

15 September 2010  
Company Announcements

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

## ENGINEERING UPDATE FROM CITRONEN ZINC PROJECT

Ironbark is pleased to provide an update on recent engineering results received from the Citronen Base Metal Project (Citronen). In addition to the extensive drilling conducted this year Ironbark Zinc Limited (Ironbark) has been working with its key contractors on advancing Citronen. The Definitive Feasibility study is progressing well and remains on budget.

A series of engineering site visits have been conducted in July, when the lead engineers visited Citronen to enable site layout, geotechnical assumptions and mining work to be finalised. The final plant, process and layout design meeting was held early August in Vancouver during which the plant design was finalised. The results from this ongoing work are summarised herein.

### Mining – Open Pit

The preliminary open pit mineable inventory has been revised upwards and may now represent 10 million tonnes of mineralised feed and 17 million tonnes of waste using an unconstrained whittle run representing a significant increase in potential minable mineral feed (Figure 1 and 2). The ore to waste ratio in the first year is a very low at 1:1.1. The overall tonnage may be reduced to account for the seasonal river which cuts through the western area of the open pit. The mineralisation remains drill constrained and will be re-evaluated following the final resource estimate to be conducted later this year once a final resource estimation has been made incorporating the 2009 and 2010 drilling data.

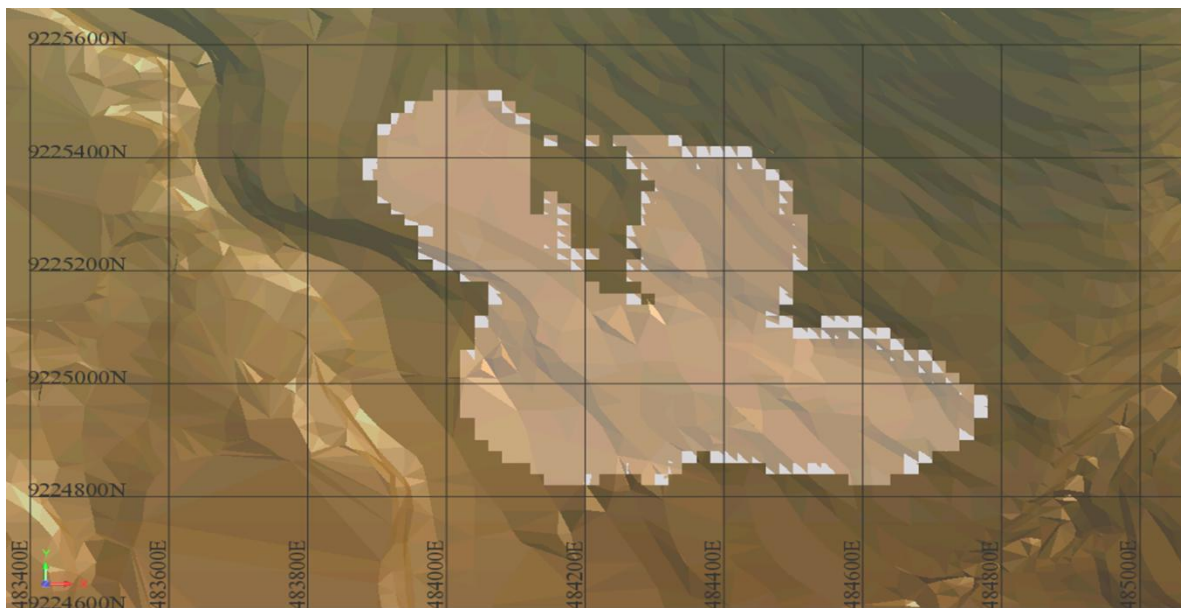


Figure 1 –Discovery open pit plan over topography and 1km squares with an overall pit wall angle of 60 °.

