

## ASX Release

28 July 2025

# North Rukwa prospective helium resource upgraded.

Upgraded charge model and NSAI resource assessment informs upcoming drill campaign plan, currently being finalised.

### Highlights

- **Netherland, Sewell & Associates, Inc (“NSAI”) upgrades gas-phase Prospective Helium Volumes across North Rukwa Project licences.**
- **Upgraded charge model and NSAI assessment drive the refinement of the plans for the next phase drilling campaign at North Rukwa (which is being finalised at the moment).**
- **Enhanced drill plan is part of six-month Strategic Review which will implement best-practice governance focused on the delivery of significant process improvements across multiple areas.**

**Noble Helium Limited (ASX: NHE) (“Noble Helium” or “the Company”) reports that independent resource auditor Netherland, Sewell & Associates, Inc (“NSAI”) has upgraded the Company’s gas-phase Prospective Helium Resource Estimate for its flagship North Rukwa Project.**

NSAI’s updated and independent assessment has incorporated all new exploration data acquired since the 2022 pre-IPO Competent Persons Report, including drilling and geophysical results returned throughout 2024.

The “low Billion Cubic Feet (BCF) Estimate” increased 2.6 BCF from 19.6 BCF to 21.1 BCF (+17.2%) while the “Mean BCF Estimate” increased 28.5 BCF from 175.5 BCF to 225.5 BCF (+28.5%).

Crucially, this resource update has coincided with the Company’s completely revised helium charge model, which confirms the likely presence of one or more gas-forming mechanisms for each of the re-assessed leads.

### **Noble Helium Executive Chairman, Mr Dennis Donald, said:**

*“This improved resource upgrade is further confirmation of the North Rukwa Basin as a unique and potentially globally significant helium producing system that the Company’s focused strategy will soon begin to unlock. NSAI’s resource assessment work together with an upgraded helium charge model and peer reviewed deep geological analysis has served to refine the Company’s next drilling program which is close to being finalised as we advance monetisation of the Company’s helium assets.”*

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**Table 1: NSAI Unrisked Summed Prospective Helium Volume Estimates**

Assessment Date	Low (Bcf)	Best (Bcf)	Mean (Bcf)	High (Bcf)
2022	19.6	100.7	175.5	405.7
2025	21.1	118.0	225.5	526.1
<b>Variance (%)</b>	<b>+2.6</b>	<b>+17.2</b>	<b>+28.5</b>	<b>+29.7</b>

*Note: The updated estimate excludes the Mbelele gas cap Prospective Resource, which will be quantified through appraisal drilling as a Contingent Helium Volume.*

NSAI's Helium Prospective Volumes for the North Rukwa Project were calculated in accordance with the Society of Petroleum Engineers Petroleum Resource Management System (SPE-PRMS), which is widely accepted as the standard for hydrocarbon resource and reserve estimation, including by the ASX. The SPE-PRMS is specifically designed for hydrocarbons, which helium is not, however the SPE acknowledges the principles and methods for hydrocarbon gas resource estimation are directly applicable to helium gas volume estimation and approves the use of the system for such.

#### Technical breakthroughs to enhance planning for next drill campaign

The plan for the next phase of drilling is close to being finalised with the number of wells, depths, locations and budgets to be confirmed following a final peer review. However, Mbelele and Kinambo will be key targets after Noble Helium's geological team, led by Technical Director Mr Justyn Wood, made critical advances in understanding the extensive Rukwa helium system.

Optimal drilling locations to target gas-phase helium have been pinpointed. The final target locations will be confirmed shortly on the basis of an upgraded helium charge model drawn from maiden drilling, NSAI's resource assessment and peer reviewed deep geological analysis.

The BorExpert rig is currently on standby at zero cost. It can be rapidly mobilised and eliminates the need for expensive petroleum-orientated drilling operations.

#### Strategic review completed

The drill plan was part of an intensive six-month strategic board review of all company operations led by Executive Chairman Mr Dennis Donald. The review has established a structure to implement best-practice governance with a focus on results, safety, process, reporting, and rigorous cost control measures.

**This announcement has been authorised for release on the 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. Justyn Wood, Executive Director with 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 Wood is a qualified geophysicist with over 30 years technical, and management experience in exploration for, appraisal and development of, oil and gas resources. Mr Wood 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.

