whitebark ENERGY

ASX ANNOUNCEMENT

Wizard Lake Reserves & Resources Upgrade

12 August 2020

Highlights:

- Whitebark net 1P Reserves as at 30 June 2020 increased more than 250% from 30 June 2019 to 2.8MMBOE (1.3MM bbls oil and 7.8 MMcf gas).
- Contingent Resources (2C) at Wizard Lake Oilfield add a further 3.8 MMBOE (1.9 MM bbls oil and 9.9 MMcf gas).
- Combined 2P and 2C presents a significant opportunity for Whitebark, totalling 9.4MMBOE.
- Whitebark will seek to continue to increase its reserves through a combination of low risk exploration, development and acquisition.
- Following the sale of certain assets in December 2019 the Wizard Lake Oilfield in Alberta accounts for 100% of the reserves of the company.
- The average working interest in the Wizard Lake Oilfield is now 84% (up from 30% WI) following completion of a number of successful work programs and acquisitions since 30 June 2019.
- During the last 12 months the company has successfully drilled two wells, significantly expanded the original facilities and acquired and built additional gas pipelines.

Whitebark Energy Ltd (ASX: WBE) ("Whitebark" or "the Company") is pleased to provide an update on its reserve and resources position for its Canadian operations at Wizard Lake as at 30 June 2020.

The Reserves update at 30 June 2020 shows over a 300% increase in 1P oil Reserves (305Mbbls to 1342Mbbls) after the production of over 83,000 barrels of oil during the period. The 2P oil reserves have increased over 400% from 520Mbbls to 2687Mbbls. Gas Reserves and associated liquids have also increased by approximately 2-fold during the same period (Refer to Tables 1 and 2). These increases were achieved even though the company sold its other non-core producing assets during the period and are substantially a result of:

- the success of the appraisal drilling programme
- the acquisition of new leases over the oilfield area
- an increase in average ownership percentage in the oilfield

In addition to the Proven reserves the Wizard Lake Oilfield, the 1C and 2C oil Contingent Resources categories add a further 748 Mbbls and 1944 Mbbls respectively to total resources.

The appraisal programme greatly extended the proven(1P) and probable(2P) field areas and established the depth of an oil-down-to structural contour. These outcomes were responsible for upgrading most of the 3P and prospective resources previously identified, into 2P and 2C reserve and resource categories described herein. While further 3P and prospective resources are likely to exist at the periphery of the field they have not been assessed in the current analysis.

Whitebark Energy Managing Director David Messina said: "Whitebark is very pleased with the success at the Wizard Lake Oilfield where a 250% increase in the Company's Reserves has been achieved even with severely discounted pricing assumptions. With the active work program over the last 12 months we have upgraded all key reserve categories and we still have 3P and prospective categories to further quantify over the next 12 months."

SUMMARY OF RESERVES

Table 1 – WBE Reserves and Resources at 30 June 2020

30 June 2020				
	Crude Oil Mbbl	**Natural Gas MMcf**	**Natural Gas Liquids Mbbl**	**Total MBOE**
1P				
PDP	350	1817	36	689
PUD	992	5948	118	2101
Total 1P	**1342**	**7766**	**154**	**2790**
2P (includes 1P)	2687	15433	307	5566
1C	748	3819	76	1461
2C (includes 1C)	1944	9929	198	3797

Note : Reserve and Resources estimates included in KD Angus assessment,– refer qualified reserve and resource evaluator statement.

Table 2 – WBE Changes in Reserves 2019 to 2020

	Jun-20				Jun-19				Change			
	Crude Oil Mbbl	**Natural Gas MMcf**	**Natural Gas Liquids Mbbl**	**Total MBOE**	**Crude Oil Mbbl**	**Natural Gas MMcf**	**Natural Gas Liquids Mbbl**	**Total MBOE**	**Crude Oil Mbbl**	**Natural Gas MMcf**	**Natural Gas Liquids Mbbl**	**Total MBOE**
1P												
Producing	350	1817	36	689	97	2134	40	493	253	-317	-4	196
Non-Producing	0	0	0	0	1	35	1	8	-1	-35	-1	-8
Undeveloped	992	5948	118	2101	207	425	9	286	785	5523	109	1815
Total 1P	**1342**	**7765**	**154**	**2790**	**305**	**2594**	**50**	**787**	**1038**	**5171**	**104**	**2003**
2P	**2687**	**15433**	**307**	**5566**	**519.5**	**4723**	**91**	**1398**	**2168**	**10710**	**216**	**4168**

