



ASX RELEASE

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20 December 2019

**TITANIUM SANDS LIMITED**

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**Directors**

Lee Christensen  
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**Ticket**

ASX: TSL

## COMPANY UPDATE

- Acquisition of 32Mt HMS project progressing towards EGM.
- Mannar Island resource upgrade awaiting final samples for lab analysis. Completed report expected in February 2020.
- Mannar Island scoping study progressing and on target for January completion.
- RC Air Core depth drilling program has been completed with resource report expected in the 1<sup>st</sup> Quarter of 2020.

### ACQUISITION TENURE

Titanium Sands Ltd ("TSL" or "The Company") has previously announced (ASX:TSL 24/9/19 and ASX:TSL 25/10/19) the proposed acquisition of a group of companies that hold a substantive 38km<sup>2</sup> tenure package on Mannar Island. The tenure package holds an inferred mineral resource of 32Mt of HMS at 7.45%<sup>1</sup> ("Acquisition Tenure") (Figure 1) and complements the Company's existing assets at Mannar Island in North West Sri Lanka.

The Company is pleased to report after some unforeseen delays, the Notice of Extraordinary General Meeting seeking various shareholder approvals for the Company to proceed with the proposed acquisition is expected to be sent to ASIC and ASX for review this week and will be despatched to shareholders once approved. At this stage the EGM is anticipated to be no later than February 2020.

### MANNAR PROJECT

Included in the previous announcement, The Company had also expected to release a resource update for the shallow surface exposed, high grade resource situated above the water table on Mannar Island. This resource update is still awaiting final samples from Mannar Island as well as the final mineralogy report from the laboratory. The completed resource report is now anticipated to be available for release in the first quarter of 2020.

### SCOPING STUDY

The Company is now well advanced in the preparation and completion of a scoping study of the Mannar Island project. First pass mining and processing engineering studies are being undertaken by

third-party industry experts and the Company has been advised the study should be available for the board to review in January 2020.

## **DRILLING UPDATE**

The RC Aircore drilling program has been completed on time and on budget and samples have been prepared to be sent to the laboratory in South Africa. A total of 473 RC drill holes were completed for 5,632m of drilling. As previously announced (ASX:TSL 27/9/19) the resource infill and extension drilling is targeting beneath the water table under parts of the shallow resource drilling and visual indication have shown consistent heavy mineral sand concentrations to a depth of 12m in over 90% of the holes drilled. Laboratory analyses from the RC drilling will enable resource modelling to be completed in the first Quarter of 2020 of the 10m of unconsolidated sands that underly the existing shallow mineral resources already reported for the Mannar Island project.

## **OFFTAKE DISCUSSIONS**

The Company has been approached by a number of potential offtake partners purely on an introductory basis discussing the TSL resource. Discussions to date have included parties from China, Japan, India and UAE. No formal MOU's or agreements have been entered into at this stage, and subject to the recommendations of the Scoping Study, the board will continue offtake discussions in early 2020 with each of the above parties.

Mineral product test work for the Mannar Island heavy mineral sands indicates that it is most likely to find a market for its ilmenite (ilmenite-leucoxene) minerals as a quality feedstock for sulphate route TiO<sub>2</sub> pigment production with the potential for smaller volume specialist rutile, zircon and garnet products. TiO<sub>2</sub> forms the basis for pigmented products used in a wide range of paints, plastics, paper, self cleaning coatings. Other uses of ilmenite minerals include the production of titanium metal (light, strong, corrosion-resistant), for aerospace industries and increasingly in motor vehicles and medical implants and welding rods (flux coating).

Market indications suggest a base case pricing for premium sulphate ilmenite feedstock product of between USD\$180-220p/t<sup>2</sup> (\$240 high grade) and rutile at around USD\$1,118 p/t<sup>2</sup>.

Zircon is processed into zirconium compounds, intermediate products and zirconium metal for a variety of applications including ceramics / tiles / toilets (55% demand), foundry sands / castings (14% demand), refractories / furnace linings (10% demand) and chemicals / gem stones / nuclear reactors (14% demand). Specialty uses include fibre optics, glass, paints, catalysts, underarm deodorants, adhesives, cosmetics, dental ceramics plus various research applications. Market indications suggest that zircon is selling for around USD\$973p/t<sup>2</sup>.

Garnet is used as an abrasive in high pressure paint stripping and industrial cleaning solutions and is sold for between USD\$200 – USD\$220p/t<sup>2</sup>.

