



WA Silica Sand Projects

Ventnor Resources Limited

Bruce Maluish, Managing Director

May 2018

Disclaimer

This summary was prepared with due care and attention and is current at the date of the presentation.

The proposed programs are generic and may differ from project to project.

Actual programs may materially vary from any proposals (where applicable) in this presentation.

Before making any investment in an exploration project, all investors should consider the appropriateness of that investment in light of their individual investment objectives and financial situation.

Exploration is subject to risks associated with location, commodity, geology and geography.

Competent Person's Statement

- *The information in this release that relates to exploration results and exploration targets is based on, and fairly represents, information compiled by Mr David Reid who is a Member of the Australian Institute of Geoscientists (MAIG). Mr Reid is a contractor to Ventnor Resources Limited. Mr Reid has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the "2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves."*

Mr Reid consents to the inclusion in this release of the matters based on information provided by him and in the form and context in which they appear.

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The world is facing a global sand crisis



Demand for sand leads to global ecological crisis
Alexandra Popescu on 8 February 2018

News - Middle East Documentaries - Shows - Investigations

FEATURE / BUSINESS & ECONOMY

Running out of sand: in numbers

the depletion of one the world's most sought-after the 21st century: sand.

TOPIC BELT AND ROAD INITIATIVE

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THE WORLD IS RUNNING OUT OF A RESOURCE, AND IT'S NOT OIL

of sand – a crucial resource once thought endless – could sink infrastructure projects, including Belt and Road Initiative

A shore thing

An improbable global shortage: sand

Thanks to booming construction activity in Asia, sand is in high demand



Global Shortage of Key Resource Could Doom Key Asian Infrastructure Projects

ENVIRONMENT 03:40 07.01.2018 (updated 07:18 07.01.2018) Get short URL

In the city of Kampot in southern Cambodia, the extraction of sand from an estuary on the Praek Tuek Chhu river is increasing and sand extraction is so common in Asia currently that the continent may deplete all of its sand in the not-too-distant future.

Real Estate News / Latest Real Estate News / Industry

Sand crisis hits construction workers hard in Madurai

What has made things worse is that M-sand (manufactured sand), the alternative prescribed for river sand, is available in quantity and its quality is also far from desirable.

THN | January 23, 2018, 12:00 IST

The world is facing a global sand crisis

September 8, 2017 6:22am AEST

Sand for use in hydraulic fracturing operations at a processing plant in Chippewa Falls, Wisconsin in 2011. AP Photo/Steve Karnowski, Author provided

When people picture sand spread across idyllic beaches and endless deserts, they understandably think of it as an infinite resource. But as we discuss in a [just-published perspective](#) in the journal Science, over-exploitation of global supplies of sand is damaging the environment, endangering communities, causing shortages and promoting violent conflict.

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SPECIAL COVERAGE

Sand mining: Growing pains trade

3

Unchecked sand mining, with more sand removed each year than what can be replaced over the course of centuries, is unsustainable

Silica Sand Use



Construction Sand

Concrete

Glassmaking

Float, Containers, Architectural, Thin Film

Metal Casting / Foundry

Automobile parts

Oil/gas Well Stimulation

Frac sand/proppant

Metallurgical

Ferrous and Non-ferrous Alloys

Paint and Coatings

Brightness and durability

Chemical Production

Sodium silicate, Silicon gels

Ceramics and Refractories

High temp resistance

Filtration

Water production

Recreational

Inert growing media, Golf bunkers

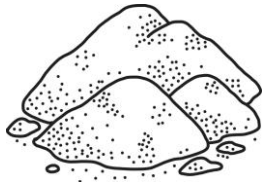
Ventnor's silica sand strategy

Identify and delineate large scale silica sand resources close to infrastructure.

