

## **Important Notice and Disclaimer**



#### **Disclaimer**

This presentation (Presentation) has been prepared by Comet Ridge Limited (ABN 47 106 092 577) (Comet Ridge). The Presentation and information contained in it is being provided to shareholders and investors for information purposes only. Shareholders and investors should undertake their own evaluation of this information and otherwise contact their professional advisers in the event they wish to buy or sell shares. To the extent the information contains any projections, Comet Ridge has provided these projections based upon the information that has been provided to Comet Ridge. None of Comet Ridge or its directors, officers or employees make any representations (express or implied) as to the accuracy or otherwise of any information or opinions in the Presentation and (to the maximum extent permitted by law) no liability or responsibility is accepted by such persons.

#### **Summary information**

This Presentation contains summary information about Comet Ridge and its subsidiaries and their activities current as at the date of this Presentation. The information in this Presentation is of general background and does not purport to be complete. It should be read in conjunction with Comet Ridge's other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange (ASX), which are available at www.asx.com.au.

#### **ASX Releases**

Investors are advised that by their nature as visual aids, presentations provide information in a summary form. The key information on detailed Resource statements can be found in Comet Ridge's ASX releases. Resource statements are provided to comply with ASX guidelines but investors are urged to read supporting information in full on the website.

#### Past performance

Past performance information given in this Presentation is given for illustrative purposes only and should not be relied upon as (and is not) an indication of future performance.

#### Future performance

This Presentation contains certain "forward-looking statements". Forward looking words such as, "expect", "should", "could ", "may", "plan", "will", "forecast", "estimate", "target" and other similar expressions are intended to identify forward-looking statements within the meaning of securities laws of applicable jurisdictions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this Presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Such forward-looking statements, opinions and estimates are not guarantees of future performance.

Forward-looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. This presentation contains such statements that are subject to known and unknown risks and uncertainties and other factors, many of which are beyond the control of Comet Ridge, and may involve significant elements of subjective judgement and assumptions as to future events which may or may not be correct. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates. Such forward-looking statements are relevant at the date of this Presentation and Comet Ridge assumes no obligation to update such information.

#### Investment risk

An investment in Comet Ridge shares is subject to investment and other known and unknown risks, some of which are beyond the control of Comet Ridge. Comet Ridge does not guarantee any particular rate of return or the performance of Comet Ridge. Persons should have regard to the risks outlined in this Presentation.

## **Comet Ridge - Corporate Overview**

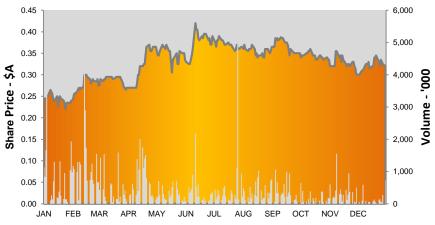


#### Capital Structure - ASX: COI

Share price (22 January 2019 close)	\$0.32
Shares on issue	727.9m
Performance rights	5.5m
Market capitalisation	\$233m
Cash (30 September 2018)	\$24.9m

#### 12 Month Share Price Performance

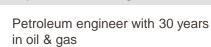
Share Price and Volume Last 12 months to 22 January 2019





**James McKay** Non-Exec Chairman

30 years in business (commerce/law background) Considerable public company experience including Sunshine Gas



Previously Head of Commercial for Cairn plc in India & LNG Contract Manager for VICO (Bontang)

Mike Dart

**Chris Pieters** 

**Executive Director** 

Geologist with 12 years in oil & gas **Previously Chief Commercial** Officer, Sunshine Gas



Non-Exec Director

- 20 years experience in M&A and Finance
- Director of Dart Capital Partners, private venture capital fund



**Gillian Swaby** Non-Exec Director

Tor McCaul

Managing Director

- 30+ years in Finance & Resources
  - Former Chair of WA Council of Chartered Sec.



