

The following is a summary of the activities of Ventnor Resources Ltd (**Ventnor** or **Company**) during the quarter ending 30 September 2018.

Muchea Acquisition

Earlier in the year, on 31 January 2018 Ventnor requested the ASX grant an immediate trading halt in the Company's quoted securities in order to facilitate an orderly market in the Company's securities pending a material announcement about a proposed transaction, being the Muchea Option. On 2 February 2018, ASX suspended the Company's securities from trading at the request of the Company.

ASX determined that the transaction for the Muchea Option comprised a change in the nature and/or scale of the Company's activities and trading in its shares was to remain suspended until the Company had sought shareholder approval for the transaction and re-complied with Chapters 1 and 2 of the ASX Listing Rules for a re-listing of its shares in ASX.

In late July 2018, the Company entered into new agreements with Wisecat Pty Ltd and Australian Silica Pty Ltd to immediately acquire 100% of the Muchea Silica Sand Project (**Muchea Project**) in lieu of the Muchea Option in consideration for the issue of an aggregate of 8,333,333 Ventnor shares to Wisecat Pty Ltd and 65 million Ventnor shares and 20 million options over Ventnor shares to Australian Silica and an ongoing net production royalty of 1% subject to shareholder approval.

Shareholder approval sought for the issue of the shares and options (where required) was obtained on 12 September 2018.

Under the new transaction structure for the Muchea Silica Sand Project, ASX confirmed that the Company was no longer required to re-comply with ASX's admission requirements for the re-listing of the Company's shares and trading in its shares recommenced on 2 August 2018.

Tenement E70/4886 (**Tenement**) with the adjacent license application ELA 70/5157 forms the Muchea Project located 50km north of Perth, Western Australia and covers an area of 93km².

Arrowsmith Project

Also on 2 August Ventnor announced the development program for the Arrowsmith (**Arrowsmith**) and Muchea (**Muchea**) Silica Sand Projects.

The Muchea acquisition complements Ventnor's Arrowsmith Project which comprises 3 granted exploration licenses and one application covering a total area of approximately 350 km² which is broken down into 3 smaller project areas, namely Arrowsmith North, Central and South

Ventnor is now poised to rapidly develop the potential of these substantial silica sand resources as the time spent in Voluntary Suspension had been spent planning the development program and completed preparation for the implementation of environmental studies, resources estimations, testwork programs and infill drilling programs.

The Company has also undertaken environmental desktop studies of both Arrowsmith and Muchea which formed the basis for detailed flora, vegetation and fauna studies to be conducted during the coming Spring months and, which will also support a referral to the relevant environmental authorities for a Mining Proposal.

The Company has conducted preliminary testwork programs which indicate the deposits at Arrowsmith can be upgraded to glassmaking silica sand requirements. A further iteration of testwork is underway which will enable the finalisation of the proposed processing circuit design.

Adequate auger and aircore drilling has been undertaken to allow a JORC 2012 Resource estimation at each of the projects following the completion of QA/QC assaying and review.

On 15 August Ventnor announced that the Department of Mines, Industry and Safety (**DMIRS**) had granted a Programme of Work (**PoW**) for exploration on both the Arrowsmith North (E70/5076) and Arrowsmith Central (E70/4987) prospects.



Exploration drilling was planned to commence once the ground had dried out to conform with the Company's Dieback Management Plan, which has been accepted by DMIRS and added to the tenement conditions for the PoW areas. It requires dry conditions in order for ground disturbing work to be conducted.

These approvals now allow the Company to undertake drilling programmes to enable a JORC-2012 compliant Mineral Resource Estimation to an Indicated category

Ventnor's application for Exploration License, E70/5109 cleared the Native Title process and was granted 14 August 2018 and a further application was made for Exploration License ELA70/5197 at Arrowsmith that is contiguous with the existing holding. This application area of 8.5 km² complements existing tenement holdings and means Arrowsmith now comprises 4 granted exploration licenses and one new application covering a total area of approximately 379 km².

