



Green helium for a
high-tech world.

ASX Release

15 August 2023

Operations Update

Highlights

- Marriott Rig #16 on board MV Bohwa Tsingtao scheduled to arrive at the Suez Canal 23rd August
 - Rig on track to arrive port of Dar es Salaam, Tanzania early September
 - Mbelele-1 and Mbelele-2 well site preparation on schedule
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Noble Helium Limited (ASX:NHE) (“Noble Helium” or “the Company”) is pleased to provide an operational update on its North Rukwa Project in Tanzania, while preparing for spud in Q3 2023.

Noble Helium Chief Executive and Co-founder, Mr Justyn Wood commented:

“We are rapidly approaching a potentially transformative step for NHE’s shareholders, as we prepare to drill our first two wells. Leveraging 20 plus years of exploration experience in the East African Rift system (EARS), we have applied the best available science in the North Rukwa basin to potentially unlock what we believe will be a globally significant helium system.”

“It’s rewarding to watch our team synchronously bringing all the moving parts of our drilling program together as we prepare to begin drilling Mbelele-1 in September. A successful drilling program is only possible with significant planning and attention to detail; our team’s knowledge coupled with Rig #16’s experienced crew, supported by Marriott’s management team and comprehensive Safety, Health, Environment and Quality Management System that bridges to Noble Helium’s HSE-MS, sets us up for success.”

Rig in Transit

Marriott Rig #16 departed the port of Hull on 11 August 2023 aboard the MV Bohwa Tsingtao and at the time of writing sails adjacent to northwestern Spain. The vessel is scheduled to arrive at Port Said at the northern entrance to the Suez Canal on 23 August 2023. The rig is scheduled to arrive in Tanzania in early September and anticipated to be onsite to commence drilling in late September 2023.

Mbelele Drill Pad and Camp Construction

Construction of our Mbelele-1 and Mbelele-2 well sites (Figure 1) are being carried out safely, on time and on budget by our local civil engineering contractor. The Mbelele-1 site is on track to be ready by the end of August, well ahead of the rig's arrival in Tanzania, with the Mbelele-2 site on track for readiness by early September.

The BGP seismic camp is being re-purposed for the drilling campaign, being located very close to the Mbelele-2 wellsite and with an associated all-weather access road.



Figure 1. Mbelele site construction. Clockwise from top left: morning toolbox meeting, Mbelele-1 site road, Mbelele-1 cellar compaction, completed Mbelele-1 cellar.

