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



Quarterly Activities Report Quarter ending September 2019

Highlights

- Bankable Feasibility Study ("BFS") confirmed the Superior Lake Project is a low cost, high margin zinc Project with robust project economics. Key financial outputs included the following:
 - o C1 Cost US\$ 0.35/lb Zn lowest cost global quartile
 - AISC Cost US\$ 0.47/ lb Zn
 - o NPV8 pre-tax A\$224M
 - o IRR 31% (pre-tax)
 - EBITDA at full production U\$\$59M pa
 - o Initial capital expenditure of US\$86M
 - o Life of Mine of 9 years
- Key production outputs include the following:
 - o Annual production (after ramp-up) of 38ktpa contained Zinc and 1.4ktpa contained Cu
 - o Plant throughput 325,000 tonnes per annum
 - o Total 2.2 million tonnes treated
 - o Average grade: 13.7% Zn
 - Average zinc recovery: 96%
- Optimisation study remains on track for completion by November 2019.
 - o The study aims to further enhance the already robust project economics which in turn could potentially increase the project debt carrying capacity
- Project Financing received multiple non-binding indicative proposals from global banks and resource funds. These proposals ranged between U\$\$50m and U\$\$70m.
 - o The Company continues to advance negotiations with these parties as well as consider equity funding solutions.
- Offtake received multiple indicative proposals from global metal traders regarding the zinc and copper concentrates.
 - o Proposals provide guidance on pricing, treatment and refining charges and specification
 - Additional funding could potentially be provided through binding offtake
- Exploration successful drilling and Down-Hole Transient Electromagnetic (DHTEM) survey which identified four previously unknown conductive bodies.
 - All four conductive bodies are located in close proximity to current deposits and existing underground infrastructure
- All three drill holes intersected sulphide-bearing mineralisation
 - Geological observations indicate that all four conductive bodies host features commonly seen in VMS deposits
 - The Company is undertaking a full 50 element and whole-rock analysis of selected core samples to test for additional key markers related to VMS systems
- The Company had a closing cash balance of \$1.9m

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

Bankable Feasibility Study (ASX announcement 28 August 2019)

The cashflow modelling of the Project demonstrated highly positive financial returns. The modelling is based upon 100% ownership, no debt, 9-year life of mine, long-term pricing, and the Orelogy, Primero, Nordmin and Wood supplied capital and operating costs (as set out further below).

The key financial results are:

Table 1: Project Financial Summary

Criteria	Value		
NPV ₈ (pre-tax)	US\$158M		
NPV ₈ (post-tax)	US\$115M		
IRR (pre-tax)	31%		
IRR (post-tax)	27%		
EBITDA/annum (average LOM)	US\$34M		
Initial Capital Cost	US\$87M		
Owner's and Pre-production	US\$10M		
Production (average LOM)	32ktpa contained In		
Zinc pricing (long-term)	U\$1.22/lb Zn		
C1 Operating Cost (average LOM)	US\$0.35/lb Zn		
AISC Cost (average LOM)	US\$ 0.46/lb Zn		
LOM	9 Years		

Capital Costs

The construction capital required for mine development, inclusive of the decline to access the Pick ore, a 325,000tpa plant and associated infrastructure is estimated to be US\$87M (excluding owner's costs and pre-production). This includes a 9.5% overall contingency and is based on the following:

- Owner Operator mining for the mine development
- Primary crusher with SAG milling
- Two-stage flotation (copper and zinc)
- Concentrate filtration and loading into sea containers
- Use of existing transmission line to site (115kV)
- Use of existing site access road
- Use of existing tailing storage facility (TSF)
- Upgrades to surface water infrastructure and water treatment plant

The capital cost is based upon an estimate date of Q2 2019 with an accuracy of -10% +15%. The breakdown of the capital cost estimate is shown in Table 2 below:

Table 2: Project Capital Cost Estimate

Cost Centre	US\$M
Site General	0.8
Process Plant	43.5
Infrastructure	7.5
Mine Development	13.2
sub-total Direct Capital Costs	65.1
EPCM / Management	5.4
Construction Indirects	7.7
sub-total Indirect Capital Costs	13.1
Contingency	8.6
Total	86.7M





Pre-production costs and Owner's costs are shown in Table 3 below.

