AUSTRALIAN SILICA QUARTZ GROUP LIMITED GROUND EM SURVEY IDENTIFIES THREE LATE TIME CONDUCTORS AT THE KOOLYANOBBING METALS PROJECT



HIGHLIGHTS

- Identification of three well defined, late time, fixed loop electromagnetic conductors at the Koolyanobbing Metals Project ('KMP')
- Two conductors, VC4 and VC5, lie within an interpreted mafic/ultramafic volcanic sequence in the underexplored Koolyanobbing Greenstone Belt
- Conductor VC4 and VC5 are located parallel to and only slightly offset from a 1.5km section of surface gold anomalism within the Golden Wishbone gold trend with values to 0.4ppm Au
- The third conductor, Island Gossan Conductor lies within a felsic volcanic unit, in a sequence of banded iron and metamorphosed mafic rocks.
- Island Gossan Conductor modelled geometry and orientation is consistent with mapped outcropping gossanous material suggesting near surface potential supported by surface historical rock chip values up to 1150ppm Cu and 0.04ppm Au
- Each of the three conductors demonstrate all the consulting geophysicist's target ranking criteria for high priority drill targets
- ASQ considers the targets prospective for gold, nickel, and copper
- Drill testing planned immediately following program environmental approval and heritage clearances



FLEM surveying on Lake Seabrook at the Koolyanobbing Metals Project – January 2023

7 March 2023

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Following the completion of the acquisition to establish the Koolyanobbing Metals Project ('KMP'), Australian Silica Quartz Group Limited (ASX:ASQ, 'ASQ' or the 'Company') is pleased to announce the results of ground based fixed loop electromagnetics (FLEM) surveys at the KMP. The survey generated three high-priority bedrock conductors.

GEM Geophysics Pty Ltd completed FLEM surveying during December 2022 and January 2023 with supervision and interpretation by ASQ's geophysics consultant Newexco Exploration Pty Ltd.



Figure 1: KMP Tenement locations and status with the identified FLEM late-time conductor positions



ISLAND GOSSAN

Exploration by Noranda Australia Ltd ('Noranda') in 1980 identified the target "Island Gossan", consisting of an area of outcropping gossan developed within an interlayered sequence of felsic tuff, clastic sediments, chert and banded iron formation on an island within the Lake Seabrook salt lake (See Figure 1 and 2). The gossanous horizon was mapped by Noranda over a strike length of 400m, with widths up to 5m. Pyrite, pyrrhotite and oxidised chalcopyrite were observed. Values up to 1150ppm Cu and 0.04ppm Au were recorded from rock chip sampling. Ground magnetics confirmed the continuity of the gossanous horizon under the Lake Seabrook salt pan to the south. Although planned, drill testing was never completed.

The ASQ Island Gossan FLEM survey consisted of two lines (Local Grid: 32350 and 32450) and loop 22LSL7 designed to explore the interpreted gossanous horizon for bedrock conductors. A well-defined late-time anomaly was identified across both lines. The late-time anomaly is clearly separate from an identified mid-time response interpreted to be attributable to the conductive sediment layers of the salt lake.

The Island Gossan conductor plate has a modelled conductance of 6400S, a length of 150m and a depth extent of 227m (Figure 3).



Figure 2: Identified Island Gossan, VC4 & VC5 FLEM late-time conductors





Figure 3: Modelled Island Gossan FLEM conductor plate (red) with loop 22LSL7 (blue) and Bz profiles of channels 30-34 (white lines)



Figure 4: Island Gossan FLEM conductor plate with interpreted geology and planned drill hole



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VC4 and VC5

Previous explorers Emu Nickel NL ('Emu') completed a 27.5km² VTEM airborne electromagnetics (AEM) survey in 2008 to test a 5km strike length of the western edge of the interpreted ultramafic contact within E77/2684 to cover a 1km long Ni soil anomaly and a 1.5km Au in soils anomaly. Several conductors were identified and followed up with RAB/RC drilling. ASQ had this work reviewed by Newexco Exploration Pty Ltd ('Newexco'). Newexco identified two high-priority, strong late-time anomalies (also identified by the previous explorer – referred to as "Anomalies VC4 and VC5") and other lower-priority anomalies. The previous explorer attempted to drill test Anomaly VC4 but encountered drilling difficulties with some planned holes abandoned and others moved. Newexco has concluded that the previous explorer's drilling fell just short of the conductor and did not adequately test the target. They did not attempt to drill test VC5 due to drilling difficulties already encountered and the position of the anomaly within the salt lake.

