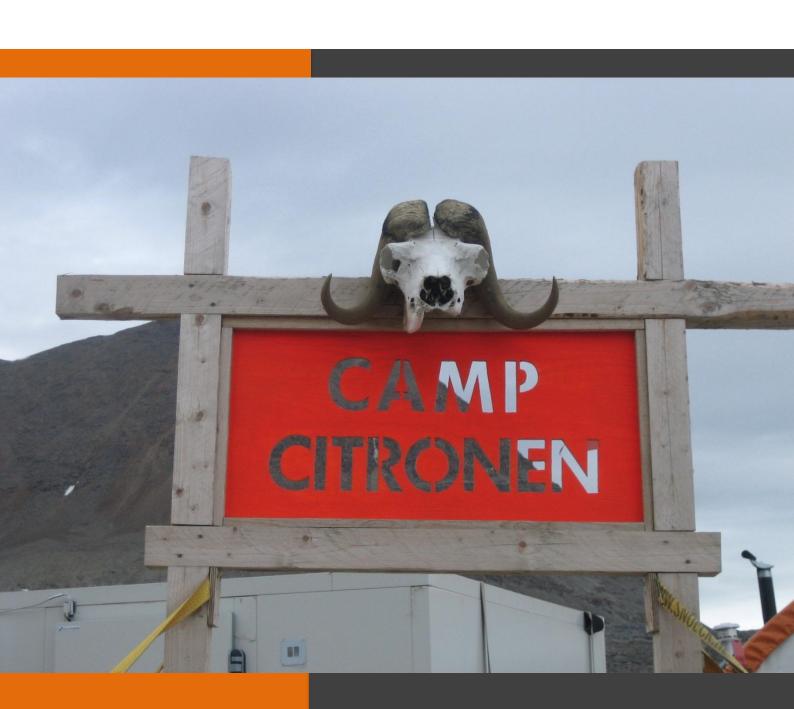


# "Transitioning to a Developer"

## **Quarterly Activities Report**

**Period Ending 31 March 2013** 



30 April 2013

## **Quarterly Activities Report - Period End 31 March 2013**

## **HIGHLIGHTS**

Citronen Feasibility Study released (subsequent to the quarter)

Highlights of the Citronen Feasibility Study are\*:

- o NPV: US\$609 Million (US\$354M post tax)
- o IRR: 32.0% (22.2% post tax)
- Equity Return:37.9% (Geared NPV after tax)
- Capital Cost: U\$\$429.3 Million inc contingency (U\$\$484.8M with First Fills)
- Operating Cost: U\$\$0.79/lb Zn in real terms (Payable, net of by-product credits,
   Years 1-5, including smelter fees) \*\*
- o Mine Life: 14 years
- Life of Mine Revenue: US\$5.65 Billion
- Life of Mine Operating Costs: US\$3.42 Billion
- Ironbark wins Greenland Prospector & Developer of the Year Award
- **Jerangle drilling results** indicating large mineralised system with peak results returned from drill hole JRDD1101:
  - o 2.6 metres @ 10 g/t silver, 0.2% copper and 6.0% lead+zinc
  - o 5.0 meters @ 4.2 g/t silver, 0.13% copper and 4.6% lead+zinc
  - o 9.9 metres@ 5.7 g/t silver and 0.45% copper
- Fiery Creek Rock Chip Sampling returned high grade results with peaks of 15.3% copper and 22.7 g/t gold

<sup>\*</sup> The assumptions that the results are based on are detailed in the Feasibility Study document, released to ASX on 29 April 2013

<sup>\*\*</sup> Nominal Operating Cost: US\$0.68/lb Zn (Payable, net of by-product credits, Years 1-5, smelter fees additional US\$0.22/lb Zn)



Ironbark Zinc Limited (ASX: IBG) ("Ironbark" or "the Company") is pleased to report its quarterly activities for the period ending 31 March 2013.

### **Citronen Feasibility Study**

Released subsequent to the quarter, the Citronen Feasibility Study is the culmination of an enormous amount of work, the main body of which has been derived from the work conducted by independent engineers. The detailed summary of the Feasibility Study was lodged with the ASX on 29 April 2013.

