

## **Highly successful flow from Nangwarry-1**

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- **Strong CO<sub>2</sub> gas flow from lower section of Top Pretty Hill Formation**
- **Approximately 12-14 MMscfd through a 68/64" choke at 900 psi**
- **Further flows expected from upper section in coming days**
- **Three exploration wells drilled since listing with three discoveries**

Vintage Energy Ltd (ASX: VEN, "Vintage") is pleased to provide an update on production testing activities for Nangwarry-1 in the onshore Otway Basin.

Neil Gibbins, Vintage Managing Director, said "We are extremely pleased that the first perforation zone in the Top Pretty Hill Formation has delivered an excellent result, with a very strong flow of CO<sub>2</sub> gas observed. The most pleasing part of this result is that gas flow came from the lower section of the interpreted gas column, with log data indicating this section would likely flow at a lower rate than the upper section.

The strong gas flows delivered to date are estimated at 12-14 MMscfd through two 48/64" chokes (equivalent to a 68/64" choke) at 900 psi wellhead pressure, which has already easily exceeded our expectations. The perforations were done over a five-metre interval approximately 110 metres below the next planned perforation interval which will test the top of the interpreted gas column.

In the coming days we will move to the uppermost part of the Top Pretty Hill Formation and, once perforated, will commence an extended production test to further quantify the flow rate from the interpreted gas column and analyse the pressure data for indications of connected volumes.

Vintage Energy can now claim a 100% success rate from drilling three exploration wells. We have made successive significant discoveries in the Albany-1 well in the Galilee Basin, the Vali-1 ST1 well in the Cooper Basin and now the Nangwarry-1 well in the onshore Otway Basin, which have all resulted in gas flow to surface."

Otway Basin – PEL 155 (Vintage 50%, Otway Energy Pty Ltd 50% and operator)

Nangwarry-1 has produced strongly during all flow periods since perforating a five-metre zone at the base of the Top Pretty Hill gas column on Monday. The Operator advised that due to very high flow rates and corresponding gas expansion, a temperature drop resulted in ice formation at the separator, which has prevented the ability to maintain a prolonged stabilised flow rate. However, orifice plate readings have indicated flow rates in the 12-14 MMscfd range through two 48/64" chokes (equivalent to a 68/64" choke) with flowing wellhead pressures holding relatively stable around 900 psi. This confirms a gas column in the higher range of expectations, with the top upper-most sand of the Top Pretty Hill CO<sub>2</sub> column to be perforated next to acquire further flow information and volumetric estimations.

This is an excellent result as this section was identified via log data as a potential transition zone, with the expectation it could flow gas at a lower rate than the upper section and possibly flow with water.

The production test of Nangwarry-1 commenced on 19 March, with the Mid-Pretty Hill zone tested initially. The perforation of this zone revealed that it was, as expected, of poor reservoir quality and likely water wet.

Little pressure response was observed once perforations were completed. This section was isolated, with testing focused on the main target zone, the Top Pretty Hill Formation. The perforation of the upper section of the Top Pretty Hill Formation is expected to take place over the coming days, with extended flow testing of the Top Pretty Hill to take place over the coming weeks. Once the extended production test is completed, a

stabilised flow rate and volumetric estimate of the recoverable CO<sub>2</sub> will be obtained. Gross recoverable estimates for Nangwarry-1 CO<sub>2</sub> are: Low of 7.8 Bcf (3.9 Bcf net), Best of 25.1 Bcf (12.6 Bcf net), High of 82.1 Bcf (41.1 Bcf net) (refer ASX release dated 31 August 2020).

The production test is a key milestone on the path to first production of food grade CO<sub>2</sub>. The production test will confirm volumes of saleable CO<sub>2</sub> and allow the Joint Venture to consider appropriate debt funding options for the infrastructure required to produce food grade CO<sub>2</sub>. The co-produced methane (approximately 10%) will be used to power the production plant, with Supagas already commissioning preliminary design work for a skid mounted CO<sub>2</sub> plant, in line with the MOU signed in 2020.

A stable source of CO<sub>2</sub> is currently in high demand. After producing CO<sub>2</sub> for 50 years the Caroline-1 well ceased production in 2017. Caroline-1 is located within 100 kilometres of Nangwarry-1 and remains South Australia's most profitable well to date (refer to DMITRE, Otway Basin South Australian acreage release dated August 2012).

Uses for food grade CO<sub>2</sub> include refrigeration/dry ice (needed for storage of some vaccines), carbonation for soft drinks and beer, firefighting, medical devices and winemaking.

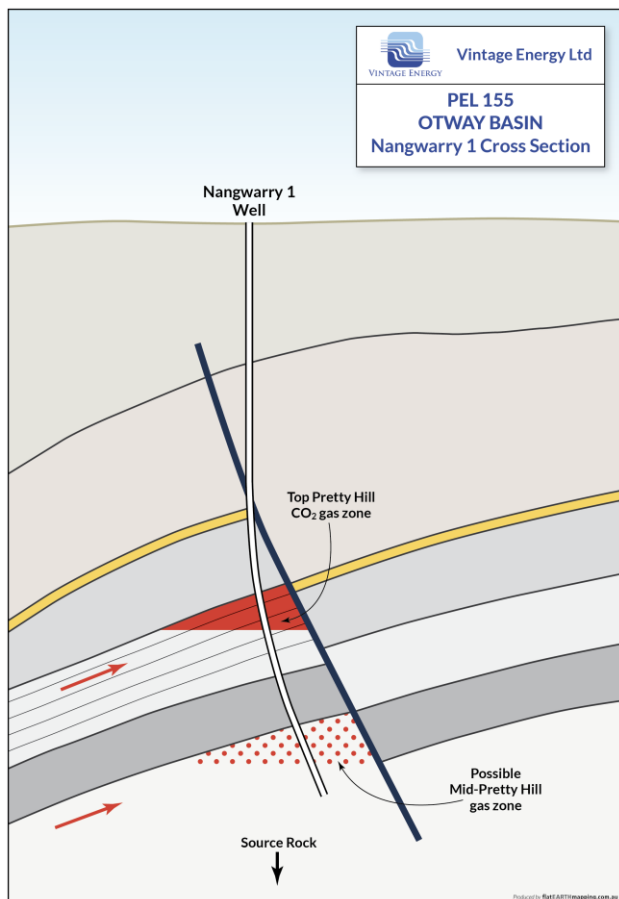


Figure 1: Superior Energy rig at the Nangwarry-1 site

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

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