



Significant brownfields exploration target defined at Superior Lake

Highlights

- Brownfield exploration study defines near-mine Exploration Target at the Superior Lake Project in Canada
- Study focused on near resource areas which can potentially be quickly added to the near term mine life
- Exploration Target excludes untested greenfield exploration potential
- Re-start Feasibility Study is due for completion shortly

Superior Lake Resources Limited (ASX: SUP) (“**Superior Lake**” or the “**Company**”) is pleased to announce it has defined an initial brownfields Exploration Target of between 2.1 to 5.2 million tonnes at a grade ranging between 13.3% to 15.4% Zn for its Superior Lake Project in Ontario, Canada.

The Exploration Target is in the immediate vicinity of the existing JORC resource of 2.15Mt at 17.1% Zn, as announced on 3 July 2018. The Exploration Target excludes the significant greenfields potential which exists at the project.

Limited exploration has been completed across the Superior Lake Project in the past 20 years, however, management is investigating a low-cost exploration program focused on these Exploration Target areas (Refer Figure 1).

**The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

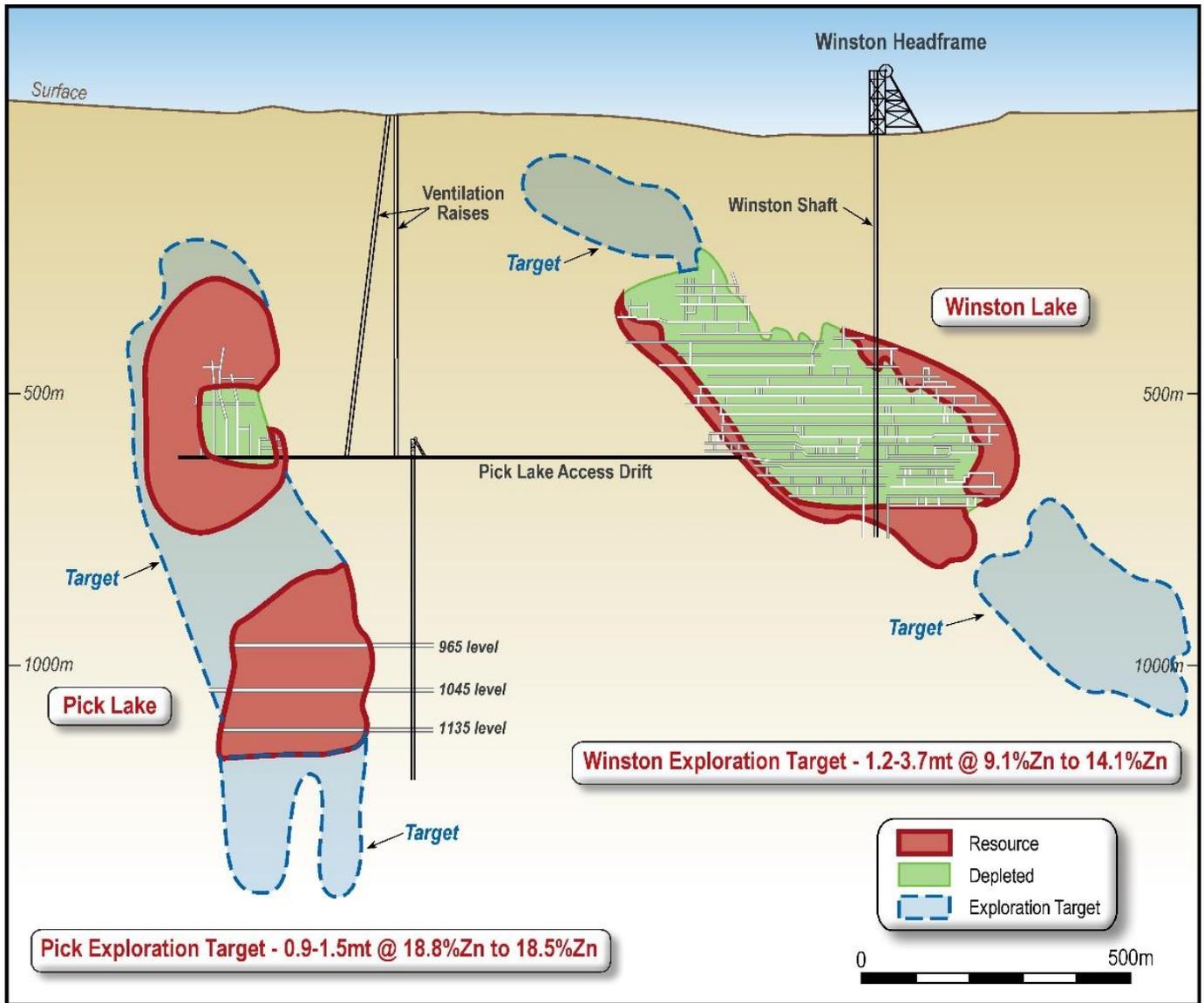
Superior Lake Chief Executive Officer David Woodall said:

“The exploration target highlights the potential to significantly increase the resource at the Superior Lake Project in the coming years. Importantly, this Exploration Target is in close proximity to both the existing resource and vast underground mine development, therefore could potentially be converted into mine life at a relatively low cost.

