



HILL END GOLD LIMITED

ACN 072 692 365

Report for September Quarter

31 October 2017

ASX Code: HEG, HEGOC

High Purity Alumina Project

- Acquisition of HPA Project completed.
- Resource drilling on the initial kaolin deposit at Yendon, Victoria outlined a deposit 3-4 times larger than expected from earlier drilling, to depths greater than 20m with 1-2m overburden.
- Drill samples dispatched to LabWest Mineral Analysis lab in Perth for sizing and assaying for resource estimation, to be finished during November.
- Optimal beneficiation sizing test work confirmed an excellent mass yield of 46% at -63 microns assaying >33% Al₂O₃ in a low contaminant kaolin product.
- An initial metallurgical sample is progressing through test work to produce a HPA product, with results to date confirming the superior quality of the Yendon deposit and indicating a simple, conventional HPA process design.
- Full metallurgical test work and other studies for the Preliminary Feasibility Study (PFS) to be completed in early 2018.
- HPA is an important material used in the rapidly expanding battery and LED lighting industry and preliminary metallurgical test work indicates HEG can produce a high purity, low cost HPA product.
- A placement raised \$0.6M before costs and discussions are underway to fund the next phase of the PFS.

Gold Projects

- The HEG gold projects of Hargraves and Hill End in central New South Wales have gold resources totalling 571,000 ounces (20.9.2016)
- Pre-development activities continue for two potential low cost open pit development projects.
- Proposals to maximize shareholder value for the gold projects are being reviewed.

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CORPORATE

On 28 August 2017, HEG Limited announced the completion of conditions precedent to acquire the rights, title and interests in granted exploration licences, tenement applications and the entire issued share capital of Pure Alumina Pty Ltd (ACN 618 881 137), a company associated with Tolga Kumova and Tom Eadie, for its HPA Project. The terms of the acquisition have been advised in previous announcements and are summarised as follows:

- HEG is operator of the assets and will pay for all costs;
- HEG issued 8M shares and paid \$100,000 in cash to the vendors who have appointed one director, Mr David Leavy, to the HEG board;
- On completion of a Preliminary Feasibility Study, HEG will issue 20M shares to the vendors and HEG will own the tenements, HPA information and related rights;
- Completion of a viable Definitive Feasibility Study (DFS) is expected to occur within 2 years and at such time HEG will issue \$1.5M shares to the vendors at the lesser of 20c per share and 30 day VWAP, with a floor price of 10c per share;
- If viable DFS not achieved within two years then \$100kpa payments, pro rata per month, until achieved or up to 31 December 2022; and
- Upon receipt of sales contract for 100% offtake arrangement for 1.5 time payback period, HEG will issue \$0.5M shares to the vendors at the lesser of 20c per share and 30 day VWAP, with a floor price of 10c per share.

The Annual General Meeting on 9 October 2017 ratified the resolutions in respect of this acquisition.

PROJECTS

High Purity Alumina Project – VIC EL5457/5461 and EL006428/006447 (HEG 100%)

The HPA Project tenements (Exploration Licences 5457 and 5461 and Exploration Licence applications 006447 and 006428) are located near Ballarat, Victoria at Pittong and Lal Lal in areas where kaolin mining and processing has continued for decades. The Yendon kaolin deposit near Lal Lal, Victoria is located on EL5457 and EL5461, where previous drilling for the paper and filler markets was done during the 1980s.

A 126 hole aircore drilling program was completed on the initial target kaolin deposit at Yendon at predominantly 50m x 50m spacing to a depth of 10-30m to delineate a JORC 2012 resource. The program outlined 3-4 times the anticipated size of deposit as drilled during the 1980s. Approximately 900 kaolinised samples from the air core drilling program have been dispatched to LabWest Mineral Analysis in Perth WA for optimal beneficiation sizing test work and head assay analysis for the maiden resource estimate. Bulk density drilling of the deposit is to be completed during November.