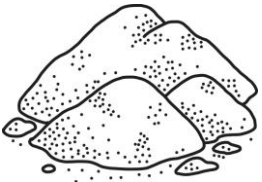
Develop plans for the mining and export of high quality silica sands

Explore opportunities for further processing to value-add

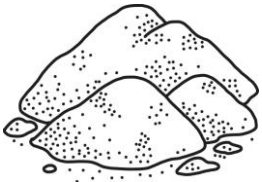
Silica Sand Markets



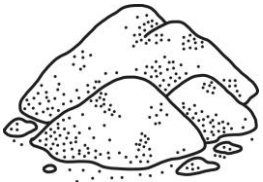
Construction sand



Silica sand for glassmaking



Foundry sand



Frac sand proppant



Market Outlook



Estimated demand for silica sand by region:

Region	% of Global demand
Asia Pacific	47%
North America	20%
Western Europe	16%
Eastern Europe	8%
Africa/Middle East	5%
Central and South America	4%

Source: Freedonia



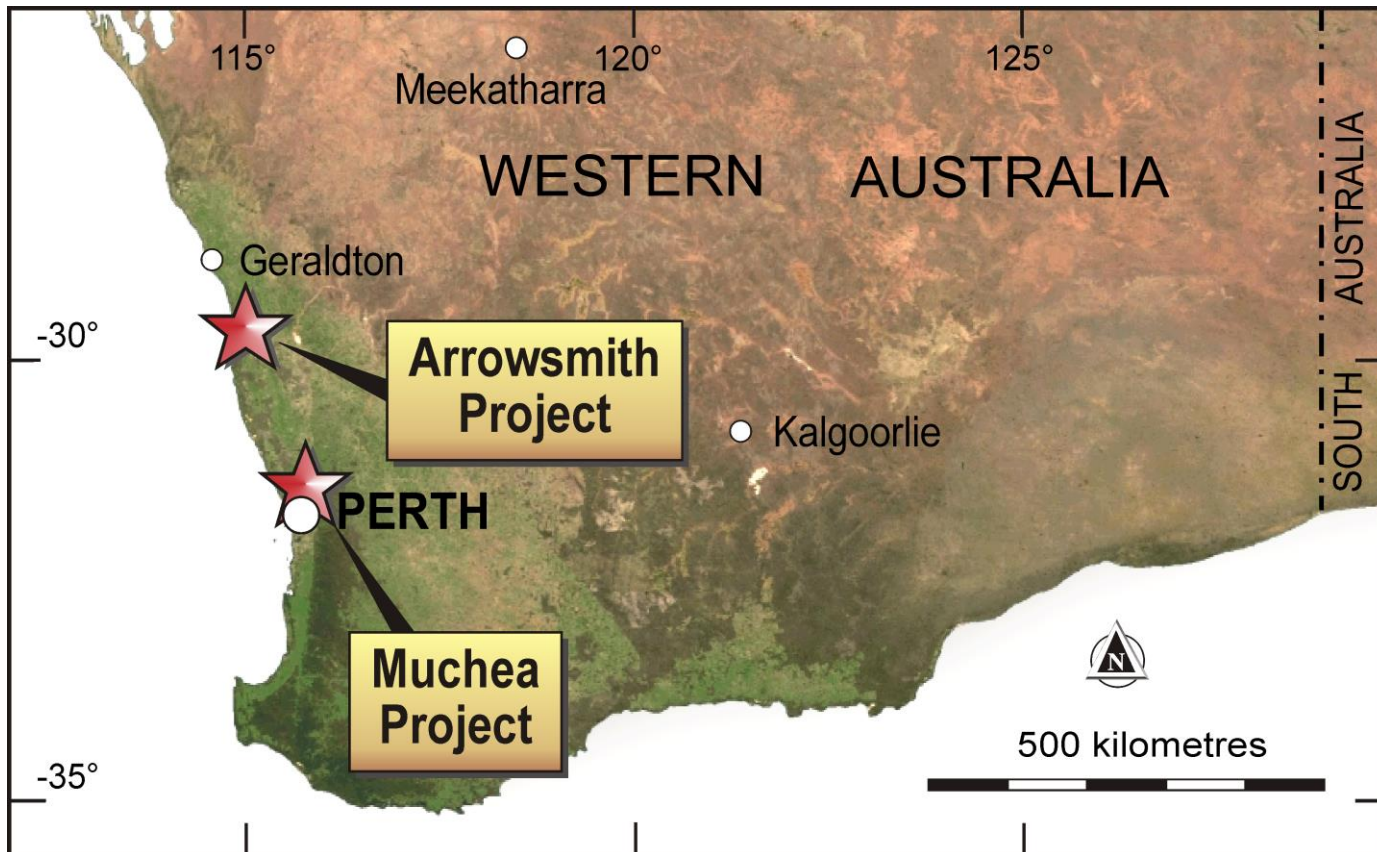
WA Silica Sands Projects

1. Muchea

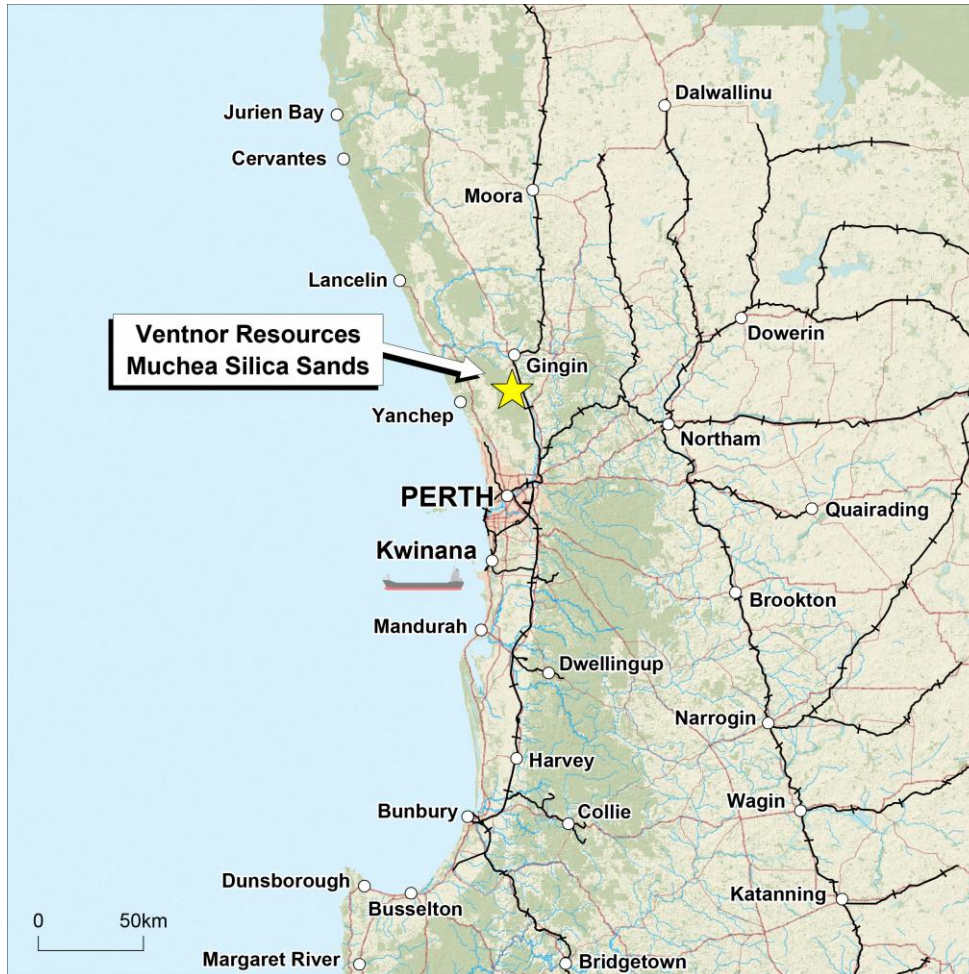
70kms north of Perth

2. Arrowsmith

370kms north of Perth

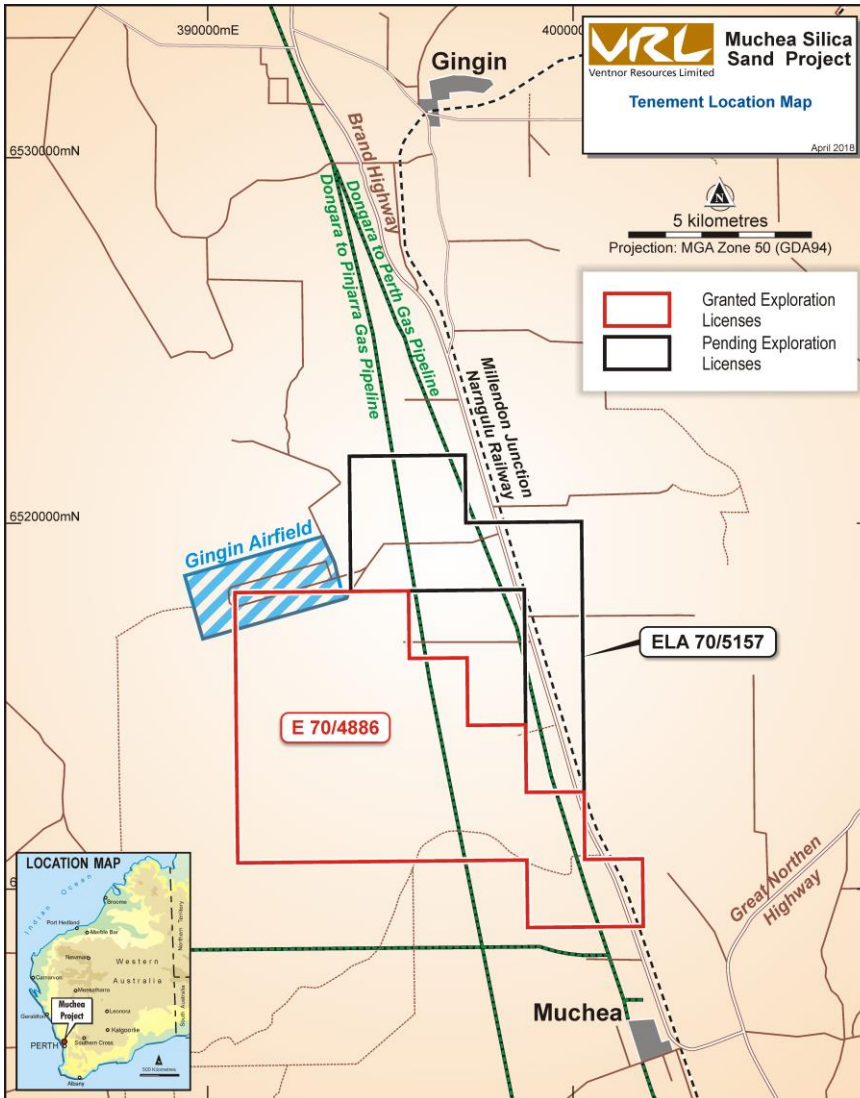


Muchea (100% Option to Acquire)



