

### **ASX RELEASE**

**31 JANUARY 2018** 

CODE: ALY

#### **BOARD OF DIRECTORS**

Mr Lindsay Dudfield Non-Executive Chairman

**Mr Leigh Ryan** Managing Director

Ms Liza Carpene Non-Executive Director

Mr Anthony Ho Non-Executive Director

#### **ISSUED CAPITAL**

SHARES 342,335,585

OPTIONS 7,500,000 (Unlisted)

#### **PROJECTS**

BRYAH BASIN (80-100%)

**KARONIE (100%)** 

LACHLAN (earning up to 80%)

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# **DECEMBER 2017 QUARTERLY REPORT**

# **Highlights**

#### KARONIE PROJECT (WA) - GOLD

- First-pass RAB drilling of the gold prospective Claypan Shear Zone to commence early in February 2018.
- First-pass RAB drilling of interpreted dolerite coincident with magnetic and gravity highs at the Warrior Prospect also planned to commence in February.
- Significant untested gold-in-soil anomaly identified at KZ5.

#### LACHLAN / COBAR BASIN PROJECTS (NSW) - GOLD / BASE METALS

- Reverse Circulation drilling at the Black Range Tank Gossan VTEM / surface EM anomaly and coincident Au-Cu-Pb-Zn-Ag-in-soil anomaly to commence during the March 2018 quarter.
- First pass wide spaced soil sampling at Eurow identifies significant gold and copper anomalism.
- Historic soil sampling collation identifies strong gold and copper soil anomalism at Quarry Hill and Rosedale prospects.
- Auger drilling at Girilambone identifies low tenor copper anomalism.

#### BRYAH BASIN PROJECT (WA) – GOLD / BASE METALS

- Independence Group NL moving loop EM (MLEM) survey identifies strike extensive EM conductors.
- Billabong Gold Pty Ltd JORC 2012 update for the Wilgeena resource has commenced but is yet to be finalised.

#### **CORPORATE**

Cash at 31 December 2017 - \$1.41M.

Alchemy Resources Ltd (ASX: ALY; "Alchemy" or "the Company") is an Australian exploration company focused on growth through the discovery and development of gold and base metal resources within Australia. The Company has built a significant land package in the Karonie greenstone belt in the Eastern Goldfields region in Western Australia, and has entered into a Farm-in and Joint Venture Agreement with Heron Resources Ltd (ASX: HRR; "Heron") to earn an 80% interest in the Lachlan Projects in New South Wales. The Company also maintains its interest in the Bryah Basin Project in the emerging gold and base metal-rich Gascoyne region of Western Australia (Figure 1), where farm-in and joint venture partners, Independence Group NL (ASX: IGO; "IGO") and Billabong Gold Pty Ltd ("Billabong"), a subsidiary of TSX-V listed Superior Gold Inc. (TSX-V: SGI), are continuing to advance base metal and gold exploration, respectively.

Work completed by the Company in the December 2017 Quarter included soil sampling at the KZ5 and Gilmore prospects, and the planning and preparation of first-pass RAB drilling across the Claypan Shear Zone at the Manhattan and Dragon prospects, and follow up drilling at the Warrior Prospect within the Karonie Project, WA.