In addition, we are in the final phases of completing our Re-start Feasibility Study which will be released shortly.



Figure 1: Significant Brownfields exploration potential





Brownfields Exploration Target

Superior Lake has defined a brownfield Exploration Target of between 2.1 to 5.2 million tonnes at a grade ranging between 13.3% to 15.4% Zn. This Exploration Target is in the immediate vicinity of the existing JORC resources.

Table 2: Superior Lake Exploration Target

PICK LAKE						
Range	Tonnes	Zn%	Cu%	Au (g/t)	Ag (g/t)	Reporting Cut Off Zn%
Upper Bound	1,500,000	18.5	0.9	0.4	35	6
Lower Bound	900,000	18.8	0.7	0.3	34	3

WINSTON LAKE						
Range	Tonnes	Zn%	Cu%	Au (g/t)	Ag (g/t)	Reporting Cut Off Zn%
Upper Bound	3,700,000	14.1*	0.7	1.0	18	6
Lower Bound	1,200,000	9.1	0.6	0.8	15	3

TOTAL						
Range	Tonnes	Zn%	Cu%	Au (g/t)	Ag (g/t)	Reporting Cut Off Zn%
Upper Bound	5,200,000	15.4	0.9	0.4	35	6
Lower Bound	2,100,000	13.3	0.7	0.3	34	3

*average mined grade

The Exploration Target is based on the current geological understanding of the mineralised geometry, sub-surface geochemistry provided an extensive historic drill hole database and detailed underground mapping provided by historic mining activity coupled with understanding of the host stratigraphic sequence.

The Exploration Target, being conceptual in nature, takes no account of geological complexity, possible mining method or metallurgical recovery factors. The Exploration Target was estimated in order to provide the market with an assessment of the potential scale of the Superior Lake Project.

The Company intends to test the Exploration Target, based on the outcomes of further geophysical surveys and potentially with drilling. These activities are expected to extend over approximately 18 months.

Exploration Potential Estimation Methodology

The Exploration Target is defined by a combination of:

- Drilling-informed kriged block model estimation based on resource geological wireframes where the data density and sample support does not meet the criteria for either indicated or inferred classification.
- Extrapolation of the block modelled exploration target into extensional zones that have not been tested by drilling but in which geological continuity is supported by either geological mapping or outlying mineralised drill hole intercepts below a 1% Zn cut off that suggest continuity. Grade assigned from global average grade estimate for modeled component.

The Exploration Target is based largely on extensions of the reported classified resource into areas that have not been drill-tested in the past. These areas cover the strike and plunge continuations of the defined classified resources within host rocks that are the same as those that host the resources.



