# VRX SILICA LIMITED

ABN 59 142 014 873

FOR HALF-YEAR ENDED

31 DECEMBER 2022

#### **DIRECTORS**

Paul Boyatzis (Non-Executive Chairman)
Bruce Maluish (Managing Director)
Peter Pawlowitsch (Non-Executive Director)
David Welch (Non-Executive Director)

#### **SECRETARY**

Ian Hobson

# **REGISTERED AND PRINCIPAL OFFICE**

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Telephone: (08) 9226 3780 Facsimile: (08) 9226 3764

Website: www.vrxsilica.com.au

# **SHARE REGISTRY**

Computershare Investor Services Pty Ltd Level 11, 172 St George's Terrace Perth WA 6000

Telephone: (08) 9323 2000 Facsimile: (08) 9323 2033

#### **AUDITORS**

RSM Australia Partners Level 32, Exchange Tower 2 The Esplanade Perth WA 6000

# **AUSTRALIAN SECURITIES EXCHANGE**

VRX Silica Limited shares (VRX) are listed on the Australian Securities Exchange

Your directors submit the financial report of the consolidated entity for the half-year ended 31 December 2022. In order to comply with the provisions of the *Corporations Act 2001*, the directors report as follows:

#### **DIRECTORS**

The names of the Directors who held office during or since the end of the half-year and until the date of this report are noted below. Directors were in office for this entire period unless otherwise stated:

Paul Boyatzis (Non-Executive Chairman)
Bruce Maluish (Managing Director)
Peter Pawlowitsch (Non-Executive Director)
David Welch (Non-Executive Director)

#### PRINCIPAL ACTIVITIES

The principal continuing activities during the half-year of entities within the consolidated entity was mineral exploration.

#### **REVIEW OF OPERATIONS**

The net loss for the half-year attributable to members of VRX Silica Limited (VRX or Company) was \$2,621,638 (2021: loss of \$3,239,861).

The following is a summary of the activities conducted by VRX during the half year ended 31 December 2022 at its Western Australian silica sand projects at Arrowsmith North, Arrowsmith Central (located 270 km north of Perth), Muchea (located 50 km north of Perth) and Boyatup (located 100 km east of Esperance).

# **VRX Silica Sand Resources**

VRX is a Western Australian based pure-play silica sand exploration and development company with four high-value, advanced, very long-term silica sand projects in Western Australia, a Tier 1 mining region.

The Company has multi-decade scale contiguous sand deposits on granted Mining Leases with secure tenure and a combined +1.1Bn tonne Mineral Resource of 99.6% to 99.9% SiO<sub>2</sub> high grade silica sand (see table of Combined Mineral Resource on page 18).

The Company and its management team is WA based as are its four large scale, high-grade and low impurity silica sand projects. Each project can be run independently and will supply high-grade silica sand to many diverse markets.

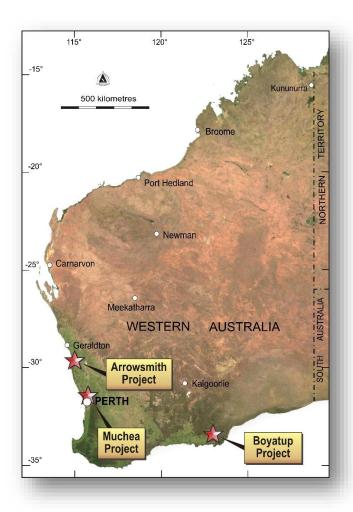


Figure 1: Project Locations

#### **Applications of Silica Sand**

Silica sand is the most-used commodity on the planet after air and water. It is the main ingredient in all types of **glassmaking**, including specialty solar panel and high-tech glass. The glass manufacturing industry demand is increasing at a rate of 5-6% per year, or about 8-10 million tonnes pa. Around 47% of the world's glass is manufactured in Asia.

Silica sand is also an essential component of the **foundry** and casting industries. The largest foundry industry is in Korea where it dominates the industry particularly for large marine components.

Silica sand is also the main ingredient in concrete.

Silica sand is a <u>finite</u> resource that is rapidly being exhausted and the Asia-Pacific region is currently experiencing **increasing demand** at a time of a **global supply shortfall**.

# A Project development pipeline to ensure a disciplined, staged development of world-class assets

The Arrowsmith North silica sand project (**Arrowsmith North**) will lead a staggered and disciplined development program, followed by the Muchea silica sand project (**Muchea**) and Arrowsmith Central (**Arrowsmith Central**) silica sand project.

VRX has the most-developed ASX listed company silica sand projects in Australia with planning, Aboriginal heritage, environmental approvals, metallurgical testwork studies and plant engineering well advanced having commenced in 2017.

Mining Leases are granted over these projects as well as various Miscellaneous Licences for access with permitting and infrastructure preparations well-advanced.

The scale of the projects provides for a long-term opportunity for **silica sand export** and potential for **glass manufacturing and downstream industries** in Western Australia.

#### **Critical Minerals Publication**

In December 2022 VRX announced its Arrowsmith North and Muchea projects have been included in the Australian Critical Minerals Prospectus for 2022 published by Austrade and launched by Minister Farrell, the Minister for Trade and Tourism.

The prospectus includes technical, commercial, and geological data to facilitate investment into projects for Australia's identified critical minerals. To-date, the prospectus has received significant recognition among interested foreign investors and buyers, Australian corporates, and the Australian government for its significant role in marketing opportunities in the Australian and export markets.

The recognition by the Australian Government that silicon and silica sand are a critical mineral and that VRX has significant potential to address anticipated production shortfalls, build supply chain security, and help deliver progress on a net-zero future is an important step forward.

This publication will enable Austrade to actively promote the VRX products to foreign investors and potential buyers.

VRX continues to engage with potential buyers that have received samples of products from Arrowsmith North and Muchea.

#### **Arrowsmith North**

The mining and processing operation is relatively simple and low impact with long-term production expected to commence initially at Arrowsmith North on the **221Mt** Proved and Probable Ore Reserve (9.2Mt Proved and 212Mt Probable) in 2023, subject to final environmental approvals.

A revised capital estimate is currently underway on a tailored 2Mtpa processing plant with a unique patented custom process circuit.