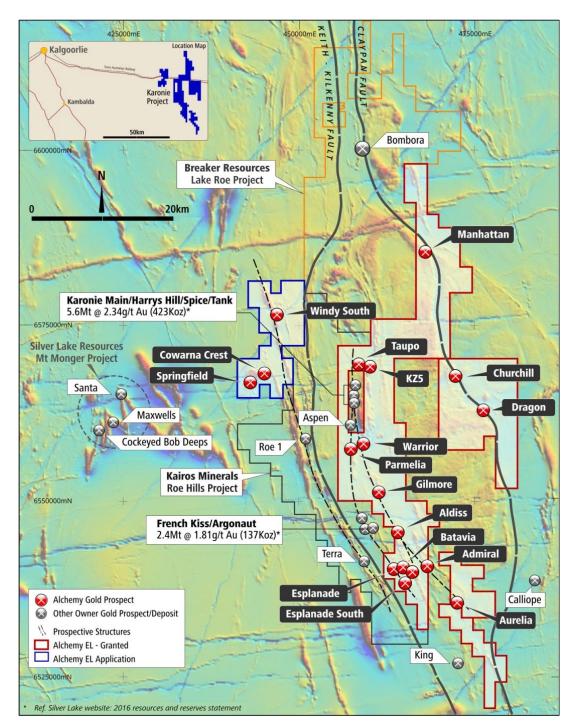
Soil sampling and shallow auger drilling programs were completed at the Eurow and Girilambone projects (respectively), and preparation for RC drilling at the Black Range Tank Gossan and Hilltop workings at the Overflow Project in NSW commenced.



Figure 1: Alchemy Resources' Project Location Map.

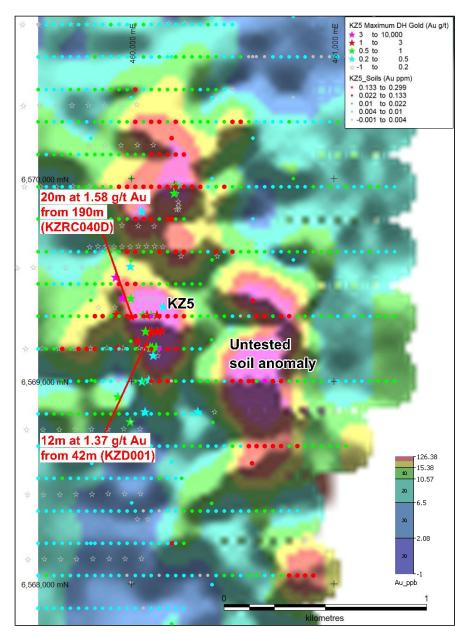
### **Karonie Project (WA)** (Alchemy 100%)

The Karonie Project includes eight exploration licences and one exploration licence application covering 782km<sup>2</sup> of highly prospective mineralised structures within Kurnalpi Terrain greenstones 100km east of Kalgoorlie (*Figure 2*). The tenements are located along strike of Silver Lake Resources Ltd's (ASX: **SLR**) Karonie/Harry's Hill and French Kiss deposits (reserves/resources of over 560,000oz @ 2.34g/t Au), and also cover 35km of the underexplored, gold endowed Claypan Shear Zone commencing just 12km along strike to the south of the Bombora deposit (Breaker Resources NL) (ASX: **BRB**), all within 50km of Silver Lake's Randalls processing plant.



**Figure 2**: Karonie Project tenements, major deposits, prospects and interpreted major structures over aeromagnetic image

During the quarter 128 soil samples were collected at 200m x 400m staggered spacings across the KZ5 and KZ5 north prospects. Fifty soil samples were also collected at 100m x 100m spacings across a small area of residual soil at the Gilmore prospect. All samples were submitted for low level gold and 4 acid digest multi-element analysis. Results included 20 values greater than 20ppb Au including up to a maximum value of 141ppb Au from the Gilmore Prospect and 61ppb Au from KZ5. Results from KZ5 confirmed and further defined a significant gold in soil anomaly approximately 500m SE of the main body of drilling at KZ5 (Figure 3). Considering the significant historic gold intercepts returned from the adjacent KZ5 Prospect (20m at 1.58 g/t Au and 12m at 1.37 g/t Au – refer to Alchemy Resources ASX announcement dated 28 October 2016), Reverse Circulation drill testing of this anomaly is warranted.