Table 3: Project Owner's Pre-Production Cost Estimate

Cost Centre	(US\$M)
Owner's Costs	1.8
Mining Pre-production	5.0
Plant Pre-production	3.6
Total	10.5M

A life of mine sustaining capital amount of US\$43M (average US\$5.1M per annum) has also been included in the discounted cash flow model.

Operating Costs

Operating costs are presented in Table 4 below and assume a mine delivery of 1,000tpd ore, an average of 725tpd waste material and a 325,000tpa processing plant with grid power producing individual copper and zinc concentrates. The operating cost is based upon an estimate date of Q2 2019 with an accuracy of -10% +15%, no contingency allowance has been assumed.

Table 4: Project Operating Cost Estimate

Cost Centre	US\$M / year	US\$/t ore	US\$/Ib Zn
Minima	17.5	52.00	0.17
Mining	17.5	53.28	0.16
Labour (excl. mine personal)	5.5	16.92	0.05
Operating consumables	4.0	12.34	0.04
Power	1.8	5.37	0.02
Maintenance material	1.0	3.18	0.01
General and Administration	2.8	8.58	0.03
Total	32.6	99.66	0.30

Production Profile

The BFS is based upon an underground mine access via a decline from surface providing 1,000tpd mill feed (325,000tpa) for the 9-year life of mine. The 325,000tpa production rate equates to approximately 73,000tpa zinc concentrate and 5,200tpa copper concentrate.

The production schedule was initially developed to only target the Indicated Resources, which were used for the Ore Reserve determination, with Inferred Resources added as additional tonnes where it correlated with the Indicated Resources. Over the modelled 9 years, the Project utilises 2.0 Mt of Indicated Resources (93%) and 0.2 Mt of Inferred Resources (7%).





Image 1: Annual Production Tonnes by Resource Category

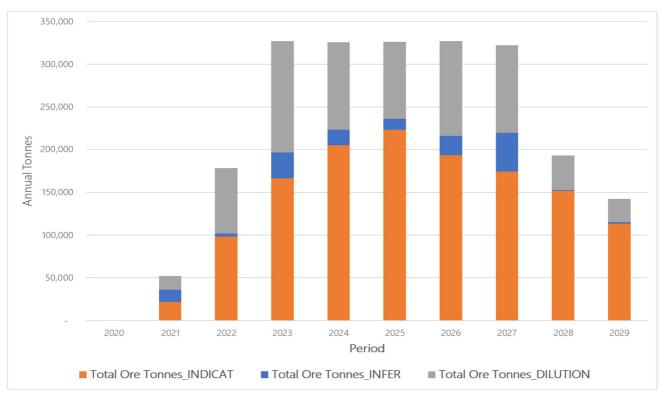
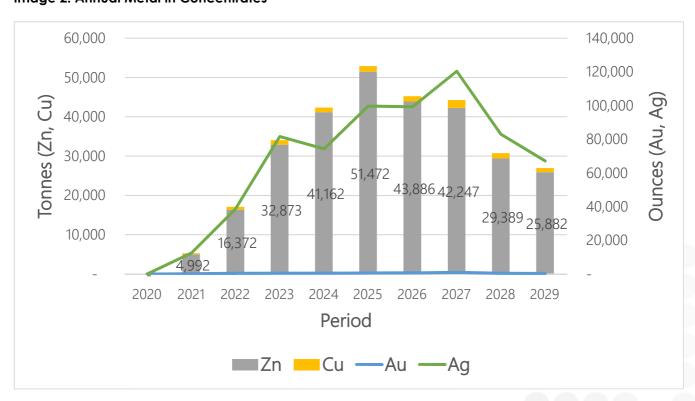


Image 2: Annual Metal in Concentrates







Mineral Resource

The Project Mineral Resource estimates were prepared by independent resource consultant MASSA Geoservices as part of the BFS and were reported in accordance with JORC (2012) guidelines. The Project Mineral Resource is summarised below (ASX announcement 7th March 2019).

