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securing the  
future of helium

# PROSPECTUS 2022

Noble Helium Limited  
ACN 603 664 268



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future of helium

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ACN 603 664 268

# PROSPECTUS 2022

For an offer of a minimum of 35,000,000 Shares and a maximum of up to 50,000,000 Shares, at an issue price of \$0.20 per Share, to raise between \$7,000,000 and \$10,000,000 (before costs) **(Public Offer)**.

The Public Offer pursuant to this Prospectus is conditional upon satisfaction of the Offer Conditions, which are detailed in Section 2.2. No Shares will be issued pursuant to this Prospectus until the Offer Conditions are met.

It is proposed that the Public Offer will close at 5.00pm (WST) on 28 March 2022. The Directors reserve the right to close the Public Offer earlier or to extend this date without notice. Applications must be received before that time.

The Public Offer is not underwritten.

## Joint Lead Managers:



Max Capital Pty Ltd (ACN 152 214 956)  
(AFSL 411 136)



Inyati Capital Pty Ltd (ACN 642 351 193)  
(Corporate Authorised Representative  
Number: 1287573)

### IMPORTANT INFORMATION

**This is an important document that should be read in its entirety.  
If you have any queries or do not understand it you should consult your professional advisers without delay.  
The Shares offered by this Prospectus should be considered highly speculative.**

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# PROSPECTUS 2022



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## CORPORATE DIRECTORY

### Directors

Justyn Wood  
(Executive Director & Chief Executive Officer)  
Shaun Scott (Non-Executive Chairperson)  
Ariel (Eddie) King (Non-Executive Director)  
Prof Andrew Garnett (Non-Executive Director)

### Company Secretary

Craig McNab

### Solicitors

Nova Legal Pty Ltd  
Level 2, 50 Kings Park Road  
West Perth, WA 6005

### Investigating Accountant

Hall Chadwick WA Audit Pty Ltd  
283 Rokeby Road  
Subiaco WA 6008

### Independent Technical Expert's Report

Nertherland, Sewell & Associates, Inc.  
2100 Ross Avenue  
Suite 2200  
Dallas, Texas 75201  
United States of America

### Solicitor's Report on Tenements

Mawalla Advocates  
Mawalla Road, Mawalla Heritage Park  
Plot No. 175/20  
Arusha, Tanzania, PO Box 6101

These entities are included for information purposes only and have not been involved in the preparation of this Prospectus.

### Proposed ASX Code

NHE

### Registered Office and Principal Place of Business

Level 11, London House  
216 St Georges Tce  
Perth WA 6000

Telephone: 08 9481 0389  
Email: [info@noblehelium.com.au](mailto:info@noblehelium.com.au)  
Website: [noblehelium.com.au](http://noblehelium.com.au)

### Share Registry\*

Automatic Pty Ltd  
Level 5, 191 St Georges Terrace  
Perth WA 6000

### Joint Lead Managers

Max Capital Pty Ltd  
35 Richardson St  
West Perth, WA 6005

Inyati Capital Pty Ltd  
3/300 Rokeby Road  
Subiaco, WA 6008

### Auditor\*

Hall Chadwick Audit (WA) Pty Ltd  
283 Rokeby Road  
Subiaco WA 6008

### Independent Market Report

Kornbluth Helium Consulting, LLC  
5 Benner Court  
Bridgewater, New Jersey 08807  
United States of America

## IMPORTANT NOTICE

### GENERAL

This Prospectus is dated 18 February 2022 and was lodged with ASIC on that date. Neither ASX nor ASIC and its officers take responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates. No Shares may be issued on the basis of this Prospectus later than thirteen (13) months after the date of this Prospectus.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Shares the subject of this Prospectus should be considered highly speculative.

No person is authorised to give information or to make any representation in connection with this Prospectus, which is not contained in the Prospectus. Any information or representation not so contained may not be relied on as having been authorised by the Company in connection with this Prospectus.

### EXPOSURE PERIOD

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. You should be aware that this examination may result in the identification of deficiencies in this Prospectus and, in those circumstances, any application that has been received may need to be dealt with in accordance with Section 724 of the Corporations Act. Applications for Shares under this Prospectus will not be processed by the Company until after the expiry of the Exposure Period. No preference will be conferred on Applications lodged prior to the expiry of the Exposure Period.

### PROSPECTUS AVAILABILITY

A copy of this Prospectus can be downloaded from the website of the Company at [noblehelium.com.au](http://noblehelium.com.au). If you are accessing the electronic version of this Prospectus for the purpose of making an investment in the Company, you must be an Australian resident and must only access this Prospectus from within Australia.

The Corporations Act prohibits any person passing onto another person an Application Form unless it is attached to a hard copy of this Prospectus or it accompanies the complete and unaltered electronic version of this Prospectus. You may obtain a hard copy of this Prospectus free of charge by contacting the Company. The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant

supplementary or replacement prospectus or any of those documents were incomplete or altered.

### APPLICANTS OUTSIDE AUSTRALIA

This Prospectus does not constitute an offer or invitation in any place in which, or to any person to whom it would not be lawful to make such an offer or invitation. The distribution of this Prospectus (in electronic or hard copy form) in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws. No action has been taken to register to qualify the Shares, or the Public Offer, or otherwise permit a public offering of Shares, in any jurisdiction outside Australia. Refer to Section 2.11 for more information.

### FORWARD LOOKING STATEMENTS

This Prospectus contains forward-looking statements which are identified by words such as 'could', 'believes', 'may', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and its Directors and management.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this prospectus, except where required by law. These forward looking statements are subject to various risk factors that could cause our actual results to differ materially from the results expressed or anticipated in these statements. These risk factors are set out in Section 6 of this Prospectus.

### PHOTOGRAPHS AND DIAGRAMS

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown

endorses the Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale.

## MARKET AND INDUSTRY DATA

This Prospectus (and in particular Section 4) contains industry data and forecasts that were obtained from industry publications, opinions, market data, third-party market research and publicly available information. These publications may state or imply that the information contained in them has been obtained from sources believed to be reliable, but the Company has not independently verified the accuracy or completeness of such information. There is no assurance that any of this information will be achieved. These matters involve risks and uncertainties and are subject to change based on various factors, including those described in the risk factors set out in Section 6.

## QUALIFIED RESERVES AND RESOURCES EVALUATOR'S STATEMENT

The prospective volumes in the Independent Technical Expert's Report at Annexure A are for helium, which are not hydrocarbons. However, Netherland, Sewell & Associates, Inc. have used the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (SPE-PRMS) approved by the Society of Petroleum Engineers as the framework to classify these helium volumes as "prospective". The SPE-PRMS is specifically designed for hydrocarbons, which helium is not, however the principles and methods for hydrocarbon gas resource estimation are directly applicable to helium gas volume estimation.

The prospective helium volumes included in the Independent Technical Expert's Report should not be construed as petroleum reserves, petroleum contingent resources, or petroleum prospective resources. They represent exploration opportunities and quantify the development potential in the event a helium discovery is made.

This information in this Prospectus which relates to prospective helium volumes is based on, and fairly represents, in the form and context in which it appears, information and supporting documents prepared by, or under the supervision of, Alexander Karpov and Zachary Long

Alexander Karpov is an employee of Netherland, Sewell & Associates, Inc. Alexander Karpov attended Texas A&M University and graduated in 2001 with a Master of Science Degree in Petroleum Engineering and attended the Moscow Institute of Oil and Gas and graduated in 1992 with a Bachelor of Science Degree in Petroleum Geology. Alexander Karpov is a Licensed Professional Engineer in the State of Texas, United States of America and has

in excess of 26 years of experience in petroleum engineering studies and evaluations. Alexander Karpov has sufficient experience to qualify as a qualified petroleum reserves and resources evaluator as defined in the ASX Listing Rules.

Zachary Long is an employee of Netherland, Sewell & Associates, Inc. Zachary Long attended Texas A&M University and graduated in 2005 with a Master of Science Degree in Geophysics, and attended the University of Louisiana at Lafayette and graduated in 2003 with a Bachelor of Science Degree in Geology. Zachary Long is a Licensed Professional Geoscientist in the State of Texas, United States of America and has in excess of 16 years of experience in geological and geophysical studies and evaluations. Zachary Long has sufficient experience to qualify as a qualified petroleum reserves and resources evaluator as defined in the ASX Listing Rules.

Alexander Karpov, Zachary Long and Netherland, Sewell & Associates, Inc. have each consented to the inclusion in this Prospectus of the matters based on this information in the form and context in which they appear, including the Independent Expert's Report at Annexure A.

## SPECULATIVE INVESTMENT

The Shares offered under this Prospectus are considered speculative. There is no guarantee that the Shares offered will make a return on the capital invested, that dividends will be paid on the Shares, or that there will be an increase in the value of the Shares in the future. Prospective investors should carefully consider whether the Shares offered under this Prospectus are an appropriate investment for them in light of their personal circumstances, including but not limited to their financial and taxation position. Refer to Section 6 for details of the risks associated with an investment in the Company.

## RISK FACTORS

You should read this document in its entirety and, if in any doubt, consult your professional advisers before deciding whether to apply for Shares. There are risks associated with an investment in the Company. The Shares offered under this Prospectus carry no guarantee with respect to return on capital investment, payment of dividends or the future value of the Shares. Refer to Section 6 for details of some of the key risks associated with an investment in the Company that should be considered by prospective investors. There may be risk factors in addition to these that should be considered in light of your personal circumstances.

## DEFINITIONS

Unless the context otherwise permits, defined terms and abbreviations used in this Prospectus have the meanings set out in Section 12.



## LETTER FROM THE CHAIRMAN

Dear Investor,

On behalf of my fellow Directors, it is with great pleasure that I present to you this Prospectus and invite you to become a Shareholder of Noble Helium Limited (ACN 603 664 268) (**Noble Helium** or the **Company**).

Noble Helium is an Australian public company incorporated on 13 January 2015 that is focused on exploration for helium in Tanzania, with the ultimate objective of establishing a major new commercially viable green helium source not linked to hydrocarbon production, to create a sustainable green helium option creating much needed geopolitical diversification within the existing fragile global supply chain of this vital industrial gas.

The Company holds (through its wholly owned subsidiaries registered in Tanzania) a 100% interest in a number of tenements in Tanzania which comprise four project areas, as follows:

- (a) the **North Rukwa Basin Project**, which comprises twelve (12) granted prospecting licences covering a combined area of approximately 1,467km<sup>2</sup> of the North Rukwa Basin located in south-west Tanzania;
  - (b) the **North Nyasa Basin Project**, which comprises two (2) granted prospecting licences covering a combined area of approximately 466km<sup>2</sup>;
  - (c) the **Eyasi Basin Project** which comprises five (5) applications for prospecting licences covering a combined area of approximately 1,138 km<sup>2</sup> of the Eyasi Basin located in central northern Tanzania; and
  - (d) the **Manyara Basin Project** which comprises four (4) applications for prospecting licences covering a combined area of approximately 854km<sup>2</sup> of the Manyara Basin located in central northern Tanzania,
- (together, the **Projects**).

Detailed information about the Projects is set out in Section 3.5, the Independent Technical Expert's Report in Annexure A, and the Solicitor's Report on Tenements in Annexure B. Details about the helium market are also contained in the Independent Market Report at Section 4.

The Public Offer made pursuant to this Prospectus is seeking to raise a minimum of \$7,000,000 and a maximum of \$10,000,000 (before costs) through the issue of between 35,000,000 and 50,000,000 Shares at an issue price of \$0.20 per Share. The purpose of the Public Offer is to (among other things) provide funds for the Company to undertake systematic exploration of the Projects in accordance with its intended exploration program detailed in Section 3.6.

Helium is vital for a wide range of activities and industries, from semiconductor production, fibre optics, rocket fuel pressurization, and cryogenics to cooling superconducting magnets used in medical imaging. The growth and upside potential for helium is enormous and this Public Offer presents investors with the opportunity to become a part of a focused helium exploration company with a management team that is committed to delivering value for Shareholders in what could well be described as the next big thing that no one has ever heard about.

The Company has brought together a management and exploration team with a proven track record and diverse range of skills in the oil and gas industry. This uniquely qualified team offers experience and success across the realms of exploration, development, finance and acquisitions and is poised to aggressively explore the Projects with the objective of making a commercial helium discovery.

This Prospectus contains detailed information about the Company, its business and the Public Offer, as well as the risks of investing in the Company. Before making any decision on this investment it is recommended that you read this Prospectus in its entirety and seek professional advice as appropriate.

On behalf of the Directors I commend this investment opportunity to you and look forward to welcoming you as a Shareholder.

Yours sincerely,



---

**Shaun Scott**  
**Non-Executive Chairman**

## KEY OFFER INFORMATION

### Key Dates – Indicative Timetable

Event	Date
Lodgement of Prospectus	18 February 2022
Opening Date of the Public Offer	28 February 2022
Closing Date of the Public Offer	28 March 2022
Allotment and issue of Shares under the Public Offer	1 April 2022
Expected dispatch of holding statements	1 April 2022
Shares expected to begin trading on ASX	8 April 2022

#### Notes:

1. Subject to the Exposure Period. The Exposure Period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act. Any extension of the Exposure Period will impact on the Opening Date.
2. Prospective investors are encouraged to submit their Applications as early as possible. The Directors reserve the right to close the Public Offer earlier or later than as indicated above without prior notice to prospective investors.
3. Anticipated dates only. The above dates are indicative only and may change without notice. The Directors reserve the right to amend the timetable. The date the Shares are expected to be issued and/or commence trading on ASX may vary with any change to the Closing Date.



## KEY OFFER DETAILS

	Minimum Subscription (\$7,000,000)	Maximum Subscription (\$10,000,000)
Shares on issue at the date of this Prospectus <sup>1</sup>	131,285,191	131,285,191
Shares to be issued under the Marketing Services Agreement <sup>2</sup>	1,875,000	1,875,000
Shares to be issued under the Public Offer <sup>3</sup>	35,000,000	50,000,000
<b>Offer Price per Share</b>	<b>\$0.20</b>	<b>\$0.20</b>
<b>Total Shares on issue on completion of the Public Offer</b>	<b>168,160,191</b>	<b>183,160,191</b>
Options on issue at the date of this Prospectus <sup>4</sup>	<b>28,277,778</b>	<b>28,277,778</b>
Options to be issued to Directors and Advisors <sup>5</sup>	<b>12,375,000</b>	<b>12,375,000</b>
Options to be issued under the Joint Lead Manager Mandate <sup>6</sup>	<b>3,325,000</b>	<b>4,750,000</b>
<b>Total Options on issue on completion of the Public Offer</b>	<b>43,977,778</b>	<b>45,402,778</b>
<b>Fully diluted Share capital<sup>7</sup></b>	<b>212,137,969</b>	<b>228,562,969</b>
<b>Gross Proceeds of the Public Offer</b>	<b>\$7,000,000</b>	<b>\$10,000,000</b>
<b>Market Capitalisation on completion of the Public Offer (undiluted)<sup>8</sup></b>	<b>\$33,632,038</b>	<b>\$36,632,038</b>
<b>Market Capitalisation on completion of the Public Offer (fully diluted)<sup>8</sup></b>	<b>\$42,427,594</b>	<b>\$45,712,594</b>

### Notes:

- Includes 17,777,778 Shares issued pursuant to the Seed Raising. Refer to Section 3.8 for details regarding the substantial Shareholders of the Company as at the date of this Prospectus.
- The Company has agreed to issue a total of 1,875,000 Shares at a deemed issue price equal to \$0.20 each to S3 Consortium Pty Ltd (and/or its nominees) in lieu of cash payment of \$375,000 in fees for digital marketing services to be provided to the Company in accordance with the Marketing Services Agreement. Refer to Section 9.5 for a summary of the material terms and conditions of the Marketing Services Agreement.
- Refer to Section 2.1 for details of the Public Offer.
- Exercisable at \$0.20 on or before 16 September 2025. Refer to Section 10.2 for the full terms and conditions of the Existing Options.
- 10,275,000 Options exercisable at \$0.25 on or before the date that is 30 months from the date of issue to be issued to the Directors (subject to vesting conditions) as reasonable remuneration for future services to be provided to the Company. 2,000,000 Options exercisable at \$0.25 on or before the date that is 30 months from the date of issue to be issued to various advisors (unrelated third-party service providers) as consideration for services provided to the Company. Refer to Sections 10.3 and 10.4 for the full terms and conditions of the Director Options and Advisor Options respectively.
- Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. Refer to Section 9.1 for a summary of the material terms and conditions of the Joint Lead Manager Mandate and Section 10.4 for the full terms and conditions of the Lead Manager Options.
- Certain Securities on issue post-listing will be subject to ASX-imposed escrow. Refer to Section 3.9 for further information. The Company will announce to the ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.
- Assuming a Share price of \$0.20, however, the Company notes that the Shares may trade above or below this price.

## 1. INVESTMENT OVERVIEW

The information in this Section is a summary only and not intended to provide full information for investors intending to apply for Shares offered pursuant to this Prospectus. This Prospectus should be read and considered by potential investors in full, including the full risk factors set out in Section 6 and the experts' reports included in this Prospectus.

### 1.1 Key Information

Topic	Summary	Reference
<b>A. Company and Project Overview</b>		
<b>Who is issuing this Prospectus?</b>	Noble Helium Limited (ACN 603 664 268) (Proposed ASX Code: NHE) ( <b>Noble Helium</b> or the <b>Company</b> ).	Section 3
<b>Who is the Company and what does it do?</b>	<p>The Company is an Australian public company incorporated on 13 January 2015 that is focused on exploration of helium with the ultimate objective of establishing a new source of commercially viable liquid helium for the global supply chain.</p> <p>The Company holds (through its wholly owned subsidiaries registered in Tanzania) a 100% interest in a number of tenements in Tanzania which comprise four project areas (together, the <b>Projects</b>).</p> <p>Following completion of the Offers and the admission of the Company to the Official List of the ASX, the Company plans to undertake systematic exploration activities on the Projects to determine their potential.</p>	Section 3
<b>What are the Projects and where are they located?</b>	<p>The Projects consist of:</p> <ul style="list-style-type: none"> <li>(a) the <b>North Rukwa Basin Project</b>, which comprises twelve (12) granted prospecting licences covering a combined area of approximately 1,467km<sup>2</sup> of the North Rukwa Basin located in south-west Tanzania;</li> <li>(b) the <b>North Nyasa Basin Project</b>, which comprises two (2) granted prospecting licences covering a combined area of approximately 466km<sup>2</sup> of the North Nyasa Basin located in south-west Tanzania;</li> <li>(c) the <b>Eyasi Basin Project</b> which comprises five (5) applications for prospecting licences covering a combined area of approximately 1,138km<sup>2</sup> of the Eyasi Basin located in central northern Tanzania; and</li> <li>(d) the <b>Manyara Basin Project</b> which comprises four (4) applications for prospecting licences covering a combined area of approximately 854 km<sup>2</sup> of the Manyara Basin located in central northern Tanzania.</li> </ul> <p>The Company expects the Prospecting Licence Applications to be granted after its admission to the Official List of the ASX.</p> <p>A summary of the key information in relation to the Projects is set out in Section 3.5. In addition, more detailed information about the geology, background and proposed expenditure for the Projects is set out in the Technical Expert's Report in Annexure A. For information about the legal nature and status of the Projects, refer to the Solicitors' Reports on Tenements in Annexure B. The budget for exploration of the Projects is set out in Section 3.6.</p>	Sections 3.5, 3.6 and Annexures A and B

Topic	Summary	Reference
What is the Company's principal asset?	<p>The Company's principal asset is the North Rukwa Basin Project in Tanzania. The Rukwa Basin occupies a 300km-long rift segment of the East African Rift System, located between Lake Tanganyika and Lake Nyasa (Malawi) in southwest Tanzania.</p> <p>In the mid to late 1980s, Amoco Tanzania Oil Company explored the Rukwa Basin for hydrocarbons, providing valuable exploration data in the form of basin-wide 2D seismic data and two (dry) exploration wells. Since 2001, an extensive geological database has been further developed by researchers associated with the School of Mines and Geology at the University of Dar es Salaam and James Cook University in Townsville, Queensland.</p> <p>Large structural closures have been mapped on the 2D seismic within the North Rukwa Basin Project, and multiple, quality reservoir/seal pairs identified from surface to basement. The two proven physical mechanisms that cause helium to form into gas phase at depth are modelled as active within the North Rukwa Project.</p> <p>A working helium source is demonstrated in the Rukwa Basin with multiple hot springs measured at concentrations of up to 10 percent helium and associated mainly with nitrogen. This independence from hydrocarbons is exceedingly rare, with 95% of the world's helium sourced as by-product of natural gas. In 2021, further evidence of a working helium source was demonstrated in the central Rukwa Basin by Helium One Global Ltd (Helium One), which drilled two helium exploration wells in close proximity to one another, the Tai-1 and Tai-2 wells. While both are considered dry holes, helium was measured in shallow sections above the primary formations of interest and detected at multiple levels including the deepest targets in the Karoo section.</p>	Sections 3.5, 3.6 and Annexures A and B



## 1.1 Key Information continued

Topic	Summary	Reference								
<b>Do the Projects contain any Reserves and Resources?</b>	<p>Helium Prospective Volumes for the North Rukwa Project have been independently provided by Netherland Sewell and Associates (NSAI) of Houston, Texas, in accordance with the Society of Petroleum Engineers Petroleum Resource Management System (<b>SPE-PRMS</b>). The SPE-PRMS 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 principles and methods for hydrocarbon gas resource estimation are directly applicable to helium gas volume estimation.</p> <p>NSAI estimates the following helium Unrisked Gross Summed Prospective Volumes within the North Rukwa Project, within 9 structures:</p> <table><tr><th>Low Estimate</th><th>Best Estimate</th><th>High Estimate</th><th>Mean</th></tr><tr><td>19.6 Bcf</td><td>100.7 Bcf</td><td>405.7 Bcf</td><td>175.5 Bcf</td></tr></table> <p>The prospective helium volumes included in the Independent Technical Expert's Report should not be construed as petroleum reserves, petroleum contingent resources, or petroleum prospective resources. They represent exploration opportunities and quantify the development potential in the event a helium discovery is made.</p> <p>The Company notes the North Nyasa Basin Project, Eyasi Basin Project and the Manyara Basin Project are not as advanced as the North Rukwa Basin Project and are considered to be early stage exploration projects.</p>	Low Estimate	Best Estimate	High Estimate	Mean	19.6 Bcf	100.7 Bcf	405.7 Bcf	175.5 Bcf	Section 3.5 and Annexure A
Low Estimate	Best Estimate	High Estimate	Mean							
19.6 Bcf	100.7 Bcf	405.7 Bcf	175.5 Bcf							

Topic	Summary	Reference
Why is helium important?	<p>Helium is an inert noble gas that is generated naturally within the earth's crust, cannot be synthesised, and rarely accumulates in economic quantities.</p> <p>The vast majority (95%) of today's global helium supply is sourced as a low-concentration by-product from the very small fraction of petroleum gas fields with sufficient helium concentration for economic extraction. The other 5% of produced helium is associated with either CO<sub>2</sub> or nitrogen gas fields ("Green Helium").</p> <p>Helium has many unique properties that make it extremely valuable and irreplaceable in many industrial applications that are extremely important to society and the global economy. These applications are wide and varied, however key uses include:</p> <ul style="list-style-type: none"><li>(a) Internet: The major components of the internet – the semiconducting chips within computers and the fibre-optic cables that interconnect them – are both critically reliant on helium for their manufacture. In 2021 semiconductor manufacture consumed 19% of global helium supply. Growing at an 11% compound annual growth rate electronics will soon surpass MRI imaging as the largest single consumer of helium. Combined with optical fibre manufacturing at 3%, the internet already requires as much helium to function as MRIs, and is a technology that impacts most individuals on a daily basis.</li><li>(b) MRI machines: The superconducting magnets within MRI machines require helium as the coolant. This technology currently consumes 22% of the world's helium supply.</li><li>(c) Aerospace: While NASA remains the single largest user of helium for aerospace applications, SpaceX is revolutionising the space industry. SpaceX' rockets rely on significant volumes of helium for fuel tank pressurisation and fuel line purging. Total aerospace demand for helium in 2021 is believed ~8% of global supply, although with SpaceX' accelerating cadence in rocket launches, this may be as high as 10%.</li></ul>	Section 4

**Helium Demand by Application**

Application	Percentage
MRI	22%
Semiconductor	19%
Welding	12%
Aerospace	8%
Lifting	10%
Breathing	3%
Laboratory	10%
Leak Detection	6%
Fiber Optics	4%
Other Cryogenic	3%
Controlled Atmospheres	3%

*Helium demand by application (Independent Market Report, Kornbluth Helium Consulting, LLC)*

## 1.1 Key Information continued

Topic	Summary	Reference																
Why is helium important?	<p>For most of the 20th Century, all helium was produced from a small number of helium-enriched natural gas fields, located onshore USA. However, as these US gas fields have been depleted, a small number of large gas fields outside the USA containing economic concentrations of helium, notably in Algeria, Qatar, and most recently Russia, have been increasingly adding to the global supply.</p> <p>By 2025, these three countries will supply greater than 60% of the world's helium from just 3 gas fields, exposing the global helium supply to significantly increased levels of geopolitical and engineering risk.</p> <div><h3>Helium Supply by Country – 2025</h3><table><thead><tr><th>Country</th><th>Percentage</th></tr></thead><tbody><tr><td>U.S. + CAN</td><td>37%</td></tr><tr><td>QATAR</td><td>27%</td></tr><tr><td>ALGERIA</td><td>8%</td></tr><tr><td>AUSTRALIA</td><td>0%</td></tr><tr><td>POLAND</td><td>1%</td></tr><tr><td>RUSSIA</td><td>26%</td></tr><tr><td>SOUTH AFRICA</td><td>2%</td></tr></tbody></table><p><i>2025 Expected helium supply by country (Independent Market Report, Kornbluth Helium Consulting, LLC)</i></p></div> <p>The US Federal Helium Reserve in Amarillo, Texas historically provided a large, variable supply that insulated the helium market against supply fluctuations. However for the last 15 years, the ongoing depletion of the Federal Reserve has resulted in increased volatility and unreliability in the global supply helium supply chain, with three major supply shortages in 2006-07, 2011-13 and 2018-20.</p>	Country	Percentage	U.S. + CAN	37%	QATAR	27%	ALGERIA	8%	AUSTRALIA	0%	POLAND	1%	RUSSIA	26%	SOUTH AFRICA	2%	Section 4
Country	Percentage																	
U.S. + CAN	37%																	
QATAR	27%																	
ALGERIA	8%																	
AUSTRALIA	0%																	
POLAND	1%																	
RUSSIA	26%																	
SOUTH AFRICA	2%																	



Topic	Summary	Reference
<p><b>Why is helium important?</b></p>	<p>These shortages have demonstrated that:</p> <ul style="list-style-type: none"> <li>(a) the balance of helium supply and demand can be quite volatile and unpredictable;</li> <li>(b) the helium supply chain is complex and impacted by many different factors;</li> <li>(c) due to the decline of the BLM System and a general lack of helium storage capacity, there is very little flex capacity in the global supply chain;</li> <li>(d) due to the fact that &gt;95% of the world's helium supply is a by-product of hydrocarbon processing, helium supply can be disrupted by maintenance shutdowns upstream of the helium plant;</li> <li>(e) new helium projects have a tendency to start-up later than expected and produce less than advertised; and</li> <li>(f) helium supply can also be disrupted by geopolitical events, such as the embargo of Qatar.</li> </ul> <p>The Qatar embargo of June 2017, in which 30% of global helium supply was cut off overnight, and the January 2022 explosion at the first Amur helium production plant in Russia, highlight this global helium supply chain vulnerability.</p> <p>In Tanzania, Noble Helium is targeting global-scale, primary-product helium, meaning the helium production would not be secondary to another (typically hydrocarbon) gas.</p> <p>If demonstrated, this style and scale of helium deposit could once again act as the global supply reserve, from a geopolitically non-aligned country.</p> <p>Surface gas sampling in and around the Rukwa Basin indicates that helium trapped underground may be "Green Helium" (associated with nitrogen rather than hydrocarbon gas). In the future, Green Helium may become vital for maintaining supply of this critical industrial gas, with 95% of the world's helium supply currently associated with fossil fuel energy production.</p>	<p>Section 4</p>

## 1.1 Key Information continued

Topic	Summary	Reference
<b>B. Business Model</b>		
<b>Overview of the Company's business model and strategy</b>	<p>The Company's business model is focussed on the acquisition, exploration and development of substantial and ideally primary helium projects throughout Tanzania and other international jurisdictions, which have the potential to deliver growth for Shareholders.</p> <p>Following completion of the Public Offer and the admission of the Company to the Official List, the Company intends on increasing Shareholder wealth through undertaking systematic exploration activities on the Projects in accordance with its intended exploration program and the acquisition, exploration and development of helium projects throughout Tanzania and elsewhere.</p> <p>A detailed explanation of the Company's business model is provided at Section 3.3 and a summary of the Company's proposed exploration programs for each Project is set out at Section 3.5.</p> <p>The Company proposes to fund its exploration activities over the first two years following Admission as outlined in the table at Section 3.6.</p>	Sections 3.3, 3.5 and 3.6.
<b>What are the key business objectives of the Company</b>	<p>The Company's main objectives on completion of the Offers and Admission are:</p> <ul style="list-style-type: none"> <li>(a) focusing on helium opportunities within the Projects that have the potential to deliver growth and value for Shareholders;</li> <li>(b) mature and test previously identified priority helium targets at the Projects;</li> <li>(c) identify additional priority helium targets by undertaking further high-level exploration activities within the Projects;</li> <li>(d) through exploration success, evaluate opportunities for near term helium production; and</li> <li>(e) seek further exploration, acquisition and joint venture opportunities in Tanzania and elsewhere that have a strategic fit for the Company and have the potential to deliver growth for Shareholders.</li> </ul> <p>Although the Company's primary objective will be to focus on the exploration and potential development of helium on the Projects, the Company will also, as part of its business strategy, implement a growth strategy by continuing to evaluate new project acquisition opportunities, both by tenement application and commercial acquisitions, to maintain a pipeline of projects which complement the Company's existing focus. Any such acquisitions and investments will be considered and commercially evaluated by the Company when they are identified. The Company confirms that it is not currently considering other acquisitions and that any future acquisitions are likely to be in the oil and gas sector.</p> <p>The Directors are satisfied that on completion of the Public Offer and Admission, the Company will have sufficient funds to carry out its stated objectives.</p>	Section 3.3

Topic	Summary	Reference
<b>What are the key dependencies of the Company's business model?</b>	<p>The key dependencies of the Company's business model include:</p> <ul style="list-style-type: none"> <li>(a) completing the Public Offer;</li> <li>(b) maintaining title to the Projects;</li> <li>(c) the successful grant of the Prospecting Licence Applications which make up the Eyasi Basin Project and the Manyara Basin Project;</li> <li>(d) retaining and recruiting key personnel skilled in the helium exploration sector;</li> <li>(e) sufficient worldwide demand for helium;</li> <li>(f) the market price of helium remaining higher than the Company's costs of any future production (assuming successful exploration by the Company);</li> <li>(g) raising sufficient funds in the future to satisfy expenditure requirements for exploration and operating costs in respect of the Projects; and</li> <li>(h) minimising environmental impact on the Projects and complying with environmental and health and safety requirements.</li> </ul>	Section 3.4
<b>C. The Public Offer</b>		
<b>What are the key terms of the Public Offer and why is it being conducted?</b>	<p>The Public Offer is an offer of a minimum of 35,000,000 Shares and a maximum of up to 50,000,000 Shares, at an issue price of \$0.20 per Shares, to raise between \$7,000,000 and \$10,000,000 (before costs).</p> <p>The principal purposes of the Public Offer are to:</p> <ul style="list-style-type: none"> <li>(a) implement the business model and objectives of the Company (as set out in Section 3.3);</li> <li>(b) provide funding for the purposes set out in Section 3.6;</li> <li>(c) meet the expenses of the Public Offer (as set out in Section 10.9);</li> <li>(d) provide for general administration and working capital needs;</li> <li>(e) enhance the public and financial profile of the Company to facilitate its growth;</li> <li>(f) continue to provide the Company with access to equity capital markets for future funding needs; and</li> <li>(g) meet the requirements of the ASX and satisfy Chapters 1 and 2 of the ASX Listing Rules, as part of the Company's application for admission to the Official List.</li> </ul>	Sections 2.1 and 2.4
<b>What is the Minimum Subscription amount under the Public Offer?</b>	The minimum subscription requirement for the Public Offer is \$7,000,000 representing the subscription of 35,000,000 Shares, at an issue price of \$0.20 per Share ( <b>Minimum Subscription</b> ).	Section 2.1.1
<b>What is the Maximum Subscription?</b>	The maximum subscription requirement for the Public Offer is \$10,000,000 representing the subscription of 50,000,000 Shares, at an issue price of \$0.20 per Share ( <b>Maximum Subscription</b> ).	Section 2.1.2

## 1.1 Key Information continued

Topic	Summary	Reference
<b>How does the Company intend to use the funds raised from the Public Offer?</b>	<p>It is intended that the funds raised from the Public Offer will be applied in accordance with the table set out in Section 2.6.</p> <p>The Board is satisfied that upon completion of the Public Offer, the Company will have sufficient working capital to meet its stated objectives.</p>	Section 2.6
<b>Is the Public Offer underwritten?</b>	The Public Offer is not underwritten.	Section 2.1.3
<b>Who are the lead managers to the Public Offer?</b>	<p>The Company has appointed Max Capital Pty Ltd (ACN 152 214 956) (AFSL 411 136) (<b>Max Capital</b>) and Inyati Capital Pty Ltd (ACN 642 351 193) (Corporate Authorised Representative Number: 1287573) (<b>Inyati Capital</b>) as joint lead managers to the Public Offer (<b>Joint Lead Managers</b>). A summary of the material terms and conditions of the lead manager mandate between the Company and the Joint Lead Managers (<b>Lead Manager Mandate</b>) is set out in Section 9.1.</p>	Section 9.1
<b>What are the conditions to the Public Offer?</b>	<p>The Offers are conditional upon the following events occurring:</p> <ul style="list-style-type: none"> <li>(a) the Company receiving sufficient Applications to meet the Minimum Subscription under the Public Offer (see Section 2.1.1 for further information); and</li> <li>(b) ASX granting conditional approval for the Company to be admitted to the Official List on conditions reasonably acceptable to the Company,</li> </ul> <p>(the <b>Offer Conditions</b>).</p> <p>There is a risk that the Offer Conditions will not be achieved. In the event the Offer Conditions are not achieved, the Company will not proceed with the Offers and will repay all Application Monies received without interest in accordance with the Corporations Act.</p>	Section 2.2
<b>What will the Company's capital structure look like after the completion of the Public Offer?</b>	Refer to Section 3.7 for details of the Company's capital structure following completion of the Public Offer.	Section 3.7

Topic	Summary	Reference
<b>Will any Securities be subject to escrow?</b>	<p>None of the Shares issued under the Public Offer will be subject to escrow.</p> <p>Subject to the Company being admitted to the Official List and completion of the Offers, certain Securities on issue will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.</p> <p>The Company will seek to enter into restriction deeds and issue restriction notices (as applicable) in respect of all Securities classified by ASX as restricted securities in accordance with Chapter 9 of the ASX Listing Rules. The Company will announce to ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.</p> <p>The Company confirms its 'free float' (the percentage of the Shares that are not restricted and are held by shareholders who are not related parties (or their associates) of the Company) at the time of admission to the Official List will be not less than 20% in compliance with ASX Listing Rule 1.1 Condition 7.</p> <p>The number of Securities that are subject to ASX imposed escrow are at ASX's discretion in accordance with the ASX Listing Rules and underlying policy.</p>	Section 3.9
<b>What are the key dates of the Offers?</b>	The key dates of the Public Offer are set out in the indicative timetable on page 10 of this Prospectus.	Page 10
<b>What are the rights and liabilities attached to the Shares being offered?</b>	<p>A summary of the material rights and liabilities attached to the Shares offered under the Public Offer are set out in Section 10.1.</p> <p>A summary of the terms and conditions attaching to the Options currently on issue (<b>Existing Options</b>), the Options to be issued to the Directors (<b>Director Options</b>), and the Options to be issued to the Joint Lead Managers (<b>Lead Manager Options</b>) and the Options to be issued to other advisors in consideration for services provided to the Company (<b>Advisor Options</b>) are set out in Sections 10.2, 10.3 and 10.4 respectively.</p> <p>Also refer to Section 10.5 for a summary of the Company's employee incentive plan, pursuant to which additional Securities may be issued in the future.</p>	Sections 10.1, 10.2, 10.3, 10.4 and 10.5



## 1.1 Key Information continued

Topic	Summary	Reference
<b>D. Key Advantages and Key Risks</b>		
<b>What are the key advantages of investing in the Company?</b>	<p>The Directors are of the view that investing in the Company offers the following non-exhaustive list of benefits:</p> <ul style="list-style-type: none"> <li>(a) following completion of the Public Offer, the Company will have sufficient funds to carry out its intended exploration program on the Projects as set out in Section 3.6;</li> <li>(b) the Company holds a portfolio of quality assets in Tanzania considered by the Board to be highly prospective for helium;</li> <li>(c) the Company has a well-defined strategy, with a targeted short- and medium-term exploration program focused on exploring the Projects and potentially making acquisitions of, or investments in, assets that will complement the existing assets of the Company; and</li> <li>(d) the Company has an experienced Board and management team, with a broad range of exploration, development, management, commercial and technical skills in the resources industry.</li> </ul>	Section 3

Topic	Summary	Reference
<p><b>What are the key risks?</b></p>	<p>You should consider the key risks when deciding whether to invest in Shares. You should be aware that an investment in Shares should be considered a highly speculative investment. Some of the risks set out in this Prospectus are beyond the Company's control and those risks may have a material adverse impact on us and on our financial performance and position.</p> <p>Set out below is a summary of key risks which apply to an investment in the Company.</p> <p>These risks include a variety of Company specific and general risks, including, but not limited to:</p> <p>(a) <b>(Conditionality of the Public Offer):</b> The Public Offer is subject to the Offer Conditions. These Conditions are summarized in Section 2.2. There is a risk that on or more of these Offer Conditions cannot be fulfilled, and in turn, the Public Offer will not proceed.</p> <p>(b) <b>(Helium Exploration and Evaluation Risks):</b> The future value of the Company will depend on its ability to find and develop helium resources that are economically recoverable within the Projects.</p> <p>The circumstances in which a discovered helium accumulation becomes or remains commercially viable depends on a number of factors. These include the particular attributes of the deposit, such as size, depth, concentration, development cost and proximity to infrastructure as well as key external factors such as helium supply and demand. This, along with other factors such as maintaining title to tenements and consents, successful design construction, commissioning and operating of wells and processing facilities may result in projects not being developed, or operations becoming unprofitable.</p> <p>Helium exploration involves exploration activities and drilling operations which may not generate a positive return on investment. This may arise from dry wells, but also from wells that are productive but do not produce sufficient revenues to return a profit after accounting for drilling, operating and other associated costs. The outcome of any drilling program may be dependent on matters which include the reservoir's composition, the permeability of the sediments, the flow rate and the rate of any decrease in pressure as the gas flows to the surface. These matters cannot be known until the Company undertakes initial drilling programs. The production from successful wells may also be impacted by various operating conditions, including insufficient storage or transportation capacity, or other geological and mechanical conditions. In addition, managing drilling hazards or environmental damage and pollution caused by exploration and development operations could greatly increase the associated cost and profitability of individual wells.</p>	<p>Section 6</p>

## 1.1 Key Information continued

Topic	Summary	Reference
	<p>The future exploration activities of the Company may be affected by a range of factors including geological conditions, limitations on activities due to seasonal weather patterns, unanticipated operational and technical difficulties, industrial and environmental accidents, landholder disputes, changing government regulations and many other factors beyond the control of the Company.</p> <p>The success of the Company will also depend upon the Company having access to sufficient development capital, being able to maintain title to its projects and obtaining all required approvals for its activities. In the event that exploration programmes prove to be unsuccessful this could lead to a diminution in the value of the Company's projects, a reduction in the cash reserves of the Company and possible relinquishment of the Company's projects.</p> <p>The exploration costs of the Company are based on certain assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect the Company's viability.</p> <p>(c) <b>(No History of Production)</b>: The Company's properties are exploration stage only. The Company has never had any material interest in helium producing properties. Even with application of best science, there is no assurance that commercial quantities of helium will be discovered at any of the properties of the Company or any future properties, nor is there any assurance that the exploration or development programs of the Company thereon will yield any positive results. Even if commercial quantities of helium are discovered, there can be no assurance that any property of the Company will ever be brought to a stage where helium can profitably be produced thereon. Factors which may limit the ability of the Company to produce helium from its properties include, but are not limited to, commodity prices, availability of additional capital and financing and the nature of any helium deposits.</p> <p>(d) <b>(Risks associated Drilling)</b>: The Company's helium exploration and development activities are dependent on the availability of drilling rigs and related equipment in the area of its Projects. Recent increases in oil and gas exploration activities have resulted in high demand and limited availability for some types of drilling rigs and equipment in certain areas which may result in delays to the Company's planned exploration and development activities.</p>	

Topic	Summary	Reference
	<p>The Company may encounter hazards inherent in drilling activities. Examples of such hazards include unusual or unexpected formations, abnormal pressures or rock properties, adverse weather conditions, mechanical difficulties, condition which could result in damage to plant or equipment or shortages or delays in delivery of rigs and/or other equipment. Drilling may result in wells that, which encountering resources, may not achieve economically viable results.</p> <p>Whilst the Company intends to take adequate precautions to minimise risks associated with drilling activities, there can be no guarantee that the Company will not experience one or more material incidents during drilling activities that may have an adverse impact on the operating and financial performances of the Company, including costs associated with control of well operation, recovery of plant and equipment, environmental rectification and compensation along with delays and other impacts on anticipated results.</p> <p>(e) <b>(Requirements for permits and licenses)</b>: The operations of the Company require it to obtain licenses for operating, permits, and in some cases, renewals of existing licenses and permits from authorities in Tanzania. The Company believes that it currently holds or has applied for all necessary licenses and permits to carry on the activities it is currently conducting under applicable laws and regulations in respect of its properties, and also believes that it is complying in all material respects with the terms of such licenses and permits. However, the ability of the Company to obtain, sustain or renew any such licenses and permits on acceptable terms is subject to changes in regulations and policies and to the discretion of the applicable authorities or other governmental agencies.</p> <p>(f) <b>(Prospecting License resulting in Mining Licenses or Special Mining License in Tanzania)</b>: The licenses issued to the Company's subsidiaries are Prospecting Licences and have the rights and obligations attaching to them as set out in the Solicitor's Report on Tenements in Annexure B. If these licenses result in a Mining Licence or Special Mining Licence as defined in the Tanzania Mining Act 2010 being granted, then additional requirements will apply to the Company and its subsidiaries.</p> <p>A Mining Licence is granted for medium scale mining operations, where the capital investment is estimated to be between USD100,000 and USD100,000,000 or its equivalent in Tanzanian shillings and is for a duration of 10 years. A Mining Licence for metallic minerals, energy minerals, industrial minerals and kimberlitic diamond shall have a maximum area of 10 square kilometres (1,000 hectares).</p>	

## 1.1 Key Information continued

Topic	Summary	Reference
	<p>A Special Mining Licence is granted for large scale mining operations, where the capital investment is expected to be not less than USD100,000,000 or its equivalent in Tanzanian shillings and is for the duration of the estimated life of the ore body as indicated in the feasibility study report. A Special Mining Licence for mineral deposits other than superficial deposits shall have a maximum area of 35 square kilometres (3,500 hectares).</p> <p>If a Mining Licence or Special Mining Licence is granted then the Government of the Republic of Tanzania (<b>Tanzanian Government</b>) shall be entitled to a 16 per cent non-dilutable free carried interest in the share capital of the company which owns such Mining Licence or Special Mining Licence, depending on the type of minerals and the levels of investment (<b>Free Carried Interest</b>). In addition to the Free Carried Interest, the Tanzanian Government shall be entitled to acquire up to 50 per cent of the issued share capital of the company which owns the Mining Licence or Special Mining Licence commensurate with the total tax expenditures incurred by the Tanzanian Government in favour of the company. The Tanzanian Government can only acquire an additional 34% of the shares in the company (in addition to the Free Carried Interest) if and only if the company receives expenditure from the Tanzanian Government in the form of tax exemptions. If no such expenditure has been sought or received from the Tanzanian Government, then the Tanzanian Government is not entitled to any interest greater than the Free Carried Interest. The Company notes that the Tanzanian Government has incurred no tax expenditures in favour of the Company to date.</p> <p>In the event that a Special Mining Licence is granted, the company holding such licence may be required to apply for the admission of its entire issued share capital to a local stock exchange with a minimum local shareholding of not less than 30%. However, if an agreement is entered into with the Tanzanian Government in respect of the Free Carried Interest and sharing of economic benefits then this requirement ceases to apply.</p> <p>Refer to the Solicitor's Report on Tenements in Annexure B for further information regarding the terms and conditions applying to mining tenements in the Tanzania.</p>	



Topic	Summary	Reference
	<p>(g) <b>(Reserves and Resources Estimates):</b> The Helium Prospective Volumes of the North Rukwa Project have been certified by independent experts Netherland Sewell and Associates of Houston, Texas, USA (<b>NSAI</b>), using probabilistic analysis; these estimates have been prepared in accordance with the petroleum engineering and evaluation principles set forth in the 2018 and 2011 (Guideline) Editions of the Petroleum Resource Management System of the Society of Petroleum Engineers (SPE-PRMS, 2011 and 2018).</p> <p>The Australian Stock Exchange mandates the use of the SPE-PRMS classifications for oil and gas entity public reporting requirements and has accepted the use of SPE-PRMS for listed helium entity reporting requirements. New terminology as per SPE-PRMS 2018 in describing low (1U equivalent to P90), best (2U equivalent to P50) and high estimates (3U equivalent P10) are used to denote as-yet undiscovered volumes.</p> <p>No Reserves have been assigned in connection with the Company's property interests to date, given their early stage of development. Unrisked Prospective Helium Volumes have been defined. However, estimating helium volumes is subject to significant uncertainties associated with technical data and the interpretation of that data, future commodity prices, and development and operating costs. There can be no guarantee that Noble Helium will successfully convert its helium resource to reserves and produce that estimated volume. Estimates may alter significantly or become more uncertain when new information becomes available due to for example, additional drilling or production tests over the life of field. As estimates change, development and production plans may also vary. Downward revision of helium volumes estimates may adversely affect Noble Helium's operational or financial performance.</p> <p>Helium volume estimates are expressions of judgement based on knowledge, experience and industry practice. These estimates are imprecise and depend to some extent on interpretations, which may ultimately prove to be inaccurate and require adjustment or, even if valid when originally calculated, may alter significantly when new information or techniques become available. As further information becomes available through additional drilling and analysis the estimates are likely to change. Any adjustments to volume estimates could affect the Company's exploration and development plans which may, in turn, affect the Company's performance.</p>	

## 1.1 Key Information continued

Topic	Summary	Reference
	<p>(h) <b>(Tenement Risks):</b> The business activities of the Company are dependent on the grant and maintenance of appropriate licences, permits and consents over the exploration interests. The Company's prospecting licenses are subject to certain expenditure obligations and annual rents, whilst additional licences and permits may also be subject to compulsory work or expenditure obligations or responsibilities in respect of the environment and safety for each year which must be met to keep the licence or permit in good standing. Failure to observe these requirements could prejudice the right to maintain title to a given area and result in government action to forfeit a permit or permits.</p> <p>There is no guarantee that current or future exploration permit applications or existing permit renewals will be granted, that they will be granted without undue delay, or that the Company can economically comply with any conditions imposed on any granted exploration permits.</p> <p>(i) <b>(Tenure and Access to Tenements in Tanzania):</b> Mining and exploration tenements in Tanzania are subject to periodic renewal. The Company believes that it currently holds or has applied for all necessary licenses and permits to carry on the activities it is currently conducting under applicable laws and regulations in respect of its properties, and also believes that it is complying in all material respects with the terms of such licenses and permits. However, the ability of the Company to obtain, sustain or renew any such licenses and permits on acceptable terms is subject to changes in regulations and policies and to the discretion of the applicable authorities or other governmental agencies.</p> <p>Where a licensee has met the terms of the grant, renewal should not be denied. However, if development conditions are not met there is no guarantee that current or future tenements or future applications for production tenements will be approved.</p> <p>Tenements in Tanzania are also subject to expenditure and work commitments which must be met in order to keep such tenements in good standing. If there is failure to meet the commitments, this could lead to forfeiture of the tenement.</p> <p>Access to and from a number of the Company's licences are limited due to seasonal weather conditions. Unexpected weather, such as significant amounts of precipitation occurring outside the wet season, violent tropical storms or flooding may delay or adversely impact the Company's drilling and operational activities.</p>	

Topic	Summary	Reference
	<p>(j) <b>(Sovereign Risk):</b> The Company's exploration and development activities are to be carried out in Tanzania. The Company will be subject to political, social, economic and other uncertainties including, but not limited to, changes in policies or the personnel administering them, foreign exchange restrictions, changes of law affecting foreign ownership, currency fluctuations, royalties and tax increases in that country.</p> <p>There is no assurance that the Tanzanian government will not in the future adopt different regulations, policies or interpretations with respect to, but not limited to environmental protection, foreign ownership of resources, royalty rates, taxation, rates of exchange, labour relations, repatriation of income or return of capital, restrictions on production or processing, price controls, export controls, currency remittance, or the obligations of the Company under its respective mining codes. The possibility that the Tanzanian government may adopt substantially different policies or interpretations, which might extend to the expropriation of assets, may have a material adverse effect on the Company. Political risk also includes the possibility of terrorism, civil or labour disturbances and political instability. No assurance can be given that the Tanzanian government will not revoke or significantly alter the conditions of the applicable exploration and mining authorisations nor that such exploration and mining authorisations will not be challenged or impugned by third parties. The effect of any of these factors cannot be accurately predicted.</p> <p>In certain respects, Tanzania's legal systems are less developed than more established countries and this could result in various risks including difficulty obtaining or enforcing legal redress in the courts, a lack of administrative guidance on implementing and complying with legislation and regulation (e.g. in respect to taxation or property rights), or certain inconsistencies or conflicts between various legislation, regulations, decrees or orders.</p>	

## 1.1 Key Information continued

Topic	Summary	Reference
	<p>(k) <b>(Changes in helium price)</b>: The Company's possible future revenues may be derived mainly from helium or from royalties gained from potential joint ventures or other arrangements. Consequently, the Company's potential future earnings will likely be closely related to the price of helium.</p> <p>Helium prices fluctuate and are affected by numerous industry factors including demand for the resource, forward selling by producers, production cost levels in major producing regions and macroeconomic factors, e.g. inflation, interest rates, currency exchange rates and global and regional demand for, and supply of, helium. If the Company is producing helium and the market price of helium were to fall below the costs of production and remain at such a level for any sustained period, the Company would experience losses and could have to curtail or suspend some or all of its proposed activities. In such circumstances, the Company would also have to assess the economic impact of any sustained lower commodity prices on recoverability.</p> <p>(l) <b>(Operational Risk)</b>: If the Company decides to develop into helium production in the future, the operations of the Company including exploration and processing may be affected by a range of factors. These include failure to achieve the predicted grade in exploration, processing, technical difficulties encountered in commissioning and operating plant and equipment, mechanical failure, problems which affect extraction rates and costs, adverse weather conditions, industrial and environmental accidents, industrial disputes, unexpected shortages or increase in the costs of consumables, spare parts, plant and equipment.</p> <p>(m) <b>(Land Access Risk)</b>: Land access is critical for exploration and evaluation to succeed. In all cases the acquisition of prospective tenements is a competitive business, in which propriety knowledge or information is critical and the ability to negotiate satisfactory commercial arrangements with other parties is often essential.</p> <p>Access to land in Tanzania for exploration purposes can be affected by land ownership, other stakeholder interests and regulatory requirements within the jurisdiction where the Company operates.</p>	

Topic	Summary	Reference
	<p>The Company may be required to pay compensation to land owners, local authorities, traditional land users and others who may have an interest in the area covered by the licenses. The Company's ability to resolve such compensation issues and compensation costs may have an impact on the future success and financial performance of the Company's operations. If the Company is unable to resolve such compensation claims on economic terms, this could have a material adverse effect on the business, results or operations and financial condition of the Company. Further, in Tanzania, exploration works may only begin on an exploration tenement once agreement has been reached in relation to compensation of the relevant landowners, or in the absence of agreement, once the value of the compensation is set by a court.</p> <p>(n) <b>(Additional requirements for Capital):</b> The Company has finite financial resources and no cash flow from producing assets and therefore will likely require additional financing in order to carry out its helium exploration and development activities.</p> <p>The Company's ability to effectively implement its business strategy over time is likely to depend in part on its ability to raise additional funds. There can be no assurance that any such equity or debt funding will be available to the Company on favourable terms or at all. Failure to obtain appropriate financing on a timely basis could cause the Company to have an impaired ability to expend the capital necessary to undertake or complete drilling programs, forfeit its exploration interests in certain properties, and reduce or terminate its operations entirely.</p> <p>The Company's capital requirements depend on numerous factors. Depending on the Company's ability to maintain its funds and/or generate income from its operations, the Company may require further financing in the future. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back exploration expenditure as the case may be.</p>	



## 1.1 Key Information continued

Topic	Summary	Reference
	<p>(o) <b>(COVID-19 Risk)</b>: The Company's exploration and development projects may have to be put on hold, or operate at reduced capacity or subject to restriction due to COVID 19 and the associated measures put in place by national governments to control COVID 19, including social distancing measures and travel restrictions. This will cause delays to the Company's projects and in turn further delay the date at which the Company can generate revenues and make progress towards profitability. In addition, it is also likely to cause the Company to incur additional costs as machinery and staff may be required to remain idle whilst projects are on hold due to the government restrictions implemented in response to COVID 19. Such delays and additional costs may have a material adverse impact on the Company's financial condition and operations.</p> <p>The impact of COVID 19 has had a materially adverse effect on the global economy and overall business sentiment, which has the potential to negatively impact the demand and price for commodities and have an impact on the financial position and prospects of the Company.</p> <p>The Company's Share price may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19. The Directors are monitoring the situation closely and have considered the impact of COVID-19 on the Company's business and financial performance. However, the situation is continually evolving, and the consequences are therefore inevitably uncertain.</p> <p>(p) <b>(Limited History)</b>: The Company has limited operating history and limited historical financial performance. No assurance can be given that the Company will achieve commercial viability through the successful exploration of the Projects. Until the Company is able to realise value from the Projects (or any other tenements the Company may acquire in the future), it is likely to incur ongoing operating losses.</p> <p>(q) <b>(Going Concern)</b>: The ability of the Company to continue as a going concern is dependent on the successful completion of the Public Offer. The Directors have determined that the Public Offer funds will be sufficient to allow for the exploration and evaluation activities in accordance with its current plans and to provide the necessary working capital to meet its commitments for a period of at least 24 months from Admission. The Company may also look to complete future equity offerings in order to raise additional capital as the business progresses.</p> <p>(r) <b>(Potential Acquisitions)</b>: The Company may make acquisitions of, or significant investments in, complementary companies or prospects. Any such transactions will be accompanied by risks commonly encountered in making such acquisitions.</p>	

Topic	Summary	Reference
	<p>(s) <b>(Reliance on Key Personnel):</b> The Company's operational success will depend substantially on the continuing efforts of senior executives. The loss of services of one or more senior executives may have an adverse effect on the Company's operations. Furthermore, if the Company is unable to attract, train and retain key individuals and other highly skilled employees and consultants, its business may be adversely affected.</p> <p>(t) <b>(Commodity Price Volatility and Exchange Rate Risk):</b> If the Company achieves success leading to mineral production, the revenue it will derive through the sale exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors. Furthermore, international prices of various commodities are denominated in United States dollars, whereas the income and expenditure of the Company will be taken into account in Australian or Tanzanian currency, exposing the Company to the fluctuations and volatility of the rate of exchange between the United States dollar and the Australian dollar or Tanzanian Shillings as determined in international markets.</p> <p>This list is only a summary and is not exhaustive, the prospective Applicants should refer to additional risk factors in Section 6 of this Prospectus before deciding to apply for Shares under the Prospectus.</p>	

## 1.1 Key Information continued

Topic	Summary	Reference										
<b>Board and Management</b>	<p>The Directors of the Company comprise of:</p> <p>(a) Justyn Wood (Executive Director &amp; Chief Executive Officer);</p> <p>(b) Shaun Scott (Non-Executive Chairperson);</p> <p>(c) Ariel (Eddie) King (Non-Executive Director); and</p> <p>(d) Prof Andrew Garnett (Non-Executive Director).</p> <p>Refer to Section 7.1 for details of the experience and qualifications of the Directors.</p>	Section 7.1										
<b>What benefits are being paid to the Directors?</b>	<p>The below table sets out the proposed remuneration to be paid to the Directors. Other than as set out in the below table, the Company has not paid the Directors any other remuneration or provided any other interests since incorporation.</p> <table><tr><th>Director</th><th>Cash remuneration (excluding statutory superannuation)<sup>1,2</sup></th></tr><tr><td>Justyn Wood<sup>3</sup></td><td>\$195,000 per annum</td></tr><tr><td>Shaun Scott</td><td>\$75,000 per annum</td></tr><tr><td>Ariel (Eddie) King</td><td>\$48,000 per annum</td></tr><tr><td>Andrew Garnett</td><td>\$36,000 per annum</td></tr></table> <p><b>Notes:</b></p> <p>1. Refer to the terms of the executive service agreements and letters of appointment between the Company and the Directors (as applicable) at Sections 9.2 and 9.3 respectively.</p> <p>2. The Directors have also been issued a total of 10,375,000 Options (exercisable at \$0.25 on or before the date that is 30 months from the date of issue and subject to vesting conditions) as part of their reasonable remuneration for future services to be provided to the Company. The full terms and conditions of the Director Options are set out in Section 10.3.</p> <p>3. Since incorporation in 2015, Mr Wood has received fees totalling \$176,000 (plus GST) for services provided to the Company.</p>	Director	Cash remuneration (excluding statutory superannuation) <sup>1,2</sup>	Justyn Wood <sup>3</sup>	\$195,000 per annum	Shaun Scott	\$75,000 per annum	Ariel (Eddie) King	\$48,000 per annum	Andrew Garnett	\$36,000 per annum	Sections 7.3.3, 9.2 and 9.3
Director	Cash remuneration (excluding statutory superannuation) <sup>1,2</sup>											
Justyn Wood <sup>3</sup>	\$195,000 per annum											
Shaun Scott	\$75,000 per annum											
Ariel (Eddie) King	\$48,000 per annum											
Andrew Garnett	\$36,000 per annum											

Topic	Summary	Reference																														
What interests do the Directors have in the Securities of the Company?	<p>The Directors and their related entities have the following interests in Securities as at the date of this Prospectus:</p> <table> <tr> <th>Director</th><th>Shares</th><th>Options<sup>1</sup></th></tr> <tr> <td>Justyn Wood<sup>2</sup></td><td>70,000,000</td><td>-</td></tr> <tr> <td>Shaun Scott</td><td>-</td><td>-</td></tr> <tr> <td>Ariel (Eddie) King</td><td>-</td><td>-</td></tr> <tr> <td>Andrew Garnett</td><td>-</td><td>-</td></tr> </table> <p>Based on the intentions of the Directors at the date of this Prospectus in relation to participation in the Public Offer, the Directors and their related entities will have the following interests in Securities on Admission:</p> <table> <tr> <th>Director</th><th>Shares</th><th>Options<sup>1</sup></th></tr> <tr> <td>Justyn Wood<sup>2</sup></td><td>70,000,000</td><td>-</td></tr> <tr> <td>Shaun Scott</td><td>-</td><td>4,000,000</td></tr> <tr> <td>Ariel (Eddie) King</td><td>-</td><td>4,375,000</td></tr> <tr> <td>Andrew Garnett</td><td>-</td><td>2,000,000</td></tr> </table> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. These Options will be issued as reasonable remuneration for future services to be provided to the Company and will assist in ensuring that the interests of the Directors are aligned with those of Shareholders. The full terms and conditions of the Director Options are set out in Section 10.3.</li> <li>35,000,000 Shares are held indirectly by Wood Petroleum Exploration Pty Ltd, an entity associated with Mr Wood.</li> </ol>	Director	Shares	Options <sup>1</sup>	Justyn Wood <sup>2</sup>	70,000,000	-	Shaun Scott	-	-	Ariel (Eddie) King	-	-	Andrew Garnett	-	-	Director	Shares	Options <sup>1</sup>	Justyn Wood <sup>2</sup>	70,000,000	-	Shaun Scott	-	4,000,000	Ariel (Eddie) King	-	4,375,000	Andrew Garnett	-	2,000,000	Section 7.3.2
Director	Shares	Options <sup>1</sup>																														
Justyn Wood <sup>2</sup>	70,000,000	-																														
Shaun Scott	-	-																														
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Shaun Scott	-	4,000,000																														
Ariel (Eddie) King	-	4,375,000																														
Andrew Garnett	-	2,000,000																														
Who will be the substantial holders of the Company?	<p>Refer to Section 3.8 for details regarding the Shareholders who are expected to hold 5% or more of the total number of Shares on issue at Admission (based on information known at the date of this Prospectus and subject to Applications received under the Public Offer).</p> <p>The Company will announce to the ASX details of its top-20 Shareholders following completion of the Offers prior to the Shares commencing trading on ASX.</p>	Section 3.8																														

## 1.1 Key Information continued

Topic	Summary	Reference															
<b>What important contracts has the Company entered into with related parties?</b>	<p>The Company has entered into the following related party transactions on arms' length terms:</p> <ul style="list-style-type: none"> <li>(a) an executive services agreement with Justyn Wood pursuant to which he is engaged as Executive Director and Chief Executive Officer of the Company;</li> <li>(b) a letter of appointment with Shaun Scott for his appointment as Non-Executive Chairperson;</li> <li>(c) a letter of appointment with Ariel (Eddie) King for his appointment as Non-Executive Director;</li> <li>(d) a letter of appointment with Andrew Garnett for his appointment as Non-Executive Director; and</li> <li>(e) deeds of indemnity, insurance and access with each of its Directors on standard terms.</li> </ul> <p>Refer to Section 9 for further details of the material contracts to which the Company is party to.</p>	Section 7.4															
<b>F. Advisor Interests</b>																	
<b>What benefits are being paid to the Lead Managers and to other advisors?</b>	<p>The following fees are payable to the Joint Lead Managers (and/or their nominees) pursuant to the Joint Lead Manager Mandate:</p> <ul style="list-style-type: none"> <li>(a) a management fee of 1% (plus GST) of the total amount raised under the Offer (a total of \$70,000 based on the Minimum Subscription and \$100,000 based on the Maximum Subscription);</li> <li>(b) a capital raising fee of 5% (plus GST) of the total amount raised under the Offer (a total of \$350,000 based on the Minimum Subscription and \$500,000 based on the Maximum Subscription); and</li> <li>(c) a pro-rata number of unlisted Options, between 3,325,000 for the Minimum Subscription and 4,750,000 for the Maximum Subscription, which are exercisable at \$0.25 and expiring 30 months from the date of issue (Lead Manager Options).</li> </ul> <table border="1"> <thead> <tr> <th></th><th>Minimum Subscription</th><th>Maximum Subscription</th></tr> </thead> <tbody> <tr> <td><b>Cash</b></td><td>\$420,000</td><td>\$600,000</td></tr> <tr> <td><b>Lead Manager Options</b></td><td>\$279,798</td><td>\$399,711</td></tr> <tr> <td><b>Total</b></td><td>\$699,798</td><td>\$999,711</td></tr> <tr> <td><b>% of IPO funds</b></td><td>10.0%</td><td>10.0%</td></tr> </tbody> </table> <p>The Company notes that a portion of the Lead Manager Options to be allocated to the Joint Lead Managers may be granted to other parties that assist with raising funds under the Public Offer.</p> <p>Refer to Section 9.1 for a summary of the key terms and conditions of the Joint Lead Manager Mandate. The full terms and conditions of the Lead Manager Options are set out in Section 10.4.</p> <p>Details of fees to be paid to other advisors in connection with the Public Offer are set out in Section 10.7.</p>		Minimum Subscription	Maximum Subscription	<b>Cash</b>	\$420,000	\$600,000	<b>Lead Manager Options</b>	\$279,798	\$399,711	<b>Total</b>	\$699,798	\$999,711	<b>% of IPO funds</b>	10.0%	10.0%	Sections 2.3, 9.1 and 10.7
	Minimum Subscription	Maximum Subscription															
<b>Cash</b>	\$420,000	\$600,000															
<b>Lead Manager Options</b>	\$279,798	\$399,711															
<b>Total</b>	\$699,798	\$999,711															
<b>% of IPO funds</b>	10.0%	10.0%															



Topic	Summary	Reference																														
What are the advisors' interests in the Securities of the Company?	<p>As at the date of this Prospectus, the Joint Lead Managers and their respective associates have a relevant interest in the following Securities:</p> <table> <tr> <th>Lead Manager</th><th>Shares</th><th>Options</th></tr> <tr> <td>Inyati Capital<sup>1</sup></td><td>2,777,778</td><td>6,277,778</td></tr> <tr> <td>Max Capital<sup>2</sup></td><td>1,833,333</td><td>3,583,333</td></tr> </table> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>2,777,778 Shares issued at \$0.09 each pursuant to the Seed Raising, together with 2,777,778 free-attaching Options (exercisable at \$0.20 and expiring 16 September 2025). 3,500,000 Options (exercisable at \$0.20 expiring 16 September 2025) issued in consideration for services provided in respect of the Seed Raising.</li> <li>1,833,333 Shares issued at \$0.09 each pursuant to the Seed Raising, together with 1,833,333 free-attaching Options (exercisable at \$0.20 and expiring 16 September 2025). 1,750,000 Options (exercisable at \$0.20 expiring 16 September 2025) issued in consideration for services provided in respect of the Seed Raising.</li> </ol> <p>Other than as detailed in the table above, the Joint Lead Managers and their respective associates have not participated in a placement of Securities by the Company in two years preceding lodgement of this Prospectus.</p> <p>Based on the information available to the Company as at the date of this Prospectus regarding the intentions of the Joint Lead Managers and their respective associates in relation to the Public Offer, they will have a relevant interest in the following Securities on Admission:</p> <table> <tr> <th>Lead Manager</th><th>Shares</th><th>Options</th></tr> <tr> <td colspan="3"><b>Minimum Subscription</b></td></tr> <tr> <td>Inyati Capital</td><td>2,777,778</td><td>7,940,278</td></tr> <tr> <td>Max Capital</td><td>1,833,333</td><td>6,998,833</td></tr> <tr> <td colspan="3"><b>Maximum Subscription</b></td></tr> <tr> <td>Inyati Capital</td><td>2,777,778</td><td>8,527,778</td></tr> <tr> <td>Max Capital</td><td>1,833,333</td><td>7,583,333</td></tr> </table>	Lead Manager	Shares	Options	Inyati Capital <sup>1</sup>	2,777,778	6,277,778	Max Capital <sup>2</sup>	1,833,333	3,583,333	Lead Manager	Shares	Options	<b>Minimum Subscription</b>			Inyati Capital	2,777,778	7,940,278	Max Capital	1,833,333	6,998,833	<b>Maximum Subscription</b>			Inyati Capital	2,777,778	8,527,778	Max Capital	1,833,333	7,583,333	Sections 2.3.2 and 9.1
Lead Manager	Shares	Options																														
Inyati Capital <sup>1</sup>	2,777,778	6,277,778																														
Max Capital <sup>2</sup>	1,833,333	3,583,333																														
Lead Manager	Shares	Options																														
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## 1.1 Key Information continued

Topic	Summary	Reference
<b>G. Financial Information</b>		
<b>What is the financial position of the Company?</b>	A summary of the financial position of the Company is set out in Section 5 and in the Independent Limited Assurance Report in Annexure C.	Sections 5 and Annexure C
<b>H. Additional Information</b>		
<b>How do I apply for Shares under the Public Offer?</b>	Applications for Shares under the Public Offer must be made using the Application Form and in accordance with the instructions set out in Section 2.7.1.	Section 2.7.1
<b>What is the allocation policy under the Public Offer?</b>	<p>The Company retains an absolute discretion to allocate Shares under the Public Offer and reserves the right, in its absolute discretion, to issue to an Applicant a lesser number of Shares than the number for which the Applicant applies or to reject an Application Form.</p> <p>If the number of Shares issued is fewer than the number applied for, or where no issue is made, surplus application money will be refunded without interest as soon as practicable.</p> <p>No Applicant under the Public Offer has any assurance of being allocated all or any Shares applied for.</p> <p>The allocation of Shares by Directors will be influenced by the following factors:</p> <ul style="list-style-type: none"> <li>(a) the number of Shares applied for;</li> <li>(b) the overall level of demand for the Public Offer;</li> <li>(c) the desire for spread of investors, including institutional investors; and</li> <li>(d) the desire for an informed and active market for trading Shares following completion of the Public Offer.</li> </ul> <p>The Company will not be liable to any person not allocated Shares or not allocated the full amount applied for under the Public Offer.</p>	Section 2.8
<b>What is the minimum investment size under the Public Offer?</b>	Applications for Shares under the Public Offer must be for a minimum of 10,000 Shares (\$2,000) and thereafter in multiples of 2,500 Shares (\$500) and payment for the Shares must be made in full at the issue price of \$0.20 per Share.	Section 2.7
<b>What are the total expenses of the Offers</b>	The expenses of the Public Offer (excluding GST) are approximately \$725,000 based on Minimum Subscription and \$910,000 based on Maximum Subscription. For further details regarding the expenses of the Public Offer please refer to Section 10.9.	Section 10.9

Topic	Summary	Reference
<b>What are the corporate governance principles and policies of the Company?</b>	<p>To the extent applicable, the Company has adopted the Corporate Governance Principles and Recommendations (4<sup>th</sup> Edition) as published by ASX Corporate Governance Council (<b>Recommendations</b>).</p> <p>The Companies main corporate governance policies and practices and the Company's compliance and departures from the Recommendations as at the date of this Prospectus are outlined in Section 8.</p> <p>In addition, the Company's full Corporate Governance Plan is available from the Company's website (<a href="http://noblehelium.com.au">noblehelium.com.au</a>).</p>	Section 8
<b>Will the Securities be quoted on the ASX?</b>	<p>Application for quotation of all Shares to be issued under the Public Offer will be made to the ASX no later than 7 days after the date of this Prospectus. The rights attaching to the Shares under the Public Offer are set out in Section 10.1.</p> <p>No Options on issue, or to be issued, are currently anticipated to be quoted at the time the Company is admitted to the Official List.</p>	Sections 2.9 and 10.1
<b>What are the tax implications of investing in the Shares?</b>	<p>The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.</p> <p>To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.</p>	Section 2.14
<b>What is the Company's dividend policy?</b>	The Company does not expect to pay dividends in the near future as its focus will primarily be on exploration and development of the Projects.	Section 3.11
<b>Company contact</b>	Should you have any queries with respect to the Company or this Prospectus, you can contact the Company Secretary by phone on +61 8 9481 0389.	Corporate Directory

**Note:** This information is a selective overview only. Prospective investors should read the Prospectus in full, including the experts' reports included in this Prospectus before deciding to invest in Shares.

