

23<sup>rd</sup> October 2018

## 88 Energy Limited

### Conventional Portfolio Update

88 Energy Limited (ASX: 88E) ("88 Energy" or the "Company") provides the following update related to ongoing work on its conventional prospect portfolio at Project Icewine, located on the Central North Slope, Alaska.

#### Highlights

- Icewine 3D seismic inversion substantially complete for both shallow and deep horizons
  - Discrete geobodies (containers) are now mapped in three dimensions in the Schrader (topset) and Torok (basin floor fan) horizons
  - Increase in gross mean prospective resource to 2,896 MMBO (2,211 MMBO net to 88E)
- Updated rock trending models combined with 3D seismic inversion products highlights better than expected potential reservoir quality within the Torok
- Farm-out process continues as planned, with deal targeted prior to year-end 2018

#### Overview

The processing of the Icewine 3D seismic, acquired in 1Q2018, has entered its final phase, with interpretation of the inversion product largely complete. This inversion product has now been integrated into the mapping effort and has allowed prediction of hydrocarbon saturation in the shallow Schrader sequences as well as predicting where best reservoir quality is likely to be encountered in both the Schrader and deeper Torok sequences. Significantly, each of these horizons has been penetrated by historic wells (most notably by Malguk#1:1991 and Heavenly#1:2002) on the Project Icewine acreage, proving the presence of oil saturated sandstones coincident with many of the mapped prospects, which consequently are regarded as discoveries in their own right.

Reservoir quality had been deemed a key risk factor, particularly in the deeper Seabee and Torok formations, due to depth of burial and compaction. However, based on the regional Brookian porosity / permeability trend and results from petrophysical analysis, potential for productive reservoir has been identified in both the Schrader and Torok sequence at Icewine. For example, the Middle Stellar discovery in the Torok at Icewine has average permeability ranging from 6-30md (based on 18.3% porosity) and up to 180md (based on 21.8% porosity). By comparison, the 2016 Tinmiaq#2 well has an average permeability of 11mD and average porosity of 17% (based on core data). Tinmiaq#2 was fraced with ~50,000lbs of proppant in a vertical well and flowed at 3,220 barrels of oil per day.

Previously, mapping had been undertaken utilising a conservative "slab" approach, which calculates volume based on areal extent using amplitude response combined with an estimate of average reservoir thickness. The post inversion product has allowed mapping in a more robust fashion, identifying the discrete geobodies with more favourable reservoir characteristics and improved net to gross in three dimensions.

Dave Wall, Managing Director of 88 Energy, commented on the update:

*"The evolution of the conventional portfolio continues to result in positive revisions to the already large potential identified. Additionally, the dataset is becoming more robust with each completed phase of processing and interpretation, which bodes well for the ongoing farm-out process."*

*Increased potential has been quantified in the two primary target zones: the Schrader, which contains a shallow topset play similar to that in which most of the recent large discoveries have been made on the North Slope; and the Torok, where Project Icewine is favourably located compared to where the recent USGS upgrade identified the core part of the Torok play, which remains largely underexplored on the Slope."*

