

# EXCELLENT RESULTS FROM SOUTHERN SILICA SAND PROJECTS

Esperance East, Narrikup and North Stirlings Projects proving prospective for High Purity Silica Sand

# Highlights

- Several prospective High Purity Silica Sand (HPSS) targets identified from hand auger sampling across the Southern Silica Sand Projects
- Esperance East target identified 30km from Port of Esperance
  - High priority with additional IND exploration work program planned to determine extent and overall quality of silica sand
  - Initial access granted by pastoralist and access agreement being negotiated
- Narrikup several HPSS targets identified within 45km of the Port of Albany
  - Access permitted by supportive landowners and agreements under negotiation with neighbouring properties
- North Stirlings –120km from the Port of Albany
  - Initial reconnaissance hand auger sampling program completed on three properties within project area with encouraging laboratory results received
  - Access discussions initiated with these and other pastoralists



Plate 1: Existing sand pits within Narrikup Project



#### IND's Managing Director Jeff Sweet commented:

"Several prospective targets have been identified within IND's Esperance East, Narrikup, and North Stirlings Projects in southern Western Australia. We are encouraged by the preliminary results from auger samples and are planning a follow-up exploration program.

"These results, along with the positive response from landholders, provides the potential for IND to replicate the rapid exploration and development seen at our Stockyard Project. We continue to assess high quality Silica Sand on accessible farmland in close proximity to Ports."

Industrial Minerals Ltd (ASX: **IND** or the **Company**) is pleased to announce exceptional HPSS results from samples taken from its Narrikup, Esperance East and North Stirlings Projects, located in southwestern Western Australia. The results follow a successful initial sampling program, which included positive engagement with private landholders.

The projects are close to the southern ports of Albany and Esperance which supports IND's project selection strategy of matching high-quality resources with minimal transport costs. The Company will further engage landowners and stakeholders, presenting its Low Impact Mining Strategy and highlighting the benefits to agricultural productivity while minimising negative effects to the surrounding environment.

## **Esperance East Silica Sand Project**

E63/2260 was granted on 30 September 2022 and covers an area of 85.15 km<sup>2</sup>. The tenement is covered with Pleistocene sandplain deposits composed of grey and yellow sand over laterite/pisolites and yellow clay. A series of sand dunes with an approximate east-west trend overlay the sandplain in the northeast and southwest of the tenement and there are scattered outcrops of granite. The dunes are composed of leached white to pale yellow, fine grained quartz sand.

White quartz sand occurs at the surface across much of the Esperance East Project and a reconnaissance hand auger drilling program was carried out as part of the Company's search to identify areas that are potentially prospective for HPSS. Permission to sample prospective properties was granted by several landholders and other auger samples were collected along public roads (Figure 1).

Encouraging assays were received over a series of sand dunes on a property in the southwest of the tenement (Figure 2) some 30km by road from the Port of Esperance. The property had previously been used for commercial plantation timber growth, but most trees have been removed and the property returned to pasture.





Figure 1: Hand auger locations within the Esperance East Project



Figure 2: Hand auger drill samples over dunes in southwest of the Esperance East Project

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Of the 14 auger drill hole samples taken across the property, 12 holes returned results for raw samples above the 98% cut-off, for an average grade of 98.5% SiO<sub>2</sub>. Importantly for high quality silica sand end uses the  $Fe_2O_3$  values are low, averaging 270ppm and the best result being 143ppm. While these in-situ are good, it is anticipated that higher SiO<sub>2</sub> and lower  $Fe_2O_3$  values can be achieved with beneficiation. Process flow test work has begun to determine the best and most economic beneficiation process to achieve an optimal product.

A summary of drilling results is tabled below, and the complete set of results are presented in Appendix 1. The maximum thickness of the HPSS was 1.5m with an average thickness of 0.9m.