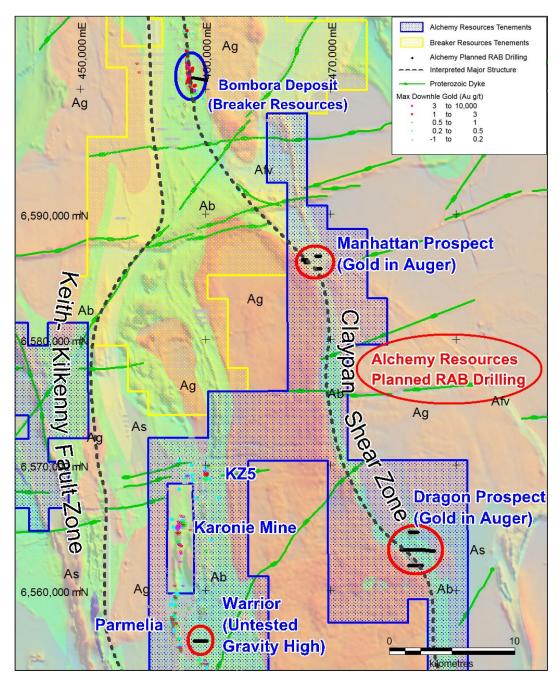


**Figure 3**: KZ5 Prospect recent and historic soil sampling (Au ppm), historic drilling (maximum downhole gold) and best historic drilling results (red text) over gold in soil imagery (Au ppb).

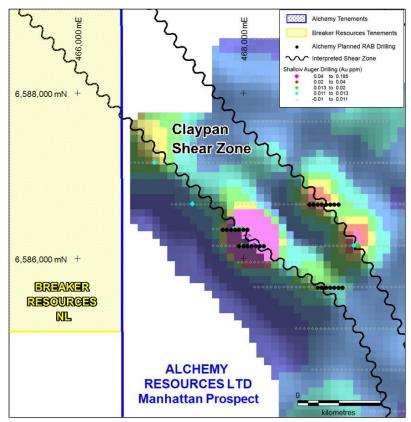
Also during the quarter, 5,000m of RAB drilling was designed with the aim of testing two high priority targets along strike to the south of the Breaker Resources NL (ASX: BRB) Bombora deposit. The drilling is targeting gold anomalism identified in previous shallow auger drilling over the Claypan Shear Zone at the Manhattan and Dragon targets (Figures 4-6), where coincident prospective folded or converging dolerite units have been interpreted from detailed aeromagnetic imagery. Holes will be drilled 50m apart on lines at variable spacings targeting specific gold in auger anomalies.

An additional line of RAB drilling is planned across an interpreted dolerite unit coinciding with gravity and magnetic highs at the Warrior Prospect located 7 kilometres north of the recently drilled Gilmore Prospect (Figures 4 & 7). The drill line is just 2 kilometres north of previous WMC drilling intercepts including 2m @ 1.5g/t Au from 54m, and 1m @ 8.8g/t Au from 8m (*Refer to Alchemy Resources ASX Announcement dated 30 October 2017*).

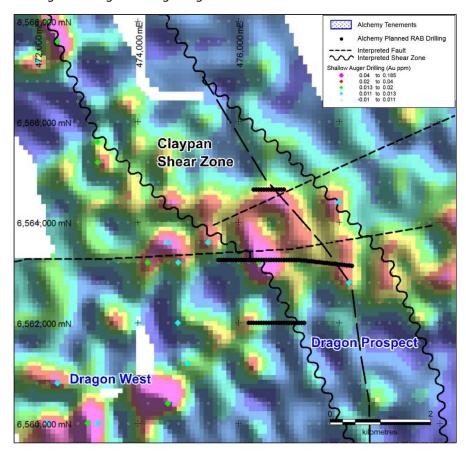
The Program of Work (PoW), Native Title ground clearance, and clearing of drill lines has been completed. Kennedy Drilling of Kalgoorlie has been awarded the drilling contract with the program due to start early in February. The program should be completed in 3 weeks, with final results expected before the end of March.