## 2. DETAILS OF THE PUBLIC OFFER

### 2.1 Public Offer

Pursuant to this Prospectus, the Company invites applications for a minimum of 35,000,000 Shares and a maximum of up to 50,000,000 Shares, at an issue price of \$0.20 per Share, to raise between \$7,000,000 and \$10,000,000 (before costs) (**Public Offer**).

The Public Offer is open to the general public however investors who are not Australian residents should consider the statements and restrictions set out in Section 2.11 before applying for Shares.

The Shares to be issued under the Public Offer are of the same class and will rank equally in all respects with existing Shares on issue. A summary of the rights and liabilities attaching to Shares can be found in Section 10.1.

Applications for Shares under the Public Offer must be made using the Application Form accompanying this Prospectus or using the online Application Form at <https://investor.automic.com.au/#/ipo/noblehelium>. Completed Applications and Application Monies must be received by the Company on or before the Closing Date. Persons wishing to apply for Shares under the Public Offer should refer to Section 2.7 and the Application Form for further details and instructions.

It is intended that the funds raised from the Public Offer will be applied in accordance with the table set out in Section 2.6.

The Company believes that, following completion of the Public Offer, the Company will have sufficient working capital to achieve its objectives as set out in this Prospectus.

All Application Monies are payable in full on Application.

#### 2.1.1 Minimum Subscription

The minimum subscription requirement for the Public Offer is \$7,000,000 representing the subscription of 35,000,000 Shares, at an issue price of \$0.20 per Share (**Minimum Subscription**).

None of the Shares offered by this Prospectus will be issued if Applications are not received for the Minimum Subscription. Should Applications for the Minimum Subscription not be received within 4 months from the date of this Prospectus, the Company will either repay the Application Monies (without interest) to Applicants or issue a supplementary prospectus or replacement prospectus and allow Applicants one month to withdraw their Applications and Application Monies will be repaid (without interest).

#### 2.1.2 Oversubscriptions

Oversubscriptions of up to a further 15,000,000 Shares at an issue price of \$0.20 per Share to raise up to a further \$3,000,000 may be accepted (**Maximum Subscription**).

No oversubscriptions above the Maximum Subscription will be accepted by the Company.

#### 2.1.3 Not underwritten

The Public Offer is not underwritten.

## 2.2 Conditions of the Public Offer

The Public Offer is conditional upon:

- (a) the Company receiving sufficient Applications to meet the Minimum Subscription under the Public Offer (see Section 2.1.1 for further information); and
- (b) ASX granting conditional approval for the Company to be admitted to the Official List of the ASX on conditions reasonably acceptable to the Company.

(together, the **Offer Conditions**).

There is a risk that the Offer Conditions will not be achieved. In the event the Offer Conditions are not achieved, the Company will not proceed with the Public Offer and will repay all Application Monies received without interest in accordance with the Corporations Act.

## 2.3 Joint Lead Managers' interest in the Public Offer

The Company has appointed Max Capital Pty Ltd (ACN 152 214 956) (AFSL 411 136) (**Max Capital**) and Inyati Capital Pty Ltd (ACN 642 351 193) (Corporate Authorised Representative Number: 1287573) (**Inyati Capital**) as joint lead managers to the Public Offer (**Joint Lead Managers**). A summary of the material terms and conditions of the lead manager mandate between the Company and the Joint Lead Managers (**Joint Lead Manager Mandate**) is set out in Section 9.1.

### 2.3.1 Fees payable to the Joint Lead Managers

The following fees are payable to the Joint Lead Managers (and/or their nominees) pursuant to the Joint Lead Manager Mandate:

- (a) a management fee of 1% (plus GST) of the total amount raised under the Offer (a total of \$70,000 based on the Minimum Subscription and \$100,000 based on the Maximum Subscription);
- (b) a capital raising fee of 5% (plus GST) of the total amount raised under the Offer (a total of \$350,000 based on the Minimum Subscription and \$500,000 based on the Maximum Subscription); and
- (c) a pro-rata number of unlisted Options, between 3,325,000 for the Minimum Subscription and 4,750,000 for the Maximum Subscription, which are exercisable at \$0.25 and expiring 30 months from the date of issue (**Lead Manager Options**).

The total value of the fees (exclusive of GST) payable to the Joint Lead Managers pursuant to the Joint Lead Manager Mandate is as follows:

	Minimum Subscription	Maximum Subscription
<b>Cash</b>	\$420,000	\$600,000
<b>Lead Manager Options</b>	\$279,798	\$399,711
<b>Total</b>	\$699,798	\$999,711
<b>% of IPO funds</b>	10.0%	10.0%

The Company agreed to pay the fees to the Joint Lead Managers set out above following arm's length negotiations with the Joint Lead Managers. Specifically, the Company considered the following in deciding to issue the Lead Manager Options:

- (a) the exercise price of the Lead Manager Options represents a 25% premium to the issue price of Shares under the Public Offer;
- (b) the grant of the Lead Manager Options has no immediate cash impact for the Company and will have no long-term impact on the capital structure of the Company unless the Lead Manager Options are exercised; and
- (c) any exercise of the Lead Manager Options would result in additional funds being raised by the Company upon which no further fees or commissions are payable.

The Company notes that a portion of the Lead Manager Options to be allocated to the Joint Lead Managers may be granted to other parties that assist with raising funds under the Public Offer. Accordingly, the total value of fees payable to the Joint Lead Managers, and the potential maximum voting power of the Joint lead Managers will reduce to the extent this occurs.

Refer to Section 9.1 for a summary of the key terms and conditions of the Joint Lead Manager Mandate. The full terms and conditions of the Lead Manager Options are set out in Section 10.4.

### 2.3.2 Joint Lead Managers' interests in Securities and participation in previous placements

As at the date of this Prospectus, the Joint Lead Managers and their respective associates have a relevant interest in the following Securities:

Lead Manager	Shares	Options	%(undiluted) <sup>1</sup>	%(diluted) <sup>1</sup>
Inyati Capital <sup>2</sup>	2,777,778	6,277,778	2.1%	5.7%
Max Capital <sup>3</sup>	1,833,333	5,333,333	1.4%	4.5%

**Notes:**

- Figures calculated on the basis that the Company has 131,285,191 Shares and 28,277,778 Options on issue as at the date of this Prospectus.
- 2,777,778 Shares issued at \$0.09 each pursuant to the Seed Raising, together with 2,777,778 free-attaching Options (exercisable at \$0.20 and expiring 16 September 2025). 3,500,000 Options (exercisable at \$0.20 expiring 16 September 2025) issued in consideration for services provided in respect of the Seed Raising. Refer to Section 10.2 for the full terms and conditions of the Existing Options.
- 1,833,333 Shares issued at \$0.09 each pursuant to the Seed Raising, together with 1,833,333 free-attaching Options (exercisable at \$0.20 and expiring 16 September 2025). 3,500,000 Fee Options (exercisable at \$0.20 expiring 16 September 2025) issued in consideration for services provided in respect of the Seed Raising. Refer to Section 10.2 for the full terms and conditions of the Existing Options.

Other than as detailed in the table above, the Joint Lead Managers and their respective associates have not participated in a placement of Securities by the Company in the 2 years preceding lodgement of this Prospectus.

Based on the information available to the Company as at the date of this Prospectus regarding the intentions of the Joint Lead Managers and their respective associates in relation to the Public Offer, the Joint Lead Managers will have the respective interests in the following Securities on Admission:



Lead Manager	Shares	Options	%(undiluted) <sup>1</sup>	%(diluted) <sup>1</sup>
<b>Minimum Subscription</b>				
Inyati Capital	2,777,778	7,940,278	1.7%	5.1%
Max Capital	1,833,333	6,995,833	1.1%	4.2%
<b>Maximum Subscription</b>				
Inyati Capital	2,777,778	8,527,778	1.5%	4.9%
Max Capital	1,833,333	7,583,333	1.0%	4.1%

**Notes:**

1. Figures calculated on the basis that the Company will have 168,160,191 Shares and 43,997,778 Options on issue based on the Minimum Subscription and 183,160,191 Shares and 45,402,778 Options on issue based on the Maximum Subscription.

## 2.4 Purpose of the Public Offer

The principal purposes of the Public Offer are to:

- (a) implement the business model and objectives of the Company (as set out in Section 3.3);
- (b) provide funding for the purposes set out in Section 3.6;
- (c) meet the expenses of the Public Offer (as set out in Section 10.9);
- (d) provide for general administration and working capital needs;
- (e) enhance the public and financial profile of the Company to facilitate its growth;
- (f) continue to provide the Company with access to equity capital markets for future funding needs; and
- (g) meet the requirements of the ASX and satisfy Chapters 1 and 2 of the ASX Listing Rules, as part of the Company's application for admission to the Official List.

## 2.5 Offer Period

The proposed opening date for acceptance of the Public Offer will be 28 February 2022 or such later date as may be prescribed by the ASIC.

The Public Offer is expected to remain open until 5:00pm (WST) on 28 March 2022. However, the Company reserves the right to extend the Public Offer or to close the Public Offer early.

## 2.6 Indicative Use of Funds

Following completion of the Public Offer, it is anticipated that the following funds will be available to the Company:

Source of funds	Minimum Subscription	Maximum Subscription
Existing cash reserves <sup>1</sup>	\$800,000	\$800,000
Funds raised from the Public Offer	\$7,000,000	\$10,000,000
<b>Total</b>	<b>\$7,800,000</b>	<b>\$10,800,000</b>

**Notes:**

1. Refer to the Financial Information set out in Section 5 for further details. The Company intends to apply these funds towards the items set out in the table below, including the payment of the expenses of the Public Offer of which various amounts will be payable prior to completion of the Public Offer.

The Company intends to apply funds raised from the Public Offer, together with existing cash reserves, over the first two years following admission of the Company to the Official List of ASX as follows:

Allocation of funds	Minimum Subscription			Maximum Subscription		
	Year 1	Year 2	%	Year 1	Year 2	%
Tanzanian Licencing <sup>1</sup>	\$663,000	\$661,000	17%	\$663,000	\$661,000	12%
Exploration at North Rukwa (incl 100km <sup>2</sup> 3D seismic)	\$2,382,200	\$127,000	32%	\$4,582,200	\$127,000	44%
Exploration at North Nyasa	\$149,000	-	2%	\$249,000	-	2%
Exploration at Eyasi <sup>2</sup>	\$163,000	\$158,000	4%	\$213,000	\$208,000	4%
Exploration at Manyara <sup>2</sup>	\$142,000	\$159,000	4%	\$192,000	\$209,000	4%
Estimated expenses of the Public Offer <sup>3</sup>	\$725,000	-	9%	\$910,000	-	8%
Directors Fees <sup>4</sup>	\$389,400	\$389,400	10%	\$389,400	\$389,400	7%
Administration costs <sup>5</sup>	\$562,000	\$608,000	15%	\$562,000	\$608,000	11%
Working capital <sup>6</sup>	\$235,000	\$287,000	7%	\$400,000	\$437,000	8%
<b>Sub-Total</b>	<b>\$5,410,600</b>	<b>\$2,389,400</b>	<b>100%</b>	<b>\$8,160,600</b>	<b>\$2,639,400</b>	<b>100%</b>
<b>Total</b>	<b>\$7,800,000</b>		<b>100%</b>	<b>\$10,800,000</b>		<b>100%</b>

**Notes:**

1. Annual surface rentals for 3,926km<sup>2</sup> prospecting licences (awarded and pending) and Game Reserve access Fees for 148km<sup>2</sup> (anticipated), as per Tanzanian regulations. Refer to the Solicitor's Report on Tenements at Annexure B for further information.
2. The Company notes that the tenements comprising the Eyasi Basin Project and the Manyara Basin Project are currently applications for prospecting licences. The Company is unaware of any circumstances that would prevent these prospecting licence applications from being granted and expects that they will be granted after the Company's admission to the Official List of the ASX.
3. Refer to Section 10.9 further details regarding the estimated expenses of the Public Offer.
4. Refer to Section 7.3.3 for further details regarding the remuneration of the Directors.
5. Administration costs include the general costs associated with the management and operation of the Company's business including administration expenses, rent and other associated costs.
6. Includes fees payable under the Licence and Royalty Agreement, a summary of which is included at Section 9.6. Further, to the extent that:

- (a) the Company's exploration activities warrant further exploration activities; or
- (b) the Company is presented with additional acquisition opportunities,

the Company's working capital will fund such further exploration and acquisition costs (including due diligence investigations and expert's fees in relation to such acquisitions). Any amounts not so expended will be applied toward administration costs for the period following the initial 2-year period following Admission.

The Company notes that:

- (a) it is not currently considering other acquisitions;
- (b) any future acquisitions are likely to be in the mineral resource sector;
- (c) the timing of any such transactions is not yet known; and
- (d) if no suitable acquisition opportunity arises, and subject to the outcomes of exploration activities, the Company may elect to allocate some or all of these funds to exploration on the existing Projects

Refer to Section 3.6 and the Independent Technical Report at Annexure A for further details with respect to the Company's proposed exploration program on the Projects.

The above table is a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.

Although the Company's immediate focus will be on the Projects, as with most exploration entities, it will pursue and assess other new business opportunities in the resource sector over time which complement its business. If and when a viable investment opportunity is identified, the Board may elect to acquire or exploit such opportunity by way of acquisition, joint venture or earn-in arrangement which may involve the payment of consideration in cash, equity or a combination of both.

The use of further equity funding may be considered by the Board where it is appropriate to accelerate a specific project or strategy.

Based on the intended use of funds detailed above, the amounts raised pursuant to the Public Offer will provide the Company sufficient funding for only 2 years' operations. As the Company has no operating revenue, the Company will require further financing in the future.

On admission to the Official List of the ASX, the Board believes the funds raised from the Public Offer will provide the Company with sufficient working capital to achieve its stated objectives as detailed in this Prospectus. It should be however noted that an investment in the Company is speculative and investors are encouraged to read the risk factors outlined in Section 6.

## 2.7 Applications

### 2.7.1 Public Offer

Applications for Shares under the Public Offer must be made using the Application Form as follows:

- (a) using the online Application Form accompanying the electronic version of this Prospectus which is available at <https://investor.automic.com.au/#/ipo/noblehelium> and paying the Application Monies electronically by BPAY® or Electronic Funds Transfer (EFT); or
- (b) completing a printed copy of the Application Form accompanying this Prospectus and paying the Application Monies by cheque.

Applications for Shares under the Public Offer must be for a minimum of 10,000 Shares (\$2,000) and thereafter in multiples of 2,500 Shares (\$500) and payment for the Shares must be made in full at the issue price of \$0.20 per Share.

A completed Application Form together with a cheque or payment by BPAY® or EFT is an offer by the applicant to the Company to apply for the amount of Shares specified in the Application Form on the terms and conditions set out in this Prospectus (including any supplementary or replacement document) and the Application Form. To the extent permitted by law, an Application by an applicant is irrevocable.

All Application Monies will be paid into a trust account.

The Company reserves the right to decline any Application and all Applications in whole or in part, without giving any reason. Applicants under the Public Offer whose Applications are not accepted, or who are allocated a lesser number of Shares than the amount applied for, will receive a refund of all or part of their Application Monies, as applicable. Interest will not be paid on any monies refunded. Acceptance of an Application will give rise to a binding contract.

The Company reserves the right to close the Public Offer early.

#### (a) Option 1: Submitting an Application Form online any paying by BPAY® or EFT

Applicants wishing to pay by BPAY® or EFT should complete the online Application Form accompanying the electronic version of this Prospectus which is available at <https://investor.automic.com.au/#/ipo/noblehelium> and follow the instructions on the online Application Form.

A unique reference number will be quoted upon completion of the online Application Form. Your BPAY reference number will process your payment to your Application Form electronically and you will be deemed to have applied for such Shares for which you have paid.

You do not need to complete and return a paper Application Form if you pay by BPAY® or EFT.

You should be aware that you will only be able to make a payment via BPAY® if you are the holder of an account with an Australian financial institution which supports BPAY® transactions. Your bank, credit union or building society may impose a limit on the amount which you can transact on BPAY®, and policies with respect to processing BPAY® transactions may vary between banks, credit unions or building societies.

It is your responsibility to ensure that payments are received by 5.00pm (WST) on the Closing Date. The Company accepts no responsibility for any failure to receive Application Monies or payments by BPAY® or EFT before the Closing Date arising as a result of, among other things, processing of payments by financial institutions.

**(b) Option 2: Submitting an Application Form with a cheque**

Completed Application Forms and accompanying cheques, made payable to “**Noble Helium Limited**” and crossed “**Not Negotiable**”, must be received by the Company before 5.00pm (WST) on the Closing Date by being delivered or mailed to the address set out in the Application Form.

Payments by cheque will be deemed to have been made when the cheque is honoured by the bank on which it is drawn. Accordingly, Applicants should ensure that sufficient funds are held in the relevant account(s) to cover your cheque(s). If the amount of your cheque(s) for Application Monies (or the amount for which those cheques clear in time for the allocation) is insufficient to pay for the amount you have applied for in your Application Form, you may be taken to have applied for such lower amount as your cleared Application Monies will pay for (and to have specified that amount in your Application Form) or your Application may be rejected.

**For more information on how to complete the Application Form, Applicants should refer to the instructions set out on the form or contact the Share Registry.**

**2.7.2 General**

It is the responsibility of applicants outside Australia to obtain all necessary approvals in order to be issued Shares under the Public Offer. The return of an Application Form or otherwise applying for Shares under the Public Offer will be taken by the Company to constitute a representation by the Applicant that it:

- (a) has received a printed or electronic copy of this Prospectus accompanying the Application Form and has read it in full;
- (b) agrees to be bound by the terms of this Prospectus and the Constitution;
- (c) makes the representations and warranties in Section 2.11 (to the extent that they are applicable) and confirms its eligibility in respect of an offer of Shares under the Public Offer;
- (d) declares that all details and statements in the Application Form are complete and accurate;
- (e) declares that they are over 18 years of age and have full legal capacity and power to perform all of its rights and obligations under the Application Form;
- (f) acknowledges that once the Application Form is returned or payment is made its acceptance may not be withdrawn;
- (g) agrees to being issued the number of new Shares it applies for at the price per Share specified in this Prospectus (or such other number issued in accordance with this Prospectus);
- (h) authorises the Company to register it as the holder(s) of the Shares issued to it under the relevant Offer;
- (i) acknowledges that the information contained in this Prospectus is not investment advice or a recommendation that the Shares are suitable for it, given its investment objectives, financial situation or particular needs; and

- (j) authorises the Company and its officers or agents to do anything on its behalf necessary for the new Shares to be issued to it, including correcting any errors in the Application Form or other form provided by it and acting on instructions received by the Share Registry using the contact details in the Application Form.

## **2.8 Allocation Policy under the Public Offer**

The Company retains an absolute discretion to allocate Shares under the Public Offer and reserves the right, in its absolute discretion, to issue to an Applicant a lesser number of Shares than the number for which the Applicant applies or to reject an Application Form. If the number of Shares issued is fewer than the number applied for, or where no issue is made, surplus application money will be refunded without interest as soon as practicable.

No Applicant under the Public Offer has any assurance of being allocated all or any Shares applied for. The allocation of Shares by Directors (in conjunction with the Lead Manager) will be influenced by the following factors:

- (a) the number of Shares applied for;
- (b) the overall level of demand for the Public Offer;
- (c) the desire for spread of investors, including institutional investors; and
- (d) the desire for an informed and active market for trading Shares following completion of the Public Offer.

The Company will not be liable to any person not allocated Shares or not allocated the full amount applied for.

## **2.9 ASX Listing**

Application for Official Quotation by ASX of the Shares offered pursuant to this Prospectus will be made within 7 days after the date of this Prospectus. However, applicants should be aware that ASX will not commence Official Quotation of any Shares until the Company has complied with Chapters 1 and 2 of the ASX Listing Rules and has received the approval of ASX to be admitted to the Official List. As such, the Shares may not be able to be traded for some time after the close of the Offer.

If the Shares are not admitted to Official Quotation by ASX before the expiration of 3 months after the date of issue of this Prospectus, or such period as varied by the ASIC, the Company will not issue any Shares and will repay all Application Monies for the Shares within the time prescribed under the Corporations Act, without interest.

The fact that ASX may grant Official Quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or the Shares now offered for subscription.

No Options on issue, or to be issued, are currently anticipated to be quoted at the time the Company is admitted to the Official List.

Subject to the Company being admitted to the Official List, certain Securities will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. None of the Shares issued under the Public Offer will be subject to escrow under the ASX Listing Rules. Refer to Section 3.9 for further information in respect of escrow.

## **2.10 Issue of Shares**

Subject to the Offer Conditions set out in Section 2.2 being met, issue of Shares offered by this Prospectus will take place as soon as practicable after the Closing Date.



Pending the issue of the Shares or payment of refunds pursuant to this Prospectus, all Application Monies will be held by the Company in trust for the Applicants in a separate bank account as required by the Corporations Act. The Company, however, will be entitled to retain all interest that accrues on the bank account and each Applicant waives the right to claim interest.

The Directors will determine the allottees of all the Shares in their sole discretion in accordance with the allocation policy set out in Section 2.8.

Holding statements for Shares issued to the issuer sponsored subregister and confirmation of issue for Clearing House Electronic Subregister System (CHES) holders will be mailed to applicants being issued Shares pursuant to the Offer as soon as practicable after their issue.

## 2.11 Applicants outside Australia

This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

No action has been taken to register or qualify the Shares or otherwise permit a public offering of the Shares the subject of this Prospectus in any jurisdiction outside Australia. Applicants who are resident in countries other than Australia should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

If you are outside Australia it is your responsibility to obtain all necessary approvals for the issue of the Shares pursuant to this Prospectus. The return of a completed Application Form will be taken by the Company to constitute a representation and warranty by you that all relevant approvals have been obtained.

### 2.11.1 New Zealand

This document has not been registered, filed with or approved by any New Zealand regulatory authority under the *Financial Markets Conduct Act 2013* (the **FMC Act**). The Shares are not being offered or sold in New Zealand (or allotted with a view to being offered for sale in New Zealand) other than to a person who:

- (a) is an investment business within the meaning of clause 37 of Schedule 1 of the FMC Act;
- (b) meets the investment activity criteria specified in clause 38 of Schedule 1 of the FMC Act;
- (c) is large within the meaning of clause 39 of Schedule 1 of the FMC Act;
- (d) is a government agency within the meaning of clause 40 of Schedule 1 of the FMC Act; or
- (e) is an eligible investor within the meaning of clause 41 of the FMC Act.

### 2.11.2 United Kingdom

Neither this document nor any other document relating to the Offers has been delivered for approval to the Financial Conduct Authority in the United Kingdom (**UK**) and no prospectus (within the meaning of Section 85 of the Financial Services and Markets Act 2000, as amended (**FSMA**)) has been published or is intended to be published in respect of the Shares.

The Shares may not be offered or sold in the UK by means of this document or any other document, except in circumstances that do not require the publication of a prospectus under Section 86(1) of the FSMA. This document is issued on a confidential basis in the UK to “qualified investors” (within the meaning of Article 2(e) of the Prospectus Regulation (2017/1129/EU), replacing Section 86(7) of the FSMA). This document may not be distributed or reproduced, in whole or in part, nor may its contents be disclosed by recipients, to any other person in the UK.

Any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received in connection with the issue or sale of the Shares has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the UK in circumstances in which Section 21(1) of the FSMA does not apply to the Company.

In the UK, this document is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 (FPO), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together “relevant persons”). The investment to which this document relates is available only to relevant persons. Any person who is not a relevant person should not act or rely on this document.

## **2.12 Commissions payable**

The Company reserves the right to pay a commission of up to 6% (exclusive of goods and services tax) of amounts subscribed through any licensed securities dealers or Australian financial services licensee in respect of any valid Applications lodged and accepted by the Company and bearing the stamp of the licensed securities dealer or Australian financial services licensee. Payments will be subject to the receipt of a tax invoice from the licensed securities dealer or Australian financial services licensee.

The Joint Lead Managers will be responsible for paying all commissions that they and the Company agree with any other licensed securities dealers or Australian financial services licensees out of the fees paid by the Company to the Joint Lead Managers under the Joint Lead Manager Mandate.

## **2.13 Financial Information**

The Company's financial information is set out in Section 5 and in the Independent Limited Assurance Report in Annexure C.

A summary of the audited historical consolidated statement of financial position for the Company for the financial year ended 30 June 2020, financial year ended 30 June 2021 and half-year ended 31 December 2021, and the pro-forma consolidated statement of financial position assuming completion of the Public Offer is set in Sections 5.4 and 5.6 respectively.

## **2.14 Taxation**

The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.

## **2.15 Withdrawal of Offer**

The Public Offer may be withdrawn at any time. In this event, the Company will return all Application Monies (without interest) in accordance with applicable laws.

### 3. COMPANY AND PROJECT OVERVIEW

#### 3.1 Background

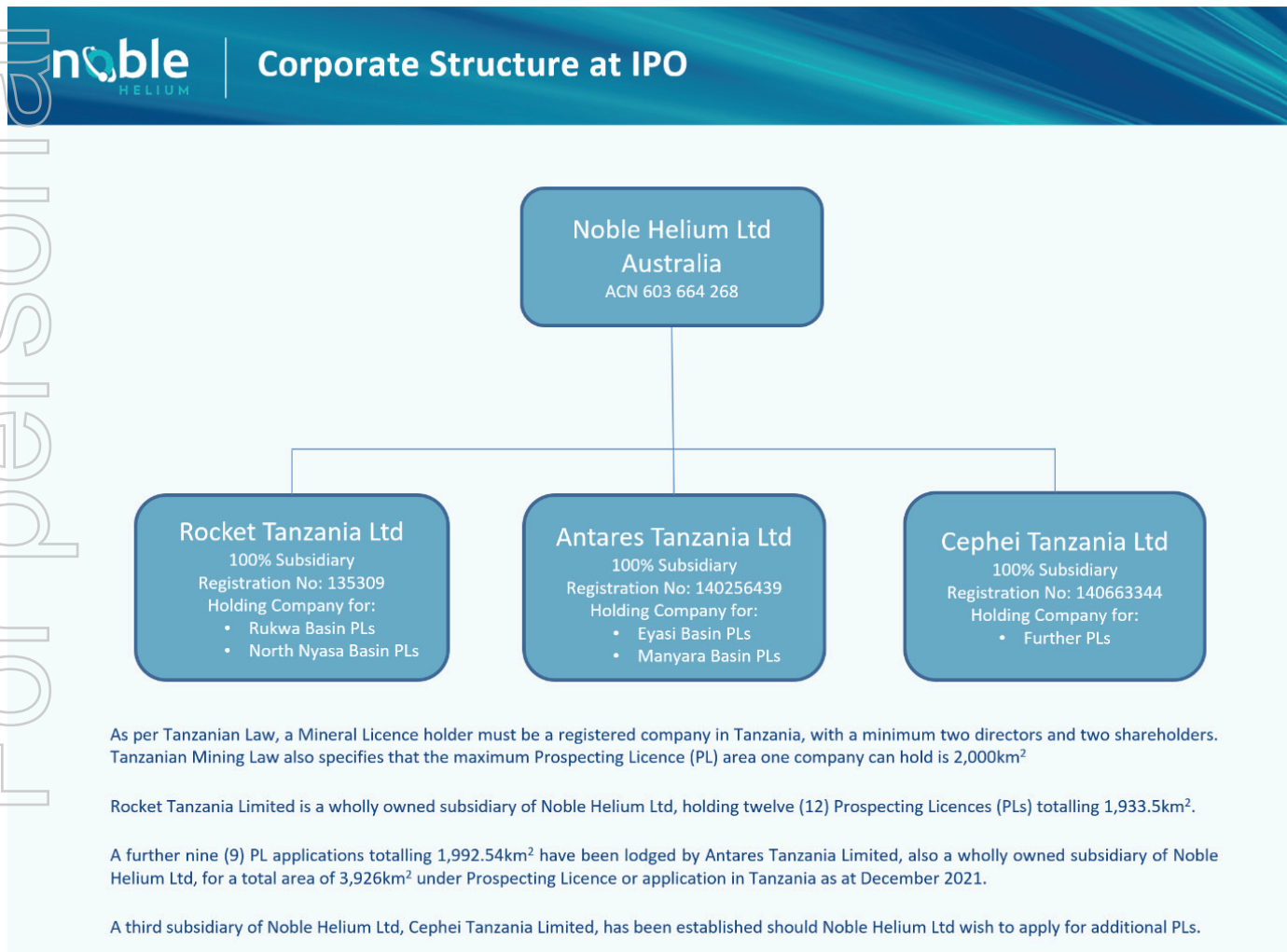
The Company is an Australian public company incorporated on 13 January 2015 that is focused on exploration of helium with the ultimate objective of establishing a new source of commercially viable liquid helium for the global supply chain.

The Company holds (through its wholly owned subsidiaries registered in Tanzania) a 100% interest in a number of tenements in Tanzania which comprise four project areas (together, the **Projects**).

Following completion of the Offers and the admission of the Company to the Official List of the ASX, the Company plans to undertake systematic exploration activities on the Projects to determine their potential.

#### 3.2 Corporate Structure

The corporate structure of the Company is as set out in the diagram below:



### 3.3 Business Model and Strategy

The Company's business model is focussed on the acquisition, exploration and development of primary helium resource projects throughout Tanzania and in other international jurisdictions identified as having similar potential. The Company's mission is to become the world's leading primary helium producer.

Following completion of the Public Offer and the admission of the Company to the Official List, the Company intends on increasing Shareholder wealth through undertaking systematic exploration activities on the held Projects in Tanzania in accordance with its intended exploration program and the further acquisition, exploration and development of helium projects throughout Tanzania and elsewhere.

A summary of the Company's proposed exploration programs is set out at Section 3.5. The Company proposes to fund its exploration activities over the first two years following listing as outlined in the table at Section 3.6.

The Company's main objectives on completion of the Public Offer and Admission are:

- (a) focusing on helium opportunities within the Projects that have the potential to deliver growth and value for Shareholders;
- (b) mature and test previously identified priority helium targets at the Projects;
- (c) identify additional priority helium targets by undertaking further high-level exploration activities within the Projects;
- (d) through exploration success, evaluate opportunities for near term helium production; and
- (e) seek further exploration, acquisition and joint venture opportunities in Tanzania and elsewhere that have a strategic fit for the Company and have the potential to deliver growth for Shareholders.

Although the Company's primary objective will be to focus on the exploration and potential development of helium in the Projects, the Company will also, as part of its business strategy, implement a growth strategy by continuing to evaluate new project acquisition opportunities, both by tenement application and commercial acquisitions, to maintain a pipeline of projects which complement the Company's existing focus. Any such acquisitions and investments will be considered and commercially evaluated by the Company when they are identified. The Company confirms that it is not currently considering other acquisitions and that any future acquisitions are likely to be in the mineral resource sector.

The Directors are satisfied that on completion of the Public Offer and Admission, the Company will have sufficient funds to carry out its stated objectives.

### 3.4 Key Dependencies

The key dependencies of the Company's business model include:

- (a) completing the Public Offer;
- (b) maintaining title to the Projects;
- (c) the successful grant of the Prospecting Licence Applications which make up the Eyasi Basin Project and the Manyara Basin Project;
- (d) retaining and recruiting key personnel skilled in the helium exploration sector;
- (e) sufficient worldwide demand for helium;
- (f) the market price of helium remaining higher than the Company's costs of any future production (assuming successful exploration by the Company);
- (g) raising sufficient funds in the future to satisfy expenditure requirements for exploration and operating costs in respect of the Projects; and
- (h) minimising environmental impact on the Projects and complying with environmental and health and safety requirements.

### 3.5 Overview of the Projects

The Projects consist of the:

- (a) the **North Rukwa Basin Project**, which comprises twelve (12) granted prospecting licences covering a combined area of approximately 1,467km<sup>2</sup> of the North Rukwa Basin located in south-west Tanzania (see Figure 5);
- (b) the **North Nyasa Basin Project**, which comprises two (2) granted prospecting licences covering a combined area of approximately 466km<sup>2</sup> of the North Nysa Basin located in south-west Tanzania (see Figure 6);
- (c) the **Eyasi Basin Project** which comprises five (5) applications for prospecting licences covering a combined area of approximately 1,138km<sup>2</sup> of the Eyasi Basin located in central northern Tanzania (see Figure 7); and
- (d) the **Manyara Basin Project** which comprises four (4) applications for prospecting licences covering a combined area of approximately 854km<sup>2</sup> of the Manyara Basin located in central northern Tanzania (see Figure 7).

Further details regarding the tenements comprising the Projects (**Tenements**) are set out below:

Project	Tenement	Holder	Status	Expiry Date	Area (km <sup>2</sup> )
<b>North Rukwa Basin<sup>1</sup></b>	PL11323-2019	RTL	Awarded	29 July 2023	185.77
	PL11324-2019	RTL	Awarded	29 July 2023	26.06
	PL11325-2019	RTL	Awarded	29 July 2023	107.12
	PL11326-2019	RTL	Awarded	29 July 2023	93.42
	PL11327-2019	RTL	Awarded	29 July 2023	107.48
	PL11328-2019	RTL	Awarded	29 July 2023	131.85
	PL11737-2021	RTL	Awarded	30 Nov 2025	206.4
	PL11738-2021	RTL	Awarded	30 Nov 2025	291.04
	PL11739-2021	RTL	Awarded	30 Nov 2025	116.84
	PL11740-2021	RTL	Awarded	30 Nov 2025	29.43
	PL11742-2021	RTL	Awarded	30 Nov 2025	148.24
	PL11750-2021	RTL	Awarded	30 Nov 2025	23.7
<b>North Nyasa Basin<sup>1</sup></b>	PL11736-2021	RTL	Awarded	30 Nov 2025	237.27
	PL11741-2021	RTL	Awarded	30 Nov 2025	228.88
<b>Eyasi Basin<sup>2</sup></b>	PL18258-2021	ATL	"Application Recommended"	Four years from award	299.52
	PL18259-2021	ATL	"Application Recommended"	Four years from award	222.62
	PL18260-2021	ATL	"Application Recommended"	Four years from award	222.7
	PL18261-2021	ATL	"Application Recommended"	Four years from award	147.6
	PL18262-2021	ATL	"Application Recommended"	Four years from award	245.53
<b>Manyara Basin<sup>2</sup></b>	PL18262-2021	ATL	"Application Recommended"	Four years from award	299.97
	PL18262-2021	ATL	"Application Recommended"	Four years from award	267.43
	PL18262-2021	ATL	"Application Recommended"	Four years from award	137.39
	PL18262-2021	ATL	"Application Recommended"	Four years from award	149.72



**Notes:**

1. Rocket Tanzania Limited is a wholly owned subsidiary of the Company and the registered holder of the Tenements comprising the North Rukwa Basin Project and the North Nyasa Basin Project.
2. Antares Tanzania Limited is a wholly owned subsidiary of the Company and the registered holder of the Tenements comprising the Eyasi Basin Project and the Manyara Basin Project. The Company is unaware of any circumstances that would prevent the Prospecting Licence Applications from being granted and expects the Prospecting Licence Applications to be granted after its admission to the Official List of the ASX. The expenditure for these Tenements will commence once these Tenements have been granted.

The geology of Tanzania is dominated by the East African Rift System (EARS), which extends approximately 5,000 kilometres from Ethiopia to Mozambique and is relatively young, at a maximum 30 million years old. It is very tectonically active today and is known for the extensive and dynamic volcanic systems that extend along the length of the rift. Helium seeps have been found along the active margins of the rift system. High concentrations (greater than one percent) of helium are known from the northern portion of the rift down to the southern portion of the rift. The EARS is characterised by two main rifting trends: the Eastern and Western Branches.

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

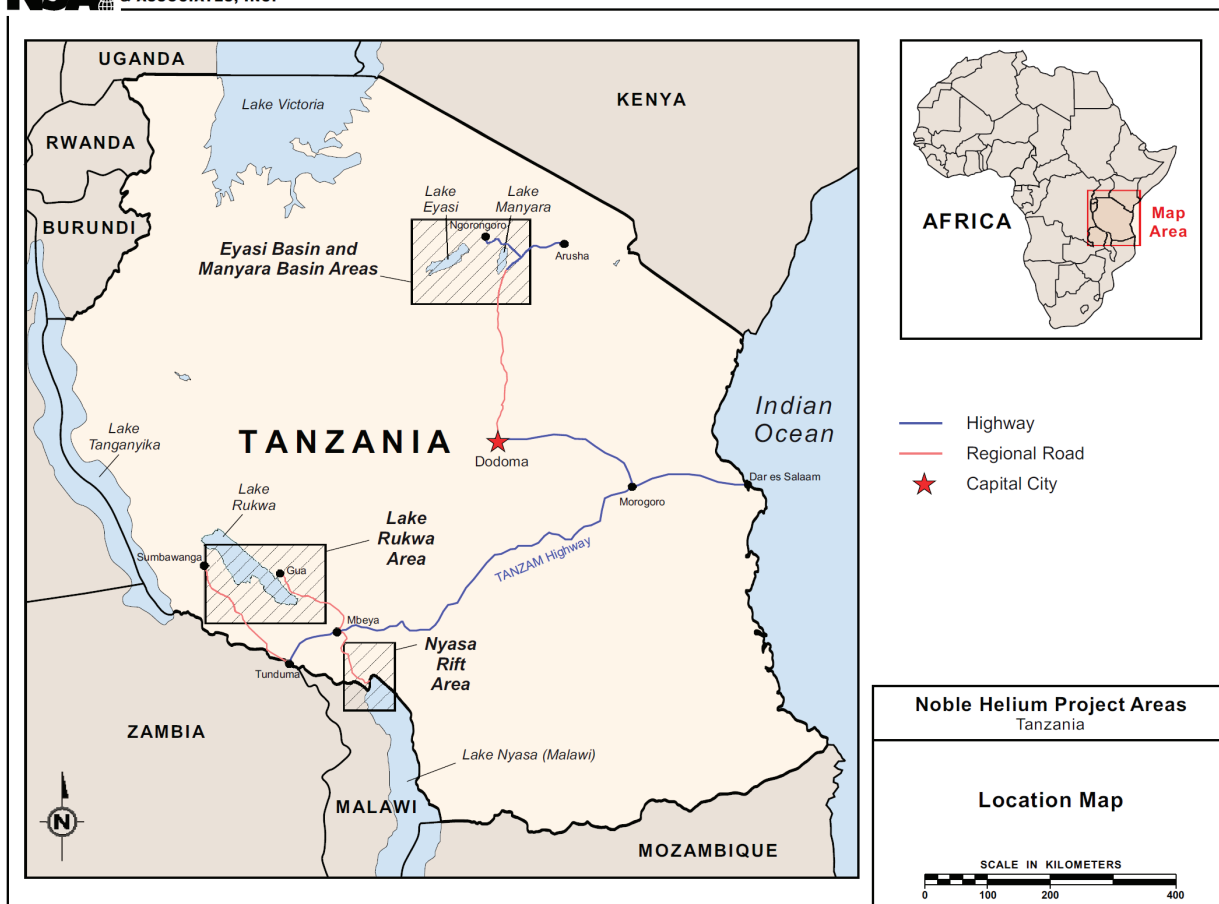


Figure 1 – Noble Helium Project Areas in Tanzania (Source: NSAI)

A comprehensive summary of regional and local geology, historical exploration pertaining to the Projects is contained in the Independent Technical Expert's Report in Annexure A. A comprehensive summary of the status of the Tenements can be found in the Solicitor's Report on Tenements in Annexure B.

The Company notes the North Nyasa Basin Project, Eyasi Basin Project and the Manyara Basin Project are not as advanced as the North Rukwa Basin Project and are considered to be early stage exploration projects.

### **3.5.1 North Rukwa Basin Project (Tanzania) – 100%**

#### **(a) Location and Access**

Noble Helium is exploring for helium in the northern section of the Rukwa Rift area. The Rukwa Rift is part of the Western Branch of the EARS and is situated between Lake Tanganyika and Lake Nyasa (Malawi) in western Tanzania (see Figure 1).

The North Rukwa project area is accessible by road via the TANZAM highway from Dar es Salaam to Mbeya at the southern end of Lake Rukwa, followed by regional roads north, to Sumbawanga on the western side of Lake Rukwa and to Gua on the eastern side of Lake Rukwa.

Mbeya is a major regional centre in southwest Tanzania that is also serviced by daily flights to Dar es Salaam.

## (b) Geology

The Rukwa Rift is a northwest-to-southeast trending basin that is approximately 300km long by 50km wide. It is bordered on the northeast by the Lupa Fault and on the southwest by the Ufipa fault. The Ubende Plateau is located to the north of the Rukwa Rift and the Mbozi and Rungwe Volcanics are located to the southwest and south, respectively.

Lake Rukwa occupies the middle third of the rift valley, with a maximum water depth of approximately 15 metres; however this depth can vary depending on rainfall. The structural elements and surface geology of the Rukwa Rift Basin are shown in Figure 2.

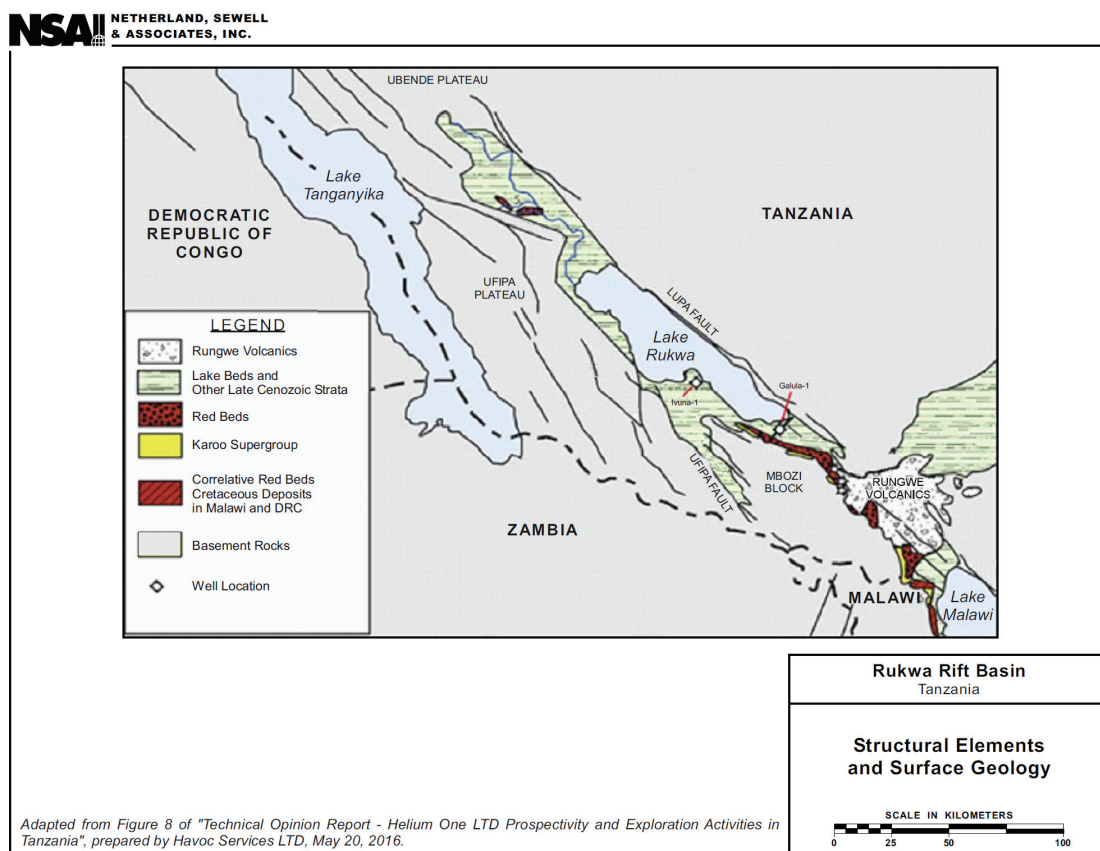


Figure 2 – Structural elements and surface geology of the Rukwa Rift Basin (Source: NSAI)

Three megasequences are present in the sediments of the Rukwa Rift: the Karoo Supergroup, the Red Sandstone Group and the Lake Beds. These megasequences contain the main potential reservoirs for helium in the Lake Rukwa area. A stratigraphic column of the southern Rukwa Basin is shown in Figure 3.

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

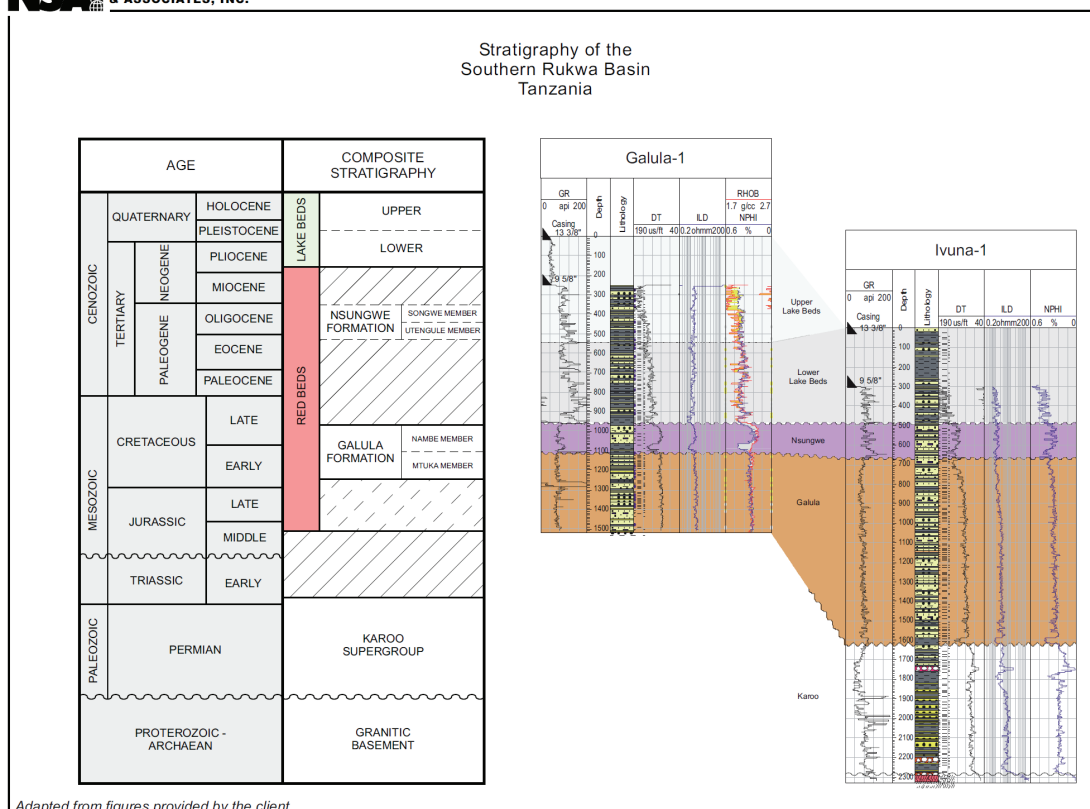


Figure 3 – Stratigraphic column of the southern Rukwa Basin (Source: NSAI)

Several surface gas samples have been taken in the hot springs in the Rukwa Rfit area, with locations shown in Figure 4. Helium concentrations at surface in the central Rukwa Rift, approximately 35km to the south of Noble Helium’s prospecting licences, are reported at up to 10 percent and associated primarily with nitrogen.

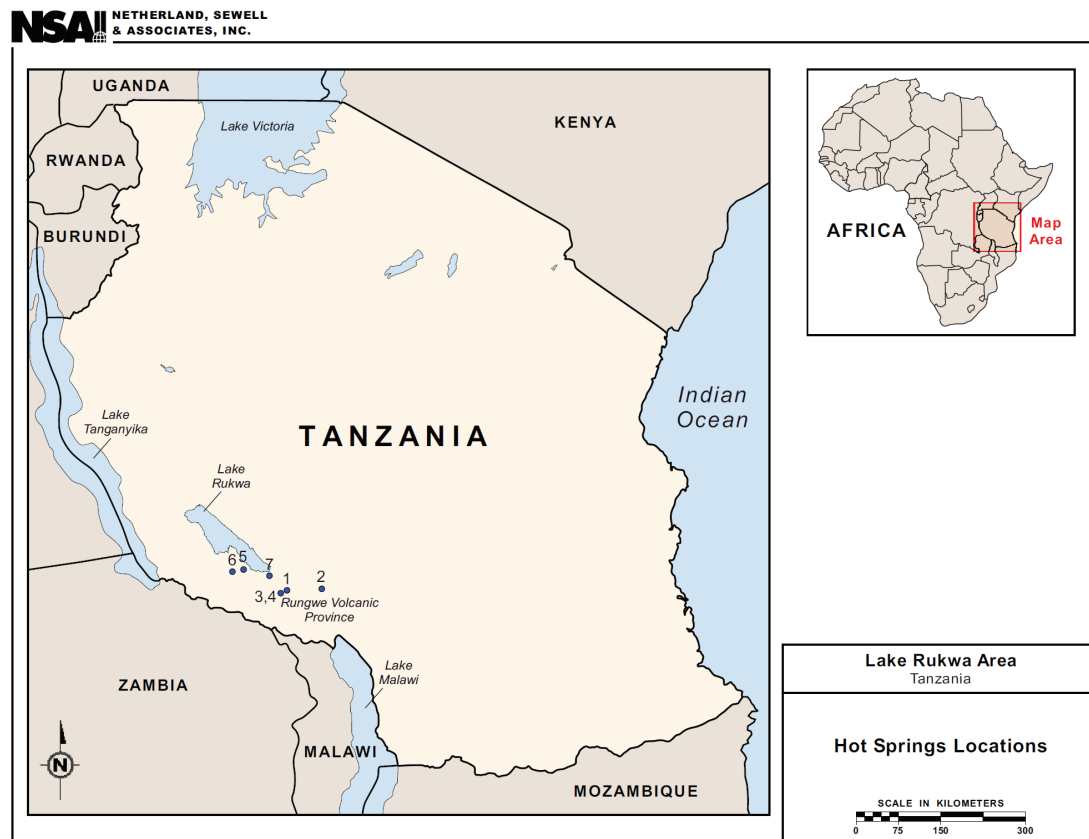


Figure 4 – Surface gas samples taken in the hot springs in the Rukwa Rift area (Source: NSAI)

Map Number	Sample Location/Name	Source	Helium Concentration (%)	Nitrogen Concentration (%)	CO <sub>2</sub> Concentration (%)
1	Rukwa #1/MMCT001	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	0.005	Not Reported	Not Reported
2	Rukwa #1/MMCT002	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	0.004	Not Reported	Not Reported
3	Songwe River #1	James, 1967	0.010	0.6	99.2
4	Songwe River #2	James, 1967	0.010	2.1	97.2
5	Rukwa #2/Rukwa #2b (rerun)	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	2.490	96.0	Not Reported
6	Rock of Hades Spring	James, 1967	4.200	87.5	Not Reported
7	Salt Works (reported as "at-depth samples" but no further details)	Ballentine, Barry, Fontijn, Hillegonds, Bluett, Abraham-James, Danabalan, Gluyas, Brennwald, Plüss, Seneshen, Sherwood, 2017	8.000 to 10.000	Not Reported	Not Reported

Table 1 – Surface gas samples taken in the hot springs in the Rukwa Rift area (Source: NSAI)

### (c) Exploration History and Prospectivity

In 1987, Amoco Tanzania Oil Company drilled the Galula-1 and Ivuna-1 wells in the Lake Rukwa area. Each well represents a different structural and stratigraphic position within the Rukwa Rift. The Galula-1 well was drilled in a position where the section thickness of the Lake Beds was 970m. It reached a total depth of 1,525m in the Red Beds, resulting in a section thickness of 556m for the red beds. The Ivuna-1 well penetrated a stratigraphic section outside of the thickest composite rift-fill sequence and encountered all three of the main potential reservoirs and reached total depth in Precambrian granite. Within the Ivuna-1 well, the section thickness of the Lake Beds, the Red Beds and the Karoo Supergroup is approximately 700m, 890m and 700m respectively.

In 2021, Helium One Global Ltd (Helium One) drilled two helium exploration wells in close proximity to one another, the Tai-1 and Tai-2 wells. While both are considered dry holes, helium was detected in shallow sections above the primary formations of interest, providing further evidence of a working helium source in the area. Additionally, valuable information was collected regarding the presence of porous rock and what is interpreted to be competent sealing intervals.

Nine structural leads mapped on the Amoco seismic dataset within Noble Helium's Prospecting Licences in the northern Rukwa Basin have been assigned Helium Prospective Volumes in accordance with the 2018 SPE-PRMS by Netherland Sewell and Associates Inc of Houston USA (see Figure 5 and Table 2).

In the northern portion of the EARS, the Lake Albert Basin in Uganda is structurally analogous to the Lake Rukwa Area. The ages and geometries of the traps found in the Lake Albert Basin were targeted for hydrocarbon exploration in the early 2000s and numerous discoveries were made. Since hydrocarbons are being trapped in the Lake Albert Basin, it is encouraging for the potential of natural gases (helium, nitrogen, methane or CO<sub>2</sub>) to be trapped in structural features that have similar characteristics in the Lake Rukwa Area.



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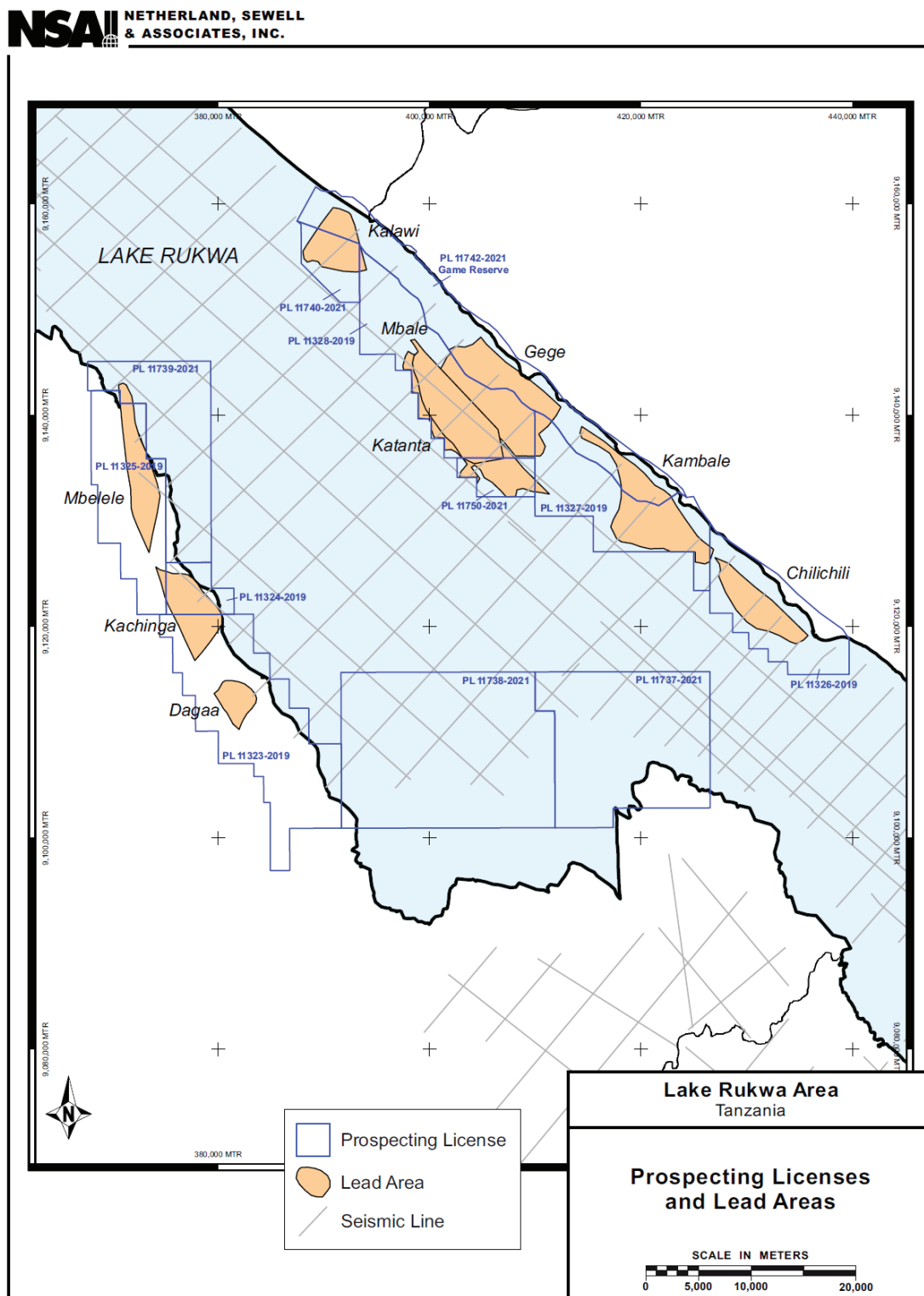


Figure 5 – Noble Helium North Rukwa Prospecting Licences and Leads (Source: NSAI)

Lead/Reservoir	Undiscovered OGIP <sup>(1)</sup> (BCF)				Unrisked Gross (100%) Prospective Helium Volumes (BCF)				P <sub>g</sub> (%)
	Low Estimate	Best Estimate	High Estimate	Mean	Low Estimate	Best Estimate	High Estimate	Mean	
Chilichili									
Upper Lake Beds	12.9	40.2	127.1	60.0	0.2	1.3	5.5	2.3	16
Lower Lake Beds	10.9	33.0	102.7	48.3	0.2	1.0	4.1	1.8	16
Galula	10.0	33.8	115.2	53.5	0.2	1.0	4.6	2.0	16
Karoo	19.2	68.9	264.3	118.9	0.4	2.1	10.2	4.4	18
Dagaa									
Galula	4.3	16.2	62.9	28.0	0.1	0.5	2.5	1.1	10
Gege									
Upper Lake Beds	259.9	685.4	1,760.4	891.4	4.3	21.1	75.0	33.2	13
Lower Lake Beds	224.9	572.4	1,448.9	744.4	3.9	18.0	61.4	27.1	13
Galula	144.5	437.7	1,321.3	620.9	2.6	13.2	53.8	23.1	12
Karoo	21.9	68.1	219.9	102.5	0.4	2.1	8.9	3.8	13
Kachinga									
Upper Lake Beds	21.7	62.4	182.6	88.2	0.4	1.9	7.4	3.3	13
Lower Lake Beds	15.5	46.4	136.3	66.6	0.3	1.4	5.7	2.4	13
Galula	19.8	47.4	108.4	58.4	0.3	1.5	5.0	2.2	12
Kalawi									
Upper Lake Beds	13.2	52.3	211.4	93.5	0.3	1.6	8.2	3.4	13
Lower Lake Beds	1.9	9.3	44.3	20.3	0.0	0.3	1.7	0.8	13
Galula	4.5	22.4	100.9	44.0	0.1	0.7	3.8	1.6	12
Karoo	18.7	70.4	259.1	118.3	0.4	2.1	10.4	4.4	13
Kambale									
Upper Lake Beds	32.0	109.6	379.3	174.6	0.6	3.3	15.0	6.5	16
Lower Lake Beds	28.2	96.7	346.3	155.5	0.5	3.0	13.2	5.6	16
Galula	22.4	75.3	253.1	117.7	0.4	2.3	10.2	4.3	16
Karoo	24.1	79.8	253.4	119.1	0.4	2.3	10.2	4.3	18
Katanta									
Upper Lake Beds	31.6	124.2	485.8	221.9	0.6	3.7	19.5	8.3	13
Lower Lake Beds	34.0	106.6	335.5	160.8	0.6	3.4	14.2	6.0	13
Galula	50.3	160.9	514.0	244.4	0.9	4.8	21.1	8.9	12
Mbale									
Lower Lake Beds	3.1	7.9	19.8	10.2	0.1	0.3	0.8	0.4	11
Galula	0.6	2.9	15.0	6.6	0.0	0.1	0.6	0.2	8
Karoo	25.2	77.0	233.2	111.5	0.5	2.3	9.6	4.1	11
Mbelele									
Upper Lake Beds	17.2	56.6	185.1	87.2	0.3	1.7	7.6	3.2	16
Lower Lake Beds	5.4	22.1	87.7	38.9	0.1	0.7	3.5	1.5	16
Galula	31.7	89.5	251.2	122.9	0.5	2.7	10.2	4.5	16
Karoo	2.2	10.3	48.3	20.9	0.0	0.3	1.8	0.8	18
Total <sup>(2)</sup>	1,111.8	3,285.7	9,873.4	4,749.4	19.6	100.7	405.7	175.5	

<sup>(1)</sup> Undiscovered OGIP is inclusive of helium, hydrocarbon, nitrogen, CO<sub>2</sub>, and other gases.

