ASX Announcement ASX: SUP 31st July 2019 superiorlake.com.au



June Quarterly Activities Report Quarter Ended 30 June 2019

Highlights

- Significant progress on the Definitive Feasibility Study (DFS) with its release imminent
- Project financing negotiations continue to advance, with the Information Memorandum sent to numerous major global banks and resource funds
 - Non-binding indicative terms expected during 3Q19
- Multiple indicative proposals received regarding concentrate offtake from leading global offtakers
- Progress with key permitting and approvals requirements means the Company remains on track to commence construction during 1H2020
- A 1,900m drill program and a Down Hole Transient Electromagnetic (DHTEM) survey will commence during August on the three major near mine geophysical anomalies identified earlier this year (Image 2, 3, 4 and 5)
- \$3.78m raised through the placement of 216.3M shares at \$0.0175 per share
 - The placement was heavily supported, with strong demand from existing and new investors
- Agreement to acquire an additional 15% of the Project, increasing the Company's ownership to 85% (subject to shareholder approval September 2019)

Superior Lake Resources Limited (ASX: SUP) ("**Superior Lake**" or the "**Company**") is pleased to provide its quarterly activities report for the Quarter ended 30 June 2019.

Definitive Feasibility Study

During the Quarter, the Company made significant progress on the DFS for the Superior Lake Zinc Project ("**Project**") located in Ontario, Canada, with results expected to be available in early August. The preliminary mining, processing and capital costs components are largely in-line with the previous guidance as highlighted in the Restart Study¹. The DFS is being prepared by highly regarded independent, specialist third party consultants.

Project Financing

Orimco Resource Investment Advisers ("**Orimco**"), the Company's advisors with respect to project financing, sent an Information Memorandum to numerous major global banks and resource funds based in both Australia and overseas during the Quarter. Non-binding indicative terms are expected to be received during 3Q19.

¹ See ASX announcement "Outstanding study confirms Superior Lake as low-cost project" dated 10 October 2018. The Company confirms that it is not aware of any new information or data that materially affects the information in that announcement (save for the 200,000 tonnes increase in the Mineral Resource estimate announced on 7 March 2019), and that all material assumptions and technical parameters underpinning the production targets and forecast financial information based on production targets in that announcement continue to apply and have not materially changed. The inclusion of the 200,000 tonnes will not materially affect the throughput set out in the Restart Study.

Superior Lake Resources Limited ACN 139 522 553

Level One 1202 Hay Street T: -West Perth WA 6005

T: +61 8 6117 0479



Concentrate Offtake

During the Quarter, the Company received two indicative proposals regarding concentrate offtake. These proposals provide guidance on pricing, treatment and refining charges and production specification. Receiving such indicative proposals from the world's largest metal traders highlights the quality of the concentrate to be produced at the Project, with favourable grades and minimal deleterious elements¹. These proposals are the first step towards securing binding offtake agreements.

Discussions with potential offtake partners has also highlighted the possibility of additional funding outside of the senior project finance facility to be linked with offtake. An offtake related financing typically is in the form of mezzanine debt or concentrate pre-payments. This funding would further reduce the equity component for financing project development.

In North America, there are currently four operating zinc smelters (CEZinc smelter in Salaberry-de-Valleyfield, Quebec, HudBay Minerals in Flin Flon, Manitoba, Teck Resources in Trail, BC and Nyrstar in Clarksville, Tennessee) (Image 1 below). The Flin Flon refinery will however reportedly close in 2021.

The concentrate produced at Superior Lake can access each smelter using existing rail and road infrastructure. Superior Lake's unique location and access to the Canadian rail network, which in turn provides access to the Canadian port system, both on the East and West coast, also allows for relatively easy access to both European and Asian smelters.



Image 1: Location of North American smelters, rail and port terminals

Zinc and copper concentrate specifications

Prior to its closure in 1998 due to a sustained period of low zinc prices, the Project produced zinc and copper concentrates for a decade. The historical operation provided the Company with concentrates specifications as highlighted in Table 1 below.

These historical concentrates specifications were the primary source of information used by the Company in the Restart Study completed in October 2018. The Restart Study estimated the following concentrate production.¹

- Zinc concentrate 88,000tpa of zinc concentrate (45,000t of contained zinc metal); and
- Copper Concentrate 6,700 tpa copper concentrate (25% Cu, 11g/t Au and 310g/t Ag).

