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# 31 July 2020

Company Announcement Officer ASX Limited Exchange Centre 20 Bridge Street SYDNEY NSW 2000

# ACTIVITIES REPORT FOR THE QUARTER ENDED 30 June 2020

#### **HIGHLIGHTS**

# **Bowdens Silver Project, New South Wales**

- Submission of the Development Application (DA) and associated Environmental Impact Statement (EIS).
- The EIS supports the findings of the Bowdens Silver Feasibility Study which demonstrates a robust silver mine development with a mine life of 16.5 years.
- The EIS confirms very favourable assessment outcomes and demonstrates a clear path to approval and development.

#### **Bowdens Silver Exploration**

- Expanded diamond drilling campaign commenced at Bowdens Silver for up to 10,000 metres.
- Primary targets are high-grade silver below the current proposed pit and multiple new targets to extend beyond current Mineral Resource.
- Drilling is expected to continue to at least the end of the calendar year 2020.

#### **Tuena Gold Project, New South Wales**

- Initial drill program of up to 4,000 metres to commence in the September quarter, pending approvals.
- Three new mineral exploration licenses granted expanding the total holdings to 747 square kilometres (from 178 square kilometres).

#### **Corporate**

**Silver Mines Limited** 

 Successful placement conducted to institutional, professional and sophisticated investors raising A\$12 million (before costs).



#### **Silver Mines Limited COVID-19 Response**

During the June 2020 quarter, Silver Mines Limited (ASX:SVL) ("Silver Mines" or "the Company") continued to carry out measures in response to the impact of the COVID-19 pandemic. The Company's priorities are to protect the health and safety of our staff, contractors and local communities, while maintaining the integrity of our business.

The Company adheres to directives from Federal and State Government and has put in place comprehensive COVID-19 Policies and Procedures. This has allowed our current operations to continue safely and with minimal interruption.

Field activities including drilling within the Bowdens Silver area, where the Company owns all the properties and can control access, have continued. Planned near-term field activities at the regional Barabolar Project have been placed on hold. Activities at the Company's Tuena Projects will be recommencing during the September quarter.

Although there have been significant impacts on capital markets and commodity prices due to the pandemic, it is the Company's view that the medium to long term market fundamentals for silver and other commodities are strong.

The Company is well positioned to react should COVID-19 pandemic circumstances change.

# **Bowdens Silver Project**

During the June 2020 quarter, the Company reported that the Development Application (DA) and Environmental Impact Statement (EIS) for the proposed development of the Bowdens Silver Project had been lodged with the New South Wales Department of Planning, Industry and Environment.

The Bowdens Silver Project is the largest undeveloped silver deposit in Australia and lies within Exploration Licence 5920, which is 100% held by the Company. The Project is located in central New South Wales, approximately 26 kilometres east of Mudgee.

The proposed development comprises an open-cut mine feeding a new processing plant with a conventional milling circuit and differential flotation to produce two concentrates that will be sold for smelting off site. Plant capacity is designed for 2.0 million tonnes per annum with a project life of 16.5 years. Life of mine production is planned to be approximately 66 million ounces of silver, 130,000 tonnes of zinc and 95,000 tonnes of lead.

Summary points of the EIS include:

- Considerable local economic benefits with substantial local job creation;
- Minimal impacts on surface water and groundwater during and after operations;
- An arrangement to source surplus water from nearby coalfields via a dedicated water pipeline limiting the requirement to source water locally;
- No physical human health risk issues of concern have been identified;

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- A progressive rehabilitation plan has been committed to with rehabilitation occurring throughout the life of the mine;
- No significant impacts upon migratory or threatened species. The Project's biodiversity offset program will see a significant area of land conserved in perpetuity;
- Relocation of a local road around the mine site with the result that the majority of traffic would avoid the local township of Lue;
- Aboriginal Cultural Heritage assessment has been concluded in conjunction with the local Aboriginal communities, with agreement on ongoing management;
- More broadly, the potential for amenity-related impacts would be managed over the life
  of the mine through a range of management commitments, monitoring and reporting;
- The EIS was placed on an 8 week public exhibition which concluded subsequent to the end of the quarter on 27 July 2020.

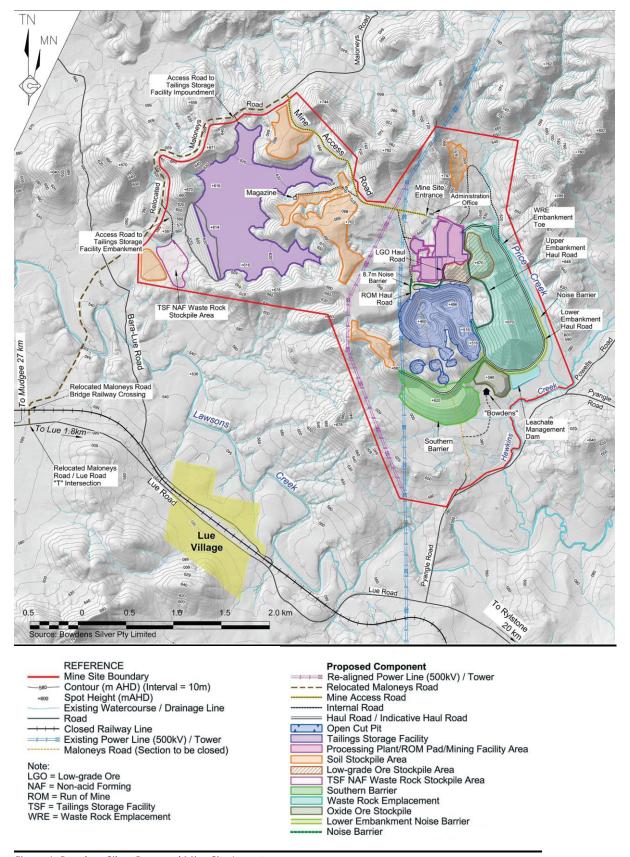
# **Environmental Impact Statement**

Preparation of the EIS has been a comprehensive process managed and authored by R.W. Corkery & Co with a range of selected independent specialist consultants covering the following disciplines.