### NSAI Resource Update

The technical persons responsible for preparing the reserves estimates presented herein meet the requirements regarding qualifications, independence, objectivity and confidentiality set forth in the Standards Pertaining to Estimating and Auditing of Oil and Gas Reserves Information promulgated by the Society of Petroleum Engineers. We are independent petroleum engineers, geologists, geophysicists and petrophysicists; we do not own an interest in these properties nor are we employed on a contingent basis. Netherland, Sewell & Associates, Inc. performs consulting petroleum engineering services under the Texas Board of Professional Engineers Registration No. F-2699. Netherland, Sewell & Associates, Inc has consented to the form and context in which the Prospective Resource Estimates and supporting information are presented.

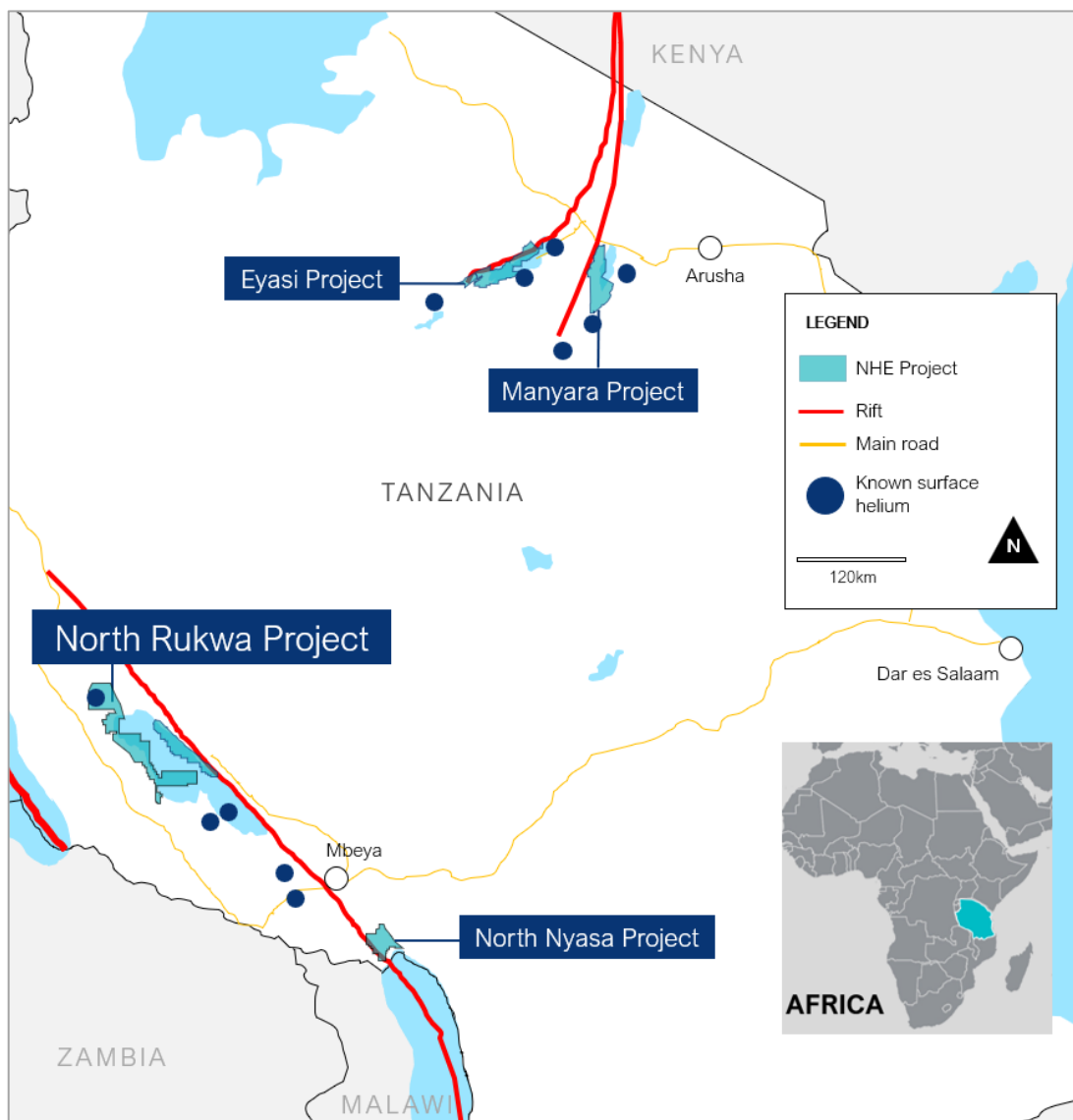
### Cautionary Statement for Prospective Resource Estimates

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.