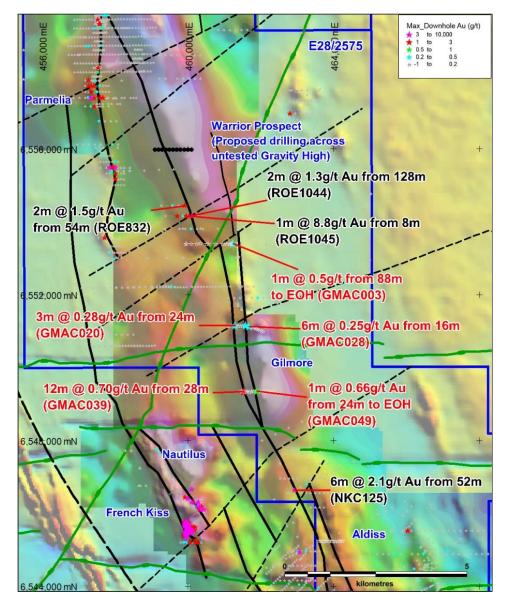
**Figure 4**: Karonie Project proposed RAB drill lines (within red circles), previous drilling maximum downhole gold (Au g/t), Alchemy and Breaker Resources tenement outlines, and relevant prospects over regional transparent Government geology on regional aeromagnetic image.



**Figure 5**: Manhattan Prospect planned RAB drill lines (black dots), previous auger drilling, and interpreted Claypan Shear Zone over gold in auger drilling image.



**Figure 6:** Dragon Prospect planned RAB drill lines (black dots), previous auger drilling, and interpreted Claypan Shear Zone over gold in auger drilling image.

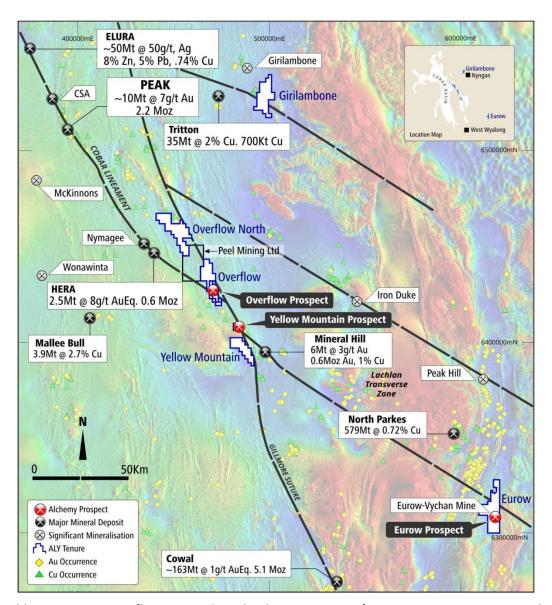


**Figure 7:** Warrior Prospect planned RAB drilling (black dots), recent ALY Aircore drilling results (red text), previous drilling maximum downhole gold results, relevant historic drilling results (black text), prospects, and interpreted major structures over combined gravity and TMI aeromagnetic imagery. (Refer to Alchemy Resources ASX Announcement dated 30 October 2017).

Results for all Gilmore and Aldiss aircore drilling one metre re-sampling of all >0.1g/t Au composite samples have been received. There were no significant differences between 1m and 4m composite results. Follow-up RC drilling is planned for later in the year.

# **Lachlan / Cobar Basin Projects (NSW)** (Alchemy earning up to 80%)

The Lachlan / Cobar Basin Projects consist of the Overflow Gold-Base Metal Project, the Eurow Copper-Gold Project and the Girilambone Copper Project each containing multiple gold and/or base metal targets, including drill-ready targets at Overflow and Yellow Mountain. The projects, which are a joint venture with Heron Resources (ASX: HRR), are proximal to high profile mining centres in the central Lachlan Fold Belt, including Hera/Nymagee (Aurelia Metals Ltd), Mallee Bull (Peel Mining Ltd), Tritton (Aeris Resources Ltd) and the Parkes mining centre (*Figure 8*).