The ASQ VC4/VC5 FLEM survey consisted of five lines and two loops, designed to target the VC4 and VC5 anomalies and improve conductor constraints for drilling.

At VC4, the FLEM survey identified a strike extensive mid-time source across multiple lines. Within the broader source, a zone of higher conductance was identified in the late time centred under line 34320. A late-time model of VC4 was achieved with a good fit to lines 34320 and 34420. This was done with a 170 x 400m, 1360S plate with a steep SW dip.

The VC5 conductor was well-defined across three lines by the FLEM survey. A model was produced with a strong fit across all three lines, with the dip and strike of the plate constrained to be consistent with the modelling of the VC4 anomaly. The final model is a 380 x 160m, 3000S plate, steeply dipping SW, with a slight plunge to the south.



Figure 3: Modelled VC4 and VC5 FLEM conductor plates (red) with loops 22LSL8 and 22LSL9 (blue) and Bz profiles of channels 30-34 (white lines)

Next Steps

EM Targets

- Drill program planning, with the potential to combine conductor test drill program with RC drilling of gold soil anomalies on the Golden Wishbone Gold Trend.
- Heritage clearance surveys
- Environmental approvals application for the VC4/VC5 targets. Approvals have already been received for the Island Gossan drilling.
- Drill testing of the conductors. As some of the drilling will be on the salt lake it will be undertaken using a track mounted rig.

Other Prospects

- Ongoing processing of soil samples collected late in 2022
- Infill soil sampling at the gold in soils anomalies identified in 2022
- Drill testing of the gold anomalies, if warranted

Competent persons statement

The information in this document that relates to exploration results is based on data collected under the supervision of Mr Nick Algie in his capacity as Exploration Manager for Australian Silica Quartz Group Limited. Mr Algie is a registered member of the Australian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience that is relevant to the type of deposit and style of mineralisation under consideration to qualify as a competent person under the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Algie consents to the inclusion of the data in the form and context in which it appears.

The Information in this report that relates to Exploration Results for the Koolyanobbing Metals Project is extracted from the ASX announcements titled "ASQ Acquires Li/Au/Ni/Cu Ground" released on 11 August 2022 and ""Extensive Gold in Soils Anomalies Detected"" released on 7 December 2022 which are available at www.asqg.com.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

This announcement has been approved for release by the Board



About Australian Silica Quartz Group Limited

ASQ DEVEX 50/50 JV (non-dilutable at ASQ's election)

