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**SYRAH UPDATE**

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**About Syrah Resources**

*Syrah Resources Limited (ASX code: SYR) is an Australian-based industrial minerals and technology company. Syrah is currently constructing the Balama graphite project (Balama) in Mozambique, with commissioning scheduled to commence in May 2017. Balama will be the leading global producer of high purity graphite. Balama production is targeted to supply traditional industrial graphite markets and emerging technology markets. Syrah has successfully completed extensive product certification test work with several major battery producers for the use of Balama spherical graphite in the anode of lithium ion batteries.*



## **Forward Looking Statements**

This presentation contains certain statements which may constitute forward-looking statements. Such statements are only predictions and are subject to inherent risks, uncertainties and other factors which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based generally on the Company's beliefs, opinions and estimates as of the dates the forward looking statements that are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Although the Company believes the outcomes expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include licence applications, the development of economic mineral or metal substitutes and general economic, market or business conditions. While, the Company has made every reasonable effort to ensure the veracity of the information presented they cannot expressly guarantee the accuracy and reliability of the estimates, forecasts and conclusions contained herein. Accordingly, the statements in the presentation should be used for general guidance only.



## **MANAGING DIRECTOR AND CEO'S REPORT TO INVESTORS**

Dear Shareholders,

This is the first quarterly report since I was appointed Managing Director and CEO of Syrah Resources Limited (Syrah) during February 2017. Accordingly, I believe it is important to provide shareholders with my observations, strategy and priorities for the Company as an introduction to the March 2017 quarterly report.

Syrah continues to maintain strong momentum in transitioning from project development to operations and commercial execution in the flake concentrate and battery anode material (BAM) markets. The key areas of strategic focus are:

- Construction completion, commissioning and ramp-up at Balama
- Executing proprietary market analysis and implementing the sales and marketing plan
- Executing the BAM Strategy
- Maintaining balance sheet strength
- Executive and professional recruitment.

### **Balama Project**

As advised in the Corporate Presentation (released to the ASX on 30 March 2017), the completion of construction and the commencement of commissioning will run concurrently through the end of Q2 2017 and start of Q3 2017. The Balama construction and operations teams are working to coordinate the transition from commissioning commencement in May, to targeted first production in August 2017. Further detail on construction progress, commissioning and ramp up planning is provided in the Quarterly Activities report.

### **Sales and marketing**

Syrah's sales and marketing strategy is to be the baseload industry supplier for major consumers, diversified across segment and geography. Syrah will provide high quality, consistent, and reliable products, in both the traditional industrial flake and battery anode material markets.

In preparation for the launch of commercial production, a coordinated program of market analysis, market segmentation and product placement, customer engagement and negotiation, and integrated sales and operations planning has been underway.

**Market analysis**

A significant market analysis program has been in place since the commencement of Q4 2016 to optimise sales and marketing efforts, and support Syrah's market entry. Initiated through existing industry analysis channels, Syrah has since extended into proprietary analysis.

The core elements of the market analysis program are:

- Global production analysis
- Cost curve development
- Supply and demand driver modelling
- Integration of forecasts from steel, industrial and battery sector demand to natural flake spherical and synthetic graphite
- Substitution analysis
- Quality differentiation – defining the value-in-use of Syrah materials
- Supply and demand balance assessment and price forecasting

In summary, this work has confirmed that:

- Syrah's reserve and project investment metrics are unparalleled
- Syrah will be first quartile on the natural flake cost curve.
- Syrah flake and fines product characteristics are highly valued
- Price premiums exist for higher grade materials against standard grades
- The demand profile provided by battery anode material growth, and proportional substitution of natural in preference to synthetic graphite is extremely attractive
- Syrah is uniquely placed with first mover advantage, significant capacity, and a high quality, consistent supply to fill the demand/supply gap
- Significant value opportunity exists for entry into the flake market and development of the downstream strategy.

**Market segmentation and product placement planning**

The completion of our initial market analysis program has facilitated:

- Detailed market segmentation
- A clear understanding of value-in-use for Syrah's materials
- Identification of arbitrage opportunities
- Development of a two-year product placement plan.

**Customer engagement**

Sales activity continues to progress very strongly. Sales and pricing mechanisms in both the flake and spherical (Battery Anode Material) markets are bespoke, bilateral and non-transparent. A significant proportion of sales and purchase arrangements contain confidentiality clauses. Customers are protective of sourcing information, maintenance of existing commercial relationships, and product composition which in many cases forms competitive advantage.

Industrial minerals sales contracting is sequential, with most major terms negotiated through preliminary engagement and sample testing, and final commitment in many cases aligned with commercial production. As Syrah is fully funded through Balama's commencement, we will maximise contract values by finalising sales without the need to either provide incentives or advance timing.

The current customer engagement focus is:

- Furthering the excellent technical sample and relationship base built over the past two years
- Implementation and conversion of Statements of Sales Intent (SSI) and Memoranda of Understanding (MOU) to contracts as per customer preference in preparation for the commencement of commercial production
- Continuing detailed commercial negotiations with core customers
- Completion of remaining pre-production samples and planning for production samples where required
- Operationalising existing agreements (working closely with end users) including negotiation of initial pricing and final contract terms, including payment, delivery, and quality specification.

Demand for Syrah's material is extensive. Our product quality, baseload volume, life of asset, and the ability to diversify sourcing is highly attractive to our customer base.

**Integrated sales and operations planning**

A formal integrated sales and operations planning (S&OP) process has been implemented to match production planning with sales demand. During initial ramp-up, the integrated S&OP process will balance:

- Product specification optimisation
- Production sample requirements for final qualification (where required) across the product suite
- Delivery of product into immediate sales for cash flow.

As production stabilises, the S&OP focus will shift to:

- Progressive ramp-up in line with demand
- Product range and specification optimisation (including attrition cells)
- Potential to meet any upside demand opportunity immediately.

The production plan for the ramp up in the initial two-years has been finalised, and is outlined in the Quarterly Activities Report.

Further marketing strategy and analysis is provided in the Sales and Marketing Presentation also released to the ASX this morning.