Table 5: Mineral Resource Estimate

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	0.4	34	
Inferred	0.28	16.2	1.0	0.3	37	
Total	2.35	17.7	0.9	0.4	34	

Mineral Resources are inclusive of Ore Reserves. The Mineral Resource was estimated within constraining wireframe solids using a nominal 3% zinc cut-off grade. The resource is quoted from all classified blocks within these wireframe solids. Differences may occur due to rounding.

Ore Reserve

The Project Ore Reserve estimates were prepared by independent mining consultant Orelogy Consulting Pty Ltd and were reported in accordance with JORC (2012) guidelines (ASX announcement 28th August 2019). The Project Ore Reserves are summarised in Table 6 below.

Table 6: Ore Reserve Estimate

Superior Lake Ore Reserve						
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						

Ore Reserves were estimated only on the Indicated portion of the Mineral Resource Estimate. The average cut-off grade applied was 5.2% Zn. The Ore Reserve was achieved by creating a mining block model from the resource model and the detailed mine design and mine scheduling. The mining schedule includes mining loss, with a calculated average mine dilution of 31% incorporated in the model. The Ore Reserves have been classified as Probable based on guidelines specified in JORC Code (2012).

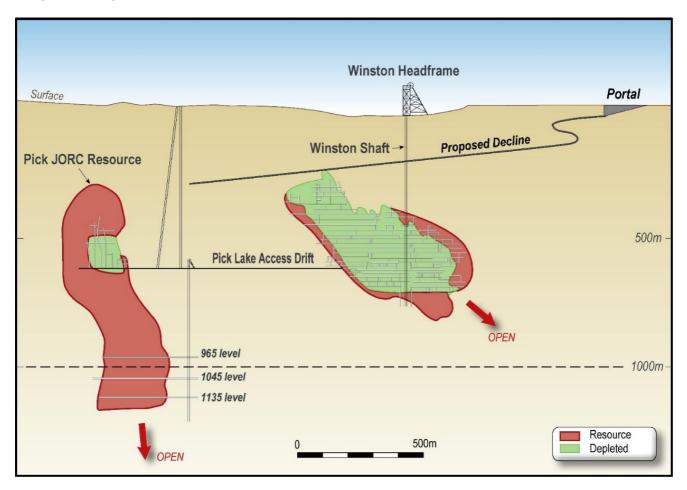
Mining

The Project considered two options for the mine development; the first being the re-establishment of the shaft system and the second option being a ramp developed from the surface to the upper resources of the Pick deposit. The work completed showed the ramp from the surface is the preferred option based on shorter time to first ore and reduced risk for the project.

The mining production schedule proposed is therefore is based on the decline ramp option developed from surface, adjacent to the historical Zenmac workings across to upper Pick and a hanging wall ramp developed to access the Pick resources (see Image 3).



Image 3: Mining Layout



The stoping methods used during historical operations included mechanised cut and fill, AVOCA and Alimak. Towards the end of the historic mine operations, a test stope was successfully completed at the Pick deposit using sub-level longhole stoping. The Company has selected longhole open stoping (LHOS) with introduced cemented paste fill as the preferred mining method.

Processing

The Company undertook confirmatory comminution and flotation testwork on sample of core collected from the diamond drill program completed in 2018 into the mid-Pick ore. The results were similar to those seen in the historical production data. Recovery and concentrate values are based on a combination of historical operating data from when Pick was an operating mine, the plant performance when treating the test stope from lower Pick and the current metallurgical testwork (see Table 7).