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

Table 2 – Undiscovered OGIP, unrisked Prospective Helium Volumes and Geological Probability of Success (P<sub>g</sub>) for Noble Helium North Rukwa Leads (Source: NSAI)

#### (d) Proposed Exploration

Noble Helium is planning further data acquisition in the Lake Rukwa Area to improve structural resolution and to assist in drill target selection. The work program the Company has designed for its North Rukwa PLs include:

- (i) completion of surface geochemistry surveys across all mapped leads, enabling each to be ranked according to its relative probability of subsurface helium discovery;
- (ii) geologic sampling and analysis of outcrops of the Galula Formation and Karoo Supergroup, to improve understanding of depositional environments and quantify reservoir and seal properties. The Lake Beds megasequence has previously been substantially sampled and analysed;
- (iii) acquire Airborne Gravity Gradiometry surveys across all leads, calibrated to the existing reprocessed 2D seismic lines, to provide structural trend information between Amoco's 5km-spaced vintage 2D seismic grid; and
- (iv) acquire up to 300km<sup>2</sup> of 3D seismic data, in the form of either (1) full-coverage of the 3 leading structural closures, as identified by the earlier work program, or (2) a 3-4 km wide 3D swath over each of the mapped structures, from crest to below the lowest closing contour.

#### 3.5.2 North Nyasa Basin Project (Tanzania) – 100%

##### (a) Location and Access

In addition to the Lake Rukwa Area, Noble Helium has been awarded two PLs in the North Basin of the Nyasa (Malawi) Rift area. The PLs are located approximately 230 km to the southeast of the Lake Rukwa area, along the northern part of Lake Nyasa (Malawi). The Nyasa Rift is part of the Western Branch of the EARS and forms part of the western border of southwestern Tanzania with Malawi (Figure 1 and Figure 6).

The Nyasa project area is accessible by road via the TANZAM highway from Dar es Salaam to Mbeya at the southern end of Lake Rukwa, followed by regional roads south, directly to Noble Helium's PLs.

Mbeya is a major regional centre in southwest Tanzania that is also serviced by daily flights to Dar es Salaam.

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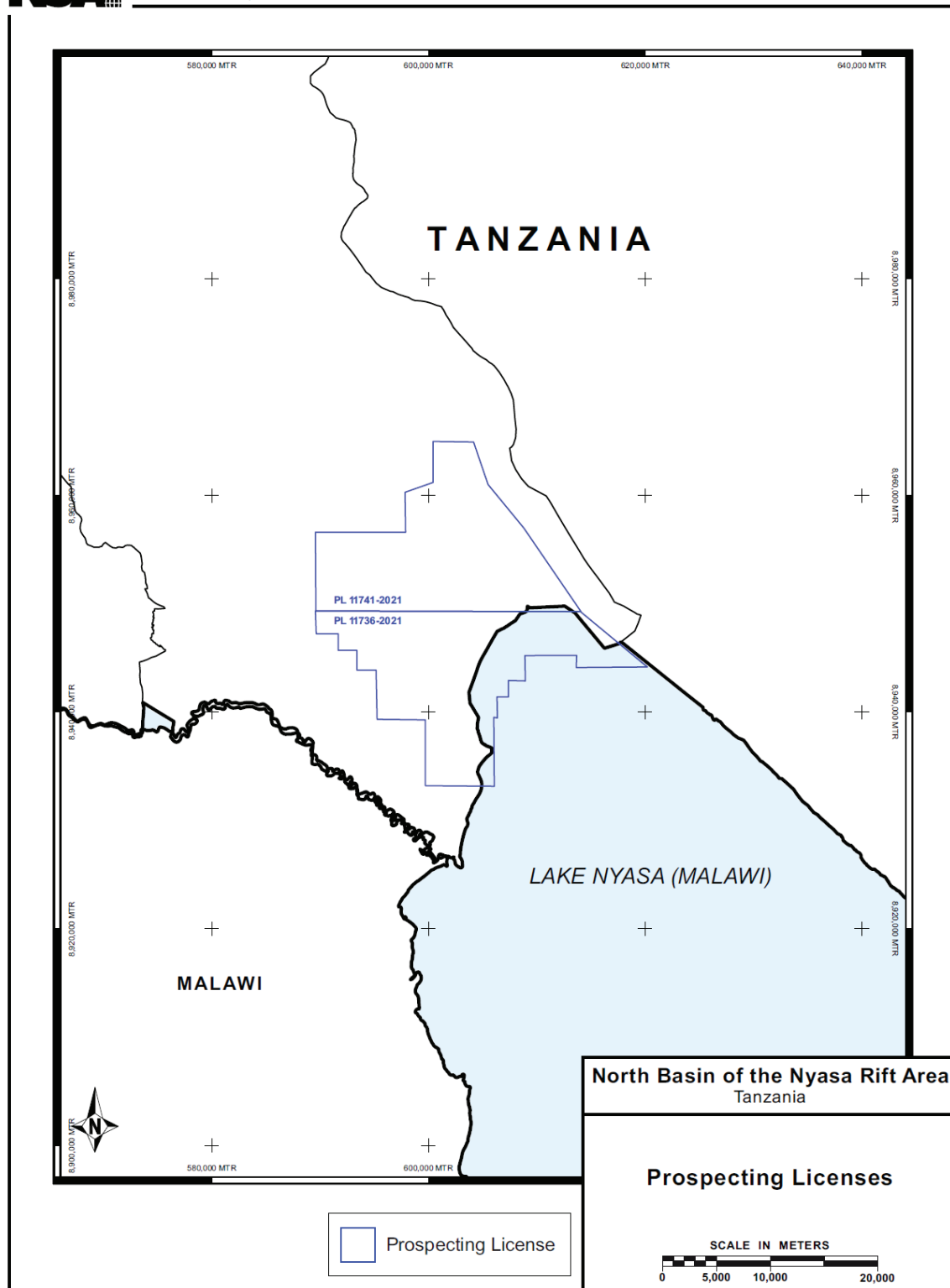


Figure 6 – North Nyasa Basin Prospecting Licences (Source: NSAI)

## **(b) Geology**

Currently, Noble Helium does not have sufficient data to evaluate the prospectivity within the blocks but plans to acquire more data in the future

From what is currently known, there are geologic similarities between the Rukwa and Nyasa Rift areas related to both the tectonic evolution of the areas and the associated geologic formations. The Karoo Supergroup, the Red Sandstone Group (Red Beds), and the Lake Beds that are targeted for exploration in Rukwa are also present in the Nyasa Rift Area.

## **(c) Exploration History and Prospectivity**

In 2012, Heritage Oil and Gas plc acquired 1,500km<sup>2</sup> airborne gravity gradiometry over the North Nyasa area, followed by a 100km 2D seismic program, confirming structural closures. Heritage Oil and Gas relinquished its petroleum license over the North Nyasa area in approximately 2017.

As Noble Helium does not yet have these data estimates for helium prospective volumes for the Nyasa prospecting licenses have not been carried out.

The success of exploration within the Nyasa Rift Area PLs may be affected by the licenses' proximity to the Rungwe volcanic deposits as shown on Figure 2. The presence of these volcanics may have an adverse effect on helium concentrations in the area.

## **(d) Proposed Exploration**

Noble Helium is planning further data acquisition in the North Nyasa Area to improve structural resolution and to assist in drill target selection. The work program the Company has been designed for its North Nyasa PLs include:

- (i) sourcing of the vintage exploration data to build a prospective resource base for the North Nyasa PLs; and
- (ii) completion of surface geochemistry surveys across the leads identified by Heritage Oil and Gas, enabling each to be ranked according to its relative probability of subsurface helium discovery.

### 3.5.3 Eyasi Basin Project and Manyara Basin Projects (Tanzania) – 100%

#### (a) Location and Access

Noble Helium has applied for, but not been granted, five prospecting licenses in the Eyasi Basin and four prospecting licences in the Manyara Basin, both located in central northern Tanzania as shown on Figure 1 and Figure 7.

Road access to the Eyasi Basin Project from Dar es Salaam is via the Tanzanian Capital of Dodoma, in the centre of the country.

Air access is via Arusha, the major tourist centre in northern Tanzania, followed by road access west toward Ngorongoro for approximately 100km to the Manyara Project Area and 160km to the Eyasi Project Area.

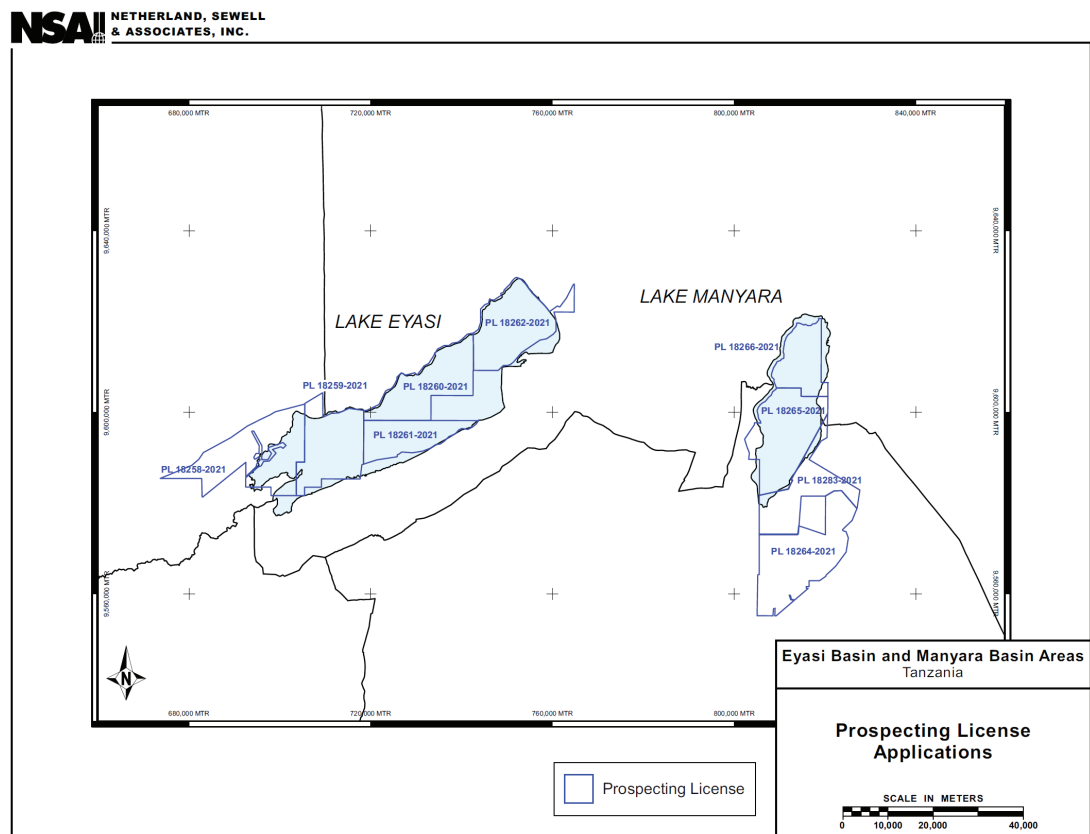


Figure 7 – Eyasi and Manyara Basin Prospecting Licence applications (Source: NSAI)

## **(b) Geology**

These basins are rift segments within the eastern branch of the EARS. The PLs shown on Figure 7 are approximately 300 km to the northeast of the Lake Rukwa Areas.

The tectonic setting of the Eyasi and Manyara Basins is similar to that of the Rukwa; each basin has hot springs in which helium has been measured, with higher helium concentrations in the Eyasi Basin. The Manyara Basin, like the Nyasa Rift, is home to a volcanic province that could have a negative impact on helium concentrations, so the focus of the exploration in this basin will be on areas sufficiently distal to the volcanics.

Further study is required to evaluate the stratigraphy on these license areas to assess potential reservoirs.

## **(c) Exploration History and Prospectivity**

No previous oil and gas exploration programs have been carried out in the Eyasi and Manyara Basins. Similar to the Nyasa Rift area, the exploration status of these basins is very immature with more data needed to progress evaluation efforts.

Due to the pending status of the applications and insufficient data, helium prospective volumes have not yet been estimated for the prospecting licenses in the Eyasi and Manyara Basins.

## **(d) Proposed Exploration**

Noble Helium is planning data acquisition in the Eyasi and Manyara Areas that will provide initial structural, stratigraphic and geochemical insights into the basin. This planned work program includes:

- (i) purchase the national airborne magnetics survey covering most of Tanzania, including the Eyasi and Manyara Basins, for inversion with gravity to identify internal structural trends;
- (ii) completion of surface geochemistry surveys to identify areas of each basin that demonstrate greater helium concentrations associated with high nitrogen and low CO<sub>2</sub>; and
- (iii) geological sampling and analysis programs.

## **3.6 Proposed Exploration Programmes and Expenditure**

The Company proposes to apply funds raised from the Public Offer, together with existing cash reserves, over the first two years following admission of the Company to the Official List of ASX toward exploration activities as outlined in the tables below. It should be noted that the budgets will be subject to modification on an ongoing basis depending on the results obtained from exploration undertaken. This will involve an ongoing assessment of the Company's projects and may lead to increased or decreased levels of expenditure on certain projects, reflecting a change in emphasis. Following successful admission to the Official List of ASX, the Company may also allocate funds to new projects as part of its project generation strategy in accordance with the Company's business model.

Following completion of the Public Offer and the admission of the Company to the Official List, the Company intends on increasing Shareholder wealth through undertaking systematic exploration activities on the Projects in accordance with its intended exploration program and the acquisition, exploration and development of helium projects throughout Tanzania and elsewhere.



Subject to the above, the following budgets are proposed which takes into account the proposed expenses over the next two years to complete initial target identification and drill testing.

As budgeted below, the Company's exploration expenditure will exceed the minimum annual expenditure requirements for each of the granted prospecting licences.

Activities	Minimum Subscription (\$7,000,000)			Maximum Subscription (\$10,000,000)		
	Year 1 (\$)	Year 2 (\$)	Total (\$)	Year 1 (\$)	Year 2 (\$)	Total (\$)
<b>North Rukwa Basin Project</b>						
Community Engagement and Environmental Impact Assessment	\$100,000	\$60,000	\$160,000	\$100,000	\$60,000	\$160,000
Airborne Gravity and Magnetics	\$500,000	-	\$500,000	\$500,000	-	\$500,000
Seismic Survey	\$1,782,200	-	\$1,782,200	\$3,915,200	-	\$3,915,200
Geological mapping	-	\$67,000	\$67,000	\$67,000	\$67,000	\$134,000
<b>Total</b>	<b>\$2,382,200</b>	<b>\$127,000</b>	<b>\$2,509,200</b>	<b>\$4,582,200</b>	<b>\$127,000</b>	<b>\$4,709,200</b>
<b>North Nyasa Basin Project</b>						
Community Engagement and Environmental Impact Assessment	\$20,000	-	\$20,000	\$20,000	-	\$20,000
Vintage data acquisition	\$80,000	-	\$80,000	\$180,000	-	\$180,000
Surface Geochemistry Survey	\$49,000	-	\$49,000	\$49,000	-	\$49,000
<b>Total</b>	<b>\$149,000</b>	<b>-</b>	<b>\$149,000</b>	<b>\$249,000</b>	<b>-</b>	<b>\$249,000</b>
<b>Eyasi Basin Project</b>						
Community Engagement and Environmental Impact Assessment	\$10,000	\$30,000	\$40,000	\$10,000	\$30,000	\$40,000
Airborne Magnetics inversion	\$153,000	-	\$153,000	\$153,000	-	\$153,000
Surface Geochemistry Survey	-	\$128,000	\$128,000	-	\$128,000	\$128,000
Geological mapping	-	-	-	\$50,000	\$50,000	\$100,000
<b>Total</b>	<b>\$163,000</b>	<b>\$158,000</b>	<b>\$321,000</b>	<b>\$213,000</b>	<b>\$208,000</b>	<b>\$421,000</b>

Manyara Basin Project						
Community Engagement and Environmental Impact Assessment	\$10,000	\$30,000	\$40,000	\$10,000	\$30,000	\$40,000
Airborne Magnetism inversion	\$132,000	-	\$132,000	\$132,000	-	\$132,000
Surface Geochemistry Survey	-	\$129,000	\$129,000	-	\$129,000	\$129,000
Geological mapping	-	-	-	\$50,000	\$50,000	\$100,000
<b>Total</b>	<b>\$142,000</b>	<b>\$159,000</b>	<b>\$301,000</b>	<b>\$192,000</b>	<b>\$209,000</b>	<b>\$401,000</b>
<b>Grant Total</b>	<b>\$2,836,200</b>	<b>\$444,000</b>	<b>\$3,280,200</b>	<b>\$5,236,200</b>	<b>\$544,000</b>	<b>\$5,780,200</b>

### 3.7 Capital Structure

The capital structure of the Company following completion of the Public Offer is summarised below:

Security	Minimum Subscription (\$7,000,000)	Maximum Subscription (\$10,000,000)
<b>Shares<sup>1</sup></b>		
Shares on issue at the date of this Prospectus <sup>2</sup>	131,285,191	131,285,191
Shares to be issued under the Marketing Services Agreement <sup>3</sup>	1,875,000	1,875,000
Shares to be issued under the Public Offer <sup>4</sup>	35,000,000	50,000,000
<b>Total Shares on completion of the Public Offer</b>	<b>168,160,191</b>	<b>183,160,191</b>
<b>Options</b>		
Options on issue at the date of this Prospectus <sup>4</sup>	28,277,778	28,277,778
Options to be issued to Directors and Advisors <sup>5</sup>	12,375,000	12,375,000
Options to be issued to the Joint Lead Managers <sup>6</sup>	3,325,000	4,750,000
<b>Total Options on completion of the Public Offer</b>	<b>43,977,778</b>	<b>45,402,778</b>

**Notes:**

- The rights attaching to Shares are summarised in Section 10.1.
- Includes 17,777,778 Shares issued pursuant to the Seed Raising. Refer to Section 3.8 for details regarding the substantial Shareholders of the Company as at the date of this Prospectus.
- The Company has agreed to issue a total of 1,875,000 Shares at a deemed issue price equal to \$0.20 each to S3 Consortium Pty Ltd (and/or its nominees) in lieu of cash payment of \$375,000 in fees for digital marketing services to be provided to the Company in accordance with the Marketing Services Agreement. Refer to Section 9.5 for a summary of the material terms and conditions of the Marketing Services Agreement.
- Refer to Section 2.1 for details of the Public Offer.

5. 10,275,000 Options exercisable at \$0.25 on or before the date that is 30 months from the date of issue to be issued to the Directors (subject to vesting conditions) as reasonable remuneration for future services to be provided to the Company. 2,000,000 Options exercisable at \$0.25 on or before the date that is 30 months from the date of issue to be issued to various advisors (unrelated third-party service providers) as consideration for services provided to the Company. Refer to Sections 10.3 and 10.4 for the full terms and conditions of the Director Options and Advisor Options respectively.
6. Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. Refer to Section 9.1 for a summary of the material terms and conditions of the Joint Lead Manager Mandate and Section 10.4 for the full terms and conditions of the Lead Manager Options.

### Loyalty Options

The Company may, at the sole discretion of the Board, undertake a pro-rata non-renounceable entitlement issue of loyalty Options in which eligible Shareholders registered on the share register of the Company at a record date, determined by the Board, will be entitled to participate. Should the issue proceed the record date is expected to be within 6 months of Admission.

The future issue of Loyalty Options would be offered under a separate prospectus that, for a nominal issue price per Option, one (1) loyalty Option will be granted for every five (5) Shares held by eligible Shares on the record date (other than Shareholders with a registered address outside of Australia). It is expected that the loyalty Options will be exercisable at \$0.25 with an expiry date approximately 2.5 years from the date of issue.

There is no certainty that the Company will undertake a loyalty Options offer. Should the offer proceed, eligible Shareholders who wish to participate will need to complete an application form that will accompany a separate prospectus, which will be provided by the Company in accordance with the ASX Listing Rules for pro-rata offers.

## 3.8 Substantial Shareholders

Those Shareholders holding 5% or more of the Shares on issue as at the date of this Prospectus are set out in the table below.

### Substantial shareholdings as at the date of this Prospectus:

Security holder	Shares	Options	% (undiluted) <sup>1</sup>	% (diluted) <sup>1</sup>
Justyn Wood	70,000,000	-	53.3%	43.9%
Shoki Pty Ltd	25,000,000	-	19.0%	15.7%
Jerry Kent Masters	11,537,500	-	8.8%	7.2%

#### Notes:

1. Figures calculated on the basis that the Company has 131,285,191 Shares and 28,277,778 Options on issued as at the date of this Prospectus.

**Substantial Shareholders on completion of the Public Offer (assuming Minimum Subscription and no existing substantial Shareholder subscribers and receives additional Shares pursuant to the Public Offer).**

Security holder	Shares	Options	% (undiluted) <sup>1</sup>	% (diluted) <sup>1</sup>
Justyn Wood	70,000,000	-	41.7%	33.0%
Shoki Pty Ltd	25,000,000	-	14.9%	11.8%
Jerry Kent Masters	11,537,500	-	6.9%	5.4%

**Notes:**

- Figures calculated on the basis that the Company will have 168,160,191 Shares and 43,977,778 Options on issue at Admission based on the Minimum Subscription.
- Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. Refer to Section 10.4 for the full terms and conditions of the Lead Manager Options.

**Substantial Shareholders on completion of the Public Offer (assuming Maximum Subscription and no existing substantial Shareholder subscribers and receives additional Shares pursuant to the Public Offer).**

Security holder	Shares	Options	% (undiluted) <sup>1</sup>	% (diluted) <sup>1</sup>
Justyn Wood	70,000,000	-	38.2%	30.6%
Shoki Pty Ltd	25,000,000	-	13.6%	10.9%
Jerry Kent Masters	11,537,500	-	6.3%	5.0%

**Notes:**

- Figures calculated on the basis that the Company will have 183,160,191 Shares and 45,402,778 Options on issue at Admission based on the Maximum Subscription.
- Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. Refer to Section 10.4 for the full terms and conditions of the Lead Manager Options.

The Company will announce to the ASX details of its top-20 Shareholders following completion of the Offers prior to the Shares commencing trading on ASX.

### 3.9 Restricted Securities

None of the Shares issued under the Public Offer will be subject to escrow.

Subject to the Company being admitted to the Official List and completion of the Public Offer, certain Securities on issue will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.

The Company will seek to enter into restriction deeds and issue restriction notices (as applicable) in respect of all Securities classified by ASX as restricted securities in accordance with Chapter 9 of the ASX Listing Rules.

The Company will announce to the ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.

The Company confirms its 'free float' (the percentage of the Shares that are not restricted and are held by shareholders who are not related parties (or their associates) of the Company) at the time of Admission will be not less than 20% in compliance with ASX Listing Rule 1.1 Condition 7.

### 3.10 Additional Information

Prospective investors are referred to and encouraged to read in their entirety:

- (a) the Independent Technical Expert's Report in Annexure A for further details about the geology, location and mineral potential of the Projects (namely the North Rukwa Project);
- (b) the Solicitor's Report on Tenements in Annexure B for further details in respect to the Company's interests in the Tenements; and
- (c) Section 5 and the Independent Limited Assurance Report in Annexure C for further details in respect to the financial position of the Company.

### 3.11 Dividend Policy

The Company anticipates that significant expenditure will be incurred in the evaluation and development of its business and the exploration of the Projects. These activities, together with the possible acquisition of further exploration assets that complement the Projects, are expected to dominate the two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.

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# GLOBAL HELIUM MARKET UPDATE

Prepared by:

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# Global Helium Market Update

## Executive Summary

### ***Helium market transition from tight supply to more plentiful supply delayed by Amur explosion***

After a 16 year period of recurring helium shortages and unreliable supply dating back to 2006, 2022 was expected to be the year when helium supply finally became more plentiful, driven by the start of production from Gazprom's large Amur Project, as well as increased supply from Qatar, Algeria, other Russian projects, Canada and the U.S. However, due to a fire at Amur's natural gas processing plant (NGPP) on October 8, 2021, as well as an explosion and fire at Amur's NGPP that occurred on January 5, 2022, Amur production will be delayed until at least Q3 of 2022, and possibly until 2023, delaying the transition from tight supply to more plentiful supply until 2023. The new supply projects could add 2 BCF/year to global supply by the end of 2024 and more than 3.5 BCF/year by 2028. However, there is still significant uncertainty in the market as to how long it will take to repair Amur and how quickly production will ramp up once it commences. Given the recent difficulties at Amur, there is also increased skepticism about the future reliability of Amur's production. Based on demand growth projections of 4%/year, capacity utilization is expected to remain in the 90's through 2023, before falling into the low to mid-80's by 2024. Prices for helium will likely remain strong through 2023, before moderating in 2024, assuming the expected new supply comes to fruition. While helium supply looks to be more plentiful from 2024 through the remainder of the decade, the supply chain will be increasingly vulnerable to political risk as over 60% of the world's helium supply will be produced in Russia, Qatar and Algeria by 2025.

### ***Market likely to be very tight in 2022***

At the start of 2022, helium markets are tightly balanced and vulnerable to shortages during periods of plant maintenance in large part due to the delayed entry of Amur into the market. Helium Shortage 3.0, which lasted from February 2018 through February 2020 came to an abrupt end in early 2020 when the start of the COVID-19 disrupted the world economy and dramatically reduced global demand for helium. While helium demand gradually recovered from its trough in Q2 of 2020, helium supply remained sufficient through the remainder of 2020 and the first half of 2021. Helium supply tightened up again during Q3 and Q4 of 2021 due primarily to a prolonged outage of the Bureau of Land Management's (BLM) Crude Helium Enrichment Unit and a maintenance outage of the Skikda, Algeria source. With both of these sources returning to normal production by November, and seasonally low demand, helium markets were back in tight balance by mid-Q4. Meanwhile, Gazprom briefly started up the first of three tranches of their Amur project in September, but shut down after a few weeks to complete construction punch-list items. Due to the explosion and fires discussed above, Amur is not likely to have a significant impact on capacity utilization until 2023.

## ***Market tightness should subside by 2024, timing uncertain***

With meaningful quantities of new supply from Amur, production at full capacity from Qatar 3 (400 MMCF), completion of an expansion at Arzew, Algeria (100 - 200 MMCF), and various other smaller sources contributing new supply, it seems probable that by 2024, 2 BCF/year of new supply will have entered the market, resulting in a significant decline in helium capacity utilization. Of these major potential sources of new supply, only Qatar 3 is already producing at full capacity and there is considerable uncertainty around the timing and magnitude of new capacity from Amur. While it seems likely that Gazprom will complete the repairs at Amur and ramp up production during 2023, the lack of transparency from Gazprom, as well as continuing logistics issues, makes it difficult to predict when Amur will become a major contributor to helium supply. Helium prices should remain elevated during 2022 and some helium suppliers may take advantage of the delayed production from Amur to increase prices by 5 – 10% early in 2022. While helium markets should experience a significant change by 2024, it is not clear exactly when that is going to happen.

## ***Semiconductor manufacturing will drive demand growth***

Semiconductor manufacturing is expected to grow at double-digit rates at least through the first half of the 2020's and is expected to surpass MRI as the leading sector for helium demand by 2022 or 2023. The impact of COVID on reliability of global supply chains, as well as increasing concerns about over-reliance on China (or increasingly vulnerable Taiwan), have been the catalyst for a surge in construction of new wafer fabs in Europe, China, Taiwan, Korea, Japan and the U.S. Increased demand from wafer fabs, along with growth from the aerospace sector should offset the gradual decline in demand from the MRI sector, where helium consumption per scanner continues to decline, resulting in overall helium demand growth of around 4% per annum. After a 10 year period where helium demand was constrained by a lack of supply and significant price increases, it appears that helium markets should experience modest growth, with possible upside bias to our forecast.

## ***COVID-19 still a factor***

While COVID-19 temporarily reduced demand for helium by as much as 25% during Q2 of 2020, most of the demand lost due to COVID-19 has returned. In fact, future demand growth may be accelerated to some degree due to the boom in new semiconductor manufacturing facilities for which supply chain issues caused by COVID have been a major catalyst. At the present time, however, the helium supply chain continues to be disrupted by port bottlenecks related to COVID. Transportation between Asian markets and U.S. West Coast ports continues to experience bottlenecks which have lengthened the helium supply chain, tightened up the industry fleet of expensive cryogenic ISO containers required to ship helium and significantly increased the cost of transportation. These same factors have made it difficult to reliably transport containers to/from the Russian port of Vladivostok which will be the primary port for shipments from Amur. The issues with shipments through Vladivostok raise questions about the difficulty of integrating Amur production into the global helium supply chain once Amur production restarts.

## ***Lack of flex capacity and geopolitical risk are increasing concerns***

While the prevailing view is that helium supply will be more readily available beginning 2023 than it has been during the 2006 – 2021 period, there are concerns about the ongoing fragility of the helium supply chain due to a lack of flex capacity and increased reliance on production from countries that are subject to varying degrees of political risk. The ongoing decline of the BLM Pipeline and Storage System has greatly reduced the ability of the global supply chain to respond to plant outages without disrupting continuity of supply. Air Liquide's storage facility in Germany and Air Products' recently announced storage facility in Texas are positive steps to increase the flexibility of supply, but more storage and swing capacity are needed. While the U.S. is still a net exporter of helium, its share of global capacity is expected to decline from its current share of about 50% to an expected 37% by 2025. Similar to rare earth minerals, there are growing concerns about increased reliance for supply on countries that are subject to geopolitical risk. While foremost concerns relate to supply from Russia's Amur Project, there are also concerns about supply from Qatar, which was curtailed by the Saudi-led embargo in June 2017 and is located in a volatile part of the world, and supply from politically unstable Algeria.

## ***"Green Helium" could become a factor later in the 2020's***

With >95% of helium produced as a by-product of natural gas processing or LNG production, Green Helium is not yet much of a factor in the market in 2022. Quite simply, there is not enough Green Helium being produced to make it practical for customers to demand the supply of Green Helium or for major helium distributors to offer the supply of Green Helium to their customers. There is, however, an increased willingness by some investors to preferentially invest in Green Helium projects rather than traditional by-product sources. With prices for helium at or near current levels, it can be quite attractive to develop projects where helium is the primary or only commercial product. While helium consumers will undoubtedly rely on traditional by-product helium sources for many years to come, Green Helium sources may eventually carve out an increasing share of the global helium market due to the increasing impact of climate change initiatives on access to capital, customer preferences and natural gas consumption.

## What is Helium?

Helium is an industrial gas with many unique properties which make it extremely valuable and irreplaceable in many applications that are extremely important to society and the global economy.

While helium is one of the most common elements in the universe, it occurs in very minor concentrations in the Earth's atmosphere and is relatively rare on Earth. Helium is continually generated in the ground by the radioactive decay of uranium and thorium. Where the right set of geological conditions exist, helium can collect within natural gas deposits in the ground. Helium concentrations in natural gas vary from a small fraction of one percent in most cases to greater than 20% in a very few small pockets of natural gas discovered in South Africa. Helium concentrations greater than 0.2 - 0.3% are considered helium rich, but depending on the unique circumstances, it may be commercially viable to extract helium from natural gas that has much lower helium concentrations.

All of the world's commercially available helium is extracted from natural gas. Greater than 95% of the world's helium is produced as a by-product of either the purification of natural gas (i.e. methane) or the production of liquefied natural gas (LNG). Helium, which is inert and does not burn, is concentrated in the waste streams of natural gas processing or LNG plants, along with nitrogen. When there is a sufficient quantity of helium in the waste gas, the waste gas can be utilized as feed gas for a helium purification and liquefaction facility, which can produce helium that can be sold commercially.

In recent years, as recurring shortages have driven up the price of helium, it has become economically viable, in some cases, to extract helium from natural gas that contains at least 0.5% helium, but does not contain commercially viable concentrations of hydrocarbons. In such cases, where the carrier gas is usually nitrogen or carbon dioxide, helium is not viewed as a by-product and would either be a co-product or the primary commercial product to be produced from the gas. Where helium is not produced as a by-product of production of hydrocarbon gas and where the carrier gas is not a greenhouse gas, the helium that is produced is referred to "Green Helium". While Green Helium is only a minor fraction of current helium production, there has been increased interest in Green Helium in recent years as climate change initiatives have gained momentum.

Helium can be purified via membrane separation, pressure swing adsorption, cryogenic processing or a combination of these processes. The optimal process to use in a given situation depends on the helium concentration and other characteristics of the gas to be processed. Liquefaction is a cryogenic process. While there are continual refinements to these processes, all of the required technologies are well established.

The typical purity of commercial grade helium is 99.999%. Some applications, such as lifting or leak detection can utilize helium of lesser purity, while some applications may require purities of 99.9999% or higher. In some cases, helium is produced as an intermediate product, commonly referred to as crude helium. Crude helium, which can range in purity from 50% to 99%, is typically transported via pipeline or truck to another facility for final purification and liquefaction.

Helium has many unique properties which give rise to its commercial value. Helium is a colorless, odorless and tasteless gas. It is chemically and radiologically inert. It is non-reactive and does not become radioactive. Helium is the second lightest element and the second smallest atom. It is the lightest and smallest atom that is inflammable. Liquid helium is the coldest substance on the planet.

Helium has the lowest condensation point of any gas at -452 degrees Fahrenheit, -269 degrees Celsius and 4.2 degrees Kelvin. Helium gas has a very high specific heat and thermal conductivity. These unique properties will be linked to the applications for helium in a later section of this report.

## Helium Market Structure & Supply Chain

The Global Helium Business is dominated by six major multinational industrial gas companies who control at least 95% of the world's helium supply at the source. The three largest players are Air Products and Chemicals (U.S.), Linde (U.S.) and Air Liquide (France), followed by the Matheson Gas subsidiary of Nippon Sanso Holdings (Japan) and the Messer Group (Germany). Collectively, these five large companies will be referred to herein as the Helium Majors. The sixth company that controls a smaller, but still significant share of helium supply is Iwatani Corporation (Japan). These companies may purchase both crude helium, which they purify and liquefy at their own refining facilities, and bulk liquid helium from natural gas processors and LNG producers at various locations around the world. Some of the world's largest energy companies, including ExxonMobil, Qatargas, Gazprom and Sonatrach produce helium, but sell most of their output to the Helium Majors at their plant tailgate and generally have very limited participation in the Helium Business further downstream. The Helium Majors resell the helium to smaller regional or national industrial gas companies, or end users. At the source, helium is typically sold under long term (typically 10 – 20 years) "Take or Pay" contracts and, similar to oil, most sourcing and wholesale agreements are transacted in U.S. Dollars. At the end user level, helium is often sold along with other industrial gases such as oxygen, nitrogen or argon. For that reason, there are very few industrial gas companies that only sell helium. The estimated value of the global helium market is approximately \$6B per annum. The value and profitability of the Global Helium Business has increased significantly in recent years due to price increase activity resulting from Helium Shortages 2.0 and 3.0, which took place between 2011 – 2013 and Q1 of 2018 through Q1 of 2020, respectively. Owing to the concentration of supply among a relative handful of large companies, the Global Helium Business operates as a classic oligopoly. The Global Helium Business is extremely "opaque". There is no publicly available pricing information and no transparency at any level of the supply chain.

The helium supply chain is based on the production of bulk liquid helium and its shipment around the world in costly 11,000 gallon cryogenic ISO containers which can cost between \$850,000 to over \$1,000,000 each. There are an estimated 2,000+ of these containers in operation, the great majority of which are owned by the Helium Majors. Other than the Helium Majors, there are approximately 25 – 30 smaller industrial gas companies who own a much lesser number of helium containers. Helium is produced in bulk liquid form for two reasons. The first is that some of the major applications for helium, including the largest application, refrigeration for the superconducting magnets within MRI scanners, require helium in liquid form. It is much more economical to produce liquid helium at the source than it is to operate small liquefiers at local distribution facilities. The second reason for shipping helium around the world in bulk liquid form is that 11,000 gallon containers carry a payload that is more than 5X the capacity of the largest tube trailers suitable for shipping gaseous helium on container ships. For that reason, the shipment of helium in bulk liquid form is much more economical than shipping gas on a unit cost basis.

At the present time, there are a total of only 16 liquid helium production facilities in the entire world. Seven of these plants are located in the United States and, including the recently commissioned Amur plant, there are nine liquid helium plants located outside of the U.S. Liquid scale helium plants generally range in size from 150 MMCF/year at the low end to 1.5 BCF at the largest plants including ExxonMobil's Wyoming, USA plant and Qatargas' Helium 2 plant at Ras Laffan. The table below lists the location of all of the existing liquid helium plants.

Table I.

Liquid Helium Plants			
U.S. Plants		Non-U.S. Plants	
Owner	Location	Owner	Location
Air Products	Liberal, Kansas	Gazprom	Orenburg, Russia
Air Products	Doe Canyon, Colorado	Gazprom (Amur)	Svobodny, Russia
Badger Midstream	Keyes, Oklahoma	Linde	Darwin, Australia
ExxonMobil	Shute Creek, Wyoming	Polish Oil & Gas Co.	Odolanow, Poland
Linde	Ulysses, Kansas	QatarGas/Qatar Energy	Ras Laffan, Qatar
Messer	Otis, Kansas	QatarGas/Qatar Energy	Ras Laffan, Qatar
Tumbleweed Midstream	Cheyenne Wells, Colorado	QatarGas/Qatar Energy	Ras Laffan, Qatar
		Sonatrach	Arzew, Algeria
		Sonatrach	Skikda, Algeria

Source: Kornbluth Helium Consulting – February 2022

There are also a number of mostly smaller plants and exclusively in North America that produce gaseous helium that, depending on its purity, may either be transported to one of the helium liquefaction plants and sold as crude helium, or sold directly into the market for balloon grade helium. For the most part, the foundation of the Global Helium Business is the transportation of bulk liquid helium.

From the liquid helium source, the Helium Majors (mostly) pick up the helium in their containers at the plant tailgate and transport the containers via road to domestic transfilling facilities or to container ports for shipment around the world on cargo vessels. Depending on the model and vintage of these containers, they have no loss hold times of between 30 – 48 days, with the newer containers having 40 – 48 day hold times. From a technical standpoint, these no loss hold times are sufficient to enable liquid helium to be transported from even remote sources to most of the world's helium markets. Of course, the cost of transportation is usually proportional to distance from the market, so it is generally advantageous to consume helium in markets that are closer to the particular source. When the liquid container arrives at the transfilling facility, which is essentially a break-bulk/repacking operation, helium is filled into liquid dewars, high pressure tube trailers and high pressure cylinders for delivery to end users. The basis for competition at the end user level is price, reliability of supply and, to a lesser extent, technical support.



## Helium Applications

While the average person is generally unaware of applications for helium beyond the filling of party balloons and blimps, helium is actually used in many applications that are critical to our economy and society.

The largest single application is the use of liquid helium to cool the superconducting magnets that are utilized in MRI scanners to the temperatures at which they lose their resistance to electricity. This application represents around 22% of global demand for helium. Between 2,000 – 4,000 liters of liquid helium are usually required to initially cool the magnets down to superconducting temperatures and, thereafter, the liquid helium must be replenished periodically as it boils off to the atmosphere. There are over 50,000 MRI scanners installed worldwide and new scanners are being installed at the rate of approximately 5,000 machines per year (many of these are replacements of older units, so the installed base is growing by less than 5,000 units per year). Liquid helium is used similarly to cool superconducting magnets utilized in NMR (nuclear magnetic resonance) scanners, particle accelerators used in physics research and containment of plasma in nuclear fusion research.

The second largest application for helium, representing an estimated 19% of demand, is semiconductor chip manufacturing. Helium is used in wafer fabs as a carrier gas in deposition processes, to leak test vacuum systems, as a component of specialty gas blends, for load-lock cooling and for backside wafer cooling. Helium is critical to the wafer manufacturing process and, it is becoming more so, as wafer manufacturing processes become more sophisticated. Linx-Consulting, a consultancy that provides electronic materials insight to the semiconductor industry, explains that “vertical scaling” of semiconductor manufacturing processes to increase chip capacity (think of going from a parking lot to a parking deck) requires more of the deposition steps and vacuum steps that require helium. For that reason, new “state of the art” wafer fabs are more helium intensive than fabs using less advanced technology.

Roughly 10% of helium is used for various “lifting” and “inflation” applications. This segment of the market consists of party balloons as well as helium required to provide lift for dirigibles, aerostats, weather balloons, balloons or aerostats used for telecommunications and any other usage where helium is utilized to lift balloons or airships. Significant quantities of helium are also utilized in the pressurized cartridges utilized for automobile airbag inflation. While there has been recent business development activity related to the use of airships for lifting of oversize cargo or as “cruise ships in the sky”, it is likely that party balloon demand will continue to dominate this segment during the next 5 – 10 years.

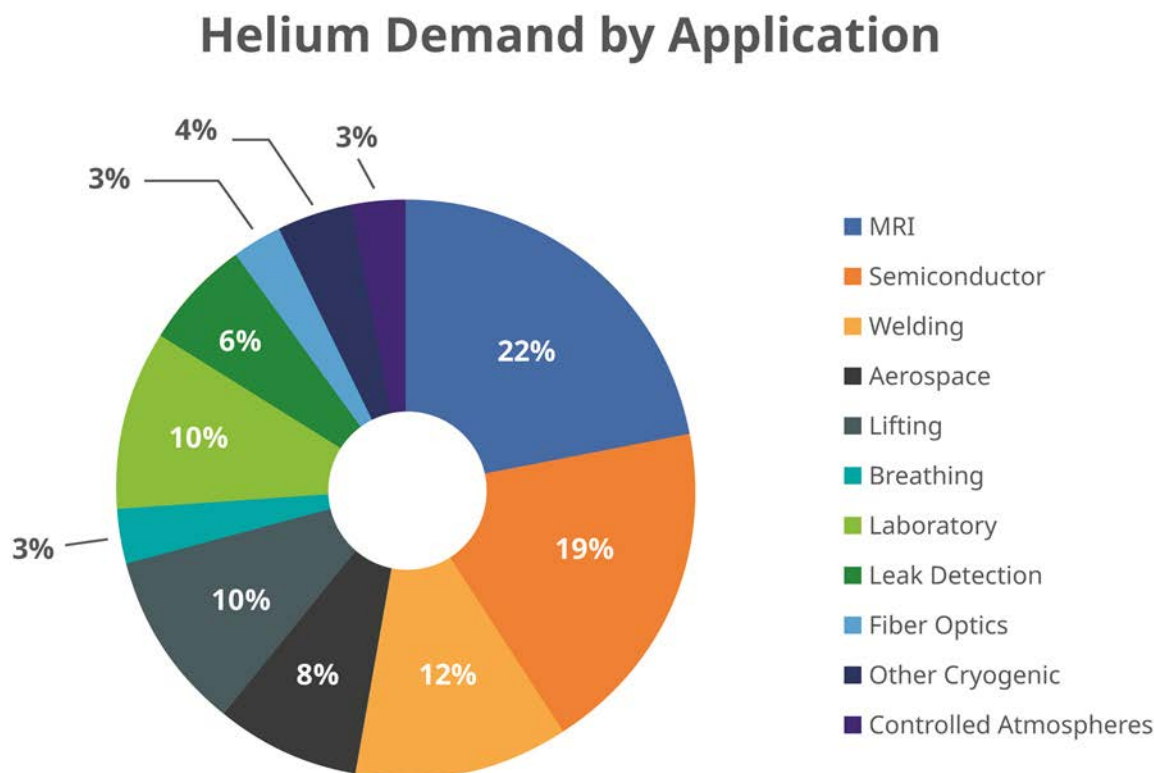
Increasing quantities of gaseous helium are used by the aerospace industry to purge and pressurize tanks and rocket engines that utilize liquid hydrogen fuel systems. Helium may also be used for some rocket engines that rely on liquid oxygen fuel. Typically, large quantities of helium are required prior to launches at the launch facility. Additional significant quantities of gaseous helium may be required for the testing of rocket engines. Helium is utilized in these applications because it is inert and it remains in gaseous form at liquid hydrogen temperatures due to its extremely low boiling point.

About 12% of helium is used as a shielding gas in plasma arc welding and metal arc welding. Using helium as a component of the welding gas mixture results in higher quality and more reliable welds of titanium, aluminum, stainless steel and other high-value, high-reliability applications. Welding is one application where other, less costly, gases can be used as a substitute for helium.

Gaseous helium is utilized in the manufacturing of fiber optic cable primarily for cooling during the pre-form manufacturing process as well as in the draw towers where the pre-forms are melted and cooled rapidly to form the actual optical fiber. It is not essential to utilize helium in the draw towers, but using helium enables you to pour the fiber at a faster rate than you are able to if you use nitrogen for cooling.

Other helium applications worth noting include leak detection, where helium is utilized due to its small molecular size, cooling of some types of nuclear reactors, gas chromatography, where helium is used as a carrier gas, as a component of breathing mixtures for deep water diving (to prevent nitrogen narcosis) and as a component of controlled atmospheres utilized in metal refining. The chart below summarizes the significance of the various uses of helium. It should be noted that there is very little reliable data available for helium demand, so the percentages attributed to the various demand segments are informed estimates.

**Chart I.**



*Source: Kornbluth Helium Consulting – February 2022*

## Helium Demand Outlook

Estimated worldwide helium demand in 2021 was 5.9 BCF, with demand in 2022, expected to complete its recovery from COVID and grow to 6.2 BCF. Despite persistent media misinformation about helium demand growth, demand for helium in 2022 will not be much different than it was in 2011 or 2019. During that period of 11 years, the market experienced Helium Shortage 2.0, which lasted from 2011 – 2013 and resulted in price increases of roughly 100%, a period of over-supply during 2014 – 2015 (prices came down by ~25%), balanced markets in 2016 – 2017, Helium Shortage 3.0 in 2018 and 2019, when prices doubled again, with COVID impacting the market in 2020 and, to a lesser extent in 2021.

The reality is that the helium business has experienced a decade of zero net growth. This would probably surprise many casual observers of the helium business, but it is a logical result when one considers that the economic principle of “elasticity of demand” dictates that when the price of a commodity goes up, demand will have a tendency to decrease. While demand for helium has historically been considered to be relatively inelastic, a tripling of price over a ten-year period was enough to prove otherwise. For example, all of the major MRI magnet manufacturers installed helium recycling capability at their facilities, removing hundreds of millions of cubic feet from annual demand for helium. They have also made technological improvements to their magnets to greatly reduce their consumption of helium. If it had been less difficult to acquire helium during the periods of extended shortage and if prices had not sky-rocketed, perhaps the MRI magnet manufacturers would not have been so motivated to reduce consumption. While MRI provides the most visible example of elasticity of demand and “demand destruction” there are numerous other examples of helium consumers reducing their helium consumption by improving efficiency, recycling and/or plugging leaks to mitigate the impact of higher prices.

Despite what has been a stagnant period for helium demand in recent years, helium demand is expected to grow at an estimated rate of 4% during the 2023 – 2031 period. The estimated growth rate was derived by making assumptions about demand growth for a handful of the key applications and then making broad assumption about “everything else” and the contribution from new applications. The weighted average growth rate was then rounded to 4%. Underlying assumptions for this projection are that helium will be more readily available during most of the forecast period, prices will moderate and industry will continue to find new high-tech applications that require the unique properties of helium.

The below table illustrates this very high-level approach to estimating a future growth rate:

**Table II.**

Helium Demand Growth Segmentation			
Application	Market Share	Growth Rate	Impact on Total
MRI	22%	-5%	-1.1%
Electronics	19%	11%	2.1%
Aerospace	8%	10%	0.8%
Lifting/Balloons	10%	1%	0.1%
Other	41%	2%	0.8%
New Applications	0%	N/A	1.0%
<b>Total</b>		<b>100%</b>	<b>3.7%</b>

Source: Kornbluth Helium Consulting

**Source: Kornbluth Helium Consulting – February 2022**

The following sections take a closer look at several of the key applications.

#### **Electronics/Semiconductor –**

According to Linx-Consulting, worldwide demand for helium from the semiconductor industry was an estimated 1.13 BCF during 2021, accounting for approximately 19% of total helium demand. Helium demand for semiconductor manufacturing is forecasted to grow to 1.93 BCF by 2026. This equates to compound annual growth of 11.3% between 2021 to 2026. If this forecast comes to fruition, electronics could account for 28% of worldwide demand for helium by 2026 and electronics will easily surpass MRI as the largest application for helium. Linx Consulting's year by year forecast is shown in Table III. below:

**Table III.**

Helium Demand for Semiconductor Manufacturing 2021-2026		
Year	Projected Helium Demand (BCF)	
2021	1.13	<b>2021-2026 CAGR: 11.3%</b>
2022	1.26	
2023	1.39	
2024	1.55	
2025	1.73	
2026	1.93	

Courtesy of Linx-Consulting

From a geographic standpoint, Linx Consulting expects that the majority of the semiconductor-related growth in helium demand will come from Korea and Taiwan, with China accounting for an additional 20%. Chinese fabs generally do not have the most advanced technology and some companies have been pulling back from manufacturing in China. As a result of COVID and the growing realization that the U.S. is increasingly vulnerable to an over-reliance on foreign sources of semiconductors, the U.S. will see a near term spike in construction of new wafer fabs. Linx Consulting expects 5 - 9 new fabs to be built in the U.S. by 2025, and U.S. demand for helium should experience strong growth as the new fabs come on-line.

#### **MRI –**

Total annual demand for helium for cooling MRI magnets is estimated to be approximately 49 million liters (1.3 BCF) per year, representing approximately 22% of total worldwide demand for helium. Helium use for MRI scanners has already come down considerably from its peak demand. Helium recycling and re-liquefaction capability has been installed at the major MRI magnet manufacturing facilities, reducing their consumption by an estimated 30% and newer generation 4K magnets that are supplanting 10K magnets reduce the frequency of required helium top-offs from 2 -3 per year to only once per year. Helium use for MRI is expected to continue to decline at an estimated annual rate of around 5% per year, as more efficient scanners continue to replace the earlier generation machines that consumed more helium. Moreover, the three leading manufacturers, GE, Siemens and Philips, have all developed (and continue to develop) new technology that will require much less helium than current models for both the initial magnet cooldowns, as well as periodic top-off. Helium demand for MRI scanners will continue its declining trend and the reduction in MRI-related helium demand will continue to be a “headwind” that reduces overall helium demand growth. MRI will likely be surpassed by electronics as the single largest segment for helium demand by 2023.

#### **Aerospace –**

NASA is the single large user of helium for aerospace applications. Based on publicly available data, NASA’s estimated and projected helium usage during the years 2020 – 2024 is as shown in Table IV below:

**Table IV.**

NASA Helium Demand	
Year	Volume (MMscf/yr)
2020	120
2021	135
2022	140
2023	150
2024	155

Source: NASA – 2021

NASA's helium demand estimates include their own requirements, as well as the requirements of NASA's launch partners (e.g. Space-X), who purchase helium under the NASA umbrella to secure preferential access to helium. Total aerospace-related demand for helium in 2021 is believed to have been about 500 MMCF, or approximately 8% of total helium demand.

NASA's forecast reflects healthy 6.6% compound annual growth during the 2020 – 2024 period. However, KHeC believes that helium demand growth in the aerospace sector, driven by increased launch activity, will surpass NASA's estimates and could be as high as 10%.

### **Balloons & Lifting –**

American Gas Products, the leading independent distributor of balloon gas in the U.S., estimates that demand for helium used for party balloons and lifting in the U.S. is approximately 300 MMCF/yr, representing an estimated 15% slice of U.S. demand for helium. The use of helium for party balloons is much higher in the U.S. than most other countries, due to the higher disposable income in the U.S. and the more widespread availability of helium. If one assumes that the U.S. represents about half of helium demand for lifting applications, worldwide demand for helium used in lifting applications would be around 600 MMCF per year, or 10% of total helium demand.

KHC believes that the demand for helium used to fill party balloons could be negatively impacted by growing environmental activism against the use of party balloons, which are hazardous to marine life that ingest the balloons. A growing number of U.S. towns have either banned the filling of party balloons or are considering legislation to do so. Also, during and subsequent to Helium Shortage 3.0, there has been a growing outcry emanating from the scientific community that using helium to fill party balloons is a wasteful use of a scarce resource that should be conserved for more important applications. The scientific community has been calling for a complete ban of the use of helium to fill party balloons. While a complete ban of helium use for party balloons seems unlikely, the use of party balloons in the U.S. may be nearing its peak. Modest growth may continue in countries that have a growing middle class and increasing disposable income. Driven mostly by growth outside of the U.S., helium demand for lifting applications is expected to grow by an estimated 1% per year.

### **Optical Fiber –**

While optical fiber manufacturing was a significant driver of helium demand growth at one time, demand for helium from the optical fiber segment has been reduced dramatically by the installation of helium recycling technology in most draw towers that utilize helium. While there are still several very large helium consumers in the optical fiber manufacturing sector, including Corning, Furukawa (Optical Fiber Solutions), Fujikura and Sterlite, total consumption of helium is down considerably from its former peak and is now estimated to be only around 150 - 200 MMCF per year. This represents only around 3% of global demand for helium.

While the conversion to 5G networks will increase demand for optical fiber, one of the leading manufacturers believes that capacity utilization for optical fiber will remain below 90% through 2023, so they do not expect to see aggressive additions to capacity. For that reason, helium demand for optical

fiber manufacturing is expected to remain relatively flat during the next few years. While there are several important customers in this space, KHC does not expect optical fiber to regain its former position as a growth driver for helium demand.



## Existing Helium Sources

Worldwide helium capacity in 2021 was estimated to be approximately 6.4 BCF per year, with effective capacity of approximately 6.1 BCF after reflecting a 5% downtime factor. There were 16 helium liquefaction plants (including Amur) that operated at least part of the year, including 7 U.S. plants and 9 located outside of the U.S. The 7 U.S. plants accounted for 3.2 BCF, or about half of the world's capacity. The 9 non-U.S. plants also accounted for about half of the world's helium supply. In addition to the world's 16 helium liquefaction plants, there were an additional 15 – 20 plants producing gaseous helium of varying purities. All of these relatively small gaseous helium plants were located in either the U.S. or Canada. Gaseous helium produced from these plants was either sold directly into the North American balloon gas market or transported via high pressure tube trailer to one of the helium liquefaction plants in the U.S. for final purification and liquefaction.

U.S. sources of liquid helium include four plants connected to the BLM's Pipeline and Storage System, ExxonMobil's LaBarge, Wyoming Plant, Air Products and Chemicals' plant in Doe Canyon, Colorado and Tumbleweed Midstream's Ladder Creek plant in Cheyenne Wells, Colorado.

**ExxonMobil – LaBarge, WY** – ExxonMobil's LaBarge, Wyoming plant (also referred to as the Shute Creek plant) is one of the world's two largest helium plants (tied with Qatar's Helium 2) with annual production of about 1.4 BCF, or about 22% of global supply. ExxonMobil's helium plant is integrated with a large natural gas processing facility that also produces CO<sub>2</sub>, natural gas and natural gas liquids. The reserves behind the LaBarge plant are huge and helium production from LaBarge is not expected to decline within the foreseeable future. Due to its size, reliability, longevity and lack of exposure to political risk, the LaBarge plant is considered to be one of the world's "blue chip" helium sources.

**BLM System Plants** – The four plants connected to the BLM Pipeline and Storage System include:

- Air Products and Chemicals – Liberal, Kansas
- Linde – Ulysses, Kansas
- Messer Industries – Otis, Kansas
- Badger Midstream Services – Keyes, Oklahoma

Collectively, these four plants accounted for about 1.1 BCF, or 17% of worldwide helium capacity in 2021. This capacity is fed by a combination of crude helium delivered from the BLM's storage facility near Amarillo, Texas, plus virgin crude helium produced from natural gas processing facilities connected to the BLM System. As the BLM's stockpile has gradually depleted, reducing the pressure in the gas field, the BLM System has lost approximately 75% of its peak deliverable capacity. While the BLM System is expected to be privatized by 2023, it is expected to remain in operation for a number of years. It will continue to lose deliverable capacity at an expected rate of around 10% per year. According to Nitec LLC's projections, helium production from the BLM System is expected to decline from 1.1 BCF in 2021 to <.4 BCF by 2031 and Kornbluth Helium Consulting believes it is likely that the four current helium plants will eventually consolidate to one or two.

**Tumbleweed Midstream – Cheyenne Wells, CO** – The Ladder Creek plant has nameplate capacity of 350 MMCF/year, but only produced around 100 MMCF in 2021 due to a lack of feed gas. Tumbleweed is

aggressively looking for additional sources of feed gas and plans to expand their capacity in the coming years. Tumbleweed's production should at least double by 2023. The Ladder Creek plant has also become the leading facility in the U.S. for third-party tolling of gaseous helium transported to the plant via tube trailer.

**Air Products – Doe Canyon, CO** – The Doe Canyon plant extracts helium from CO<sub>2</sub> carrier gas that is produced for tertiary oil recovery in the Permian Basin. The nameplate capacity of Doe Canyon is about 250 MMCF per year, but actual production is believed to be closer to 150 MMCF per year due to weak demand for CO<sub>2</sub> for tertiary oil recovery in recent years.

Non-U.S. sources of liquid helium include three Qatargas plants located in Qatar's Ras Laffan Industrial City, two Sonatrach plants in Algeria, a Polish Oil and Gas plant in Odolanow, Poland, a Gazprom plant in Orenburg, Russia and a Linde plant in Darwin, Australia. Gazprom's Amur plant, which was still in the commissioning phase when it experienced the January 5<sup>th</sup> explosion, will be discussed in the section that discusses future sources.

**Qatargas – Ras Laffan Industrial City, Qatar** - Qatargas operates three separate helium plants located in Ras Laffan Industrial City. Qatargas refers to these plants as Helium 1, Helium 2 and Helium 3, while everyone else refers to them as Qatar 1, Qatar 2 and Qatar 3. Qatar 1 and Qatar 2 produce about 2.2 BCF from the waste gas from Qatar's huge LNG plants. Based on information presented at the Gasworld Helium Summit in December 2021, Qatar 3 produces approximately 400 MMCF of helium from the Barzan Gas Plant's waste gas. Helium 2, with annual production of around 1.4 BCF, is tied with ExxonMobil's plant for the honor of being the world's largest helium plant. With total production of 2.6 BCF (per Qatargas), Qatar accounted for about 40% of world capacity at the end of 2021. All of the helium bearing gas processed at Ras Laffan is produced from the North Field, which is the world's largest non-associated gas field. The North Field is not expected to decline within the foreseeable future and due to their size, longevity and reliability, Ras Laffan's helium plants are viewed as "blue chip" sources. Although Qatar is aligned politically with the U.S., Qatari helium was cut off from the market by a Saudi-led embargo that forced the helium plants to shut down for several weeks in June 2017 until the helium buyers could develop an alternate supply chain. This was a reminder that Qatar's production could be vulnerable during future periods of instability in the Middle East.

**Sonatrach – Arzew, Algeria** – The Arzew, Algeria plant became the first large scale source of helium outside of the U.S. when it began production in 1995. This plant processes the waste gas from the GL2Z LNG plant in Bethouia, Algeria. The helium plant has nameplate capacity of 600 MMCF per year, but has produced only about half that quantity (300 MMCF) in recent years due to a lack of feed gas. Relative to other major sources, the Algerian sources suffer from unreliable logistics between Algeria and Europe. The capacity of the Arzew source is expected to increase by at least 100 MMCF during 2022 as a result of a project to tie-in feed gas from the GL1Z and GL3Z LNG plants to the existing helium plant.

**Sonatrach – Skikda, Algeria** – The Skikda, Algeria plant began to produce helium in 2007. Similar to the Arzew plant, the Skikda plant processes LNG waste gas. The feed gas for both Arzew and Skikda is predominantly from the huge Hassi R'Mel gas field. A large explosion that destroyed 3 of Skikda's 6 LNG trains limited Skikda to producing 50% of its 600 MMCF nameplate capacity until they were replaced in late 2013. In recent years, production has usually been around 300 MMCF per year due to a lack of feed gas. Total production from Algeria represents about 9% of world capacity. Given the lack of popular

support for the Algerian government, there is some degree of political risk associated with helium from Algeria.

**Polish Oil and Gas Company – Odolanow, Poland** – The Polish Oil and Gas Company operates a plant in Odolanow, Poland that produced around 80 MMCF of liquid helium in 2021. The Odolanow plant produces helium from the waste gas of a nitrogen rejection plant at the same location. The Polish plant was the first plant that produced liquid helium outside of the U.S. and has been producing helium since 1977. Helium from the Odolanow plant is viewed as very desirable due to the short supply chain and simple logistics to transport it to Western European markets. Hence, it typically sells for a premium price.

**Gazprom – Orenburg, Russia** – OrenburgGazprom operates a plant in Orenburg, Russia that produces around 180 MMCF per year of helium, mostly for the domestic Russian market. While the helium concentrations in the gas processed at Orenburg are very low, Orenburg has been the source of helium to support Russia's space program, military and research requirements for many years. Helium production in excess of domestic requirements is exported to Western Europe.