As part of the BFS, additional independent testwork is being completed by SGS Lakefield in Canada, primarily to complete confirmatory testwork on the fresh ore from the mid-Pick zone.

Element	Zinc Concentrate (%)	Copper Concentrate (%)	
Fe	10.2	28.7	
Cu	0.67	24.7	
Ni	0.002	0.008	
Pb	0.010	0.074	
Zn	55.0	7.47	
Bi	0.008	0.023	
Cd	0.13	0.018	
Cr	0.008	0.010	
Со	0.010	0.019	
Ge	0.002	0.002	
In	0.033	0.011	
Mn	0.15	0.024	
Hg	0.0005	0.0003	
Мо	<0.001	<0.001	
As	<0.002	0.011	
Sb	0.002	0.005	
Sn	0.018	0.017	
Se	0.032	0.030	
Те	0.0001	0.0005	
F	0.036	0.005	
CI	0.016	0.007	
S	32.4		
SiO2	0.44		
AI2O3	0.059 0.13		
CaO	0.047 0.057		
MgO	0.19 0.37		
BaO	0.008 0.027		
Au	0.39 g/t	0.39 g/t 12.9 g/t	
Ag	41.2g/t	344 g/t	

Permitting and approval process update

In the province of Ontario where the Project is located, The Ministry of Energy Northern Development and Mines (MENDM) coordinates with other key departments, including The Ministry of Environment, Conservation and Parks (MOECP), and The Ministry of Natural Resources and Forestry (MNRF) regarding the key permitting and approvals requirements.

The Company recognises that a collaborative and consultative approach that involves all potential Indigenous rights holders and interested stakeholder groups is a key requirement. Engagement activities will increase following completion of the BFS, which remains on track for delivery during 3Q2019.

The BFS is the critical document required for a number of the key permits and approvals for the redevelopment of the Project. Given the Company's expectations on the timing for receipt of such key permits and approvals, and following a benchmarking exercise of other recent mining development projects in Ontario, the Company remains on track to commence development during 1H2020.

Key permits and approvals required for the commencement of the redevelopment of the Project include:

- 1. Water pumping two permits have been submitted for approval regarding water pumping. These permits include to take water of >50,000 L/day from the mine workings as well as a permit to take water of >50,000 L/day from the freshwater reservoir.
- 2. Consultation and agreements with Indigenous groups this is a continuous process and the Company is taking a collaborative and consultative approach. These discussions will increase post the release of the BFS as this is the critical document for this work.
- 3. Environmental assessment where particular Project components or activities are subject to the federal or provincial processes. These discussions will increase post the release of the BFS as this is the critical document for this work.
- 4. Notice of Project Status and Notice of Material Change to the MENDM is inclusive of the following information and will all be submitted as part of the BFS.
 - an operating plan (Project description, site plan, site access details, targeted minerals, Project term, number of workers, operating schedule);
 - map of Project boundaries;
 - uses of adjacent land and water;
 - owners, occupants and users of Project land and immediately adjacent land; and
 - Project schedule.
- 5. Closure Plan Amendment (CPA) with Financial Assurance for mine development and operation. Certain aspects of the CPA will be completed as part of the BFS. However, the CPA can only be finalised once the Project ownership has been transferred to the Company. The Company currently has an option to acquire the Winston Lake Mine from First Quantum Minerals (see ASX announcement 21st February 2018).

Exploration to recommence during 3Q19 to test and define geophysical anomalies

Subsequent to the end of the Quarter, the Company announced that it will commence a 1,900m drill program during August at the Project. The drill program and the Down Hole Transient Electromagnetic (DHTEM) survey is targeting three major near mine geophysical anomalies identified by the Company through a Fixed Loop Transient Electromagnetic (FLTEM) survey carried out in 1Q19.²

The FLTEM survey targeted a small 9km² area surrounding the existing resource and mine infrastructure. This area was selected as any new discovery could be accessed more efficiently and economically through the existing mine development, thereby allowing for a potential increase in future production and / or extension of mine life.

As part of that exploration program, the Company completed the first DHTEM survey at the Project, specifically targeting Pick Lake. Pick Lake was selected as a "test case", given significant mineralisation was already known to exist. As a result, if EM could successfully detect and define the known mineralisation, it would confirm this was an appropriate exploration tool to use at the Project.

² ASX release dated 28 March 2019, "Geophysics program identifies further anomalies". Superior Lake confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 28 March 2019.

