

**THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION****Pensana Plc ("Pensana" or the "Company")****Technical Due Diligence Report on Longonjo**

Pensana (LSE:PRE) is pleased to advise that the technical due diligence report on the Longonjo rare earth project in Angola (the Project or Longonjo) has been reported by The Mineral Corporation (TMC) to ABSA Capital (ABSA) as the Mandated Lead Arranger for potential debt funding of the Project.

**A summary of TMC's key findings:**

The Project is located approximately 320km east of the Port of Lobito and envisages the open pit mining and processing of near surface Rare Earth Elements (REE) bearing carbonatite ores to produce a mixed REE carbonate (MREC) concentrate which will then be marketed commercially.

The holder of the Mineral and Mining Rights over the Longonjo mining licence area is the Angolan registered company Ozango Minerais S.A. (Ozango), which is 84% owned by Portugal domiciled subsidiaries of Pensana. The balance of Ozango is held by the Angolan Sovereign Wealth Fund and two Angolan partners.

Longonjo will comprise an open pit mine to recover near surface REE, which will then be processed via concentration and downstream refining to produce a commercially saleable Mixed Rare Earth Carbonate (MREC) concentrate for export via the Port of Lobito to third-party offtakers for the purpose of ultimately producing Neodymium/Praseodymium (NdPr) feed into the renewable energy and electric vehicle markets.

A nominal plant feed of 0.8Mtpa has been specified at a TREO feed grade of 4.12% and an NdPrO feed grade of 0.9%. The stockpiling and blending strategy critical to achieving stable and consistent concentrator performance and product has been identified and included in the mining and processing flowsheets. The plant design is nominally based on a dry concentrate feed of approximately 59ktpa, to produce a nominal MREC dry product of 19.6ktpa (15ktpa normal operating conditions).

Whilst TMC is of the opinion that ramp-up to achieve design recoveries will be challenging, and the ongoing operational control of the processing plants will be critical to maintaining product quality and recovery, TMC notes no fatal flaws in terms of the revised bankable feasibility study (BFS) review and no material technical divergences from the level of study required for bank funding approval.

TMC noted the capital estimate provided is extremely detailed and based on bills of quantities and tendered prices with a capital base date of Q4 2023. An accuracy assessment was also carried out, which confirms the level of accuracy complies with that required by a BFS standard. TMC is of the opinion that sustaining capital may be slightly understated however this does not present a material risk to the Project.

## Capital Cost Breakdown

Concentrator Plant	US\$37 766 993
Plant Common Areas	US\$14 687 930
TSF	US\$7 157 201
Recovery Plant	US\$75 472 541
Plant Infrastructure	US\$15 568 988
Project Infrastructure	US\$123 386
Mine Infrastructure	US\$9 707 348
Environmental	US\$4 538 590
Security	US\$1 767 680
Site Infrastructure	US\$7 001 150
Indirect Costs	US\$22 640 254
Contingency	US\$20 100 933
<b>Total Project Capital Expenditure</b>	<b>US\$216 532 994</b>

The capital estimate was derived from the various currencies relating to the goods and services costs in the country of origin and adjusted for the relevant exchange rates: US\$ South African Rand ZAR 18.5, European Euro EUR 0.9, Australian Dollar AUD 1.5 and Angolan Kwanza AOA 830.

TMC notes the level of detail provided in the detailed capital estimate consisting of in excess of 18,000 line items, the methodology undertaken to produce the capital estimate and the basis of estimate being predominantly based on bills of quantity, tendered rates and budget quotations.

Operating Cost Estimates have been updated based on the revised Project scope and also brought to a consistent cost base date of Q4 2023. TMC has reviewed all of the operating cost centre data and concurs that the operating cost estimates as provided meet the accuracy levels associated with a BFS, however it is noted that the retender for the mining contract scheduled for late 2024 will impact on overall Project economics and in all likelihood trigger the requirement for a revision of the mining optimisation plan.

TMC notes that the financial model as received is detailed in all modelled inputs and results in free cash flow levels which would be likely to support a funding decision. TMC reiterates the sensitivity of the Project economics to the forecast rare earth oxide prices and recommends that the imminent offtake agreements and pricing structures should be included in any funding agreement as Conditions Precedent. Once these are available the Project financial model should be updated, and the economics revised. The Project economics are most sensitive to projected market dynamics and the resulting product pricing projections, which in turn present the most material risk to Project economics.