- Noise, Vibration and Blasting
- Air Quality
- Health
- Social Impact
- Surface Water
- Groundwater
- Traffic and Transport

- Visibility
- Terrestrial Ecology
- Aquatic Ecology
- Soils and Land Capability
- Aboriginal and Cultural Heritage
- Economic Impact
- Agricultural Impact





 ${\it Figure~1.~Bowdens~Silver~Proposed~Mine~Site~Layout.}$ 

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A thorough peer review program has been undertaken with regards to the key components of the EIS specialty reports.

This assessment has been supported by a comprehensive community engagement program aimed at gathering information, education and reviewing potential impacts from the community's perspective. The most common point of feedback has been support for the generation of employment and opportunities for local business enhancement.

# **Key Components of the EIS**

#### **Water Management**

Surface water and groundwater assessments have been undertaken in accordance with the Department of Planning, Industry and Environment's assessment requirements and the NSW Aquifer Interference Policy. The assessments have determined minimal impacts from the Project on surface water and groundwater during operations and into the future.

Annual water usage is planned to be approximately 1,857 megalitres (ML) principally for processing and dust suppression. The Project would access water from a range of sources, with a focus on reuse of water captured on-site or recycled from the tailings storage facility, the use of groundwater inflows to the open cut pit and water sourced externally via a dedicated water supply pipeline.

The approximately 58.5km pipeline would be constructed and commissioned during the construction phase of the Project. This option is supported locally as it reduces reliance on local water sources. The pipeline is envisaged to provide options for off-take of water for fire-fighting purposes and represents reuse of surplus water from other mining operations.

# **Economic and Social Impacts**

The economic benefits of the Project would be generated as a result of the revenue from sales of the silver, zinc and lead produced at the mine and through the provision of employment opportunities over the operating life of the Project. The peak workforce is planned to be 320 personnel during construction and 228 personnel during operations. The Company is committed to local employment, procurement and education pathways to ensure that benefits are maximised locally and regionally.

The Project is projected to have a material benefit to the local communities, in particular having a positive impact on high levels of unemployment in various communities and towns across the region as well as through utilising local businesses and suppliers.

The assessment of potential social impacts of the Project has been supported by a comprehensive program of social engagement and research that sought the views and concerns expressed by the community so that these might be included in ongoing planning.

A range of feedback has been received indicating both support for and objection to the Project. Overall, the local communities strongly support the Project primarily due to its economic benefits including local job creation and increased trade for existing local businesses.

It is acknowledged the outcomes of the Project would be experienced differently in the community, with ongoing meaningful engagement throughout the Project life proposed to Silver Mines Limited



ensure that mitigation programs are refined over time and the benefits of the Project are distributed as equitably as possible.

The Company is committed to ensuring the sustainability of the local Lue village and other nearby townships which would benefit from the Project. In addition to the Company's current social investment programs, a range of programs, some of which were identified in the community, would be initiated or funded through the development of a Community Investment Program.

#### Amenity Impacts - Air Quality, Noise, Blasting, Visual and Health Impacts

The Project is significantly aided by a topographical ridge line which forms a natural barrier between the Mine Site, the Lue township and other residences. During the life of the mine, no part of the open pit operations, the processing facilities, the TSF or any other infrastructure will be visible from the Lue township.

Air quality modelling predicts that there would be no exceedance of annual average TSP, PM<sub>10</sub> and PM<sub>2.5</sub>, maximum 24-hour average PM<sub>10</sub> and PM<sub>2.5</sub>, or dust deposition criteria at any privately-owned residences or receivers, either from the Project alone or cumulatively.

Furthermore, no exceedances of the impact assessment criteria are predicted at any Project-related or private residences for metal dust concentrations, respirable crystalline silica or hydrogen cyanide.

The human health risk assessment has considered risks associated with local changes to air quality, noise, surface water and groundwater. No physical health risk issues of concern have been identified that would be associated with the Project.

Assessment of potential blasting impacts has indicated that in the majority of situations, blast design would ensure that blasting impacts are acceptable. Almost all noise levels during the day, evening and night are below the accepted thresholds for any adverse health effects. Some exceedances during worst-case meteorological conditions would occur at some of the closest properties. Mitigation arrangements would be implemented for those households under agreement.

# **Rehabilitation and Ecology Offsets**

Consistent with many modern mining projects, rehabilitation of all areas disturbed by mining-related activities would be an integral part of the Project. Emphasis would be placed upon progressively creating final landforms and re-establishing soil profiles and vegetation as they become available. Revegetation would either be temporary or permanent. Final landforms would be created to achieve the preferred final land use(s) which predominantly include a return to productive agriculture with some areas to be dedicated to biodiversity conservation.

Comprehensive field surveys have concluded that the Project as proposed would result in the removal of approximately 381.7ha of native vegetation of variable condition. This vegetation has the potential to be habitat for a range of native fauna. However, the Project is not expected to result in significant impacts upon migratory or threatened species. Biodiversity impacts that cannot be avoided would be offset in accordance with the NSW Biodiversity Offsetting Scheme, with 795ha within and surrounding the Mine Site currently intended to be conserved in perpetuity. Additional 'off-site' biodiversity offset areas would also be established.

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#### **Aboriginal Cultural Heritage**

In collaboration with the Aboriginal community, the Company will provide a "Keeping Place" for salvaged artefacts within the Mine Site so these can be returned to the final landform post-mining in recognition of the importance of appropriate management of items of cultural heritage significance. Other sites that were identified but would not be disturbed would be protected for the life of the Mine. An Aboriginal Cultural Heritage Management Plan would also be developed to guide these activities.

