

Wednesday 25 January 2023

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 2022

Ironbark Zinc Limited (“Ironbark”, “the Company” or “IBG”) (ASX: IBG) hereby provides a report on its activities for the quarter ending 31 December 2022.

### Highlights

#### *Citronen*

- US EXIM Bank 2022 due diligence program successfully concluded; no “red flags” identified
- Post DD, various work streams identified by EXIM to meet expected standards in several areas, including technical, environmental and social, however none of these are material from a cost or logistical perspective
- Refreshed equity Joint Venture partner search begun in the quarter, process currently in the preliminary stages only
- Field work commenced December 2022; High Grade Copper found at surface (see ASX release 16 December 2022)

#### *Corporate*

- \$1.93 million Cash at Bank as at 31 December 2022
- Placement to raise a further \$1.5m successfully completed in October

#### *Zinc Market*

- 2022 Zn price lows were witnessed in early November before a modest rally into year end
- Average price sustained above the key US1.30/lb mark (as modelled in the 2021 Citronen BFS) for the quarter with further price support seen early in 2023

Ironbark Zinc Limited Managing Director:

*“The announcement we released in mid-December 2022 was important in updating our shareholders on progress in 2022. While we didn’t achieve all we set out to do, several significant milestones were met including a largely successful conclusion to EXIM’s due diligence program for the year.*

*We are very active currently in looking at new ways to grow the business and look forward to further updating shareholders as soon as we’re able.”*

## Projects - Citronen

### ***US EXIM Bank Due Diligence Conclusions***

Following the EXIM site visit in July and 2022 due diligence program EXIM highlighted the following conclusions, as detailed in the ASX announcement on 12 December 2022:

- Due diligence remains incomplete at present with most of the work in 2022 focused on the financial, technical, environmental and social categories. These areas, in Ironbark's view, comprise the main risk elements of a typical mining project.
- As previously disclosed, market and shipping have not yet begun nor have key commercial elements been fully interrogated given the current state of maturity of the Project (e.g. no signed EPC agreement, no binding equity commitments made etc)
- Full Technical and E&S Risk Tables have been prepared. No issues were identified that EXIM thought Ironbark would be unable to successfully mitigate against.
- EXIM expressed its ongoing commitment to the Citronen Project, with it remaining formally listed as a pending project on their public records

The main work streams flagged in the risk tables as requiring further attention by Ironbark include:

1. Infill drilling in the Esrum Zone to upgrade resource tonnes from Inferred to Measured & Indicated.
2. Additional geotechnical drilling including in the proposed infrastructure zones
3. New flora, fauna, hydrology and hydrogeology survey data to be captured, with a baseline requirement of a minimum of two years (inclusive of existing data)
4. More recent stakeholder and social engagement consultation to be completed, this can be done year-round and does not require any work at the Project site itself

With regard to these points, Ironbark advised the following:

#### *Esrum Drilling*

Infill drilling at Esrum is, in Ironbark's view, a relatively low risk exercise. It may not necessarily affect the bankability of the Project in its start-up phase, given where Esrum sits in the schedule, but does have the potential to lift the Reserve life from the current 14 years to up to 20 years. This may allow for a much-extended loan tenor to be negotiated (currently proposed for 8.5 years, EXIM have the capacity to loan for up to 14 years) which will greatly strengthen overall project cashflows.

#### *New Baseline Monitoring*

Expectations around the scope and quality of data required regarding all ESG related issues have increased substantially since most of Ironbark's field work was completed between 2007 and 2011. As such, Ironbark sees this as a largely procedural issue with no new issues having yet been identified through the due diligence, rather additional longitudinal data now needs to be captured.

#### *Social Engagement*

Ironbark enjoys very strong relationships in-country and as part of its EIA & SIA approvals (both of which are already granted) the Project received the official support of every single municipality in Greenland. Citronen was the first and still only mining project to have obtained such a broad and definitive signal of support from the citizenry of Greenland. Furthermore, the local region (broadly North-East Greenland) is home to less than 30 permanent residents, all of whom are serving members of the Danish military. Nonetheless Ironbark has elected to conduct further stakeholder engagements to add yet more robustness to its social licence to operate following discussions with US EXIM's adviser on this issue.

