



Ventnor Resources Limited

20 September 2018

ASX ANNOUNCEMENT

Silica Sand Bulk Testwork Results

Highlights:

- **Bulk testwork completed on all projects**
- **Testwork has confirmed high-grade products with samples sent to potential customers**
- **Third iteration testwork to confirm circuit design to enable engineering**
- **Equipment list and cost estimates by end of year**

Ventnor Resources Limited (**Ventnor** or **Company**) (ASX: VRX) is pleased to announce positive bulk sampling results from its Arrowsmith Silica Sand Project, located 270km north of Perth, and Muchea Silica Sand Project, 50km north of Perth.

The results of the testwork have confirmed that Arrowsmith North and Arrowsmith Central, part of the Arrowsmith Project, and Muchea can produce sought-after product for glassmaking.

Ventnor had collected a bulk sample of 300kg from each of its four granted tenements across the Arrowsmith and Muchea projects for bulk metallurgical testwork.

The testwork program was developed from laboratory scale testwork that had been undertaken by Nagrom in Perth. The initial results justified a further program on a larger sample.

The bulk samples were sent to a specialist sand metallurgical testing laboratory, CDE Global.

The intention of this program was to gain a better understanding of the sand characteristics when subjected to standard processing techniques.

A significant result of the testwork was the apparent effect of high-density attritioning and also the recovery of magnetic grains by a high-intensity magnetic separator on the quality of the final product.

Results from this testwork will also support the Mineral Resource Estimates for reporting under the JORC 2012 code.

Ventnor has engaged experienced geological consultancy CSA Global to undertake the Maiden Resource Estimate for Arrowsmith North. The Estimate is expected later this month.

Ventnor Managing Director Bruce Maluish said: *“These testwork results not only confirm our expectations for glassmaking quality sand at Arrowsmith and higher-quality sand at Muchea but also justify a further iteration of testwork to investigate the potential for even higher-grade and higher-value products.”*

This testwork program has enabled the Company to send samples to prospective customers. The third iteration of bulk testwork is under way, with results expected in October 2018.

ASX: VRX

Capital Structure

Shares on Issue:
365 million

Unlisted Options:
46.25 million

Corporate Directory

Paul Boyatzis

Non-Executive
Chairman

Bruce Maluish

Managing Director

Peter Pawlowitsch

Non-Executive Director

John Geary

Company Secretary

Company Projects

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

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

Biranup base metals
and gold Project
adjacent to the
Tropicana Gold Mine,
WA.

Warrawanda Nickel
Project south of
Newman, WA.

The Company is actively
assessing other projects
in Australia.

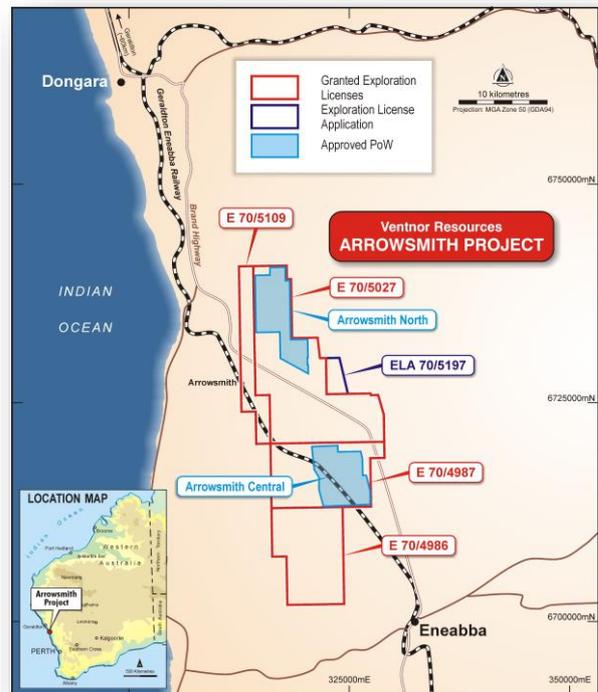
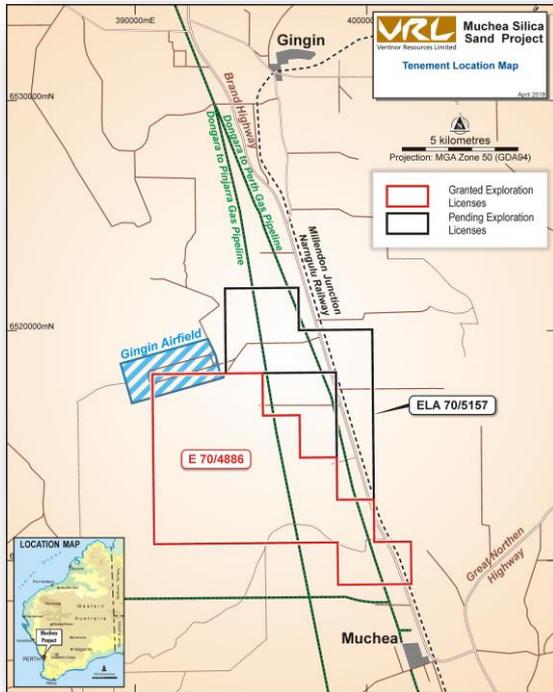
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ABN 59 142 014 873

Detailed Information

Ventnor has two silica sand projects – at Arrowsmith and Muchea, 270km and 50km north of Perth, respectively. See locations below:

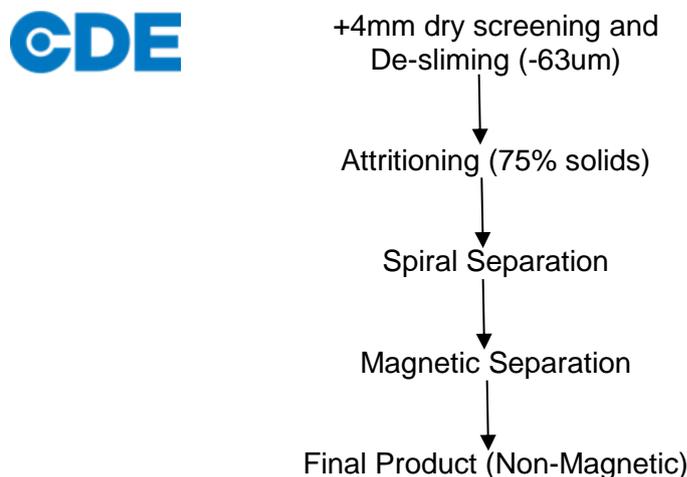


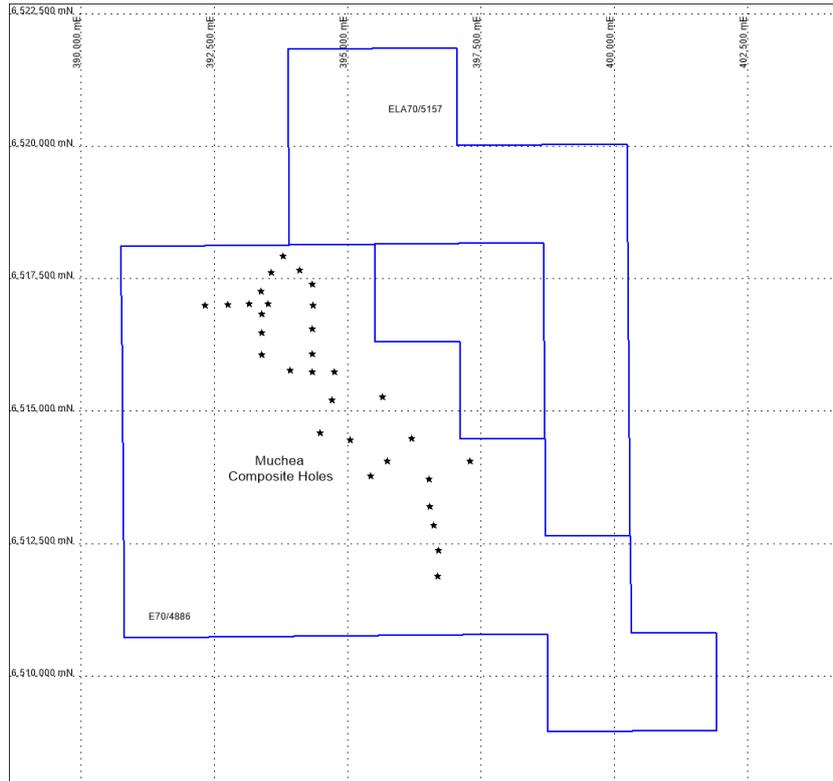
Muchea (Left) and Arrowsmith (Right) Silica Sand Projects

Ventnor has completed bulk sampling at both projects – air core drilling and hand auger at Muchea, and hand auger at Arrowsmith – as announced to ASX on 30 July 2018 “*Muchea Acquisition and Capital Raising*” and 30 August 2018 “*Arrowsmith Silica Sand Project*”.

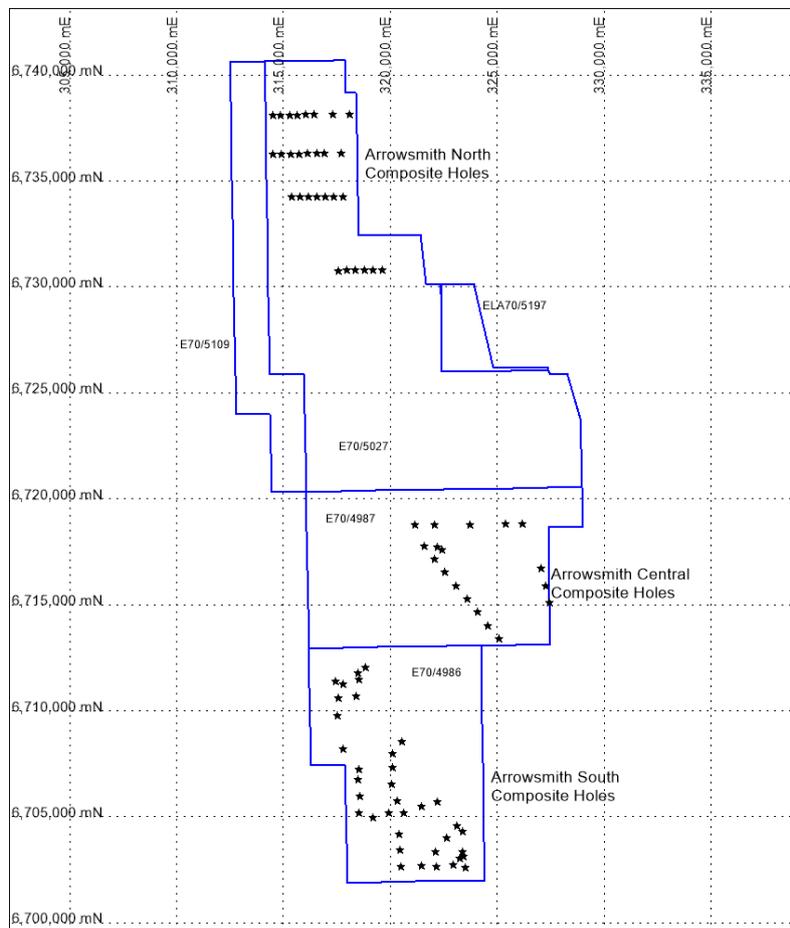
The drill samples were used to generate four bulk composites for metallurgical testwork for Muchea (air core drilling only sampling), Arrowsmith North, Arrowsmith Central and Arrowsmith South (hand auger sampling), location maps showing the location of the composites are on the following page, and drill hole locations tabulated in Appendix 1.

The 4 x 300kg composites were sent to the CDE Global Testwork Facility in Cookstown, Northern Ireland, and were tested using the following flowsheet:





Muhea bulk composite drill hole locations



Arrowsmith bulk composite drill hole locations

The table below shows the average calculated composite grade from the drilling assays for each project area;

Project	No. Samples in Composite	Al ₂ O ₃	CaO	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	TiO ₂	LOI _{1000C}	SiO ₂ Calc.	SiO ₂ +LOI
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Muchea	163	729	6	285	64	36	9	14	970	0.22	99.57	99.79
Arrowsmith North	120	9,081	33	3,290	960	107	20	90	1,648	0.43	98.04	98.47
Arrowsmith Central	58	10,992	92	2,711	2,582	107	64	208	2,487	0.42	97.65	98.07
Arrowsmith South	104	26,117	322	5,861	6,669	259	41	532	2,824	0.85	94.88	95.73

The table below shows the 4Acid ICP assay analysis for the Raw Material and Final Product (Non-Magnetic) for each composite;

