



31 January 2013

## QUARTERLY ACTIVITIES REPORT – PERIOD ENDED 31 DECEMBER 2012

### Highlights:

- **Maiden mineral resource announced for Balama West**
  - Global Inferred Resource of 564 million tonnes at 9.8% Total Graphitic Carbon (TGC) and 0.21%  $V_2O_5$
  - Combined high grade zones of 157 million tonnes at 17.1% TGC and 0.43%  $V_2O_5$
- Balama West is the largest known graphite deposit in the world
- Balama West's vanadium resource exceeds that of the world's largest operating vanadium deposit – Rhovan in South Africa (owned by Xstrata Alloys)
- Balama East drill results announced to date strongly suggest that the Balama deposit will grow significantly once a maiden mineral resource is calculated for Balama East – expected in the second quarter 2013
- Balama East has an Exploration Target\* of 300-400 million tonnes at 11% TGC and 0.30%  $V_2O_5$
- Scoping Study progressing according to plan and expected to be released early in the second quarter 2013
- Discussions commenced with graphite buyers. One buyer has tested Balama graphite ore and produced an average concentrate grade of 97.3% total graphitic carbon
- 8,000 metres drilled at Fungoni mineral sands project. Assays due soon
- Airborne magnetic, radiometric and digital terrain survey flown over northern mineral sands licences - Tongani to Tajiri Trend. Numerous targets identified
- Completion of an oversubscribed fully underwritten institutional share placement to raise \$16 million

\* This targeted tonnage and grade is conceptual in nature and there has been insufficient work to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.

ASX Code SYR

### Current Corporate Structure

#### Ordinary Shares

Issued Shares: 135,454,589

#### Options

Exercisable at \$0.26: 15,415,001  
Exercisable at \$2.21: 500,000

#### Major Shareholders

HSBC Custody Nom Aust Ltd	11.19%
Basapa PL	10.52%
Copper Strike Ltd	8.20%

### Board of Directors

Mr Tom Eadie  
Non-Executive Chairman

Mr Paul Kehoe  
Managing Director

Mr Michael Chester  
Non-Executive Director

Ms Melanie Leydin  
Company Secretary

### Key Projects

#### Balama Graphite Project (Mozambique) and Nachingwea Graphite Project (Tanzania)

Balama is the largest and one of the highest grade flake graphite and vanadium projects globally. Balama is mainly medium to coarse flake and Nachingwea is fine to coarse flake.

#### Tanzania Mineral Sands

A very prospective portfolio of mineral sands licence areas, some of which have drill results up to 28% heavy minerals.

### Website

[www.syrahresources.com.au](http://www.syrahresources.com.au)

## SUMMARY

The December 2012 quarter was a very active period for Syrah Resources (ASX: SYR). During the quarter, Exploration Targets were announced for the Balama West and Balama East areas of the Balama Graphite and Vanadium Project in northern Mozambique. The Exploration Target for **Balama West** was 400-500 million tonnes at 10% TGC and 0.2%  $V_2O_5$ . In January 2013, SYR announced that it had exceeded the Exploration Target by delivering a **maiden Inferred Resource** of **564 million tonnes at 9.8% TGC and 0.21%  $V_2O_5$** . The **Exploration Target\*** for **Balama East** is **300 to 400 million tonnes at 11% TGC and 0.30%  $V_2O_5$** . All Inferred Resources referred to in this release have been prepared according to JORC guidelines.

Although **Balama** is already the **largest graphite deposit in the world** based on the resource announced for Balama West, SYR anticipates that it will **grow significantly** once a resource is announced for Balama East. These zones have a total 2 km strike distance for a deposit which outcrops over 7km. The deposit has high grade zones (such as Ativa and Mualia) which are amongst the highest grade in the world. Balama is an extraordinary deposit in terms of all of its key attributes and location.

Significant progress was made during the quarter on the **Balama Scoping Study**.

**Drilling commenced** at the **Fungoni mineral sands** prospect in Tanzania. Historical drilling records grades up to 27.8% heavy minerals with a high zircon content (up to 25% zircon). The Company is encouraged by field observations that Fungoni could host a high grade mineral sands deposit. Assays are expected shortly.

