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Report for December 2006 Quarter

31 January 2007

ASX Code : HEG, HEGOA

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## **HIGHLIGHTS**

### ***Hill End Project***

- ***Excellent diamond drill intersections extend the Reward resource area along strike to the north and outline continuous high grade zones of up to 375 metres strike length.***
- ***The core portion of the Paxton's vein set in the Exhibition area averages 72g/t over 180 metre strike length.***
- ***Reward resource estimate update commences.***
- ***Preparations commence for the development and sampling of the Reward area.***
- ***High gravity gold recovery of +95% indicated for Hawkins Hill and Reward mineralisation.***
- ***Diamond drilling and reverse circulation drilling recommences at Red Hill to extend resources. New Red Hill estimate by mid-year.***
- ***Diamond drilling commences at Germantown.***

### ***Other Opportunities***

- ***Negotiations underway on significant project area in Laos.***

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## ***CORPORATE***

During the quarter a placement was completed in a number of tranches to raise a net amount of \$3.893 million through the issue of 36.286 million ordinary shares (HEG) and 18.143 million 15 cent options, which are exercisable by 31 May 2007 (HEGOA).

Excellent progress continues on the Hill End project with very high grade zones being identified in the Reward resource area. Preparation for sample mining and processing the new Exhibition area is well advanced. An updated resource estimate will be completed during the quarter.

In addition a number of acquisition opportunities have been reviewed in Australia, New Zealand, South Africa and Laos. Negotiations are underway on a significant project area in Laos, where initial field reconnaissance has been completed and local consultants have been appointed.

## ***HILL END GOLD***

Hill End Gold has the majority of the historically rich Hill End goldfield under tenement with approximately 50 kilometres strike length of the Hill End Anticline including EL5868, EL 6558 and a number of granted mining leases. Approvals are in place for the underground sampling and processing of the of the Reward area and a gravity plant is in place at the Amalgamated portal.

Historical production from the Hill End goldfield was about 1.5 Moz of gold during the period 1850 to 1920 from surface and underground workings. Much of the historical production came from the Hawkins Hill Zone, which yielded over 400,000 ounces of gold often grading two ounces per tonne or more. A targeted resource potential of 4 – 5 million ounces is interpreted below shallow workings within the under-explored Hill End Anticline.

The field is known for its coarse gold, high grade deposits containing shoots of very high grade gold material. In 1872 the world's largest mass of gold ever hoisted to the surface, the Holtermann Nugget, was discovered at Hawkins Hill containing some 3,100 ounces of gold.

Strong gold mineralisation outcrops for 20 kilometres along the Hill End Anticline in the Company's tenements and further significant deposits are interpreted to occur below surface. The historic Hawkins Hill deposit was approximately 400 metres long, 40 metres wide and 50 metres downdip.

High grade shoots such as the Hawkins Hill deposit are the targets of the current exploration activities, particularly along the ten kilometres of strike encompassing the Hawkins Hill, Reward, Scandinavian, Germantown and Red Hill areas.

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

The third stage diamond drilling program at Reward was completed in January with 2071 metres drilled in seven holes. Two high grade zones, the Exhibition and Cornelian, have been drilled in the Reward resource area, with excellent drill intersections extending the Paxton's and Phillipson's vein sets to strike lengths of 300 metres and 375 metres respectively.

Recent intersections include:

HHD29	Phillipson's	6.16g/tAu over 6.10m from 252.06m
HHD30	Paxtons	106.06g/tAu over 1.40m from 183.30m
HHD31	Paxton's	34.38g/tAu over 0.96m from 218.16m

Further assays are pending for HHD30 to HHD32.

The attached table shows the high grade continuity of the Paxton's vein set. The central Paxton's veins, in the core portion of the high grade zone, average 72g/tAu with an average true width of 0.8 metre over a strike length of 180 metres. This material has a nominal in situ value of \$2000 per tonne over this strike length.