**Fig. 1 Updated Resource Table (Project Icewine Conventional Potential Only)**

<b>PROJECT ICEWINE CONVENTIONAL PORTFOLIO</b>						
<b>Prospective Oil Resource MMBO (Unrisked)</b>						
<b>Prospects and Leads</b>	<b>October 2018: Post 3D Inversion Results</b>					
	<b>Horizon / Play</b>	<b>Low</b>	<b>Best</b>	<b>High</b>	<b>Gross Mean</b>	<b>Net Mean to 88E</b>
<b>WESTERN PLAY FAIRWAY:</b>						
Victor Prospect (stacked)	Schrader / Topset	196	313	477	328	254
Indigo Discovery	Schrader / Topset	225	358	543	374	290
Charlie Prospect	Schrader / Topset	126	201	304	210	163
Bravo Prospect	Seabee / Fan	57	138	292	160	124
Mike Prospect	Seabee / Fan	9	26	56	30	23
Rose Prospect	Seabee / Fan	7	21	44	24	19
Lima Discovery/ Prospect (stacked)	Seabee / Apron Fan	105	323	713	376	334
Heavenly Discovery	Torok / Apron Fan	23	62	120	68	58
Whiskey Prospect (stacked)	Torok Apron	62	112	192	118	101
Stellar Prospect/Discovery (stacked)	Torok / Fan, Channel	320	604	999	639	500
Y Lead	Schrader / Topset	24	41.2	67	44	34
Z Lead	Schrader / Topset	11	27	53	29	22
<b>WESTERN PLAY FAIRWAY TOTAL:</b>					<b>2,400</b>	<b>1,922</b>
<b>CENTRAL PLAY FAIRWAY:</b>						
Echo Lead	Canning / Fan	60	138	293	162	121
Golf Lead	Canning / Fan	106	193	339	211	72
<b>CENTRAL PLAY FAIRWAY TOTAL:</b>					<b>373</b>	<b>193</b>
<b>EASTERN PLAY FAIRWAY:</b>						
Alpha Lead	Canning / Submrn Fan	19	71	263	118	91
Romeo Lead	Kuparuk / Kemik Sands	2	3	5	4	3
Sierra Lead	Kuparuk / Kemik Sands	1	2	3	2	2
<b>EASTERN PLAY FAIRWAY TOTAL:</b>					<b>124</b>	<b>96</b>
<b>TOTAL PROSPECTIVE OIL RESOURCE MMBO (Mean Unrisked)</b>					<b>2,896</b>	<b>2,211</b>

Prospective Resources classified in accordance with SPE-PRMS as at 22<sup>nd</sup> October 2018 using probabilistic and deterministic methods on an unrisked basis. Prospects and Leads identified from interpretation of modern 3D seismic acquired in 2018, 2D seismic acquired in 2015/2016 and legacy 2D seismic of varying vintages post 1980 across Project Icewine, which comprises 504,000 gross acres (332,000 net acres) on the Central North Slope of Alaska. 88 Energy is Operator of record at Project Icewine (through its wholly owned subsidiary Accumulate Energy Alaska, Inc) with a ~80% working interest over the conventional play fairway where the leads have been mapped.

*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.*

**Fig. 2 Representative Example – Middle Stellar Discovery (Torok Formation – Albian Age)**

<b>Middle Stellar - Oil Discovery</b>	
<b>Prospective Resource: (unrisked mean)</b>	292 MMBO (226 MMBO net to 88E)
<b>Trap:</b>	Stratigraphic/ structural, updip pinchout
<b>Formation:</b>	Brookian: Mid Torok Formation
<b>Depositional model:</b>	Distributary channel feeding a submarine fan system downslope via a canyon on the slope to the NW
<b>Structural Crest:</b>	9200 ft TVDss
<b>Source:</b>	HRZ shale: light and sweet, 35 – 37 deg API oil, underlies Torok Formation prospects which downlap onto source
<b>Seal:</b>	Lateral facies change, pinch-out to North
<b>Volumetrics:</b>	Volumetrics have been calculated using the defined VpVs geobody areal extent and thickness. P50 GRV defined by the oil-down-to in Malguk-1 at c. 10,200ft TVDss
<b>Reservoir Interval:</b>	Reservoir parameters are based on the petrophysical evaluation of the sands in Malguk-1. Porosity range 14.7 – 21.8%; Mean porosity 18.3%, net pay 86ft. Gross porous interval >200ft thick
<b>Reservoir/ Shows:</b>	The Mid Stellar sandstones are oil-bearing at Malguk-1 – good hydrocarbon shows Sands typically fine – very fine, occasionally medium grained
<b>NOTES:</b> <ul style="list-style-type: none"> <li>• Good stacked potential for an exploration / appraisal well</li> <li>• Further upside – fan lobes outside of the incised channel not included in current resource estimate</li> <li>• Sands deposited during lowstand event resulting in potential for optimal reservoir characteristics</li> <li>• Potential for preservation of porosity / permeability via early hydrocarbon charge and secondary porosity development</li> <li>• Located in recently upgraded area for 'yet to be discovered' oil potential (USGS 2017)</li> </ul>	

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**Fig. 3 Middle Stellar geobody – channel feature mapped post inversion**

