

5 March 2019

# **High Purity Quartz at Warrawanda**

# Highlights:

- Rock chip samples +99.95% SiO<sub>2</sub>;
- Multiple targets;
- Drilling planned mid-2019.

VRX Silica Limited (**VRX Silica** or **Company**) (ASX: VRX) is pleased to announce the results of rock chip samples from its Warrawanda Project, located, 40kms south of Newman, WA.

The Company has held the Warrawanda Project since listing in 2011 (as Ventnor Resources Ltd) with its primary focus on the nickel prospectivity on a massive ultramafic intrusion which runs east-west across the tenements.

Since the Company has changed direction to supply the Silica Sand market the tenement was re-evaluated to examine the quartz outcrops which dot the landscape in the granites adjoining the ultra-mafic intrusion.

Three outcrops have been initially sampled with outstanding results at each with the potential to produce a High Purity Quartz (HPQ) product.

VRX Silica Managing Director Bruce Maluish said: "This is potentially yet another product we can supply in to the Silica market."

"The HPQ market is much smaller and industry specific than the silica sand market for glassmaking but it is significantly higher value with prices up to US\$300 per tonne for crushed and bagged HPQ," said Maluish.

High purity quartz is a special category of silica and used in high added value products, particularly optical fibres, LED lights, silicon manufactured for use in the electronics industry, photovoltaic cells and high tech glass.

There is significant growth in the production of LED lights and a high market demand for HPQ.

The Warrawanda HPQ Project is close to the town of Newman and immediately adjacent to Great Northern Highway which connects to Fremantle with ample opportunity for backloads from trucks servicing the Pilbara.

The Company will conduct a diamond drill program to test the extent and quality of the deposits mid-year following an Aboriginal Heritage survey.

### **ASX ANNOUNCEMENT**

#### ASX: VRX

### Capital Structure

Shares on Issue: 366 million

Unlisted Options: 63 million

# **Corporate Directory**

### **Paul Boyatzis**

Non-Executive Chairman

# **Bruce Maluish**

Managing Director

#### Peter Pawlowitsch

Non-Executive Director

#### Iohn Geary

Company Secretary

### **Company Projects**

Arrowsmith Silica Sand Project, 270km north of Perth, WA.

Muchea Silica Sand Project, 50km north of Perth, WA.

Boyatup Silica Sand Project, 100km east of Esperance, WA.

Biranup base metals and gold Project adjacent to the Tropicana Gold Mine, WA, (subject to option with MCT).

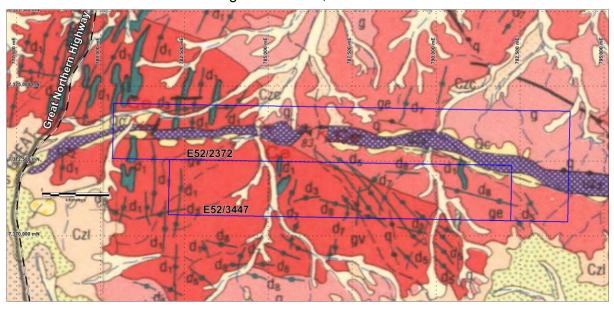
Warrawanda HPQ Project south of Newman, WA.

The Company is actively assessing other silica sand projects in Australia.

Warrawanda Location Plan

## **Detailed Information**

The Warrawanda Project is located 40km south of Newman in Western Australia and comprises two granted tenements E52/2373 and E52/3447, the tenements are proximal to the Great Northern Highway. The geology of the Warrawanda project is an east-west orientated ultramafic unit within an extensive granitic terrain, see below.



The focus of exploration to date has been the potential for nickel sulphide mineralisation to be hosted in the 15km long ultramafic unit. With the recent change in Company direction to silica sand, the Warrawanda Project was re-evaluated and attention went to the quartz hills, picture below, which exist within the granites.

There are a number of these quartz hills on the tenements, they rise 5 to 15m above ground level and two were able to be field checked and sampled, WWQ4 and WWQ6, table below.