**Figure 8**: Lachlan projects – Overflow, Eurow & Girilambone – Farm-in / Joint Venture Agreement with Heron Resources.

#### Overflow Gold-Base Metal Project (285km<sup>2</sup>)

A Native Title Heritage Agreement has now been received by the Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan Aboriginal People and is currently being reviewed by Alchemy in order to access Crown Land immediately south and along strike of the Overflow Prospect. The 2 month negotiation period ends on 6 March and if the agreement has not been reached by that date arbitration can be sought. As soon as an Agreement has been signed the planned ground EM survey over the strong airborne EM conductivity anomaly at the Overflow Prospect will commence.

RC drilling at the Black Range Tank Gossan VTEM / surface EM anomaly and coincident Au-Cu-Pb-Zn-Ag-in-soil anomaly is not impacted by Native Title and will be conducted as soon as approvals and drilling preparations have been completed. This is likely to commence late in the first quarter of 2018.

A three year renewal for EL8267 was granted during the quarter.

### Yellow Mountain Copper-Gold Project (93km²)

Historical soil data (1000 samples) from the Quarry Hill and Rosedale prospects was compiled during the quarter. The data included 16 gold values >100ppb Au to a maximum of 0.29g/t Au, and 16 copper values >100ppm Cu to a maximum of 1850ppm Cu. Results show strong gold-in-soil anomalism over Quarry Hill, however copper anomalism is strongest at Rosedale (*Figure 9*). Historic significant drill intercepts at Rosedale, including 24m @ 2.51g/t Au from 4m, and 6m @ 3.1g/t Au from 5m (*refer to Alchemy investor presentation dated 14 Feb 2017*), are open down plunge to the south-west and warrant follow-up RC drilling.

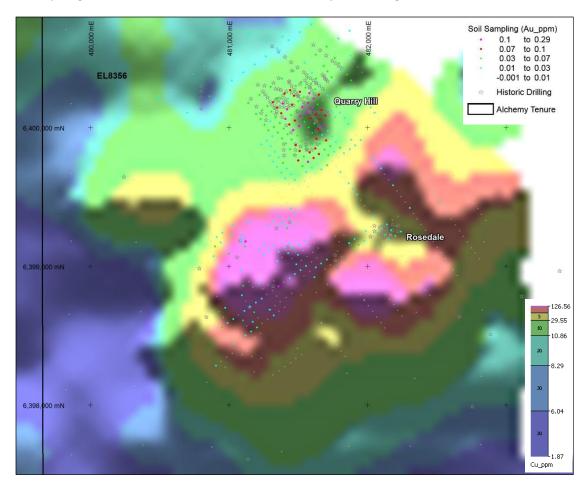


Figure 9: Yellow Mountain Project -soil sampling results (Au ppm) over copper in soil imagery.

#### Eurow Copper-Gold Project (167km²)

Wide spaced soil sampling (500m x 500m) was completed over residual soils coinciding with Ordovician and or Silurian aged rocks during the quarter. Results included a maximum of 15ppb Au and 66ppm Cu from a sample collected 2.9km NE of the Cookamidgera manganese mine (*Figure 10*). Anomalous Cu and Au in soils (striking NNE-SSW parallel with regional lithological trends) was also identified immediately north of Cookamidgera (*Figure 10*). Analysis of the copper and gold results showed a very high correlation between the two elements (0.66 – Pearson correlation index). Infill soil sampling will be required around the anomalous samples. Interestingly only low Cu and Au results were returned from the Eurow Mine area (*Figure 10*).