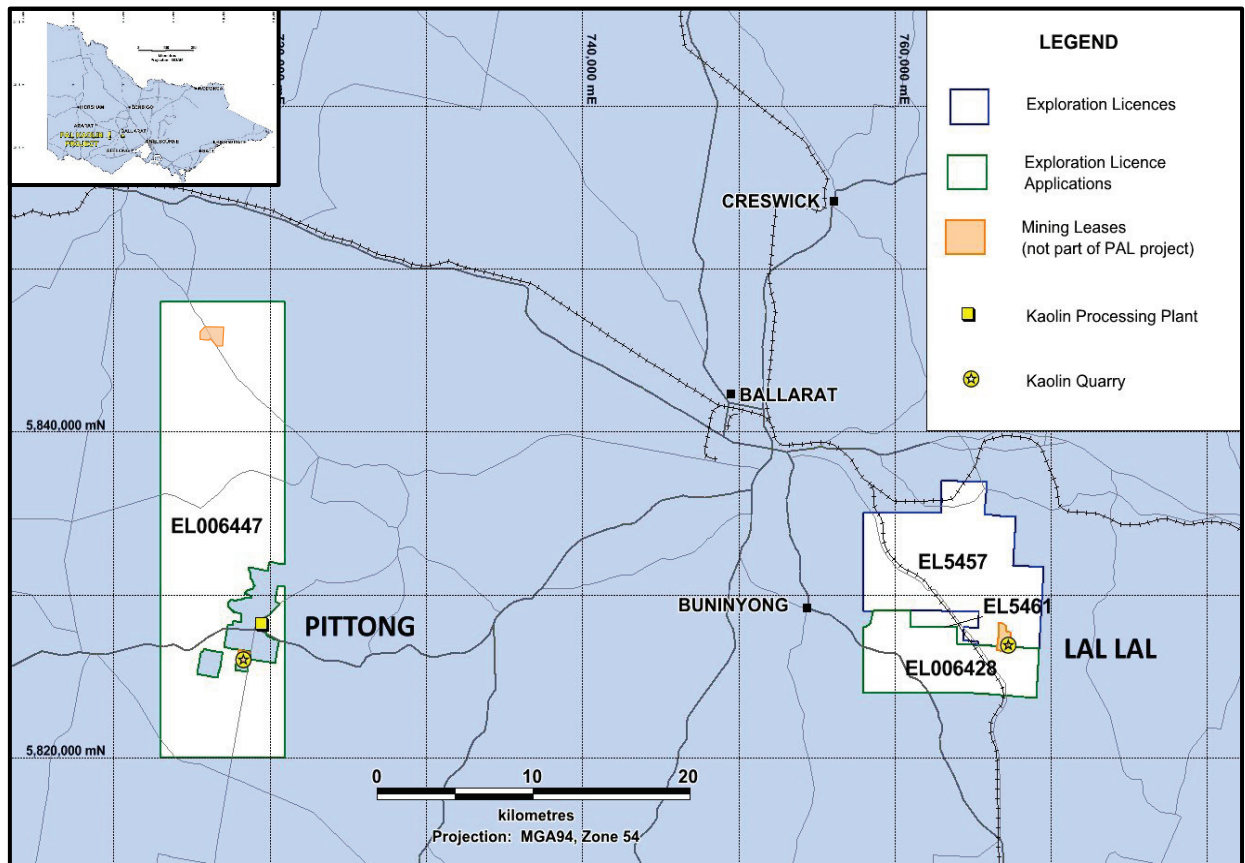
The optimal cut size for the kaolin beneficiation process is used for plant design and as the cut size for the ~900 samples being assayed for the resource estimate. The sizing test work was conducted on a representative 25kg composite of fifty air core samples. The composite was wet screened in a sieve series from 1mm to 45 microns and all fractions were weighed and assayed.

Beneficiation sizing

Size (Microns) 100% passing	Yield%	Al ₂ O ₃ %	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %
1000	77.5	21.0	67.1	0.87	0.58
106	49.8	32.2	49.9	0.93	0.89
75	47.5	32.9	48.7	0.94	0.92
63	46.3	33.2	48.2	0.95	0.93
53	44.9	33.4	47.7	0.96	0.95
45	43.6	33.6	47.3	0.97	0.96

As shown in the above table, optimal beneficiation sizing test work has provided exceptional results with ~80% of the Al₂O₃ in the Lal Lal material reporting to the -63um fraction with ~90% kaolin content. This confirms that a high purity kaolin product can be beneficiated on site as an excellent feedstock for the HPA processing facility and provides for a simpler HPA process compared to similar projects.

The 63 micron sizing was chosen as the beneficiation cut size for process design and resource estimation head assaying. The results indicate that process plant scalability will be quite reliable given the low variance between the -106 and -45 micron products and that the kaolin deposit is readily beneficiated to a superior feedstock for the HPA leach and purification process.