The results of additional bulk testwork programs undertaken during the March and June 2022 quarters were received in August 2022. These programs produced sufficient final product for the large samples (50-60kg) required for glassmaking furnace testing and foundry resin coating testing. The samples have been forwarded to an extensive list of potential buyers.

The Company has identified long-lead items and has commenced the specification and production of tender documentation of processing equipment for the plant in preparation for the procurement process in order to enable a timely construction program following a decision to mine at Arrowsmith North.

# Engineering

The Company has undertaken significant steps to finalise the processing circuit design to produce multiple products and to finalise the detailed engineering required for construction.

The final design phase is progressing to shop detailing of all disciplines - steelwork, mechanicals, pipework, electrical, air, etc.

The execution schedule has been recently updated with revised lead times for major equipment. Well-documented supply-side constraints, including COVID lockdowns and supply chain delays in China that have led to a backlog in production, is affecting equipment delivery globally and there is little certainty with quoted lead times. Specification and tendering of long lead time equipment is essentially complete and VRX is awaiting final mining approval and financing to commence procurement of these major items.

#### Key Plant Equipment

VRX has previously announced the start of project capital expenditure for its Arrowsmith North processing plant, with the purchase of two major items of sand processing capital equipment.

VRX has purchased locally a 3m diameter x 8m long RCR-designed feed trommel and a 3.6 x 8.5m Schenck "banana" vibrating screen. This equipment has been refurbished by Bunbury based workshops.

The banana screen has undergone strip, non-destructive testing and refurbishment by the OEM (Original Equipment Manufacturer) and is complete.

VRX will continue to pursue other lead time and cost-saving opportunities to capitalise on its first-mover advantage in Western Australia's emerging silica sand sector, at a time when there is fast-rising global demand for high-quality, responsibly sourced silica sand volumes.

#### Process Water

A process water bore was successfully drilled to access water from the Yarragadee North deep aquifer with aquifer testing to supply data for an abstraction licence application for 0.9Gl of water. Monitoring boreholes for the borefield have been completed. The plant has been designed to operate predominately with recycled water.

VRX has successfully completed a production bore and monitoring bores for abstraction at Arrowsmith Central. Results from the pump testing at Arrowsmith Central will contribute to the assessment modelling for both Arrowsmith North and Central water abstraction.



Figure 2: Bore testing equipment

#### Power Supply

The Company continues to engage with local power providers to investigate establishing a power supply using locally produced LNG. Initial evaluation indicates that there are significant potential savings to use LNG from the wellhead after it is dewatered and before it is compressed for transport in one of the two gas pipelines adjacent to the project area. This solution eliminates the transport cost for LNG and provides a very long term power supply.

In March 2023, the Company entered into a non-binding letter of intent with ResourcesWA to further investigate this proposal.

ResourcesWA has a fully resourced and operational project development, delivery and asset management team. The proposal is inclusive of all design, construction and operational requirements to provide a 100% turn key build, own and operate solution.

The term of the LOI is six months. Its purpose is to investigate the potential to establish a powerhouse, with containerised gas reciprocating engines, at a nearby gas wellhead site with direct offtake from the existing gas plant and reticulation to the Arrowsmith North site via a dedicated transmission line.

Desktop modelling indicates that a gas-driven powerhouse and transmission solution is not only cost effective but will reduce the project footprint and expected greenhouse gas emissions.

#### Logistics

The Company is continuing discussions with the Mid West Ports Authority (for export of silica sand product from Geraldton Port) to enable a storage area and shiploading within their Port Maximisation Plan.

The Company has access to the adjacent Brand Highway and an approved road intersection plan from Main Roads enable road transport of silica sand product in the short term.

#### **Approvals**

VRX has conducted extensive environmental studies on its silica sand projects over a number of seasons in anticipation of requirements of the State and Federal environmental regulation authorities to undertake approvals assessments. These surveys commenced shortly after the tenements were acquired and the number and extent of these surveys have expanded following further consultation with these authorities. The Company has initially concentrated on gaining approval for development of the Arrowsmith North project.

VRX has received confirmation from the Commonwealth Department of Agriculture, Water and the Environment (now Department of Climate Change, Energy, the Environment and Water) for accredited approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Accreditation of the Environmental Protection Authority of Western Australia's (EPA) assessment processes means that the Commonwealth can rely on environmental assessments undertaken by the EPA for the purpose of its approval decisions under the EPBC Act on proposals that are likely to have a significant impact on a matter of national environmental significance. If the EPA assesses a proposal at the level of Public Environmental Review (PER), as is the case for Arrowsmith North, separate assessment by the Commonwealth is not required.

The Environmental Scoping Document (ESD) was lodged with the EPA in September 2021 and approved in April 2022.

During May 2022 the Company lodged the initial Environmental Review Document (**ERD**) for Arrowsmith North with the EPA. The ERD document is required under the EPA's public environmental review process and will be released for public review following review and acceptance by the EPA and other relevant authorities. The ERD was prepared according to the EPA's Administrative Procedures, Procedures Manual and other guidance documents. The ERD is a comprehensive summary of the project environmental setting, the physical elements of the mine and infrastructure, operational elements, the extent of effects on the environment and the proposed rehabilitation and closure plan. The Company received a request from the EPA for further information in early July 2022 and the response was submitted later that month.

As per the Procedures Manual, the ERD was distributed for review by relevant government agencies, subsequently a request for additional information was received in mid-November 2022. The Company lodged a revised ERD (Revision D) and response table to address the requested information in December 2022. The Company now awaits a response and/or acceptance for the ERD for publication, initiating the four week Public Environmental Review of the ERD.

An important feature of the EPA Proposal is the proposed rehabilitation method to use the unique VDT method which is estimated to result in the best restoration of the mine area vegetation and habitat.

The VDT methodology can be viewed at:

https://vrxsilica.com.au/miningandrehabilitationmethodology/

# Arrowsmith North update to the Mineral Resource Estimate (MRE) and Ore Reserve Statement (ORS)

On 11 November 2022 VRX announced an update to the Mineral Resource Estimate (**MRE**) and Ore Reserve Statement (**ORS**) for Arrowsmith North.