It is also noted that the mineralised Paxton's vein set can broaden up to 20 metres into the hanging wall to encompass the parallel Steven's vein set. In the Exhibition area there are other parallel veinsets such as Phillipson's, Mica and Amalgamated in the footwall of the Paxton's vein set.

The successful diamond drilling program at Reward has led to a review of the Snowden Mining Industry Consultants draft scoping study. It is now proposed to develop directly into the high grade Exhibition area and sample and process the Paxton's and Steven's vein sets, compared to the earlier proposal of general sampling along the Reward area vein sets. The planned schedule is to mine and process bulk samples from the Paxton's and Steven's vein sets during 2007.

Mining cost estimates to sample the Paxtons and Stevens high grade Exhibition vein sets at Reward have been provided by Mancala. The proposed program is to continue the Amalgamated level development from Hawkins Hill for 400 metres to the Reward area and put in a 240 metre raise bore hole from the Amalgamated level to surface. The raise bore hole would be fitted with shaft equipment to provide access to the Paxton's and Steven's high grade vein sets at 190 metres and 140 metres below surface. Cross cuts to the vein sets at these levels and a total of 200 metres of drive development on the vein sets is planned. The material sampled from the vein sets would be dropped to the Amalgamated level and hauled to the Amalgamated plant for processing. Costs and scheduling for the development and sampling exercise are being finalised.

The existing Amalgamated plant requires some modifications for processing material from the Amalgamated development and from the Exhibition area sampling program. Gekko Systems have completed a preliminary review of the Amalgamated processing plant as a bulk sampling plant for the Reward development with an estimated cost to re-commission the plant and install a gold room of approximately \$0.25m.

Hydrological studies have commenced to identify water usage and availability for the Reward project, the Red Hill project and for Hill End town supplies. CM Jewell and Associates have been appointed as hydrological consultants.

An update of the Reward area resource will be completed during the coming quarter including separate estimates for the Exhibition and Cornelian areas. The 2006 initial mineral resource estimate for part of the Reward area was 680,000 tonnes at 6g/tAu.

Underground bulk sampling may lead to the development of the Reward underground project as a small, though profitable, high grade operation. Following bulk sampling, the Reward high grade area target potential is expected to be of the order of 100,000 tonnes at 20 – 30g/t.

In addition, the Red Hill area is being evaluated as an open pit project, which may be worked together with the Reward project and processed through a combined plant located in the Red Hill area.

Additional targets in the Hawkins Hill – Reward area include the Amalgamated and Brand and Fletcher's vein sets in the unmined and unexplored mineralised corridor beneath the historical Hawkins Hill deposit. The new Hawkins Hill target is in close proximity to the Amalgamated plant and further evaluation and underground drilling is planned. During the quarter mini-bulk samples were taken for metallurgical testwork from one of the Amalgamated veins with a resulting gravity recovery of 98% at a grind size of P<sub>80</sub> 670µm.

Drilling along strike to the north of the Exhibition area has extended Reward beyond the Robert Emmett's Cross Course, which has been the historical limit of the Reward area mineralisation. Some gold mineralisation was intersected in Rowley's and Paxton's vein sets and the cross course itself contained sulphide mineralisation with little gold. However the Phillipson's vein set mineralisation has been intersected on the north side of the Robert Emmett's Cross Course, returning assays of 8.88g/tAu over 0.20m.

The Reward mineralisation is now interpreted to continue at depth beneath the town of Hill End where no drilling has yet taken place. Diamond drilling at Germantown, which is located to the west of town in the central part of the Hill End Anticline has commenced and approval for diamond drilling of the Scandinavian area from the roads in Hill End is anticipated soon.