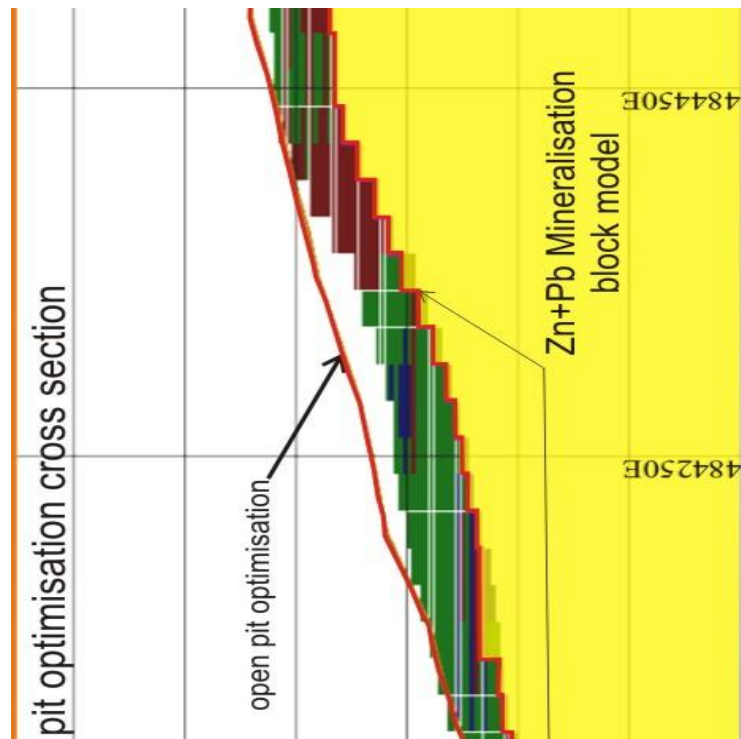


Figure 2 Cross section of Discovery Open Pit plan and wall angles

The cost for the open pit mining is estimated at US\$ 2.70/tonne moved. Mining recovery is estimated at 97%, with a dilution factor of 5.7%. Operating bench heights will be 5 metres mined in 2 x 3 metre flitches.

### Mining - Underground

Mining methods to be adopted are the following conventional techniques:

- 2 metre to 14 metre vertical ore face heights - use multi bench room and pillar
- 14 metre to 28 metre ore face - vertical long hole stoping.

Excavated spans will range from 6 to 14m based on local geotechnical considerations, with structural iced backfill testwork showing an encouraging 450 PSI backfill strength at -8.4 degrees Celsius which is stronger than typical cement backfill (Figure 4) from tailings waste. The majority of the tailings waste is being evaluated to be pumped back underground where it will freeze and become supportive fill material. This approach will remove the need for a paste fill plant and remove a potential environmental liability making Citronen one of the cleanest base metal mines in the world.

Underground trucks are planned to have a nominal payload of 60 tonnes and the open pit trucks to be 90 tonnes.