**Peter Harding-Smith** Chief Financial Officer

20 years experience in Finance 10 + years experience in public companies,

# **Comet Ridge - Summary**



#### ✓ Mahalo Gas Project – Southern Bowen – CSG

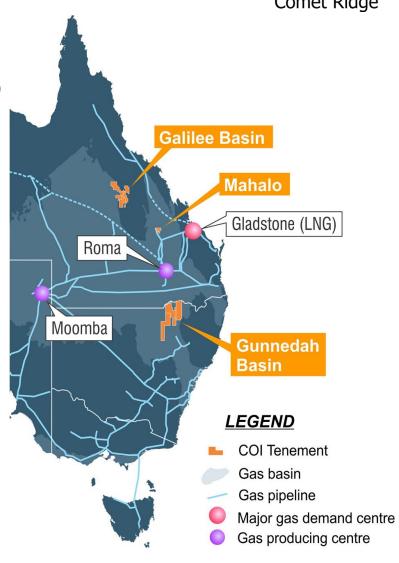
- Significant net to Comet 2P+ (172PJ) & 3P+ (374PJ) reserves located 240 km west of Gladstone
- Production testing on 5 well evaluation programme
- JV with Santos and APLNG

#### ✓ Galilee Basin – CSG, Sandstone and Shale

- Appraisal well, Sandstone target June 2018 First measured gas flow from Sandstones
- Significant resource base northwest of Gladstone (over 2200 PJ 3C)<sup>+</sup>
- Opportunities for early commercialisation
- Resources certified in Sandstone and CSG

#### ✓ Gunnedah Basin – CSG – NSW

- Assets cover ~17,000 km<sup>2</sup> located north of Santos Narrabri development
- Longer term, hold-then-follow strategy



# **Comet Ridge – 2018 Achievements**

Comet Ridge

- ✓ 2018 work programme resulted in significant Reserves and Resources Upgrade for Mahalo – 172 PJ 2P+ net to Comet Ridge
- ✓ Re-appointed Exploration Agent for Mahalo by Santos, with Comet managing 2018 drilling programme
- Mira 6 (short single lateral) well producing 1.4 mmcf/d, exceeding expectations
- ✓ Farmed-out 15% of Galilee Sandstone to Vintage
- ✓ First Measured Gas Flow from Lake Galilee Sandstone Reservoir – 230,000 scf/d
- √ \$17.4 million placement, at market price







# 2019 activities and expected news flow



#### **Mahalo**

- Production testing data from Memooloo 2, Struan 2 and Sirius Road 1
- Project definition for the development of Mahalo, leading to FID
- Lodgement of Environmental applications with Federal and State governments
- Lodgement of Petroleum Lease applications

#### **Galilee**

- 2D seismic programme identifying broad structural trends and delineating drilling targets
- Drilling results from Albany 1 (deepening) and 2, potential for follow up stimulation activities
- Potential for CSG pilot in "shallows"
- Progressing gas sales options for nearby power generation

#### **Corporate**

Additional tenure through Government land release programmes

# **Comet Ridge - Strategic East Coast Gas Portfolio**



Mah	alo
(QL	.D)

	⁺Reserve (PJ)			⁺Contingent Resource (PJ)		
Туре	1P	2P	3P	1C	2C	3C
CSG	18	172	374	224	385	389

# Galilee (QLD)

	<sup>+</sup> Reserve (PJ)			*Contingent Resource (PJ)		
Туре	1P	2P	3P	1C	2C	3C
CSG					67	1,870
Sandstone *				48	130	354

#### Gunnedah (NSW)

	*Reserve (PJ)			*Contingent Resource (PJ)		
Туре	1P	2P	3P	1C	2C	3C
CSG						562

# Comet Portfolio (East Coast Australia)

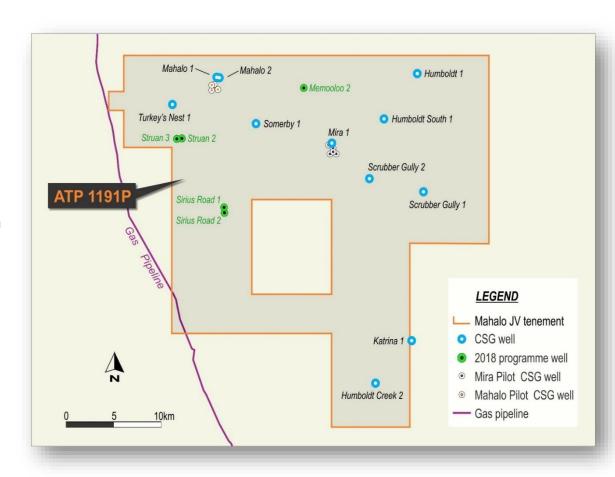
COI Total	*Reserve (PJ)			*Contingent Resource (PJ)		
Туре	1P	2P	3P	1C	2C	3C
CSG + Sandstone	18	172	374	272	582	3,175

