

 **IRONBARK** Zinc Limited

CITRONEN FEASIBILITY STUDY UPDATE



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VIA E-LODGEMENT

ASX ANNOUNCEMENT CITRONEN BASE METAL MINE FEASIBILITY STUDY UPDATE

KEY FINDINGS AND STATUS

Ironbark Zinc Limited (Ironbark) is pleased to announce the progress and current status of the Feasibility Study for its 100% owned Citronen base metal project (Citronen) in Greenland. The study is focused on developing a large scale, long life base metal mining operation situated within the stability of a first world Government regime. Ironbark is fortunate in having very strong and supportive partners in Nyrstar NV, Glencore International AG and China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd (NFC). The recent relationship developed with NFC is expected to provide an excellent platform to advance the development of Citronen.

The study is based on a 3 million tonne per annum (tpa) mining operation to produce between 175,000 and 275,000 tpa of 55% zinc concentrate and 10,000 to 26,000 tpa of 50% lead concentrate over a mine life of at least 13 years, not including Inferred mineralisation which could see a mine life of 16 years, with substantial potential for a much longer mine life. The costs provided herein are interim and do not include any Inferred resources, which require further drilling to reclassify to Indicated or Measured categories. The resource remains open in almost every direction which may support future mine expansion.

The Citronen project is targeting operating costs to concentrate (at the mine gate) in the range of US 32c/lb to US 42c/lb of zinc (US 37c/lb to US 49.5c/lb payable* zinc) after lead credits (at the mine gate) for the first 5 years of production, depending on finalised mine schedule, resources and mining reserve conversion. A capital cost of US\$502M on the base case, excluding first fills, has been estimated to a feasibility study level. This release provides graphs that highlight the relevance of Citronen against a global background and indicate that the forecast operating costs are lower than other major mines such as Century (Australia), the second largest zinc mine in the world and the Mount Isa mine (Australia). Further work is ongoing so that Ironbark is prepared to take advantage of the market at a time when many of the worlds mines, some of them very large, have closed or are closing and with very few large scale replacement mines in the global pipeline.

* Payable zinc refers to the benchmark payment made to miners by the smelters after the smelter takes 15% of the metal as "free metal" to cover the cost of metal lost in the smelting process. Modern smelters can recover over 95% of the metal but still typically pay for 85% of the metal.

CITRONEN BASE METAL PROJECT KEY POINTS

100% Owned by Ironbark Zinc Limited – One of a few World Class deposits wholly owned by a junior resource company.

Strong Cash Position – The majority of the feasibility study has been completed and Ironbark retains a healthy cash balance* of approximately \$10 M at September 2011.

Long Life – Large tonnage resource base of 60 Mt at 6% zinc + lead (Zn+Pb) with a potential mineable mineral inventory of 50 million tonnes with the majority in the Measured and Indicated category. The resource remains open to further mineralisation in almost every direction. The first five years average diluted ore grade at a mining rate of 3 Mt/pta delivered to the process plant will be approximately:

- **Underground** 7.5 Mt at between 6.1% and 6.8% Zn+Pb upgrading to mill feed grading to between 10% and 11.9% Zn+Pb.
- **Open pit** 7.5 Mt at approximately 3.7% Zn+Pb upgrading to mill feed of approximately 5.3% Zn+Pb at low strip ratios, although this will be moved the end of the mine life to give preference to underground tonnes due to a focus on targeting early high grade.

Citronen has excellent potential for the mine life to be increased beyond the current 13 years as defined within the Measured and Indicated resources. The mineralisation remains open in most directions and is constrained only by drilling with reserve classification limited to the Measured and Indicated resources categories only. The current Inferred resources will need to be infill drilled to a higher confidence level to be included in a mine plan but could take the mine life to 18.7 years. A target resource of 165 M to 190 M tonnes @ 5.7% to 6.5 % zinc + lead (as previously released) highlights the significant upside potential of this world class asset.

Life of Mine Revenue at US\$ 1/lb Zn and US\$ 0.90/lb Pb could exceed US\$3.2 Billion**.

Simple Process Flowsheet – Industry standard flowsheet that results in a saleable concentrate with feasibility process design recovering 85% of the zinc mined and approximately 60% of the lead mined overall with further testwork ongoing.

Capital Cost – US \$502M***. Opportunities for capital cost reduction have been identified and the following initiatives are underway including:

China Nonferrous Metal Industry's Foreign Engineering and Construction Co.,Ltd. (NFC) and Arccon (WA) Pty Ltd signed a Memorandum of Understanding (MOU) with Ironbark to engineer, design, procure, supply, construct, test and commission the Citronen project. The MOU also envisages potential funding of the project development costs by major Chinese banks and entering into concentrate offtake sale agreements.

Metso Corporation (Metso) one of the world's largest equipment suppliers to the mining industry have identified significant savings to the process plant capital cost which will be investigated in the coming months.

Supportive Industry Shareholders – Ironbark has very strong and supportive shareholders in Nyrstar NV (the world's largest zinc metal producer) and Glencore International AG (the world's largest zinc trader).

* Includes bonds fully refundable following meeting exploration commitment.

** Include Inferred resources that optimise for mining but is not currently able to be included as reserves based on the 2010 resource.

*** The capital estimations were made across several currencies and finalised in US dollars with a basis date of Q4-2010 and does not include any escalation beyond this date. The estimate is a class 3 estimate with an accuracy range of $\pm 15\%$, prepared in accordance with the AACE International estimate classification system. The estimate does not include or allow for escalation, exchange rate variation, working or sustaining capital, financing costs, rehabilitation and closure costs or project growth, first fills or barge transport to Iceland and assumes leasing of barges.

Operating Costs – The target Life of Mine average operating cost for Citronen is calculated to be US \$57.87/t net of by-product credits. The operating costs are plotted against other global mines for comparison purposes in Figure 1.

