

21 January 2020

## 1.6 BILLION BBLS OF PROSPECTIVE RESOURCE

- Mean <u>unrisked</u> recoverable oil prospective resource of ~1.6 Billion barrels of oil net entitlement (after royalties) assessed for XCD's 100% owned Project Peregrine
- Multiple stacked Nanushuk objectives able to be tested with two shallow wells (representing ~65% of the prospective resource)
- Torok (~10,000 ft) and Nanushuk objectives able to be tested using traditional North Slope rig (100% of prospective resource)
- ~US\$250MM being spent on drilling in 2020 on Alaska's North Slope by ConocoPhillips (8 wells), Oil Search (2 wells) and Premier Oil/88E (1 well)

**XCD Energy Limited (ASX:XCD)** ("XCD or the "Company") is pleased to announce the outcomes from the maiden Independent Prospective Resources Report recently completed by ERC Equipoise Pte Ltd (ERCE), which has assessed a prospective resource associated with XCD's 100% owned Project Peregrine of over 1.6 billion barrels in the mean case (unrisked net entitlement).

Project Peregrine: Alaska North Slope	Unrisked Net Entitlement to XCD <sup>1,2</sup> Prospective Oil Resources (MMstb)				
Prospects (Probabilistic Calculations)	Low (1U)	Best (2U)	High (3U)	Mean	COS <sup>4</sup>
Merlin (Nanushuk)	40	257	1,411	622	32%
Harrier (Nanushuk)	48	207	959	420	18%
Harrier Deep (Torok)	42	266	1,333	572	20%
Prospects Total				1,614 <sup>3</sup>	

<sup>1.</sup> The working interest share of the Prospective Resources is the net entitlement interest to XCD which is calculated as 86% of 100% Working interest after deduction of state royalty (12.5%) and an overriding royalty interest (1.5%) which is accounted for in the table above.

\*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.

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<sup>2.</sup> The Prospective Resources include the resources associated with four provisionally awarded leases which XCD expects to be formally issued in Q1 2020 (highlighted in dark blue in Figure 1).

<sup>3.</sup> The unrisked means, which have been arithmetically added to arrive at 1.6 billion barrels in total, is not representative of the expected total from the three prospects and assumes a success case in all three wells.

<sup>4.</sup> COS represents the geological chance of success of at least one of the stacked layers which comprise each prospect. This excludes phase risk which ERCE has estimated to be 70% oil (30% gas). The Prospective Resources have also not been adjusted for the chance of development, which is estimated by XCD to be 60% (including phase risk), ERCE sees this as reasonable based on the data available. 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 ERCE they must be used with caution

# **ASX ANNOUNCEMENT**



### **Project Peregrine**

The Project Peregrine leases have a five to ten-year exploration period remaining and cover an area of 195,373 acres within the NPR-A. The leases are around 35km south of the Willow discoveries owned and operated by ConocoPhillips estimated to be between 450–800 MMBOE where ConocoPhillips have announced they are drilling five (5) further appraisal wells during this year's winter drilling season (between now and approximately end April 2020). XCD's Merlin Prospect is interpreted to be on the same sequence boundaries as the Willow Oil Field.

In addition, ConocoPhillips announced its intention to drill up to three (3) exploration wells on its Harpoon Prospect which lies approximately 15km to the north west of XCD's Harrier Prospect. XCD interprets the Harpoon Prospect (based on USGS 2D seismic data) to be on the same sequence boundaries as the Harrier Prospect and success at Harpoon would likely materially upgrade XCD's Harrier Prospect.

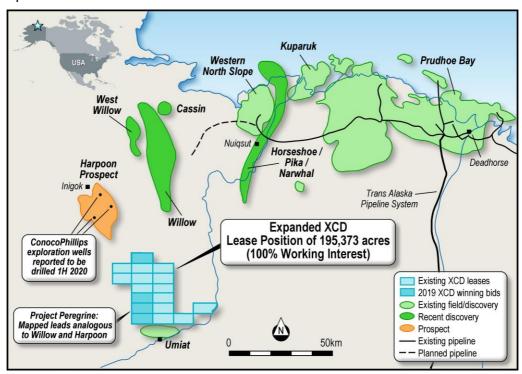


Figure 1: XCD lease position relative to ConocoPhillips Harpoon Prospect and Willow Oil Field

Both the Harrier and Merlin Prospect are targeting the shallow Nanushuk play (~4,300 and 3,400 ft respectively) and can potentially be drilled using a smaller drilling rig, something the Company is continuing to assess. The Harrier Deep Prospect would require a standard north slope drill rig to reach the Torok target (~10,000 ft) but would intersect both the shallow Nanushuk and the deeper Torok objectives in the same wellbore.

