

The following is a summary of the activities conducted by VRX Silica Ltd (**VRX Silica or Company**) (ASX:VRX) during the quarter ending 31 March 2019.

Exploration

Muchea

On 17 January 2019 VRX Silica announced that a silica sand Mining Lease application (MLA70/1390) had been lodged for its Muchea Silica Sand Project (**Muchea Project**), located 50km north of Perth, the second such application for the Company. The Mining Lease application includes 92% of the total previously announced Resource of 191 Mt @ 99.6% SiO₂ (Muchea Maiden Resource announcement of 20 November 2018) but is expected to increase with deeper drilling than the hand-auger sampling previously undertaken to estimate the Resource.

The Mining Lease application for the Muchea Project is a very extensive application and covers the prospective Resource for very long-term future mining. Significant environmental studies have already been undertaken and will be finalised as part of the Company's application for a Mining Permit, planned for later this year.

MLA70/1390 has an area of 2,918Ha, see Table 1 below, and covers part of the Exploration Licence E70/4886, see Figure 1, which was granted on 27 March 2017.

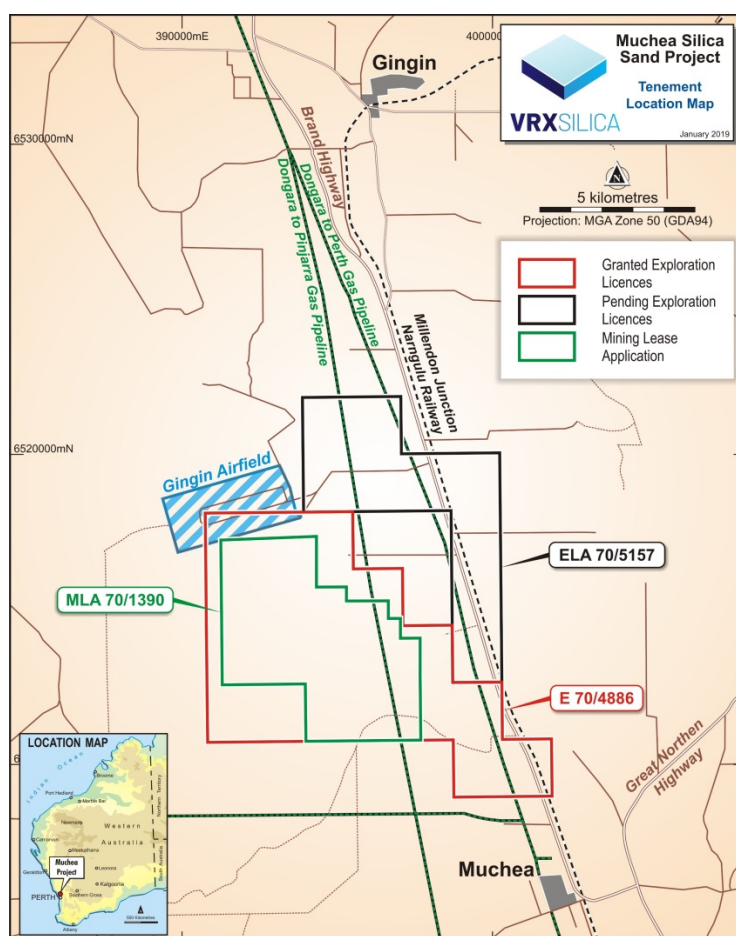


Figure 1: Muchea Mining Lease Application Location

Tenement	Holders	Application date	Area (km ²)
MLA70/1390	Wisecat Pty Ltd	14/01/2019	29.2

Table 1: Muchea Project Mining Lease application details

CSA Global has reported the Mineral Resource which is located within the MLA boundary and is summarised in Table 2, below.

