ASX Announcement ASX: SUP 31 July 2020 superiorlake.com.au



# Quarterly Activities Report Three months ended 30 June 2020

# **Highlights**

- Optimisation Study focused on accelerated mining and staged implementation of capital expenditure identified multiple areas of improvement from the Bankable Feasibility Study.
- A comprehensive review of the exploration potential outside of the immediate Pick Lake and Winston deposits identified several new targets.
- Entry into to two exclusivity agreements under which it is conducting due diligence on three USA based uranium projects located in Wyoming, Utah and Oregon due diligence work on those projects is continuing.

**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 2020. The Company continued to undertake work to advance the Pick Lake Project ("**Project**"), while also considering all options in relation to funding its interest in the Project and reviewing other project opportunities, with a focus on the uranium industry.

## **Business development**

During the Quarter, the Company entered into two agreements under which it has exclusivity for a period of three months to conduct due diligence and, subject to the outcome of that due diligence and if considered to be commercially prudent, negotiate the acquisition of one or both projects.

#### **Aurora Uranium Proiect**

The Aurora Project is located in southern Oregon, approximately 5km from the Nevada border and about 15km west of the border town of McDermitt. The Aurora Project is supported by excellent surrounding infrastructure including Highway 95, power transmission lines and substation and an airport, all within 15km of the project as highlighted in Image 1 below.

The Aurora Project was first discovered during the 1970s and since then, an estimated \$20m spent on exploration and development with a current uranium resource of approximately 38Mlbs  $U_3O_8$  as shown in Table 1 below (ASX announcement 28 July 2020). The total existing resource is located within 100m of surface, with the higher-grade material generally being approximately 50m from surface.



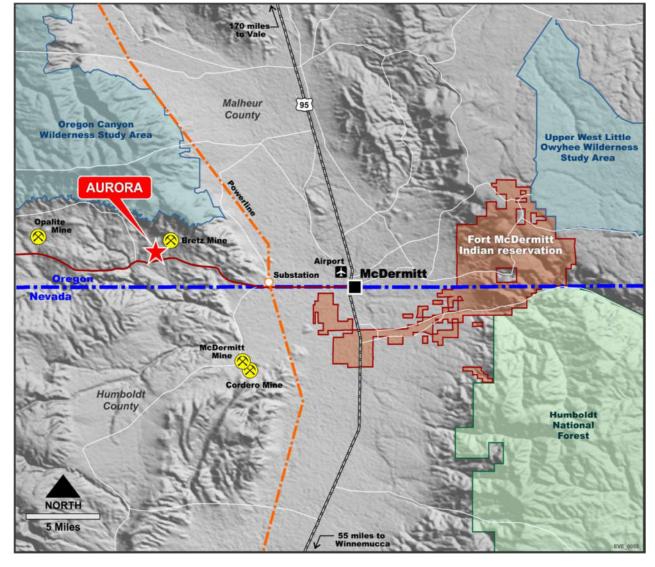


Image 1: Location of Aurora Project

Table 1: Uranium Resource – Main zone estimated using a 300ppm  $eU_3O_8$  cut-off. Halo Zone estimated using a 100ppm  $eU_3O_8$  cut-off (reported on 12 January 2011 in accordance with the JORC Code 2004).

Classification	Tonnes (Mt)	eU₃O₃ppm	Mlb eU3O8
Main Zone – Indicated	18.4	444	18.0
Main Zone – Inferred	-	-	-
Main Zone – total	18.4	444	18.0
Halo Zone – Indicated	47.3	179	18.7
Halo Zone – Inferred	3.6	151	1.2
Halo Zone – total	50.9	177	19.9
Indicated – total	65.7	253	36.7
Inferred – total	3.6	151	1.2
Total	69.3	248	37.9

The information in this Presentation that relates to the historical Mineral Resource Estimate for Aurora Project (Aurora MRE) was announced on 9 June 2020. The Aurora MRE was not reported in accordance with the 2012 JORC Code; a competent person has not done sufficient work to classify the Aurora MRE as mineral resources in accordance with the 2012 JORC Code; and it is uncertain that following evaluation and/or





further exploration work that the Aurora MRE will be able to be reported as mineral resources in accordance with the 2012 JORC Code.

The Company confirms that it is not in possession of any new information or data relating to the Aurora MRE that materially impacts on the reliability of the Aurora MRE or Graphex's ability to verify the Aurora MRE as mineral resources in accordance with Appendix 5A of the 2012 JORC Code and the supporting information provided in the announcement of 17 June 2020 continues to apply and has not materially changed.

#### Sweetwater Project and Uravan Project

During the Quarter, the Company secured an exclusive right to conduct due diligence on Premier Uranium LLC's USA uranium assets. Premier is held by leading global uranium fund Sachem Cove Partners LLC, a uranium/nuclear energy dedicated fund led by respected uranium expert Mike Alkin. Premier owns the rights to two highly prospective uranium projects which are strategically located close to existing and historical uranium operations within the major uranium producing states of Wyoming and Utah in the USA.

#### Sweetwater Uranium Project, Wyomina

Sweetwater Uranium Project is located in Wyoming, within the Great Divide Basin. The project area is 40 to 50 miles northwest of Rawlins, Wyoming and 15 miles from the Sweetwater Uranium Mill (Image 2). The Sweetwater Mill is controlled by Rio Tinto and was a conventional open pit mine. The mill has a US NRC Source Materials License but has not operated since the early 1980s.