The Mbelele Wells

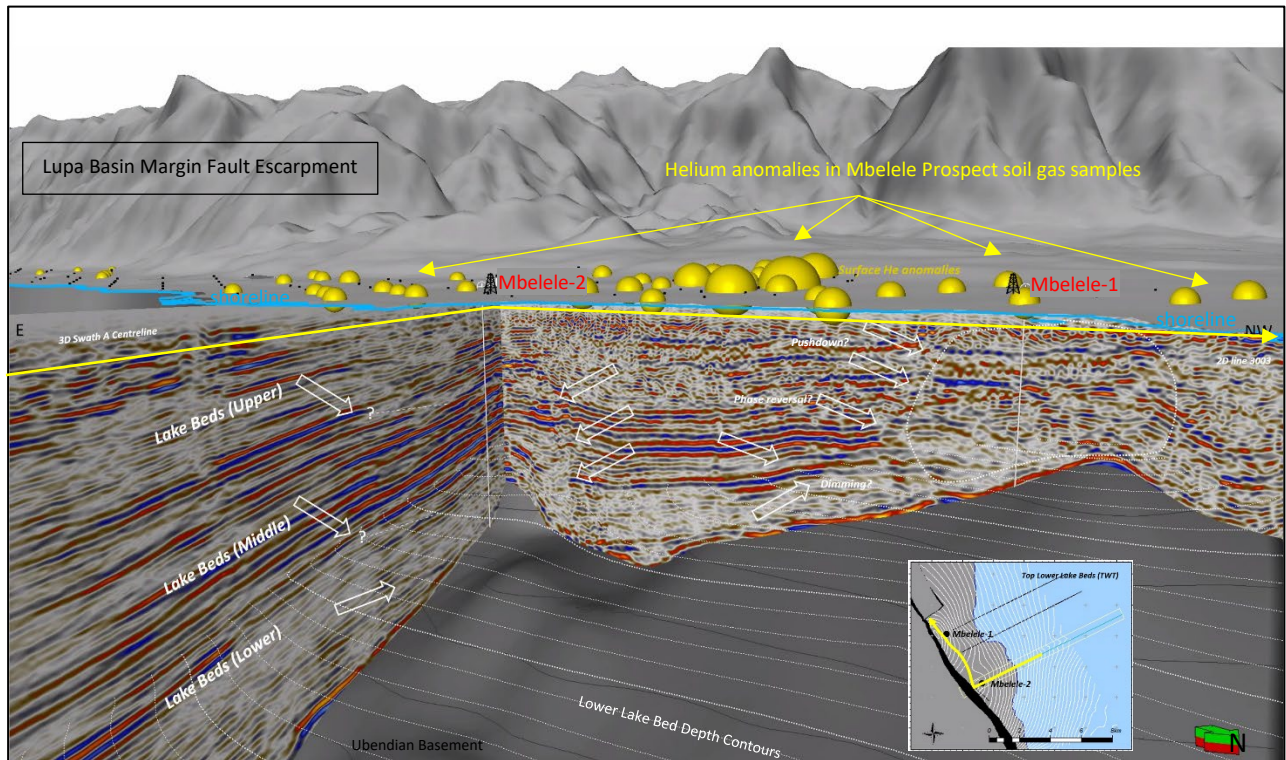


Figure 2. Mbelele-1 and Mbelele-2 well locations on 3D & 2D seismic, showing potential gas-related responses.

Mbelele-1 (Figure 2) will be drilled to TD of circa 500m, targeting Upper, Middle and the top of Lower Lake Bed formations, each of which demonstrate potential gas-related responses in the new 2D seismic at the uppermost culmination of the Mbelele Basin Margin Fault Closure (BMFC) structure.

Mbelele-2 (Figure 2) will appraise the same Mbelele-1 reservoirs approximately 4km southeast and approximately 100m down-dip. In addition, Mbelele-2 will be drilled to a TD of approximately 850m, targeting reservoirs of the Lower Lake Beds, which as previously announced also demonstrate potential gas-related responses in the new 3D seismic.

Targeting a company estimated unrisked mean Helium Prospective Resource of 15.7 billion cubic feet (Bcf) of helium; this is 2.5 years global demand and represents less than 9% of our NSAI independently certified unrisked mean of 176Bcf for our North Rukwa leads and prospects. For reference, helium pricing on long-term, bulk liquid contracts is US\$450/Mscf (per thousand standard cubic feet).

As we are targeting simple relatively shallow vertical wells, our current drilling and testing plan for the Mbelele wells anticipates both Mbelele wells drilled and tested by the end of October, well ahead of the start of the wet season.

Our comprehensive testing program will include onsite analysis of both mud gas at surface and downhole sampling of fluids at reservoir conditions, with duplicate downhole samples sent for verification at a highly regarded international laboratory. SLB (formerly Schlumberger) will run

wireline logs for reservoir properties and mini-DSTs (Drill Stem Tests) at identified gas intervals for reservoir flow rates. The Company has been working with our certifiers and potential helium offtakers to ensure that both wells, but in particular the appraisal leg of the Mbelele-2 well gathers the information required to fast track commercialisation of a Mbelele discovery. Having the ability to drill an appraisal well now and collect this information will allow field development planning and offtake arrangements to be advanced during the wet season. We have made provision in our contract with Mariott to stack Rig #16 onsite, ready for further exploration, appraisal and development drilling in the next dry season drilling window.

As previously announced, Mbelele represents a potential standalone helium field for a commercialisation opportunity that could place the Company in production just 12 to 18 months from discovery, with little CAPEX required.

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.

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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 unrisked 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.