Classification	Million Tonnes	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	LOI%	TiO ₂ %
Indicated	12.5	99.7	0.04	0.04	0.2	0.09
Inferred	162.7	99.6	0.04	0.02	0.2	0.08
Indicated + Inferred	175.2	99.6	0.04	0.02	0.2	0.08
* Note: Mineral Resources are reported only from within the VRX nominated MLA and form a subset of the total Muchea Project Mineral Resources as reported to the ASX on 20 November 2018. Differences may occur due to rounding.						

Table 2: Muchea Silica Sand Mineral Resource estimate within MLA

Boyatup

On 4 February 2019, VRX Silica Limited announced the acquisition of the Boyatup Silica Sand Project (**Boyatup Project**), located on E69/3560 which has a total area of 105.7 km². VRX Silica issued the vendor of the Boyatup Project, Silatec Pty Ltd, 2,000,000 ordinary fully paid shares plus \$10,000 in full consideration for the acquisition.

The tenement is almost totally covered by vacant crown land and only a very small section is over farming freehold land, which is of no interest to the Company. It is located 100km east of the port town of Esperance, (Figure 2. below) and is connected to the Esperance Bulk Port via a sealed road which by-passes the city of Esperance. The Esperance Deep Water Bulk Port has been the exit port for bulk nickel and iron ore commodities and can load ships of up to 200,000 tonnes.

The Boyatup Project deposit is subtly different to the Company's Arrowsmith and Muchea Silica Sand Projects and has the potential to provide yet another option in the product range that the Company may market in Asia.



Figure 2. Boyatup Project Location

Arrowsmith Central

The third silica sand Mining Lease application (MLA70/1392) by VRX Silica was announced on 14 February 2019 for its Arrowsmith Central prospect within the Arrowsmith Silica Sand Project (**Arrowsmith Project**), located 270km north of Perth.

The Mining Lease application includes 96% of the total previously announced Resource of 28 Mt @ 97.7% SiO₂ (Arrowsmith Central Maiden Mineral Resource of 13 December 2018).

The Arrowsmith Central Mining Lease application is another extensive application of 1,900 hectares, see Table 3 below, and substantially covers the previously identified Mineral Resource. The combined Mining Lease applications over the Arrowsmith Project (North and Central prospects) and the Muchea Project now amount to an aggregate 6,546 Ha with a significant inventory of over 400 Mt of Silica Sand at an average 98.7% SiO₂.

This is expected to increase with the recently completed Air core drilling program on all three Mining Lease Application areas during March. Air core drills deeper than hand-auger sampling and is expected to increase the confidence and JORC Resource status at each project.

Tenement	Holders	Application date	Area (km ²)
MLA70/1392	Ventnor Mining Pty Ltd	13/02/2019	19.0

Table 3: Arrowsmith Central Mining Lease application details

Environmental baseline surveys have been completed over the application area to support a Mining Permit application.

MLA70/1392 covers part of the Exploration Licence E70/4987, see Figure 3, which was granted on 6 April 2018.

