



Green helium for a
high-tech world.

ASX Release

2 November 2023

Mbelele-1 Reaches TD

Noble Helium Limited (ASX:NHE) (“Noble Helium” or “the Company”) provides an update on drilling on at Mbelele-1 at the Company’s North Rukwa Helium Project in Tanzania.

Following the Company’s previous announcement of reaching tophole casing point after encountering gas and helium¹, the 8.5” open-hole section of Mbelele-1 has now been drilled to Total Depth (TD) of 400m TVD on 31st October local time.

A comprehensive suite of wireline logs has been run by SLB to collect subsurface information for petrophysical analysis. Initial interpretation in the 8.5” section, indicates stacked, interbedded sandstone-clay formations with the multiple helium shows above background, detected in the mudgas, coincident with permeable sandstone reservoirs below clay seals. The well was drilled intentionally ‘over-balance’ for safety reasons. Therefore, the wireline data are now being further studied to identify potential points for further gas and fluid sampling, where feasible and appropriate, using modular formation dynamic tester (MDT) and/or mini-DSTs.

MDT sampling and mini-DST runs are expected to take a number of days, after which Mbelele-1 will be plugged and abandoned as planned, with Mbelele-1 not designed to be a future production well. The Marriott rig will then be rigged down and along with the SLB equipment moved 4km to commence drilling at the Mbelele-2 site.

The Company’s CEO and Co-Founder Justyn Wood commented:

*“The continued helium shows at multiple levels in Mbelele-1 are very encouraging and in line with our interpretation of the exploration and seismic data that this is an active helium producing system and continues to support the Company’s well-researched thesis that the North Rukwa rift basin has the potential to emerge as a new globally significant **primary** helium province.”*

“We look forward to understanding the nature of the helium shows and the reservoir potential in these deeper targets at Mbelele-1 and of course Mbelele-2, which also demonstrates anomalies on seismic consistent with gas presence.”

¹ ASX release XX October 2023 Mbelele-1 Tophole helium

This announcement has been authorised for release on ASX by Noble Helium's Board of Directors.

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Forward-looking statements

This announcement may contain certain “forward-looking statements”. Forward looking statements can generally be identified by the use of forward-looking words such as, “expect”, “should”, “could”, “may”, “predict”, “plan”, “will”, “believe”, “forecast”, “estimate”, “target” and other similar expressions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

Competent Persons Statement

The technical information provided in this announcement has been compiled by Mr. Ashley Howlett, Exploration Manager, Professor Andrew Garnett, Non-Executive Director, and Mr. Justyn Wood, Chief Executive Officer, all of Noble Helium Limited. The resource estimates have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2018, approved by the Society of Petroleum Engineers.

Mr Howlett is a qualified geologist with over 20 years technical, and management experience in exploration for, appraisal and development of, oil and gas resources. Mr Howlett has reviewed the results, procedures and data contained in this announcement and consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

Cautionary Statement for Prospective Resource Estimates

With respect to the Prospective Resource estimates contained within this report, it should be noted that the estimated quantities of gas that may potentially be recovered by the future application of a development project relate to undiscovered accumulations. These estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable helium.

Green helium for a high-tech world.

Noble Helium is answering the world’s growing need for a primary, ideally carbon-free, and geo-politically independent source of helium. Located along Tanzania’s East African Rift System, the Company’s four projects are being advanced according to the highest ESG benchmarks to serve the increasing supply chain fragility and supply-demand imbalance for this scarce, tech-critical and high-value industrial gas.

Our flagship North Rukwa Project has an independently certified, summed unrisksed mean Prospective Helium Resource of 176 billion cubic feet (equivalent to approximately 30 years’ supply). The project lies within the Rukwa Basin, which has the potential to be the world’s third largest helium reserve behind USA and Qatar.

Priced at up to 50 times the price of LNG in liquid form, helium is now essential to many modern applications as an irreplaceable element in vital hi-tech products such as computer and smartphone components, MRI systems, medical treatments, superconducting magnets, fibre optic cables, microscopes, particle accelerators, and space rocket launches – NASA is a major consumer. Rising demand and constrained supply are fuelling growth prospects within the global marketplace, particularly for cleaner “green helium” sourced from non-carbon environments. At present, more than 95% of the world’s helium is produced as a by-product of the processing of hydrocarbon-bearing gas.

Additionally, Noble Helium has commissioned the first ever Helium Atlas, with an exclusive five-year agreement allowing the Company to identify additional prospective areas to target for diversification. The Atlas uniquely positions Noble Helium as a world leading helium explorer.