	SiO <sub>2</sub> %	Al₂O₃ ppm	Fe₂O₃ ppm	TiO₂ ppm	LOI-1000°c %
Average	98.5	1783	270	1602	0.98
Range	98 – 98.9	630 - 3600	146 - 452	1205 - 2178	0.65 – 1.37

#### Table 1. Summary of the Esperance East Project assay results – SiO2 >98%

The landowner is supportive of IND's exploration activities and low impact mining strategy and a land access agreement is currently being negotiated.

This property is now the focus of exploration work by the Company, with a detailed auger drilling program planned to test the quality and extent of the shallow HPSS mineralisation on the property after the Easter holiday period.

The Port of Esperance currently handles silica sand, and the project's proximity to the port vastly improves the economic viability should a HPSS resource be defined.

## Narrikup Silica Sand Project

The Narrikup Project is located 40km north of the Port of Albany and consists of a single granted exploration license covering an area of 161km<sup>2</sup>. The project straddles the Albany Highway and the Northam-to-Albany rail line.

Initial exploration has been in and adjacent to previously identified deposits and abandoned quarries along the Albany Highway where white sand is exposed at the surface. Permission was granted from some of the landowners to conduct reconnaissance sampling within their properties, and additional sampling was undertaken on publicly accessible roads (Figure 3).

Deposits of white, fine grained, silica sand are interpreted as reworked alluvial terrace sand infilling fluvial palaeochannels and overlying basement highs. The sand is white at the surface either becoming orange brown to dark brown sand near the base or terminating on laterite/hardpan. In some holes the sand grades into sandy grits. The maximum thickness of the HPSS unit encountered during drilling was 3.3m with an average thickness of 1.2m.





Figure 3: Location of auger and surface samples within the Narrikup Project

Of the 38 auger and 4 pits sampled, 34 raw samples returned >98% SiO<sub>2</sub> with three of those returning 99.5% SiO<sub>2</sub>. Fe<sub>2</sub>O<sub>3</sub> content was low; the lowest result being 73ppm and an overall average of 275ppm. A summary of reconnaissance drilling results from Narrikup are shown in Table 2 and the complete set of results are presented in Appendix 1.

Table 2	Summary	of the	Narriku	) Proie	ct assav	results -	- SiO <sub>2</sub>	>98%
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	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> ppm	Fe₂O₃ ppm	TiO₂ ppm	LOI-1000°c %
Average	98.8	848	275	2136	0.76
Range	98 - 99.5	193 - 4114	73 - 875	1375 - 3541	0.16 - 1.41

These encouraging results confirm the potential of the area for HPSS. Given the ease of access for potential offtake from the nearby Port of Albany, the Company is now in the process of formalising access agreements with pastoralists and other stakeholders to advance its exploration programme.

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# North Stirlings Silica Sand Project

North Stirlinas

The North Stirlings Project, E70/6204, was granted on 18 October 2022. It covers an area of 265.55km<sup>2</sup> and is located 120 kilometres north of the Port of Albany. Much of the area is cleared pastoral land with some plantation timber stands.

Alluvium covers the southern part and sand plains the northern part of the tenement with exposed bedrock outcropping in the centre and on the eastern side. Both the alluvium and the sand plains comprise similar lithologies of sand, gravel, silt, clay, laterite and silcrete. Lunette dunes and lake deposits fall within nature reserves except in the southwest of the tenement. White dune sand is exposed on the surface and forms an irregular blanket over parts of the tenement.

Initial exploration targeted the exposed white sand, and a reconnaissance hand auger drilling programme was undertaken to collect samples of the sand and determine the thickness of these surficial deposits (Figure 4).

#### Figure 4: Hand auger sample locations within the North Stirlings Project









Permission was granted to collect samples from all three of the properties approached and a total of 16 hand augers were drilled. The auger drilling identified several HPSS targets, with all but one raw sample grading greater than 98.5% SiO<sub>2</sub>. The highest grade was 99.3% SiO<sub>2</sub> with an average grade of 98.8% SiO<sub>2</sub> and 740 ppm Fe<sub>2</sub>O<sub>3</sub>.

A summary of reconnaissance drilling results from North Stirlings are tabled below and the complete set of results in Appendix 1.