<sup>+</sup> Refer to the Competent Persons Statement at Page 20 and the ASX announcement dated 6 March 2018 for further information on COI's Reserves and Contingent Resources

## **Mahalo Project**



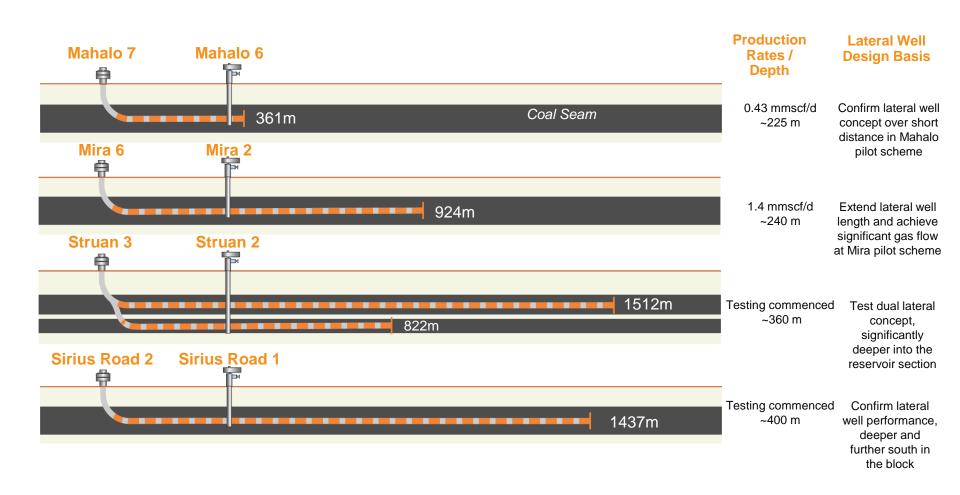
- Joint Venture Equity
  - Comet Ridge 40%
  - Santos 30%\*
  - APLNG 30%#
- Central QLD
  - between Emerald & Rolleston
- Area 911 km<sup>2</sup>
- Close to pipeline infrastructure (to Gladstone)
- Great well productivity
- Low end of the cost curve
- Near term production potential



# Mahalo - Summary of lateral wells



Evolution of various lateral well styles to feed into project definition/FID



## Mahalo - likely to be at low end of cost curve



#### Mahalo will get development priority because:

- Only 225 to 500 metres to coal **Shallow** Lower drilling and completion costs Mahalo 7 and Mira 6 flowed 1200 to 1500 scfd per metre of coal intersected **Permeable** Higher flowrates means less wells **Less Water** Low water-gas ratio on both Mahalo 7 & Mira 6 Lower water handling capex and opex Low No coal fines - minimising workovers maintenance **Gas Quality** No expensive CO<sub>2</sub> or H<sub>2</sub>S removal to get to sales gas spec Use basic carbon steel in wells, flowlines and plant
- √ 63 km Mira Pilot to GLNG pipeline

Close to

infrastructure

14 km - nearest pipeline connection

60 km - Mira Pilot to Jemena pipeline

# **Mahalo - Development Concept**



Development Concept: possible option displayed

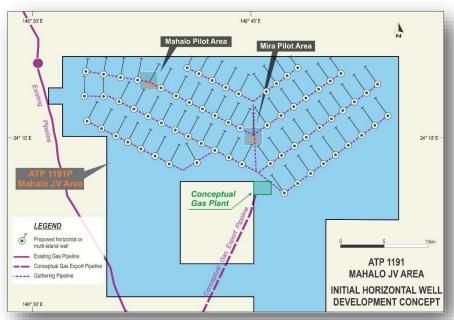
# Development concept – Targeting up to 100 to 120 TJ/d production

#### Phase 1

- 50 to 60 TJ/d modular plant targeting the northern part of the block,
- 12 inch Gas Export Pipeline (120 TJ/d capability),
- Water treatment,
- Wells and gathering system.

#### Phase 2 – following

- Second 50 to 60 TJ/d modular plant targeting remaining resources, increasing production to 100 to 120 TJ/d
- Increased water treatment,
- Wells and gathering system.