HEG HPA Project location near Ballarat, Victoria

A small composite bulk sample of the drilled deposit is being metallurgically tested under the management of BHM Process to assist with test parameters for the PFS bulk sample and to produce a high purity alumina product for initial marketing and offtake discussions. Initial calcination and leach testing has showed that the kaolin is very amenable to a conventional acid leach process to remove impurities. The tests have indicated that rapid leaching at moderate temperature and rapid precipitation of the intermediate aluminium chloride product is possible with exclusion of the minor contaminants. Final results of the initial tests to produce a HPA product are anticipated within the coming month.

Metallurgical testing of the due diligence bulk sample is ongoing and indicates excellent processing parameters for both the kaolin beneficiation and the HPA process. Reduced operating costs and size of the processing infrastructure are expected compared to similar projects.

A preliminary financial study has indicated the potential to produce a high purity HPA product at a low unit cost and the Preliminary Feasibility Study is expected early in 2018.

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High purity alumina (HPA) is a product consisting of Al_2O_3 with a purity level that is greater than 99.99% (4N). Its largest use is in the established high-growth markets of LED lighting and high temperature / high resistance electronics, such as the insulation separator in Lithium batteries.

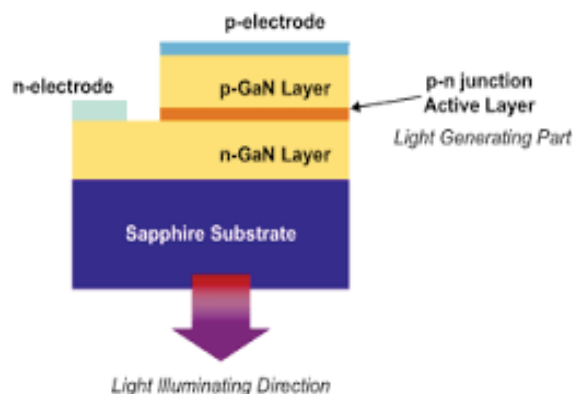
HPA has unique properties of high hardness, excellent insulation and temperature resistance and is chemically inert and corrosion resistant, which make it attractive for a wide and increasing range of synthetic sapphire applications and semi-conductor manufacturing. In particular, the unique chemical properties of HPA make it an important material in the development of high performance electronics.

The main use for HPA is in the manufacture of synthetic sapphire for many high growth applications:

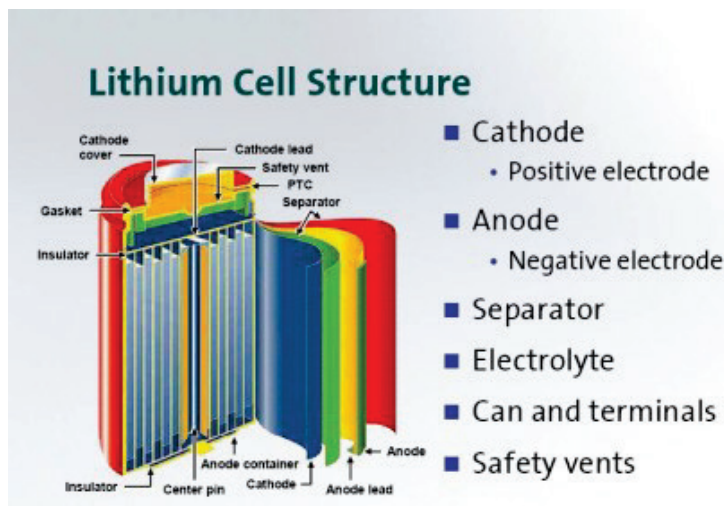
LED Lighting



Synthetic sapphire Substrate in high brightness LED chips has excellent heat resistance / electrical resistance and transparency for low energy, high power and long life span LED lighting.