	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> ppm	Fe <sub>2</sub> O <sub>3</sub> ppm	TiO <sub>2</sub> ppm	LOI-1000°c %
Average	98.8	2436	740	2321	0.60
Range	98.5 - 99.3	542 - 3472	186 - 1897	1475 - 2566	0.35 – 0.68

### Table 3. Summary of North Stirlings Project assay results – SiO<sub>2</sub> >98%

## Next Steps

IND's primary objective for its Southern WA projects in 2023 is:

- Finalisation of land access agreements with pastoralists
- Systematic auger drilling of the Esperance East and Narrikup projects commencing by late-April 2023 to assess the potential scale of HPSS mineralisation
- Complete metallurgical test work on the sand including particle size and grade distribution to assess preferred processing routes
- Progress discussions to be held with the Ports of Esperance and Albany regarding port access for offtake

IND's low impact and low-cost rapid exploration and resource definition technique give the Company a significant advantage in its efforts to rapidly explore and develop its highly prospective tenure and pipeline of quality projects.

The Company looks forward to providing further updates as results come to hand.

### This announcement has been approved by the Board of Industrial Minerals.

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#### **Competent Person**

The information in this announcement that relates to exploration activities on the Projects is based on information compiled and fairly represented by Mr Robert Andrew Jewson, who is a Member of the Australian Institute of Geoscientists and consultant to Industrial Minerals Ltd. Mr Jewson is also a shareholder of Industrial Minerals Ltd. Mr Jewson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Jewson consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

#### Forward-looking Statements

Certain statements contained in this document may be 'forward-looking' and may include, amongst other things, statements regarding production targets, economic analysis, resource trends, pricing, recovery costs, and capital expenditure. These 'forward–looking' statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by IND, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as 'believe', 'expect', 'anticipate', 'indicate', 'target', 'plan', 'intends', 'budget', 'estimate', 'may', 'will', 'schedule' and others of similar nature. IND does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements as they are not a guarantee of future performance.

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## Appendix 1: Details of Assay Results

								Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	LOI
Project	BHID	sample_ID	easting	northing	from	to	interval	ppm	ppm	%	ppm	%
Narrikup	NA-AU22-1	DX001	564082.34	6157133.24	0	1.2	1.2	1418	389	99	2099	0.51
Narrikup	NA-AU22-2	DX002	564178.46	6157131.36	0	0.8	0.8	2491	637	98.5	2104	0.86
Narrikup	NA-AU22-3	DX003	564284.72	6156967.59	0	0.9	0.9	1685	9651	97.9	1642	0.78
Narrikup	NA-AU22-4	DX004	564125.79	6157074.72	0	1.1	1.1	667	270	98.3	1925	1.41
Narrikup	NA-AU22-5	DX005	564126.91	6156998.85	0	1.2	1.2	1007	243	98.8	1768	0.83
Narrikup	NA-AU22-6	DX006	562984.30	6157075.83	0	0.7	0.7	4803	13750	96.4	1232	1.42
Narrikup	NA-AU22-7	DX007	562817.19	6157073.54	0	0.8	0.8	673	251	97.9	1862	1.75
Narrikup	NA-AU22-8	DX008	563062.50	6156996.45	0	0.7	0.7	4114	3690	98.1	1543	0.63
Narrikup	NA-AU22-9	DX009	561191.63	6157805.21	0	1.4	1.4	328	227	99.5	2371	0.16
Narrikup	NA-AU22-10	DX010	561191.00	6158000.74	0	0.9	0.9	2528	447	98.2	2734	1.21
Narrikup	NA-AU22-11	DX011	561186.33	6158219.90	0	1.5	1.5	432	167	98.5	2801	1.1
Narrikup	NA-AU22-12	DX012	561193.18	6158438.66	0	1.2	1.2	240	142	99.2	2378	0.52
Narrikup	NA-AU22-13	DX013	561191.10	6158635.52	0	3.3	3.3	263	245	99.4	2759	0.28
Narrikup	NA-AU22-14	DX014	561387.04	6158410.53	0	3.3	3.3	203	223	99.3	2320	0.41
Narrikup	NA-AU22-15	DX015	561374.73	6157827.51	0	1	1	193	316	99.5	2581	0.19
Narrikup	NA-AU22-16	DX016	561379.96	6158021.10	0	1.2	1.2	973	493	98.7	2656	0.81
Narrikup	NA-AU22-17	DX017	561323.92	6158159.32	0	1	1	2166	763	98.4	3541	0.89
Narrikup	NA-AU22-18	DX018	561723.39	6158164.53	0	2	2	2484	335	98	2361	1.38
Narrikup	NA-AU22-19	DX019	561744.17	6158258.54	0	1.3	1.3	1293	553	95.9	2313	3.55
Narrikup	NA-AU22-20	DX020	561681.95	6158225.36	0	2.3	2.3	364	348	98.8	2518	0.85