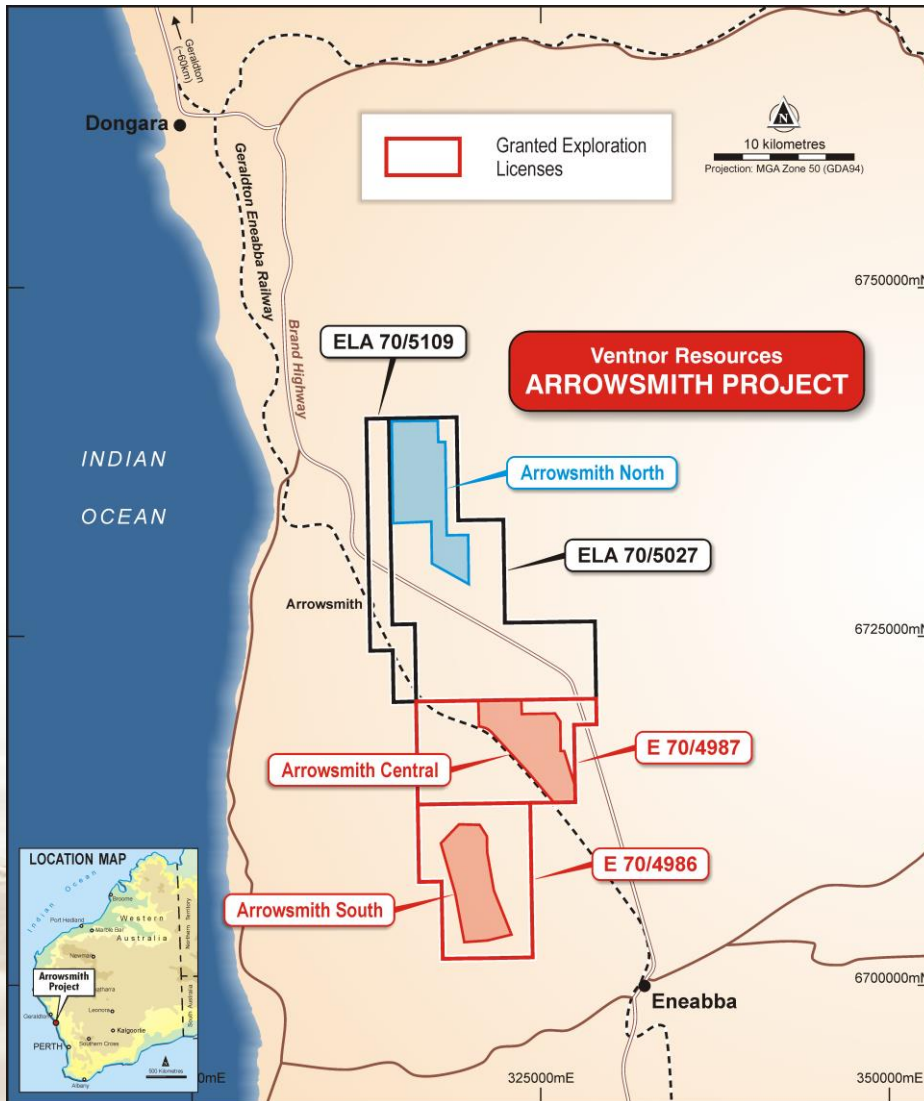
- Significant high grade Silica Sand deposit
 - 70 km NNE of Perth
 - 14 km north of Muchea
- Transport logistics - rail products to Kwinana Port for export
- Inland from Brand Highway
- Granted tenure - E 70/4886