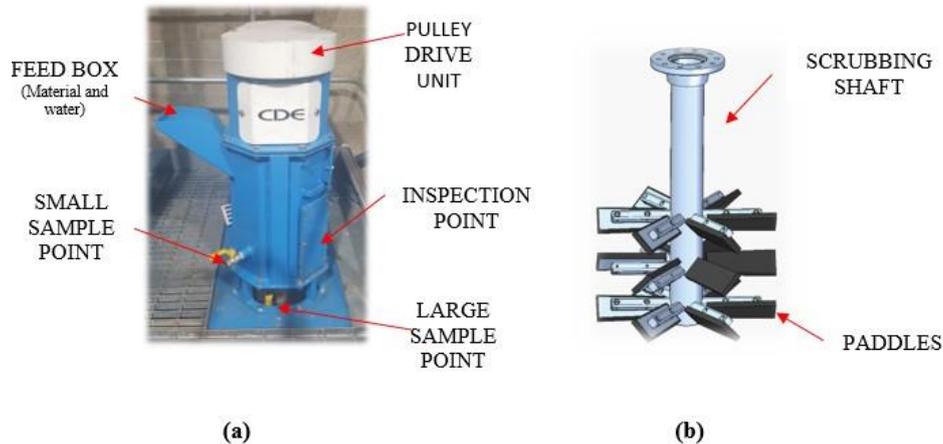
CDE Global – Bulk Testwork Results

SAMPLE MATERIAL	SAMPLE DESCRIPTION	Al ₂ O ₃	CaO	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	TiO ₂	LOI _{1000C}	SiO ₂ Calc.	SiO ₂ + LOI
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MUCHEA	Raw Material	562	39	175	54	20	4	35	414	0.23	99.64	99.87
	Non-magnetic	262	49	68	38	12	1	21	179	0.10	99.84	99.94
ARROWSMITH NORTH	Raw Material	11,313	104	3,885	881	100	17	88	1,096	0.58	97.67	98.25
	Non-magnetic	1,797	46	414	276	20	2	33	198	0.09	99.63	99.72
ARROWSMITH CENTRAL	Raw Material	12,683	153	2,452	3,270	93	23	228	1,889	0.57	97.35	97.92
	Non-magnetic	2,566	68	341	785	22	2	69	267	0.13	99.46	99.59
ARROWSMITH SOUTH	Raw Material	15,066	194	3,603	3,822	126	36	262	2,043	0.62	96.86	97.48
	Non-magnetic	7,311	149	470	3,847	32	2	289	193	0.15	98.62	98.77

These results clearly demonstrate that glass-quality silica sand product (+99.5% SiO₂) can be produced from all project areas, with the exception of Arrowsmith South.

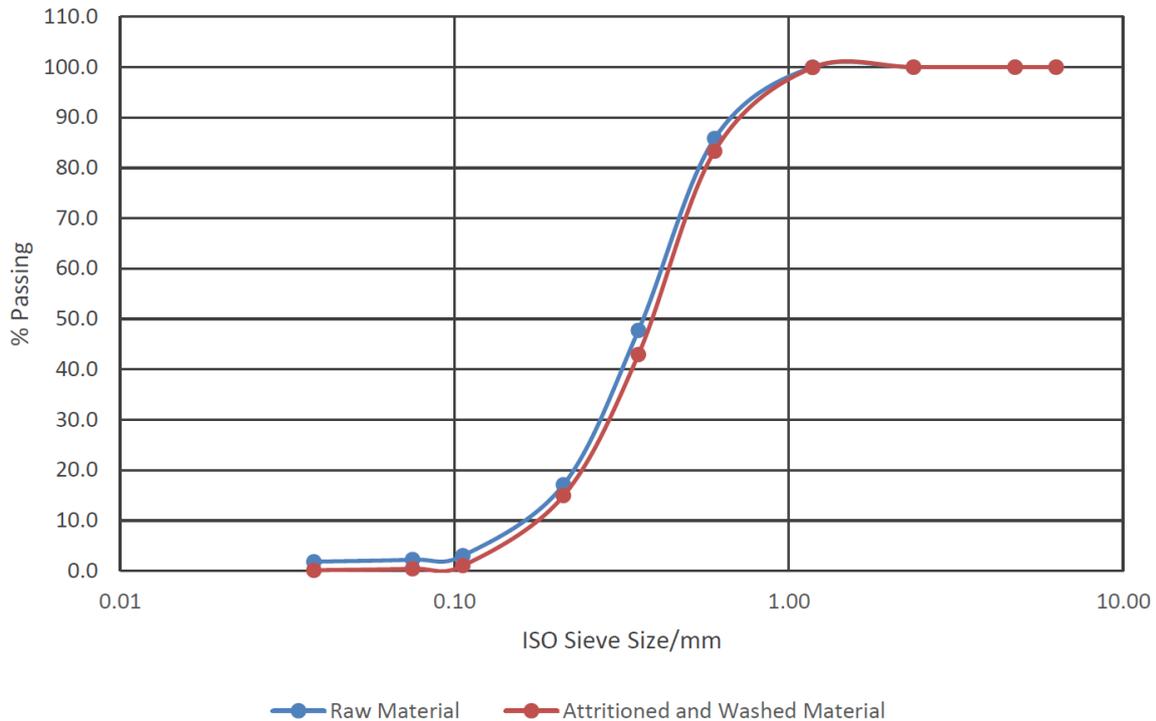
The silica sand from Muchea will produce a high-quality product with very low impurities, particularly iron.

The testwork completed by CDE Global has highlighted the potential for further improvements by utilising specialist processing equipment in the attritioning and magnetic separation steps. The attrition test uses a high-speed shaft with paddles (see image below) at a high slurry density of 75% solids to liberate fine particles.