Narrikup	NA-AU22-21	DX021	563558.85	6156917.29	0	0.8	0.8	1677	519	96.8	2872	2.62
Narrikup	NA-AU22-22	DX022	563803.25	6156472.45	0	0.5	0.5	7221	736	98.1	2765	0.77
Narrikup	NA-AU23-1	DX070	564027.99	6156717.53	0	0.7	0.7	606	262	98.7	1433	1.02
Narrikup	NA-AU23-2	DX071	564596.40	6156654.89	0	0.5	0.5	1436	875	98.1	1589	1.39
Narrikup	NA-AU23-4	DX073	564890.03	6156552.58	0	0.7	0.7	610	222	98.8	1887	0.84
Narrikup	NA-AU23-5	DX074	565261.08	6156613.72	0	1.6	1.6	435	213	98.8	1810	0.89
Narrikup	NA-AU23-6	DX075	561806.39	6162911.08	0	0.7	0.7	6577	466	97.4	2731	1.56
Narrikup	NA-AU23-8	DX077	561237.11	6160998.57	0	1.6	1.6	273	105	99.3	2183	0.4
Narrikup	NA-AU23-9	DX078	561191.28	6161159.89	0	2	2	218	92	98.3	1900	1.47
Narrikup	NA-AU23-10	DX079	561147.78	6161410.37	0	1.9	1.9	197	175	99.3	2101	0.37
Narrikup	NA-AU23-11	DX080	561163.91	6161770.57	0	0.5	0.5	7150	1243	96.5	3071	2.25
Narrikup	NA-AU23-14	DX083	561226.27	6162911.41	0	1	1	822	272	98.7	2580	0.91
Narrikup	NA-AU23-15	DX084	561179.68	6163166.45	0	0.5	0.5	3939	624	97.8	2313	1.37
Narrikup	NA-AU23-16	DX085	562022.89	6160187.97	0	2	2	219	93	99.2	1754	0.58
Narrikup	NA-AU23-16	DX086	562022.89	6160187.97	0	0.3	0.3	221	94	98.7	1936	1.01
Narrikup	NA-AU23-17	DX087	561852.96	6160182.79	0	1.3	1.3	383	227	98.5	1375	1.2
Narrikup	NA-AU23-17	DX088	561852.96	6160182.79	0	0.4	0.4	297	73	98.9	1468	0.89
Narrikup	NA-SS23-01	VPit1	563184.05	6159967.93	0	0.1	0.1	311	119	98.6	1871	1.09
Narrikup	NA-SS23-02	VPit2	563329.99	6160293.86	0	0.1	0.1	257	98	99.1	2152	0.63
Narrikup	NA-SS23-03	VPit3	562565.92	6160657.06	0	0.1	0.1	644	256	99.5	1941	0.17
Narrikup	NA-SS23-04	VPit4	562718.66	6160071.37	0	0.1	0.1	450	193	98.1	2367	1.51
Esperance East	EE-AU23-1	EEX001	984499.86	6266049.91	0	0.5	0.5	12412	3198	96.1	2244	2
Esperance East	EE-AU23-5	EEX005	985095.84	6265971.85	0	0.5	0.5	10263	2094	96.8	2084	1.6
Esperance East	EE-AU23-6	EEX006	989978.11	6247797.82	0	0.8	0.8	2863	608	98.4	1745	0.99
Esperance East	EE-AU23-11	EEX011	982137.81	6253933.13	0	0.6	0.6	3373	701	97.8	1838	1.49
Esperance East	EE-AU23-16	EEX016	990182.21	6251042.96	0	0.5	0.5	8884	1924	96.8	1965	1.82



