

25 July 2018

## Quarterly Activities Report to 30 June 2018

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### Dubbo Project (DP)

- The update on the engineering, development and financials was released. Key points include that for circumstances where the Project is successfully funded and developed:
  - The Project could generate A\$4.7 billion free cash flow at the 20-year base case, with a forecast capital cost of A\$1.3 billion base case build or A\$808 million for the stage 1 build.
  - The NPV / IRR is estimated to be between A\$1,297 / 17.5% and A\$909 / 16.1%, depending on whether capital is managed to build the Project as a single 1Mtpa plant or in two stages, with both alternatives confirmed viable.

### Tomingley Gold Operations (TGO)

- Excellent operational performance saw guidance for the full year met with 78,533 ounces of gold produced at an all in sustaining cost (AISC) of A\$1,002 per ounce.
- Continued strong site operating cash flow for the quarter at A\$16.0M (full year A\$60.1M).
- Quarter Results
  - Gold production was in line with forecast at 19,135 ounces.
  - Site operating cash costs were A\$754/ounce with AISC of A\$1,017/ounce.
  - Gold sales were 19,163 ounces for revenue of A\$33.2M at an average price of A\$1,735/ounce.
  - 4,000 ounces of open forward contracts existed at 30 June 2018 at average forward price of A\$1,750/ounce.
- Due to the completion of open cut mining, guidance for FY19 is production of 30,000 to 35,000 ounces of gold at an AISC of A\$1,300 to A\$1,400 per ounce. Included in this is budgeted expenditure of \$5M on rehabilitation for which provision in Alkane's accounts has already been made.
- Planning for underground operations continues with appointment of a project manager to confirm the development economics and prepare a detailed execution plan for an investment decision by December 2018.

### Corporate

- The Group's cash and bullion position totalled A\$80.0M, with A\$72.0M in cash and bullion on hand at fair value of A\$8.0M, an increase of A\$11.0M from the previous quarter.

### Exploration

- Assays at the Roswell prospect, slightly less than 3km south of TGO, have confirmed the discovery of a zone of broad gold mineralisation with high-grade gold ore shoots beneath 30m of cover, with the following intersection:

RWRC003	31 metres grading 0.93g/t Au from 39 metres;
Incl	1 metre grading 3.28g/t Au from 46 metres;
And	16 metres grading 1.90g/t Au from 76 metres;
Incl	7 metres grading 3.43g/t Au from 78 metres.



## **DUBBO PROJECT (DP) – zirconium, hafnium, niobium, yttrium, rare earth elements**

*Australian Strategic Materials Ltd (ASM) 100%*

The Dubbo Project remains construction ready, with the mineral deposit and surrounding land wholly owned, all material State and Federal approvals in place, an established flowsheet and a solid business case.

The modularised build study is complete and an update of the engineering, development and financials was released in the **ASX Announcement of 4 June 2018** and the Company confirms that the material assumptions underpinning the forecast financial information in that announcement continue to apply and have not changed. The update details that in circumstances where the Project is successfully funded and developed:

- It has an 18.90Mt ore reserve and 75.18Mt resource, giving an estimated 20-year project life (at a 1Mtpa plant feed rate) and significant extension and expansion potential.
- The Project could potentially be successfully implemented as a single 1Mtpa plant (base case) or via two stages of development involving two production trains, each of 500,000 tonnes per annum (500ktpa) plant feed rate capacity (staged build). The final decision is dependent on customer demand, securing adequate funding for development of the Project and strategic partner requirements. Crucially, the studies also demonstrate the Project's capacity to grow beyond 1Mtpa through the addition of more production trains.
- It is a technically sound and financially viable Project generating a potential A\$4.7 billion in undiscounted free cash flow (base case, pre-tax) over an initial 20-year project life.
- A forecast capital cost (base case) of A\$1,297M with an additional A\$124M of sustaining capital over the 20 years, giving an estimated Net Present Value (NPV 8%, pre-tax) of A\$1,236M and estimated 17.5% Internal Rate of Return (project IRR, pre-tax).
- Potential undiscounted free cash flow (staged build, pre-tax) in excess of A\$3.9 billion, forecast capital cost (staged build) of A\$808M for stage 1, A\$692M for stage 2 (with opportunities to stage further) and an additional A\$39M of sustaining capital over the 20 years, giving an estimated Net Present Value (NPV 8%, pre-tax) of A\$909M and an estimated 16.1% Internal Rate of Return (project IRR, pre-tax).

### ***Financing***

Australian Strategic Materials (ASM) continues to work towards securing finance for the Dubbo Project. ASM's key focus is on securing offtake contracts for its products and a resultant strategic investor in the project. There continues to be pressure on both prices and supply, as discussed in *Product Marketing* below.