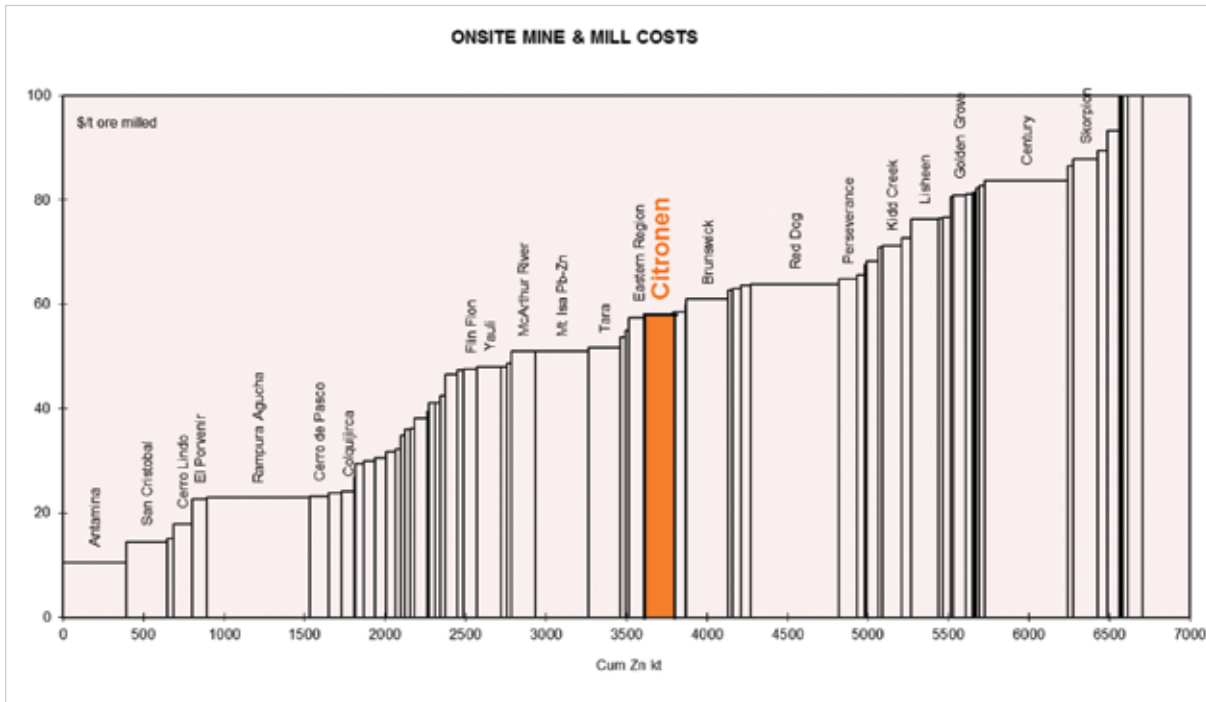


FIGURE 1: ADOPTED BY IRONBARK FROM MINECOST DATA (2010 GLOBAL COSTS)

Negligible Sovereign Risk – Greenland provides a supportive and pro-mining environment that operates under European law. The corporate tax rate is 30% (37% for repatriated funds) and there are 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.

Clean and Saleable Concentrate Product – The forecast zinc concentrate grade is 55% zinc with no forecast penalty limit breaches.

Environmental Impact Assessment – Completed and lodged with the Bureau of Minerals and Petroleum, awaiting public comment.

Social Impact Assessment – First draft submitted to the Bureau of Minerals and Petroleum Greenland (BMP) for comment, revision currently being addressed by Ironbark.

PROJECT SUMMARY

The preparation of the Feasibility Study is being coordinated by Wardrop Engineering Inc. (Wardrop) of Vancouver, Canada, in conjunction with Wardrop Engineering Inc./Tetra Tech (Wardrop/TT), Metso Corp. (Metso), MTHøjgaard Grønland ApS. (MTH) and with input from Ironbark and the in-house team of engineering, geological and environmental staff. A detailed conceptual flythrough of the completed and operating Citronen mining and processing operation is located on the home page of the Ironbark website: www.ironbark.gl then click on "To view a fly through video of Citronen, please click here."

The scope was distributed as follows:

- **Wardrop Engineering Inc. (Wardrop)** – Mining, Layout & General Arrangement, Plant Infrastructure, Dust Control, Building Services such as HVAC (Heat Recovery) and Fire Protection, Instrumentation and Controls, Piping, Process Plant Electrical Distribution, Mechanical Equipment (excluding Metso supplied equipment), Operating Costs.
- **Wardrop Engineering Inc./Tetra Tech (Wardrop/TT)** – Tailings & Water Management.
- **Metso Corp. (Mesto)** – Process Mechanical Equipment (Metso supplied).
- **MTHøjgaard Grønland ApS. (MTH)** – Site Layout, Site Civil Works, Site Infrastructure & Services, Construction Costs.

The Citronen Project (Citronen) is located adjacent to the Citronen Fjord which flows to the much larger Frederick E. Hyde Fjord. Citronen Fjord is approximately 2,000 km north-northeast from Greenland's capital, Nuuk and 940 km from Qaanaaq – the nearest Greenlandic settlement.

The Feasibility Study details the development of a 3 million tonne per annum lead-zinc mining operation (open pit and underground) including process plant, port, and other associated infrastructure at Citronen. The region lies in an Arctic desert environment with annual precipitation, mainly as snow, estimated to be 125-250mm (water equivalent).

The project lies at the junction of two glacial valleys (in which the Esum and Eastern Rivers flow), surrounded by mountains up to 1000m high. The glacial valleys are filled with glacial till, which has been eroded in benches, while the bases of the mountain slopes are covered with scree taluses. The Citronen Fjord itself is a drowned glacial valley.

The Citronen resource was discovered in 1993 by Platinova A/S (Platinova). Five years of intensive drilling and environmental studies were conducted. No further field work was conducted during a period of depressed base metal prices in the late 1990s and the earlier part of the decade until the project was purchased by Ironbark. In 2007, Ironbark initiated investigation via an extensive re-sampling of Platinova diamond drill core, followed by construction of a 40-person camp and an extensive diamond drill program in 2008.

The current Citronen project development plan envisages the process plant being constructed on 3 barges and towed to site where they will be positioned and joined together on the eastern margin of the Citronen Fjord. The site infrastructure and mine development will be constructed concurrently. The plant will ramp up initially to a mining rate of 3 million tonnes per annum sourced equally from the open pit and underground mines. Once the open pit had been depleted the mill feed will be sourced solely from the underground operation.

The processing plant coarse crushes the ore to 38 mm before upgrading the feed material through a dense media separation plant to increase the grade of the ore prior to a conventional grind and flotation plant, which will produce separate zinc and lead concentrates. The concentrates are stored on site in the storage building until the annual shipping season when the material is distributed to global smelters.

ZINC AND LEAD MARKET

Zinc is one of the most widely used metals in the modern world ranking as the fourth most consumed metal overall.