The MRE update was based on an additional 130 close spaced grade control holes<sup>1</sup>. These holes were drilled as a pre-production activity to increase the resource confidence in the initial years of mining, and to produce a bulk sample for pilot scale metallurgical testwork and the generation of bulk samples for potential offtake partners.

A pilot plant testwork of a 3.3 tonne bulk metallurgical composite was completed. In combination with market analysis a suite of four saleable products have been determined that will be produced from Arrowsmith North. Process and Engineering design of the proposed Process Plant has been guided by the chemical and physical specifications of these products. The declaration of these four products was used to define the saleable Ore Reserve declared in this release.

This updated Mineral Resource and Ore Reserve is a culmination of significant metallurgical testwork and evaluation of the Resource to determine the premium products VRX can produce.

These products include sought after foundry sand as well as glassmaking sand suitable for flat glass, including automobile glass and also container glass.

Large samples (50-60kg) have been despatched to several foundry and glassmaking companies in Korea, Japan and Taiwan for evaluation and subsequent discussions for offtake.

The creation of this JORC compliant Proved Ore Reserve has led to a high confidence mining and processing schedule of the final products that will be available for sale for the initial 6 years of mining. This will allow for a proactive marketing effort to return the best economic outcomes from the project. Future grade control programs and ore reserve updates will not be required for 5 years from the commencement of mining.

Detailed information on the methodology underpinning the final Mineral Resource Estimate and Ore Reserve Statement is contained in the Company's ASX Announcement dated 11 November 2022.

#### Summary of updated MRE and ORE Information

In March 2021 VRX completed the pre-production activity by conducting a close spaced grade control drilling program of 130 AC holes with the aim of improving the resource confidence for the initial years of mining, and to produce a bulk metallurgical composite that represents the material that will be processed in these initial years and to process this material through a pilot plant that mimics the current designed process circuit to generate bulk samples for potential offtake partners.

VRX engaged CSA Global to update the Arrowsmith North MRE with the expectation that the new estimate would not be materially different from the published estimate<sup>2</sup>, as the CSA update was confined to the new data generated by the grade control drilling, see Figure 3, which shows the area (shown in green) that was included in the updated MRE.

<sup>&</sup>lt;sup>1</sup> ASX announcement of 11 March 2021, "Arrowsmith North Grade Control Drilling".

<sup>&</sup>lt;sup>2</sup> ASX announcement of 9 July 2019, "Arrowsmith North Mineral Resource Estimate Upgrade".

The updated MRE resulted in a category upgrade to the material in the area grade controlled to a Measured Resource. A summary of the updated MRE is shown in Table 1. The JORC 2012 Table 1 is included in Appendix 2 in the Company's ASX Announcement dated 11 November 2022.

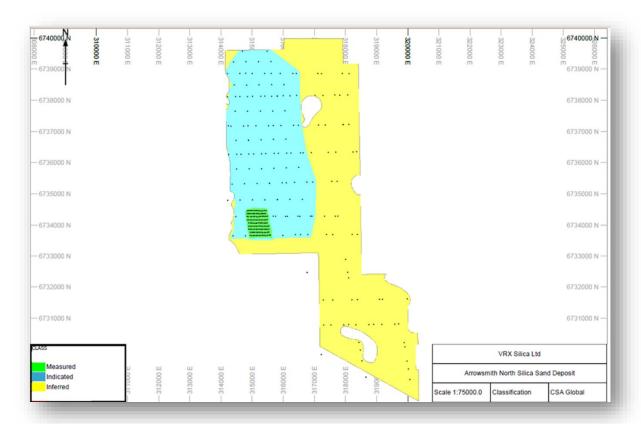


Figure 3: CSA MRE Update - Green area updated

#### **Arrowsmith North - Mineral Resources**

July 2019 Estimate

Classification	Mt	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub>	LOI %
Measured						
Indicated	248	97.7	1.0	0.4	0.2	0.5
Inferred	523	98.2	0.8	0.3	0.2	0.4
Total	771	98.0	0.9	0.3	0.2	0.4

Updated Estimate Change

Classification	Mt	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub> %	LOI %	Mt	%
Measured	10	95.9	1.9	0.7	0.3	0.7	10	
Indicated	237	97.7	1.00	0.40	0.20	0.50	-11	-4.6%
Inferred	521	98.2	0.80	0.30	0.20	0.40	-2	-0.4%
Total	768	98.0	0.90	0.30	0.20	0.40	-3	-0.4%

\*Note: Interpreted mineralisation is domained into different sand types based on drill logging data and chemical analysis results. Depletion zones include the upper 0.5 m for rehabilitation purposes, 2 m base of sands within the 'grade control' area, iron richer sand ridges in the west and minor swamp zones in the east and south of the modelled area. Differences may occur due to rounding.

Table 1: Arrowsmith North Mineral Resource Estimate

### Ore Reserve Estimate Update

Cube Consulting was engaged by VRX to complete mining engineering work towards a life of mine production schedule to provide an updated Ore Reserve estimate for Arrowsmith North.

The scope of work included importing and reconciling the supplied mineral resource block model, defining mining boundaries for successive schedule timing, preparing the mining area into appropriate blocks which would form the basis of the mining schedule, preparing a mining schedule for the total mine life, reporting of the mining schedule physicals including material mined and the associated products, for inclusion in the financial model, culminating in the reporting of an updated Ore Reserves estimate for the project.

The production schedule was completed in quarterly increments for the first 7 years, followed by annual increments for the following 38 years after which the schedule was aggregated and reported in 5-year increments to the end of the mine's 111 year life in Figure 5.

Total material movements planned are shown for the first seven years in quarterly increments in Figure 4 and annually for years 8 to 45 in Figure 5.

The work completed supports the reporting of an updated Ore Reserve estimate for this project in accordance with the guidelines in the JORC Code. Proved and Probable Ore Reserves have been derived from the Measured and Indicated Mineral Resources respectively contained within the mining lease area M70/1389. The Arrowsmith North updated Ore Reserve estimate is shown in

Table 2.

