



12 November 2013

## ATIVA ZONE – INDICATED AND INFERRED RESOURCE

### Highlights:

- **Ativa Zone Indicated and Inferred Resource calculated by independent consultants, MSA Group (MSA), comprises 51 million tonnes at 19.9% Total Graphitic Carbon (TGC) and 0.38% V<sub>2</sub>O<sub>5</sub> at a 13% TGC cut-off**
- **This result more than doubles the earlier Inferred Resource of 21 million tonnes at 20.8% TGC and 0.38% V<sub>2</sub>O<sub>5</sub>**
- **The total Indicated Resource comprises 13.5 million tonnes at 19.8% TGC and 0.40% V<sub>2</sub>O<sub>5</sub> at a 13% TGC cut-off**
- **From 0-100m, the Indicated Resource is 12 million tonnes at 19.9% TGC and 0.40% V<sub>2</sub>O<sub>5</sub> at a 13% TGC cut-off**
- **Using a 20% cut off grade, the Ativa resource is 30 million tonnes at 21.8% TGC, a tonnage that far exceeds that of Lac Guéret and Lac Knife combined and at a higher grade than both. Guéret and Lac Knife are reported be the highest grade graphite deposits in the world**

On 23 January 2013, Syrah Resources (ASX:SYR) announced a maiden Inferred Resource of 21 million tonnes at 20.8% TGC and 0.38% V<sub>2</sub>O<sub>5</sub> for the Ativa Zone at Balama West. This is only a small part of the billion plus Inferred Resource that Syrah has previously announced.

Syrah Resources (ASX:SYR) is very pleased to report an updated Mineral Resource for the Ativa Zone. The Ativa Zone now has a total Indicated and Inferred Resource of **51 million tonnes at 19.9% TGC and 0.38% V<sub>2</sub>O<sub>5</sub>**. The resource has more than doubled with a negligible decline in graphite grade and no decline in vanadium grade. The resource was determined based on a cut-off grade of 13% TGC. The Ativa Zone is still open to the west and east and at depth. Full details of the updated Mineral Resource are shown in the table overleaf:

ASX Code SYR

### Current Corporate Structure

#### Ordinary Shares

Issued Shares: 148,410,123

#### Options

Exercisable at \$0.26:	2,489,467
Exercisable at \$2.21:	470,000
Exercisable at \$2.90:	250,000
Exercisable at \$3.87:	1,000,000

#### Major Shareholders

Directors	24.39%
Citicorp Nom PL	10.60%
Copper Strike Ltd	7.42%
Gasmere PL	4.42%
HSBC Custody Nom Aust Ltd	3.22%

### Board of Directors

Mr Tom Eadie  
*Non-Executive Chairman*

Mr Paul Kehoe  
*Managing Director*

Mr Tolga Kumova  
*Executive Director*

Mr Rhett Brans  
*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)

Depth	Mineral Resource size and grade	Mineral Resource Category	Contained graphite (tonnes)	Contained vanadium pentoxide (tonnes)
0-50m	5.50 million tonnes at 20.2% TGC and 0.38% V <sub>2</sub> O <sub>5</sub>	Indicated	1,111,000	20,900
0-50m	5.65 million tonnes at 20.9% TGC and 0.34%	Inferred	1,180,850	19,210
0-100m	12.02 million tonnes at 19.9% TGC and 0.40% V <sub>2</sub> O <sub>5</sub>	Indicated	2,391,980	48,080
0-100m	13.16 million tonnes at 20.6% TGC and 0.35% V <sub>2</sub> O <sub>5</sub>	Inferred	2,710,960	46,060
100m – 300m	1.53 million tonnes at 19.3% TGC and 0.40% V <sub>2</sub> O <sub>5</sub>	Indicated	295,290	6,120
100-300m	24.61 million tonnes at 19.5% TGC and 0.38% V <sub>2</sub> O <sub>5</sub>	Inferred	4,798,950	93,518
<b>Total</b>	<b>51.32 million tonnes at 19.9% TGC and 0.38% V<sub>2</sub>O<sub>5</sub></b>	<b>Indicated and Inferred</b>	<b>10,197,180</b>	<b>193,778</b>

**Table 1 – Mineral resource figures for Ativa Zone at a 13% TGC cut-off**

As can be seen from the above table, a substantial portion of the Mineral Resource is now in the Indicated category. The total Indicated Mineral Resource is currently 13.5 million tonnes at 19.8% TGC and 0.40% V<sub>2</sub>O<sub>5</sub>.