Muchea



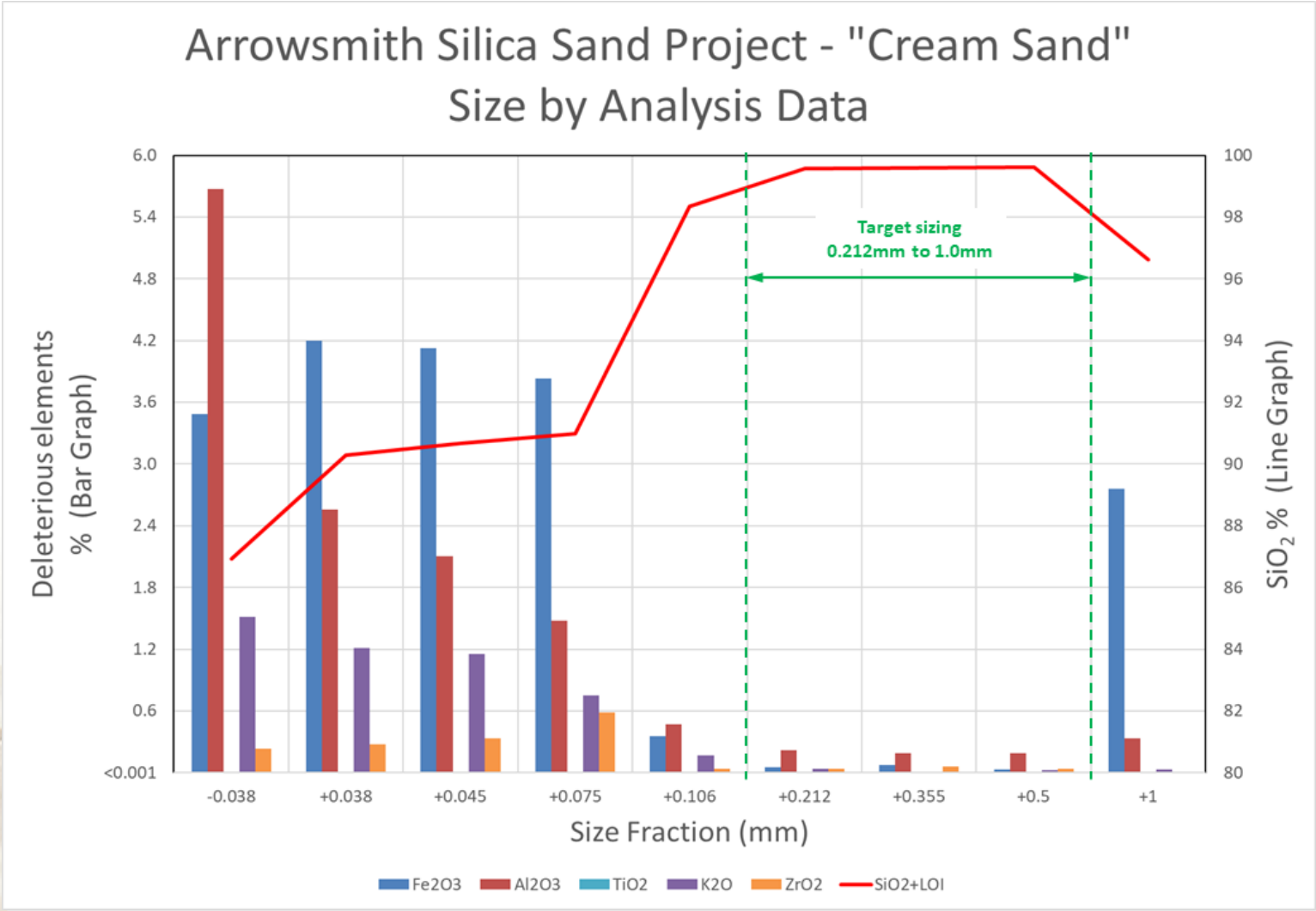
- Acquired option over the tenement
- Due diligence drilling indicated high-grade SiO₂
- Processing can upgrade sand to specialised glass quality
- Current logistics under-utilised with significant interest from operators

Arrowsmith (VRX 100%)