ASQ has entered into a joint venture with DevEx Resources ("DevEx" ASX:DEV) on it's 100% owned E70/3405 tenement located along strike from Chalice Gold Mines ("Chalice" ASX:CHN) nickel copper platinum group elements Julimar discovery in WA. The first \$3M expenditure on the JV area is to be fully funded by DevEx to earn 50%. ASQ has the option to jointly fund future expenditure to maintain 50% share or opt to allow DevEx to fund the next \$3M to earn a further 20% share in non-bauxite minerals. Initial geochemical and geophysical exploration work returned positive results. Recently completed aircore drilling has defined a layered, differentiated mafic-ultramafic intrusion, extending over 12 kilometres. Three reconnaissance diamond holes have confirmed the presence of a thick sequence of differentiated mafic-ultramafic intrusive rocks extending over the full length of the Project. As part of this initial diamond programme, several zones of disseminated (low grade) Ni-Cu sulphide mineralisation were intersected, which, together with signs of assimilation of the surrounding country rock, provide an indication of the potential for the intrusion to host concentrations of Ni-Cu-PGE mineralisation. Extensive ground electromagnetic (EM) surveys have been completed along with a trial application of Induced Polarisation (IP) surveying resulting in the identification of two zones of coincident IP anomalism and mid-time EM responses with overlying elevated surface PGE's. RC and Diamond drilling is underway to test these anomalies (Refer full detail in the 1 June 2020 ASX announcement ASQ reaches agreement for funding of exploration on its tenement in Julimar Region, WA, 8 October 2020 ASX announcement Update on Geophysics Targets at ASQ/DevEx JV in Julimar Region, WA, 19 August 2020 ASX announcement Update on ASQ/DevEx 50/50 JV in Julimar Region, WA, 4 December 2020 ASX announcement DevEx Exploration Update, 27 April 2021 ASX announcement Drilling confirms Mafic-Ultramafic Intrusion at Sovereign, 17 August 2021 ASX announcement 12km Long Mafic-Ultramafic Intrusion at Sovereign, Large Scale Ground EM and Diamond Drilling set to Commence, 7 October 2021 ASX announcement Diamond drilling underway at Sovereign Ni-Cu-PGE Project, 10 November 2021 ASX announcement Disseminated Ni-Cu sulphides in drilling - Sovereign Project, 23 December 2021 ASX announcement Drilling results confirm prospective intrusion at Sovereign, and 1 March 2023 ASX announcement Drilling IP Anomalies at Sovereign).

SILICA

ASQ has established a range of silica sand and hardrock projects held via exploration licence applications 100% owned by ASQ's subsidiary Australian Silica Quartz Pty Ltd. These projects now comprise 10 granted exploration licences and two applications covering approximately 1,130 km² within Western Australia and Queensland.

High grade silica (99.5-99.9% SiO2) and high purity silica (>99.95% SiO2) currently have a wide range of applications. All indications suggest the high grade and high purity silica market is currently growing strongly due to greater demand from the PV Solar, TFT glass, Electronics, Flat Glass and Speciality Glass industries. This is reinforced by the level of enquiries from qualified end user customers the Company has received, primarily from China and Southeast Asia.

SILICA SAND

ASQ's high grade silica sand projects are located in the regions of Albany and Gingin in the southwest of Western Australia.

These projects potentially present the opportunity for the Company to produce a washed DSO silica sand product with longer term potential to enter the higher value higher grade silica sand market with a niche processed product.

ASQ is currently working on a Scoping Study for the 11.6Mt Albany White Hill high grade, low iron Silica Sand Project (refer full detail in the 28 January 2021 ASX announcement *High Grade, Low Iron Silica Sand Resource*). The Albany White Hill Project is located on farmland cleared of native vegetation 70 km east northeast of the



port of Albany. In addition to its wholly-owned silica exploration projects ASQ has reached an agreement with an existing local sand producer. In 2019 the Company executed a binding terms sheet with Urban Resources Pty Ltd (Urban) to jointly exploit Urban's Silica Sand deposit located in Bullsbrook, Western Australia. Urban has operated the mine for the last six years and produced over 1Mt from the deposit in the last two years. The ASQ/Urban Resources agreement presents the Company with the opportunity to potentially fast track its entry into the DSO silica sand export market. ASQ has completed a JORC 2012 Inferred Mineral Resource on the raw sand at Urban's Maralla Road tenement M70/326 (Refer full detail in the 7 May 2019 ASX announcement *Update on Maralla Road Silica Sand Deposit Maiden Resource* and 29 January 2020 ASX announcement *Spiral and Classifier Testwork Results for the M70/326 Silica Sand Products*). ASQ has now reached an agreement to supply Fortune 500 company C&D Logistics with 45kt/month of processed silica sand from the Marella Rd Deposit. At present this business is on hold due pending a port access solution (Refer full detail in the 1 February 2022 ASX announcement *MOU Terms Sheet agreed for Bulk Silica Sand Exports*, and the 26 April 2022 ASX announcement *Update on Kwinana Port access for Silica Sand Export*).