### ***Engineering***

ASM continues to work with engineers to detail the staged execution model for the Project so that packages can be rapidly let on securing funding. This is expected to cost ~A\$3M over the remainder of this calendar year.

### ***Product Development***

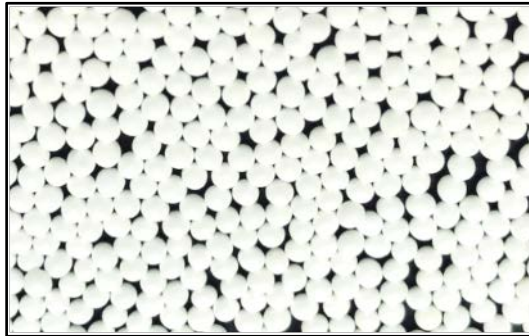
#### ***Zirconium***

Samples of high-purity zirconium oxychloride (ZOC) and zirconia produced at the ANSTO demonstration pilot plant were dispatched to leading companies as part of ongoing offtake discussions. The zirconia samples also included high-value hafnium-free zirconia, with hafnium levels less than 10 ppm; these



purities are suitable for producing zirconium metal for the nuclear industry. ASM's proprietary process to separate hafnium from zirconium has allowed development of this low-hafnium zirconia product, paving the way for its sale as a separate high-value zirconia product. The process also provides an opportunity for ASM to produce even higher-valued zirconium metal. These products are being actively investigated in addition to the existing suite of zirconium products already planned for the Dubbo Project.

Yttria-stabilised zirconia (YSZ) milling media have been produced at a laboratory scale in different sizes and compositions, with 2mm diameter media shown below. YSZ products are one of the key development priorities for the Dubbo Project, as they will enable full value capture of yttrium oxide produced by the Project in a range of higher-value YSZ products.



### *Hafnium*

Following the successful development of ultra-high purity hafnium oxide announced earlier this year (**ASX Announcement of 17 January 2018**), ASM has been investigating opportunities to convert hafnium oxide to hafnium metal. Hafnium demand is mostly for hafnium metal containing differing levels of zirconium, while hafnium oxides and chemicals are other important but smaller markets.

### ***Product Marketing***

Trade tensions between the US and China have heightened concerns over China's monopoly on rare earths and zirconium chemicals. China's efforts to reduce pollution and shut down non-complying or illegal operations continued and the US proposed 10% tariffs on rare earths and zirconium products that would be passed on to US consumers. The need for alternative western supplies of these technology metals is central to Alkane's discussions with companies regarding offtake and/or investment in the Dubbo Project. Most companies understand the need for action due to growing supply uncertainties, plus the clear trends towards higher prices, and appreciate the importance of the Dubbo Project to provide alternative supply. This has caused a shift in mindset and urgency to address China's global 90+% monopoly of rare earths and zirconium supply. Leading international companies are showing increased interest in securing non-Chinese magnet rare earths and zirconium materials to decrease supply chain risks.

### *Zirconium*

Zirconium chemicals prices were mostly flat during the second quarter, with weaker export prices due to depreciation of China's currency against the United States dollar. ZOC prices have settled at around RMB 17,000/Mt (US\$2,550/Mt), while fused zirconia prices now sit at ~US\$5,100/Mt. A continued shortage of zircon is set to further increase downstream zirconium prices, with zircon price increases expected in the second half of 2018. Premium zircon grades (66% ZrO<sub>2</sub>+HfO<sub>2</sub>) from a number of producers are predicted to increase by US\$100-175/Mt to around US\$1,550-1,650/Mt, CIF China. The price increases are expected to increase zirconium prices by US\$150-250/Mt (100% ZrO<sub>2</sub>).

Yttria-stabilised zirconia (YSZ) has been the material of choice for solid oxide fuel cells for several decades, but a promising new application is being developed for green production processes to produce different



industrial and technology metals. YSZ has emerged as the front runner for solid oxide membranes (SOM) used in the conversion of oxides to metal by electrolysis processes, where greenhouse gases can be significantly reduced or eliminated altogether. In some cases, the only by-product is oxygen, which can be recovered, while providing a process cost credit.

Key industrial and aerospace metals produced using electrolysis include aluminium, titanium and magnesium, as well as magnet rare earths, zirconium and hafnium produced by the Dubbo Project. There are a number of different processes being developed independently, but most of them use SOMs based on YSZ. In addition to yttria demand for YSZ, it is also added to minimise the diffusion of yttria from YSZ during electrolysis to extend the life of the electrolyte. Commercialisation of SOM technology using YSZ materials for any of the major metals would create a new level of demand for both yttrium oxide and zirconia which is yet to be quantified. China currently dominates over 95% of zirconium and yttrium supply, so the Dubbo Project will be one of the few non-Chinese sources of supply.