The result was positive as Pick Lake was clearly identified, thereby increasing the Company's confidence that electromagnetics is a highly suitable technique for identifying new anomalies at Superior Lake.

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Pick North DHEM Target Zone Pick Lake North Lake North Control Lake No

Image 2: Plan view of the Superior Lake Project and the geophysical targets

Pick North EM Anomaly

The Pick North conductor (previously Conductor 3), is a chargeable anomaly located to the north of the Pick Lake orebody that is supported by the "Pick 1" alteration/lithogeochemical target described in the ASX announcement dated 30 January 2019.²³ This identification of a strong conductor along strike from known economic VMS mineralization, supported by geochemistry and alteration mapping is a significant development and gives strong support to the target.

This anomaly is modelled at approximately 650m in depth and will be tested with a single 700m drillhole followed by DHTEM. The DHTEM will search an area with a radius of approximately 200m. Image 3 below highlights the location of the planned hole, the targeted coverage volume of the DHTEM as well as its proximity to the Winston and Pick deposits.

³ ASX release dated 30 January 2019, "Multiple near mine zinc targets identified". Superior Lake confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 30 January 2019.

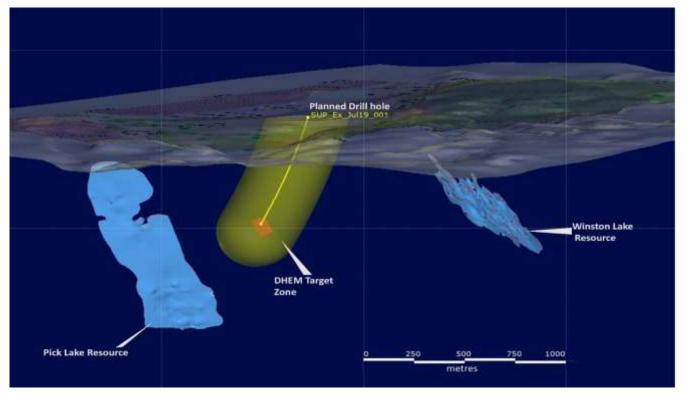


Image 3 – Pick North DHTEM target area and planned drill hole

Winston Deep EM Anomaly

Winston Deep (previously referred to as Conductor 2) is a shallow conductor in the footwall to the Winston Lake orebody with modelled dimensions of 200m x 120m. This anomaly is modelled at a depth of approximately 475m and will be tested with a single drillhole to a depth of 500m followed by DHTEM. The DHTEM will search an area with a radius of approximately 200m. Image 4 below highlights the location of the planned hole, the targeted area of the DHTEM as well as its proximity to the Winston Lake deposit.

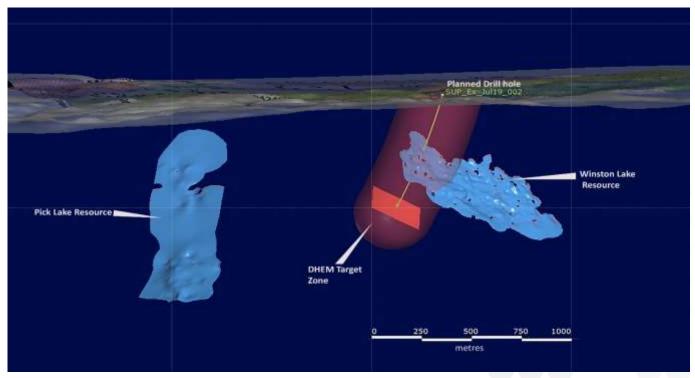


Image 4 – Winston Footwall DHTEM target area and planned drill hole



Winston Footwall South EM Anomaly

Winston Footwall South (previously referred to as Conductor 1), is a new major conductive anomaly located adjacent to the Winston Lake deposit in the footwall. This anomaly is significant as it measures 300m x 150m, has not been tested by historical drilling and is very proximal to existing underground mine infrastructure. The anomaly is modelled around 650m in depth and will be tested with a single 700m drillhole followed by DHTEM. The DHTEM will search an area with a radius of approximately 200m. Image 5 below highlights the location of the planned hole, the targeted area of the DHTEM as well as its proximity to the Winston Lake deposit.