XCD will shortly be initiating a farm-out campaign where the options available to farm-in partners will be to pursue either the two well low cost shallow Nanushuk drilling initiative, or use a standard north slope drilling rig to pursue all the targets in the Harrier and Merlin Prospects.

The data used to compile the independent prospective resource report includes reprocessed 2D seismic data, basin modelling, petrophysical analysis of publicly available wells and historical geological records. The data was compiled and interpreted by XCD and was reviewed, validated and in some cases modified independently by ERCE.

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### **ERCE's methodology for determining Prospective Resources for Project Peregrine**

ERCE has determined Prospective Resource by examining the areas of consistent bright amplitude that were mapped by XCD using the reprocessed 2D seismic data within the Project Peregrine area. Parameters including potential pool area and thickness, porosity, hydrocarbon saturation, oil expansion and recovery factor were estimated on a probabilistic low, mid and high basis. The Prospective Resources distributions were then aggregated into three (3) prospects, on the basis that three (3) wells could effectively test all the mapped prospective horizons. The unrisked prospective resources estimates and associated geological chance of success were modelled using Monte-Carlo analysis on the assumption there was no economic minimum and that volumes and risks of each of the prospective horizons within each prospect were independent with the exception of hydrocarbon migration, which was common to all.

The Prospective Resources have not been adjusted for phase risk or chance of development. ERCE has considered the chance of discovering oil over gas to be 70%. Chance of development is estimated by XCD to be 60% (including phase risk), ERCE sees this as reasonable based on the data available.

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

#### **About ERCE**

ERCE is the largest global independently owned petroleum Reserves and Resources auditor, providing expert consultancy services to the upstream oil and gas industry for over 40 years. With over 50 full-time technical staff, ERCE provides geoscience, reservoir, facilities and cost engineering and economic/commercial expertise in conventional and unconventional projects. Examples of current public clients include Carnarvon, Jadestone Energy, Tag Oil, Interra Resources, ADX Energy and Elixir Energy. ERCE has offices in UK, Singapore and Perth, WA.

XCD's Managing Director, Mr. Dougal Ferguson commented:

"This excellent result is the culmination of a substantial amount of technical work that has been undertaken over the last six months. We are now able to embark on our farm-out campaign with confidence that the size of the prize is significant enough in our lease area to attract large companies. With a raft of wells being drilled in both the NPR-A and State lands by other companies over the current Alaskan drilling season, it should be an exciting period for XCD and any success nearby will significantly upgrade our current lease position."

For further information, please contact:

#### **Dougal Ferguson**

Managing Director +61 (8) 9381 4975

For further information on XCD Energy, please visit the Company's website at www.xcdenergy.com.

This ASX announcement was approved and authorized for release by XCD Energy's Board of Directors.

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# **ASX ANNOUNCEMENT**



### **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 Prospective Resource estimates for Project Peregrine presented in this report are prepared as at 20 January 2020. The Prospective Resource estimates are quoted on an unrisked basis together with the geological chance of success for each prospect. The unrisked mean total presented in the table is not representative of the expected total from the three prospects and assumes a success case in all three wells. ERCE has considered the chance of discovering oil over gas to be 70%. Chance of development is estimated by XCD to be 60% (including phase risk), ERCE sees this as reasonable based on the data available. 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 ERCE they must be used with caution.

**Government Royalty and Overriding Royalty Interests** – The Project Peregrine leases ("Leases") are situated in the National Petroleum Reserve – Alaska (NPR-A) and are administered by the US Department of the Interior - Bureau of Land Management (BLM). All leases issued by BLM are subject to a royalty and XCD's Leases are subject to a 12.5% government royalty. In addition, the Leases are subject to an overriding royalty of 1.5% payable to non-related parties of the Company. The net economic interest to XCD has therefore been calculated as 86% and the Net Entitlement Prospective Resources have been adjusted to reflect this.

Competent Person Statement Information – In this report information relating to hydrocarbon resource estimates have been supplied by ERCE, 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. ERC Equipoise Pte Ltd, the independent resource reviewer named in this document, has consented to the inclusion of information relevant to their review in the form and context in which it appears. The report has been prepared under the supervision of Mr Greg Channon who is the chief geological advisor to XCD. Mr Channon is a qualified geoscientist with over 30 years of oil and gas industry experience and a member of the AAPG. Mr Peter Stickland, who is the Chairman of XCD, has peer reviewed the Prospective Resource estimation process. Mr Stickland is a qualified geoscientist with over 25 years of oil and gas industry experience. Mr Stickland and Mr Channon consent to the inclusion of the information in this report relating to hydrocarbon Prospective Resources in the form and context in which it appears.

Forward looking statements – This document may include forward looking statements. Forward looking statements include, are not necessarily limited to, statements concerning XCD'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 XCD 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.