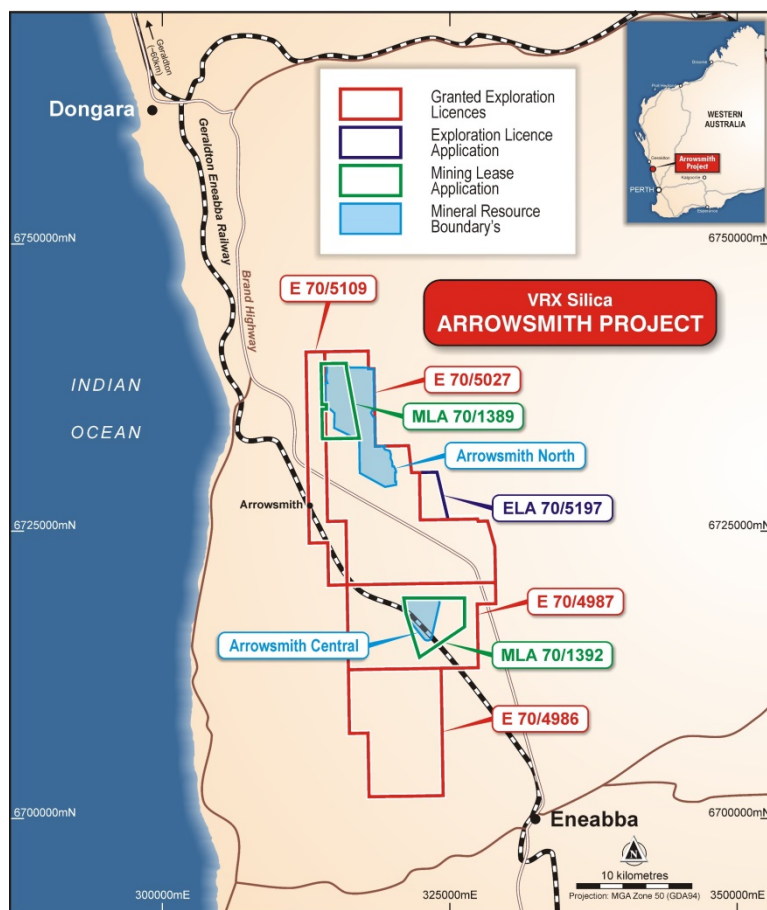


Figure 3: Arrowsmith North and Arrowsmith Central Mining Lease Application Locations

CSA Global has reported the Mineral Resource which is located within the MLA boundary and is summarised in Table 4, below.

Classification	Million Tonnes	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	LOI%	TiO ₂ %
Inferred	27	97.7	1.2	0.3	0.5	0.2
<p><i>* Note: Mineral Resources are reported only from within the VRX nominated MLA and form a subset of the total Arrowsmith Central Project Mineral Resources as reported to the ASX on 13 December 2018.</i></p> <p><i>Differences may occur due to rounding.</i></p>						

Table 4: Arrowsmith Central Silica Sand Mineral Resource estimate within MLA

Testwork

On 26 February 2019 VRX Silica Limited announced the results from its testwork program to produce silica sand products from its Arrowsmith Project and its Muchea Project. Following the Company's completion of its third iteration of testwork on each of the projects over the past year, the optimum products from each of the projects were determined with the results also contributing to the final circuit design.

There are two products from each of the Arrowsmith and Muchea Projects for the glassmaking industry, and four products from the Arrowsmith Project for the foundry industry.

A catalogue has now been produced and forwarded to potential customers.

Based on this testwork, the circuit design for the processing plant has been finalised, while the engineering work by CDE Global is nearing completion.

The engineering works include:

- Concept flow sheets (mass and water balance);
- Equipment list (containing power demand);
- Site Drawings;
- Capex Estimate +/- 15%;
- Concept Construction and Installation schedules.

Mineral Resources

Composite samples from all projects were sent to a sand testing laboratory for testing based on a specific testwork program. The program was completed and the results announced on 20 September 2018 (Silica Sand Bulk Testwork Results). The results demonstrated that glass-quality silica sand could be produced from the Muchea Project and the Arrowsmith Project (North and Central prospects). This outcome enabled the estimation of Mineral Resources for the three projects (announced 20 November 2018, 2 October 2018, and 13 December 2018 respectively).

The table below summarises the Company's current silica sand resources:

Project Name	Indicated		Inferred		Total	
	Mt	SiO ₂ %	Mt	SiO ₂ %	Mt	SiO ₂ %
Arrowsmith North			193.6	98.0%	193.6	98.0%
Arrowsmith Central			28	97.7%	28	97.7%
Muchea	19	99.7%	172	99.6%	191	99.6%
Total	19	99.7%	393.6	98.8%	412.6	98.7%

Table 5: Summary of Silica Sand Mineral Resources

A refined testwork flow sheet was developed after reviewing the results of the initial program. The major changes in this program have been the increase in attritioning (twice), and the inclusion of a range of magnetic intensities in the magnetic separator, HI Filter.