Ironbark's view, which has been shared with EXIM Bank, is the field work to address these concerns could be completed in a single season subject to funding being available. Furthermore, Ironbark's position that its 2021 Bankable Feasibility Study was completed with sufficient rigour is unchanged, and the Board's view is that these issues are not unusual when negotiating with project lenders.

### ***LNS Update***

Ironbark's prospective equity and operating partner at the Citronen Project, LNS A/S, also participated in the site visit as part of their continuing due diligence process foreshadowed under the MOU signed in May 2022. The MOU contemplates various commercial arrangements including LNS either acquiring or earning an equity stake in the Project, along with being granted preferred contractor status for several of the key commercial elements of the Project including Logistics, Civil Construction and Mining.

Ironbark continues to believe LNS, with its long and successful history of operating in permafrost environments, is uniquely suited to partnering at Citronen but at the time of this report no further agreements pursuant to the MOU have been reached. Discussions with LNS are continuing and further guidance will be provided as and when it's available.

### ***Revised JV Partner Search***

Ironbark ran a formal process during much of 2022, in parallel to its EXIM funding application, targeting a decision to proceed being reached during the 2022 calendar year. The timing of this decision was extended to a yet to be determined date in the ASX announcement dated 11 August 2022, after which the Strategic Equity Process continued at a much-reduced intensity (including discussions with LNS as noted above).

The recently concluded EXIM Due Diligence analysis gave rise to a new, much more targeted JV partner search that will be a key priority for management in the coming quarters. Any JV transaction is likely to focus initially on funding for upcoming field seasons, aimed at both EXIM de-risking plus potentially further exploration work, with any decision to proceed to mining being subject to various further milestones yet to be agreed.

Areas of high priority for any new exploration work conducted by Ironbark and/or any future JV partners include:

- Capture of new geo-physical data aimed at large scale and/or deeper target identification
- Stream sampling of all watercourses, and a re-evaluation of historic exploration work, to further understand known occurrences of other metals
- Further drilling at high grade Beach North zone, which remains open in almost all directions laterally and at depth
- Identification, and prioritisation, of deeper magnetic drill targets based off historic and newly captured geophysical data
- Further work on the XX deposit to understand potential for more tonnes given it contains the highest known grades anywhere on the Project (25-30% Zn)

## **Projects - Australia**

### ***Fiery Creek (EL 6925)***

#### ***2022 Exploration Program***

The field reconnaissance visit conducted during the quarter out was designed to re-establish site access to the Fiery Creek Project area, located approximately 90km south, south-east of Canberra in New South Wales, after

several years of very inclement weather in the region (fires and more recently floods). The visit was successful with a new route being established into the area that can be accessed by field personnel in the future.

Whilst in the project area, several historic workings were visited and a portable X-ray fluorescence (pXRF) machine used to take readings from mullock dumps. The pXRF was not able to take gold readings, only base metal readings. The mineralisation comprised quartz veins and pods in and around the workings that were hosted in interbedded, strongly cleaved and locally folded and crenulated siltstones and sandstones. Quartz veins occasionally contained coloured Fe-oxide minerals with rare boxwork (likely after pyrite) textures, and in one case, weathered arsenopyrite blebs.

Significant readings taken with a portable XRF included:

- o FCW4 – 7.1% Cu (Nb: pXRF on base metals program only, not Au)
- o FCW9 – 4.5% Cu, 1.2% Zn
- o FCW5 – 3.4% Cu

Refer to the ASX announcement released on 16 December 2022 for further information.