The Citronen base metals project benefits from the following favourable characteristics:

- Located in Greenland low sovereign risk
- Located adjacent to deep, protected water on the doorstep of Europe and North America
- Simple, flat and continuous ore zones
- Open-pit fresh sulphide potential with very low strip ratios available to supplement higher grade underground mined mineralisation
- Simple, predominantly underground room and pillar mining operation planned
- Long mine life, with mineralisation open in almost every direction
- One of few world class deposits wholly owned by a junior company
- Production scheduled at a time of many planned zinc mine closures, a forecast shortage of zinc supply and anticipated high zinc prices
- Ironbark is working with China Nonferrous under a MOU to deliver an EPC fixed price contract and financing for the project

The Feasibility Study incorporated a recent review of capital costs and the 2012 updated Resources Statement. Further advances and improvements, particularly surrounding resource confidence and mine scheduling, were released in 2012 and were included in the Feasibility Study.

New metallurgical breakthroughs made with zinc flotation (recoveries of 90% achieved) were reported in the Feasibility Study; however, as testwork remains ongoing, the results could not be included in the Feasibility Study. The higher recoveries will be incorporated into the Feasibility Report following the completion of further studies.

Ironbark has a non-binding 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 is being presented to NFC for the purposes of preparing the EPC and financing work. NFC is expected to be in a position to begin delivering the results from their work scheduled for later in 2013.

#### Ironbark wins Greenland Prospector and Developer of the year award

During the quarter, Ironbark was awarded the prestigious "Greenland Prospector and Developer of the Year 2013" award for its work on the Citronen base metal project at the PDAC convention in Toronto. The criteria for the award are that it is given to a company or a person who has been active in exploration and has shown initiative and innovation as well as



inspiring other companies with consideration also made for sound environmental practices and social responsibility.

## **Encouraging drilling results from Jerangle**

During the quarter, Ironbark and its Captains Flat Project joint venture partner, NSW Base Metals Pty Ltd (NSWBM) (a subsidiary of Glencore International AG), Ironbark announced that several zones of base metal sulphide mineralisation were intercepted in the drill hole JRDD1201 at the Jerangle Prospect, within the Captains Flat Project area – see ASX release dated 15 March 2013. Drilling highlights included:

- Broad sulphide mineralisation encountered down dip from JRDD1101 with intercepts such as:
  - o 2.6 metres @ 10 g/t silver, 0.2% copper and 6.0% lead+zinc
  - o 5.0 meters @ 4.2 g/t silver, 0.13% copper and 4.6% lead+zinc
  - o 9.9 metres@ 5.7 g/t silver and 0.45% copper
- Mineralisation remains open in every direction
- Results will be used to target higher grade trends

Drilling commenced at the Jerangle prospect to test an electromagnetic (EM) conductor identified by NSWBM. The target was located below a drill intercept of JRDD1101 which returned higher grade zones including 2.2 metres @ 8.0% zinc and 4.4 metres @ 5.0% zinc from 378.0 metres and 386.8 metres down hole, respectively, within broader lower grade mineralisation.

Figure 1 shows part of a four metre zone of zinc mineralisation in drill hole JRDD1201 from approximately 524 metres down hole consisting of a beige coloured content sphalerite. This zone returned a higher grade core of 2.6 metres @ 10 g/t silver, 0.2% copper and 6.0% lead+zinc from 524.4 metres.



Figure 1: Zinc mineralisation (beige coloured low-iron sphalerite) from approximately 524 metres.

Additional broad zones of low grade copper were also intercepted, including 9.9 metres @ 5.7 g/t silver and 0.45% copper from 633.1 metres down hole. The broad nature of the sulphide mineralisation is very encouraging as it indicates a large scale mineralised system.



These results are currently being reviewed and modelled to target higher grade zones of mineralisation and to determine the relationship with historic areas of drilling which returned grades of up to +5% copper. Elevated levels of indium were also identified, with a peak one metre intercept grading 106.5 g/t indium from 620 metres. The indium mineralisation will also be evaluated to determine its significance.

Ironbark and NSWBM are currently entitled to a 51% Joint Venture Interest on an equal basis and have been jointly funding exploration to earn an additional 24% combined Joint Venture Interest from Forge Resources Limited.

## **Fiery Creek Project**

During the quarter, Ironbark was pleased to report the discovery of unexpectedly high-grade copper and gold rock chip results from its 100% owned Fiery Creek Prospect at the Peakview Prospect in New South Wales. Six rock chip samples taken from around the historic pits and shafts returned up to **15.25% copper** and **22.7 g/t gold** during a recent reconnaissance trip to the Fiery Creek project area.