Uranium mineral resources in, and within the vicinity of Premier's projects, are found in the Eocene Battle Springs Formation and the Eocene Wasatch Formation. The Battle Springs Formation is, in order of predominance, composed of medium to coarse grained arkosic sandstone grading to fine sandstones and claystones with local carbonaceous shales. The Battle Springs Formation is interpreted to have formed through the coalescing of alluvial fans and piedmont facies that transition basinward to form the Wasatch Formation.

Battle Springs has a thickness of more than 4,500 feet. Uranium mineralisation within the project is typical of the Wyoming roll-front sandstones. Dribus and Hanna (1982) referring to the Battle Springs and Wasatch Formations in the Great Divide Basin, state that "environments within massive cross-bedded, well to poorly sorted arkoses and other sandstones are favourable for Wyoming roll-type uranium deposits".

Premier Uranium's claims cover the underexplored Western part of the Great Divide Uranium district and contains favourable and prospective stratigraphy that elsewhere is the basin host deposit such as Lost Creek.

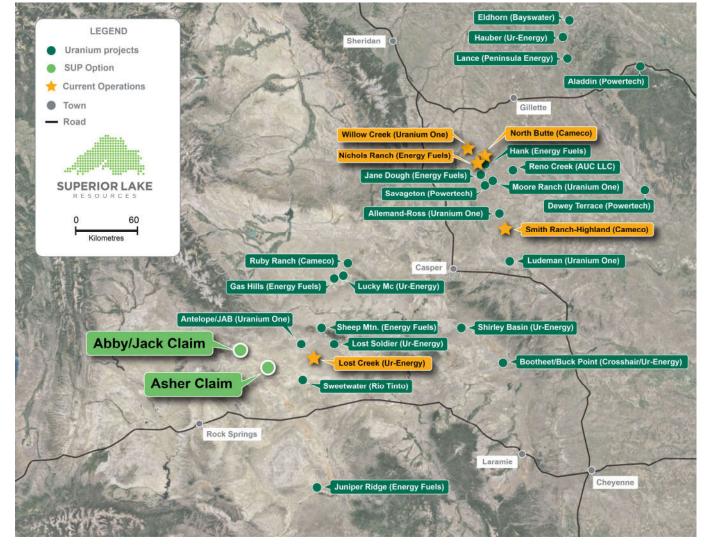


Image 2: Premier's Wyoming project locations

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#### <u>Uravan Uranium Project, Utah</u>

The Uravan Mineral Belt and adjacent uranium-vanadium mining districts of the Colorado Plateau have experienced significant cycles of exploration and mining over the past 100 years. Available records and reports indicate that more than 85Mlbs of uranium and 660Mlbs of vanadium have historically been produced from Salt Wash ores from the Colorado Plateau (Thamm, et al., 1981).

Energy Fuels' White Mesa mill, the only fully licensed and fully operating conventional uranium/vanadium mill in the United States, is located within trucking distance (50km) of a number of the claims. It has historically been the largest producer of uranium in the USA and a major producer of high purity vanadium.

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Energy Fuels has historically accepted toll milling agreements, as well as purchase programs, for processing ores from third party mines. This may represent a low-cost opportunity for developers in the region to utilise existing infrastructure, eliminating the significant capital requirement of developing a mill. The White Mesa mill operates as a conventional acid leach process with solvent extraction recovery of uranium (yellow cake) and vanadium (vanadium pentoxide/black flake). The mill is licenced to produce up to 8Mlbs of uranium per annum.

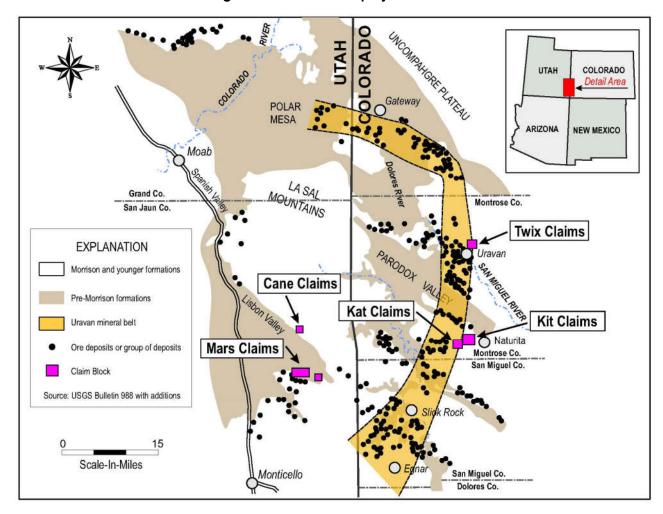


Image 3 – Premier's Utah project locations

#### **Geology and Mineralisation**

Uranium deposits of the Colorado Plateau are flat-lying and tabular and are primarily hosted by fluvio-lacustrine sandstones of the Triassic Chinle and the Jurassic Morrison Formations, with the latter having been more significant. The deposits are notable for their generally high uranium grades and strong association with vanadium minerals. Across the Colorado Plateau, which stretches from Utah in the west to Colorado in the east, the  $V_2O_5$ : $U_3O_8$  ratio averages about 4:1 and can range up to 15:1 in parts of the Uravan Mineral Belt.

Most of the Uravan Mineral Belt areas consist of oxidized sediments of the Morrison Formation, comprising red, hematite-rich rocks. Individual deposits are localized in areas of reduced sandstone and mudstone.