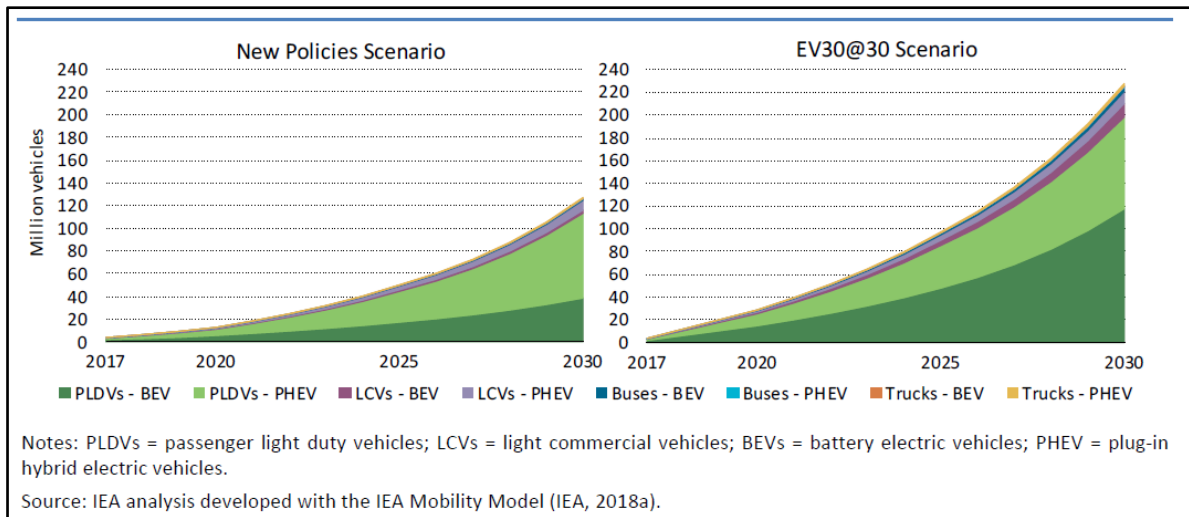
As an example of the trend towards SOM technology using YSZ materials, in May Alcoa and Rio Tinto announced the world's first carbon-free aluminium smelting process, which produces oxygen as a by-product and eliminates all direct greenhouse gas emissions from the traditional smelting process. A new joint venture company, named Elysis, has been formed for larger-scale development and commercialisation of the SOM technology based process, with Alcoa, Rio Tinto, the Government of Canada, the Government of Quebec, and Apple agreeing to provide a combined investment of CAD\$188M.

Use of the Elysis technology could eliminate 6.5 million tonnes of greenhouse gas emissions in Canada alone, equivalent to removing approximately 1.8 million cars off the road. The USGS estimates Canada produced approximately 3.2 million tonnes of aluminium in 2017, while annual global production was over 60 million tonnes.

#### *Rare Earths*

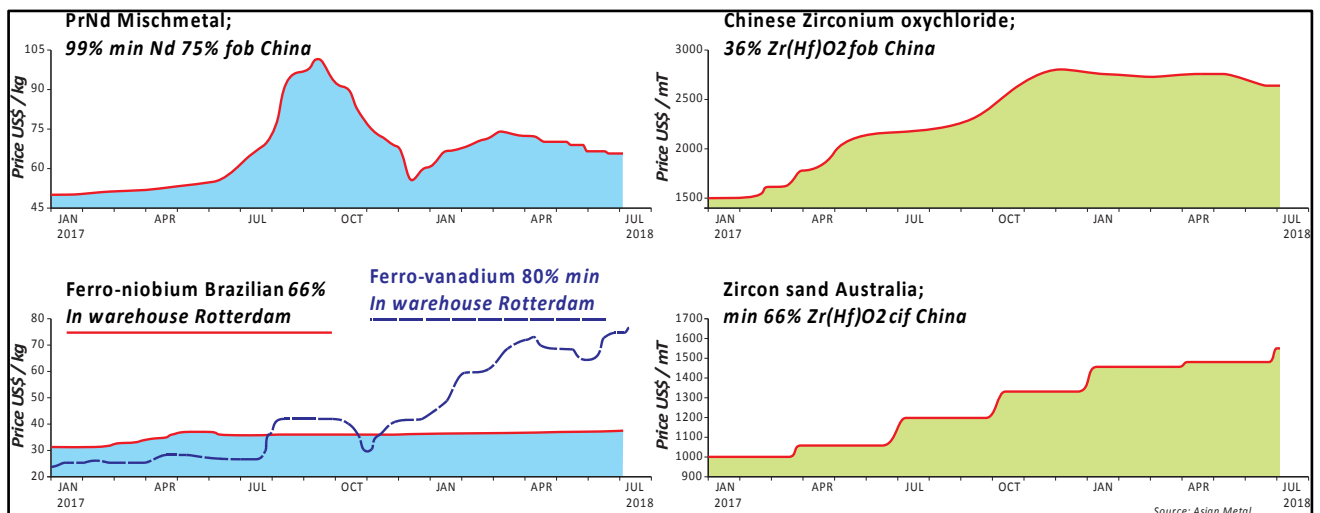
Prices for the important magnet rare earths, Praseodymium/Neodymium (PrNd), have continued to strengthen in the past quarter, with current export prices at ~US\$64/kg, FOB China. Increased efforts by Chinese authorities to stamp out illegal mining and processing of rare earths continues across the country. The 40% increase in production quotas for the first half year is widely seen as legitimising previous illegal activity, with the benefit of increased mining and tax revenues, rather than an increase in actual supply.