Esperance East	EE-AU23-18	EEX018	989640.23	6246661.07	0	0.9	0.9	2324	550	98.2	1517	1.23
Esperance East	EE-AU23-19	EEX019	980634.72	6255438.18	0	0.4	0.4	5139	1310	96.7	2037	2.36
Esperance East	EE-AU23-20	EEX020	986112.51	6259152.75	0	0.6	0.6	1272	350	98.5	1438	1.16
Esperance East	EE-AU23-22	EEX022	986033.01	6258894.71	0	0.5	0.5	1425	459	98.2	1543	1.43
Esperance East	EE-AU23-25	EEX025	985349.66	6258913.10	0	0.6	0.6	1773	361	98.6	1437	0.93
Esperance East	EE-AU23-27	EEX027	980813.57	6246249.98	0	0.8	0.8	3600	307	98.1	1239	1.13
Esperance East	EE-AU23-28	EEX028	982675.16	6246256.62	0	1.5	1.5	1070	179	98.6	1281	1.06
Esperance East	EE-AU23-29	EEX029	978844.58	6247705.55	0	1.3	1.3	630	146	98.6	1701	1.05
Esperance East	EE-AU23-30	EEX030	978873.17	6247880.24	0	1	1	855	224	98.6	1717	1.01
Esperance East	EE-AU23-31	EEX031	978953.78	6248161.52	0	0.6	0.6	2422	277	98.5	1910	0.93
Esperance East	EE-AU23-32	EEX032	978458.28	6247357.50	0	1.2	1.2	725	179	98.9	1556	0.75
Esperance East	EE-AU23-33	EEX033	978275.59	6246737.13	0	1.3	1.3	825	275	98.8	2178	0.75
Esperance East	EE-AU23-34	EEX034	978466.12	6246674.66	0	0.4	0.4	2310	802	97.4	1889	1.96
Esperance East	EE-AU23-35	EEX035	978532.48	6246660.19	0	0.6	0.6	2581	291	98.4	1742	0.99
Esperance East	EE-AU23-38	EEX038	980215.63	6246330.18	0	0.5	0.5	1689	312	98.7	1600	0.83
Esperance East	EE-AU23-39	EEX039	980499.87	6246441.85	0	1	1	1664	191	98.9	1205	0.65
Esperance East	EE-AU23-40	EEX040	980884.86	6246674.66	0	0.7	0.7	2860	452	98	1319	1.37
Esperance East	EE-AU23-41	EEX041	981385.89	6246741.05	0	0.5	0.5	2473	411	98.2	1359	1.21
Esperance East	EE-AU23-42	EEX042	981619.29	6246596.74	0	0.8	0.8	2697	307	97.4	1420	1.92
North Stirlings	NS-AU22-1	DX023	584053.59	6210522.15	0	1	1	1728	2971	98.8	2086	0.45
North Stirlings	NS-AU22-2	DX024	584309.47	6210526.28	0	1.2	1.2	2962	440	98.6	2627	0.78
North Stirlings	NS-AU22-3	DX025	584027.01	6210772.57	0	0.8	0.8	5281	1301	97.8	2315	1.18
North Stirlings	NS-AU22-4	DX026	584413.05	6210625.49	0	0.6	0.6	1276	269	99.3	2294	0.26
North Stirlings	NS-AU22-5	DX027	584200.21	6210451.07	0	1	1	8509	32584	94.7	2234	0.85
North Stirlings	NS-AU22-6	DX028	584328.53	6210474.32	0	0.5	0.5	3472	1897	98.5	2496	0.61
North Stirlings	NS-AU22-7	DX029	584184.14	6210394.55	0	0.9	0.9	2516	523	98.6	2518	0.8





