

## DECEMBER- 2015 QUARTERLY REPORT

### ATHENA RESOURCES LIMITED

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### CONTACTS

Mr Ed Edwards  
Managing Director

### PROJECTS

#### Byro:

Iron Ore, Nickel-Copper-PGE's

### SECURITIES

189M Shares - AHN

### SHAREHOLDERS

Mr E Edwards	16.16%
Brilliant Glory	7.95%
Mr D Webster	5.24%

## BYRO IRON PROJECT

### CORPORATE

- **Binding Terms Sheet Signed with Brilliant Glory for**
  - **Placement of \$1,000,000**
  - **Conditional sale Byro Project**

### EXPLORATION

- **Completion of FE1 Mineralisation Report**
- **Preparation of Drill Sample from the Byro South Project for DTR and Metallurgical Test Work**
- **Planning for Infill and further metallurgical Drilling**

## **BYRO MAGNETITE PROJECT (Athena Resources 100%)**

### **Corporate**

As announced to ASX on 8 January 2016, Athena has entered into a Binding Term Sheet with Brilliant Glory Industrial Corporation Limited (Brilliant Glory), the material terms of which are as follows:

#### **Placement to Raise \$1 million**

Brilliant Glory will subscribe for \$1,000,000 worth of Shares on the following basis:

- 15,000,000 Shares at an issue price of \$0.02 each to raise \$300,000 (**Tranche 1 Placement**). The Tranche 1 Placement has already taken place; the Shares were issued under the Company's Listing Rule 7.1 placement capacity; and
- 28,000,000 shares at an issue price of \$0.025 each to raise \$700,000 (**Tranche 2 Placement**). The Tranche 2 Placement is subject to the Company receiving Shareholder approval.

Shares issued pursuant to the Tranche 1 Placement and the Tranche 2 Placement will be subject to a 12 month voluntary escrow period from their date of issue.

#### **Proposed Board Appointment**

Mr. Jian Li, a director of Brilliant Glory, will be appointed to the Board on completion of the Tranche 2 Placement.

#### **Conditional Disposal of the Byro Project**

Subject to the Company receiving all necessary Shareholder and regulatory approvals, the Company has agreed to give Brilliant Glory the right (but not the obligation) to purchase the Byro Project in consideration for the payment of \$20,000,000.

Completion of the acquisition under the Binding Term Sheet is subject to the following conditions:

- Athena conducting the necessary works to obtain two mining leases within the boundaries of the Byro Project; and
- Athena and Byro obtaining all necessary Shareholder and regulatory approvals prior to completion.

On and from completion of the acquisition, Athena will be entitled to a royalty of \$2 per dry metric tonne of iron ore sold from the Byro Project.

### **Exploration**

During the second quarter, Athena started preliminary work on gaining approval of mining lease applications.

The mineralised areas being considered for mining lease applications are

- FE1
- Mt Narryer
- Byro South
- Whistlejack
- Heppenstall

This quarter the company has met with the Department of Mines and Petroleum to initiate the lease application process. A Mineralisation report has been completed for the FE1 Prospect intended to fulfil the

## Athena Resources Limited – Second Quarter Activities

statutory requirement in Section 74(1) (a) and Section 74(ca) (ii) of the *Mining Act 1978* in support of an application to convert part of Exploration Lease E09/1507 covering the FE1 Ore body and JORC compliant inferred resource to a mining lease and also in support of a consequent mining proposal.

The preparation of mineralisation reports for the remaining projects will be undertaken in 2016.

Following the grant of the mining leases the individual projects will be assessed for potential mining based on their merits.

### **Summary of Key Elements in the Byro Magnetite Mineralisation Reports**

#### **Metallurgical Review**

Review of the physical and metallurgical characteristic of the Byro Magnetite.

- Observed crystal is granular
- Grain size up to 4mm (4,000  $\mu\text{m}$ )
- Dissemination Granularity 95% between 0.2mm < 1.65mm (200 $\mu\text{m}$  < 1,650  $\mu\text{m}$ )
- Hardness on Mohs scale 6.5 with Vickers Hardness Number ( $\text{VHN}_{100}=681 - 792 \text{ kg/mm}^2$ )
- Specific gravity calculated at 5.18  $\text{g/cm}^3$
- Uneven fracture parting on surface {111}
- Negligible cleavage planes within the crystal matrix.

