25 October 2022

ALTONA RARE EARTHS PLC

("Altona" or "the Company")

QUARTERLY UPDATE

Altona (AQSE: ANR), a rare earths exploration, development and mining company, is pleased to provide an update of its activities on the Monte Muambe Rare Earths Mining Project for the 3rd Quarter, 2022.

Highlights

- Operations progressing on schedule
- Drilling on Target 1 and Target 4 continue to define orebodies suitable for an open-pit mining operation
- Target 3 and Target 10 undergoing preliminary investigation
- Samples sent away for analysis ahead of publication of Resource Estimate in Q1 2023

Exploration activities continued in accordance with Altona's 2022 project plan and budget, with the immediate next milestones being the completion of the project's maiden Mineral Resource Estimate (Q1 2023) and Scoping Study (Q2 2023).

During the quarter, resource drilling progressed with 14 Reverse Circulation ("RC") holes totaling 1,372m drilled, mainly on Target 1. These holes were specifically planned to provide data for the project's maiden Mineral Resource Estimate and they included two 150m holes which allowed to test for the presence of Rare Earth Elements ("REE") mineralisation at depth. The work done allowed the Company to confirm the geometry of the REE-bearing body, with a strike length of at least 550m (open to the East and West), a width of up to 150m and extending at depth to at least 120m below the surface (open downwards).

Out of the above-mentioned total, three holes were drilled on Target 9. The results were inconclusive, despite some intercepts of up to 4.515% Total Rare Earth Oxide ("TREO"), and for this reason Target 9 was not included in the JORC Exploration Target estimate, which was published in August 2022. Target 9 remains a high potential target and detailed soil sampling and ground geophysics were done during Q3 to support additional drilling to be carried out in the future.

The JORC Exploration Target was completed on the basis of *actual* drilling data from Targets 1 and 4, with grades being in large part analysed on site using a pXRF under stringent QAQC conditions. The estimate allowed the Company to confirm the potential size and grade of this primary carbonatite deposit, which compares favorably to peers in Africa, and to validate the resource drilling plan. An additional 1,600m of drilling are planned before the end of the year, both on Target 1 (with a focus on the deeper parts of the orebody and its extension towards the East) and on Target 4.

A batch of 1,360 RC drilling samples (including QAQC samples) was dispatched to Intertek Laboratories in South Africa for preparation. These will be analysed for 52 chemical elements including all rare earth elements.

Additionally, 20 representative ore samples from Target 1 and Target 4 were sent to Intertek in Perth for XRD and QEMSCAN. The results will provide more information on ore mineralogy and base data for metallurgical testing scheduled for November.

While the focus of drilling operations is currently on Target 1 and Target 4, surface exploration work continues on the other targets identified so far, with the objective of identifying new blind targets which are likely to be present at Monte Muambe under a limited layer of overburden. To this effect, detailed geological mapping, soil sampling and ground geophysics continued on Target 9, Target 3 and Target 10.

During the quarter, the Company also carried out a thorough differential GPS survey (dGPS, or RTK), covering all existing borehole collar locations (including legacy holes), as well as the topography of Targets 1, 4 and 9. The level of accuracy of these datasets is in accordance with industry standards and allows them to be used in the preparation of the Mineral Resource Estimate.

The Company is on track to publish its maiden Mineral Resource estimate in Q1 2023 and Scoping Study in Q2 2023 and, during the quarter, the request for quotations for these key independent studies was launched.

Christian Taylor-Wilkinson, Chief Executive of Altona, commented, "Within only a year, Altona has been able to rapidly and efficiently put itself, and the Monte Muambe project, on the map of possible future REE producers in Africa. While the feasibility of a mining operation at Monte Muambe will ultimately rest on a large number of key parameters, including metallurgy, the results of the Exploration Target show a potential resource of a size and grade that could sustain a viable mining operation, with a geometry favorable to low strip ratio open pit mining. The project's characteristics compare favorably to Monte Muambe's peer group in Africa. Drawing on the mining experience of our operations team, we continue to integrate mining parameters in our exploration programme, right from the beginning, to ensure the delivery of an actually mineable project."

For further information, please visit www.altonaRE.com or contact:

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About Altona Rare Earths Plc

Altona is a mining exploration company focused on the evaluation, development and extraction of Rare Earth Element (REE) metals in Africa. It owns a REE mining project in Mozambique; the Monte Muambe Project, a significant Light REE mining project in the northwest of the country. Resource Drilling commenced in April 2022 and it will publish a maiden Resource Estimate in Q1 2023, and a Scoping Study in Q2 2023. The Company is in the process of investigating other REE opportunities in Africa.