# **Public Exhibition and Government and Community Engagement**

The Bowdens Silver Project Development Application has been made to the New South Wales Minister for Planning and Public Spaces. The Environmental Impact Statement (EIS) was placed for public exhibition on the Department of Planning, Industry and Environment (DPIE) Major Projects website (https://www.planningportal.nsw.gov.au/major-projects). The public exhibition period of 8 weeks concluded on 27 July 2020.

Silver Mines continues an extensive program of consultation with relevant Government departments, local communities, and other interested stakeholders. The program examines the potential impacts and benefits of exploration and development across the substantial Bowdens Silver tenement portfolio. Consultation processes focus on the current potential mine development area and the wider area where the Company is commencing or undertaking exploration programs. Although current public programs are minimised due to the COVID-19 pandemic, Bowdens Silver held public virtual Open Days on 2<sup>nd</sup> and 3<sup>rd</sup> July which has been recorded and placed online at www.bowdenssilver.com.au.



# **Bowdens Silver Project Exploration**

#### Introduction

During and subsequent to the June 2020 quarter, the Company provided an update on exploration activities commencing at the Bowdens Silver Project (refer release 28 July 2020).

The Company reported that drilling activities at Bowdens Silver will be expanded with up to 10,000 metres of drilling targeting high-grade infill and extension silver mineralisation. Drilling is likely to continue to at least the end of the calendar year 2020.

#### **Expanded Drilling Program**

During the June 2020 quarter and through the ongoing drilling program, the Company has continued with targeting and drilling in the wider Bowdens environs. While the most recent drilling is still being analysed, it has added significant understanding to the context of the Bowdens Silver Deposit being located at the periphery of a large Caldera and highlights the potential for analogue deposits on other faults. Additionally, an external consultant's review has highlighted the potential for multiple higher-grade silver zones within and proximal to the Bowdens Silver Project (refer to Figure 2). Diamond drilling is continuing with upcoming holes planned to test extensions of existing resources and to infill to the Northwest High-Grade silver zone that has previously returned spectacular high-grade silver results. At the date of this report, BD20010 is currently being drilled (refer to Figure 3).

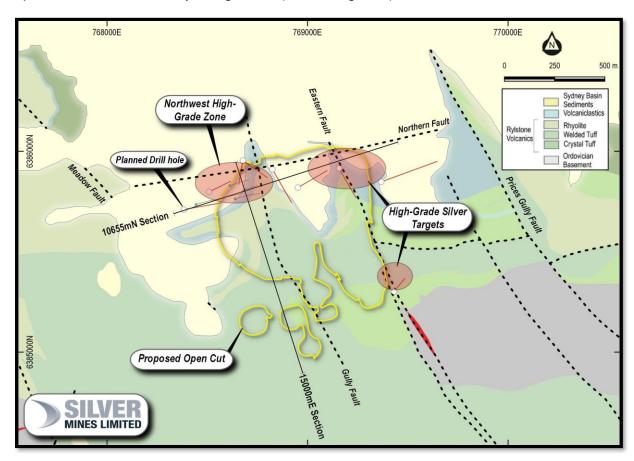


Figure 2. Planned drilling into high-grade silver targets at the Bowdens Silver Project.

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The Northwest High-Grade zone is structurally controlled by fault zones, (the Gully Fault and the Northern Fault) and is situated proximal to the main Bowdens Silver Deposit at depth. Previous drilling in this zone has returned the following:

Hole	From	То	Interval	Silver	Zinc	Lead	Silver Eq
	(metres)	(metres)	(metres)	(g/t)	(%)	(%)	(g/t)
BRD18001	283	307	24	108	0.37	0.73	150
Incl.	283	288	5	216	0.37	0.32	245
BD17013	128	171	43	110	0.36	0.86	157
Incl.	151	165	14	203	0.55	0.99	254
BD17015	235	268	33	167	0.29	1.17	215
Incl.	235	242	7	483	0.75	1.38	555
BD17018	179	190.7	11.7	270	0.22	1.18	316
Incl.	183.6	190.7	7.1	391	0.32	1.86	494
BRC12037	186	200	14	284	0.11	0.89	319
Incl.	196	200	4	935	0.14	2.01	1007
BD17020	193	211	18	74	0.81	0.68	136
Incl.	204	205	1	596	0.62	1.18	667
BD17021	198	213	15	209	0.09	1.16	252

For further information and JORC tables, refer to releases dated 31 July 2017 and 22 June 2018. Bowdens' silver equivalent: Ag Eq (g/t) = Ag (g/t) + 33.48\*Pb (%) + 49.61\*Zn (%) calculated from prices of US\$20/oz silver, US\$1.50/lb zinc, US\$1.00/lb lead and metallurgical recoveries of 85% silver, 82% zinc and 83% lead estimated from test work commissioned by Silver Mines Limited.

The Bowdens Silver mineral system is located within a series of stacked west dipping faults which acted as conduits for mineralising fluids. The faults include the Gully Fault and Eastern Fault (refer to Figure 3 and Figure 4). These faults also controlled mineralisation in the basement Ordovician rocks where the Company recently reported broad zones of base-metal mineralisation (refer release dated 8 April 2020 and 28 July 2020).

A number of other recently identified faults that sit close to the interpreted Caldera edge are situated under the post-mineral Sydney Basin sediments and these will also be tested during the upcoming diamond drilling campaign.