## BALAMA GRAPHITE AND VANADIUM PROJECT

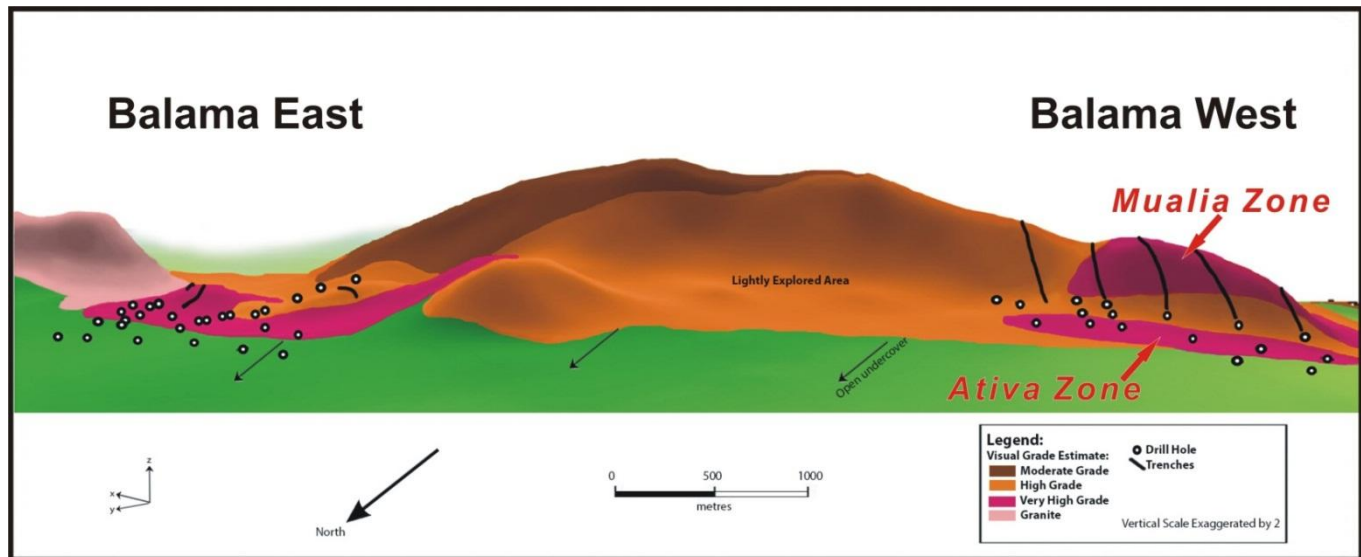
### Maiden Mineral Resource for Balama West

On 23 January 2013, SYR announced a maiden Inferred Mineral Resources (According to JORC Guidelines) for Balama West. The Inferred Resource as calculated by independent resource consultants (MSA Group), commence from outcrop down to a depth of 300m below surface and are as follows:

- The **Global Inferred Resource for Balama West** is **564 million tonnes at 9.8% TGC and 0.21%  $V_2O_5$**  at a 5% cut off
- The **combined high grade zones** (Ativa and Mualia) are **157 million tonnes at 17.1% TGC and 0.43%  $V_2O_5$**  at a 5% cut off
- The **Ativa Zone** has an Inferred Resource of **21 million tonnes at 20.8% TGC and 0.38%  $V_2O_5$**  at a 13% cut off. There has been insufficient drilling at the northern margin of this area to properly define a resource below 100 metres.
- The **Mualia Zone** has a Inferred Resource of **136 million tonnes at 16.6% TGC and 0.43%  $V_2O_5$**  at a 5% cut off