HARDROCK QUARTZ R&D

The Company is undertaking an R&D program aiming to develop a high purity, high value silica quartz product. To this end the Company has secured a number of hardrock quartz tenements and is progressing with a research and development project in this area. Assays from rock chip sampling of ASQ's hard rock tenements reported grades of up to 99.993% SiO2 with processed hard rock samples demonstrating further grade improvement (refer to full detail in the 15 December 2021 ASX announcement *Exploration and Research Update Hardrock High Purity Quartz and Silica - Revised*).



SOUTH STIRLING Ni/Cu PROJECT

ASQ has established the South Stirling Ni/Cu Project by way of four exploration lease applications lodged covering 1,603 km2 over the Albany Fraser Mobile Belt, South-Western WA, where the Company has identified



a historical end of hole aircore drilling assay of 1.5m at 0.79% Ni, 934 ppm Cu, 832 ppm Co from 28.5m that was never followed up. ASQ has now twinned and extended the anomalous historical hole to 52m depth, confirming and upgrading the mineralisation intersection. ASQ considers the project area has potential for Nickel-Copper magmatic sulphide mineralisation associated with mafic-ultramafic intrusions emplaced into granulite facies country rocks and planning is underway to complete extensive airborne EM surveys and other associated exploration work (Refer full detail in the 23 September 2020 ASX announcement *Exploration Update* and the 3 June 2022 announcement *South Stirling Ni/Cu Project – Positive Drilling Results*).

KOOLYANOBBING METALS PROJECT

ASQ has established the Koolyanobbing Metals Project by combining recently acquired ground with the existing ASQ tenure in the area. The KMP is considered prospective for Au, Ni, Cu and Li. (Refer full detail in the 11 August 2022 ASX announcement *ASQ Acquires Li/Au/Ni/Cu Ground*). Late 2022 Koolyanobbing Shear Zone soil sampling results outlined several well-defined significant gold anomalies with follow-up infill sampling planned for early 2023 (Refer full detail in the 7 December 2022 ASX announcement *Extensive Gold in Soil Anomalies Detected*). FLEM has identified 3 high priority well, defined conductors for drill testing as detailed in this report.

BAUXITE JV

ASQ has a joint venture with HD Mining & Investments Pty Ltd (HDM). HDM is currently working towards obtaining a 40% interest in the bauxite rights of several tenements under the joint venture which are wholly owned by ASQ. Exploration activities are fully funded by HDM. Should HDM and ASQ make a subsequent decision to mine, then HDM will earn an additional 20% interest in bauxite rights on the tenements. ASQ maintains 100% interest in all other minerals. A seventy-eight million tonne Bauxite JORC resource has been identified under this JV (Refer to Company Annual Financial Report for 2022 - Mineral Resources and Ore Reserves section).

BAUXITE ROYALTY

Following the sale of the Bauxite Resources Joint Venture Bauxite Project to Yankuang Group a royalty on future bauxite sales from the Project of 0.9% of FOB price payable to ASQ was negotiated. The Yankuang Group bauxite project contains over 300 million tonnes in the world class bauxite region in the Darling Range, Western Australia. ASQ is entitled to a royalty of 0.9% of the FOB price on the first 100 million tonnes mined (under current prices of Bauxite, this royalty would equate to approx. A\$0.50/tonne) (refer full detail in 30 November 2015 ASX announcement *Final Agreements signed with Yankuang for sale of Joint Venture Interest and Buy Back of Shares*).



APPENDIX 1 - JORC 2012 Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary		
Sampling techniques	 Not applicable –this release does not relate to the collection of samples. 		
Drilling techniques	 Not applicable –this release does not include drilling results. 		
Drill sample recovery	Not applicable –this release does not include drilling results.		
Logging	Not applicable –this release does not include drilling results.		
Sub-sampling techniques and sample preparation	 Not applicable –this release does not include drilling results. 		
Quality of assay data and laboratory tests	• FLEM surveys were carried out by GEM Geophysics under the supervision and direction of		
Verification of sampling and assaying	• The FLEM survey data quality was monitored on a daily basis by GEM in the field and checked by Newexco geophysical consultants.		