The uranium- and vanadium-bearing minerals can occur either as fine-grained coatings on the detrital grains, filling pore spaces between the sand grains or as replacement of carbonaceous material. The primary uranium mineral is uraninite (pitchblende) (UO<sub>2</sub>) with minor amounts of coffinite (USiO<sub>4</sub>OH). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica.





# Optimisation Study

Following completion of the BFS (ASX Announcement 28 August 2019), which delivered robust financial returns (pre-tax NPV<sub>8</sub> of A\$224M), driven by exceptionally low operating costs (C1 US\$0.35/lb) and low upfront capital expenditure (US\$87M), the Company commenced work on options to further improve Project economics. The objective of the Optimisation Study was to improve the economic returns and increase the Project's debt carrying capacity.

The key areas of focus were on:

- 1) Examining the potential to mine higher grade ore and / or more tonnes earlier in the Project's life.
- 2) Assessing the benefits of using a mining contractor that could achieve higher mining rates.
- 3) Identifying capital costs that could potentially be deferred until later in the Project's life.
- 4) Staging the Project by looking at options whereby a mining contractor or similar would undertake mine development work for equity or enter into a project financing agreement to cover these costs.

#### Mining Schedules

With the support of the BFS mining consultant, the Company investigated options for mining higher grade ore or increased tonnes in years one and two, aimed at improving the Project's debt carrying capacity. Due to the geometry of the ore body, with the higher grade and wider ore zones at the bottom of the Pick deposit, the work focused primarily on increasing the mined tonnes, rather than grades.

After analysing several options, two mining schedules were produced, the basis of which are outlined below, with the BFS basis included for comparison.

#### BFS schedule basis

- BFS used a single jumbo until month 16 when multiple headings were completed, after which two
  jumbos were employed.
- Decline rate from portal to top of Pick Upper and between Pick Upper and Pick Middle maintained at 210m/month.
- Production ramped up as stopes were developed and ready for extraction.

#### Option 1 Schedule Basis

- Decline Rate from Portal to top of Pick Upper changed to 260m/month to enable earlier access to the first ore.
- Decline Rate from Pick Upper to Pick Middle A changed to 300m/month to optimize the production shortfall between Pick Upper and Pick Middle A.
- An additional jumbo is added from start of the schedule to month 22 to optimize the production shortfall between Pick Upper and Pick Middle A and then to maintain sufficient stope production levels.
- An additional 295m of bypass waste development has been added in Pick Lower B to enable bottom-up stoping ore to be brought forward and optimise final years in the schedule.
- Maximum total monthly tonne-kilometres (TKM) is no more than 420,000 to maintain the maximum truck number to 4.
- In months 16 to 22, production is capped at 20 kt / month and in months 28 to 46, production is capped at 30 kt / month.





#### **Option 2 Schedule Basis**

- Decline Rate from Portal to top of Pick Upper changes to 260m/month to enable earlier access to the first ore.
- Decline Rate from Pick Upper to Pick Middle A changes to 300m/month to optimize the production shortfall between Pick Upper and Pick Middle A.
- An additional jumbo is added from start of the schedule to month 22 to optimise the production shortfall between Pick Upper and Pick Middle A and then to maintain sufficient stope production levels.
- An additional 295m of bypass waste development has been added in Pick Lower B to enable bottom-up stoping ore to be brought forward and optimise final years in the schedule.
- Maximum total monthly TKM is no more than 420,000 to keep the maximum truck number to 4.
- Months 16 to 22, uncapped production, and months 28 to 46, production capped at 30 kt / month.

Table 1 shows that respective mining volumes on an annual basis and shows the variances with the BFS on a year-by-year basis. In summary, the accelerated mining rates were successful in bringing tonnes forward in the mining schedule.

Under Option 1, with production capped in Year 1, approximately 18,000 tonnes of additional metal was mined in the first two years with a smoother production profile and a smaller dip in month 25.

Under Option 2, unconstrained in Year 1, approximately 21,000 tonnes of additional metal was mined in the first two years, but with a peak and trough in the period similar to the BFS schedule. This could be further managed on the RoM pad to develop a smoother production schedule.

In both cases the life-of-mine was reduced by one year (but with the same life-of mine metal production) and a flatter mining profile.

**Table 2: Mining Schedule Scenarios** 

	Total	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9
	BFS Schedule									
Ore tonnes (t)	2,202,631	51,584	178,335	312,511	329,400	328,500	328,500	327,910	192,928	152,693
In Grade (%)	13.7	10.0	9.6	10.4	13.1	16.4	14.1	13.7	15.9	18.7
Zn Metal (t)	290,076	4,997	16,389	31,265	41,451	51,693	44,450	43,002	29,420	27,410
	Optimisation Study – Option 1									
Ore tonnes (t)	2,202,632	144,544	282,068	328,500	325,837	326,450	325,380	325,500	141,352	
In Grade (%)	13.7	9.6	9.7	12.8	15.2	16.3	15.3	14.5	13.1	
Zn Metal (t)	290,344	13,332	26,399	40,342	47,722	51,123	47,785	45,865	17,776	
Variance (t)	268	8,335	10,010	9,078	6,271	-570	3,335	2,863	-11,644	
		Optim	isation S	tudy – O	ption 2					
Ore tonnes (t)	2,202,632	165,699	284,957	328,500	324,813	326,629	324,166	328,500	119,369	
Zn Grade (%)	13.7	9.2	10.2	12.6	15.5	15.8	15.5	14.6	13.6	
Zn Metal (t)	290,453	14,686	28,009	39,897	48,441	49,626	48,160	46,095	15,538	
Variance (t)	377	9,689	11,620	8,632	6,989	-2,066	3,710	3,094	-13,882	

#### Contract Mining

The optimised schedules were provided to a selection of Australian mining contractors to produce a revised mining cost estimate for the Project. The contractor estimate considered the accelerated mining rate, the additional jumbo early in the schedule, additional bypass as well as the required manning to support the contractor scenario.

