

# Quarterly Activities Report

Ending 30 June 2009

## “Becoming a Major Base Metal Miner”



Figure 1: Drilling operators at Citronen

# HIGHLIGHTS DURING THE JUNE QUARTER

## **1. CAPITAL COST REDUCTION AND FINANCIAL SUMMARY –**

Results have been received from a review of capital costs derived from a number of engineering firms, based on recent plant and equipment construction. The results saw a reduction in previously released capital cost of ~15%. Using price forecasting for 2011, the Citronen project delivers an NPV of US\$500M and shows a low operating costs for the life of mine making Citronen a potential large scale, long life and low cost mining operation

## **2. FIELD SEASON COMMENCED –**

Mobilisation of drill crews and equipment to the Citronen project were funded from existing cash reserves. Work this season is focused on development of a large scale base metal mine and includes geotechnical drilling, infill drilling, hydro-geological drilling and to provide further material for metallurgical testwork

## **3. DRILLING RESULTS –**

Early drilling results have supported the resource model and returned better than expected results including the first hole CF09\_182: 4.2m @ 11.2% zinc and 3m @ 5.3% zinc

Also further information;

## **4. ABOUT CITRONEN -**

A summary of the Citronen project and resource breakdowns as estimated in 2008

**Ironbark is pleased to report to its shareholders the latest results from the Citronen Base Metal Project (Citronen) and remains focused on developing Citronen to become a major base metal producer. The Company remains well funded and well placed to explore the potential of Citronen this current field season.**

## **1. CAPITAL COST REDUCTION AND FINANCIAL SUMMARY**

Ironbark announced the results from an engineering review of the Citronen process plant adopting an industry standard gravity pre-concentration process (DMS) such as utilised by the Mount Isa mine. The cost estimate represents a reduction of approximately 15% from the previous estimate. Capital reduction items of significance include reduced steel costs, ship loading facilities as well as crushing, grinding, power generation and flotation equipment. These costs have been based on key elements from the Ausenco Pre-feasibility study (previously released to the market), information provided by MT Hojgaard (Greenland and Denmark's leading engineering contractor), internal cost estimates and Metso Minerals with regards to the processing plant. The project and process plant was optimised using the results achieved from the DMS testwork and conceptual mining rate scenarios of 1Mtpa, 2Mtpa and 3Mtpa based on the 2008 resource estimate.

The largest impact to the capital cost was the result of excellent DMS testwork, which significantly reduced the processing plant size, supporting infrastructure and services. As the fjord is well protected and has only a 0.5 metre tidal variation the ship loading costs have been reduced from initial estimates. Discussions are currently underway with contractors to evaluate and confirm the ship loading methodology. Weather data for the last year has showed that the lowest recorded temperature on site was -37.5 degrees Celsius – which is higher than the mining centre Yellowknife in Canada and may allow for further cost reductions.

A six stage testwork program will be conducted in the coming months to further optimise the flowsheet and progress the project towards a Bankable Feasibility Study.

The reduction in capital costs has provided Ironbark with an improved NPV in excess of US\$500M based on mining at a rate of 3Mtpa and applying a forecast zinc price of US\$1.08lb in 2011 (average of forecast from Macquarie, Barclays and GFMS and a lead price of \$US0.95lb - see Table 1).

**Table 1: Estimated Capital and Operating costs in (\$US)/ lb Payable Zinc**

<i>Annual Mining Rate</i>	<i>1Mtpa</i>	<i>2Mtpa</i>	<i>3Mtpa</i>
Ore Mining	\$0.19	\$0.21	\$0.22
DMS	\$0.01	\$0.01	\$0.01
Power	\$0.04	\$0.04	\$0.04
Processing Costs	\$0.06	\$0.07	\$0.07
Admin & Other	\$0.01	\$0.01	\$0.01
Concentrate Transport	\$0.03	\$0.03	\$0.03
Pb Credits*	-\$0.07	-\$0.07	-\$0.07
Operating Costs**	\$0.26	\$0.29	\$0.31
NPV (8% discount rate)***	<b>\$208,465,474</b>	<b>\$301,066,386</b>	<b>\$500,063,833</b>
Total Capital Cost Estimate****	<b>\$213,624,542</b>	<b>\$316,786,916</b>	<b>\$404,997,022</b>

\* Based on a lead price of US\$0.95/lb

\*\* Excluding zinc and lead Treatment Charges

\*\*\* Based on average 2011 forecast zinc price of US\$1.08/lb (Macquarie, Barclays, GFMS)

\*\*\*\* Excluding Owners Costs

On an estimated C1 cost basis Citronen is well positioned against major global zinc mining operations as shown in Figure 2. The image highlights that Ironbark is a relevant project that is well positioned to meet global zinc requirements as world growth recovers from the financial crisis.