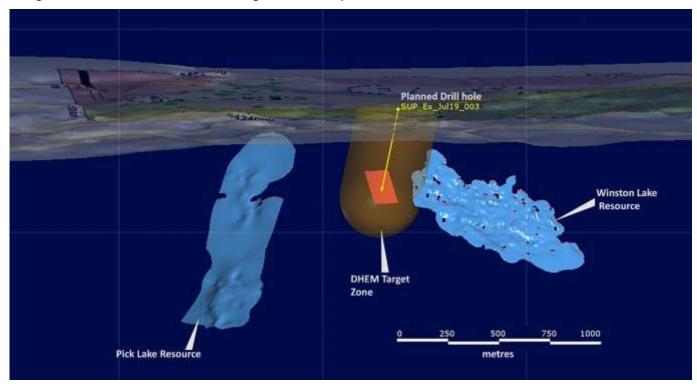


Image 5 – Winston Footwall DHTEM target area and planned drill hole

Corporate

Capital Raising

On 2 July 2019, the Company issued 216,363,122 fully paid ordinary shares at \$0.0175 cents per share to professional and sophisticated investors to raise \$3.78 million before costs ("**Placement**"). Directors subscribed for a further 11,428,571 shares, the issue of which is subject to shareholder approval at the Company's next general meeting.

Proceeds from the Placement will be used to further advance the Superior Lake Zinc Project, including finalising the project finance process currently being managed by Orimco, securing the required permits and approvals for project development and carrying out the proposed exploration drilling and DHTEM program.

Cash

As at 30 June 2019, the Company had \$1.6 million cash, \$1.1 million of which was early receipt of proceeds from the Placement. On 3 July 2019, the Company received the remaining \$2.5 million of proceeds from the Placement, which took the Company's cash balance to \$4.1 million.

Binding agreement executed to acquire an 85% interest in the Superior Lake Project

The Company entered into a binding agreement with certain minority shareholders of Ophiolite Holdings Pty Ltd ("**Ophiolite**") to acquire up to an additional 15% of Ophiolite ("**Ophiolite Acquisition**"). Ophiolite is the subsidiary entity which holds the Company's Superior Lake Zinc Project. The agreement will see the Company increase its ownership in the Project to up to 85%. Consideration for the Ophiolite Acquisition will be 185,454,375 Superior Lake shares.

As two of the three Selling Minority Shareholders are entities controlled by Mr Grant Davey, an Executive Director of Superior Lake, completion of the Ophiolite Acquisition is conditional on Superior Lake shareholder approval. A general meeting is expected to be held in September 2019.

As required by the ASX Listing Rules and the Corporations Act, the Company has appointed BDO as an independent expert to prepare a report on the Ophiolite Acquisition that opines on whether it is fair and reasonable to Superior Lake shareholders. This report will accompany the notice of general meeting that will sent to Superior Lake shareholders in connection with the Ophiolite Acquisition.

Key stakeholder and investor site visit

In the lead up to the DFS, the Company hosted a number of Australian and international investors on a site visit. This gave investors the opportunity to meet and hear from key stakeholders involved in the Project's development, including representatives from the Ministry of Energy for Northern Development and Mines, Mr Andrew Kane, independent consultants responsible for the Bankable Feasibility Study and the Company's Environmental and First Nations Consultants, both of whom are assisting the Company with permitting and licencing.

In addition, investors were also able to see the significant existing infrastructure that remains at the site, including a 115kV powerline, a tails dam, a freshwater dam, a well-maintained access road, and a rail siding, all of which are central to the successful and cost-effective redevelopment of the Project. This existing infrastructure not only reduces the capital development cost in comparison to a new development project, but also materially accelerates the development timeline.

Information required under ASX Listing Rule 5.3.3

List of current mining and exploration tenements (as at 30 June 2019):