Tenement	Holders	Grant Date	Expiry Date	Area (km ²)
E70/4986	Ventnor Mining Pty Ltd	06/04/2018	05/04/2023	80.5
E70/4987	Ventnor Mining Pty Ltd	06/04/2018	05/04/2023	86.5
E70/5027	Ventnor Mining Pty Ltd	14/06/2018	13/06/2023	167.3
E70/5109	Ventnor Mining Pty Ltd	14/08/2018	14/08/2023	35.9
ELA70/5197	Ventnor Mining Pty Ltd	03/08/2018*		8.5
		*Application Date	Total	379km ²

Tenements in the project area are summarised below;

The Company has conducted preliminary testwork programs that indicate the deposits at Arrowsmith can be upgraded to glassmaking silica sand requirements. A further iteration of testwork is underway, which will enable an announcement of final products and finalisation of the proposed processing circuit design.

Area	Tonne	es (Mt)	Grade SiO ₂		
Alta	Low	High	Low	High	
Arrowsmith North	100	140	95%	98%	
Arrowsmith Central	40	70	95%	98%	
Total	140	210	95%	98%	

Prior to the Maiden Mineral Resource estimate, the Company had estimated **Exploration Targets** for the Arrowsmith Silica Sand Project;

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.

These estimations are based on:

Arrowsmith North Exploration Target

- Exploration Target area 3,600 ha
- 1.6t/m³ in situ bulk density
- Between 40% and 50% of area contains high grade silica sand
- Depth of high grade sand 4 to 5 metres

Arrowsmith Central Exploration Target Area

- Exploration Target area 3,000 ha
- 1.6t/m³ in situ bulk density
- Between 40% and 50% of area contains high grade silica sand
- Depth of high grade sand 2 to 3 metres

Auger drilling in the Exploration Target Areas has been completed and is adequate for a JORC-2012 compliant Maiden Mineral Resource estimate but further Aircore drilling was planned for mid to late September 2018 but has been deferred to the December quarter due to rig availability. This will upgrade the level of confidence and increase the Resource by drilling deeper than the hand-held auger.

Bulk Sampling at Arrowsmith and Muchea

Ventnor announced positive bulk sampling results from both its Arrowsmith Silica Sand Project and its Muchea Silica Sand Project. The testwork results 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 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 effect of 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.

The testwork results confirmed Ventnor's expectations for glassmaking quality sand at Arrowsmith and higher-quality sand at Muchea. They also justified 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.

Detailed Information

Ventnor has completed bulk sampling at both of its silica sand projects – air core drilling and hand auger at Muchea, and hand auger at Arrowsmith. 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.

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



Muchea bulk composite drill hole locations



Arrowsmith bulk composite drill hole locations



 AI_2O_3 CaO Fe₂O₃ K₂O MgO MnO Na₂O TiO₂ LOI_{1000C} SiO₂Calc. SiO₂+LOI No. Samples in Project Composite % % % ppm ppm ppm ppm ppm ppm ppm ppm 36 99.79 Muchea 163 729 6 285 64 9 14 970 0.22 99.57 Arrowsmith North 120 3,290 960 107 20 90 0.43 98.04 98.47 9,081 33 1,648 58 97.65 Arrowsmith Central 10,992 92 2,711 2,582 107 64 208 2,487 0.42 98.07 26,117 6,669 2,824 Arrowsmith South 104 322 5,861 259 41 532 94.88 95.73 0.85

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

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	AI_2O_3	CaO	Fe ₂ O ₃	K ₂ O	MgO	MnO	Na ₂ O	TiO ₂	LOI _{1000C}	SiO ₂	SiO ₂ +
SAMPLEMATENIAL	DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	Calc.	LOI
	Raw Material	562	39	175	54	20	4	35	414	0.23	99.64	99.87
WIUCHEA	Non-magnetic	262	49	68	38	12	1	21	179	0.10	99.84	99.94
	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
	Raw Material	12,683	153	2,452	3,270	93	23	228	1,889	0.57	97.35	97.92
ARROWSIMITH CENTRAL	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, dependent 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.