## Primary helium for a high-tech world.

Noble Helium is answering the world's growing need for a primary 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.

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.



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## Appendix 1.

### NSAI North Rukwa Leads Helium Prospective Volumes

**NSAI** NETHERLAND, SEWELL & ASSOCIATES, INC.

Lead/Reservoir	Undiscovered OGIP <sup>(1)</sup> (BCF)				Unrisked Gross (100%) Prospective Helium Volumes (BCF)			
	Low Estimate	Best Estimate	High Estimate	Mean	Low Estimate	Best Estimate	High Estimate	Mean
<b>Chilichili</b>								
Galula	29.4	98.4	315.0	147.8	0.5	3.1	13.7	5.8
Karoo	44.5	131.8	385.6	186.9	0.8	4.2	17.1	7.4
Lake Beds	20.3	74.8	268.8	123.0	0.4	2.3	11.4	4.8
Nsungwe	7.0	30.1	119.4	53.3	0.1	0.9	5.0	2.1
<b>Gege</b>								
Galula	167.3	557.6	1,742.2	815.8	3.1	17.4	75.3	32.2
Karoo	23.2	82.7	280.4	129.3	0.4	2.6	12.0	5.1
Lake Beds	346.3	951.4	2,546.1	1,257.7	5.9	30.1	115.7	49.7
Nsungwe	98.0	321.5	939.3	448.5	1.7	10.0	41.4	17.7
<b>Kachinga</b>								
Galula	38.7	104.7	263.7	134.2	0.6	3.3	12.0	5.3
Karoo	49.7	143.8	409.7	200.9	0.9	4.5	18.4	8.0
Lake Beds	42.5	127.9	384.2	184.8	0.8	4.0	16.8	7.3
Nsungwe	12.7	45.8	150.5	69.7	0.2	1.4	6.5	2.7
<b>Kalawi</b>								
Galula	12.2	40.5	131.1	61.3	0.2	1.3	5.7	2.4
Karoo	10.6	42.7	171.3	76.3	0.2	1.3	7.1	3.0
Lake Beds	44.3	128.9	373.3	181.1	0.8	4.1	16.4	7.1
Nsungwe	14.8	53.1	169.9	78.9	0.3	1.6	7.3	3.1
<b>Kambale</b>								
Galula	29.4	127.5	533.2	235.0	0.6	4.0	21.8	9.3
Karoo	49.3	198.2	778.4	349.1	1.0	6.1	32.1	13.7
Lake Beds	34.6	128.5	471.7	213.3	0.7	4.0	19.9	8.4
Nsungwe	12.3	53.5	212.5	94.3	0.2	1.6	8.8	3.7
<b>Katanta</b>								
Galula	12.7	42.9	137.4	64.5	0.2	1.3	5.9	2.6
Karoo	3.2	14.6	65.8	28.8	0.1	0.4	2.6	1.1
Lake Beds	11.9	75.9	479.7	209.5	0.3	2.3	18.8	8.2
Nsungwe	4.2	30.8	209.3	91.5	0.1	0.9	8.1	3.6
<b>Mbale</b>								
Galula	0.3	1.8	9.7	4.3	0.0	0.1	0.4	0.2
Karoo	21.3	67.5	211.5	100.0	0.4	2.1	9.2	3.9
Nsungwe	1.2	3.8	11.2	5.4	0.0	0.1	0.5	0.2
<b>Ngambwa</b>								
Galula	3.5	13.0	48.2	21.6	0.1	0.4	2.0	0.8
Lake Beds	4.5	16.2	57.4	26.1	0.1	0.5	2.4	1.0
Nsungwe	1.8	7.5	28.9	13.0	0.0	0.2	1.2	0.5
<b>Pegere</b>								
Galula	6.2	29.2	131.0	58.3	0.1	0.9	5.4	2.3
Nsungwe	7.9	32.8	122.2	54.7	0.2	1.0	5.1	2.2
<b>Total<sup>(2)</sup></b>	<b>1,165.9</b>	<b>3,779.5</b>	<b>12,158.8</b>	<b>5,718.9</b>	<b>21.1</b>	<b>118.0</b>	<b>526.1</b>	<b>225.5</b>