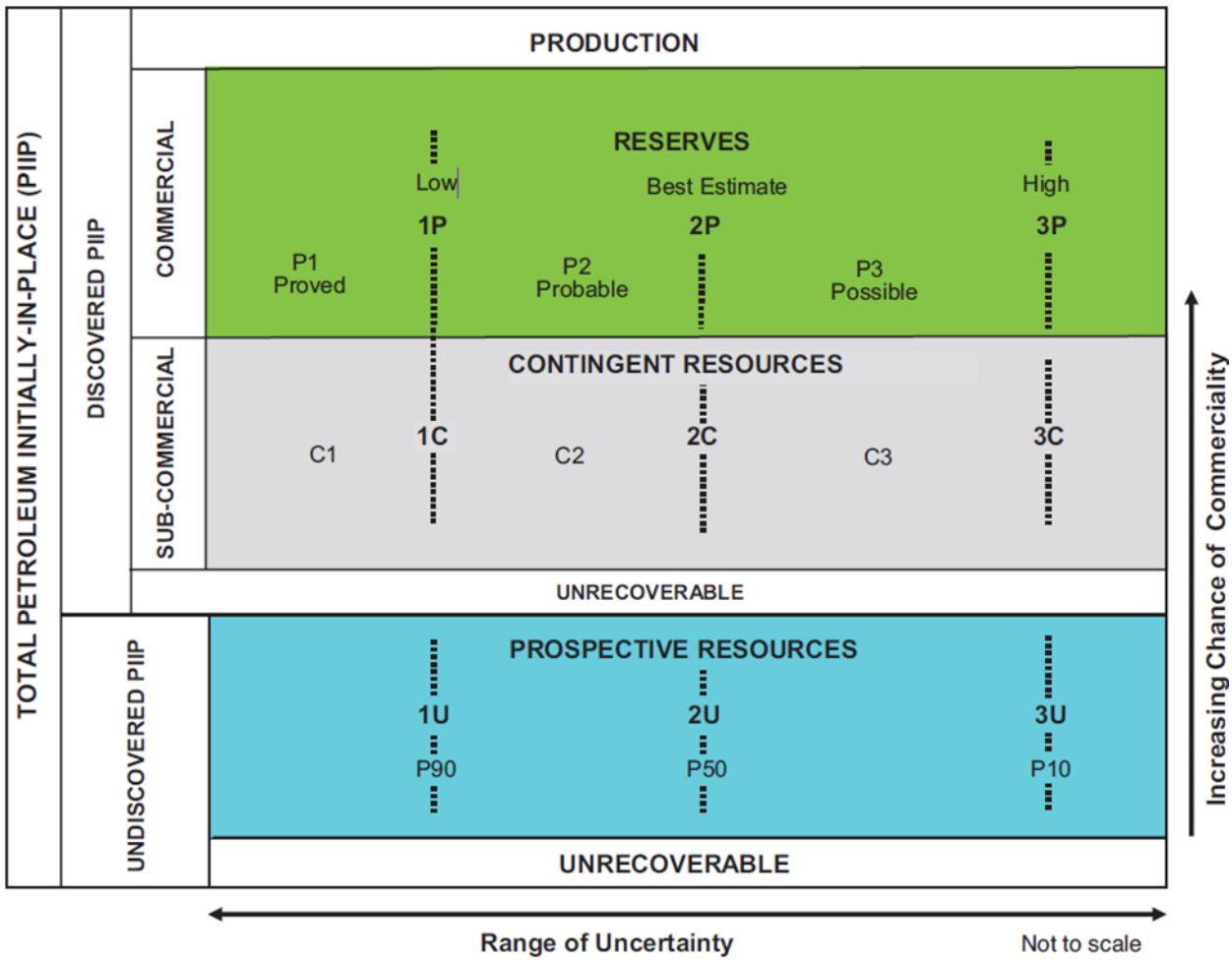
Types of Permits

Table 3 – Permit Types

Description	Type	Number of blocks	Net area acres
Crown	Licence	7	2480
Freehold	Lease	5	2864

Key Assumptions and Notes

30 June 2020 Reserves and Resources evaluation was prepared by KD Angus Corp. The evaluation was carried out under the standards contained in the Petroleum Resource Management System revised June 2018 version. The Reserve Classifications are shown below. Note only P1, P2, C1 and C2 reserve and resource types were considered in this evaluation as P3 and C3 classifications were not assessed.



