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31 January 2018

Company Announcements

Australian Securities Exchange Limited Level 40, Central Park, 152-158 St Georges Terrace PERTH WA 6000

QUARTERLY ACTIVITIES REPORT PERIOD ENDING 31 DECEMBER 2017

Ironbark Zinc Limited ("Ironbark, the Company") (ASX: IBG) hereby provides a report on its activities for the period ending 31 December 2017. During this reporting period the Company remained focussed on the development of the world class Citronen zinc project. This is an exciting time for the Company as it progresses toward the major project financing stage of the advanced and high margin, large scale Citronen zinc project during a period of very strong zinc prices.

Ironbark is now working towards project financing and progressing into production. The wholly owned Citronen project is exceptionally well placed to meet the strong and growing global demand for zinc and would be highly profitable in today's environment. Citronen is held under a granted mining permit in a low sovereign risk jurisdiction that provides the Company with confidence that the financing process will be successfully achieved.

Cutfield Freeman & Co Appointed

During the reporting period Ironbark announced the appointment of Cutfield Freeman & Co., (CF&Co) a highly credentialed tier one international financial advisory firm to assist Ironbark structure and secure the financing for the world class Citronen zinc project.

CF&Co is an independent corporate finance house with offices in London, Toronto and Hong Kong providing independent advice to companies in the mining and metals sectors. CF&Co advises on all aspects of corporate, project and offtake-related finance, mergers and acquisitions, and joint ventures. CF&Co has acted on a wide variety of transactions for a range of mining companies including BHP Billiton Ltd, Dynatec Corporation, Molycorp Inc, Zijin Mining Group Co., Anatolia Mineral Development Ltd/Alacer Gold Corporation.

Senior Appointments

Ironbark has commenced work on identifying the project development team including the appointment of a Senior Project Manager and Senior Finance Manager.

The Feasibility Study Project Execution document is currently being reviewed by CPC Engineering. Long lead items and logistical plans are being prepared to ensure a seamless





transition into production with mining planned to commence in 2019, with site preparation works being conducted this year.

Germanium

Ironbark has identified potentially significant Germanium in the Citronen ore as released to the Australian Securities Exchange (ASX) on 7 December 2017. Further assaying is underway and results will be reported in due course.

Germanium is a potential credit in some zinc ore bodies that formed in low temperature environments, such as Citronen. As previously announced, Ironbark has released results for one composite ore sample that is considered representative of the Beach Zone ore body and that returned a result of 24 parts per million (ppm). Germanium tends to report to, and get upgraded to, the zinc concentrate during processing. Certain zinc smelters around the world are able to extract and pay for the germanium from the zinc concentrate, requiring no change to the Citronen processing of zinc concentrate on site. Ironbark makes no representation about how much, if any, of the germanium processed will be a payable credit to Ironbark.

The demand for germanium for fibre optic communication networks, solar panels, infrared night vision systems, and polymerisation catalysts has increased dramatically in recent years. These end uses represent the majority of worldwide germanium consumption. The US government designated germanium as a strategic and critical material and holds a supply in the national defence stockpile.



Germanium (Ge) ask price chart

China Nonferrous Progress

Work is ongoing with China Nonferrous (NFC) with the majority of the design and planning studies having been completed. We note that Chinese regulatory requirements and design changes have resulted in variations to the Western Feasibility Study. Some of these changes



have resulted in delays and Ironbark remains in close discussion with NFC. Ironbark continues to work with NFC under the pre-existing Memorandum of Understanding.

Western Project Financing

Aided by Cutfield Freeman's global expertise, Ironbark is working on a traditional financing pathway that could see the adoption of the Metso plant and equipment and Western financing as envisaged under the current Feasibility Study. Ironbark has received interest from several large funds and is encouraged by the interest shown in the project.

Updated Shipping Study

Ironbark is pleased to advise that it has received an updated shipping study that incorporates weather conditions over the past 6 years. The Shipping Study, prepared by the Pre Eminent Shipping advisor highlights significant changes in the artic shipping environment around the proposed Citronen shipping pathway. This has a significant positive impact on the shipping vessel access.

Patersons Securities Limited

During the quarter Patersons Securities Limited (Patersons) initiated research on Ironbark with a target share price of 35c per share. The Patersons research note is available on Ironbark's website (<u>www.ironbark.gl</u>). Post quarter-end Ironbark appointed Patersons as Lead Manager for a capital raising that was significantly oversubscribed.