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The results indicate an increase in mining costs for the contractor of approximately 25%. Operating costs increased from C\$74/tonne ore to C\$86/tonne with the most significant cost increases seen in sustaining capital. The key driver in most of the cost increases related to labour, specifically labour rates with the contractor using a higher skilled / experienced labour force which entails higher remuneration.

It is important to note that in the BFS, an owner operator model was used with an acknowledgement that new systems, training and procedures will need to be implemented at the start of the Project which would limit mining rates. A conservative mining rate of 210m/month was therefore assumed. A mining contractor with a well-established capability in place is expected to enable a higher mining rate to be achieved in the initial stages.

#### Project Staging

A detailed assessment was undertaken to determine if delinking the mine development from the remainder of the Project execution could improve economics. This scenario involved stockpiling ore for a period at the beginning of the schedule, with plant construction then delayed so that when the plant commences operations the concentrate production ramp-up is not constrained by the mine development and ramp-up.

The analysis indicated that the plant construction can be delayed by up to nine months, with the plant throughput ramping up to the design value of 300,000 tonnes per year at the end of the first year of production rather than at the end of the second year as per the BFS schedule. This scenario however requires an alternate funding approach for mine development.

#### **Project Capital Costs**

The Company undertook a review of the plant capital costs, specifically contracting methodologies and associated indirect costs. Savings of approximately US\$4M were identified, resulting in a revised upfront capital cost of US\$82.9M, excluding Owner's costs and pre-production expenditure.

Table 3: Updated Project Capital Cost Estimate

Cost Centre	BFS Capex US\$M	Updated Capex (US\$M)
Site General	0.8	0.8
Process Plant	43.5	45.9
Infrastructure	7.5	7.5
Mine Development	13.2	13.2
sub-total Direct Capital Costs	65.1	67.4
EPCM / Management	5.4	5.4
Construction Indirects	7.7	1.9
sub-total Indirect Capital Costs	13.1	7.3
Contingency	8.6	8.2
Total	\$86.7M	\$82.9M

For further information on the Optimisation Study, see ASX announcement dated 23 April 2020.

### **Regional Exploration**

During 2019, the Company's exploration focus centred on the discovery of new deposits or extensions to the Pick and Winston Lake deposits. This area was targeted as any new discovery could be more easily and quickly accessed through the planned mine development. This work took place within a relatively small area of approximately 9km² (ASX announcement 25 July 2019).

During the Quarter, the Company expanded its exploration efforts across the Company's total holding in the Superior Lake region (217km²) as highlighted in Image 4 below. This resulted in the Company "stepping





out" from the previous near mine targets to assess numerous prospects along strike from the existing resources as well as assess regional targets. This work has resulted in the following targets being identified:

- Near mine targets Multiple targets identified along trend from the Pick, Winston and Zenith deposits.
- Joe Creek Untested brownfield targets associated with structural and aeromagnetic anomalies in regionally attractive mafic volcanic rocks.
- Victoria Lake Untested aeromagnetic anomalies in mafic volcanic rocks along trend of historical assays of 0.12% Zn over 20m and surface grab samples of 1100ppm Zn.
- Ellis Lake potential for gold mineralisation along trend of the Schrieber Pyramid Gold mine.

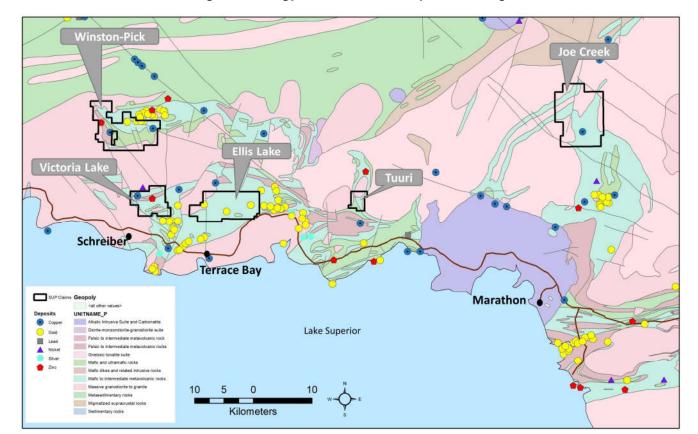


Image 4: Geology and location of exploration targets

#### Near Mine Targets

In addition to the previously identified targets adjacent to the Pick and Winston deposits (ASX announcement 29 October 2019), the Company has expanded and re-examined historical information surrounding the known mineralisation to generate additional targets. Information on each target is set out below.

#### **VTEM Anomalies**

In 2011, a Versatile Time Domain Electromagnetic (VTEM) survey was completed over the Project with the results shown in Image 5 below. The VTEM survey clearly identified the known deposits at Winston, Pick Lake and Zenith, as well as numerous other potential targets that have received little to no historical exploration work.