#### **Chemistry Review**

The concentrate chemistry key attributes are,

- Mineral composition of the ore is simple.
- No significant secondary alteration.
- $\text{K}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , P, and S, all low and with P and S particularly low.
- Product is a high-quality concentrate of primary acidic magnetite.
- $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ , CaO, and MgO decrease as TFe increases.
- Magnetite represents the major iron-bearing mineral, while quartz represents the major gangue mineral.
- Tailings component of the ore is  $\text{SiO}_2$ , accounting for 80.99% of the total
- Product and tailings have no significant environment impacts.

Minerals to be disposed by separation for iron enrichment on concentration include mainly  $\text{SiO}_2$ , followed by  $\text{Al}_2\text{O}_3$ , CaO, and MgO, altogether amounting 46.83% of the total weight. Contents of phosphorus and sulphur, which are the common hazardous contents, in like ores, are too low to cause any substantial influence on the quality of concentrate. Common Byro magnetite grains only microscopic impurities.

#### **Summary of Premium Markets Suitable for Byro Magnetite**

The industrial magnetite product from Byro is suitable for a large range of industrial uses. In the previous quarter the company had commenced discussion with several industries and specific product users. Those discussions continue and market gaps identified by Athena endure. The Market gaps include common use areas as well specialist industries using coarse grain size and or purity are in high demand.

- **High Grade – Low Impurity for Specialised Manufacturing**
- **Dense Media Separation – Ragging**
- **Dense Media Separation – Coal Washing**
- **Catalyst in Ammonia Production**

## Athena Resources Limited – Second Quarter Activities

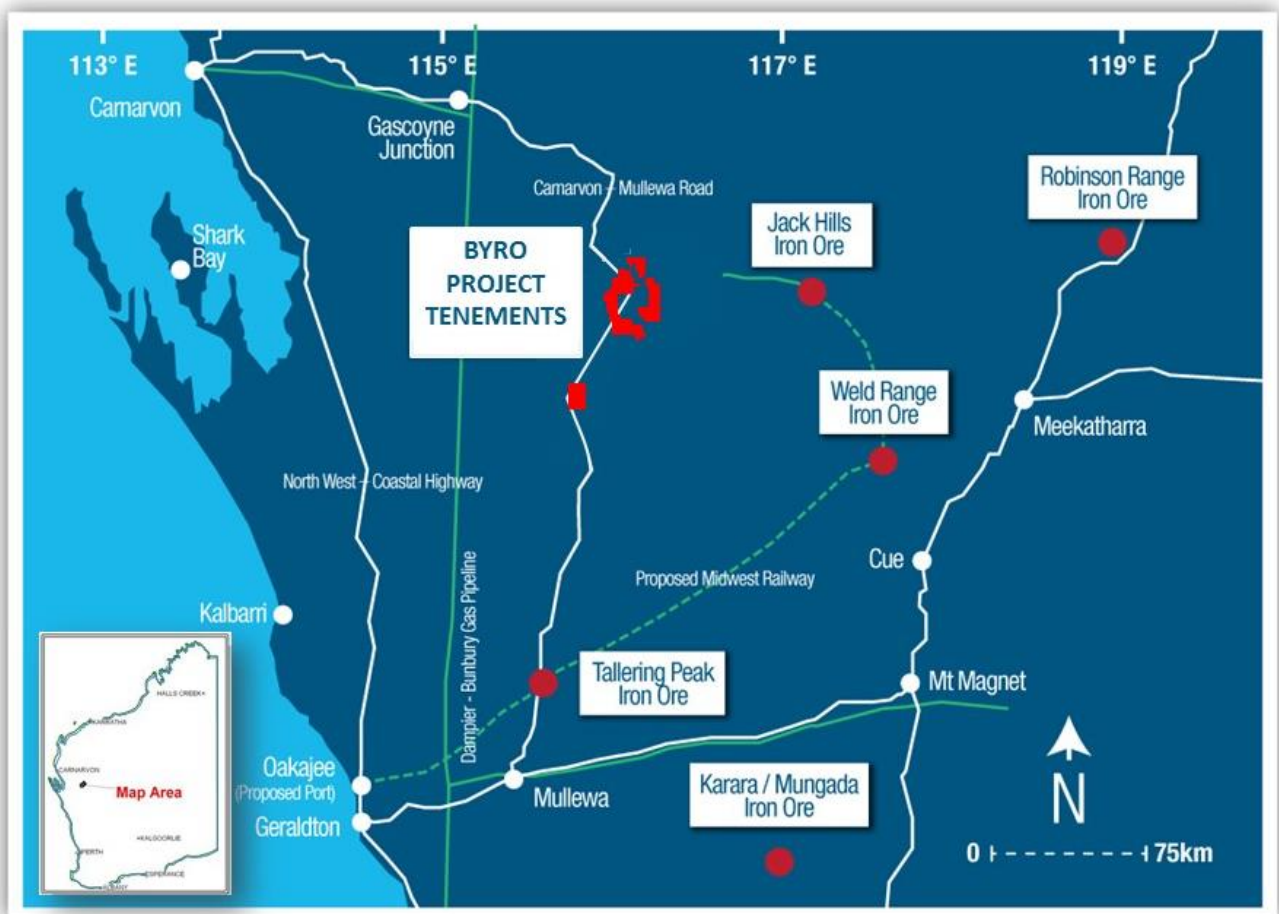
- **Liquid Hydrocarbon Fuel Production from Coal and Natural Gas**
- **Industrial abrasives, sand blasting and ablation**
- **Aggregate in high-density concrete.**