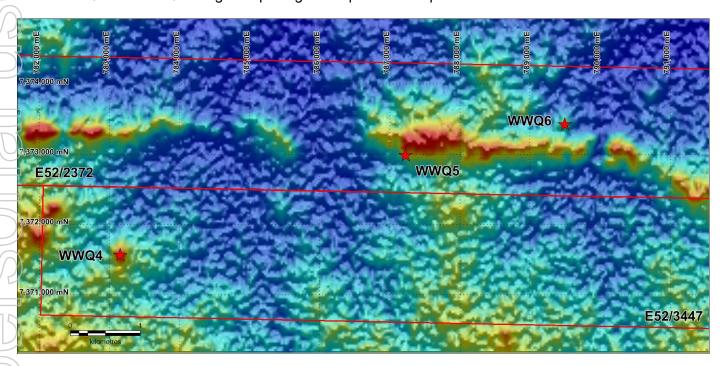


In addition to these a quartz vein was sampled that was internal to the ultramafic unit, WWQ5. Rock chips samples were taken and submitted to the laboratory for silica analysis, with the results in the table below indicating the quartz in the outcrops is almost pure silica with very little in the way of contaminants.

Table 1: Warrawanda Quartz Rockchip Sample Results

	Rockchip ID	MGA North	MGA East	SiO2(Calc.) %	Al2O3 ppm	CaO ppm	Fe2O3 ppm	K2O ppm	MgO ppm	Na2O ppm	TiO2 ppm	LOI1000C %
	WWQ4	7371574	783153	99.96	212	Х	117	Х	97	Χ	Χ	0.03
7	WWQ5	7372997	787223	99.95	199	Х	175	Χ	102	Х	Χ	0.03
	WWQ6	7373432	789494	99.96	166	Χ	125	Χ	81	Χ	Χ	0.02

The Image below shows the rockchip sample locations displayed on the SRTM topography, WWQ4 and WWQ6 being the spot high of a quartz outcrop.



The picture below of WWQ6 from below showing the quartz outcrop.



And from the top of WWQ6,



# **Exploration Targets**

It is possible to estimate an exploration target for the potential quartz outcrops that were visited and sampled, however, there are other outcrops on the tenements which remain to be further investigated.

### WARRAWANDA HIGH PURITY QUARTZ

Exploration Targets\* Dated 5 March 2019

Area	Strike (m)		Width (m)		Depth (m)		Bulk Density	Tonnes		Grade SiO₂	
	Low	High	Low	High	Low	High	t/m³	Low	High	Low	High
WWQ4	100	150	10	15	10	20	2.65	25,000	120,000	99%	99.95%
WWQ5	100	150	5	5	10	20		15,000	40,000	99%	99.95%
WWQ6	100	150	15	20	10	20		40,000	160,000	99%	99.95%
							Totals	80,000	320,000	99%	99.95%

<sup>\*</sup>The potential quality and grade of these Exploration Targets are conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource; it is uncertain if further exploration will result in the estimation of a Mineral Resource.

# **Future Work**

Approval to diamond drill these and other quartz targets on the tenements has been received from the DMIRS. The Company will conduct a native title heritage survey before drilling commences in Q2 2019.

### **Competent Persons Statements**

The information in this document that relates to Warrawanda exploration results and exploration targets is based on data collected under the supervision of Mr David Reid, in his capacity as Exploration Manager. Mr Reid, BSc (Geology), is a registered member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person under the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves." Mr Reid consents to the inclusion of the data in the form and context in which it appears.

For silica sand enquiries contact Mr Yoonil Kim:

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#### **About VRX Silica**

VRX Silica Ltd (VRX Silica) (ASX: VRX) has significant silica sand projects in Western Australia.

The Arrowsmith Silica Sand Project, located 270km north of Perth, comprises four granted exploration licences with one exploration licence and two mining lease applications pending. The Muchea Silica Sand Project, located 50km north of Perth, comprises one granted exploration licence, with one exploration licence and one mining lease applications pending. Testwork has confirmed a range of silica sand products which are capable of production at both projects. Further work is underway to enable feasibility studies to be completed.