Silver Mines' research and development programs are also continuing with infill gravity geophysical data to be collected across the immediate Bowdens Silver Project area. Previously collected gravity data was on a broad line spacing to efficiently cover the Rylstone Volcanics package of rocks, successfully identifying faults, intrusions and the geometry of a Permian aged Caldera. Recently delineated, within the centre of the Bowdens Deposit, is a quartz-dacite porphyry intrusion, which is moderately north-dipping along an east to west strike through the Bundarra Zone and Main Zone. This intrusion is interpreted to be premineralisation. The relationship of this intrusion to the source of hydrothermal mineralising

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fluids is not yet established, however it appears the intrusion has created fractures within the surrounding rocks, which host the bulk of the silver-lead-zinc mineralisation at Bowdens. Further detailed gravity surveying will aid in identifying the extent of this intrusive, along with the controlling structures for the emplacement of it and where other intrusives and mineralisation may co-exist.

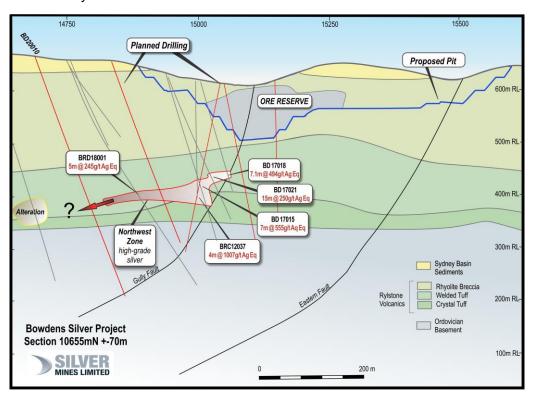


Figure 3. Cross-section 10655mN through the Northwest High-Grade silver zone with planned drilling.



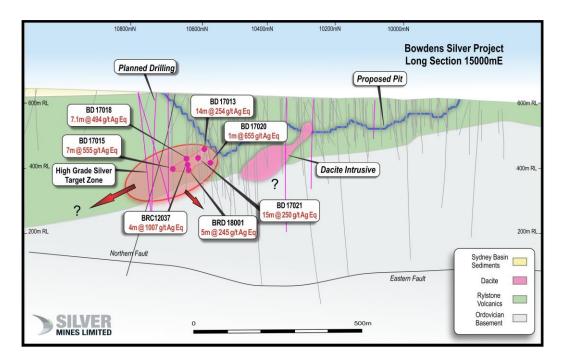


Figure 4. Long section 15000mE through the deposit showing Northwest High-Grade silver zone

#### BD20001

During the June 2020 quarter, the Company reported results from drill hole BD20001 of its 2020 deep exploration drilling program.

The hole intersected widespread sphalerite (zinc iron sulphide), galena (lead sulphide) and silver mineralisation, including zones with appreciable gold mineralisation. Mineralisation was intersected in the sedimentary Coomber Formation, which underlies the Rylstone Volcanics—the main host to Bowdens Silver Project. This drill hole represents a significant step-out from the Bowdens Silver project Mineral Resource.

BD20001 intersected widespread mineralisation including sulphide supported breccia, quartz and semi-massive sulphide veins and stringer to disseminated sulphides. Significantly, the results of this hole indicate the potential for mineralised zones of higher grade within a large mineralised envelope.





Figure 5. Semi massive sphalerite-pyrite veins and stringers overprinting quartz within silicified shale (~640m).

The pervasive zinc mineralisation is mainly hosted in the hanging and footwall shale and siltstone horizons of the Gully Fault, which is considered as the main conduit for mineralisation from an inferred intrusive source. The mineralisation surrounding the Gully Fault includes gold grades up to 3.09g/t over one metre and extends mineralisation some 400 metres from the Bundarra Zone beneath the main Bowdens Silver Deposit. The intersection of the broader Bowdens system at such a large step out is considered highly encouraging and validates existing structural models.

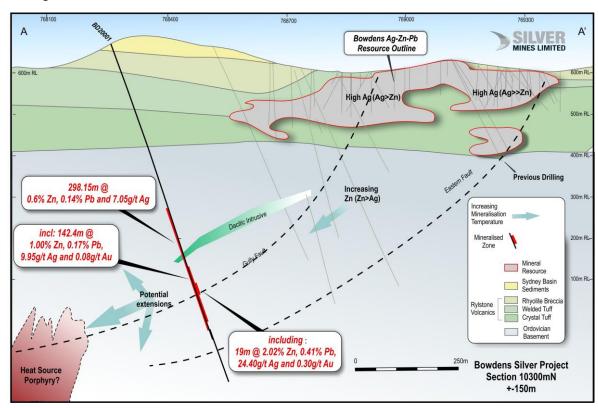


Figure 6. Cross-section of BD20001, view north-northwest.

BD20001 was designed to test a distinct gravity low adjacent to the Bowdens Silver deposit, and while narrow porphyritic dacite dykes were intersected, the gravity low appears to be a

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result of contrasting depths of iron and metal enrichment within the Rylstone and Coomber formations.

When compared to drilling beneath the Bowdens deposit, BD20001 has a greater intensity of silica alteration, pervasive iron rich sphalerite mineralisation and accessory silver with galena. In addition, appreciable gold mineralisation is hosted in steeply dipping veins. These combined observations indicate that the temperature when minerals were deposited increases to the west. The fault-control on mineralisation in this area also provides a further high-grade target to the north, where the Gully Fault is projected to intersect the Bundarra Fault. As the system remains open to the north, south and west of BD20001, the Company intends to continue to step out to explore for an intrusive source and structurally controlled high-grade base and precious metal mineralisation.

# **About the Bowdens Silver Project**

The Bowdens Silver Project is located in central New South Wales, approximately 26 kilometres east of Mudgee (See Figure 7). The consolidated project area comprises 2,007 km² (496,000 acres) of titles covering approximately 80 kilometres of strike of the highly mineralised Rylstone Volcanics and underlying sediments, intrusions and volcanics of the Macquarie Arc. Multiple target styles and mineral occurrences have potential throughout the district including analogues to Bowdens Silver, high-grade silver-lead-zinc epithermal, volcanogenic massive sulphide (VMS) systems and copper-gold targets.