Board Appointment and Resignation

Mr. Kelly Strong has been appointed as a Non-Executive Director on the Board of Ironbark as a nominee of Nyrstar N.V. (Nyrstar), one of the world's largest zinc metal producers. Ironbark advised that Mr. Jason Dunning has resigned as a Non-Executive Director of Ironbark as a result of him accepting another role outside of Nyrstar.

Mr. Strong is the Vice President for mining operations at Nyrstar located in Tennessee. In his current role Mr. Strong is responsible for all of Nyrstar's zinc mining and milling operations in Canada and the United States, operating the mining of polymetallic zinc ore bodies, and associated products. Mr. Strong's appointment is ideally suited to support Ironbark's planned transition into mining.

Prior to joining Nyrstar, Mr. Strong spent 14 years with Vale in various senior management roles. These roles included working at their nickel operations in Indonesia and was also responsible for mining and smelting operations in various parts of Canada and the UK. In Mr. Strong's last role he was the Vice President of the Ontario and UK operations where his portfolio included mining, smelting and refining operations of nickel, copper, cobalt and precious metals. Mr. Strong holds a Bachelor degree in Mining Engineering from South Dakota Tech.





Zinc Price Hits New Decade High

The zinc price has continued to rise and has recently, subsequent to this report, crossed decade high levels of US\$3,500/t or over US\$1.60 /lb. These exceptionally strong levels are supported by falling London Metal Exchange (LME) inventories which are looking towards reaching critically low levels.

Aside from the well-known depletion of several of the Worlds larger zinc mines and against a backdrop of ever growing demand there are other market dynamics at play. China has historically produced almost half of the worlds zinc and generally consumes approximately this amount. Since 2014, the Chinese authorities have taken a strict stance regarding the environment. Many Chinese operators, particularly the smaller swing producers, have historically had a substantial and negative impact on the environment. The new focus has resulted in the suspension of a large number of smaller operations. It is unlikely many of these will ever be able to comply with the environmental standards. This has had a strong and apparently lasting effect on the supply and demand fundamentals surrounding zinc production. Existing operations around the world have expanded where possible, in many cases with production growth considered to be near record levels in 2017 and forecast to be equally strong in 2018. Wood Mackenzie forecast that despite this, the global zinc stocks will remain at critically low levels and forecast zinc to rise as high as US\$4,000/t (over US\$1.80/lb) in the first quarter of 2019.

Citronen remains one of the largest zinc projects in the world and offers strong leverage to the rising zinc price with exceptionally high revenues and a strong NPV, as released on 12 September 2017, once in production.

Ironbark remains debt-free and has a strong shareholder base. Ironbark has an engineering and construction Memorandum of Understanding (MOU) with China Nonferrous Metal Industry's Foreign Engineering and Construction Co. Ltd (NFC) for a fixed price Engineering, Procurement and Construction (EPC) contract. The MOU encompasses a 70% debt funding proposal through Chinese banks and provides NFC with a right to buy a 20% direct interest in the Citronen Project. Citronen's Feasibility Study with all the supporting studies has been presented to NFC for the purposes of preparing the EPC and financing work. Ironbark is assessing the best financing pathway forward and is considering working with several potential partners.

Cash Position

The Company holds a cash position at the end of the December 2017 quarter of approximately \$1.3M with no debt. Subsequent to the Quarter Ironbark concluded a strongly subscribed \$6M capital raising that places Ironbark in a strong position to aggressively progress the financing and development activities.

End.

For further information please visit Ironbark's website <u>www.ironbark.gl</u> or contact us:

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Highlights of the Feasibility Study

NPV⁸ US \$1,034 Million (US \$909 Million post tax*) IRR 36% (35% post tax*) US \$514 Million** **Capital Cost** • Large Scale Production 3.3Mtpa Mine Rate/Production up to 200,000tpa zinc metal US\$0.52/lb Zn (Payable, Net of by-product credits)*** Site Cost Mine Life 14 years (open ended and with further inferred resources that could potentially be converted to reserves) Life of Mine Revenue US\$6,364 Million Life of Mine Operating Costs US\$3,025 Million • Life of Mine NPAT US\$1,836 Million*

Project Highlights

- 100% Owned Exploitation Licence 2016/30 (Mining Permit) Granted by the Greenland Government 30 year term
- Open-ended, simple, consistent resource
- Simple Mining, Simple Processing using Standard Technology
- Ironbark is Working with China Nonferrous under a MOU to Deliver an EPC Fixed Price Contract and Assist in Project Financing
- No debt
- Major Industry Shareholders Glencore International AG & Nyrstar NV

* Excluding dividend withholding tax (Corporate tax rate of 30%, dividend withholding tax 36%). All costs and prices indexed at a CPI rate of 2.5% pa

** Compared against the last Western Calculation dated 2011 is a 2.4% increase. NFC are currently working on a Chinese Feasibility study

*** Smelter fees an additional US\$0.14/lb Zn payable

Feasibility Study Cautionary Statement:

Refer to ASX announcement 12 September 2017. Ironbark confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from the production target, in the initial ASX announcement continue to apply and have not materially changed. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.