	SAMPLE	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}	
PROCESS STAGE	DESCRIPTION	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	3102 + 101
Muchaa	Magnetics	0.41%	1,245	175	14	2,521	196	128	57	117	3,756	0.21	99.18
iviucriea Magnatia Compution	Middlings	7.31%	335	50	2	90	51	14	1	30	207	0.05	99.92
Magnetic Separation	Non magnetic	92.27%	262	49	2	68	38	12	1	21	179	0.10	99.94
Arrowsmith North	Magnetics	0.63%	5,069	403	75	15,456	904	518	433	126	22,668	0.39	95.43
Arrowsmith North	Mids	9.33%	1,762	48	3	453	238	22	2	36	255	0.10	99.72
Magnetic Separation	Non magnetic	90.04%	1,797	46	3	414	276	20	2	33	198	0.09	99.72
Arrougemith Control	Magnetics	0.71%	16,006	424	419	44,243	1,379	471	834	141	36,954	1.08	89.91
Arrowsmith Central	Middlings	11.24%	2,863	71	5	749	827	31	7	74	676	0.18	99.47
Magnetic Separation	Non magnetic	88.06%	2,566	68	3	341	785	22	2	69	267	0.13	99.59
Arrowsmith South	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
wagnetic Separation	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 completed the Arrowsmith North Mineral Resource estimateand it 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 shown in Appendix 1. 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.

Events Subsequent

The independent maiden Mineral Resource estimate (**MRE**) for the Arrowsmith North target area that Ventnor engaged CSA Global to prepare was announced on the ASX 2 October 2018 "*Arrowsmith North Maiden Mineral Resource*". It comprises 193.6 Mt @ 98% SiO₂ reported in accordance with the JORC Code 2012 Edition and exceeds the previous Exploration Target of 100 to 140 million tonnes at 95% to 98% SiO₂.

The MRE is based on the results obtained from 62 hand auger drill holes to a depth of 4-5 metres for a total of 235.6 m obtained during December 2017. It defined two silica sand types, white and yellow sand, geologically logged and differentiated based on colour and through chemical analysis results and is an acceptable standard for use in a Mineral Resource estimate publicly reported in accordance with the JORC Code.

Based on metallurgical testwork completed to-date, both sand types are readily amenable to upgrading by conventional washing and screening methods to produce a high-purity silica sand product with high mass recoveries. The high-purity silica sand product specifications are expected to be suitable for industries such as glass making.

The project area is a substantial prominent dune system that has only been tested with shallow auger. Additional drilling planned for late 2018 will use deeper aircore drill holes and is expected to add substantially to the maiden Mineral Resource.

The initial exploration program also provided a bulk sample which was used for the second iteration of metallurgical testwork and has verified that the sand can be beneficiated to glass making quality. An additional third iteration of testwork, which is underway, is expected to improve on the currently known quality.

From our testwork we have been able to obtain samples of the final products that we can send to prospective customers. Coupled with the Mineral Resource estimate we can accelerate our marketing program for potential sales in Asia.

The Company has had a number of enquiries from potential customers in Asia.

Classification	Domain	Million Tonnes	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	LOI%	TiO₂%
	Yellow Sand	149.4	97.7	1.1	0.4	0.5	0.2
Inferred	White Sand	44.2	99.1	0.3	0.1	0.2	0.2
	All Sand	193.6	98.0	0.9	0.3	0.4	0.2

The MRE results are shown in the following table:

*Note: Interpreted mineralisation is domained into different sand types based on drill logging data and publicly available soil mapping information, above a basal surface wireframe defined based on the current drill sampling depths. Depletion zones include the upper 0.5 m for rehabilitation purposes, and minor swamp zones in the east and south of the modelled area. Differences may occur due to rounding.

Competent Persons Statements

The information in this document that relates to Arrowsmith Exploration Results is based on data collected under the supervision of Mr David Reid, in his capacity as Exploration Manager for Ventnor. 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.

The information in this document that relates to Mineral Resources is based on information compiled by Mr Grant Louw, under the direction and supervision of Dr Andrew Scogings, who were both fulltime employees of CSA Global at the time of the Mineral Resource estimation. Dr Scogings is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. He is a Registered Professional Geologist in Industrial Minerals. Dr Scogings has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Dr Scogings consents to the disclosure of information in this report in the form and context in which it appears.