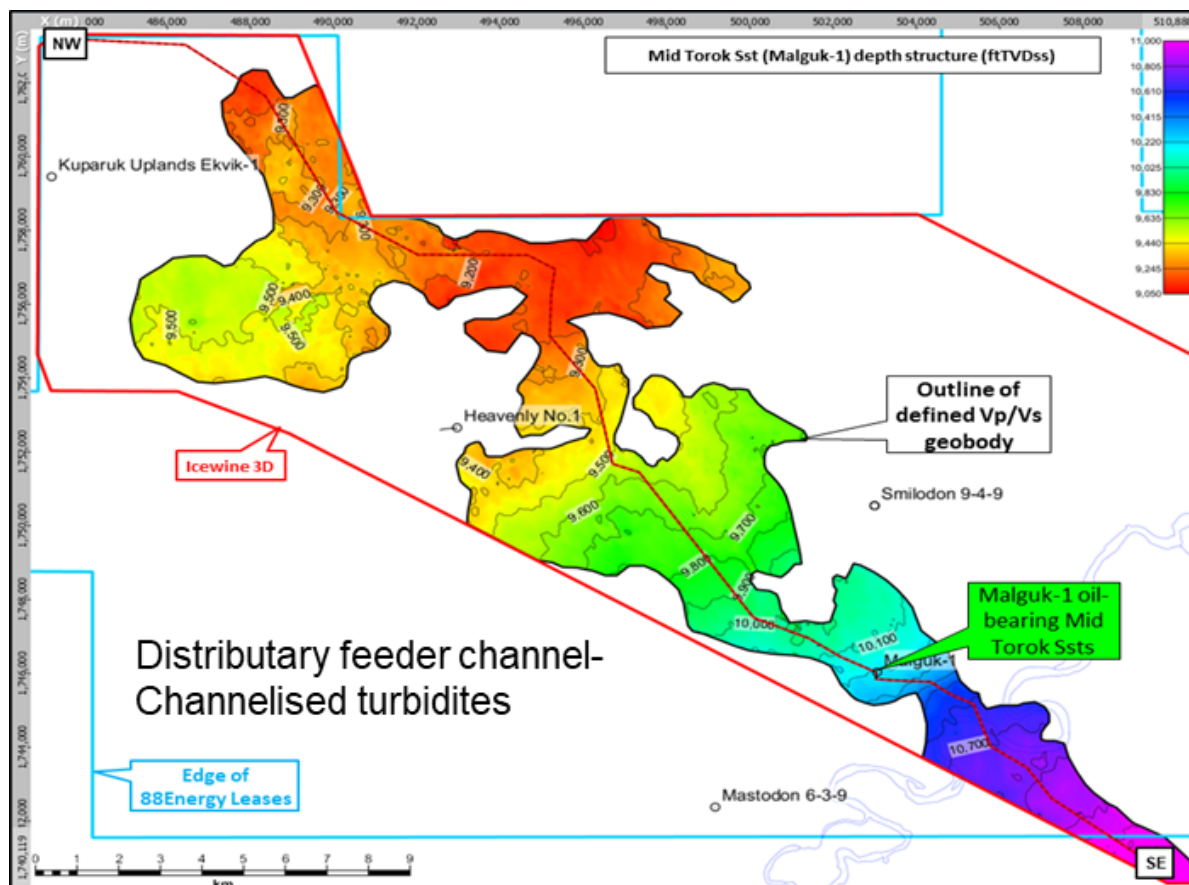
