

Nangwarry-1 production test update

- **Continued strong CO₂ gas flow from Top Pretty Hill Formation**
- **Measured flow rates well in excess of those required for production purposes**
- **Downhole gauges gathering pressure data over coming weeks**

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 “The production test of Nangwarry-1 continues to exceed expectations, with choked back flow rates of approximately 11 million standard cubic feet per day (“MMscfd”) observed during an extended flow period at a relatively stable wellhead pressure of 1,415 psi. The well also delivered rates as high as 22 MMscfd (from choke calculations) over shorter periods.

To put this flow rate into context, production of 150 tonnes per day of CO₂ only requires a flow rate of approximately 3 MMscfd. Clearly this well has productive capacity in excess of this. The highly profitable Caroline-1 well flowed for almost 50 years with flows in the order of 2 MMscfd, producing almost 800,000 tonnes (~16 Bcf) over its life, which is less than the Best (mid case) estimate for Nangwarry-1.

We are confident that, based on data to be collected from the shut-in over the coming weeks, Nangwarry-1 will exceed the current Best (mid case) estimate. Once we have this information, we will seek to expedite the next stage of activities and focus on the potential development of the reservoir.

A stable source of food grade carbon dioxide is in high demand both here in Australia and globally. With the use of dry ice for storage of vaccines, and the need for carbonation in the production of soft drinks and beer, we believe that demand will only continue to grow over the coming years.”

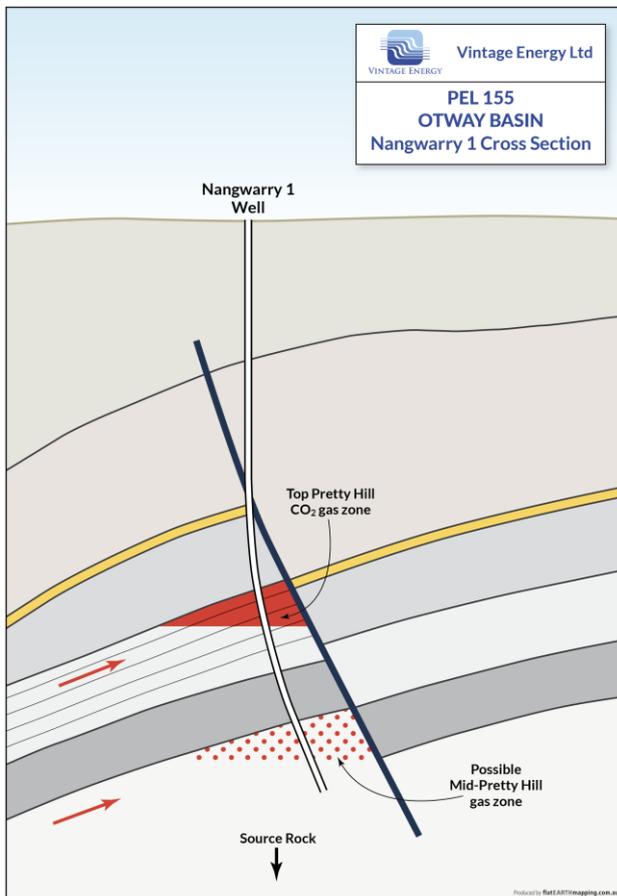
Otway Basin – PEL 155 (Vintage 50%, Otway Energy Pty Ltd 50% and operator)

Nangwarry-1 was perforated across the targeted zones in the Top Pretty Hill Formation with flow testing now complete. The well continued to produce strongly and delivered 10.5-10.8 MMscfd through a 48/64” choke at a flowing wellhead pressure of 1,415 psi over a 36 hour period. This flow was measured through a 3” orifice plate and choked back in order to analyse the well over this extended flow period with stable conditions. The well is very productive and, over shorter periods, has flowed at rates in excess of those measured during the extended flow test.

During the latter part of the flow testing period, a production logging tool (“PLT”) was made up, calibrated, and run into the hole to perform the production logging run. The logging passes across the perforations were run at 30, 60, 90 feet/min while flowing at a restricted rate by a 32/64” choke at approximately 6 MMscfd, and then by a 48/64” choke at approximately 11 MMscfd. The PLT data will now be assessed to determine the relative contributions from each of the perforated zones.

Once the PLT was pulled from the hole, downhole gauges were programmed and run into the hole and set at 2,919 metres to record pressure data for the extended flow and shut-in period.

Once the extended shut-in pressure data has been acquired and analysed, a more accurate volumetric estimate of the recoverable CO₂ will be obtained. Prior to testing, gross recoverable estimates for Nangwarry-1 CO₂ were estimated at: 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 CO₂. The production test will confirm volumes of saleable CO₂ and allow the Joint Venture to consider appropriate debt funding options for the infrastructure required to produce food grade CO₂. 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 CO₂ plant, in line with the MOU signed in 2020.

A stable source of CO₂ is currently in high demand. After producing CO₂ for 50 years the Caroline-1 well ceased production in 2017. Caroline-1 is located within 40 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 CO₂ 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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