

12 January 2024

## 88 Energy Limited Hickory-1 Flow Test Update

### Highlights

- Hickory-1 discovery well flow test and well stimulation program (**Flow Test**) set to commence mid-February 2024, following ice road construction, pad construction and rig mobilisation.
- Fully funded Flow Test budget of US\$11 million (gross).
- Design, planning and logistics complete, with permitting on track for end of January 2024.
- The Slope Fan System (**SFS**) and Shelf Margin Deltaic (**SMD**) are the two primary test targets.
- Each zone will be tested separately and are planned to take approximately ten days each.
- Hickory-1 is a vertical well and not optimal for the production phase, however, information critical to development planning will be collected, such as reservoir deliverability, fluid compositions, pressures and connectivity.
- Flow rates from horizontally developed wells, such as those planned for the development of Project Phoenix, have been modelled to be 6 to 12 times higher than those from vertical wells.

88 Energy Limited (ASX:88E, AIM:88E, OTC:EEENF) (**88 Energy** or the **Company**) is pleased to provide an update in relation to the Hickory-1 flow testing program at Project Phoenix on the North Slope, Alaska.

### Hickory-1 Flow Testing Program

The Hickory-1 discovery well, which was drilled in February 2023, is currently cased and suspended ahead of the upcoming flow testing program, with testing scheduled to commence in mid-February 2024. Flow Test planning has been finalised, with all relevant permits submitted and all final approvals expected to be received in January 2024.

Testing operations will focus on the two primary targets, the SFS and the SMD reservoirs (see Figure 1), which will be testing a mean, unrisked, multi-hundred-million-barrel oil resource <sup>1,2,3</sup> (Table 1).

Of the SFS series of reservoirs, the Upper SFS reservoir is targeted to be flow tested as it has not been previously flowed, whereas the Lower SFS has previously been flowed and producibility of that reservoir confirmed on adjacent acreage. This will be followed by a targeted testing of the SMD-B reservoir. Each zone will be independently isolated, stimulated and flowed to surface using nitrogen lift to assist in an efficient clean-up of the well. Perforation, completion-running and stimulation is expected to take approximately four days, followed by a clean-up and flow period of up to four days and a pressure build-up of up to two days.

<sup>1</sup> **Cautionary Statement:** The estimated quantities of petroleum that may be potentially recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation are required to determine the existence of a significant quantity of potentially movable hydrocarbons.

<sup>2</sup> Mean unrisked resource - Net Entitlement to 88 Energy. Refer announcement dated 23 August 2022 for pre-Hickory-1 estimates.

<sup>3</sup> Refer announcement dated 6 November 2023 for post-Hickory-1 for post Hickory-1 drilling resource estimates.

Downhole and surface fluid samples are to be captured to reduce fluid characterisation uncertainties. Downhole pressure and temperature data, surface pressure and temperature data, and flow rates of oil, gas and water will be recorded. Water salinity data will be acquired to enable distinction between stimulation and formation water production. This data is essential in maturing development plans by accurately constraining reservoir models used to progress the next phases of the Project.

Any future development plan for Project Phoenix will almost certainly include horizontal wells with unconventional completion technology to maximise oil rates. As is evidenced in many Lower 48 analogues, horizontal well production rates typically produce at rates that are 6-12 times higher than vertical wells once lessons from field development are captured in the appraisal phase. Offset exploration vertical well tests, similar to the Hickory-1 discovery well, have all flowed in the 50-100 BOPD range per test. Water to oil ratios, gas to oil ratios and the evolution of rates and pressures over time are critical datasets that assist in development planning and forecasting. It is not uncommon for formation water to be produced sustainably in conjunction with hydrocarbons in these types of reservoirs, as is often observed in producing analogues in the Lower 48. Vertical wells provide cost effective access to test multiple reservoirs in a single wellbore and are therefore the crucial first steps on the path to development of Project Phoenix resources.