The HHD30 and HHD31 Paxton's samples were assayed by the relatively expensive 'amalgam' assay technique, which uses gravity recovery and mercury amalgamation to recover the coarse gold, followed by assaying of the amalgam and the gravity concentrate and tail pulps. Sample preparation and gravity recovery were done by Metcon Laboratories in Sydney and the amalgam and pulp fire assaying were done by SGS in Townsville. The amalgam technique is more reliable for rich, coarse gold samples than screen fire assaying at ALS Chemex in Orange. The amalgam assay procedure also provides an indication of gravity recovery performance, which for the Paxton's samples was approximately 98%, after grinding to a nominal size of less than 0.5mm.

It has been noted that the Reward diamond core assay results may have been significantly understated due to a combination of the ALS Chemex screen fire assay protocol and laboratory procedure. Assay orientation studies to assess the 'Leachwell' assay technique have been completed with SGS in Townsville, Queensland and further assaying of Hill End samples will utilise the Leachwell assay technique.

Assays are pending from SGS for HHD32 and portions of holes HHD30 and HHD31.

## ***RED HILL GOLD PROJECT***

The Red Hill project is located over a zone of near surface gold mineralisation and old high grade workings of three kilometres in strike length and 50 to 100 metres in width.

Excellent reverse circulation and diamond drilling results were reported early in 2006 with broad intersections extending the Old Red Hill resource area. Four separate vein sets continuing from near surface to the depth of drilling were identified.

A reverse circulation drill rig arrived at Hill End during January 2007 and reverse circulation drilling and diamond drilling has recommenced at Red Hill to follow up intersections from the early 2006 drilling program. The initial 3000 metre forty hole program is designed to extend the resources along strike, to test for parallel mineralised corridors and drill areas which are potential infrastructure sites for open pit and plant construction.

Significant intersections previously reported include the following results:

RHRC88 with 1.94g/tAu over 20 metres from 27 metres;  
RHRC89 with 2.83g/tAu over 9 metres from 32 metres;  
RHRC90 with 2.04g/tAu over 25 metres from surface; and,  
RHRC91 with 1.36g/tAu over 20 metres from 6 metres.

An additional wide zone of shallow gold mineralisation was intersected near the Red Hill shaft in the Marshall – McMahon vein set with the following results:

RHRC84 with 2.43g/tAu over 22 metres from 4 metres.

Further drilling on the vein sets is planned down dip and down plunge of the current drilling. Previous drilling by BHP in 1989 will also be re-drilled since it is likely that the BHP drilling, sampling and assay methods have resulted in a low bias in the assays received.

RHRCD108, the first diamond tail on a pre-collared hole, has already intersected a 25 metre downhole zone of stockwork quartz in the White's zone position. Traces of gold were observed in three separate veins within the intersection, which is approximately 200 metres down plunge to the north from the current White's resource. Visible gold was also observed in quartz veining below the White's zone in a potential new zone.

An updated Red Hill resource estimate will be completed by mid-year. Preparation for a mining lease application for the Red Hill area has commenced.

## **HILL END EXPLORATION**

The diamond drill rig and RC rig will move to scout drilling at Germantown, north of Red Hill at Valentine, Emily and Old Company, then to the Clines Gully line and the Kings/ Marshall's Line on the western side of the Hill End Anticline.

Work on the Gowan exploration licence EL6558 has identified a number of targets which are being assessed with field work over the coming quarter.

### ***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



Philip Bruce  
Managing Director

Attached:

- Paxton's vein set intersections in Exhibition Area, Reward from south to north.
- Significant assays from Reward Stage Three drilling program.
- Reward Area Current Drilling Program.
- Hill End Project Regional Overview.