**Linde – Darwin, Australia** – Linde's Darwin, Australia plant processes the waste gas from ConocoPhillips' Darwin LNG plant. This plant has nameplate capacity of around 180 MMCF per year, but only produced 125 MMCF in 2021, due to a lack of feed gas. Due to depletion of the Bayu Undan gas field, which had higher helium concentrations than other gas fields whose gas will flow to Darwin in the future, helium production is expected to decline rapidly in 2022 and 2023 and it is possible that helium production at Darwin could end sometime in 2023. Thereafter, the Darwin plant might be available for tolling of third-party gas produced from on-shore gas fields in Australia.

## Future Helium Sources

This section of the report discusses future sources of helium that are likely to commence production prior to 2031. From a practical standpoint, this section is limited to discussing new sources through 2027, as there is no visibility into potential developments further into the future. Early stage projects that have not yet been clearly defined are not discussed in this section. As a general comment, it is fair to say that the pipeline of new helium projects is quite robust at the present time, as there are a handful or so of significant projects at various stages of development and at least 30 start-up companies exploring for helium and seeking to develop helium projects in the U.S., Canada, Tanzania, South Africa, Australia, France and the UK.

**Gazprom – Amur Project – Svobodny, Russia** – Gazprom’s Amur Project will extract helium from gas produced from the Kovykta and Chyanda fields for sale to China via the Power of Siberia pipeline. There will be six natural gas processing trains, and three helium purification and liquefaction plants. According to Gazprom’s press releases, each helium plant will have design capacity of 700 MMCF per year, with total nameplate capacity of 2.1 BCF when the project reaches full capacity around 2025. This represents an increment to the world’s helium supply that is equivalent to about 33% of current capacity. According to information released by Gazprom, the Amur Project was reported to be 80.9% complete as of October 2021, with 2 of 6 NGPP trains in operation. Gazprom’s plan was to start-up the first helium plant in Q3 of 2021, the second helium plant in Q1 2022, with the third helium plant starting up in 2024 and reaching full capacity by 2025. Gazprom did briefly start-up the first helium plant for a few weeks in September 2021 and demonstrated their capability to produce helium, before shutting down to complete punch list construction items. However, helium production had not resumed as of mid-January and the Amur gas processing plant has experienced a fire on October 8, 2021 and an explosion and second fire on January 5, 2022, which are expected to delay both the restart of the first helium plant and the start-up of the second plant until at least Q3 of 2022. Recent events combined with a lack of transparency from Gazprom have created quite a bit of uncertainty about the timing of Amur’s restart and the magnitude of Amur’s production in 2022 and 2023, as well as the long-term reliability of Amur as a source of helium. ***Gazprom’s success (or lack thereof) in developing Amur as a large, reliable source of helium in the coming years will be the single biggest factor in determining the shape of global helium markets during the 2020’s.*** If the Amur project approaches its potential, helium supply should be plentiful from 2024 through the remainder of the decade. If Amur disappoints, helium supply could remain tight. Gazprom’s ability to execute large, complex gas processing projects in the past would seem to imply that they will eventually be successful at Amur. However, there is tremendous uncertainty about Amur, especially relating to 2022 and 2023.

Of course, even a successful project at Amur will be subject to political risk, as Russian relations with the U.S. and its allies have deteriorated in recent years and Russia has previously demonstrated its willingness to use access to natural gas and oil for political leverage. For that reason, the Helium Majors may not want to be over-reliant on Russian supply.

**Irkutsk Oil Company – Yarakinsky Project – Irkutsk Region, Russia** – Irkutsk Oil Company (INK) is the largest privately owned oil producer in Russia. INK is building a natural gas processing facility to process gas from the Yarakinsky Field. According to INK’s press releases, they are building a helium plant with planned capacity of 10 million liters per year, equivalent to 266 MMCF. The planned start-up date is

December 2022, but slippage into 2023 is likely. All of the helium output has been committed under long term contracts.

**Irkutsk Oil Company – Markovsky Project - Irkutsk Region, Russia** – INK’s second helium plant will extract helium from gas produced from the Markovsky Field. The Markovsky Plant will have annual capacity of approximately 160 MMCF, with start-up planned for 2024. Slippage to 2025 would not be surprising. All of the helium output has been committed under long term contracts.

**Renergen – Virginia Project – Orange Free State, South Africa** – Renergen is planning to develop a project that would produce LNG for the domestic market and liquid helium, primarily for export. Phase I of the Virginia Project, which amounts to a small demonstration project, will begin production of 25 MMCF per year of helium in 2022. According to Renergen’s press releases, Phase II of the Virginia Project is much larger and would have estimated annual helium capacity of 370 MMCF. The estimated investment for the Virginia Project is USD \$800M and Renergen is actively looking for funding. The final investment decision is expected in 2022 and, if the project proceeds, helium production from Phase II could commence in 2025. The probability of this project proceeding is viewed to be greater than 50%.

**Qatargas – Helium 4 Project – Ras Laffan Industrial City, Qatar** – According to press releases, Qatargas and its partners have ambitious plans to expand LNG production from its current 77 MTPA (million tons per annum) to 110 MTPA by 2025 and 126 MTPA by 2027. Consistent with these plans, Qatargas announced, at the December 2021 Gasworld Helium Summit, their intention to build their fourth helium plant, expanding their helium capacity by 1.5 BCF in 2027. This would increase Qatar’s total helium capacity to 3.6 BCF, possibly enabling Qatar to surpass the U.S. as the world’s leading helium producer.

**Saskatchewan & Alberta, Canada** – There are at least 10 start-up companies exploring for helium in Saskatchewan and Alberta, Canada, with four small helium plants in operation, producing about 95 MMCF per year of gaseous helium. Two of these plants are owned by North American Helium, one is owned by Thor Resources and the fourth plant is owned by Canadian Helium. North American Helium, in particular, is well-financed, having raised over USD \$250M, and has managed a very active exploration and drilling program. The government of Saskatchewan has been very supportive of the development of a local helium industry and has recently announced an ambitious plan to produce 10% of the world’s helium by 2030. While this plan is unlikely to be achieved, helium production in Canada will increase to an estimated 300 MMCF by 2024 and, possibly, more. Canadian production is likely to consist of a number of small-ish plants (10 - 50 MMCF/year each) producing gaseous helium that would be transported to a regional liquefier for final purification and liquefaction.

**SW United States (Colorado, Arizona, New Mexico, Utah)** – Similar to the situation in Canada, there are a large number of start-ups exploring for helium. Helium concentrations in the SW U.S. can be quite high, in some cases up to 8%. While the helium concentrations can be impressive, the individual gas fields tend to be relatively small. New helium production from the SW U.S. is expected to contribute 200 MMCF per year by 2025 from small gaseous helium plants, whose output would usually be transported to a third-party liquefier for final purification and liquefaction.

## Supply/Demand Outlook Through 2031

Previous sections of this report have addressed the outlook for helium demand growth and future sources of supply. After taking a look back at the balance of helium supply and demand during the last 15 years, this section of the report will combine the various assumptions for future supply and demand to develop a forecast of capacity utilization through 2031.

### ***A Look Back at the Last 15 Years***

Before looking to the future, it is instructive to take a brief look back at the balance of helium supply and demand over the last 15 years. During that period of time, there have been three prolonged shortages, each of which lasted at least two years. The years 2006 and 2007 (Helium Shortage 1.0) were a period of tight supply and supply allocation as the BLM Pipeline System began to lose capacity due to depletion of the Federal Helium Reserve. At that time, the Skikda, Algeria and Qatar 1 plants also were producing below expectations, and industry supply was periodically reduced by maintenance shutdowns at ExxonMobil's Wyoming plant and other sources. Due to overall tight supply and crude helium delivery allocations, the BLM Pipeline was no longer able to provide the swing capacity on which the industry had traditionally relied to balance supply and demand. Helium markets returned to a comfortable balance during 2008–2010 when worldwide economic activity experienced a severe recession and demand for helium declined.

In March of 2011, the industry began to experience a severe shortage of helium that lasted for roughly three years (Helium Shortage 2.0). This shortage, unprecedented in both its depth and duration, was almost entirely driven by production shortfalls. There were a number of significant supply constraints and outages that suppliers had to deal with during this period, including outages of the BLM's Crude Helium Enrichment Unit that greatly reduced the effective capacity of helium refining facilities tied to the BLM, sustained allocation of crude helium deliveries (by the BLM) to the helium refiners, prolonged maintenance outages at ExxonMobil's Wyoming plant in both 2011 and 2012, and production outages/shortfalls at the plants in Arzew, Algeria, and Orenburg, Russia. This "Perfect Storm" of circumstances resulted in a worldwide supply shortfall of roughly 20 percent (and far worse at times) throughout much of the period, with all of the major helium suppliers forced to allocate supply to their customers.

After three years of struggling with shortages and supply allocations, Helium Shortage 2.0 came to an end with Qatar 2 commenced production, the Skikda, Algeria plant started up the mega-train that replaced the three trains that had been destroyed in an earlier explosion and Gazprom started up a new liquefier at Orenburg. The major helium suppliers struggled to cope with the challenges associated with excess supply during 2014 and 2015. Companies who had signed up for large Take or Pay commitments at Qatar 2, most notably Air Liquide, built excessive inventory and struggled to avoid Take or Pay penalties. Markets were in balance during 2016 and 2017, except for Q3 of 2017, when the unexpected Saudi-led embargo of Qatar in June 2017 forced Qatargas to shut down and remove 30% of global supply from the market for several weeks due to an inability to ship empty containers to Ras Laffan for filling.

Helium markets experienced their third major shortage (Helium Shortage 3.0) from February 2018 through February 2020. Once again, the shortage was driven by supply disruption to a much greater extent than demand growth. During this period, the BLM System continued to lose deliverable capacity forcing the BLM to allocate crude helium feed gas to the four helium liquefaction plants dependent on the BLM. Production from Algeria was disappointing, the start-up of Qatar 3 was delayed by several years due to a rupture of the underwater pipeline used to transport feed gas to the Barzan Gas Plant and there was a five week maintenance outage at ExxonMobil's plant (22% of world supply) during the Summer of 2019. While the global supply deficit was an estimated 10 – 15% during most of Helium Shortage 3.0, the deficit exceeded 40% during the period while ExxonMobil's plant was down. Helium Shortage 3.0 came to an abrupt end in February 2020 when the COVID pandemic forced the world's economy to shut down and helium demand plummeted by as much as 25% from pre-COVID levels during Q2 of 2020.

As helium demand gradually recovered from the impact of COVID, helium supply was ample during the remainder of 2020 and first half of 2021. However, supply tightened up during Q3 and the beginning of Q4, primarily due a four month maintenance shutdown of the BLM System (July – October) as well as delayed and disappointing early production from Amur. That brings us back to the present. Some key takeaways from this review of the last 15 years include:

- The balance of helium supply and demand can be quite volatile and unpredictable.
- The helium supply chain is complex and impacted by many different factors.
- Due to the decline of the BLM System and a general lack of helium storage capacity, there is very little flex capacity in the global supply chain.
- Due to the fact that >95% of the world's helium supply is a by-product of hydrocarbon processing, helium supply can be disrupted by maintenance shutdowns upstream of the helium plant.
- New helium projects have a tendency to start-up later than expected and produce less than advertised.
- Helium supply can also be disrupted by geopolitical events, such as the embargo of Qatar.

## ***Forecasted Supply, Demand & Capacity Utilization Through 2031***

Among the key assumptions underlying this forecast are the following:

### **Demand**

- Base demand of 5.915 BCF in 2021, increasing to 6.211 BCF in 2022.
- CAGR of 4% from 2023 through 2031.

### **Supply**

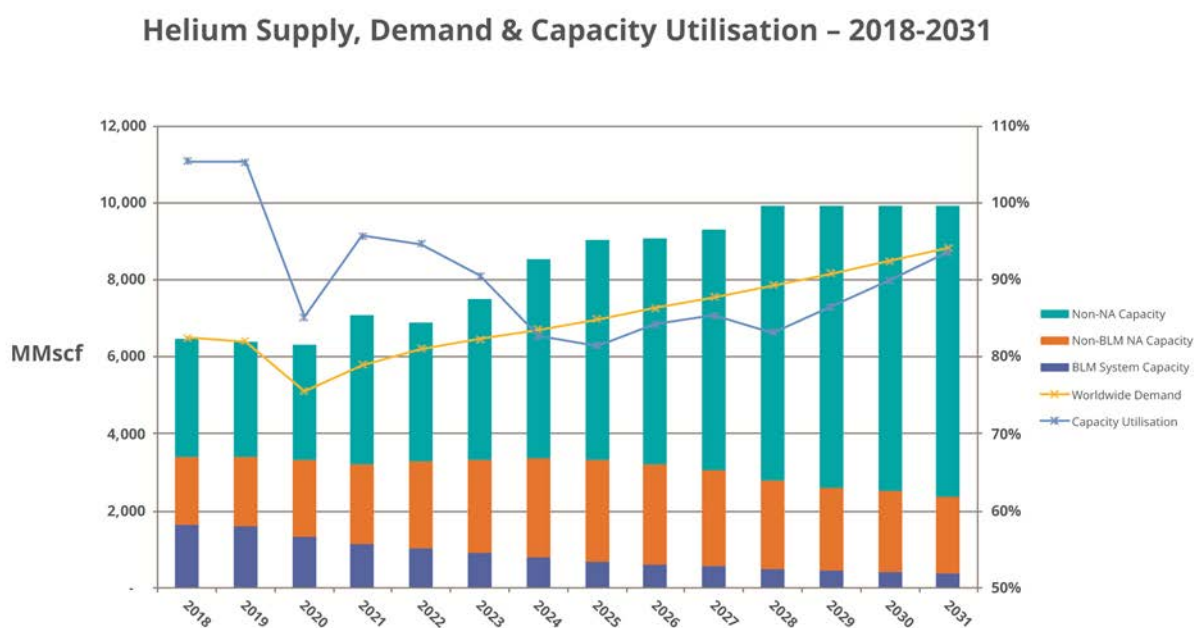
- Amur production restarts in Q4 of 2022, with each of the first two helium plants producing 75 MMCF in 2022.
- Amur production increases to 600 MMCF in 2023, split evenly between the first two helium plants.



- Effective annual capacity for each of Amur's helium plants marked down from 700 MMCF to 600 MMCF, based on early difficulties and concerns about harsh climate conditions and Gazprom's ability to operate the plant.
- Helium 4 in Qatar starts up in 2027 and contributes 500 MMCF of new supply. Helium 4 reaches full capacity of 1.5 BCF in 2028.
- Other sources contribute supply as described in the previous section. New sources generally ramp up over 2 years.
- Currently unidentified sources contribute 281 MMCF, 481 MMCF and 625 MMCF in 2029, 2030 and 2031 to hold supply constant at the 2028 level.

The chart below illustrates the forecast derived from the assumptions outlined above:

**Chart II.**



*Source: Kornbluth Helium Consulting – February 2022*

Some of the key conclusions from this forecast include the following:

- Due to the delayed start-up of Amur, capacity utilization will remain very high in 2022 at an estimated 95%. When capacity utilization is that high, the market is essentially sold out and prone to shortages and supply allocations during periods of plant maintenance.
- Capacity utilization should drop down to the low 90's in 2023, assuming that Amur begins to contribute a material quantity to supply (600 MMCF is included in the forecast for 2023).
- The early years of the forecast are highly dependent on the assumptions about Amur, which could be too optimistic or too pessimistic.
- By 2024, again assuming 1.2 BCF of supply from Amur, as well as smaller contributions from other new sources, capacity utilization is expected to decline to around 83% and remain in the low to mid 80's through 2028.

While the specific details of the forecast are certainly up for debate, the overall conclusions and major trends seem reasonably clear. The global helium market is likely to be very tight and susceptible to shortages throughout 2022. Assuming a relatively modest contribution from Amur, the transition to more plentiful supply should begin in 2023 and, by 2024 and for what looks like the next 5 years, helium supply should be plentiful, with capacity utilization ranging from 80 – 85%. The transition to plentiful supply has been delayed by at least a year due to the difficulties at Amur. The biggest variables which could impact this forecast include the timing and magnitude of Amur production and the rate of growth for helium demand. Even after being marked down by 14% relative to nameplate capacity, Amur production is still expected to grow to 1.8 BCF by 2025. There is both upside and downside risk in the assumptions for Amur. The 4% demand growth assumption is a little more aggressive than other recent forecasts, but could be conservative, especially in the early years, if there is a growth spurt in construction of new wafer fabs.

## Pricing Outlook

Before launching into a discussion about the outlook for helium prices, it is necessary to discuss a few fundamentals of the industrial gas and helium businesses and to establish a common understanding of which “helium price” we are discussing.

The industrial gas business operates as a classic oligopoly and the Helium Business is one of the more concentrated segments within the industrial gas business. The industrial gas business is also very much a contract business, with established commercial structures that are usually quite favorable to the gas company. Finally, there is a considerable amount of centralized control of pricing in the Helium Business. For these reasons, it would be correct to say that the major helium suppliers are disciplined and savvy managers of pricing. During periods of tight supply or shortages, the industry is very adept at increasing prices. Conversely, during periods of excess supply, prices tend to be “sticky” and suppliers tend to maintain prices at higher levels than might be dictated solely by supply and demand influences. With that being said, the Helium Business is a commodity business and prices move up or down based on supply vs. demand and cost influences.

An important point that requires clarification is exactly which price we are referring to in this section of the report. Throughout the global helium supply chain, there are many different prices that might be referred to. There are prices for crude helium, prices for bulk liquid helium sold at the source, prices for bulk liquid in wholesale transactions, spot prices for bulk liquid, and end user prices for high pressure tube trailers, liquid dewars and high-pressure cylinders, which can vary considerably by country. There can be a great deal of confusion when individuals who are not familiar with the Helium Business discuss prices. For purposes of this discussion, we will focus specifically on the **“Ex-Works price for large quantities ( $\geq 100$  MMCF/year) of bulk liquid helium picked up at the source and purchased under long term ( $\geq 10$  years) contracts”**. While this definition may sound fairly technical, it really means the price for helium in large “sourcing” transactions. This price tends to be fairly consistent globally (differences, of course, for transportation cost to get to the relevant market) and this is the relevant price for anyone looking to develop a large new helium project. Quite simply, it would not be feasible to sell out the production from a large new source to smaller buyers or via the spot market. To load a new plant, you would need to sell large quantities to the Helium Majors under long term contracts. While it might be possible to sell a portion of production to smaller buyers or on the spot market, to realize higher prices, sales to the Helium Majors must provide the base load. Another important point is that, similar to oil, helium sold in sourcing transaction is generally priced in US Dollars. When discussing this price, we do not need to be concerned with currency translation or currency movements. A final point is that the helium market is very opaque. There is no publicly available information on helium prices and no formal spot market. Information about helium prices comes from participation in transactions, information that can be gleaned from the grapevine and feel for the market.

Kornbluth Helium Consulting estimates that the market price for helium in 2021 was approximately \$220/MCF, plus or minus ten percent. There were prices outside of this range in the market for reasons specific to individual agreements. For example, Gazprom’s price for Amur is believed to be below market because prices were negotiated prior to Helium Shortage 3.0 and the price adjustment formula in their contracts did not allow Gazprom to take advantage of price increases during the shortage. As their contracts allow, Gazprom will correct the disparity via price reopener negotiations. To put the

current helium price in perspective, it is worth taking a look at the progression of helium prices over the last 10 and 15 years. According to Kornbluth Helium Consulting's estimates, between 2006 and 2021, the helium price has risen from an estimated \$69/MCF to \$220/MCF, a compounded annual increase of 8.0%. Over the last 10 years, from 2011 to 2021, driven by helium shortages 2.0 and 3.0, prices have increased from \$90/MCF to \$220/MCF, an even more impressive 9.4%. For this cycle, prices likely peaked at around \$250/MCF in 2019 during the peak of Helium Shortage 3.0 and before the market began to anticipate the impact of Amur production. The key points are that the price of helium has had a very impressive, long term rate of increase and current prices, even if they have come down a bit from the 2019 peak, remain at historically high levels. The chart below illustrates the historical movement of the helium price since 2006:

**Chart III.**

### Historical Price of Bulk Liquid Helium – 2006-2021



**Source: Kornbluth Helium Consulting – February 2022**

The price for helium during 2022, is expected to be relatively stable, with a possible upward bias, due to the tight market conditions that are expected. Spot prices and prices pursuant to short term contracts, will likely move up considerably during 2022, as they are typically more sensitive to market conditions.

Prices should remain relatively stable until market participants become convinced that Amur will contribute significant new supply. Once Amur ramps up and capacity utilization falls into the low to mid-80's, helium prices are likely to come down from current levels due to competition between major producers including ExxonMobil, Qatargas, Gazprom and potential new entrants. Downside risk could be in the range of 20 – 25% from current levels, which would result in prices ranging from \$168 - \$180/MCF, plus or minus 10%.

One factor that could partially mitigate downside risk would be construction of new helium storage capacity. If surplus production could be stored in the ground, it would reduce the urgency to find customers for helium purchased pursuant to contractual “take or pay” commitments and reduce the downward pressure on price during periods of surplus. Air Liquide has a storage facility in Gronau-Epe, Germany, Air Products recently announced a new storage facility in Beaumont, Texas and a third storage facility is under development in Kansas, USA by Total Helium, along with an un-named partner, rumored to be Linde.

## Green Helium

“Green Helium” is helium produced from gas that contains little, if any, hydrocarbons and where the production of helium does not result in the emission of greenhouse gases. At present, more than 95% of the world’s helium is produced as a by-product of the processing of hydrocarbon-bearing gas at either natural gas processing facilities or liquefied natural gas (LNG) plants. At these plants, helium, which is inert, is part of the waste stream that consists mostly of nitrogen and helium. The small percentage of helium that is produced from non-hydrocarbon gas is produced from gas where the primary component of the gas is either nitrogen or carbon dioxide. When nitrogen is the carrier gas, it can be vented to the atmosphere. Since nitrogen is the primary component of the atmosphere and is not a greenhouse gas, helium produced from nitrogen carrier gas is Green Helium. When CO<sub>2</sub> is the carrier gas, the helium can be considered “Green” if the CO<sub>2</sub> is reinjected into the ground and there are no emissions of greenhouse gases. There is also activity related to producing helium from gas where hydrogen is the major component of the gas and there are no hydrocarbons. This would also be considered Green Helium.

Until helium prices rose dramatically during Helium Shortage 3.0, helium production from non-hydrocarbon gas, where helium is the primary or only commercial product, was not commercially viable. Helium was simply not valuable enough to cover the costs of exploration, drilling, transportation and processing, plus a financial return. At recent price levels, and depending on the location and circumstances associated with a particular project, it can be economically viable to recover helium from non-hydrocarbon gas with helium concentrations of around 0.5% or higher. Within the last year or so, some of the companies trying to extract helium from non-hydrocarbon gas have begun touting it as Green Helium.

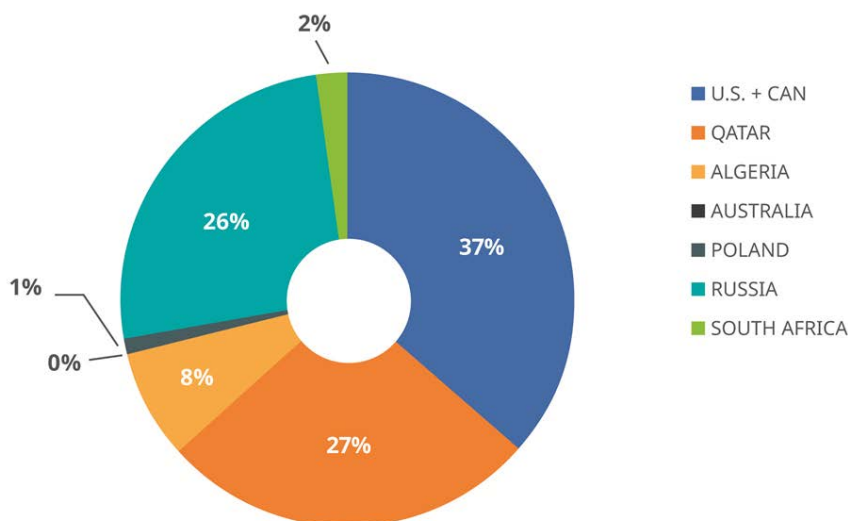
At present, the primary advantage associated with Green Helium is that sponsors of Green Helium projects may have greater access to investment capital. With increasing emphasis on climate change initiatives and ESG investing, many investors or funds have a preference for investing in green projects. For that reason, being categorized as green can be beneficial for attracting investment capital. Thus far, there does not appear to be significant demand from end customers for Green Helium. Although this may change over time, the global helium supply chain, with more than 95% of supply from hydrocarbon gas, is not set up to segregate and deliver Green Helium to customers. If we take a long-term view, climate change initiatives are likely to result in reduced consumption of natural gas at some point in the future. That could result in demand for Green Helium to replace hydrocarbon by-product helium that has gone off-line. Forecasts from experts like McKinsey do not expect demand for natural gas to peak until after 2035 and expect a very gradual decline from that point forward.

## Geopolitical Risk

Geopolitical risk to the helium supply chain has become an increasing consideration for helium suppliers and end customers as the dominant position of the U.S. has gradually eroded in recent years. As the government's helium stockpile has been sold off and gradually depleted, the BLM's Pipeline and Storage System has lost roughly 75% of its deliverable capacity and the global helium supply chain has lost much of its flex capacity. Due to the ongoing loss of capacity from the helium liquefaction plants connected to the BLM, as well as the construction of new capacity in Algeria, Qatar and Russia, the U.S. share of global capacity is expected to decline from an estimated 50% in 2020 to approximately 37% in 2025. The chart below shows the projected breakdown of helium supply by country by 2025.

Chart IV.

Helium Supply by Country – 2025



**Source: Kornbluth Helium Consulting – February 2022**

By 2025, Russia will control an estimated 26% of global capacity, Qatar will be supplying 27%, with another large expansion planned for 2027, and Algeria will control roughly 8% of global capacity. Russia's relations with western countries are unreliable and Russia has demonstrated a willingness to use access to natural resources, especially natural gas, for political leverage. While Qatar has been an ally of the West in recent times, it is located in a volatile part of the world which exposes it to potential blockades or embargos that could cut off the supply of helium. In fact, the Saudi-led embargo of Qatar in June 2017 cut off the supply of helium for several weeks and disrupted the helium supply chain for several months, while helium suppliers were forced to develop alternative routes to market. If a major conflict were to erupt in the Middle East, supply from Qatar could easily be disrupted. Algeria has a government that has very weak popular and could be subject to an "Arab Spring" type revolution at any time. For these reasons, the major helium suppliers want to avoid over-reliance on supply from sources that could be disrupted and seek to develop a diversified supply portfolio. These concerns about



political risk cut in both directions, as helium suppliers in China, the world's second largest market, are also seeking to develop domestic supply and avoid reliance on supply from the U.S. and its allies.

For these reasons, helium supply from non-aligned countries like Tanzania or South Africa, that is subject to minimal geopolitical risk can be quite attractive.

## Glossary Of Technical Terms & Acronyms

**BCF** refers to billion standard cubic feet of helium.

**BLM** means the Bureau of Land Management, United States Department of the Interior which is the U.S. government entity responsible for managing the Federal Helium Reserve and the Crude Helium Pipeline and Storage System which connects four private helium liquefaction plants to the Cliffside Field crude helium storage facility.

**Bulk Liquid Helium** refers to helium in liquid form when transported in 11,000 gallon cryogenic ISO containers. This is the primary form in which helium is transported around the world from sources to helium transfilling facilities and very large end users.

**ESG** means Environmental, Social & Governance. The increased interest in Green Helium is a direct result of climate change initiatives which are one form of ESG initiative.

**Green Helium** is helium produced from gas that contains little, if any, hydrocarbons and where the production of helium does not result in the emission of greenhouse gases.

**Helium Majors** refers to the five multinational industrial gas companies who collectively control at least 90% of the world's helium supply at the source. The Helium Majors include Air Liquide, Air Products and Chemicals, Linde, the Mathrson Gas subsidiary of Nippon Sanso Holdings and the Messer Industries affiliate of the Messer Group.

**ISO Container** means the standardized cryogenic containers that are utilized to ship bulk liquid helium via trucks and container ships around the world. ISO stands for International Standards Organization. An ISO helium container is 40 feet long, 8 feet wide and 8 and a half feet high.

**LNG** means liquefied natural gas. Of the world's 16 helium liquefaction plants, five process waste gas from LNG plants.

**MMCF** as used herein means one million standard cubic feet.

**NGPP** is an acronym that means natural gas processing plant.

**Standard Cubic Feet** or **SCF** means the quantity of gas that would fill one cubic foot of space at 70 degrees Fahrenheit and 1 atmosphere of pressure.

## **Disclosure**

This independent market report has been prepared by Kornbluth Helium Consulting, LLC on 9 February 2022 to be used by Noble Helium Limited (**Company**) for inclusion in its initial public offer prospectus and associated listing on the ASX. Any other use of this report without the express written consent of Kornbluth Helium Consulting, LLC is strictly prohibited. Kornbluth Helium Consulting, LLC consents to the release of this report in the Company's prospectus in the form and context in which it is included. As at the date of the Company's prospectus, this consent has not been withdrawn.

**Qualifications:** Kornbluth Helium Consulting, LLC was founded in February 2013 by its President, Phil Kornbluth. Mr. Kornbluth has worked in the industrial gases industry for 41 years and has worked continuously in various commercial roles in the Helium Business for the last 39 years. During that period, Kornbluth had general management and P&L responsibility for the global helium businesses of BOC Gases and the Matheson Gas subsidiary of Nippon Sanso Holdings, two of the world's Helium Majors at the time. Kornbluth Helium Consulting focuses its efforts exclusively on commercial issues related to the Global Helium Business and is viewed as the leading consultancy in this specialized niche of the gases business. Kornbluth is currently a member of Gasworld Magazine's Editorial Advisory Board and is a frequent contributor of articles to that publication. Kornbluth is also a frequent speaker at industry conferences and has been involved with organizing Gasworld's biennial helium conferences in 2016, 2018 and 2021.

**Accuracy of content:** Kornbluth Helium Consulting has undertaken a number of market studies in the global helium market. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable. All effort has been made by Kornbluth Helium Consulting to ensure that the information in this report is accurate and appropriate at the time of writing. However, Kornbluth Helium Consulting do not guarantee the accuracy or completeness of the information sourced for this report and have not sought for the information to be independently verified. Opinions contained in this report represent the opinions of Kornbluth Helium Consulting at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future events, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the results, performance or achievements of their subject matter to be materially different from current expectations.

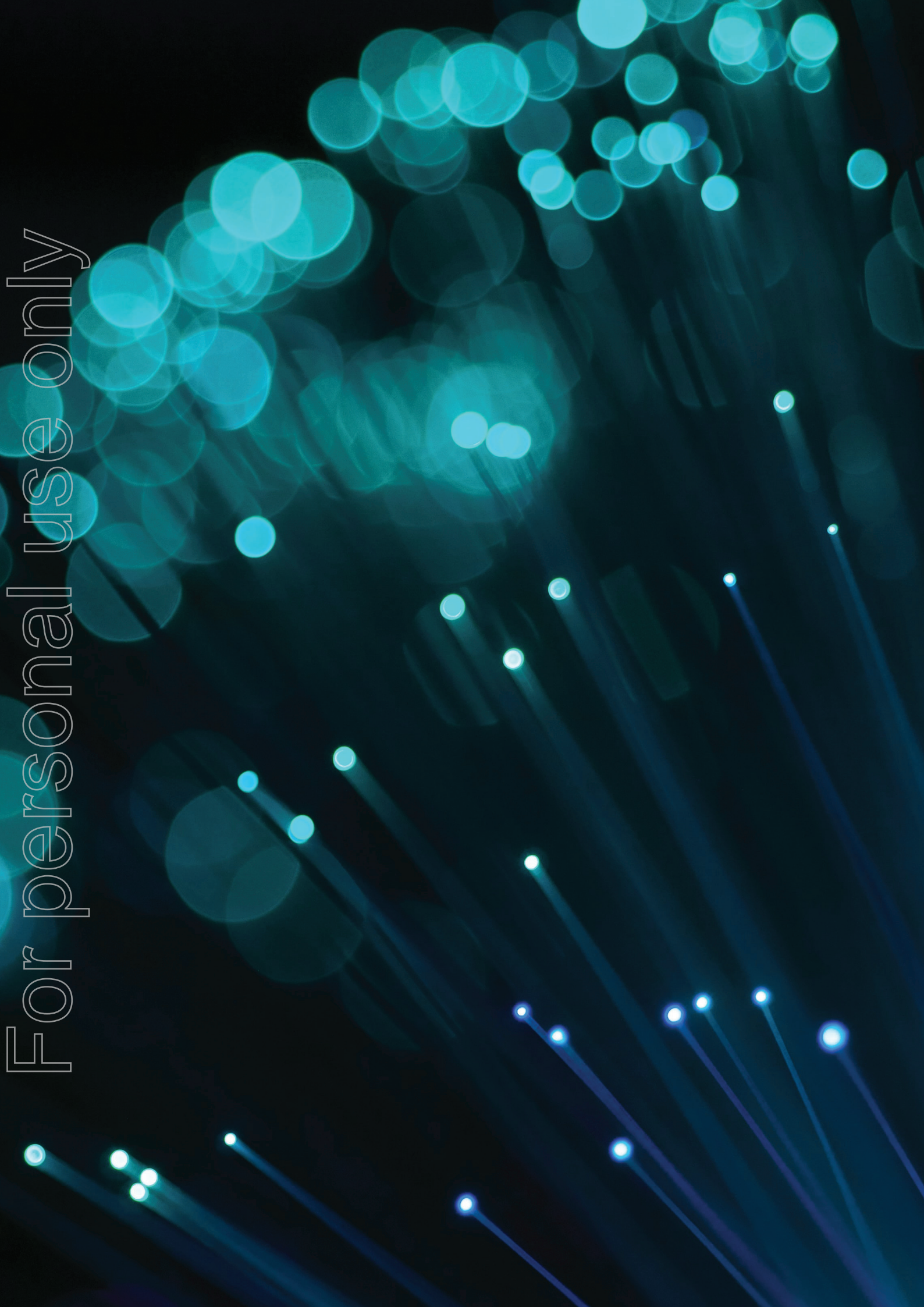
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## 5. FINANCIAL INFORMATION

### 5.1 Introduction

This section sets out the Historical Financial Information of the Company. The Directors are responsible for the inclusion of all Financial Information in the Prospectus. The purpose of the inclusion of the Financial Information is to illustrate the effects of the Public Offer. Hall Chadwick WA Audit Pty Ltd (Hall Chadwick) has prepared an Independent Limited Assurance Report in respect to the Historical Financial Information and the Pro Forma Financial Information. A copy of this report, within which an explanation of the scope and limitation of Hall Chadwick's work is set out in Annexure C of this Prospectus.

All information present in this Section should be read in conjunction with the balance of this Prospectus, including the Independent Limited Assurance Report in Annexure C.

### 5.2 Basis of Preparation

The historical financial information has been prepared in accordance with the recognition and measurement requirements of Australian Accounting Standards and the accounting policies adopted by the Company as detailed in Note 1 of Section 5.7. The pro forma financial information has been derived from the historical financial information and assumes the completion of the pro forma adjustments as set out in Note 2 of Section 5.7 as if those adjustments had occurred as at 31 December 2021.

The financial information contained in this section is presented in an abbreviated form and does not contain all the disclosures that are provided in a financial report prepared in accordance with the Corporations Act 2001 and Australian Accounting Standards and Interpretations.

- (a) The historical financial information comprises the following (collectively referred to as the **Historical Financial Information**):
  - (i) The historical Statements of Profit or Loss and Other Comprehensive Income for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021;
  - (ii) The historical Statements of Financial Position as at 30 June 2020, 30 June 2021 and 31 December 2021; and
  - (iii) The historical Statements of Cash Flows for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021.
- (b) The pro forma financial information comprises (collectively referred to as the **Pro Forma Financial Information**):
  - (i) The pro forma statement of financial position as at 31 December 2021, prepared on the basis that the pro forma adjustments and subsequent events detailed in Note 2 of Section 5.7 had occurred as at 31 December 2021; and
  - (ii) the notes to the pro forma financial information,  
(collectively referred to as the **Financial Information**).

The Historical Financial Information of the Company has been extracted from the financial reports of the Company for the respective years. The financial reports were audited by Hall Chadwick in accordance with Australian Auditing Standards, except for the financial reports for the half year ended 31 December 2021 which were reviewed in accordance with ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity. Hall Chadwick have issued an unqualified audit opinion on the financial reports for the years ended 30 June 2020 and 30 June 2021 with material uncertainty related to going concern paragraph. Hall Chadwick issued an unqualified review conclusion with material uncertainty related to going concern paragraph on the Half Year Reports for the period ended 31 December 2021.

### 5.3. Historical Statement of Profit or Loss and other Comprehensive Income

	Reviewed* Half Year Ended 31 December 2021	Audited* Year Ended 30 June 2021	Audited* Year Ended 30 June 2020
	\$	\$	\$
Revenue	23,777	-	23,893
Expenses	(254,598)	(165,418)	(330,068)
<b>Loss before income tax expense</b>	<b>(230,821)</b>	<b>(165,418)</b>	<b>(306,175)</b>
Income tax expense	-	-	-
<b>Loss after income tax</b>	<b>(230,821)</b>	<b>(165,418)</b>	<b>(306,175)</b>
<b>Other comprehensive income for the period, net of tax</b>			
Exchange differences on translation of foreign operations	(14,014)	(2,433)	1,199
<b>Total comprehensive loss</b>	<b>(244,835)</b>	<b>(167,851)</b>	<b>(304,976)</b>

\* Refer to Section 5.2 with respect to the audit opinions/review conclusion issued by Hall Chadwick on the Historical Financial Information. The Financial Information should be read in conjunction with the accounting policies in Section 5.7 and the Independent Limited Assurance Report in Annexure C.



#### 5.4. Historical Statement of Financial Position

	Reviewed* 31 December 2021 \$	Audited* 30 June 2021 \$	Audited* 30 June 2020 \$
<b>Current assets</b>			
Cash & cash equivalents	1,092,424	13,150	238,184
Trade & other receivables	14,329	-	-
<b>Total current assets</b>	<b>1,106,753</b>	<b>13,150</b>	<b>238,184</b>
<b>Non-current assets</b>			
Exploration and evaluation expenditure	892,555	295,349	234,751
<b>Total non-current assets</b>	<b>892,555</b>	<b>295,349</b>	<b>234,751</b>
<b>TOTAL ASSETS</b>	<b>1,999,308</b>	<b>308,499</b>	<b>472,935</b>
<b>Current liabilities</b>			
Trade & other payables	63,696	6,920	3,505
Borrowings	339,845	20,110	20,110
<b>Total current liabilities</b>	<b>403,541</b>	<b>27,030</b>	<b>23,615</b>
<b>TOTAL LIABILITIES</b>	<b>403,541</b>	<b>27,030</b>	<b>23,615</b>
<b>NET ASSETS</b>	<b>1,595,767</b>	<b>281,469</b>	<b>449,320</b>
<b>Equity</b>			
Issued capital	2,156,191	986,066	986,066
Reserves	375,429	435	2,868
Accumulated losses	(935,853)	(705,032)	(539,614)
<b>TOTAL EQUITY</b>	<b>1,595,767</b>	<b>281,469</b>	<b>449,320</b>

\* Refer to Section 5.2 with respect to the audit opinions/review conclusion issued by Hall Chadwick on the Historical Financial Information. The Financial Information should be read in conjunction with the accounting policies in Section 5.7 and the Independent Limited Assurance Report in Annexure C.

## 5.5 Historical Statement of Cash Flows

	Reviewed* Half Year Ended 31 December 2021 \$	Audited* Year Ended 30 June 2021 \$	Audited* Year Ended 30 June 2020 \$
<b>Cash flows from operating activities</b>			
Payments to suppliers and employees	(174,045)	(124,006)	(379,132)
<b>Total cash flows from operating activities</b>	<b>(174,045)</b>	<b>(124,006)</b>	<b>(379,132)</b>
<b>Cash flows from investing activities</b>			
Payment for exploration expenditures	(597,205)	(60,598)	(232,191)
<b>Total cash flows from investing activities</b>	<b>(597,205)</b>	<b>(60,598)</b>	<b>(232,191)</b>
<b>Cash flows from financing activities</b>			
Proceeds from borrowings	339,845	-	-
Proceeds from issue of shares in the Company (net of costs)	1,559,133	-	568,006
<b>Total cash flows from financing activities</b>	<b>1,898,978</b>	<b>-</b>	<b>568,006</b>
Net increase in cash held	1,127,728	(184,604)	(43,317)
Cash and cash equivalents at the beginning of the period	13,150	238,184	257,608
Effects of exchange rate movements	(48,454)	(40,430)	23,893
<b>Cash and cash equivalents at the end of the period</b>	<b>1,092,424</b>	<b>13,150</b>	<b>238,184</b>

\* Refer to Section 5.2 with respect to the audit opinions/review conclusion issued by Hall Chadwick on the Historical Financial Information. The Financial Information should be read in conjunction with the accounting policies in Section 5.7 and the Independent Limited Assurance Report in Annexure C.

## 5.6

### Historical and Pro forma Statement of Financial Position

	Notes	31 December 2021 (Reviewed)	Pro forma subsequent events (Reviewed)	Pro forma Adjustments (Minimum)	Pro forma Adjustments (Maximum)	Pro forma balance (Minimum)	Pro forma balance (Maximum)
		\$	\$	\$	\$	\$	\$
<b>Current assets</b>							
Cash & cash equivalents	3	1,092,424	-	5,930,530	8,745,530	7,022,954	9,837,954
Trade & other receivables		14,329	-	-	-	14,329	14,329
Prepayments	4	-	-	250,000	250,000	250,000	250,000
<b>Total current assets</b>		<b>1,106,753</b>	<b>-</b>	<b>6,180,530</b>	<b>8,995,530</b>	<b>7,287,283</b>	<b>10,102,283</b>
<b>Non current assets</b>							
Exploration and evaluation	5	892,555	-	344,470	344,470	1,237,025	1,237,025
Prepayments	4	-	-	125,000	125,000	125,000	125,000
<b>Total non current assets</b>		<b>892,555</b>	<b>-</b>	<b>469,470</b>	<b>469,470</b>	<b>1,362,025</b>	<b>1,362,025</b>
<b>Total assets</b>		<b>1,999,308</b>	<b>-</b>	<b>6,650,000</b>	<b>9,465,000</b>	<b>8,649,308</b>	<b>11,464,308</b>
<b>Current liabilities</b>							
Trade & other payables		63,696	-	-	-	63,696	63,696
Borrowings	6	339,845	(339,845)	-	-	-	-
<b>Total current liabilities</b>		<b>403,541</b>	<b>(339,845)</b>	<b>-</b>	<b>-</b>	<b>63,696</b>	<b>63,696</b>
<b>Net assets/(liabilities)</b>		<b>1,595,767</b>	<b>339,845</b>	<b>6,650,000</b>	<b>9,465,000</b>	<b>8,585,612</b>	<b>11,400,612</b>
<b>Equity</b>							
Issued capital	7	2,156,191	339,845	6,944,304	9,726,873	9,440,340	12,222,909
Reserves	8	375,429	-	1,320,836	1,440,749	1,696,265	1,816,178
Accumulated losses	9	(935,853)	-	(1,615,140)	(1,702,621)	(2,550,993)	(2,638,474)
<b>Total equity</b>		<b>1,595,767</b>	<b>339,845</b>	<b>6,650,000</b>	<b>9,465,000</b>	<b>8,585,612</b>	<b>11,400,612</b>

\* Refer to Section 5.2 with respect to the audit opinion issued by Hall Chadwick on the Historical Financial Information. The Financial Information should be read in conjunction with the accounting policies in Section 5.7 and the Independent Limited Assurance Report in Annexure C.

## **5.7 Notes to and Forming Part of the Historical Financial Information**

### **Note 1: Summary of Significant Accounting Policies**

#### **5.7.1 Basis of Accounting**

The Historical Financial Information has been prepared in accordance with the measurement and recognition (but not the disclosure) requirements of Australian Accounting Standards, Australian Accounting Interpretations and the Corporations Act 2001.

The financial statements have been prepared on an accruals basis, are based on historical cost and except where stated do not take into account changing money values or current valuations of selected non-current assets, financial assets and financial liabilities. Cost is based on the fair values of the consideration given in exchange for assets.

The preparation of the Statement of Financial Position requires the use of certain critical accounting estimates and assumptions. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the Statement of Financial Position are disclosed where appropriate.

The pro forma Statement of Financial Position as at 31 December 2021 represents the audited financial position and adjusted for the transactions discussed in Note 2. The Statement of Financial Position should be read in conjunction with the notes set out below.

#### **5.7.2 Going Concern**

The financial information has been prepared on a going concern basis, which contemplates the continuity of normal business activity and the realisation of assets and the settlement of liabilities in the normal course of business.

The entity's ability to continue as a going concern is dependent on the success of the Public Offer. The Directors believe that the entity will continue as a going concern. As a result, the Financial Information has been prepared on a going concern basis. However, should the Public Offer be unsuccessful, the entity may not be able to continue as a going concern. No adjustments have been made relating to the recoverability and classification of liabilities that might be necessary should the entity not continue as a going concern.

#### **5.7.3 Exploration and Evaluation Assets**

Exploration and evaluation expenditure in relation to the Company's mineral tenements is expensed as incurred. When the Directors decide to progress the development of an area of interest all further expenditure incurred relating to the area will be capitalised. Projects are advanced to development status and classified as mine development when it is expected that further expenditure can be recouped through sale or successful development and exploitation of the area of interest. Such expenditure is carried forward up to commencement of production at which time it is amortised over the life of the economically recoverable reserves. All projects are subject to detailed review on an annual basis and accumulated costs written off to the extent that they will not be recoverable in the future.

#### **5.7.4 Cash and Cash Equivalents**

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. For the statement of cash flows presentation purposes, cash and cash equivalents also includes bank overdrafts, which are shown within borrowings in current liabilities on the statement of financial position.

#### **5.7.5 Trade and Other Payables**

Liability for trade creditors and other amounts are carried at amortised cost, which is the fair value of the consideration to be paid in the future for goods and services received, whether or not billed.

#### **5.7.6 Trade and Other Receivables**

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any allowance for expected credit losses. Trade receivables are generally due for settlement within 30 days.

The Company has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance.

Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

#### **5.7.7 Borrowings**

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method.

#### **5.7.8 Contributed Equity**

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown as a deduction from the equity proceeds.

#### **5.7.9 Goods and Services Tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the Consolidated Statement of Financial Position.

#### **5.7.10 Revenue**

The Company recognises revenue as follows:

##### **(a) Interest**

Revenue is recognised as the interest accrues (using the effective interest method, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument) to the net carrying amount of the financial asset.

##### **(b) Other revenue**

Other revenue is recognised when it is received or when the right to receive payment is established.

#### 5.7.11 Income Tax

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised, except:

- (a) Where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- (b) In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Unrecognised deferred income tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the financial period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Income taxes relating to items recognised directly in equity are recognised in equity.

Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to the same taxable entity and the same tax authority.

#### 5.7.12 Impairment of Assets

At the end of each reporting period, the Directors assess whether there is any indication that an asset may be impaired. The assessment will include the consideration of external and internal sources of information including dividends received from subsidiaries, associates or jointly controlled entities deemed to be out of pre-acquisition profits. If such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, to the asset's carrying amount. Any excess of the asset's carrying amount over its recoverable amount is recognised immediately in profit or loss, unless the asset is carried at a revalued amount in accordance with another Accounting Standard.

Any impairment loss of a revalued asset is treated as a revaluation decrease in accordance with that other Standard. Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Impairment testing is performed annually for goodwill, intangible assets with indefinite lives and intangible assets not yet available for use.

#### 5.7.13 Critical Accounting Estimates and Judgements

The directors evaluate estimates and judgments incorporated into the financial statements based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained both externally and within the Company. In the opinion of the directors, there are no critical accounting

estimates or judgments in this financial report. The judgements, estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities (refer to the respective notes) within the next financial year are discussed below.

### **Coronavirus (COVID-19) pandemic**

Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the Company based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the Company operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the Company unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic.

### **Note 2: Actual and Proposed Transactions to Arrive at the Pro forma Financial Information**

The pro forma historical financial information has been prepared by adjusting the statement of financial position of the Company as at 31 December 2021 to reflect the financial effects of the following subsequent events which have occurred since 31 December 2021:

- (a) The issue of 1,969,913 Shares on conversion of the Company's convertible loan;  
and the following pro forma transactions which are yet to occur, but are proposed to occur:
- (b) The issue of between 35,000,000 and 50,000,000 Shares at \$0.20 per share to raise between \$7,000,000 (Minimum Subscription) and \$10,000,000 (Maximum Subscription) before costs of between \$725,000 and \$910,000;
- (c) The issue of 10,375,000 Options to the Directors of the Company and 2,000,000 Options to non-related parties which are exercisable at \$0.25 each and will expire 2.5 years from the date of their issue;
- (d) The issue of between 3,325,000 (Minimum Subscription) and 4,750,000 (Maximum Subscription) Options to the Lead Manager which are exercisable at \$0.25 each and will expire 2.5 years from the date of their issue;
- (e) The issue of 1,875,000 Shares as consideration for digital marketing services over a period of 18 months from listing; and
- (f) The payment of USD250,000 (AUD\$344,470) License Fee pursuant to the License and Royalty Agreement with Global Helium Resources Pty Ltd.

**Note 3: Cash and Cash Equivalents**

	<b>Pro forma (Minimum)</b>	<b>Pro forma (Maximum)</b>
	<b>\$</b>	<b>\$</b>
Cash and cash equivalents	7,022,954	9,837,954
Reviewed balance as at 31 December 2021	1,092,424	1,092,424
Pro forma adjustments		
Proceeds from issue of ordinary shares under the Offer	7,000,000	10,000,000
Costs of the Offer	(725,000)	(910,000)
Payment of license fee	(344,470)	(344,470)
Total	5,930,530	8,745,530
Pro forma Balance	7,022,954	9,837,954

**Note 4: Prepayments**

	<b>Pro forma (Minimum)</b>	<b>Pro forma (Maximum)</b>
	<b>\$</b>	<b>\$</b>
Current prepayments	250,000	250,000
Non current prepayments	125,000	125,000
Current reviewed balance as at 31 December 2021	-	-
Non current reviewed balance as at 31 December 2021	-	-
<i>Pro forma adjustments</i>		
Issue of shares for digital marketing services:		
Current	250,000	250,000
Non current	125,000	125,000
Pro forma Balances:		
Current	250,000	250,000
Non current	125,000	125,000



**Note 5: Exploration & Evaluation**

	<b>Pro forma (Minimum)</b>	<b>Pro forma (Maximum)</b>
	<b>\$</b>	<b>\$</b>
Exploration & evaluation	1,237,025	1,237,025
Reviewed balance as at 31 December 2021	892,555	892,555
<i>Pro forma adjustments</i>		
Payment of license fee	344,470	344,470
Total	344,470	344,470
Pro forma Balance	1,237,025	1,237,025

**Note 6: Borrowings**

	<b>Pro forma (Minimum)</b>	<b>Pro forma (Maximum)</b>
	<b>\$</b>	<b>\$</b>
Borrowings	-	-
Reviewed balance as at 31 December 2021	339,845	339,845
<i>Subsequent event adjustments</i>		
Issue of shares upon conversion of borrowings	(339,845)	(339,845)
Total	(339,845)	(339,845)
Pro forma Balance	-	-

**Note 7: Issued Capital**

	<b>Pro forma (Minimum)</b>		<b>Pro forma (Maximum)</b>	
		<b>\$</b>		<b>\$</b>
Issued capital		9,440,340		12,222,909
	<b>Number of shares</b>	<b>\$</b>	<b>Number of shares</b>	<b>\$</b>
Reviewed balance as at 31 December 2021	129,315,278	2,156,191	129,315,278	2,156,191
Subsequent events				
Issue of shares upon conversion of borrowings	1,969,913	339,845	1,969,913	339,845
Total subsequent events	1,969,913	339,845	1,969,913	339,845
<i>Pro forma adjustments</i>				
Issue of ordinary shares under the Public Offer	35,000,000	7,000,000	50,000,000	10,000,000
Costs of the Public Offer	-	(150,898)	-	(248,416)
Lead Manager options	-	(279,798)	-	(399,711)
Issue of shares as consideration for digital marketing services	1,875,000	375,000	1,875,000	375,000
Total	36,875,000	6,944,304	51,875,000	9,726,873
Pro forma Balance	168,160,191	9,440,340	183,160,191	12,222,909

**Note 8: Reserves**

	<b>Pro forma (Minimum)</b>	<b>Pro forma (Maximum)</b>
	<b>\$</b>	<b>\$</b>
Reserves	1,696,265	1,816,178
Reviewed balance as at 31 December 2021	375,429	375,429
<i>Pro forma adjustments</i>		
Director options	872,790	872,790
Lead Manager options	279,798	399,711
Options issued to other parties	168,248	168,248
Total	1,320,836	1,440,749
Pro forma Balance	1,696,265	1,816,178

### Terms of Options

The options have been valued using a Black & Scholes Option Valuation model with the valuation inputs as follows:

	Director and other options	Lead Manager options	
		(Minimum)	(Maximum)
Number of options	12,375,000	3,325,000	4,750,000
Spot price	\$0.20	\$0.20	\$0.20
Exercise price	\$0.25	\$0.25	\$0.25
Term	2.5 years	2.5 years	2.5 years
Expected volatility	80%	80%	80%

### Note 9: Accumulated Losses

	Pro forma (Minimum)	Pro forma (Maximum)
	\$	\$
Accumulated Losses	(2,550,993)	(2,638,474)
Reviewed balance as at 31 December 2021	(935,853)	(935,853)
Pro forma adjustments		
Costs of the Public Offer	(574,102)	(661,583)
Options issued to Directors & other parties	(1,041,038)	(1,041,583)
Total	(1,615,140)	(1,702,621)
Pro forma Balance	(2,550,993)	(2,638,474)

### Note 10: Related Parties

Refer to Section 7 of the Prospectus for the Board and Management Interests.

### Note 11: Subsequent Events

Subsequent to 31 December 2021 the following event has occurred which have been reflected in the pro forma adjustments:

- (a) the issue of 1,969,913 Shares on conversion of the Company's convertible loan.

## 6. RISK FACTORS

### 6.1 Introduction

The Shares offered under this Prospectus are considered highly speculative. An investment in the Company is not risk free and the Directors strongly recommend potential investors to consider the risk factors described below, together with information contained elsewhere in this Prospectus, before deciding whether to apply for Shares and to consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.

There are specific risks which relate directly to our business. In addition, there are other general risks, many of which are largely beyond the control of the Company and the Directors. The risks identified in this section, or other risk factors, may have a material impact on the financial performance of the Company and the market price of the Shares.

The following is not intended to be an exhaustive list of the risk factors to which the Company is exposed.

### 6.2 Company Specific

#### (a) Conditionality of the Public Offer

The Public Offer is subject to the Offer Conditions summarised in Section 2.2. There is a risk that one or more of these Offer Conditions cannot be fulfilled, and in turn, the Public Offer will not proceed.

#### (b) Helium Exploration and Evaluation Risks

The future value of the Company will depend on its ability to find and develop helium resources that are economically recoverable within the Projects.

The circumstances in which a discovered helium accumulation becomes or remains commercially viable depends on a number of factors. These include the particular attributes of the deposit, such as size, depth concentration, development cost and proximity to infrastructure as well as key external factors such as helium supply and demand. This, along with other factors such as maintaining title to tenements and consents, successful design, construction, commissioning and operating of wells and processing facilities may result in projects not being developed, or operations becoming unprofitable.

Helium exploration involves exploration activities and drilling operations which may not generate a positive return on investment. This may arise from dry wells, but also from wells that are productive but do not produce sufficient revenues to return a profit after accounting for drilling, operating and other associated costs. The outcome of any drilling program may be dependent on matters which include the reservoir's composition, the permeability of the sediments, the flow rate and the rate of any decrease in pressure as the gas flows to the surface. These matters cannot be known until the Company undertakes initial drilling programs. The production from successful wells may also be impacted by various operating conditions, including insufficient storage or transportation capacity, or other geological and mechanical conditions. In addition, managing drilling hazards or environmental damage and pollution caused by exploration and development operations could greatly increase the associated cost and profitability of individual wells.

The future exploration activities of the Company may be affected by a range of factors including geological conditions, limitations on activities due to seasonal weather patterns, unanticipated operational and technical difficulties, industrial and environmental accidents, landholder disputes, changing government regulations and many other factors beyond the control of the Company.

The success of the Company will also depend upon the Company having access to sufficient development capital, being able to maintain title to its projects and obtain all required approvals for its activities. In the event that exploration programmes prove to be unsuccessful this could lead to a diminution in the value of the Company's projects, a reduction in the cash reserves of the Company and possible relinquishment of the Company's projects.

The exploration costs of the Company are based on certain assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect the Company's viability.

(c) **No History of Production**

The Company's properties are exploration stage only. The Company has never had any material interest in helium producing properties. Even with application of best science, there is no assurance that commercial quantities of helium will be discovered at any of the properties of the Company or any future properties, nor is there any assurance that the exploration or development programs of the Company thereon will yield any positive results. Even if commercial quantities of helium are discovered, there can be no assurance that any property of the Company will ever be brought to a stage where helium can profitably be produced thereon. Factors which may limit the ability of the Company to produce helium from its properties include, but are not limited to, commodity prices, availability of additional capital and financing and the nature of any helium deposits.

(d) **Risks associated Drilling**

The Company's helium exploration and development activities are dependent on the availability of drilling rigs and related equipment in the area of its Projects. Increases in oil and gas exploration activities could result in higher demand and limited availability for some types of drilling rigs and equipment in certain areas, which may result in delays to the Company's planned exploration and development activities.

The Company may encounter hazards inherent in drilling activities. Examples of such hazards include unusual or unexpected formations, abnormal pressures or rock properties, adverse weather conditions, mechanical difficulties, condition which could result in damage to plant or equipment or shortages or delays in delivery of rigs and/or other equipment. Drilling may result in wells that, which encountering resources, may not achieve economically viable results.

Whilst the Company intends to take adequate precautions to minimise risks associated with drilling activities, there can be no guarantee that the Company will not experience one or more material incidents during drilling activities that may have an adverse impact on the operating and financial performances of the Company, including costs associated with control of well operation, recovery of plant and equipment, environmental rectification and compensation along with delays and other impacts on anticipated results.

(e) **Requirements for permits and licenses**

The operations of the Company require it to obtain licenses for operating, permits, and in some cases, renewals of existing licenses and permits from authorities in Tanzania. The Company believes that it currently holds or has applied for all necessary licenses and permits to carry on the activities it is currently conducting under applicable laws and regulations in respect of its properties, and also believes that it is complying in all material respects with the terms of such licenses and permits. However, the ability of the Company to obtain, sustain or renew any such licenses and permits on acceptable terms is subject to changes in regulations and policies and to the discretion of the applicable authorities or other governmental agencies.

(f) **Prospecting Licence resulting in Mining Licences or Special Mining Licence in Tanzania**

The licenses issued to the Company's subsidiaries are prospecting licences and have the rights and obligations attaching to them as set out in the Solicitor's Report on Tenements in Annexure B. If these licenses result in a Mining Licence or Special Mining Licence as defined in the Tanzania Mining Act 2010 being granted, then additional requirements will apply to the Company and its subsidiaries.

A Mining Licence is granted for medium scale mining operations, where the capital investment is estimated to be between USD100,000 and USD100,000,000 or its equivalent in Tanzanian shillings and is for a duration of 10 years. A Mining Licence for metallic minerals, energy minerals, industrial minerals and kimberlitic diamond shall have a maximum area of 10 square kilometres (1,000 hectares).

A Special Mining Licence is granted for large scale mining operations, where the capital investment is expected to be not less than USD100,000,000 or its equivalent in Tanzanian shillings and is for the duration of the estimated life of the ore body as indicated in the feasibility study report. A Special Mining Licence for mineral deposits other than superficial deposits shall have a maximum area of 35 square kilometres (3,500 hectares).

If a Mining Licence or Special Mining Licence is granted then the Government of the Republic of Tanzania (**Tanzanian Government**) shall be entitled to a 16 per cent non-dilutable free carried interest in the share capital of the company which owns such Mining Licence or Special Mining Licence, depending on the type of minerals and the levels of investment (**Free Carried Interest**). In addition to the Free Carried Interest, the Tanzanian Government shall be entitled to acquire up to 50 per cent of the issued share capital of the company which owns the Mining Licence or Special Mining Licence commensurate with the total tax expenditures incurred by the Tanzanian Government in favour of the company. The Tanzanian Government can only acquire an additional 34% of the shares in the company (in addition to the Free Carried Interest) if and only if the company receives expenditure from the Tanzanian Government in the form of tax exemptions. If no such expenditure has been sought or received from the Tanzanian Government then the Tanzanian Government is not entitled to any interest greater than the Free Carried Interest. The Company notes that the Tanzanian Government has incurred no tax expenditures in favour of the Company to date.

In the event that a Special Mining Licence is granted, the company holding such licence may be required to apply for the admission of its entire issued share capital to a local stock exchange with a minimum local shareholding of not less than 30%. However, if an agreement is entered into with the Tanzanian Government in respect of the Free Carried Interest and sharing of economic benefits then this requirement ceases to apply.

Refer to the Solicitor's Report on Tenements in Annexure B for further information regarding the terms and conditions applying to mining tenements in the Tanzania.

(g) **Reserves and Resources Estimates**

The Helium Prospective Resource of the North Rukwa Project has been developed and certified by independent experts Netherland Sewell and Associates of Houston, Texas, USA (NSAI), using probabilistic analysis; these estimates have been prepared in accordance with the petroleum engineering and evaluation principles set forth in the 2018 and 2011 (Guideline) Editions of the Petroleum Resource Management System of the Society of Petroleum Engineers (SPE-PRMS, 2011 and 2018).

The Australian Stock Exchange mandates the use of the SPE-PRMS classifications for oil and gas entity public reporting requirements and has accepted the use of SPE-PRMS for listed helium entity reporting requirements. New terminology as per SPE-PRMS 2018 in describing low (1U equivalent to P90), best (2U equivalent to P50) and high estimates (3U equivalent P10) are used to denote as-yet undiscovered volumes.

No Reserves have been assigned in connection with the Company's property interests to date, given their early stage of development. Unrisked Prospective Helium Volumes has been defined. However, estimating helium volumes is subject to significant uncertainties associated with technical data and the interpretation of that data, future commodity prices, and development and operating costs. There can be no guarantee that Noble Helium will successfully convert its helium volume to reserves and produce that estimated volume. Estimates may alter significantly or become more uncertain when new information becomes available due to for example, additional drilling or production tests over the life of field. As estimates change, development and production plans may also vary. Downward revision of helium volume estimates may adversely affect Noble Helium's operational or financial performance.

Helium volume estimates are expressions of judgement based on knowledge, experience and industry practice. These estimates are imprecise and depend to some extent on interpretations, which may ultimately prove to be inaccurate and require adjustment or, even if valid when originally calculated, may alter significantly when new information or techniques become available. As further information becomes available through additional drilling and analysis the estimates are likely to change. Any adjustments to volume could affect the Company's exploration and development plans which may, in turn, affect the Company's performance.

(h) **Tenement Risks**

The business activities of the Company are dependent on the grant and maintenance of appropriate licences, permits and consents over the exploration interests. The Company's prospecting licenses are subject to certain expenditure obligations and annual rents, whilst additional licences and permits may also be subject to compulsory work or expenditure obligations or responsibilities in respect of the environment and safety for each year which must be met to keep the licence or permit in good standing. Failure to observe these requirements could prejudice the right to maintain title to a given area and result in government action to forfeit a permit or permits.

There is no guarantee that current or future exploration permit applications or permit renewals will be granted, that they will be granted without undue delay, or that the Company can economically comply with any conditions imposed on any granted exploration permits.

(i) **Tenure and Access to Tenements in Tanzania**

Mining and exploration tenements in Tanzania are subject to periodic renewal. The Company believes that it currently holds or has applied for all necessary licenses and permits to carry on the activities it is currently conducting under applicable laws and regulations in respect of its properties, and also believes that it is complying in all material respects with the terms of such licenses and permits. However, the ability of the Company to obtain, sustain or renew any such licenses and permits on acceptable terms is subject to changes in regulations and policies and to the discretion of the applicable authorities or other governmental agencies.

