ASX Announcement ASX: SUP

5th December 2019 superiorlake.com.au



Optimisation Study targets earlier higher-grade production to increase leverage

Highlights

- The Company continues to make significant progress with an Optimisation Study on the back of the successful Bankable Feasibility Study released during 3Q 2019
- The Company is working closely with financial advisor Orimco Resource Investment Advisers ("Orimco") and potential debt financiers to improve project financing options.
- The main purpose of the Optimisation Study is to increase the Project's debt carrying capacity, whilst also improving the already robust financial returns
 - o The Company has received multiple non-binding indicative proposals to assist with project financing of between US\$50 to US\$70m (ASX announcement 27th August 2019)
 - o The Bankable Feasibility delivered a pre-tax NPV₈ of A\$224M (ASX Announcement 28th August 2019)
- The Optimisation Study is focused on two key areas to achieve these outcomes:
 - Examining the potential to mine higher grade ore earlier in the schedule to enable an increase in margins in the first two years of production; and
 - o Optimising Project cashflow through staging and deferring non-essential capital costs.
- The Optimisation Study is expected to be completed during 1Q 2020

Superior Lake Resources Limited (ASX: SUP) ("Superior Lake" or the **"Company")** is pleased to provide an update regarding the Optimisation Study ("**Study**") being carried out for the Company's Superior Lake Zinc Project ("**Project**") in Ontario, Canada.

The Optimisation Study follows the Bankable Feasibility Study (BFS) released during 3Q 2019, which delivered robust financial returns for the Project (pre-tax NPV $_8$ of A\$224M). These returns were driven by the exceptionally low operating costs (C1 US\$0.35/lb) and low upfront capital expenditure (US\$87M) (ASX announcement 28th August 2019). The Company has since identified areas that have the potential to further improve the returns achieved in the BFS and more importantly, further increase the Project's debt carrying capacity that would see the equity component for Project development further reduced. The two key areas the Company is focusing on in the Study are:

- 1) Examining the potential to mine higher grade ore earlier in the Project's life. During the first two years of production, the average grade mined is less than the reserve grade of 13.9% Zn. The Company has identified potential areas that could see the grade increase to at least the reserve grade during this time. There is also potential to increase the tonnes mined during the "ramp up" period.
- 2) Identifying capital costs and sustaining capital costs that could potentially be deferred until later in the Project's life, by staging or alternate scheduling.

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The Company has made substantial progress in both areas and is working closely with our financial advisor, Orimco, potential debt financiers and other resource sector specialists to examine the potential to achieve these outcomes. The Company aims to complete this work during 1Q 2020.

Executive Director Grant Davey commented:

"Whilst the BFS highlighted the Project's outstanding potential and excellent financial returns, we believe there are further areas that could enhance returns for investors, specifically regarding mined tonnes and grade earlier in the mining schedule.

"The Company has identified several concepts that have the potential to deliver the required results and is currently investigating these concepts. We will continue to keep the market updated as we progress this work".

About the Company

Superior Lake Resources Limited

Superior Lake Resources Limited is focused on the redevelopment of the Superior Lake Zinc Project in North Western Ontario, Canada. The Project is a high-grade zinc deposit with a JORC resource of 2.35 Mt at 17.7% Zn, 0.9% Cu, 0.38 g/t Au and 34 g/t Ag (ASX announcement 7th March 2019) and a Probable Ore Reserve of 1.96Mt at 13.9% Zn, 0.6%Cu, 0.2g/t Au and 26.2g/t Ag (ASX announcement 28th August 2019).

Superior Lake Mineral Resource at 3% Zn cut-off grade					
Classification	Tonnage Mt	Zn%	Cu%	Au g/t	Ag g/t
Indicated	2.07	18.0	0.9	0.38	34
Inferred	0.28	16.2	1.0	0.31	37
Total	2.35	17.7	0.9	0.38	34
Superior Lake Ore Reserve at 5.2% Zn cut-off grade					
Classification	Tonnage Mt	Zn%	Cu%	Au g/t	Ag g/t
Probable	1.96	13.9	0.6	0.2	26.2
Total	1.96	13.9	0.6	0.2	26.2

To learn more about the Company, please visit www.superiorlake.com.au, or contact:

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Reference to previous ASX announcements

In relation to the Mineral Resource estimate previously reported on 7^{th} March 2019, Superior Lake confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 7^{th} March 2019 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the announcement of 7^{th} March 2019 continue to apply and have not materially changed.

In relation to the Ore Reserve estimate previously reported on 28th August 2019, Superior Lake confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 28th August 2019 and that all material assumptions and technical parameters underpinning the Ore Reserve estimate in the announcement of 28th August 2019 continue to apply and have not materially changed.

In relation to the results of the Bankable Feasibility Study announced on 28th August 2019, the Company confirms that all material assumptions underpinning the production target and forecast financial information included in that announcement continue to apply and have not materially changed.