The latest International Energy Agency (IEA) forecast sees significant growth in the market for electric vehicles (EVs) up to 2030, as shown below. The New Policies Scenario considers existing and announced policies and forecasts EVs will reach 125 million on the road by 2030. However, this could be as high as 220 million by 2030 if policy ambitions increase to meet climate and other sustainability targets. This is a significant increase on the IEA's 2016 outlook, which forecast a global stock of between 100-140 million EVs by 2030. Assuming 1kg of PrNd oxide per electric vehicle, the 2030 forecast will require an additional 125,000 to 220,000t of PrNd oxide for new demand that does not exist today. This is an average increase in demand of 9,000 to 17,000tpa over this 13-year period, requiring multiple new projects and brownfield expansions to occur. This forecast excludes other transport modes such as trucks, buses, and bicycles, which will further increase demand for magnet rare earths, plus growth in demand for existing applications that underpin current demand. With this outlook, China will increasingly need all of its rare earth production, plus imported rare earths, to meet its domestic demand. China's rare earths monopoly should increasingly result in magnets being exported as part of finished products, rather than the oxides, metals, magnets, or electric motors that rest-of-world producers are accustomed to purchasing today. Given the price sensitivity of rare earths in EVs is low, but essential, rest-of-world supply will become critical for these essential elements.



### Niobium

Ferro-niobium prices continue to trend higher in response to continued strength in the ferro-vanadium market. The graphic below shows ferro-vanadium prices relative to ferro-niobium, and how they have more than doubled since the end of last year. Current ferro-niobium prices are around US\$37.0/kg in warehouse Rotterdam and look set to move higher.



### Hafnium

Hafnium metal prices are approximately US\$775/kg (min 99% Hf max 1% Zr) in warehouse Rotterdam, with demand currently matching supply. However, there are multiple applications under development that could increase demand significantly for both hafnium oxide and metal.



## **TOMINGLEY GOLD OPERATIONS (TGO)**

*Tomingley Gold Operations Pty Ltd 100%*

Tomingley Gold Operations is based on four gold deposits (Wyoming One, Wyoming Three, Caloma and Caloma Two) located about 14 kilometres north of the Company's inactive Peak Hill Gold Mine, and approximately 50 kilometres southwest of Dubbo.

### **Operations**

TGO continues to perform well, with one fleet operating between the Caloma Two and Wyoming One pits. Open pit mining remains on schedule to finish in this coming quarter.

A total of 19,135 ounces of gold were poured for the quarter, taking full year production to 78,533 ounces, which met guidance. The site cash costs for the quarter were A\$754/oz (full year A\$767/oz) with an all in sustaining cost (AISC) of A\$1,017/oz (full year A\$1,002/oz).

Guidance for FY19 is production of 30,000 to 35,000 ounces of gold at an AISC of A\$1,300 to A\$1,400 per ounce. The reduction in production is due to the cessation of mining in the coming quarter, and subsequent processing of stockpiles. The increase in AISC is due to the higher proportion of fixed costs during this period, particularly in processing, as well as the realisation of previously amortised rehabilitation (this includes budgeted expenditure of \$5M on rehabilitation for which provision in Alkane's accounts has already been made).

