



# ASX Announcement

2 November 2022

## Mahalo North – Initial Reserves Certification

### Key points:

- 1P Reserves of 11.9 PJ (Petajoules).
- 2P Reserves of 42.9 PJ.
- 3P Reserves of 110.2 PJ.
- Delivery on strategy of building a material natural Gas Reserve portfolio in the Mahalo Gas Hub area.
- Progressing infrastructure connection and early gas production scheme.

Building on the material existing certified Gas Reserves, geological knowledge and experience gained from the joint venture with Santos QNT Pty Ltd (Santos) in the Mahalo Gas Project to the south, Comet Ridge Limited (ASX:COI) is pleased to announce its initial independent Reserves certification for its 100% held Mahalo North Project (ATP 2048). This material increase in Comet Ridge's Gas Reserves further strengthens the Mahalo Gas Hub's capacity to become the next new significant gas producing region on the east coast of Australia.

Sproule Incorporated, a global energy consulting and advisory firm (which acquired MHA Petroleum Consultants LLC in 2019), has provided the following independent certification of Gas Reserves for the Mahalo North Project (ATP 2048) at 31 October 2022. Refer to Appendix 1 for additional information on this independent Reserves certification required by ASX Listing Rules.

Comet Ridge Limited	Independently Certified Gas Reserves (PJ)		
31 October 2022	1P	2P	3P
Mahalo North (ATP 2048)	11.9	42.9	110.2

#### Notes:

- 1P Reserves = Proved Reserves; 2P Reserves = Proved + Probable Reserves; 3P Reserves = Proved + Probable + Possible Reserves.
- Refer to Competent Person's Statement in Appendix 2 of this Announcement.
- Gas Reserves stated in the table above assume no fuel or shrinkage losses as production activities such as wellsite pumping, compression and water treatment are planned to be powered using electricity from the local grid and have been calculated at the wellhead (which is the reference point for the purposes of Listing Rule 5.26.5).
- 1P Gas Reserves for Mahalo North has been included in this Reserves certification on the basis that a development decision by Comet Ridge (as 100% owner and operator of the project) is planned as soon as transport arrangements and petroleum lease applications are concluded. Similarly, with the streamlined Comet Ridge and Santos Mahalo Joint Venture now focused on development plans for the Mahalo Gas Project to the south, the re-instatement of 1P Reserves for Comet Ridge's net interest in the Mahalo Gas Project will be reviewed and will be actioned as development plans are finalised with Santos.

## A compelling east coast gas play

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Comet Ridge Managing Director, Tor McCaul, said; “We are very excited to be able to progress Mahalo North to Gas Reserves so rapidly, and are focussed on driving into development and natural gas sales at a time molecules are needed in the east coast market. This independent Reserves certification has been completed in approximately 12 months from the spud of our first well in Mahalo North, achieving a world-class result from the Mahalo North 1 pilot well.

“Our team has captured, evaluated and incorporated an enormous volume of subsurface data into our geologic model and has provided this exceptionally detailed, high-quality model to the Reserves Auditor for the evaluation. The extensive level of data control in the geologic model will also help to optimise our development and we look forward to Mahalo North supplying natural gas to support Australian gas consumers and industry at a time when it is most needed.

“Although gas customers focus on 2P Reserves as the basis for gas sales agreements, we have been particularly pleased with the 110 PJ of 3P Reserves on this initial certification, which gives an indication where 2P Reserves may ultimately trend with further gas flow testing, particularly in the central and northern parts of the block. We are also utilising this extensive geological model of the area to finalise a Contingent Resource booking in the Mahalo East Project.”

These initial Gas Reserves at Mahalo North have added 28% of additional 2P Reserves and 42% of additional 3P Reserves to Comet Ridge’s net Gas Reserves portfolio (see Figure 1).

