

*This announcement contains inside information*

## 88 Energy Limited

### Hickory-1: Confirmed Discovery with BFF Maiden Contingent Resource Estimate

#### Highlights

- Maiden Independent Contingent Resource estimate completed at Project Phoenix for the Basin Floor Fan (BFF) reservoir.
- Gross Best Estimate (2C) Contingent Resource of 250 Million Barrels of Oil Equivalent (MMBOE) from the deepest reservoir encountered in Hickory-1, the BFF, comprised of;
  - 136 million barrels (MMbbl)\* of recoverable hydrocarbon liquids (Oil and NGL); and
  - 628 billion cubic feet (BCF)\* of recoverable gas.
- Independently certified Contingent Resource assessment prepared by Netherland, Sewell & Associates, Inc. (NSAI), a leading US based independent consultancy for the petroleum industry.
- Contingent Resources defined on the basis of multiple successful flow tests conducted in the BFF reservoir on adjacent acreage and clear reservoir continuity demonstrated through high quality seismic data and correlations across Hickory-1 and Icewine-1 to the neighbouring successful wells.
- Assessment carried out by NSAI confirms discovery status for the BFF reservoir prior to planned testing operations at Hickory-1.
- Key step towards the understanding of the hydrocarbon volumes in of Project Phoenix prior to Hickory-1 testing operations. If successful, these operations will allow additional contingent resources to be assigned to the shallower SMD-B and SFS reservoirs.

88 Energy Limited (ASX:88E, AIM:88E, OTC:EEENF) (**88 Energy** or the **Company**) is pleased to report a maiden, independently certified Contingent Resource estimate of 136 MMbbl of hydrocarbon liquids (gross best estimate (2C)) and 628 BCF of gas, for the BFF reservoir in Project Phoenix (~75% net working interest).

#### Managing Director, Ashley Gilbert, commented:

*"This maiden Contingent Resource is a great result for 88E and its shareholders. It represents an important milestone on the path to the possible development of Project Phoenix, even prior to flow testing operations at Hickory-1 this upcoming season.*

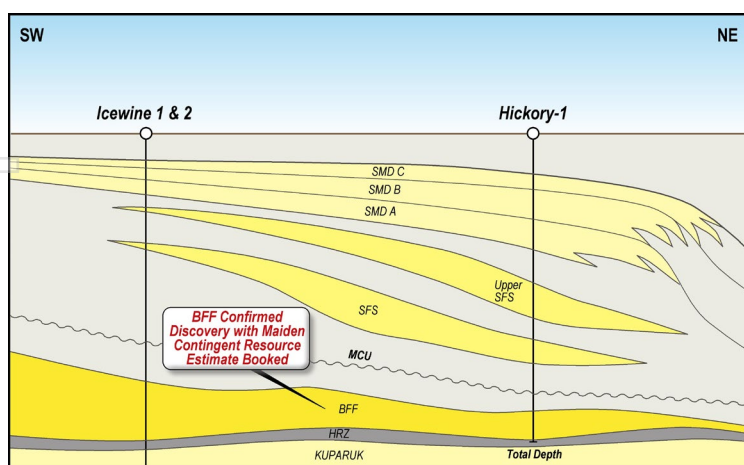
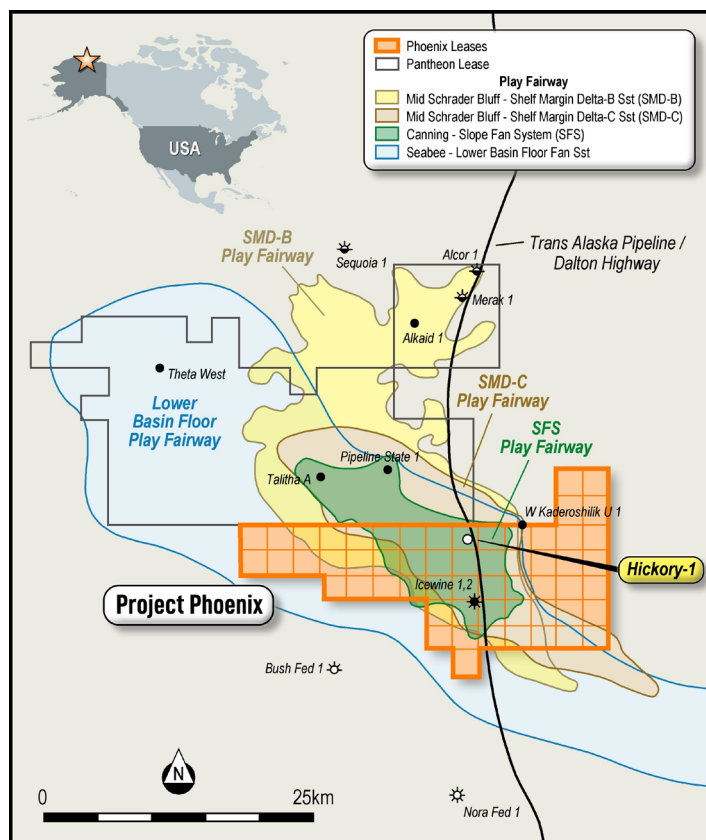
*We look forward to the upcoming planned Hickory-1 flow tests which, if successful, will enable the certification of additional contingent resources in the shallower reservoirs and move another step closer to appraising the discovery. We remain on track for Q1 2024 operations for this exciting project."*