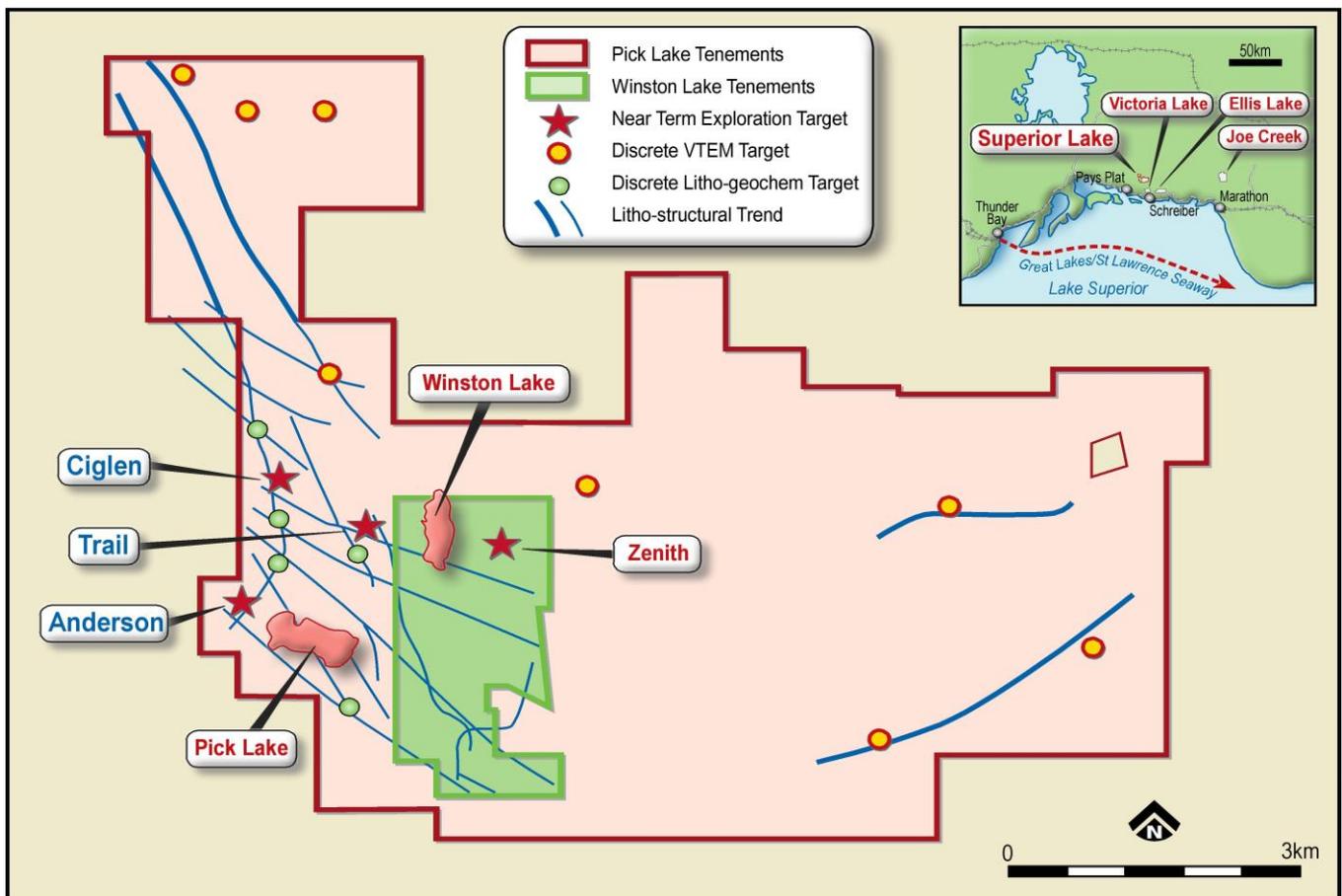
Grade ranges have been either estimated or assigned from the classified resource using either a 3% Zn cut off for the lower bound grade and 6% Zn cut off for the upper bound grade. A classification is not applicable for an Exploration Target.

Brownfields Exploration Strategy

Superior Lake's brownfields exploration strategy is planned to leverage off the significant potential of the project area and historical high priority geophysics targets. The key activities envisaged are:

1. Complete a structural review and test a new exploration targeting model using new modern geophysical techniques;
2. Consolidate all geological, geochemical and geophysical data into a GIS database, inclusive of all raw data from previous exploration activities;
3. Test areas adjacent to the current known resources with the DHTEM¹ geophysical methods for possible extensions and hidden mineralisation;
4. Test known near-surface, near mine brownfield anomalies with high-powered high-resolution TEM² geophysics;
5. A targeted underground drilling program in, upper Pick Lake, mid Pick Lake, lower Pick Lake, as well as surrounding the Winston Lake deposit.