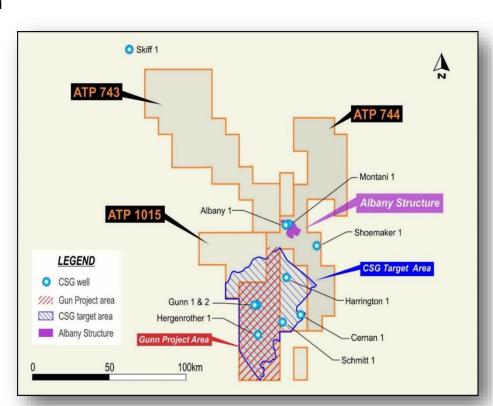
Minimum gas processing required – only separation, compression and dehydration

\*Comet Ridge internal concept. Development remains subject to approval of Joint Venture.

## **Galilee Basin – Targets at multiple levels**

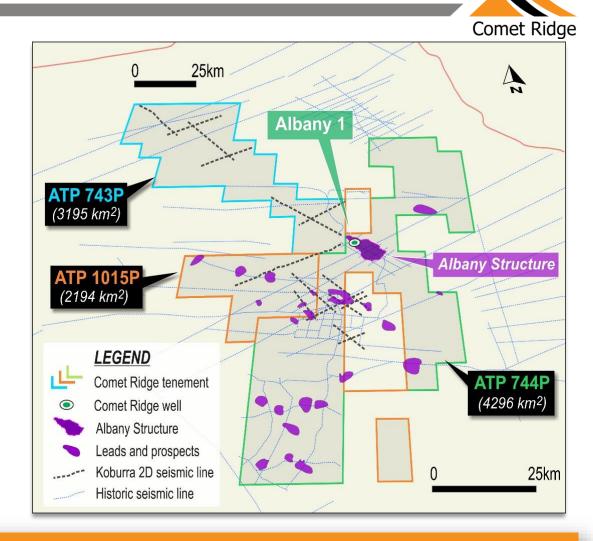


- Basin covers a large part of central western Queensland (~250,000 km²)
- Comet has a massive position in the east portion of the Basin – 9,685 km<sup>2</sup>
- CSG (Shallows) Comet 100%
- Sandstone (Deeps) JV
  - Comet Ridge 85%, Vintage Energy (ASX:VEN) 15%, moving up to 30%
- Maiden gas flowrate of 230,000 scf/d from Albany 1 Sandstone (June 2018)
- Marine Shales in deeper section
- Potential for early commercialisation with nearby Mining and Industrial gas demand
- Significant interest from Infrastructure Providers to assist with gas transportation



# Galilee Sandstone – Large Number of Potential Targets

- Significant gross 3C<sup>+</sup> resources certified in conventional Sandstones (417PJ) in one structure (Albany)
- Previous gas flows from oil exploration wells in Comet blocks
- Seismic is sparse, therefore likely other unidentified structures
- Basin has up to 140m of gross sandstone section
- 2D Seismic programme commenced, assessing broad structural trends and delineating structural targets



Significant number of sandstone leads and prospects identified from relatively sparse seismic data set in the eastern Galilee

# Galilee Sandstone – Albany 1 well



- ✓ Initial 13 metre section of Sandstone produced stabilised gas flow of 230,000 scf/d
- ✓ Drilling suspended due to wellbore difficulties
- Approximately 100 metres of sandstone yet to be penetrated / tested in Albany 1
- Pre-drilling objectives of improving flow through underbalanced drilling and confirming the reservoir as an excellent stimulation candidate have been met
- ✓ No expensive CO₂ or H₂S removal to get to sales gas spec