Country	Tenement	Interest	Status
Ontario, Canada	4287909	70%	Granted
Ontario, Canada	4287910	70%	Granted
Ontario, Canada	4287911	70%	Granted
Ontario, Canada	4274196	70%	Granted
Ontario, Canada	4274197	70%	Granted
Ontario, Canada	4244161	70%	Granted
Ontario, Canada	4244162	70%	Granted
Ontario, Canada	4244163	70%	Granted
Ontario, Canada	4244751	70%	Granted
Ontario, Canada	4274195	70%	Granted
Ontario, Canada	3001231	70%	Granted
Ontario, Canada	4284603	70%	Granted
Ontario, Canada	4287912	70%	Granted
Ontario, Canada	4287913	70%	Granted
Ontario, Canada	4287914	70%	Granted
Ontario, Canada	4287915	70%	Granted
Ontario, Canada	4287916	70%	Granted
Ontario, Canada	4287917	70%	Granted
Ontario, Canada	4287918	70%	Granted
Ontario, Canada	4287919	70%	Granted
Ontario, Canada	4287920	70%	Granted
Ontario, Canada	4287921	70%	Granted
Ontario, Canada	4287922	70%	Granted
Ontario, Canada	4287923	70%	Granted
Ontario, Canada	4287924	70%	Granted
Ontario, Canada	4287925	70%	Granted
Ontario, Canada	4284634	70%	Granted
Ontario, Canada	4284639	70%	Granted
Ontario, Canada	4284644	70%	Granted
Ontario, Canada	4284628	70%	Granted
Ontario, Canada	4284629	70%	Granted
Ontario, Canada	4284630	70%	Granted
Ontario, Canada	4284631	70%	Granted
Ontario, Canada	4284632	70%	Granted

Country	Tenement	Interest	Status
Ontario, Canada	4284633	70%	Granted
Ontario, Canada	4284635	70%	Granted
Ontario, Canada	4284636	70%	Granted
Ontario, Canada	4284637	70%	Granted
Ontario, Canada	4284638	70%	Granted
Ontario, Canada	4284640	70%	Granted
Ontario, Canada	4284641	70%	Granted
Ontario, Canada	4284642	70%	Granted
Ontario, Canada	4284643	70%	Granted
Ontario, Canada	4284648	70%	Granted
Ontario, Canada	4284680	70%	Granted
Ontario, Canada	4284684	70%	Granted
Ontario, Canada	4284601	70%	Granted
Ontario, Canada	4284606	70%	Granted
Ontario, Canada	4284602	70%	Granted
Ontario, Canada	4284604	70%	Granted
Ontario, Canada	4284605	70%	Granted
Ontario, Canada	4284607	70%	Granted
Ontario, Canada	4284608	70%	Granted
Ontario, Canada	4284609	70%	Granted
Ontario, Canada	4284610	70%	Granted
Ontario, Canada	4284617	70%	Granted
Ontario, Canada	4284645	70%	Granted
Ontario, Canada	4284646	70%	Granted
Ontario, Canada	4284647	70%	Granted
Ontario, Canada	4284649	70%	Granted
Ontario, Canada	4284650	70%	Granted
Ontario, Canada	4284679	70%	Granted
Ontario, Canada	4284681	70%	Granted
Ontario, Canada	4284682	70%	Granted
Ontario, Canada	4284683	70%	Granted
Ontario, Canada	4284611	70%	Granted
Ontario, Canada	4284612	70%	Granted
Ontario, Canada	4284613	70%	Granted
Ontario, Canada	4284614	70%	Granted
Ontario, Canada	4284615	70%	Granted
Ontario, Canada	4284616	70%	Granted

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Country	Tenement	Interest	Status
Ontario, Canada	4284618	70%	Granted
Ontario, Canada	4284619	70%	Granted
Ontario, Canada	4284620	70%	Granted
Ontario, Canada	4284621	70%	Granted
Ontario, Canada	4284622	70%	Granted
Ontario, Canada	4284623	70%	Granted
Ontario, Canada	4284624	70%	Granted
Ontario, Canada	4284625	70%	Granted
Ontario, Canada	4284626	70%	Granted
Ontario, Canada	4284627	70%	Granted
Western Australia, Australia	E33/477	100%	Granted

No tenements were acquired or disposed of during the Quarter.

About the Company

Superior Lake Resources Limited

Superior Lake Resources Limited (ASX: SUP) is focused on the redevelopment of the Superior Lake Project in North Western Ontario, Canada. The Project hosts a JORC resource of 2.35 Mt at 17% Zn, 0.9% Cu, 0.4 g/t Au and 34 g/t Ag.⁵ A Restart Study completed in 2018, forecast the Project to produce approximately 46,000tpa Zn metal, with an AISC of US\$0.51 (see footnote 1, page 1).

Table 2: Superior Lake Mineral Resource at 3% Zn cut-off grade					
Classification	Tonnage (Mł)	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

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

David Woodall Chief Executive Officer +61 8 6117 0479

5. ASX announcement 7 March 2019 "Increase in Superior Lake Mineral Resource". 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 March 2019 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the announcement of 7 March 2019 continue to apply and have not materially changed.