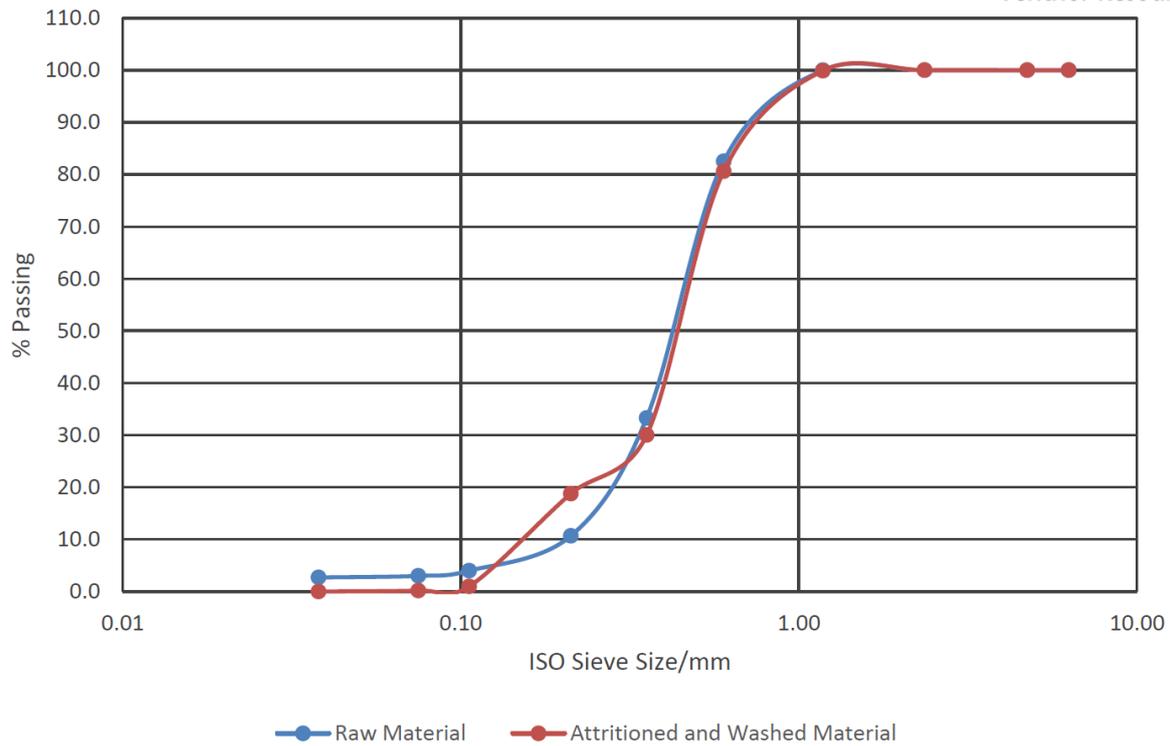


CDE Global Lab scale attrition cell

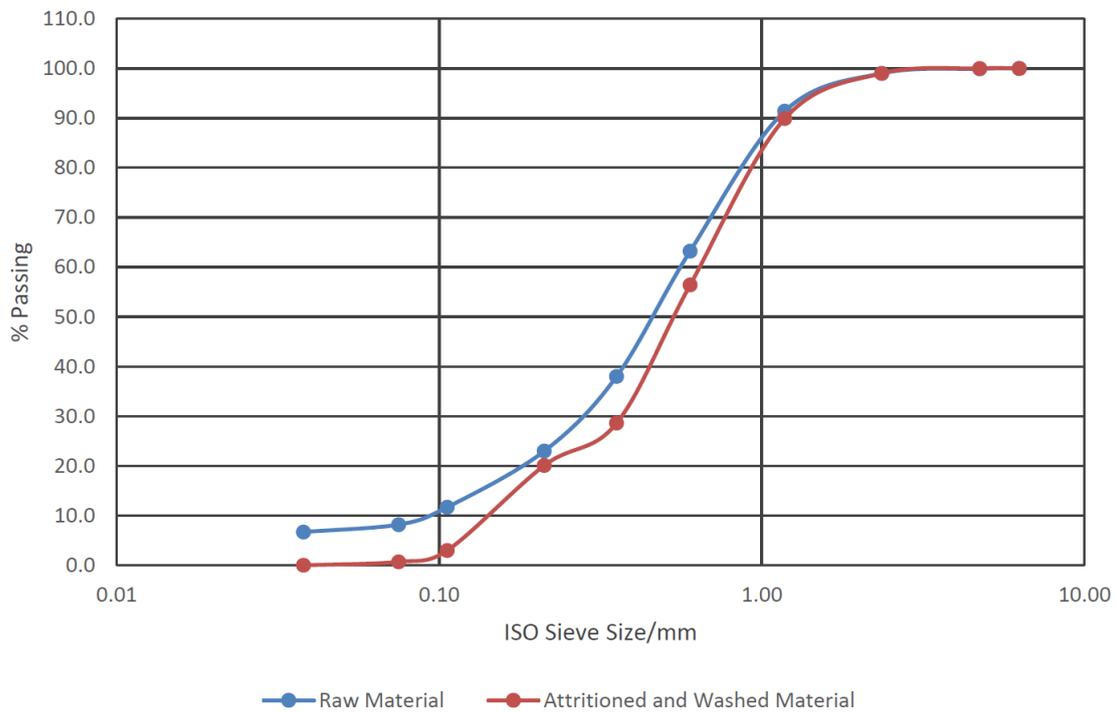
The particle size distribution charts (PSD), below, for the 4 Projects areas show the effect of attritioning at high densities with a high-energy attritioning cell.



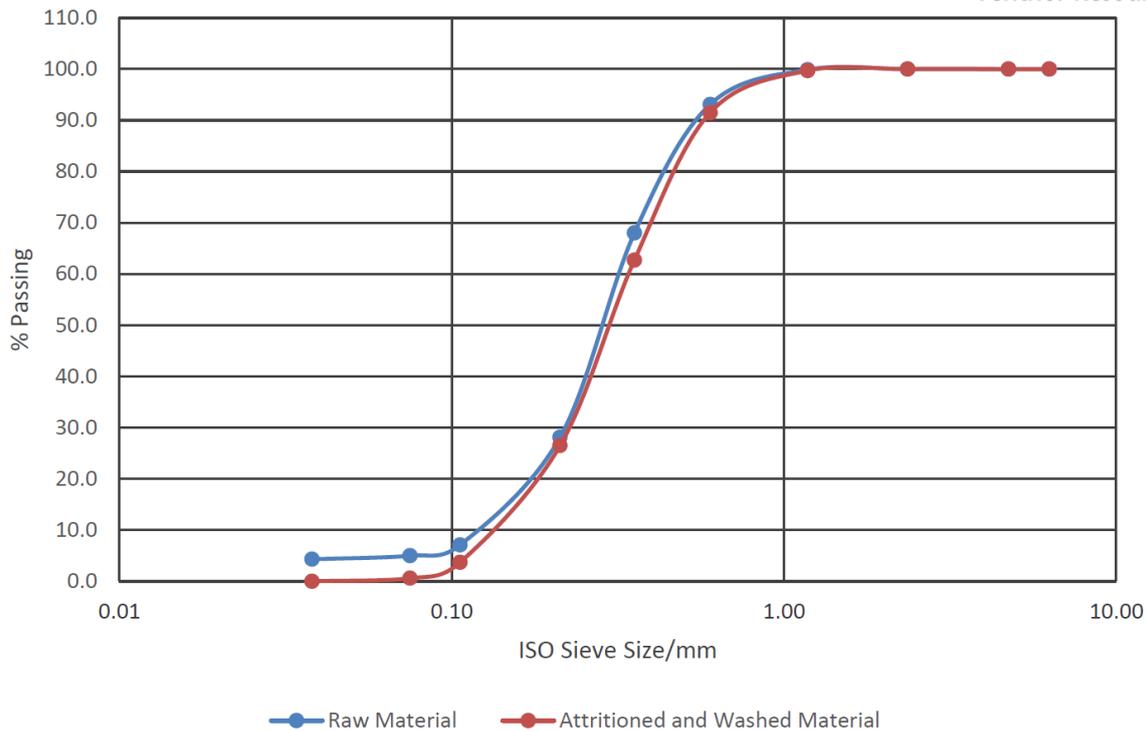
PSD comparison of Muchea raw material Vs attritioned and washed sample



PSD comparison of Arrowsmith North raw material Vs attritioned and washed sample



PSD comparison of Arrowsmith Central raw material Vs attritioned and washed sample



PSD comparison of Arrowsmith South raw material Vs attritioned and washed sample

The magnetic separation step involved pumping a slurry through a magnetised matrix “Hi Intensity Magnetic Filter”, which separates the feed into three distinct fractions: magnetics, middlings and non-magnetics, dependant on the magnetic susceptibility of the individual sand grains.