Where a licensee has met the terms of the grant, renewal should not be denied. However, if development conditions are not met there is no guarantee that current or future tenements or future applications for production tenements will be approved.

Tenements in Tanzania are also subject to expenditure and work commitments which must be met in order to keep such tenements in good standing. If there is failure to meet the commitments, this could lead to forfeiture of the tenement.

Access to and from a number of the Company's licences are limited due to seasonal weather conditions. Unexpected weather, such as significant amounts of precipitation occurring outside the wet season, violent tropical storms or flooding may delay or adversely impact the Company's drilling and operational activities.



**(j) Sovereign Risk**

The Company's exploration and development activities are to be carried out in Tanzania. The Company will be subject to political, social, economic and other uncertainties including, but not limited to, changes in policies or the personnel administering them, foreign exchange restrictions, changes of law affecting foreign ownership, currency fluctuations, royalties and tax increases in that country.

There is no assurance that the Tanzanian government will not in the future adopt different regulations, policies or interpretations with respect to, but not limited to environmental protection, foreign ownership of resources, royalty rates, taxation, rates of exchange, labour relations, repatriation of income or return of capital, restrictions on production or processing, price controls, export controls, currency remittance, or the obligations of the Company under its respective mining codes. The possibility that the Tanzanian government may adopt substantially different policies or interpretations, which might extend to the expropriation of assets, may have a material adverse effect on the Company. Political risk also includes the possibility of terrorism, civil or labour disturbances and political instability. No assurance can be given that the Tanzanian government will not revoke or significantly alter the conditions of the applicable exploration and mining authorisations nor that such exploration and mining authorisations will not be challenged or impugned by third parties. The effect of any of these factors cannot be accurately predicted.

In certain respects, Tanzania's legal systems are less developed than more established countries and this could result in various risks including difficulty obtaining or enforcing legal redress in the courts, a lack of administrative guidance on implementing and complying with legislation and regulation (e.g. in respect to taxation or property rights), or certain inconsistencies or conflicts between various legislation, regulations, decrees or orders.

**(k) Changes in helium price**

The Company's possible future revenues may be derived mainly from helium or from royalties gained from potential joint ventures or other arrangements. Consequently, the Company's potential future earnings will likely be closely related to the price of helium.

Helium prices fluctuate and are affected by numerous industry factors including demand for the resource, forward selling by producers, production cost levels in major producing regions and macroeconomic factors, e.g. inflation, interest rates, currency exchange rates and global and regional demand for, and supply of, helium. If the Company is producing helium and the market price of helium were to fall below the costs of production and remain at such a level for any sustained period, the Company would experience losses and could have to curtail or suspend some or all of its proposed activities. In such circumstances, the Company would also have to assess the economic impact of any sustained lower commodity prices on recoverability.

**(l) Operational Risk**

If the Company decides to develop into helium production in the future, the operations of the Company including exploration and processing may be affected by a range of factors. These include failure to achieve the predicted grade in exploration, processing, technical difficulties encountered in commissioning and operating plant and equipment, mechanical failure, problems which affect extraction rates and costs, adverse weather conditions, industrial and environmental accidents, industrial disputes, unexpected shortages or increase in the costs of consumables, spare parts, plant and equipment.



(m) **Land Access Risk**

Land access is critical for exploration and evaluation to succeed. In all cases the amalgamation of prospective tenements is a competitive business, in which propriety knowledge or information is critical and the ability to negotiate satisfactory commercial arrangements with other parties is often essential.

Access to land in Tanzania for exploration purposes can be affected by land ownership, other stakeholder interests and regulatory requirements within the jurisdiction where the Company operates.

(n) **Additional requirements for Capital**

The Company has finite financial resources and no cash flow from producing assets and therefore will likely require additional financing in order to carry out its helium exploration and development activities.

The Company's ability to effectively implement its business strategy over time is likely to depend in part on its ability to raise additional funds. There can be no assurance that any such equity or debt funding will be available to the Company on favourable terms or at all. Failure to obtain appropriate financing on a timely basis could cause the Company to have an impaired ability to expend the capital necessary to undertake or complete drilling programs, forfeit its exploration interests in certain properties, and reduce or terminate its operations entirely.

The Company's capital requirements depend on numerous factors. Depending on the Company's ability to maintain its funds and/or generate income from its operations, the Company may require further financing in the future. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back exploration expenditure as the case may be.

(o) **COVID-19 Risk**

The Company's exploration and development projects may have to be put on hold, or operate at reduced capacity or subject to restriction due to COVID 19 and the associated measures put in place by national governments to control COVID 19, including social distancing measures and travel restrictions. This would cause delays to the Group's projects and in turn further delay the date at which the Company can generate revenues and make progress towards profitability. In addition, it is also likely to cause the Company to incur additional costs as machinery and staff may be required to remain idle whilst projects are on hold due to the government restrictions implemented in response to COVID 19. Such delays and additional costs may have a material adverse impact on the Group's financial condition and operations.

The impact of COVID 19 has had a materially adverse effect on the global economy and overall business sentiment, which has the potential to negatively impact the demand and price for commodities and have an impact on the financial position and prospects of the Company.

The Company's Share price may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19. The Directors are monitoring the situation closely and have considered the impact of COVID-19 on the Company's business and financial performance. However, the situation is continually evolving, and the consequences are therefore inevitably uncertain.

(p) **Limited History**

The Company has limited operating history and limited historical financial performance. No assurance can be given that the Company will achieve commercial viability through the successful exploration of the Projects. Until the Company is able to realise value from the Projects (or any other tenements the Company may acquire in the future), it is likely to incur ongoing operating losses.

(q) **Going Concern**

The ability of the Company to continue as a going concern is dependent on the successful completion of the Public Offer. The Directors have determined that the Public Offer funds will be sufficient to allow for the exploration and evaluation activities in accordance with its current plans and to provide the necessary working capital to meet its commitments for a period of at least 24 months from Admission. The Company may also look to complete future equity offerings in order to raise additional capital as the business progresses.

(r) **Potential Acquisitions**

The Company may make acquisitions of, or significant investments in, complementary companies or prospects. Any such transactions will be accompanied by risks commonly encountered in making such acquisitions.

(s) **Reliance on Key Personnel**

The Company's operational success will depend substantially on the continuing efforts of senior executives. The loss of services of one or more senior executives may have an adverse effect on the Company's operations. Furthermore, if the Company is unable to attract, train and retain key individuals and other highly skilled employees and consultants, its business may be adversely affected.

(t) **Commodity Price volatility**

If the Company achieves success leading to mineral production, the revenue it will derive through the sale exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors. Furthermore, international prices of various commodities are denominated in United States dollars, whereas the income and expenditure of the Company will be taken into account in Australian or Tanzanian currency, exposing the Company to the fluctuations and volatility of the rate of exchange between the United States dollar and the Australian dollar or Tanzanian Shillings as determined in international markets.

## 6.3 Mining Industry Risks

### (a) Exploration Risk

Potential investors should understand that mineral exploration and development are high-risk undertakings. There can be no assurance that exploration of the Projects, or any other tenements that may be acquired in the future, will result in the discovery of an economic deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

The future exploration activities of the Company may be affected by a range of factors including geological conditions, limitations on activities due to seasonal weather patterns, unanticipated operational and technical difficulties, industrial and environmental accidents, social licence to operate, changing government regulations and many other factors beyond the control of the Company.

The success of the Company will also depend upon the Company having access to sufficient development capital, being able to maintain title to its projects and obtaining all required approvals for its activities. In the event that exploration programmes prove to be unsuccessful this could lead to a diminution in the value of the Company's projects, a reduction in the cash reserves of the Company and possible relinquishment of the Company's projects.

The exploration costs of the Company are based on certain assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect the Company's viability.

### (b) Regulatory Risks

The Company's exploration and development activities are subject to extensive laws and regulations relating to numerous matters including resource licence consent, conditions including environmental compliance and rehabilitation, taxation, employee relations, health and worker safety, waste disposal, protection of the environment, native title and heritage matters, protection of endangered and protected species and other matters. The Company requires permits from regulatory authorities to authorise the Company's operations. These permits relate to exploration, development, production and rehabilitation activities.

Obtaining necessary permits can be a time consuming process and there is a risk that the Company will not obtain these permits on acceptable terms, in a timely manner or at all. The costs and delays associated with obtaining necessary permits and complying with these permits and applicable laws and regulations could materially delay or restrict the Company from proceeding with the development of a project or the operation or development of a mine. Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in material fines, penalties or other liabilities. In extreme cases, failure could result in suspension of the Company's activities or forfeiture of one or more of the tenements.

**(c) Operating and Development Risks**

The Company's ability to achieve production, development, operating cost and capital expenditure estimates on a timely basis cannot be assured.

The business of mining involves many risks and may be impacted by factors including ore tonnes, grade and metallurgical recovery, input prices (some of which are unpredictable and outside the control of the Company), overall availability of free cash to fund continuing development activities, labour force disruptions, cost overruns, changes in the regulatory environment and other unforeseen contingencies. Other risks also exist such as environmental hazards (including discharge of pollutants or hazardous chemicals), industrial accidents, occupational and health hazards, cave-ins and rock bursts. Such occurrences could result in damage to, or destruction of, production facilities, personal injury or death, environmental damage, delays in mining, increased production costs and other monetary losses and possible legal liability to the owner or operator of the mine. The Company may become subject to liability for pollution or other hazards against which it has not insured or cannot insure, including those in respect of past mining activities for which it was not responsible.

In addition, the Company's profitability could be adversely affected if for any reason its production and processing of or mine development is unexpectedly interrupted or slowed. Examples of events which could have such an impact include unscheduled plant shutdowns or other processing problems, mechanical failures, the unavailability of materials and equipment, pit slope failures, unusual or unexpected rock formations, poor or unexpected geological or metallurgical conditions, poor or inadequate ventilation, failure of mine communications systems, poor water condition, interruptions to gas and electricity supplies, human error and adverse weather conditions.

**(d) Mine Development Risk**

Possible future development of mining operations of the Projects is dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, receiving the necessary approvals from all relevant authorities and parties, seasonal weather patterns, unanticipated technical and operational difficulties encountered in extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services.

If the Company commences production of any of the Projects, its operations may be disrupted by a variety of risks and hazards which are beyond the control of the Company. No assurance can be given that the Company will achieve commercial viability through the development of the Projects. The risks associated with the development of a mine will be considered in full should the Projects reach that stage and will be managed with ongoing consideration of stakeholder interests.

**(e) Environmental**

The operations and proposed activities of the Company are subject to State and Federal laws and regulations concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment, particularly if advanced exploration or mine development proceeds. It is the Company's intention to conduct its activities to the required standard of environmental obligation, including compliance with all environmental laws.

Mining operations have inherent risks and liabilities associated with safety and damage to the environment and the disposal of waste products occurring as a result of mineral exploration and production. The occurrence of any such safety or environmental incident could delay production or increase production costs. Events, such as unpredictable rainfall, flood or bushfires may impact on the Company's ongoing compliance with environmental legislation, regulations and licences. Significant liabilities could be imposed on the Company for damages, clean-up costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous operations or non-compliance with environmental laws or regulations.

The disposal of mining and process waste and mine water discharge are under constant legislative scrutiny and regulation. There is a risk that environmental laws and regulations become even more onerous making the Company's operations more expensive.

Approvals are required for land clearing and for ground disturbing activities. Delays in obtaining such approvals can result in the delay to anticipated exploration programmes or mining activities.

(f) **Failure to Satisfy Expenditure Commitments**

The Tenements comprising the Projects are governed by the mining acts and regulations in Tanzania. Each granted Tenement is for a specific term and carries with it annual expenditure and reporting commitments, as well as other conditions requiring compliance. Consequently, the Company could lose title to or its interest in the tenements if conditions are not met or if insufficient funds are available to meet expenditure commitments.

(g) **Force Majeure**

The Company's projects now or in the future may be adversely affected by risks outside the control of the Company including labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions.

## 6.4 General Risks

The future prospects of the Company's business may be affected by circumstances and external factors beyond the Company's control. Financial performance of the Company may be affected by a number of business risks that apply to companies generally and may include economic, financial, market or regulatory conditions.

(a) **Reliance on Key Personnel**

The Company's operational success will depend substantially on the continuing efforts of senior executives. The loss of services of one or more senior executives may have an adverse effect on the Company's operations. Furthermore, if the Company is unable to attract, train and retain key individuals and other highly skilled employees and consultants, its business may be adversely affected.

(b) **Additional Requirements for Capital**

The Company's capital requirements depend on numerous factors. Depending on the Company's ability to maintain its funds and/or generate income from its operations, the Company may require further financing in the future. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back exploration expenditure as the case may be.

(c) **General Economic Climate**

Factors such as inflation, currency fluctuation, interest rates and supply and demand have an impact on operating costs, commodity prices and stock market prices. The Company's future revenues and securities price may be affected by these factors, as well as by fluctuations in the price of commodities, which are beyond the Company's control.

(d) **Changes in Legislation and Government Regulation**

Government legislation in Australia or any other relevant jurisdiction, including changes to the taxation system, may affect future earnings and relative attractiveness of investing in the Company. Changes in government policy or statutory changes may affect the Company and the attractiveness of an investment in it.

(e) **Competition for Projects**

The Company competes with other companies, including mineral exploration and production companies. Some of these companies have greater financial and other resources than the Company. As a result, such companies may be in a better position to compete for future business opportunities and there can be no assurance that the Company can effectively compete with these companies. In the event that the Company is not able to secure a new project or business opportunity this may have an adverse effect on the operations of the Company, its possible future profitability and the trading price of its securities, including the Securities offered under this Prospectus.

(f) **Commodity Price Volatility and Exchange Rate Risk**

If the Company achieves success leading to mineral production, the revenue it will derive through the sale exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors. Furthermore, international prices of various commodities are denominated in United States dollars, whereas the income and expenditure of the Company are and will be taken into account in Australian currency, exposing the Company to the fluctuations and volatility of the rate of exchange between the United States dollar and the Australian dollar as determined in international markets.

(g) **Market Conditions**

Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

- (i) general economic outlook;
- (ii) introduction of tax changes or other new legislation;
- (iii) interest rates and inflation rates;
- (iv) changes in investor sentiment toward particular market sectors;
- (v) the demand for, and supply of, capital; and
- (vi) terrorism or other hostilities.

The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular. Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company.

Applicants should be aware that there are risks associated with any securities investment. Securities listed on the stock market, and in particular securities of exploration companies experience extreme price and volume fluctuations that have often been unrelated to the operating performance of such companies. These factors may materially affect the market price of the Shares regardless of the Company's performance.

(h) **Climate Change Risks**

Climate change is a risk the Company has considered, particularly related to its operations in the mining industry. The climate change risks particularly attributable to the Company include:

- (i) the emergence of new or expanded regulations associated with the transitioning to a lower-carbon economy and market changes related to climate change mitigation. The Company may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage. These examples sit amongst an array of possible restraints on industry that may further impact the Company and its profitability. While the Company will endeavour to manage these risks and limit any consequential impacts, there can be no guarantee that the Company will not be impacted by these occurrences; and
- (ii) climate change may cause certain physical and environmental risks that cannot be predicted by the Company, including events such as increased severity of weather patterns and incidence of extreme weather events and longer term physical risks such as shifting climate patterns. All these risks associated with climate change may significantly change the industry in which the Company operates.

(i) **Currently No Market**

There is currently no public market for the Company's Shares, the price of its Shares is subject to uncertainty and there can be no assurance that an active market for the Company's Shares will develop or continue after the Offer.

The price at which the Company's Shares trade on ASX after listing may be higher or lower than the Offer price and could be subject to fluctuations in response to variations in operating performance and general operations and business risk, as well as external operating factors over which the Directors and the Company have no control, such as movements in mineral prices and exchange rates, changes to government policy, legislation or regulation and other events or factors.

There can be no guarantee that an active market in the Company's Shares will develop or that the price of the Shares will increase.

There may be relatively few or many potential buyers or sellers of the Shares on ASX at any given time. This may increase the volatility of the market price of the Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is above or below the price that Shareholders paid.



(j) **Reports regarding the Company and the Projects**

If securities or industry analysts do not publish or cease publishing research or reports about the Company, its business or its market, or if they change their recommendations regarding the Company's Securities adversely, the price of its Securities and trading volumes could be adversely affected.

The market for the Company's Securities trading on ASX may be influenced by any research or reports compiled by securities or industry analysts. If any of the analysts who may cover the Company and its products change previously disclosed recommendations on the Company or for that matter its competitors, the price of its Securities may be adversely affected.

(k) **If the Company's goodwill or intangible assets become impaired, it may be required to record a significant charge to earnings**

Under Generally Accepted Accounting Standards the Company reviews its intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually.

(l) **Litigation Risks**

The Company is exposed to possible litigation risks including landholder claims, tenure disputes, environmental claims, occupational health and safety claims and employee claims. Further, the Company may be involved in disputes with other parties in the future which may result in litigation. Any such claim or dispute if proven, may impact adversely on the Company's operations, financial performance and financial position. The Company is not currently engaged in any litigation.

(m) **Insurance**

The Company intends to insure its operations in accordance with industry practice. However, in certain circumstances the Company's insurance may not be of a nature or level to provide adequate insurance cover. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company.

Insurance of all risks associated with mineral exploration and production is not always available and where available the costs can be prohibitive.

(n) **Speculative Nature of Investment**

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus. Therefore, the Shares offered pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, returns of capital or the market value of the securities.



## 7. BOARD AND MANAGEMENT

### 7.1 Directors and Key Personnel

The names and details of the Directors in office at the date of this Prospectus are as set out below:

(a) **Justyn Wood – Chief Executive Officer and Executive Director**

A petroleum geophysicist and highly successful explorer, Justyn brings more than 25 years of E&P industry experience to Noble Helium.

Justyn has an outstanding track record of value creation with a global career in technical, managerial and directorship roles with majors and super-majors Chevron and Repsol and at juniors Hardman Resources and Jacka Resources Australia.

He has designed and executed numerous international frontier exploration projects and is recognised as having played key roles in unlocking the then frontier petroleum provinces of the East African Rift and the Guyana basins of NE South America.

As a proven contrarian opportunity finder and highly successful explorer, Justyn became aware of the importance of helium and the potential for a Tier-1 helium resource in the East African Rift System. Following years of extensive research, he has committed his full attention to applying his skills and experience to securing the global supply chain of this critical, high-value, rare and unique, technology-enabling gas.

Justyn holds a B.Sc App (Geophysics) from University of Queensland and a Grad Cert (App Fin & Inv) from Securities Institute of Australia and has completed director training at AICD.

Justyn is a member of SEG, AAPG and PESA.

Mr Wood will not be considered an independent director.

(b) **Shaun Scott – Non-Executive Chairperson**

B.A. (Rec Admin), B.Bus, CA

Shaun Scott is an experienced independent non-executive director on publicly listed and private company boards. Shaun's board experience includes non-executive director roles in the resources sector, training and education, alternative waste technology and the services industries.

As an executive Shaun was CEO of Arrow Energy Ltd and was instrumental in taking this business from a \$20 million coal seam gas explorer to a significant gas and energy producer and leader in the development of Queensland's LNG industry until Arrow's \$3.5 billion acquisition by Shell and Petro-China in 2010.

Shaun is a Chartered Accountant, whose corporate career involved financing, commercial and M&A activities in the mining, resources and energy sectors in Australia, the United States and Asia, negotiating and closing many billions of dollars of transactions.

At the board level Shaun has operated as Chairman and Non-Executive Director of a number of publicly listed companies and chaired numerous board sub-committees. Shaun has specific expertise and experience in business strategy, financing, negotiations, financial and risk management, executive remuneration, governance, and safety leadership.

Mr Scott will be considered an independent director.

(c) **Ariel (Eddie) King – Non-Executive Director**

Mr King holds a Bachelor of Commerce and Bachelor of Engineering (Mining Systems) from the University of Western Australia. His past experience includes being a manager for a boutique investment banking firm, where he specialised in the technical and financial analysis of global resource projects for equity research and acquisitions. He was also a representative for a stockbroking and corporate advisory firm where he specialised in providing corporate advisory services for micro-cap ASX-listed companies.

Mr King is currently a director of the following ASX listed entities: Queensland Pacific Metals (ASX: QPM), Eastern Iron (ASX: EFE), Ragnar Metals (ASX: RAG), M3 Mining (ASX: M3M) and Rubix Resources (ASX: RB6).

Mr King will be considered an independent director.

(d) **Prof Andrew Garnett – Non-Executive Director**

Prof Garnett is currently the Director of the University of Queensland's research Centre for Natural Gas (CNG), working closely with the main LNG project proponents in Queensland, Australia. The Centre aims to be a leading provider of a wide range of technical and social science research services in this unconventional sector. He is also research Director of the University's Carbon Capture Utilisation and Storage Program.

Andrew is a former non-executive Director of National Energy Resources Australia, an Australian government industry growth initiative and a former review for natural gas for the IEA's World Energy Outlook series. He is a current non-executive Director of the Australian Gas Industry Trust.

A former Shell and Schlumberger executive, Andrew has over 25 years' world-wide experience with oil majors in conventional and unconventional hydrocarbon exploration, appraisal and development projects.

Prior to joining the university, Andrew consulted widely on unconventional developments, most notably those with high GHG emissions footprints. A dual Australian-British citizen, he moved to Australia in 2007 and was director of a Schlumberger SPV (Carbon Store Australia Pty Ltd) and CEO and Project Director of ZeroGen Pty Ltd, a "clean coal" project.

He has worked with the Queensland government, Petroleum and Gas Inspectorate on Well Construction Codes and Health and Safety and with Industry on well Integrity Modelling.

Mr Garnett will be considered an independent director.

## 7.2 **Management and Consultants**

The Company is aware of the need to have sufficient management to properly supervise its business and the Board will continually monitor the management roles in the Company. As the business and the Company, require an increased level of involvement the Board will look to appoint additional management and/or consultants when and where appropriate to ensure proper management of the Company's business.

## 7.3 Disclosure of Interests

### 7.3.1 Interests of Directors

Other than as set out below or elsewhere in this Prospectus, no Director has, or had within two years before lodgement of this Prospectus with ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) property acquired or proposed to be acquired by the Company in connection with its formation or promotion of the Offer; or
- (c) the Offer,

and no amounts have been paid or agreed to be paid (in cash or securities or otherwise) and no benefits have been given or agreed to be given to any Director:

- (d) to induce him to become, or to qualify him as, a Director; or
- (e) for services rendered by him in connection with the formation or promotion of the Company or the Offer.

### 7.3.2 Security holdings of Directors

The Directors and their related entities have the following interests in Securities as at the date of this Prospectus:

Director	Shares	Options	% (undiluted) <sup>1</sup>	% (diluted) <sup>1</sup>
Justyn Wood <sup>2</sup>	70,000,000	-	53.3%	43.9%
Shaun Scott	-	-	-	-
Ariel (Eddie) King	-	-	-	-
Andrew Garnett	-	-	-	-

#### Notes:

- Figures calculated on the basis that the Company has 131,285,191 Shares and 28,277,778 Options on issued as at the date of this Prospectus.
- 35,000,000 Shares held indirectly by Wood Petroleum Exploration Pty Ltd, an entity associated with Mr Wood.

Based on the intentions of the Directors at the date of this Prospectus in relation to participation in the Public Offer, the Directors and their related entities will have the following interests in Securities on Admission:

#### Minimum Subscription

Director	Shares	Options <sup>1</sup>	% (undiluted) <sup>2</sup>	% (diluted) <sup>2</sup>
Justyn Wood <sup>3</sup>	70,000,000	-	41.7%	33.0%
Shaun Scott	-	4,000,000	-	1.9%
Ariel (Eddie) King	-	4,375,000	-	2.1%
Andrew Garnett	-	2,000,000	-	0.9%

### Maximum Subscription

Director	Shares	Options <sup>1</sup>	% (undiluted) <sup>2</sup>	% (diluted) <sup>2</sup>
Justyn Wood <sup>3</sup>	70,000,000	-	38.2%	30.6%
Shaun Scott	-	4,000,000	-	1.8%
Ariel (Eddie) King	-	4,375,000	-	1.9%
Andrew Garnett	-	2,000,000	-	0.9%

**Notes:**

1. Exercisable at \$0.25 on or before the date that is 30 months from the date of issue. These Options will be issued as reasonable remuneration for future services to be provided to the Company and will assist in ensuring that the interests of the Directors are aligned with those of Shareholders. The full terms and conditions of the Director Options are set out in Section 10.3.
2. Figures calculated on the basis that the Company will have 168,160,191 Shares and 43,977,778 Options on issue at Admission based on the Minimum Subscription and 183,160,191 Shares and 45,402,778 Options on issue at Admission based on the Maximum Subscription.
3. 35,000,000 Shares held indirectly by Wood Petroleum Exploration Pty Ltd, an entity associated with Mr Wood.

### 7.3.3 Directors remuneration

The below table sets out the proposed remuneration to be paid to the Directors. Other than as set out in the below table, the Company has not paid the Directors any other remuneration or provided any other interests since incorporation.

Director	Cash remuneration (excluding statutory superannuation) <sup>1,2</sup>
Justyn Wood <sup>3</sup>	\$195,000 per annum
Shaun Scott	\$75,000 per annum
Ariel (Eddie) King	\$48,000 per annum
Andrew Garnett	\$36,000 per annum

**Notes:**

1. Refer to the terms of the executive service agreements and letters of appointment between the Company and the Directors (as applicable) at Sections 9.2 and 9.3.
2. The Directors have also been issued a total of 10,375,000 options (exercisable at \$0.25 on or before the date that is 30 months from the date of issue and subject to vesting conditions) as part of their reasonable remuneration for future services to be provided to the Company. The full terms and conditions of the Director Options are set out in Section 10.3.
3. Since incorporation in 2015, Mr Wood has received fees totalling \$176,000 (plus GST) for services provided to the Company.

#### 7.4 Agreements with Directors or Related Parties

The Company's policy in respect of related party arrangements is:

- (a) a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- (b) for the Board to consider such a matter, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.

The Company has entered into the following related party transactions on arms' length terms:

- (a) an executive services agreement with Justyn Wood pursuant to which he is engaged as Executive Director and Chief Executive Officer of the Company;
- (b) a letter of appointment with Shaun Scott for his appointment as Non-Executive Chairperson;
- (c) a letter of appointment with Ariel (Eddie) King for his appointment as Non-Executive Director;
- (d) a letter of appointment with Andrew Garnett for his appointment as Non-Executive Director; and
- (e) deeds of indemnity, insurance and access with each of its Directors on standard terms.

Refer to Section 9 for further details of the material contracts to which the Company is party to.

## 8. CORPORATE GOVERNANCE

### 8.1 ASX Corporate Governance Council Principles and Recommendations

The Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. The Board is committed to administering the policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, the Company has adopted The Corporate Governance Principles and Recommendations (4<sup>th</sup> Edition) as published by ASX Corporate Governance Council (**Recommendations**).

In light of the Company's size and nature, the Board considers that the current board is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined below and the Company's full Corporate Governance Plan is available in a dedicated corporate governance information section of the Company's website ([noblehelium.com.au](http://noblehelium.com.au)).

### 8.2 Board of directors

The Board is responsible for corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. The goals of the corporate governance processes are to:

- (a) maintain and increase Shareholder value;
- (b) ensure a prudential and ethical basis for the Company's conduct and activities; and
- (c) ensure compliance with the Company's legal and regulatory objectives.

Consistent with these goals, the Board assumes the following responsibilities:

- (a) developing initiatives for profit and asset growth;
- (b) reviewing the corporate, commercial and financial performance of the Company on a regular basis;
- (c) acting on behalf of, and being accountable to, the Shareholders; and
- (d) identifying business risks and implementing actions to manage those risks and corporate systems to assure quality.

The Company is committed to the circulation of relevant materials to Directors in a timely manner to facilitate Directors' participation in the Board discussions on a fully-informed basis.

### 8.3 Composition of the Board

The Board should comprise Directors with a mix of qualifications, experience and expertise which will assist the Board in fulfilling its responsibilities, as well as assisting the Company in achieving growth and delivering value to shareholders.

In appointing new members to the Board, consideration must be given to the demonstrated ability and also future potential of the appointee to contribute to the ongoing effectiveness of the Board, to exercise sound business judgement, to commit the necessary time to fulfil the requirements of the role effectively and to contribute to the development of the strategic direction of the Company.

The composition of the Board is to be reviewed regularly against the Company's Board skills matrix prepared and maintained by the nominations committee to ensure the appropriate mix of skills and expertise is present to facilitate successful strategic direction and to deal with new and emerging business and governance issues.

Where practical, the majority of the Board should be comprised of non-executive Directors who can challenge management and hold them to account as well as represent the best interests of the Company and its shareholders as a whole rather than those of individual shareholders or interest groups. Where practical, at least 50% of the Board should be independent.

Prior to the Board proposing re-election of non-executive Directors, their performance will be evaluated by the remuneration and nomination committee to ensure that they continue to contribute effectively to the Board.

#### **8.4 Identification and management of risk**

The Board's collective experience will enable accurate identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

#### **8.5 Independent professional advice**

Subject to the Chairman's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

#### **8.6 Ethical standards**

The Board is committed to the establishment and maintenance of appropriate ethical standards.

#### **8.7 Remuneration arrangements**

The remuneration of an executive Director will be decided by the Board, without the affected executive Director participating in that decision-making process.

The total maximum remuneration of non-executive Directors is initially set by the Constitution and subsequent variation is by ordinary resolution of Shareholders in general meeting in accordance with the Constitution, the Corporations Act and the ASX Listing Rules, as applicable. The determination of non-executive Directors' remuneration within that maximum will be made by the Board having regard to the inputs and value to the Company of the respective contributions by each non-executive Director. The current amount has been set at an amount not to exceed \$250,000 per annum.

In addition, a Director may be paid fees or other amounts (i.e. subject to any necessary Shareholder approval, non-cash performance incentives such as Options) as the Directors determine where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director.

Directors are also entitled to be paid reasonable travelling, hotel and other expenses incurred by them respectively in or about the performance of their duties as Directors.

The Board reviews and approves the remuneration policy to enable the Company to attract and retain executives and Directors who will create value for Shareholders having consideration to the amount considered to be commensurate for a company of its size and level of activity as well as the relevant Directors' time, commitment and responsibility. The Board is also responsible for reviewing any employee incentive and equity-based plans including the appropriateness of performance hurdles and total payments proposed.

The remuneration committee assists the Board in monitoring and reviewing any matters of significance affecting the remuneration of the Board and employees of the Company.

## **8.8 Diversity policy**

The Board has adopted a diversity policy which provides a framework for the Company to achieve, amongst other things, a diverse and skilled workforce, a workplace culture characterised by inclusive practices and behaviours for the benefit of all staff, improved employment and career development opportunities for women and a work environment that values and utilises the contributions of employees with diverse backgrounds, experiences and perspectives.

## **8.9 Trading policy**

The Board has adopted a policy that sets out the guidelines on the sale and purchase of securities in the Company by its key management personnel (i.e. Directors and, if applicable, any employees reporting directly to the managing director). The policy generally provides that the written acknowledgement of the Chair (or the Board in the case of the Chair) must be obtained prior to trading.

## **8.10 External audit**

The Company in general meetings is responsible for the appointment of the external auditors of the Company, and the Board from time to time will review the scope, performance and fees of those external auditors.

## **8.11 Audit and risk committee**

The Company will have a separate audit and risk committee responsible for monitoring and reviewing any matters of significance affecting financial reporting and compliance, the integrity of the financial reporting of the Company, the Company's internal financial control system and risk management systems and the external audit function.

## **8.12 Departures from Recommendations**

Following admission to the Official List of ASX, the Company will be required to report any departures from the Recommendations in its annual financial report.

The Company's compliance and departures from the Recommendations as at the date of this Prospectus are set out on the following pages.



RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>PRINCIPLE 1: LAY SOLID FOUNDATIONS FOR MANAGEMENT AND OVERSIGHT</b>		
<b>Recommendation 1.1</b>  A listed entity should have and disclose a board charter setting out: <ul style="list-style-type: none"> <li>(a) the respective roles and responsibilities of its board and management; and</li> <li>(b) those matters expressly reserved to the board and those delegated to management.</li> </ul>	YES	<p>The Company has adopted a Board Charter that sets out the specific roles and responsibilities of the Board, the Chair and management and includes a description of those matters expressly reserved to the Board and those delegated to management.</p> <p>The Board Charter sets out the specific responsibilities of the Board, requirements as to the Board's composition, the roles and responsibilities of the Chairman and Company Secretary, the establishment, operation and management of Board Committees, Directors' access to Company records and information, details of the Board's relationship with management, details of the Board's performance review and details of the Board's disclosure policy.</p> <p>A copy of the Company's Board Charter, which is part of the Company's Corporate Governance Plan, is available on the Company's website.</p>
<b>Recommendation 1.2</b>  A listed entity should: <ul style="list-style-type: none"> <li>(a) undertake appropriate checks before appointing a director or senior executive, or putting someone forward for election as a director; and</li> <li>(b) provide security holders with all material information relevant to a decision on whether or not to elect or re-elect a director.</li> </ul>	YES	<ul style="list-style-type: none"> <li>(a) The Company has guidelines for the appointment and selection of the Board and senior executives in its Corporate Governance Plan. The Company's Remuneration and Nomination Committee Charter (in the Company's Corporate Governance Plan) requires the Nomination Committee (or, in its absence, the Board) to ensure appropriate checks (including checks in respect of character, experience, education, criminal record and bankruptcy history (as appropriate)) are undertaken before appointing a Director or senior executive, or putting someone forward for election, as a Director.</li> <li>(b) Under the Remuneration and Nomination Committee Charter, all material information relevant to a decision on whether or not to elect or re-elect a Director must be provided to security holders in the Notice of Meeting containing the resolution to elect or re-elect a Director.</li> </ul>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 1.3</b>  A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.	YES	<p>The Company's Remuneration and Nomination Committee Charter requires the Nomination Committee (or, in its absence, the Board) to ensure that each Director and senior executive is a party to a written agreement with the Company which sets out the terms of that Director's or senior executive's appointment.</p> <p>The Company has written agreements with each of its Directors and senior executives.</p>
<b>Recommendation 1.4</b>  The company secretary of a listed entity should be accountable directly to the board, through the chair, on all matters to do with the proper functioning of the board.	YES	<p>The Board Charter outlines the roles, responsibility and accountability of the Company Secretary. In accordance with this, the Company Secretary is accountable directly to the Board, through the Chair, on all matters to do with the proper functioning of the Board.</p>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<p><b>Recommendation 1.5</b></p> <p>A listed entity should:</p> <p>(a) have a diversity policy;</p> <p>(b) through its board or a committee of the board set measurable objectives for achieving gender diversity in the composition of its board, senior executives and workforce generally;</p> <p>(c) disclose in relation to each reporting period:</p> <p>(i) the measurable objectives set for that period to achieve gender diversity;</p> <p>(ii) the entity's progress towards achieving those objectives; and</p> <p>(iii) either:</p> <p>(A) the respective proportions of men and women on the board, in senior executive positions and across the whole workforce (including how the entity has defined "senior executive" for these purposes); or</p> <p>(B) if the entity is a "relevant employer" under the Workplace Gender Equality Act, the entity's most recent "Gender Equality Indicators", as defined in and published under that Act.</p> <p>(d) If the entity was in the S&amp;P / ASX 300 Index at the commencement of the reporting period, the measurable objective for achieving gender diversity in the composition of its board should be to have not less than 30% of its directors of each gender within a specified period.</p>	PARTIALLY	<p>(a) The Company has adopted a Diversity Policy which provides a framework for the Company to establish, achieve and measure diversity objectives, including in respect of gender diversity. The Diversity Policy is available, as part of the Corporate Governance Plan, on the Company's website.</p> <p>(b) The Diversity Policy allows the Board to set measurable gender diversity objectives, if considered appropriate, and to continually monitor both the objectives, if any have been set, and the Company's progress in achieving them.</p> <p>(c) The Board did not set measurable gender diversity objectives for the past financial period, because:</p> <p>(i) It is the Board's view that the existing Directors and senior executives have sufficient skill and experience to carry out the Company's plans; and</p> <p>(ii) if it became necessary to appoint any new Directors or senior executives, the Board considered the application of the measurable diversity objectives and determined that, given the small size of the Company and the Board, requiring specified objectives to be met, unduly limit the Company from applying the Diversity Policy as a whole and the Company's policy of appointing the best person for the job; and</p> <p>(iii) the respective proportions of men and women on the Board, in senior executive positions and across the whole organisation (including how the entity has defined "senior executive" for these purposes) for the past financial period is disclosed on the Company's website.</p> <p>The Company was not in the S&amp;P / ASX 300 Index at the commencement of the reporting period.</p>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<p><b>Recommendation 1.6</b></p> <p>A listed entity should:</p> <p>(a) have and disclose a process for periodically evaluating the performance of the board, its committees and individual directors; and</p> <p>(b) disclose for each reporting period, whether a performance evaluation has been undertaken in accordance with that process during or in respect of that period.</p>	YES	<p>(a) The Company's Nomination Committee (or, in its absence, the Board) is responsible for evaluating the performance of the Board, its committees and individual Directors on an annual basis. It may do so with the aid of an independent advisor. The process for this is set out in the Company's Corporate Governance Plan, which is available on the Company's website.</p> <p>(b) The Company's Corporate Governance Plan requires the Company to disclose whether or not performance evaluations were conducted during the relevant reporting period. The Company intends to complete performance evaluations in respect of the Board, its committees (if any) and individual Directors for each financial year in accordance with the above process.</p>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<p><b>Recommendation 1.7</b></p> <p>A listed entity should:</p> <p>(a) have and disclose a process for evaluating the performance of its senior executives at least once every reporting period; and</p> <p>(b) disclose for each reporting period whether a performance evaluation has been undertaken in accordance with that process during or in respect of that period.</p>	YES	<p>(a) The Company's Nomination Committee (or, in its absence, the Board) is responsible for evaluating the performance of the Company's senior executives on an annual basis. The Company's Remuneration Committee (or, in its absence, the Board) is responsible for evaluating the remuneration of the Company's senior executives on an annual basis. A senior executive, for these purposes, means key management personnel (as defined in the Corporations Act) other than a non-executive Director.</p> <p>The applicable processes for these evaluations can be found in the Company's Corporate Governance Plan, which is available on the Company's website.</p> <p>(b) The Company's Corporate Governance Plan requires the Company to disclose whether or not performance evaluations were conducted during the relevant reporting period. The Company intends to complete performance evaluations in respect of the senior executives (if any) for each financial year in accordance with the applicable processes.</p> <p>At this stage, due to the current size and nature of the existing Board and the magnitude of the Company's operations, the Company has not appointed any senior executives.</p>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>PRINCIPLE 2: STRUCTURE THE BOARD TO BE EFFECTIVE AND ADD VALUE</b>		
<p><b>Recommendation 2.1</b></p> <p><b>The board of a listed entity should:</b></p> <p>(a) have a nomination committee which:</p> <ul style="list-style-type: none"> <li>(i) has at least three members, a majority of whom are independent directors; and</li> <li>(ii) is chaired by an independent director,</li> </ul> <p>and disclose:</p> <ul style="list-style-type: none"> <li>(iii) the charter of the committee;</li> <li>(iv) the members of the committee; and</li> <li>(v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> <p>(b) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.</p>	PARTIALLY	<p>(a) The Company's Remuneration and Nomination Committee Charter provides for the creation of a Nomination Committee (if it is considered it will benefit the Company), with at least three members, a majority of whom are independent Directors, and which must be chaired by an independent Director.</p> <p>(b) The Company does not have a Nomination Committee as the Board considers the Company will not currently benefit from its establishment. In accordance with the Company's Board Charter, the Board carries out the duties that would ordinarily be carried out by the Nomination Committee under the Remuneration and Nomination Committee Charter, including the following processes to address succession issues and to ensure the Board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively:</p> <ul style="list-style-type: none"> <li>(i) devoting time at least annually to discuss Board succession issues and updating the Company's Board skills matrix; and</li> <li>(ii) all Board members being involved in the Company's nomination process, to the maximum extent permitted under the Corporations Act and ASX Listing Rules.</li> </ul>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 2.2</b>  A listed entity should have and disclose a board skill matrix setting out the mix of skills the board currently has or is looking to achieve in its membership.	PARTIALLY	The Board Charter provides that the Board is responsible for developing and implementing a skills matrix setting out the mix of skills and diversity that the Board has or is looking to achieve in its membership. The Board considers the current mix of skills and experience of members of the Board and its senior management is sufficient to meet the requirements of the Company. Although the skills, experience and expertise of each Director are available on the Company's website, the Company does not have a formal board skills matrix.
<b>Recommendation 2.3</b>  A listed entity should disclose: <ul style="list-style-type: none"> <li>(a) the names of the directors considered by the board to be independent directors;</li> <li>(b) if a director has an interest, position, affiliation or relationship of the type described in Box 2.3 of the ASX Corporate Governance Principles and Recommendation (4th Edition), but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position or relationship in question and an explanation of why the board is of that opinion; and</li> <li>(c) the length of service of each director</li> </ul>	YES	<ul style="list-style-type: none"> <li>(a) The Board Charter requires the disclosure of the names of Directors considered by the Board to be independent. The Company will disclose those Directors it considers to be independent in its Annual Report and on the Company's website. The Board considers the following Directors are independent: Ariel (Eddie) King, Prof Andrew Garnett and Shaun Scott.</li> <li>(b) There are no independent Directors who fall into this category. The Company will disclose in its Annual Report and ASX website any instances where this applies and an explanation of the Board's opinion why the relevant Director is still considered to be independent.</li> <li>(c) The Company's Annual Report will disclose the length of service of each Director, as at the end of each financial year.</li> </ul>
<b>Recommendation 2.4</b>  A majority of the board of a listed entity should be independent directors.	YES	The Company's Board Charter requires that, where practical, the majority of the Board should be independent.  The Board currently comprises a total of 4 directors, of whom 3 are considered to be independent. As such, independent directors are currently an independent majority of the Board.
<b>Recommendation 2.5</b>  The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.	YES	The Board Charter provides that, where practical, the Chair of the Board should be an independent Director and should not be the CEO/Managing Director.  The Chair of the Company is an independent Director and is not the CEO/Managing Director.

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 2.6</b>  A listed entity should have a program for inducting new directors and periodically reviewing whether there is a need for existing director to undertake professional development to maintain the skills and knowledge needed to perform their role as directors effectively.	YES	In accordance with the Company's Board Charter, the Board is responsible for procuring appropriate professional development opportunities for Directors to develop and maintain the skills and knowledge needed to perform their role as Directors efficiently. The Company Secretary is also responsible for facilitating the induction and professional development of Directors.
<b>PRINCIPLE 3: INSTILL A CULTURE OF ACTING LAWFULLY, ETHICALLY AND RESPONSIBLY</b>		
<b>Recommendation 3.1</b>  A listed entity should articulate and disclose its values.	YES	The Company is committed to conducting all of its business activities in accordance with the stated values set out in the Company's Code of Conduct available on the Company's website.
<b>Recommendation 3.2</b>  A listed entity should: <ul style="list-style-type: none"> <li>(a) have and disclose a code of conduct for its directors, senior executives and employees;</li> <li>(b) ensure that the board or a committee of the board is informed of any material breaches of that code by a director or senior executive; and</li> <li>(c) any other material breaches of that code that call into question the culture of the organisation.</li> </ul>	YES	The Company's Corporate Code of Conduct applies to all Directors, officers, contractors, senior executives and employees (Staff). Staff are under the obligation to ensure that the Code of Conduct is not breached. If any Staff notice any violations of the Conduct of Conduct, they must notify the Company Secretary or the Chair of the Company (if applicable). The Directors must ensure that reports of any breach of the Code of Conduct undergoes thorough investigations and that appropriate action is taken by the Company.
<b>Recommendation 3.3</b>  A listed entity should: <ul style="list-style-type: none"> <li>(a) have and disclose a whistleblower policy; and</li> <li>(b) ensure that the board or a committee of the board is informed of any material incidents reported under that policy.</li> </ul>	YES	<p>The Company's Whistleblower Policy (which forms part of the Corporate Governance Plan) is available on the Company's website. The Board is to be immediately notified of any reports made under the Whistleblower Policy concerning allegations of series misconduct.</p> <p>The Company Secretary is also required to prepare reports which contain a general summary of the number and types of incidents identified or complaints received through the Company's internal reporting processes, together with a description of the nature and results of any investigation conducted as a result of a reported incident or complaint. These reports are to be provided to the Board and the Audit and Risk Committee (if applicable).</p>



RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 3.4</b>  <b>A listed entity should:</b>  (a) have and disclose an anti-bribery and corruption policy; and  (b) ensure that the board or committee of the board is informed of any material breaches of that policy.	YES	The Company's Anti-Bribery and Corruption Policy (which forms part of the Corporate Governance Plan) is available on the Company's website. Any actual or suspected breach of the Anti-Bribery and Corruption Policy must be reported to the Company Secretary or the CEO/ Managing Director (if applicable). Reports can also be made in accordance with the Whistleblower Policy.

#### PRINCIPLE 4: SAFEGUARD INTEGRITY IN FINANCIAL REPORTING

<b>Recommendation 4.1</b>  The board of a listed entity should: (a) have an audit committee which: <ul style="list-style-type: none"> <li>(i) has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and</li> <li>(ii) is chaired by an independent director, who is not the chair of the board,</li> </ul> and disclose: <ul style="list-style-type: none"> <li>(iii) the charter of the committee;</li> <li>(iv) the relevant qualifications and experience of the members of the committee; and</li> <li>(v) in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> (b) if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.	PARTIALLY	(a) The Company does not have an Audit and Risk Committee. The Company's Corporate Governance Plan contains an Audit and Risk Committee Charter that provides for the creation of an Audit and Risk Committee (if it is considered it will benefit the Company), with at least three members, all of whom must be independent Directors, and which must be chaired by an independent Director who is not the Chair.  (b) The Company does not have an Audit and Risk Committee as the Board considers the Company will not currently benefit from its establishment. In accordance with the Company's Board Charter, the Board carries out the duties that would ordinarily be carried out by the Audit and Risk Committee under the Audit and Risk Committee Charter including the following processes to independently verify and safeguard the integrity of its financial reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner: <ul style="list-style-type: none"> <li>(i) the Board devotes time at annual Board meetings to fulfilling the roles and responsibilities associated with maintaining the Company's internal audit function and arrangements with external auditors; and</li> <li>(ii) all members of the Board are involved in the Company's audit function to ensure the proper maintenance of the entity and the integrity of all financial reporting.</li> </ul>
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RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 4.2</b>  The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.	YES	The Company's Audit and Risk Committee Charter requires the CEO and CFO (or, if none, the person(s) fulfilling those functions) to provide a sign off on these terms.  The Company intends to obtain a sign off on these terms for each of its financial statements in each financial year.
<b>Recommendation 4.3</b>  A listed entity should disclose its process to verify the integrity of any periodic corporate report it releases to the market that is not audited or reviewed by an external auditor.	YES	The process which is followed to verify the integrity of the Company's periodic corporate reports is tailored based on the nature of the relevant report, its subject matter and where it will be published. However, the Company seeks to adhere to the general principles set out in its Shareholder Communication Policy (which forms part of the Corporate Governance Plan) with respect to the preparation and verification of its corporate reporting.

**PRINCIPLE 5: MAKE TIMELY AND BALANCED DISCLOSURE**

<b>Recommendation 5.1</b>  A listed entity should have and disclose a written policy for complying with its continuous disclosure obligations under listing rule 3.1.	YES	The Company's Corporate Governance Plan contains a Continuous Disclosure Policy which sets out the processes the Company follows to comply with its continuous disclosure obligations under the ASX Listing Rules and other relevant legislation.  The Corporate Governance Plan, which incorporates the Continuous Disclosure Policy, is available on the Company website.
<b>Recommendation 5.2</b>  A listed entity should ensure that its board receives copies of all material market announcements promptly after they have been made.	YES	In accordance with the Company's Continuous Disclosure Policy (which forms part of the Corporate Governance Plan), the Board receives copies of all material market announcements promptly after they have been made.

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 5.3</b>  A listed entity that gives a new and substantive investor or analyst presentation should release a copy of the presentation materials on the ASX Market Announcements Platform ahead of the presentation.	YES	In accordance with the Company's Continuous Disclosure Policy (which forms part of the Corporate Governance Plan), any substantive written material or presentations made to institutions, stockbrokers or shareholders, which do not contain material information, will be placed on the Company's website prior to such presentations and will be sent to ASX.

**PRINCIPLE 6: RESPECT THE RIGHTS OF SECURITY HOLDERS**

<b>Recommendation 6.1</b>  A listed entity should provide information about itself and its governance to investors via its website.	YES	Information about the Company and its governance is available in the Corporate Governance Plan which can be found on the Company's website.
<b>Recommendation 6.2</b>  A listed entity should design and implement an investor relations program to facilitate effective two-way communication with investors.	YES	The Company has adopted a Shareholder Communications Policy which aims to promote and facilitate effective two-way communication with investors. The Shareholder Communications Policy outlines a range of ways in which information is communicated to shareholders and is available on the Company's website as part of the Company's Corporate Governance Plan.
<b>Recommendation 6.3</b>  A listed entity should disclose the policies and processes it has in place to facilitate and encourage participation at meetings of security holders.	YES	Shareholders are encouraged to participate at all general meetings and AGMs of the Company. Upon the despatch of any notice of meeting to Shareholders, the Company Secretary shall send out material stating that all Shareholders are encouraged to participate at the meeting.
<b>Recommendation 6.4</b>  A listed entity should ensure that all substantive resolutions at a meeting of security holders are decided by a poll rather than by a show of hands.	YES	All substantive resolutions at a meeting of security holders will be decided by a poll rather than by a show of hands.

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 6.5</b>  A listed entity should give security holders the option to receive communications from, and send communications to, the entity and its security registry electronically.	YES	<p>The Shareholder Communication Policy provides that security holders can register with the Company to receive email notifications when an announcement is made by the Company to the ASX, including the release of the Annual Report, half yearly reports and quarterly reports. Links are made available to the Company's website on which all information provided to the ASX is immediately posted.</p> <p>Shareholders queries can be made through the Company website or alternatively, shareholders may contact the Company Secretary.</p>

**PRINCIPLE 7: RECOGNISE AND MANAGE RISK**

<b>Recommendation 7.1</b>  The board of a listed entity should: <p>(a) have a committee or committees to oversee risk, each of which:</p> <ul style="list-style-type: none"> <li>(i) has at least three members, a majority of whom are independent directors; and</li> <li>(ii) is chaired by an independent director,</li> </ul> <p>and disclose:</p> <ul style="list-style-type: none"> <li>(iii) the charter of the committee;</li> <li>(iv) the members of the committee; and</li> <li>(v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</li> </ul> <p>(b) if it does not have a risk committee or committees that satisfy (a) above, disclose that fact and the process it employs for overseeing the entity's risk management framework.</p>	PARTIALLY	<p>(a) The Company does not have an Audit and Risk Committee. The Company's Corporate Governance Plan contains an Audit and Risk Committee Charter that provides for the creation of an Audit and Risk Committee (if it is considered it will benefit the Company), with at least three members, all of whom must be independent Directors, and which must be chaired by an independent Director.</p> <p>A copy of the Corporate Governance Plan is available on the Company's website.</p> <p>(b) The Company does not have an Audit and Risk Committee as the Board consider the Company will not currently benefit from its establishment. In accordance with the Company's Board Charter, the Board carries out the duties that would ordinarily be carried out by the Audit and Risk Committee under the Audit and Risk Committee Charter. Relevantly, the Board devotes time at quarterly Board meetings to fulfilling the roles and responsibilities associated with overseeing risk and maintaining the entity's risk management framework and associated internal compliance and control procedures.</p>
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RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>Recommendation 7.2</b>  <b>The board or a committee of the board should:</b>  (a) review the entity's risk management framework at least annually to satisfy itself that it continues to be sound and that the entity is operating with due regard to the risk appetite set by the board; and  (b) disclose in relation to each reporting period, whether such a review has taken place.	YES	(a) The Audit and Risk Committee Charter requires that the Audit and Risk Committee (or, in its absence, the Board) should, at least annually, satisfy itself that the Company's risk management framework continues to be sound and that the Company is operating with due regard to the risk appetite set by the Board.  (b) The Company's Risk Management Policy requires the Company to disclose at least annually whether such a review of the company's risk management framework has taken place.
<b>Recommendation 7.3</b>  <b>A listed entity should disclose:</b>  (a) if it has an internal audit function, how the function is structured and what role it performs; or  (b) if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its governance, risk management and internal control processes.	NO	(a) The Audit and Risk Committee Charter provides for the Audit and Risk Committee to monitor the need for an internal audit function.  (b) The Company does not have an internal audit function. The Board considers the process employed pursuant to the Audit and Risk Committee Charter and Risk Management Policy are sufficient for evaluating and continually improving the effectiveness of its governance, risk management and internal control processes given the size and complexity of the current business. The Board will assess on an ongoing basis whether it would be beneficial to appoint an internal auditor.
<b>Recommendation 7.4</b>  A listed entity should disclose whether it has any material exposure to environmental or social risks and, if it does, how it manages or intends to manage those risks.	YES	The Company's Risk Management Policy requires the Audit and Risk Committee (or, in its absence, the Board) to assist management determine whether the Company has any material exposure to environmental and/or social risks and, if it does, how it manages or intends to manage those risks.  The Company's Risk Management Policy requires the Company to disclose whether it has any material exposure to environmental and/or social sustainability risks and, if it does, how it manages or intends to manage those risks. The Company will disclose this information in its Annual Report (if applicable).

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>PRINCIPLE 8: REMUNERATE FAIRLY AND RESPONSIBLY</b>		
<p><b>Recommendation 8.1</b></p> <p>The board of a listed entity should:</p> <p>(a) have a remuneration committee which:</p> <p>(i) has at least three members, a majority of whom are independent directors; and</p> <p>(ii) is chaired by an independent director,</p> <p><b>and disclose:</b></p> <p>(iii) the charter of the committee;</p> <p>(iv) the members of the committee; and</p> <p>(v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</p> <p>(b) if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive.</p>	PARTIALLY	<p>(a) The Company does not have a Remuneration Committee. The Company's Corporate Governance Plan contains a Remuneration Committee and Nomination Committee Charter that provides for the creation of a Remuneration Committee (if it is considered it will benefit the Company), with at least three members, a majority of whom must be independent Directors, and which must be chaired by an independent Director.</p> <p>(b) The Company does not have a Remuneration Committee as the Board considers the Company will not currently benefit from its establishment. In accordance with the Company's Board Charter, the Board carries out the duties that would ordinarily be carried out by the Remuneration Committee under the Remuneration and Nomination Committee Charter. Relevantly, the Board devotes time at annual Board meetings to assess the level and composition of remuneration for directors and executives to ensure that such remuneration is appropriate and not excessive.</p>
<p><b>Recommendation 8.2</b></p> <p>A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors and other senior executives.</p>	YES	<p>The Company's Remuneration and Nomination Committee Charter requires the Remuneration Committee (or, in its absence, the Board) to set policies and practices regarding the remuneration of Directors and senior executives, which will be disclosed in the Annual Report.</p>

RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<p><b>Recommendation 8.3</b></p> <p>A listed entity which has an equity-based remuneration scheme should:</p> <p>(a) have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme; and</p> <p>(b) disclose that policy or a summary of it.</p>	YES	<p>(a) The Company does have an equity based remuneration scheme. The Remuneration and Nomination Committee Charter requires the Remuneration Committee (or, in its absence, the Board) to review, manage and disclose the policy (if any) under which participants to an employee incentive scheme of the Company may be permitted (at the discretion of the Company) to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the employee incentive scheme.</p> <p>The Company's Securities Trading Policy prohibits Key Management Personnel:</p> <p>(i) participating in equity-based incentive schemes from entering into any transaction which would have the effect of hedging or otherwise transferring to any other person the risk of any fluctuation in the value of any unvested entitlement in the Company's securities; and</p> <p>(ii) trading during Closed Periods in financial products issued or created over or in respect of the Company's securities.</p> <p>(b) The Securities Trading Policy is available, as part of the Corporate Governance Plan, on the Company's website.</p>



RECOMMENDATIONS (4 <sup>TH</sup> EDITION)	COMPLY	EXPLANATION
<b>ADDITIONAL RECOMMENDATIONS THAT APPLY ONLY IN CERTAIN CASES</b>		
<b>Recommendation 9.1</b>  A listed entity with a director who does not speak the language in which board or security holder meetings are held or key corporate documents are written should disclose the processes it has in place to ensure the director understands and can contribute to the discussions at those meetings and understands and can discharge their obligations in relation to those documents.	N/A	As set out in the Company's Board Charter (which forms part of the Corporate Governance Plan), in the event that a Director does not speak the language in which key corporate documents are written or Board or shareholder meetings are held, the Company will ensure that such documents are translated into the Director's native language, and a translator is present at all Board and shareholder meetings.
<b>Recommendation 9.2</b>  A listed entity established outside Australia should ensure that meetings of security holders are held at a reasonable place and time.	N/A	All Shareholder meetings will be held at a reasonable place and time for shareholders.
<b>Recommendation 9.3</b>  A listed entity established outside Australia, and an externally managed listed entity that has an AGM, should ensure that its external auditor attends its AGM and is available to answer questions from security holders relevant to the audit.	N/A	The Company's Auditor will attend the Company's Annual General Meeting and will be available to answer questions from shareholders in respect of the Company's audit.
<b>ADDITIONAL DISCLOSURES APPLICABLE TO EXTERNALLY MANAGED LISTED ENTITIES</b>		
<i>Alternative to Recommendation 1.1 for externally managed listed entities:</i>  The responsible entity of an externally managed listed entity should disclose: <ul style="list-style-type: none"> <li>(a) the arrangements between the responsible entity and the listed entity for managing the affairs of the listed entity; and</li> <li>(b) the role and responsibility of the board of the responsible entity for overseeing those arrangements.</li> </ul>	N/A	This Recommendation does not apply to the Company.
<i>Alternative to Recommendations 8.1, 8.2 and 8.3 for externally managed listed entities:</i>  An externally managed listed entity should clearly disclose the terms governing the remuneration of the manager.	N/A	This Recommendation does not apply to the Company.



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## 9. MATERIAL CONTRACTS

Set out below is a summary of the contracts to which the Company is a party that may be material or otherwise may be relevant to a potential investor in the Company. The whole of the provisions of the contracts are not repeated in this Prospectus and below is summary of the material terms only.

To fully understand all rights and obligations of a material contract, it would be necessary to review it in full and these summaries should be read in this light.

### 9.1 Joint Lead Manager Mandate

The Company has appointed Max Capital and Inyati Capital as joint lead managers to the Public Offer. A summary of the material terms and conditions of the Joint Lead Manager Mandate are set out below:

- (a) **(Services):** The services to be provided by the Joint Lead Managers to the Company include (but are not limited to) the following:
- (i) providing advice as to the appropriate timing, pricing and structuring of the Public Offer;
  - (ii) in conjunction with the Company's professional advisers, assisting with dealings with ASIC and ASX in relation to the Public Offer;
  - (iii) assisting the Company with its due diligence process in respect of the Public Offer;
  - (iv) assisting and providing input on the framework and content of this Prospectus;
  - (v) liaising as reasonably necessary with the Company's legal, accounting, taxation and other regulatory advisers;
  - (vi) subject to the satisfaction of the Company's spread requirements under the ASX Listing Rules, determining the allocation policy in connection with the Public Offer and co-ordinating the allocation process;
  - (vii) assisting in preparation of investor presentation materials and the marketing of the Public Offer;
  - (viii) holding and maintaining all necessary licences and authorisations;
  - (ix) conducting detailed internal sales briefings;
  - (x) organising investor roadshow presentations;
  - (xi) assisting with the Public Offer application process and other administration aspects;
  - (xii) providing strategic market advice as required; and
  - (xiii) providing such other assistance to the Company in connection to the Public Offer as agreed in writing from time to time.

(b) **(Fees):** The following fees are payable to the Lead Manager (and/or its nominees) pursuant to the Lead Manager Mandate:

- (i) a management fee of 1% (plus GST) of the total amount raised under the Offer (a total of \$70,000 based on the Minimum Subscription and \$100,000 based on the Maximum Subscription);
- (ii) a capital raising fee of 5% (plus GST) of the total amount raised under the Offer (a total of \$350,000 based on the Minimum Subscription and \$500,000 based on the Maximum Subscription); and
- (iii) a pro-rata number of unlisted Options, between 3,325,000 for the Minimum Subscription and 4,750,000 for the Maximum Subscription, which are exercisable at \$0.25 and expiring 30 months from the date of issue.

(c) **(Expenses):** The Company will reimburse the Joint Lead Managers periodically, upon request and subject to satisfactory evidence of such expenditure being provided, for all reasonable out-of-pocket and travel expenses (including any applicable GST) incurred by the Joint Lead Managers in connection with the Public Offer and the performance by the Joint Lead Managers of their role under the Joint Lead Manager Mandate. The Joint Lead Managers will seek approval from the Company for any one-off out of pocket or travel expense that exceeds \$1,000, such approval not to be unreasonably withheld.

(d) **(Termination):** The Joint Lead Manager Mandate may be terminated by the Joint Lead Managers or the Company at any time with or without cause upon 7 days written notice to the other party.

The Joint Lead Manager Mandate otherwise contains provisions considered standard for an agreement of its nature (including its scope of services, representations and warranties, confidentiality provisions and an indemnity in favour of the Joint Lead Managers).

Refer to Section 2.3 for further details regarding the Joint Lead Managers' interest in the Public Offer. The full terms and conditions of the Lead Manager Options are set out in Section 10.4.

## 9.2 Executive Service Agreement – Executive Director & Chief Executive Officer (Justyn Wood)

The Company has entered into an executive services agreement with Justyn Wood (Executive Services Agreement) on the following material terms:

- (a) **(Position):** Executive Director and Chief Executive Officer.
- (b) **(Appointment):** Mr Wood's appointment and commencement of the Executive Services Agreement is subject to the Company being admitted to the Official List of the ASX **(Commencement Date)**.
- (c) **(Term):** Mr Wood's engagement as Executive Director and Chief Executive Officer of the Company will commence on the Commencement Date and continue until the Executive Services Agreement is validly terminate in accordance with its terms.
- (d) **(Salary):** \$195,000 per annum (plus superannuation).
- (e) **(Bonus):** The Board may determine from time to time whether to pay Mr Wood a bonus in addition to his salary and what the quantum of that bonus will be, including issuing Shares, Options or other securities to Mr Wood (or his nominee).

- (f) **(Duties):** Mr Wood's duties under the Executive Services Agreement include:
- (i) driving operational development and performance;
  - (ii) assisting in the achievement of corporate goals and objectives;
  - (iii) development of short, medium and long term corporate strategies and planning to achieve the Company's vision and overall business objectives;
  - (iv) assessment of business opportunities of potential benefit to the Company;
  - (v) assist in proposals for major capital expenditure to ensure their alignment with corporation strategy and justification on economic grounds;
  - (vi) sustain competitive advantage through maximising available resources, encouraging staff commitment and strategically aligning the corporate culture with the organisation's goals and objectives;
  - (vii) undertake a role of company spokesperson;
  - (viii) ensure statutory, legal and regulatory compliance and comply with corporate policies and standards; and
  - (ix) ensure appropriate risk management practices and policies are in place.
- (g) **(Termination):** Each party may terminate the Executive Services Agreement without reasons by giving the other party three (3) months' written notice or salary in lieu of notice. The Company may terminate the Executive Services Agreement if, among other things, Mr Wood ceases or is otherwise prohibited from being a director in accordance with the Corporations Act, becomes bankrupt, is convicted of an indictable offence.
- (h) **(Expenses):** The Company will reimburse Mr Wood for all reasonable out of pocket expenses, as well as all reasonable travel and accommodation costs incurred by Mr Wood in the performance of his duties under the Executive Services Agreement.

The Executive Services Agreement otherwise contains provisions considered standard for an agreement of this nature.

Refer to Section 7.3.2 for details of Mr Wood's interests in Securities on Admission.

