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# Ironbark Signs MOU with Norwegian Arctic Specialist LNS A/S

Ironbark Zinc Limited ("Ironbark", "the Company" or "IBG") is pleased to announce that a non-binding Memorandum of Understanding ("MOU") has been executed between the Company and Norwegian group Leonhard Nilsen & Sønner ("LNS") regarding a possible equity investment in, and contractual arrangement for services to, the Company's flagship Citronen Project.

# **Highlights**

The MOU contemplates LNS taking, or earning, an equity position in the Project in return for preferred contractor status on three key elements of the Project:

- Civil construction contractor during the construction phase;
- 2. Mining contractor during the operations phase; and
- 3. Logistics management for both phases.

IBG Managing Director Michael Jardine:

"This is beginning of what I anticipate will be a fundamental, long term and valuable relationship between Ironbark and LNS A/S. With their background in Arctic and Antarctic construction and mining, there are few – if any – groups anywhere in the world better qualified to help execute the vision we have for the Citronen Project.

The challenges of undertaking an Arctic project for Ironbark would be significantly reduced with the project support and participation of LNS. This MOU potentially marries together the world class Citronen deposit with the LNS team's extensive experience in building and operating high latitude projects.



I am personally very invested in making this MOU a success and look forward to working closely with LNS in taking Citronen from concept to reality"

LNS President Frode Nilsen:

"The Citronen Project is unique, and this MOU opens for LNS to contribute with our knowledge and competency in the further development of the Citronen Project. The Arctic is our home turf, and our experience fits very well with what Ironbark is requiring. I'm looking forward to continuing our cooperation and good work into the next phase of the Project."

# **Key MOU Terms**

In addition to the three specific elements identified above under "Highlights", the MOU also contains a provision allowing broader commercial arrangements to be contemplated between the parties for their mutual benefit. The MOU will be executed in two phases:

- Phase 1 confirmatory due diligence by LNS on the Citronen Project, including provisional agreement on terms to proceed to Phase 2; and
- Phase 2 subject to Phase 1 successfully concluding, agreement of a Term Sheet relating to an equity
  investment by LNS A/S in the Citronen Project, along with the accompanying commercial agreements
  relating to items 1-3 on page 1 of this announcement.

The MOU as currently agreed between Ironbark and LNS is non-binding in nature and has an initial term of 12 months from signing, subject to any further date being agreed by the parties. Given the MOU is non-binding, the MOU will not have a financial impact on the Company's financial position unless and until a binding agreement is entered into.

#### **About LNS**

LNS is a wholly owned family business based in Risøyhamn, Norway. The group currently owns and operates mining businesses in both Greenland and Norway and specialises in high latitude civil, construction, mining and logistics businesses.

Notable successes in LNS' portfolio include the construction of the Global Seed Vault at Svalbard, groundwork and infrastructure for the Norwegian Troll research station in Antarctica, mining operations and civil works from the late 1990s up until today at Svalbard, and a range of large and complex mining, civil construction and tunnel projects



in Norway, Greenland, the Faroe Islands, Iceland, Chile and Hong Kong. LNS has successfully operated in the polar regions, Arctic and Antarctica since the establishment in 1961.

Alongside its mining and contracting arms, LNS has a large and established logistics business based out of Longyearbyen, Svalbard. Given the proximity of Svalbard to Citronen and its likely role as a forward base, as well as the fact that LNS has historically provided logistics services to Ironbark, the scope of this MOU potentially de-risks a broad swathe of operational elements relating to project execution.

Please see Appendix A of this announcement for further details on major LNS A/S Projects.

# **Update on Citronen Financing Process**

In person meetings took place between Ironbark and US EXIM in Washington DC in mid-May 2022 and further progress is being made on Phase 2 due diligence with Colorado headquartered RPM Global now appointed in the key Technical & Environmental adviser roles. RPM will be accompanying EXIM on the planned site visit to Citronen in July 2022; Shipping and Market advisers are yet to be appointed.

The equity process remains ongoing, and Ironbark remains in discussion with several interested parties. It is anticipated that these talks will continue to move in parallel with the EXIM process and further updates will be provided at the appropriate time.

# **Further Details**

This notice is authorised to be issued by the Board. Please contact Managing Director Mr. Michael Jardine for any further inquiries on either <a href="mjardine@ironbark.gl">mjardine@ironbark.gl</a> or +61 424 615 047.



## APPENDIX A - MAJOR LNS A/S PROJECTS

## **SILA Narvik**

Client: LKAB

Construction period: 2006-2009

Contract model: EPC

LKAB hired LNS to build the SILA-project in Narvik, Northern Norway. A unique project combining underground silos and tunnels. A total of twelve silos, 38 meters across and 60 meters deep, were excavated. In addition, the contract also included a 6500 m<sup>2</sup> loading hall, concrete and steel buildings and 2.8 km of tunnels. A total of 850 thousand m<sup>3</sup> of volume of rock was blasted and excavated.