**BAM Project****Battery Anode Material - downstream strategy**

During 2017, the key actions underway to further develop and progress the BAM strategy are:

- Completion of the downstream Qualification Plant in Louisiana for production by Q1 2018.
- Implementation of partnership arrangements for development of advanced battery anode material testing and formulation capability
- Advancement of revenue through earliest entry to the BAM market through commercialisation of the qualification plant, and assessment of additional commercial opportunities
- Completion of the BAM feasibility study for the Commercial Plant in Louisiana, targeting commercial production from Q4, 2018.

In addition to the Qualification Plant and Sales and Marketing progress outlined in the BAM section of the Quarterly Activities Report, two major initiatives are being progressed to develop critical technical capability and increase speed to market:

**1. Research and development MOU with Cadenza Innovation**

A research and development partnership MOU has been established with Cadenza Innovation Inc. (Cadenza) for development and testing of advanced battery anode materials, marking a strong commitment to the development of proprietary downstream technology.

The three to five year agreement will include embedding Syrah personnel within the world-renowned Cadenza team and facilitate deep technical customer engagement. Through the development partnership, Cadenza will provide:

- Coordinated development of Syrah technical capability
- BAM product and battery testing – cell production and testing
- Development of spheroidisation, chemical and thermal purification, and coating specifications to optimize product characteristics
- Connection to world class research institutes, OEMs and end-users
- Support for in-field testing and data analysis and feed-back
- Development of product data books and product validation
- Product and IP development to end-user specifications

The agreement will facilitate exclusive development of Syrah's carbon materials – natural, synthetic and blends.

**2. Development of toll processing options**

To capitalize on the strong interest in Syrah material, we have initiated commercial discussions with spherical graphite processors in China. Syrah will advance entry into the spherical market through production of uncoated purified spherical graphite in China, targeting initial production in Q1, 2018.



## Finance

The immediate financial objectives for Syrah are:

- For Balama to operate as soon as possible as a profitable standalone flake concentrate business in line with the ramp-up profile – key variables being management of volume, pricing, cost and the working capital position
- Maintenance of a strong balance sheet position under a wide range of scenarios
- Analysis to support optimised price realisation through targeted sales focussing on sustainable market entry, quality of counterparty, and recognition of value-in-use.
- Support for advancement of revenue through early entry to the downstream market and commercialisation opportunities for a downstream plant

## Revenue and margin management

The sales and marketing strategy and ramp up profile allow Syrah to prioritise value over volume during market entry. Syrah retains the ability to increase production very quickly to fulfil additional global demand. Whilst spot prices are softer than assumptions in the 2015 feasibility study, Syrah is very well positioned with a high variable cost base. Sales prices in most cases are adjusted quarterly, and quality premia in combination with a phased increase of operating costs, will allow for margin and cash flow optimisation.

## Conclusion

Syrah is the only major natural graphite development project in construction globally, and is fully funded to commencement of production of graphite concentrate. The size, quality, life and cost base of the Balama operation positions Syrah perfectly to satisfy growing global graphite demand. Construction and commissioning peak in the short term, and commercial production is imminent. The sales and marketing activity underway is building long-term baseload customer relationships, based on value in use. Syrah is positioned for cash flow from Balama, and is developing multiple downstream BAM opportunities to maximise value.

Shaun Verner

**Managing Director and CEO**





## **QUARTERLY ACTIVITIES REPORT – PERIOD ENDING 31 MARCH 2017**

### **HEADLINES**

#### **Balama Project**

- Remains on schedule with commissioning starting in May 2017 and first production in August 2017
- Project capital cost remains unchanged at US\$193m plus a project contingency of US\$7m
- Production ramp-up is currently expected to be 140,000 to 160,000 tonnes of flake graphite concentrate in the first year of production, and 250,000 to 300,000 tonnes in the second year.
- Comprehensive logistics contract (mine to port) has been signed with Grindrod
- Mining Agreement is being progressed through the Mozambican government
- Multiple sales initiatives have been progressed including Memorandum of Understanding (MOU) with BTR New Energy Materials, the world's largest battery anode manufacturer, and finalisation of a Statement of Sales Intent (SSI) with a European trader consortium for 15,000 to 25,000 tonnes per annum of flake graphite for 5 years
- Proposals received and being assessed for US\$50m in debt funding

#### **Battery Anode Material (BAM) Project**

- Initial BAM team mobilised to Louisiana and Chief Operating Officer - BAM Project contracted
- Qualification Plant (Louisiana) site selected and contract is being finalised. Front End Engineering Design (FEED) complete, permitting progressing well and production on target for Q1, 2018.
- Commercial plant planning on schedule, additional commercial options developed before Bankable Feasibility Study (BFS)
- New conditional SSI signed with a major anode producer for battery grade spherical graphite
- Progress made in commercial discussions under Memorandum of Understanding (MOU) with BTR
- Toll processing options being sourced to produce spherical graphite using Syrah flake in China
- China Pilot Plant will be relocated to Perth in mid-2017
- MOU finalised with Cadenza Innovation Inc., for provision of testing and development partnership in the development of proprietary downstream technology



## BALAMA GRAPHITE PROJECT (100%) – REMAINS ON SCHEDULE FOR COMMISSIONING IN MAY 2017 AND FIRST PRODUCTION IN AUGUST 2017

### Costs

During Q1 CY2017, US\$24.5 million was spent on the Balama Graphite Project, resulting in total project development expenditures of US\$137.4 million as at 31 March 2017. An additional US\$30.6 million in development expenditures have been committed as at the end of the quarter, which brings total actual and committed capital expenditures to US\$168 million.

Total project capital cost remains unchanged at US\$193 million plus a project contingency of US\$7 million.

### Schedule and commissioning

- Mining is ahead of schedule, with first ore to the run-of-mine (ROM) pad now scheduled to commence in June 2017
- Process plant construction was 72.3% complete as at the end of the quarter. Most activities remain on schedule, with the majority of process plant and supporting infrastructure available progressively in May 2017 and June 2017.
- The tail end of construction will overlap with commissioning into July 2017, predominately to finalise construction of the water pipeline, as well as piping and electrical works for flotation, filtration and bagging
- Commissioning activities are on track to commence in May 2017 as planned. Please refer **Attachment 1** for a detailed review of the commissioning process
- First production remains on schedule for August 2017, targeting specific flake qualities

### Production ramp up

- An integrated sales and operational planning (S&OP) process has been implemented to match production planning with sales demand.
- During the first 12 months of production, it is currently expected that the plant will ramp-up to:
  - Initially achieve a stable and reliable annualized plant throughput rate of 70% of nameplate production capacity



- Initially achieve a C1 production cash cost of less than US\$400 per tonne establishing Syrah's position in the first quartile of the global graphite cost curve (with later progression to less than US\$300 per tonne)
- Establish a structural cost base of 40% fixed and 60% variable (with later progression to <30% fixed)
- Produce between 140,000 and 160,000 tonnes of flake graphite concentrate
- Production volumes beyond Year 1 will be optimized to meet global market demands. At this time Syrah foresees global demand to support between 250,000 and 300,000 tonnes of flake graphite production from Balama in Year 2.