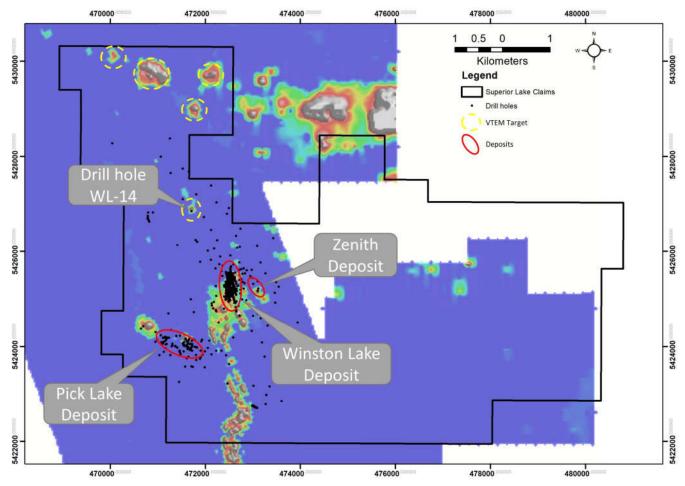


Image 5 – VTEM survey over Superior Lake Project

In the northern area of the VTEM survey, approximately 2km from the Winston Lake mine, four strong conductors have been identified in the Carib Lake Formation. While these targets have a number of similarities when compared to the known deposits, no drilling or other follow up work has been undertaken following this VTEM survey. Further work is required at these targets, including field reconnaissance work, soil sampling, additional compilation of historical near-mine drill data and incorporation in the current GIS data set to allow for detailed targeting.

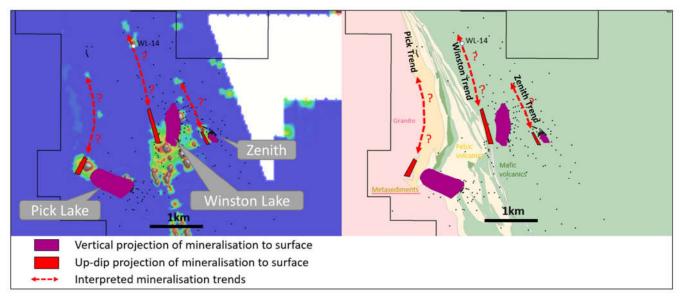
A second coincident VTEM anomaly (WL-14) has also been identified approximately 1km north of the Winston mine. This target was historically drilled, with logging indicating laminated zinc sulphides (approximately 5% sulphides) with up to 10% sphalerite from 20m (ASX announcement 28 April 2020). The logged sulphides were however never sampled, and no further drilling was undertaken to test this zone.

The mineralisation is approximately 500m along trend of the Winston/Zenith deposits and is interpreted to be related to the systems that host these deposits. The interpreted VTEM conductor trends, as highlighted by the red dashed lines in Image 6 below, illustrate a strong correlation to mapped geology and anomalism seen in several historical drill holes (e.g. WL-14, Image 5) and represent target corridors for future exploration work that is expected to include mapping, sampling and drilling.





Image 6: (LHS) VTEM geophysical anomalies and interpreted trends of mineralisation along strike from deposits; (RHS) Interpreted trends overlain on regional geology



Further work is required at these targets, including field reconnaissance work, soil sampling, mapping, additional compilation of historical near-mine drill data and incorporation in the current GIS data set to allow for detailed targeting.

#### **Pick Target**

Diamond drilling north of the Pick Deposit, encountered sulphide mineralisation grading 3.4% In and 0.25% Cu over 0.35m from 608m in hole PL19-01 (ASX Announcement 26 November 2019). This mineralisation was within a broader 29m wide zone hosting narrow bands of massive and semi-massive pyrrhotite and pyrite.

Follow-up Down-Hole Transient Electromagnetic (DHTEM) indicated a conductive plate associated with the new sulphide intercepts, and drill hole assays and geochemical analysis confirmed the existence of typical VMS systems markers being iron, zinc, and copper bearing sulphide minerals.

Importantly, further work completed by the Company indicates the mineralisation encountered in hole PL19-01 is interpreted to occur on the same prospective horizon that hosts the Pick Lake deposit. The tenor and thickness of the sulphide mineralisation in hole PL19-01 is significantly higher than any of the historical drill holes in the area along strike from the Pick Lake deposit.

In addition, a review of the historical drilling database indicates that unlike the Winston deposit which has received significant historical drilling, only three drill holes have intersected this prospective horizon. A target region of approximately 1800m x 1500m has been established as shown in Image 7 below and is a priority for future exploration programs.





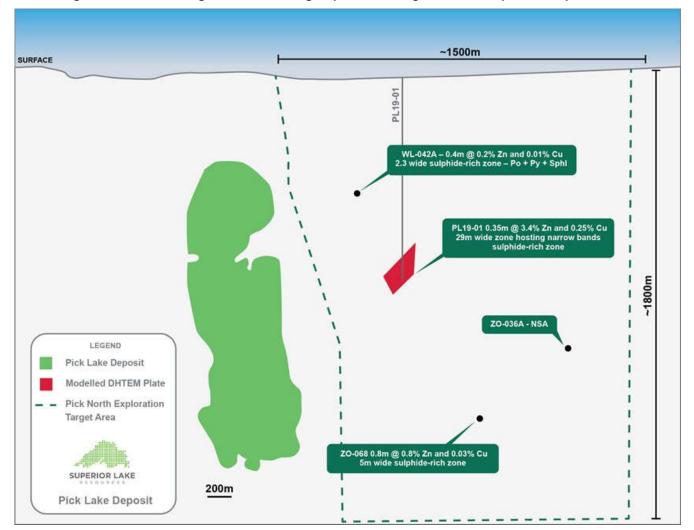


Image 7: Pick Lake long section showing exploration target area – only tested by 4 drill holes

#### **Zenith Deposit**

The historic Zenith operation is located approximately 500m east of the Winston Lake deposit and was the first major zinc deposit discovered in the Superior Lake region. This deposit is located adjacent to the proposed decline for the Pick Lake operation and was always intended to be further examined by the Company when mining commenced, given the probability of a shallow remnant resource remaining at the deposit.