For further information contact Philip Bruce +61 412 409555

**Paxton's vein set intersections in Exhibition Area, Reward from south to north.**

Hole Number	Vein Intercept MGA Northing	From (m)	To (m)	Interval (m)	Gold Grade (g/t)	COMMENT
HHD32	6341351	230.12	243.09	6 qtz veins	Pending	
HHD14	6341393	<b>253.21</b> 256.67	<b>253.35</b> 256.83	<b>0.14</b> 0.16	<b>0.82</b> 1.30	<b>Paxton's Only</b>
HHRCD24	6341408	210.22 <b>218.16</b> 224	210.34 <b>218.46</b> 224.12	0.12 <b>0.30</b> 0.12	2.28 <b>39.60</b> 2.57	<b>Paxton's Only</b>
HHD13	6341472 including	<b>218.77</b> <b>219.33</b> 223.3	<b>218.91</b> <b>219.8</b> 223.55	<b>1.03</b> <b>0.14</b> <b>0.47</b> 0.25	<b>11.96</b> <b>0.01</b> <b>26.20</b> 5.98	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
HHD31+	6341509 including	<b>174.14</b> <b>174.81</b>	<b>174.39</b> <b>175.10</b>	<b>0.96</b> <b>0.25</b> <b>0.29</b>	<b>34.39</b> <b>3.29*</b> <b>111.00*</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
HHRCD20	6341543 including	<b>203.05</b> <b>203.40</b> 205.30 206.60	<b>203.15</b> <b>203.95</b> 205.42 206.71	<b>0.90</b> <b>0.10</b> <b>0.55</b> 0.12 0.11	<b>7.85</b> <b>6.32</b> <b>11.70</b> 1.11 1.20	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
HHD30	6341559 including	167.01 <b>183.30</b> <b>184.48</b>	183.70 <b>183.63</b> <b>184.70</b>	24 qtz veins <b>1.40</b> <b>0.33</b> <b>0.22</b>	Pending <b>106.06</b> <b>422.70*</b> <b>40.9*</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
		185.30	188.84	8 qtz veins	Pending	
NRI005	6341589 including	217.00 <b>220.32</b> <b>220.87</b>	217.10 <b>220.50</b> <b>221.20</b>	0.10 <b>0.88</b> <b>0.18</b> <b>0.33</b>	3.37 ** <b>208.17</b> <b>16.70</b> <b>546.00</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
NRI009	6341596	<b>220.18</b> 223.81 224.50	<b>220.25</b> 223.92 224.65	<b>0.07</b> 0.11 0.15	<b>9.65**</b> 3.11 3.44**	<b>Paxton's Only</b>
HHD25	6341618 including	<b>201.2</b> <b>202.07</b>	<b>201.3</b> <b>202.16</b>	<b>0.96</b> <b>0.10</b> <b>0.09</b>	<b>1.31</b> <b>10.05</b> <b>2.76</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
		203.68 206.64	203.78 206.84	0.10 0.20	6.99 1.56	
HHD27	6341661 including	187.90 188.08 191.88 195.25 <b>198.20</b> <b>198.50</b> <b>199.32</b>	188.08 188.22 192.05 195.65 <b>198.50</b> <b>198.80</b> <b>199.48</b>	0.18 0.14 0.17 0.40 <b>1.28</b> <b>0.30</b> <b>0.30</b> <b>0.16</b>	3.71 40.00 4.87 11.60 <b>6.03</b> <b>19.85</b> <b>2.73</b> <b>5.87</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>
		202.16 209.60 212.75	202.32 209.80 213.00	0.16 0.20 0.25	5.83 1.43 1.88	
HHD29+	6341701 including	<b>202.83</b> <b>203.07</b>	<b>203.07</b> <b>203.31</b>	<b>0.48</b> <b>0.24</b> <b>0.24</b>	<b>7.81</b> <b>5.62</b> <b>9.99</b>	<b>Weighted average assay</b> <b>Hanging Wall</b> <b>Foot Wall</b>

+ New assay report.

\* Amalgam gold assay.

\*\* 50g Fire Assay.

All other assays are by Screen Fire Assay.

True widths are approximately 90% of the downhole interval, except for holes HHD27+ which are 70%.