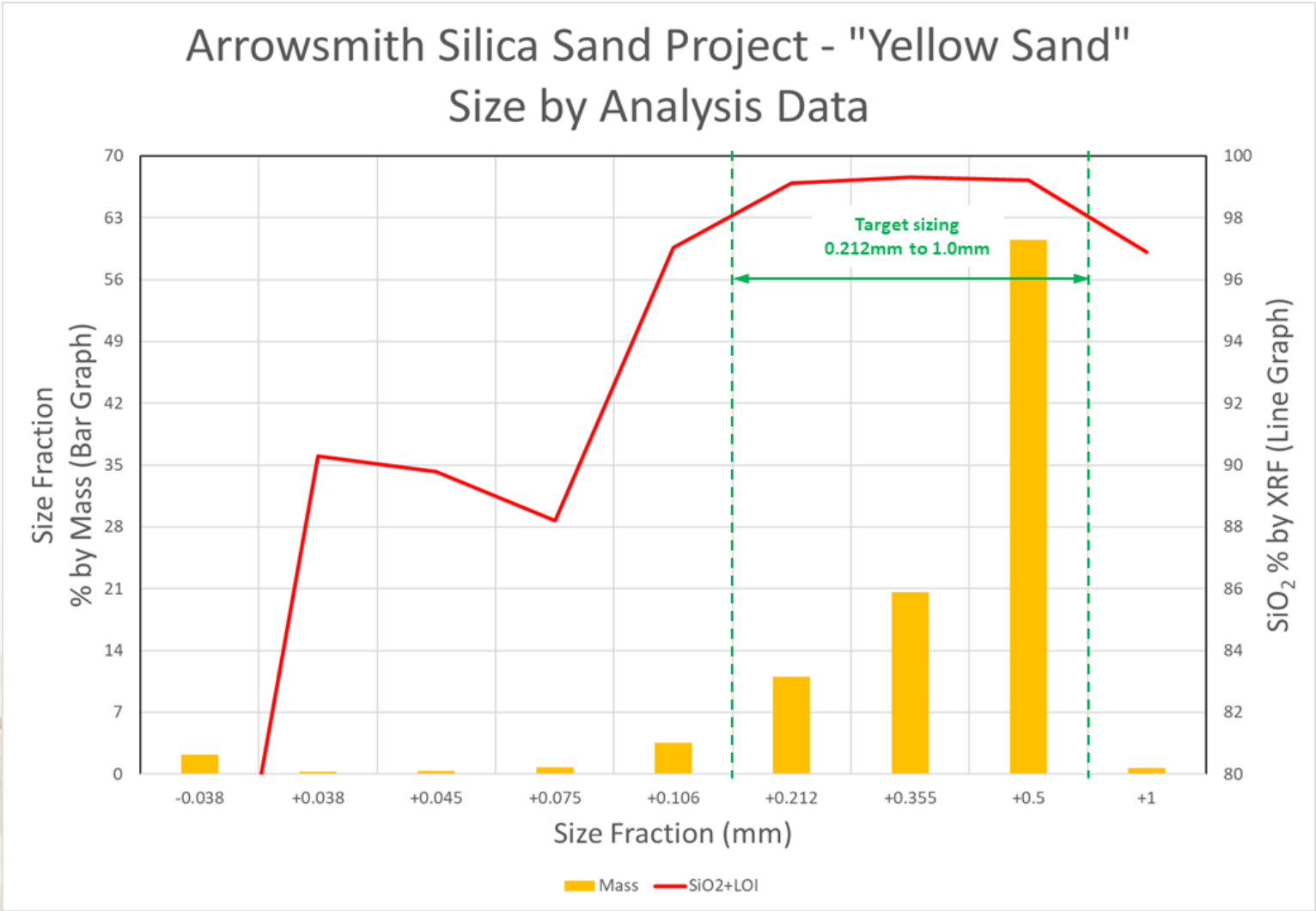


- South of Geraldton with rail connections to Geraldton Port
- Large-scale potential
- Testwork confirms glass-making quality (+99.5% SiO₂)
- Low capital intensity and low environmental impact mining propositions

