



# HILL END GOLD LIMITED

ACN 072 692 365

Report for March 2009 Quarter

30 April 2009

ASX Code : HEG, HEGOB

## Hill End Project, NSW

### Reward

- *Quarterly gold production increases by 75% to 2,110 ounces from 4,514 tonnes at 16g/t gold.*
- *Successful stoping operations on high grade Reward Paxton's and Cornelian M2.*
- *Reward shaft rock pass now completed to ten levels.*
- *Additional mining areas opened up by development on 640 level.*
- *Processing plant operation successfully increased to 24 hour / 7 day basis with improved reliability.*
- *Indicator fault association with high grade mineralisation increases very high grade targets throughout Hawkins Hill – Reward deposit.*
- *Production continues at over 2,000 tonnes per month at an average grade of over 15g/t gold.*
- *Significant project management changes.*

### Hargraves

- *BNH deposit mining licence application preparation underway.*
- *Scoping study under preparation for nominal 10mt deposit at 4g/t in 40 metres wide zone of 500 metres strike and 400 metres depth from surface.*

## Lak Sao, Laos

- *Lak Sao Mineral Reconnaissance and Exploration Agreement (MREA) pending.*
- *Additional near-production JV projects under review.*

## Hill End Gold Investment Bars

- *Preparation for sale of 99.99% gold bars to HEG shareholders being finalised.*

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## SUMMARY

Major advances in underground development and plant production were made during the quarter.

Gold production of 2,110 ounces from 24,514 tonnes at 1.6g/t gold was a 75% increase over the previous quarter. Production was sourced from stoping the high grade Reward Paxton's and Cornelian M2 vein sets and pre-production development for additional stope production areas.

The gravity gold processing plant has increased throughput to average approximately 70 tonnes per day and the feed grade ranges up to 40g/t on a daily basis. Plant gold recovery has been increased from 80% to approximately 97%, which is excellent for gravity processing, and plant production availability has been improved to 70%, including scheduled maintenance.

The Reward shaft rock pass has been completed to the top 780 level and has connected all ten levels including the bottom main level of the old Reward workings. Dewatering of the minor amount of water in the Exhibition shaft is being done so access to the Frenchman's vein set can be made from the current workings. Frenchman's has been mined up to 24 metres wide and was reported to have been bulk sampled at the 730 level over a nine metre width at 20g/t.

The combination of level and rise development along the Paxton's has been so successful in delineating the high grade zones that the inter-level distance is being doubled to 24 metre spacing. This will reduce pre-production time and costs of stope preparation.

A total of 180 metres were diamond drilled underground during the quarter.

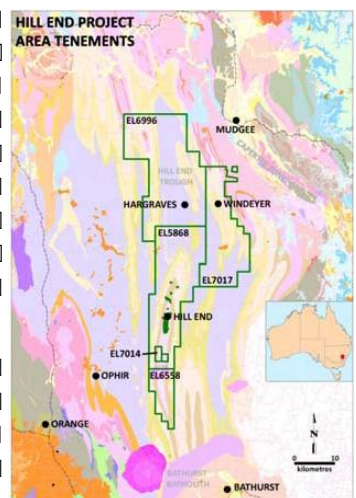
The Mineral Reconnaissance and Exploration Agreement application for the Lak Sao Project in Laos is currently pending and Hill End Gold is reviewing near term development joint ventures on advanced projects.

Preparations have been made for 99.99% one ounce gold investment bars to be made available for shareholders through the online Gold Sales page on our website. Strong demand was experienced for the initial run of approximately 500 ounces which went on sale on 27 April 2009.

## HILL END PROJECT

The Hill End Project includes tenements covering the Hill End, Hargraves and Windeyer goldfields which had a combined gold production of over two million ounces of gold from surface and shallow underground workings during the nineteenth century. The majority of past hard rock production came from high grade deposits such as at Big Nugget Hill at Hargraves, Reward and Hawkins Hill at Hill End, the last which yielded over 400,000 ounces of gold from a strike length of approximately 400 metres at an average grade of 10 ounces per tonne.

