

3D Seismic Recommences Ahead of Drilling in Q3

Highlights

- Rukwa 3D Seismic Survey recommences over eastern leads
- Multiple potential drilling candidates and rig options identified for Q3 drilling program
- Farm-out process continuing, with LAB Energy Advisors Ltd appointed – non-binding offers due end Q1 2023

Noble Helium Limited (ASX:NHE) ("**Noble Helium**", "**NHE**" or "**the Company**") is pleased to provide an update on its exploration activities in Tanzania.

The Company is advancing preparations to discover gas-phase helium in the subsurface of the Rukwa Basin, SW Tanzania, and narrowing in on drilling candidates for spud in Q3 2023.

The 3D seismic program that commenced in 2022 has recommenced following replacement of the source vessel. The remaining 80km² of the program is being collected for processing and interpretation.

The exploration program is on track for the commencement of drilling in Q3 2023, with multiple suitable rig options identified.

As announced previously, the Company is seeking partners for the drilling phase of the program in the North Rukwa Basin. Multiple parties have shown an interest in participating, with non-binding offers due by the end of March.

Noble Helium's Co-Founder and CEO, Justyn Wood, commented:

"The Company's 2022 exploration program has successfully provided highly encouraging signals from the Rukwa basin's Helium System. This is allowing us to mature multiple drilling target options for our maiden drilling program in 2023.

"Applying best science, our aim is to demonstrate commercially viable, gas-phase helium within the subsurface of this globally unique helium system.

"We look forward to updating our shareholders as we complete our final preparatory activities in the North Rukwa Basin and progress to defining our two preferred drilling targets for Q3 2023."

North Rukwa 3D Seismic Survey Recommences

The Company is pleased to advise that, on 30th January, our seismic contractor, BGP, successfully recommenced the final ~80km² 3D seismic survey over the Chilichili structures on the eastern side of Lake Rukwa. This is the last of the planned Phase I seismic programs prior to drilling in Q3 2023 and is expected to be completed by late February, retaining Chilichili on the list of potential drilling candidates.

The Chilichili structure is currently estimated to host a mean Prospective Helium Resource of 10.5 Bcf primary helium (NSAI 2022), with the full stratigraphic section of the Rukwa Basin, including deeper Karoo sands, offering significant potential for stacked pay. It is highly likely the Chilichili structure would be an economically viable standalone drilling target with long-term liquid helium contracts recently executed at ~US\$450/Mscf.¹

As previously announced, the fully processed 3D surveys over the three western leads have now been received and are being integrated into our Petrel™ subsurface model, with the Mbelele and Kachinga leads expected to mature to drillable Prospects and potential candidates for the upcoming 2023 drilling program (NSAI mean Prospective Helium Resource 10.0 Bcf and 7.9Bcf respectively).

The Company is confident that it will be able to announce high quality drilling candidates of potential economic significance in the coming weeks.