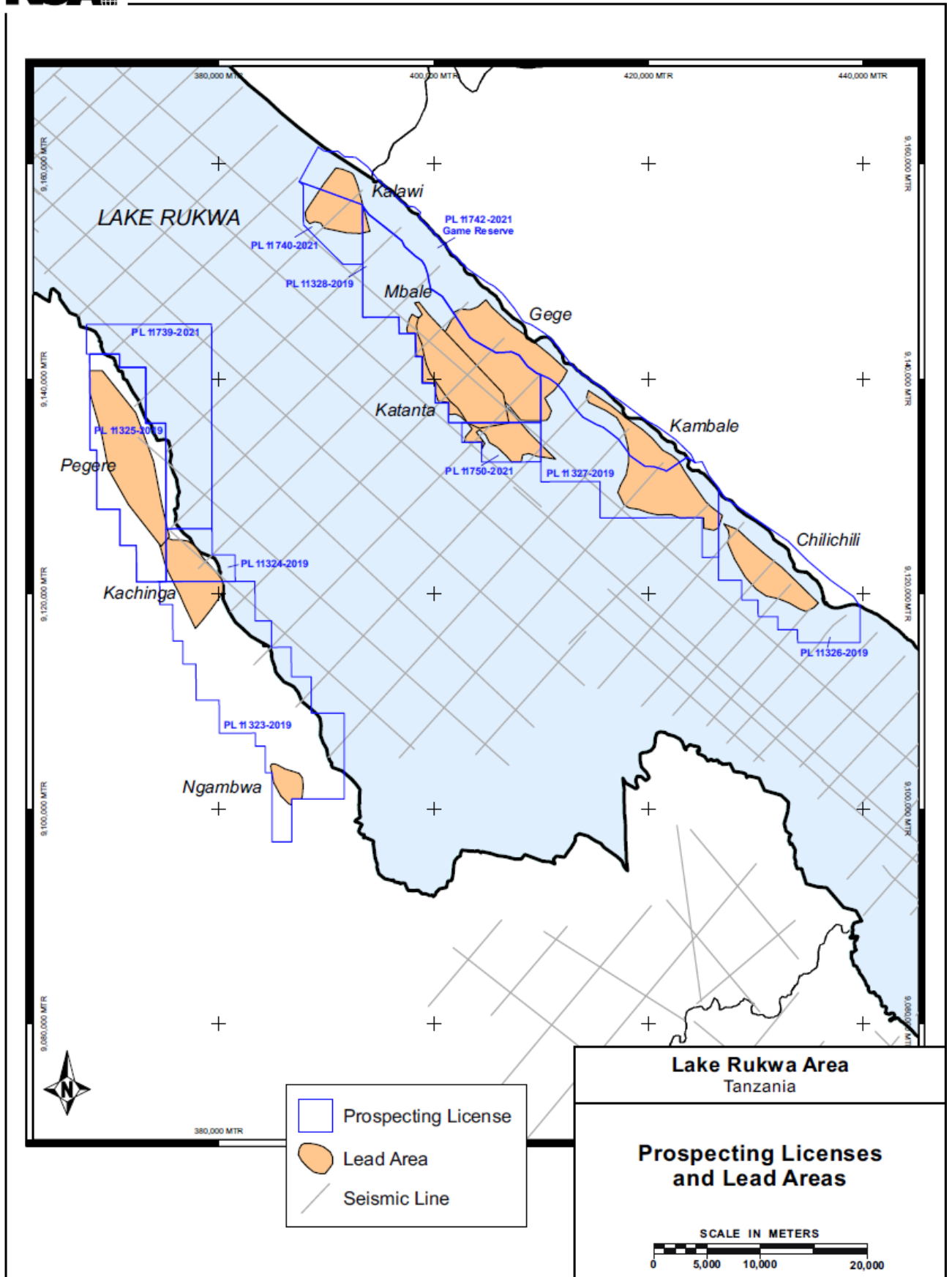
(1) Undiscovered OGIP is inclusive of helium, hydrocarbon, nitrogen, carbon dioxide, and other gases.

(2) Totals are the arithmetic sum of multiple probability distributions and may not add because of rounding.

**Note:** Mbelele target and Kinambo target formerly known as Pegere and Ngambwa targets respectively.

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All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.