# **Arrowsmith North - Ore Reserves**

**Updated Estimate** 

- Paatoa Zotiiiato					
Classification	Total	AFS20	AFS35	AFS55	Local
	Mt	Mt	Mt	Mt	Mt
Proved	9.2	0.8	3.9	2.7	1.8
Probable	211.8	24.2	102.5	51.1	34.1
Total	221.0	25.0	106.4	53.8	35.9
Prior Estimate	223	Mt			
Change	-2.0	Mt			

0.9%

Table 2: Arrowsmith North Open Pit Ore Reserve Estimate - November 2022

The rounding in the above table is an attempt to represent levels of precision implied in the estimation process which may result in apparent errors of summation in totals shown in rows or columns.

The Prior Estimate relies on VRX's bankable feasibility study for Arrowsmith North announced to ASX on 28 August 2019<sup>3</sup>. All material assumptions contained in that study continue to apply and have not materially changed from the date of release of that study. While VRX considers all of the material assumptions to be based on reasonable grounds, there is no certainty they will be correct or that the range of outcomes indicated within the study will be achieved.

<sup>&</sup>lt;sup>3</sup> ASX announcement of 28 August 2019, "Arrowsmith North BFS and Maiden Ore Reserve".

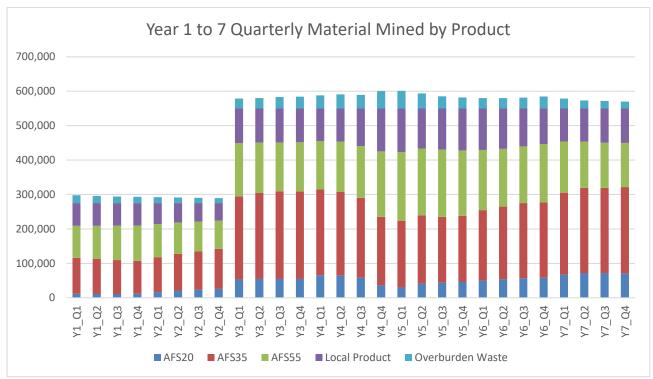


Figure 4: First 7 Years Production Profile

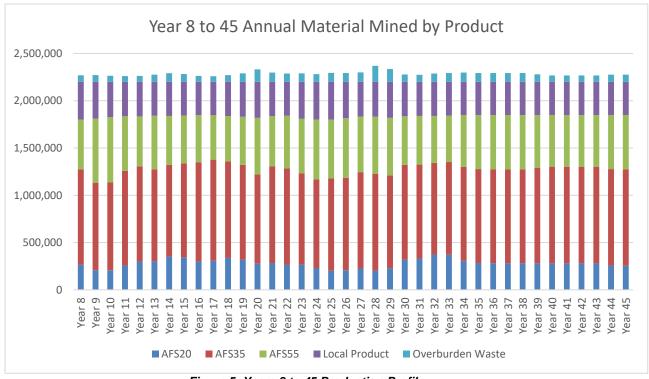


Figure 5: Years 8 to 45 Production Profile

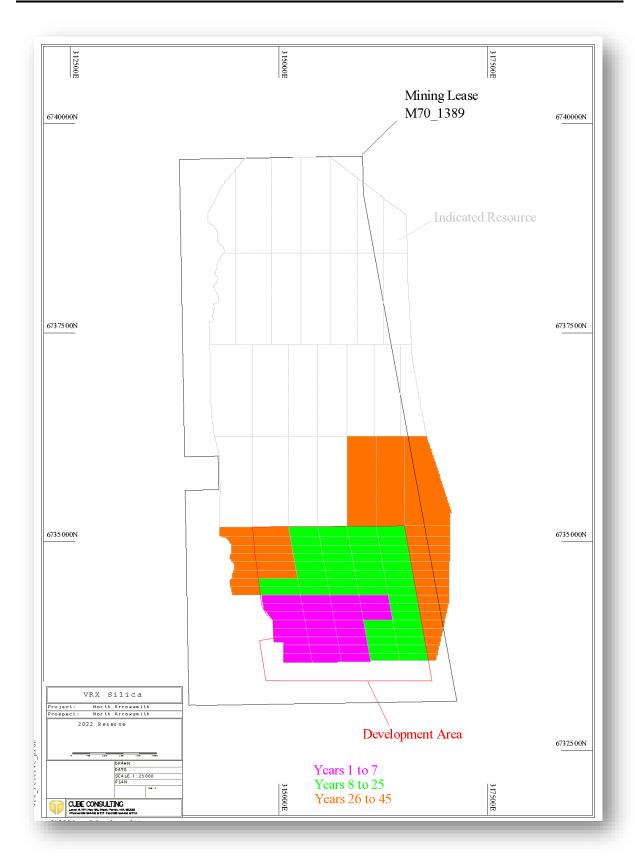


Figure 6: Mine Schedule Blocks, Development area and Mining Lease Area

The schedule targets total product tonnes of 2.2 Mt per annum over the full mine life with the exception of the first 2 years which are scheduled at half of the full production target as part of a conservative ramp up plan. The total material mined averages just over the target of product tonnes, which is due to the very low volumes of overburden waste to be moved to expose the target product material. Total material movements planned are shown for the first seven years, in quarters in Figure 5 and annually for years eight to forty five in Figure 6.

#### Ore Reserve Estimate

At the conclusion of this study, it was demonstrated that the project is economically viable considering all relevant factors, test work and design criteria, culminating in a financial analysis with favourable economic metrics.

The work completed supports the reporting of an updated Ore Reserve estimate for this project in accordance with the guidelines in the JORC Code. Proved and Probable Ore Reserves have been derived from the Measured and Indicated Mineral Resources respectively, contained within the mining lease area M70/1389. The Arrowsmith North updated Ore Reserve estimate is shown in Table 3.

			Product		
Ore Reserve	Total	AFS20	AFS35	AFS55	Local
Classification	Mt	Mt	Mt	Mt	Mt
Proved	9.2	0.8	3.9	2.7	1.8
Probable	211.8	24.2	102.5	51.1	34.1
Total	221.0	25.0	106.4	53.8	35.9

Table 3: Arrowsmith North Open Pit Ore Reserve Estimate – 11 November 2022

The rounding in the above table is an attempt to represent levels of precision implied in the estimation process which can result in apparent errors of summation in some columns.

Figure 7 shows the Arrowsmith North Ore Reserve area.