*JORC Table 1 included in an announcement to the ASX released on 16 December 2022: “Fiery Creek Field Program Underway; High Grade Copper found at surface”. Ironbark confirms that it is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and technical parameters underpinning the results continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.*

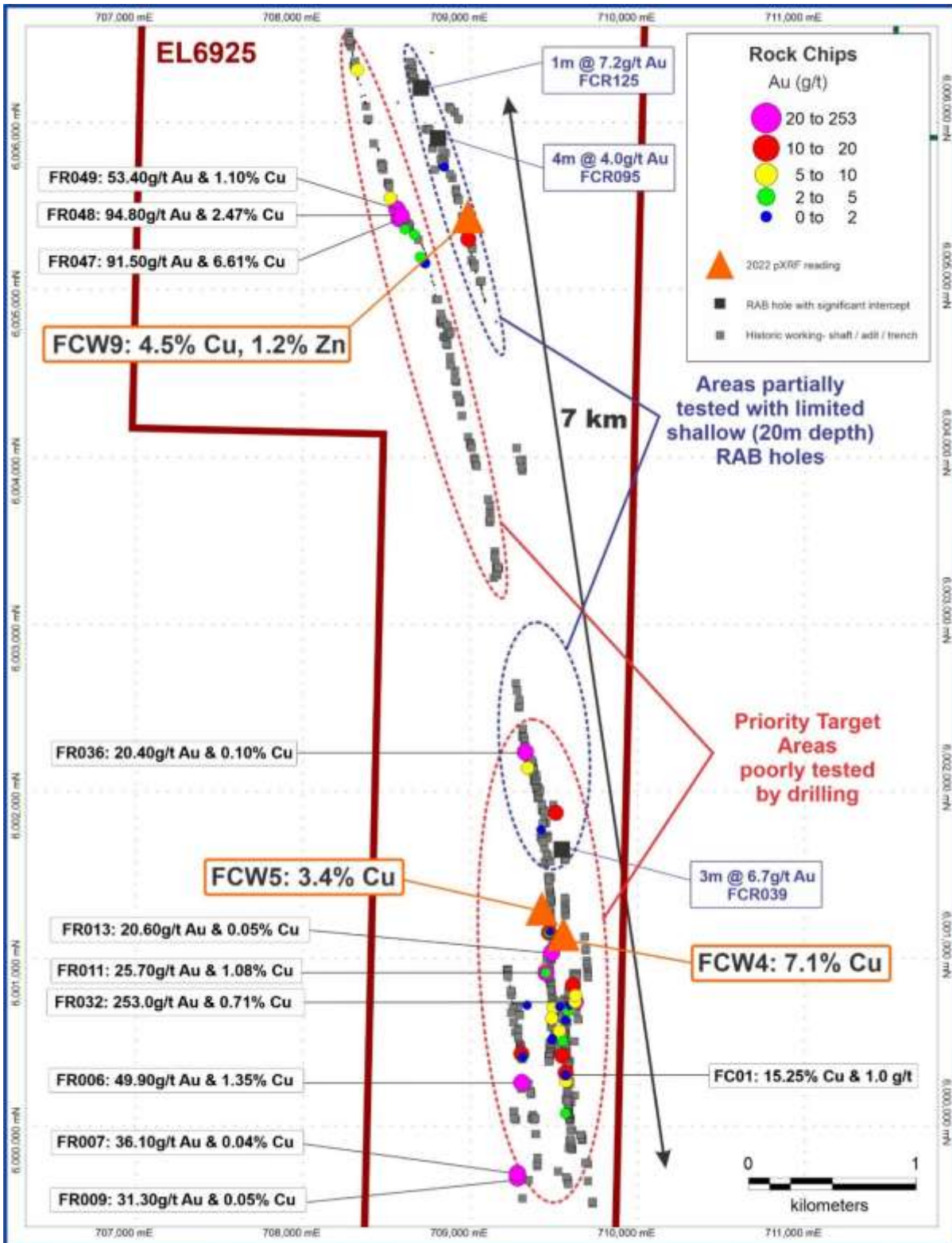


Figure 1: Plan view of the central area of the Fiery Creek workings showing historic drill intercepts, previous Ironbark rock chip samples and recent pXRF copper readings in orange highlight boxes. *Previous results released 1/5/2013.*

**Captains Flat (EL 6381)**

No work occurred on the Captains Flat Project in the December quarter.