About Ironbark

Ironbark is listed on the Australian Securities Exchange and is seeking to become a base metal mining house. Ironbark has an undrawn US\$50M funding facility provided by Glencore to expand its project base through acquisition.

Ironbark seeks to build shareholder value through exploration and development of its projects and also seeks to actively expand the project base controlled by Ironbark through acquisition. The management and board of Ironbark have extensive technical and corporate experience in the minerals sector.

The wholly owned Citronen base metal project currently hosts in excess of 13.1 Billion pounds of zinc (Zn) and lead (Pb). For full details refer to ASX announcement 25 November 2014 – Citronen Project Resource Update – JORC 2012 compliant resource. Ironbark is not aware of any new information or data that materially affects the information included in this ASX release, and Ironbark confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the resource estimates in this release continue to apply and have not materially changed.

Category	Mt	Zn%	Pb%	Zn+Pb%
Measured	25.0	5.0	0.5	5.5
Indicated	26.5	5.5	0.5	6.0
Inferred	19.3	4.9	0.4	5.3

The current JORC 2012 compliant resource for Citronen:

70.8 million tonnes at 5.7% Zn + Pb

Using Ordinary Kriging interpolation and reported at a 3.5% Zn cut-off

Including a higher grade resource of:

29.9 million tonnes at 7.1% Zn + Pb

Category	Mt	Zn%	Pb%	Zn+Pb%
Measured	8.9	6.6	0.6	7.2
Indicated	13.7	6.8	0.5	7.3
Inferred	7.3	6.2	0.5	6.6

Using Ordinary Kriging interpolation and reported at a 5.0% Zn cut-off

"Ironbark is an emerging leader amongst Australia's mineral resource companies, dedicated to the development of its major base metal mining operation in Greenland – the world class Citronen Project, and the acquisition of quality base metals projects."



Disclosure Statements and Important Information

Forward Looking Statements

The following information is not intended to guide any investment decisions in Ironbark Zinc Limited. This material contains certain forecasts and forward-looking information, including possible or assumed future performance, costs, production levels or rates, reserves and resources, prices and valuations and industry growth and other trends. Such forecasts and information are not a guarantee of future performance and involve many risks and uncertainties, as well as other factors. Actual results and developments may differ materially from those implied or expressed by these statements and are dependent on a variety of factors. The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, based on the information contained in this and previous ASX announcements.

The Citronen Zinc Project is considered to be at an early development stage and will require further regulatory approvals and securing of finance and there is no certainty that these will occur. Nothing in this material should be construed as either an offer to seek a solicitation or as an offer to buy or sell Ironbark securities. Consideration of the technical and financial factors requires skilled analysis and understanding of their context.

Ironbark is not aware of any new information or data that materially affects the information included in this ASX release, and Ironbark confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.

Competent Persons Statement

The information included in this report that relates to Exploration Results & Mineral Resources is based on information compiled by Ms Laursen (B. ESc Hons (Geol), GradDip App. Fin., MSEG, MAIG), an employee of Ironbark Zinc Limited. Ms Laursen has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Laursen consents to the inclusion in the report of the matters based on this information in the form and context in which it appears

Competent Persons Disclosure

Ms Laursen is an employee of Ironbark Zinc Limited and currently holds securities in the company.



IRONBARK ZINC LIMITED CONSOLIDATED BASIS SCHEDULE OF INTERESTS IN MINING TENEMENTS								
Captains Flat (Joint Venture with Glencore)	EL6381	New South Wales	50%					
Fiery Creek	EL6925 EL8107	New South Wales	100%					
Belara	EL6576	New South Wales	0%	-100%				
Citronen	ML2016/30 EL2007/31 EL2010/47	Greenland	100%					
Mestersvig	EL2011/28 EL2007/32 EL2016/22	Greenland	100%					
Washington Land	EL2007/33	Greenland	100%					

Schedule of Tenements (as required by ASX Listing Rule 5.3.3)