Attritioning is a high energy interaction of grains rubbing on grains which liberates attached fine particles and reduces particle size by breakage on corners and grain boundaries. This reduces contaminants and improves particle shape.

Warrawanda High Purity Quartz

On 5 March 2019, VRX Silica announced the results of rock chip samples from its Warrawanda Project, located, 40kms south of Newman, WA. It comprises two granted tenements E52/2373 and E52/3447 which are proximal to the Great Northern Highway that connects to Fremantle with ample opportunity for backloads from trucks servicing the Pilbara.

The Company initially acquired the Warrawanda Project tenements to focus on the nickel prospectivity on a massive east-west ultramafic intrusion. With the Company's change of 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, potentially yet another product the Company can potentially supply.

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.

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.

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, see Table 6 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 also in Table 6 below indicating the quartz in the outcrops is almost pure silica with very little in the way of contaminants.

Rockchip ID	MGA North	MGA East	SiO ₂ (Calc.) %	Al ₂ O ₃ ppm	CaO ppm	Fe ₂ O ₃ ppm	K ₂ O ppm	MgO ppm	Na ₂ O ppm	TiO ₂ ppm	LOI1000C %
WWQ4	7371574	783153	99.96	212	X	117	X	97	X	X	0.03
WWQ5	7372997	787223	99.95	199	X	175	X	102	X	X	0.03
WWQ6	7373432	789494	99.96	166	X	125	X	81	X	X	0.02

Table 6: Warrawanda Quartz Rockchip Sample Results



Figure 4. View from the top of WWQ6.

Warrawanda High Purity Quartz Exploration Targets

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

Exploration Targets* Dated 5 March 2019

Area	Strike (m)		Width (m)		Depth (m)		Bulk Density	Tonnes		Grade SiO ₂	
	Low	High	Low	High	Low	High	t/m ³	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%

****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.***

Exploration Drilling

On 13 March 2019 VRX Silica announced the commencement of further drilling at the Arrowsmith Project (North and Central prospects) and the Muchea Project.

The Landcruiser mounted Mantis aircore drill rig that was used is capable of deeper drill holes than those previously drilled by hand auger. The drill program consisted of a total of 189 holes for 1,726 metres at Arrowsmith and 57 holes at Muchea for 887 metres, was confined to existing tracks and was completed during the quarter.

Arrowsmith North

This area has only been tested by shallow hand augering with an average depth of 3.8 metres. The air core drilling was planned to an average of 11.2 metres, maximum 26 metres. The purpose of the drilling was to significantly increase the volume of sand tested and to infill the mining lease area with the intention of estimating a JORC Compliant Indicated Resource.

Arrowsmith Central

The Arrowsmith Central area has only been sparsely tested in the past with very shallow auger drilling along existing tracks. This air core drilling will significantly increase the area that has been tested and will infill with the expectation of estimating a JORC Compliant Indicated Resource.

Muchea

The program at the Muchea Project was also closer spaced than the original aircore drilling and will both increase the tonnage within the area of Indicated Resource and also increase the JORC confidence within the area of the recently applied for Mining Lease.

Results from these drill programs are expected to add substantial value to VRX Silica's inventory and confirm previous assumptions about the extent and quality of the company's silica sand projects.

Drilling Programs

The Aircore drilling completed on the Company's three silica sand deposits at Muchea, and Arrowsmith North and Central is set out in Table 7.

Project	Holes Completed	Total Metres	Average Hole Depth Metres
Muchea	57	887	15.6
Arrowsmith North	114	1,276	11.2
Arrowsmith Central	75	450	6

Table 7: Completed Aircore Drilling

Samples have been submitted to the Perth based laboratory with assays results expected in May 2019. New JORC compliant Resource Estimates will be updated following receipt of assay results.