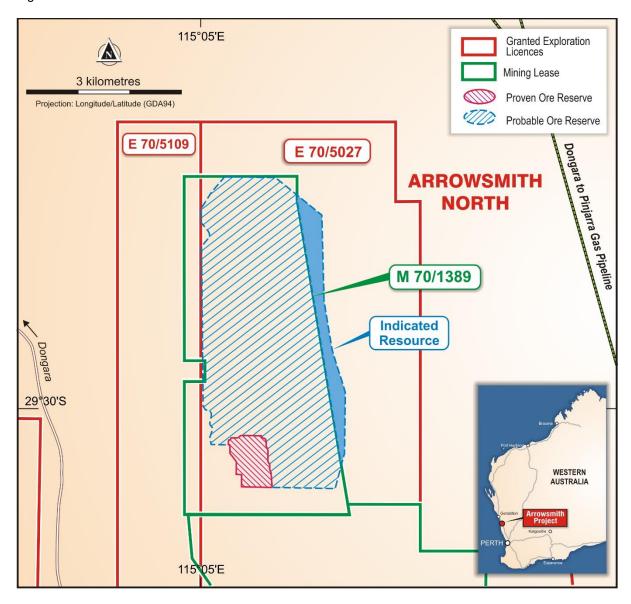


Figure 7: Arrowsmith North Ore Reserve Area

#### Future Work

VRX has now completed all mining and processing pre-production works as well as the production of bulk material of the various final products and detailed engineering design of the planned processing plant is close to completion. VRX is in the final stages of gaining regulatory approval to commence construction once all approvals are in place.

#### **Arrowsmith Central**

Arrowsmith Central is another of the Company's silica sand projects under development.

#### Approvals

Arrowsmith Central has moved to the next stage of the environmental approval process with the EPA.

On 20 June 2022 the Company lodged an Environmental Scoping Document (**ESD**) which details the environmental studies that are required to inform the assessment of the project. Lodgement of the ESD is a fundamental step in the EPA administration procedures to inform the Environmental Impact Assessment of Arrowsmith Central. The Company is confident the ESD addresses the EPA's Environmental Principles, Factors and Objectives.

The ESD is under assessment and the Company is seeking feedback from the EPA.

The Company is not in a position at this stage to set a definitive timeline for the approval process for Arrowsmith Central.

#### Process Water

On 6 September 2022 VRX announced the completion of the test holes for 2 production water bores which will be the source of water supply for the proposed processing plant at Arrowsmith Central. The borehole drilling, construction, test pumping and downhole logging is completed to compile the required data for the H3 assessment for the abstraction licence.

#### Muchea

Development of Muchea will follow development at Arrowsmith North.

The Company has had many offtake enquiries for Muchea silica sand from Asian markets and believes that the consistent production of such high-grade silica sand with a low iron content will be in high demand as raw material for the manufacture of predominately premium ultra-clear glass production, particularly for the burgeoning solar panel manufacturing industry. VRX continues to receive these enquiries on a regular basis.

#### **Environmental Studies**

Detailed springtime flora and vegetation studies were undertaken during the springtime months on a selected priority area of 450Ha.

This survey will comply with the requirements of the Environment Protection Authority Environmental Factor Guideline: Flora and Vegetation, and Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (2016a and 2016b).

The final flora and vegetation report will include previous survey results and the current survey results from quadrats, targeted searches as well as historical information that relates to the root structure, density and distribution of the key species.

The Priority Area has been selected as an area that has only two vegetation types and is restricted to Low Banksia Woodland on loose sand. Which is the Company production target.

Work to date indicates that the selected area has <u>no</u> Priority Species of flora and <u>no</u> thickets of paperbark which are restricted to low lying areas and generally have more fauna species.

The final report will form the basis of the EPA Proposal Referral for Muchea.



Figure 8: Typical vegetation in the Muchea Priority Area

#### Muchea Aboriginal Heritage

VRX had previously undertaken an Aboriginal Ethnographic and Archaeological heritage survey in 2017 to clear the initial drilling program area, with representatives of the Whadjuk People accompanying the drill crew.

VRX has undertaken a comprehensive Aboriginal Ethnographic and Archaeological heritage survey over the Priority Area to identify and understand Aboriginal heritage values within the area to support future dialogue with the Whadjuk people about the proposed mining project.

During October 2022 an Aboriginal Heritage Work Area Clearance Survey was conducted on the Priority Area at the Muchea Silica Sand Project with representatives from the Whadjuk People and VRX managed by Joe Dortch (PhD, Archaeology) with an Ethnographic Survey conducted early November 2022 with representatives from the Whadjuk People and VRX and managed by Dirima Cuthbert (MEnv Des, BSc Hons, Anthropology) and anthropology assistant Jordanna Rebbeck (BA Anthropology, BA Archaeology).

No archaeological heritage sites were identified on the archaeological survey. VRX has committed to continued monitoring by Whadjuk representatives when significant ground disturbing works are undertaken to identify any material which may come to light as a result of the proposal.

No ethnographic heritage sites were identified on the ethnographic survey. The Proposal will be managed through a Cultural Heritage Management Plan (CHMP) under the *Aboriginal Cultural Heritage Act (Western Australia) 2021* (to be implemented in 2023).



Figure 9: Muchea clearance survey area

#### Exploration

The samples from the drill program conducted the previous quarter will undergo metallurgical testwork which will generate further samples for buyer testing following overwhelming interest from potential offtake partners.

#### **Boyatup**

A first pass metallurgical testwork program is underway on drill samples from the March 2022 program to determine the specification of the potential products that can be produced from the in-situ sand resource at Boyatup.

Once the potential products that can be produced are identified a marketing study will be completed to determine the focus to maximise the economic value of the project.

# **Geothermal Exploration Permit Applications**

In January 2022 DMIRS released 21 areas in Western Australia for applications for Geothermal Exploration Permits with a closing date for applications of 21 April 2022.

VRX made a number of applications for permits proximal to the Company's current Arrowsmith North and Arrowsmith Central silica sand holdings.

The applications were made as part of VRX's overall green energy intentions as demonstrated by the hydrogen gas MOU signed with XODUS Energy Pty Ltd.

VRX has not received any notification at this stage regarding these applications and received no notification on the timetable to grant.

#### **Metallurgical Testwork R&D**

During April 2022, VRX lodged a registration for an R&D Tax Incentive Application with AusIndustry for the year ending June 2021.