## Significant assays from Reward Stage Three drilling program

Hole Number	MGA Easting	MGA Northing	Dip	Azimuth (MGA)	Total Depth (m)	From (m)	To (m)	Interval (m)	Au g/t	vein
HHD26	725,373	6,341,665	-67	335	328	250.35	250.65	0.30	1.65	Ph
						254.70	254.90	0.20	8.88	Ph
HHD27	725,376	6,341,661	-79	270	316	46.50	46.80	0.30	1.42	MM
						47.70	48.10	0.40	3.26	MM
						63.65	63.88	0.23	1.12	Ro
						63.88	64.10	0.22	9.33	Ro
						153.60	153.75	0.15	7.17	St
						159.40	159.50	0.10	15.80	St
						162.68	162.84	0.16	65.60	St
						171.71	171.91	0.20	13.45	St
						182.05	182.17	0.12	5.68	
						187.90	188.08	0.18	3.71	Px
						188.08	188.22	0.14	40.00	Px
						191.88	192.05	0.17	4.87	Px
						195.25	195.65	0.40	11.60	Px
						198.20	198.50	0.30	19.85	Px
						198.50	198.80	0.30	2.73	Px
						199.32	199.48	0.16	5.87	Px
						202.16	202.32	0.16	5.83	Px
						209.60	209.80	0.20	1.43	Px
						212.75	213.00	0.25	1.88	Px
						221.80	222.01	0.21	1.99	Px
227.51	227.82	0.31	3.41	Px						
246.08	246.32	0.24	1.25	Px						
249.80	250.00	0.20	1.22	Ph						
	250.10	250.40	0.30	74.70	Ph					
HHD28	725,342	6,341,695	-59	352	100	49.33	49.59	0.26	2.72	Ro
						67.76	68.17	0.41	0.53	Br
						102.84	103.15	0.31	0.90	
						103.15	103.40	0.25	1.88	
HHD29	725,376	6,341,699	-80	270	327	13.40	13.50	0.10	1.46	MM
						27.00	27.20	0.20	0.61	MM
						39.50	39.74	0.24	1.18	MM
						60.18	60.48	0.30	0.55	Ro
						173.40	173.58	0.18	34.00	St
						202.83	203.07	0.24	5.62	Px
						203.07	203.31	0.24	9.99	Px
						217.13	217.27	0.14	0.64	
						235.92	236.16	0.24	16.70	Mi
						252.06	252.40	0.34	103.50	Ph
257.85	258.16	0.31	7.78	Ph						
324.50	324.80	0.30	4.30	LB						
HHD30	725,362	6,341,551	-80	282	310	183.30	183.63	0.33	422.7	Px
						184.48	184.70	0.22	40.9	Px
						<i>awaiting results</i>				
HHD31	725,360	6,341,509	-80	270	331	152.35	152.55	0.20	6.87	St
						174.14	174.39	0.25	3.29	Px
						174.81	175.10	0.29	111.00	Px
						224.81	224.98	0.17	57.70	Mi
						<i>awaiting results</i>				
HHD32	725,416	6,341,351	-68	270	330	<i>awaiting results</i>				