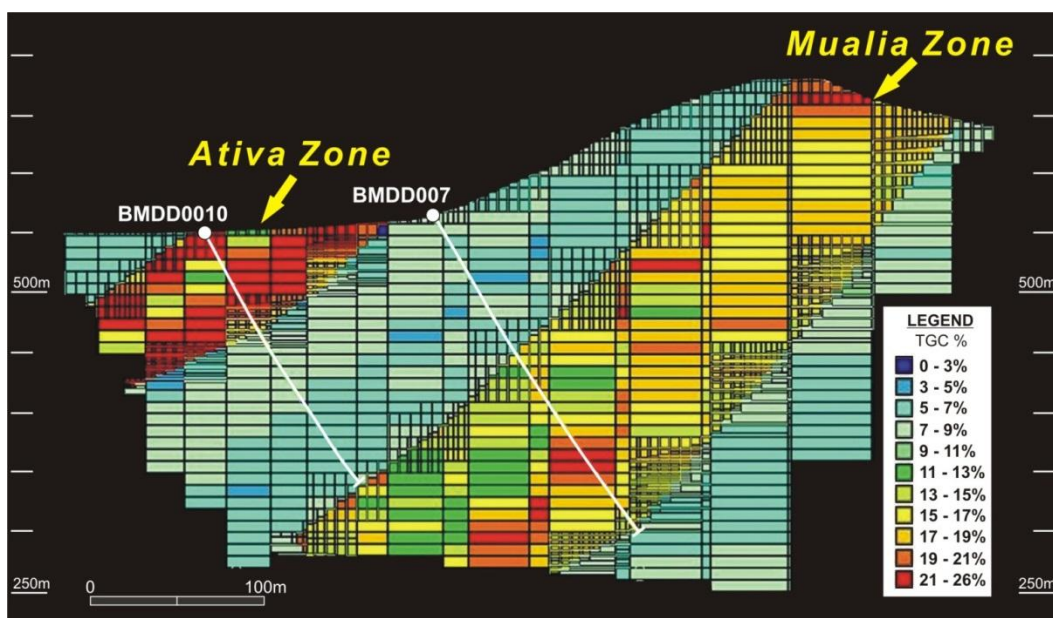
\* *This targeted tonnage and grade is conceptual in nature and there has been insufficient work to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

The global mineral resource well exceeded the exploration target of 400-500 million tonnes at 10% TGC and for Balama West announced 13/11/2012. The Balama West zone alone is the largest graphite deposit in the world. The deposit will grow significantly once a resource is calculated for the Balama East zone. These zones have a combined strike distance of about 2km and the Balama graphite mineralisation outcrops over 7km (Figure 1).



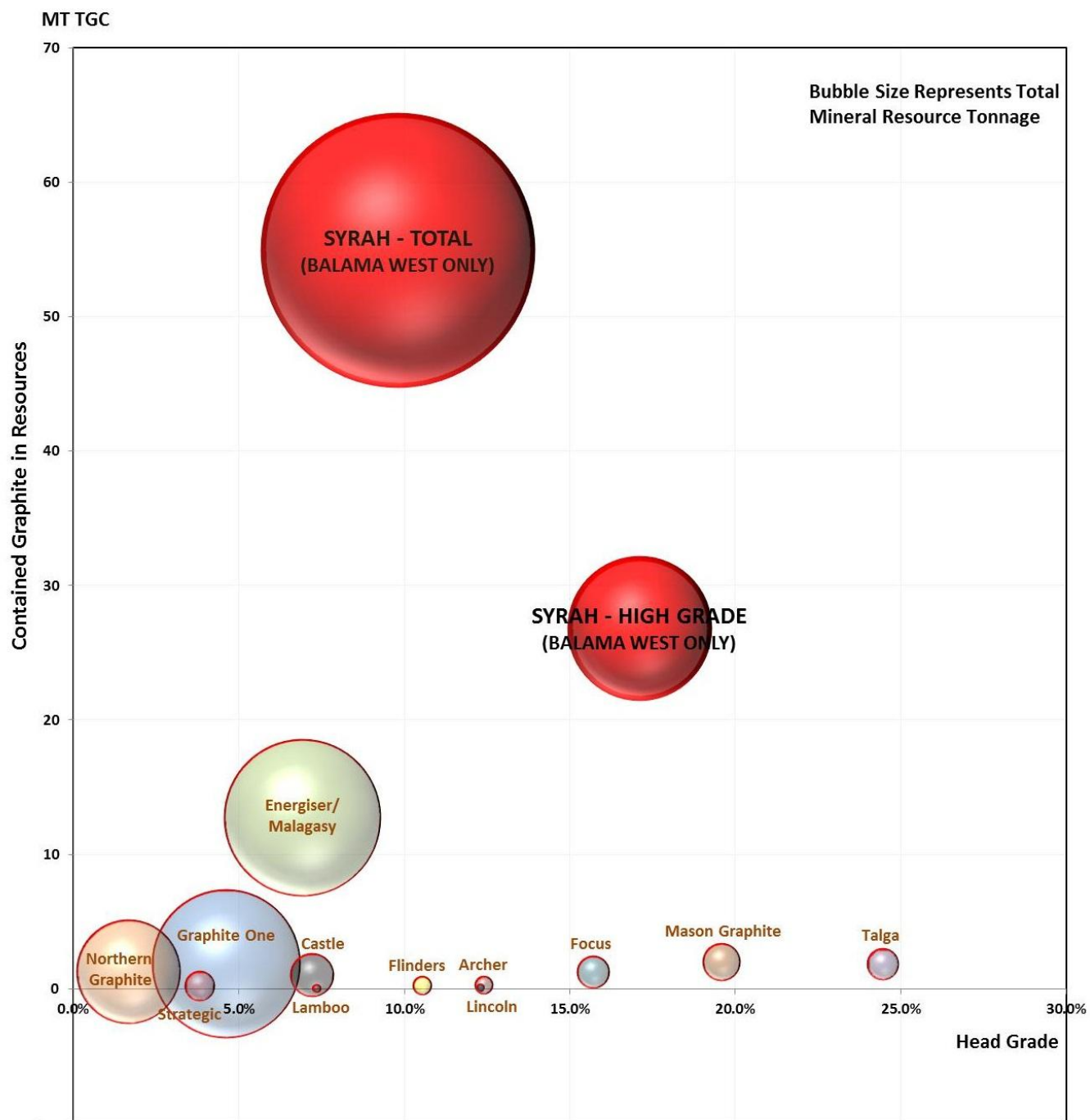
**Figure 1 – 3D model of the Balama Graphite and Vanadium Deposit. The model shows the location of the Balama West and Balama East areas, including the high grade Ativa and Mualia zones. The area between Balama East and Balama West is very lightly explored.**