### Global Cumulative Zinc Production (%)

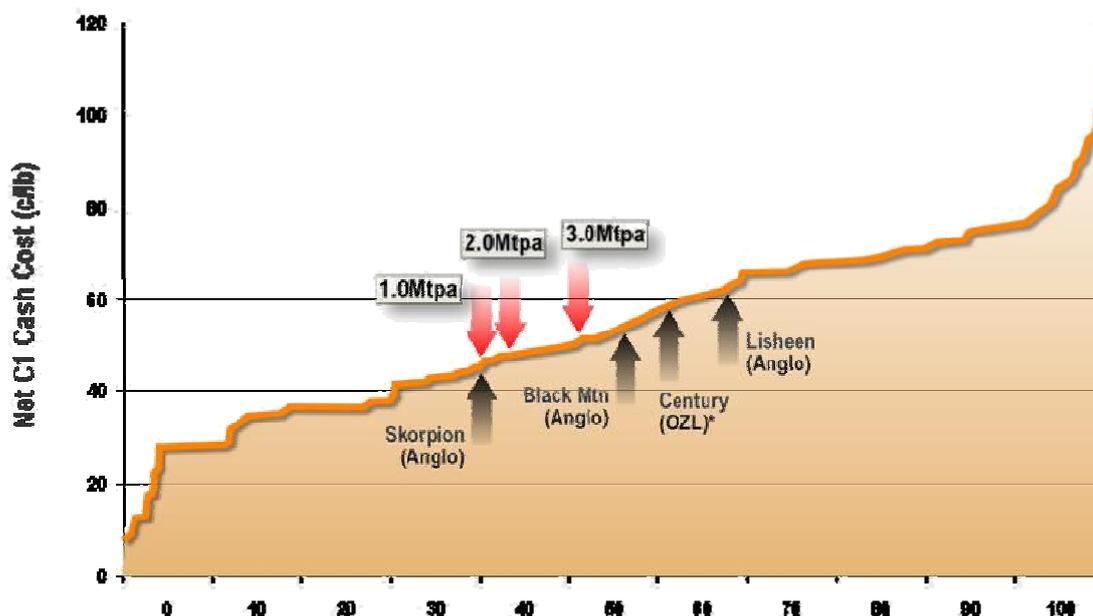


Figure 2: 2008 Zinc Industry Estimated 'C1' Costs Net of By-products with Ironbark conceptual production costs overlayed for mine production rates of 1Mtpa, 2Mtpa and 3Mtpa

Source Anglo American PLC presentation 20/01/09

OZL: Oz Minerals Limited, Ironbark treatment charges estimated using US\$0.70/lb Zn and US\$0.75/lb Pb

## 2. FIELD SEASON COMMENCED

Ironbark commenced the 2009 field season at Citronen with key equipment, supplies and crew mobilised to Greenland. The field season is fully funded from existing cash reserves and is utilising the extensive inventory on site including 3 drilling rigs, 40 man camp site, fuel, bulldozer, tractors and various other equipment. The company expects to remain in a strong cash position following the completion of the field work.

The purpose of the 2009 field season is to advance the Citronen project towards production and will include geotechnical drilling, infill drilling, hydro-geological drilling and to provide further material for metallurgical testwork to improve recoveries and increase the concentrate grade. The infill drilling is expected to increase the confidence of the material planned for mining in the first several years of production.

## 3. DRILLING RESULTS

The first round of drilling results for the 2009 season have been received from Citronen including **4.2 metres @ 11.2% zinc and 3 metres @ 5.3% zinc**. The results of the first 4 holes within the Beach Zone resource (Level 2: 17 Million tonnes @ 7.1% zinc+lead *indicated* and Level 3: 10 Million tonnes @ 5.5% zinc + lead *inferred*) are all strongly mineralised and have shown excellent support for the resource block model, and are indicating higher grade mineralisation than estimated which is considered very encouraging.