The recent zinc exploration and development market has been challenging with the zinc price declining over a 5 year period by 33% while other commodities have risen strongly, such as copper which has risen by 34% over the same period. Zinc development projects have suffered the same operating and capital cost increases that have faced, and been driven by, the other increasing commodities but without a stronger price to support the rising cost environment.

While these factors have made operating in zinc a difficult business, the long term fundamentals are very positive with a current shortage of zinc concentrates facing the existing smelters universally forecast.

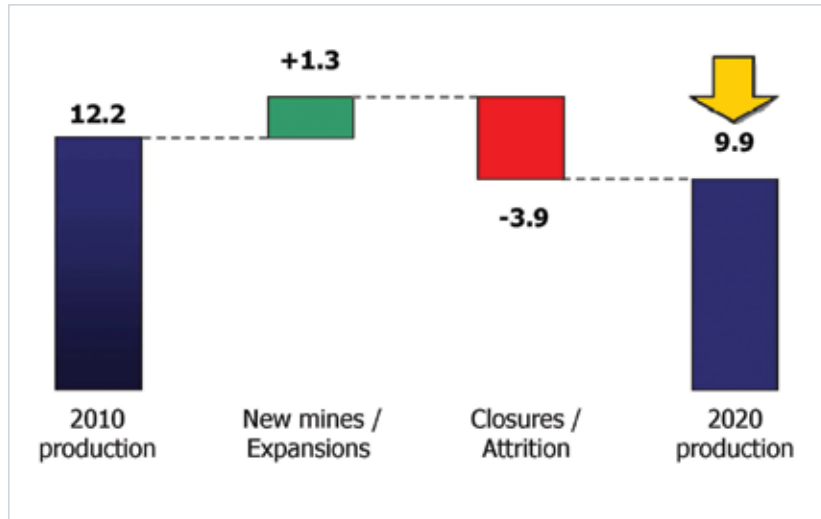


FIGURE 2: SOURCE BREAKWATER PRESENTATION (MARCH 2011)

In the face of increasing global zinc demand, several large zinc mines are due for closure in the near future removing more supply than planned new zinc mines being commissioned– see Figures 2 and 3. This is likely to place significant upward pressure on the zinc price.

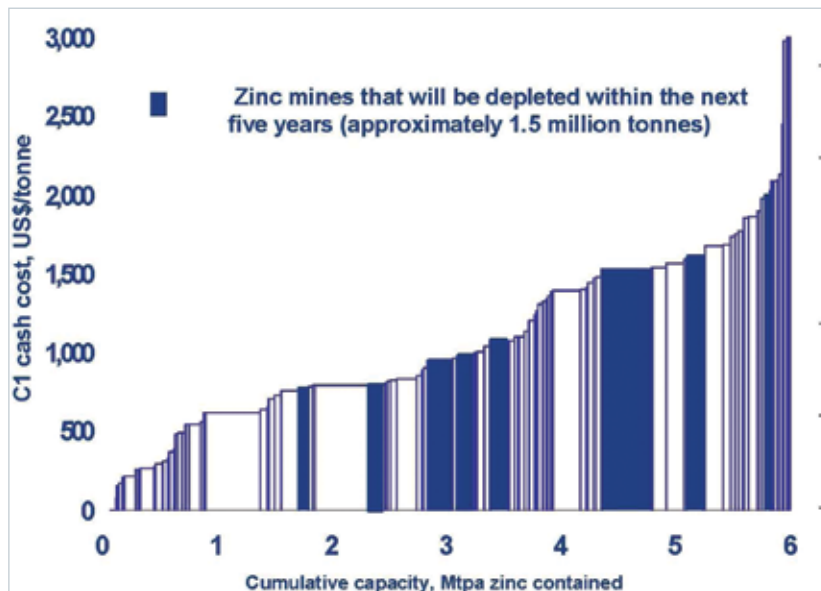


FIGURE 3: ZINC MINES CLOSING EXCEED PROPOSED STARTUPS (SOURCE NYRSTAR THE WORLD’S LARGEST ZINC REFINER)

Xstrata estimates 1.9 million metric tonnes of zinc mine capacity and 0.5 million tonnes of lead capacity will close globally by 2016 while forecasting 800,000 tonnes worth of new zinc projects and 150,000 tonnes of new lead projects will appear by 2016. This supply gap could grow to seven million tonnes in 2020.

The chief executive of Xstrata Zinc, the world’s largest zinc miner, Santiago Zaldumbide is quoted as saying that “We think zinc fundamentals are just as good as copper long term.”

These simple facts set the stage for a very supportive future for the large and long life Citronen base metal project.

CAPITAL COST

The capital cost estimate for the initial development of the facilities including mining, process and infrastructure is US\$ 502M.

A summary of the capital cost estimate including direct and indirect costs is shown in Table 1.

Project Capital Costs have been broken down as shown in Table 1:

TABLE 1: CAPITAL COST BY AREA *

	\$M	US \$M
Mining Development and Equipment	54.5	58.3
Crushing Plant	13.1	14.0
Process Plant	100.3	107.4
Concentrate Storage	9.5	10.1
Tailings and Water Management	14.7	15.7
Siteworks	22.8	24.4
Site Power and Heating	38.3	41.0
Port Facilities and Storage	16.9	18.1
General Infrastructure	10.5	11.3
Site Services and Utilities	5.0	5.4
Temporary Services	11.4	12.2
EPCM	46.5	49.9
Freight and Logistics	39.8	42.6
Construction Costs	25.7	27.5
Owners Costs	16.3	17.4
Spares	5.4	5.7
Commissioning and Startup	4.9	5.2
Contingency	33.3	35.7
Total	469.0	502

* The costs are presented in Australian dollars using an exchange rate of AUD\$1.07:US\$1. The capital estimations in the study were made across several currencies and finalised in US dollars with a basis date of Q4-2010 and does not include any escalation beyond this date. The estimate is a class 3 estimate with an accuracy range of $\pm 15\%$, prepared in accordance with the AACE International estimate classification system. The estimate does not include or allow for escalation, exchange rate variation, first fills, barge transport to Iceland, working sustaining capital, financing costs, rehabilitation and closure costs or project growth. The costs do not include first fills and assumes a leasing arrangement for concentrate barges.

OPERATING COST

The operating cost estimate for the life-of-mine (LOM) operations for the Citronen project is presented in Table 2. The unaudited operating costs, based on Ironbark's best estimate are as follows:

TABLE 2: OPERATING COST FOR LIFE OF MINE

OPERATING COSTS	LIFE OF MINE US\$/T
Mining (Under Ground)	22.01
Mining (Open Pit)	0.72
Processing	17.32
G&A	9.98
Sub-total	50.03
Lead Credits	-5.82
Sub-total	44.21
Shipping	13.66
Total	57.87

The projected LOM average operating cost for the Citronen project is calculated to be US\$57.87/t net of byproduct credits.

