



ACN 072 692 365

Report for March Quarter, 2018

26 April 2018

ASX Code: HEG, HEGOC

Hill End makes rapid progress toward becoming a significant producer of high purity alumina at its Yendon Project in Victoria

Yendon Pre-feasibility Study on schedule for completion in this quarter

Highlights

- Rapid progress this quarter advances Hill End to being a leading supplier of high purity alumina to the rapidly growing lithium battery and LED lighting industries
- Hill End announced an outstanding maiden kaolin resource estimate for Yendon of 3.68Mt of in-situ kaolinized material (measured and indicated) which when beneficiated will convert to 1.59Mt of kaolin concentrate containing 34.68% Al₂O₃
- Initial metallurgical test work returned exceptional results with Yendon kaolin successfully refined into high purity alumina exceeding 99.99% purity
- Metallurgical test work to define the process of converting Yendon kaolin to high purity alumina (HPA) is almost finished
- Highly experienced marketing executives Eileen Hoa and Robert Sills appointed to undertake marketing in China and the rest of Asia as part of strategy to secure long-term offtake agreements for the Yendon HPA project
- Options to maximise shareholder value for Hill End's gold projects are now being considered

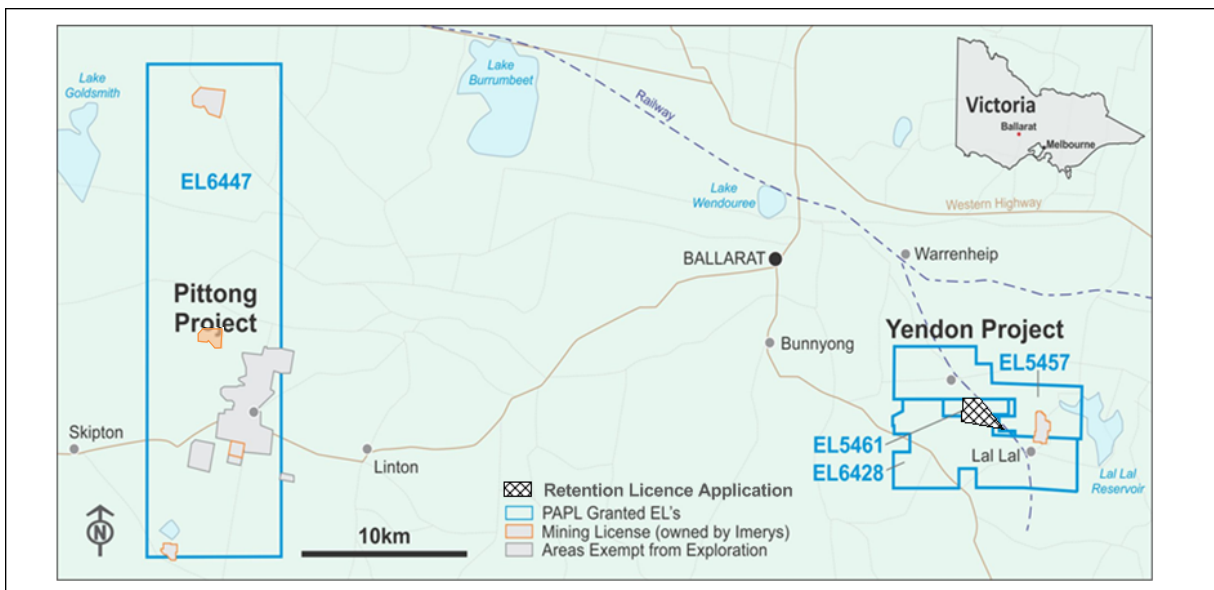
CORPORATE

Martin McFarlane was appointed as Managing Director and David Leavy was appointed as finance and marketing director in January 2108.

PROJECTS

High Purity Alumina Project (HEG 100%)

The HPA Project tenements, Exploration Licences 5457, 5461, 006447 and 006428, are located near Ballarat, Victoria at Pittong and Yendon in areas where kaolin mining and processing has occurred for decades. The Yendon kaolin Resource is located on EL5457 and EL5461. Application for a retention licence over the Yendon kaolin deposit has been made to the Victorian Mines Department.



