

27<sup>th</sup> June 2018

## **88 Energy Limited Operations Update**

88 Energy Limited (ASX: 88E) (“88 Energy” or the “Company”) provides the following update related to the testing of its Icewine#2 well, located on the North Slope of Alaska.

### **Project Icewine – Icewine#2 Production Testing**

As at 0530 26<sup>th</sup> June (AK time), the flowback rate was averaging 30 barrels of water per day on a variable choke setting (currently 36/64”). Wellhead pressure has been managed lower to 32psi to reduce back pressure in the system.

Since the last update, the reduction in nitrogen injection rate to minimise the impact of a perceived downhole choke has not resulted in an increase in the rate of flowback of stimulation fluid or gas.

During this period there has been no meaningful change to the composition of the returned gas and fluid. Flowback is considered to be gas and 100% low salinity stimulation fluid, which is not considered representative of the content of the reservoir. It is expected that, if contact with the reservoir is achieved, the salinity of the returned fluid will increase by an order of magnitude. This has not occurred to date.

Hydrocarbon gas content continues to be predominantly methane (90%) with some heavier elements up to trace C6+. The percentage of hydrocarbon gas in the flowback gas increased from 5% to between 11 and 13% when the nitrogen injection rate was reduced, suggesting that a positive impact on the downhole choke has been made.

Total clean up fluid returned (net of diesel for freeze protection and any other fluids introduced as part of the current operation) since commencement of flowback on 12<sup>th</sup> June 2018 is 1,264 barrels interpreted as 100% stimulation fluid. Total fluid returned during the entire Icewine#2 flowback operation, including last year, is now 6,797 barrels or 24.4% of the frac fluid injected vs a target percentage return of at least 30%.

The early results from the flowback were within the range of expectations; however, given the reduction in rate of returned fluid, despite the optimised lift settings, the timeline and forward plan to achieve the return of 30% of injected fluid is being re-assessed.

88E Managing Director, Dave Wall, commented: *“The HRZ play remains in its infancy and shows great promise; however, we do not know all the answers at this stage.*

*The Joint Venture remain confident that the reservoir quality and geomechanical properties of the HRZ indicate that it has the requisite ingredients to attract a farm-in partner.*

*We appreciate that investors want clarity and certainty in relation to the results from the Icewine#2 well and the team is working hard to provide these.”*

### **Icewine#2 Production Testing - Timeline**

The Icewine#2 well is located on the North Slope of Alaska (ADL 392301). 88 Energy Ltd (via its wholly owned subsidiary, Accumulate Energy Alaska, Inc) has a 77.55% working interest in the well. The well was stimulated in two stages over a gross 128-foot vertical interval in the HRZ shale formation, from 10,957-11,085ft TVD, using a slickwater treatment comprising 27,837 barrels of fluid and 1,034,838 pounds of proppant.

Prior to Winter shut-in (2017) 20% of the stimulation fluids had been flowed back versus a projected minimum target of 30% to gain connectivity to the source rock reservoir.

Flowback re-commenced, on schedule, at 22:30 11<sup>th</sup> June 2018 (AK time) to clean-up stimulation fluids from the Icewine#2 borehole with a well head pressure of 3,000 psi and flowback rate of 253 barrels of water per day on an 8/64" choke.

A production log was run on 12<sup>th</sup> June and confirmed that all perforations were contributing to flow. As per the flowback design, nitrogen was then introduced gradually to the wellbore from 0845 13<sup>th</sup> June (AK time), prior to installation of the coiled tube velocity string, to artificially lift stimulation fluids. The flowback rate stabilised at 200 barrels of water per day through an 8/64" choke and then steadily declined to circa 100 barrels of water per day, as per expectation.

Flowback was interrupted, as per the program, on the 15<sup>th</sup> June 08:00 (AK time) to allow installation of the velocity string. Flow was re-established on 15<sup>th</sup> June at 20:00 (AK time) with nitrogen introduced into the annulus between the 4.5" casing and the 1.75" velocity string. After displacement of fluid in the annulus, the flowback rate stabilised at 350bpwd through a variable choke to maintain a target wellhead pressure of 200-400psi. This technique decreases the backside pressure in the system and optimises lifting of fluid from the wellbore.

From the 18<sup>th</sup> June to the 22<sup>nd</sup> June, adjustments were made to the flowback system to determine the optimal settings for the nitrogen lift operation. Consequently, flowback rates fluctuated between an average rate of 50 barrels of water per day to 120 barrels of water per day. The percentage of hydrocarbon gas in the flowback dropped to 5% at one stage due to an increased nitrogen injection rate, 300 scf/m, which is deemed to have limited the flowback of both water and gas from the borehole. The reduction in productivity was attributed to an effective downhole choke created between the 4.5" annulus and the 1.75" velocity string, limiting the flowback when the nitrogen rate is too high. The nitrogen injection rate was reduced back to 150 scf/m in an attempt to increase flowback of water and gas from the borehole

Yours faithfully



Dave Wall  
Managing Director  
88 Energy Ltd



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, Mr Brent Villemarette, who is a Non-Executive Director of the Company. Mr Villemarette has more than 30 years' experience in the petroleum industry, is a member of the Society of Petroleum Engineers, and a qualified Reservoir Engineer 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. Mr Villemarette 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.