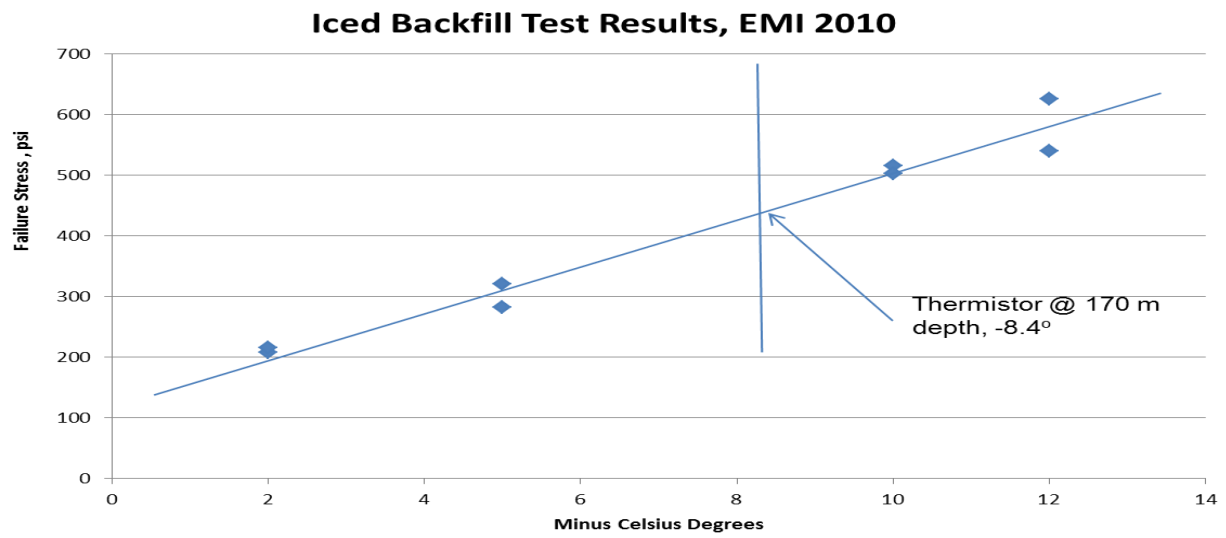


Figure 4 – backfill strength for underground mining backfill at various temperatures

## Site Layout

Site layout designs have been optimised and are shown below, with a more detailed version as an attachment as Figure 5.

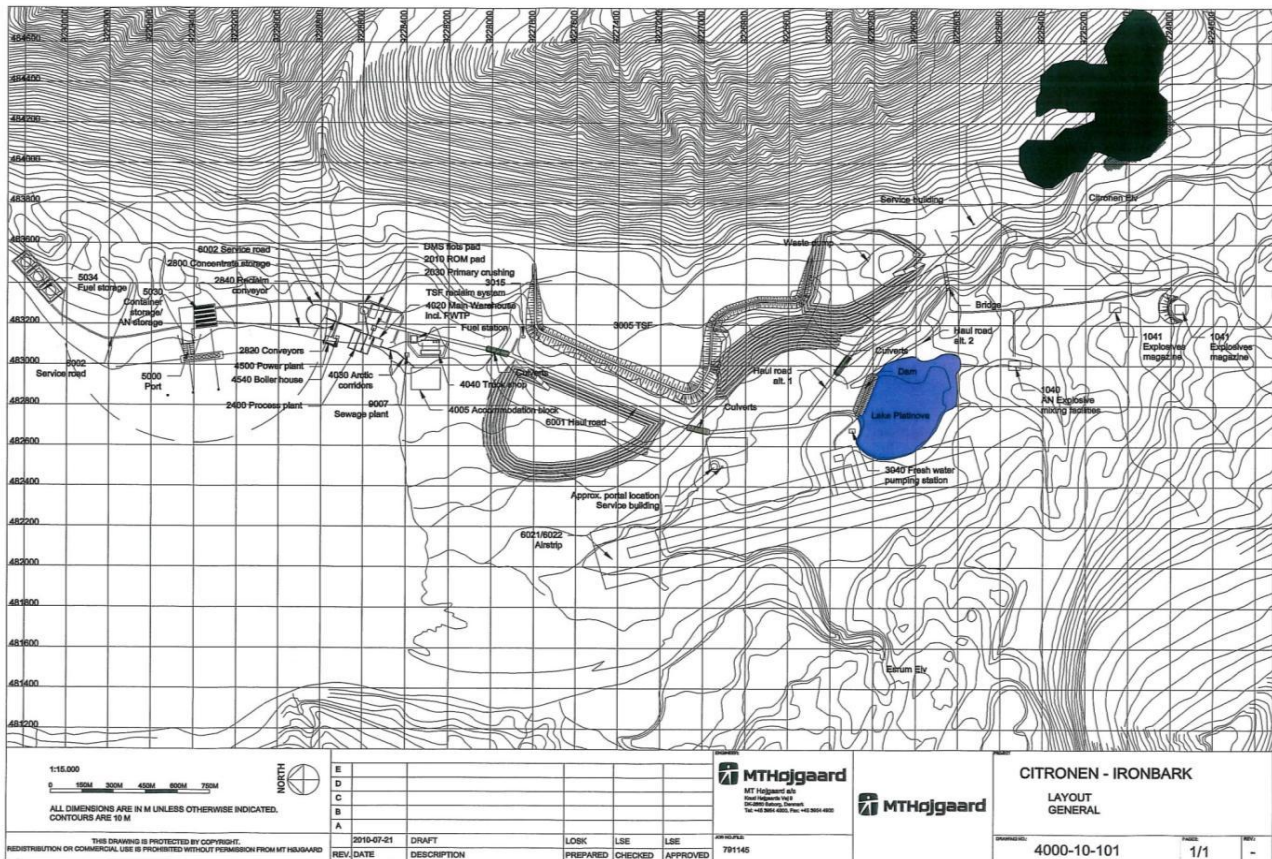


Figure 5 Plan view of Conceptual Site Layout

## Metallurgy

The overall testwork program is continuing, utilising both AMMTEC's Perth and Tasmanian laboratories. The crushing, Dense Media Separation (DMS) and primary grinding work is being performed in Perth. Flotation and dewatering tests are being conducted in Burnie. Secondary grinding work and additional crushing tests are being conducted by Metso at their laboratories in Europe.