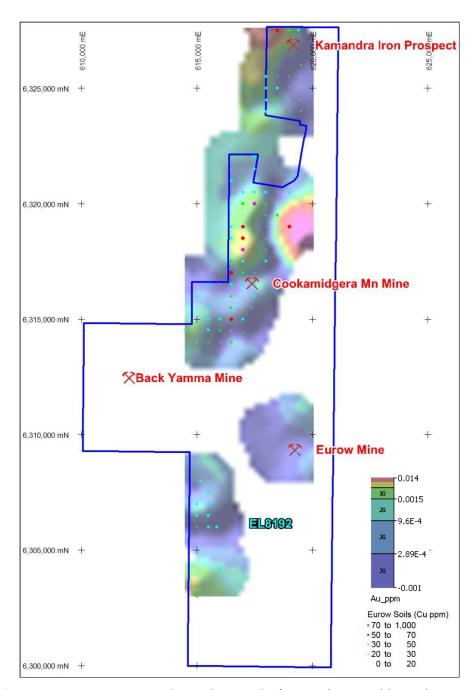
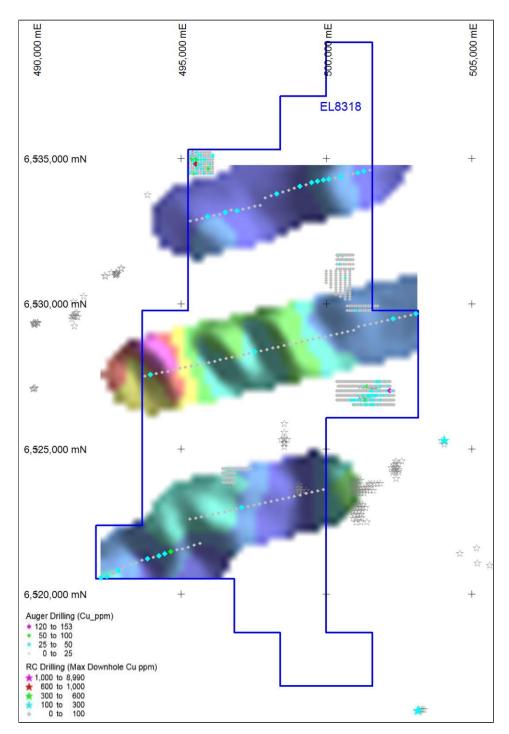


Figure 10: Eurow Project –soil sampling results (Cu ppm) over gold in soil imagery.

#### Girilambone Copper Project (129km²)

Assays from the wide spaced auger drilling (200m x 2km) completed across the Girilambone Project during the last quarter returned only weakly anomalous Cu, Pb, Zn, Au, As, and Sb at the NE and SW ends of the drill lines. The Cu:Sc ratio image derived from the results (*Figure 11*), used to distinguish Cu mineralisation from rock types naturally elevated in copper, shows Cu anomalism possibly related to mineralisation at the western end of the central line. Infill geochemistry around this area may be warranted.



**Figure 11**: Girilambone Project –auger drilling results (Cu ppm), all previous drilling (RC and auger) over Cu:Sc ratio image.

## **Bryah Basin Project (WA)** (Alchemy 80-100%)

#### **Base Metals Exploration** (IGO earning up to 80%)

Leading Australian base metal and gold producer IGO is exploring and earning a Joint Venture interest in the whole and part tenements that cover the base metal prospective area of the Bryah Basin Project ("IGO JV") (Figure 12). Under the terms of the IGO JV, IGO can earn up to 80% in Alchemy's interests (excluding iron ore rights) through Earn-In Expenditure of \$6M within five years, with Alchemy free-carried on further exploration to

completion of a Pre-Feasibility Study and then carried on an interest-free deferred basis for a further \$5M of Definitive Feasibility Study expenditure. Total expenditure by IGO to the end of December 2017 is approximately \$3.8M.

An interpretation of the Neptune North, Magnus West, and Central Bore moving loop TEM survey was completed during the quarter. The MLTEM data was determined to be of reasonable quality and the survey identified numerous conductors, many of which are strike extensive and may relate to stratigraphy. Further modelling of the various EM conductors is warranted to better determine their nature and whether any can be related to VHMS-style mineralisation.

Unfortunately, despite negotiating in good faith since October 2015, IGO is yet to reach agreement with the Jidi Jidi Aboriginal Corporation (JJAC) regarding formal Survey Terms, as required in the NWN Heritage Agreement executed with the JJAC on 5 March 2009.