Bowdens Silver is the largest undeveloped silver deposit in Australia and one of the largest globally with substantial resources and a considerable body of high quality technical work completed. The projects boast outstanding logistics for future mine development.

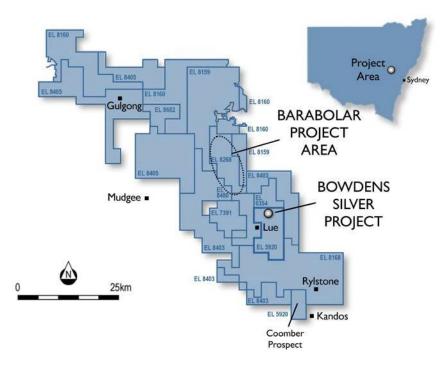


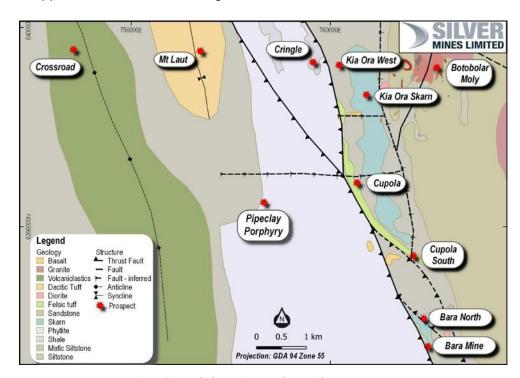
Figure 7. Silver Mines Limited tenement holdings in the Mudgee district.



# **Barabolar Project**

During the June 2020 quarter, the Company continued desktop activities on the Barabolar Project, which is located approximately 26 kilometres east of Mudgee in central New South Wales and 10 kilometres northwest of the Company's Bowdens Silver Project (refer Figure 7).

Due to the COVID-19 pandemic the planned drilling at Barabolar has been put on-hold so as to avoid unnecessary contact between the Company's staff and contractors when accessing third-party landholder properties. The Barabolar Project, however, remains a compelling target area with a considerable hydrothermal footprint, and the Company is continuing with desktop studies and application of R&D technologies in this area.



 ${\it Figure~8.~Barabolar~Project~geology~with~prospects.}$ 

# **Tuena Gold Project**

During the June 2020 quarter, the Company provided an update on review of recent exploration activities at the Tuena Gold Project located 80 kilometres south of the city of Orange in New South Wales.

The Tuena Gold Project consists of an extensive series of historic hard-rock and alluvial gold mines which operated from the 1850s until the early 1900s.

Mineralisation, as indicated by historic shafts and adits, can be mapped over several kilometres of strike. Mineralisation occurs within splay/horsetail structures associated with an inflection in the Copperhania/Lake George Thrust Faults. This structure is part of the major Godolphin-Copperhannia-Cullarin Fault Corridor, which is closely associated with mineralisation at the multi-million ounce McPhillamys gold project (Regis Resources) located



to the north and the recent Cullarin Project discovery (Sky Metals) located to the south (refer to Figure 9).

Both the McPhillamy's Gold Project and the Cullarin Project are bulk-tonnage gold rich systems with a clear multi element association.

At Tuena there are potentially two interrelated deposit target styles present. Firstly, the historic mining activity focused on very high-grade gold bearing lodes/veins. Secondly, the potential for bulk-tonnage style gold and base-metal deposits.

# New tenements granted

The Company announced that it has been granted 569 square kilometres of new exploration licences adjoining the Tuena Gold Project and associated with the major Godolphin-Copperhannia-Cullarin Fault Corridor (Figure 9). The new licences are EL8973, EL8974 and EL8975. These licences include extensive historic workings and prospective stratigraphy and structure for the generation of targets throughout the belt. Total holdings in the area are now 747 square kilometres, all 100% held by the Company.

New tenements EL8974 and EL8975, adjoin the Tuena Gold Project to the northeast, west and south of the existing tenement (Figure 9). The licenses to the west and south are known as the Binda Licences. The Binda Licence is underlain by Silurian and Devonian volcanics/sediments and is transected by both the Binda Thrust and the Copperhania Fault and associated splays. Devonian granites intrude the sedimentary rocks in the west and southern parts of the licence area. The Binda licences include several historic mines and workings including a cluster of gold occurrences hosted by Devonian granite and Silurian sediments. The historic Bonanza mine, for example, is reported to have operated at a grade of over 1200g/t silver (NSW government database Mine Record 1478). The Binda granite includes several historic occurrences including the Union Jack mine which recorded gold over 31g/t in samples and the Caledonia mine with assays recorded up to 226g/t gold, 0.18% copper, 0.7% lead and 4.9g/t silver (NSW government database 8729MMS0287).

The Bald Hill Licence (EL8974) adjoins the Tuena Gold project to the northeast of the existing tenement. This Licence covers Silurian sediments and volcanics. The area spans several north-south striking faults that are considered as splay structures related to the Copperhania Fault. The licence also has potential volcanogenic massive sulphide (VMS) style deposits and is along strike to the north of Mt Costigan and Peelwood base-metal VMS style mines. Historic workings within the Bald Hill area reference rock-chip assays up to 1.8% zinc and gold in drilling up to 4 metres @ 7.4g/t (NSW government database R00015980 and GS1981/470).

The Newbridge Licence (EL8973) covers an area of 60 square kilometres and is located approximately 6 kilometres along strike to the east from the McPhillamy's Gold Project. The licence geology includes Silurian and Devonian sediments and an extension of the Godolphin Fault transects the area.