Gold sold for the quarter was 19,163 ounces (full year 75,507 ounces) at an average sales price of A\$1,735/oz (full year A\$1,706/oz), generating revenue of A\$33.2M (full year A\$128.8M). Bullion remained constant at 4,836 ounces (fair value of A\$8.0M at quarter end). Run of mine ore stockpiles increased during the quarter by 193,041 tonnes, with this consisting of predominately medium-grade ore. (Refer to table on next page.)

Site operating cash flow<sup>1</sup> was A\$16.0M (full year A\$60.1M). The hedge book at quarter end consisted of 4,000 ounces of forward contracts at an average forward price of A\$1,750/oz.

### **Underground Mining Study**

The revamped Mineral Resources and Ore Reserves were completed during the quarter and full details were given in the **ASX Announcement of 4 June 2018** and **ASX Supplementary Announcement of 12 June 2018**. (Also see tables following.)

A project manager has been appointed to confirm the development economics and prepare a detailed execution plan for an investment decision by December 2018. The current plan being evaluated shows portal development occurring in the March quarter of FY19.

<sup>1</sup>Operating cashflow = As prescribed by AASB 107 Statement of Cashflows where exploration outflows and development outflows are grouped under investing cashflows. Note that the Quarterly Cashflow (Appendix 5B) includes those outflows under operating cashflows.





## TGO FY 2018 Quarterly and Annual Production Figures

TGO Production		FY 2017	Sep Quarter 2017	Dec Quarter 2017	Mar Quarter 2018	Jun Quarter 2018	FY 2018
Waste mined	BCM	7,679,110	1,807,545	507,498	470,598	379,733	3,165,414
Ore mined	Tonnes	1,222,868	289,627	330,613	505,840	463,732	1,589,811
Strip Ratio	Ratio	16.6	16.0	4.1	2.5	2.3	5.4
Grade	g/t	2.08	2.55	1.96	1.80	1.87	1.99
Ore milled	Tonnes	1,087,983	281,191	264,416	272,125	274,871	1,092,602
Head grade	g/t	2.15	2.80	2.21	2.41	2.23	2.42
Recovery	%	91.5	92.7	92.9	91.2	90.5	91.9
Gold poured	Ounces	68,836	24,122	16,641	18,635	19,135	78,533
<b>Revenue Summary</b>							
Gold sold	Ounces	69,929	21,610	13,184	21,550	19,163	75,507
Average price realised	A\$/oz	1,678	1,685	1,694	1,708	1,735	1,706
Gold revenue	A\$M	117.3	36.4	22.3	36.8	33.2	128.8
<b>Cost Summary</b>							
Mining	A\$/oz	748	501	503	436	455	475
Processing	A\$/oz	295	208	260	240	248	236
Site Support	A\$/oz	84	56	78	42	51	56
C1 Site Cash Cost	A\$/oz	1,127	766	840	718	754	767
Royalties	A\$/oz	49	54	51	48	54	52
Sustaining capital	A\$/oz	47	34	27	27	37	32
Rehabilitation	A\$/oz	71	97	99	140	136	117
Corporate	A\$/oz	41	31	41	29	36	34
AISC <sup>2</sup>	A\$/oz	1,335	982	1,058	962	1,017	1,002
Bullion on hand	Ounces	1,814	4,303	7,756	4,870	4,836	4,836
<b>Stockpiles</b>							
Ore for immediate milling	Tonnes	761,829	770,136	829,356	1,063,782	1,256,823	1,256,823
Grade	g/t	0.95	0.86	0.87	0.91	0.97	0.97
Contained gold	Ounces	23,300	21,086	23,195	31,140	39,338	39,338

<sup>2</sup>AISC = All in Sustaining Cost comprises all site operating costs, royalties, mine exploration, sustaining capex, mine development and an allocation of corporate costs, calculated on the basis of ounces produced. AISC does not include share based payments or net realisable value provision for ore inventory.

## TGO Underground Mineral Resources at 2.5g/t Au cut off

TOMINGLEY GOLD OPERATIONS UNDERGROUND RESOURCES (May 2018)									
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold (Koz)
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	
Underground Resources (cut off 2.50g/t Au)									
Wyoming One	0	0.0	866	4.0	110	3.2	976	3.9	122
Wyoming Three	10	3.6	6	3.1	4	3.1	20	3.4	2
Caloma	82	3.8	35	3.4	47	3.0	164	3.5	18
Caloma Two	-	0.0	218	3.6	76	3.2	294	3.5	33
<b>Sub Total</b>	<b>92</b>	<b>3.6</b>	<b>1,125</b>	<b>3.9</b>	<b>237</b>	<b>3.2</b>	<b>1,454</b>	<b>3.7</b>	<b>175</b>
<b>TOTAL</b>	<b>92</b>	<b>3.6</b>	<b>1,125</b>	<b>3.9</b>	<b>237</b>	<b>3.2</b>	<b>1,454</b>	<b>3.7</b>	<b>175</b>