## Røssåga Power Station

Client: Statkraft Energi AS

Construction period: 2013-2016

Contract model: Unit Price Contract

In connection with this development, LNS commissioned a tunnel boring machine (TBM), something which had not been done in Norway for 22 years. The material from the TBM was transported on conveyor belts, which was a brand-new method in Norway at the time. LNS excavated a new power station, as well as three tunnels of a combined length of 19.5 km. LNS drilled 7.5 km of the tunnel to its full dimensions using TBM, acquiring unique expertise in the use of tunnel boring machines. The TBM was 7.23 m in diameter and was an open-shield machine.

The project was completed in 2016 and was an extension of the existing facility from the 1950s and 1960s. On completion of the plant, the total annual power production from Nedre Røssåga increased by approximately 200 GWh, from 1900 to 2150 GWh. This increase in power production corresponds to the annual consumption of 20,000 households.

# Rana Gruber Mine - Open Pit

Client: Rana Gruber AS

Construction period: 2018-2024

Contract model: Main Contractor

The operation consists of three open-pit mines with different ore qualities requiring blending for delivery to the mineral processing plant. Kvannevann Øst is the main mine, and there are operations at two satellite mines located further west on Ørtfjellet. In 2018, the open-pit mine switched to a new pattern of operations, with a new and



larger fleet of machinery. This included four 100-tonne tipper trucks, two 100-tonne main loaders and several smaller articulated dumper trucks, cleaning machines, drilling rigs and various road maintenance equipment.

# Rana Gruber Mine – Underground

• Client: Rana Gruber AS

Construction period: 2007-current

Contract model: Main Contractor

LNS has since 2007 developed six new underground levels, plus access tunnels, for Rana Gruber's iron ore production drilling. Approximately 8000 meters are developed per level. The transportation drive is drilled 20 meters from the iron ore. Every 22nd meter, a production tunnel is driven into the iron ore. Each tunnel is 32 m<sup>2</sup> and up to 160 meters long.

#### **Svea Tunnel**

Client: Store Norske

Contract model: EPC

LNS developed a new entry tunnel for the Svea North coal mine at 78 degrees N, Spitsbergen. This was a challenging task because of the geology (proximity to coal) and permafrost ground conditions. However, a new world record in tunnel drilling was set by LNS during this project, with 150.1m bored in one week. The average over all was 103 m/week and a total of 6500 meters of tunnel was excavated (cross section of 38.5 m<sup>2</sup>).

#### Tana Quartzite Quarry

Client: Elkem Tana AS

Construction period: 2001-current

Contract model: Mining Contractor - Unit price

One of the world's largest quartzite quarries is located in Austertana, Norway. LNS has a contract with Elkem Tana AS to excavate quartzite for the ferrosilicon industry around the world. The open-pit and surface mine in Austertana is one of several northern Norwegian mines where LNS is the operating contractor.

The project involves drilling, blasting and transporting 1.2 million tonnes of quartzite per year. In addition, 200–250 thousand tonnes of waste rock material is transported from sea level to the final destination 220 m above sea level. The mine is located at an altitude of about 350 m, which counts as high mountain terrain at this latitude. The quartzite is transported from the quarry to the crushing plant 40 m above sea level. The transport route, which is characterised by machine suppliers as the "world's toughest", has a gradient of up to 1:7 placing significant demands on the LNS crew and equipment.



### **Bharati Research Station**

Client: NCAOR

Construction period: 2010-11

Contract model: EPC

LNS Spitsbergen (LNS subsidiary) was hired by the Indian National Centre for Antarctic & Ocean Research for groundwork and infrastructure at the Bharati research base at Princess Elizabeth Land, Antarctica.

The contract included: petroleum tank farms with 13 tanks (24 000 litres each), 30x30 meter helipad, concrete and piles foundation for the research station (30x50 meter and 12-meter height), 720 m pipelines above ground, 300m temporary road, pump station and water intake. The planning and logistics for this remote project was extremely challenging.

#### Aappaluttoq Ruby Mine, Greenland

LNS subsidiary, Greenland Ruby, opened its ruby and pink sapphire mining operation in Aappaluttoq in southwest Greenland in May 2017. The ruby bearing rock is processed at LNS' ultra-modern, state-of-the-art cleaning and sorting operation at the mine site. Further sorting is done in Nuuk, at Greenland Ruby's headquarters.

The current Aappaluttoq mine site is estimated to have at least 10-years' worth of gem-quality ruby and pink sapphire material, ensuring consistency of supply for jewellery assortments and collections. Greenland Ruby is also exploring two neighbouring mining locations.

The majority of Greenland Ruby's workforce is made up of Greenlandic people. More than a third of our employees are female. Our local workforces enjoy all the protections and working conditions guaranteed by Greenlandic law, which is modelled on strict, northern European standards.