## **MILESTONE SHARES**

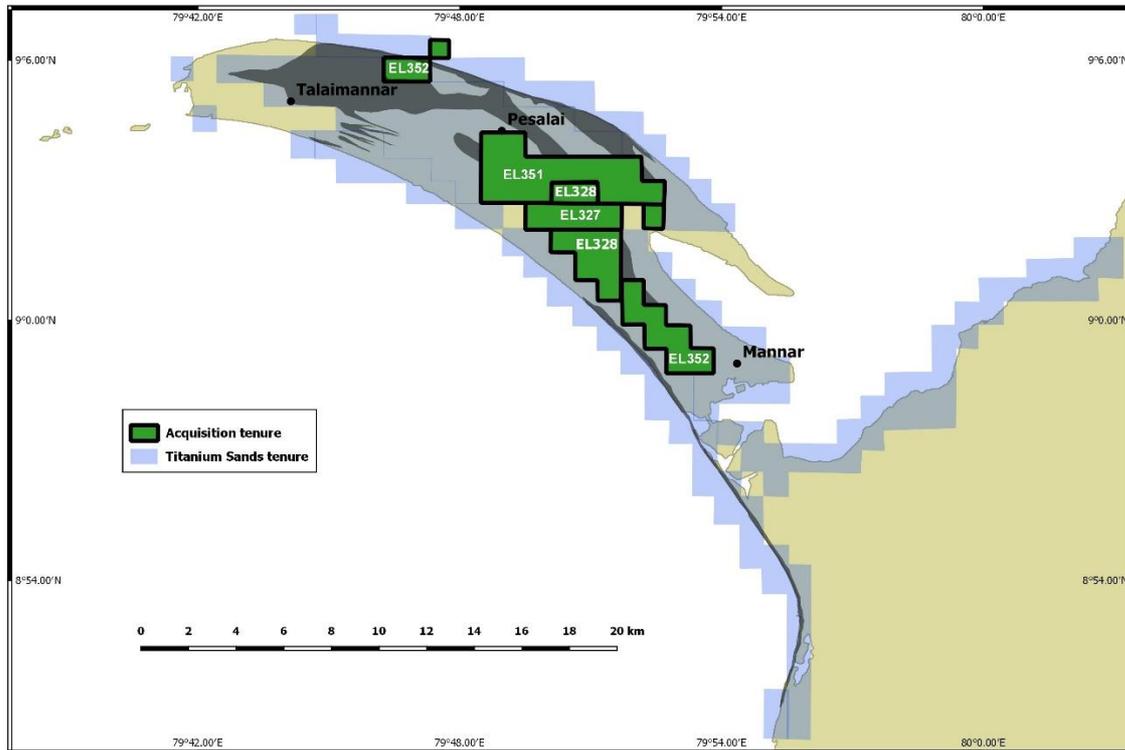
As previously announced (ASX:TSL 22/10/19) the Company advises that 133,333,333 Class C Performance Shares ("Class C Performance Shares") issued to the vendor of the Mannar Island licences will convert to 133,333,333 fully paid ordinary shares in TSL ("Shares"). The Milestone for

the Class C Performance Shares converting into Shares is the Company achieving a Mineral Resource of 70 million tonnes of heavy mineral content of not less than 5% discovered (or equivalent tonnage to heavy mineral content discovered ratio. For example, 35 million tonnes of heavy mineral content of not less than 10% discovered). The Milestone was formally achieved on the announcement of the resource upgrade confirming an inferred mineral resource of 53.08Mt @ 6.71%<sup>1</sup> (ASX:TSL 11/2/19). It had been agreed between the vendor and the Company at the time to wait for the next resource upgrade before converting the Class C Performance Shares into Shares, however given the delay of results as outlined above The Company has agreed to issue the shares now given the vendor had waited 10 months in good faith for the shares to be issued. As the Performance Shares were subject to an ASX Escrow Restriction to 18 December 2020, the Ordinary Shares will also remain in escrow for that period.

## CORPORATE

As approved at The Company's AGM in November 2019, TSL is also pleased to announce the issue today of 10,000,000 fully paid ordinary shares in the Company to CPS Capital Group Pty Ltd (or their nominee) as per the terms of their corporate mandate.

TSL Managing Director Dr James Searle said *"The Company is poised to achieve each of the above outlined milestones by the first quarter of 2020. This has the potential to move TSL from a small / medium asset company to a medium / large asset\* company as the resource is scaled up at depth (\*based on visual indications). It is an exciting time for the mineral sands industry with demand increasing via initial offtake discussions. The Board are looking forward to continuing to build on the excellent results achieved in 2019"*.



**Figure 1 Existing Titanium Sands Ltd tenure over the Mannar Island Project and the Acquisition Tenure.**

**Ends-**

The Board of Directors of Titanium Sands Ltd authorised this announcement to be given to ASX.

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**COMPLIANCE STATEMENTS**

*Forward-Looking Statements*

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company’s planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "expect," "intend," "may", "potential," "should," "further" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward- looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that further exploration will result in additional Mineral Resources.

<sup>1</sup> Refer to the ASX announcement on 11 February 2019 and 18 September 2019. The Company confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the mineral resource estimate in the relevant market announcements continue to apply with respect to the resource block model and total heavy mineral content and have not materially changed. The Company confirms that the form and context in which the Competent Persons’ finding are presented have not been materially modified from the relevant original market announcement.

<sup>2</sup> [www.indmin.com](http://www.indmin.com) – IM November 2019 Price Movements