

3D SEISMIC SURVEYS – KACHINGA LEAD

Highlights

- Acquisition of all three 3D seismic swaths on the western side of North Rukwa Project area complete
- First fast-track 3D seismic cube over the Kachinga Lead completed, supporting the presence and extent of the Kachinga Basin Margin Fault Closure; full processing to PSTM and PSDM now underway
- Seismic crew now remobilising to acquire 3D swaths on the identified leads on the eastern side of Lake Rukwa

Noble Helium Limited (ASX:NHE) ("**Noble Helium**", "**NHE**" or "**the Company**") is pleased to announce the completion of 3D seismic acquisition over the three western leads in its North Rukwa Project portfolio in Tanzania (Figure 1).

The first "Brute Stack" fast-track 3D volume has now been received for the Kachinga lead, which was the first 3D survey acquired (Photo 1). This preliminary 3D volume clearly demonstrates the Rukwa Basin's sedimentary layers climbing toward the Basin Margin Fault, consistent with our pre-Airborne Gravity Gradiometry (AGG) geological model and the subsequent AGG. In combination with the AGG results, the presence and gross extent of the structural closure at the Basin Margin Fault is now well supported. These early results are highly encouraging and Kachinga remains on the list of drilling candidates for 2023.

Over the coming weeks, the full pre-stack time migration (PSTM) and pre-stack depth migration (PSDM) processing are expected to provide full definition imaging in the subsurface.

Fast-track 3D cubes are in process for the Mbelele and Dagaa leads.

The 3D crew is remobilising to the eastern side of Lake Rukwa to commence the 3D seismic surveys for the remainder of the North Rukwa Project area leads.

These new 3D seismic datasets will be progressively integrated into our Petrel model for the play a key role in the selection and farmout of our 2 preferred drilling targets for 2023.

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

"The 3D seismic survey is the pinnacle of our 2022 exploration program at North Rukwa as we begin to focus in on the two most prospective targets for drilling in 2023.

"These initial results are extremely encouraging and further confirms our theory that the Rukwa Basin is highly prospective for Helium and the presence of Basin Margin Fault Closures. Kachinga will remain on the list for potential drill targets for 2023.

"I look forward to updating the market as we progress through the 3D seismic survey."

Noble Helium Limited ACN 603 664 268 Level 8, London House 216 St Georges Terrace Perth WA 6000 E: info@noblehelium.com.au T: 08 9481 0389 www.noblehelium.com.au





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

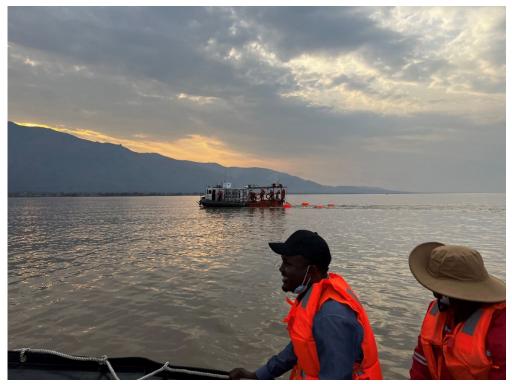


Photo 1 – 3D Seismic Gunboat in action in the Rukwa Lake



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: <u>zander@whitenoisecomms.com</u> M: +61 433 515 723

Disclaimer

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.



About Noble Helium

Noble Helium is a Tanzania-focused helium explorer looking to provide carbon-free and geopoliticalfree 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.

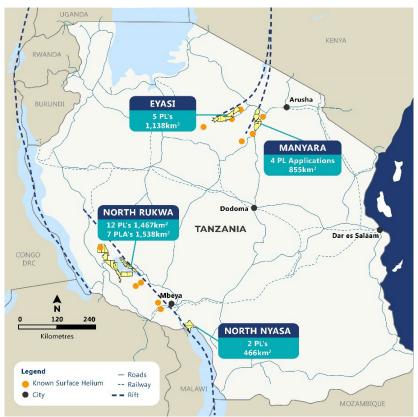


Figure 2 – Noble Helium Project Locations

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.