### **About Athena Resources Limited.**

Athena Resources Limited (ASX:AHN), which is based in Perth was listed on the ASX in 2006 and currently has 188 million shares on issue. Athena owns a 100% interest in the Byro Project through its subsidiaries Complex Exploration and Byro Exploration where it is exploring for iron ore copper, nickel and PGE's.

The Byro Iron Ore Project is strategically located in the Midwest which includes a substantial mining sector. The projects southern boundary is 210km north of the Mullewa Rail Siding by road and 310km from the Port of Geraldton. Access and improved infrastructure to the maturing iron ore province is growing with development of the CSIRO SKA Project and increased capacity and further development at the Port of Geraldton.

**Figure 1 Regional Project Location**



Yours faithfully

Ed Edwards  
**Managing Director**  
**ATHENA RESOURCES LIMITED**

28 January 2016

## Athena Resources Limited – Second Quarter Activities

### **JORC Compliance**

No new sampling or data was acquired in this quarter or released in this document that is required to be disclosed in compliance with the

#### **JORC Code, 2012 Edition Section 1 Sampling Techniques and Data**

No new sampling or data was acquired in this quarter or released in this document that is required to be disclosed in compliance with the

#### **JORC Code, 2012 Edition Section 2 Reporting of Exploration Results**

No new sampling or data was acquired in this quarter or released in this document that is required to be disclosed in compliance with the

#### **JORC Code, 2012 Edition Section 3 Estimation and Reporting of Mineral Resources**

<b>INTEREST IN MINING TENEMENTS</b>	
<b>Athena Resources Limited 100%</b>	
<b>Byro</b>	
E09/1507	E – Exploration License
E09/1552	E – Exploration License
E09/1637	E – Exploration License
E09/1781	E – Exploration License
E09/1938	E – Exploration License

### **Cautionary Notes**

#### **Forward Looking Statements**

*This announcement contains certain statements that may constitute “forward looking statements”. Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward looking statements.*

#### **JORC Code Compliance Statement**

*Some of the information contained in this announcement is historic data that have not been updated to comply with the 2012 JORC Code. The information referred to in the announcement was prepared and first disclosed under the JORC Code 2004 edition. It has not been updated since to comply with the JORC Code 2012 edition on the basis that the information has not materially changed since it was last reported.*

#### **Competent Persons Statement**

*The information included in the announcement was compiled by Mr Liam Kelly, an employee of Athena Resources Limited. Mr Kelly is a Member of the Australasian Institute of Mining and Metallurgy, and has sufficient relevant experience in the styles of mineralisation and deposit styles under consideration to qualify as a Competent Person as defined in “The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition)”. Mr Kelly consents to the inclusion of the information in the announcement in the context and format in which it appears and that the historical information was compliant with the relevant JORC Code, 2004 Edition, and new information announced in this report is compliant with the JORC Code 2012 Edition.*

#### **Competent Persons Disclosure**

*Mr Kelly is an employee of Athena Resources and currently holds securities in the company.*