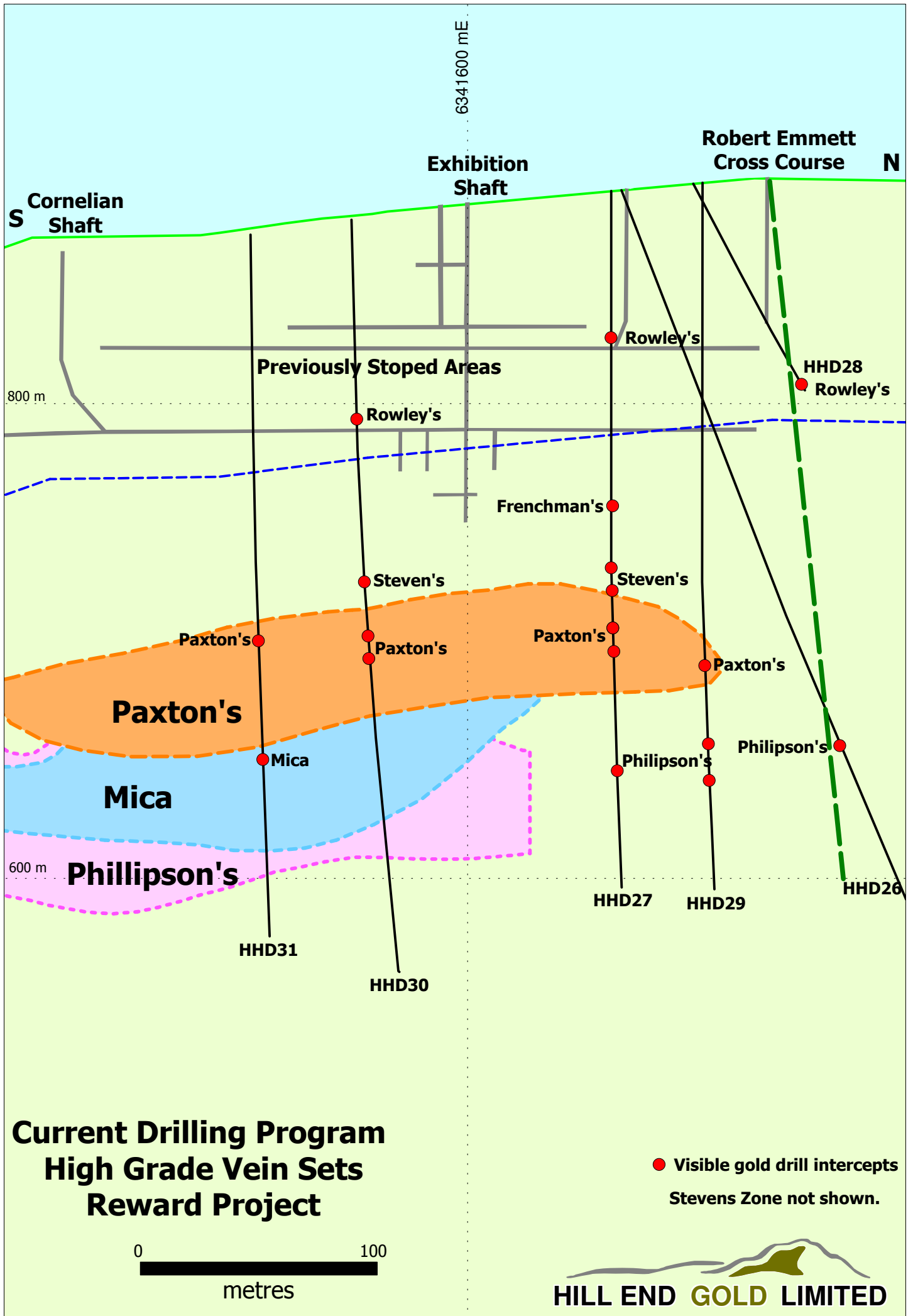
All samples are from half HQ3 diamond core.

HHD26 to HHD29 analysed by screen fire assay technique at ALS Chemex Laboratories in Orange, NSW.

HHD30 & HHD31 by amalgamation fire assay technique at Metcon, Brookvale, NSW and SGS, Townsville, QLD.

HHD32 by Leachwell assay technique at SGS, Townsville, QLD.

Ph – Phillipson's, MM – Mountain Maid, Ro – Rowley's, St – Steven's, Px – Paxton's, Br – Britt's, LB – Lady Belmore, Mi – Mica.





HILL END GOLD LIMITED

Valentines Prospect

Dun Dun Prospect

Emily Prospect

Frasers Line Prospect

Red Hill Project

Tambaroora Prospect

Clines Gully Prospect

Golden Gully Prospect

Western Limb Prospect

Germantown Prospect

Scandinavian Prospect

HILL END HISTORIC SITE

Reward Project

Kings Line Prospect

Hawkins Hill Workings

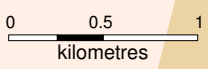
South Star Prospect

HILL END ANTICLINE

Sawpit Gully

Turon

River



Hill End Project Regional Overview