Zenith was originally discovered in 1882 with a small mining operation taking place during 1899 where 1,065 tonnes at a reported ~45% Zn was mined. Further development was undertaken until 1902 when an additional 2,700 tonnes of ore was mined. No further work took place at Zenith until 1952 when a 14,000m of diamond drill program was completed and a historical resource was estimated (270kt at 16.5%Zn, non-JORC). Subsequently, an underground mine was developed and a reported 180,000 tonnes of 16.5 % zinc was mined between 1966 and 1970. (ASX announcement December 2017).

Zenith has been an operating mine at various stages since the 1880s, most recently by Falconbridge Copper who discovered the Winston Lake deposit.

Interpretation of the Zenith deposit indicated it to be a rafted or dislodged portion of the Winston Lake Deposit where the massive sulphide and associated host rock xenoliths were dislodged and transported by a multi-phase intrusive gabbro.





#### Regional Exploration Targets

#### Joe Creek Prospect

The Joe Creek Prospect is located within the Schreiber-Hemlo Greenstone Belt, 75km east of Pick/Winston (Image 4) and comprises mafic volcanic flows, tuffs and metasediments interbedded with minor felsic volcanics, and intruded by later granodiorite.

An airborne EM survey and magnetic surveys were completed by Noranda Inc. (**Noranda**) in 1983, the location of which is shown in Image 8 below. The Company's interpretation of the survey data indicates two strong magnetic highs along structures in the mafic volcaniclastic sediments which are a known host horizon. In addition, the confluence of N-S and NE-SW trending volcanic sequences, is a favourable structural target for both base metal and gold mineralisation.

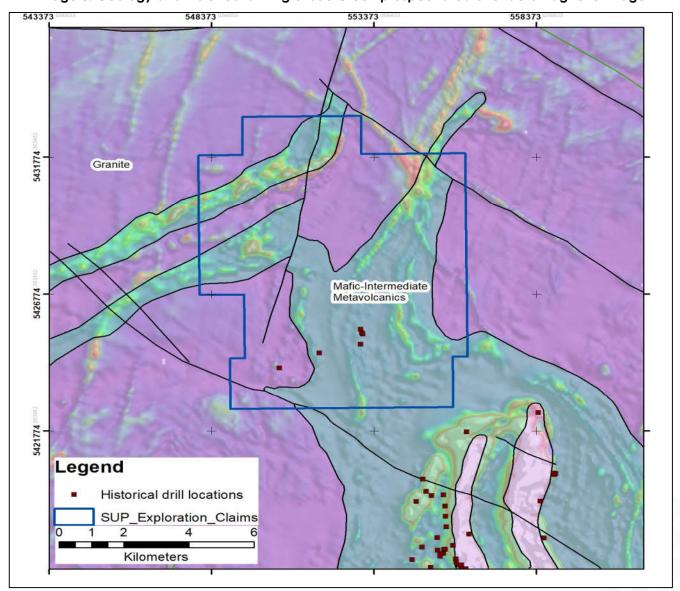


Image 8: Geology and historical drilling of Joe Creek prospect area over aeromagnetic image

Follow up work in the Joe Creek Prospect is planned to focus on reconnaissance mapping and soil and rock chip sampling across the target areas which have a combined strike length of over 15km. Historical drill core will also be located to review the geology logging and obtain samples for assaying.





#### Victoria Lake Prospect

The Victoria Lake Prospect is located 20km south of the Pick Lake deposit (Image 4) and comprises a thick sequence of metavolcanic and metasedimentary units which have been folded about an E-W trending syncline axis. An airborne aeromagnetic survey (Image 9) was completed by Noranda in 1983 which identified several anomalies which were subsequently tested with limited drilling.

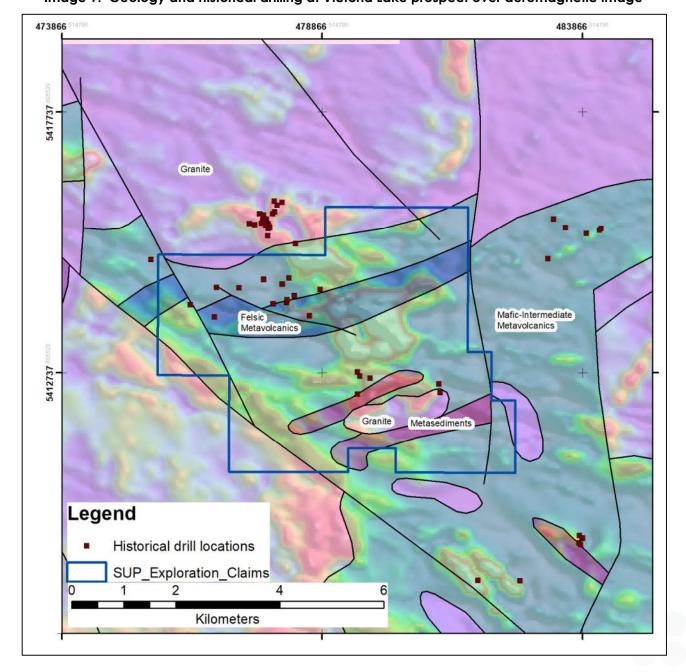


Image 9: Geology and historical drilling at Victoria Lake prospect over aeromagnetic image

Drill results included a sulphide-bearing basalt sequences with assay results returning 0.12% Zn over 20m and 40m of >400ppm Zn. Whilst further drilling encountered 6m at >400ppm Zn, the drill hole did not reach the target depth and the majority of the conductors were not followed up with drilling (ASX announcement 28 April 2020).