All costs are exclusive of taxes, permitting costs, or other government imposed fees unless otherwise noted. These costs not be considered to be to a feasibility study level of accuracy and assume resource and mining head grades remain constant per the current feasibility study.

DEVELOPMENT TIMETABLE

Project development begins concurrently at two sites under the current study plan:

- Akureyri, where the process plant will initially be constructed on barges and towed to Citronen by icebreaker/ tug boat.
- Citronen, where the main infrastructure components and primary crusher, etc. will be erected in-situ and where the operational mine site is located. With the introduction of NFC certain aspects of the schedule to be accelerated and the construction of the process barges may be moved from Akureyri to China.

EPCM SCHEDULE

EPCM schedules were developed for both respective sites. Some of the key activities are:

- Year 1 program which includes the commencement of detailed engineering with the EPCM contractor, issue of Section 702 (Standard Terms for Exploration) and Sections 19/43 (Mineral Act) applications to the BMP, planning and mobilisation of necessary equipment for the year 2 activities, and finalising the geotechnical investigations on site.
- BMP approval of early mobilisation according to Section 702 of the Standard Terms for Exploration of Minerals (mobilisation and construction under the exploration licence).
- BMP approvals according to Sections 19 and 43 of the Act on Mineral Resources in Greenland (Exploitation Licence).
- Detailed design, planning and approval of critical items according to Section 86 of the Act on Mineral Resources in Greenland (Exploitation Licence).

Long lead items that were identified during development of the schedules are:

- Process barges.
- Vertical ball mills (Verti-mills).
- Power Plant drives.
- Primary crusher.
- First fuel tank.
- Mobile Mining Equipment.

GEOLOGY

The Citronen zinc-lead deposit is hosted in the Ordovician Franklinian Basin that extends across northern Greenland and into north-eastern Canada. The Citronen Project is a Sedimentary-Exhalative type deposit (SEDEX). SEDEX deposits are formed in sub-marine environments by the precipitation of sulphides from metal bearing fluids introduced onto the sea floor through underlying fractures which act as conduits for the fluids.

The deposit consists of five major sulphide mounds, forming three orebodies - the Discovery, Beach and Esum. The mounds are present within three stratigraphic positions, termed Levels 1, 2, and 3. Level 3 represents the lowest and oldest stratigraphic position of mineralisation and Level 1 the highest and youngest - see Figure 4.



FIGURE 4: GOSSANOUS OUTCROP OF LEVEL 1 SULPHIDES AT DISCOVERY ZONE - POTENTIAL OPEN PIT MINE LOCATED 2 KM FROM THE INITIAL UNDERGROUND OPERATION

Ore mineralisation is pyrite dominated with variable amounts of sphalerite ($(Zn/Fe)S$) and lesser galena (PbS) present as sulphide species.

Several geophysical, geochemical, and structural targets have not been tested within the project area, which have the potential to host further significant and discrete zones of zinc and lead bearing sulphide mineralisation.

Platinova drilled 148 diamond holes for 32,839 m between 1993 and 1997 (both NQ, and more commonly, BQ diameter). As of the 2011 drilling season, Ironbark has completed 169 diamond drill holes in BQ, NQ and HQ for over 35,000 m, bringing the total metres drilled on site to date in excess of 67,000m - see Figure 5.

Ironbark Zinc Limited holds over 2,500 sq.km of tenements adjoining the Citronen lease. The multiple deposit nature of SEDEX deposits in general suggests the ground held is highly prospective for further base metal discoveries.