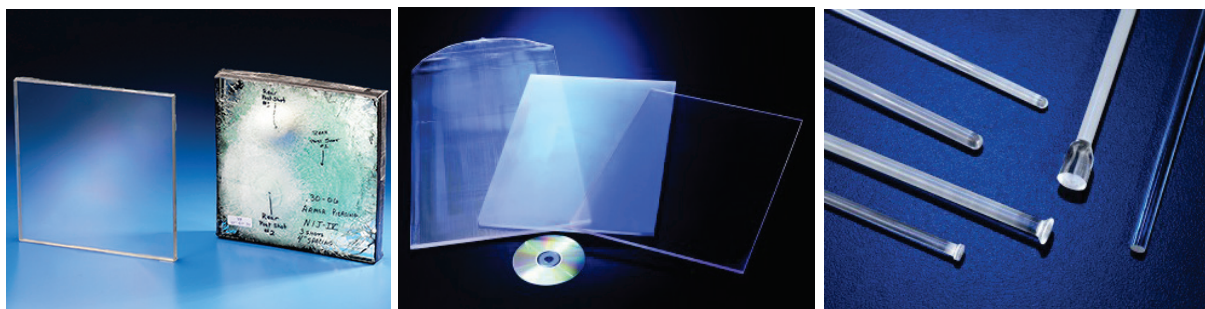


Lithium batteries



Synthetic sapphire coating of the lithium battery Separator ensures high insulation between the Anode and Cathode and excellent heat resistance: the larger the battery, the higher the charge density and the faster the charge rate, then the thicker the coating.

Optical applications



Synthetic sapphire 'glass' is second in hardness to diamond on the Mohs scale and has excellent optical properties, making it ideal for applications such as smart phone screens, watch faces and military transparent armour. It is inert and corrosion resistant and is used in harsh environments and medical applications.

The market for HPA has shown strong growth over the last few years, and with expected growth in battery demand, environmentally friendly LED lights and increasing uses for synthetic sapphire, this growth is expected to continue. In addition, there are a number of new technologies that will benefit from the unique properties that HPA offers. HEG intends to produce a significant proportion of the global demand for HPA at a low cost. Reduction in the product cost profile over time will encourage substitution of HPA/synthetic sapphire in products containing high strength, scratch-resistant glass and expected new uses in electronics, military and medical technologies will broaden the market base and drive demand.

Through the acquisition of Pure Alumina Pty Ltd and the vendor's Ballarat tenements, HEG has secured a high quality feed stock resource with the kaolin deposits at Pittong and Lal Lal. The key characteristics that make this deposit preferable to similar material is its easy beneficiation to a fine-grained, high purity kaolin, low level of impurities and relative ease of removing those impurities. This combination is expected to allow for a very low cost processing route.

HEG has assembled a highly experienced team to undertake the necessary studies to determine the optimum processing route and complete process design and project costing. The aim is to become the supplier of choice for the HPA market by:

- Meeting customer specs every time
- Providing consistency of supply
- Working with customers to develop optimum specification for new technologies

This will be achieved by:

- Producing a consistent kaolin feedstock for the HPA facility
- Using a range of metallurgical technologies to produce reliable products
- Reducing the consumable and energy requirements and maintaining stable process parameters
- Developing close working relationships with our customers to become their supplier of choice
- Continued research into process improvements to reduce costs and improve efficiency



HEG Gold Project locations

Hargraves Project - EL 6996 (HEG 100%)

The wholly-owned Hargraves Project is located approximately 30 km south-west of Mudgee in central New South Wales.

HEG proposes to develop the BNH Deposit to recover 1.2 Mt with an average grade of 2.5 g/t gold. The production estimate includes approximately 20% inferred resource blocks and it is proposed to mine two initial open pits, the Central Pit and the South Pit for a combined production of 300,000 tonnes per year. The South Pit is planned to be approximately 70m deep and the Central Pit about 165m deep. There is excellent potential for resource extensions beyond the current pit optimisation design.

The relevant authorities have accepted the Conceptual Project Development Plan (30.6.15) and the monitoring of environmental parameters at Hargraves continues in preparation for a Mining Lease application for the development of the project.

Hargraves Gold Project Development Proposal Summary Economics (PFS 2014)^{1,2,3}

- Initial production of ~100,000 ounces over four years at <A\$900/oz cash cost
- Production rate 300,000 tonnes per year at 2.5g/t from two initial open pits
- 11:1 waste to ore stripping ratio at a pit design gold price of A\$1,450/oz
- Gold recovery of 95%
- Pre-development cost of A\$2m and project capital of A\$13m
- Net profit of ~A\$40m after full cost recovery / royalty payments at A\$1,600/oz
- Potential for Hargraves development extensions at same production rate
- Potential development of Red Hill deposit may add significant net profit

¹ First announced 30.4.2013 and PFS report completed June 2014. We are not aware of any new information or data that materially affects the information included in the relevant market announcement and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

² The pit optimisation study for the Hargraves Gold Project used a Mineral Resource made up of a combination of Indicated and Inferred resource blocks. There is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration work will result in the determination of Indicated mineral resources or that the production target itself will be realised.