## Corporate

### ***Strongly Supported Capital Raise Sees Ironbark Zinc Raise \$1.5 Million***

In October the Company completed a strongly supported capital raise raising \$1.5 million through the issue of 142,857,143 fully paid ordinary shares at \$0.0105 per share (Placement). A 1-for-4 attaching Option was also issued (strike price \$0.022, 3-year expiry). The Placement was completed in a single tranche, from existing 7.1 and 7.1A placement capacity.

The proceeds of the Placement are being used for field work at Fiery Creek, ongoing activities directed at the Citronen Project Financing process and for general working capital purposes.

Peak Asset Management acted as Lead Manager to the Placement.

### ***ASX Listing Rule 5.4.5 Disclosure***

Payments to related parties during the quarter as outlined in Sections 6.1 and 6.2 of the Appendix 5B consisted of \$97,714 in directors' fees and fees to the Managing Director under his executive services agreement.

The Company's cash balance, as at 31 December 2022, was **AUD \$1.93 million**.

### **Further Inquiries**

Contact and person who authorised the announcement:

Managing Director Michael Jardine on +61 424 615 047 or [mjardine@ironbark.gl](mailto:mjardine@ironbark.gl) for any further inquiries.

## ABOUT IRONBARK

Ironbark is listed on the Australian Securities Exchange and is seeking to become a base metal mining house. 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.

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.

## JORC Resource

The current JORC 2012 compliant resource for Citronen (see ASX announcement dated 19 July 2021):

### 84.7 million tonnes at 4.72% Zn & 0.47% Pb

Category	Mt	Zn (%)	Pb (%)
<b>Open pit @ 1.5% Zn cut-off</b>			
Measured	11,767,520	2.9	0.5
Indicated	2,159,548	2.6	0.3
<b>M&amp;I</b>	<b>13,927,068</b>	<b>2.8</b>	<b>0.5</b>
Inferred	3,303,573	2.9	0.4
<b>Open pit total</b>	<b>17,230,641</b>	<b>2.8</b>	<b>0.4</b>
<b>Underground @ 3.5% Zn cut-off</b>			
Measured	22,518,764	5.2	0.5
Indicated	26,208,555	5.5	0.5
<b>M&amp;I</b>	<b>48,727,319</b>	<b>5.4</b>	<b>0.5</b>
Inferred	18,744,401	4.8	0.4
<b>Underground total</b>	<b>67,471,720</b>	<b>5.2</b>	<b>0.5</b>
<b>TOTAL Mineral Resource</b>			
<b>Measured</b>	<b>34,286,284</b>	<b>4.36</b>	<b>0.51</b>
<b>Indicated</b>	<b>28,368,103</b>	<b>5.30</b>	<b>0.46</b>
<b>Inferred</b>	<b>22,047,974</b>	<b>4.55</b>	<b>0.42</b>
<b>Total</b>	<b>84,702,361</b>	<b>4.72</b>	<b>0.47</b>

JORC Table 1 included in an announcement to the ASX released on 19<sup>th</sup> July 2021: “2021 Bankable Feasibility Study Confirms Citronen as World Class Zinc Project”. Ironbark confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

## Ore Reserve

The current JORC 2012 compliant Ore Reserve for Citronen is summarised below:

Deposit	Category	Tonnes (Mt)	ZnEq grade (%)*	Zn grade (%)	Pb grade (%)	ZnEq metal (Mt)	Zn metal (Mt)	Pb metal (Mt)
Beach underground	Proved	19.0	5.5	5.2	0.5	1.0	1.0	0.1
	Probable	7.0	5.8	5.7	0.5	0.4	0.4	0.03
Esrum underground	Proved	-	-	-	-	-	-	-
	Probable	15.8	5.1	4.8	0.4	0.8	0.8	0.06
Discovery open pit	Proved	5.5	3.5	3.2	0.6	0.2	0.2	0.03
	Probable	1.4	2.5	2.3	0.4	0.04	0.03	0.01
<b>Total</b>	<b>Proved</b>	<b>24.6</b>	<b>5.1</b>	<b>4.6</b>	<b>0.5</b>	<b>1.2</b>	<b>1.1</b>	<b>0.13</b>
	<b>Probable</b>	<b>24.2</b>	<b>5.1</b>	<b>5.0</b>	<b>0.4</b>	<b>1.2</b>	<b>1.1</b>	<b>0.10</b>
	<b>Total</b>	<b>48.8</b>	<b>5.1</b>	<b>4.8</b>	<b>0.5</b>	<b>2.5</b>	<b>2.3</b>	<b>0.24</b>