North Stirlings	NS-AU22-8	DX030	584898.11	6212078.96	0	0.7	0.7	1882	385	98.8	2350	0.68
North Stirlings	NS-AU22-9	DX031	585181.41	6211993.66	0	0.8	0.8	2822	548	98.8	2566	0.58
North Stirlings	NS-AU22-10	DX032	586243.32	6211118.85	0	0.9	0.9	713	269	99.3	2262	0.35
North Stirlings	NS-AU22-11	DX033	585590.03	6210280.36	0	1.6	1.6	1976	516	98.8	2373	0.67
North Stirlings	NS-AU22-12	DX034	590238.95	6210679.69	0	0.9	0.9	989	369	99.1	2148	0.46
North Stirlings	NS-AU22-13	DX035	590343.25	6210377.59	0	0.9	0.9	1547	358	99	2185	0.54
North Stirlings	NS-AU22-14	DX036	590283.48	6208666.33	0	0.8	0.8	542	186	99.3	1475	0.41
North Stirlings	NS-AU22-15	DX037	590264.89	6208104.47	0	1	1	1611	337	99	2348	0.48





## Appendix 2: JORC TABLE 1

## JORC Table 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Hand auger drill/surface samples were taken from private properties and public roadsides</li> <li>Sampling techniques and quality are considered appropriate for this style of mineralisation.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	<ul> <li>Cased hand auger drilling using a 50mm spiral auger inside PVC casing. The casing is pushed into the substrate as the auger advances to prevent oversampling of the drilled sediment.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>All targeted sediment recovered is retained in a container. Depth of recovery measured when sediment changes.</li> <li>The auger is extracted from the casing and all the recovered sediment collected in a container which is then transferred to a calico bag, labelled and sealed.</li> </ul>



Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> </ul>	<ul> <li>All auger primary information was initially captured in a written log on site by a geologist including depths when sediment changed.</li> </ul>
	<ul><li>photography.</li><li>The total length and percentage of the</li></ul>	
Sub	<ul> <li>If core, whether cut or sawn and whether quarter half or all core taken</li> </ul>	<ul> <li>A riffle type sample splitter was used to halve the sample</li> </ul>
techniques and sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul> <li>Half of the sand sample was submitted for analysis. The samples were submitted to:</li> <li>Intertek Genalysis Perth for drying, further</li> </ul>
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	splitting, and pulverisation in a zircon bowl. A subsample of 200 g with -75 μm particle size was utilised for analysis
	<ul> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>Laboratory replicates are completed routinely at the splitting stage and results are included in precision analysis.</li> </ul>
	<ul> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	<ul> <li>The laboratory sample size taken is appropriate for the sand being targeted.</li> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	• Auger sand samples were submitted to: Intertek Laboratory in Maddington, Perth, Western Australia. The assay method for multi-element analysis consisted of four-acid digest including
tests	<ul> <li>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 derivation, etc.</li> </ul>	<ul> <li>hydrofluoric, nitric, perchloric and hydrochloric acids in Teflon beakers with inductively coupled plasma (ICP)-optical (atomic) emission spectrometry finish. Silica is reported by difference.</li> <li>No geophysical tools were utilised for the</li> </ul>
	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>process.</li> <li>No quality control procedures have been used for auger sand samples, although standard assay laboratory quality control protocols have been adhered to.</li> </ul>
Verification of sampling and	• The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>No significant intersections have been compiled; only individual (unaggregated) results are reported.</li> </ul>
assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All sampling procedures were documented and monitored on site by a geologist and/ or field technician.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>All primary information was initially captured in a written log on site by a field technician, data entered, imported then visually validated and stored in a geological database. No data quarantine function is enabled at this time.</li> <li>A set of conversion factors, to 5 decimal places are developed from molecular unsisted and some state and set of conversion factors.</li> </ul>
		achieve oxide values.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used. Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The position of the auger drillhole and surface sample locations was determined by a GPS model Garmin GPS Map 79sc with an accuracy within 5-10 m.</li> <li>The Grid system used was GDA2020 Zone 50 and 51.</li> <li>No topographic control has been used for reconnaissance auger sand samples</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Reconnaissance auger sand samples were collected over targeted landforms and where white sand was exposed on the surface.</li> <li>Samples of the target sand were composited over the depth collected and submitted as whole auger samples.</li> </ul>
Orientation of data in relation to geological structure Sample	<ul> <li>Whether the orientation of 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.</li> <li>The measures taken to ensure sample</li> </ul>	<ul> <li>It is expected that the sand stratum sampled is relatively flat dipping and as such is representative of that layer of sediment.</li> <li>There is not considered to be any mineralised structures that would cause any sampling bias from the orientation of drilling utilised.</li> <li>All samples have been bagged and menous of from site and are under the area.</li> </ul>
security	security.	<ul> <li>removed from site and are under the care of the contract senior geologist and field sampling supervisor.</li> <li>Auger samples were delivered to Intertek Genalysis Perth. The laboratories provided a sample reconciliation report which was audited against the sample submission sheet</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No Audits or reviews have been undertaken.