The first four drillholes are located within an area designated as potentially early mine feed, in a shallow region of the Beach zone best accessed from an underground decline. The early years of mine planning are targeting ore feed in excess of 10% zinc, which is planned to be upgraded by DMS to a high grade +20% zinc ore prior to being treating in the flotation circuit. A finished product of zinc concentrate of between 50% and 60% zinc (and a separate lead concentrate) is then planned to be shipped to smelters in Europe or North America.

### Analytical Method

Mineralised drillcore is being analysed using the portable Niton XLT hand held XRF analyser (Niton). This equipment was used extensively by Ironbark personnel during the +11,000m drilling campaign conducted during 2008. Based on excellent correlation between results of systematic close-spaced Niton XRF analysis results and those of traditional chemical assays, Ironbark is confident to use Niton as an indicator of mineralisation grade to report exploration results. Drillcore identified as having economic significance in 2008 was cut and sent for chemical analysis in Canada. Results reported on site using Niton XRF and cross checked against commercial assay laboratories returned within 5% (Niton marginally undercalling and chemical analysis returning higher grades) of the grades as determined by commercial Canadian laboratories. Zinc and lead mineralisation at Citronen is found in broad bands of sulphide material hosted within sedimentary shale and mudstones. The grade and tenor of zinc and lead sulphide mineralisation is very consistent over large distances.

Ironbark's Niton procedure is to orientate and geologically log drill core to determine areas of sulphide mineralization. After correct referencing with standard materials, an Ironbark geologist then uses the Niton to record spot readings taken over a 30 second period for zinc every 6cm. Results are averaged for intervals of drill core and reported on minimum widths of 0.5m. Whilst lead mineralization is present and of economic significance at Citronen, only zinc mineralisation is recorded using Niton. A cross-check slice of NQ drillcore (47mm diameter), is cut and will be analysed as verification at the end of the season by commercial assay laboratories and will also report the lead mineralisation.

Table2: Drillhole summary

Hole_ID	East UTM Zone 26	North UTM Zone 26	RL	Dip	Azim	From (m)	Level 2A intercept (m)	zinc %		Level 2B intercept (m)	zinc %	inc m	zinc %	Total Hole Depth (m)
CF09_182	482441	9226925	41	-90	0	93	4.2	11.2		3	5.3			114
CF09_183	482438	9226923	41	-70	100	95	3.25	12.7		<4	<4			114
CF09_184	482403	9226916	41	-90	0	100	4.9	6.7		3.3	4.5			117
CF09_185	482421	9226908	42	-70	180	98	6.2	7.3		na	na	3.5	9.9	120

## 4. ABOUT CITRONEN

Ironbark is a well funded Company that is listed on the Australian Securities Exchange (ASX:IBG) and specialises in base metal exploration and development in Greenland and Australia.

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.

Ironbark's key focus is the Citronen base metal deposit in Northern Greenland. The current JORC compliant resource for Citronen (November 2008) is detailed as follows:

**55.8 million tonnes at 6.1% zinc (Zn) + lead (Pb)**

Indicated resource of 29.9Mt @ 5.8% Zn and 0.6% Pb
Inferred resource of 25.9Mt @ 5.0% Zn and 0.7% Pb

*Using inverse distance squared ( $ID^2$ ) interpolation and reported at a 3.5% Zn cut-off*

including a higher grade resource of:

**22.6 million tonnes at 8.2% zinc (Zn) + lead (Pb)**

Indicated resource of 14.3Mt @ 7.8% Zn and 0.7% Pb
Inferred resource of 8.2Mt @ 7.1% Zn and 0.7% Pb

*Using inverse distance squared ( $ID^2$ ) interpolation and reported at a 5% Zn cut-off*

Within a larger global resource of:

**101.7 million tonnes at 4.7% zinc (Zn) + lead (Pb)**

Indicated resource of 50.2Mt @ 4.5% Zn and 0.5% Pb
Inferred resource of 51.5Mt @ 3.8% Zn and 0.6% Pb

*Using Ordinary Kriging interpolation and reported at a 2% Zn cut-off*

*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 Gold 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.*