HEG HPA Project location near Ballarat, Victoria

Hill End Gold Ltd (ASX: HEG) is nearing completion of its metallurgical test work to define and evaluate the process to refine Yendon kaolin to high purity alumina. This work forms a critical part of the Pre-feasibility Study (PFS).

The PFS work completed to date includes:

- the resource estimate;
- mine design and costing;
- beneficiation design;
- hydrometallurgical process flow sheet and equipment list;
- process modelling and optimisation.

Costings have been sought for all equipment with financial modelling of the capital and operating costs now underway as well as report writing. The PFS is on schedule for delivery this current quarter.

Metallurgical test work completed so far includes:

- beneficiation to remove silica;
- roasting;
- acid leaching;
- purification;
- crystallisation and washing optimisation tests, and
- final calcination is about to commence.

The tests show that Yendon kaolin beneficiates simply using screening to remove 55% of the coarse silica, leaving a high grade alumina (~35%) kaolin. The fine particle size of the concentrated kaolin provides a large surface area which is highly responsive to acid leaching. This response has resulted in high extraction of alumina, lower acid strengths, shorter residence times and lower temperatures than anticipated.

Purification of the aluminium chlorohydrate is similarly effective, with rapid crystallisation of alumina from solution leaving most of the impurities behind. Repeating this step twice has shown to reduce the impurity levels to better than 99.99%. However, three stages of purification will be used in the final process to ensure stringent HPA quality standards are achieved.

These metallurgical test results highlight the potential to reduce Yendon's capital and operating costs. Efficient leach times may lead to smaller equipment sizes, while lower temperatures and acid strengths may result in less exotic and expensive materials being specified for the process equipment, thus reducing capital costs. Lower acid strengths and temperatures may also reduce operating costs.

Another key outcome from this test program is that the process has been upscaled from 1-litre to 5-litre vessels with slightly improved results. This provides significant comfort that the process can be scaled up to an industrial level without impacting the efficiency of the flow sheet.

Hill End also plans to take a sample through a fourth leach and precipitation stage with the aim of producing a 99.999% HPA product (5N HPA).

In February, Hill End announced an outstanding maiden kaolin resource estimate for its Yendon high-purity alumina project in Victoria, marked by an extensive inventory, exceptionally high grades and low impurities.

The maiden resource estimate at Yendon is 3.68 million tonnes¹ of in-situ kaolinized material (measured and indicated). When this is beneficiated by wet screening to recover the -63 micron fraction, 1.59 million tonnes of kaolin concentrate containing 34.68% Al₂O₃ is produced.

Table 1: Yendon Kaolin Mineral Resource estimates - January 2018¹

Class	Tonnage (Mt)		<63 µm Concentrate Grades (%)								
	In situ	Concentrate	Mass Rec	Al ₂ O ₃	CaO	Fe	K ₂ O	MgO	Na ₂ O	SiO ₂	TiO ₂
Measured	1.73	0.75	43.13	35.08	0.08	0.79	0.19	0.09	0.16	47.84	1.13
Indicated	1.95	0.84	43.14	34.33	0.07	0.85	0.25	0.10	0.17	48.94	1.12
Total	3.68	1.59	43.14	34.68	0.08	0.82	0.22	0.10	0.17	48.42	1.12

Note: The estimates are based on a block cut-off concentrate grade of $\geq 30\%$ Al₂O₃.

Assays used to calculate the resource estimate reveal that the Yendon mineralisation is of extremely high quality, containing almost 35% alumina, and very low levels of impurities such as iron, titanium and potassium (see table 1), making it easier and potentially less costly to process to high purity alumina.

The Yendon resource is very uniform. A very high cut-off grade of 30% Al₂O₃ in concentrate was applied which resulted in minimal diminution of the resource.

There is also immense scope to grow the resource further, as the Yendon deposit remains open to both the north and south. Drilling was halted, while still intersecting substantial intervals of kaolinized material, once sufficient material had been identified for the project.

In January, Hill End announced that initial metallurgical test work had returned exceptional results.

The tests, which used simple, conventional processes, showed that kaolin from Hill End's Yendon deposit near Ballarat in Victoria could be converted to HPA exceeding 99.99% purity. Importantly, Hill End's initial test sample contained low levels of the specific deleterious elements that concern HPA consumers.