The table below shows the results of the magnetic separation tests for the 4 project areas. The results demonstrate that a HI Filter can very effectively separate out the pure quartz grains from those which contain deleterious elements.

PROCESS STAGE	SAMPLE DESCRIPTION	Mass	Al ₂ O ₃	CaO	Cr ₂ O ₃	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	TiO ₂	LOI _{1000C}	SiO ₂ + LOI
		%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
Muchea Magnetic Separation	Magnetics	0.41%	1,245	175	14	2,521	196	128	57	117	3,756	0.21	99.18
	Middlings	7.31%	335	50	2	90	51	14	1	30	207	0.05	99.92
	Non magnetic	92.27%	262	49	2	68	38	12	1	21	179	0.10	99.94
Arrowsmith North Magnetic Separation	Magnetics	0.63%	5,069	403	75	15,456	904	518	433	126	22,668	0.39	95.43
	Mids	9.33%	1,762	48	3	453	238	22	2	36	255	0.10	99.72
	Non magnetic	90.04%	1,797	46	3	414	276	20	2	33	198	0.09	99.72
Arrowsmith Central Magnetic Separation	Magnetics	0.71%	16,006	424	419	44,243	1,379	471	834	141	36,954	1.08	89.91
	Middlings	11.24%	2,863	71	5	749	827	31	7	74	676	0.18	99.47
	Non magnetic	88.06%	2,566	68	3	341	785	22	2	69	267	0.13	99.59
Arrowsmith South Magnetic Separation	Magnetics	0.70%	15,696	1,873	254	43,891	4,046	1,553	1,301	405	54,561	0.74	87.64
	Mids	8.26%	6,104	135	5	624	2,972	45	5	225	476	0.22	98.94
	Non magnetic	91.04%	7,311	149	4	470	3,847	32	2	289	193	0.15	98.77

Future Work

The results of the CDE Global testwork has confirmed that the Muchea, Arrowsmith North and Arrowsmith Central projects can produce a sought-after product for glassmaking. This now enables a JORC compliant Mineral Resource to be estimated for these projects. CSA Global has been engaged to commence work on the Arrowsmith North Mineral Resource estimate, which will be completed later this month.

The Arrowsmith North Mineral Resource Estimate will be followed by the Mineral Resource Estimate at Muchea, to be completed in the December quarter.

A further iteration of testwork has been commenced by CDE Global using a refined flow sheet to incorporate additional attritioning to further improve the quality of the potential final products for Muchea, Arrowsmith North and Arrowsmith Central. The proposed testwork flow sheet is available in Appendix 2. The results of this work are expected to be available early in the December quarter. Process circuit design and engineering will then follow, allowing for capital cost estimates to be generated before the end of 2018.

Further information:

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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 an employee of 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.

About Ventnor

Ventnor Resources Ltd (Ventnor) (ASX: VRX) has significant silica sand projects including four granted exploration licences and one application pending over the Arrowsmith Silica Sands Project, located 270km north of Perth, Western Australia. Initial testwork has confirmed that the projects' sand can be upgraded to glassmaking quality. Further work is under way to enable feasibility studies to be completed.

The Company has also completed the acquisition of the Muchea Silica Sand Project, 50km north of Perth, which complements the Arrowsmith Silica Sands Project with additional significant silica sand resources. Further work is also under way at this project to enable a feasibility study to be completed.

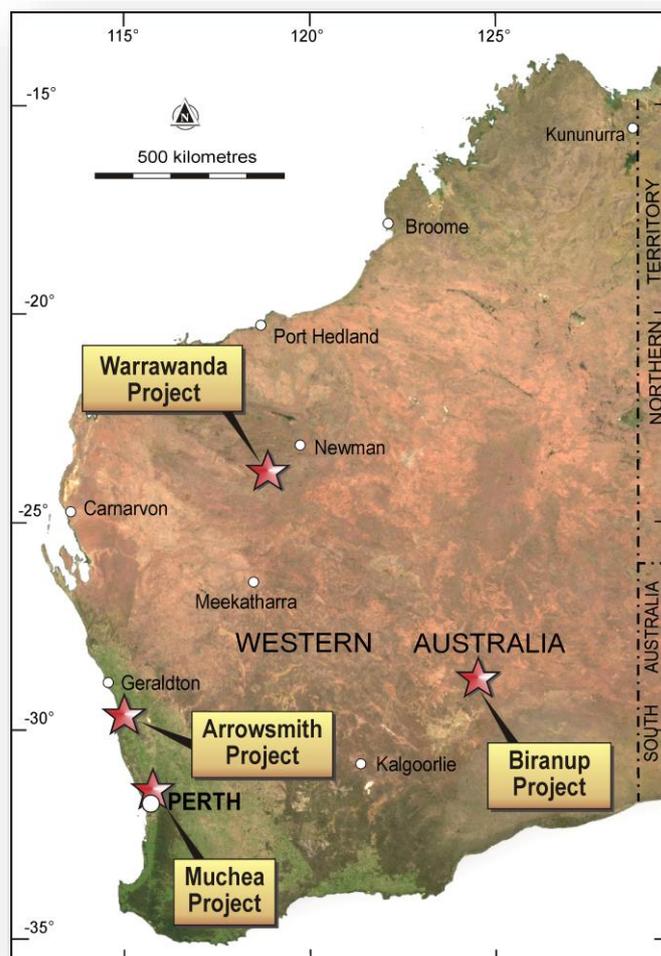
Ventnor also granted tenements adjacent to the Tropicana Gold Mine in Western Australia's Goldfields that are prospective for gold and base metals (Biranup Project), with prospects identified following an extensive review of historical data.

Also in Western Australia, 40km south of Newman, is Ventnor's Warrawanda Nickel Project, which is prospective for nickel sulphides.

Proven Management

The Ventnor directors have extensive experience in mineral exploration and production and in the management of publicly listed mining and exploration companies.