A block model cross section through the Balama West deposit showing high grade Ativa and Mualia zones is shown below (Figure 2):



**Figure 2 – Block model cross section through Balama West deposit showing high grade Ativa and Mualia Zones. Large areas of the Ativa Zone are >20% TGC while much of the Mualia Zone is >15% TGC.**

A graph showing where Balama West sits in relation to other global graphite deposits is shown below (Figure 3).



**Figure 3 – Balama West alone is the largest known high grade graphite deposit in the world – an order of magnitude larger than all but one of its competitors in terms of contained graphite. Also impressive is the size and grade of the two high grade portions of the deposit – the Ativa and Mualia Zones**



## Balama East

Twenty-five diamond holes were drilled at Balama East (Figure 4).

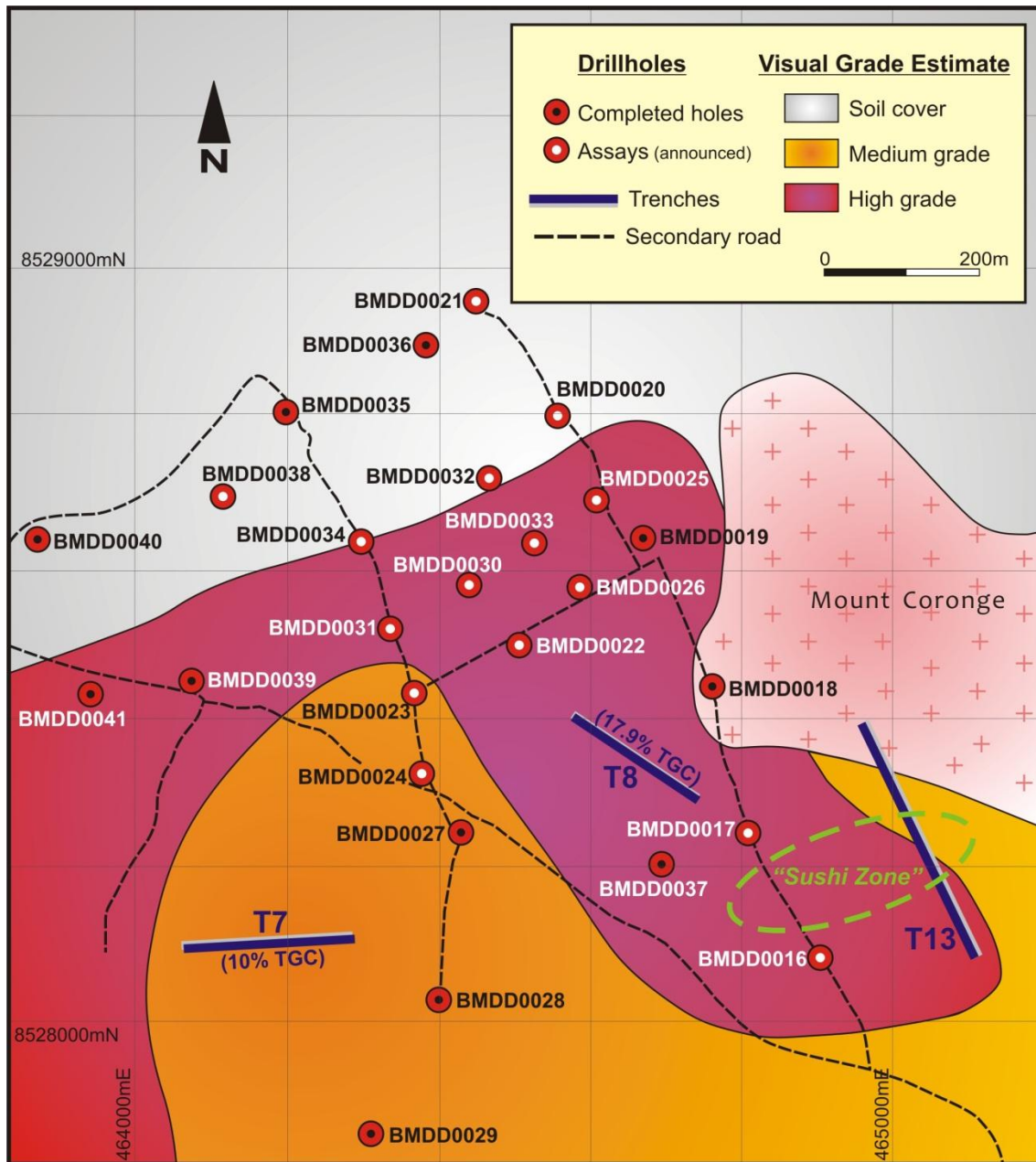


Figure 4 – Balama East map showing drill hole and trench locations

Assay results from the holes that have been announced are shown below:

BMDD0016 – **251.4m at 7.7% TGC and 0.11% V<sub>2</sub>O<sub>5</sub>**

BMDD0017 – **251.4m at 8.1% TGC and 0.19% V<sub>2</sub>O<sub>5</sub>**