This test work consisted of two leach and precipitation cycles. The PFS metallurgical test work is based on three leach and precipitation cycles, which is expected to lead to an increase in impurity levels, yielding a higher purity product which may attract higher prices.

The Yendon kaolin sample was beneficiated and purified by conventional processes at Nagrom's metallurgical facilities in Perth with the following significant assays:

Element*	Assay
Al ₂ O ₃ (alumina)	99.995%
Iron	21.5 ppm
Sodium	12.3 ppm
Magnesium	6.8 ppm
Calcium	2.6 ppm
Arsenic	2.3 ppm
Zinc	1.6 ppm
Manganese	1.1 ppm
Potassium	0.3 ppm
Gallium	0.2 ppm
Lead	0.2 ppm
Barium	0.2 ppm
Tungsten	0.1 ppm
Copper***	< 1 ppm
Silicon***	< 1 ppm
Boron***	< 1 ppm
Other**	0.7 ppm

* Analysis were conducted using induced coupled plasma mass spectrometry. Results shown are for elemental assays not the chemical compound the element may be present as. Volatile elements such as Chlorine, Sulphur, Phosphorus, Carbon and Oxygen were not tested as the analysis method was not suitable or the detection limit was insufficiently sensitive.

** includes 51 other elements analysed for whose results were each below 0.1ppm.

*** certain elements were tested for but not detected and have been included at the detection limit of the equipment.

In March, Hill End appointed Eileen Hao to the key role of General Manager and Chief Representative, China and more recently Robert Sills as General Manager Asia excluding China.

The Asian market accounts for more than 70% of global HPA demand and forecast growth. Therefore, developing relationships with key HPA buyers in Asia will help ensure that our final product meets their various requirements. This is a crucial step to secure offtake agreements.

Ms Hao is a highly experienced marketing consultant with an extensive network in Chinese industries which consume high purity alumina (HPA). Ms Hao has more than 25 years' experience in industrial minerals, metals and applications, spanning a variety of minerals and metals, including kaolin, lithium, graphite, nickel, cobalt, alumina, titanium, vanadium, zirconium, rare earths and battery materials.

Mr Sills has an extensive network in the Japanese and South Korean industries which consume material quantities of high purity alumina (HPA) garnered from 24 years' experience across a number of industry sectors in commercial and business development functions including telecoms, precious metals, diamonds, kaolin and specialised materials such as rare earths, graphite and lithium. Companies represented range from junior developers to global corporates such as Rio Tinto.

Competent Persons' Statement

The information in this statement that relates to the Mineral Resource estimates is based on work done by Rod Brown of SRK Consulting (Australasia) Pty Ltd. Rod Brown is a member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 edition). The information in this statement that relates to the geology, drilling, and sampling is based on work done by Mike Ware. Mike Ware is a fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 edition).

JORC Code

All information within this Quarterly Report relating to Maiden JORC (2012) Kaolin Resource for the Yendon HPA Project is referred to above as Table 1 appended into ASX market release "Initial Kaolin Resource" dated 12 February 2018. The Company confirms that it is 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.

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")

March 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (..9..months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(276)	(995)
(b) development	(4)	(10)
(c) production		
(d) staff costs		
(e) administration and corporate costs	(436)	(1,420)
1.3 Dividends received (see note 3)		
1.4 Interest received	9	15
1.5 Interest and other costs of finance paid		(4)
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	(707)	(2,414)
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment	(2)	(2)
(b) tenements (see item 10)		
(c) investments	80	(20)
(d) other non-current assets		

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (..9..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	78	(22)

3. Cash flows from financing activities		
3.1 Proceeds from issues of shares	80	4,176
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	80	4,176

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	2,921	632
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(707)	(2,414)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	78	(22)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	80	4,176
4.5 Effect of movement in exchange rates on cash held	-	-
4.6 Cash and cash equivalents at end of period	2,372	2,372

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	2,372	2,921
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)	2,372	2,921

6. Payments to directors of the entity and their associates

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 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

Current quarter \$A'000
65

7. Payments to related entities of the entity and their associates

- 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

Current quarter \$A'000
-
-

Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
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.		

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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	250
9.5 Administration and corporate costs	150
9.6 Other (provide details if material)	
9.7 Total estimated cash outflows	900

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				

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:
(Director/Company secretary)

Date:26.April 2018

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.