Plant Design and Costs

On 27 March 2019 VRX Silica received an independent process design, engineering and cost estimate for a processing plant for its Arrowsmith Project (North and Central prospects) and Muchea Project.

The independent processing testwork, process circuit design and engineering has been undertaken by CDE Global, a global leader in the construction of sand mining wet processing plants.

The plant design (see Figure 5) incorporates features to ensure high utilisation and performance with duplicated critical pumps and variable speed drives on all pumps.

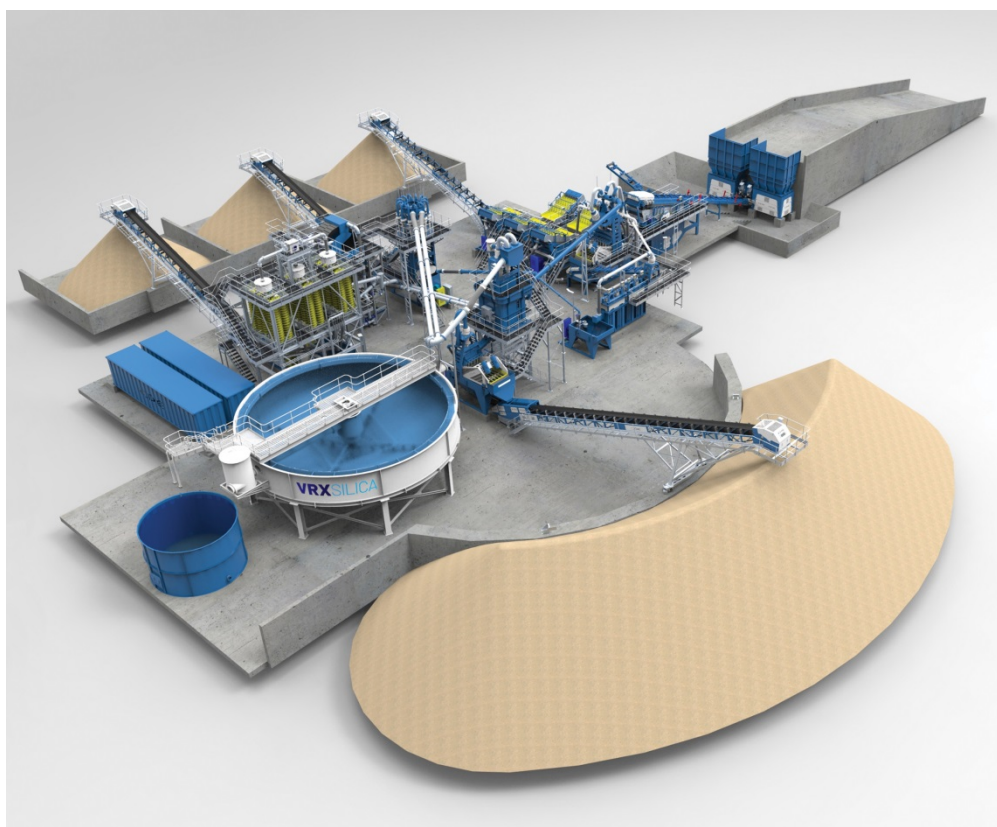


Figure 5. Computer generated image of plant design.

Three iterations of testwork have been carried out on the Arrowsmith and Muchea Projects. Significantly, the attritioning cycle has been demonstrated to be particularly effective in removing impurities from the quartz grains.

Testwork completed by VRX Silica has confirmed that the plant design for the production of a high purity silica sand product suitable for the glass-making industry is the same for each of the three projects (Arrowsmith North, Arrowsmith Central and Muchea). The process flow sheet for each plant is described below.

CDE Global has provided the Company with a cost estimate for a two million tonne per annum (Mtpa) processing plant which, due to its modular nature, is a detailed proposal and accurate to $\pm 15\%$ in pricing. Table 9 sets out a summary of this cost estimate.