Figure 2: Brownfields Surface Exploration Targets

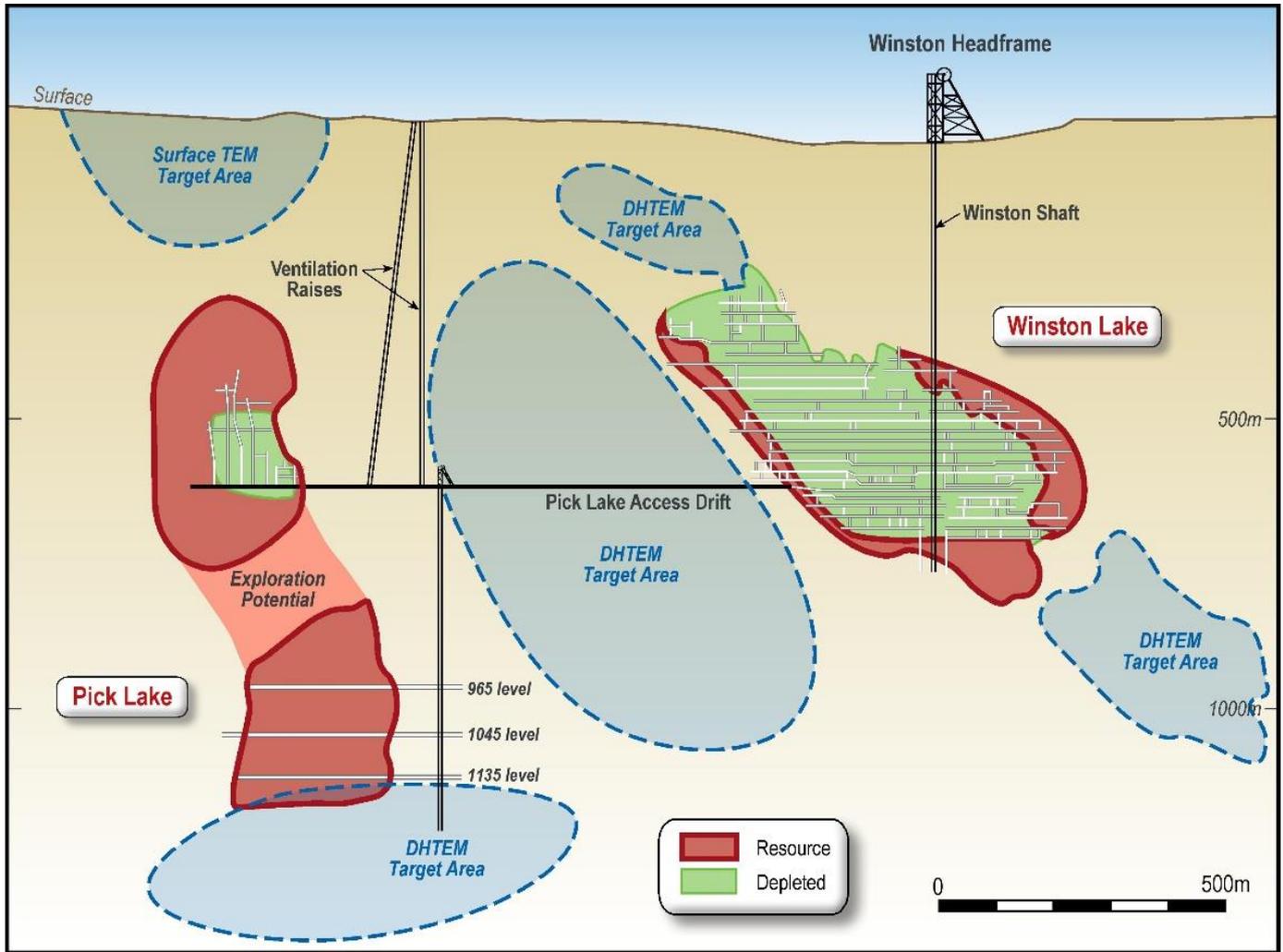


Note:

1. Transient Electromagnetic (TEM)
2. Down Hole Transient Electromagnetic (DHTEM)



Figure 3: Schematic of Brownfield Geophysics Exploration Targets at the Superior Lake Project



About the Company

Superior Lake Resources Limited

Superior Lake Resources Limited (ASX: SUP) is an ASX listed company focused on the redevelopment of the Superior Lake Project, which incorporates the Winston and Pick Lake Mines. These deposits rank amongst the highest-grade zinc deposits globally with a combined JORC resource of 2.15 Mt at 17.7% Zn, 0.9% Cu, 0.4 g/t Au and 33.5 g/t Ag. The Project is located in North Western Ontario, Canada which is rated one of the best mining jurisdictions in the world.

The Superior Lake Project has significant infrastructure in place which includes underground mine development to the existing mineralisation, tailings dams, site power connected to the grid and an all-weather road. The Superior Lake Project historically produced over 3Mt of ore up until 1999 where mining was suspended due to low commodity prices.



Superior Lake Project - Total Mineral Resource at 3% Zn cut-off grade

Classification	Tonnage	Zn%	Cu%	Au g/t	Ag g/t
Indicated	1,992,000	17.8%	0.9%	0.4 g/t	33.7 g/t
Inferred	152,000	15.4%	0.9%	0.4 g/t	31.2 g/t
Total	2,145,000	17.7%	0.9%	0.4 g/t	33.5 g/t

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

David Woodall Chief Executive Officer +61 8 6143 6740

Competent Person Statement

Exploration Targets

The information contained in this announcement that relates to Exploration Targets is based on, and fairly reflects, information compiled by Mr. Alfred Gillman, an independent consultant Superior Lake Resources Limited. Mr. Alfred Gillman is a Fellow and Chartered Professional of the Australian Institute of Mining and Metallurgy and was engaged as a consultant to Superior Lake Resources to complete the JORC (2012) resource. Mr. Gillman has sufficient experience which 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Gillman consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Mineral Resources

The information in this announcement that relates to the Mineral Resources on the Superior Lake Project was first reported by the Company to ASX on July 3rd, 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.