## **Regulatory approvals**

Both the Mining Agreement and Pipeline Construction Approval continues to be advanced through their respective government agencies. Feedback remains positive that both will be approved in their current form.

If required, contingency measures are in place to utilise an established bore water system and collected water from the Tailings Storage Facility, which will be sufficient for commissioning and production activities in 2017 (refer Chipembe Dam Update section for further details).



## **Mine development (license to mine in place)**

Mine development is ahead of schedule with the following remaining activities now completed or near completion:

- Subsoil removal continues and is due for completion in mid May 2017
- Grade control will commence with the mining of ore scheduled in early May 2017 for commissioning through the primary crusher
- Temporary grade control laboratory is operational with the main laboratory expected to be operational in late May 2017.



**Balama West pit**



## Processing plant

Progress continues at the Balama Project with overall construction progress now at 72.3% as at the end March 2017.

The Balama processing plant will use conventional processes including:

- Primary Crushing/ Crushed Ore storage/Recycled Crusher
- Primary Milling
- Flotation and attrition
- Secondary Milling and Classification
- Filtration, Flake & Fine drying
- Classification and product bagging.

Waste material will be pumped to the Tailings Storage Facility after the graphite flotation process.

### General overview

- Engineering and procurement, fabrication of structural steel and plate work, and most off-site piping fabrication is complete and delivered to site
- Main concrete works for the process plant and associated infrastructure is complete.
- All conveyor systems have been erected with belt installation started along with some electrical instruments
- All major contracts for the installation of the process plant are well advanced
- Substations are structurally complete and motor control centres (MCCs) have been installed and running of cabling to MCC's has commenced
- Cable racking is advanced throughout the process plant, and pulling of cable underway.

Please refer to **Attachment 2** for a detailed progress review of each segment of the process plant and associated photographs.



## Mine support infrastructure

### General overview

Significant progress has been made with emphasis on the following activities:

- Power station – diesel generators scheduled for completion in May 2017
- Fuel storage facility – commissioning scheduled for May 2017
- Main laboratory – building is complete and equipment fitout scheduled for completion in May 2017
- Process and raw water ponds – majority of the water requirement (16,000 m<sup>3</sup>) for the commencement of commissioning has been stored
- Accommodation village – fully operational with a 750 person capacity

Please refer to **Attachment 3** for a detailed progress review of the mine support infrastructure.

## Chipembe Dam update

The Water Licence for extraction from the Chipembe Dam has been extended from 5 to 10 years with construction of pipeline to commence upon receipt of the relevant construction permit. The installation contract has been awarded and the contractor is mobilising plant required for the upcoming works.

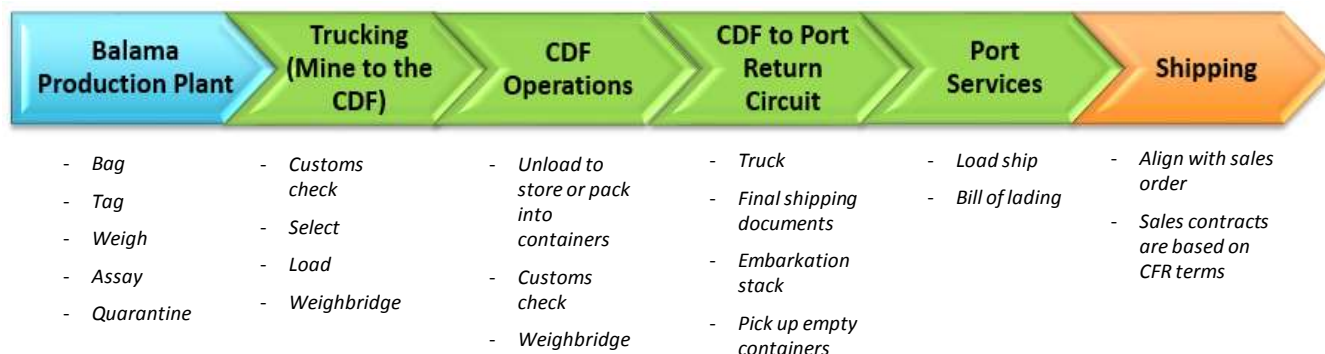
As at late-March 2017, the Chipembe Dam was at 55% capacity and holding approximately 13.9 million m<sup>3</sup>. The water requirement for the processing plant in 2017 will be approximately 0.2 million m<sup>3</sup>.

The slight delay in the issuance of the construction permit for the Chipembe Dam water pipeline is not an issue as the intention is to commence commissioning utilising the already established bore water system located on the Mining Concession, which currently has a capacity of 200,000 m<sup>3</sup> per annum.

The Company's strategy regarding water is to utilise a combination of the Chipembe Dam, bore water system and collecting water using the Tailings Storage Facility during the wet season (an area of 550,000 m<sup>2</sup>).



## LOGISTICS – MINE TO PORT



Note: CDF = Crossing docking facility, CFR = Cost and Freight

- Subsequent to the March 2017 quarter, a Graphite Distribution and Logistics Services Supply contract (Logistics Contract) for the Balama Project was awarded to Grindrod for provision of long and short haul logistics, a cross dock loading and storage facility at Nacala port, and customs clearing and forwarding services (refer ASX announcement dated 24 April 2017)
- The Logistics Contract has an initial term of five years with the option for Syrah to extend for two further five year periods. The operating cost for logistics and distribution services is expected to be lower than the Balama Feasibility Study estimate of US\$125.70 per product tonne (refer ASX announcement dated 29 May 2015).
- The Company will continue to progress discussions with Nacala Port during Q2 2017 regarding the movement of product through the port.
- The Company will finalise initial shipping agreements with international shipping lines who operate services to and from Nacala Port during Q2 2017.