From 0-50m, the Indicated Mineral Resource currently stands at 5.5 million tonnes at 20.2% TGC and 0.38% V<sub>2</sub>O<sub>5</sub> for 1.1 million tonnes of contained graphite and 21,000 tonnes of contained vanadium. The oxidation zone at Balama extends to about 60m in depth. The graphitic rocks in this zone are very friable. Therefore the anticipated mining costs are anticipated to be very low for the initial years of mining and the graphite flakes will liberate with very little energy required.

From 0-100m, the Indicated Mineral Resource currently stands at 12 million tonnes at 19.9% TGC and 0.40% V<sub>2</sub>O<sub>5</sub> for 2.4 million tonnes of contained graphite and 48,000 tonnes of contained vanadium. The contained graphite is considered sufficient to sustain an envisaged Ativa pit life of well over 10 years.

Syrah drilled only a limited number of holes greater than 100m in depth as the aim of the program was to prove up an Indicated Mineral Resource at shallow depth that would sustain an anticipated Ativa pit life of at least a decade. Accordingly, most of the resource below 100m is still in the Inferred Resource category. Based on the data obtained from this drill program, Syrah is very confident that this part of the Mineral Resource can be readily upgraded from Inferred to Indicated if ever needed.

As noted in Syrah's announcement of 21 October 2013, the Lac Guéret and Lac Knife deposits (both of which are in Canada) are reported to be the world's highest grade graphite deposits based on claims by their owners. The Lac Guéret deposit has a combined Measured and Indicated Mineral Resource of 7.6 million tonnes at 20.4% TGC. The Lac Knife deposit has a combined Measured and Indicated Mineral Resource of 8 million tonnes at 16% TGC. These compare with the total Indicated and Inferred Mineral Resource of Ativa (a small portion of the Balama deposit) which currently stands at 51 million tonnes at 19.9% TGC and 0.38% V<sub>2</sub>O<sub>5</sub>, a tonnage that far exceeds that of Lac Guéret and Lac Knife combined. Using a cut-off grade of 20%, the Indicated and Inferred Mineral Resource at Ativa is 30 million tonnes at 21.8% TGC.

Depth	Resource size and grade	Mineral Resource Category	Contained graphite (tonnes)
0-100m	6.93 million tonnes at 22.1% TGC	Indicated	1,531,530
0-100m	8.65 million tonnes at 22.3% TGC	Inferred	1,928,950
100m – 300m	0.71 million tonnes at 21.7% TGC	Indicated	154,070
100-300m	13.71 million tonnes at 21.3% TGC	Inferred	2,920,230
<b>Total</b>	<b>30.00 million tonnes at 21.8% TGC</b>	<b>Indicated and Inferred</b>	<b>6,534,780</b>

**Table 2 – Graphite Mineral Resource figures for Ativa Zone at a 20% TGC cut-off**



## COMPETENT PERSONS STATEMENT

The information in this report which relates to mineral resources at the Balama West Project in Mozambique is based on information compiled by Mr Michael R. Hall, BSc (Hons), MBA, Pr.Sci.Nat., MAusIMM. Mr Hall has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken 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 Hall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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### ***About Syrah Resources***

*Syrah Resources (ASX code: SYR) is an Australian resource company with a diversified exploration portfolio located in southeast Africa. The Company is rapidly progressing its core Balama Graphite and Vanadium Project in Mozambique to production. Balama is a 106km<sup>2</sup> granted prospecting licence located within the Cabo Delgado province in the district of Namuno in northern Mozambique. The project is approximately 265km by road west of the port town of Pemba. Pemba Port is a deep-water container port, and the third largest in Mozambique. The Balama project site is accessible by a sealed, main road, running directly from Pemba Port.*

*Syrah's exploration portfolio also includes a strategic mineral sands portfolio in Tanzania, comprising eight tenement areas, some with high grade heavy mineral intersections, and the Nachingwea graphite project in Tanzania.*