- Reserves are presented on a "company gross" basis, which is defined as Whitebark's working interest operating share.
- Petroleum Reserves are reported net of lease fuel up.
- Company Reserves based on the average forecast and foreign exchange prices from McDaniels, Sproule, GLJ and Deloitte. The forecast of commodity prices used are outlined in Table 6.

Rex Field Description

Table 4 – Rex Field Description

Name of Well and Type	Rex field ; Rex-1, Rex-2 and Rex-3 are horizontal wells
Location	Alberta Canada Wizard Area within T48R27W4
Working interest	Average WI 84%, ranging from 60-100%
Reservoir Thickness	Vertical wells show 7-12m. As Rex-wells are horizontal wells, the entire pay section was not penetrated in each well and thickness is interpolated to be up to 17 m
Formation	Cretaceous Mannville Formation, Rex unit
Rock Type	Fluvial-lacustrine sandstone
Depth	1410-30mss
Hydrocarbon phases recovered	Oil (15api) with associated gas (GOR approx. 2200 cft/bbl). Rex-1 extended testing; 100-270bopd. Rex-2 and Rex-3 yielded initial oil rate in excess of 300bopd with GOR of 5000 and 9000 cft/bbl respectively
Other fluids	Water recovered with WOR of 50-65%
Production	All wells are on pump
Fracture stimulation stages	27-44 depending on length of well and 35 tonne of proppant each stage

Wizard Lake Reserve and Contingent Resource Estimates

Table 5 – Wizard Lake Reserve & Contingent Resource Estimates

Basis for confirming existence of a significant quantity of potentially moveable hydrocarbons and determination of a discovery.	• The presence of a significant quantity of moveable hydrocarbons is established by the results of Rex-1, 2 and 3. All wells are currently producing oil at commercial rates into dedicated facilities constructed by the joint venture. The presence of Reserves is confirmed by the KDC Reserve report which ascribes proven producing and proven undeveloped Reserves to the Wizard pool. The existing field wells and nearby older wells indicate the presence of a widespread channel sand running in a roughly N-S direction.
• **Analytical procedures used to estimate the Reserves and contingent resource** • **Key contingencies prevent the contingent resources from being a classified as a reserve; and** • **Any further appraisal drilling and evaluation work to be undertaken to assess the potential for commercial recovery, and to progress the project.**	• The pool has been penetrated by 35 wells vertical wells mainly drilled prior to 1960 when appropriate completion technology (horizontal fracced wells) was not available. No commercial flows were achieved from the early wells though strong shows and log signatures indicative of oil pay were encountered. While the past wells provide a valuable dataset that was used to estimate the range of reservoir parameters and define the areal extent of the channel sand and hence the pool, they have been recently are supplemented by the results of Rex-1 and 2 which drilled 1200m, 1500m and 1800m of oil filled reservoir in horizontal wells. • The field reserves and resources were assessed using net pay mapping and both Valnav runs incorporating the potential future wells and a Monte Carlo approach to estimate the likely volumetric extent of the field. • All ValNav runs were generated by Saltbush with input parameters reviewed and validated for this report. • As the early stage production of the existing Rex 1 through 3 wells precludes the generation of a definitive type curve and EUR estimates solely from data from those wells, a similar Mannville play type being developed by Blackspur Oil Corp to the North West of the Wizard Lake pool was used to generate a probabilistic reserve distribution. Nine Blackspur wells with similar completion designs were used to generate an EUR distribution which was then used as the basis for EUR estimates for additional Saltbush drilling. • Monte Carlo analysis was run with representative reservoir parameters (area, net pay, porosity etc.) to generate a probabilistic estimate of potential reserves and to cross-check the P90, P50 and P10 reserve estimates generated through Valnav. The Monte Carlo assessment incorporates all relevant nearby reservoir penetrations and importantly the identification of an oil-down-to depth in Rex-3 (12-4). • Undeveloped reserves are associated with undrilled locations within the existing producing field. Drilling of PUD locations will take place in accordance with good oilfield practice and are subject to normal regulatory and environmental approvals. Given the divergence between the P90 reserves generated by the Monte Carlo assessment and the 1P estimates using standard DSU spacing, 1C resources were ascribed to the difference and assume infill drilling will take place at later date. This same approach was applied to the P50 Monte Carlo estimate which is comprised of 2P and 2C reserve and resource categories. Well costs average C2.5 million for drilling, completion and tie-in and are assumed to require 3 weeks from beginning to end of operations. The entire development programme comprises 28 wells of which 3 have been drill and a further 18 are expected over the next 5 years. • The Contingent Resources are considered to be part of Wizard discovered accumulation where project activities are ongoing. The Resources are expected to be developed in the foreseeable future but as yet development funds have not been committed – Development Pending. Future development work will proceed in a step-wise manner as facilities are expanded and be timed to comply with tenure obligations and regulatory approvals concerning well spacing. • As with all development programmes, the drilling plan will evolve as well results become available. As the pool is held within a fluvial channel complex some variability in reservoir quality is expected and may control the final placement of wells as the configuration of the pool is refined. If found to be applicable, some well locations may be addressed with 3D seismic.