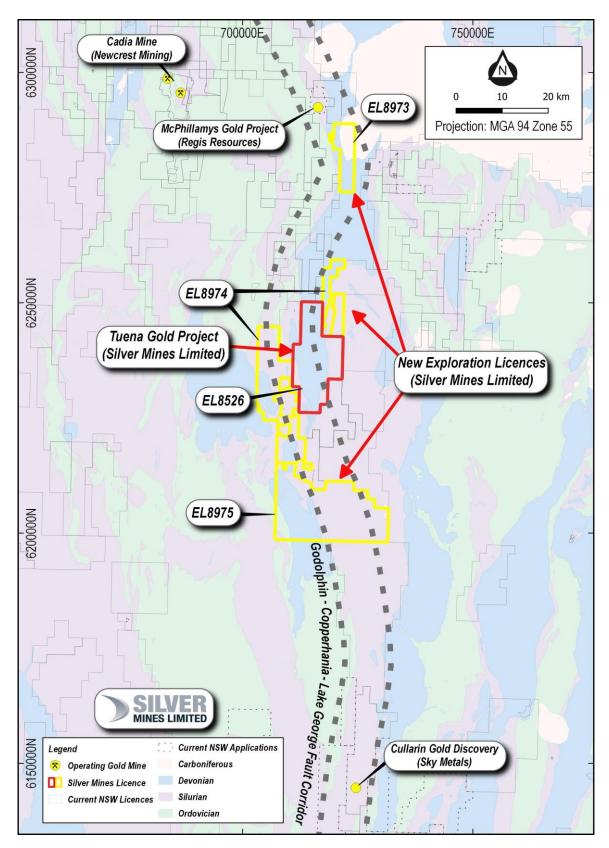


Figure 9: Map showing the Tuena Gold Project relative to the McPhillamy's and Cullarin Projects, including the current Exploration Licences and Licence applications.

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# Multi-metal pathfinders for gold targets identified at Tuena

The Company has continued to analyse and target specific prospects throughout the large Tuena Project area. This work has involved the integrated analysis of soil geochemistry, detailed airborne magnetics and radiometrics geophysical data; geological reconnaissance and remote sensing data (refer to Company announcement 23 October 2019, and the December 2019 quarterly report).

In addition to the obvious and extensive gold in soil anomalies and high-grade rock results released by the Company (refer Company announcement 23 October 2019), the Company has continued with analysis on the base-metal and pathfinder element data for gold-rich VMS style systems.

The Company has now prioritised two further extensive targets that form part of the on-going prioritisation of targets at Tuena.

# Lucky Hit South Gold + VMS Target

The Lucky Hit South Target adjoins the existing Lucky Hit historic workings and extends for approximately 2.6 kilometres to the south. At the Golden Dyke to Lucky Hit zone the Company has already identified a >8ppb gold in soil anomaly over 1.4 kilometres of strike length (refer Company announcement 23 October 2019).

At Lucky Hit South, a 2600 metre by 600 metre multi-element anomaly in soil data consists of anomalous silver (averaging 85ppb); bismuth (averaging 188ppb); lead (averaging 12ppm) and tellurium (averaging 22ppb). A rock-chip sample in the Lucky Hit South area yielded 2.7g/t gold (refer Company announcement 23 October 2019). This metal association, along with the geological setting consisting of intermediate volcanics and deep-water sediments is consistent with a VMS style geological setting.

Airborne magnetics data at Lucky Hit South suggests magnetic depletion, which is often associated with large hydrothermal alteration zones.

# Markham's Gold + VMS Target

The Markham's Target adjoins to the east the Markham's historic workings and extends over a 1600 metre by 400 metre zone. The Markham's prospect is also located 650 metres to the northeast of the Cooper & McKenzie historic workings, where recent work by the Company identified an 850 metre by 200 metre soil anomaly >25ppb Au with individual results up to 1550ppb Au. At Markham's a multi-element soil anomaly consisting of gold (averaging 12ppb), silver (average 76ppb), bismuth (averaging 253ppb), lead (averaging 20ppm) and tellurium (averaging 31ppb) has been identified.

The Markham's Target is located in the same stratigraphic package as the Lucky Hit South Target, and is located close to the axis of an anticline as seen in the magnetics data.



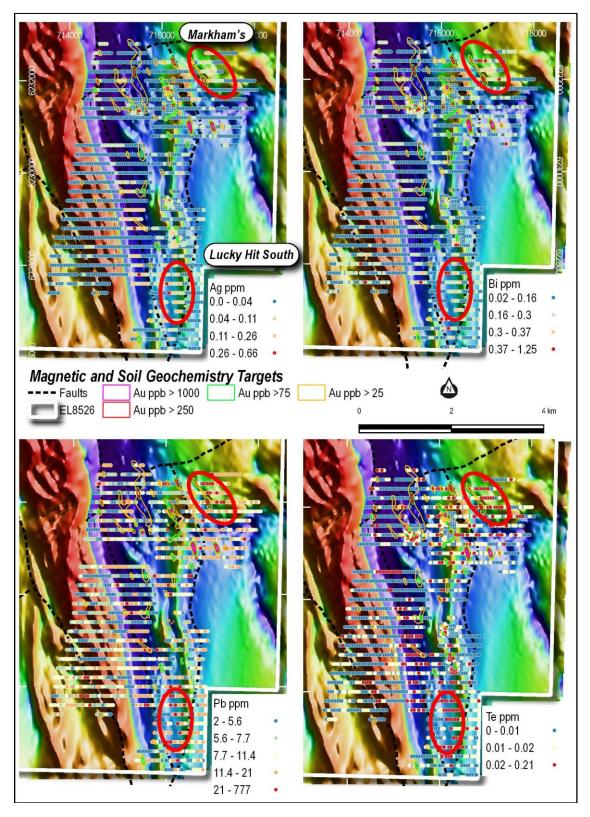


Figure 10: Reduced to pole magnetics and multi-element geochemistry of the Tuena Gold Project highlighting previously identified gold trends and the polymetallic Lucky Hit South and Markham's anomalies in red.