*\* Gross (100%) best estimate contingent resource. Natural Gas Liquids (NGL's) are converted to oil equivalent volumes on a constant ratio basis of 1:1. Gas is converted to oil equivalent volumes on a constant ratio basis of 5.5 BCF per 1 MMBoe.*

NSAI's maiden Independent Contingent Resource Report was completed after its review of an extensive data suite that included seismic data, well logs from Hickory-1 and Icewine-1 and certain data from wells in adjacent acreage including flow test data. NSAI is a leading independent US-based expert petroleum asset evaluation firm with significant and recent experience in providing resource estimates globally, as well as more specifically in Alaska.

NSAI confirmed that the following requirements were met by the Company to achieve a Contingent Resource classification for the BFF reservoir:

- Multiple successful flow tests for the same reservoir in adjacent acreage.
- Clear reservoir continuity was demonstrated through high quality seismic data and correlations across all four wells, Talitha-A, Theta West-1, Hickory-1 and Icewine-1.
- Log data, petrophysical interpretations and reservoir conditions across all four wells demonstrated sufficient similarity to confirm producibility in Project Phoenix.
- All existing data was integrated consistently and coherently which established the existence of a known petroleum accumulation in the BFF reservoir in Project Phoenix.



This assessment confirms a discovery status at Hickory-1 and Icewine-1 for the BFF reservoir in Project Phoenix and further validates 88 Energy's internal assessments of Project Phoenix.

Further, the certification of a Contingent Resource for the BFF reservoir allows the Company to focus the Hickory-1 flow testing on the shallower reservoirs (SMD-B and SFS), with any further testing of the BFF reservoir optional and contingent on JV funding and approvals.

The forward work-program to assess the viability of the commercial development of the BFF reservoir, either in isolation or together with the shallower reservoirs, as well as addressing each of the contingencies, will occur subsequent to the flow testing at Hickory-1 which is scheduled for the upcoming Alaskan winter operational season.

## Contingent Resources Estimate – Basin Floor Fan, Project Phoenix

The assessed maiden Contingent Resource estimate associated with the BFF reservoir in Project Phoenix (~75% net working interest to 88E and ~63% net entitlement) is summarised below.

Project Phoenix: Basin Floor Fan		Gross (100%) Contingent Resources <sup>1,3</sup>		
Probabilistic Method		Low (1C)	Best (2C)	High (3C)
Oil	Million Barrels	17	44	104
NGL	Million Barrels	35	91	218
Oil + NGL <sup>2</sup>	Million Barrels	52	136	322
Gas	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)
Oil	Million Barrels	11	28	65
NGL	Million Barrels	22	57	137
Oil + NGL <sup>2</sup>	Million Barrels	33	85	202
Gas	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.

### Cautionary Statement:

Please refer to the disclaimers attached as Schedule 1 of this release for more information on the contingent resource report.

### About NSAI

Founded in 1961, NSAI is a worldwide leader in petroleum consulting and advisory services. NSAI specializes in multi-disciplinary integration and consists of experienced technical staff across a wide range of professionally qualified engineers and geologists, who provide geoscience, reservoir, facilities and cost engineering and economic/commercial expertise in conventional and unconventional projects.

## Updated Prospective Resources Estimate – Project Phoenix

The Prospective Resource estimate below was prepared by Lee Keeling and Associates (**LKA**) as of 9 August 2022 and is prior to the drilling of Hickory-1, and is an update from the prospective resource estimate announced on 23 August 2022 with respect to the BFF reservoir only. NSAI has not conducted a review in relation to the prospective resources reported below. The Prospective Resource estimate associated with 88 Energy's Project Phoenix acreage (~75% net working interest) has been updated to reflect the reclassification of the BFF from Prospective Resource to Contingent Resource as of 1 November 2023, with remaining Prospective Resources summarised below.

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.