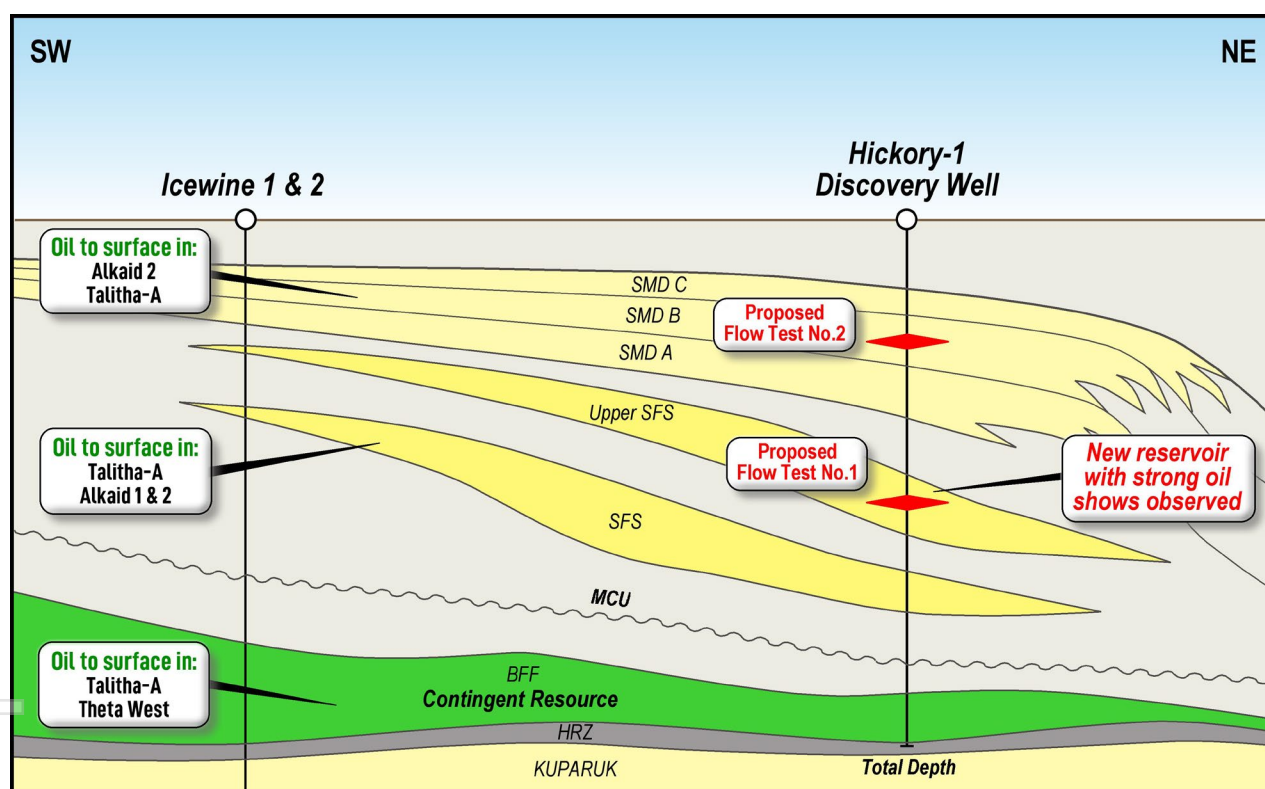


Figure 1: Flow testing program to target two of the four pay zones intersected in the Hickory-1 discovery well.

**Table 1: Previously announced Prospective Resource assessment conducted prior to the drilling of Hickory-1**

Project Phoenix: Alaska North Slope	Unrisked Gross Prospective Oil Resources (MMstb) <sup>4,5</sup>				
Prospects (Probabilistic Method)	Low (1U)	Best (2U)	High (3U)	Mean	COS <sup>3</sup>
Shelf Margin Delta (SMD A, B & C)	70	224	518	231	81%
Slope Fan Set (SFS)	37	134	345	141	50%
Kuparuk (KUP)	39	88	156	89	72%
<b>Prospects Total</b>	<b>146</b>	<b>446</b>	<b>1,019</b>	<b>461 <sup>2</sup></b>	

Project Phoenix: Alaska North Slope	Unrisked Net Entitlement to 88E <sup>1</sup> Prospective Oil Resources (MMstb) <sup>4,5</sup>				
Prospects (Probabilistic Method)	Low (1U)	Best (2U)	High (3U)	Mean	COS <sup>3</sup>
Shelf Margin Delta (SMD A, B & C)	44	140	326	145	81%
Slope Fan Set (SFS)	24	84	217	89	50%
Kuparuk (KUP)	24	56	98	56	72%
<b>Prospects Total</b>	<b>92</b>	<b>280</b>	<b>641</b>	<b>290 <sup>2</sup></b>	

1. 88 Energy net resources have been calculated using a 75.227% working interest and a 16.5% royalty.

2. The unrisked means, which have been arithmetically summed, are not representative of expected total from the prospects and implies a success case in all reservoir intervals. 88 Energy cautions that the arithmetically summed 1U estimate may be a conservative estimate and the arithmetically summed 3U estimate may be optimistic when compared to a statistical aggregation of probability distributions.