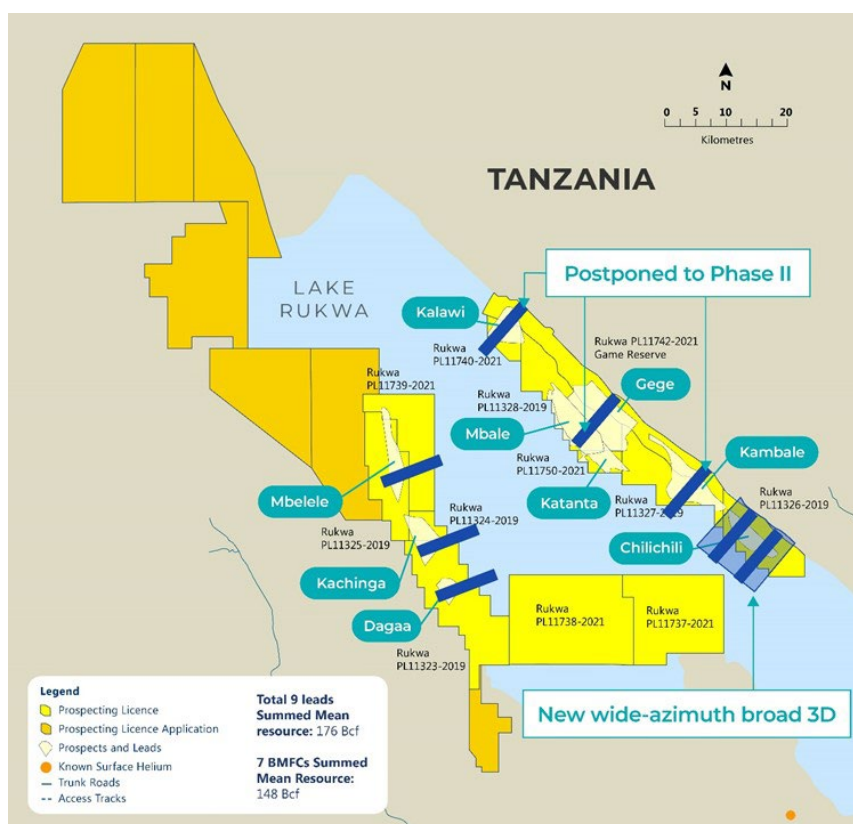


Figure 1 – North Rukwa Project Tenement and approximate 3D Seismic Swath Locations

¹ November 2022 Kornbluth Consulting

2023 Drilling Program and Farm-out

Preparations for the 2023 maiden drilling campaign are now well underway with our highly experienced drilling management team fully integrated into the Company and focussed on successfully delivering the well program.

The team have networked with other Tanzanian operators to source a suitable drilling rig, resulting in four viable rig options under consideration for NHE's 2023 program, with a rig selection imminent.

In parallel, the farm-out process to fund the drilling program continues, with LAB Energy Advisors Ltd appointed to manage the process. Multiple parties have been engaged and non-binding offers are due at the end of Q1 2023.

Strong Activity Pipeline

As previously advised, with the Company now preparing to drill in the North Rukwa in Q3 2023, the following activities are expected to be completed over the coming months:

- Definition of drilling candidates for the 2023 campaign
- Finalisation of North Rukwa farm-out process
- Execution of rig contract
- Commencement of maiden drilling campaign in the North Rukwa Basin

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

For further information:

Justyn Wood

Co-Founder and CEO

E: justyn@noblehelium.com.au

M: +61 410 626 261

Zander Beacham

White Noise Communications

E: zander@whitenoisecomms.com

M: +61 433 515 723

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About Noble Helium

Noble Helium is a Tanzania-focused helium explorer looking to provide carbon-free and geopolitical-free helium to the global market for this scarce, tech-critical and high-value industrial gas. Noble Helium has a substantial landholding of premium helium exploration acreage totalling 5,464km² across four key project areas in the East African Rift System (EARS) basins of Tanzania: North Rukwa, North Nyasa, Eyasi and Manyara.

The Company's flagship project, North Rukwa, already has an independently certified, summed unrisked mean Prospective Helium Resource of 176 billion cubic feet (equivalent to approximately 30 years' supply), with the benefit of legacy oil and gas exploration data. Rukwa Basin has the potential to be the world's third largest helium reserve behind USA and Qatar.



Figure 2 – Noble Helium Project Locations

The potential for helium to have been retained within the rift basins of Tanzania is considered significant. After the first oil discoveries in Uganda in 2006, in which Noble Helium's CEO played a key role, a succession of oil and gas exploration wells in the EARS basins of Uganda and Kenya demonstrated an extraordinary discovery rate of 80%, or 4 in 5 from over 30 wells. More than 4 Billion BOE has been proven, and both countries are now progressing to commercial production.

Neighbouring Rukwa Basin explorer Helium One Global plc has recently announced plans to redrill its Tai-1 well, which demonstrated multiple helium shows from surface to basement in August 2021. Tai-1 is located 30km to the south of the Company's licences.

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 helium Atlas uniquely positions Noble Helium as a world leading helium explorer.