BMDD0020 – **146.8m at 13.3% TGC and 0.43% V<sub>2</sub>O<sub>5</sub>**  
BMDD0021 – **218.4m at 12.3% TGC and 0.39% V<sub>2</sub>O<sub>5</sub>**  
BMDD0022 – **290.4m at 13.8% TGC and 0.41% V<sub>2</sub>O<sub>5</sub>**  
BMDD0023 – **302.6m at 13.7% TGC and 0.38% V<sub>2</sub>O<sub>5</sub>**  
BMDD0024 – **60m at 9.8% TGC and 0.29% V<sub>2</sub>O<sub>5</sub>**  
BMDD0025 – **119.73m at 12.1% TGC and 0.39% V<sub>2</sub>O<sub>5</sub>**  
BMDD0026 – **67m at 11.4% TGC and 0.34% V<sub>2</sub>O<sub>5</sub>**  
BMDD0030 – **59m at 11.9% TGC and 0.28% V<sub>2</sub>O<sub>5</sub>**  
BMDD0031 – **152.6m at 9.0% TGC and 0.20% V<sub>2</sub>O<sub>5</sub>**  
BMDD0032 – **65m at 11.5% TGC and 0.26% V<sub>2</sub>O<sub>5</sub>**  
BMDD0033 – **152.6m at 10.8% TGC and 0.32% V<sub>2</sub>O<sub>5</sub>**  
BMDD0034 – **152.6m at 12.5% TGC and 0.33% V<sub>2</sub>O<sub>5</sub>**  
BMDD0038 – **242.6m at 11.4% TGC and 0.30% V<sub>2</sub>O<sub>5</sub>**

On 13 November 2012, SYR announced an **Exploration Target of 300-400 million tonnes at 11% TGC and 0.30% V<sub>2</sub>O<sub>5</sub>** for Balama East.