Earthworks and civils contractors established site in November 2022. Servitude bush clearing and pylon installations to the borehole pumps, contractors camp, main camp and water treatment plant were in progress at the time of the site visit at the end of February 2023. Overall, the level of detail design of the infrastructure is commensurate with the requirements of the BFS and TMC is of the opinion that

the infrastructure design is appropriate and fit for purpose to support the mining and processing operations.

TMC is of the opinion that the level of work undertaken for the project schedule and plan of execution is commensurate with the requirements of a BFS and the work undertaken is comprehensive and will be the basis for a potential successful project execution.

Extensive work has been undertaken in the areas of social and community engagement. TMC supports the programmes and costs which have been allocated to the various social initiatives, however notes that the Relocation Action Plan still requires careful monitoring and management to ensure successful implementation, minimising community grievances. Ozango's engagements and initiatives now comply with the expectations associated with a BFS level of study and in some instances exceed expected levels.

TMC notes that all legislative aspects of Human Resources management have been addressed adequately, however it does recommend that remuneration levels are reviewed prior to the commencement of recruitment, as the budgeted levels may mitigate against the procurement of top level individuals, particularly in the senior technical expatriate roles. The BFS meets expected levels of detail in terms of all HR, operational readiness and occupational health and safety aspects. It is noted that specific operational readiness planning is only expected at the next stage of the Project.

**Tim George CEO commented:** *"We are very grateful to Russel Heins and the team at The Mineral Corporation team for the diligent and extremely thorough review of all aspects of the Longonjo project undertaken in their role as lead Technical Advisor to ABSA as the Mandated Lead Arranger and we are pleased with the positive recommendations.*

*The review was based on the re-engineered, reduced capital cost of the project for financing purposes following our review in Q2 of 2023. A huge amount of work has gone into the capital cost estimate which as noted by Russell and the team is based on very detailed estimates and we are pleased that despite the current inflationary and cost pressures the estimate has been confirmed around US\$217 million, which includes US\$20 million in contingency.*

*As previously announced, once the Longonjo operations are operational and fully commissioned it is our intention to expand production to around 40,000 tonnes of MREC per annum which will require an additional capital cost of around US\$100 million which is expected to be incurred around year three of the initial operations.*

*Whilst this technical review has been underway, we have been working closely with our financiers ABSA, FSDEA and others and we expect to be in a position to announce the financing arrangements shortly."*

## **About The Mineral Corporation**

The Mineral Corporation (TMC) was established in Johannesburg, South Africa in 1997 and is home to a well-informed, globally-focused corporate and technical advisory team of mining sector professionals. TMC have expertise in mineral exploration, geology, mining engineering and development, mineral

processing, mining infrastructure, ESG, statutory compliance, mineral asset valuation and techno-economic modelling.

TMC understand that exploration and mining can be high risk industries and are confident that their skills can be applied to identify, resolve and minimise their clients exposure to such risk, thereby creating or preserving value.

TMC cover all minerals, including precious metals, base metals, noble and refractory metals, energy minerals (coal and uranium), mineral sands, precious and semi-precious stones, rare earth elements and industrial minerals.

Since inception, TMC has created or preserved many billions in various currencies (including rand, dollar, pounds) on behalf of clients. Their business model is founded on the qualification and quantification of mineral investment opportunities. TMC assemble teams of expert multi-disciplinary consultants who collectively craft an integrated business model to evaluate clients' enterprises. TMC's group of professionals offers knowledge from six continents but enjoys a particular passion for Africa. In many circumstances, TMC's imaginative, but always realistic, examination of mineral projects offers distinctive solutions to the complex alternatives that challenge investors.

TMC also provide bespoke institutional research on the mining industry.

**The information contained within this announcement is considered by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No.596/2014. Upon the publication of this announcement via a Regulatory Information Service, this inside information will be considered to be in the public domain. The person responsible for arranging for the release of this announcement on behalf of the Company is *Paul Atherley, Chairman*.**

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