Planned work to be completed at this prospect includes ongoing compilation of historical data, reconnaissance mapping, soils, rock chips and review of historical core.





#### Ellis Lake Prospect

The Ellis Lake Prospect is located 25km southeast of Pick/Winston (Image 4) and comprises of a thick sequence of metavolcanics and metasedimentary units folded about an E-W trending syncline as found in the Victoria Lake Prospect.

Although only limited historical work has been completed, the tenement is prospective for both gold and base metal mineralisation. Mapping and aeromagnetic surveys indicate similarities with the Winston Lake sequences as highlighted in Image 10 below.

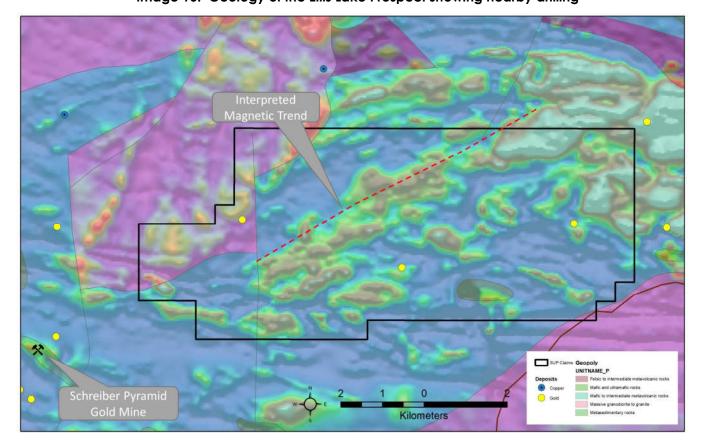


Image 10: Geology of the Ellis Lake Prospect showing nearby drilling

The volcanic sequence remains largely untested by drilling but remains a highly prospective greenfields target given the proximity to the Schrieber Pyramid Gold Mine (~6km SE) where a review of government data repositories found that mining of lode-style, base-metal rich, veining of up to 30g/t Au has been reported. Follow up work is planned to include ongoing compilation of historical data, reconnaissance mapping, soils and rock chips.

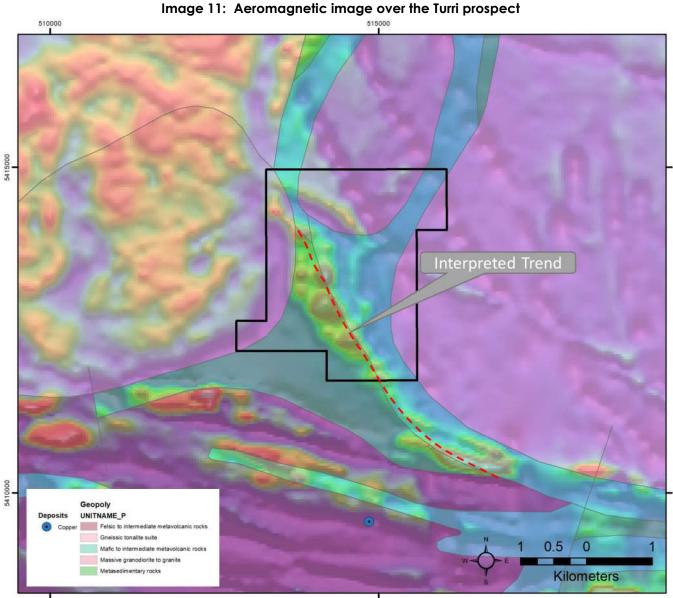




#### **Tuuri Prospect**

The Turri Prospect is located 40km southeast of the Pick/Winston Project (Image 4) and comprises maficintermediate metavolcanics and metasediments and granite intrusions and cross-cut by mafic dykes.

Image 11 below highlights regional aeromagnetic data showing a strong magnetic high corresponding to the trend of mapped geology within the tenement. This has the potential for structurally hosted gold mineralisation.



Exploration work completed at the Turri Prospect has been limited. Follow up work is expected to include

ongoing compilation of historical data, reconnaissance mapping, and soils and rock chips sampling.





### Corporate

#### Cash

As at 30 June 2020, the Company had cash of \$220,000. On 30 July 2020, the Company announced that it had received binding commitments for a placement of 18.125 million shares at \$0.12 per share to raise \$2.2 million before costs (**Placement**). Following completion of the Placement, the Company expects to have cash of \$2.3 million (unaudited).

#### Share placement

During the Quarter, the Company completed a placement of 12,000,000 shares at \$0.05 per share to raise \$0.6 million. Proceeds were used to meet payments for exclusivity in relation to conducting due diligence on uranium projects and for general corporate purposes.

#### Board changes

On 1 July, the Company appointed Mr Alf Gillman and Mr Chris Knee as directors, replacing Mr Keong Chan and Mr Peter Williams.