Table 7: Metallurgical Data

2019 Met Testwo		et Testwork	Pick Test Stope Ore		Pick Upper Production		Historical Production	
Metal	LCT Recovery	Concentrate Grades	Pick Recovery	Concentrate Grades	Average Recovery	Concentrate Grades	Average Recovery	Concentrate Grades
Zinc	96%	48%	97%	54%	91%	53%	93%	50-52%
Copper	71%	24%	61%	28%	74%	24%	78%	26-28%
Gold ¹	18%	0.04g/t ²	31%	9g/t	29%	13g/t	38%	11g/t
Silver ³	46%	276g/t	32%	750g/t	31%	311g/t	37%	310g/t

The processing flow sheet consists of the following stages:

- Single stage crushing of ROM
- Single-stage milling (SAG)
- Copper conditioning and flotation (with regrind of rougher concentrate)
- Zinc conditioning and flotation (with regrind of rougher concentrate)
- Concentrate filtration
- Product loading into seatainers

The process is similar to the plant that was previously installed on the site with the exception of the SAG mill replacing the rod and ball mill previously used. The SAG mill provides some benefits with regard to reduced amount of equipment and lower costs generally, without comprising performance.

The plant has been sized initially for 325,000tpa mill feed, but designed to allow for a doubling of throughput by duplicating the main equipment, which can be relatively easily undertaken.

Infrastructure

The Project has excellent existing infrastructure including:

- Access road
- 115kV transmission line to site
- Tailings Storage Facility (TSF)
- Freshwater dam
- Water treatment plant
- Mine shaft at Winston
- Approximately16km of underground workings, including two ventilation raises into Pick workings
- Cleared site where the plant and associated infrastructure can be located

¹ Reporting to copper concentrate

² Head grade only 0.08g/t Au

³ Reporting to copper concentrate





The region is a well-developed historical mining area with multiple operating mines located within the area. Thunder Bay is a significant town, less than 200km away, with excellent facilities including engineering workshops, various service providers, Lakehead University and medical facilities.

Permitting and approval process

During the Quarter, work continued with the Ministry of Energy Northern Development and Mines (MENDM) and other key departments, including The Ministry of Environment, Conservation and Parks (MOECP), and The Ministry of Natural Resources and Forestry (MNRF) on the permitting and approvals requirements.

The Company continues with a collaborative and consultative approach with Indigenous rights holders and interested stakeholder groups. The completion of the BFS has enable the commencement of a draft Closure Plan a critical document required for a number of the key permits and approvals for the redevelopment of the Project. 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 continue with discussions to increase post the BFS and the completion of elections in the First Nations communities during November.
- 3. 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.
 - a. an operating plan (Project description, site plan, site access details, targeted minerals, Project term, number of workers, operating schedule);
 - b. map of Project boundaries;
 - c. uses of adjacent land and water;
 - d. owners, occupants and users of Project land and immediately adjacent land; and
 - e. Project schedule.
- 4. Closure Plan Amendment (CPA) with Financial Assurance for mine development and operation. A draft CPA will be completed in Q4 2019 and 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).





Project Financing

The Company announced it has received multiple non-binding indicative proposals for financing the development of its Superior Lake Zinc Project. These proposals range between US\$50m and US\$70m.

The financing process has been managed by Orimco Resource Investment Advisers ("Orimco"), an independent advisory firm, specialised in funding solutions for emerging producers in the resources sector. The Company continues to work with Orimco in evaluating the merit of each proposal.

The Company has commenced an optimization study aimed at further enhance the already robust project economics. One of the major reasons for this study is to assess the potential to further enhance the projects debt carrying capacity.

In addition to debt financing, the Company has commenced a process to consider the equity component of financing. This process will consider a range of potential options aimed ultimately at maximising value for shareholder.

Concentrate Offtake negotiations

As previously announced, the Company continues to receive strong interest from global metal traders regarding the zinc and copper concentrates expected to be produced at the Project. This interest has resulted in multiple indicative proposals being received by the Company to date.

These proposals provide guidance on pricing, treatment and refining charges and production specification. Receiving such indicative proposals from leading international metal traders highlights the quality of the concentrate to be produced at the Project, with favourable grades and minimal deleterious elements. These proposals are the first step towards securing binding offtake agreements in the future.