**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.

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

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## **SCHEDULE 1**

### **Disclaimers:**

**Cautionary Statement for Prospective Resource Estimates** - With respect to the Prospective Resource estimates contained within this report, it should be noted that the estimated quantities of gas that may potentially be recovered by the future application of a development project relate to undiscovered accumulations. These estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

**Hydrocarbon Resource Estimates** – The Contingent and Prospective Resource estimates for Project Phoenix presented in this report are prepared as at 1<sup>st</sup> November 2023 (LR 5.25.1). The Prospective Resource estimates remain unchanged from the 2022 independent report by LKA and are quoted on an unrisks basis together with the geological chance of success for each prospect. The unrisks mean total presented in the table is not representative of the expected total from the three prospects and assumes a success case in all reservoir intervals. 88 Energy have considered the chance of discovering oil over gas to be 100% for all targets except for the Kuparuk Formation which was assessed to be 70%. Chance of development has not been estimated. Quantifying the chance of development (COD) requires consideration of both economic contingencies 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.

**Government Royalty and Overriding Royalty Interests** – The Project Phoenix leases ("Leases") are situated in the State Lands of the North Slope of Alaska and are administered by the Alaskan Department of Natural Resources – Oil and Gas Division (DNR). All leases issued by DNR are subject to a royalty and 88E's Leases are subject to a 12.5% government royalty. In addition, the Leases are subject to an overriding royalty of 4.0% payable to non-related parties of the Company. The net economic interest to 88E has therefore been calculated as 62.81% and the Net Entitlement Prospective Resources have been adjusted to reflect this.

**Competent Person Statement Information** – Information relating to contingent resource estimates have been supplied by NSAI, and the company has stated in the Report that it has been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2018, approved by the Society of Petroleum Engineers and have been prepared using probabilistic methods. Netherland, Sewell & Associates, Inc., the independent resource reviewer engaged to assess the Basin Floor Fan reservoir, has consented to the inclusion of information relevant to their review in the form and context in which it appears.

References to all Prospective Resources in this announcement relate to the 2022 report compiled by Lee Keeling and Associates, Inc. These resource estimates remain valid and no adjustments are required but will be reassessed if and when flow test data is obtained from any of these reservoirs.

Dr Stephen Staley, who is a Non-Executive Director of the Company, 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 prospective resource 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.

**Forward looking statements** – This document may include forward looking statements. Forward looking statements include, are not necessarily limited to, statements concerning 88E's planned operation program and other statements that are not historic facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward looking statements. Although 88E believes the expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements. The entity confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed.



## SCHEDULE 2

### Definitions and Glossary of Key Terms:

#### SPE definitions:

##### **Prospective Resource**

Prospective resources are estimated volumes associated with undiscovered accumulations. These represent quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from oil and gas deposits identified on the basis of indirect evidence but which have not yet been drilled. This class represents a higher risk than contingent resources since the risk of discovery is also added. For prospective resources to become classified as contingent resources, hydrocarbons must be discovered, the accumulations must be further evaluated and an estimate of quantities that would be recoverable under appropriate development project(s) prepared.

##### **Contingent Resource**

Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, by the application of a development project not currently considered to be commercial owing to one or more contingencies. The resources shown in this report are contingent upon (1) acquisition of additional technical data that demonstrate producing rates and volumes sufficient to sustain economic viability across the acreage; (2) approval of a field development plan and regulatory permits; (3) demonstration of viable gas and water utilization or disposal methods; (4) demonstration of ability to market oil and natural gas liquids (NGL); (5) establishment of a viable North Slope gas market and development of infrastructure which is currently evolving; and (6) commitment to fund and complete the development project. If these contingencies are successfully addressed, some portion of the contingent resources estimated in the report may be reclassified as reserves; the estimates have not been risked to account for the possibility that the contingencies are not successfully addressed. The project maturity subclass for these contingent resources is development unclarified.

#### Glossary of Key Terms

<i>1U</i>	Denotes the unrisks low estimate qualifying as Prospective Resources.
<i>2U</i>	Denotes the unrisks best estimate qualifying as Prospective Resources
<i>3U</i>	Denotes the unrisks high estimate qualifying as Prospective Resources
<i>1C</i>	Denotes the low estimate qualifying as Contingent Resources
<i>2C</i>	Denotes the best estimate qualifying as Contingent Resources
<i>3C</i>	Denotes the high estimate qualifying as Contingent Resources
<i>API</i>	American Petroleum Institute's Inverted scale for denoting the "lightness" or "heaviness" of crude oils and other liquid
<i>BOE</i>	Barrels of oil equivalent
<i>BOPD</i>	Barrels of oil per day
<i>Bnbbl</i>	Billion barrels of oil
<i>Chance</i>	Chance equals 1-risk. Generally synonymous with likelihood.
<i>Chance of Development</i>	The estimated probability that a known accumulation, once discovered, will be commercially developed.
<i>Entitlement</i>	That portion of future production (and thus resources) legally accruing to an entity under the terms of the development and production contract or license.
<i>Mean</i>	The sum of a set of numerical values divided by the number of values in the set.
<i>MMbbl</i>	Million barrels of oil
<i>Prospect</i>	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.