**Building a large 2P and 3P Net Gas Reserve Portfolio**  
(28% ↑ in 2P reserves and 42% ↑ in 3P Reserves)

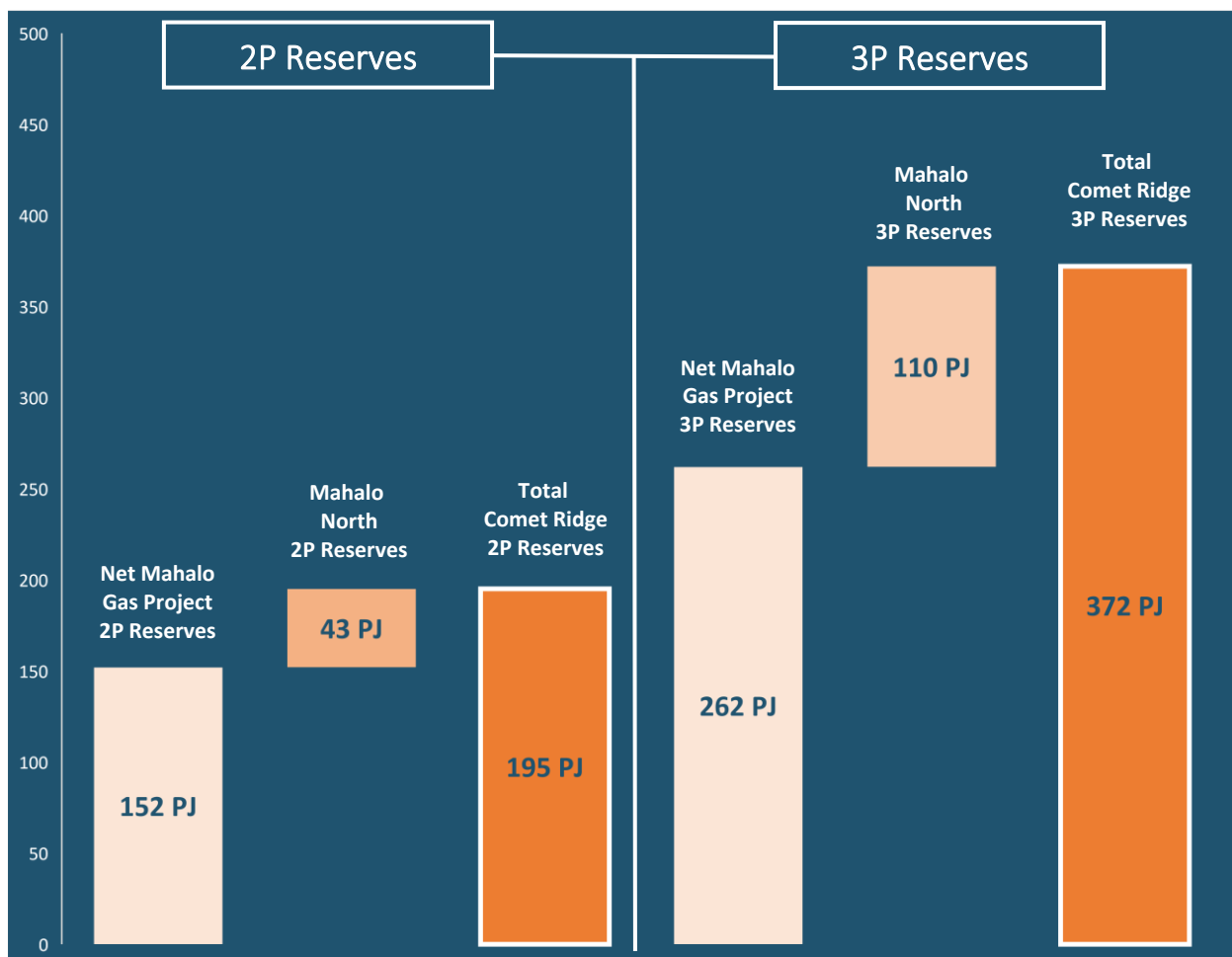


Figure 1 – Additions to Comet Ridge’s Net Gas Reserves Portfolio



#### Notes to Figure 1 (Listing Rule 5.43)

- *The Gas Reserves recorded for the Mahalo Gas Project (PL 1082 & PL 1083) were last announced to the market on 30 October 2019 and were determined by and under the supervision of Mr Timothy L. Hower of MHA Petroleum Consultants LLC (now part of Sproule Incorporated) in accordance with Petroleum Resource Management System (SPE-PRMS) guidelines. Mr Hower is a fulltime employee of Sproule and is a qualified petroleum reserves and resource evaluator as defined under the ASX Listing Rules.*
- *Mr Hower is a Licensed Professional Engineer in the States of Colorado and Wyoming as well as being a member of The Society of Petroleum Engineers. Mr Hower has consented to the publication of Gas Reserves for Mahalo Gas Project in the form and context in which they appear in this announcement.*
- *These Reserves recorded for the Mahalo Gas Project represent Comet Ridge's 57.14% of the project which it holds in joint venture with Santos QNT Pty Ltd, holder of the remaining 42.86% and Development Operator.*
- *The Company also confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.*

Gas content and permeability data from the Mahalo North 1 core well drilled in late 2021 and the successful Mahalo North production test (comprising a vertical production well intersected by a dual lateral well) which flowed 1.75 million standard cubic feet per day (MMcfd), has been combined with an extensive dataset of coal industry data released by the Queensland Government in February 2022. This newly available coal industry data provides a highly detailed grid of coalbore logs, seismic data, gas desorption data and permeability testing across Mahalo North and the greater Mahalo Hub. This underpins very high confidence in the geologic model used for this Gas Reserves estimate.