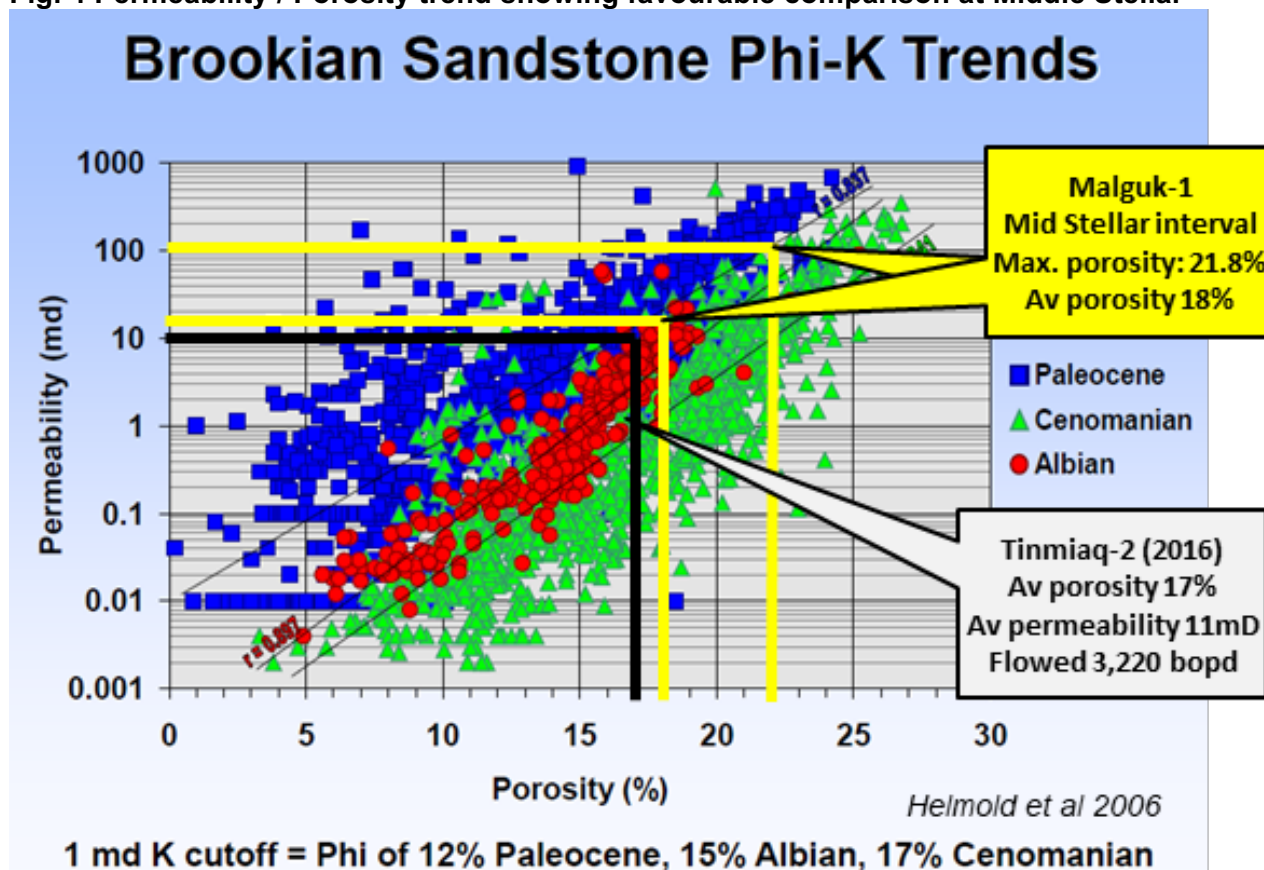