## **UPSTREAM SALES AND MARKETING**

Syrah's sales and marketing strategy is to be the baseload industry supply for major consumers, diversified across segment and geography. Syrah will also provide high quality, consistent, and reliable products, targeting the traditional industrial flake and battery anode material markets.

Sales activity continues to progress very strongly. Sales and pricing mechanisms in both the flake and spherical (Battery Anode Material) markets are bespoke, bilateral and non-transparent. A significant proportion of sales and purchase arrangements contain confidentiality clauses. Customers are protective of sourcing information, maintenance of existing commercial relationships, and product composition which in many cases forms competitive advantage.

Industrial minerals sales contracting is sequential, with most major terms negotiated through preliminary engagement and sample testing, and final commitment in many cases aligned with commercial production. As Syrah is fully funded through Balama's commencement, we will maximise contract values by finalising sales without the need to either provide incentives or advance timing.

Further marketing strategy and analysis information is provided in the Managing Director and CEO's Letter and Sales and Marketing Presentation released to the ASX this morning.





## Summary of flake concentrate sales and marketing agreements

| Customer                                | Type    | Region                   | Product                                      | Tonnes p.a.      | Duration | Status   |
|---|---------|--------------------------|--|------------------|----------|--|
| Chalieco                                | Offtake | China                    | Flake graphite                               | 80,000           | 3 years  | Being operationalised (timing, customer volumes, pricing)  |
| Marubeni                                | Offtake | Japan & Korea            | Flake graphite                               | 20,000           | 3 years  | Being operationalised (timing, customer volumes, pricing)  |
| Hiller Carbon                           | SSI     | North America and Mexico | Recarburiser                                 | 25,000 to 35,000 | 5 years  | Extending focus of agreement to include traditional markets                                      |
| European refractory producer            | SSI     | Europe                   | Flake graphite                               | Up to 15,000     | 10 years | Awaiting commercial production to operationalise contract  |
| <b>European trader consortium (NEW)</b> | SSI     | Europe                   | Flake graphite                               | 15,000 to 25,000 | 5 years  | Agency and direct sales for traditional markets only; excluding battery and recarburiser markets |
| <b>BTR New Energy Materials (NEW)</b>   | MOU     | China                    | Flake graphite and supply chain co-operation | Confidential     |          |  |

## Other sales and marketing developments during Q1 2017

- China battery anode segment – additional direct flake sales to spherical producers being negotiated
- India – sales agency options for flake sales have been identified and negotiations have commenced
- South East Asia and Taiwan – initial offers for flake sales underway
- Europe and South America – initial offers for recarburiser business have been made
- Spherical graphite toll processing options – discussions underway to produce spherical graphite from Balama flake concentrate in China.



## DOWNSTREAM STRATEGY

During November 2016, Syrah provided the market with an update on its downstream battery anode material (BAM) strategy. The strategy consists of three principal stages:

- A Qualification Plant (first line) in Louisiana to enable customers to complete the product qualification process
- A Commercial Plant, also located in Louisiana, to produce initially 20,000 tonnes of BAM with permitting sought for expansion to 60,000 tonnes
- Development of a technology centre in Perth for optimisation of product and production processes.

Please refer to **Attachment 4** for the latest schedule (no change) for each of these stages.

### Qualification Plant

- Targeting commencement of operations in Q1 2018
- Initial BAM team has been mobilised in Louisiana with further buildout of the team planned:
  - Chief Operations Officer – BAM Project Paul Jahn contracted. Paul Jahn has over 30 years of experience in the petrochemical and powders sectors in the USA and globally, as well as strong Louisiana experience
  - Peter Barnes, Study Manager for the BAM Project has relocated from Perth to the USA
- Qualification Plant site has been identified and commercial lease terms agreed in principle. The proposed site is located within a secure facility that provides direct access to key port and rail infrastructure facilities, as well as gas, power, water and municipal sewer services
- Front End Engineering Design (FEED) has been completed, delivering process design documentation, general arrangements for the identified site and specification documentation for long lead items. Syrah expects to place orders for equipment (e.g. air classifying mills, filters and dryers) during Q2 2017
- Detailed engineering and design phase will commence in early Q2 2017 through the engagement of a US based engineering consultant with extensive experience in process facility design in the Louisiana region. This will deliver all detailed engineering required for equipment specification and procurement, and for execution of the Qualification Plant
- An environmental consultant has been engaged and permit approvals for the Qualification Plant are underway concurrent with site finalization. Key components are air emissions and liquid discharges. These permit applications will be submitted during Q2 2017.



## **Commercial Plant**

- In parallel with approvals for the Qualification Plant, early assessment and review of Commercial Plant emissions are underway to establish permit application requirements.
- The Feasibility Study for the BAM commercial plant will commence following an assessment of learnings from the Qualification Plant design and newly developed commercial and operational options.
- No change to the schedule with first production planned in Q4 2018.

## **China Pilot Plant and process optimisation in Perth**

- The final phase of Syrah Pilot Plant production of spherical material is underway in Guangzhou:
  - Multiple spherical samples have been provided to and tested by major battery anode manufacturers globally
  - Specification development for base products is now complete, and the Pilot Plant will be decommissioned in China and relocated to Perth
- The focus of process optimisation will shift to operational requirements and ongoing customer specific developments once the pilot plant is relocated in mid-2017
- Some 1,500 kg of spherical graphite samples have been sent to Perth for purification testing and flowsheet development. Results from the test work to date have verified core flowsheet design parameters, and provided additional data for the larger scale piloting work to commence in early Q2 2017.

## **Research and development**

As noted in the Managing Director and CEO's letter, a research and development partnership MOU has been established with Cadenza for development and testing of advanced battery anode materials, marking a strong commitment to the development of proprietary downstream technology.

With Corporate Headquarters in Wilton, Connecticut and state-of-the-art laboratories in Bethel, Connecticut, both sites located just outside New York City, Cadenza is an internationally recognized lithium ion battery research and development group specialising in the design and production of scalable energy storage platforms for license that initially targets grid and transportation markets, and deliver high energy density, low cost and high safety. Cadenza is renowned for both its strong position advocating high safety standards and commitment to data driven development.