The 2P Gas Reserves achieved in this initial certification are located in the southern central portion of the block, in proximity to the Mahalo North pilot location, whilst 3P Reserves have been certified over a much wider area of the tenure. It is expected that 2P Reserves can be expanded further over time from the drilling of step out pilot well(s) and/or development wells at Mahalo North as the block is developed for production.

1P Gas Reserves for Mahalo North have been included in this Reserves certification on the basis that a development decision is planned as soon as transport arrangements and petroleum lease applications are concluded. The smaller scale development plan at Mahalo North is likely to be relatively easy to sanction, given the expenditure and funding requirements are modest and the project is within the control of Comet Ridge.

Contingent Gas Resources have not been evaluated in detail at this time, however, may be assessed in more detail as an extension to the Reserves volumes in the future.

This Reserves assessment has been independently certified by Mr Tim Hower, from the Denver office of Sproule Incorporated in accordance with SPE-PRMS guidelines. Mr Hower has significant experience with the Mahalo area, having undertaken all of Comet Ridge's prior Reserves certifications for the Mahalo Gas Project on behalf of Sproule and predecessor firm, MHA Petroleum Consultants LLC.

**By Authority of the Board per: Tor McCaul, Managing Director**

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## APPENDIX 1 - ADDITIONAL INFORMATION REQUIRED UNDER CHAPTER 5 OF THE LISTING RULES

### Statement in compliance with ASX Listing Rule (LR) 5.25

Listing Rule (LR)	Reporting Requirements
LR 5.25.1	The Gas Reserves reported in this announcement for the Mahalo North Project within ATP 2048 have been assessed as at 31 October 2022.
LR 5.25.2	The Gas Reserves have been reported in accordance with SPE-PRMS guidelines.
LR 5.25.3	Gas Reserves have been certified in the 1P, 2P and 3P categories. There have been no Contingent or Prospective Resources certified. There has been no adjustment for risk.
LR 5.25.4	Gas Reserves have been certified in the 1P, 2P and 3P categories. There have been no Contingent or Prospective Resources certified. There has been no adjustment for risk.
LR 5.25.5	The reported estimate of Gas Reserves is based on Comet Ridge's 100% interest in ATP 2048. There are no contractual royalties of any kind that need to be accounted for that would result in a net interest less than 100%. Once the Gas Reserves are developed, Comet Ridge will be required to pay petroleum royalties on the sales value of those Gas Reserves to the Queensland Government in accordance with the Petroleum and Gas (Royalty) Regulation 2021.
LR 5.25.6	The Gas Reserves assessment has been undertaken utilising the deterministic estimation method.
LR 5.25.7	The reported Gas Reserves are stated in Petajoules and have not been reported in or converted from other units of equivalency (eg BOEs).

### Requirements applicable to reporting petroleum reserves for material oil and gas projects in compliance with Listing Rule 5.31

#### *Listing Rule 5.31 - Background:*

Authority to Prospect (ATP) 2048, which Comet Ridge refers to as the Mahalo North Project, is located in the Bowen Basin between the Queensland towns of Rolleston and Comet at its southern permit boundary and 61 km south-east of Emerald. The Mahalo North Project is an area made up of 144 sub-blocks and is 100% owned and operated by Comet Ridge Mahalo North Pty Ltd.

#### *LR 5.31.1 - Material Economic Assumptions:*

A large volume of technical data has been obtained over the entire area of ATP 2048 in order to model the commercial nature of the Reserves. This data includes:

- The Mahalo North 1 core well drilled and extensively evaluated by Comet Ridge in October 2021;
- The Mahalo North production pilot scheme, comprising the Mahalo North 1 vertical core well (completed for production) and the Mahalo North 2 dual lateral well, drilled in late 2021, which intersected the Mahalo North 1 well;



- The Mahalo North 1/2 production test, which was undertaken between January 2022 and August 2022 and resulted in the pilot producing gas at a rate of 1.75 MMcfd;
- Extensive pre-existing coal industry data over and adjacent to the area was released confidentially by the Queensland Government during 2021-2022. This information has greatly aided and accelerated the estimation of Reserves by a number of years as it has reduced the need for significant new data acquisition. Over and adjacent to the southern part of ATP 2048, this data includes 2D seismic data, coalbore lithologic and geophysical logs, core data and laboratory analyses. The seismic data includes 237km of high resolution 2D seismic data acquired between 1995 and 1998. From the same coal exploration program, 943 coalbores drilled largely on a 500m grid spacing and containing core data and geophysical logs were also released. Of these, two had permeability test data and 36 contained gas desorption data. Additionally, over and adjacent to the northern part of ATP 2048, an extensive dataset of coalbore data from 1994 to 1999 was released. Of the over 200 coalbores in this dataset, 25 contain gas desorption data and most contain geophysical logs.