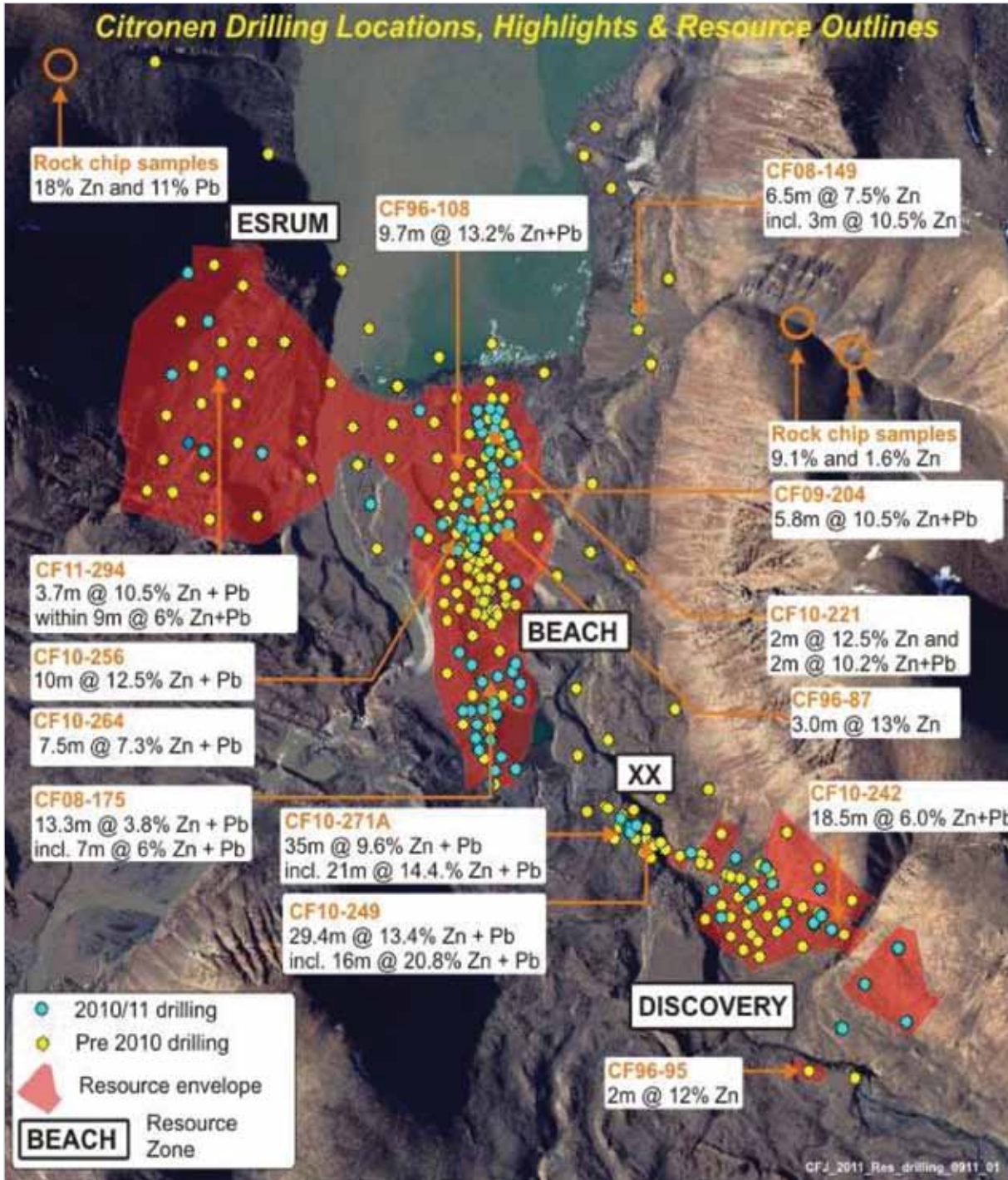


FIGURE 5: PLAN VIEW OF SIGNIFICANT DRILL HOLE LOCATIONS

RESOURCE

Citronen currently hosts 11.8 billion pounds of zinc (Zn) and lead (Pb). The JORC compliant resource estimate is:

TABLE 3: CITRONEN JORC COMPLIANT RESOURCE

Resource Total of 59.9 million tonnes at 5.9% zinc (Zn) + lead (Pb)

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	15.0	5.8	0.5	6.3
Indicated	19.3	5.1	0.6	5.7
Inferred	25.5	5.3	0.5	5.8
Total	59.9	5.3	0.5	5.9

Using inverse distance squared (ID^2) interpolation and reported at a 3.0% Zn cut-off

within a larger global resource of:

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	33.2	3.8	0.5	4.2
Indicated	52.2	3.7	0.5	4.2
Inferred	47.2	3.3	0.4	3.7
Total	132.6	3.6	0.5	4.0

Using Ordinary Kriging interpolation and reported at a 2.0% 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 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.

ONGOING WORK

A summary of the capital costs, operating costs and vision for the Citronen project is detailed herein. During the course of the study several substantial opportunities to reduce capital and shipping costs have been identified and are currently being pursued. As a result the final definitive feasibility study has not been completed until these options have been evaluated.

The recent execution of a MOU with NFC will play an important role in incorporating these opportunities. In summary the MOU establishes the framework that will seek to define formal agreements for:

- NFC to engineer, design, procure, supply, construct, test and commission the project on a full turnkey basis;
- NFC to facilitate funding of the project development costs from major banks in China;
- NFC entering into an offtake agreement for the concentrate products of the project or a portion thereof.

The most recent iterations of the indicative mining schedule design are substantially different to previous models and contain optimised regions of the ore body that remain within the Inferred category of resources and therefore cannot be accounted for in the financial model or classified as reserves. Mineralisation that scheduled for mining but was at the Inferred confidence category was targeted for further drilling during the 2011 field season to improve the confidence to the Indicated or Measured category, as well as to target higher grade zones which have been successfully identified. This new information is currently being assessed for inclusion as a reserve and applied to the project financial model.

The most recent round of optimisation work has indicated that the open pit should be moved to the end of the mining operation, and underground evaluated at higher cut-off grades than previously used. Initial appraisals have indicated that higher cut off grades have the potential to improve the financial outcomes for the project. In addition alternative mine design parameters are being evaluated to specifically target narrower high grade mineralisation that is currently conceptually modelled as being diluted to medium to low grade at the process plant.

Final metallurgical testwork is continuing and will be adopted when complete.

The shipping costs increased during the finalisation of the feasibility study and indicate that traditional loaded ships could potentially be a more cost effective transport solution than the barge based transport operation. A traditional shipping review is underway following an increase in barging transport costs between the scoping study and the feasibility study levels of costing. A more traditional shipping solution utilising large powered cargo ships looks likely to be a more cost effective transport alternative.

Results from this year's drilling season and the resource is currently being updated and reviewed. Once this is complete the mine plan will be updated, as the 2011 resource is expected to contain substantially higher grade material from the Esum zone. Additionally, the resource is expected to be moved into higher categories such as Indicated or Measured as defined by the JORC code.

Cut-off grade optimisations on the 2011 resource will be performed with work well advanced on a range of options.

Spirals testwork is ongoing to determine if a low value stream can be rejected prior to the flotation section of the process plan.

Metallurgical testwork on the Esum Zone samples obtained during the 2011 field season will be evaluated to improve the understanding of the ore body variability.

Ironbark will present a full financial summary for the project including Net Present Value and Internal Rates of Return as soon as all the elements of the study have been concluded to the satisfaction of the Executives and the Board of Ironbark. The identified opportunities will be incorporated into the financial model as it is important to present a full and optimal study with confidence.

MINING

A revised resource estimate based on the 2011 drilling programme is currently underway, and will likely include increased higher grade material recently identified from the Esum zone. Mining schedule optimisation work has identified further opportunities, which are currently being pursued, including deferring open pit mining to later in the project mine life and bringing forward production from the underground mine. This delivers substantially higher grade material to the processing plant in the early period of operation.

GEOTECHNICAL

The Rock Mass Ratings (RMR) at Citronen for the rock types encountered, range from 60 to 82 (classification- Fair through to Very Good) for the mining horizons. The rock ranges from 68 to 172 MPa Uniaxial Compressive Strength (UCS). The rock at the mining horizon is the strongest as a result of its sulphide content.

Equipment, ventilation, and production criteria resulted in the main decline and laterals being sized at 5 m wide x 6 m high and 5 m x 5 m respectively. Utilizing empirical analysis, stress modelling, and rock mass ratings methodology, most of the rock can be supported with 2 and 2.4 m long split set bolts at 1.5 to 2 m centres with mesh. Cable bolts may be required when the footwall shale is the immediate roof due to its lower RMR.

Ventilation shafts and raises may be supported with a concrete lining on a case by case basis. Pillars range in size from 4 to 17 m square and spans from 10 to 14 m.

Pit slopes are 55 degree overall pit slope angle, 10 m bench height, safety berm width of 7 m. The intrabench face angle is 75 or 80 degrees depending on when the pit face is oblique to parallel to the major joint set.