The Company holds a minimum 5% beneficial interest in the Mining Leases in the Hill End area and the area formerly subject to Exploration Licence 2037, which is now part of Exploration Licence 25868, and holds a 100% interest in all other tenements.



Gold production continues to increase from the underground mining of the north end of the Hawkins Hill Reward deposit and processing of the ore through the gravity gold plant located at the Amalgamated site. The underground activities are outlining the extent of the economic resources to determine the appropriate scale for project expansion of the deposit.

Drilling at Hargraves, which is located 35 kilometres to the north of Hill End, has outlined a large deposit at Big Nugget Hill (BNH), which has a targeted scope of 10 million tonnes at a grade of 4g/t gold and may be suitable for bulk underground mining. The current mid-point Exploration Potential of the Hargraves BNH deposit, which has been drilled over 500 metres of strike, 400 metres depth and 40 metres width, is approximately one million tonnes at 7.7g/t gold. Further drilling and studies are necessary to confirm these figures.

## **HAWKINS HILL – REWARD**

### **Mine**

During the quarter a total of 482 metres of underground development were advanced, which is a 21% increase over the previous quarter and successful stoping commenced in the high grade Reward Paxton's vein set between the 695 and 707 levels. The Paxton's stoping was done at a width of just over one metre with excellent grade recovery and minimal dilution.

With the completion of the Reward shaft rock pass to the top level at 780RL the development to open and dewater the old workings will commence. Development on the 730, 755 and 780 levels of the Reward shaft is planned to open up the wide Frenchman's and Steven's vein sets beneath the old Exhibition shaft workings, which mined the wide Frenchman's vein set. The water present in the old shaft and connected workings below the 780 level will be drained to the Amalgamated level for use in the processing plant.

Some downtime was experienced during the quarter due to the Reward shaft Alimak installation not operating, which restricted access to the upper levels in the Reward shaft for a few weeks. A preventative maintenance program and procurement of critical spares will eliminate this issue in the future.

### Patriarch wide zone

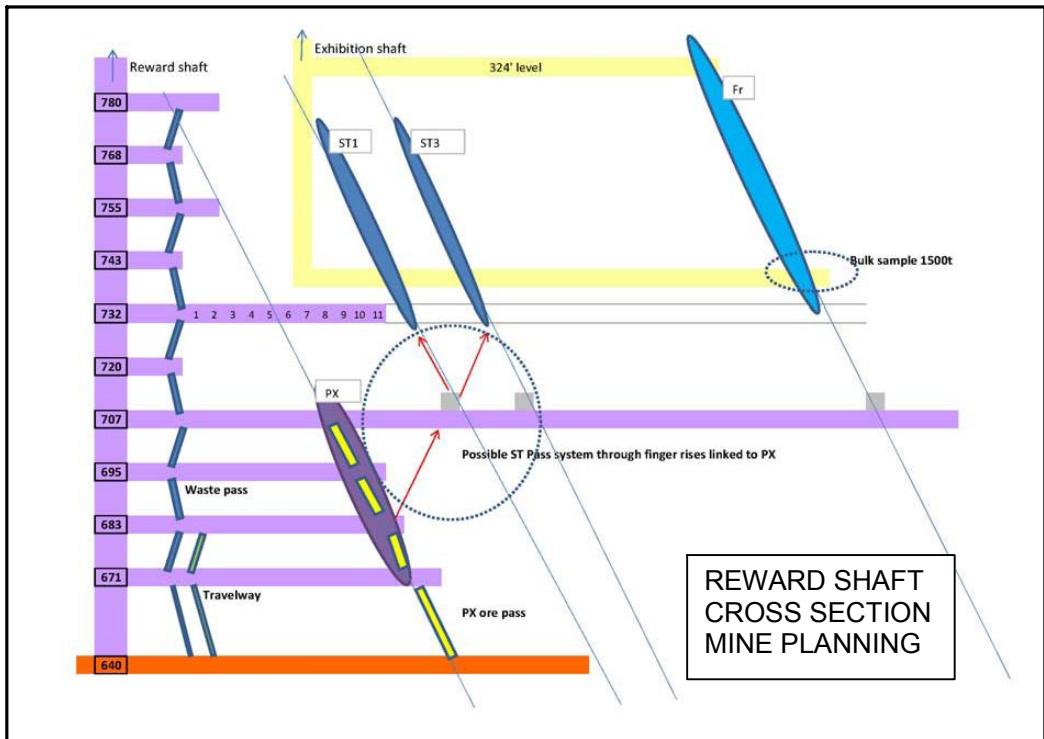
Development in the wide Patriarch Central zone (including the M1/M2 Star of Peace Middle Paxton's vein sets) advanced on the 640 level along the Patriarch M1/M2 vein sets to the limit of the old Mica workings in Hawkins Hill at 1240N. This development is below the wide intersection in HUG09, which returned a total intersection of 4.1g/t gold over 17.3 metres (true width) at 1250N. The 640 drive returned encouraging results from both the M1 and, particularly, the M2 and further definition is required to define the extent of the potential wide stoping block. Crosscut rising and underground diamond drilling is planned over a strike length of 100 metres between 1240N and 1340N.