An Inferred Mineral Resource from Balama East is planned to be released in the second quarter this year.

### **Planned 2013 Drill Programme**

The 2013 drill programme is forecast to commence in March / April 2013, following the current wet season. The programme will extend and close-off the high grade Ativa and Mualia zones. SYR envisages that approximately 5,000 metres of diamond drilling will be required to complete this program.

### **SCOPING STUDY**

The Scoping study is progressing to plan and is expected to be released during the second quarter of this year.

In relation to infrastructure, SYR has held discussions with Pemba Port and believes there is ample capacity to handle the volumes of graphite likely to be shipped from the port. A major dam is located only 14 kilometres from the Balama Project and SYR obtained an offer for water rights from the dam administrator. The national electricity grid is only 40 km away at a major regional town, Monte Puez. Power lines are planned to be installed between Monte Puez and Balama. The Scoping Study will consider both grid power and self generated power options.

Based on the size of the deposit and the product mix achieved from metallurgical testwork (announced 27/9/2012), SYR believes that Balama could meet demand requirements across all natural graphite flake ranges (jumbo to amorphous) for several generations. Given the low impurities contained in the graphite concentrate, SYR believes it will achieve premium prices on its product range. Finally, given the high grade,

negligible waste and simple processing route, SYR believes that mining and processing costs will be amongst the lowest in the world. In this regard, SYR expects to be able to compete with other existing and impending producers as Balama is expected to supply a higher quality product with a considerably lower cost structure.

## **CUSTOMER METALLURGICAL TESTING OF BALAMA GRAPHITE**

Over the past few months, the SYR marketing manager, Sait Uysal has been meeting with major global buyers of graphite. The response has been extremely positive with all requesting samples for testing purposes.

A major graphite buyer visited the Balama Project in October last year, collecting three batches of core sample splits from three locations at Balama. These samples were processed through their laboratory-scale plant which used four stages of stages of flotation and two re-grinding steps. This testwork produced three concentrates with an average grade exceeding 97.3% total graphitic carbon. This result validates SYR's earlier metallurgical test work (September 2012) that produced 97.02% concentrates with a simple grinding and flotation circuit.

## **MINERAL SANDS – TANZANIA**

SYR controls a 100% interest in eight Prospecting Licences and one Prospecting Licence Application focused on mineral sands exploration in the northern and central coastal areas of Tanzania (Figure 5). This significant portfolio of licences covers an area of over 1,000 km<sup>2</sup> and strike extent of greater than 100 km. Most of the Tanzanian coast known to be prospective for heavy mineral sands is now secured by a SYR granted licence. All projects have significant mineral sands anomalies identified by past explorers with minimal exploration follow up.

