

## COMPANY COMMENT

### Pantheon Resources

#### Operational Update

**Pantheon Resources indicated that the Talitha #A well is flaring gas from the Kuparuk section as the well cleans up.**

- Key operational data:** That gas is being flared is highly encouraging. This is an early indicator that the well's completion operations have been effective. It is also absolutely necessary for these wells to have a high gas content because it is the expansion of gas that will provide energy that will push the oil up the wellbore to the surface. It also critical that the gas has sufficient energy to "clear up" the well, which involves clearing it of relatively heavy drilling and completion fluid. The previously announced over pressure of the Kuparuk formation created drilling challenges because it was unexpected. However, that overpressure will, in our opinion, favour well productivity.
- 40° API Oil:** The company indicated, for the first time, that the liquids recovered from the Brookian targets (Shelf Margin Deltaic, Slope Fan System and two separate zones within the Basin Floor Fan) have an API density of 40°. We are positively surprised by this as it suggests we are dealing with light oil, not too dissimilar to Brent, which for reference also has an API density of 40°. In a context where most American shale oil plays are producing lighter condensate with higher API densities, refineries, the market and potential farmin partners are all seeking Brent-type crude oil – it also has a higher value per barrel. Analysis of the above-mentioned Brookian targets suggests that good reservoir properties appear present in notable potential oil pay zones, according to the company.
- Validation:** Pantheon made some very difficult and critical decisions in light of the highly encouraging potential of the Kuparuk formation and the unexpected over-pressured subsurface conditions encountered in that horizon, which created challenges. We believe Pantheon's decision to sidetrack the well and case it to total depth has paid off. With the well secured to total depth, the investment in Talitha #A is secured in its entirety. Moreover, Pantheon has acquired very high quality downhole data for the entirety of the well and is now progressing with a production test within the Kuparuk.
- Near-term testing:** Pressure Transient Analysis will provide information relating to the flow/pressure characteristics of the well. Pantheon has engaged Baker Hughes (in partnership with Advanced Hydrocarbon Stratigraphy) to undertake Cryo-Trap Mass Spectrometry analysis which provides a heightened level of analysis of rock cuttings from the well and the hydrocarbons within those cuttings. For reference, according to the website of Baker Hughes the level of analysis from Cryo-Trap Mass Spectrometry can provide estimates of the expected ultimate recovery, implying it is a means of extrapolating very meaningful data. Combined with the high-quality well logs for the Kuparuk formation acquired as a result of casing the well to total depth, we believe that Pantheon will have acquired a significant amount of data to better define the resource potential of the Kuparuk formation and to formulate forward looking plans – the goal of all exploration/appraisal drilling.
- Timing of forthcoming news:** We see the upcoming investor presentation planned for 20<sup>th</sup> of April as a key date and expect the company to present its comprehensive preliminary assessment of the well results at that time. We expect production data to be announced as and when that data is available. We believe that Pantheon Resources

### CORPORATE

Share Price (last close) 38.5p

Reuters/BBG	PANR.L / PANR LN
Index	FTSE AIM
Sector	Oil & Gas
Market Cap	£266.9m

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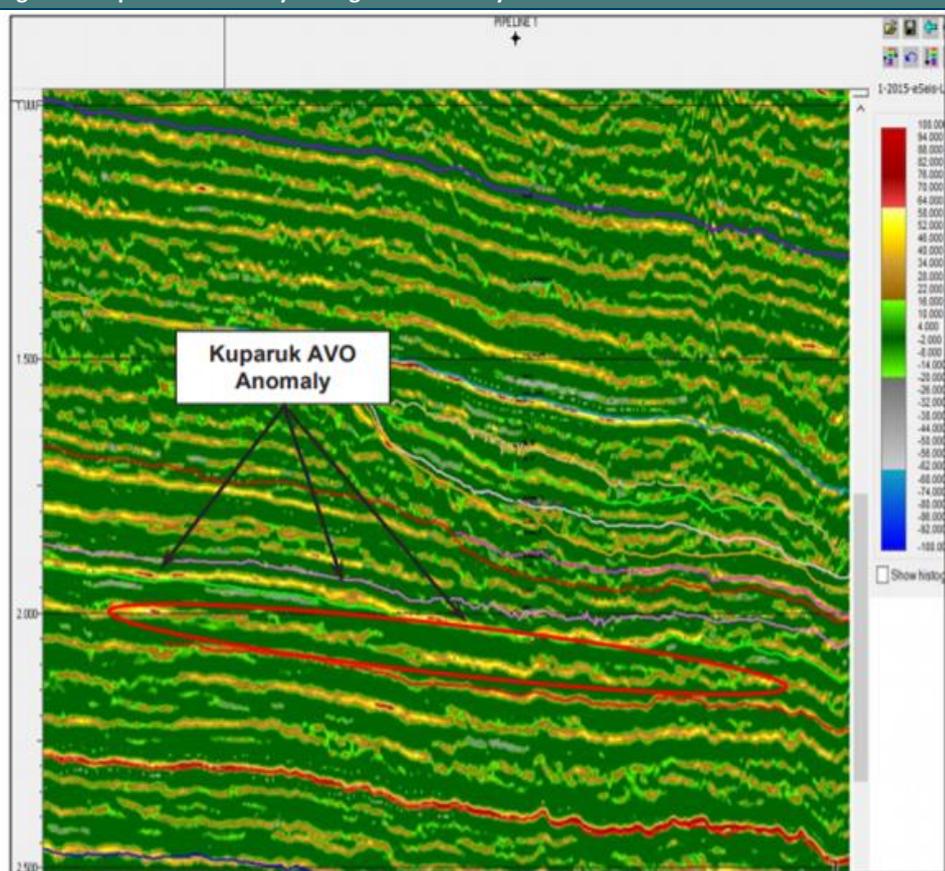
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will have acquired sufficient data to make the quarters ahead rich in newsflow as the data is analysed and integrated.