Criteria	Commentary		
Location of data points	 A local grid was generated for the acquisition to ensure profiles were taken perpendicular to geological strike; 		
	Local Grid	Map Grid	
	X1 30,000	East1 746560 mE	Bearing: 45°
	Y1 150,000	North1 6577820 mN	Scale: 1:1
Data spacing and distribution	 Line spacing was 100m, receiver station spacing 50m and transmitter loops were 200m x 200m with the exception of the island gossan which was 225m x 200m due to topographical constraints. 		
Orientation of data in relation to geological structure	• A local grid bearing 45° was employed to ensure profiles were perpendicular to geological strike.		
Sample security	Not applicable –this release does not relate to the collection of samples.		
Audits or reviews	• No external audits or reviews have been conducted apart from internal company reviews.		

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary	
Mineral tenement and land tenure status	 The Koolyanobbing Metals Project consists of the following tenements; E77/2644, E77/2645, E77/2675, E77/2684, E77/2912, E77/2941 and E77/3021. Tenement E77/2684 is owned by ASQ. The lease has been granted and it is in good standing. Tenement E77/2941 and E77/3021 are ASQ owned applications which have not yet been granted. ASQ has received notification that two objections have been lodged to the grant E77/3021. Two objections were received for E77/2941 that have subsequently been resolved and the objections withdrawn. ASQ has received notification that two objections have been lodged to the grant E77/3021. ASQ is in communications with the objectors and is confident the objections can be resolved, and the tenement move to grant in due course. Tenements E77/2645, E77/2675 and E77/2912 are in the process of being transferred to ASQ excluding iron rights. ASQ has acquired the gold rights to E77/2912 is understood to be part of a ballot application with two other applications having equal priority giving a 1:3 chance the tenement will be granted to ASQ once the acquisition is complete. The details provided above aside, there are no known impediments to obtaining approvals to operate in the area. 	
Exploration done by other parties	 operate in the area. ASQ has not yet completed a full review of the historical exploration work completed by pre-explorers across the entire KMP area. The following is a summary of the work complete E77/2645, E77/2675 and E77/2684 in the areas of the priority exploration prospects idea and referred to in this report: From 1967 to 1976 Barrier explored the KGB for gold, base metals and tungsten. work involved magnetic and geochemical surveying, induced polarisation studies, drilling, mapping and analysis of a quartz vein (on the mafics / KSZ contact) cont scheelite. Geochemical studies of the scheelite mineralisation returned grades of 5.55% WO3, with other samples giving values of 2.56% WO3 and 0.18% WO3. Barrier Exploration signed a joint venture with Kennecott Exploration Australia November 1980 to explore the property. Under the agreements, Kennecott managed the Project had an option to earn 51%. Exploration work complete the property. 	