The company has ample capacity and expertise to assist Syrah Resources in battery materials testing and development, as evidenced through its partnership with Fiat Chrysler Automotive and the successful development of energy storage solutions with several US government institutions.

Cadenza's Founder and CEO is Christina Lampe-Onnerud, a recognized expert in battery technology with more than 80 patents, who will become an Executive Director (previous Non-Executive Director) of Syrah once the contract is signed.

### **BAM sales and marketing agreements**

| <b>Customer</b> | <b>Type</b> | <b>Region</b> | <b>Product</b>                         | <b>Tonnes p.a.</b> | <b>Duration</b> | <b>Status</b>   |
|-----------------|-------------|---------------|--|--------------------|-----------------|---|
| Marubeni        | Offtake     | Japan & Korea | Uncoated spherical graphite            | 50,000             | 5 years         | Ongoing sample testing and customer engagement. Awaiting production from US plant |
| Morgan Hairong  | Offtake     | China         | Uncoated spherical graphite            | 2,000              | 3 years         | Awaiting production from US plant   |
| Morgan Hairong  | Marketing   | China         | Coated and uncoated spherical graphite | 7,000              | 3 years         | Awaiting production from US plant   |

Note: Typically 2 tonnes of flake concentrate is required to produce 1 tonne of spherical graphite

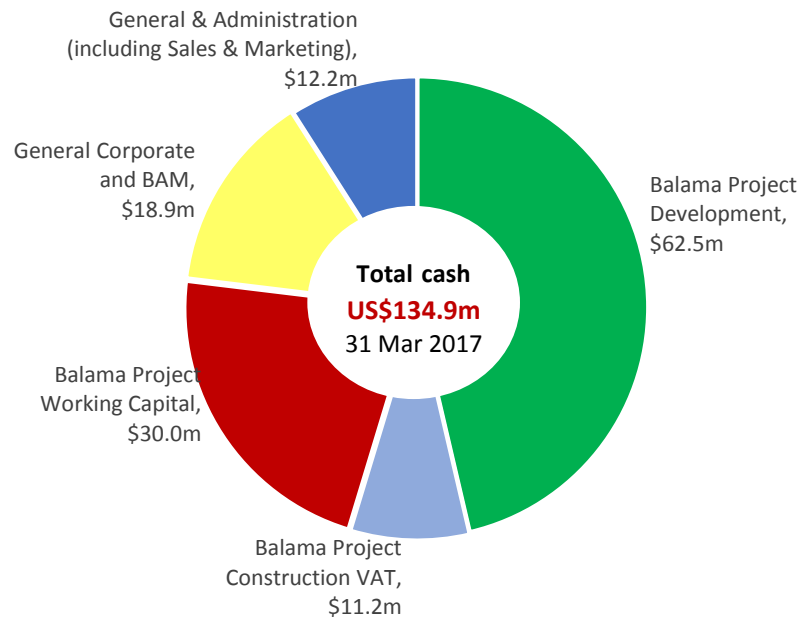
### **Other BAM sales and marketing developments in Q1 2017**

- BTR New Energy Materials – MOU for strategic development of sales and supply chain options
- Major anode manufacturer – conditional SSI for lithium ion battery grade spherical graphite. This SSI follows the provision of multiple spherical graphite samples for testing and reference purposes, and is targeted at continuing close cooperation to qualify material for mass production
- Spherical graphite toll processing options – awaiting final proposals to toll process Balama flake concentrate into spherical graphite in China
- Ongoing sample provision and commercial negotiation with multiple potential customers.



## FINANCE

The balance of cash reserves and projected use of funds as at 31 March 2017 is shown below:



- Progress has been made during the quarter to implement a working capital facility of US\$50 million to maintain a strong balance sheet under a wide range of scenario's during the commissioning and production ramp-up phase.
- Advanced discussions with potential debt financiers are well underway. Proposals for funding options have been received and are presently under assessment.
- Preparatory work to identify options for the funding of the BAM Strategy beyond the construction of the qualification plant in Louisiana is also concurrently underway.

**PEOPLE, HEALTH, SAFETY, ENVIRONMENTAL AND COMMUNITY DEVELOPMENT**

- Currently, there are approximately 1,900 people employed at the Balama Project. Nearly 550 are direct Syrah employees, of which 73% are employed from the eight Host Communities local to the Mining Concession
- Over 1.5 million hours has now been achieved with no Lost-Time Injuries or significant incidents in 2017
- As construction activities progress, a strong focus remains on ensuring all high risk activities such as Working at Heights and Confined Space Entry are performed safely according to Company requirements. The Company is working closely with all onsite contractors to ensure strong health and safety performance is maintained
- The Environmental Monitoring Program continued in line with license conditions with sample data acquired across surface round water, air quality, noise, macro-invertebrates, dust, as well as flora and fauna parameters
- The Company is in final discussions with the National Institute of Employment and Professional Training & Labour Studies (IFPLAC) in Mozambique and is looking forward to forming a partnership that will see the establishment and co-management of the Balama Training Centre in H2 2017. This facility will cater for the training of some 500 local people from the project Host Communities over five years
- Successful conclusion of the first group of 20 local people that completed an intense 6-month articulated dump truck training program
- The Company continues to attract skilled Mozambican professionals across the mining, processing, human resources, training, warehousing, health and safety and infrastructure disciplines.



**New general induction completed and certificates issued to each new starter**

## **CORPORATE**

- Shaun Verner was appointed Managing Director and CEO. Shaun joined the Company in October 2016 as Executive General Manager - Sales and Marketing. Prior to joining Syrah, Shaun was at BHP Billiton for 20 years in a variety of executive roles, with extensive international commercial and operational experience across a range of commodities including copper and base metals, uranium and thermal and metallurgical coal. Shaun is a proven senior executive with extensive general management and cross-functional commercial, operations, supply chain, and leadership experience
- Rob Schaefer was appointed as Chief Commercial Officer, with accountability for sales and marketing strategy, outbound logistics, and strategic supply contracts. Rob has extensive sales, marketing and finance experience in the resources industry with senior roles at WMC Limited, BHP Billiton and most recently MMG Ltd across the commercial spectrum
- Tolga Kumova will finalise his consulting arrangement with Syrah, effective 15 May 2017, which was jointly agreed with the Company. Syrah would like to thank Tolga for the smooth transition of his customer and industry contacts and relationships to Shaun and Rob during the past six months, and wishes him the best with his future endeavours
- Annual General Meeting will be held on 19 May 2017.