The DMS testwork has been conducted on the Beach and Discovery mineralisation –the first scheduled feed sources to the plant. An investigation into the optimum crush size for feed to the DMS has been conducted, leading to a top size increase to 38 mm (the maximum practical size for the DMS cyclone). Encouragingly all mass to sinks, zinc (Zn) and lead (Pb) distributions remains consistent across all size fractions (Figures 6 and 7).

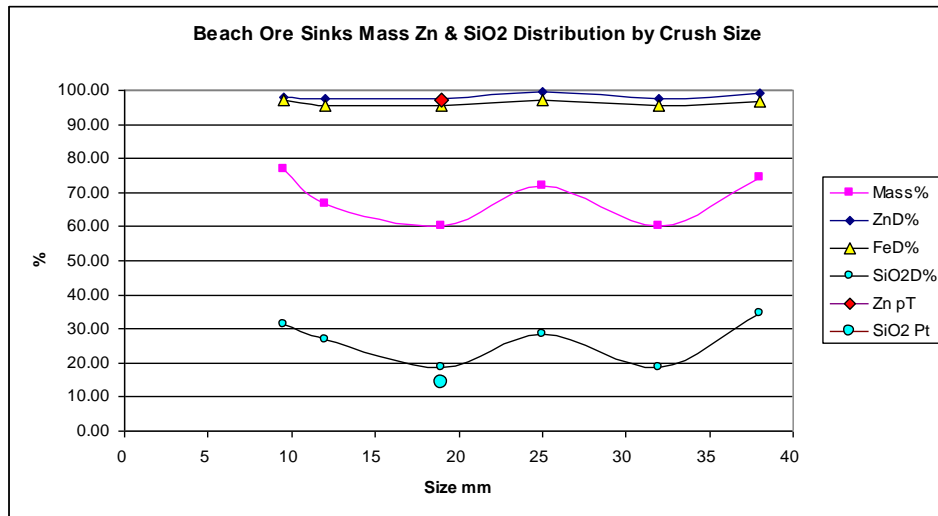


Figure 6 DMS size results for Beach L2

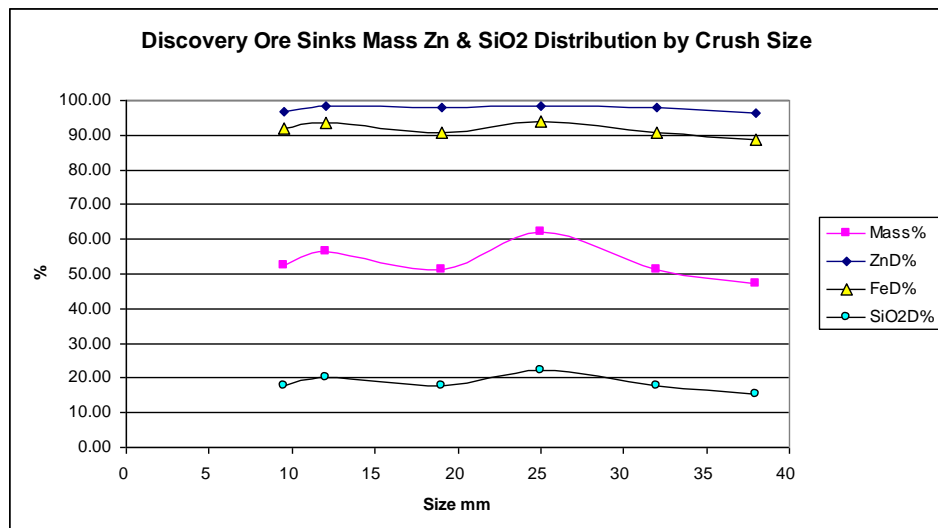


Figure 7 DMS size results for Discovery

Varying DMS separation densities were also evaluated and very little additional rejection occurred at specific gravities (sg) greater than 3.0 tonnes/cubic metre (Figure 8 and 9).