Mr Gillman, who is a highly experienced geologist with over 40 years' experience in senior management and Board roles across uranium, gold and base metals, has been appointed as a Non-Executive Director. His extensive uranium experience includes exploration and resource development roles in Southern Africa (Esso Eastern), Northern Australia (Anaconda Inc), the United States (Peninsula Energy Inc.) and the Czech Republic. Mr Gillman has worked on US roll front deposits for five years and was a key executive Board member of the team that explored and developed the Lance Uranium Project in Wyoming.

Mr Knee, who is currently the Company's Chief Financial Officer and has over 15 years year of broad finance experience, including executive roles in a number of resource companies, has been appointed as an Executive Director. Mr Knee is the current Chief Financial Officer of Matador Mining Limited and Graphex Mining Limited and the previous Chief Financial Officer of Manas Resources Limited, IMX Resources Limited and Indiana Resources Limited. Mr Knee brings a wealth of taxation, accounting and compliance experience to the Board.

Authorised for release by the Board of Directors.





# About the Company

#### Superior Lake Resources Limited

Superior Lake Resources Limited main asset is 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	e Ore Reserve o	it 5.2% Zn cut-o	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 <a href="www.superiorlake.com.au">www.superiorlake.com.au</a>, or contact:

Grant Davey Executive Director +61 8 6117 0479

#### Reference to previous ASX announcements

In relation to the zinc project Mineral Resource estimate previously reported on 7<sup>th</sup> 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<sup>th</sup> March 2019 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the announcement of 7<sup>th</sup> March 2019 continue to apply and have not materially changed.

In relation to the zinc project Ore Reserve estimate previously reported on 28<sup>th</sup> 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 28<sup>th</sup> August 2019 and that all material assumptions and technical parameters underpinning the Ore Reserve estimate in the announcement of 28<sup>th</sup> August 2019 continue to apply and have not materially changed.

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

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

#### Name of entity

Lotus Resources Limited	
ABN	Quarter ended ("current quarter")
38 119 992 175	30 June 2020

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	(2,608)	(3,209)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(145)	(444)
	(e) administration and corporate costs	(385)	(1,349)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	7
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	44	44
1.9	Net cash from / (used in) operating activities	(3,092)	(4,951)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities <sup>(1)</sup>	-	(2,000)
	(b) tenements	-	-
	(c) property, plant and equipment	-	(3)
	(d) exploration & evaluation (if capitalised)	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

ASX Listing Rules Appendix 5B (01/12/19)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) 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) <sup>(1)</sup>	14,558	11,365
2.6	Net cash from / (used in) investing activities	14,558	9,362

<sup>(1)</sup> The Company acquired a \$14.56 million cash backed environmental performance bond as part of the acquisition of the Kayelekera Uranium project. This is restricted cash that cannot be used to fund operations whilst the environmental performance bond is in place. The Company is currently working with its bank and insurance company to put insurance in place that would allow the Company to access the funds currently restricted by the bond. The first tranche of the repayment of the environmental performance bond to the vendor from the Company was US\$4 million. The vendor has offset US \$2 million against this payment for agreed funding provided by them for planned site restorations.

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	9,800
3.2	Proceeds from issue of convertible debt securities	-	501
3.3	Proceeds from exercise of options	1,997	2,285
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(479)
3.5	Proceeds from borrowings	-	501
3.6	Repayment of borrowings	-	(651)
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	1,997	11,957

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,978	73
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,092)	(4,951)

ASX Listing Rules Appendix 5B (01/12/19)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	14,558	9,362
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,997	11,957
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	16,441*	16,441*

<sup>\*</sup> Included in the cash balance above is \$14.56 million environmental performance bond (restricted cash). The Company is currently working with its bank and insurance company to put insurance in place that would allow the Company to access part of the funds currently restricted by the bond. Subsequent to the end of the quarter the Company also received \$1.04 million in cash from the conversion of options which is not included in the cash balance.

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	1,883	2,978
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	14,558*	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	16,441	2,832

<sup>\*</sup> US\$10M environmental performance bond (restricted cash).

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	-
6.2	Aggregate amount of payments to related parties and their associates included in item 2	145

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(3,092)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(3,092)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	16,441*
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	16,441*
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	5.3*

<sup>\*</sup> Included in the cash balance above is \$14.56 million environmental performance bond (restricted cash). The Company is currently working with its bank and Lombards Insurance company to put insurance in place that would allow the Company to access part of the funds currently restricted by the bond. The company also has approximately \$1 million committed in options to be exercised in the 3<sup>rd</sup> quarter 2020. Subsequent to the end of the quarter the Company also received \$1.04M in cash from the conversion of options which is not included in the cash balance. The company would require raising cash by the end of the year or early 2021 if it is unable to access part of its environmental bond.

If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: The budgeted cost for the 3<sup>rd</sup> quarter is \$1.85 million and is significantly less than the 2<sup>nd</sup> quarter.

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

8.8

Answer: The company is advanced in investigating options to insure it's environmental bond requirements so that it is able to access the available cash or portion of the \$14.60 million collateral that is in place. Further to this the company has commitments from option holders of exercising approximately \$ 1.00 million of options at 4 cents and as of 31st July 2020 has received a further \$1.04 million subsequent to the end of the second quarter of options exercised by shareholders.

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes based on 1 and 2 above.

#### **Compliance statement**

- 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.

Date: 31 July 2020

Authorised by: . By the board

(Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow 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 cash flow 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.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.