The Ore Reserve is based on Measured and Indicated Resources only and does not include any Inferred Mineral Resources. JORC Table 1 included in an announcement to the ASX released on 19<sup>th</sup> July 2021: "2021 Bankable Feasibility Study Confirms Citronen as World Class Zinc Project" Ironbark confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## Exploration Target

**40 Mt to 90 Mt at 5.0% to 7.1% zinc + lead combined**

Prospect Area	Prospective sulphide horizons	Tonnes from - to (Mt)	Zinc % Grade range	Lead % Grade range	Combined zinc + lead grade
East	L3/L4	3 to 5Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
Western Gossans	L3/L4	5 to 8Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
Beach South	L2/L3	4 to 10Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
Esrum Extended	L3	12 to 28Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
Discovery South East	L1/L2/L3	10 to 25Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
Discovery North/Trilobite Valley	L2/L3/L4	6 to 14 Mt	4.6 to 6.5% Zn	0.4 to 0.6 % Pb	5 to 7.1% zinc + lead
<b>Total</b>		<b>40 to 90 Mt</b>	<b>4.6 to 6.5% Zn</b>	<b>0.4 to 0.6 % Pb</b>	<b>5 to 7.1% zinc + lead</b>



*For further information on the Citronen Exploration Target, please see the ASX announcement dated 11 February 2021. The Exploration Target has not been included in the calculation of the life of mine or project NPV. The Exploration Target listed above is formed on the basis of historic exploration work at Citronen, including over 60,000m of diamond drilling and subsequent work sufficient to declare the Mineral Resource and Ore Reserve. The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

*Ironbark plans to test the Exploration Targets as part of a phased exploration and resource development program. This multi-year program is planned to commence concurrently with mine development and construction, and is aimed at further improving the current Citronen mine plan through some potential combination of mine life extensions, grade uplift and/or the deferral of major lateral mine development in the current schedule. At present, Ironbark intends to undertake this work will take place within two years of construction beginning at Citronen.*

*A systematic drilling program is planned to test extensions to the known mineralisation at the newly identified conceptual target areas. IBG already has four drill rigs at Citronen that are available for any future exploration program, and any further exploration equipment will be mobilised in conjunction with the site construction activities as required.*

*The Exploration Target is based upon review of project drilling, rock chip samples and the limited geophysical data available. A 3D geological model of the project was used to assist in identifying prospective areas. Each area was systematically reviewed with tonnage ranges based on conceptual target sizes and area prospectivity. Exploration Target zinc and lead grade ranges and rock densities are based upon typical grades observed from the current Citronen Resource (refer to ASX announcement 12th March 2020). The Exploration Target calculation has been based on a combination of actual exploration results as discussed in this report and proposed exploration programmes.*

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***“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 and Exploration Targets is based on information compiled by Ms Elizabeth Clare 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.

The mining-specific information in this report, which relates to Ore Reserves, is based on information compiled by Mr Andrew Gasmier CP (Mining), who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Gasmier is employed full time by Mining Plus. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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'. Mr Gasmier consents to the inclusion in the report of the matters based on his 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.

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

IRONBARK ZINC LIMITED CONSOLIDATED BASIS				
SCHEDULE OF INTERESTS IN MINING TENEMENTS				
Project	Mining Licence and tenements held	Location of tenements	Beneficial % interest at end of the quarter	Change in the quarter
Captains Flat (Joint Venture with Glencore)	EL6381	New South Wales	50%	-
Fiery Creek	EL6925	New South Wales	100%	-
Citronen	ML 2016/30	Greenland	100%	-