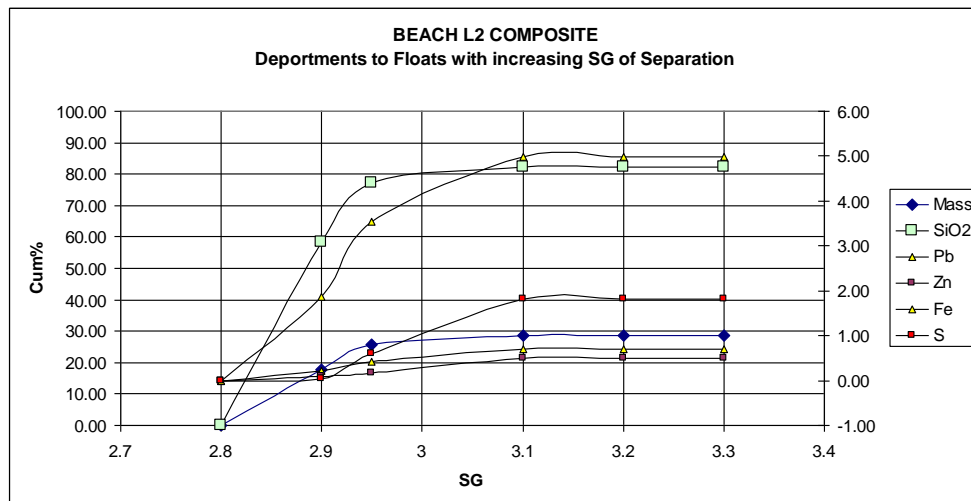
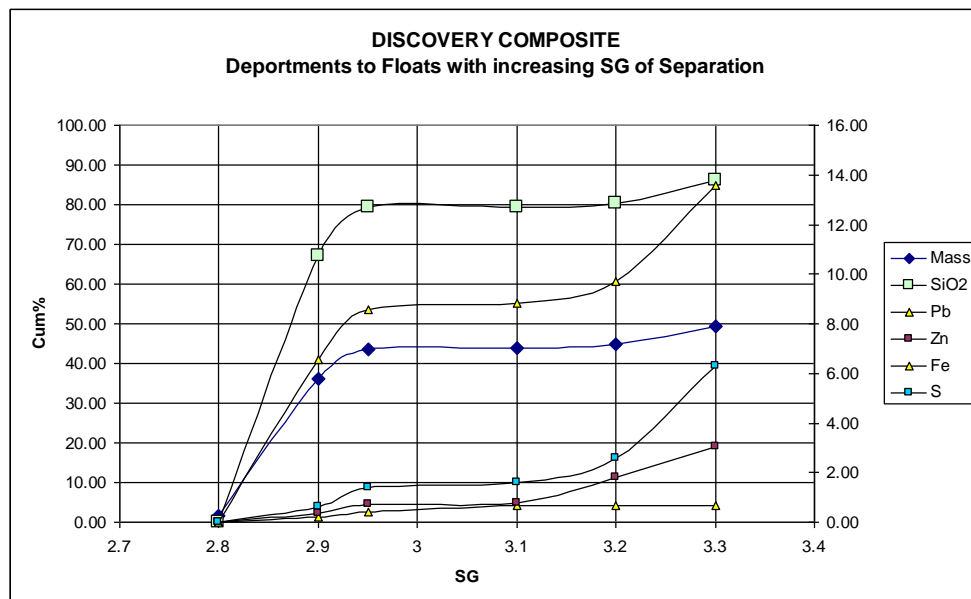


Figure 8 Deportment to floats Beach L2 by SG

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**Figure 9 Department to floats Discovery by SG**

A bulk sample has been prepared for flotation testing based on these results and this work is currently underway.

Flotation optimisation is ongoing and has been concentrating on reducing lime and reagent requirements.