Price Forecast

The following table summarizes price forecast, foreign exchange rate and inflation rate assumptions used in this assessment. The figures are an average of 4 reserve auditor price forecasts (McDaniels, Sproule, GLJ, and Deloitte). The quality differential is provided by SBE based on historical information.

Table 6 – Price Forecast, Foreign Exchange & Inflation Rate Assumptions

Year	Exchange Rate	WTI Crude Oil	Edmonton Light Crude Oil	Western Canadian Select	Natural gas Alberta AECO Spot	Quality Diff
	$US/$Cdn	$US/bbl	$Cdn/bbl	$Cdn/bbl	$Cdn/MMBtu	US$/bbl
2020	1.43	30.00	29.72	20.12	1.78	-10.00
2021	1.38	41.18	47.20	34.77	2.22	-14.00
2022	1.33	49.88	59.66	45.91	2.42	-14.00
2023	1.33	55.87	67.00	52.70	2.54	-14.00
2024	1.33	71.33	71.33	55.26	2.61	-14.00

Other Supporting Information

- Estimated future net revenues are stated without any provision for interest costs, other debt service charges or general and administrative expenses, and after deduction of royalties, operating costs, estimated well abandonment and reclamation costs and estimated future development costs.
- Estimated future net revenue, whether discounted or not, may not represent fair market value.
- Columns may not add due to rounding of individual items.
- Inflation rate is accounted for at 2% per year.
- Crude Oil: The crude oil reserves estimates presented were based on a review of the volumetric data and performance characteristics of the individual wells and reservoirs in question. Volumetric estimates of the original oil in-place were based on individual well petrophysical interpretations, geological studies of pool configurations, and in some cases on published estimates. In those cases where indicative oil production decline and/or increasing gas-oil and oil cut trends were evident, the remaining reserves were determined by extrapolating these trends to economic limiting conditions. Where definitive production information was not yet available, the reserves estimates were usually volumetrically determined using recovery factors based on analogy with similar wells or reservoirs or on estimates of recovery efficiencies. The cumulative production figures were taken from published sources or from records of the Company and estimated for those recent periods where such data were not available.
- Natural Gas and Products: The natural gas reserves estimates for non-associated gas and gas cap pools were based on a study of the volumetric data and performance characteristics of the individual wells and reservoirs in question. Volumetric estimates of the initial gas in-place were based on individual well petrophysical interpretations, geological studies of the pools and areas, and in some cases on published estimates. Material balance estimates of the initial gas in-place were employed where sufficient information was available for a reliable estimate. The reserves recoverable from the currently producing properties were estimated from studies of production performance characteristics and/or reservoir pressure histories. In those cases where indicative gas production decline and/or increasing oil-gas ratio and water-gas ratio trends were evident, the remaining reserves were determined by extrapolating these trends to economic limiting conditions. In cases of competitive drainage in multi-well pools the reserves were based on an analysis of the relevant factors relating to the future pool depletion by existing and possible future wells. The recovery factors for the non-producing properties were estimated from a consideration of test rates, reservoir pressures and by analogy with similar wells or reservoirs.
- Natural gas reserves estimates for solution gas production from producing crude oil properties were based on an analysis of producing gas-oil ratios and existing sales gas recoveries. Solution gas reserves were