The recently purchased Boyatup Silica Sand Project, located 100kms east of Esperance, comprises one granted exploration licence. Since acquisition the Company has applied for an adjacent extensional exploration license. Initial indications are that this project will complement both Arrowsmith and Muchea while adding to the silica products VRX Silica will look to produce.

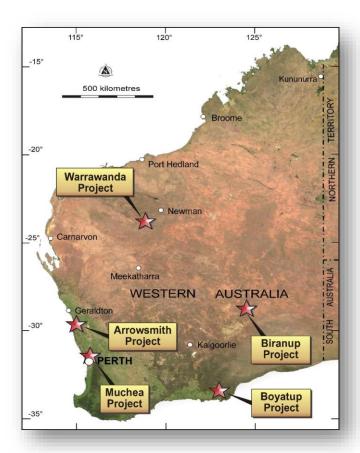
VRX Silica also has granted tenements at its Biranup Project, adjacent to the Tropicana Gold Mine in Western Australia's Goldfields that are prospective for gold and base metals, which are currently under option for partial sale and farm-in joint venture.

Also in Western Australia, 40km south of Newman, is VRX Silica's Warrawanda HPQ Project, which is detailed in this announcement.

### **Proven Management**

The VRX Silica Board and management team have extensive experience in mineral exploration and mine development into production and in the management of publicly listed mining and exploration companies.

### **Project Locations**



# **Section 1: Sampling Techniques and Data**

Criteria	Commentary
Sampling techniques	Rockchip sample of selected quartz outcrop was taken, 2-5 kilograms.
Drilling techniques	No Drilling was completed as part of this program.
Drill sample recovery	No applicable.
Logging	Only quartz material was sampled.
Subsampling techniques and sample preparation	Rocks were crushed to -10mm and a subsample of ~100 grams was selected for assay.
Quality of analytical data and laboratory tests	Samples were submitted for analysis to the Intertek Laboratory in Maddington in Perth WA. The assay methods used by Intertek are as follows: multi-elements are determined by a specialised four-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon tubes. Analysed by Inductively Coupled Plasma Mass Spectrometry, silica is reported by difference.
	The assay results have also undergone internal laboratory QAQC, which includes the analysis of standards, blanks, and repeat measurements.
Verification of sampling and analyses	No repeat or verification sampling has been completed on the rockchip samples.
Location of data points	Rockchip locations were measured by hand-held GPS with the expected relative accuracy; GDA94 MGA Zone 50 grid coordinate system is used.
Data spacing and distribution	First pass reconnaissance sampling, spot sampling only.
Orientation of data in relation to geological structure	Not Applicable
Sample security	All samples are selected onsite under the supervision of VRX Silica Geological staff.
	Samples are delivered to the Intertek laboratory in Maddington. Intertek receipt received samples against the sample dispatch documents and issued a reconciliation report for every sample batch.
Audits or reviews	There has been no audit or review of sampling techniques and data yet.

# **Section 2: Reporting of Exploration Results**

Criteria	Commentary					
Mineral tenement and land tenure status	Rock chip sampling was conducted on Tenements E52/2372 and E52/3447 which are 100% held by a wholly owned subsidiary of VRX Silica Limited.					
	The tenements were granted on 03/04/2009 and 20/05/2016 respectively and are in good standing.					
Exploration done by other parties	The tenements have been explored in the past for laterite and sulphide nickel by VRX Silica Limited and prior operators. No exploration for quartz has been previously undertaken.					
Geology	The targeted mineralisation is the late stage quartz blows within granites flows.					
Drillhole information	No drilling to date on quartz outcrops, rock chip sampling only.					
Data aggregation methods	Not applicable.					
Relationship between mineralisation widths and intercept lengths	Not applicable.					
Diagrams	Refer to figures within the main body of this report.					
Balanced reporting	The accompanying document is considered a balanced report.					
Other substantive exploration data	These results are for first pass reconnaissance work. These samples are not expected to represent the entirety of the surface quartz deposits as that was not the intention of the work.					
Further work	Approval to diamond drill these and other quartz targets on the tenements has been received from the DMIRS. The Company will conduct a native title heritage survey before drilling commences in Q2 2019.					