### 9.3

#### **Non-Executive Letter of Appointment – Non-Executive Chairman (Shaun Scott) and Non-Executive Directors (Ariel (Eddie) King and Andrew Garnett)**

The Company has entered into a letter of appointment with Shaun Scott for his appointment as Non-Executive Chairman and each of Ariel (Eddie) King and Andrew Garnett for their appointments as Non-Executive Directors (Letters of Appointment) on the following material terms:

- (a) **(Term):** The appointment of each of Messrs Scott, King and Garnett is subject to the provisions of the Constitution and the ASX Listing Rules relating to retirement by rotation and re-election of directors and their appoint will automatically cease at the end of any meeting at which they are not re-elected as a director of the Company by Shareholders.
- (b) **(Remuneration):** Mr Scott will be paid \$75,000 per annum (excluding superannuation), Mr King will be paid \$48,000 per annum (excluding superannuation) and Mr Garnett will be paid \$36,000 per annum (excluding superannuation).

- (c) **(Director Options):** In addition, Mr Scott will receive 4,000,000 Director Options, Mr King will receive 4,375,000 Director Options and Mr Garnett will receive 2,000,000 Director Options. The full terms and conditions of the Director Options are set out in Section 10.3.
- (d) **(Expenses):** Each of Messrs Scott, King and Garnett will be entitled to be reimbursed reasonable expenses incurred in performing their duties in accordance with the Letters of Appointment, including the cost of attending Board meeting, travel, legal and other fees, accommodation and entertainment where agreed to by the Board.

The Letters of Appointment otherwise contain terms and conditions that are considered standard for agreements of this nature.

#### 9.4 Deeds of indemnity, insurance and access

The Company has entered into a deed of indemnity, insurance and access with each of its Directors. Under these deeds, the Company agrees to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company. The Company is also required to maintain insurance policies for the benefit of the relevant officer and must also allow the officers to inspect board papers in certain circumstances.

#### 9.5 Marketing Services Agreement

The Company entered into a services agreement with S3 Consortium Pty Ltd (ACN 135 239 968) trading as Stocks Digital (S3 Consortium) pursuant to which S3 agreed to provide the Company digital marketing services (Marketing Services Agreement).

The material terms and conditions of the Marketing Services Agreement are summarised below:

- (a) **(Services):** S3 Consortium has agreed to provide the following services:
- (i) creation and management of investor awareness campaigns; and
  - (ii) drafting, reviewing and finalising research, commentary and investment thesis on the Company and distributing online to support investor awareness,
- (together, the **Services**).
- (b) **(Fees):** The Company agreed to pay S3 Consortium a total fee of \$375,000 plus GST. As agreed by the Company and S3 Consortium, the \$375,000 fee will be paid by the Company by the issue of 1,875,000 Shares at a deemed issue price of \$0.20 per Share. The GST component of \$37,500 will be paid in cash.
- The 1,875,000 Shares are expected to be subject to the 24 month mandatory escrow period in accordance with the ASX Listing Rules. S3 Consortium will enter into a restriction deed with the Company to give effect to these escrow restrictions.
- (c) **(Term):** The term of the Marketing Services Agreement is for a period of eighteen (18) months commencing on 21 January 2022 (**Term**).
- (d) **(Termination):** The Marketing Services Agreement will terminate three (3) months after the Term, irrespective of whether all services to be provided by S3 Consortium have been completed. The Marketing Services Agreement may be terminated earlier by either party:
- (i) in the event that the other party is in default of a term of the Marketing Services Agreement and that party fails to remedy the default within fourteen (14) days of being given notice of the alleged default;

- (ii) immediately if the other party is declared bankrupt, suffers an insolvency event or enters into a deed of arrangement with its creditors; or
- (iii) by giving not less than 45 days written notice of termination to the other party.

If the Marketing Services Agreement is terminated prior to the Service being provided then S3 Consortium shall be entitled, on a pro-rata basis, to payment for so much of the Services as have been completed at the date of termination together with any costs or third-party expenses reasonably incurred by S3 Consortium in anticipation of completion of the Services.

The Marketing Services Agreement otherwise contains provisions considered standard for an agreement of its nature.

## 9.6 Licence and Royalty Agreement

On 21 May 2021, the Company entered into a licence and royalty agreement (Licence and Royalty Agreement) with Global Helium Resources Pty Ltd (Licensor) pursuant to which the Licensor has granted the Company an exclusive licence to use the Atlas of Helium Occurrence and Exploration Fairway Analysis by C.J Ballentine, J.G.Gluyas, J.de Glanville and J.Wood, and updates (Atlas).

The Atlas was developed with the assistance of two of the world's leading helium researchers, Professor Chris Ballentine, Chair of Geochemistry at Oxford University and Professor Jon Gluyas, Chair of Geo-energy at Durham University (together, the Chief Geoscientists) and contains an atlas of large-scale helium resource potential in regions throughout the world.

The material terms and conditions of the Licence and Royalty Agreement are summarised below:

- (a) **(Licence):** The Licensor has agreed to grant the Company an exclusive licence to use the Atlas for the sole purpose of identifying locations with commercial helium potential and securing helium exploration, development and production opportunities.
- (b) **(Delivery and Installation):** The Licensor will deliver one secure, watermarked, password-encoded copy of the completed Atlas to the Licensee thirty (30) days after the Company is admitted to the Official List of ASX **(Delivery Date)**,
- (c) **(Term):** The Licence and Royalty Agreement commenced on 21 May 2021 **(Commencement Date)** and continues for a term of three (3) years, unless terminated earlier. The Company may, at its discretion, elect to extend the term of the Licence and Royalty Agreement for an addition two (2) years by written notice to the Licensor.
- (d) **(Fees):** In consideration of the licence provided under the Licence and Royalty Agreement, the Company has agreed to pay the Licensor:
  - (i) a non-refundable deposit of USD5,000 which was paid on the Commencement Date **(Deposit)**;
  - (ii) a licence fee of USD250,000 (less the Deposit and inclusive of the first annual Maintenance Fee described below), which is to be paid within five (5) business days of the Delivery Date **(Licence Fee)**;
  - (iii) an annual maintenance fee (indexed to CPI) of USD100.00, which is to be paid within 5 business days of the anniversary of the Delivery Date for the term of the Licence and Royalty Agreement **(Maintenance Fee)**. The Maintenance Fee is to be paid in consideration for all updates to the Atlas and assistance provided by the Chief Geoscientists in selecting focus areas from the Atlas and other ongoing obligations;
  - (iv) a 5% commission **(Commission)** on the capital gain, net costs and adjustment for CPI, from the sale of any helium asset owner or operated by the Company at any time subsequent to the Licence and Royalty Agreement, within a region identified by the Atlas as at the Delivery Date, or any subsequent updates as medium or high priority **(Helium Asset)**; and

- (v) a 5% royalty (**Royalty**) from the revenue that any Helium Asset produces.

The Company notes that the Commission and Royalty does not apply to any of the Company's Projects (being the current helium assets in Tanzania), or any assets the Company may acquire in the future in Tanzania. As at the date of this Prospectus, the Company has paid the Deposit. No other fees have been paid to the Licensor, however, it is anticipated that the Licence Fee will be paid after Admission on the Delivery Date.

- (e) (**Right of first refusal for the Atlas**): If the Licensor wants to transfer a part of, or its entire interest in, the rights to the Atlas, the Licensor must give a transfer notice to the Company offering to sell its entire interest in the Atlas.
- (f) (**Termination**): Either party may terminate the Licence and Royalty Agreement with immediate effect by giving written notice to the other party if the other party commits a material breach of any term of the Licence and Royalty Agreement and either:
- (i) the breach cannot be remedied; or
  - (ii) the other party fails to remedy that breach within a period of 30 business days after the other party has, or is deemed to have, received written notice requesting it to do so.

The Licensor may terminate the Licence and Royalty Agreement with immediate effect by giving written notice to the Company if the Company fails to pay any amount due under the Licence and Royalty Agreement on the due date for payment and remains in default not less than 40 business days after being notified in writing to make such payment, or if an insolvency event occurs in relation to the Company.

The Licence and Royalty Agreement otherwise contains provisions considered standard for an agreement of its nature.

## 9.7 Memorandum of Understanding – University of Dar es Salaam

On 19 January 2022, the Company's subsidiary, Rocket Tanzania Limited (**RTL**), has entered into an agreement with the University of Dar es Salaam (**UDSM**) which provides a framework pursuant to which RTL and UDSM work together to conduct helium gas exploration activities and undertake collaborative research and development activities (**MOU**).

The material terms and conditions of the MOU are as follows:

- (a) (**Purpose**): The common objective of both parties is to conduct helium gas exploration activities, developing research and industrial co-operation on the basis of sustainable partnership and mutual understanding. UDSM will provide its experts to affiliate with RTL for helium gas exploration and research activities on a consultancy basis.
- (b) (**Term**): The MOU shall remain effective for a period of four (4) years from the date of the MOU.
- (c) (**Termination**): Either party may terminate the MOU by giving ninety (90) days written notice to the other party.
- (d) (**Responsibilities of RTL**): RTL shall:
- (i) provide a reasonable use of facilities during the term of the MOU;
  - (ii) be responsible for all costs associated with RTL's projects;
  - (iii) reimburse UDSM for any out of pocket expenses and/or other business related expenses (upon UDSM providing supporting documentation) reasonably or necessarily incurred by RTL in performing its duties under the MOU;

- (iv) pay a consultation fee per UDSM guidelines for each UDSM engaged.
- (e) **(Responsibilities of UDSM):** UDSM shall:
  - (i) retain the ownership of the newly purchase portable mass spectrometer and be responsible for ongoing maintenance of the device;
  - (ii) not charge RTL for use of the device and shall give RTL first priority on the use of the device for future field/analysis works; and
  - (iii) require its staff to adhere to RTL' rules, regulations, policies and procedures and apply their initial, skills and experience in the best interests of RTL.
- (f) **(Intellectual Property):** In the course of consultancy and research collaboration under the MOU, UDSM will retain ownership of all forms of technology invented by its staff.

As at the date of this Prospectus, the Company has paid UDSM a total of USD64,912.50 for exploration and research services provided to the Company in accordance with the MOU.



## 10. ADDITIONAL INFORMATION

### 10.1 Rights to attaching to Shares

The following is a summary of the more significant rights attaching to Shares. This summary is not exhaustive and does not constitute a definitive statement of the rights and liabilities of Shareholders. To obtain such a statement, persons should seek independent legal advice.

Full details of the rights attaching to Shares are set out in the Constitution, a copy of which is available for inspection at the Company's registered office during normal business hours.

#### (a) General meetings

Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

Shareholders may requisition meetings in accordance with Section 249D of the Corporations Act and the Constitution.

#### (b) Voting rights

Subject to any rights or restrictions for the time being attached to any class or classes of Shares, at general meetings of Shareholders or classes of Shareholders:

- (i) each Shareholder entitled to vote may vote in person or by proxy, attorney or representative or if a determination has been made, by direct vote;
- (ii) on a show of hands, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder has one vote (even though he or she may represent more than one member); and
- (iii) on a poll, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder shall (or where a Direct Vote has been lodged), in respect of each fully paid Share held by him, or in respect of which he is appointed a proxy, attorney or representative, have one vote for the Share, but in respect of partly paid Shares, shall have such number of votes being equivalent to the proportion which the amount paid (not credited) is of the total amounts paid and payable in respect of those Shares (excluding amounts credited).

#### (c) Dividend rights

Subject to and in accordance with the Corporations Act, the Listing Rules, the rights of any preference Shareholders and to the rights of the holders of any shares created or raised under any special arrangement as to dividend, the Directors may from time to time declare a dividend to be paid to the Shareholders entitled to the dividend which shall be payable on all Shares according to the proportion that the amount paid (not credited) is of the total amounts paid and payable (excluding amounts credited) in respect of such Shares. The Directors may rescind a decision to pay a dividend if they decide, before the payment date, that the Company's financial position no longer justifies the payment.

The Directors may from time to time pay to the Shareholders any interim dividends as they may determine. No dividend shall carry interest as against the Company.

The Directors may set aside out of the profits of the Company any amounts that they may determine as reserves, to be applied at the discretion of the Directors, for any purpose for which the profits of the Company may be properly applied. Pending any application of the reserves, the Directors may invest or use the reserves in the business of the Company or in other investments as they think fit. Any amount set aside as a reserve is not required to be held separately from the Company's other assets and may be used by the Company or invested as the Directors think fit.

Subject to the ASX Listing Rules and the Corporations Act, the Company may, by resolution of the Directors, implement a dividend reinvestment plan on such terms and conditions as the Directors think fit and which provides for any dividend which the Directors may declare from time to time and payable on Shares which are participating Shares in the dividend reinvestment plan, less any amount which the Company shall either pursuant to the Constitution or any law be entitled or obliged to retain, be applied by the Company to the payment of the subscription price of Shares.

(d) **Restricted Securities**

The Company shall comply in all respects with the requirements of the Listing Rules with respect to Restricted Securities.

Without limiting the generality of the above:

- (i) a holder of Restricted Securities must not Dispose of, or agree or offer to Dispose of, the Securities during the escrow period applicable to those Securities except as permitted by the Listing Rules or the ASX;
- (ii) if the Restricted Securities are in the same class as quoted Securities, the holder will be taken to have agreed in writing that the Restricted Securities are to be kept on the Company's issuer sponsored subregister and are to have a Holding Lock applied for the duration of the escrow period applicable to those Securities;
- (iii) the Company will refuse to acknowledge any Disposal (including, without limitation, to register any transfer) of Restricted Securities during the escrow period applicable to those Securities except as permitted by the Listing Rules or the ASX;
- (iv) a holder of Restricted Securities will not be entitled to participate in any return of capital on those Securities during the escrow period applicable to those Securities except as permitted by the Listing Rules or the ASX; and
- (v) if a holder of Restricted Securities breaches a Restriction Deed or a provision of this Constitution restricting a Disposal of those Securities, the holder will not be entitled to any dividend or distribution, or to exercise any voting rights, in respect of those Securities for so long as the breach continues.

(e) **Winding-up**

If the Company is wound up, the liquidator may, with the authority of a special resolution of the Company, divide among the shareholders in kind the whole or any part of the property of the Company, and may for that purpose set such value as he considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders. No member is obliged to accept any Shares, securities or other assets in respect of which there is any liability.

The liquidator may, with the authority of a special resolution of the Company, vest the whole or any part of any such property in trustees upon such trusts for the benefit of the contributories as the liquidator thinks fit, but so that no Shareholder is compelled to accept any Shares or other securities in respect of which there is any liability.

(f) **Shareholder Liability**

As the Shares under the Prospectus are fully paid shares, they are not subject to any calls for money by the Directors and will therefore not become liable for forfeiture.

(g) **Transfer of Shares**

Subject to formal requirements, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of the Corporations Act or the ASX Listing Rules, the Shares are freely transferable.

(h) **Variation of Rights**

Pursuant to Section 246B of the Corporations Act, the Company may, with the sanction of a special resolution passed at a meeting of Shareholders vary or abrogate the rights attaching to Shares.

If at any time the share capital is divided into different classes of Shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three-quarters of the issued shares of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

(i) **Alteration of Constitution**

The Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. In addition, at least 28 days written notice specifying the intention to propose the resolution as a special resolution must be given.

## 10.2 Existing Options

The terms and conditions of the Existing Options are set out below:

(a) **Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph (i), the amount payable upon exercise of each Option is \$0.20 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (WST) on 16 September 2025 (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of Issue of Shares on Exercise**

Following the Exercise Date and within the time period specified by the ASX Listing Rules, the Company will:

- (i) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (ii) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (iii) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under (g)(ii) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares Issued on Exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Reconstruction of Capital**

If at any time the issued capital of the Company is reconstructed, all rights of a holder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(j) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(k) **Change in exercise price or number of underlying securities**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(l) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

### 10.3 Director Options

The terms and conditions of the Director Options are set out below:

(a) **Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

(b) **Exercise Price**

With the prior written consent of the Board and subject to paragraph (i), the amount payable upon exercise of each Option is \$0.25 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (WST) on the date that is thirty (30) months from the date of issue (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

Subject to paragraph (l), the Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of Issue of Shares on Exercise**

Following the Exercise Date and within the time period specified by the ASX Listing Rules, the Company will:

- (i) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (ii) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (iii) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under (g)(ii) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares Issued on Exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Reconstruction of Capital**

If at any time the issued capital of the Company is reconstructed, all rights of a holder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(j) **Participation in New Issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(k) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

(l) **Leaver**

Where the holder ceases employment, or their engagement is discontinued (for whatever reason), with the Company within two (2) years from the date of their employment or engagement, any unexercised Options will automatically lapse and be forfeited by the holder, unless the Board otherwise determines in its discretion.

#### 10.4 **Lead Manager Options and Advisor Options**

The terms and conditions of the Lead Manager Options and Advisor Options are set out below:

(a) **Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph (i), the amount payable upon exercise of each Option is \$0.25 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (WST) on the date that is thirty (30) months from the date of issue (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of issue of Shares on exercise**

Following the Exercise Date and within the time period specified by the ASX Listing Rules, the Company will:

- (i) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (ii) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (iii) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under (g)(ii) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares Issued on Exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Reconstruction of Capital**

If at any time the issued capital of the Company is reconstructed, all rights of a holder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(j) **Participation in New Issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(k) **Change in exercise price or number of underlying securities**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(l) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.



## 10.5 Summary of the Company's Employee Incentive Securities Plan

A summary of the terms of the Employee Incentive Securities Plan (**Incentive Plan**) is set out below:

- (a) (**Eligible Participant**): Eligible Participant means a person that:
- (i) is an "eligible participant" (as that term is defined in ASIC Class Order 14/1000) in relation to the Company or an Associated Body Corporate (as that term is defined in ASIC Class Order 14/1000); and
  - (ii) has been determined by the Board to be eligible to participate in the Incentive Plan from time to time.
- (b) (**Maximum Allocation**): The Company must not make an offer of Securities under the Incentive Plan, in reliance on ASIC Class Order 14/1000, where the total number of Shares to be issued under the offer (**Plan Shares**) (or that will be issued upon conversion of convertible securities to be issued (**Convertible Securities**), when aggregated with the number of Plan Shares that may be issued as a result of offers made under the Plan, in reliance on ASIC Class Order 14/1000, at any time during the previous 3 year period, would exceed 5% of the total number of Shares on issue at the date of the offer.

The maximum number of equity securities proposed to be issued under the Incentive Plan within a 3 year period from the date of this Prospectus for the purposes of the ASX Listing Rules is 36,632,038 Shares (representing approximately 20% of the issued Shares on completion of the Public Offer, assuming Maximum Subscription) (**ASX Limit**), meaning that the Company may issue up to the ASX Limit under the Incentive Plan, without seeking Shareholder approval and without reducing its placement capacity under ASX Listing Rule 7.1.

The ASX Limit is not intended to be a prediction of the actual number of securities to be issued under the Incentive Plan, simply a ceiling for the purposes of Listing Rule 7.2 (Exception 13(a)).

- (c) (**Purpose**): The purpose of the Incentive Plan is to:
- (i) assist in the reward, retention and motivation of Eligible Participants;
  - (ii) link the reward of Eligible Participants to Shareholder value creation; and
  - (iii) align the interests of Eligible Participants with shareholders of the Group (being the Company and each of its Associated Bodies Corporate), by providing an opportunity to Eligible Participants to receive an equity interest in the Company in the form of Securities.
- (d) (**Plan administration**): The Incentive Plan will be administered by the Board. The Board may exercise any power or discretion conferred on it by the Plan rules in its sole and absolute discretion. The Board may delegate its powers and discretion.
- (e) (**Eligibility, invitation and application**): The Board may from time to time determine that an Eligible Participant may participate in the Plan and make an invitation to that Eligible Participant to apply for Securities on such terms and conditions as the Board decides.

On receipt of an Invitation, an Eligible Participant may apply for the Securities the subject of the invitation by sending a completed application form to the Company. The Board may accept an application from an Eligible Participant in whole or in part. If an Eligible Participant is permitted in the invitation, the Eligible Participant may, by notice in writing to the Board, nominate a party in whose favour the Eligible Participant wishes to renounce the invitation.

- (f) (**Grant of Securities**): The Company will, to the extent that it has accepted a duly completed application, grant the Participant the relevant number of Securities, subject to the terms and conditions set out in the invitation, the Incentive Plan rules and any ancillary documentation required.

- (g) **(Terms of Convertible Securities):** Each 'Convertible Security' represents a right to acquire one or more Shares (for example, under an option or performance right), subject to the terms and conditions of the Incentive Plan.

Prior to a Convertible Security being exercised a Participant does not have any interest (legal, equitable or otherwise) in any Share the subject of the Convertible Security by virtue of holding the Convertible Security. A Participant may not sell, assign, transfer, grant a security interest over or otherwise deal with a Convertible Security that has been granted to them. A Participant must not enter into any arrangement for the purpose of hedging their economic exposure to a Convertible Security that has been granted to them.

- (h) **(Vesting of Convertible Securities):** Any vesting conditions applicable to the grant of Convertible Securities will be described in the invitation. If all the vesting conditions are satisfied and/or otherwise waived by the Board, a vesting notice will be sent to the Participant by the Company informing them that the relevant Convertible Securities have vested. Unless and until the vesting notice is issued by the Company, the Convertible Securities will not be considered to have vested. For the avoidance of doubt, if the vesting conditions relevant to a Convertible Security are not satisfied and/or otherwise waived by the Board, that Convertible Security will lapse.
- (i) **(Exercise of Convertible Securities and cashless exercise):** To exercise an Convertible Security, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of Convertible Securities (see below), pay the exercise price (if any) to or as directed by the Company, at any time prior to the earlier of any date specified in the vesting notice and the expiry date as set out in the invitation.

An invitation may specify that at the time of exercise of the Convertible Securities, the Participant may elect not to be required to provide payment of the exercise price for the number of Convertible Securities specified in a notice of exercise, but that on exercise of those Convertible Securities the Company will transfer or issue to the Participant that number of Shares equal in value to the positive difference between the Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities.

**Market Value** means, at any given date, the volume weighted average price per Share traded on the ASX over the 5 trading days immediately preceding that given date, unless otherwise specified in an invitation.

A Convertible Security may not be exercised unless and until that Convertible Security has vested in accordance with the Incentive Plan rules, or such earlier date as set out in the Plan rules.

- (j) **(Cashless exercise of Convertible Securities):** Subject to agreement by the Board, an Eligible Participant may elect not to be required to provide payment of the exercise price for the number of Convertible Securities specified in a notice of exercise but that on exercise of those Convertible Securities the Company will transfer or allot to the Eligible Participant that number of Shares equal in value to the positive difference between the then Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities (with the number of Shares rounded down to the nearest whole Share).

If the difference between the total exercise price otherwise payable for the Convertible Securities being exercised and the then Market Value of the Shares at the time of exercise and the exercise price is zero or negative, then the Eligible Participant will not be entitled to use the cashless exercise facility

- (k) **(Delivery of Shares on exercise of Convertible Securities):** As soon as practicable after the valid exercise of a Convertible Security by a Participant, the Company will issue or cause to be transferred to that Participant the number of Shares to which the Participant is entitled under the Plan rules and issue a substitute certificate for any remaining unexercised Convertible Securities held by that Participant.
- (l) **(Forfeiture of Convertible Securities):** Where a Participant who holds Convertible Securities ceases to be an Eligible Participant or becomes insolvent, all unvested Convertible Securities will automatically be forfeited by the Participant, unless the Board otherwise determines in its discretion to permit some or all of the Convertible Securities to vest.

Where the Board determines that a Participant has acted fraudulently or dishonestly, or wilfully breached his or her duties to the Group, the Board may in its discretion deem all unvested Convertible Securities held by that Participant to have been forfeited.

Unless the Board otherwise determines, or as otherwise set out in the Incentive Plan rules:

- (i) any Convertible Securities which have not yet vested will be forfeited immediately on the date that the Board determines (acting reasonably and in good faith) that any applicable vesting conditions have not been met or cannot be met by the relevant date; and
  - (ii) any Convertible Securities which have not yet vested will be automatically forfeited on the expiry date specified in the invitation.
- (m) **(Change of control):** If a change of control event occurs in relation to the Company, or the Board determines that such an event is likely to occur, the Board may in its discretion determine the manner in which any or all of the Participant's Convertible Securities will be dealt with, including, without limitation, in a manner that allows the Participant to participate in and/or benefit from any transaction arising from or in connection with the change of control event.
- (n) **(Rights attaching to Plan Shares):** All Plan Shares issued under the Incentive Plan, or issued or transferred to a Participant upon the valid exercise of a Convertible Security, will rank *pari passu* in all respects with the Shares of the same class. A Participant will be entitled to any dividends declared and distributed by the Company on the Plan Shares and may participate in any dividend reinvestment plan operated by the Company in respect of Plan Shares. A Participant may exercise any voting rights attaching to Plan Shares.
- (o) **(Disposal restrictions on Plan Shares):** If the invitation provides that any Plan Shares are subject to any restrictions as to the disposal or other dealing by a Participant for a period, the Board may implement any procedure it deems appropriate to ensure the compliance by the Participant with this restriction.

For so long as a Plan Share is subject to any disposal restrictions under the Plan, the Participant will not:

- (i) transfer, encumber or otherwise dispose of, or have a security interest granted over that Plan Share; or
  - (ii) take any action or permit another person to take any action to remove or circumvent the disposal restrictions without the express written consent of the Company.
- (p) **(Adjustment of Convertible Securities):** If there is a reorganisation of the issued share capital of the Company (including any subdivision, consolidation, reduction, return or cancellation of such issued capital of the Company), the rights of each Participant holding Convertible Securities will be changed to the extent necessary to comply with the ASX Listing Rules applicable to a reorganisation of capital at the time of the reorganisation.

If Shares are issued by the Company by way of bonus issue (other than an issue in lieu of dividends or by way of dividend reinvestment), the holder of Convertible Securities is entitled, upon exercise of the Convertible Securities, to receive an allotment of as many additional Shares as would have been issued to the holder if the holder held Shares equal in number to the Shares in respect of which the Convertible Securities are exercised.

Unless otherwise determined by the Board, a holder of Convertible Securities does not have the right to participate in a pro rata issue of Shares made by the Company or sell renounceable rights.

- (q) **(Participation in new issues):** There are no participation rights or entitlements inherent in the Convertible Securities and holders are not entitled to participate in any new issue of Shares of the Company during the currency of the Convertible Securities without exercising the Convertible Securities.
- (r) **(Amendment of Plan):** Subject to the following paragraph, the Board may at any time amend any provisions of the Incentive Plan rules, including (without limitation) the terms and conditions upon which any Securities have been granted under the Plan and determine that any amendments to the Plan rules be given retrospective effect, immediate effect or future effect.

No amendment to any provision of the Incentive Plan rules may be made if the amendment materially reduces the rights of any Participant as they existed before the date of the amendment, other than an amendment introduced primarily for the purpose of complying with legislation or to correct manifest error or mistake, amongst other things, or is agreed to in writing by all Participants.

- (s) **(Plan duration):** The Incentive Plan continues in operation until the Board decides to end it. The Board may from time to time suspend the operation of the Incentive Plan for a fixed period or indefinitely and may end any suspension. If the Incentive Plan is terminated or suspended for any reason, that termination or suspension must not prejudice the accrued rights of the Participants.

If a Participant and the Company (acting by the Board) agree in writing that some or all of the Securities granted to that Participant are to be cancelled on a specified date or on the occurrence of a particular event, then those Securities may be cancelled in the manner agreed between the Company and the Participant.

## 10.6 Litigation

As at the date of this Prospectus, the Company is not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against the Company.

## 10.7 Interests of Experts and Advisers

Other than as set out below or elsewhere in this Prospectus, no:

- (a) person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of the Company; or
- (c) underwriter (but not a sub-underwriter) to the issue or a financial services licensee named in this Prospectus as a financial services licensee involved in the issue,

holds, or has held within the two years before lodgement of this Prospectus with ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) property acquired or proposed to be acquired by the Company in connection with its formation or promotion of the Offers; or
- (c) the Offers,

and no amounts have been paid or agreed to be paid (in cash or securities or otherwise) and no benefits have been given or agreed to be given to any Director:

- (a) to induce him to become, or to qualify him as, a Director; or
- (b) for services rendered by him in connection with the formation or promotion of the Company or the Offers.

Netherland, Sewell & Associates, Inc. (Houston, Texas) has acted as Technical Expert and has prepared the Independent Technical Expert's Report which is included in Annexure A of this Prospectus. The Company estimates it will pay Netherland, Sewell & Associates, Inc. (Houston, Texas) a total of \$50,000 (GST not applicable) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Netherland, Sewell & Associates, Inc. (Houston, Texas) has not received any fees from the Company for any other services.

Mawalla Advocates (Tanzania) has prepared the Solicitor's Report on Tenements and Company Standing included in Annexure B of this Prospectus. The Company estimates it will pay Mawalla Advocates (Tanzania) a total of up to \$18,000 (excluding GST and disbursements) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Mawalla Advocates (Tanzania) has not received fees from the Company for any other services.

Hall Chadwick WA Audit Pty Ltd has acted as Investigating Accountant and has prepared the Independent Limited Assurance Report which is included in Annexure C of this Prospectus. The Company estimates it will pay Hall Chadwick WA Audit Pty Ltd a total of \$12,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Hall Chadwick WA Audit Pty Ltd has not received fees from the Company for any other services other than the audit services noted below.

Hall Chadwick WA Audit Pty Ltd has acted as auditor to the Company and has audited the financial statements for the years ended 30 June 2020 and 30 June 2021 and has reviewed the financial statements for the period ended 31 December 2021. The Company estimates it will pay Hall Chadwick WA Audit Pty Ltd a total of \$15,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Hall Chadwick WA Audit Pty Ltd has not received any fees from the Company for any other services other than the non-audit services noted above.

Nova Legal Pty Ltd has acted as the solicitors to the Company in relation to the Offers. The Company estimates it will pay Nova Legal Pty Ltd up to \$100,000 (excluding GST and disbursements) for these services. Subsequent fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with ASIC, Nova Legal Pty Ltd has not received any fees from the Company for any other services.

Max Capital Pty Ltd and Inyati Capital Pty Ltd have acted as joint lead managers to the Public Offer and for this are entitled to be paid fees in accordance with the Joint Lead Manager Mandate summarised in Section 9.1. Max Capital Pty Ltd and Inyati Capital Pty Ltd also received a total of 5,250,000 Options (exercisable at \$0.20 expiring 16 September 2025) as consideration for services provided in respect of the Seed Raising. During the 24 months preceding lodgement of this Prospectus with ASIC, neither Max Capital Pty Ltd or Inyati Capital Pty Ltd have received any fees from the Company for any other services.

Kornbluth Helium Consulting, LLC has acted as Independent Market Expert to the Company and has prepared the Independent Market Report which is included at Section 4 of this Prospectus. The Company estimates it will pay Kornbluth Helium Consulting, LLC a total of US\$15,000 for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Kornbluth Helium Consulting, LLC has not received any fees from the Company for any other services.

Automic Pty Ltd has been appointed to conduct the Company's share registry functions and to provide administrative services in respect to the processing of Applications received pursuant to this Prospectus and will be paid for these services on standard industry terms and conditions.

## 10.8 Consents

Chapter 6D of the Corporations Act imposes a liability regime on the Company (as the offer or of the Shares), the Directors, any underwriters, persons named in the Prospectus with their consent having made a statement in the Prospectus and persons involved in a contravention in relation to the Prospectus, with regard to misleading and deceptive statements made in the Prospectus. Although the Company bears primary responsibility for the Prospectus, the other parties involved in the preparation of the Prospectus can also be responsible for certain statements made in it.

Each of the parties referred to in this Section:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this Section;
- (b) in light of the above, only to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that party as specified in this Section; and
- (c) has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Netherland, Sewell & Associates, Inc. (Houston, Texas) has given its written consent to be named as Independent Technical Expert in this Prospectus and to the inclusion of the Independent Technical Expert's Report in Annexure A of this Prospectus, in the form and context in which the information and report is included. Netherland, Sewell & Associates, Inc. (Houston, Texas) has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

Mawalla Advocates (Tanzania) has given its written consent to being named as the mining solicitors to the Company in respect of the preparation of the Solicitor's Report on Tenements included in Annexure B, in the form and context in which the information and report is included. Mawalla Advocates (Tanzania) has not withdrawn its consent prior to lodgement of this Prospectus with ASIC.

Hall Chadwick WA Audit Pty Ltd has given its written consent to being named as Investigating Accountant and to the inclusion of Independent Limited Assurance Report in Annexure C of this Prospectus, in the form and context in which the information and report is included. Hall Chadwick WA Audit Pty Ltd has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

Hall Chadwick WA Audit Pty Ltd has given its written consent to being named as auditor of the Company in this Prospectus and the inclusion of the audited financial information of the Company contained in Section 5 of this Prospectus, in the form and context in which the information is included.

Nova Legal Pty Ltd has given its written consent to being named as the solicitors to the Company in relation to the Offers in this Prospectus, in the form and context in which it has named. Nova Legal Pty Ltd has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.



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Max Capital Pty Ltd and Inyati Capital Pty Ltd have given their written consent to being named in this Prospectus as joint lead managers to the Public Offer, in the form and context in which it has named. Neither Max Capital Pty Ltd or Inyati Capital Pty Ltd have withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

Kornbluth Helium Consulting, LLC has given its written consent to being named as Independent Market Expert to the Company in relation to the Offers in this Prospectus, in the form and context in which it has named and the inclusion of the Independent Market Report in Section 4. Kornbluth Helium Consulting, LLC has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

Automic Pty Ltd has given its written consent to being named as share registry of the Company in this Prospectus, in the form and context in which it has named. Automic Pty Ltd has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

## 10.9 Expenses of the Public Offer

The total cash expenses of the Public Offer (excluding GST) are estimated to be approximately \$725,000 at Minimum Subscription and \$910,000 at Maximum Subscription and are expected to be applied towards the items set out in the table below:

Item of Expenditure	Minimum Subscription (\$7,000,000)	Maximum Subscription (\$10,000,000)
ASIC fees	\$3,206	\$3,206
ASX fees	\$102,375	\$105,668
Lead Manager fees <sup>1</sup>	\$420,000	\$600,000
Legal fees <sup>2,3</sup>	\$118,000	\$118,000
Independent Technical Expert's fees <sup>2</sup>	\$50,000	\$50,000
Investigating Accountant's fees <sup>2</sup>	\$12,000	\$12,000
Auditor's fees <sup>2</sup>	\$15,000	\$15,000
Share registry fees	\$3,000	\$3,000
Miscellaneous	\$1,419	\$3,126
<b>Total</b>	<b>\$725,000</b>	<b>\$910,000</b>

### Notes:

1. Refer to Section 9.1 for a summary of the fees payable to the Joint Lead Managers under the Joint Lead Manager Mandate.
2. Refer to Section 10.7 for details regarding the interests of experts and advisers.
3. Includes fees payable in respect of the preparation of the Solicitor's Report on Tenements.

## 10.10 Continuous disclosure obligations

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in Section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Company's securities.

Price sensitive information will be publicly released through ASX before it is disclosed to shareholders and market participants. Distribution of other information to shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

## 10.11 Electronic Prospectus

Pursuant to ASIC Regulatory Guide 107, ASIC has exempted compliance with certain provisions of the Corporations Act to allow distribution of an electronic prospectus and electronic application form on the basis of a paper prospectus lodged with the ASIC, and the publication of notices referring to an electronic prospectus or electronic application form, subject to compliance with certain conditions.

If you have received this Prospectus as an electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the Application Form. If you have not, please contact the Company and the Company will send you, for free, either a hard copy or a further electronic copy of this Prospectus or both. Alternatively, you may obtain a copy of this Prospectus from the website of the Company at [noblehelium.com.au](http://noblehelium.com.au).

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

## 10.12 Financial Forecasts

The Directors have considered the matters set out in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

## 10.13 Clearing House Electronic Sub-Register System (CHES) and Issuer Sponsorship

The Company will apply to participate in CHES, for those investors who have, or wish to have, a sponsoring stockbroker. Investors who do not wish to participate through CHES will be issuer sponsored by the Company.

Electronic sub-registers mean that the Company will not be issuing certificates to investors. Instead, investors will be provided with statements (similar to a bank account statement) that set out the number of Shares issued to them under this Prospectus. The notice will also advise holders of their Holder Identification Number or Security Holder Reference Number and explain, for future reference, the sale and purchase procedures under CHES and issuer sponsorship.

Electronic sub-registers also mean ownership of securities can be transferred without having to rely upon paper documentation. Further monthly statements will be provided to holders if there have been any changes in their security holding in the Company during the preceding month.

## 10.14 Privacy statement

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

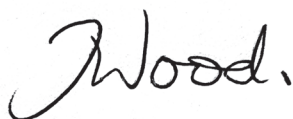
You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information is governed by legislation including the *Privacy Act 1988* (as amended), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Shares, the Company may not be able to accept or process your application.

## 11. DIRECTOR'S AUTHORISATION

This Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors.

In accordance with Section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with the ASIC.



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**Justyn Wood**  
**Chief Executive Officer**  
**For and on behalf of Noble Helium Limited**

## 12. GLOSSARY

Where the following terms are used in this Prospectus they have the following meanings:

**\$** means an Australian dollar.

**Admission** means admission of the Company to the Official List following completion of the Public Offer.

**Advisor Options** means Options on the terms and conditions set out in Section 10.4.

**Applicant** means a person who submits an Application Form.

**Application Form** means the application form attached to or accompanying this Prospectus relating to the Public Offer.

**Application Monies** means application monies for Shares under the Public Offer received and banked by the Company.

**Applications** means completed Application Forms submitted to and received by the Company accompanied by Application Monies.

**ASIC** means Australian Securities & Investments Commission.

**ASX** means ASX Limited (ACN 008 624 691) or the financial market operated by it as the context requires.

**ASX Listing Rules** or **Listing Rules** means the official listing rules of ASX.

**Board** means the board of Directors as constituted from time to time.

**Closing Date** means the closing date of the Public Offer as set out in the indicative timetable in the Key Offer Information at the commencement of this Prospectus (subject to the Company reserving the right to extend the Closing Date or close the Public Offer early).

**Company** means Noble Helium Limited (ACN 603 664 268).

**Constitution** means the constitution of the Company.

**Corporations Act** means the Corporations Act 2001 (Cth).

**Corporate Governance Plan** means the corporate governance plan adopted by the Company which contains the Company's corporate governance policies.

**Directors** means the directors of the Company at the date of this Prospectus.

**Director Options** means Options on the terms and conditions set out in Section 10.3.

**Existing Options** means Options on the terms and conditions set out in Section 10.2.

**Prospecting Licence Applications** means applications for prospecting licences which comprise the Eyasi Basin Project and the Manyara Basin Project.

**Exposure Period** means the period of 7 days after the date of lodgement of this Prospectus, which period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act.

**Generally Accepted Accounting Standards** means the accounting standards approved under the Corporations Act being the Australian Accounting Standards adopted by the Australian Accounting Standards Board.

**Helium Prospective Volumes** has the meaning given in the Independent Expert's Report

**Independent Expert's Report** means the report prepared by Netherland, Sewell & Associates Inc. and included in Annexure A.

**Independent Limited Assurance Report** means the report prepared by

**Independent Market Report** means the report prepared by Kornbluth Helium Consulting, LLC and included at Section 4.

**Lead Manager Options** means Options on the terms and conditions set out in Section 10.4.

**Solicitor's Reports on Tenements** means the solicitor's report completed by Mawalla Advocates on the Tenements as set out in Annexure B.

**Maximum Subscription** has the meaning given in Section 2.1.2.

**Minimum Subscription** has the meaning specified in Section 2.1.1.

**Offer Conditions** means the conditions of the Public Offer as set out in Section 2.2.

**Official List** means the official list of ASX.

**Official Quotation** means official quotation by ASX in accordance with the ASX Listing Rules.

**Option** means an option to acquire a Share.

**Option Holder** means a holder of an Option.

**Projects** means the North Rukwa Basin Project, North Nyasa Basin Project, Eyasi Basin Project and Manyara Basin Project, as described in Section 3.5.

**Prospectus** means this prospectus.

**Recommendations** means the 4th Edition of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations.

**Related Party** has the meaning ascribed to that term as set out in the Corporations Act and the Listing Rules.

**Section** means a section of this Prospectus.

**Securities** means any securities, including Shares and Options, issued or granted by the Company.

**Seed Raising** means the 17,777,778 Shares issued at an issue price of \$0.09 each, together with 17,777,778 free-attaching Options pursuant to a seed raising conducted by the Company in September 2021 whereby the Company raised a total of \$1,600,000 (before costs).

**Share** means a fully paid ordinary share in the capital of the Company.

**Shareholder** means a holder of Shares.

**Tanzania** means the United Republic of Tanzania

**Tenements** means the tenements comprising the Projects as set out in the table in Section 3.5.

**Unrisked Prospective Helium Volume** has the meaning given in the Independent Expert's Report.

**USD** means a United States dollar.

**WST** means Western Standard Time, being the time in Perth, Western Australia.

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# ANNEXURE A

INDEPENDENT TECHNICAL EXPERT'S REPORT

**ESTIMATES**  
of  
**UNRISKED GROSS (100 PERCENT)**  
**PROSPECTIVE HELIUM VOLUMES**  
for  
**LEADS**  
located in the  
**LAKE RUKWA AREA, TANZANIA**  
as of  
**FEBRUARY 1, 2022**

**COMPETENT PERSON'S REPORT**

Prepared for  
**NOBLE HELIUM LIMITED**



February 4, 2022

Mr. Justyn Wood  
Noble Helium Limited  
Level 1, 67 Lytton Road  
East Brisbane QLD 4169  
Australia

Dear Mr. Wood:

In accordance with your request, we have estimated the undiscovered original gas-in-place (OGIP) and unrisked gross (100 percent) prospective helium volumes, as of February 1, 2022, for leads located in the Lake Rukwa Area, Tanzania. We completed our evaluation on or about the date of this letter. The prospective volumes in this Competent Person's Report (report) are for helium, which are not hydrocarbons. However, we have used the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE) as the framework to classify these helium volumes as "prospective". For reference, the 2018 PRMS definitions of reserves and resources are presented immediately following this letter. Following the definitions are certificates of qualification for the primary evaluators who contributed to this report and a list of abbreviations used in this report. It is our understanding that Noble Helium Limited (Noble Helium) is planning to file an initial public offering on the Australian Securities Exchange (ASX) and will include a copy of this report in the prospectus to be filed as part of the listing process.

For the purposes of this report, prospective helium volumes are the estimated quantities of helium that may potentially be recovered by the application of future development projects related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable helium. The prospective helium volumes included in this report should not be construed as petroleum reserves, petroleum contingent resources, or petroleum prospective resources; they represent exploration opportunities and quantify the development potential in the event a helium discovery is made. The undiscovered accumulations assessed in this report have been subclassified as leads. The 2018 PRMS defines a prospect as a project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target, a lead as a project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be subclassified as a prospect, and a play as a project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects. A geologic risk assessment was performed for these leads, as discussed in subsequent paragraphs. This report does not include economic analysis for these leads. Based on analogous field developments, it appears that, assuming a discovery is made, the unrisked best estimate prospective helium volumes in this report have a reasonable chance of being economically viable.

Totals of unrisked prospective helium volumes beyond the lead level are not reflective of volumes that can be expected to be recovered and are shown for convenience only. Because of the geologic risk associated with each lead, meaningful totals beyond this level can be defined only by summing risked prospective helium volumes. Such risk is significant.

We estimate the undiscovered OGIP and the unrisked gross (100 percent) prospective helium volumes for these leads, along with the probability of geologic success ( $P_g$ ), as of February 1, 2022, to be:

Lead/Reservoir	Undiscovered OGIP <sup>(1)</sup> (BCF)				Unrisked Gross (100%) Prospective Helium Volumes (BCF)				$P_g$ (%)
	Low Estimate	Best Estimate	High Estimate	Mean	Low Estimate	Best Estimate	High Estimate	Mean	
Chilichili									
Upper Lake Beds	12.9	40.2	127.1	60.0	0.2	1.3	5.5	2.3	16
Lower Lake Beds	10.9	33.0	102.7	48.3	0.2	1.0	4.1	1.8	16
Galula	10.0	33.8	115.2	53.5	0.2	1.0	4.6	2.0	16
Karoo	19.2	68.9	264.3	118.9	0.4	2.1	10.2	4.4	18

Lead/Reservoir	Undiscovered OGIP <sup>(1)</sup> (BCF)				Unrisked Gross (100%) Prospective Helium Volumes (BCF)				P <sub>g</sub> (%)
	Low Estimate	Best Estimate	High Estimate	Mean	Low Estimate	Best Estimate	High Estimate	Mean	
Dagaa									
Galula	4.3	16.2	62.9	28.0	0.1	0.5	2.5	1.1	10
Gege									
Upper Lake Beds	259.9	685.4	1,760.4	891.4	4.3	21.1	75.0	33.2	13
Lower Lake Beds	224.9	572.4	1,448.9	744.4	3.9	18.0	61.4	27.1	13
Galula	144.5	437.7	1,321.3	620.9	2.6	13.2	53.8	23.1	12
Karoo	21.9	68.1	219.9	102.5	0.4	2.1	8.9	3.8	13
Kachinga									
Upper Lake Beds	21.7	62.4	182.6	88.2	0.4	1.9	7.4	3.3	13
Lower Lake Beds	15.5	46.4	136.3	66.6	0.3	1.4	5.7	2.4	13
Galula	19.8	47.4	108.4	58.4	0.3	1.5	5.0	2.2	12
Kalawi									
Upper Lake Beds	13.2	52.3	211.4	93.5	0.3	1.6	8.2	3.4	13
Lower Lake Beds	1.9	9.3	44.3	20.3	0.0	0.3	1.7	0.8	13
Galula	4.5	22.4	100.9	44.0	0.1	0.7	3.8	1.6	12
Karoo	18.7	70.4	259.1	118.3	0.4	2.1	10.4	4.4	13
Kambale									
Upper Lake Beds	32.0	109.6	379.3	174.6	0.6	3.3	15.0	6.5	16
Lower Lake Beds	28.2	96.7	346.3	155.5	0.5	3.0	13.2	5.6	16
Galula	22.4	75.3	253.1	117.7	0.4	2.3	10.2	4.3	16
Karoo	24.1	79.8	253.4	119.1	0.4	2.3	10.2	4.3	18
Katanta									
Upper Lake Beds	31.6	124.2	485.8	221.9	0.6	3.7	19.5	8.3	13
Lower Lake Beds	34.0	106.6	335.5	160.8	0.6	3.4	14.2	6.0	13
Galula	50.3	160.9	514.0	244.4	0.9	4.8	21.1	8.9	12
Mbale									
Lower Lake Beds	3.1	7.9	19.8	10.2	0.1	0.3	0.8	0.4	11
Galula	0.6	2.9	15.0	6.6	0.0	0.1	0.6	0.2	8
Karoo	25.2	77.0	233.2	111.5	0.5	2.3	9.6	4.1	11
Mbelele									
Upper Lake Beds	17.2	56.6	185.1	87.2	0.3	1.7	7.6	3.2	16
Lower Lake Beds	5.4	22.1	87.7	38.9	0.1	0.7	3.5	1.5	16
Galula	31.7	89.5	251.2	122.9	0.5	2.7	10.2	4.5	16
Karoo	2.2	10.3	48.3	20.9	0.0	0.3	1.8	0.8	18
Total <sup>(2)</sup>	1,111.8	3,285.7	9,873.4	4,749.4	19.6	100.7	405.7	175.5	

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

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

OGIP and helium volumes are expressed in billions of cubic feet (BCF) at standard temperature and pressure bases. In-place volumes are reported at surface conditions.

The prospective helium volumes shown in this report have been estimated using probabilistic methods and are dependent on a helium discovery being made. If a discovery is made and development is undertaken, the probability that the recoverable volumes will equal or exceed the unrisked estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate. As requested, mean estimates are reported in addition to the low, best, and high estimate prospective helium volumes. The low, best, and high estimate prospective helium volumes have been aggregated beyond the lead level by arithmetic summation; therefore, these totals do not include the portfolio effect that might result from statistical aggregation.

Unrisked prospective helium volumes are estimated ranges of recoverable helium volumes assuming their discovery and development and are based on estimated ranges of undiscovered in-place volumes. Geologic risking

of prospective helium volumes addresses the probability of success for the discovery of a significant quantity of potentially recoverable helium; this risk analysis is conducted independent of estimations of helium volumes and without regard to the chance of development. For helium volumes, principal geologic risk elements include (1) trap and seal characteristics; (2) reservoir presence and quality; (3) source rock capacity, quality, and maturity; and (4) timing, migration, and preservation of helium in relation to trap and seal formation. Risk assessment is a highly subjective process dependent upon the experience and judgment of the evaluators and is subject to revision with further data acquisition or interpretation. Included in this report is a discussion of the primary geologic risk elements. The geologic risk elements and overall  $P_g$  by lead for each reservoir are shown in the following table:

Lead/Reservoir	Geologic Risk Element (%)				$P_g$ (%)
	Trap Integrity	Reservoir Quality	Source Evaluation	Timing/ Migration	
Chilichili					
Upper Lake Beds	50	90	90	40	16
Lower Lake Beds	50	90	90	40	16
Galula	40	90	90	50	16
Karoo	40	90	90	55	18
Dagaa					
Galula	25	90	90	50	10
Gege					
Upper Lake Beds	40	90	90	40	13
Lower Lake Beds	40	90	90	40	13
Galula	30	90	90	50	12
Karoo	30	90	90	55	13
Kachinga					
Upper Lake Beds	40	90	90	40	13
Lower Lake Beds	40	90	90	40	13
Galula	30	90	90	50	12
Kalawi					
Upper Lake Beds	40	90	90	40	13
Lower Lake Beds	40	90	90	40	13
Galula	30	90	90	50	12
Karoo	30	90	90	55	13
Kambale					
Upper Lake Beds	50	90	90	40	16
Lower Lake Beds	50	90	90	40	16
Galula	40	90	90	50	16
Karoo	40	90	90	55	18
Katanta					
Upper Lake Beds	40	90	90	40	13
Lower Lake Beds	40	90	90	40	13
Galula	30	90	90	50	12
Mbale					
Lower Lake Beds	35	90	90	40	11
Galula	20	90	90	50	8
Karoo	25	90	90	55	11
Mbelele					
Upper Lake Beds	50	90	90	40	16
Lower Lake Beds	50	90	90	40	16
Galula	40	90	90	50	16
Karoo	40	90	90	55	18

Each lead was evaluated to determine ranges of in-place total gas containing helium and recoverable helium, and each lead was risked as an independent entity without dependency between potential lead drilling outcomes. If helium discoveries are made, smaller-volume leads may not be commercial to independently develop, although they may become candidates for satellite developments and tie-backs to existing infrastructure at some future date.

The development infrastructure and data obtained from early discoveries will alter both geologic risk and future economics of subsequent discoveries and developments.

It should be understood that the prospective helium volumes discussed and shown herein are those undiscovered, highly speculative volumes estimated where geological and geophysical data suggest the potential for discovery of helium. The unrisksed prospective helium volumes shown in this report are the range of volumes that could reasonably be expected to be recovered in the event of the discovery and development of these leads.

As shown in the Table of Contents, this report includes a technical discussion followed by pertinent figures and a bibliography.

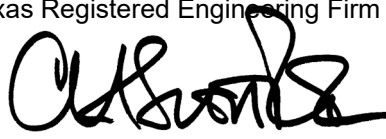
For the purposes of this report, we did not perform any field inspection of the leads. We have not investigated possible environmental liability related to the leads.

For the purposes of this report, we used technical data including, but not limited to, well logs, geologic maps, seismic data, drilling records, well test data, and surface helium measurements. The volumes in this report have been estimated using probabilistic methods; these estimates have been prepared in accordance with generally accepted petroleum engineering and evaluation principles set forth in the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE (SPE Standards). We used standard engineering and geoscience methods, or a combination of methods, including volumetric analysis and analogy, that we considered to be appropriate and necessary to classify, categorize, and estimate volumes. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, our conclusions necessarily represent only informed professional judgment.

The data used in our estimates were obtained from Noble Helium, public data sources, and the nonconfidential files of Netherland, Sewell & Associates, Inc. and were accepted as accurate. Supporting work data are on file in our office. We have not examined the contractual rights to the leads or independently confirmed the actual degree or type of interest owned. The technical persons primarily responsible for preparing the estimates presented herein meet the requirements regarding qualifications, independence, objectivity, and confidentiality set forth in the SPE Standards. We are independent petroleum engineers, geologists, geophysicists, and petrophysicists; we do not own an interest in these leads nor are we employed on a contingent basis.

Sincerely,

**NETHERLAND, SEWELL & ASSOCIATES, INC.**  
Texas Registered Engineering Firm F-2699

By: 

C.H. (Scott) Rees III, P.E.  
Chairman and Chief Executive Officer

By:

Alexander V. KarpoV, P.E. 105042  
Vice President

Date Signed: February 4, 2022

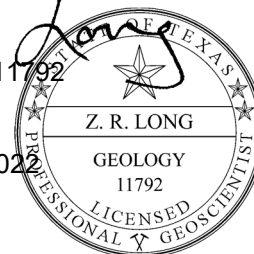
AVK:NAB



By:

Zachary R. Long, P.G 11792  
Vice President

Date Signed: February 4, 2022



## PETROLEUM RESERVES AND RESOURCES CLASSIFICATION AND DEFINITIONS

Excerpted from the Petroleum Resources Management System Approved by  
the Society of Petroleum Engineers (SPE) Board of Directors, June 2018

This document contains information excerpted from definitions and guidelines prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) and reviewed and jointly sponsored by the SPE, World Petroleum Council, American Association of Petroleum Geologists, Society of Petroleum Evaluation Engineers, Society of Exploration Geophysicists, Society of Petrophysicists and Well Log Analysts, and European Association of Geoscientists & Engineers.

### Preamble

Petroleum resources are the quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resources assessments estimate quantities in known and yet-to-be-discovered accumulations. Resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating projects, and presenting results within a comprehensive classification framework.

This updated PRMS provides fundamental principles for the evaluation and classification of petroleum reserves and resources. If there is any conflict with prior SPE and PRMS guidance, approved training, or the Application Guidelines, the current PRMS shall prevail. It is understood that these definitions and guidelines allow flexibility for entities, governments, and regulatory agencies to tailor application for their particular needs; however, any modifications to the guidance contained herein must be clearly identified. The terms "shall" or "must" indicate that a provision herein is mandatory for PRMS compliance, while "should" indicates a recommended practice and "may" indicates that a course of action is permissible. The definitions and guidelines contained in this document must not be construed as modifying the interpretation or application of any existing regulatory reporting requirements.

### 1.0 Basic Principles and Definitions

1.0.0.1 A classification system of petroleum resources is a fundamental element that provides a common language for communicating both the confidence of a project's resources maturation status and the range of potential outcomes to the various entities. The PRMS provides transparency by requiring the assessment of various criteria that allow for the classification and categorization of a project's resources. The evaluation elements consider the risk of geologic discovery and the technical uncertainties together with a determination of the chance of achieving the commercial maturation status of a petroleum project.

1.0.0.2 The technical estimation of petroleum resources quantities involves the assessment of quantities and values that have an inherent degree of uncertainty. These quantities are associated with exploration, appraisal, and development projects at various stages of design and implementation. The commercial aspects considered will relate the project's maturity status (e.g., technical, economical, regulatory, and legal) to the chance of project implementation.

1.0.0.3 The use of a consistent classification system enhances comparisons between projects, groups of projects, and total company portfolios. The application of PRMS must consider both technical and commercial factors that impact the project's feasibility, its productive life, and its related cash flows.

### 1.1 Petroleum Resources Classification Framework

1.1.0.1 Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid state. Petroleum may also contain non-hydrocarbons, common examples of which are carbon dioxide, nitrogen, hydrogen sulfide, and sulfur. In rare cases, non-hydrocarbon content can be greater than 50%.

1.1.0.2 The term resources as used herein is intended to encompass all quantities of petroleum naturally occurring within the Earth's crust, both discovered and undiscovered (whether recoverable or unrecoverable), plus those quantities already produced. Further, it includes all types of petroleum whether currently considered as conventional or unconventional resources.

1.1.0.3 Figure 1.1 graphically represents the PRMS resources classification system. The system classifies resources into discovered and undiscovered and defines the recoverable resources classes: Production, Reserves, Contingent Resources, and Prospective Resources, as well as Unrecoverable Petroleum.

1.1.0.4 The horizontal axis reflects the range of uncertainty of estimated quantities potentially recoverable from an accumulation by a project, while the vertical axis represents the chance of commerciality,  $P_c$ , which is the chance that a project will be committed for development and reach commercial producing status.

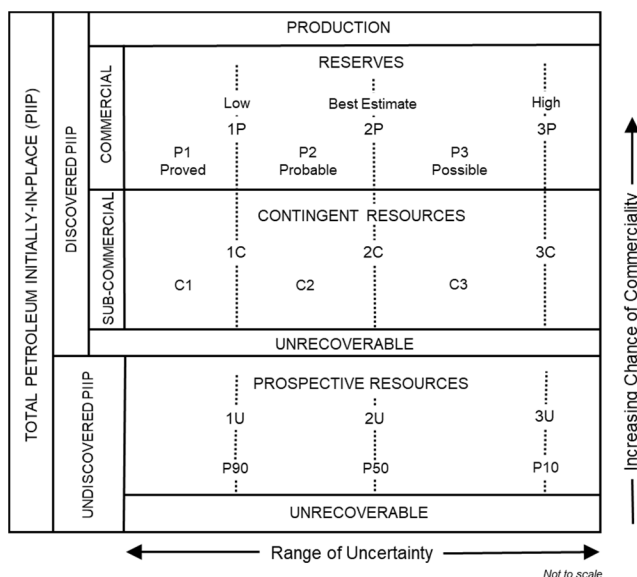


Figure 1.1—Resources classification framework

## PETROLEUM RESERVES AND RESOURCES CLASSIFICATION AND DEFINITIONS

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1.1.0.5 The following definitions apply to the major subdivisions within the resources classification:

- A. **Total Petroleum Initially-In-Place (PIIP)** is all quantities of petroleum that are estimated to exist originally in naturally occurring accumulations, discovered and undiscovered, before production.
- B. **Discovered PIIP** is the quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations before production.
- C. **Production** is the cumulative quantities of petroleum that have been recovered at a given date. While all recoverable resources are estimated, and production is measured in terms of the sales product specifications, raw production (sales plus non-sales) quantities are also measured and required to support engineering analyses based on reservoir voidage (see Section 3.2, Production Measurement).

1.1.0.6 Multiple development projects may be applied to each known or unknown accumulation, and each project will be forecast to recover an estimated portion of the initially-in-place quantities. The projects shall be subdivided into commercial, sub-commercial, and undiscovered, with the estimated recoverable quantities being classified as Reserves, Contingent Resources, or Prospective Resources respectively, as defined below.

- A. 1. **Reserves** are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must satisfy four criteria: discovered, recoverable, commercial, and remaining (as of the evaluation's effective date) based on the development project(s) applied.
  - 2. Reserves are recommended as sales quantities as metered at the reference point. Where the entity also recognizes quantities consumed in operations (CiO) (see Section 3.2.2), as Reserves these quantities must be recorded separately. Non-hydrocarbon quantities are recognized as Reserves only when sold together with hydrocarbons or CiO associated with petroleum production. If the non-hydrocarbon is separated before sales, it is excluded from Reserves.
  - 3. Reserves are further categorized in accordance with the range of uncertainty and should be sub-classified based on project maturity and/or characterized by development and production status.
- B. **Contingent Resources** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, by the application of development project(s) not currently considered to be commercial owing to one or more contingencies. Contingent Resources have an associated chance of development. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the range of uncertainty associated with the estimates and should be sub-classified based on project maturity and/or economic status.
- C. **Undiscovered PIIP** is that quantity of petroleum estimated, as of a given date, to be contained within accumulations yet to be discovered.
- D. **Prospective Resources** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of geologic discovery and a chance of development. Prospective Resources are further categorized in accordance with the range of uncertainty associated with recoverable estimates, assuming discovery and development, and may be sub-classified based on project maturity.
- E. **Unrecoverable Resources** are that portion of either discovered or undiscovered PIIP evaluated, as of a given date, to be unrecoverable by the currently defined project(s). A portion of these quantities may become recoverable in the future as commercial circumstances change, technology is developed, or additional data are acquired. The remaining portion may never be recovered because of physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

1.1.0.7 The sum of Reserves, Contingent Resources, and Prospective Resources may be referred to as "remaining recoverable resources." Importantly, these quantities should not be aggregated without due consideration of the technical and commercial risk involved with their classification. When such terms are used, each classification component of the summation must be provided.

1.1.0.8 Other terms used in resource assessments include the following:

- A. **Estimated Ultimate Recovery (EUR)** is not a resources category or class, but a term that can be applied to an accumulation or group of accumulations (discovered or undiscovered) to define those quantities of petroleum estimated, as of a given date, to be potentially recoverable plus those quantities already produced from the accumulation or group of accumulations. For clarity, EUR must reference the associated technical and commercial conditions for the resources; for example, proved EUR is Proved Reserves plus prior production.
- B. **Technically Recoverable Resources (TRR)** are those quantities of petroleum producible using currently available technology and industry practices, regardless of commercial considerations. TRR may be used for specific Projects or for groups of Projects, or, can be an undifferentiated estimate within an area (often basin-wide) of recovery potential.

## PETROLEUM RESERVES AND RESOURCES CLASSIFICATION AND DEFINITIONS

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### 1.2 Project-Based Resources Evaluations

1.2.0.1 The resources evaluation process consists of identifying a recovery project or projects associated with one or more petroleum accumulations, estimating the quantities of PIIP, estimating that portion of those in-place quantities that can be recovered by each project, and classifying the project(s) based on maturity status or chance of commerciality.

1.2.0.2 The concept of a project-based classification system is further clarified by examining the elements contributing to an evaluation of net recoverable resources (see Figure 1.2).

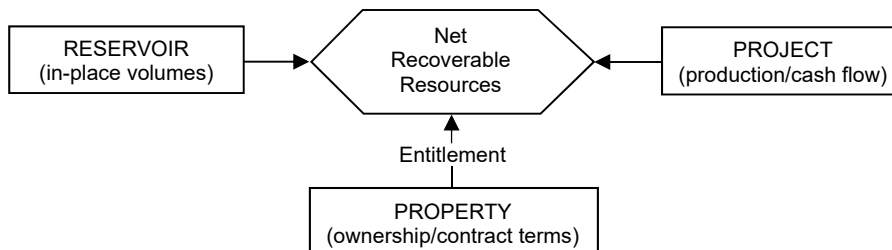


Figure 1.2—Resources evaluation

1.2.0.3 **The reservoir** (contains the petroleum accumulation): Key attributes include the types and quantities of PIIP and the fluid and rock properties that affect petroleum recovery.

1.2.0.4 **The project:** A project may constitute the development of a well, a single reservoir, or a small field; an incremental development in a producing field; or the integrated development of a field or several fields together with the associated processing facilities (e.g., compression). Within a project, a specific reservoir's development generates a unique production and cash-flow schedule at each level of certainty. The integration of these schedules taken to the project's earliest truncation caused by technical, economic, or the contractual limit defines the estimated recoverable resources and associated future net cash flow projections for each project. The ratio of EUR to total PIIP quantities defines the project's recovery efficiency. Each project should have an associated recoverable resources range (low, best, and high estimate).

1.2.0.5 **The property** (lease or license area): Each property may have unique associated contractual rights and obligations, including the fiscal terms. This information allows definition of each participating entity's share of produced quantities (entitlement) and share of investments, expenses, and revenues for each recovery project and the reservoir to which it is applied. One property may encompass many reservoirs, or one reservoir may span several different properties. A property may contain both discovered and undiscovered accumulations that may be spatially unrelated to a potential single field designation.

1.2.0.6 An entity's net recoverable resources are the entitlement share of future production legally accruing under the terms of the development and production contract or license.

1.2.0.7 In the context of this relationship, the project is the primary element considered in the resources classification, and the net recoverable resources are the quantities derived from each project. A project represents a defined activity or set of activities to develop the petroleum accumulation(s) and the decisions taken to mature the resources to reserves. In general, it is recommended that an individual project has assigned to it a specific maturity level sub-class (See Section 2.1.3.5, Project Maturity Sub-Classes) at which a decision is made whether or not to proceed (i.e., spend more money) and there should be an associated range of estimated recoverable quantities for the project (See Section 2.2.1, Range of Uncertainty). For completeness, a developed field is also considered to be a project.