assigned to non-producing oil properties where there was a likelihood of those reserves being recovered and sold from existing facilities or facilities that are expected to be available in the near future. The natural gas products reserves estimates for the producing properties were based on historical and anticipated future recoveries of these products from the natural gas reserves. The natural gas products recoveries from the non-producing natural gas reserves were estimated from gas analyses, well test information and from analogy with similar reservoirs. Natural gas products reserves were only assigned to non-producing properties in those cases where there was a likelihood that the gas production would be processed through existing facilities capable of extracting these products or where such a facility will be available in the near future.

- Undeveloped reserves are associated with undrilled locations within existing producing fields. Drilling of PUD locations will take place in accordance to good oilfield practice and are subject to normal regulatory and environmental approvals.
- All products have ready access to market through existing infrastructure.
- Operating costs were based on 2019-20 actuals.
- Royalties are calculated in accordance to the Province of Alberta regulations.
- Well costs and associated depths, lengths and completion practices are ascribed to each well in according to their location in the field or accumulation and prevailing oil and gas field practices.
- All proposed wells are analysed for commercial viability and only those deemed commercial were included in the reserve estimates.
- The oil and gas assets are held under existing production licenses in the Province of Alberta, Canada.

See also cautionary statements below for further explanations and discussions.

This ASX announcement was approved and authorised for release by the Board of Whitebark Energy Ltd.

For further information:

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Reserve and Resources Estimates

A Note Regarding Forward Looking Information

This announcement includes certain statements related to our future business and financial performance and future events or developments involving Whitebark Energy Limited ('WBE' or 'the Company') that may constitute forward-looking statements. All statements, other than statements of historical fact, that refer to any future oil and gas production, resources or reserves, exploration results and events that the Company expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes anticipated. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

The Qualified Petroleum Reserves and Resources Evaluator Statement

The information in this report that relates to oil and gas Reserves and Resources is based on and fairly represents information and supporting documentation prepared and compiled by Salt Bush and its technical employees under the supervision of Stephen Keenihan and reviewed and validated by Kevin Angus, an independent Canadian oil and gas consultant and reserve estimator.

Mr. Angus is currently President of KD Angus Corp., a private geotechnical consulting company. Mr. Angus has over 35 years of industry geotechnical experience in both Western Canada and International areas. He has wide-ranging project experience across numerous theatres of operation and reservoir types and has worked extensively on tight oil and gas plays in clastic sequences. Mr. Angus has been involved as a cofounder of 5 public oil and gas companies and was the founding director of Painted Pony Petroleum where he has chaired and been a member of the reserve committee since 2012. He has over 15 years of experience as a director on publicly traded oil and gas companies. Mr. Angus, P. Geoph., has an ICD.D designation from the Institute of Corporate Directors. He holds a Bachelor of Science in Geology from the University of Calgary and is registered as a Professional Geoscientist with the Alberta Professional Engineers and Geoscientists of Alberta (APEGA).

Mr Stephen Keenihan BSc (Hons) Geology/Geophysics, Mr Keenihan is a director and share and option holder of the Company and has more than 40 years relevant experience in the petroleum industry and is a member of The Society of Petroleum Engineers (SPE), AAPG (American Association of Petroleum Geologists) and PESA (Petroleum Exploration Society Australia). The Reserves and Resources included in this report have been prepared using definitions and guidelines consistent with the June 2018 Society of Petroleum Engineers (SPE) / World Petroleum Council (WPC) / American Association of Petroleum Geologists (AAPG) / Society of Petroleum Evaluation Engineers (SPEE) Petroleum Resources Management System (PRMS).

Both Mr Angus and Mr Keenihan have consented to the inclusion of such information in this report in the form and context in which it appears.

GLOSSARY OF TERMS

Abbreviation	Definition
AECO	The Alberta natural gas price which is quoted in gigajoules (GJ) and is traded on the Natural Gas Exchange (NGX).
MBOE	Thousand Barrels of Oil Equivalent
MMCF	One million cubic feet of gas volume only.
BOE	Barrel of oil equivalent using 6Mcf= 1BOE
PDP	Proved Developed Producing
PUD	Proved Undeveloped
WTI	West Texas Intermediate