Apparent arithmetic inconsistencies are due to rounding & Wyoming Three remains unchanged from the 2015 study (full details in ASX Announcement of 4 June 2018 and ASX Supplementary Announcement of 12 June 2018)



## TGO Underground Ore Reserves at 2.4g/t Au cut off and gold price of A\$1,350/oz

UNDERGROUND ORE RESERVES (May 2017)			
SOURCE	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)
Proven	45	2.7	4
Probable	688	3.2	70
<b>TOTAL</b>	<b>732</b>	<b>3.1</b>	<b>74</b>

Apparent arithmetic inconsistencies are due to rounding (full details in ASX Announcement of 4 June 2018 and ASX Supplementary Announcement of 12 June 2018)

### Planned Material for Mining

The financial evaluation of the potential underground mining operation included the creation of a mine plan. The intention is to mine 1.24Mt of ore with grading 2.7g/t gold, for a resultant 108,000 ounces of contained gold.

The division of the material contained in the mine plan by resource classification is shown below.

TOMINGLEY GOLD OPERATIONS UNDERGROUND PLANNED MINING MATERIAL (MAY 2018)									
Deposit	Measured		Indicated		Inferred		Total		Total Gold (koz)
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	
	(kt)	(g/t Au)	(kt)	(g/t Au)	(kt)	(g/t Au)	(kt)	(g/t Au)	
Wyoming One			939	2.7	3	1.3	943	2.7	81
Caloma	65	2.6	17	2.6	12	2.3	94	2.5	8
Caloma Two			153	3.2	52	2	206	2.9	19
<b>Total</b>	<b>65</b>	<b>2.6</b>	<b>1109</b>	<b>2.8</b>	<b>67</b>	<b>2.0</b>	<b>1243</b>	<b>2.7</b>	<b>108</b>

Apparent arithmetic inconsistencies are due to rounding (full details in ASX Announcement of 4 June 2018 and ASX Supplementary Announcement of 12 June 2018)

The decision to include Inferred Resources in the mine plan was supported by the operating experience and reconciliations in the existing open cut pits. There is a lower 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/mine plan itself will be realised.

Note the key difference between the material included in the mine plan and the material included in the ore reserve is that the mine plan uses a gold price of A\$1,600 per ounce and the reserve uses a gold price of A\$1,350 per ounce.

### Regional Exploration

As part of the ongoing regional exploration program to define additional gold resources for the mining operation at Tomingley, assay results were received from Reverse Circulation (RC) drilling comprising 13 drill holes totalling 2,514m at Roswell, Myalls United and Glen Isla prospects. Results were detailed in the **ASX Announcement of 11 July 2018**.

The Roswell discovery confirmed the potential within the 8km corridor to the Smiths prospect for a number of TGO style deposits. The geological models for each prospect are being improved to assist further targeting and evaluation for resource potential.





### *Roswell Prospect*

Mineralisation intersected by the 2017 air core drilling program (e.g. MCAC058 – 9m grading 0.88g/t Au at previously termed McLeans South Prospect) at Roswell Prospect was tested by six RC drill holes for 1,326m.

The drilling confirmed strong gold mineralisation, in particular RWRC003. This hole intersected a large zone of quartz veining hosted predominantly in weathered bedrock from the base of alluvium. The mineralisation identified within fresh rock, further down hole, is typical 'Tomingley' style quartz veining and associated sericite-carbonate bleaching alteration, with strong development of pyrite and arsenopyrite hosted within porphyritic volcanics and volcanoclastics. Three metres of puggy clay from 197m has been interpreted as a reverse or thrust fault which offsets stratigraphy and mineralisation. Assays have confirmed the discovery of a zone of broad gold mineralisation with high-grade gold ore shoots beneath 30m of cover, with the following intersections:

**RWRC003 31 metres grading 0.93g/t Au from 39 metres;  
incl 1 metre grading 3.28g/t Au from 46 metres;  
and 16 metres grading 1.90g/t Au from 76 metres;  
incl 7 metres grading 3.43g/t Au from 78 metres.**

This mineralisation is largely open to the north and south with significant but lower-grade gold mineralisation intersected 100m north in hole MCP070:

**MCP070 8 metres grading 0.80g/t Au from 152 metres;  
incl 3 metres grading 1.51g/t Au from 156 metres;  
and 8 metres grading 0.60g/t Au from 183 metres.**

Diamond coring is underway to characterise the geology, alteration and to determine structural controls to the mineralisation. In addition, a 13,000m air core program is underway to infill mineralisation intersected by previous air core traverses to nominal 200m spaced traverses as part of an evaluation exploration program south of Tomingley to determine the resource potential of these mineralised zones.