3. COS represents the geological chance of success as assessed by 88 Energy and reviewed and endorsed by LKA.

4. Prospects are subject to a phase risk (oil vs gas). Chance of oil has been assessed as 100% for all targets except for the Kuparuk Formation which has been assessed as 70%. Phase risk has not been applied to the unrisked numbers.

5. The Prospective Resources have not been adjusted for the chance of development. Quantifying the chance of development (COD) requires consideration of both economic and other contingencies, such as legal, regulatory, market access, political, social license, internal and external approvals and commitment to project finance and development timing. As many of these factors are outside the knowledge of LKA they must be used with caution.

6. Prospective Resource Estimates – determined pre-drilling of Hickory-1.

7. Updated Prospective Resource Estimates reflect the removal of the resource estimate for the Basin Floor Fan which as of 1 November 2023 has been redetermined and classified as a Contingent Resource. No other changes have been made to the original estimates, please refer to the ASX announcement of 23 August 2023.

**Table 2: Previously announced Contingent Resource assessment for the BFF discovery at Hickory-1**

Project Phoenix: Basin Floor Fan		Gross (100%) Contingent Resources <sup>1,3</sup>		
Probabilistic Method		Low (1C)	Best (2C)	High (3C)
<b>Oil</b>	Million Barrels	17	44	104
<b>NGL</b>	Million Barrels	35	91	218
<b>Oil + NGL <sup>2</sup></b>	Million Barrels	<b>52</b>	<b>136</b>	<b>322</b>
<b>Gas</b>	Billion Cubic Feet	255	628	1,417
<b>Total <sup>2</sup></b>	<i>Million Barrels of Oil Equivalent <sup>4</sup></i>	<b>98</b>	<b>250</b>	<b>580</b>

Project Phoenix: Basin Floor Fan		Net Entitlement (~63%) Contingent Resources <sup>1,3</sup>		
Probabilistic Method		Low (1C)	Best (2C)	High (3C)
<b>Oil</b>	Million Barrels	11	28	65
<b>NGL</b>	Million Barrels	22	57	137
<b>Oil + NGL <sup>2</sup></b>	Million Barrels	<b>33</b>	<b>85</b>	<b>202</b>
<b>Gas</b>	Billion Cubic Feet	160	394	890
<b>Total <sup>2</sup></b>	<i>Million Barrels of Oil Equivalent <sup>4</sup></i>	<b>62</b>	<b>157</b>	<b>364</b>

1. 88 Energy net resources have been calculated using a 75.227% working interest and a 16.5% royalty.

2. 88 Energy cautions that the reported totals for Oil+NGL and Total MMBOE are an arithmetic sum of the individual hydrocarbon types within the BFF reservoir. The arithmetically summed 1C estimate may be a conservative estimate and the arithmetically summed 3C estimate may be optimistic when compared to a statistical aggregation of probability distributions.

3. The Contingent Resource classification is not required to be adjusted for the chance of development, as per PRMS 2018 guidance, and hence has not been carried out in this assessment.

4. Natural Gas Liquids (NGL's) are converted to oil equivalent volumes via a constant ratio of 1:1. Gas is converted to oil equivalent volumes via a constant ratio of 5.5 BCF per 1 MMBoe.

**This announcement has been authorised by the Board.**

*Media and Investor Relations:*

**88 Energy Ltd**

Ashley Gilbert, Managing Director

Tel: +61 8 9485 0990

Email: [investor-relations@88energy.com](mailto:investor-relations@88energy.com)

**Fivemark Partners**, Investor and Media Relations

Michael Vaughan

Tel: +61 422 602 720

**Euroz Hartleys Limited**

Dale Bryan

Tel: + 61 8 9268 2829

**Cavendish Capital Markets Ltd**

Neil McDonald / Derrick Lee

Tel: + 44 131 220 6939

Pursuant to the requirements of the ASX Listing Rules Chapter 5 and the AIM Rules for Companies, the technical information and resource reporting contained in this announcement was prepared by, or under the supervision of, Dr Stephen Staley, who is a Non-Executive Director of the Company. Dr Staley has more than 40 years' experience in the petroleum industry, is a Fellow of the Geological Society of London, and a qualified Geologist/Geophysicist who has sufficient experience that is relevant to the style and nature of the oil prospects under consideration and to the activities discussed in this document. Dr Staley has reviewed the information and supporting documentation referred to in this announcement and considers the resource and reserve estimates to be fairly represented and consents to its release in the form and context in which it appears. His academic qualifications and industry memberships appear on the Company's website and both comply with the criteria for "Competence" under clause 3.1 of the Valmin Code 2015. Terminology and standards adopted by the Society of Petroleum Engineers "Petroleum Resources Management System" have been applied in producing this document.