UNDERGROUND

The orebody is oriented sub horizontally, and two mining methods will be used at the Citronen underground mining operations, room and pillar mining, and long hole stoping. Frozen tailings will be used for stability as backfill within the permafrost rock.

The labour requirements are such that two fly-in/fly-out rosters will be observed: 3 weeks on/3 weeks off, or 6 weeks on/3 weeks off. Offsite personnel will observe a 5 day on/2 day off work week.

The Mining schedule, see Figure 6, includes two years of pre-production development at the Beach where the following work will be completed:

- decline = 1,160 m
- development drifts = 2,000 m
- shafts = 285 m

Dilution was calculated using 0.15 m thickness to roof and floor with a constant grade of 0.6% Zn and 0.08% Pb (based on reconciliation against existing drill holes). The overall mining recovery is 88% and notably the underground mining resource is constrained by drilling and remains open numerous directions.

Spans will range from 6 m to 14 m, with structural iced backfill testwork showing an encouraging 450 psi backfill strength at -8.4 degrees Celsius, which is stronger than typical cement backfill from tailings waste. The majority of the tailings waste is to be pumped 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.



FIGURE 6: CONCEPTUAL PLAN VIEW OF THE UNDERGROUND MINE DEVELOPMENT

Mining stopes were sequenced to maintain 1.5 Mtpa during the first 6 -7 years, and then ramp up to 3 Mtpa during years 6 to 7 when the open mine is depleted.

OPEN PIT

The Discovery deposit will be mined using open pit techniques and contains 8.0 Mt of potentially mineable resources at an average diluted grade of 3.1% zinc and a strip ratio of 1.09, or just under 6 years at a production rate of 1.5 Mtpa.

The pit was designed using an overall wall angle of 55 degrees including 10m double benches. The pit itself is mined down to an elevation of 30 m below surface.

All waste material from the mine is scheduled to be stored in a waste dump approximately 1.2 km away from the open pit adjacent to the Tailings Management Facility.

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.

METALLURGY AND PROCESS DESIGN

Metso designed the process flowsheet, enabling provision of an overall process guarantee (based on the data derived from testwork on drill core samples).

The project ore is treated by two stage crushing, Dense Media Separation (DMS), two stage grinding, and then flotation and dewatering of the lead and zinc concentrates, as shown in Figure 7.

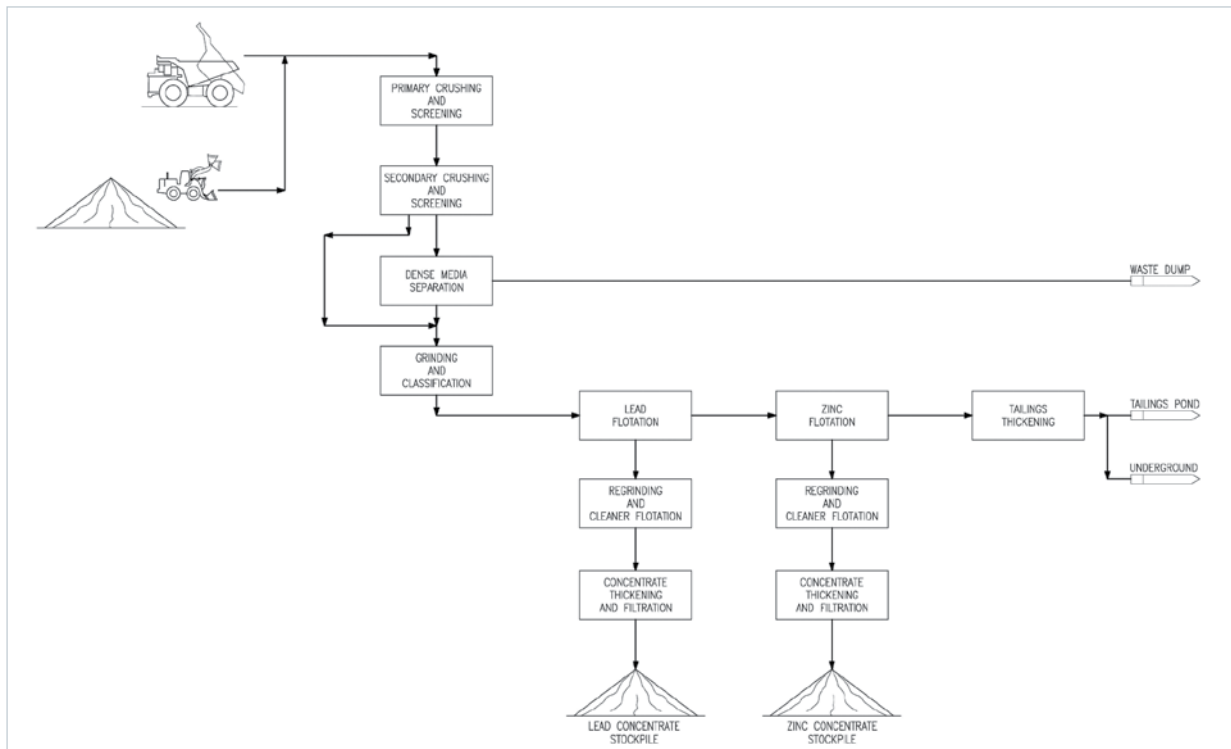


FIGURE 7: FLOWSHEET

The primary crusher will be placed within a closed structure separate from the main process plant. The primary crushed material will be conveyed to the main plant.

The overall process flowsheet proposed is conventional with testwork to date showing 85% zinc recover to form a 55% concentrate with minimal levels of deleterious elements. A separate lead concentrate is to be produced and further testwork is ongoing.

The process plant will be constructed on 3 barges and then towed to site and landed onto pre-constructed berths – see Figures 8 and 9. The ore will be 'up-graded' through a DMS process which upgrades the ore through eliminating gangue present.

The DMS product is then ground finely, floated and filter pressed dry using conventional technology. The concentrate is then conveyed to the concentrate storage building where it will be stored until the shipping season commences.



FIGURE 8: PROCESS PLANT



FIGURE 9: PROCESS BARGES WITH CONCENTRATE STORAGE

INFRASTRUCTURE

The Citronen project has been sized to allow for storage of consumables and final concentrate for the full year. The site layout is shown in Figure 10.