Arrowsmith North Upgrade



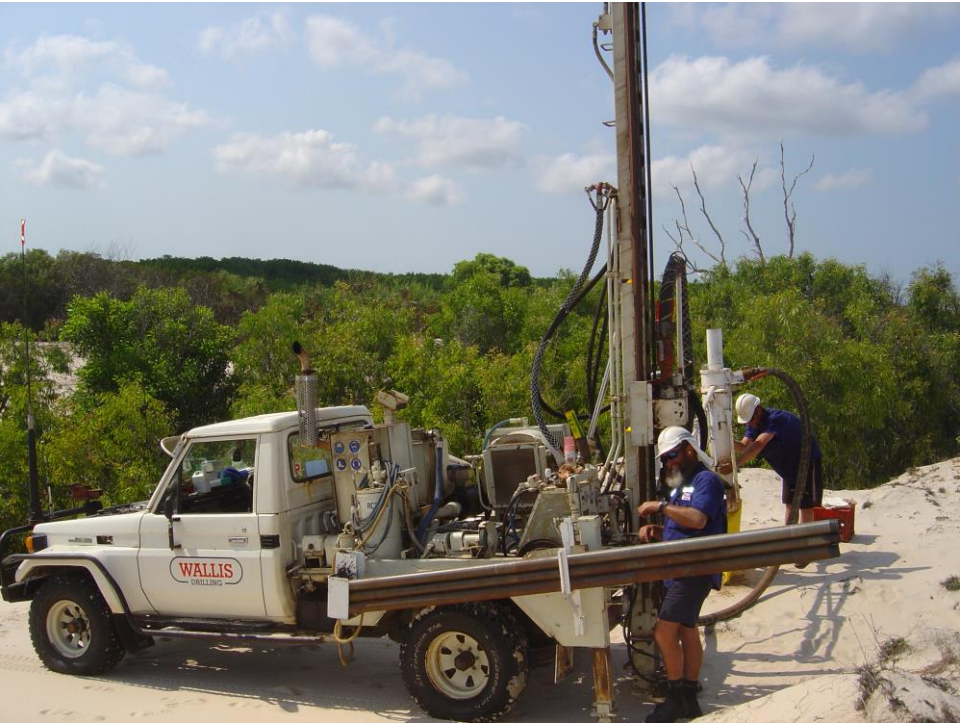
Arrowsmith North Upgrade



Geraldton Port



Proposed Exploration Program



Drilling using 4WD-mounted AC rig and hand held auger

Proposed Exploration Program

- Exploration to date is adequate for Inferred Resources
- Closer spaced drilling required to 400m x 400m for an Indicated Resource
- Very low cost shallow drilling (10-15m) in free running sand
- Sand 2-3% moisture
- ISBD determination completed
- Significant testwork programs either completed or underway
- All exploration above the water table
- Mining will require no dewatering



Development Program

- First Pass drilling by AC and hand auger completed on both projects
- Bulk testwork will determine potential products and required processing equipment
- *Testwork will also produce final quality samples to send to potential importers in India, Vietnam, Thailand, Taiwan, China and Korea*
- Processing by off-the-shelf plant
- Finalise logistics chain for access to rail and port facilities to export sand from Arrowsmith through Geraldton and from Muchea through Kwinana
- Potential for very low cost DSO capital requirements for construction sand from Arrowsmith
- Environmental studies underway
- Scoping study to be completed before end of 2018



Investment Considerations

**EMERGING
AUSTRALIAN
STRATEGIC
SILICA SAND
PRODUCER**

**OUTSTANDING
PROJECT
ECONOMICS
AND LOGISTICS**

**IDEALLY PLACED
TO CAPITALISE
ON ROBUST
MARKET
OUTLOOK AND
DEMAND**

**POTENTIAL
LARGE SAND
RESOURCES AND
PRODUCTION**

**RAPID PATHWAY
TO FINANCING
AND
PRODUCTION**

**OTHER
PROSPECTS
UNDER
INVESTIGATION**

Corporate & Capital Summary

Share Code (ASX)	VRX
Shares on Issue	251.3m
Shares – Fully Diluted	257.3m
ASX 52 week high/low	\$0.078 / \$0.009
Cash	\$0.8m
Debt	Nil
Market Capitalisation	\$16.8m

Directors

Paul Boyatzis

Non-Executive Chairman

Bruce Maluish

Managing Director

Peter Pawlowitsch

Non-Executive Director