The Company is currently preparing an additional claim for the financial year ending June 2022.

#### **WA Investment Attraction Fund**

In July 2019 the Western Australian State Government released Diversity WA to provide an economic development framework for the State. It sets out initiatives, actions and strategies that will contribute to achieving its vision for "a strong and diversified economy delivering secure, quality jobs through increased investment across a broad range of industries". It also identifies priority sectors for strategic development that match Western Australia's unique strengths with global trends to achieve growth across the economy.

As part of the initiative, successful applicants will be eligible for financial assistance in the form of grants and other incentives, subject to a Financial Assistance Agreement (FAA) from the Investment Attraction Fund.

In May 2022 VRX made a preliminary application under Stage 1 of the scheme (Expressions of Interest) and at the end of August 2022 the Company was shortlisted and invited to progress to Stage 2 and make a detailed application.

The detailed application was lodged in October 2022.

#### Corporate

During the period under review 2,000,000 ordinary fully paid shares were issued upon the exercise of 4,000,000 unlisted options.

The Company also issued 10,000,000 unlisted options under its employee equity incentive scheme, with an expiry date of 31 December 2025, exercisable at 20c.

#### **VRX Interactive Investor Hub**

During the quarter the Company invited shareholders to engage with us directly by asking questions, watching video summaries, and seeing what other shareholders have to say about this and past announcements at our Investor Hub, at:

https://vrx.freshamplify.com/.

#### Combined +1.1Bn tonne Mineral Resource

Project	Classification	Mt	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub> %	LOI %
	Indicated	29	99.6	0.09	0.03	0.07	0.22
Muchea	Inferred	172	99.6	0.05	0.02	0.10	0.23
	Total	208	99.6	0.06	0.02	0.10	0.23
A	Indicated	248	97.7	1.00	0.40	0.20	0.50
Arrowsmith North	Inferred	523	98.2	0.80	0.30	0.20	0.40
	Total	771	98.0	0.86	0.30	0.17	0.41
A	Indicated	28.2	96.6	1.70	0.40	0.20	0.70
Arrowsmith	Inferred	48.3	96.9	1.50	0.40	0.20	0.70
Central	Total	76.5	96.8	1.50	0.40	0.20	0.70
Devetur*	Inferred	60	97.8	0.83	0.23	0.13	0.88
Boyatup*	Total	60	97.8	0.83	0.23	0.13	0.88

**Total Mineral Resource** 

1.116 Million Tonnes\*\*

<sup>\*</sup> Boyatup Mineral Resource Estimate announced to ASX on 18 August 2022

<sup>\*\*</sup> See material assumptions statement at end of document

#### Material assumptions for Reserve and Resource reporting

The information in this document that relates to the estimation and reporting of the Mineral Resource and Ore Reserves for the Arrowsmith North, Arrowsmith Central and Muchea Silica Sand Projects, and Boyatup Drilling is extracted from releases to ASX on 11 November 2022 (updated from 28 August 2019), 17 September 2019, 18 October 2019 and 24 March 2022, respectively. The Company confirms that it is not aware of any new information or data that materially affects the information included in this document and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

#### **CHANGES IN STATE OF AFFAIRS**

During the half-year ended 31 December 2022 there was no significant change in the consolidated entity's state of affairs other than that referred to in the half-year financial statements or notes thereto.

#### **AUDITOR'S DECLARATION OF INDEPENDENCE**

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 in relation to the review for the half-year ended 31 December 2022 is included within this financial report.

This report is made in accordance with a resolution of directors, pursuant to section 306(3)(a) of the Corporations Act 2001.

On behalf of the directors

Melun

Bruce Maluish Director

Perth, 13 March 2023

# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME For the Half-year ended 31 December 2022

	Consolidated	
	31 December 2022 \$	31 December 2021 \$
Continuing operations Revenue	80,993	27,511
Exploration and evaluation expenditure Depreciation Directors' fees and benefits expense Finance costs Loss on revaluation of equity instruments Share-based payments Superannuation Other expenses Loss before income tax expense	(508,011) (50,414) (279,150) (7,814) (259,375) (677,301) (22,069) (898,497) (2,621,638)	(350,468) (39,835) (256,000) (5,386) (343,750) (1,518,284) (10,000) (743,649) (3,239,861)
Income tax expense		-
Net loss for the period	(2,621,638)	(3,239,861)
Other comprehensive income Other comprehensive income for the period, net of tax		<u>-</u>
Total comprehensive loss attributable to members of VRX Silica Limited	(2,621,638)	(3,239,861)
Basic and diluted loss per share (cents per share)	(0.47)	(0.59)

The accompanying notes form part of these financial statements

# STATEMENT OF FINANCIAL POSITION

As at 31 December 2022

		Consolida 31 December 2022 \$	ated 30 June 2022 \$
ASSETS	Note		
Current Assets			
Cash and cash equivalents		5,109,488	9,305,877
Trade and other receivables		368,933	236,910
Total Current Assets		5,478,421	9,542,787
Non-Current Assets			
Trade and other receivables	•	115,896	26,171
Financial assets at fair value through profit or loss Plant and equipment	2	537,500 801,031	781,250 431,669
Right-of-use assets		452,273	179,558
Deferred exploration expenditure	3	13,726,675	11,951,536
Total Non-Current Assets		15,633,375	13,370,184
Total Assets		21,111,796	22,912,971
LIABILITIES			
Current Liabilities Trade and other payables		998,085	1,146,269
Provisions		212,818	188,928
Lease liabilities		76,764	71,676
Total Current Liabilities		1,287,667	1,406,873
Non-Current Liabilities			
Lease liabilities		378,882	116,514
Total Non-Current Liabilities		378,882	116,514
Total Liabilities		1,666,549	1,523,387
Net Assets		19,445,247	21,389,584
EQUITY			
Issued capital	4	49,906,519	49,906,519
Reserves		7,199,709	6,522,408
Accumulated losses		(37,660,981)	(35,039,343)
Total Equity		19,445,247	21,389,584

The accompanying notes form part of these financial statements.