## Process Plant

An overall process flowsheet is presented in Figure 10 which shows a flow sheet of the planned process plant.

The primary crushing plant will be located as its own installation and will consist of:

- ROM pad,
- Dump hoppers for 90t trucks,
- Primary Jaw Crushers
- Plant Feed Conveyor

The remaining equipment will be located on the process plant barges and consists of the following equipment:

- Secondary Crushing
- Dense Media Separation
- Spirals
- Milling
- Lead flotation
- Zinc flotation
- Concentrate and tailing dewatering



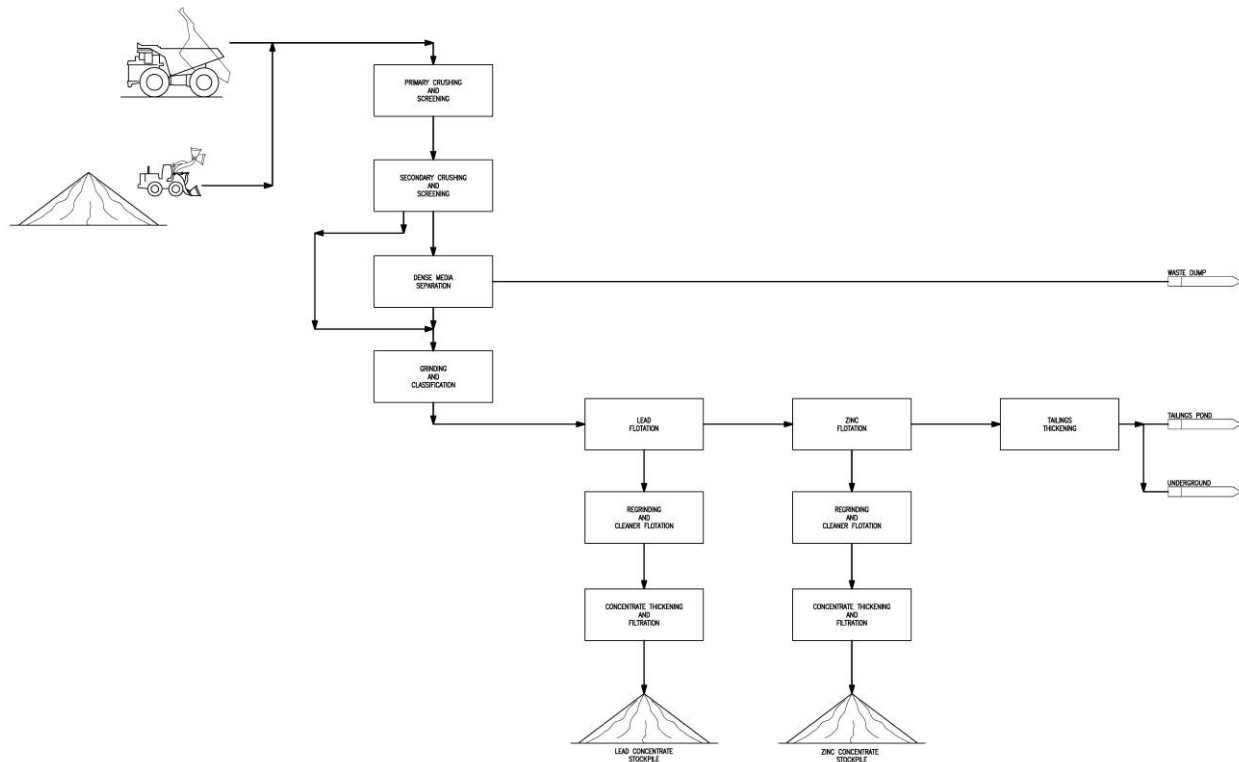


Figure 10 Overall process flowsheet

The process plant will be constructed of 3 barges and then towed to site and floated into pre-constructed berths.

Tailings will be pumped to the tailings storage facility dam during the first year, thereafter being placed underground.

## Bathymetry

A Bathymetric survey of the lake and fjord was completed during early August. The preliminary drawings are attached, but show that the current Lake Platinova will hold 0.5 gigalitres of water, requiring a dam wall to be constructed over certain areas up to 8 metres high to meet the process plant water requirements. The survey also showed that the water at Citronen Fjord becomes deep close to shore allowing the selection of the proposed wharf for shipping access (Figure 12).