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### Project Icewine

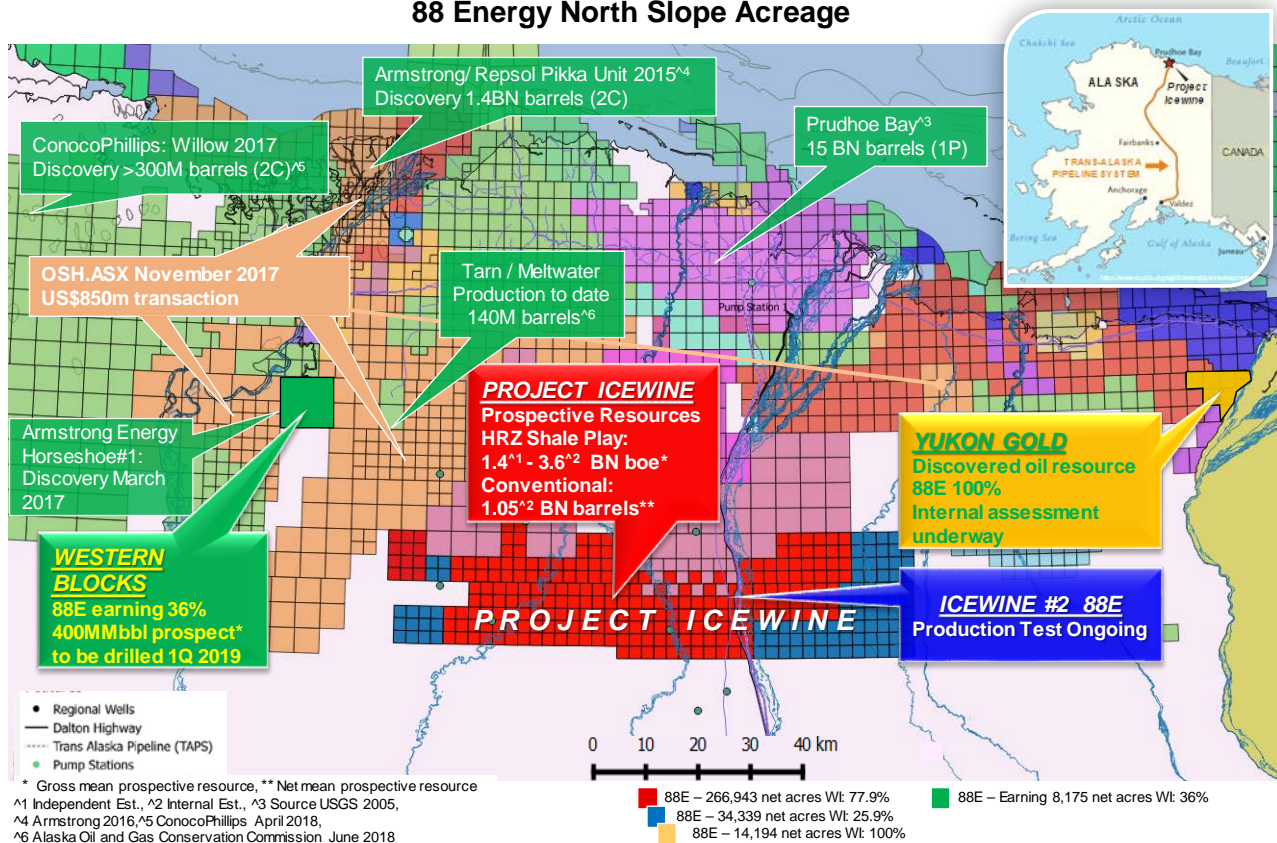
In November 2014, the Company entered into a binding agreement with Burgundy Xploration (**BEX**) to acquire a significant working interest (87.5%, reducing to 77.5% on spud of the first well on the project) in a large acreage position on a multiple objective, liquids rich exploration opportunity onshore Alaska, North America, referred to as Project Icewine. The current gross acreage position is ~475,000 contiguous acres (301,000 acres net to the Company). These are marked in blue and red on the below map.

The Project is located on an all year operational access road with both conventional and unconventional oil potential. The primary term for the State leases is 10 years with no mandatory relinquishment and a low 16.5% royalty.

The HRZ liquids-rich resource play has been successfully evaluated based on core obtained in the Icewine #1 exploration well (December 2015), marking the completion of Phase I of Project Icewine. Phase II has now commenced, with drilling at the follow-up appraisal well, Icewine#2, concluding mid 2017. Production testing is ongoing.

Significant conventional prospectivity has also been identified on recently acquired 2D and 3D seismic across the project acreage.

### 88 Energy North Slope Acreage



**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.

A Prospective Resources Report by DeGolyer and MacNaughton, was commissioned by 88 Energy to evaluate the unconventional resource potential of Project Icewine in February 2016 and was released to the market on 6<sup>th</sup> April 2016.



### **Yukon Gold**

The Yukon Gold leases are located on the eastern border of the Central North Slope of Alaska and were acquired in 2018. 88 Energy via its subsidiary has a 100% working interest in these leases, totalling 14,190 acres. The leases contain an historic discovery well, Yukon Gold #1, which is currently being evaluated internally. 3D seismic was acquired in early 2018 to assist with this process and results are expected in 4Q2018. The leases are marked in yellow on the above map.

### **Western Blocks**

88 Energy is earning a 36% working interest in four leases (totalling 22,711 acres) immediately adjacent to the Horseshoe#1/1A oil discovery well. 88 Energy, with its consortium partners Otto Energy Ltd and Red Emperor Resources NL, will pay a US\$3m performance bond to the State of Alaska and 100% of the costs of well, targeting a prospect with a gross mean unrisked prospective resource volume of 400MMbbls (144MMbbls net to 88E), to be drilled in 1Q 2019. The leases are marked in green on the above map.