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.

Offtake and smelter overview – North America

There are currently four operating zinc smelters in Norther America. These include:

- CEZinc smelter in Salaberry-de-Valleyfield, Canada owned by Glencore;
- Flin Flon smelter in Manitoba, Canada owned by HudBay Minerals;
- Trail smelter in British Columbia, Canada owned by Teck Resources; and
- Clarksville in Tennessee, USA owned by Nyrstar.







Image 4: Location of North American smelters and rail and port terminals

The majority of supply for these smelters is provided by North American zinc operations. Leading independent commodity expert, CRU, recently highlighted that North American zinc in concentrate production has been almost flat since the end of 2014, rising only 1.9% over the period to 1.76 Mt in 2018. Over the next five years, conditions are forecast to remain the same, with a number of major closures scheduled, including Teck's Pend Oreille, Hudbay's Flin Flon and Glencore's Kidd Creek. Image 2 below illustrates forecast zinc production in North America moving forward.

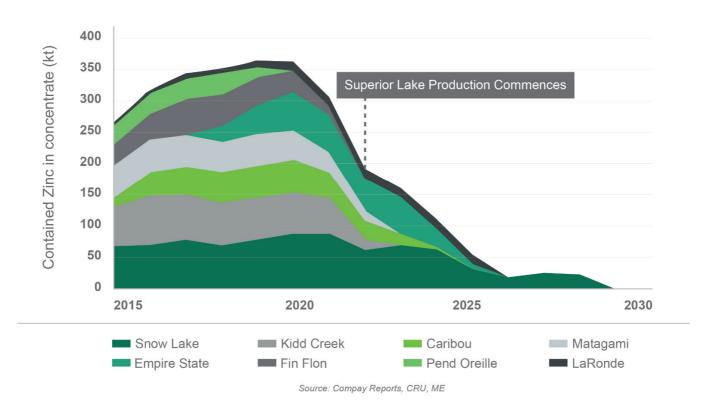
As highlighted in the graph below (Image 5), the commencement of production at Superior Lake is forecast to align with the decline in production from major North American zinc operations. This will mean that unless the mine life at existing operations is expanded or new development projects such as Superior Lake are brought into production, the smelters will need to look for new zinc supply from offshore operations or new projects located close by. As highlighted in Image 1, the concentrate produced at Superior Lake can access each smelter in North America using existing rail and road infrastructure. In addition, through this existing infrastructure network, the concentrate can easily access the Canadian port system, both on the East and West coast, and to European and Asian smelters.





Image 5: North American zinc supply deficit (Source: CRU – August 2019)

North American zinc supply - Significant Deficit



Exploration – Four major near mine conductors identified through drilling and Down-Hole Transient Electromagnetic (DHTEM) survey

Post quarter end, the Company completed a three drillhole and DHTEM geophysics program at the Project. This is the first significant exploration program at the Project in more than 20 years.

This program was highly successful as four previously unknown geophysical conductive bodies (Image 6) have been identified. Each of these bodies are within close proximity to the Pick Lake deposit (JORC resource - 2.35Mt at 17.7% Zn, see ASX announcement 7th March 2019) and the Winston Lake deposit (historical production – 3.1Mt at 15.6% Zn, see ASX announcement 28th August 2019).

Further confidence regarding the potential of each of these conductive bodies has been achieved with all drill holes intersecting sulphide bearing mineralsation, namely pyrrhotite (this interpretation is based solely on a visual inspection of logged core, which is yet to be assayed and analysed). The pronounced geophysical signature from the pyrrhotite is often found within and adjacent to VMS deposits. This association was pronounced at both the Pick Lake and Winston Lake deposits and a significant factor in their respective discoveries.

The Company is currently undertaking a full 50 element and whole-rock analysis of several core samples to test for additional key markers related to VMS systems. Once these assay results are received, the Company will assess all information from this program, as well as historical information,





to determine the optimal exploration program going forward to target potential additional economic deposits at the Project.