# STATEMENT OF CHANGES IN EQUITY

For the Half-year ended 31 December 2022

Consolidated	Issued Capital \$	Reserves \$	Accumulated Losses \$	Total Equity \$
Balance at 1 July 2022	49,906,519	6,522,408	(35,039,343)	21,389,584
Loss for period	-	-	(2,621,638)	(2,621,638)
Total comprehensive loss for period	-	-	(2,621,638)	(2,621,638)
Cost of share-based payments		677,301	-	677,301
Balance at 31 December 2022	49,906,519	7,199,709	(37,660,981)	19,445,247
Balance at 1 July 2021	45,468,491	4,591,559	(30,006,069)	20,053,981
Loss for period	-	_	(3,239,861)	(3,239,861)
Total comprehensive loss for period	-	-	(3,239,861)	(3,239,861)
Securities issued during the period	4,438,028	-	-	4,438,028
Cost of share-based payments		1,518,284	-	1,518,284
Balance at 31 December 2021	49,906,519	6,109,843	(33,245,930)	22,770,432

The accompanying notes form part of these financial statements.

# STATEMENT OF CASH FLOWS For the Half-year ended 31 December 2022

	Consolio 31 December 2022 \$	dated 31 December 2021 \$
Cash flows from operating activities Payments to suppliers and employees Interest received Other income Interest and other finance costs paid	(1,586,070) 34,708 23,980 (7,814)	(1,134,905) 8,761 17,139 (5,386)
Net cash outflows used in operating activities	(1,535,196)	(1,114,391)
Cash flows from investing activities Payments for investments Payment for plant and equipment Expenditure on mining interests Government grants received on mining interests Payments for security deposits  Net cash outflows used in investing activities	(20,000) (351,656) (2,362,703) 197,674 (89,004) (2,625,689)	(102,692) (1,814,291) - - (1,916,983)
Cash flows from financing activities Proceeds from issue of shares Repayment of lease liabilities	- (35,504)	4,438,028 (32,772)
Net cash (outflow)/inflow from financing activities	(35,504)	4,405,256
Net (decrease)/increase in cash held	(4,196,389)	1,373,882
Cash at beginning of the half-year	9,305,877	10,442,067
Cash at end of the half-year	5,109,488	11,815,949

The accompanying notes form part of these financial statements.

For the Half-year ended 31 December 2022

#### 1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

#### **Basis of Preparation**

These general purpose interim financial statements for the half-year reporting period ended 31 December 2022 have been prepared in accordance with Australian Accounting Standard AASB 134: *Interim Financial Reporting* and the *Corporations Act 2001*. The consolidated entity is a for-profit entity for financial reporting purposes under Australian Accounting Standards. Compliance with AASB 134 ensures compliance with International Financial Reporting Standard IAS 34 'Interim Financial Reporting'.

This interim financial report does not include full disclosures of the type normally included in an annual report. It is recommended that this financial report to be read in conjunction with the annual financial report for the year ended 30 June 2022 and any public announcements made by VRX Silica Limited during the half-year reporting period in accordance with the continuous disclosure requirements of the *Corporations Act 2001*.

The principal accounting policies adopted are consistent with those of the previous financial year and corresponding interim reporting period, unless otherwise stated.

## New or amended Accounting Standards and Interpretations adopted

The consolidated entity has adopted all of the new or amended Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') that are mandatory for the current reporting period.

Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

## 2. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	31 December 2022 \$	30 June 2022 \$
Listed ordinary shares and options – designated at fair value through profit or loss	537,500	781,250
Reconciliation Fair value at beginning of half-year Additions Revaluation decrement	781,250 15,625 (259,375)	
Fair value at end of half-year	537,500	

The Company holds 6,250,000 fully paid ordinary shares in NickelX Limited as part consideration for the sale of the Biranup Nickel and Gold Project in May 2021. On 31 December 2022, the closing trading price of NickelX Limited shares was 8 cents each (30 June 2022: 12.5 cents each).

During the half-year, the Company accepted the entitlement offer by NickelX Limited to 3,125,000 Loyalty Options at an offer price of 0.5 cents each. The listed options are exercisable at 20 cents each and expire on 30 November 2024. On 31 December 2022, the closing trading price of the NickelX Limited listed options was 1.2 cents each.

Refer to Note 10 for further information on fair value measurement.

For the Half-year ended 31 December 2022

# 3. DEFERRED EXPLORATION EXPENDITURE

Costs carried forward in respect of areas of interest in the following phases:

	31 December 2022 \$	30 June 2022 \$
Exploration and evaluation phase – at cost	13,726,675	11,951,536
Movement Balance at beginning of half-year Expenditure incurred R&D tax incentive received Expenditure written off	11,951,536 2,480,824 (197,674) (508,011)	
Total deferred exploration expenditure	13,726,675	

Ultimate recoupment of exploration and evaluation expenditure carried forward is dependent on successful development and commercial exploitation or, alternatively, sale of the relevant areas of interest, at amounts at least equal to book value.

#### 4. ISSUED CAPITAL

	31 December 2022 \$	30 June 2022 \$
Issued Capital		
Ordinary shares – fully paid	49,906,519	49,906,519
Maxament in audinant shares on issue	Number	Φ
Movement in ordinary shares on issue Ordinary shares – fully paid	Number	\$
Balance at beginning of half-year	558,403,029	49,906,519
Issued on exercise of options – using cashless exercise facility	2,000,000	<u> </u>
Balance at end of half-year	560,403,029	49,906,519

For the Half-year ended 31 December 2022

# 5. SHARE-BASED PAYMENTS

During the half-year period, the following share-based payments were incurred:

	Value per Option	Number	Value \$
Options granted during the period:			•
Unlisted options exercisable at \$0.20 each on or before 31 December 2025, issued to consultants and employees, vesting on issue	\$0.0543	10,000,000	543,000
Amortisation of options granted in prior periods:			
Value of options previously issued as part of financial advisory fees to Argonaut Capital Limited, as disclosed in the 30 June 2020 annual report, expensed during the half-year period.			24,911
Value of options previously issued to the Directors, as disclosed in the 30 June 2022 annual report, expensed during the half-year period.			94,489
Value of options previously issued to employees, as disclosed in the 30 June 2022 annual report, expensed during the half-year period.		_	14,901
Expensed during the period		_	677,301

The 10,000,000 unlisted option granted to consultants and employees in December 2022 were for nil consideration. The options were valued using the Hoadley ESO2 binomial valuation model using an underlying share price of \$0.12, volatility of 100%, interest rate of 3.12% and an early exercise multiple of 2.5x.