Figure 13 Tailings dam

To ensure sufficient water is available for the process plant, Lake Platinova could be dammed as shown in Figure 14. The embankment will crest at 8 metres and will store an additional 1.5 gegalitres of water (in addition to the 0.5 gegalitres of existing capacity). This volume of water storage will require pumping from the Eastern River over summer at a rate of 1000 m<sup>3</sup>/hour for a total of 3 months.

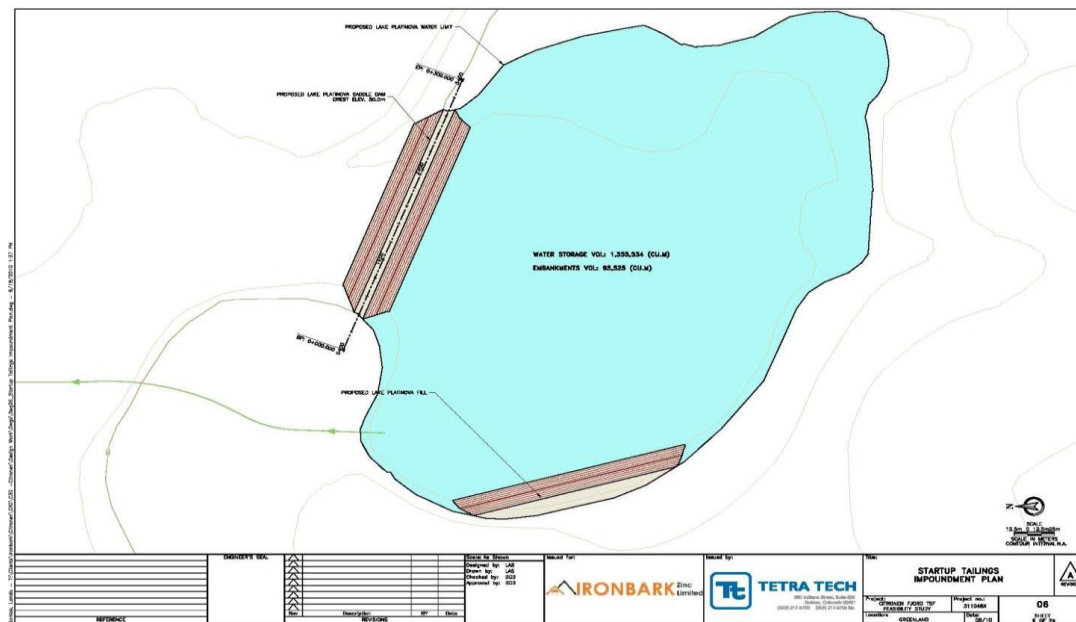


Figure 14 Lake Plantinova dam

## Topography

Topography photos and site surveying work has been completed with final data to be processed and an overall site topography to be produced. The topography is based on the draft stereo photo shown below taken by recent satellite images with survey crosses marked on the ground for rectification.



Figure 15 Site photo

## Schedule

The overall schedule remains on course to finish the report in December. The key risk to the schedule is the time for the environmental leaching tests to be completed, potentially a pre-condition for submitting the Environmental Impact Assessment.

## ABOUT IRONBARK

Ironbark is a well funded Company listed on the Australian Securities Exchange (ASX: IBG) and is focused on the development of a major base metal mining operation in Greenland.

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 wholly owned Citronen base metal deposit located in Greenland. Greenland provides a supportive mineral development environment with a tax rate of 37% and no Government royalties. In addition development expenditure and plant and equipment are deductible through depreciation at a rate of 30% on a declining balance basis.

Citronen currently hosts in excess of 10 billion pounds of zinc (Zn) and lead (Pb). 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
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Inferred resource of 25.9Mt @ 5.0% Zn and 0.7% Pb
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*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
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Inferred resource of 8.2Mt @ 7.1% Zn and 0.7% Pb
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*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
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Inferred resource of 51.5Mt @ 3.8% Zn and 0.6% Pb
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*Using Ordinary Kriging interpolation and reported at a 2% Zn cut-off*

ENDS

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*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.*