## LICENSES

The following table lists the current licenses held by Syrah Resources Limited and its subsidiaries as at 31 March 2017:

| Project             | License Number | License Type        | Country    | Interest acquired/farm-in during the quarter | Interest disposed/farm-out during the quarter |
|---------------------|----------------|---------------------|------------|--|---|
| Balama              | 6432C          | Mining Concession   | Mozambique | -  | -   |
| Balama <sup>1</sup> | 5684L          | Prospecting License | Mozambique | -  | -   |
| Botswana            | 347/2014       | Prospecting License | Botswana   | -  | 100%  |
| Botswana            | 348/2014       | Prospecting License | Botswana   | -  | 100%  |
| Botswana            | 349/2014       | Prospecting License | Botswana   | -  | 100%  |
| Botswana            | 350/2014       | Prospecting License | Botswana   | -  | 100%  |

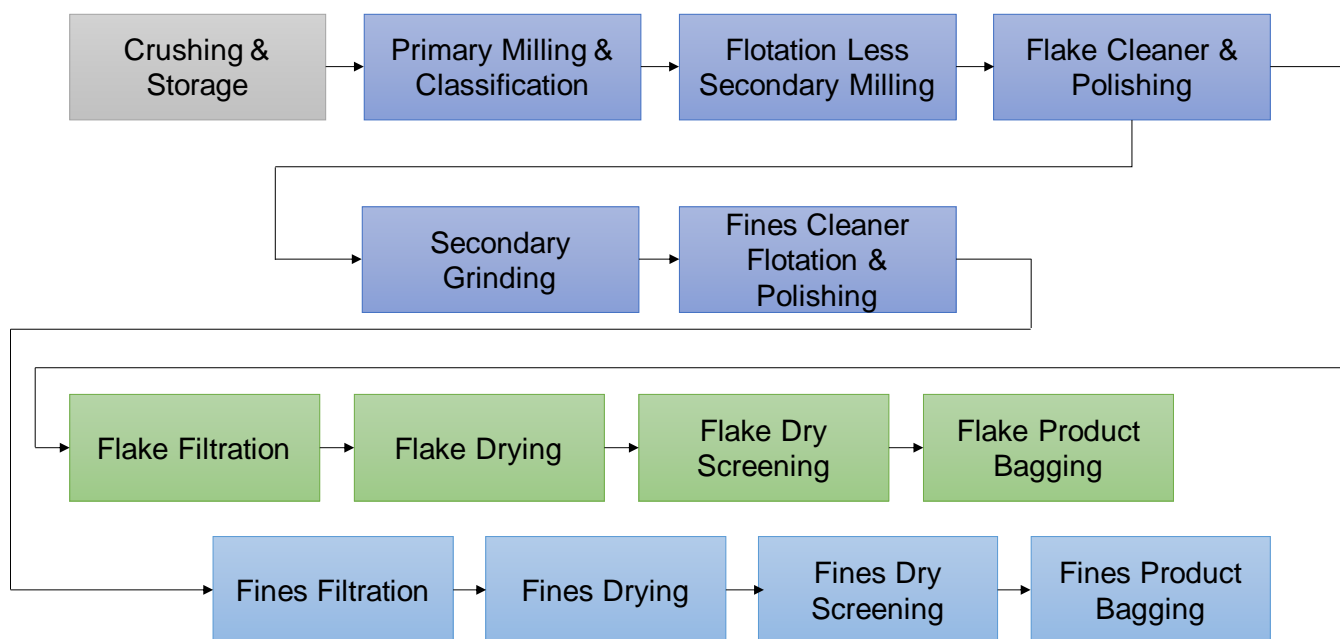
Note 1: Syrah has entered into a tenement sale agreement (TSA) for the acquisition of a tenement (Tenement) in Balama from a third party (Seller). Under the TSA, Syrah may be required to issue to the Seller, as part of the contingent consideration for the acquisition of the Tenement, up to US\$2.0 million of fully paid ordinary shares (Sale Shares) in various tranches, with the number of Sale Shares under each tranche to be calculated based on the 30 day volume weighted average price of Syrah shares prior to the issue date. The Sale Shares (if issued) will rank equally with Syrah's existing shares, and will not be issued to an existing class of security holders in Syrah. It is not expected that security holder approval will be required for the issue of Sale Shares.





## ATTACHMENT 1 – BALAMA COMMISSIONING OVERVIEW

Commissioning will be undertaken using a sequential approach as illustrated in the figure below.



Wet commissioning of the processing plant remains on schedule for Q2 2017, followed shortly afterwards by ore commissioning. Commissioning will be staged to be completed in parallel with construction completion. The stages used in the Commissioning are C1 to C4:

- Construction Verification (C0).
- Dry Commissioning (C1) – No-load energisation.
- Wet Commissioning (C2) – Running with water and air.
- Ore Commissioning (C3) – Initial introduction of ore.
- Optimisation (C4) – Tuning to enable capacity and product specifications to be achieved.

Commissioning activities will commence in Q2 with C0 activities starting at the crusher. The commissioning team will energise and test all equipment and systems to ensure that each individual item is correctly installed and functioning as designed. The equipment is then tested in larger groups until the entire facility has been tested.

Once areas of the process plant has been fully energised and tested, ore and process fluids will be introduced into individual equipment and integrated systems to demonstrate stable operation. In



addition, there are a number of other activities being advanced for both operational readiness and commissioning:

- Commissioning sequence and systems are being aligned with priorities given to the Structural, Mechanical and Piping (SMP) and Electrical and Instrumentation (E&I) contractors
- Key Syrah personnel for Commissioning and Operations have mobilised to site
- Factory Acceptance Testing of the Plant control system has been completed
- Development of commissioning procedures are well progressed
- Key reagents, grinding media and operational maintenance spares have been purchased and have started to arrive on site
- Graphite training specialists have been engaged
- Sales and operations planning team (including logistics) are being established
- Supporting IT systems are evolving.



## **ATTACHMENT 2 – DETAILED BALAMA PROCESSING PLANT PROGRESS UPDATE**

### **Primary crushing**

- Concrete works complete
- Primary crushing structural steel and mechanical equipment installation is complete
- Erection of crushed ore bin feed conveyor is complete and electrical and instrumentation installation well advanced.