For the Half-year ended 31 December 2022

#### 6. SEGMENT INFORMATION

The Group has identified its operating segments based on the internal reports that are used by the Board (the chief operating decision makers) in assessing performance and in determining the allocation of resources.

The operating segments are identified by the Board based on the phase of operation within the mining industry. For management purposes, the Group has organised its operations into two reportable segments on the basis of stage of development as follows:

- Development assets; and
- Exploration and evaluation assets, which includes assets that are associated with the determination and assessment of the existence of commercial economic reserves.

The Board as a whole will regularly review the identified segments in order to allocate resources to the segment and to assess its performance.

During the half-year ended 31 December 2022, the Group had no development assets. The Board considers that it has only operated in one segment, being mineral exploration within Australia.

Where applicable, corporate costs, finance costs, interest revenue and foreign currency gains and losses are not allocated to segments as they are not considered part of the core operations of the segments and are managed on a Group basis.

The consolidated entity is domiciled in Australia. All revenue from external customers is generated from Australia only. Segment revenues are allocated based on the country in which the customer is located.

Revenues of approximately Nil (2021: Nil) are derived from a single external customer.

#### 7. DIVIDENDS

There have been no dividends declared or recommended and no distributions made to shareholders or other persons during the period. (2021: Nil)

#### 8. COMMITMENTS

### **Exploration Commitments**

The Company has certain obligations to perform minimum exploration work and to expend minimum amounts of money on such work on mining tenements. These obligations may be varied from time to time subject to approval and are expected to be fulfilled in the normal course of the operations of the Group. These commitments have not been provided for in the accounts. Due to the nature of the Group's operations in exploring and evaluating areas of interest, it is difficult to accurately forecast the nature and amount of future expenditure beyond the next year. Expenditure may be reduced by seeking exemption from individual commitments, by relinquishment of tenure or any new joint venture arrangements. Expenditure may be increased when new tenements are granted or joint venture agreements amended. The minimum expenditure commitment on the tenements is:

31 December	30 June
2022	2022
\$	\$
859,800	859,800

Not later than one year

For the Half-year ended 31 December 2022

#### 9. CONTINGENT LIABILITIES AND ASSETS

There have been no material changes in contingent liabilities and assets since the last annual reporting date.

#### 10. FAIR VALUE MEASUREMENT

#### Fair value hierarchy

The following tables detail the consolidated entity's assets and liabilities, measured or disclosed at fair value, using a three level hierarchy, based on the lowest level of input that is significant to the entire fair value measurement, being:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Unobservable inputs for the asset or liability

	Level 1 \$	Level 2 \$	Level 3 \$	Total \$
31 December 2022				
Assets Ordinary shares and options at fair value through				
profit or loss	537,500	-	-	537,500
Total assets	537,500	-	-	537,500
30 June 2022 Assets				
Ordinary shares at fair value through profit or loss	781,250	-	-	781,250
Total assets	781,250		-	781,250

Assets and liabilities held for sale are measured at fair value on a non-recurring basis.

There were no transfers between levels during the financial half-year.

The carrying amounts of trade and other receivables and trade and other payables are assumed to approximate their fair values due to their short-term nature.

#### 11. EVENTS SUBSEQUENT TO REPORTING DATE

There are no matters or circumstances which have arisen since the end of the half-year which significantly affected or may significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity in subsequent financial periods.

# **DIRECTORS' DECLARATION**

In the opinion of the directors of VRX Silica Limited:

- 1. The financial statements and notes thereto of the consolidated entity, as set out within this financial report, are in accordance with the *Corporations Act 2001* including:
  - Complying with Accounting Standard AASB 134: Interim Financial Reporting, the Corporations Regulations 2001 and other mandatory professional reporting requirements; and
  - b. Giving a true and fair view of the consolidated entity's financial position as at 31 December 2022 and of its performance for the half-year then ended.
- 2. There are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of directors made pursuant to section 303(5)(a) of the Corporations Act 2001.

On behalf of the directors

Milund

Bruce Maluish Director

Perth, 13 March 2023



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# INDEPENDENT AUDITOR'S REVIEW REPORT

# To the Members of VRX SILICA LIMITED

#### Report on the Half-Year Financial Report

#### Conclusion

We have reviewed the accompanying half-year financial report of VRX Silica Limited which comprises the statement of financial position as at 31 December 2022, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the half-year ended on that date, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the half-year end or from time to time during the half-year.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of VRX Silica Limited is not in accordance with the *Corporations Act 2001*, including:

- (a) giving a true and fair view of the consolidated entity's financial position as at 31 December 2022 and of its performance for the half-year ended on that date; and
- (b) complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporations Regulations 2001.

#### Basis for Conclusion

We conducted our review in accordance with ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity. Our responsibilities are further described in the Auditor's Responsibilities for the Review of the Financial Report section of our report. We are independent of VRX Silica Limited in accordance with the auditor independence requirements of the Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (including Independence Standards) (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of VRX Silica Limited, would be in the same terms if given to the directors as at the time of this auditor's review report.

#### THE POWER OF BEING UNDERSTOOD

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# Directors' Responsibility for the Half-Year Financial Report

The directors of VRX Silica Limited are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that is free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility for the Review of the Financial Report

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the Corporations Act 2001 including: giving a true and fair view of the consolidated entity's financial position as at 31 December 2022 and its performance for the half-year ended on that date; and complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporations Regulations 2001.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

RSM RSM AUSTRALIA PARTNERS

AIK KONG TING

Partner

Perth, WA

Dated: 13 March 2023



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#### **AUDITOR'S INDEPENDENCE DECLARATION**

As lead auditor for the review of the financial report of VRX Silica Limited for the half-year ended 31 December 2022, I declare that, to the best of my knowledge and belief, there have been no contraventions of:

- (i) the auditor independence requirements of the Corporations Act 2001 in relation to the review; and
- (ii) any applicable code of professional conduct in relation to the review.

RSM RSM AUSTRALIA PARTNERS

AIK KONG TING

Partner

Perth, WA

Dated: 13 March 2023

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