³ The 'material assumptions' for the Pre-Feasibility Study are outlined in the JORC Table 1, Section 4 – Estimation and Reporting of Ore Reserves (16.9.16). Note that, while the PFS was quite detailed, the Mineral Resources and material assumptions were of insufficient confidence to convert the Mineral Resources to Ore Reserves and the outcome is deemed to be a Production Target until an upgraded Feasibility Study is completed.

The Hargraves Gold Project could be developed at a relatively low capital cost, as metallurgical test work has confirmed that the liberation of gold from quartz veins requires only coarse grinding with processing by low cost, simple gravity methods. The proposed gold recovery method is similar to that which was used at Hawkins Hill – Reward during trial mining.

An upgraded Feasibility Study for the Hargraves Gold Project is in preparation.

Hill End Project - EL 5868 (and Mining Leases) (HEG minimum 85%) & EL 8289 (HEG 100%)

The Hill End Project is located about 50 km north of Bathurst in central New South Wales (Figure 1).

Red Hill Project

Red Hill is located three kilometres north of Hill End on EL5868 and preliminary studies have indicated that the development of Red Hill may be viable as a stand-alone project or could add significant value to any development of the Hargraves Gold Project (15.12.2015).

An economic feasibility study on the development of Red Hill has commenced with the completion of an initial pit optimisation study. The results of this work have confirmed the expectation of a positive economic outcome through the development of open pits along a strike length of 800m.

The initial scope for the Red Hill Gold Project is to establish a 300,000 tonne per year mine and processing facility at Red Hill and produce approximately 20,000 ounces per year from shallow open pits at an operating cost of ~\$900/ounce. The initial pit designs contain approximately 30% Indicated Resource based on the recent JORC 2012 estimate for Red Hill totalling 80,000 ounces as detailed in the ASX release dated 30 November 2015.

Metallurgical test work on samples from Red Hill indicated high gold recovery using gravity processing.

Reward Gold Mine

The upper levels of the Hawkins Hill – Reward deposit host the wide Frenchmans – Stevens zone, which is part of the existing Hawkins Hill – Reward resource (total Inferred Resources of 642,200 tonnes at 8.8g/t). Previous Company workings have exposed this zone, which was mined in the early 20th century and drilling and underground activities to develop a nominal target of 250,000 - 400,000 tonnes at 5 - 8 g/t gold are proposed. The target estimate is based on drill and development intersections with sample spacing ranging from ~1m up to ~100m spacing supporting the grade range and indicating the zone as 3 - 8 metres wide over a strike length of 400 - 500m and a dip length of over 50m (The potential quantity and grade of this Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource, so it is uncertain if further exploration will result in the estimation of a Mineral Resource).

Existing drill intersections indicate the Frenchmans – Stevens zone is 3 - 8 metres wide and carries the target grade where it has been intersected in earlier development and in underground drilling.

Exploration activities for this proposal are expected to take three months and an internal report indicates that the Reward Gold Mine may be an economic underground project with an offsite plant, a short decline and three initial levels at 24m spacing.

Current Tenement Schedule

Table below contains details of tenements held by HEG at the end of the quarter.

The Company has a 100% beneficial interest in its Hill End tenements, while a portion of the ground now encompassed by EL 5868 which includes resources at Hill End and Red Hill is subject to a reduction to 85% if an 'economic feasibility study' is completed by the Company, and First Tiffany Resource Corporation, if it establishes that it continues to hold a right against the Company to do so, contributes at the 15% level.