**Primary crusher**

### **Crushed ore storage**

- Concrete works complete
- Erection of crushed ore bin conveyor and the crushed ore bin is complete
- Reclaim feeders situated under the crushed ore bin are installed
- Emergency reclaim bin and the feeder are installed.



**Ore bin**

## **Recycle crushing**

- Concrete works complete
- Erection of structural steel is complete
- Erection of the recycle feed conveyor is complete.



## Primary milling

- Concrete works complete
- Erection of structural steel is complete
- Mechanical installation of the scrubber, classification screen and pumps are all installed and nearing completion.



**Primary milling circuit**





## **Flotation circuit**

- Concrete work complete
- Structural steel erection is complete and all flotation cells are installed
- Installation of hoppers, launders and pumps significantly advanced and piping installation is underway
- Polishing mills scheduled for installation in April 2017.



**Flotation circuit**



## **Secondary milling and classification**

- Concrete work complete
- Structural steel erection and placement of hoppers and pumps have commenced
- Secondary milling classifier installation has commenced.



**Secondary milling and classification**





## **Filtration**

- The main concrete works completed
- Structural steel erection nearing completion. Screw feeders and chain conveyors have been installed
- Filter discharge chutes have been installed and erection of flake and fines storage tanks are complete except for final painting
- Suspended concrete slab completed, which will allow the filters to be placed.



**Filtration suspended floor concrete pour**





## Flake and fines drying

- Concrete works complete
- Installation of structural steel is complete and mechanical equipment including the dryer combustion chamber, pneumatic conveyor hopper and associated chute work and bins for the flake and fines dryers have been erected
- Contract for cladding and insulation of the dryers has been awarded with works to commence in April 2017.



**Flake and fines drying circuit**



## Bagging

- Concrete works complete
- Preassembly of structural steel commenced
- Product bin assembly was completed during the quarter.



**Dry screening and bagging circuit**



## ATTACHMENT 3 – DETAILED MINE SUPPORT INFRASTRUCTURE PROGRESS UPDATE

Significant progress has been made with emphasis on the activities described below:

### 15.4 MW power station

- Two generators are near completion and will be commissioned mid-May 2017.
- The remaining five generators are planned to be commissioned late-May 2017.



Power station





## **700,000 litre Fuel Storage Facility**

- Facility Installation progressing well with commissioning scheduled for mid-May 2017.



**Fuel storage tank farm**

## **Sub stations**

- All buildings are complete with electrical fit-out ongoing.

## **Main site administration building**

- Electrical and networking cabling complete.
- Ceilings being installed.
- East wing 95% complete.
- Joinery fit-out ongoing.



**Administration building**

## **Main product storage building**

- Roof sheeting and wall cladding is 85% complete.



**Main product storage building**



## **Fixed plant and ancillary fleet workshops**

- Both facilities fully operational.



**Fixed Plant and Ancillary Fleet workshops**

## **Main laboratory**

- Building 100% complete
- Equipment fit-out commenced and scheduled for completion late May 2017
- Temporary grade control laboratory facility fully operational.



## **Reagents warehouse**

- Building fully operational.

## **Main warehouse**

- Building 100% complete
- Office erection 100% complete.

## **Process and raw water pond**

- Almost full of water in readiness for commissioning to commence (16,000m<sup>3</sup>).

## **Tails storage facility**

- Bulk earthworks for the Tailings Storage Facility Cell 1A is complete
- Liner installation is complete with 280,000m<sup>3</sup> installed.



**Tailings Storage Facility**





## **Accommodation village**

- Fully operational with a 750 person capacity
- New wet mess recreation room operational.

## **Site medical and emergency response centre**

- Building 100% complete
- Medical equipment fitout commenced.

## **Site ablutions**

- 5 Blocks fully operational.

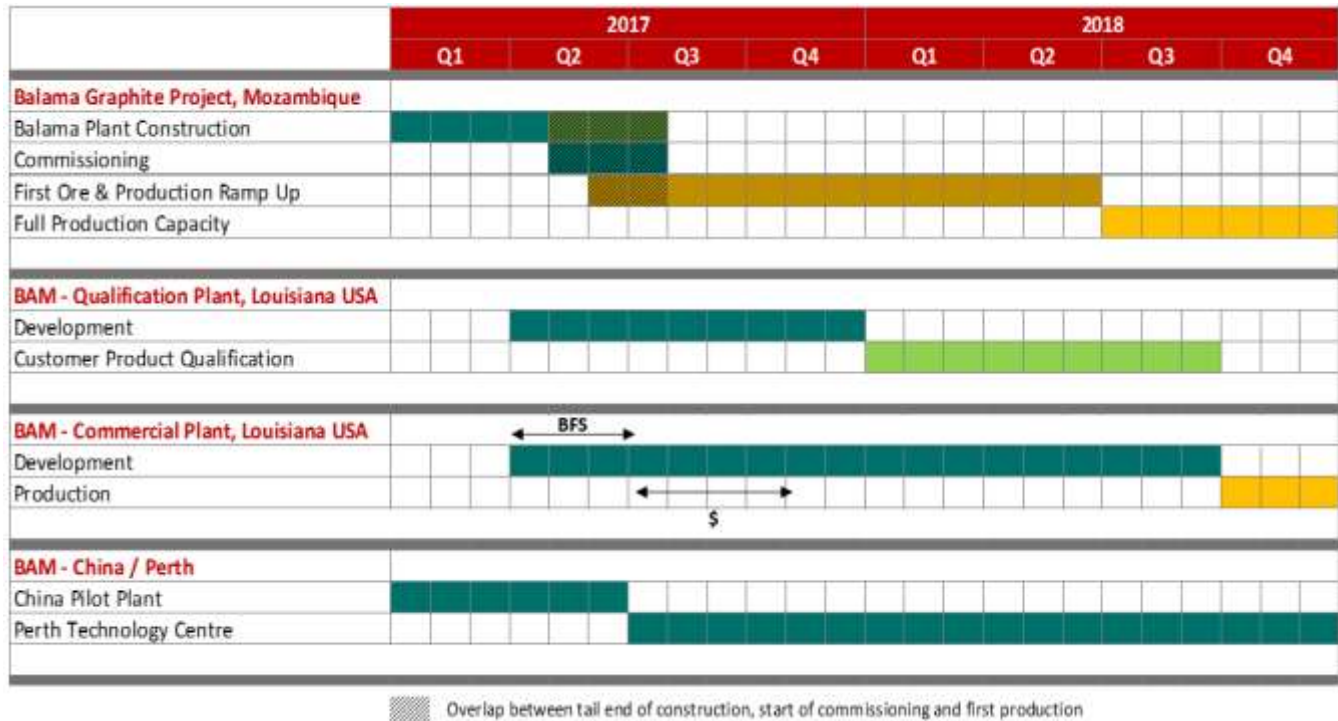
## **Site canteens**

- Both Buildings fully operational
- One building is being initially utilised as the Commissioning Office.