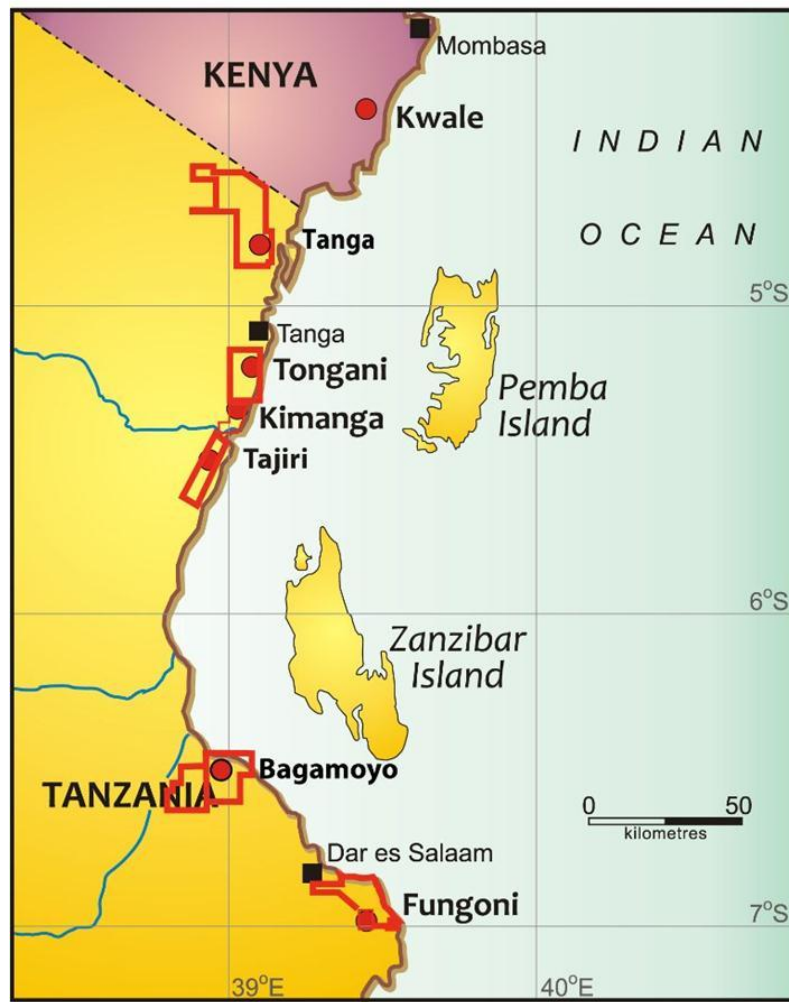


Figure 5 - Tanzanian central and northern coastline showing Syrah licences and HM project locations.

## Fungoni

Drilling by a previous explorer at the Fungoni prospect revealed the following best intercepts:

- **4m containing 27.8%** heavy minerals
- **4m containing 24.9%** heavy minerals
- **4m containing 23.1%** heavy minerals

The previous drilling stopped at 4m as the auger was not able to penetrate below the water table. These high heavy mineral grades are particularly interesting as the average composition of the heavy minerals was 25% zircon, 5% rutile and 44% ilmenite.



During the quarter, approximately 8,000m was drilled at the Fungoni prospect. Based on visual inspection of drill samples, SYR believes it is very likely that the high grade zones extend below a depth of 4m.

## **Tongani to Tajiri Trend**

The coastline in this area runs uniformly north northeast and has several major rivers entering the Indian Ocean over the 50km strike length of the licences. The three licences contain several zones that have been interpreted to be >3% heavy minerals from surface sampling, exploration pits and limited hand auger drilling. Of these anomalous zones, only Tajiri has been seriously followed up with further auger drilling.

At **Tajiri** best drill intersections included:

- **14m containing 9.2%** heavy minerals
- **9m containing 12.3%** heavy minerals.

The average assemblage of the Tajiri heavy minerals was 7% zircon, 12% rutile and 72% ilmenite.

A detailed airborne magnetic, radiometric and digital terrain survey was flown over this area during the quarter. This has identified several areas for further ground checking.

## **CASH AT BANK**

As at 31 December 2012, SYR had approximately \$12.9 million of cash.

During the quarter, SYR completed an oversubscribed fully underwritten institutional share placement to raise approximately \$16 million to primarily fund exploration and evaluation of the Balama Graphite and Vanadium Project and the Tanzanian mineral sands project and also for working capital purposes.

*The information in this report as it relates to geology, geochemical, geophysical and exploration results was compiled by Mr Tom Eadie, FAusIMM, who is a Competent Person and Chairman of Syrah Resources Ltd. Mr Eadie has more than 20 years experience in the activities being reported on and has sufficient expertise which is relevant to the style of mineralisation and type of deposit under consideration. He consents to the inclusion of this information in the form and context in which it appears in this report.*

Paul Kehoe  
Managing Director  
Syrah Resources Ltd  
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# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

SYRAH RESOURCES LIMITED

ABN

77 125 242 284

Quarter ended ("current quarter")

31 DECEMBER 2012

### Consolidated statement of cash flows

Cash flows related to operating activities		Current quarter \$A	Year to date (6 months) \$A
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for		
	(a) exploration and evaluation	(2,948,681)	(5,024,211)
	(b) development	-	-
	(c) production	-	-
	(d) administration *	(355,817)	(938,402)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	50,118	75,960
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other	-	-
<b>Net Operating Cash Flows</b>		<b>(3,254,380)</b>	<b>(5,886,653)</b>
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of:		
	(a)prospects/farmins	(296,170)	(686,964)
	(b)equity investments	-	-
	(c) other fixed assets	(57,507)	(172,581)
1.9	Proceeds from sale of:		
	(a)prospects	-	-
	(b)equity investments	-	-
	(c)other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
<b>Net investing cash flows</b>		<b>(353,677)</b>	<b>(859,545)</b>
1.13	Total operating and investing cash flows (carried forward)	<b>(3,608,057)</b>	<b>(6,746,198)</b>

\* The major administration costs during the quarter included general corporate costs, accounting fees, legal fees, travelling expenses, and general administrative costs at the Balama Graphite and Vanadium Project in Mozambique, and the Tanzanian Mineral Sands projects.

