



ASX RELEASE

15 February 2019

Test work successfully completed on Orokolo Bay magnetite, demonstrating suitability for use in dense media application

HIGHLIGHTS:

- Laboratory scale test work completed on magnetite sand product from Orokolo Bay confirms suitability for application as dense media in industrial mineral processing such as coal washing
- Results demonstrated that the product has excellent magnetic susceptibility qualities with no evidence of magnetisation and or agglomeration
- Subject to receipt of regulatory approvals for the pilot plant operations at Orokolo Bay, this successful test program now paves the way to undertake commercial scale product trials with interested customers

Mayur Resources Ltd (ASX: MRL) (the Company) is pleased to announce the recent completion of a laboratory scale test program to test the suitability of the Orokolo Bay magnetite for use as dense media separation (DMS). The DMS test programme focussed on establishing the magnetic susceptibility and agglomeration of the magnetite from the Orokolo Bay project in Gulf Province.

The Company engaged highly experienced consulting process engineer Mr Paul Foote to design and supervise the programme that was conducted at CRL Energy laboratories in Wellington, New Zealand. The test program was designed to replicate the actual use of the magnetite in a dense media plant via a closed loop circuit. This also enabled a comparison of the performance the Orokolo Bay magnetite against that of an existing DMS magnetite product.





Magnetite concentrate on Low Intensity Magnets (LIMS)

Lab scale LIMS circuit

The key outcomes from the work established that the Orokolo Bay magnetite was relatively easily upgraded to produce a dense media product with 93% magnetics. The size distribution and physical properties compared extremely favourably to the comparable magnetite product, and although the



Orokolo Bay magnetite exhibited different chemical properties (given it is a titano-magnetite) there was no noticeable difference in the magnetic susceptibility with both products being highly susceptible minerals.

The Orokolo Bay magnetite was tested through a closed loop circuit and continually run for 30 hours, exposed to the low intensity magnet (LIMS) and there was no evidence of the product magnetizing or agglomerating, thus yielding a positive outcome for the programme.

Managing Director Paul Mulder said "this DMS test work is a great result and on the back of this Mayur can now confidently move forward in providing pilot plant samples for further testing by an interested customer base of coal washeries in Queensland's Bowen Basin"

The Company recently announced a Joint Venture with China Titanium Resources Holdings Limited (CTRH) to develop the Orokolo Bay project¹ and the definitive transaction documents were expected to be concluded by the end of January 2019. By way of an update, these definitive transaction documents are substantially complete with a revised completion target date of 28 February 2019.

-

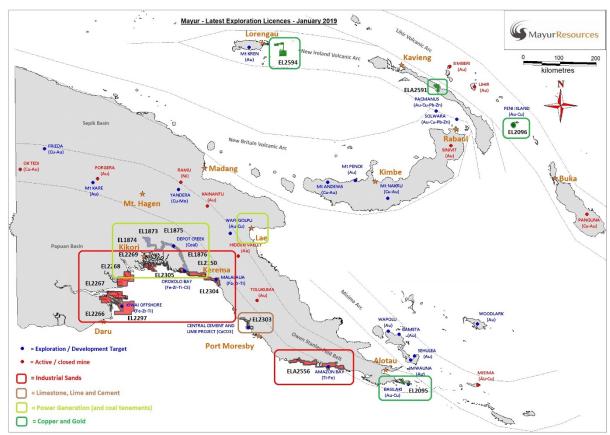
¹ Refer to ASX announcement dated 7 January 2019 - "Up to \$25m funding for the Orokolo Bay Industrial Sands Project – Pilot Plant & Full-Scale Operation"



About Mayur Resources

Mayur Resources is a diversified mineral exploration and energy development company operating in Papua New Guinea (PNG) across the following divisions:

- (a) Industrial Mineral Sands (construction sands, magnetite sands, heavy mineral sands). The Company is advancing the Orokolo Bay Industrial Sands Project along the southern coast of PNG. A pre-feasibility study has been completed which identified an opportunity to establish a project producing fine grain construction sands, titanomagnetite (iron sands) and a zircon-rich Valuable Heavy Mineral Concentrate by-product. The next steps include preparation of a Definitive Feasibility Study and, subject to the requisite regulatory approvals, the construction of a pilot scale demonstration plant.
- (b) Lime and Cement. The company has completed a DFS for the Central Cement and Lime Project which contemplates, subject to the requisite regulatory approvals, the quarrying of large-scale high-grade limestone deposits together with the development of a vertically integrated downstream processing quicklime and clinker / cement plant for domestic (import replacement) and export markets.
- (c) Copper and Gold. The Company holds exploration licences at the Feni Islands in New Ireland Province as well as Basilaki and Sideia Islands in Milne Bay Province
- (d) Power Generation. The Company has proposed a vertically integrated domestic power project at PNG's second largest city of Lae. A detailed Power Purchase Agreement has been submitted to PNG Power, the state-owned power entity, for a 52.5MW (net) power facility (with future scalability to 200MW). A definitive feasibility study has been completed for the Lae project that contemplates the use of multi fuels (Enviro Energy Park) including renewables and potentially coal, subject to the requisite regulatory approvals, from the Company's Depot Creek project in Gulf Province.
- **(e) Coal Exploration.** The Company holds a portfolio of exploration licenses in Gulf Province that includes the Depot Creek Coal project.



Mayur's mineral exploration licence (EL) and project portfolio in PNG

Enquiries

Paul Mulder – Managing Director

info@mayurresources.com

+61 7 3157 4400