Fig. 4 Permeability / Porosity trend showing favourable comparison at Middle Stellar





Yours faithfully

A blue ink signature of Dave Wall, consisting of a stylized 'D' and 'W' followed by a horizontal line.

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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## 88 Energy Alaska North Slope Assets Overview

### Project Icewine

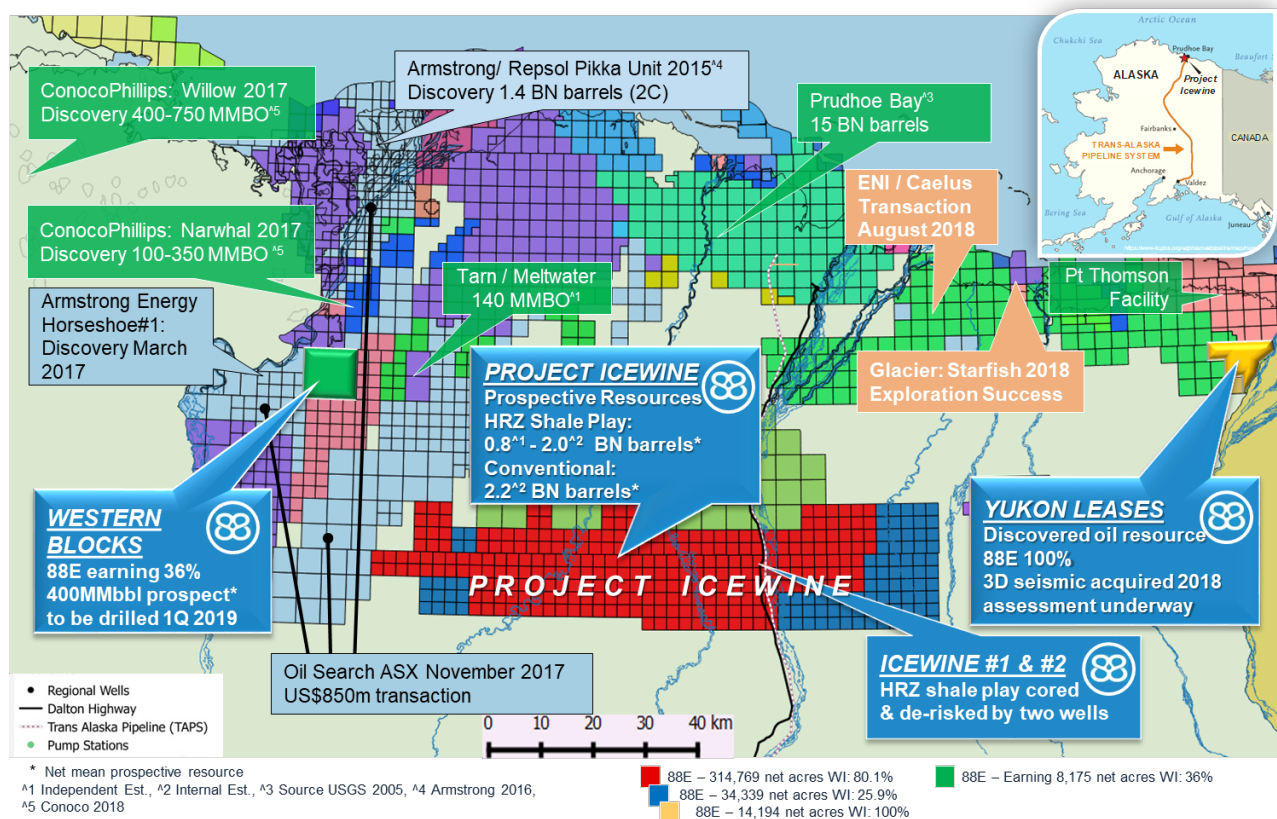
In November 2014, the Company entered into a binding agreement with Burgundy Xploration (**BEX**) to acquire a significant working interest in a large acreage position on a multiple objective, liquids rich exploration opportunity onshore Alaska, North America, referred to as Project Icewine. The current gross acreage position is ~525,000 contiguous acres (349,000 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.

Significant conventional prospectivity has been identified on recently acquired 2D and 3D seismic across the project acreage where 2.2 billion barrels of oil potential has been delineated (net mean prospective resource). A farm-out process is currently underway, with a deal targeted prior to 2018 year end.

The HRZ liquids-rich resource play was 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 comprised drilling in mid 2017 at the follow-up appraisal well, Icewine#2, which was subsequently fracture stimulated and flow tested. Production testing at Icewine#2 concluded on 30 June 2018 after retrieving 24.8% of the injected stimulation fluid vs a targeted return of at least 30%. Gas rates of up to 100mcf/d were achieved during flowback; however, these are not considered representative due to limited reservoir connectivity. Further evaluation is being completed prior to launching a formal farm-out process in early 2019 to fund the future work program.

### 88 Energy North Slope Acreage



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*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 14,194 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, has posted a US\$3m performance bond to the State of Alaska and will fund 100% of the costs of well, targeting a prospect with a gross mean unrisked prospective resource volume of 400MMBO (144MMBO net to 88E), to be drilled in 1Q 2019. The leases are marked in green on the above map.