### Reward Frenchman's and Steven's vein sets

The Frenchman's vein set has been previously mined to 100 metres below surface (780L) and widths reported to be up to 24 metres and grades up to 32 ounces per tonne.

Up to about 1920 the reported production from the Frenchman's vein set was approximately 200,000 tonnes at 16g/t gold over a 400 metre strike length from surface down to 780L. Sampling below this level in the Exhibition shaft at the 600N position early in the last century gave results of 9 metres width at 20g/t gold at 730L and 4 metres width at 26g/t gold at 752L. These wide intersections are immediately above our current Paxton's workings.

Similarly, the wide Steven's vein sets between the Paxton's and the Frenchman's vein sets and has been mined in the workings above the 780 level. Access to the Steven's and Frenchman's will commence on the 732, 755 and 780 levels with cover drilling in the development to drill ahead for the presence of water when required.



### Outlook

A further five stopping blocks were identified and scheduled for extraction over the next five months, including three further stopes in Reward Paxton's and two Cornelian - Reward M2 stopes. Production is planned to be maintained at over 2,000 tonnes per month at an average grade of over 15g/t gold.

Focus for the coming quarter is on increasing development to 600 metres in the following areas:

- Reward Frenchman's/Stevens vein sets on the 730, 755 and 780 levels;
- Cornelian Amalgamated vein set on the 640 level;
- Patriarch Central zone on the 640 level;
- Hawkins Hill Central zone of vein sets via the old Star of Peace workings on 640 level;
- Continue Reward Paxton's development to the north and south.

Another underground diamond drilling rig has been purchased to support and extend this development program and to increase the definition of resources in the Hawkins Hill - Reward deposit. In addition, the rig will provide cover drilling for advancing development activity when working in proximity of old workings.

The current drilling, mining and processing of the Hawkins Hill - Reward deposit is aimed at determining the appropriate scope of the project for a planned expansion during 2010.

## Hawkins Hill Reward underground diamond drilling

Seven holes were completed during the quarter for a total of 179.9 metres using the small LTK48 drilling rig on the 640 level. The first four holes tested the M2 vein to the north and south of the cross cut at 1500N, at and below the Amalgamated level. The remaining three holes tested the Amalgamated vein to the west of the Reward access drive at 1430N and 1560N.