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# **Next Steps**

Planning is advanced for the commencement of an initial reverse circulation (RC) and diamond drilling program at the Tuena Gold Project. Despite being an extensive historic gold field, it has had very little exploration completed in the modern era and the planned drilling campaign will represent the first comprehensive drill investigations. Targets are analogous to McPhillamys (Regis Resources) and Cullarin (Sky Metals) gold-rich structurally controlled systems along the Godolphin-Copperhannia-Structural Zone. Targets also include testing beneath historic hard-rock gold workings along an extensive 5.4 kilometre by 1.5 kilometre shear complex.

Pending approvals, a priority program of 4,000 metres drilling will commence during the September 2020 quarter.

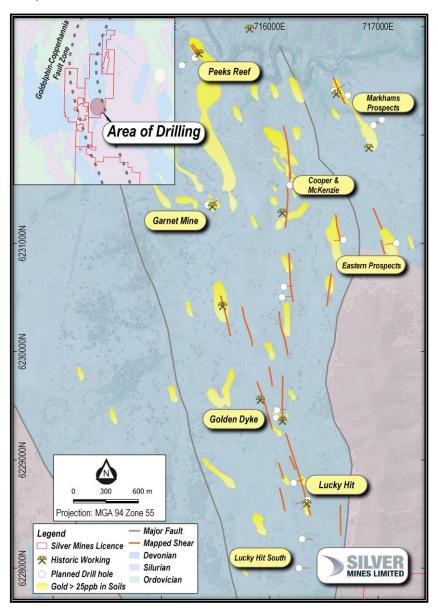


Figure 11. Tuena Gold Project planned drilling with regional insert.



#### **Other Projects**

During the June 2020 quarter, the Company continued environmental remediation work at the Webbs and Conrad areas in New South Wales. The Company continues to assess exploration options and other options for these prospective projects.

#### Research and Development and NSW New Frontiers Cooperative Drilling Grants

During the June 2020 quarter, the Company was advised that it had been successful in the application for funding under the NSW New Frontiers Cooperative Drilling Round 3 and will receive up to \$200,000 as reimbursement for direct drilling costs incurred during the Bowdens drill program. The application presented an integration of multiple technical data methods used by the Company to target source porphyry intrusives to the Bowdens Silver System.

The \$200,000 grant forms part of the \$2.2 million in funding grants budget announced by the NSW government in 2019.

The Bowdens Silver Regional Exploration drilling program represents greenfield exploration. The program test hypotheses generated by the Company during Research & Development work.

The Company has an active research and development ("R&D") program to better map and understand the Permian volcanics and basement Palaeozoic (Ordovician and Silurian) rocks of the Company's exploration licenses. The R&D programs are on-going and have, over the past three years, involved collaboration between Silver Mines' researchers and researchers from the University of Technology Sydney, the University of New South Wales and Macquarie University. Several industry consultants and data collection contractors have also assisted in analysing and providing base datasets for the R&D program.

The R&D project involves developing innovative new technology and processes, which have been applied to geological studies on the Bowdens Silver Deposit and particularly the basement rocks and the search for a porphyry source. In addition, research has been applied to the Barabolar Project area and elsewhere in the Company's portfolio. The Company has developed and continues to develop new technologies for multivariate geochemical analysis; automated mapping of geology from geochemistry data; and predictive geochemistry modelling using machine learning techniques. These R&D programs have developed further hypotheses for mineralisation in areas such as basement rocks beneath the main volcanic host at the Bowdens Silver Deposit; Bowdens northern and north-westerly extensions; and several targets in the Barabolar Corridor including the Cringle prospect area. Much of the Company's exploration drilling is considered as a test of hypotheses and targets developed under these R&D programs.

During the June 2020 quarter, the development and testing of the machine learning predictive geochemistry technology and integration with recently acquired gravity data continued. The current drill programs at Bowdens are on targets generated under this work and based on the integration of technologies and data. The Company is now establishing programs to test its machine learning technologies on targeting outside of the Bowdens-Barabolar district to establish if such technologies have transferable applications to other geological domains. In particular, the Tuena Gold Project, with a multi-element association of gold mineralisation along with complex structure, is being used as a further test site for technologies.

**Silver Mines Limited** 



#### Corporate

# **Placement and Securities Update**

On 27 May 2020, the Company announced that it had conducted a placement to institutional, professional and sophisticated investors, with Canaccord Genuity (Australia) Limited acting as Lead Manager (Placement). The Placement was fully subscribed and conducted at an issue price of \$0.10 per share raising A\$12 million (before costs), via the issue of 120,000,000 fully paid ordinary shares (Shares).

Related parties of the Company subscribed for 500,000 Shares and the issue of these Shares is subject to shareholder approval. The Shares will rank equally with the Company's fully paid, ordinary shares currently on issue.

On 2 June 2020 119,500,000 Placement Shares were issued.

The funds raised under the Placement have been and will continue to be used for the predevelopment progression of the Company's flagship Bowdens Silver Mine. Exploration activities over the coming 12 months will include extensional drilling at Bowdens Silver and exploration drilling at the Barabolar Project. Initial drilling at the Company's Tuena Gold Project will also be scheduled in coming months.

Funding has and will also be made available for land acquisitions and for corporate and general working capital purposes.

During the June 2020 quarter, a total number of 129,804,878 fully paid ordinary shares were issued comprising the Placement Shares, shares issued as deferred consideration upon lodgement of the Environmental Impact Statement as announced on 25 May 2020.