1.2.0.8 An accumulation or potential accumulation of petroleum is often subject to several separate and distinct projects that are at different stages of exploration or development. Thus, an accumulation may have recoverable quantities in several resources classes simultaneously.

1.2.0.10 Not all technically feasible development projects will be commercial. The commercial viability of a development project within a field's development plan is dependent on a forecast of the conditions that will exist during the time period encompassed by the project (see Section 3.1, Assessment of Commerciality). Conditions include technical, economic (e.g., hurdle rates, commodity prices), operating and capital costs, marketing, sales route(s), and legal, environmental, social, and governmental factors forecast to exist and impact the project during the time period being evaluated. While economic factors can be summarized as forecast costs and product prices, the underlying influences include, but are not limited to, market conditions (e.g., inflation, market factors, and contingencies), exchange rates, transportation and processing infrastructure, fiscal terms, and taxes.

1.2.0.11 The resources being estimated are those quantities producible from a project as measured according to delivery specifications at the point of sale or custody transfer (see Section 3.2.1, Reference Point) and may permit forecasts of CiO quantities (see Section 3.2.2., Consumed in Operations). The cumulative production forecast from the effective date forward to cessation of production is the remaining recoverable resources quantity (see Section 3.1.1, Net Cash-Flow Evaluation).



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1.2.0.12 The supporting data, analytical processes, and assumptions describing the technical and commercial basis used in an evaluation must be documented in sufficient detail to allow, as needed, a qualified reserves evaluator or qualified reserves auditor to clearly understand each project's basis for the estimation, categorization, and classification of recoverable resources quantities and, if appropriate, associated commercial assessment.

## 2.0 Classification and Categorization Guidelines

### 2.1 Resources Classification

2.1.0.1 The PRMS classification establishes criteria for the classification of the total PIIP. A determination of a discovery differentiates between discovered and undiscovered PIIP. The application of a project further differentiates the recoverable from unrecoverable resources. The project is then evaluated to determine its maturity status to allow the classification distinction between commercial and sub-commercial projects. PRMS requires the project's recoverable resources quantities to be classified as either Reserves, Contingent Resources, or Prospective Resources.

#### 2.1.1 Determination of Discovery Status

2.1.1.1 A discovered petroleum accumulation is determined to exist when one or more exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially recoverable hydrocarbons and thus have established a known accumulation. In the absence of a flow test or sampling, the discovery determination requires confidence in the presence of hydrocarbons and evidence of producibility, which may be supported by suitable producing analogs (see Section 4.1.1, Analogs). In this context, "significant" implies that there is evidence of a sufficient quantity of petroleum to justify estimating the in-place quantity demonstrated by the well(s) and for evaluating the potential for commercial recovery.

2.1.1.2 Where a discovery has identified potentially recoverable hydrocarbons, but it is not considered viable to apply a project with established technology or with technology under development, such quantities may be classified as Discovered Unrecoverable with no Contingent Resources. In future evaluations, as appropriate for petroleum resources management purposes, a portion of these unrecoverable quantities may become recoverable resources as either commercial circumstances change or technological developments occur.

#### 2.1.2 Determination of Commerciality

2.1.2.1 Discovered recoverable quantities (Contingent Resources) may be considered commercially mature, and thus attain Reserves classification, if the entity claiming commerciality has demonstrated a firm intention to proceed with development. This means the entity has satisfied the internal decision criteria (typically rate of return at or above the weighted average cost-of-capital or the hurdle rate). Commerciality is achieved with the entity's commitment to the project and all of the following criteria:

- A. Evidence of a technically mature, feasible development plan.
- B. Evidence of financial appropriations either being in place or having a high likelihood of being secured to implement the project.
- C. Evidence to support a reasonable time-frame for development.
- D. A reasonable assessment that the development projects will have positive economics and meet defined investment and operating criteria. This assessment is performed on the estimated entitlement forecast quantities and associated cash flow on which the investment decision is made (see Section 3.1.1, Net Cash-Flow Evaluation).
- E. A reasonable expectation that there will be a market for forecast sales quantities of the production required to justify development. There should also be similar confidence that all produced streams (e.g., oil, gas, water, CO<sub>2</sub>) can be sold, stored, re-injected, or otherwise appropriately disposed.
- F. Evidence that the necessary production and transportation facilities are available or can be made available.
- G. Evidence that legal, contractual, environmental, regulatory, and government approvals are in place or will be forthcoming, together with resolving any social and economic concerns.

2.1.2.2 The commerciality test for Reserves determination is applied to the best estimate (P50) forecast quantities, which upon qualifying all commercial and technical maturity criteria and constraints become the 2P Reserves. Stricter cases [e.g., low estimate (P90)] may be used for decision purposes or to investigate the range of commerciality (see Section 3.1.2, Economic Criteria). Typically, the low- and high-case project scenarios may be evaluated for sensitivities when considering project risk and upside opportunity.

2.1.2.3 To be included in the Reserves class, a project must be sufficiently defined to establish both its technical and commercial viability as noted in Section 2.1.2.1. There must be a reasonable expectation that all required internal and external approvals will be forthcoming and evidence of firm intention to proceed with development within a reasonable time-frame. A reasonable time-frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While five years is recommended as a benchmark, a longer time-frame could be applied where justifiable; for example, development of economic projects that take longer than five years to be developed or are deferred to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.

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2.1.2.4 While PRMS guidelines require financial appropriations evidence, they do not require that project financing be confirmed before classifying projects as Reserves. However, this may be another external reporting requirement. In many cases, financing is conditional upon the same criteria as above. In general, if there is not a reasonable expectation that financing or other forms of commitment (e.g., farm-outs) can be arranged so that the development will be initiated within a reasonable time-frame, then the project should be classified as Contingent Resources. If financing is reasonably expected to be in place at the time of the final investment decision (FID), the project's resources may be classified as Reserves.

### 2.2 Resources Categorization

2.2.0.1 The horizontal axis in the resources classification in Figure 1.1 defines the range of uncertainty in estimates of the quantities of recoverable, or potentially recoverable, petroleum associated with a project or group of projects. These estimates include the uncertainty components as follows:

- A. The total petroleum remaining within the accumulation (in-place resources).
- B. The technical uncertainty in the portion of the total petroleum that can be recovered by applying a defined development project or projects (i.e., the technology applied).
- C. Known variations in the commercial terms that may impact the quantities recovered and sold (e.g., market availability; contractual changes, such as production rate tiers or product quality specifications) are part of project's scope and are included in the horizontal axis, while the chance of satisfying the commercial terms is reflected in the classification (vertical axis).

2.2.0.2 The uncertainty in a project's recoverable quantities is reflected by the 1P, 2P, 3P, Proved (P1), Probable (P2), Possible (P3), 1C, 2C, 3C, C1, C2, and C3; or 1U, 2U, and 3U resources categories. The commercial chance of success is associated with resources classes or sub-classes and not with the resources categories reflecting the range of recoverable quantities.

#### 2.2.1 Range of Uncertainty

2.2.1.1 Uncertainty is inherent in a project's resources estimation and is communicated in PRMS by reporting a range of category outcomes. The range of uncertainty of the recoverable and/or potentially recoverable quantities may be represented by either deterministic scenarios or by a probability distribution (see Section 4.2, Resources Assessment Methods).

2.2.1.2 When the range of uncertainty is represented by a probability distribution, a low, best, and high estimate shall be provided such that:

- A. There should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- B. There should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- C. There should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.

2.2.1.3 In some projects, the range of uncertainty may be limited, and the three scenarios may result in resources estimates that are not significantly different. In these situations, a single value estimate may be appropriate to describe the expected result.

2.2.1.4 When using the deterministic scenario method, typically there should also be low, best, and high estimates, where such estimates are based on qualitative assessments of relative uncertainty using consistent interpretation guidelines. Under the deterministic incremental method, quantities for each confidence segment are estimated discretely (see Section 2.2.2, Category Definitions and Guidelines).

2.2.1.5 Project resources are initially estimated using the above uncertainty range forecasts that incorporate the subsurface elements together with technical constraints related to wells and facilities. The technical forecasts then have additional commercial criteria applied (e.g., economics and license cutoffs are the most common) to estimate the entitlement quantities attributed and the resources classification status: Reserves, Contingent Resources, and Prospective Resources.

#### 2.2.2 Category Definitions and Guidelines

2.2.2.1 Evaluators may assess recoverable quantities and categorize results by uncertainty using the deterministic incremental method, the deterministic scenario (cumulative) method, geostatistical methods, or probabilistic methods (see Section 4.2, Resources Assessment Methods). Also, combinations of these methods may be used.

2.2.2.2 Use of consistent terminology (Figures 1.1 and 2.1) promotes clarity in communication of evaluation results. For Reserves, the general cumulative terms low/best/high forecasts are used to estimate the resulting 1P/2P/3P quantities, respectively. The associated incremental quantities are termed Proved (P1), Probable (P2) and Possible (P3). Reserves are a subset of, and must be viewed within the context of, the complete resources classification system. While the categorization criteria are proposed specifically for Reserves, in most cases, the criteria can be equally applied to Contingent and Prospective Resources. Upon satisfying the commercial maturity criteria for discovery and/or development, the project quantities will then move to the appropriate resources sub-class. Table 3 provides criteria for the Reserves categories determination.

2.2.2.3 For Contingent Resources, the general cumulative terms low/best/high estimates are used to estimate the resulting 1C/2C/3C quantities, respectively. The terms C1, C2, and C3 are defined for incremental quantities of Contingent Resources.

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2.2.2.4 For Prospective Resources, the general cumulative terms low/best/high estimates also apply and are used to estimate the resulting 1U/2U/3U quantities. No specific terms are defined for incremental quantities within Prospective Resources.

2.2.2.5 Quantities in different classes and sub-classes cannot be aggregated without considering the varying degrees of technical uncertainty and commercial likelihood involved with the classification(s) and without considering the degree of dependency between them (see Section 4.2.1, Aggregating Resources Classes).

2.2.2.6 Without new technical information, there should be no change in the distribution of technically recoverable resources and the categorization boundaries when conditions are satisfied to reclassify a project from Contingent Resources to Reserves.

2.2.2.7 All evaluations require application of a consistent set of forecast conditions, including assumed future costs and prices, for both classification of projects and categorization of estimated quantities recovered by each project (see Section 3.1, Assessment of Commerciality).

**Table 1—Recoverable Resources Classes and Sub-Classes**

Class/Sub-Class	Definition	Guidelines
<b>Reserves</b>	Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.	<p>Reserves must satisfy four criteria: discovered, recoverable, commercial, and remaining based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by the development and production status.</p> <p>To be included in the Reserves class, a project must be sufficiently defined to establish its commercial viability (see Section 2.1.2, Determination of Commerciality). This includes the requirement that there is evidence of firm intention to proceed with development within a reasonable time-frame.</p> <p>A reasonable time-frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While five years is recommended as a benchmark, a longer time-frame could be applied where, for example, development of an economic project is deferred at the option of the producer for, among other things, market-related reasons or to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.</p> <p>To be included in the Reserves class, there must be a high confidence in the commercial maturity and economic producibility of the reservoir as supported by actual production or formation tests. In certain cases, Reserves may be assigned on the basis of well logs and/or core analysis that indicate that the subject reservoir is hydrocarbon-bearing and is analogous to reservoirs in the same area that are producing or have demonstrated the ability to produce on formation tests.</p>
<b>On Production</b>	The development project is currently producing or capable of producing and selling petroleum to market.	<p>The key criterion is that the project is receiving income from sales, rather than that the approved development project is necessarily complete. Includes Developed Producing Reserves.</p> <p>The project decision gate is the decision to initiate or continue economic production from the project.</p>
<b>Approved for Development</b>	All necessary approvals have been obtained, capital funds have been committed, and implementation of the development project is ready to begin or is under way.	<p>At this point, it must be certain that the development project is going ahead. The project must not be subject to any contingencies, such as outstanding regulatory approvals or sales contracts. Forecast capital expenditures should be included in the reporting entity's current or following year's approved budget.</p> <p>The project decision gate is the decision to start investing capital in the construction of production facilities and/or drilling development wells.</p>

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Class/Sub-Class	Definition	Guidelines
<b>Justified for Development</b>	Implementation of the development project is justified on the basis of reasonable forecast commercial conditions at the time of reporting, and there are reasonable expectations that all necessary approvals/contracts will be obtained.	<p>To move to this level of project maturity, and hence have Reserves associated with it, the development project must be commercially viable at the time of reporting (see Section 2.1.2, Determination of Commerciality) and the specific circumstances of the project. All participating entities have agreed and there is evidence of a committed project (firm intention to proceed with development within a reasonable time-frame). There must be no known contingencies that could preclude the development from proceeding (see Reserves class).</p> <p>The project decision gate is the decision by the reporting entity and its partners, if any, that the project has reached a level of technical and commercial maturity sufficient to justify proceeding with development at that point in time.</p>
<b>Contingent Resources</b>	Those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable owing to one or more contingencies.	<p>Contingent Resources may include, for example, projects for which there are currently no viable markets, where commercial recovery is dependent on technology under development, where evaluation of the accumulation is insufficient to clearly assess commerciality, where the development plan is not yet approved, or where regulatory or social acceptance issues may exist.</p> <p>Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by the economic status.</p>
<b>Development Pending</b>	A discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future.	<p>The project is seen to have reasonable potential for eventual commercial development, to the extent that further data acquisition (e.g., drilling, seismic data) and/or evaluations are currently ongoing with a view to confirming that the project is commercially viable and providing the basis for selection of an appropriate development plan. The critical contingencies have been identified and are reasonably expected to be resolved within a reasonable time-frame. Note that disappointing appraisal/evaluation results could lead to a reclassification of the project to On Hold or Not Viable status.</p> <p>The project decision gate is the decision to undertake further data acquisition and/or studies designed to move the project to a level of technical and commercial maturity at which a decision can be made to proceed with development and production.</p>
<b>Development on Hold</b>	A discovered accumulation where project activities are on hold and/or where justification as a commercial development may be subject to significant delay.	<p>The project is seen to have potential for commercial development. Development may be subject to a significant time delay. Note that a change in circumstances, such that there is no longer a probable chance that a critical contingency can be removed in the foreseeable future, could lead to a reclassification of the project to Not Viable status.</p> <p>The project decision gate is the decision to either proceed with additional evaluation designed to clarify the potential for eventual commercial development or to temporarily suspend or delay further activities pending resolution of external contingencies.</p>
<b>Development Unclassified</b>	A discovered accumulation where project activities are under evaluation and where justification as a commercial development is unknown based on available information.	<p>The project is seen to have potential for eventual commercial development, but further appraisal/evaluation activities are ongoing to clarify the potential for eventual commercial development.</p> <p>This sub-class requires active appraisal or evaluation and should not be maintained without a plan for future evaluation. The sub-class should reflect the actions required to move a project toward commercial maturity and economic production.</p>

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Class/Sub-Class	Definition	Guidelines
<b>Development Not Viable</b>	A discovered accumulation for which there are no current plans to develop or to acquire additional data at the time because of limited production potential.	The project is not seen to have potential for eventual commercial development at the time of reporting, but the theoretically recoverable quantities are recorded so that the potential opportunity will be recognized in the event of a major change in technology or commercial conditions.  The project decision gate is the decision not to undertake further data acquisition or studies on the project for the foreseeable future.
<b>Prospective Resources</b>	Those quantities of petroleum that are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.	Potential accumulations are evaluated according to the chance of geologic discovery and, assuming a discovery, the estimated quantities that would be recoverable under defined development projects. It is recognized that the development programs will be of significantly less detail and depend more heavily on analog developments in the earlier phases of exploration.
<b>Prospect</b>	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.	Project activities are focused on assessing the chance of geologic discovery and, assuming discovery, the range of potential recoverable quantities under a commercial development program.
<b>Lead</b>	A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation to be classified as a Prospect.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to confirm whether or not the Lead can be matured into a Prospect. Such evaluation includes the assessment of the chance of geologic discovery and, assuming discovery, the range of potential recovery under feasible development scenarios.
<b>Play</b>	A project associated with a prospective trend of potential prospects, but that requires more data acquisition and/or evaluation to define specific Leads or Prospects.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to define specific Leads or Prospects for more detailed analysis of their chance of geologic discovery and, assuming discovery, the range of potential recovery under hypothetical development scenarios.

**Table 2—Reserves Status Definitions and Guidelines**

Status	Definition	Guidelines
<b>Developed Reserves</b>	Expected quantities to be recovered from existing wells and facilities.	Reserves are considered developed only after the necessary equipment has been installed, or when the costs to do so are relatively minor compared to the cost of a well. Where required facilities become unavailable, it may be necessary to reclassify Developed Reserves as Undeveloped. Developed Reserves may be further sub-classified as Producing or Non-producing.
<b>Developed Producing Reserves</b>	Expected quantities to be recovered from completion intervals that are open and producing at the effective date of the estimate.	Improved recovery Reserves are considered producing only after the improved recovery project is in operation.
<b>Developed Non-Producing Reserves</b>	Shut-in and behind-pipe Reserves.	Shut-in Reserves are expected to be recovered from (1) completion intervals that are open at the time of the estimate but which have not yet started producing, (2) wells which were shut-in for market conditions or pipeline connections, or (3) wells not capable of production for mechanical reasons. Behind-pipe Reserves are expected to be recovered from zones in existing wells that will require additional completion work or future re-completion before start of production with minor cost to access these reserves.  In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.

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Status	Definition	Guidelines
<b>Undeveloped Reserves</b>	Quantities expected to be recovered through future significant investments.	Undeveloped Reserves are to be produced (1) from new wells on undrilled acreage in known accumulations, (2) from deepening existing wells to a different (but known) reservoir, (3) from infill wells that will increase recovery, or (4) where a relatively large expenditure (e.g., when compared to the cost of drilling a new well) is required to (a) recomplete an existing well or (b) install production or transportation facilities for primary or improved recovery projects.

**Table 3—Reserves Category Definitions and Guidelines**

Category	Definition	Guidelines
<b>Proved Reserves</b>	Those quantities of petroleum that, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from a given date forward from known reservoirs and under defined economic conditions, operating methods, and government regulations.	<p>If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the estimate.</p> <p>The area of the reservoir considered as Proved includes (1) the area delineated by drilling and defined by fluid contacts, if any, and (2) adjacent undrilled portions of the reservoir that can reasonably be judged as continuous with it and commercially productive on the basis of available geoscience and engineering data.</p> <p>In the absence of data on fluid contacts, Proved quantities in a reservoir are limited by the LKH as seen in a well penetration unless otherwise indicated by definitive geoscience, engineering, or performance data. Such definitive information may include pressure gradient analysis and seismic indicators. Seismic data alone may not be sufficient to define fluid contacts for Proved reserves.</p> <p>Reserves in undeveloped locations may be classified as Proved provided that:</p> <ul style="list-style-type: none"> <li>A. The locations are in undrilled areas of the reservoir that can be judged with reasonable certainty to be commercially mature and economically productive.</li> <li>B. Interpretations of available geoscience and engineering data indicate with reasonable certainty that the objective formation is laterally continuous with drilled Proved locations.</li> </ul> <p>For Proved Reserves, the recovery efficiency applied to these reservoirs should be defined based on a range of possibilities supported by analogs and sound engineering judgment considering the characteristics of the Proved area and the applied development program.</p>
<b>Probable Reserves</b>	Those additional Reserves that analysis of geoscience and engineering data indicates are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves.	<p>It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.</p> <p>Probable Reserves may be assigned to areas of a reservoir adjacent to Proved where data control or interpretations of available data are less certain. The interpreted reservoir continuity may not meet the reasonable certainty criteria.</p> <p>Probable estimates also include incremental recoveries associated with project recovery efficiencies beyond that assumed for Proved.</p>

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Category	Definition	Guidelines
<b>Possible Reserves</b>	Those additional reserves that analysis of geoscience and engineering data indicates are less likely to be recoverable than Probable Reserves.	<p>The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability (P10) that the actual quantities recovered will equal or exceed the 3P estimate.</p> <p>Possible Reserves may be assigned to areas of a reservoir adjacent to Proved where data control and interpretations of available data are progressively less certain. Frequently, this may be in areas where geoscience and engineering data are unable to clearly define the area and vertical reservoir limits of economic production from the reservoir by a defined, commercially mature project.</p> <p>Possible estimates also include incremental quantities associated with project recovery efficiencies beyond that assumed for Probable.</p>
<b>Probable and Possible Reserves</b>	See above for separate criteria for Probable Reserves and Possible Reserves.	<p>The 2P and 3P estimates may be based on reasonable alternative technical interpretations within the reservoir and/or subject project that are clearly documented, including comparisons to results in successful similar projects.</p> <p>In conventional accumulations, Probable and/or Possible Reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from Proved areas by minor faulting or other geological discontinuities and have not been penetrated by a wellbore but are interpreted to be in communication with the known (Proved) reservoir. Probable or Possible Reserves may be assigned to areas that are structurally higher than the Proved area. Possible (and in some cases, Probable) Reserves may be assigned to areas that are structurally lower than the adjacent Proved or 2P area.</p> <p>Caution should be exercised in assigning Reserves to adjacent reservoirs isolated by major, potentially sealing faults until this reservoir is penetrated and evaluated as commercially mature and economically productive. Justification for assigning Reserves in such cases should be clearly documented. Reserves should not be assigned to areas that are clearly separated from a known accumulation by non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results); such areas may contain Prospective Resources.</p> <p>In conventional accumulations, where drilling has defined a highest known oil elevation and there exists the potential for an associated gas cap, Proved Reserves of oil should only be assigned in the structurally higher portions of the reservoir if there is reasonable certainty that such portions are initially above bubble point pressure based on documented engineering analyses. Reservoir portions that do not meet this certainty may be assigned as Probable and Possible oil and/or gas based on reservoir fluid properties and pressure gradient interpretations.</p>



## CERTIFICATE OF QUALIFICATION

I, Alexander V. Karpov, Licensed Professional Engineer, 1301 McKinney Street, Suite 3200, Houston, Texas 77010, hereby certify:

I am an employee of Netherland, Sewell & Associates, Inc., which prepared a Competent Person's Report for Noble Helium Limited. The effective date of this evaluation is February 1, 2022.

I do not have, nor do I expect to receive, any direct or indirect interest in the securities of Noble Helium Limited or its affiliated companies.

I attended Texas A&M University and graduated in 2001 with a Master of Science Degree in Petroleum Engineering, and I attended the Moscow Institute of Oil and Gas and graduated in 1992 with a Bachelor of Science Degree in Petroleum Geology; I am a Licensed Professional Engineer in the State of Texas, United States of America; and I have in excess of 26 years of experience in petroleum engineering studies and evaluations.

By:

Alexander V. Karpov, P.E.  
Vice President  
Texas License No. 105042



February 4, 2022  
Houston, Texas

## CERTIFICATE OF QUALIFICATION

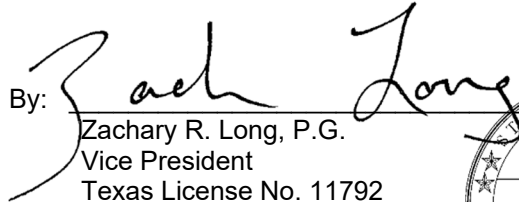
I, Zachary R. Long, Licensed Professional Geoscientist, 1301 McKinney Street, Suite 3200, Houston, Texas 77010, hereby certify:

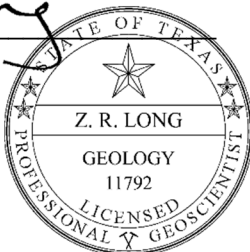
I am an employee of Netherland, Sewell & Associates, Inc., which prepared a Competent Person's Report for Noble Helium Limited. The effective date of this evaluation is February 1, 2022.

I do not have, nor do I expect to receive, any direct or indirect interest in the securities of Noble Helium Limited or its affiliated companies.

I attended Texas A&M University and graduated in 2005 with a Master of Science Degree in Geophysics, and I attended the University of Louisiana at Lafayette and graduated in 2003 with a Bachelor of Science Degree in Geology; I am a Licensed Professional Geoscientist in the State of Texas, United States of America; and I have in excess of 16 years of experience in geological and geophysical studies and evaluations.

By:

  
Zachary R. Long, P.G.  
Vice President  
Texas License No. 11792



February 4, 2022  
Houston, Texas

## ABBREVIATIONS

%	percent
$\phi$	porosity
°C	degrees Celsius
AGG	airborne gravity gradiometry
ASX	Australian Securities Exchange
BCF	billions of cubic feet
CO <sub>2</sub>	carbon dioxide
EARS	East African Rift System
FVF	formation volume factor
GRV	gross rock volume
HC	helium concentration
Helium One	Helium One Global Ltd
Heritage	Heritage Oil Limited
km	kilometers
km <sup>2</sup>	square kilometers
m	meters
m <sup>3</sup>	cubic meters
MMm <sup>3</sup>	millions of cubic meters
Noble Helium	Noble Helium Limited
NSAI	Netherland, Sewell & Associates, Inc.
NTG	net-to-gross ratio
OGIP	original gas-in-place
P10	10 percent confidence interval
P90	90 percent confidence interval
P <sub>g</sub>	probability of geologic success
PHV	prospective helium volume
PL	Prospecting License
PRMS	Petroleum Resources Management System
Red Beds	Red Sandstone Group
report	Competent Person's report
RF	recovery factor
sm <sup>3</sup> /rm <sup>3</sup>	surface cubic meters per reservoir cubic meters
SMT	Seismic Micro Technology
SPE	Society of Petroleum Engineers
SPE Standards	Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE
S <sub>w</sub>	water saturation
TMC	Tanzanian Mining Commission

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### BIBLIOGRAPHY

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TECHNICAL DISCUSSION

## TECHNICAL DISCUSSION LAKE RUKWA AREA, TANZANIA

### 1.0 GENERAL OVERVIEW

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Netherland, Sewell & Associates, Inc. (NSAI) has estimated the undiscovered original gas-in-place (OGIP) and unrisked gross (100 percent) prospective helium volumes, as of February 1, 2022, for leads located in the Lake Rukwa Area, Tanzania. A location map for the Lake Rukwa Area is shown on Figure 1. The prospective volumes in this Competent Person's Report (report) are for helium, which are not hydrocarbons. However, we have used the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE) as the framework to classify these helium volumes as "prospective".

For the purposes of this report, prospective helium volumes are the estimated quantities of helium that may potentially be recovered by the application of future development projects related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable helium. The prospective helium volumes included in this report should not be construed as petroleum reserves, petroleum contingent resources, or petroleum prospective resources; they represent exploration opportunities and quantify the development potential in the event a helium discovery is made. The undiscovered accumulations assessed in this report have been subclassified as leads. The 2018 PRMS defines a prospect as a project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target, a lead as a project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be subclassified as a prospect, and a play as a project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects. A geologic risk assessment was performed for these leads, as discussed in Section 5.0. This report does not include economic analysis for these leads. Based on analogous field developments, it appears that, assuming a discovery is made, the unrisked best estimate prospective helium volumes in this report have a reasonable chance of being economically viable.

The data used in our estimates were obtained from Noble Helium Limited (Noble Helium), public data sources, and the nonconfidential files of NSAI. Noble Helium provided access to engineering and geoscience data including, but not limited to, two-way time maps, digital log data, a Seismic Micro Technology Kingdom Suite (SMT) project, and various geological and geophysical studies. Additional technical data included well logs, geologic maps, seismic data, drilling records, well test data, and surface helium measurements. All data were used, as appropriate, for the evaluation of the leads. We reviewed these data and performed an independent interpretation.

The volumes in this report have been estimated using probabilistic methods; these estimates have been prepared in accordance with generally accepted petroleum engineering and evaluation principles set forth in the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE. We used standard engineering and geoscience methods, or a combination of methods, including volumetric analysis and analogy, that we considered to be appropriate and necessary to classify, categorize, and estimate volumes. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, our conclusions necessarily represent only informed professional judgment.

## 2.0 REGIONAL OVERVIEW

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### 2.1 GEOLOGY

The East African Rift System (EARS) extends approximately 5,000 kilometers (km) from Ethiopia to Mozambique and is relatively young at approximately 30 million years old. It is very tectonically active and is known for the extensive and dynamic volcanic systems that extend along the length of the rift. Helium seeps have been found along the active margins of the rift system. High concentrations (greater than one percent) of helium are known from the northern portion of the rift down to the southern portion of the rift. The EARS is characterized by two main rifting trends, the Eastern and Western Branches.

Noble Helium is exploring for helium in the Rukwa Rift area. The company has been awarded 12 prospecting licenses (PL) in the area, as shown on Figure 2. The Rukwa Rift is part of the Western Branch of the EARS and is situated between Lake Tanganyika and Lake Nyasa (Malawi) in western Tanzania. The Rukwa Rift is a northwest-to-southeast-trending basin that is approximately 300 km long by 50 km wide. It is bordered on the northeast by the Lupa Fault and on the southwest by the Ufipa Fault. The Ubende Plateau is located to the north of the Rukwa Rift, and the Mbozi Block and Rungwe Volcanics are located to the southwest and south, respectively. Lake Rukwa occupies the middle third of the rift valley, with a maximum water depth of approximately 15 meters (m); however, this depth can vary depending on rainfall. The structural elements and surface geology of the Rukwa Rift Basin are shown on Figure 3.

Three megasequences are present in the sediments of the Rukwa Rift: the Karoo Supergroup, the Red Sandstone Group (Red Beds), and the Lake Beds. These megasequences contain the main potential reservoirs for helium in the Lake Rukwa Area. A stratigraphic column of the Southern Rukwa Basin is shown on Figure 4. The lowermost megasequence is the Permian-aged Karoo Supergroup, which is composed of continental deposits that record the onset of rifting in the area. The sediments were deposited in glacial, lacustrine, and fluvial environments. The Karoo Supergroup unconformably sits on Precambrian shield. The Red Beds megasequence lies above the Karoo Supergroup and is composed of thick continental sandstones and mudstones of Jurassic to Neogene age. The evaluated Galula Formation is part of the Red Beds megasequence. The upper megasequence is the Lake Beds of Neogene- to Holocene-aged rift-filling sediments that are composed of volcanoclastic, fluvial, and lacustrine deposits. The Lake Beds megasequence has been subdivided into upper and lower units. The lower unit is a transitional interval from the continental Red Beds deposition to the lacustrine Lake Beds deposition.

In 1987, Amoco Tanzania Oil Company drilled the Galula-1 and Ivuna-1 wells in the Lake Rukwa Area. Each well represents a different structural and stratigraphic position within the Rukwa Rift. The Galula-1 well was drilled in a position where the section thickness of the Lake Beds was 970 m. It reached a total depth of 1,525 m in the Red Beds, resulting in a section thickness of 556 m for the Red Beds. The Ivuna-1 well penetrated a stratigraphic section outside of the thickest composite rift-fill sequence and encountered all three of the main potential reservoirs and reached a total depth in Precambrian granite. Within the Ivuna-1 well, the section thickness of the Lake Beds, the Red Beds, and the Karoo Supergroup is approximately 700 m, 890 m, and 700 m, respectively. In 2021, Helium One Global Ltd (Helium One) drilled two helium exploration wells in close proximity to one another, the Tai-1 and Tai-2 wells. While both wells are considered dry holes, helium was detected in shallow sections above the primary formations of interest, providing further evidence of a working source in the area. Additionally, valuable information was collected regarding the presence of porous rock and what is interpreted to be competent sealing intervals.

In the northern portion of the EARS, the Lake Albert Basin in Uganda is structurally analogous to the Lake Rukwa Area. The ages and geometries of the traps found in the Lake Albert Basin are similar to those found in the Lake Rukwa Area. The structural traps in the Lake Albert Basin were targeted for hydrocarbon exploration and numerous discoveries were made. Since hydrocarbons are being trapped in the Lake Albert Basin, it is encouraging for the potential of natural gases (CO<sub>2</sub>, helium, methane, or nitrogen) to be trapped in features that have similar characteristics in the Lake Rukwa Area. The Lake Albert Basin is filled with Miocene/Pliocene to recent sediments of predominantly lacustrine origin. The rocks are composed of



organic-rich, anoxic shale successions interbedded with lacustrine and fluvial sands. In contrast to the Lake Rukwa Area, no Mesozoic and Paleozoic sediment fill has been demonstrated in the Lake Albert Basin.

In addition to the Lake Rukwa Area PLs, Noble Helium has also been awarded two PLs in the North Basin of the Nyasa Rift Area. The PLs, shown on Figure 5, are located approximately 230 km to the southeast of the Lake Rukwa Area along the northern part of Lake Nyasa (Malawi). In 2012, Heritage Oil Limited (Heritage) acquired 1,500 square kilometers (km<sup>2</sup>) of airborne gravity gradiometry (AGG) survey data over the northern Nyasa Rift area, followed by a 100-km 2-D seismic program from which structural closures were identified. Heritage relinquished its PLs in the northern Nyasa Rift Area around 2017. Currently, Noble Helium does not have access to the AGG surveys or the seismic data but plans to acquire these and more data in the future. From available data, we know that there are geologic similarities between the Rukwa Rift and Nyasa Rift areas related to the tectonic evolution of the areas and the associated geologic formations. The Karoo Supergroup, the Red Beds, and the Lake Beds that are targeted for exploration in the Lake Rukwa Area are also present in the Nyasa Rift Area. However, the success of exploration within the Nyasa Rift Area PLs may be affected by the licenses proximity to the Rungwe volcanic deposits, as shown on Figure 3. The presence of these volcanics may have an adverse effect on helium concentrations in the area.

Noble Helium has also applied for nine PLs in the Eyasi Basin and Manyara Basin Areas, which are rift segments within the eastern branch of the EARS. The PLs, shown on Figure 6, are located approximately 300 km to the northeast of the Lake Rukwa Area. No previous oil and gas exploration programs have been carried out in the Eyasi Basin and Manyara Basin Areas and, similar to the Nyasa Rift Area, more data are needed to progress evaluation efforts. The tectonic setting of the Eyasi and Manyara Basins is similar to that of the Lake Rukwa Area; each basin has hot springs in which helium has been measured, and higher concentrations of helium were found in the Eyasi Basin. The Manyara Basin, like the Nyasa Rift, is home to a volcanic province that could have a negative impact on helium concentrations, so the focus of exploration in this basin will be on areas sufficiently distal to the volcanics. Further study is required to evaluate the stratigraphy in these license areas to assess potential reservoirs.

## 2.2 LICENSE AREAS

### 2.2.1 LAKE RUKWA AREA

Noble Helium currently operates and owns a 100 percent working interest in 12 PLs in the Lake Rukwa Area, as shown on Figure 2. As shown on Figure 1, the Lake Rukwa Area is accessible by road using the TANZAM highway from Dar es Salaam to Mbeya at the southern end of Lake Rukwa, followed by regional roads north to Sumbawanga on the western side of Lake Rukwa and to Gua on the eastern side of Lake Rukwa. Mbeya is a major regional center in southwest Tanzania that is also serviced by daily flights to Dar es Salaam. The Lake Rukwa Area PLs cover approximately 1,468 km<sup>2</sup>. Expiration date and area for each PL are shown in the following table:

Prospecting License	License Expiration Date	License Area (km <sup>2</sup> )
PL 11323-2019	July 29, 2023	186.3
PL 11324-2019	July 29, 2023	26.3
PL 11325-2019	July 29, 2023	107.2
PL 11326-2019	July 29, 2023	93.4
PL 11327-2019	July 29, 2023	107.5
PL 11328-2019	July 29, 2023	131.9
PL 11737-2021	November 30, 2025	206.4
PL 11738-2021	November 30, 2025	291.0
PL 11739-2021	November 30, 2025	116.8
PL 11740-2021	November 30, 2025	29.4

Prospecting License	License Expiration Date	License Area (km <sup>2</sup> )
PL 11742-2021	November 30, 2025	148.2
PL 11750-2021	November 30, 2025	23.7

## 2.2.2 NYASA RIFT AREA

Noble Helium operates and owns a 100 percent working interest in two PLs in the Nyasa Rift Area, as shown on Figure 5. As shown on Figure 1, the Nyasa Rift Area is accessible by road using the TANZAM highway from Dar es Salaam to Mbeya at the southern end of Lake Rukwa, followed by regional roads south, directly to Noble Helium's PLs. These PLs cover approximately 466 km<sup>2</sup>. Expiration date and area for each PL are shown in the following table:

Prospecting License	License Expiration Date	License Area (km <sup>2</sup> )
PL 11741-2021	November 30, 2025	228.9
PL 11736-2021	November 30, 2025	237.3

## 2.2.3 EYASI BASIN AND MANYARA BASIN AREAS

Noble Helium has applied for, but not been granted, nine PLs in the Eyasi Basin and Manyara Basin Areas, as shown on Figure 6. It is our understanding that the PLs currently have the "Application Recommended" status with the Tanzanian Mining Commission (TMC), which means they have passed initial screening within the TMC, have drawn no objection, and are recommended for progression to the next stage in the license award process. As shown on Figure 1, road access to the Eyasi Basin and Manyara Basin Areas from Dar es Salaam is through the Tanzanian Capital of Dodoma, located in the center of the country. Air access is through Arusha, the major tourist center in northern Tanzania, followed by road access west toward Ngorongoro for approximately 100 km to the Manyara Basin Area and 160 km to the Eyasi Basin Area. These PLs cover approximately 1,993 km<sup>2</sup>. Application date and area for each PL are shown in the following table:

Prospecting License	License Application Date	License Area (km <sup>2</sup> )
PL 18258-2021	August 30, 2021	299.5
PL 18259-2021	August 30, 2021	222.6
PL 18260-2021	August 30, 2021	222.7
PL 18261-2021	August 30, 2021	147.7
PL 18262-2021	August 30, 2021	245.5
PL 18264-2021	August 30, 2021	300.0
PL 18265-2021	August 30, 2021	267.4
PL 18266-2021	August 30, 2021	137.4
PL 18283-2021	August 30, 2021	149.7

## 2.3 NOBLE HELIUM'S NEAR-TERM EXPLORATION PROGRAM

### 2.3.1 LAKE RUKWA AREA

Noble Helium is planning further data acquisition in the Lake Rukwa Area to improve structural resolution and to assist in drill target selection. We also understand that Noble Helium has designed and estimated costs for a 2022 work program for its North Rukwa PLs that includes:

1. Completing surface geochemistry surveys across all mapped leads, enabling each to be ranked according to its relative probability of subsurface helium discovery, and providing a qualitative indication of helium concentration.
2. Geologic sampling and analysis of outcrops of the Galula Formation and Karoo Supergroup to better understand each formation's respective depositional environments and to quantify its reservoir and seal properties. The Lake Beds megasequence has previously been substantially sampled and analyzed.
3. Acquiring AGG surveys across all leads, calibrated to the existing reprocessed seismic lines, to provide structural trend information between the vintage 2-D seismic grid lines with approximately 5-km spacing.
4. Acquiring up to 300 km<sup>2</sup> of 3-D seismic data in the form of either: (1) full-fold coverage of the 3 leading structural closures, as identified by the 2022 work program, or (2) a 3- to 4-km-wide 3-D survey over each of the mapped structures, from crest to beyond the lowest closing contour.

### 2.3.2 NYASA RIFT AREA

Noble Helium is planning further data acquisition in the Nyasa Rift Area to improve structural resolution and to assist in drill target selection. The work program Noble Helium has designed for its Nyasa Rift Area PLs includes:

1. Sourcing the vintage exploration data to build a prospect inventory for the Nyasa Rift Area PLs.
2. Completing surface geochemistry surveys across the leads identified by Heritage, enabling each to be ranked by probability of geologic success.

### 2.3.3 EYASI BASIN AND MANYARA BASIN AREAS

Noble Helium is planning data acquisition in the Eyasi Basin and Manyara Basin Areas that will provide initial structural, stratigraphical, and geochemical insights into the basin. This planned work program includes:

1. Purchasing the national airborne magnetics survey that covers most of Tanzania, including the Eyasi and Manyara Basins, to be used with gravity data in order to identify structural trends.
2. Completing surface geochemistry surveys to identify areas of each basin that demonstrate greater helium concentrations associated with high nitrogen and low CO<sub>2</sub>.
3. Geologic sampling and analysis program.

We regard Noble Helium's near-term exploration work programs to be reasonable. These proposed steps will likely help Noble Helium execute a more informed and potentially more efficient future drilling campaign. These steps may also increase the overall chance of commercial helium discovery.

## 3.0 LAKE RUKWA AREA LEADS

There are 30 leads located within Noble Helium's PLs. Each lead targets one of the three megasequences that contain the main potential reservoirs for helium in the Lake Rukwa Area. The Lake Beds megasequence has been divided into upper and lower units. From deepest to shallowest, the megasequences are the Karoo Supergroup, the Red Beds (which includes the Galula Formation), and the lower and upper Lake Beds. The leads are defined by a coarse, uneven grid of 2-D seismic data. The locations of the individual leads and seismic lines are shown on Figure 2. In most cases, only two 2-D

seismic lines are available to describe the lead. The limited data reduce the accuracy of the derived interpretation and also limit the resolution of the structural details of the closure. Because of the age of deformation in this basin, many of the faults that define the limits of the features extend to the surface or near the surface. This may be beneficial with regard to helium migration fairways, but it decreases the probability of fault-dependent closures.

#### 4.0 PROBABILISTIC ANALYSIS

We used standard engineering and geoscience methods for the probabilistic assessment of the undiscovered OGIP and prospective helium volumes for all mapped leads. The parameters used in our volumetric calculations are derived by considering the geology of the area and understanding known productive subsurface traps in similar geologic environments. These volumetric parameters are input into a Monte Carlo simulation. The Monte Carlo simulation is a method of analysis that models possible results by substituting a range of values, or probability distributions, for each parameter that has inherent ranges of possible outcomes or uncertainty. The Monte Carlo simulation determines a distribution of possible volumetric outcomes for each lead. The volumetric input parameters used in our analysis are shown on Figure 7. Our estimates of undiscovered OGIP and prospective helium volumes are calculated using the following mathematical relationships:

$$\text{OGIP} = \text{GRV} * \text{NTG} * \phi * (1 - S_w) * \text{FVF}$$

$$\text{PHV} = \text{OGIP} * \text{RF} * \text{HC}$$

where:

Item	Description	Units
OGIP	Original gas-in-place	m <sup>3</sup>
GRV	Gross rock volume	m <sup>3</sup>
NTG	Net-to-gross ratio	decimal
$\phi$	Porosity	decimal
$S_w$	Water saturation	decimal
FVF	Formation volume factor	sm <sup>3</sup> /rm <sup>3</sup>
PHV	Prospective helium volume	m <sup>3</sup>
RF	Recovery factor	decimal
HC	Helium concentration	decimal

More detailed descriptions of the input parameters are discussed below. As requested by Noble Helium, all inputs for our calculations are presented in metric units and all undiscovered OGIP and helium volume estimates are presented in imperial units.

#### 4.1 GROSS ROCK VOLUME

Gross rock volume is defined as the volume of rock that is bounded by the combination of three surfaces: the top of the reservoir, the base of the reservoir, and the fluid contact between free gas and water.

The maximum areal extent of each lead was determined by evaluating the existing 2-D seismic data set. These maximum extents are defined as the spill points of the structures. The gas spill point for each structure is the point at which each additional gas molecule migrating into the structure displaces an existing gas molecule so that the structure can no longer hold additional gas. One-third fill of the overall closure height is considered to be the minimum-fill case.

By examining each of the reservoirs, an overall reservoir section thickness of 100 m was deemed to be a likely maximum reservoir thickness that would be gas-filled. In many cases, less than 100 m of rock is

above the spill point, and then the available reservoir area is only partially filled. Minimum thickness was estimated to be 20 m.

## 4.2 NET-TO-GROSS RATIO, POROSITY, AND WATER SATURATION

The net-to-gross ratio is the ratio of sand reservoir to the thickness of the total formation within the rock column. Porosity is a measure of the voids in a material. Water saturation is a measure of the percentage of water contained in a given pore. Total gas saturation is calculated as  $1 - S_w$ . We used well-log analysis of the Galula-1 and Ivuna-1 wells to determine the ranges of net-to-gross ratio, porosity, and water saturation. In all cases, the expected porosity in each reservoir decreases from youngest to oldest formation.

## 4.3 FORMATION VOLUME FACTOR

The formation volume factor represents gas expansion from the reservoir to surface conditions. To determine estimates of formation volume factor, regional trends of pressure and temperature versus depth were established. These data were combined with expected fluid characteristics to determine the formation volume factor.

For each lead, we estimated subsurface pressures using a pressure gradient of 10.6 kilopascals per m and subsurface temperatures using a temperature gradient of 3°C per 100 m. We used a gas composition based on surface sample gas analysis. Input values for the gas composition were 1, 4, 5, and 90 percent for CO<sub>2</sub>, helium, methane, and nitrogen, respectively.

## 4.4 RECOVERY FACTOR

The recovery factor is the ratio of the recoverable gas volume to the undiscovered OGIP. No reservoir permeability or drive mechanism data currently exist for the Lake Rukwa Area; therefore, estimated ranges for the recovery factor were based on our knowledge of similar reservoirs. Consideration was given to the expected reservoir quality, the nature of the expected fluids, the relative size of the development, and the degree of expected aquifer support. A wide range of recovery factors was used for the probabilistic analysis. The low and high estimate for recovery factors is 0.5 and 0.9, respectively.

## 4.5 HELIUM CONCENTRATION

No subsurface helium concentration measurements have been taken in the Lake Rukwa Area, with the exception of reported helium shows during Helium One's drilling of the Tai-1 well and the Tai-1A sidetrack. The Tai-1 well was completed in August 2021 to a depth of 1,121 m, and helium shows were reported in the Karoo Supergroup, the Red Beds, and the Lake Beds. No helium measurements were recorded in these prospective intervals within the well; however, a helium concentration of 2.2 percent was reported at a depth of 70.5 m in a shallow sand, which is beyond the scope of this evaluation. Because of mechanical problems, the well and sidetrack were not tested. In August 2021, Helium One completed the redrill of the Tai-2 well and reported that no helium gas was identified.

Several surface gas samples have been taken in the hot springs in the Rukwa Rift area. A location map of the hot springs where samples were taken is shown on Figure 8. The number on the map corresponds with the map number shown in the table below. The following table also contains the helium, nitrogen, and CO<sub>2</sub> concentrations for these surface samples.

Map Number	Sample Location/Name	Source	Helium Concentration (%)	Nitrogen Concentration (%)	CO <sub>2</sub> Concentration (%)
1	Rukwa #1/MMCT001	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	0.005	Not Reported	Not Reported
2	Rukwa #1/MMCT002	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	0.004	Not Reported	Not Reported
3	Songwe River #1	James, 1967	0.010	0.6	99.2
4	Songwe River #2	James, 1967	0.010	2.1	97.2
5	Rukwa #2/Rukwa #2b (rerun)	Barry, Hilton, Fischer, De Moor, Mangasini, and Ramirez, 2013	2.490	96.0	Not Reported
6	Rock of Hades Spring	James, 1967	4.200	87.5	Not Reported
7	Salt Works (reported as "at-depth samples" but no further details)	Ballentine, Barry, Fontijn, Hillegonds, Bluett, Abraham-James, Danabalan, Gluyas, Brennwald, Plüss, Seneshen, Sherwood, 2017	8.000 to 10.000	Not Reported	Not Reported

We assumed that the extremely low helium concentrations (less than 0.3 percent) found in the samples indicate a mantle origin for helium in those particular hot springs. In those cases, volcanogenic CO<sub>2</sub> must have caused helium dilution. The remaining samples show helium concentrations of greater than 1 percent and are believed to have radiogenic origin. For the two samples with helium concentrations greater than 1 percent and with reported nitrogen content, the nitrogen concentration is greater than 80 percent. Nitrogen is thought to be a favorable carrier gas for helium because the two gases are often found together in the subsurface for certain ranges of nitrogen-to-helium ratios. Other carrier gases, such as CO<sub>2</sub> and hydrocarbon gases, are not as favorable and tend to dilute the subsurface helium concentration. For this assessment, we determined a distribution of helium concentrations excluding the samples with less than 1 percent helium. The possibility of extremely low helium concentration is addressed in our geologic risking discussion in Section 5.0.

We analyzed the subsurface helium concentration data from helium-bearing reservoirs in the United States to use as analogs for the Lake Rukwa Area leads based on depth, geologic age, and gas composition. No one analog among the available United States reservoir data matched all of the characteristics of the Lake Rukwa Area leads. However, in samples with high nitrogen concentrations, the helium concentrations resembled those of the hot springs samples (excluding the mantle samples).

In the United States data, the distributions of helium concentration appear to reach a maximum of approximately 10.0 percent. To our knowledge, the highest subsurface concentration of helium was recorded in the Amadeus Basin in Australia at 12.0 percent (Clarke and Seddon, 2014). To determine our ranges of helium concentration, we created a beta distribution in our Monte Carlo simulation using a minimum of 0.3 percent and a maximum of 12.0 percent. For our analysis, the low and high estimate helium concentration inputs are 1.3 and 10.0 percent, respectively, with a mean of 5.3 percent.

## 5.0 GEOLOGIC RISKING

Unrisked prospective helium volumes are estimated ranges of recoverable helium volumes assuming their discovery and development and are based on estimated ranges of undiscovered in-place volumes. Geologic risking of prospective helium volumes addresses the probability of success for the discovery of a significant quantity of potentially recoverable helium; this risk analysis is conducted independent of

estimations of helium volumes and without regard to the chance of development. For helium volumes, principal geologic risk elements include (1) trap and seal characteristics; (2) reservoir presence and quality; (3) source rock capacity, quality, and maturity; and (4) timing, migration, and preservation of helium in relation to trap and seal formation. Risk assessment is a highly subjective process dependent upon the experience and judgment of the evaluators and is subject to revision with further data acquisition or interpretation.

Each lead was evaluated to determine ranges of in-place total gas containing helium and recoverable helium, and each lead was risked as an independent entity without dependency between potential lead drilling outcomes. If helium discoveries are made, smaller-volume leads may not be commercial to independently develop, although they may become candidates for satellite developments and tie-backs to existing infrastructure at some future date. The development infrastructure and data obtained from early discoveries will alter both geologic risk and future economics of subsequent discoveries and developments.

The prospective accumulations share a number of geologic risks. The helium source distribution is relatively unconstrained from empirical data. It is not known whether the helium source is from regionally extensive Precambrian igneous and metamorphic shield or whether the helium source is predominantly related to the ongoing melting of the lithosphere and movement of magma within the EARS. Current data do not resolve this issue. As leads are drilled and the fluid composition is analyzed, the presence of any CO<sub>2</sub>, helium, hydrocarbons, and/or nitrogen will help resolve the volume and type of helium gas within the system. Generally, each successful result with trapped natural gas will affect the future risks. Once a system is shown to be working, whether it is hydrocarbon- or helium-filled, each subsequent lead that is drilled and shares the same attributes has less risk associated with trap integrity.

Analysis of fill and spill of gas for each trap requires that the location of source is predetermined. Analogous evidence from surface geochemical tests at Harley Dome Field in Utah appears to support the supposition that helium migrates into the near surface soil profile and is resident above known producing helium fields. Surface expulsion of helium in the Rukwa Rift area is not universal. An ongoing geochemical survey of the area may provide more information regarding surface expulsion of helium in the future. The sealing capacity of the shales within the Rukwa Rift area are not fully categorized, and the regionally extensive evaporate units have not been encountered in either the surface exposures or the drillwells in the area. Many of the structures mapped were likely in their current structural configuration for a relatively short period of time.

Seismic data and surface geologic mapping indicate that there is an extensive and pervasive surface-piercing fault system that provides a potential migration fairway but also adds to the helium seal risk. The coarse line spacing of the available 2-D seismic data does not image the fine-scale faulting that significantly segments the mapped features. The implied connection of imaged faults on consecutive seismic lines is tenuous. There is the likelihood that the mapped size of the leads is exaggerated because of the coarse scale of the seismic grid.

## 6.0 **OGIP AND PROSPECTIVE HELIUM VOLUMES**

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We have estimated the undiscovered OGIP and unrisked gross (100 percent) prospective helium volumes, as of February 1, 2022, for leads located in the Lake Rukwa Area. We did not estimate prospective helium volumes for the Nyasa Rift Area PLs because of insufficient data, and we did not estimate prospective helium volumes for the PLs in the Eyasi Basin and Manyara Basin Areas because of the pending status of the applications and insufficient data.

Totals of unrisked prospective helium volumes beyond the lead level are not reflective of volumes that can be expected to be recovered and are shown for convenience only. Because of the geologic risk associated with each lead, meaningful totals beyond this level can be defined only by summing risked prospective helium volumes. Such risk is significant.



We estimate the undiscovered OGIP and the unrisks gross (100 percent) prospective helium volumes for these Lake Rukwa Area leads, along with the probability of geologic success ( $P_g$ ), as of February 1, 2022, to be:

Lead/Reservoir	Undiscovered OGIP <sup>(1)</sup> (BCF)				Unrisks Gross (100%) Prospective Helium Volumes (BCF)				$P_g$ (%)
	Low Estimate	Best Estimate	High Estimate	Mean	Low Estimate	Best Estimate	High Estimate	Mean	
Chilichili									
Upper Lake Beds	12.9	40.2	127.1	60.0	0.2	1.3	5.5	2.3	16
Lower Lake Beds	10.9	33.0	102.7	48.3	0.2	1.0	4.1	1.8	16
Galula	10.0	33.8	115.2	53.5	0.2	1.0	4.6	2.0	16
Karoo	19.2	68.9	264.3	118.9	0.4	2.1	10.2	4.4	18
Dagaa									
Galula	4.3	16.2	62.9	28.0	0.1	0.5	2.5	1.1	10
Gege									
Upper Lake Beds	259.9	685.4	1,760.4	891.4	4.3	21.1	75.0	33.2	13
Lower Lake Beds	224.9	572.4	1,448.9	744.4	3.9	18.0	61.4	27.1	13
Galula	144.5	437.7	1,321.3	620.9	2.6	13.2	53.8	23.1	12
Karoo	21.9	68.1	219.9	102.5	0.4	2.1	8.9	3.8	13
Kachinga									
Upper Lake Beds	21.7	62.4	182.6	88.2	0.4	1.9	7.4	3.3	13
Lower Lake Beds	15.5	46.4	136.3	66.6	0.3	1.4	5.7	2.4	13
Galula	19.8	47.4	108.4	58.4	0.3	1.5	5.0	2.2	12
Kalawi									
Upper Lake Beds	13.2	52.3	211.4	93.5	0.3	1.6	8.2	3.4	13
Lower Lake Beds	1.9	9.3	44.3	20.3	0.0	0.3	1.7	0.8	13
Galula	4.5	22.4	100.9	44.0	0.1	0.7	3.8	1.6	12
Karoo	18.7	70.4	259.1	118.3	0.4	2.1	10.4	4.4	13
Kambale									
Upper Lake Beds	32.0	109.6	379.3	174.6	0.6	3.3	15.0	6.5	16
Lower Lake Beds	28.2	96.7	346.3	155.5	0.5	3.0	13.2	5.6	16
Galula	22.4	75.3	253.1	117.7	0.4	2.3	10.2	4.3	16
Karoo	24.1	79.8	253.4	119.1	0.4	2.3	10.2	4.3	18
Katanta									
Upper Lake Beds	31.6	124.2	485.8	221.9	0.6	3.7	19.5	8.3	13
Lower Lake Beds	34.0	106.6	335.5	160.8	0.6	3.4	14.2	6.0	13
Galula	50.3	160.9	514.0	244.4	0.9	4.8	21.1	8.9	12
Mbale									
Lower Lake Beds	3.1	7.9	19.8	10.2	0.1	0.3	0.8	0.4	11
Galula	0.6	2.9	15.0	6.6	0.0	0.1	0.6	0.2	8
Karoo	25.2	77.0	233.2	111.5	0.5	2.3	9.6	4.1	11
Mbelele									
Upper Lake Beds	17.2	56.6	185.1	87.2	0.3	1.7	7.6	3.2	16
Lower Lake Beds	5.4	22.1	87.7	38.9	0.1	0.7	3.5	1.5	16
Galula	31.7	89.5	251.2	122.9	0.5	2.7	10.2	4.5	16
Karoo	2.2	10.3	48.3	20.9	0.0	0.3	1.8	0.8	18
Total <sup>(2)</sup>	1,111.8	3,285.7	9,873.4	4,749.4	19.6	100.7	405.7	175.5	

(1) Undiscovered OGIP is inclusive of helium, hydrocarbon, nitrogen, CO<sub>2</sub>, and other gases.

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

OGIP and helium volumes are expressed in billions of cubic feet (BCF) at standard temperature and pressure bases. In-place volumes are reported at surface conditions.

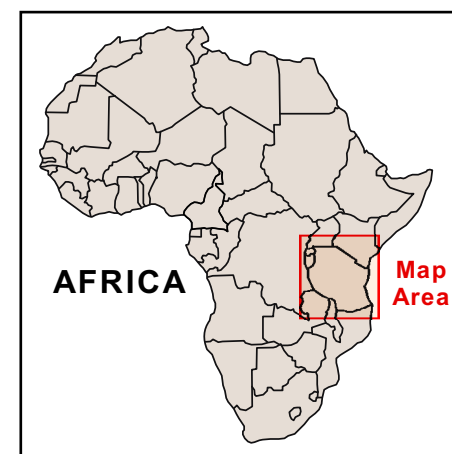
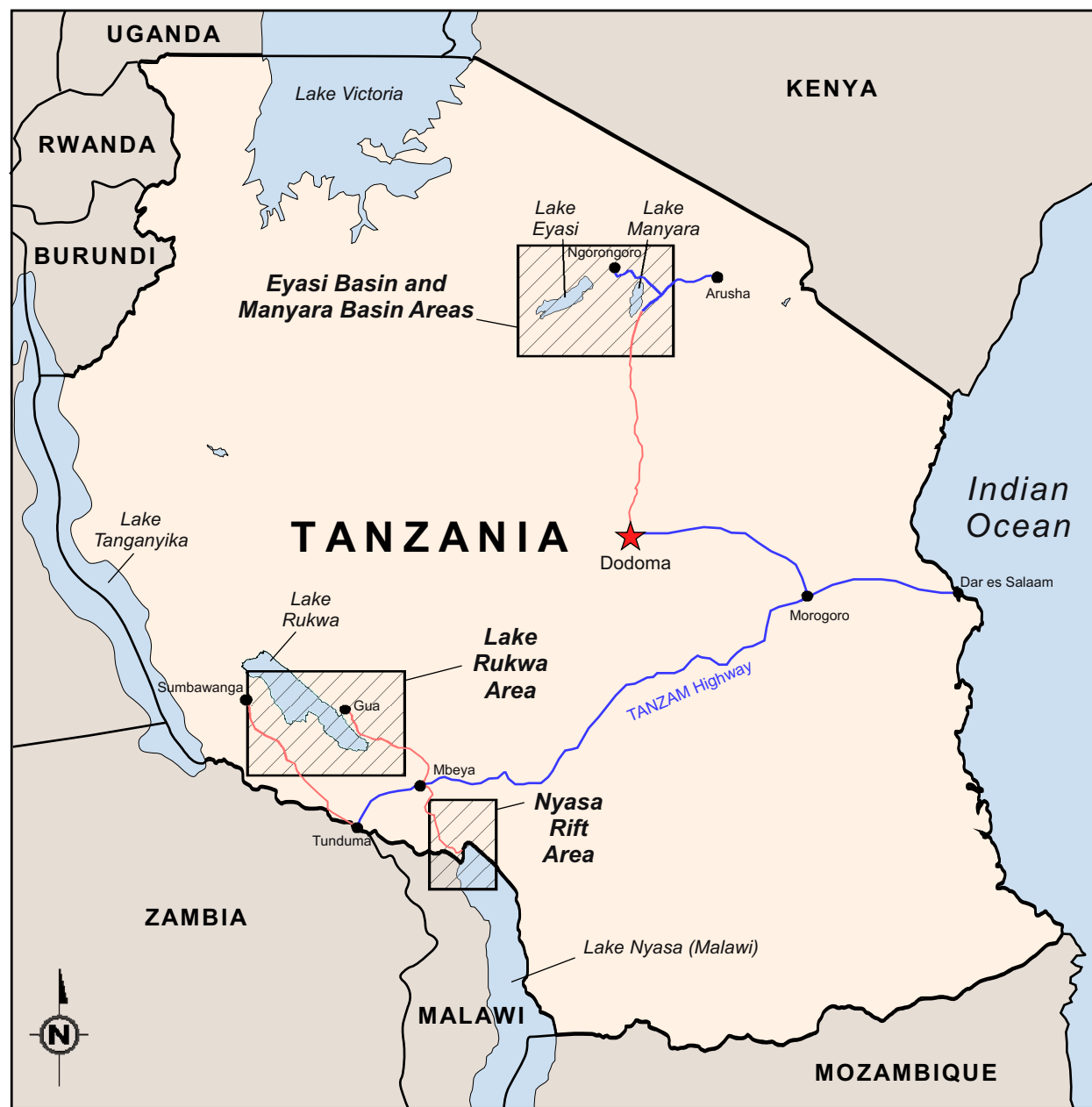
The prospective helium volumes shown in this report have been estimated using probabilistic methods and are dependent on a helium discovery being made. If a discovery is made and development is undertaken, the probability that the recoverable volumes will equal or exceed the unrisks estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate. As

requested by Noble Helium, mean estimates are reported in addition to the low, best, and high estimate prospective helium volumes. The low, best, and high estimate prospective helium volumes have been aggregated beyond the lead level by arithmetic summation; therefore, these totals do not include the portfolio effect that might result from statistical aggregation.

It should be understood that the prospective helium volumes discussed and shown herein are those undiscovered, highly speculative volumes estimated where geological and geophysical data suggest the potential for discovery of helium. The unrisked prospective helium volumes shown in this report are the range of volumes that could reasonably be expected to be recovered in the event of the discovery and development of these leads.