LEGEND Winston Deposit Winston South Target SUPERIOR LAKE Pick Lake Deposit Indicative Projection of Geophysics Target **SUP EM Plates** Off Hole DHTEM Target Pick North Target 750m SURFACE 350m 600m NW REFER INSERT ALTERNATIVE VIEW
Winston South Drill Hole Northern View Cross Section REFER INSERT ALTERNATIVE VIEW Pick Lake SW Cross Section Winston Lake Historical Production Pick Lake 3.1Mt @ 15.6% Zn 2.35Mt @ 17.7% Zn

Pick North SW Cross Section

Image 6: Location of the four major geophysical conductive bodies at Superior Lake

Winston Drilling Northern View Cross Section





Winston Footwall Target (ASX announcement 29th October 2019)

The Winston Footwall target conductor was identified through the Fixed Loop Transient Electromagnetic survey completed earlier in the year and was interpreted to be down-dip from the bottom edge of the Winston Lake orebody. A hole was drilled to a depth of 693 meters. From 639m to the bottom of the hole, drilling intersected a mixed interval of tuff, chemical and clastic sediments containing disseminations and narrow bands of heavily disseminated to semi-massive pyrrhotite along with very minor pyrite, indicative alteration features of the VMS system that hosts the Winston deposit.

The DHTEM survey of the hole subsequently confirmed that the intersected sulphides form part of an extensive conductor in the footwall of the Winston deposit. As highlighted in Image 7 below, this conductive body has a similar strike, dip and plunge to the Winston deposit.

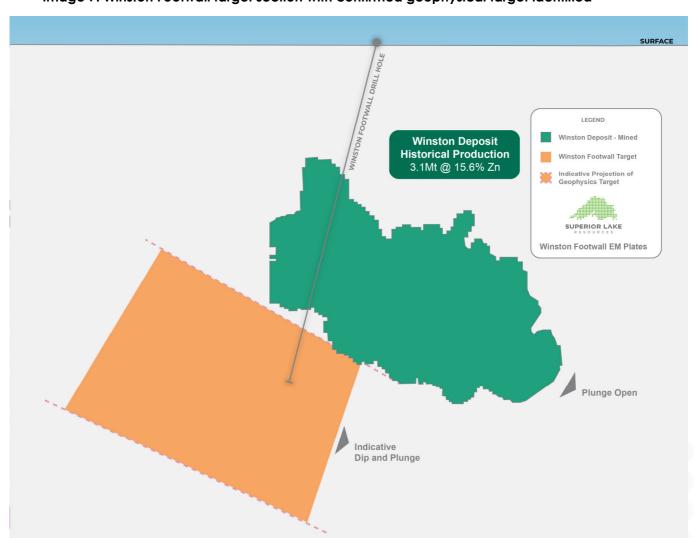


Image 7: Winston Footwall target section with confirmed geophysical target identified

If interpretation of the geochemical data from this sulphide zone confirms that it forms part of a VMS mineralised system, then extensions of the conductor up-dip into the footwall to the Winston Lake deposit would constitute high priority targets for future exploration.





Winston South Target (ASX announcement 22nd October 2019)

The Winston South hole was drilled to a depth of 549 metres. Between 318 metres and 358 metres, drilling intersected a mixed interval of tuff, chemical and clastic sediments containing disseminations and narrow bands of heavily disseminated to semi-massive pyrrhotite along with minor pyrite consistent with alteration features of VMS systems.

Following drilling, a DHTEM survey was completed that successfully identified an extensive conductive body coplanar with a known mineralised horizon which hosts the Winston Orebody as well as an additional proximal conductor which could indicate a further mineralised horizon.

The Winston South target is a conductor originally thought to be in the footwall sequence south of the Winston Lake orebody. However, the sulphide zone intersected in the hole is about 100 m up-hole from the expected position of the conductor predicted by modelling of the surface FLTEM data. The Winston South conductor geometry interpreted from DHTEM and FLTEM is on-trend with the Winston Lake orebody.