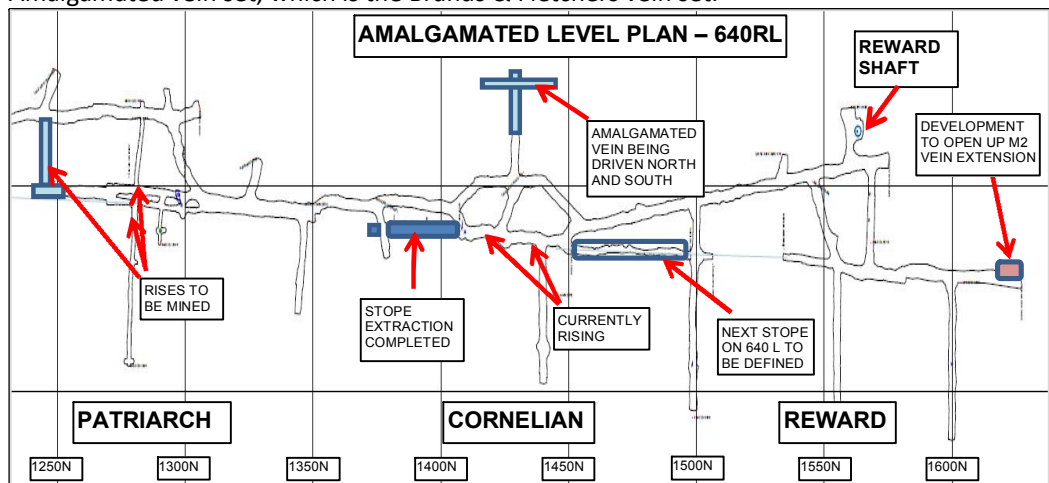
### Reward Underground Drilling (March Quarter 2009)

Hole ID	Easting	Northing	RL	completed	depth	Dip	grid Azimuth
HHUG26	725332	6341497	646	27/01/2009	25.4	-45°	240°
HHUG27	725332	6341499	645	27/01/2009	25.7	-45°	300°
HHUG28	725332	6341497	646	13/02/2009	27.5	0°	220°
HHUG29	725332	6341500	646	19/02/2009	27.2	0°	320°
HHUG30	725287	6341429	645	19/03/2009	18.1	0°	270°
HHUG31	725281	6341559	648	23/03/2009	15.8	0°	270°
HHUG32	725281	6341559	647	30/03/2009	40.2	-45°	270°
			<b>total</b>	<b>metres</b>	<b>179.9</b>		

The M2 vein set holes had visible gold mineralisation and the Cornelian M2 drive was extended to the south from 1500N as a result. Two rises were then completed on the M2 and a stope design completed.

The Amalgamated vein set holes were also highly encouraging with abundant visible gold and a cross cut and drive north and south on the Amalgamated vein set is opening up a new zone of mineralisation outside the 'mineralised' corridor.

HHUG32 adjacent to the Reward shaft position also intersected a 0.15 metre vein with good mineralisation indicator textures approximately 26 metres stratigraphically beneath the Amalgamated vein set, which is the Brands & Fletchers vein set.



A high capacity Kempe drilling rig has been purchased to assist in the Exhibition workings dewatering exercise and to increase the underground diamond drilling of the large areas of the unmined Hawkins Hill – Reward deposit.

### Reward Geological Model

The surface drilling in the Reward area in which the initial development was based has a 30-40 metre pierce point spacing in the various vein sets, and not all vein sets are comprehensively drilled. While geological and grade continuity was evident from these drill hole results, the understanding of the size, plunge, orientation, and distribution of high grade gold shoots at Reward was limited due to the spacing of these diamond drilling intersections.

The underground development from Hawkins Hill to the Reward area, and the Reward shaft development, has opened the high grade Paxton's vein set in the Reward area as the first target with the intention to determine the controls of the very high grade gold mineralisation and the continuity of the vein set for mining and grade control requirements.

Four sub levels have now been substantially developed which, together with 68 metres of rising 30 rises and two completed stopes, have provided valuable geological information. Detailed mapping and sampling of these exposures, face by face in development, metre by metre in rises and drift by drift in the stopes, has enabled a geological model to rapidly develop. Rises have been invaluable in providing the extra dimension to gold shoot orientation and aiding stope design.