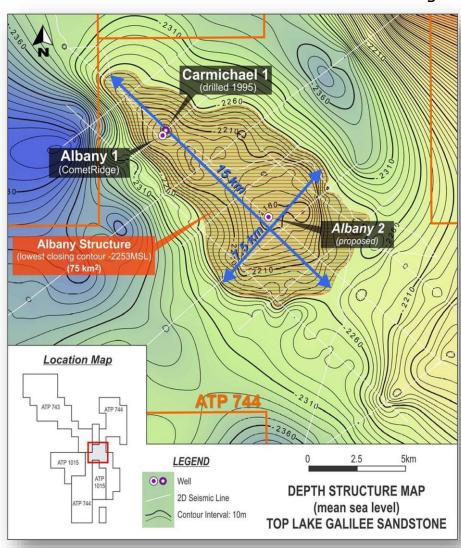


First Measured Gas Flow from Lake Galilee
Sandstone Reservoir

# **Galilee Sandstone – 2019 Work Programme**

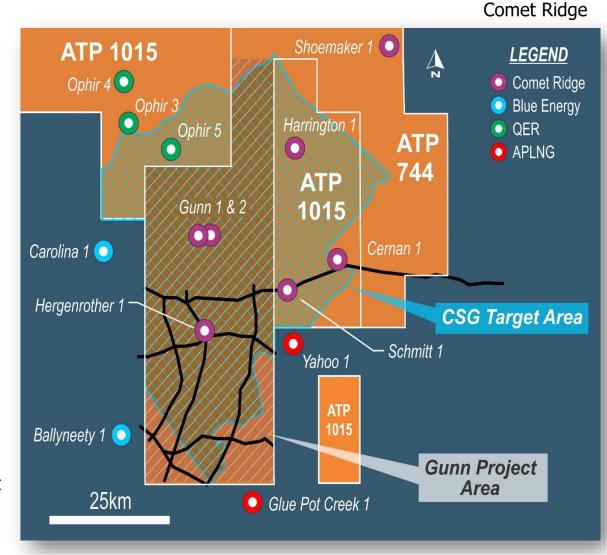


- Vintage Energy farm-out for 30% of the Sandstone reservoir sequence ("Deeps") of Comet Ridge's ATP 743, 744 and 1015 (Galilee Permits) Proven JV Partners.
- Current work programme
  - Drilling Agreement being executed, expected rig move in March 2019
  - Long lead items procured for Albany 2 and Albany 1 completion
  - 2D seismic programme to acquire 325 km expected complete mid Feb
- Targeted Outcomes
  - Additional drilling targets
  - Conversion of Resources to Reserves
  - Gas Sales Agreement(s)



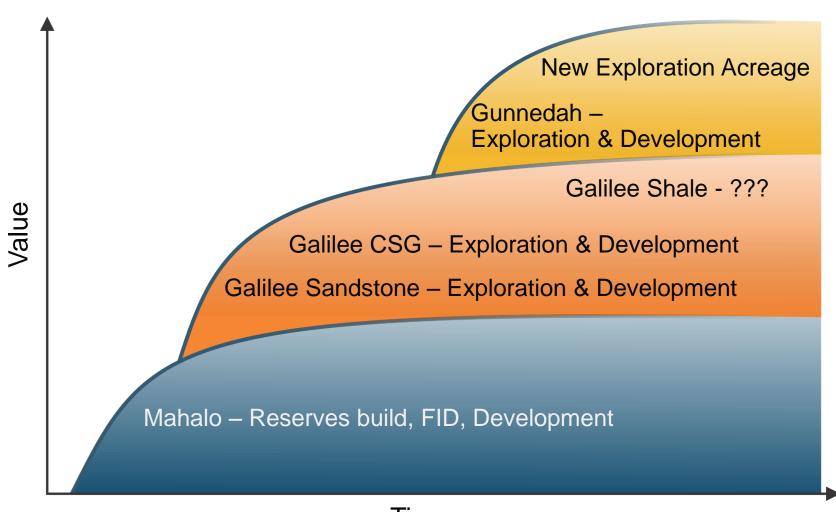
Galilee CSG – recoverable gas over approx. 2,000 km<sup>2</sup>

- Gunn Project area and ATP 1015 area (COI 100%) coals contain recoverable gas over approx. 2,000 km²
- 6 individual coal seams
- Depth to coal 700 1,000m
- 16 to 24m net coal deposited over large area
- Average gas content 4.3 m<sup>3</sup>/t (high 7.3 m<sup>3</sup>/t)
- Good to excellent permeability within target coals
- Significant CSG resource independently certified at over 1.8 Tcf in ATP 744
- COI working towards CSG pilot