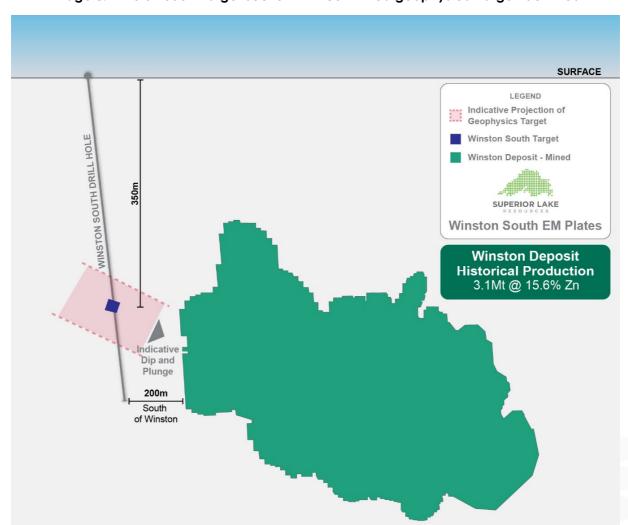


Image 8: Winston South target section with confirmed geophysical target identified

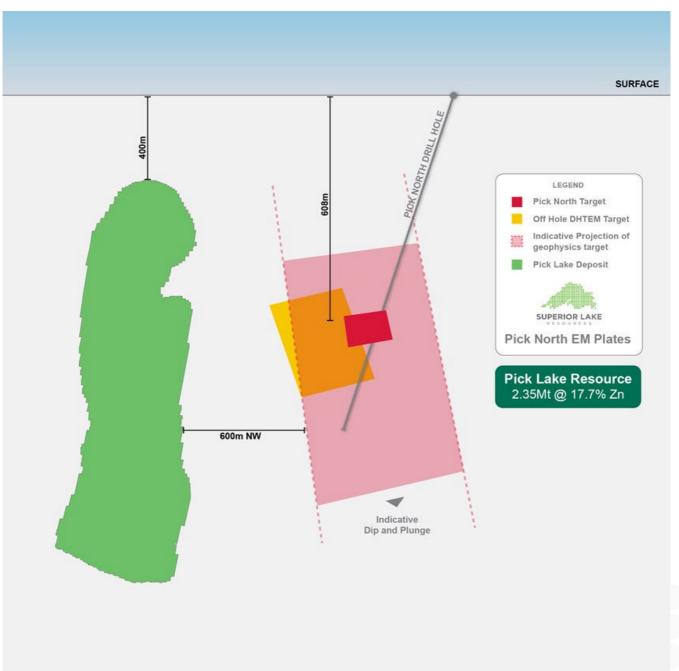




Pick North Target (ASX announcement 9th October 2019)

Pick Lake is an unusual deposit in the sense that alteration features are typically found stratigraphically below a VMS deposit, however at Pick Lake the stratigraphic features were found above.

Image 9: Pick North target section with confirmed geophysical target identified



Accordingly, it was encouraging to have noted these features as drilling progressed from above, down to the interval where the conductor was predicted, in the same relative position as at Pick. Upon reaching the predicted target depth, additional features commonly associated with the more proximal VMS environment, such as stringers of black chlorite and bands of disseminated to semi-





massive pyrrhotite, were also observed. That the down-hole geophysical probe detected two conductive bodies lying elsewhere along this interval represents a successful result. The location of these conductive bodies in relation to the Pick Lake deposit is highlighted in Image 6 above.

The Pick North target is a deep conductor, with a modelled depth to top around 550-600m below surface, dimensions of 250m strike length by 100m dip extent and conductance of 600S (i.e. upper end of conductance range for VMS targets).

It is located north of the Pick Lake orebody and associated with a surface lithogeochemical/alteration target defined in a study completed earlier this year. The depth and geometry of the conductor were poorly constrained, owing to the low signal level caused by the large depth to top, however, the drill hole intersected sulphide-rich rocks within the range of expected depths.