#### **Gold Exploration** (Billabong Gold earning up to 80%)

Exploration of Alchemy's tenements that cover the gold prospective part of the Bryah Basin Project (*Figure 12*) continued under a farm-in and joint venture arrangement with Billabong Gold Pty Ltd, a subsidiary of Superior Gold Inc (TSX-V: **SGI**). Under the terms of the Billabong Gold JV, up to 80% in Alchemy's interests in the gold prospective tenements can be earned through earn-in exploration expenditure of \$1.2M within three years. Upon fulfilment of the earn-in expenditure, Alchemy's interest is carried on an interest-free deferred basis to production, with Alchemy to repay the deferred amount from 50% of its share of free cash flow from production following commencement of mining. Expenditure to date by Billabong Gold (and its predecessors) totals \$1.11M.

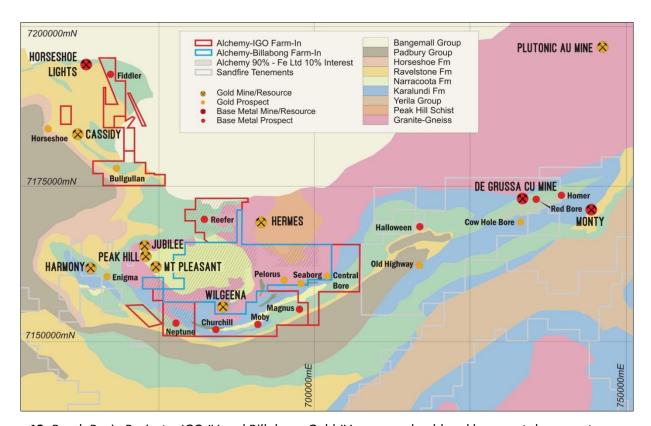


Figure 12: Bryah Basin Project – IGO JV and Billabong Gold JV areas and gold and base metal prospects.

The Billabong Gold JV currently has a JORC 2004 Indicated Resource of 87,373 ounces of gold (1.36Mt @ 1.99g/t Au) at the Wilgeena Prospect. The mineralisation is open at depth and has excellent potential for further drilling to expand the area of gold mineralisation and add to the known resource.

No on-ground exploration activity was conducted on the Joint Venture tenements during the period, however previously un-cut core from a geotechnical diamond hole drilled at the Wilgeena prospect in 2011 (WGDC006) was discovered, sampled and submitted to ALS Laboratory in Perth for gold analysis. Assays are pending. Specific gravity measurements were taken throughout the length of the hole for input into a JORC 2012 updated resource for the Wilgeena gold deposit. The resource update has commenced but is yet to be finalised.

Data interpretation and target generation work on the multi-element assay results for 1,320 pulps obtained from shallow RAB drilling drilled across the central and eastern project areas is ongoing.

Work proposed by Billabong Gold for the March 2018 quarter includes additional interpretation of the RAB drilling pulp multi-element geochemistry, review of the Wilgeena resource, drill planning for both the Wilgeena prospect and for the wider area, and follow-up on targets identified from the 2017 geophysical and geological review.

# Corporate

At 31 December 2017, the Company held a cash balance of \$1.41M.

Please direct enquiries to:

Mr Leigh Ryan – Managing Director

Telephone: +61 8 9481 4400 Email: Leigh@alchemyresources.com.au

# APPENDIX 1 Schedule of Mining Tenements as at 31 December 2017

State	Status	Interest start Qtr	Interest end Qtr	Co-holder	Notes
		-	-		
WA	Granted	80%	80%	Jackson Minerals Pty Ltd	1, 2, 3
WA	Granted	80%	80%	Jackson Minerals Pty Ltd	1, 2, 3
WA	Granted	80%	80%	Jackson Minerals Pty Ltd	1, 2
WA	Renewal Lodged	100%	100%		2, 4, 5
WA	Renewal Lodged	80%	80%	Jackson Minerals Pty Ltd	1, 2, 3
WA	Granted	100%	100%		2, 4
WA	Granted	100%	100%		2
WA	Granted	100%	100%		4
WA	Granted	100%	100%		2, 7
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2, 6
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2, 6
WA	Granted	100%	100%		2
WA	Granted	100%	100%		2
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		4, 6
WA	Granted	100%	100%		2, 4, 6
WA	Granted	100%	100%		2, 6
WA	Granted	100%	100%		4, 6
WA	Amalg. Appl.	0%	0%		4, 6
WA	Amalg. Appl.	0%	0%		2, 6
WA			0%		2,6
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WA	Appl. Appl.				
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Project/Tenement	State	Status	Interest start Qtr	Interest end Qtr	Co-holder	Notes
Karonie Project						
E28/2575	WA	Granted	100%	100%		7
E28/2576	WA	Granted	100%	100%		7
E28/2601	WA	Granted	100%	100%		7
E28/2619	WA	Granted	100%	100%		7
E28/2643	WA	Granted	100%	100%		7
E28/2657	WA	Granted	100%	100%		7
E28/2667	WA	Granted	100%	100%		7
E28/2668	WA	Granted	100%	100%		7
E28/2681	WA	Application	-	-		7
Lachlan Projects						
EL5878 - Overflow	NSW	Granted	0%	0%	ALY earning up to 80%	8
EL7941 - Overflow	NSW	Granted	0%	0%	ALY earning up to 80%	8
EL8267 – Overflow Nth	NSW	Granted	0%	0%	ALY earning up to 80%	8
EL8356 – Yellow Mtn	NSW	Granted	0%	0%	ALY earning up to 80%	8
EL8192 - Eurow	NSW	Granted	0%	0%	ALY earning up to 80%	8
EL8318 - Girilambone	NSW	Granted	0%	0%	ALY earning up to 80%	8

#### Notes:

- 1. Jackson Minerals Pty Ltd, a subsidiary of Fe Ltd (ASX: FEL), retains a 20% interest free-carried to a decision to mine.
- 2. Independence Group NL (ASX: IGO) has a right to explore and earn a 70-80% interest (excludes iron ore) in whole or part tenements by sole funding a total of \$6,000,000 of exploration expenditure, with Alchemy free-carried up to completion of a pre-feasibility study.
- 3. Billabong Gold Pty Ltd has a right to explore and earn a 70% interest in whole or part tenement by sole funding a total \$1,200,000 on exploration expenditure over tenements or parts of tenements marked (3) & (4).
- 4. Billabong Gold Pty Ltd has a right to explore and earn an 80% interest in whole or part tenement by sole funding a total \$1,200,000 on exploration expenditure over tenements or parts of tenements marked (3) & (4).
- 5. PepinNini Robinson Range Pty Ltd retains a 1% NSR on iron ore.
- 6. 100% minerals rights for all minerals, excluding iron ore; Carey Mining Iron Ore JV Alchemy Resources 50%, Carey Mining 50% iron ore.
- 7. Goldtribe Corporation Pty Ltd, a subsidiary of Alchemy Resources Ltd, has 100% interest in the tenement.
- 8. Alchemy Resources (NSW) Pty Ltd, a subsidiary of Alchemy Resources Ltd, has a right to explore and earn up to an 80% interest in tenements by sole funding a total of \$2,000,000 on exploration expenditure.

The information in this report that relates to Exploration Results is based on information compiled by Mr Leigh Ryan, who is the Managing Director of Alchemy Resources Limited. Mr Ryan is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Ryan consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at the Wilgeena Gold Deposit is based on information compiled by Simon Coxhell, who is an employee of CoxsRocks Pty Ltd, a consultant to Alchemy Resources Limited. Mr Coxhell is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2004'). Mr Coxhell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Alchemy confirms that the Indicated Mineral Resource at the Wilgeena Gold Deposit were prepared and first disclosed under JORC Code 2004. These have not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since last reported on 22 October 2012. Alchemy is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.