The proximity of the Mahalo North Project to infrastructure has also been considered, including the existing Denison Gas owned and operated infrastructure 14 km to the west (which may facilitate an early initial development) and also the planned infrastructure being progressed by the Mahalo Gas Project (PL 1082 and 1083) joint venture participants, Comet Ridge and Santos QNT Pty Ltd (Development Operator), expected to be located approximately 10 km to the south-east.

The commercial parameters supporting this Reserves assessment assumes that the Mahalo North Project development commences at the area of the existing Mahalo North 1/2 pilot location and expands to the north with the number of production wells drilled to be approximately 16 in the 2P case and 57 in the 3P case. It is also assumed the Mahalo North Project is tied into the planned Mahalo Gas Project and the field is electrified (similar to the Mahalo Gas Project development plan), hence no allowance for gas fuel usage has been made in this Reserves assessment.

A well head gas price consistent with forward medium-term LNG netback prices has been assumed, which is significantly below current reported LNG netback pricing. As at the date of this announcement, the last reported ACCC LNG netback price was \$44.32 per gigajoule, with the forecast average for 2023 being in excess of \$50 per gigajoule.

#### ***LR 5.31.2 - Overview of Operatorship of Production:***

The Operator of the Mahalo North Project is Comet Ridge Mahalo North Pty Ltd, a wholly owned subsidiary of Comet Ridge Limited.

#### ***LR 5.31.3 - Types of Permits Held in Respect of the Reported Petroleum Reserves:***

The permit is held by Comet Ridge Mahalo North Pty Ltd via Authority to Prospect (ATP) 2048, granted under the Petroleum and Gas (Production and Safety) Act 2004 (the Act) on 29 April 2020 for a term of six years. Comet Ridge intends to apply for one or two petroleum leases (possibly one to two years apart) over a significant part of ATP 2048 (covering the existing 3P Reserves area) now that this Reserves assessment has been completed and once all required environmental approvals have been received. Significant environmental field work has already been undertaken, and more is currently underway, such that (after studies and documentation) formal environmental applications can be made during the first half of 2023.

The whole of the area of ATP 2048 is subject to an Australian market supply condition as defined under section 175A of the Act, the conditions of which are as follows: (a) gas produced from ATP 2048 must not be supplied other than to the Australian market; (b) upon grant of a petroleum lease over all or part of the area of ATP 2048, the gas produced from the petroleum lease must not be supplied other than to the Australian market; (c) any contract or other arrangement for the supply of the gas must include a condition that the gas must not be further supplied other than



to the Australian market; (d) for the purpose of conditions (a), (b) and (c) above, “Australian market” has the meaning given in section 175B of the Act; and (e) any petroleum lease granted over all or part of the area of ATP 2048 will be subject to the Australian market supply condition as defined under section 175A of the Act.

#### ***LR 5.31.4 - Mahalo North Project Description:***

All of the underlying well, seismic and pilot production data (outlined above in response to LR 5.31.1) forms the basis for the technical assessment of producible gas. This is then combined with numerical reservoir simulation to generate type curves for well production profiles for various parts of the field and these profiles are incorporated into an economic model containing other input assumptions, including gas sales price, operating expenditure and capital expenditure, to confirm commerciality.

#### ***LR 5.31.5 - Estimated Quantities (in aggregate) to be recovered:***

The existing pilot wellset is not connected by pipeline to a gas plant and other facilities, therefore the project currently contains no developed petroleum Reserves. Through future investment, undeveloped petroleum Reserves are estimated in aggregate to be 11.9 PJ of 1P Reserves, 42.9 PJ of 2P Reserves and 110.2 PJ of 3P Reserves.

#### ***LR 5.31.6 - Statement in relation to Undeveloped Petroleum Reserves:***

Comet Ridge believes that sufficient technical data is now available for the Mahalo North Project, and sufficient Reserves have been independently certified, to make a decision to develop the field. Further commercial work on field development, transport options and gas sales agreements will be required before a decision to sanction the project can be made.

