

Beharra Project - Update on PFS Study

ASX RELEASE

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ASX: PEC

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Highlights

- *Beharra Pre-Feasibility Study now 48% complete*
- *All key work streams progressing well with no negative concerns or fatal flaws identified*
- *Sales and marketing discussions advancing rapidly*
- *Delivery of PFS expected in January*

Perpetual Resources Limited (ASX: PEC, “PEC” or “the Company”) is pleased to provide an update on the Pre-Feasibility Study (“PFS”) at the Beharra Silica Sand Project, which was commenced in late July 2020.

The Beharra PFS is designed to prove the economic potential of the Beharra project, prior to a more definitive decision to fund, expected in 2021. The PFS covers all aspects of the potential project, including mining and civil works requirements, processing plant design and analysis, metallurgy, logistics, in addition to analysis regarding capital requirements, power, water and environmental aspects. The Company anticipates delivering the results of the Beharra PFS in January.

The Beharra PFS is being overseen by Mr. Matt Robbins, a highly experienced mining industry professional, with deep knowledge of sand plant processing and project development, study management and cost estimation and well as sand industry advisory and strategic business development.

PEC's Managing Director, Mr Robert Benussi provided the following commentary, "Our aim since becoming involved with Perpetual has been to identify a mining project with the potential to deliver high returns for shareholders, with a modest capital outlay. Since selecting silica sand as our chosen commodity and acquiring the Beharra high grade silica sand project in Western Australia, we have rapidly grown our qualified team and advanced the project through now three rounds of exploration and definition drilling, as well as the commencement of a PFS. We are pleased to report that the PFS is progressing as well as we could have hoped, with interim feedback on the various work streams suggesting we are right on track, with no negative issues yet encountered. On the contrary, our studies and enquiries to date appear to validate our highest expectations for the project, and we look forward to confirming this via the delivery of a high quality PFS in coming months".

Below is a brief update on some of the key Beharra PFS workstreams.

Sales & Marketing

- Key sales & marketing consultants engaged
- Detailed market analysis underway, including how Beharra's likely end product quality is positioned within the regional high-grade silica sand markets
- Numerous approaches from silica sand end users received
- Discussions underway regarding offtake

Mining

- Initial Whittle shell model being developed and preliminary sections received from Snowden
- Analysis and decision making underway regarding starter pit location
- Plant location trade off studies well advanced

Metallurgy

- Detailed metallurgical testing underway at IHC Robbins
- Rougher sighter test curves comparing spiral options underway with results pending

- First pass WHIMS testing underway with results pending
- Initial metallurgical test results for announcement to the market expected in coming weeks

Engineering

- Final engineering deliverables received from Haald for tender assembly to potential plant providers
- Scope of works documents being assembled
- Equipment providers to be approached shortly to commence PFS quality competitive bidding process

Transport & Logistics

- Detailed trade off studies underway to inform optimal logistics solution to port, with potential cost saving identified
- Analysis of various potential product handling scenarios at port underway

Water

- Water license application submitted with discussions continuing regarding optimising the ultimate water solution

Flora & Fauna

- Initial reports received from Flora & Fauna consultants with manageable issues identified
- Regulatory applications being prepared for submission

Power

- Power studies well advanced with likely end solution apparent
- Awaiting final report in coming weeks

Perpetual looks forward to providing further PFS updates in coming week as the various key workstreams reach major milestones or conclusion.

About Perpetual Resources Limited:

Perpetual Resources Limited (Perpetual) is a focussed explorer of silica sands, aiming to produce high purity silica and construction sands for domestic and international markets.

Perpetual's flagship asset, the Beharra Project is located 300km north of Perth and is 96km south of the port town of Geraldton in Western Australia. Access to the Project from Geraldton (to the north) and Perth (to the South) is via the sealed Brand Highway, thence the Mt Adams unsealed road providing access to the centre of the tenure.



Figure 1: Mt Adams Road (above) & Proximal Rail (below)

Rail is about 10km from the Beharra Project and accessible via the Mt Adams Road, with the rail line potentially providing access directly to the Port of Geraldton. Rail distance from the road access point adjacent to the Beharra Project is approximately 91km. The port of Geraldton is utilised as a bulk materials handling facility and is currently utilised for the export of bulk materials, minerals and concentrates. Grains, copper concentrates, zinc concentrates, nickel concentrates, mineral sands, talc, and iron ore are currently being exported from the port. Extensive heavy mineral sands mining occurs to the south of the Project area, lime sands mining to the west and natural gas production to the south of the Project.

The Beharra Project comprises of a single exploration licence, E70/5221, covering an effective land area of 56.8km². Auger and air core drilling has confirmed the presence of extensive, high purity silica sands, with a maiden Mineral Resource Estimate completed in July 2020. A detailed Pre-Feasibility Study for Beharra is now underway with delivery expected in January 2021.

Silica Sands Market

Silica sands have an extensive range of uses including lower purity and grade applications such as construction sand, proppant sand used in well fracturing, and foundry sand. With increasing purity (>99.5% SiO₂) uses includes glass making including clear glass. Uses for purity >99.8% includes semi-conductor fillers, LCD screens, and optical glass.

This announcement has been approved for release by the Board of Perpetual.

-ENDS-

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