### *Glen Isla Prospect*

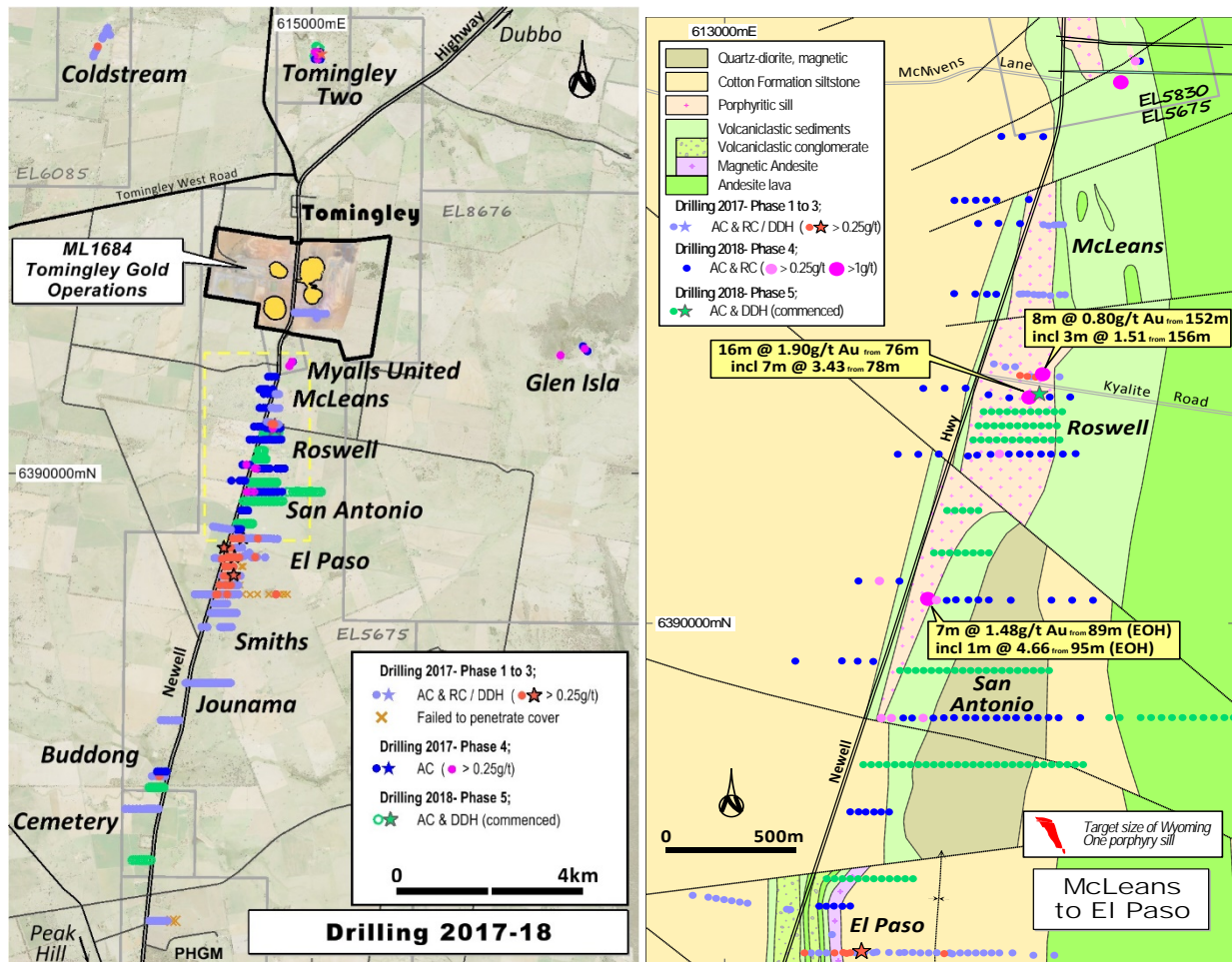
Glen Isla Prospect covers a large low-sulphidation epithermal gold system, which is located 6km east of the TGO. The prospect comprises outcropping and well-developed sinter terracing within a broadly synformal closure of rhyolite – basalt/sediments with historic bulk low-grade gold drill hole intersections. The Devonian-aged Dulladery Volcanics are known to host epithermal gold deposits elsewhere in the region.