Project Locations



Appendix 1 – Bulk Composite Drill Hole Locations

Area	Hole_ID	MGA East	MGA Nth	RL
Arrowsmith Central	AC001	6718810	326157	66
Arrowsmith Central	AC002	6718806	325403	62
Arrowsmith Central	AC004	6718801	323714	58
Arrowsmith Central	AC006	6718796	322039	54
Arrowsmith Central	AC007	6718788	321130	51
Arrowsmith Central	AC008	6717779	321568	53
Arrowsmith Central	AC009	6717752	322193	54
Arrowsmith Central	AC010	6717622	322397	54
Arrowsmith Central	AC011	6717186	322052	52
Arrowsmith Central	AC012	6716544	322559	52
Arrowsmith Central	AC013	6715908	323068	54
Arrowsmith Central	AC014	6715291	323573	54
Arrowsmith Central	AC015	6714668	324066	55
Arrowsmith Central	AC016	6714039	324567	55
Arrowsmith Central	AC017	6713406	325085	54
Arrowsmith Central	AC018	6716735	327054	64
Arrowsmith Central	AC019	6715910	327247	63
Arrowsmith Central	AC020	6715126	327430	62
Arrowsmith North	AN001	6730807	319594	51
Arrowsmith North	AN002	6730800	319173	52
Arrowsmith North	AN003	6730793	318763	49
Arrowsmith North	AN004	6730785	318344	42
Arrowsmith North	AN005	6730784	317953	38
Arrowsmith North	AN006	6730775	317537	35
Arrowsmith North	AN020	6734273	317762	41
Arrowsmith North	AN021	6734270	317339	38
Arrowsmith North	AN022	6734269	316933	47
Arrowsmith North	AN023	6734266	316540	47
Arrowsmith North	AN024	6734266	316145	47
Arrowsmith North	AN025	6734268	315764	40
Arrowsmith North	AN026	6734267	315354	48
Arrowsmith North	AN031	6736324	317699	36
Arrowsmith North	AN032	6736308	316909	36
Arrowsmith North	AN033	6736302	316565	41
Arrowsmith North	AN034	6736294	316125	47
Arrowsmith North	AN035	6736284	315716	43
Arrowsmith North	AN036	6736276	315310	47
Arrowsmith North	AN037	6736268	314900	40
Arrowsmith North	AN038	6736261	314518	36
Arrowsmith North	AN045	6738166	318080	35
Arrowsmith North	AN046	6738144	317282	35
Arrowsmith North	AN047	6738144	316440	37
Arrowsmith North	AN048	6738140	316007	44



Arrowsmith North	AN049	6738121	315634	42
Arrowsmith North	AN050	6738115	315289	37
Arrowsmith North	AN051	6738111	314864	39
Arrowsmith North	AN052	6738108	314477	34
Arrowsmith South	AS001	6712067	318822	35
Arrowsmith South	AS002	6711770	318472	34
Arrowsmith South	AS003	6711248	317758	35
Arrowsmith South	AS004	6711380	317417	33
Arrowsmith South	AS005	6710593	317547	32
Arrowsmith South	AS006	6709797	317515	32
Arrowsmith South	AS007	6708221	317794	36
Arrowsmith South	AS008	6705195	320632	68
Arrowsmith South	AS009	6705475	321451	45
Arrowsmith South	AS010	6705732	322206	49
Arrowsmith South	AS011	6704584	323100	46
Arrowsmith South	AS012	6703992	322611	45
Arrowsmith South	AS013	6703346	322095	44
Arrowsmith South	AS014	6702656	322130	44
Arrowsmith South	AS015	6702744	322934	48
Arrowsmith South	AS016	6704318	323354	47
Arrowsmith South	AS017	6703365	323379	50
Arrowsmith South	AS018	6703028	323221	51
Arrowsmith South	AS019	6703114	323407	51
Arrowsmith South	AS020	6702589	323523	51
Arrowsmith South	AS022	6702688	321448	41
Arrowsmith South	AS023	6702675	320467	38
Arrowsmith South	AS024	6703451	320424	54
Arrowsmith South	AS025	6704175	320380	59
Arrowsmith South	AS026	6705770	320314	69
Arrowsmith South	AS027	6706539	320057	68
Arrowsmith South	AS028	6707316	320079	71
Arrowsmith South	AS029	6707996	320080	69
Arrowsmith South	AS030	6708551	320533	70
Arrowsmith South	AS031	6705171	319937	59
Arrowsmith South	AS032	6704992	319161	49
Arrowsmith South	AS033	6705173	318517	36
Arrowsmith South	AS034	6705972	318549	33
Arrowsmith South	AS035	6706742	318483	33
Arrowsmith South	AS036	6707248	318514	34
Arrowsmith South	AS037	6711500	318504	34
Arrowsmith South	AS038	6710701	318404	42
Muceha	MAC005	6515740	394750	71
Muceha	MAC006	6515745	394339	71
Muceha	MAC007	6515769	393931	73
Muceha	MAC009	6516076	393393	73