DHTEM surveying confirmed that the intersected sulphides formed part of an extensive conductor. Comparison of the DHTEM and FLTEM conductor models confirmed that the original target had been tested. The centre of the target conductor is located south of the hole, along with a second, stronger conductor that has not been intersected by the hole. Therefore, further exploration will focus on this central part of the target where the untested conductor is located.

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. 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.

Cash

As at 30 September 2019, the Company had \$1.9 million cash and no debt.





Information required under ASX Listing Rule 5.3.3

List of current mining and exploration tenements (as at 30 September 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

SUPERIOR LAKE



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Country	Tenement	Interest	Status
Ontario, Canada	4284630	70%	Granted
Ontario, Canada	4284631	70%	Granted
Ontario, Canada	4284632	70%	Granted
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 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
			Granted
Ontario, Canada Ontario, Canada	4284609 4284610	70% 70%	Granted
Ontario, Canada	4284617	70%	Granted
Ontario, Canada	4284645	70%	Granted
		70%	Granted
Ontario, Canada	4284646		
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





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Country	Tenement	Interest	Status
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
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





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 (see ASX announcement 7 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 28 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	e Ore Reserve d	it 5.2% Zn cut-ot	ff grade					
Classification	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 <u>www.superiorlake.com.au</u>, or contact:

David Woodall Chief Executive Officer +61 8 6117 0479

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 Mineral Resource 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.

In relation to previous announcements containing exploration results referred to in this announcement, Superior Lake confirms that it is not aware of any new information or data that materially affects the information included in those announcements.

+Rule 5.5

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Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

Superior Lake Resources Limited ABN Quarter ended ("current quarter") 64 139 522 553 30 September 2019

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(204)	(858)
	(b) development	(1,137)	(3,497)
	(c) production	-	-
	(d) staff costs	(152)	(394)
	(e) administration and corporate costs	(194)	(628)
	(f) project acquisition costs	-	-
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	5	28
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (Business development and financing)	(202)	(202)
1.9	Net cash from / (used in) operating activities	(1,884)	(5,551)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(3)	(3)
	(b) tenements (see item 10)	(335)	(335)
	(c) investments	-	-

⁺ See chapter 19 for defined terms

1 September 2016

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
	(d) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(338)	(338)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	2,646	3,696
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(125)	(128)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	2,521	3,569

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,640	4,229
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,884)	(5,521)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(338)	(338)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,521	3,569
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,939	1,939

⁺ See chapter 19 for defined terms 1 September 2016

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5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	21	1,639
5.2	Call deposits	1,918	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,939	1,639

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	60
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Directors' fees for the quarter.

⁺ See chapter 19 for defined terms

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	106
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Mr Grant Davey, who is a non-executive Director of the Company is a Director and shareholder of Matador Capital Pty Ltd (Matador Capital). The Company makes payments to Matador Capital under a Shared Services Agreement in which Matador Capital provides office space, general office costs and technical exploration staff to the Company. Mr Davey was also a Director of Graphex Mining Limited up until his resignation on 25 September 2019, an ASX listed Company that is a party to a Shared Services Agreement with the Company for the provision of company secretarial, accounting and administration services. The breakdown of services under both Shared Services Agreements is as follows:

	Graphex Mining Limited	Matador Capital
	\$ '000	\$ '000
Office		
Office and parking	-	29
General office costs	5	4
Exploration and geology	-	10
Other	-	4
Staff	-	-
Company secretary	19	-
Accounting and bookkeeping	26	3
Administration	6	-
	56	50

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities		
8.2	Credit standby arrangements		
8.3	Other (please specify)		

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

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9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	178
9.2	Development	228
9.3	Production	-
9.4	Staff costs	130
9.5	Administration and corporate costs	227
9.6	Other (Payment for the acquisition of the Pick Lake Project under the original acquisition agreement)	-
9.7	Total estimated cash outflows	763

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2	Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Lodged electronically Date: 31 October 2019

(Director/Company secretary)

Print name: STUART MCKENZIE

+ See chapter 19 for defined terms

Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.