Processing Plant Costs $\pm 15\%$

	CDE Quote GBP	\$AUD
Mechanical Equipment, lighting, wiring, pipework	£6,800,000	\$12,716,000
WHIM Module (optional)	£700,000	\$1,309,000
Installation & commissioning Labour	£1,100,000	\$2,057,000
Crane Hire and EWP's	£400,000	\$748,000
Freight (C.I.F Fremantle) (65 containers)	£420,000	\$785,400
Contingency (5% of mech.)	£340,000	\$635,800
Total	£9,760,000	\$18,251,200

Table 9: Summary of quote details for processing plant (exchange rate of 1GBP = 1.87AUD)

VRX Silica estimates costs for plant feeder, water supply and contingency will increase the total capital cost for a 2 Mtpa processing plant to approximately A\$25 million.

Further testwork is underway to finalise the requirements for the magnetic separation component (WHIMS). This is not anticipated to materially affect the costs.

Process

The processing plant will wash, screen and attrition sand and remove heavy minerals to create a final product for delivery to customers.

No chemicals are required for the process.

The process includes a thickener which will allow for 95% of process water to be recycled.

The process flow for the plant will be as follows:

1. An upstream process will provide a slurry feed product with solids of a maximum 2mm size, the product is classified by a series of screens that will create a coarse product (<2mm - +0.6mm) and a fine product (-0.6mm).
2. The coarse product is washed dewatered and stockpiled.
3. The finer product moves to an attrition scrubbing and washing process.
4. Finer product then moves on to a spiral bank separating the feed into heavies and lights.
5. The light product passes through a magnetic separation process.
6. Non-magnetic product moves to a counter flow classification unit (CFCU) which produces two products:
 - (a) a glass sand product (<0.6mm + 0.212mm); and
 - (b) a fines product (<0.212mm + 0.06mm) that will be sent to the coarse sand stockpile.
7. Slimes less than 75um produced by the plant will be treated through an AquaCycle thickener for process water recovery.

BFS and Project Timelines

In addition to confirming the processing plant design, the Company continues to assess various options for associated production and shipping requirements at its Arrowsmith Project (North and Central prospects) and Muchea Project with a view to maximising efficiency and minimising costs.

Consequently the Company intends to finalise bankable feasibility studies for all three projects in the September 2019 Quarter.

Project timelines are set out below.

		Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
Arrowsmith	Infill Drilling								
	Resource Update								
	BFS release								
	Permitting and Approvals								
	Construction								
	Production								
Muchea	Infill Drilling								
	Resource Update								
	BFS release								
	Permitting and Approvals								
	Construction								
	Production								

Events Subsequent

Subsequent to the quarter under review, on 16 April 2019 VRX Silica announced the Company had received strong interest for the purchase of significant tonnages of silica sand products from its Arrowsmith and Muchea Projects following the appointment of Mr Yoonil Kim as its International Sales Manager in November 2018. Mr Kim is a South Korean national with over 15 years' experience marketing and selling silica sand products to glass manufacturers and foundries across the Asia-Pacific region.

VRX Silica released its Silica Sand Product Catalogues for silica sand products capable of production from the Arrowsmith and Muchea Projects in February 2019, including two products from each of Arrowsmith and Muchea for the glassmaking industry and four products from Arrowsmith for the foundry industry.

The Company has identified numerous markets in the Asia-Pacific region and met with a number of potential offtake customers for the sale of silica sand products from the Arrowsmith and Muchea Projects. The Company will be able to commit to binding offtake agreements following the approval of Mining Permits at its silica sand projects.

To-date VRX Silica has received enquiries and expressions of interest from manufacturers and also purchasing agents for smaller shipments of silica sand product for glassmaking in the following countries:

- China (3)
- Philippines (2)
- Thailand (2)
- India (1)
- Japan (1)
- Korea (1)
- Malaysia (1)
- Taiwan (1)

The Chinese glassmaking industry is the most dominant in the Asia-Pacific region with over 270 glassmaking facilities.