- Kuparuk:** Kuparuk is a stratigraphic resource defined by 3D seismic, specifically by a strong AVO anomaly as seen in Figure 1. The defined resource has a surface area of over 200 square kilometers (85 square miles) – it is a very extensive resource by any standards. This is why there is a heightened interest in the Talitha #A well data. For reference, the pre-drill oil in place estimate in relation to the Kuparuk formation amounted to 1.4 billion barrels. The pre-drill recoverable oil estimate in relation to Kuparuk was 341 million barrels of oil. Our success case valuation of Kuparuk amounts to 188 p/sh of which we have included 20% or 37.6p/sh in our 88.9p/sh fair value estimate.

**Figure 1: Kuparuk Defined by Strong AVO Anomaly**



Source: Pantheon Resources

**ESG:** We believe that oil & gas operations in Alaska have a negligible surface footprint relative to the amount of energy produced in that state. We believe that the scale of the energy produced from Alaska greatly alleviates pressures on wildlife elsewhere in the world too by alleviating the need for land to be used elsewhere to provide our energy. Habitat loss is recognised as the #1 threat to wildlife (sources: World Wildlife Fund, United Nations, US National Wildlife Federation). For reference, modern drilling operations in Alaska are capable of targeting subsurface resources with an area that is 6,500 greater than the surface footprint (source: ConocoPhillips). Figure 2 shows the minimal surface footprint of the Talitha #A well. In relation to our focus on ESG, we believe that Pantheon Resources has taken a cautious environmental decision by not over-extending its drilling operations into the spring. After the spring thaw moving heavy equipment on it risks

having a detrimental environmental impact. Pantheon has made decisions to avoid that risk.

Figure 2: Nordic Calista #3 rig drilling Talitha #A well in Alaska



Source: Pantheon Resources

**Summary:** The first well drilled by Pantheon Resources in Alaska, Talitha #A, has been an operational success despite the unexpected over-pressure in the Kuparuk formation, which created challenging subsurface conditions. We are highly encouraged by the well data to date, the entirety of the geological data provided by the company is favourable, in our opinion. Nevertheless, in keeping with the conservative nature of Pantheon Resources, we highlight the message of Jay Cheatham, CEO, “Despite this encouraging news, as always, I caution shareholders that we must wait for completion of testing before we can draw any definitive conclusions about the well.”

**Fair value estimate:** Our fair value estimate of 88.9p/sh reflects our pre-drill estimates and we see material scope to reassess and increase that valuation over the course of 2021. The most critical data relates to the forthcoming production testing because this will be determinant for ascertaining Kuparuk’s commerciality.

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Corporate	58	96.7	58	100.0
Buy	1	1.7	0	0.0
Speculative Buy	0	0.0	0	0.0
Outperform	1	1.7	0	0.0
Market Perform	0	0.0	0	0.0
Underperform	0	0.0	0	0.0
Sell	0	0.0	0	0.0
<b>Total</b>	<b>60.0</b>	<b>100.0</b>	<b>58.0</b>	<b>100.0</b>

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Company Name	Table of interest number	12-month recommendation history	Date
Pantheon Resources (PANR)	4	Corporate	11.11.20

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