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## FIGURES



- Highway
- Regional Road
- ★ Capital City

### Noble Helium Project Areas Tanzania

### Location Map

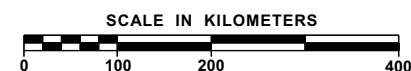
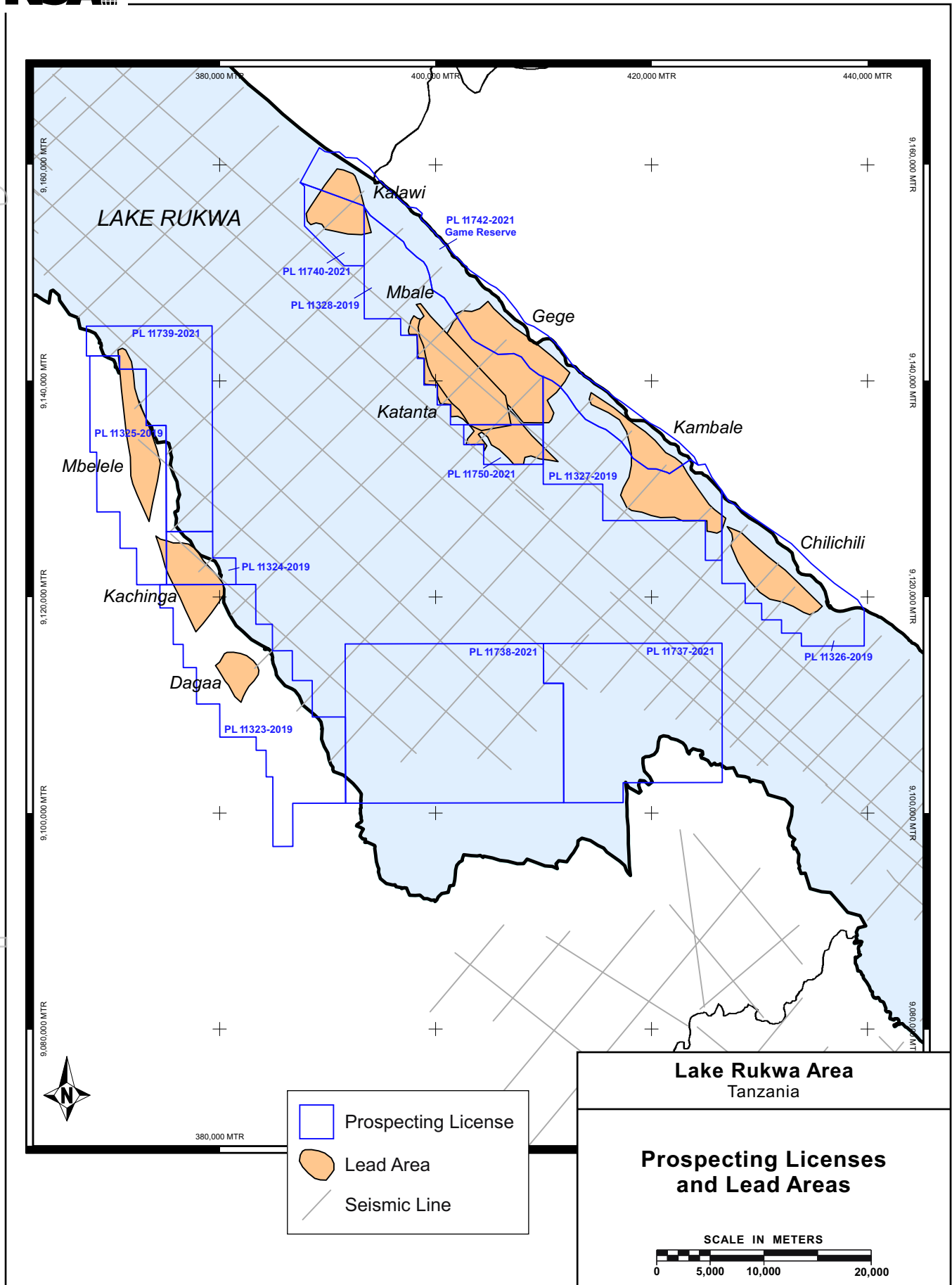
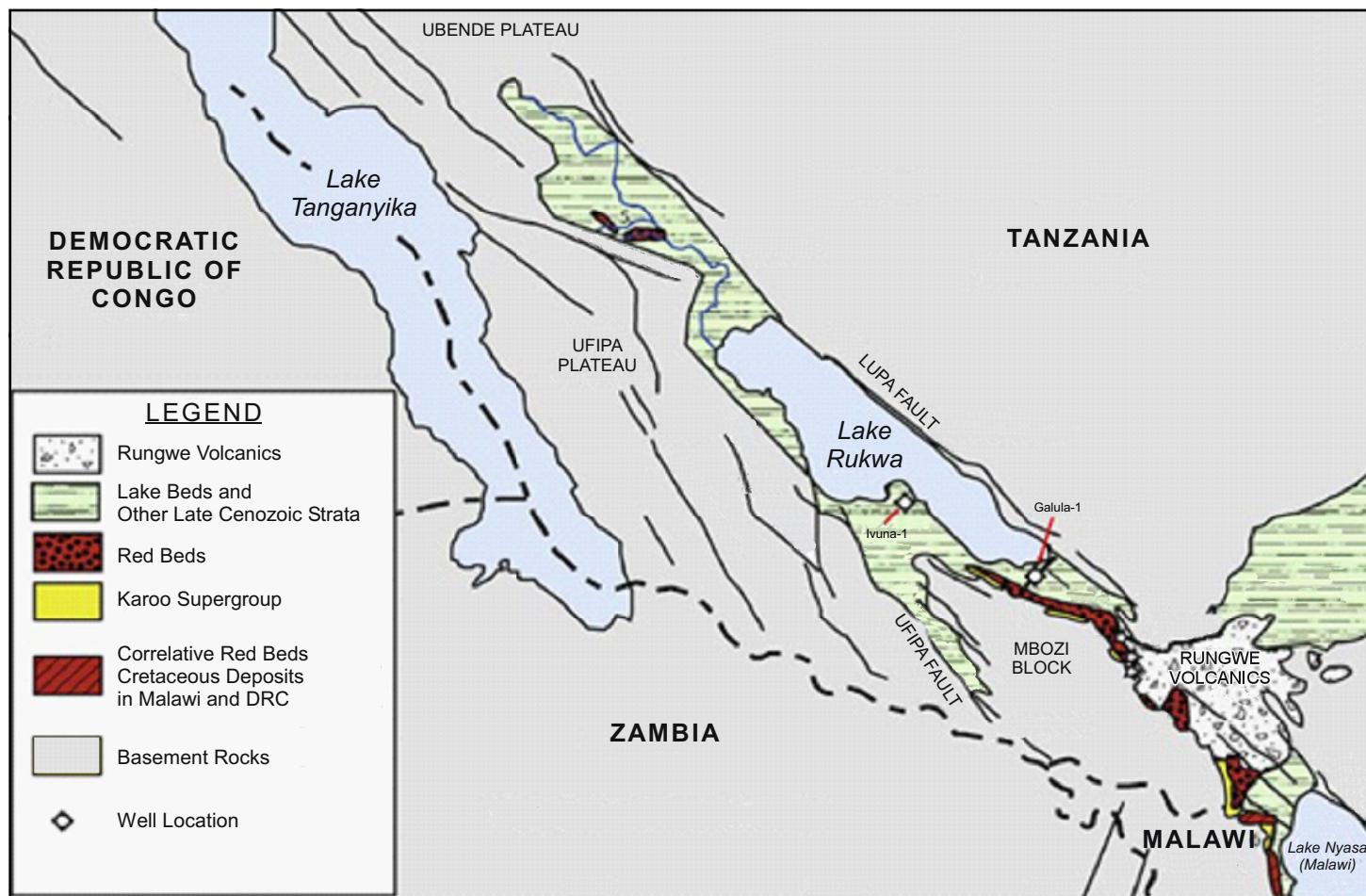


Figure 1

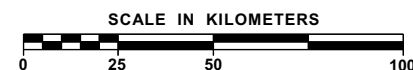
All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.





**Rukwa Rift Basin**  
Tanzania

**Structural Elements  
and Surface Geology**

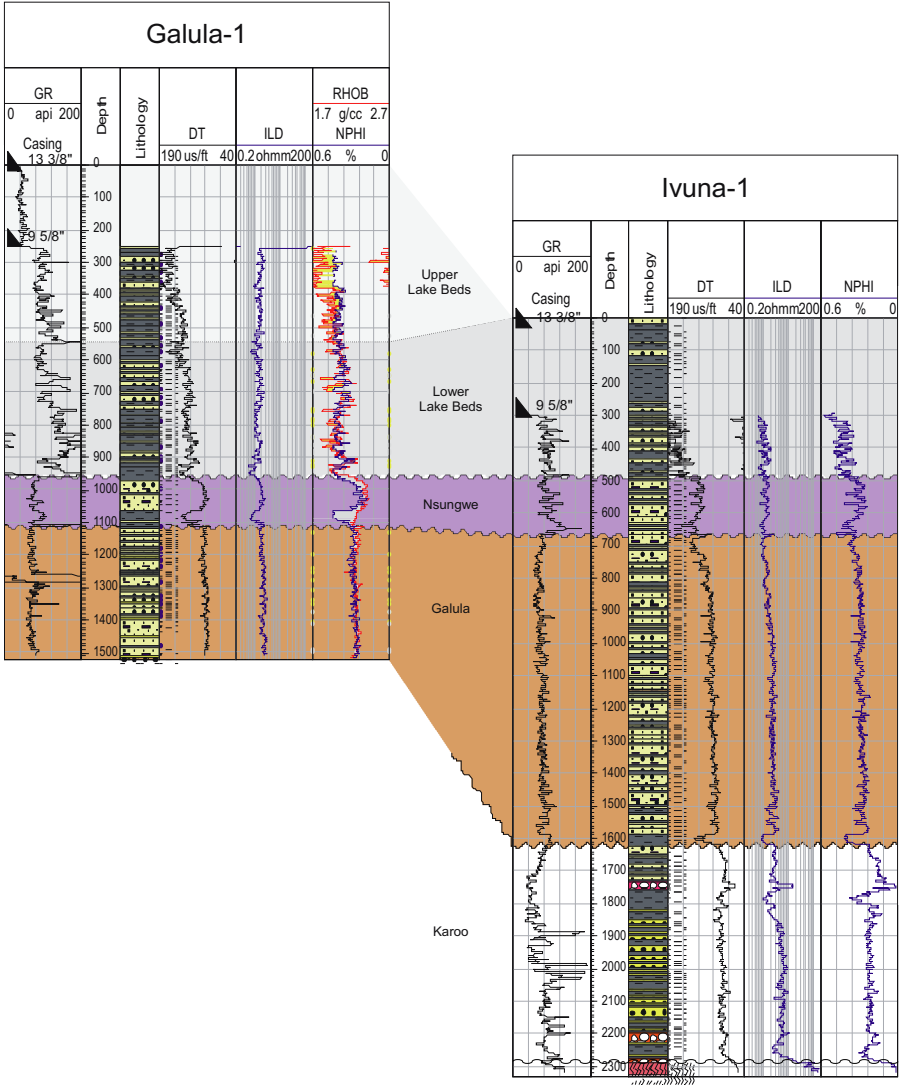
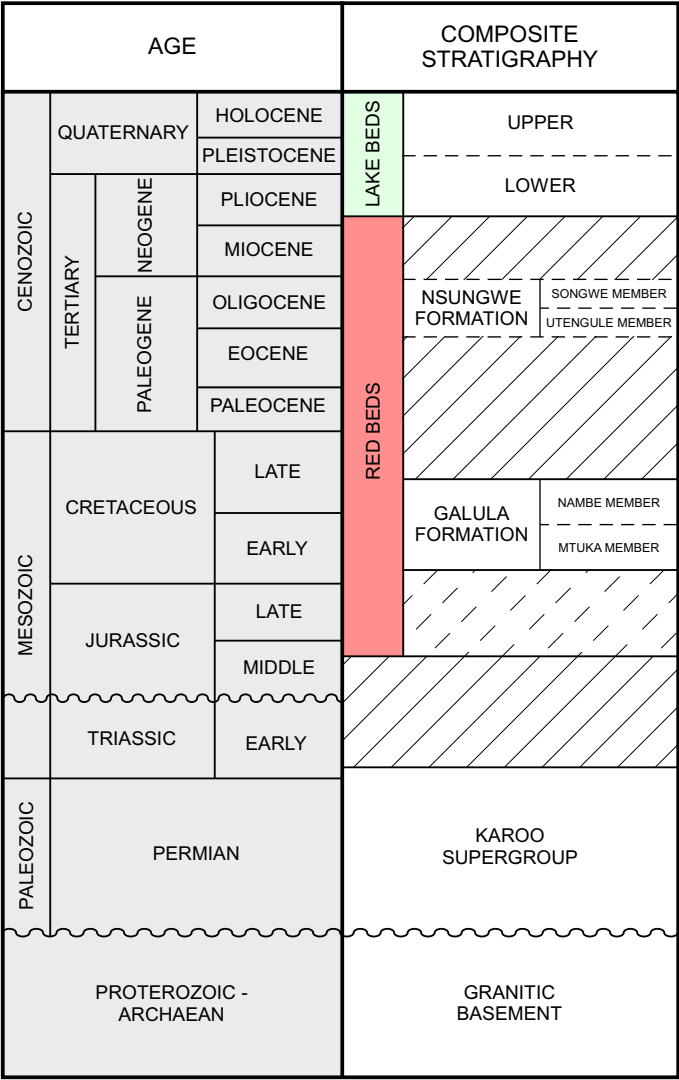


Adapted from Figure 8 of "Technical Opinion Report - Helium One LTD Prospectivity and Exploration Activities in Tanzania", prepared by Havoc Services LTD, May 20, 2016.

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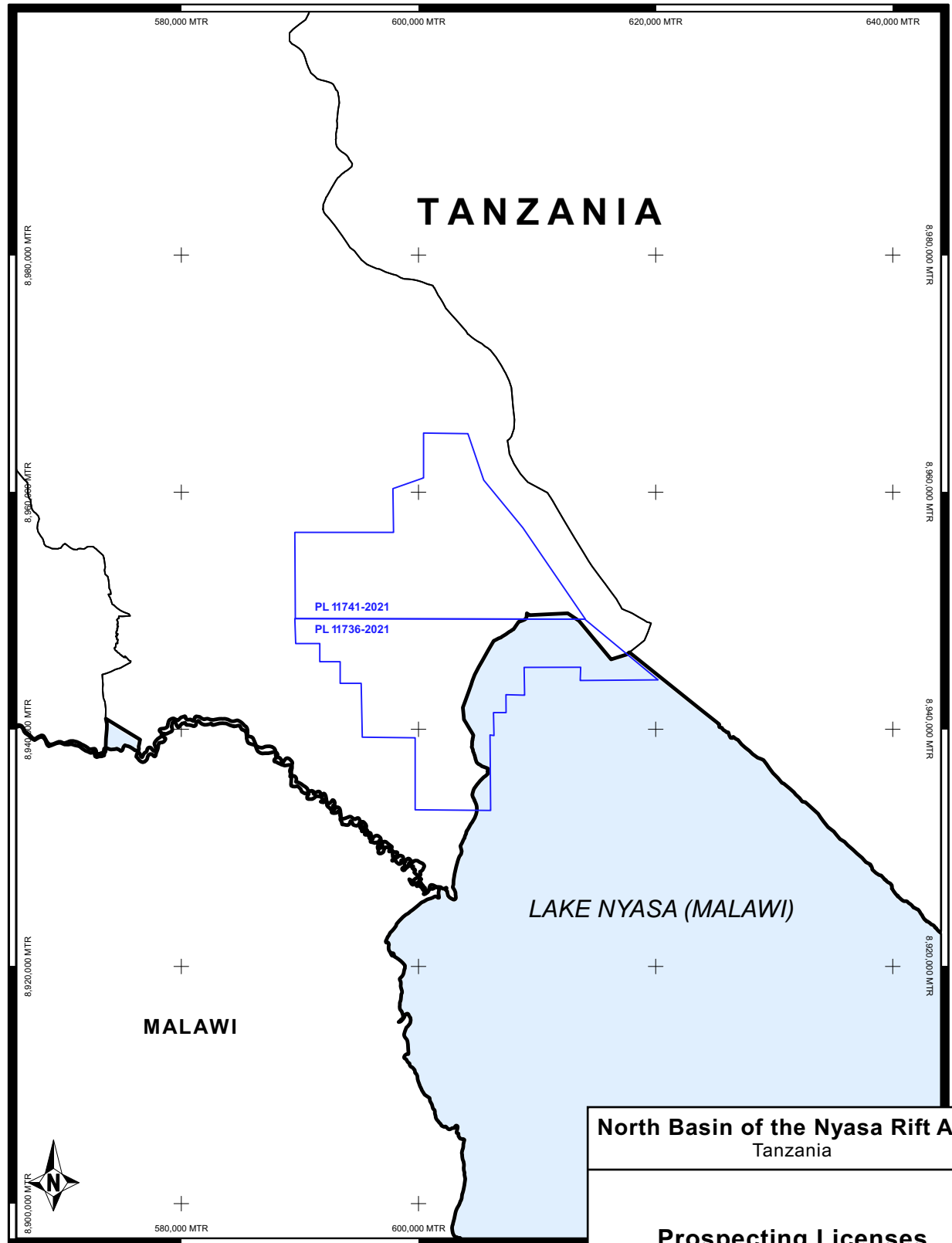
Stratigraphy of the  
Rukwa Rift Basin  
Tanzania



Adapted from figures provided by the client.

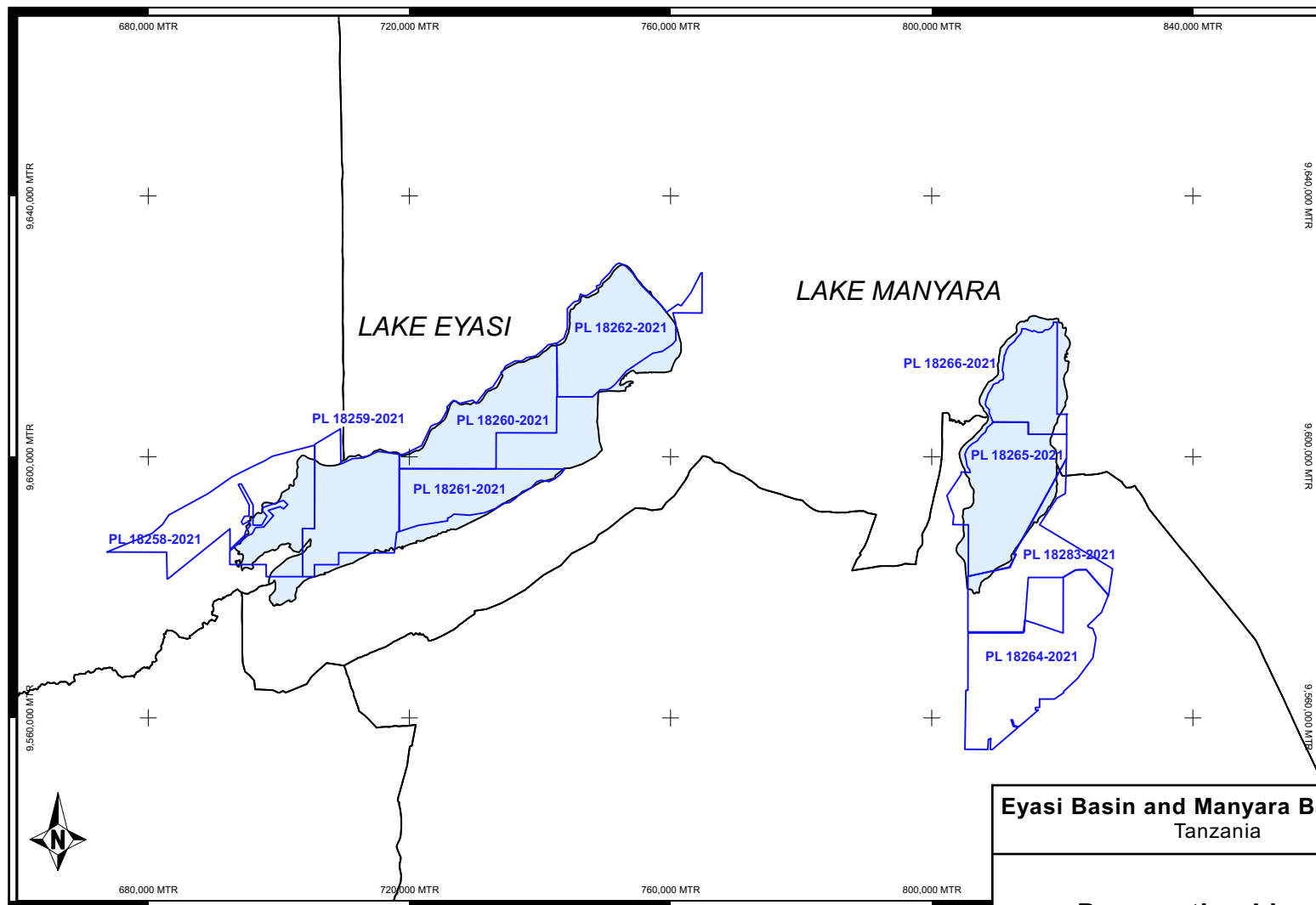
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Figure 4






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**Eyasi Basin and Manyara Basin Areas**  
Tanzania

**Prospecting License  
Applications**

 Prospecting License

SCALE IN METERS  
0 10,000 20,000 40,000

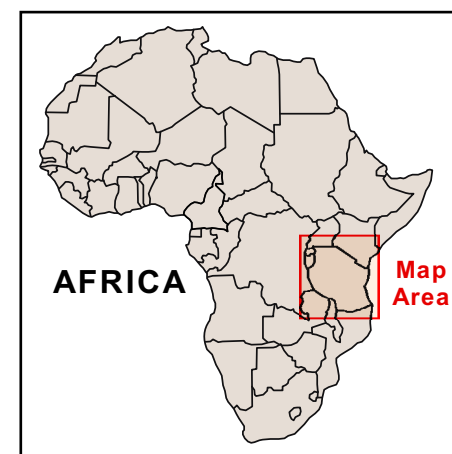
Figure 6

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

SUMMARY OF VOLUMETRIC PARAMETERS  
LAKE RUKWA AREA, TANZANIA  
AS OF FEBRUARY 1, 2022

Lead/Reservoir	Gross Rock Volume (MMm <sup>3</sup> )		Net-to-Gross Ratio (decimal)		Porosity (decimal)		Total Gas Saturation (decimal)		Initial Formation Volume Factor	Total Gas Recovery Factor (decimal)		Helium Concentration (%)	
	Lognormal Distribution		Normal Distribution		Normal Distribution		Normal Distribution		(sm <sup>3</sup> /rm <sup>3</sup> ) Point Distribution	Uniform Distribution		Beta Distribution	
	P90	P10	P90	P10	P90	P10	P90	P10		P90	P10	P90	P10
Chilichili													
Upper Lake Beds	77	1,337	0.21	0.35	0.30	0.35	0.50	0.80	62.38	0.50	0.90	1.25	10.00
Lower Lake Beds	59	936	0.20	0.33	0.27	0.32	0.50	0.80	78.22	0.50	0.90	1.25	10.00
Galula	76	1,628	0.15	0.24	0.24	0.29	0.50	0.80	85.27	0.50	0.90	1.25	10.00
Karoo	133	3,424	0.10	0.17	0.21	0.26	0.50	0.80	150.27	0.50	0.90	1.25	10.00
Dagaa													
Galula	8	205	0.35	0.75	0.24	0.29	0.50	0.80	124.22	0.50	0.90	1.25	10.00
Gege													
Upper Lake Beds	1,246	13,098	0.23	0.38	0.30	0.35	0.50	0.80	77.33	0.50	0.90	1.25	10.00
Lower Lake Beds	835	8,077	0.26	0.43	0.27	0.32	0.50	0.80	96.91	0.50	0.90	1.25	10.00
Galula	673	9,459	0.20	0.33	0.24	0.29	0.50	0.80	109.54	0.50	0.90	1.25	10.00
Karoo	75	1,253	0.19	0.31	0.21	0.26	0.50	0.80	171.14	0.50	0.90	1.25	10.00
Kachinga													
Upper Lake Beds	210	2,878	0.16	0.26	0.30	0.35	0.50	0.80	53.53	0.50	0.90	1.25	10.00
Lower Lake Beds	167	2,367	0.14	0.23	0.27	0.32	0.50	0.80	60.72	0.50	0.90	1.25	10.00
Galula	260	1,896	0.12	0.19	0.24	0.29	0.50	0.80	73.29	0.50	0.90	1.25	10.00
Kalawi													
Upper Lake Beds	32	1,087	0.40	0.60	0.30	0.35	0.50	0.80	76.63	0.50	0.90	1.25	10.00
Lower Lake Beds	5	257	0.30	0.50	0.27	0.32	0.50	0.80	100.39	0.50	0.90	1.25	10.00
Galula	9	388	0.35	0.75	0.24	0.29	0.50	0.80	115.45	0.50	0.90	1.25	10.00
Karoo	61	1,609	0.20	0.33	0.21	0.26	0.50	0.80	158.92	0.50	0.90	1.25	10.00
Kambale													
Upper Lake Beds	228	4,907	0.16	0.26	0.30	0.35	0.50	0.80	68.09	0.50	0.90	1.25	10.00
Lower Lake Beds	213	4,478	0.14	0.23	0.27	0.32	0.50	0.80	85.66	0.50	0.90	1.25	10.00
Galula	126	2,462	0.17	0.29	0.24	0.29	0.50	0.80	100.41	0.50	0.90	1.25	10.00
Karoo	93	1,698	0.18	0.29	0.21	0.26	0.50	0.80	161.02	0.50	0.90	1.25	10.00
Katanta													
Upper Lake Beds	73	2,387	0.40	0.60	0.30	0.35	0.50	0.80	83.76	0.50	0.90	1.25	10.00
Lower Lake Beds	96	1,590	0.30	0.50	0.27	0.32	0.50	0.80	106.82	0.50	0.90	1.25	10.00
Galula	111	1,702	0.35	0.75	0.24	0.29	0.50	0.80	117.21	0.50	0.90	1.25	10.00
Mbale													
Lower Lake Beds	9	85	0.30	0.50	0.27	0.32	0.50	0.80	109.54	0.50	0.90	1.25	10.00
Galula	1	57	0.35	0.75	0.24	0.29	0.50	0.80	122.66	0.50	0.90	1.25	10.00
Karoo	56	850	0.30	0.50	0.21	0.26	0.50	0.80	169.88	0.50	0.90	1.25	10.00
Mbelele													
Upper Lake Beds	75	1,344	0.32	0.53	0.30	0.35	0.50	0.80	57.89	0.50	0.90	1.25	10.00
Lower Lake Beds	26	808	0.24	0.40	0.27	0.32	0.50	0.80	71.81	0.50	0.90	1.25	10.00
Galula	323	3,787	0.14	0.24	0.24	0.29	0.50	0.80	74.00	0.50	0.90	1.25	10.00
Karoo	25	1,124	0.10	0.17	0.21	0.26	0.50	0.80	88.21	0.50	0.90	1.25	10.00

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



**Lake Rukwa Area**  
Tanzania

**Hot Springs Locations**

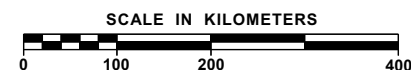


Figure 8

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

## BIBLIOGRAPHY

## BIBLIOGRAPHY

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# ANNEXURE B

## SOLICITOR'S REPORT ON TENEMENTS



**Our Ref: MAA/RTL/2022/01/27/01**

**10<sup>th</sup> February 2022**

Noble Helium Limited  
Level 1, 67 Lytton Road,  
East Brisbane Q4169  
**Australia**

Dear Sirs,

**RE: SOLICITOR'S REPORT ON TENEMENTS**

This Report is prepared for inclusion in a prospectus to be issued by **Noble Helium Limited** (the "Company") in February 2022 for the issue of a minimum of 35,000,000 fully paid ordinary shares in the capital of the Company ("Shares") and a maximum of 50,000,000 Shares at an issue price of AU\$0.20 per Share to raise between \$7,000,000 and \$10,000,000 (before costs) ("Prospectus").

**1. Scope**

- 1.1 We, Mawalla Advocates, corporate legal advisors and Advocates of the High Court of Tanzania, and courts subordinates thereto, practicing and qualified as such to practice in the United Republic of Tanzania and to advise upon the Laws of the United Republic of Tanzania, have been asked to prepare a report on certain mining tenements in the United Republic of Tanzania in which the Company has interests ("Mining Tenements").
- 1.2 Details of these mining tenements are listed in Schedule I of this report entitled "Details of Mining Tenements including results of Official Searches" which together with the Notes and Footnotes to the Schedule form part of this Report. As part of the review, we have considered the following about the Mining Tenements in the United Republic of Tanzania:

**1.2.1 Title and standing;**

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Telephone: +255 222 664 692 Telephone/Facsimile: +255 (0) 22 266 4693 Electronic mail: info.dar@mawalla.co.tz

Website: www.mawalla.co.tz

Partners: Beatus Malima Lemmy Bartholomew Wilfred Mawalla

TIN No.: 123-771-036 VRN No.: 40-019209-P



- 1.2.2 Renewal of tenements;
  - 1.2.3 Terms and conditions applying to the tenements, including rent, size and restrictions on activities;
  - 1.2.4 Validity of the tenements; and
  - 1.2.5 Any encumbrances.
- 1.3 The tenements that are the subject of this report are Prospecting Licences. There are a total of 23 prospecting licences. They are owned by Rocket Tanzania Limited and Antares Tanzania Limited. Both Rocket Tanzania Limited and Antares Tanzania Limited are registered under the Laws of the United Republic of Tanzania. Rocket Tanzania Limited is incorporated under Certificate of Incorporation No. 135309 effective from 22<sup>nd</sup> day of May 2017, while Antares Tanzania Limited is incorporated under Certificate of Incorporation No. 140256439 effective from 28<sup>th</sup> October 2019. Rocket Tanzania Limited owns 14 prospecting licences, which are fully issued and granted by the Mining Commission, while Antares Tanzania Limited holds 9 prospecting licences which have not yet been granted but the Mining Commission has recommended that they be issued and granted to Antares Tanzania Limited (the details of which are given in **Schedule I** herein below of this Report).

## 2. Official Searches and Documents

For purposes of this Report, we have conducted searches and made enquiries in respect of all of the Mining Tenements. We have obtained official search results in the respect of the Mining Tenements from the Register maintained by the Mining Commission – Ministry of Minerals of the United Republic of Tanzania ("MoM") in accordance with the provisions of section 106 of the Mining Act [CAP 123 R.E. 2018]. The results of these searches were obtained on 26<sup>th</sup> January 2022. Key details on the status of the Mining Tenements are set out in **Schedule I** of this Report.

## 3. Opinion

As a result of our searches and enquiries, but subject to the assumptions and qualifications set out in this Report, we are of the view that, as at the date of the relevant searches:





- 3.1 **Company's Interests:** this Report provides an accurate statement as to the status of the Mining Tenements and the Company's interest in the Mining Tenements;
- 3.2 **Title and Good Standing:** unless otherwise specified in this Report, the Mining Tenements are validly granted and in good standing. All tenements were granted in accordance with the existing and applicable laws of the United Republic of Tanzania. As indicated in Schedule 1, herein below, there are pending applications for 9 prospecting licences, of which the Mining Commission has recommended for their grant. There is no pending application for renewal of any tenement. We can state categorically that since the Mining Commission has recommended that the pending applications of the 9 prospecting licences be granted, then it is our legal position that on the basis of sections 22(b), 22(n) and 31 of the Mining Act [CAP 123 R.E. 2018], hereinafter the Act, the same shall be granted since Antares Tanzania Limited has met all the statutory conditions for grant of the Prospecting Licence.
- 3.3 **Rent:** all applicable rents payable under the Act in respect of the Mining Tenements have been paid. Under the Mining Act non-payment of rents does not affect the title to the tenements or the ability to renew a tenement for a further term rather a fine is imposed equal to 25% of the rent payable for individual tenement holders or 50% of the rent payable for body corporate tenement holders. Annual rents that remain unpaid become a debt, which can be recovered in a court of competent jurisdiction.
- 3.4 **Third Party Interests:** there are no third-party interests, of any nature whatsoever in relation to the Mining Tenements apparent from our searches and the information provided to us.

#### 4. Material Issues

Subject to the qualifications and assumption set forth herein, it is our considered opinion that there are no material issues concerning these Mining Tenements in accordance with the licences issued by the Mining Commission as indicated in the Schedule herein below. We can vouch that there is no risk whatsoever about the proprietary interest in the said Mining tenements. There are no registered charges, encumbrances or any other interests recognised in the United Republic of Tanzania, over those prospecting licences.

#### 5. Description of the Mining Tenements



The Mining Tenements comprise of **23 Prospecting Licences (PL)**. A total of 14 Prospecting Licences have been granted already, while 9 of them are pending for their grant. Schedule I of this Report provides a list of those licences. The following provides a description of the nature and key terms of this type of the Mining Tenements as set out in the Act.

## **5.1 Prospecting Licence**

### **5.1.1 Rights:**

5.1.1.1 A Prospecting Licence is granted under section 32 of the Act, to search for any mineral by any means and to carry out any such works and remove such samples as may be necessary to test the mineral bearing qualities of land and includes the conduct of reconnaissance operations.

5.1.1.2 In terms of sections 35 and 95 of the Act, a Prospecting Licence confers on the holder the exclusive right to carry on prospecting operations in the prospecting area for minerals to which the licence applies. Once granted it allows the Holder to enter into a prospecting area, to search for minerals within the area of the licence and to carry out all operations and such other works as may be necessary for that purpose including the removal and excavation of soil and earth.

5.1.1.3 The right to explore and/or search for minerals is guaranteed under the Laws of the United Republic of Tanzania. The Prospecting Licence cannot be revoked within the period of the licence and within the period of extension of the licence. If it is revoked the holder is entitled to a fair compensation, which is the prevailing market value at the time of revocation or cancellation.

#### **5.1.1.4 Types of Prospecting Licence**

A Prospecting Licence may be applied for and issued for minerals falling under groups of minerals specified under section 28 of the Act. A Prospecting Licence will state the group of minerals and the



type of minerals to which the licence applies. The groups to which the prospecting licence may be applied for are metallic minerals, energy minerals, and gemstones excluding kimberlitic diamonds, industrial minerals or building materials. Section 4 of the Act defines each group as follows:

- (i) Metallic minerals means "a group of minerals comprising of gold, silver, copper, iron, nickel, cobalt, tin, tungsten, zinc, chromium, manganese, titanium, aluminium, platinum group of metals and other metallic minerals",
- (ii) Energy minerals means, "a group of minerals comprising of coal, peat, uranium, thorium and other radioactive minerals",
- (iii) Gemstones means, "(a) diamonds, emerald and other gem varieties of beryl, opal, ruby, sapphire, turquoise, chrysoberyl, spinel, topaz, tourmaline, zircon, obsidian, peridot, moonstone, chrysophase, amethyst; (b) other gem varieties of quartz, garnet, zoisite, tanzanite, cordierite, and scapolite in rough and uncut form; (c) any other rough and uncut stone, which may be declared to be a gemstone by the Minister;
- (iv) Kimberlitic diamonds means, "diamonds of gem or industrial quality formed and found in a primary rock, intrusion or extrusion from the earth's crust known as kimberlite pipe". Note that there is a proviso in this group to the effect that where prospecting operations whose primary purpose is to search for diamonds located in kimberlite pipe shall not be treated as prospecting for gemstones and diamonds located in, and recovered from, a kimberlite pipe shall not be treated as gemstones;
- (v) Industrial minerals means, "a group of minerals comprising of phosphate, kaolin, lime, gypsum, dolomite, diatomite, bentonite, zeolite, trona, pozzollana, vermiculite, salt, beach



sands and other minerals other than metallic minerals, normally used in industries; and

- (vi) Building materials includes "all forms of rock, stones, gravel, sand, clay, soils, volcanic ash or cinder, scoria, pumice, or other minerals being used for construction of buildings, roads, dams, aerodromes, or similar works but does not include gypsum, limestone being burned for the production of lime, or material used for the manufacture of cement.

In terms of section 28(1)(b) of the Act, Helium Gas falls under energy minerals group. As the law stands now in the United Republic of Tanzania, Helium Gas is classified as a mineral.

#### 5.1.2 **Term**

- (a) In terms of section 32(1)(a), (b) of the Act, a Prospecting Licences is granted for an initial period of 4 years and may be extended by the Minister, for a further term of 3 years and another term of a further 2 years. In accordance with section 32(1)(c) of the Act, there is no further renewal after the second renewal.
- (b) In terms of section 32(2) of the Act, applications for renewal must be submitted not later than one month prior to the expiry of the existing licence. The licence remains in force until the application for renewal is determined and if granted continues for the additional term. The Holder is entitled to and may apply for a Special Mining Licence or a Mining Licence.

#### 5.1.3 **Conditions:**

- (a) Under section 36(1)(a) of the Act, it is a condition of a Prospecting Licence that operations must commence within 3 months of the prospecting licence being granted or such further period as the Mining Commission may allow, from the date of the grant of the licence or such other date as is stated in the licence on commencement period;



- (b) In terms of section 36(1)(b), (c) of the Act, the holder of a Prospecting Licence must give notice to the licencing authority of the discovery of any mineral deposits of a potential commercial value; and to adhere to the prospecting programme appended to the prospecting licence;
- (c) In terms of section 36(1)(d) of the Act, the holder of the Prospecting Licence must expend on prospecting operations not less than the amount prescribed. In accordance with Regulation 9 of the Mining (Mineral Rights) Regulations, 2018, the amount for the purposes expenditure for a prospecting licence, where the prospecting licence is for all minerals other than gemstones, industrial minerals or building materials shall be as follows:
  - (i) in the case of the initial prospecting period, an amount per square kilometre of US\$500;
  - (ii) in the case of the first renewal period, an amount per square kilometre of US\$200;
  - (iii) in the case of the second renewal period, amount per square kilometre of US\$6,000
  - (iv) the prescribed amount in the case of a prospecting licence for industrial minerals, building materials per square kilometre shall be US\$100; and
  - (v) the prescribed amount in the case of a prospecting licence for gemstones, shall be US\$250 per square kilometre.
- (d) In terms of Regulation 10 of the Mining (Mineral Rights) Regulations, 2018, a Holder of a Prospecting Licence is required to keep a full and proper account of all expenditure incurred in the prospecting licence area in respect of prospecting operations as the Commission may require.

#### 5.1.4 **Conversion of a Prospecting Licence into a Special Mining Licence or Mining Licence**



- (a) In accordance with sections 39(1)(a),(b) of the Act, the Holder of a Prospecting Licence is entitled to apply for a Special Mining Licence or a Mining Licence for the mining within the prospecting area of the minerals to which the Prospecting Licence applies.
- (b) Note that in terms of sections 40(1) and 40(2) of the Act, if a person other than the current holder of a Prospecting Licence makes an application for a Special Mining Licence or Mining Licence over the area where a Prospecting Licence subsists the Mining Commission shall serve a notice on the current Holder of the Prospecting Licence terminating the licence. If such notice is served, the prospecting licence shall be deemed to have been terminated after 30 days from the date of service of that notice.
- (c) However, in terms of section 40(3) of the Act, within the said 30 days of the notice of termination being served to the current Holder of the Prospecting Licence, such holder is entitled to make the application to the Mining Commission for the grant of a Special Mining Licence or Mining Licence within the area of his prospecting licence. That application shall have equal priority over an application made by a person other than the current Holder of the prospecting licence, in terms of section 40(4) of the Act.
- (d) The factors which the Mining Commission considers when determining who will be awarded the Special mining Licence are provided for in the Act. In accordance with section 29(3) of the Act, the Mining Commission is required to consider the competing bids and shall select the bid which is most likely to promote the expeditious and beneficial development of the mineral resources of the area having regard to the following:
- (i) The programme of prospecting operations which the applicant proposes to carry out and the commitments as regards expenditure which the applicant is prepared to make;
  - (ii) The financial and technical resources of the applicant; and



- (iii) The previous experience of the applicant in the conduct of prospecting and mining operations.
- (e) On the basis of the principle of legitimate expectation, and as a matter of good practice, section 40(4) of the Act notwithstanding, the Commission first considers the current owner of the Prospecting Licence application, if it is made within those 30 days of the notice of termination. That is the practice of the Commission. That practice, however, can be overridden or trumped by a better bid of a new applicant, who best meets the conditions set out under sections 28(3)(d), (e) and 29(3). If the bid of the new applicant shows that he has more financial and technical resources and can most likely promote the expeditious and beneficial development of the mineral resources of the area concerned, than the current holder, the Commission may prefer than new applicant to the first holder of the licence.
- (f) By virtue of section 41(4) of the Act, the following are the statutory requirements for the application of a Special Mining Licence.
- (i) a statement of the period for which the licence is sought;
  - (ii) a comprehensive statement by the applicant, so far as he knows, of the mineral deposits in the proposed area, and details of all known minerals proved, estimated or inferred, ore reserves and mining conditions;
  - (iii) the proposed programme for mining operations, including a forecast of capital investment, the estimated recovery rate of ore and mineral products, and the proposed treatment and disposal of ore and minerals recovered;
  - (iv) proposed plan for relocation, resettlement and compensation of people within the mining areas in accordance with the Land Act;



- (v) the Applicant's environmental certificate issued in terms of the Environmental Management Act;
- (vi) details of expected infrastructure requirements;
- (vii) the procurement plan of goods and services available in the United Republic of Tanzania;
- (viii) proposed plan with respect to the Employment and training of citizens of Tanzania and succession plan for expatriate employees, if any as may be required by the Employment and Labour Relations Act;
- (ix) a statement of integrity pledge in a prescribed form; and
- (x) local content plan;
- (xi) such other information as the Minister may reasonably require for the disposal of the application.

#### **5.1.5 Transfer**

In terms of section 9(1) of the Act, and Regulation 18 of the Mining (Mineral Rights) Regulations, 2018, all mineral rights are transferable from one person to another person. It follows therefore that a granted Prospecting Licence may be transferred from one holder to another.

## **5.2 Special Mining Licence**

Under section 42(1) of the Act, a Special Mining Licence is granted where it is established that there are sufficient deposits or reserves of minerals to justify their commercial exploitation.

### **5.2.1 Rights**

5.2.1.1 In terms of section 46 of the Act, a Special Mining Licence confers on the holder, the exclusive rights to carry on mining operations in the mining area, for minerals as specified in the licence, and for that purpose the holder or his agents may in particular enter into the mining area and undertake mining operations, erect equipment,





plant and buildings, dispose of minerals recovered; carry on prospecting within the mining area; and stack or dump waste in accordance with the environmental management plan.

#### 5.2.2 **Term**

5.2.2.1 By virtue of section 43 of the Act, a Special Mining Licence is granted for an estimated life of the ore body indicated in the feasibility study or any other such period as the licensee requests whichever one is shorter.

5.2.2.2 In terms of section 45(1) of the Act, a Special Mining Licence is renewable and application for its renewal may be submitted at any time but not later than one year before the expiry of that licence. The renewal period shall be limited to a period not exceeding the estimated lifetime of the remaining ore body.

#### 5.2.3 **Conditions**

- (a) Develop the mining area and commence production in substantial compliance with the programme of mining operations and environmental management plan;
- (b) Employ citizens of Tanzania and implement a succession plan on expatriate employees in accordance with proposals submitted during application for the licence which are also appended to the licence;
- (c) Demarcate and keep demarcated the mining areas as prescribed;
- (d) Prepare and update mine closure plans as prescribed;
- (e) Implement a proposal plan for relocation, resettlement and compensation of people within the mining areas in accordance with the Land Act;
- (f) Post rehabilitation bond if so required by the Mining Commission. An environmental certificate in line with the terms of the Environment;
- (g) A plan with respect to the Employment and Training of citizens of Tanzania;



- (h) Comply with the terms of a Development Agreement if the same has been entered into with the Mining Commission.

#### 5.2.4 **Transfer**

In terms of section 9(2), (3) of the Act, assignment of the Special Mining Licence shall be only with the express or written consent of the licensing authority, i.e., the Mining commission. However, where the transfer is to an affiliate company, a bank or other institution by way of a charge or mortgage or to another person who already constitute as a holder of a Special Mining Licence, such consent or permission shall not be required.

### 5.3 **Mining Licence**

#### 5.3.1 **Rights**

- (a) A Mining Licence confers on the holder the exclusive right to carry on mining operations in the mining area for minerals specified in the licence. The licence is granted for operations whose capital investment is between US\$100,000 and US\$100,000,000.
- (b) Allows the holder to enter into the mining area and undertake mining operations, erect equipment, plan and buildings, dispose of minerals recovered; carry on prospecting within the mining area; and stuck/dump waste in accordance with the environmental management plan.

#### 5.3.2 **Term**

- (a) The Mining Licence is granted for a maximum initial period of 10 years and may be renewed once for a period not exceeding 10 years; and
- (b) Renewal to be applied for, to the Minister, not later than 6 months prior to the expiry of the licence and must be accompanied with the prescribed fee and tax clearance certificate issued by the Tax Authority in respect of operations to be conducted during the renewal period.



#### 5.3.3 **Conditions**

- (a) A Mining Licence for mining gemstone including kimberlitic diamonds shall only be granted to applicants who are Tanzanians. Where it is determined that the development of a gemstone resource requires specialized skills or technology (as determined by the Mining Commission), the licence may be granted where it will be held by a Tanzanian together with a non – Tanzanian together a non – Tanzanian whose undivided participating shares do not exceed 50%.
- (b) To erect the necessary equipment, plant and buildings for the purposed of mining, transporting, dressing or treating the mineral recovered in the course of the mining operations;
- (c) To pay the royalties due to the Government;
- (d) To stack or dump any mineral or waste product in a manner consistent with the Environment Management Act;
- (e) To implement the proposed plan for relocation, resettlement of and payment of compensation to people within the mining areas in accordance with the Land Act;
- (f) To employ and train citizens of Tanzania and implement succession plan on expatriate employees in accordance with the Employment and Labour Relations Act; and
- (g) To prospect within that mining area for any minerals other than gemstones.

#### 5.3.4 **Transfer**

Assignment of the Mining Licence shall be only with express permission of the licensing authority except where the transfer is to an affiliate company, a bank or other financial institution by way of a charge or mortgage or to another person who already constitutes as a holder of Mining Licence.



## **5.4 Primary Mining Licence**

### **5.4.1 Rights**

A Primary Mining Licence confers on the holder the exclusive right, to carry on prospecting and mining operations in the mining area.

### **5.4.2 Term**

The Primary Mining Licence is granted for a period of 7 years and is renewable. The Mining Act does not specify either the number of years that the Primary Mining Licence may be renewed or the number of times that it may be renewed. In practice however, a Primary Mining Licence is normally renewed for the same period as the initial period for which it was granted.

### **5.4.3 Conditions**

- (a) It is only granted to citizens of Tanzania or to companies, which are exclusively composed of Tanzanians, its directors are Tanzanians and control of the company is exercised from within Tanzania by persons all of whom are citizens of Tanzania. It is not permitted for non-citizens to enter into dealings involving Primary Licences;
- (b) To erect the necessary equipment, plant and buildings for the purposed of mining, transporting, dressing or treating the mineral recovered in the course of the mining operations;
- (c) To pay the royalties due to the Government;
- (d) To stack or dump any mineral or waste product in a manner consistent with the Environment Management Act;
- (e) To implement the proposed plan for relocation, resettlement of, and payment of compensation to people within the mining areas in accordance with the Land Act;
- (f) To prospect within that mining area for any minerals other than gemstones; and



- (g) Can be converted into a Mining Licence by application to the Commissioner.

#### 5.4.4 **Transfer**

Assignment of the Primary Mining Licence is restricted to citizens of Tanzania and corporate entities, which are solely owned by citizens of Tanzania and controlled by Tanzanians.

### 5.5 **Necessary Conditions and Legal Implication to the Company**

- 5.5.1 Rocket Tanzania Limited (RTL) holds Prospecting Licence No. 11742-2021 in Rukwa Basin. The licence area is within a National Game Reserve. The implication of this is that in accordance with sections 35(2) and 95(1)(c) of the Act, the Company will have to seek and obtain a written consent of the authority having control over that Game Reserve, to secure the right to carry out exploration in that licence area. Such written consent cannot be withheld if the statutory fees required are paid.
- 5.5.2 The current regulations provide that the Company concerned must pay an annual fee of US\$10,000 to the Game Reserve Authority in this case Tanzania Wildlife Management Authority (TAWA), and an annual exploration fee of US\$60,000.
- 5.5.3 In terms of section 10(1) of the Act, the Government of the United Republic of Tanzania is entitled to 16% non-dilutable free carried interest shares in the capital of a mining company depending on the type of the minerals and the levels of investment. This includes helium since it is categorized as mineral under the law. According to section 4(1) of the Act, "free carried interest" means the interest derived from holding shares of which the holder enjoys all the rights of a shareholder but has no obligation to subscribe or contribute equity capital for the shares. In terms of section 10(1) of the Act, this condition is applicable to a Mining Licence or a Special Mining Licence only.
- 5.5.4 By virtue of section 10(2), (3) of the Act, in addition to the free carried interest shares, the Government of the United Republic of Tanzania is entitled to acquire, in total, up to 50% of the shares of the mining company



commensurate with the total expenditures incurred by the Government in favour of the mining company. The Government can only acquire 34% of the shares in addition to the free carried interest shares if and only if the mining company receives expenditures from the Government. That expenditure is always in the form of tax exemptions or quantified value of tax incentives granted to a company by the Government. In case the mining company does not receive them then the Government is not entitled to any shares in addition to the 16% free carried interests. In terms of section 10(1) of the Act, this condition is applicable to a Mining Licence or a Special Mining Licence only. We can confirm that neither Rocket Tanzania Limited nor Antares Tanzania Limited has taken any tax exemption in the United Republic of Tanzania.

- 5.5.5 By virtue of Regulations 4 and 5 of the Mining (Minimum Shareholding and Public Offering) Regulations, 2016; and Regulation 2(1) of the Mining (Minimum Shareholding and Public Offering) (Amendment) Regulations, 2017; it was then a requirement for a holder of a Special Mining Licence to obtain 30% of the total issued and paid up shares, i.e., the Minimum Local Shareholding, through a public offer to a local stock exchange in accordance with the Capital Market and securities Act, [CAP 79 R.E 2002]. The Mining (Minimum Shareholding and Public Offering) Regulations, 2016 were amended through the Mining (Minimum Shareholding and Public Offering) (Amendment) Regulations, 2020 by adding a new regulation, i.e., Regulation 6A which has repealed regulations 4 and 5 of the Mining (Minimum Shareholding and Public Offering) Regulations, 2016 to the effect that those provisions shall not apply where a company holding a Special Mining Licence has entered into an agreement with the Government providing free carried interests to the Government and economic benefits sharing arrangement. It means therefore that if the company enters into an agreement with the Government to give the Government 16% of the free carried interest shares, then the 30%, as minimum shareholding to be obtained by public offer through a local stock exchange ceases to apply.



## **6. QUALIFICATIONS AND ASSUMPTION:**

This Report is subject to the following qualifications and assumptions:

- (a) We have assumed the accuracy and completeness of all Tenement searches, register extracts and other information or responses which were obtained from the Mining Commission;
- (b) Unless apparent from our searches or information provided to us, we have assumed compliance with the requirements necessary to maintain a Tenement in good standing;
- (c) This Report does not cover any third-party interests including encumbrances in relation to the Tenements that are not apparent from our searches and the information provided to us;
- (d) With respect to the granting of the Tenements we have assumed that the Mining Commission and the Company complied with or will comply with the applicable provisions of the Mining Act, [CAP 123 R.E. 2018] and other relevant legislation;
- (e) The holding of the tenements is subject to compliance with the terms and conditions and the provisions of the applicable tenements;
- (f) We have assumed the accuracy and completeness of any instructions or information which we have received from the Company or any of its officers, agents and/or representatives;
- (g) The information in Schedule I of this Report is accurate as at the date of the relevant searches were obtained. We cannot comment on whether any changes have occurred in respect of the Tenements between the date of searches and the date of the Report.



**We therefore do hereby vouch for the accuracy of that record and can state that the Prospecting Licenses are in full force and effect and in good standing and not liable to cancellation or forfeiture for any reason and the Company is not in breach or contravention of any terms and conditions upon which the Prospecting Licenses were granted.**

**CONSENT**

This Report is given to the Company in connection with the issue of the Prospectus and WE MAWALLA ADVOCATES have given our consent to the inclusion in the Prospectus.

Yours faithfully,

Beatus Malima

**Partner**

**Mawalla Advocates**





### Schedule I: Details of Mining Tenements including results of Official Searches

S/N	Licence number	Holder	Status	Expiry date	Licence Area (km2)
1	PL 11737-2021	RTL	Granted	30/11/2025	206.4
2	PL 11750-2021	RTL	Granted	30/11/2025	23.7
3	PL 11738-2021	RTL	Granted	30/11/2025	291
4	PL 11739-2021	RTL	Granted	30/11/2025	116.8
5	PL 11740-21	RTL	Granted	30/11/2025	29.4
6	PL 11328/2019	RTL	Granted	29/07/2023	131.9
7	PL 11323/2019	RTL	Granted	29/07/2023	186.3
8	PL 11327/2019	RTL	Granted	29/07/2023	107.5
9.	PL 11326/2019	RTL	Granted	29/07/2023	93.42
10.	PL 11325/2019	RTL	Granted	29/07/2023	107.2
11.	PL 11324/2019	RTL	Granted	29/07/2023	26.3
12.	PL 11742-2021	RTL	Granted	30/11/2025	148.2
13.	PL 11741/2021	RTL	Granted	30/11/2025	228.9
14.	PL 11736/2021	RTL	Granted	30/11/2025	237.3
15.	PL 18258/2021	ATL	Application recommended		299.5
16.	PL 18259/2021	ATL	Application recommended		222.6
17.	PL 18260/2021	ATL	Application recommended		222.7



18.	PL 18261/2021	ATL	Application recommended		147.7
19.	PL 18262/2021	ATL	Application recommended		245.5
20.	PL 18264/2021	ATL	Application recommended		300.0
21.	PL 18265/2021	ATL	Application recommended		267.4
22.	PL 18266/2021	ATL	Application recommended		137.4
23	PL 18283/2021	ATL	Application recommended		149.7

Index:

ATL – Antares Tanzanian Limited

RTL – Rocket Tanzania Limited

PL – Prospecting Licence

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# ANNEXURE C

**INDEPENDENT LIMITED ASSURANCE REPORT**

14 February 2022

The Directors  
Noble Helium Limited  
Level 11  
216 St Georges Tce  
PERTH WA 6000

Dear Board of Directors

**Independent Limited Assurance Report - Noble Helium Limited  
Historical and Pro Forma Financial Information**

We have been engaged by Noble Helium Limited ("the Company") to prepare this Independent Limited Assurance Report ("Report") in relation to certain financial information of the Company for inclusion in the Prospectus. The Prospectus is issued for the purposes of issuing between 35,000,000 and 50,000,000 Shares at \$0.20 per Share to raise between \$7,000,000 (Minimum Subscription) and \$10,000,000 (Maximum Subscription) before costs and to assist the Company to meet the requirements for listing on the ASX.

Expressions and terms defined in the Prospectus have the same meaning in this Report. This Report has been prepared for inclusion in the Prospectus. We disclaim any assumption of responsibility for any reliance on this Report or on the Financial Information to which it relates for any purpose other than that for which it was prepared.

**Scope**

You have requested Hall Chadwick WA Audit Pty Ltd ("Hall Chadwick") to perform a limited assurance engagement in relation to the historical and pro forma financial information described below and disclosed in the Prospectus.

The historical and pro forma financial information is presented in the Prospectus in an abbreviated form insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the *Corporations Act 2001*.

### ***Historical Financial Information***

You have requested Hall Chadwick to review the following historical financial information (together the “Historical Financial Information”) of the Company included in the Prospectus:

- The historical Statements of Profit or Loss and Other Comprehensive Income for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021;
- The historical Statements of Financial Position as at 30 June 2020, 30 June 2021 and 31 December 2021; and
- The historical Statements of Cash Flows for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021.

The Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principals contained in Australian Accounting Standards and the Company’s adopted accounting policies. The Historical Financial Information of the Company has been extracted from the financial reports for the relevant periods. The financial reports were audited by Hall Chadwick in accordance with Australian Auditing Standards except for the financial report for the half year ended 31 December 2021 which was reviewed in accordance with *ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity*. Hall Chadwick have issued unqualified audit opinions/conclusions on the financial reports with material uncertainty related to going concern paragraphs.

### ***Pro forma financial information***

You have requested Hall Chadwick to review the pro forma historical Statement of Financial Position as at 31 December 2021 referred to as “the pro forma financial information.”

The pro forma financial information has been derived from the historical financial information of the Company, after adjusting for the effects of the subsequent events and pro forma adjustments described in Note 2 of Section 5.7 of the Prospectus. The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards applied to the historical financial information and the events or transactions to which the pro forma adjustments relate, as described in Note 2 of Section 5.7 of the Prospectus, as if those events or transactions had occurred as at the date of the historical financial information. Due

to its nature, the pro forma financial information does not represent the Company's actual or prospective financial position or financial performance.

### **Directors' Responsibility**

The directors of the Company are responsible for the preparation of the historical financial information and pro forma financial information, including the selection and determination of pro forma adjustments made to the historical financial information and included in the pro forma financial information. This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of historical financial information and pro forma financial information that are free from material misstatement, whether due to fraud or error.

### **Our Responsibility**

Our responsibility is to express limited assurance conclusions on the historical financial information and pro forma financial information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450 *Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*.

Our limited assurance procedures consisted of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A limited assurance engagement is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit or review report on any financial information used as a source of the financial information.

### **Conclusions**

#### ***Historical Financial Information***

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the historical financial information comprising:

- The historical Statement of Profit or Loss and Other Comprehensive Income for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021;
- The historical Statement of Cash Flows for the years ended 30 June 2020, 30 June 2021 and the half year ended 31 December 2021 and
- The historical Statement of Financial Position as at 30 June 2020, 30 June 2021 and 31 December 2021;

is not presented fairly in all material respects, in accordance with the stated basis of preparation as described in Section 5.2 of the Prospectus.

## ***Pro Forma Financial Information***

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the pro forma financial information comprising the Statement of Financial Position as at 31 December 2021 is not presented fairly in all material respects, in accordance with the stated basis of preparation as described in Section 5.2 of the Prospectus.

## **Restriction on Use**

Without modifying our conclusions, we draw attention to Section 5.1 of the Prospectus, which describes the purpose of the financial information, being for inclusion in the Prospectus. As a result, the financial information may not be suitable for use for another purpose.

## **Consent**

Hall Chadwick has consented to the inclusion of this Independent Limited Assurance Report in this Prospectus in the form and context in which it is so included (and at the date hereof, this consent has not been withdrawn), but has not authorised the issue of the Prospectus. Accordingly, Hall Chadwick makes no representation or warranties as to the completeness and accuracy of any information contained in this Prospectus, and takes no responsibility for, any other documents or material or statements in, or omissions from, this Prospectus.

## **Liability**

The Liability of Hall Chadwick WA Audit Pty Ltd is limited to the inclusion of this report in the Prospectus. Hall Chadwick WA Audit Pty Ltd makes no representation

regarding, and takes no responsibility for any other statements, or material in, or omissions from the Prospectus.

**Declaration of Interest**

Hall Chadwick WA Audit Pty Ltd does not have any interest in the outcome of this transaction or any other interest that could reasonably be regarded as being capable of affecting its ability to give an unbiased conclusion in this matter. Hall Chadwick WA Audit Pty Ltd will receive normal professional fees for the preparation of the report.

Yours faithfully,



**DOUG BELL CA**  
**Partner**

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# APPLICATION FORM



## CORRECT FORMS OF REGISTRABLE TITLE

Type of Investor	Correct Form of Registration	Incorrect Form of Registration
Individual	Mr John Richard Sample	J R Sample
Joint Holdings	Mr John Richard Sample & Mrs Anne Sample	John Richard & Anne Sample
Company	ABC Pty Ltd	ABC P/L or ABC Co
Trusts	Mr John Richard Sample <Sample Family A/C>	John Sample Family Company
Superannuation Funds	Mr John Sample & Mrs Anne Sample <Sample Family Super A/C>	John & Anne Superannuation Fund
Partnerships	Mr John Sample & Mr Richard Sample <Sample & Son A/C>	John Sample & Son
Clubs/Unincorporated Bodies	Mr John Sample <Health Club A/C>	Health Club
Deceased Estates	Mr John Sample <Estate Late Anne Sample A/C>	Anne Sample (Deceased)

## INSTRUCTIONS FOR COMPLETING THE FORM

### YOU SHOULD READ THE PROSPECTUS CAREFULLY BEFORE COMPLETING THIS PUBLIC OFFER APPLICATION FORM.

This is an Application Form for fully paid ordinary Shares in Noble Helium Limited (ACN 603 664 268) (Company) made under the terms of the Public Offer set out in the Prospectus dated 18 February 2022.

Capitalised terms not otherwise defined in this document has the meaning given to them in the Prospectus. The Prospectus contains important information relevant to your decision to invest and you should read the entire Prospectus before applying for Shares. If you are in doubt as to how to deal with this Application Form, please contact your accountant, lawyer, stockbroker or other professional adviser. To meet the requirements of the Corporations Act, this Application Form must not be distributed unless included in, or accompanied by, the Prospectus and any supplementary Prospectus (if applicable). While the Prospectus is current, the Company will send paper copies of the Prospectus, and any supplementary Prospectus (if applicable) and an Application Form, on request and without charge.

- Shares Applied For & Payment Amount** - Enter the number of Shares & the amount of the application monies payable you wish to apply for. Applications must be for a minimum of \$2,000 worth of Shares (10,000 Shares) and thereafter, in multiples of \$500 worth of Shares (2,500 Shares).
- Applicant Name(s) and Postal Address** - ONLY legal entities can hold Shares. The Application must be in the name of a natural person(s), companies or other legal entities acceptable by the Company. At least one full given name and surname is required for each natural person. Refer to the table above for the correct forms of registrable title(s). Applicants using the wrong form of names may be rejected. Next, enter your postal address for the registration of your holding and all correspondence. Only one address can be recorded against a holding.
- Contact Details** - Please provide your contact details for us to contact you between 9:00am and 5:00pm (AEDT) should we need to speak to you about your application. In providing your email address you elect to receive electronic communications. You can change your communication preferences at any time by logging in to the Investor Portal accessible at <https://investor.automic.com.au/#/home>
- CHESS Holders** - If you are sponsored by a stockbroker or other participant and you wish to hold Shares allotted to you under this Application on the CHESS subregister, enter your CHESS HIN. Otherwise leave the section blank and on allotment you will be sponsored by the Company and a "Securityholder Reference Number" (SRN) will be allocated to you.
- TFN/ABN/Exemption** - If you wish to have your Tax File Number, ABN or Exemption registered against your holding, please enter the details. Collection of TFN's is authorised by taxation laws but quotation is not compulsory and it will not affect your Application.
- Payment** - Payments for Applications made using a paper Application Form can only be made by cheque. Your cheque must be made payable to "Noble Helium Limited" and drawn on an Australian bank and expressed in Australian currency and crossed "Not Negotiable". Cheques or bank drafts drawn on overseas banks in Australian or any foreign currency will NOT be accepted. Any such cheques will be returned and the acceptance deemed to be invalid. Sufficient cleared funds should be held in your account as your acceptance may be rejected if your cheque is dishonoured. Completed Application Forms and accompanying cheques must be received before 5:00pm (AEDT) on the Closing Date by being delivered or mailed to the address set out in the instructions below.  
Applicants wishing to pay by BPAY® or EFT should complete the online Application, which can be accessed by following the web address provided on the front of the Application Form. Please ensure that payments are received by 5:00pm (AEDT) on the Closing Date. Do not forward cash with this Application Form as it will not be accepted.

## DECLARATIONS

### BY SUBMITTING THIS APPLICATION FORM WITH THE APPLICATION MONIES, I/WE DECLARE THAT I/WE:

- Have received a copy of the Prospectus, either in printed or electronic form and have read the Prospectus in full;
- Have completed this Application Form in accordance with the instructions on the form and in the Prospectus;
- Declare that the Application Form and all details and statements made by me/us are complete and accurate;
- I/we agree to provide further information or personal details, including information related to tax-related requirements, and acknowledge that processing of my application may be delayed, or my application may be rejected if such required information has not been provided;
- Agree and consent to the Company collecting, holding, using and disclosing my/our personal information in accordance with the Prospectus;
- Where I/we have been provided information about another individual, warrant that I/we have obtained that individual's consent to the transfer of their information to the Company;
- Acknowledge that once the Company accepts my/our Application Form, I/we may not withdraw it;
- Apply for the number of Shares that I/we apply for (or a lower number allocated in a manner allowed under the Prospectus);
- Acknowledge that my/our Application may be rejected by the Company in its absolute discretion;
- Authorise the Company and their agents to do anything on my/our behalf necessary (including the completion and execution of documents) to enable the Shares to be allocated;
- Am/are over 18 years of age;
- Agree to be bound by the Constitution of the Company; and
- Acknowledge that neither the Company nor any person or entity guarantees any particular rate of return of the Shares, nor do they guarantee the repayment of capital.

## LODGEMENT INSTRUCTIONS

The Offer opens on 28 February 2022 and is expected to close on 28 March 2022. The Directors reserve the right to close the Offer at any time once sufficient funds are received or to extend the Offer period. Applicants are encouraged to submit their Applications as early as possible. Completed Application Forms and payments must be submitted as follows:

### Paper Application and Cheque

**By Post:**  
Noble Helium Limited  
C/- Automic Pty Ltd  
GPO Box 5193  
SYDNEY NSW 2001

OR

**By Hand Delivery:**  
Noble Helium Limited  
C/- Automic Pty Ltd  
Level 5, 126 Phillip Street  
SYDNEY NSW 2000

### Online Applications and BPAY® or EFT Payments

**Online:**  
<https://investor.automic.com.au/#/ipo/noblehelium>

## ASSISTANCE

Need help with your application, no problem. Please contact Automic on:



**PHONE:**  
1300 288 664 within Australia  
+61 (2) 9698 5414 from outside Australia



**LIVE WEBCHAT:**  
Go to [www.automicgroup.com.au](http://www.automicgroup.com.au)



**EMAIL:**  
[corporate.actions@automic.com.au](mailto:corporate.actions@automic.com.au)



For personal use only



securing the  
future of helium

**Noble Helium Limited**  
ACN 603 664 268

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