## JORC Table 1 – Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	<ul> <li>The Narrikup Project is 100% held by Industrial Minerals Ltd. The underlying land is held as freehold land and IND has been granted permission by the landowners to access and explore part of their properties.</li> <li>The Esperance East Project is 100% held by Industrial Minerals Ltd. The underlying land is held as freehold land and IND has been granted permission by the landowners to access and explore part of their properties.</li> <li>The North Stirlings Project is 100% held by Industrial Minerals Ltd. The underlying land is held as freehold land and IND has been granted permission by the landowners to access and explore part of their properties.</li> <li>The North Stirlings Project is 100% held by Industrial Minerals Ltd. The underlying land is held as freehold land and IND has been granted permission by the landowners to access and explore part of their properties.</li> <li>There are no impediments on a licence to operate at the time of reporting.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration for silica sand by others has occurred in Narrikup and Esperance East in the past. Gwalia Minerals NL reported an Indicated Resource of 4.0Mt of silica sand over Red Hill farm in Narrikup in 1993. Australian Silica Quartz collected a surface sample in the Esperance East project which proved positive for HPSS. IND is the first company to explore for silica sand at North Stirlings.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Aeolian quartz sand dunes overlying basement highs and Pleistocene sandplain deposits Unconsolidated Quaternary coastal sediments.</li> </ul>
Drill hole information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:         <ul> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> </ul> </li> </ul>	<ul> <li>Exploration results are reported in the body of this announcement.</li> <li>There are no further drill hole results that are considered material to the understanding of the exploration results.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>o downhole length and interception depth</li> <li>o hole length.</li> <li>If the exclusion of this 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.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No averaging or aggregation of grades has been applied to reporting of exploration results.</li> <li>No upper cut-off grades are applied.</li> <li>No metal equivalents are required.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</li> </ul>	<ul> <li>Target deposits typically approximate a sub-horizontal accumulation over a variable basement topography.</li> </ul>
Diagrams	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 drillhole collar locations and appropriate sectional views.	<ul> <li>Plan views illustrating auger sample locations of significant intercepts are included in body of the report.</li> </ul>
Balanced reporting	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> <li>A full listing of all auger sample locations and their results are included in the body of the report- Appendix 1.</li> </ul>



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical 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> <li>Silica sand deposits occur from surface and are readily identified by colour and absence of induration.</li> <li>No other substantive exploration data is available.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further auger drilling programs are planned at Narrikup, Esperance East and North Stirlings to test silica sand mineralisation targets identified from reconnaissance auger drilling subject to execution of land access agreements.</li> </ul>