ASX Release

31 August 2020

Nangwarry recoverable CO_2 booking

- **Recoverable CO_2 independently assessed and booked**
- **Gross recoverable estimates are: Low of 7.8 Bcf, Best of 25.1 Bcf, High of 82.1 Bcf**
- **MOU signed with Supagas for the preliminary design and costing of facilities**
- **Testing plans being advanced**

Vintage Energy Ltd (ASX: VEN, "Vintage") is pleased to advise that it has made its first Otway Basin recoverable carbon dioxide ("CO_2") booking for the Nangwarry-1 discovery. Employing a method consistent with the June 2018 Society of Engineers Petroleum Resources Management System ("PRMS") methodology, a gross Best Case of 25.1 Bcf recoverable CO_2 has been booked for the Nangwarry discovery, which is held by the PEL 155 Otway Basin Joint Venture (Vintage 50%, and Lakes Oil NL ("Lakes") 50% and operator).

Managing Director, Neil Gibbins said, "The recoverable gas booking, along with the recently announced MOU with Supagas Pty Ltd, takes us a significant step closer to delivering first CO_2 production from a potentially valuable annuity style asset. Once we have flow tested the Nangwarry-1 well, we will look to expeditiously mature these volumes to reserve status."

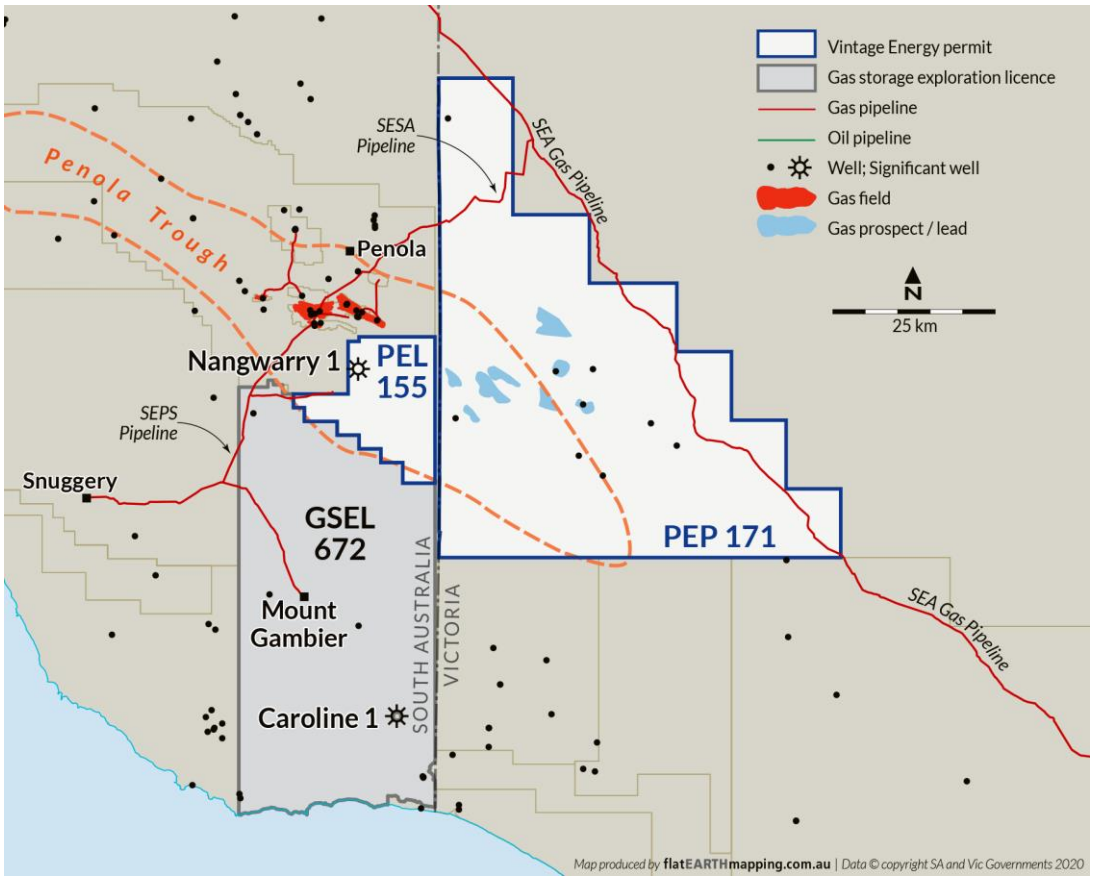

Figure 1: Vintage Otway Basin permits

Under PRMS, volumes of non-hydrocarbon by-products cannot be included in any Reserves or Resources classification. ERC Equipoise Pte Ltd ("ERCE") has assessed the sales gas volumes attributable to the Nangwarry-1 discovery using a methodology consistent with that prescribed by the PRMS. ERCE independently assesses a Best Case of 25.1 Bcf gross recoverable CO_2 in the top Pretty Hill Sandstone of the Nangwarry CO_2 discovery, located in the south east of South Australia (12.6 Bcf net to Vintage). This compares extremely well with other commercial Otway Basin CO_2 fields such as Caroline (~15 Bcf), which was in production for approximately 50 years, and Boggy Creek (~14 Bcf).