<i>Prospective Resources</i>	Those quantities of petroleum that are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
<i>Reservoir</i>	A subsurface rock formation that contains an individual and separate natural accumulation of petroleum that is confined by impermeable barriers, pressure systems, or fluid regimes (conventional reservoirs), or is confined by hydraulic fracture barriers or fluid regimes (unconventional reservoirs).
<i>Royalty</i>	A type of entitlement interest in a resource that is free and clear of the costs and expenses of development and production to the royalty interest owner. A royalty is commonly retained by a resources owner (lessor/host) when granting rights to a producer (lessee/contractor) to develop and produce that resource. Depending on the specific terms defining the royalty, the payment obligation may be expressed in monetary terms as a portion of the proceeds of production or as a right to take a portion of production in-kind. The royalty terms may also provide the option to switch between forms of payment at discretion of the royalty owner
<i>Working Interest</i>	An entity's equity interest in a project before reduction for royalties or production share owed to others under the applicable fiscal terms.



## **BFF Contingent Resources - Disclosures under ASX Listing Rules 5.25, 5.27, 5.33 and 5.41**

### **LR 5.25.1**

The contingent resources are reported as at 1 November 2023.

### **LR 5.25.3, LR 5.25.4**

This announcement does not contain disclosure of total petroleum initially-in-place, discovered petroleum-initially-in-place, total resource base, estimated ultimate recovery, remaining recoverable resources or hydrocarbon endowment.

### **LR 5.25.5**

The resources information in this document is reported according to the Company's economic interest in each of the resources net of royalties.

### **LR 5.25.6**

NSAI have used a probabilistic to estimate the contingent resources. Once all contingencies have been successfully addressed, the probability that the quantities of contingent resources actually recovered will equal or exceed the estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate.

### **LR 5.25.7**

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.

### **LR 5.27.3**

Totals for Oil & NGL and Total MMBOE are arithmetically summed. 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.

### **LR 5.27.4**

Contingent resources are reported for the BFF reservoir in the Project Phoenix area only.

### **LR 5.33.1**

The contingent resources are reported for the Project Phoenix leased area, which includes the Toolik River Unit (refer announcement 28 February 2023 for specific leases and lease area). The leases are State leases and have a primary term until February 2028 under the Unit Agreement with the State of Alaska.

#### LR 5.33.2

The existence of a significant quantity of potentially moveable hydrocarbons and confirmation of a discovery is confirmed by regional data, seismic data and well data. In particular this is supported by the recent Hickory-1 well data, together with the historical Icewine-1 well data, and also multiple successful flow tests for the same reservoir in adjacent acreage. As previously reported, in 2022 successful flow tests were conducted in the BFF reservoir in the nearby wells Talitha-A and Theta West-1. Talitha-A 'produced high quality c. 35-39 degree API oil and averaged 73 BOPD over a three day test period'. The Theta West-1 well 'flowed high quality, light 35.5-38.5 degree API gravity oil at rates that averaged 57 BOPD'. Further, clear reservoir continuity was demonstrated through high quality seismic data and correlations across all four wells, Talitha-A, Theta West-1, Hickory-1 and Icewine-1. Log data, petrophysical interpretations and reservoir conditions across all four wells demonstrated sufficient similarity to confirm producibility in Project Phoenix. All existing data was integrated consistently and coherently which established the existence of a known petroleum accumulation in the BFF reservoir in Project Phoenix.

#### LR 5.33.3

NSAI conducted an independent evaluation and estimation of the Basin Floor Fan reservoir contingent resource using the probabilistic method. The contingent resources estimated are within the sub-class of Development Unclassified, which is defined as a discovered accumulation where project activities are under evaluation and where justification as a commercial development is unknown based on available information. The Company will actively assess the commercial viability of the project and contingencies subsequent to the flow test of multiple reservoirs planned at Hickory-1.

#### LR 5.33.4

The estimates of contingent resources are not contingent on any technology that is currently under development.

#### LR 5.33.5

The contingent resources do not relate to an unconventional resource.

#### LR 5.41

The contingent resources have been prepared in accordance with the Society of Petroleum Engineers (SPE) 2018 Petroleum Resource Management System (PRMS) by Zachary R. Long and Alexander V. Karpov as the qualified petroleum resource evaluators.

#### LR 5.42

The contingent resources are based on, and fairly represent, information and supporting documentation prepared by Zachary R. Long (a member of AAPG) and Alexander V. Karpov (a member of SPE) who are employees of Netherland, Sewell & Associates. Zachary R. Long and Alexander V. Karpov have consented to the publication of these contingent resource estimates in the form and context in which they appear in this announcement.