Details of Tenements Held by HEG Limited as at the end of the Quarter

Lease	Project	Lease Status	Application Date	Grant Date	Expiry Date	Current Area
EL 5868	HILL END	Granted	12/11/1999	18/06/2001	18/06/2019	16 Units
EL 6996	HARGRAVES	Granted	23/08/2007	21/12/2007	21/12/2017	24 Units
EL 8289	CHAMBERS CREEK	Granted	24/3/2013	20/8/2014	20/8/2020	3 Units
GL 5846	HILL END	Granted		15/02/1968	7/12/2019	2.044 Ha
ML 1116	HILL END	Granted		28/03/1984	16/10/2024	15.71 Ha
ML 1541	HILL END	Granted	26/11/1999	17/10/2003	16/10/2024	279.2 Ha
ML 315	HILL END	Granted		8/12/1976	7/12/2019	6.671 Ha
ML 316	HILL END	Granted		8/12/1976	7/12/2019	8.846 Ha
ML 317	HILL END	Granted		8/12/1976	7/12/2019	7 Ha
ML 49	HILL END	Granted		30/07/1975	7/12/2019	1.618 Ha
ML 50	HILL END	Granted		30/07/1975	7/12/2019	3.02 Ha
ML 913	HILL END	Granted		20/01/1981	19/01/2023	22 Ha
ML 914	HILL END	Granted		20/01/1981	19/01/2023	21.69 Ha
ML 915	HILL END	Granted		4/02/1981	3/02/2023	13.27 Ha

EL – Exploration Licence

ML / GL – Mining Lease

Philip Bruce
Managing Director / Executive Chairman

Competent Persons' Statement

The information in this report that relates to Hawkins Hill - Reward Mineral Resources and Exploration Target is based on information reviewed by Philip Bruce, for Red Hill and for Hargraves Mineral Resources and Mineral Resources underpinning the Hargraves Gold Mine Production Target and for Exploration results is based on information reviewed by Stuart Munroe and Philip Bruce. Dr Munroe is a Member of the Australasian Institute of Mining and Metallurgy and Mr Bruce is a Fellow of the Australasian Institute of Mining and Metallurgy and Mr Bruce is a full-time employee of HEG Limited. Dr Munroe 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Dr Munroe and Mr Bruce consent to the inclusion of the matters based on their information in the form and context in which it appears.

Mineral Resource information referred to for Hawkins Hill – Reward and for Big Nugget Hill was prepared and first disclosed under the JORC Code 2004. Except for the Big Nugget Hill North estimate (30.4.2013) these estimates have not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Similarly, for the other Mineral Resource estimates, there is no new information that materially affects the estimates and information provided in earlier referenced announcements and all material assumptions and technical parameters underpinning the mineral resources estimates in the relevant market announcements continue to apply and have not materially changed.

HEG Limited (HEG) is an ASX-listed exploration and resource investment company with projects and investments that are in late exploration / early development phase with high value potential.

HEG has extensive experience in exploration, development and operation of resource and technology projects and in acquiring and enhancing project and corporate opportunities.

HEG's HPA Project proposal is to mine kaolin from tenements near Ballarat, Victoria and produce +99.99% high purity alumina products for the battery and LED lighting sectors which are experiencing exceptional demand growth with the pressure for reduced power consumption, improved power storage and increasing electric vehicle production.

HEG's gold projects of Hargraves and Hill End in central New South Wales, Australia have gold resources totalling 571,000 ounces (20.9.2016) and pre-development activities continue for two potential low cost open pit development projects.

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

HILL END GOLD LIMITED

ABN

74 072 692 365

Quarter ended ("current quarter")

September 2017

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (..3..months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(241)	(241)
(b) development	(4)	(4)
(c) production		
(d) staff costs		
(e) administration and corporate costs	(258)	(258)
1.3 Dividends received (see note 3)		
1.4 Interest received	2	2
1.5 Interest and other costs of finance paid	-	=)
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other (provide details if material)		
1.9 Net cash from / (used in) operating activities	(501)	(501)
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment		
(b) tenements (see item 10)		
(c) investments	(100)	(100)
(d) other non-current assets		

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Consolidated statement of cash flows		Current quarter \$A'000	Year to date (..3..months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities	(100)	(100)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	410	410
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	Net cash from / (used in) financing activities	410	410

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	632	632
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(501)	(501)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(100)	(100)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	410	410
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	441	441

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5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	441	441
5.2 Call deposits		
5.3 Bank overdrafts		
5.4 Other (provide details)		
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	441	441

6. Payments to directors of the entity and their associates	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	65
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

7. Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

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Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available

Add notes as necessary for an understanding of the position

8.1 Loan facilities

8.2 Credit standby arrangements

8.3 Other (please specify)

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
-	-
-	-
-	-

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9. Estimated cash outflows for next quarter**\$A'000**

9.1 Exploration and evaluation

500

9.2 Development

9.3 Production

9.4 Staff costs

100

9.5 Administration and corporate costs

200

9.6 Other (provide details if material)

9.7 Total estimated cash outflows**800**

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

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Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Date:September 2017
(Director/Company secretary)

Print name:Kevin Lynn.....

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.