Interest to-date for glassmaking quality silica sand totals 1,675,000 tonnes per annum and such interest is expected to increase as the product catalogue is further distributed. The Company has also received enquiries and expressions of interest from organisations in the foundry industry in:

- South Korea (5)
- Japan (1)
- Philippines (1)
- Taiwan (1)

The highest level of demand was from South Korea, which is the world's largest foundry market, predominately in the automobile and ship building industries. Interest to-date for foundry quality silica sand totals 888,000 tonnes per annum and, as for glassmaking silica sand, such interest is expected to increase.

Whilst these expressions of interest may not all lead to binding contracts, the Company is confident of securing adequate offtake to justify the development of its silica sand projects. Further enquiries are expected and the Company will look to progress this strong interest into binding offtake agreements before committing to funding arrangements for processing plant requirements.

Corporate

Biranup Project Option and Farm-In JV

On 15 November 2018 VRX Silica announced it had entered into an option agreement with Metalicity Limited (ASX:MCT) (**MCT**) for MCT to acquire a 40% interest in the Company's Biranup Project and a farm-in and joint venture arrangement for the balance of the project. On 13 March 2019 the Company received written notice from MCT that it has decided not to progress the proposed transaction for the Project and the option has lapsed.

Now that VRX Silica is focused on progressing its silica sand projects, the Company will seek new opportunities for a joint venture to further explore the many anomalies highlighted on the Biranup Project.

Capital Raising

On 2 April 2019 VRX Silica announced it had received commitments for a capital raising via a share placement to professional and sophisticated investors together with existing shareholders to raise approximately \$2.26 million before costs (**Placement**).

The Placement was under the Company's current placement capacity under Listing Rule 7.1 and resulted in the issue of 37,666,666 new fully paid ordinary shares at an issue price of \$0.06 per share. VRX Silica directors committed to subscribe for an aggregate of 4,333,333 shares representing approximately \$260,000, subject to shareholder approval. A general meeting of shareholders has been convened for 30 May 2019 to seek approval for the issue of shares to those VRX Silica directors.

Funds raised under the Placement have been received and will be allocated to completion of feasibility studies and progression of environmental approvals and mining lease applications at the Company's Arrowsmith and Muchea Projects. A portion of the net Placement proceeds will be directed towards exploration activities at the Boyatup Project and Warrawanda HPQ Project and for general working capital.

Hartleys Limited (AFSL No 230052) acted as lead manager to the Placement.

Interests in Mining Tenements

WESTERN AUSTRALIA

Arrowsmith Project – Silica

Tenement	Status	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
E70/4986	Granted	100	-	-	100
E70/4987	Granted	100	-	-	100
E70/5027	Granted	100	-	-	100
E70/5109	Granted	100	-	-	100
ELA70/5197	Application	-	-	-	-
MLA/1389	Application	-	-	-	-
MLA/1392	Application	-	-	-	-

Muchea Project – Silica

Tenement	Status	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
E70/4886	Granted	-	-	100	100
ELA70/5157	Application	-	-	-	-
MLA/1390	Application	-	-	-	-

Boyatup Project – Silica

Tenement	Status	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
* E69/3560	Granted	-	-	100	100
ELA70/3668	Application	-	-	-	-

- Tenement in the process of being transferred

Warrawanda Project - Nickel

Tenement	Status	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
E52/2372	Granted	100	-	-	100
E52/3447	Granted	100	-	-	100

Biranup Project – Base Metals/Gold

Tenement	Status	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
E39/1828	Granted	100	-	-	100
E38/3191	Granted	100	-	-	100
E39/2000	Granted	100	-	-	100
E39/2001	Granted	100	-	-	100
E39/2003	Granted	100	-	-	100
E38/3294	Granted	100	-	-	100