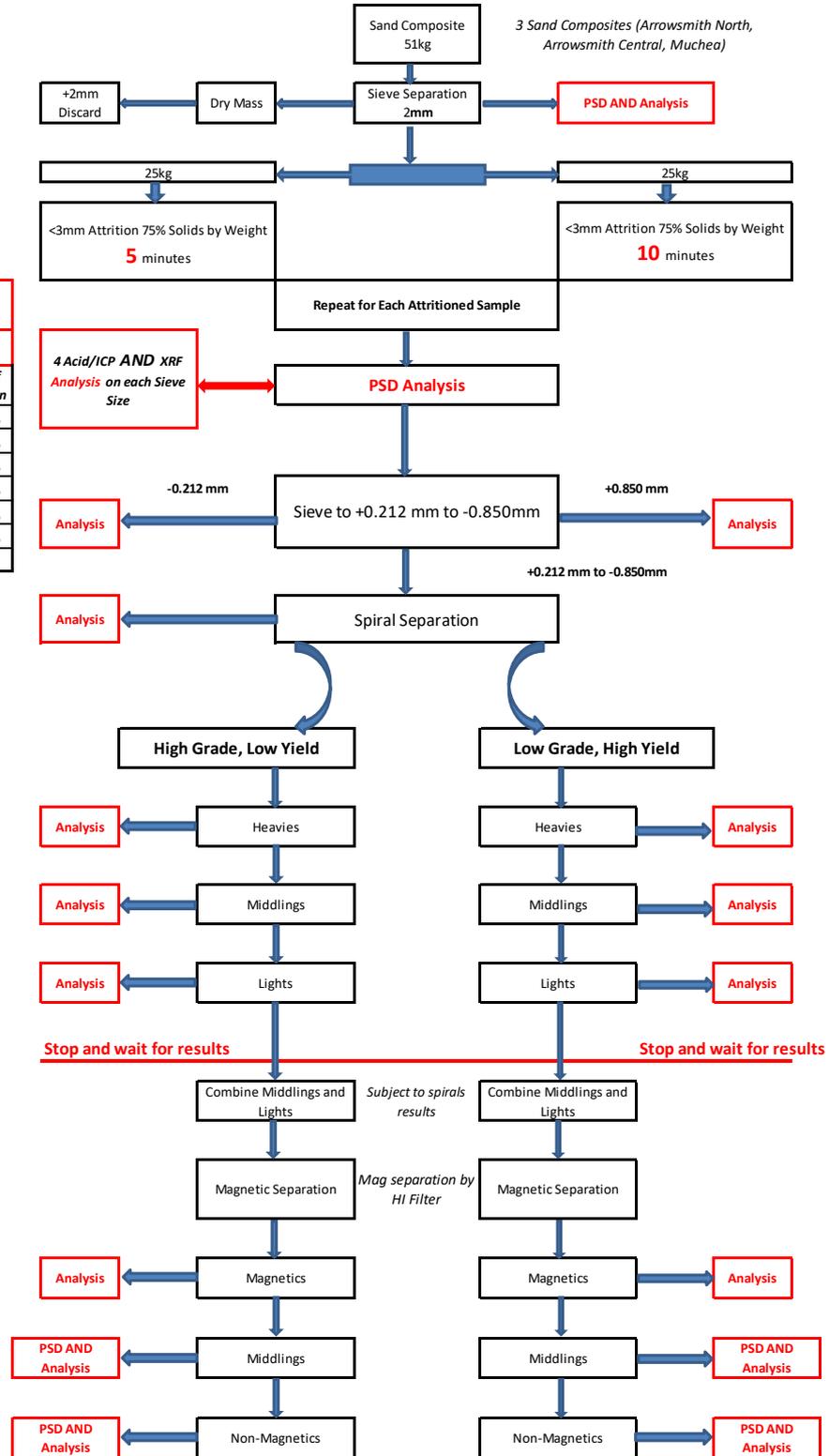
Muchea	MAC010	6516481	393389	73
Muchea	MAC011	6516835	393389	82
Muchea	MAC012	6517032	393158	77
Muchea	MAC013	6517020	392764	74
Muchea	MAC014	6517005	392327	76
Muchea	MAC017	6514493	396209	67
Muchea	MAC018	6514062	395743	68
Muchea	MAC019	6513774	395428	70
Muchea	MAC020	6513720	396525	68
Muchea	MAC021	6513201	396536	69
Muchea	MAC022	6512853	396609	69
Muchea	MAC023	6512368	396707	71
Muchea	MAC025	6511885	396685	72
Muchea	MAC026	6516560	394339	70
Muchea	MAC027	6516998	394346	73
Muchea	MAC028	6517404	394337	73
Muchea	MAC029	6517670	394103	73
Muchea	MAC030	6517937	393792	73
Muchea	MAC031	6517628	393567	73
Muchea	MAC032	6517276	393384	76
Muchea	MAC033	6517038	393516	79
Muchea	MAC036	6515267	395659	66
Muchea	MAC040	6514065	397298	67
Muchea	MAC041	6515221	394715	69
Muchea	MAC042	6514592	394493	69
Muchea	MAC044	6514457	395052	69
Muchea	MAC046	6516085	394337	71

Appendix 2 – CDE Testwork Program 3

Silica Sand Testwork Program 3

PSD Analysis	
Sieve Size mm	
+1.7	
+1.18	
+0.85	
+0.600	
+0.425	
+0.300	
+0.212	
+0.150	
+0.106	
+0.075	
+0.053	
-0.053/Pan	

Analysis			
Prep Zircon Bowl (95% P75 micron)			
4 Acid/ICP Analysis	Level of Detection	XRF Analysis	Level of Detection
Dry Mass	0.001 g	SiO ₂	0.001%
Al ₂ O ₃	20ppm	Al ₂ O ₃	0.001%
CaO	5ppm	CaO	0.001%
Cr ₂ O ₃	5ppm	Fe ₂ O ₃	0.001%
Fe ₂ O ₃	5ppm	K ₂ O	0.001%
K ₂ O	20ppm	TiO ₂	0.001%
Li ₂ O	1ppm	LOI ₁₀₀₀	0.01%
MgO	5ppm		
MnO	1ppm		
Na ₂ O	20ppm		
TiO ₂	5ppm		
V ₂ O ₅	1ppm		



APPENDIX A – JORC 2012 Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<p>Sampling techniques</p>	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<p>Muchea</p> <ul style="list-style-type: none"> AC drilling samples are 1m down hole intervals with sand collected from a cyclone mounted rotary cone splitter, ~2-3kg (representing 50% of the drilled sand) was collected. Two sub-samples, A and B, of ~200g were taken from the drill samples. The remainder was retained for metallurgical testwork. Auger drilling samples are 1m down hole intervals with sand collected from a plastic tub which received the full sample, ~8kg, from the hole. The sand was homogenised prior to sub sampling, two sub-samples, A and B, of ~200g were taken from the drill samples. A bulk sample of ~5kg was retained for each 1m interval for metallurgical testwork. The “A” sample was submitted to the Intertek Laboratory in Maddington, Perth for drying, splitting (if required), pulverisation in a zircon bowl and a specialised silica sand 4 Acid digest and ICP analysis. All auger samples were weighed to determine if down hole collapse was occurring, if the samples weights increased significantly the hole was terminated to avoid up hole contamination. <p>Arrowsmith</p> <ul style="list-style-type: none"> Auger drilling was to a depth of 1m with the top 30cm humus layer excluded The targeted mineralisation is unconsolidated silica sand dunes, the sampling techniques are considered to be “industry standard”.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Due to the visual nature of the material, geological logging of the drill material is the primary method of identifying mineralisation.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<p>Muchea</p> <ul style="list-style-type: none"> Vertical NQ sized aircore drilling was completed by Wallis Drilling using a Landcruiser mounted Mantis 82 drill rig. A 100mm diameter hand screw auger was used to drill until hole collapse. <p>Arrowsmith</p> <ul style="list-style-type: none"> A 100mm diameter hand screw auger was used to drill 1m
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<p>Aircore</p> <ul style="list-style-type: none"> Visual assessment and logging of sample recovery and sample quality Reaming of hole and clearance of drill string after every 3m drill rod Sample splitter and cyclone cleaned regularly to prevent sample contamination No relationship is evident between sample recovery and grade <p>Hand Auger</p> <ul style="list-style-type: none"> All material recovered from the hole is collected in a plastic drum and weighed, the weights are used to determine when the hole is collapsing, and drilling is terminated. No relationship is evident between sample recovery and grade
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	<ul style="list-style-type: none"> Geological logging of drill samples is done by the field geologist with samples retained in chip trays for later interpretation. Logging is captured in an excel spreadsheet, validated and uploaded into an Access database