Criteria	Commentary
	 Kennecott included regional and detailed geological mapping, auger soil sampling and diamond drilling. Tungsten mineralisation was found to be discontinuous and ol insufficient grade to warrant further work and the option was relinquished. From 1993 to 1998 Enterprise Gold Mines NL explored the area for gold. Their work included soil and sediment sampling. At the expiry of the licence 5th year of term and prior to its anniversary, an application was made for a mining lease (MLA77/942) over the ground considered most prospective and which hosts some significant anomalies. Ramelius explored the area for gold during 2008 and undertook an extensive auger drilling program over the northern part of the Lake Seabrook Peninsula, adjacent to the shore of Lake Seabrook. A total of 98 Auger drill holes were completed and analysed for Au, Ag, Li, Mo, Nb, Sn, Ta and W. Ramelius reported tantalum up to 740 ppm from a sample of quartz-feldspar-blottite-epidote? float. Tantalum is a key element in LCT pegmatite-hosted mineralisation. Tungsten Mining NL (TGN) explored the area north of Lake Seabrook in its Koolyanobbing Project for tungsten mineralisation, focusing on the greenstone lithologies adjacent to the Koolyanobbing Shear Zone (KSZ). Exploration activities by TGN between 2011-2017 included desktop studies, field-reconnaissance and geochemical sampling. Field reconnaissance included night-lamping with a UV light and confirmed the presence of narrow high-grade scheelite in the trenches, and a 5 m wide outcrop associated with coarse bladed pyroxene alteration. This zone had limited strike length (10-20 m), but indicated the potential for significant pody, high-grade scheelite mineralisation. Results from soil sampling defined a subtle tungsten anomaly over 8km of strike extensions of the structure hosting scheelite mineralisation. Emu Nickel NL explored the area from 2006 to 2010 collecting 1045 soil samples and defining the gold in soil anomaly on what is now E77/2684 referred
Geology	 The Lake Seabrook Project covers a portion of the Archaean Koolyanobbing Greenstone Belt (KGB) located on the Jackson 1:250,000 map sheet. The KGB is approximately 48km long, 8km wide and strongly elongate in a north-west direction. The belt is bounded to the north-east by granitoid and to the southwest by the Ghooli Dome. A mylonite zone follows the south-western boundary of the greenstones defining part of the Koolyanobbing Shear Zone (KSZ). The KSZ is a crustal-scale feature that extends from Koolyanobbing to the south-east, forming the north-eastern margin of the Lake Johnston greenstone belt and then joins onto the Jerdacuttup Fault. It extends northwest past the Marda greenstone belt where it is interpreted to continue as the Youanmi Fault near Sandstone giving it a total length of nearly 650km. The KGB consists of amphibolite, variably altered ultramafic rocks, chert, banded iron formation



Criteria	Commentary		
	 metamorphosed to amphibolite facies grade with subordinate greenschist facies assemblages. Lateratised BIF dominates the outcrop occurring along two ridges extending through the belt. Known gold mineralisation within the belt is minimal and documentation is sparse. There are a number of small pits and shafts located along BIF ridges generally associated with quartz veins. The total production from the Koolyanobbing Mining Centre is 1,734.4t for 27.50kg Au from 1905-1938. The banded iron formations within the greenstone belt are host to several iron ore deposits that are currently being mined by Yilgarn Iron Ore Pty Ltd (Mineral Resources Limited). Nickel sulphide mineralisation has been identified at several localities in the northern part of the Koolyanobbing Greenstone Belt, associated with komatiitic volcanics in the footwall to the western banded iron formation, as well as at the base of the underlying komatiitic flow. In the vicinity of the VC4 & VC5 FLEM conductors the local geology is interpreted to be an mafic/ultramafic volcanic sequence. At the Island Gossan prospect an area of outcropping gossan is observed developed within an interlayered sequence of felsic tuff, clastic sediments, chert and banded iron formation on an island within the Lake Seabrook salt lake (See Figure 1 and 2). Gossan is mapped over a strike length of 400m, with widths up to 5m. Pyrite, pyrrhotite and oxidised chalcopyrite were observed. Values up to 1150ppm Cu and 0.04ppm Au were recorded from rock chip sampling. Ground magnetics have confirmed the continuity of the gossanous horizon under Lake Seabrook salt pan to the south 		
Drill hole Information	Not applicable –this release does not include drilling results.		
Data aggregation methods	Not applicable –this release does not include drilling or sampling results.		
Relationship between mineralisation widths and intercept lengths	Not applicable –this release does not include drilling results.		
Diagrams	See figures in the body of the text		
Balanced reporting	This announcement is considered to be a balanced report		
Other substantive exploration data	• All relevant exploration data is shown on the figures and in the body of the report.		
Further work	EM Targets		
	 Drill program planning, potential to combine conductor test drill program with RC drilling of gold soil anomalies on the Golden Wishbone Gold Trend. Heritage clearance surveys Environmental approvals application for the VC4/VC5 targets. Approvals received already for the Island Gossan drilling. 		
	Other Prospects		
	 Ongoing processing of soil samples collected late in 2022 Infill soil sampling at the gold in soils anomalies identified in 2022 Drill testing of the gold anomalies if warranted 		