Gold appears to be concentrated in very high grade shoots two metres deep and up to 20 metres long within larger high grade pods approximately 15 metres deep and 50 metres long both plunging to the south at about 30-40 degrees. To date three of these pods have been identified in the Reward Paxton's from the 671 to the 707 level in an en echelon stack, with pods 10 metres apart and the stacked envelope of high grade mineralisation plunging to the north.

Two similar pods have been identified in the Cornelian M2 area on the 640 level. The M2 pods display the same characteristics as those observed in the Paxton's area giving confidence to the developing geological model. The boundaries of the gold pods are often sharp and coincident with subtle changes in vein morphology and orientation and these features provide confidence in setting stope boundaries.



The Indicator fault, a west dipping fault striking approximately coincident with the bedded gold quartz vein hosted mineralisation, has now been traced over at least 400 metres. Several subparallel faults have also been mapped and are being progressively modelled to ascertain their association with mineralisation. These faults approximate the orientation of the 'mineralised' corridor and appear to be coincident with previously noted very high grade pods of mineralisation, such as the source of the Holtermann's Nugget and Krohmann's 'jewelry box'. When the relationship between the faults and mineralisation is understood, the faults may provide answers related to the source and location of these ore bodies and aid in their targeting.

Exploration and development for the next few months stopping will concentrate on the following:

- Frenchman's and Steven's vein sets on the 707, 730 and 755 levels;
- Cornelian – Reward M2 in the 1440 – 1500N area;
- Wide Mica Paxton's zone in the Patriarch area above the 640 level;
- Amalgamated vein on and below the 640 level;
- Star of Peace to Paxton's vein in the old workings at 1000N; and
- Frenchman's in the old Consolidated workings.

Diamond drilling will commence shortly for deeper targets.

## Processing

The Hill End gold production results to end March 2009:

Period	Tonnes	Feed Grade (g/t gold)	Gold Recovery (%)	Gold Produced (oz)	Operating hours	Tonnes / operating hour
Prior to July 2008	434	30.9	79.0	341		
July 2008	238	43.9	77.2	259	88	2.7
August 2008	289	13.3	83.5	103	92	3.1
September 2008	625	20.4	79.4	326	174	3.6
October 2008	533	24.2	78.5	326	154	3.5
November 2008	564	15.8	81.6	233	165	3.4
December 2008	675	30.5	97.4	643	186	3.6
January 2009	682	13.7	96.2	288	171	4.0
February 2009	1555	14.1	97.8	714	370	4.2
March 2009	1975	17.6	94.8	1124	476	4.1
<b>Total</b>	<b>7570</b>	<b>19.7</b>	<b>90.9</b>	<b>4357</b>	<b>1876</b>	<b>4.0</b>

Plant throughput figures for quarter on quarter:

	<i>Total ore (dry) tonnes processed</i>	<i>Plant throughput rate (tonnes per hour)</i>	<i>Mill availability</i>	<i>Fine Gold produced (ounces)</i>
Quarter ending 31 Dec 2008	1772	3.5	45%	1202
Quarter ending 31 Mar 2009	4212	4.1	64%	2126
+/- %	+ 138%	+ 17%	+ 42%	+77%

The gold mineralisation in the Hill End area is quite coarse grained and crushing the rock to less than a millimetre size results in almost complete liberation of the gold particles from the waste rock. The Amalgamated Gravity plant is highly efficient in recovering the gold as gold and concentrate, which is cleaned to a smeltable concentrate on a Wilfley table and an Action

Mining Waste table. The gold is smelted on site and poured into gold bullion bars and then transported to the refinery.

The addition of the Wilfley table during the quarter and modifications to tabling procedures have increased table gold recovery to near 100%. We had accumulated a significant quantity of low grade gravity concentrate from earlier tabling, which we have tested with a high intensity cyanidation leaching trial at the Mineral Hill Project site near Condobolin, NSW. While the trial was successful, the tabling improvements have made such a process an unnecessary step and all low grade concentrates have now been retabled at Hill End, and the gold recovered.