ASX Listing Rule 5.8.1 Summary

The following summary presents a fair and balanced representation of the information contained within the MRE technical report:

- Silica sand mineralisation at Arrowsmith North occurs within the coastal regions of the Perth Basin, and the targeted silica sand deposits are the aeolian sand dunes that overlie the Pleistocene limestones and paleo-coastline. (ASX LR 5.8.1 geology & geological interpretation)
- Samples were obtained from auger drilling. Quality of drilling/sampling and analysis, as assessed by the Competent Person, is of an acceptable standard for use in a Mineral Resource estimate publicly reported in accordance with the JORC Code. (ASX LR 5.8.1 Sampling & 5.8.1 Drilling)
- Major and trace elements apart from SiO2 were analysed using a four-acid digest followed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry (ICP-OES) analysis at the Intertek, Perth laboratory. Loss on Ignition at 1000°C (LOI) was analysed by Thermal Gravimetric Analyser. SiO2 was back-calculated by subtracting all ICP major and trace elements plus LOI from 100%, as this is the most accurate way of determining SiO2 content for samples with very high SiO2. Certain of the ICP results were verified by X-Ray Fluorescence (XRF) analyses. (ASX LR 5.8.1 Analysis).
- The Mineral Resources were estimated above 3-d wireframe basal surfaces for the white and yellow sands. These basal surfaces are nominally limited to the drill hole depths and the extents are limited to within the Ventnor nominated Arrowsmith North target area. The surfaces are based on the geological boundaries defined by logged sand types from the drill data and with reference to the publicly available soil mapping data. The surface humus layer is typically about 300 mm thick. In consultation with Ventnor, CSA Global considered that the upper 500 mm (overburden) is likely to be reserved for rehabilitation purposes. This overburden surface forms the upper boundary of the estimated Mineral Resource and is depleted from the reported Mineral Resources. Comparatively minor areas that are mapped as swamp or sandy swamp are also depleted from the Mineral Resources. (ASX LR 5.8.1 Estimation methodology)
- Grade estimation was completed using inverse distance weighting to the power of two. (ASX LR 5.8.1 Estimation methodology)
- The Mineral Resource is quoted from all classified blocks above the defined basal surface wireframes for white and yellow sand and below the overburden surface layer. (ASX LR 5.8.1 cut-off grades)
- The Mineral Resource was classified as Inferred based on drill hole logging, drill hole sample analytical results, drill spacing, geostatistical analysis, confidence in geological continuity, and metallurgical / process test results. (ASX LR 5.8.1 classification)
- Roughly 15% of the interpreted mineralisation is extrapolated.
- The JORC Code Clause 49 requires that industrial minerals must be reported "in terms of the mineral or minerals on which the project is to be based and must include the specification of those minerals" and that "It may be necessary, prior to the reporting of a Mineral Resource or Ore Reserve, to take particular account of certain key characteristics or qualities such as likely product specifications, proximity to markets and general product marketability." (ASX LR 5.8.1 Mining, metallurgy & economic modifying factors)
- Therefore, the likelihood of eventual economic extraction was considered in terms of possible open pit mining, likely product specifications, possible product marketability and potentially

favourable logistics and it is concluded that Arrowsmith North is an industrial Mineral Resource in terms of Clause 49. (ASX LR 5.8.1 Mining, metallurgy & economic modifying factors)

Corporate

As noted earlier, Ventnor entered into new agreements with Wisecat Pty Ltd and Australian Silica Pty Ltd in late July 2018 to immediately acquire 100% of the Muchea Silica Sand Project (**Muchea Project**) in lieu of the Muchea Option. The consideration was the issue of an aggregate of 8,333,333 Ventnor shares to Wisecat Pty Ltd, 65 million Ventnor shares and 20 million options over Ventnor shares to Australian Silica and an ongoing net production royalty of 1% subject to shareholder approval.

At the same time, the Company received firm commitments for a capital raising of \$2.4 million from professional and sophisticated investors by the issue of 40 million shares at \$0.06 each, including \$207,000 (3,450,000 shares) committed by Ventnor directors, subject to shareholder approval (**Capital Raising**). The first Tranche of the Capital Raising was completed on 1 August and the second on 19 September 2018.

Shareholder approval sought for the issue of the shares and options (where required) and for Ventnor directors participation in the Capital Raising was obtained on 12 September 2018.

Appendix 1. - CDE Testwork Program 3



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	-	-	100	100

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	100	-	-	100

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