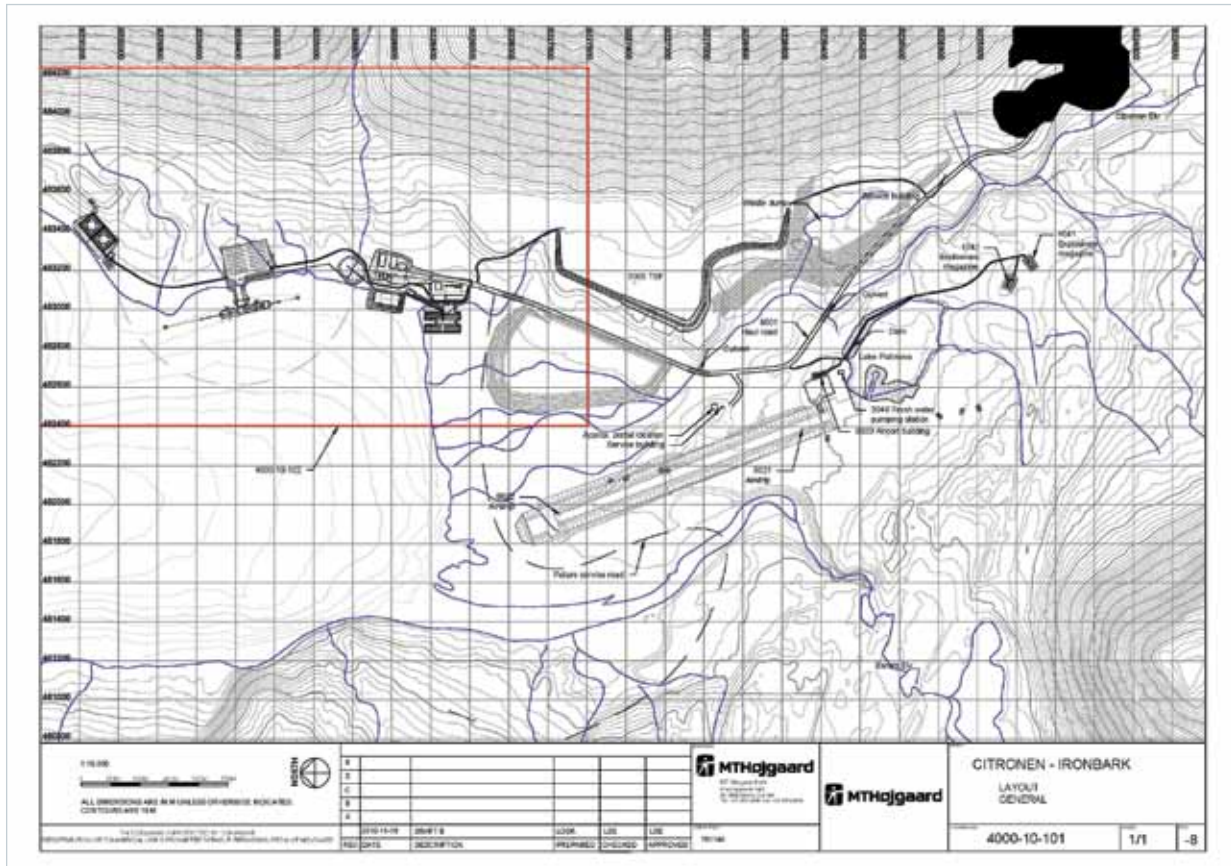


FIGURE 10: SITE LAYOUT

The key items of infrastructure include:

- **Power supply** – A 23 MW diesel fired power station will be required, consisting of four 7.12 MW capacity generators; with an additional backup generator.
- **Fuel storage** – Storage for 50 million litres of arctic grade diesel with additional capacity available off-shore on the last barge shipped to site.
- **Accommodation Complex** – A fully self-contained camp consisting of 250 rooms, kitchen quarters and recreation facilities.
- **Main Warehouse and Workshops** – The warehouse building includes spare parts storage, tool workshops, site incinerator, potable water treatment plant and sewage treatment plant.
- **Truckshop** – A maintenance facility for all site vehicles will be erected in close proximity to the process plant. The truckshop will accommodate 90 tonne open pit trucks and 60 tonne underground haul trucks and will also have a bay dedicated to the maintenance of light vehicles on site.
- **Port** – The port will be located at the south-eastern corner of the Citronen Fjord. On average, the shipping window for access to the Citronen Fjord is six weeks every year with the assistance of icebreakers. During this period, the loading will be occurring 24 hours per day. For loading of the barges with bulk concentrate, a fixed ship loader has been specified, capable of loading at a rate of 2,000 tonnes per hour.

- **Concentrate Storage** – All arctic operations store concentrate in sheds during the non-shipping season. The concentrate shed for Citronen will store on average 280,000 tonnes of concentrate.
- **Water storage** – During the winter months all surface water freezes. A reservoir for raw water is required with sufficient capacity to supply the site for approximately 9 months of the year. A dam will be constructed to increase the volume of Lake Platinova with the lake being refilled during the summer run off from the Eastern River.
- **Airstrip** – A temporary airstrip will form the initial section of the permanent airstrip and is based on a 900 m runway for the operation of passenger/freight aircrafts similar in size to the Twin Otter or DHC-7. It will include lighting and navigation systems so that it can be operated in the dark allowing for year round 24 hour per day operations. The permanent airstrip will have a 1500 metre runway to handle bigger aircrafts such as the Fokker 50 and Dash 8 (Q400) and Hercules C130. This runway will be constructed with DMS reject material from the process plant, which means that it can be completed in year 3 according to the mine plan.

ENVIRONMENT , SOCIAL IMPACT AND LICENCING

The Bureau of Minerals and Petroleum are responsible for the management of mineral resource activities in Greenland.

To advance from the current exploration licence to an exploitation (mining) licence, Ironbark is required to meet a number of requirements stipulated by the BMP. These requirements are:

1. A declaration that the deposit at Citronen Fjord is commercially viable and that Ironbark intends to exploit the deposit.
2. A definitive feasibility study of the Citronen Fjord deposit on which the declaration is based.
3. An Environmental Impact Assessment (EIA).
4. A Social Impact Assessment (SIA), including an Impact Benefit Agreement with the public authorities.

BMP requires a minimum of two years of environmental baseline studies to adequately characterise an area prior to project start. Prior to 2010, two years of baseline studies had been completed at Citronen (1994 to 1997) as well as a reconnaissance study in 1993 and marine water sampling in Citronen Fjord in the winter of 1995. In addition to this, in 2010, Ironbark and the Danish environmental firm Orbicon A/S (Orbicon) conducted an additional baseline study of the project. These three baseline studies form the basis of the EIA. The 2010 EIA is at advanced draft status, having been submitted to the BMP for comment, revised and resubmitted, and currently awaiting the commencement of the public comment phase of the application process. This will happen in conjunction with the release of the Social Impact Assessment.