The Nangwarry-1 well was operated by Lakes and its contractors, with no safety or environmental incidents experienced during drilling. A high-quality CO_2 gas column of approximately 90 metres has now been determined from sampling and pressure data, with a further 45 metres subject to confirmation by testing. This is a 25-70 metre increase over the previously advised 65 metre column. Laboratory analyses indicate that around 90% of the gas content is CO_2, with the residual being methane. This is an excellent outcome as the methane can be separated from the CO_2 and used to power the facility that would process the gas to food grade quality CO_2.

Gross PEL 155 Nangwarry Field Pretty Hill Sandstone (31 August 2020)					
CO_2 Sales Gas (Bcf)			Unrisked hydrocarbon Contingent Resources (Bcf)		
Low	Best	High	1C	2C	3C
7.8	25.1	82.1	0.8	2.6	8.8

Net PEL 155 Nangwarry CO_2 Field Pretty Hill Sandstone (31 August 2020)					
CO_2 Sales Gas (Bcf) 50% VEN			Unrisked hydrocarbon Contingent Resources (Bcf) 50% VEN		
Low	Best	High	1C	2C	3C
3.9	12.6	41.1	0.4	1.3	4.4

Notes

1. Recoverable CO_2 and Contingent Resource estimates reported here are ERCE estimates.
2. Gross Contingent Resources represent a 100% total of estimated recoverable hydrocarbon volumes.
3. Resource estimates have been made and classified in accordance with the PRMS guidelines and methodology.
4. Recoverable CO_2 estimates have been made and classified using a method consistent with the PRMS guidelines and methodology.
5. Net recoverable CO_2 attributable to Vintage represents the fraction of gross recoverable CO_2 allocated to Vintage, based on its 50% interest in PEL 155.
6. Volumes reported here are "unrisked" in the sense that no adjustment has been made for the risk that the project may not be developed in the form envisaged or may not go ahead at all (i.e. no Chance of Development factor has been applied).
7. Chance of Development for the recoverable CO_2 has been estimated to be 75% by Vintage and agreed by ERCE. This is based on the ability to establish a skid mounted processing facility at the well-head, adequate road access for trucks to transport the CO_2 to market, similar reservoirs developed nearby such as Caroline-1, and high downstream demand for food grade CO_2.
8. Hydrocarbon Contingent Resources have been sub-classified as "Development Unclarified" under the PRMS by ERCE and are assigned as Consumed in Operations, that is used as fuel for the CO_2 plant. The key contingencies are a final investment decision on development, committing to a CO_2 sales agreement, any other necessary commercial arrangements, and obtaining the usual regulatory approvals for production.
9. Recoverable CO_2 volumes shown have had shrinkage applied to account for methane and include only CO_2 gas.
10. Recoverable CO_2 and Contingent Resources presented in the tables are the probabilistic totals for the Pretty Hill Sandstone reservoir interval.
11. Probabilistic totals have been estimated using the Monte Carlo method.

The Joint Venture recently announced (refer ASX release on 19 August 2020) a non-binding Memorandum of Understanding ("MOU"), that was signed with Supagas Pty Ltd ("Supagas"), an Australian based distributor of gases for domestic, industrial, medical and other applications. Under the MOU, Supagas will fund work associated with the preliminary design and costing of facilities for processing Nangwarry CO_2, which will allow for the production and delivery of food grade standard CO_2. In return, the joint venture will give Supagas the opportunity to submit a formal proposal to develop and/or purchase gas from the Nangwarry resource.

Design work is currently underway for an extended production test of the Nangwarry-1 well, which is being targeted for late 2020.

This release has been authorised on behalf of the Vintage Energy Limited Board by Mr Neil Gibbins, Managing Director.

For more information contact:

Neil Gibbins
Managing Director
+61 8 7477 7680
info@vintageenergy.com.au

Resource Evaluator

ERCE is an independent consultancy specialising in petroleum reservoir evaluation. Except for the provision of professional services on a fee basis, ERCE has no commercial arrangement with any other person or company involved in the interests that are the subject of this Contingent Resources evaluation.

The work has been supervised by Mr Adam Becis, Principal Reservoir Engineer of ERCE's Asia Pacific office who has over 14 years of experience. He is a member of the Society of Petroleum Engineers and also a member of the Society of Petroleum Evaluation Engineers.