Under the Share Sale and Purchase Agreement (SPA) dated 24 February 2016, that effectuated the purchase of Bowdens Silver, the Company is required to issue a further 20,000,000 fully paid ordinary shares upon lodgement of the Environmental Impact Statement. Further details of the Tranche 1 Deferred Consideration were provided in the Notice of Meeting on 9 May 2016. A total of 10,000,000 fully paid ordinary shares at \$0.10 per share were issued to non-related parties of the Company. A further 10,000,000 shares at \$0.10 per share, being the balance due under the SPA, are to be issued to an entity associated with Managing Director, Mr Anthony McClure. This issuance requires shareholder approval, which will be sought at the next General Meeting of the Company.

During the June 2020 quarter, a total number of 787,000 SVLOB options with an exercise price \$0.06, expiring 6 September 2021 were exercised.

#### Appendix 5B

As set out in the attached Appendix 5B, exploration expenditure during the quarter totalled \$1.044 million. Payments to related parties totalling \$0.164 million consisted of remuneration paid to executive and non-executive directors and an associate of a director under respective service agreements.



This document has been authorised for release to the ASX by the Company's Managing Director, Mr Anthony McClure.

#### **Further information:**

Anthony McClure Luke Forrestal

Managing Director Associate Director

Silver Mines Limited M+C Partners

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#### **About Silver Mines Limited**

The Silver Mines strategy has been to consolidate quality silver deposits in New South Wales and to form Australia's pre-eminent silver company.

The Company's goal is to provide exceptional returns to shareholders through the acquisition, exploration and development of quality silver projects and by maximising leverage to an accretive silver price.

#### **Competent Persons Statement**

The information in this report that relates to mineral exploration from the Bowdens, Barabolar and Tuena projects is based on information compiled by the Bowdens Silver team and reviewed by Dr Darren Holden who is an advisor to the Company. Dr Holden is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, 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' (JORC code). Dr Holden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

#### **Previous Disclosure - 2012 JORC Code**

This report contains information extracted from previous ASX releases which are referenced in the report and which are available on the Company's website and the ASX website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original ASX announcements.

For JORC Code, 2012 Edition – Table 1, Section 1 Sampling Techniques and Data and Section 2 Reporting of Exploration Results please refer to ASX releases of 30 January 2020, 8 April 2020 and 19 May 2020. The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.



# **Tenement Information as at 30 June 2020**

Tenement	Project Name	Location	Silver Mines Ownership	Change in Quarter
EL 5920	Bowdens Silver	NSW	100%	-
EL 6354	Bowdens Silver	NSW	100%	-
EL 8159	Bowdens Silver	NSW	100%	-
EL 8160	Bowdens Silver	NSW	100%	-
EL 8168	Bowdens Silver	NSW	100%	-
EL 8268	Bowdens Silver	NSW	100%	-
EL 7391 <sup>1</sup>	Bowdens Silver	NSW	0%	-
EL 8403	Bowdens Silver	NSW	100%	-
EL 8405	Bowdens Silver	NSW	100%	-
EL 8480	Bowdens Silver	NSW	100%	-
EL 8682	Bowdens Silver	NSW	100%	-
EL 8526	Tuena	NSW	100%	-
EL 8973	Tuena	NSW	100%	100%
EL 8974	Tuena	NSW	100%	100%
EL 8975	Tuena	NSW	100%	100%
EL 5674	Webbs	NSW	100%	-
EPL1050	Conrad	NSW	100%	-
EL 5977	Conrad	NSW	100%	-
ML 6040	Conrad	NSW	100%	-
ML 6041	Conrad	NSW	100%	-
ML 5992	Conrad	NSW	100%	-

<sup>1.</sup> Under Joint Venture with Thomson Resources Limited. Silver Mines Limited earning 80%.

# Appendix 5B

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

# Name of entity

Tvarie of criticy				
Silver Mines Limited				
ABN	Quarter ended ("current quarter")			
45 107 452 942	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	18	185
1.2	Payments for		
	(a) exploration & evaluation (if expensed)*		
	(b) development		
	(c) production		
	(d) staff costs	(401)	(1,632)
	(e) administration and corporate costs	(321)	(1,367)
1.3	Dividends received (see note 3)		
1.4	Interest received	52	89
1.5	Interest and other costs of finance paid	(10)	(47)
1.6	Income taxes paid		
1.7	Government grants and tax incentives	89	753
1.8	Other (provide details if material)		
1.9	Net cash from / (used in) operating activities	(573)	(2,020)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	(3,003)	(4,782)
	(d) exploration & evaluation (if capitalised)	(1,044)	(5,003)
	(e) investments		
	(f) other non-current assets	(57)	(797)

Page 1

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	19	19
	(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)		
2.6	Net cash from / (used in) investing activities	(4,084)	(10,563)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	12,000	24,900
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	47	739
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(745)	(1,566)
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	11,302	24,073

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,480	633
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(573)	(2,020)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(4,084)	(10,563)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	11,302	24,073

Page 5

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12-months) \$A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	12,123	12,123

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	12,123	5,480
5.2	Call deposits		
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)	12,123	5,480

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	164
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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

Remuneration paid to executive and non-executive directors and an associate of a director under respective service agreements.

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	1,010	1,010		
7.2	Credit standby arrangements				
7.3	Other (please specify)				
7.4	Total financing facilities	1,010	1,010		
7.5	Unused financing facilities available at qu	uarter end	_		
7.6	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.				
West	pac Bank, secured facility with variable interest	rate at 3.66%			

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(573)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(1,044)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(1,617)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	12,123
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	12,123
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	7.50

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
  - Does the entity expect that it will continue to have the current level of net operating 1. cash flows for the time being and, if not, why not?

Answer: Not applicable		

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?

	•		
Anamar Nataralizable			
Answer: Not applicable			

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: Not applicable		

# **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.

	31 July 2020
Date:	
Authorised by:	
•	Trent Franklin – Company Secretary

#### **Notes**

- 1. 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.
- 2. 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".
- 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.