A Social Impact Assessment (SIA) detailing the potential benefits of the mine on the population of Greenland has been largely completed and submitted to the BMP for comment, Ironbark is working through BMP's comments and suggestions prior to resubmission.

The Citronen project is situated in the high arctic region, defined as the area with very low precipitation, four months of semi-darkness during winter, and a short growing season. As such, the Citronen Fjord region is a harsh environment that supports only a small number of plant and animal species adapted to these conditions.

The risk analyses conducted as part of the EIA conclude that most mine activities have a low risk level of disturbing or contaminating the environment at Citronen Fjord. This generally low level of risk is consistent with the nature and scale of the project, including:

- The project is located in an arctic environment with limited rainfall and sub-zero temperatures during winter resulting in reduced weathering/oxidisation of materials, freezing of mine wastes, limited runoff during a short period of the year and small numbers of plant and animal species.

- Tailings waste will be contained within a fully-lined facility or underground.
- Waste rock is non-acid generating.
- Relatively small scale disturbance, with only limited clearing of vegetation in a sparsely vegetated region.
- No populations of flora or fauna are unique to the project area.
- Most potential impacts only have a localised affect, which can be readily managed or remediated.

ASSUMPTIONS AND DEFINITIONS

Base Line Survey:

A comprehensive survey of the the environment prior to any disturbance caused by the mine. A total of two baseline surveys are required for an EIA in Greenland.

Bureau of Minerals and Petroleum:

The Bureau of Minerals and Petroleum (BMP) are responsible for the management of mineral resource activities in Greenland.

Capital Cost:

Refers to the initial investment required to commence operations at the Citronen project. The capital was calculated using a basis date as at October 2010 in USD, and was subsequently converted to AUD at and exchange rate of AUD:USD 1.07:1.00.

Capital Cost Estimations: were made across several currencies and finalised in US dollars with a basis date of Q4-2010 and does not include any escalation beyond this date. The estimate is a class 3 estimate with an accuracy range of $\pm 15\%$, prepared in accordance with the AACE International estimate.

Combined Zinc + Lead:

Means combined zinc and lead on an equal value basis. Recent zinc and lead prices have traded closely in valuation.

Concentrate:

Lead and Zinc is concentrated from a mined grade in the range of 4 to 12% Zinc and associated lead and then the process plant produces a saleable concentrate for each of lead and zinc- typically concentrates grade at 50% metal or more.

Closure Cost:

Costs associated with closing a mine and returning to its pre-mining condition, as required under relevant legislation.

Dense Media Separation:

A standard mineral separation technique which relies of specific gravity differences to separate valuable minerals from gangue. See Upgradeable.

DMS:

See Dense Media Separation.

Environmental Impact Assessment:

Also known as an EIA is a document required by the BMP detailing the impacts of the mine on the environment.

EPCM:

EPCM refers to Engineering, Procurement, Construction Management.

It is a common form of contracting arrangement within the construction industry. In an EPCM arrangement, the client in order to involve an experienced player in large projects, selects a EPCM contractor who primarily manages the whole project on behalf of the client. The EPCM contractor essentially ensures that the whole project is completed, as required and in time.

Escalation:

Refers to the increase in costs, mainly due to inflation.

Exchange Rates:

The costs are presented in Australian dollars, except where stated otherwise, using an exchange rate of AUD\$1.07:US\$1.

Financing Cost:

The price of obtaining loan capital.

First Fills:

Refers to the cost of the initial filling of supplies to the mine. In Ironbark's case, first fills are encompassed as the first years supplies in total and will be covered under working capital rather than as an initial capital item.

Flotation:

Is a mineral separation technique commonly used in zinc mines to upgrade the ore.

G&A:

Is a reference to General and Administrative costs.

Inferred resource:

Is a JORC code classification that refers to mineral resource inferred from geo-scientific evidence, drill holes, underground openings, or other sampling procedures where the lack of data is such that continuity cannot be predicted with confidence and where geo-scientific data may not be known with a reasonable level of confidence.

JORC Code:

Is the classification of mineral deposits based on their geologic certainty and economic value and is derived from the Australasian Joint Ore Reserves Committee Code (JORC Code). Mineral resources are those economic mineral concentrations that have undergone enough scrutiny to quantify their contained metal to a certain degree. None of these resources are ore, because the economics of the mineral deposit may not have been fully evaluated. Resource estimations under the JORC code are typically reported based upon varying degrees of confidence from Inferred, Indicated and Measured. For further information please see the official JORC code website: www.jorc.org.

Lead Credits:

Refers to the net value of the lead concentrate being deducted from the cost of producing the zinc concentrate.

Life of Mine:

Refers to the number of years that an operation is planning to mine and treat ore, taken from the current mine plan.

Mine Gate:

Refers to costs on the project site.

Operating Cost:

The target cost to produce and ship the concentrate from the mine to market.

Payable zinc:

Refers to the benchmark payment made to miners by the smelters after the smelter takes 15% of the metal as “free metal” to cover the cost of metal lost in the smelting process. Modern smelters can recover over 95% of the metal but only pay for 85% of the metal.

Rehabilitation Cost:

Expense in restoring the mine site to legislatively required condition.

Smelter:

A process facility that melts or dissolves the concentrate, often with an accompanying chemical change, to separate its metal content from waste to produce a more pure or refined product.

Social Impact Assessment:

Is a document detailing the potential benefits of the mine on the population of Greenland.

Sovereign Risk:

Probability that that the government of a country (or an agency backed by the government) will refuse to comply with the terms of a loan agreement during economically difficult or politically volatile times.

Sustaining Capital:

Is the periodic capital outlay required to maintain operations at existing levels.

Upgradeable:

The Citronen ore can be upgraded relatively easy by first crushing the ore to a coarse level and then using a gravity separation method to reject barren unmineralised waste rock from mineralised ore. The process is relatively cost effective and can increase the head grade of ore delivered to the process plant.

Working Capital:

The funds available for day-to-day operations of the mine. This includes first fills and stockpile funding arrangements.

ENDS



Ironbark Zinc Limited

Level 1, 350 Hay Street, Subiaco WA 6008
PO Box 935, West Perth WA 6872
T: +61 8 6461 6350 | F: +61 8 6210 1872

www.ironbarkgold.com.au