The changeover to a continuous production basis in the processing plant and the consequent addition of the ball mill in early December has increased gold recovery from 80% to over 95%. The installation of the ball mill and new tailings screen have reduced the tailings sizing from 1.25mm to 0.45mm and the finer tailings have enhanced tailings flow and decreased downtime with blockages.

The transition to a 24/7 roster on the plant in mid February was very smooth and was greatly assisted by the recruiting of experienced plant fitter/operators and the appointment of a plant manager.

Improved inventory control, modifications to process equipment and a regular preventative maintenance program have significantly increased plant reliability and increased operating time.

In addition, improvements continue to be made in the tailings disposal system, settling of fines and their removal from recycled water and in the plant water supply system.

Focus for the forthcoming quarter will be on improving reporting systems and increasing operator skills and there will be ongoing improvements made in the plant. A replacement jaw crusher will be installed and the ball mill will be modified from a steel lined grate discharge design to a rubber lined overflow design for improved grinding and liner life.

## **SCANDINAVIAN**

A detailed interpretation of the Scandinavian area including relogging of selected core is underway.

The Scandinavian area is a prospective northern extension of the Hawkins Hill – Reward deposit approximately 500 metres along strike to the north. The 2008 drilling was done from within the town of Hill End and tested below historical mine workings, which had been stopped by water inflow.

## **RED HILL**

No drilling was carried out during the quarter.

## **TAMBAROORA**

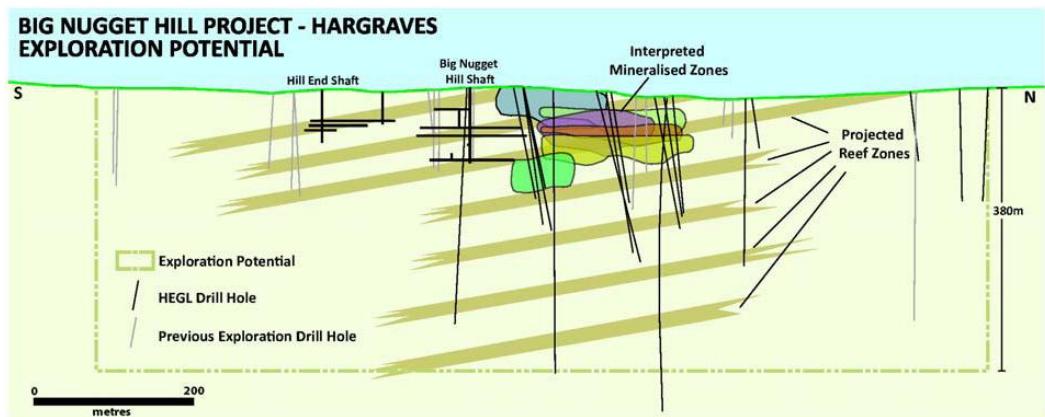
No drilling was carried out during the quarter and further work is pending review of the recent drilling program.

## GERMANTOWN

No drilling was carried out during the quarter. Mineralisation at depth within the Hill End Anticline mineralised corridor will be drill tested in due course.

## HARGRAVES

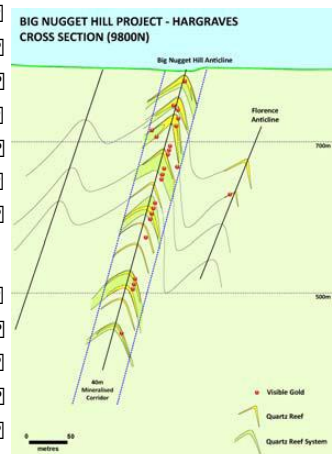
The Company holds 100% of the Hargraves Exploration Licence (EL6996), which is adjacent to the Hill End tenements to the north, and contains a series of parallel, north striking structurally controlled zones of gold mineralisation. The Big Nugget Hill (BNH) deposit is located approximately 35 kilometres to the north of the town of Hill End.