Four RC drill holes for a total of 723m were completed, testing gold-arsenic-antimony anomalies from the historic drilling and untested gold-in-soil results. The drilling intersected strong hydrothermal phyllic alteration with up to 5% pyrite mineralisation as disseminations and stringers, hosted in basalt and rhyolite sequences beneath the network of sinters. GIR028 and 30 returned broad low-grade gold intercepts, but more significant results were:

**GIR029 9 metres grading 0.41g/t Au from 48 metres  
GIR031 51 metres grading 0.36g/t Au from 75 metres  
Incl 16 metres grading 0.51g/t Au from 93 metres**



These broad, low-grade gold results, together with the presence of sinters, are typical of an upper section of a fertile gold epithermal system. Further drill testing for deep, high-grade gold feeder or 'bonanza' structures is planned for later in the year. Detailed soil sampling over the Glen Isla prospect and at other regional prospects within the tenement are planned for completion in the next few months.



### Peak Hill Gold Mine (PHGM)

3D modelling of the historic mineralisation drill database continued and an updated Resource model is anticipated in the September 2018 quarter. Core drilling is scheduled to commence in the second half of H1FY18 to both confirm these structures and provide additional information at depth.

**ELSIENORA (gold); ORANGE EAST PROJECT (gold-copper); WELLINGTON (copper-gold); CUDAL (gold-zinc); NORTHERN MOLONG PORPHYRY PROJECT (NMPP); ROCKLEY PROJECT (gold); TRANGIE (nickel-copper +); ARMSTRONGS (gold);** Alkane Resources Ltd 100%.

Activities were limited to data compilation and review, or preparation for field activities.

### LEINSTER REGION JOINT VENTURE (nickel-gold)

Alkane Resources Ltd 19.4% diluting, Australian Nickel Investments Pty Ltd (ANI) 79.6%. Two prospects - **Miranda** and **McDonough Lookout**.

ANI have not advised of any changes at time of release.



## CORPORATE

The Group's cash and bullion position totalled A\$80.0M, with A\$72.0M in cash and bullion on hand at fair value of A\$8.0M, an increase of A\$11.0M from the previous quarter. The Group is debt free.

The Company's Chief Financial Officer, Michael Ball, resigned during the quarter to take up a CFO role with another Australian mining company. Michael has provided excellent guidance and service over his five years with the Company, a period which covered the financing and development of TGO on time and on budget, approval and detailed engineering of the Dubbo Project, as well as re-establishing the Company as an operating entity. We wish Michael all the best in his new role.

The Company has subsequently appointed James Carter as Chief Financial Officer. James is a CPA with over 20 years' experience in the mining industry. His work experience has included involvement with numerous debt and equity capital market transactions, IPOs, tax strategy, M&A and corporate governance, particularly as CFO of ASX200 Straits Resources, a diversified metals group listed on the ASX, and CFO and Company Secretary of SGX listed Straits Asia Resources. James will start with the Company in October after serving his notice from his current employer.

The Company has a strategy of allocating a modest portion of its cash balance towards investments in junior gold mining companies and projects that meet its investment criteria and continued to evaluate projects within the quarter. In general the Company is looking at potential investments that have high exploration potential and/or require near term development funding. The Company is particularly interested in projects that may fit in between the commencement of underground mining at TGO and the potential commencement of production from any of the exploration tenements surrounding TGO, assuming successful resource growth and subsequent development.



### Competent Person

Unless otherwise advised above, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (director of the Company) who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Chalmers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears

### Disclaimer

This report contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

**ABOUT ALKANE - [www.alkane.com.au](http://www.alkane.com.au) - ASX: ALK and OTCQX: ANLKY**

Alkane is a multi-commodity company focused in the Central West region of NSW, Australia. Currently Alkane has two advanced projects - the Tomingley Gold Operations (TGO) and the nearby Dubbo Project (DP). Tomingley commenced production early 2014. Cash flow from TGO has provided the funding to maintain the project development pipeline and has assisted with the pre-construction development of the DP.

The DP is a large in-ground resource of zirconium, hafnium, niobium, yttrium and rare earth elements. As it is an advanced poly-metallic project outside China, it is a potential strategic and independent supply of critical minerals for a range of sustainable technologies and future industries. It has a potential mine life of 75+ years. The DP is development ready, subject to financing, with the mineral deposit and surrounding land acquired and all major State and Federal approvals in place.

Alkane's most advanced gold copper exploration projects are at the 100% Alkane owned Bodangora, Wellington, Rockley and Elsenora prospects. Wellington has a small copper-gold deposit which can be expanded, while at Bodangora a large monzonite intrusive complex has been identified with porphyry style gold copper mineralisation. Gold and base metal mineralisation has been identified at Rockley and Elsenora.