# **Comet Ridge – Value Curve**

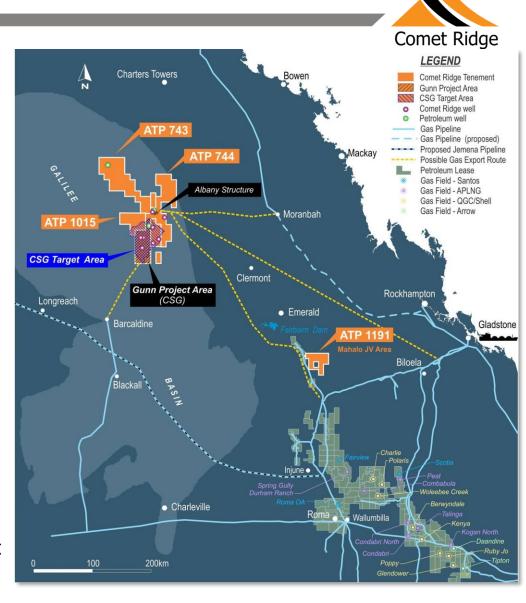




Time

# Comet Ridge – Key take away messages

- Mahalo is one of the east coast's largest, most productive and proximal to market gas fields not currently in production
- Significant upside from Galilee Proof of concept with successful flow of gas from Albany 1 with targets also in shallower coals (CSG)
- East coast gas market continues to tighten due to moratoria on gas exploration, shut-down of coal fired generation and increasing LNG demand
- Comet Ridge well placed to form part of the supply solution for the east coast gas market





## **ASX Listing Rule 5 Disclosure**



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

The Contingent Resource for the Albany Structure located ATP 744 are taken from an independent report by Dr Bruce McConachie of SRK Consulting (Australasia) Pty Ltd, an independent petroleum reserve and resource evaluation company. The Contingent Resources information has been issued with the prior written consent of Dr McConachie in the form and context in which they appear in this Annual Reserves Statement for 2016. His qualifications and experience meet the requirements to act as a qualified petroleum reserves and resource evaluator as defined under the ASX Listing Rule 5.42 to report petroleum reserves in accordance with the Society of Petroleum Engineers ("SPE") 2007 Petroleum Resource Management System ("PRMS") Guidelines as well as the 2011 Guidelines for Application.

The estimate of Reserves and Contingent Resources for the Mahalo Project as part of ATP 1191P provided in this presentation, is based on, and fairly represents, information and supporting documentation determined by Mr Timothy L. Hower of MHA Petroleum Consultants LLC Inc (MHA) in accordance with Petroleum Resource Management System guidelines. Mr Hower is a full-time employee of MHA, 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 and Contingent Resource estimates for Mahalo in the form and context in which they appear in this presentation.

The reserve and contingent gas resource estimates for ATP 1191P provided in this presentation were originally released to the Market in the Company's announcement of 28 August 2014, updated in an announcement dated 2 December 2015, and further upgraded in an announcement dated 6 March 2018 and were estimated using the deterministic method with the estimate of contingent resources not having been adjusted for commercial risk.

The contingent resource estimates for the unconventional gas located in ATP 744 provided in this presentation are based on and fairly represent, information and supporting documentation determined by Mr John Hattner of Netherland, Sewell and Associates Inc, Dallas, Texas, USA, in accordance with Petroleum Resource Management System guidelines. Mr Hattner is a full-time employee of NSAI, and is considered to be a qualified person as defined under the ASX Listing Rule 5.42 and has given his consent to the use of the resource figures in the form and context in which they appear in this presentation.

The contingent gas resource estimates for ATP 744 provided in this statement were originally released to the Market in the Company's announcement of 25 November 2010, and were estimated using the deterministic method with the estimate of contingent resources for ATP 744 not having been adjusted for commercial risk.

COI confirms that it is not aware of any new information or data that materially affects the information included in any of the announcements relating to either ATP 1191P or ATP 744P referred to above and that all of the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

The contingent resource estimates for PEL 6, PEL 427 and PEL 428 referred to in this presentation were determined by Mr Timothy L. Hower of MHA Petroleum Consultants LLC in accordance with Petroleum Resource Management System guidelines. Mr Hower is a full-time employee of MHA, and is a qualified person as defined under the ASX Listing Rule 5.42. Mr Hower consented to the publication of the resource figures which appeared in the announcement of 7 March 2011 made by Eastern Star Gas Limited (ASX:ESG) and any reference and reliance on the resource figures for PEL 6, PEL 427 & PEL 428 in this presentation is only a restatement of the information contained in the ESG announcement.

The contingent resource estimates for PEL 6, PEL 427 and PEL 428 were estimated using the deterministic method with the estimate of contingent resources for PEL 6, PEL 427 and PEL 428 not having been adjusted for commercial risk.

COI confirms that it is not aware of any new information or data that materially affects the information included in the ESG announcement of 7 March 2011 and that all of the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.