Sample	Easting	Northing	Gold (g/t)	Copper (%)	Silver (g/t)
FC01	709681	6000494	0.95	15.25	56.20
FC02	709681	6000507	7.47	0.40	5.16
FC03	709682	6000508	19.95	0.08	3.17
FC04	709661	6000608	22.70	0.30	1.51
FC05	709664	6000696	3.91	0.06	0.72
FC06	709602	6000711	0.05	0.02	0.07

Table 1: Assay results from rock chip samples at Fiery Creek

Samples were analysed at ALS laboratories in Wangara WA using Fire Assay and ICP-MS/AES methods.

Gold mining was conducted at the Fiery Creek area from 1887 to 1908. Miners exploited north-south trending mineralised shear zones that reportedly ran up to 15-20 g/t gold. It is unknown why mining ceased, however it has been speculated that mining was abandoned due to processing problems encountered when unoxidsied sulphide-rich ore was reached.

There are no records of copper produced from the Fiery Creek site despite there being significant copper mineralisation. The workings are continuous from Fiery Creek north-west to the Macanally gold workings - a strike length of over seven kilometres. Figure 2 shows some of the workings seen at Fiery Creek and the copper rich gossan material found in the area.

Several companies have in the past taken rock chip samples from the Fiery Creek workings which have returned excellent gold and copper mineralisation including the below results from rock chip samples taken by Nova Mining in 1974:

Sample AA321348: 27.2 g/t gold
Sample AA321349: 18.4 g/t gold
Sample AA321354: 16.2 g/t gold



Sample AA321359: 3.0 g/t gold & 3.0% copper

• Sample AA321363: 11.2 g/t gold

Nine diamond holes were drilled at the Fiery Creek workings in 1988 by Horizon Resources which targeted deep IP anomalies, rather than mineralisation directly under the workings. Several low grade mineralised zones were intersected including:

F001: 1.09m @ 3.63 g/t gold from 30.56m
F006: 2.0m @ 1.67 g/t gold from 35.7m
F009: 0.5m @ 2.44g/t gold from 41.2m

Despite these grades and mineralisation being completely open at depth, systematic drill testing underneath the workings has not been completed at Fiery Creek, presenting Ironbark with an exciting exploration opportunity.

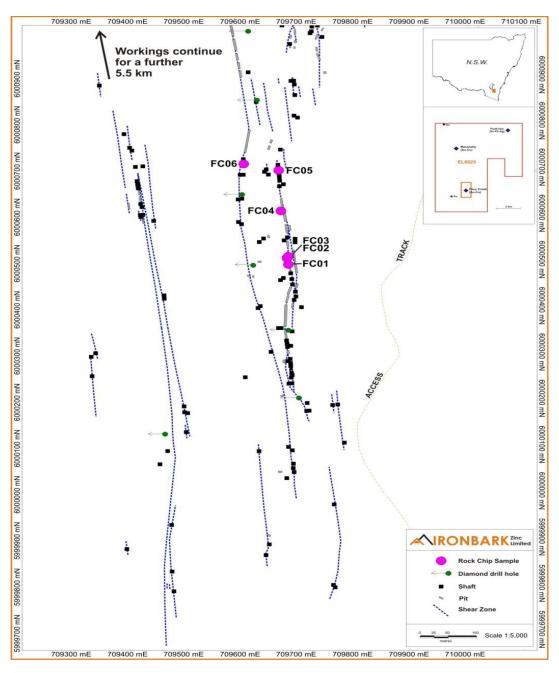


Figure 2: Fiery Creek historic workings with rock chip sample locations



#### ENDS.

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

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

Competent Person Statement: The information in this report related 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 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.



### **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 International AG 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. 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).

China Nonferrous Metal Mining (Group) Co. Ltd is currently undertaking engineering work on the Citronen project. The studies are based on an Ordinary Kriging methodology estimated mineral inventory of:

Resource 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	4.7	0.4	5.1
Total	70.8	5.1	0.5	5.7

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

### within a larger resource of:

Resource				
Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	43.1	4.2	0.5	4.7
Indicated	51.2	4.2	0.4	4.7
Inferred	37.7	3.8	0.4	4.2
Total	132.0	4.0	0.4	4.5

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

"Ironbark is an emerging leader amongst Australia's mineral resource companies and is dedicated to delivering shareholder value through the development of its major base metal mining operation in Greenland, and the acquisition of quality base metals projects."