The Mahalo North Project currently has no transportation infrastructure for gas in place. Third party infrastructure exists approximately 14 km to the west of the Mahalo North pilot, on the western edge of the Mahalo North permit and also at the QGP (Jemena) and GLNG pipelines approximately 65 to 70 km south of the Mahalo North pilot scheme. In addition, the planned Mahalo Gas Project is located directly to the south of the Mahalo North Project and is a likely tie-in point for Mahalo North gas once the Mahalo Gas Project is developed by the joint venture participants.

Documents for environment approvals will be lodged with the Federal Government during the first half of 2023, and requirements for State Government approvals are planned to be lodged concurrently with Federal approvals.

The Mahalo North Project currently has had one very successful pilot production test during 2022. Given the large amount of data available on this block, minimal further field work is required to justify development, with the main focus now being environmental approvals and completion of required commercial agreements. Based on the environmental work currently ongoing and receipt of timely environmental and petroleum lease application approvals through government at state and federal level, these Reserves could be provided to the market commencing in 2024, subject to suitable gas transport arrangements being completed.

Marketing arrangements would likely consist of gas sales agreements with a relatively small number of domestic customers, with back-to-back transport arrangements to the delivery point(s) with some volume of gas available to be offered to the spot market at the Wallumbilla Gas Hub. The proximity to infrastructure to the south significantly aids gas marketing efforts for the Gas Reserves included in this assessment.

Compensation agreements for development and production would need to be formalised with a small number of landholders where appraisal compensation agreements are already in place.



The project costs for a 10 Terajoule per day development are not considered to be large and could be achieved through one of (or a combination of) equity, debt, pre-sale of gas to customers or a sell down of equity in the Mahalo North Project. In the current tight gas market, funding via a range of options is anticipated to be available.

Environmental approvals for the Mahalo North Project to proceed would be required at state and federal level (similar to what was achieved for the adjacent Mahalo Gas Project by the joint venture participants just to the south) and Queensland Government approvals would be required for a petroleum lease and also for a pipeline licence.

#### **LR 5.31.7 - Unconventional Petroleum Reserves:**

The unconventional Gas Reserves have been certified by Sproule Incorporated (Sproule) utilising a deterministic estimation method. Due to the large amount of technical data available to Comet Ridge, the performance of the Mahalo North 1/2 pilot production test, the close proximity of Mahalo North to existing and planned gas pipelines, and the market to facilitate a development plan and decision, Sproule is of the opinion that the 1P, 2P and 3P Reserves volumes recorded in this announcement are justified.

The area covered by the 3P Reserves case is approximately 196 km<sup>2</sup>. The 3P case development plan includes 57 producing wellset locations.

#### **APPENDIX 2 - Competent Person Statement and ASX Listing Rules Chapter 5 - Reporting on Oil and Gas Activities**

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This estimate of Gas Reserves for the Mahalo North Project (within ATP 2048) is based on and fairly represents information and supporting documentation determined by and under the supervision of Mr Timothy L. Hower of Sproule in accordance with the Society of Petroleum Engineers' Petroleum Resource Management System (SPE-PRMS) guidelines.

Mr Hower is a full-time employee of Sproule, and is a qualified person as defined under the ASX Listing Rule 5.42. Mr Hower is a Licensed Professional Engineer in the States of Colorado and Wyoming as well as being a member of The Society of Petroleum Engineers. Mr Hower has consented to the publication of the Reserve estimates for Mahalo North in the form and context in which they appear in this announcement.

#### **About Sproule**

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*Sproule is a leading independent petroleum engineering and certification firm based in Calgary, Canada with offices in Denver, Colorado which has experience working in most of the significant petroleum provinces throughout the world. Sproule has completed Reserve and Resource assessments for a number of clients in Australia and internationally including Adelaide Energy, Arrow Energy, Bow Energy, ConocoPhillips, CS Energy, Eastern Star Gas, Metgasco Ltd, Molopo Energy Australia, Pure Energy, Santos Ltd, Senex, Sunbird Energy and Sunshine Gas.*

#### **About Comet Ridge**

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*Comet Ridge Limited (ASX: COI) is a publicly listed Australian energy company focused on the development of natural gas resources for the strained east coast Australian market. The company has tenement interests and a suite of prospective projects in Queensland. Our flagship Mahalo Gas Hub project consists of low cost, sales spec natural gas blocks, close to Gladstone. Our exploration assets offer further upside amid increasing domestic and international demand for natural gas as a source for cleaner energy and as a key manufacturing feedstock that makes thousands of products, used daily.*