The Hargraves tenement contains numerous historical production areas and BNH is the site of Australia's earliest gold reef mining in 1851, when large pieces of gold in quartz, containing up to 1,546 ounces, were discovered in quartz vein outcrops. Rich alluvial deposits were also mined in the nearby Louisa, Daly and Meroo Creeks and many large nuggets were found, with the 'King of Waterworn Nuggets' being the largest at 2,680 ounces of gold.

Previous exploration on the BNH deposit includes reverse circulation drilling and diamond drilling during the 1980's and 90's and, while these programs indicated significant gold mineralisation, the work was not sufficiently reliable for resource estimation. During 2008 we drilled nineteen HQ3 diamond drill holes for 4,082 metres, across and down the mineralised anticlinal structure, which hosts the BNH deposit, in order to obtain reliable data.

The 2008 program outlined mineralisation in a forty metre wide zone on the BNH deposit to a depth of 400 metres below surface. The program was the first deep drilling on the deposit since its discovery in 1850 and all holes assayed to date show a pattern of repeating zones of mineralisation continuing undiminished to the bottom of the holes.



Based on the 2008 drilling of the BNH structure over 500 metres strike, 400 metres depth and 40 metres width, the current midpoint Exploration Potential of the Hargraves BNH deposit is approximately one million tonnes at 7.7g/t gold and a target scope for the BNH deposit is 10

million tonnes at a grade of 24g/t gold, which may be suitable for bulk underground mining. Further drilling and studies are necessary to confirm these figures and a combined diamond and reverse circulation drilling program has been designed to outline an initial mining and processing target on the BNH deposit of approximately 100,000 ounces of gold within 150 metres of surface.

The 2008 drilling also tested a parallel structure to the east of BNH and intersected gold mineralisation in the Florence anticline approximately 75 metres to the east of the BNH anticline.

## **WINDEYER**

The Company holds 100% of Exploration Licence (EL7017) over the historic Windeyer goldfield area, which is adjacent to the Hargraves and Hill End goldfields and is located on a mineralised structure parallel and to the west of the mineralised Hill End Anticline.

Windeyer has a number of historically rich hardrock deposits and during the 19<sup>th</sup> century rich alluvial deposits were also mined in Clarkes Creek, which rises in the Boiga Mountain area, which is also covered by EL7017.

Very little modern exploration has been done on the Windeyer Boiga Mountain area and mapping and quartz reef sampling is planned.

## **NSW UNDERCOVER – MURRAY RIVER AREA**

The company has 100% ownership of granted Exploration Licences (EL6905, 6906, 7124, 7125 and 7127) in the Swan Hill area of New South Wales. The Swan Hill area tenements cover the extension of the gold rich Bendigo Zone from Victoria into New South Wales.

FrogTech have completed a geophysical report of the Swan Hill tenement area which indicates many targets of a shallow depth to basement for field follow up.

Initial field investigation of the tenements has been undertaken and a gravity survey is planned over a significant geophysical anomaly in the Tullakool area.

## **LAOS**

The Lak Sao Project application in Laos for a Mineral Reconnaissance and Exploration Agreement application is now pending and Hill End Gold is in discussion with parties with mineral interests adjacent to the application area and other parties with advanced projects.

The Lak Sao Project area of approximately 2,000km<sup>2</sup> is located in the Bolikhamxay Province in Central Laos between the Mekong River and the Vietnam border. The area is approximately 100 kilometres north of the Sepon copper-gold project, operated by Oxiana Limited, in the Truongson Belt.

Previous prospecting has identified numerous precious and base metal occurrences in outcrop and in stream sediment dispersion haloes. Controlled artisanal gold mining of a moderate scale is underway on a small tenement excised from the tenement application.

Hill End Gold has a 51% interest in the Lak Sao Project with Mekong Resources Pty Ltd.

**Attribution**

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mike Quayle and Philip Bruce. Mr Quayle is a Member of The Australian Institute of Geoscientists and is a full-time geological contractor for the company. Mr Bruce is Fellow of the Australasian Institute of Mining and Metallurgy. Both Mr Quayle and Mr Bruce have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Quayle and Mr Bruce consent to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Yours faithfully



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