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(3,608,057)	(6,746,198)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares and exercise of options	16,339,130	16,714,130
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	(118,878)	(118,878)
1.18	Dividends paid	-	-
1.19	Other – Capital raising costs	(763,628)	(768,214)
	<b>Net financing cash flows</b>	15,456,624	15,827,038
	<b>Net increase (decrease) in cash held</b>	11,848,567	9,080,840
1.20	Cash at beginning of quarter/year to date	1,083,305	3,874,721
1.21	Exchange rate adjustments to item 1.20	(70,391)	(94,080)
1.22	<b>Cash at end of quarter</b>	12,861,481	12,861,481

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

	Current quarter \$A
1.23 Aggregate amount of payments to the parties included in item 1.2	\$309,127
1.24 Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

The above related party payments include Salaries, Superannuation, Rent, and Consultancy fees paid to director related entities during the December 2012 quarter. It also includes payments to OptiRes Pty Ltd of \$46,529 for consultancy, administration services, and management of the Balama Scoping Study. OptiRes Pty Ltd is controlled by a former director, Mr Alistair Campbell. Payments were also made to Copper Strike Limited for part rental of the principal place of business for \$3,300. A further \$57,658 was paid to Copper Strike Limited in relation to director related time charged to Syrah. Copper Strike Limited is a related entity of Mr Tom Eadie. An amount of \$118,878 was also paid to Mr Paul Kehoe in relation to repayment of the loan owing to him which was acquired as part of the Jacana Acquisition in December 2011.

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

+ See chapter 19 for defined terms.

### Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	900
4.2 Development	-
4.3 Production	-
4.4 Administration	500
<b>Total</b>	<b>1,400</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	12,799	1,021
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other – Bank Term Deposits	62	62
<b>Total: cash at end of quarter (item 1.22)</b>	<b>12,861</b>	<b>1,083</b>

### Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed				
6.2 Interests in mining tenements acquired or increased	7499/2011		Nil	100%
	8008/2012		Nil	100%
	7960/2012		Nil	100%
	7806/2012		Nil	100%
	7712/2012		Nil	100%
	8123/2012		Nil	100%

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

**Issued and quoted securities at end of current quarter**

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 <b>Preference securities</b> <i>(description)</i>	-	-	-	-
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	-	-	-	-
7.3 <b>+Ordinary securities</b>	134,867,089*	134,867,089*	FP	FP
7.4 Changes during quarter (a) Increases through issues   (b) Decreases through returns of capital, buy-backs	7,146,569  237,499 760,000*	7,146,569  237,499 760,000*	\$2.25 (2 dollars and 25 cents) \$0.26 (26 cents) \$0.26 (26 cents)	\$2.25 (2 dollars and 25 cents) \$0.26 (26 cents) \$0.26 (26 cents)
7.5 <b>+Convertible debt securities</b> <i>(description)</i>	-	-	-	-
7.6 Changes during quarter (a) Increases through issues  (b) Decreases through securities matured, converted				
7.7 <b>Options</b> <i>(description and conversion factor)</i>	16,002,501 500,000	- -	<b>Exercise price</b> \$0.26 \$2.21	<b>Expiry date</b> 15 December 2015 16 July 2016
7.8 Issued during quarter				
7.9 Exercised during quarter	997,499	-	\$0.26	15 December 2015
7.10 Expired during quarter				
7.11 <b>Debentures</b> <i>(totals only)</i>				
7.12 <b>Unsecured notes</b> <i>(totals only)</i>				

\* Ordinary Securities includes 760,000 fully paid ordinary shares which were allotted on 4 January 2013. Funds received for the exercise of these options which totalled \$197,600 were received during December 2012 and included in the quarterly cashflow.

+ See chapter 19 for defined terms.



## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:



Date: 31 January 2013

Company Secretary

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 wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities.** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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