

Level 1 350 Hay Street Subiaco 6008 Western Australia PO Box 935 West Perth WA 6872 T: +61 8 6461 6350 F: +61 8 6210 1872 www.ironbark.gl admin@ironbark.gl

9 January 2012

**Company Announcements** 

Australian Securities Exchange Limited Exchange Plaza 2 The Esplanade PERTH WA 6000

# CITRONEN RESOURCE UPGRADE – INCREASES IN GRADE AND CONFIDENCE

# 53% increase in Measured and Indicated Resources

Ironbark Zinc Limited (Ironbark, ASX: IBG) is pleased to announce a substantial resource upgrade in both grade and confidence at its wholly owned, Citronen base metals project (Citronen) in Greenland.

The resource upgrade is based on successful drilling conducted by the company during 2011 and is based on over 60,000 metres of diamond drilling since discovery. The resource remains open in almost every direction and highlights that exploration at Citronen has resulted in resource expansion every year.

# Highlights of 2012 resource;

- 53% increase in resources within the Indicated and Measured category
- 11% increase in total contained metal inventory
- 10% increase in zinc + lead grade
- Resource upgrade calculated using more conservative Ordinary Kriging method

### Metal Inventory

The global resource at Citronen now stands at **13.1 billion pounds of zinc and lead**. This is for material reported above a 2.0% zinc cutoff and represents an increase of 11% on the previous reported estimate of 132.6Mt @ 4.0% zinc + lead for 11 billion pounds of zinc and lead (released in December 2010, see Figure 1).

Due to the predominantly infill nature of drilling in 2011, there is no material change in the global tonnage of material at this 2.0% cutoff grade, but greater continuity of higher grade material has resulted in a better understanding of mineralisation (increased resource category) and honouring of higher grade material. Increase in medium grade tonnage at the 3.5% zinc cutoff is a result of the positive movements in the grade-tonnage-curve (Figure 1).





### 2012 Global resource estimate 131.1Mt @ 4.5% zinc + lead

2010 Global resource estimate 132.6Mt @ 4.0% zinc + lead Reported 2.0% zinc cutoff, Ordinary Kriging estimation method

### 2012 Medium grade resource estimate 73.0Mt @ 5.7% zinc + lead

2010 Medium grade resource estimate 52.8Mt @ 5.2% zinc + lead Reported 3.5% zinc cutoff, Ordinary Kriging estimation method



Figure 1: Grade tonnage curve, 2012 comparison to previous estimate

Details of the current resource inventory for Citronen are shown in Appendix 1.

A target resource of 165Mt to 190Mt @ 5.7% to 6.5 % zinc + lead (ASX release January 2010) highlights the significant upside potential of this world class asset. The target resource may be updated following the 2012 resource upgrade.

### Implications for Mining Optimisation

Mining studies had identified several areas which warranted further drilling in order to increase resource level confidence and allow reporting of optimisation work as part of the Feasibility Study.

Drilling at Citronen in 2011 was focused on infill resource definition at the Esrum Zone and Beach South. Drilling was successful at defining continuous zones of higher grade material at the Esrum Zone within areas previously classified as Inferred resources (Figure 2), (ASX release October 2011). This has resulted in the resources targeted for mine optimisation to be revised upwards in confidence level and also an increase in contained metal due to increased zinc + lead grades. The new resource estimate contains 73.0Mt @ 5.7% zinc + lead above a 3.5% zinc cutoff (using the more conservative Ordinary Kriging interpolation) for 9.2 billion lb of contained metal.





Figure 2: Resource zones and significant drill intercepts at Citronen

The previously published 2010 mining study resource quoted 59.9Mt @ 5.9% zinc + lead. This was produced using Inverse Distance Squared (ID2) interpolation globally and conditional simulation methodology for areas within the Beach zone and was reported above a 3.5% zinc cutoff. This contained 7.7 billion lb of contained zinc and lead metal.

The more conservative Ordinary Kriging methodology is now being used for feasibility study work and mine scheduling due to increased drill density and confidence levels and therefore quoted in relation to resource upgrades.

Ongoing geotechnical and metallurgical work has also provided additional information that has resulted in an overall reduction in the specific gravity of mineralised material by an average of 2%.

Increasing resource confidence and the ability to more accurately define characteristics and distribution of mineralisation at Citronen was a key requirement of 2011 field work. Ironbark geologists are confident that this has been met and this information will now be used directly by mining engineers in the ongoing mining optimisation work.

Ironbark is pleased that as a result of increased drilling information and geological understanding at Citronen, more conservative interpolation methods and criteria are delivering more robust and higher grade resources than previous estimates.



# Appendix 1

### 2012 Citronen Resource

2.0% Zn cutoff Global Resource Ordinary Kriging

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	42.2	4.2	0.5	4.7
Indicated	51.2	4.2	0.4	4.7
Inferred	37.8	3.8	0.4	4.2
Total	131.1	4.1	0.5	4.5

# 3.5% Zn cutoff Medium Grade Resource Ordinary Kriging

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	24.8	5.2	0.6	5.8
Indicated	27.6	5.6	0.5	6.1
Inferred	20.6	4.7	0.4	5.2
Total	73.0	5.2	0.5	5.7



### **ABOUT IRONBARK**

Ironbark is listed on the Australian Securities Exchange and is seeking to become a base metal mining house. Ironbark has a US\$50M funding facility provided by Glencore International AG.

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. 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). Engineering work is currently being undertaken by China Nonferrous Metal Mining (Group) Co., Ltd on Citronen. The studies are based on an Ordinary Kriging methodology estimated mineral inventory of;

# 64 million tonnes at 6% zinc (Zn) + lead (Pb)

The current JORC compliant resource for Citronen:

Medium grade resource of:

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	24.0	5.2	0.6	5.8
Indicated	27.6	5.6	0.5	6.1
Inferred	22.9	4.7	0.4	5.2
Total	73.0	5.2	0.5	5.7

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

within a larger global resource of:

Mt	Zn %	Pb %	Zn+Pb%
42.2	4.2	0.5	4.7
51.2	4.2	0.4	4.7
37.8	3.8	0.4	4.2
131 1	4 1	0.5	4.5
	Mt 42.2 51.2 37.8 131.1	Mt Zn %   42.2 4.2   51.2 4.2   37.8 3.8   131.1 4.1	Mt Zn % Pb %   42.2 4.2 0.5   51.2 4.2 0.4   37.8 3.8 0.4   131.1 4.1 0.5

Using Ordinary Kriging interpolation and reported at a 2.0% Zn cut-off

#### For further information please contact:

Jonathan Downes Managing Director T +61 8 6461 6350 www.ironbark.gl James Moses Mandate Corporate T +612 8012 7702 E james@mandatecorporate.com.au

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr A Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG an employee of Ironbark Zinc Limited. Mr Byass has sufficient experience that 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 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Byass consents to the inclusion in the report of the matters based on this information in the form and context in which it appear.