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half of all core taken. If non-core, whether fiffled, tube-sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicates/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> AC drill samples are rotary split 50:50 into a calico bag resulting in 2-3kg of dry sample, 2 x 200g sub-samples, A and B, are taken from the drill sample. The A sample is submitted to the laboratory and the B sample is retained for repeat analysis and QAQC purposes. The bulk sample is retained for later metallurgical testwork. Auger drill material, ~8kg, is collected in a plastic tub and homogenised, 2 x 200g sub-samples, A and B, are taken from the drill material. The A sample is submitted to the laboratory and the B sample is retained for repeat analysis and QAQC purposes. A 5kg bulk sample is retained for later metallurgical testwork. The sample size is considered appropriate for the material sampled. The 200g samples are submitted to the Intertek Laboratory in Maddington, Intertek use a zircon bowl pulveriser to reduce the particle size to -75um.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their deviations, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> 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.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The Company has been validating a high-purity silica standard that was created for the Company by OREAS Pty Ltd. This was required as there is no commercial standard available for high purity silica sand. The standard was “round robin” assayed at several laboratory’s in Perth prior to the commencement of drilling. The standard was then included in the drill sample submissions to Intertek, in sequence, on a ratio of 1:20. Field duplicate samples were submitted in a ratio of 1:20 and in addition to this Intertek routinely duplicated analysis from the pulverised samples in a ratio of 1:25. The number of QAQC samples therefore represents ~14% of the total assays. A full analysis of all the quality control data has been undertaken. This analysis validates the drill assay dataset and conforms with the guidelines for reporting under the JORC 2012 code.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent of alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections validated against geological logging At Muchea, twinned holes AC Vs Auger were completed validate the robustness of hand auger as an appropriate method of testing the in-situ sand. Assay comparisons shown an acceptable correlation between the 2 drilling methods.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other location used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> At Muchea the drill hole locations were measured by an RTK GPS system with accuracy in the order of +/-0.2m; GDA94 MGA Zone 50 grid coordinate system is used. The reduced level (RL) of the drilling collars are generated by overlaying the drill holes on LIDAR contour data from the Department of Water. At Arrowsmith drill hole locations were measured by hand-held GPS with the expected relative accuracy; GDA94 MGA Zone 50 grid coordinate system is used. The reduced level (RL) of

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		the drilling collars is generated from publicly available SRTM data.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied Whether sample compositing has been applied. 	<ul style="list-style-type: none"> At Muchea drill holes were spaced 400-800m apart along existing tracks. At Arrowsmith auger holes were spaced depending on the presence of dune sand, typically no closer than 1,000m. It is believed that due to the relatively low variability of assays between drill holes that the current spacing maybe sufficient for the estimation of a Mineral Resource. No sample compositing (down hole) has been done.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation is sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Sampling is being done on aeolian sand dunes the drill orientation is therefore considered appropriate.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All samples are selected onsite under the supervision of Ventnor 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> There has been no audit or review of sampling techniques and data at this time.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements of material issues with third parties such as joint ventures, partnerships, overriding royalties, native title intersects, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>Muchea</p> <ul style="list-style-type: none"> All drilling has been within Tenement E70/4886, which is held by Wisecat Pty Ltd a subsidiary of Ventnor Resources Ltd. The tenement was granted 27 March 2017 and all drilling was conducted on VCL. <p>Arrowsmith</p> <ul style="list-style-type: none"> All project areas augured are located within the Arrowsmith Project area on E70/4986, 4987, 5027. These tenements are held by Ventnor Mining Pty Ltd a 100% owned subsidiary of Ventnor Resources Ltd. All tenements are granted and in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgement and appraisal of exploration by other parties. 	<p>Muchea</p> <ul style="list-style-type: none"> Prior exploration on E70/4886 is also detailed in the VRX announcement of 26 March 2018 Minor exploration for mineral sands has been completed by Tronox in the South Eastern corner of E70/4886 and has been excluded in any assessment by VRX. <p>Arrowsmith</p> <ul style="list-style-type: none"> Exploration has been completed on the tenements by a number of Companies in the past for heavy mineral sands, including Tronox and Iluka. The area forms part of the Eneabba-Dongara Gas field and has been explored for coal as well as gas, and is currently a gas producing field. No exploration for high grade silica sand has been completed in the past.

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> • The targeted silica sand deposits are the aeolian sand dunes that overlie the Pleistocene limestones and paleo-coastline which host the regional heavy mineral deposits.
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ○ Easting and northing of the drill hole collar. ○ Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill hole collar. ○ Dip and azimuth of the hole. ○ Down hole length and interception depth. <p>If the exclusion of the information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	<ul style="list-style-type: none"> • A tabulation of the drill holes which were used to generate the bulk composites is presented in Appendix 2 of this report. • All holes were drilled vertically.
Data aggregation methods	<ul style="list-style-type: none"> • In reporting exploration results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • The assay data presented for the silica sand is an arithmetic average of the 1m individual sample results. • Bulk composite averages are an arithmetic length weighted average down the hole. • The grade distribution shows a very low variability with no anomalous high-grade results; therefore the most appropriate method of aggregating intercepts is the use a simple arithmetic average. • No metal equivalents are used.
Relationship between mineralisation widths and	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	<ul style="list-style-type: none"> • As the mineralisation is associated with aeolian dune sands the majority will be essentially horizontal, some variability will be apparent on dune edges and faces.

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<i>Intercept lengths</i>	<ul style="list-style-type: none"> If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> All drilling is vertical; hence the drill intersection is essentially equivalent to the true width of mineralisation
<i>Diagrams</i>	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> A map of the selected drill collar locations is in the body of the report. Representative cross-sections are not attached as there is insufficient drilling at this time to generate meaningful sections.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> The accompanying document is considered to represent a balanced report.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> Other exploration data, if meaningful and Material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Geological observations are consistent with aeolian dune mineralisation Certified, dry in-situ bulk density measurements were completed at Muchea and Arrowsmith by Construction Sciences Pty Ltd using a nuclear densometer. The arithmetic average was used in the determination of the exploration targets. Groundwater was intersected in only a few holes that were drilled deeper deliberately to ascertain the position of the water table. The water table is typically below 15m depth. The mineralisation is unconsolidated sand. There are no known deleterious substances at this time. The Company has a metallurgical testwork program ongoing on the Muchea and Arrowsmith Silica Sand Projects. This Report details the work to date and the future testwork programs. The work reported here follows a flow sheet of wet screening and de-sliming, attritioning, spiral separation and finally magnetic separation to generate a final product.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg test for lateral extensions of depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> A further round of testwork is now in progress to optimise the flowsheet with the addition of more attritioning and magnetic separation to achieve the cleanest product possible.

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	<ul style="list-style-type: none"> Diagrams clearly highlighting the areas of possible extensions including the main geological interpretations and future drilling areas, provided the information is not commercially sensitive. 	<ul style="list-style-type: none"> Infill AC drilling is required to improve the category of resource estimates to enable the declaration of a Maiden Reserve for the projects.