## ATTACHMENT 4 – PROJECT SCHEDULE



## 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

SYRAH RESOURCES LIMITED

### ABN

77 125 242 284

### Quarter ended ("current quarter")

31 MARCH 2017

| Consolidated statement of cash flows                      | Current quarter<br>US\$'000 | Year to date<br>(3 months)<br>US\$'000 |
|---|-----------------------------|--|
| <b>1. Cash flows from operating activities</b>            |                             |  |
| 1.1 Receipts from customers                               | -                           | -                                      |
| 1.2 Payments for  |                             |  |
| (a) exploration & evaluation                              | -                           | -                                      |
| (b) development   | (24,639)                    | (24,639)                               |
| (c) production  | -                           | -                                      |
| (d) staff costs <sup>(1)</sup>                            | (3,487)                     | (3,487)                                |
| (e) administration and corporate costs                    | (1,493)                     | (1,493)                                |
| 1.3 Dividends received (see note 3)                       | -                           | -                                      |
| 1.4 Interest received                                     | 312                         | 312                                    |
| 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)                   | -                           | -                                      |
| <b>1.9 Net cash from / (used in) operating activities</b> | <b>(29,307)</b>             | <b>(29,307)</b>                        |

<sup>(1)</sup> Includes staff costs in relation to project development and corporate & administration functions

|  |      |      |
|--|------|------|
| <b>2. Cash flows from investing activities</b> |      |      |
| 2.1 Payments to acquire:                       |      |      |
| (a) property, plant and equipment              | (11) | (11) |
| (b) tenements (see item 10)                    | -    | -    |
| (c) investments                                | -    | -    |
| (d) other non-current assets                   | -    | -    |

| Consolidated statement of cash flows |   | Current quarter<br>US\$'000 | Year to date<br>(3 months)<br>US\$'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)                   | -                           | -                                      |
| <b>2.6</b>                           | <b>Net cash from / (used in) investing activities</b> | <b>(11)</b>                 | <b>(11)</b>                            |

|             |   |          |          |
|-------------|---|----------|----------|
| <b>3.</b>   | <b>Cash flows from financing activities</b>                                 |          |          |
| 3.1         | Proceeds from issues of shares  | -        | -        |
| 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)   | -        | -        |
| <b>3.10</b> | <b>Net cash from / (used in) financing activities</b>                       | <b>-</b> | <b>-</b> |

|            |  |                |                |
|------------|--|----------------|----------------|
| <b>4.</b>  | <b>Net increase / (decrease) in cash and cash equivalents for the period</b> |                |                |
| 4.1        | Cash and cash equivalents at beginning of period                             | 163,297        | 163,297        |
| 4.2        | Net cash from / (used in) operating activities (item 1.9 above)              | (29,307)       | (29,307)       |
| 4.3        | Net cash from / (used in) investing activities (item 2.6 above)              | (11)           | (11)           |
| 4.4        | Net cash from / (used in) financing activities (item 3.10 above)             | -              | -              |
| 4.5        | Effect of movement in exchange rates on cash held                            | 912            | 912            |
| <b>4.6</b> | <b>Cash and cash equivalents at end of period</b>                            | <b>134,891</b> | <b>134,891</b> |

| 5.         | <b>Reconciliation of cash and cash equivalents</b><br>at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter<br>US\$'000 | Previous quarter<br>US\$'000 |
|------------|---|-----------------------------|------------------------------|
| 5.1        | Bank balances   | 12,661                      | 13,825                       |
| 5.2        | Call deposits   | 122,200                     | 149,443                      |
| 5.3        | Bank overdrafts   | -                           | -                            |
| 5.4        | Other – Security deposits   | 30                          | 29                           |
| <b>5.5</b> | <b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>  | <b>134,891</b>              | <b>163,297</b>               |

**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  
US\$'000**

202

-

The above related party payments include salaries, superannuation and consultancy fees paid to directors and/or director related entities during the quarter ended 31 March 2017.

**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  
US\$'000**

-

-

N/A

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

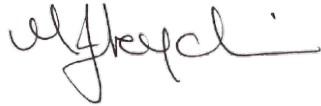
N/A

| 9. <b>Estimated cash outflows for next quarter</b> | <b>US\$'000</b> |
|--|-----------------|
| 9.1 Exploration and evaluation                     | -               |
| 9.2 Development                                    | 31,030          |
| 9.3 Production                                     | -               |
| 9.4 Staff costs                                    | 3,500           |
| 9.5 Administration and corporate costs             | 1,400           |
| 9.6 Other (provide details if material)            | -               |
| <b>9.7 Total estimated cash outflows</b>           | <b>35,930</b>   |

| 10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>                            | <b>Tenement reference and location</b> | <b>Nature of interest</b>         | <b>Interest at beginning of quarter</b> | <b>Interest at end of quarter</b> |
|--|--|-----------------------------------|---|-----------------------------------|
| 10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced | 347/2014 – Botswana                    | Surrendered (Exploration licence) | 100%                                    | NII                               |
|  | 348/2014 – Botswana                    | Surrendered (Exploration licence) | 100%                                    | NII                               |
|  | 349/2014 – Botswana                    | Surrendered (Exploration licence) | 100%                                    | NII                               |
|  | 350/2014 – Botswana                    | Surrendered (Exploration licence) | 100%                                    | Nil                               |
| 10.2 Interests in mining tenements and petroleum tenements acquired or increased           | N/A                                    | N/A                               | N/A                                     | N/A                               |

**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: .....  
(Company secretary)

Date: 28 April 2017

Print name: MELANIE LEYDIN

**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.