# Cauldron's Commitment to Minmise Carbon Footprint to Net Zero Across all of its Projects

### **Highlights**

- Cauldron is committed to achieving net zero carbon emissions target for its operations
- The fundamental characteristics of all the projects managed by Cauldron allows for highly efficient operations with inherently low energy operating requirements
- Cauldron is in the process of engaging expert advice to help it reduce even further the energy requirements of its exploration and potential mining operations so as to reduce its carbon footprint

Cauldron Energy Limited (**Cauldron** or the **Company**) (ASX: CXU) is committed to reducing its carbon footprint and achieving a target of having net zero carbon emissions target across all of its projects and operations. Cauldron's suite of projects are inherently energy efficient which provides a significant head-start on its ability to reach these goals.

Cauldron is pleased to advise of the energy efficient nature of its projects along with the early steps it is taking to develop systems to reduce the carbon footprint of our operations, both during the exploration phase and any potential production phase.

At this stage of development the Company's operations are exploratory in nature, but may involve production at some future stage, if the results of exploration prove favourable.

Cauldron CEO, Jess Oram said "*it is extraordinary when economic fundamentals of mining align with our environmental goals. This means there is very little cost in achieving the goal of net zero carbon emissions for our projects. In other words, the efficiency gains in mining uranium, for example, by in-situ recovery techniques underpins the economic fundamentals of the project in parallel with helping us reduce our carbon footprint and achieve the net zero carbon emissions target".* 

#### **Yanrey Exploration Project – Exploration**

The geological and physical characteristics of mineralisation at Bennet Well has been used to develop an exploration model proven to accurately predict the occurrence of uranium mineralisation. The efficacy of this exploration model reduces the work and therefore the energy requirements needed to be successful explorers.

#### **Bennet Well Uranium Project – Production**

Cauldron announced (ASX announcement dated 25 May 2017) the results of column leach tests completed by CSIRO, showing mineralisation to have extremely favourable leaching characteristics. The combination of favourable leaching, stratigraphic setting, and the association between sedimentary host and mineral species defines Bennet Well as a sandstone style uranium system. This style of deposit point to the possibility of extraction by the in-situ recovery (ISR) mining system. The field leach trials designed to define the economic parameters of mining Bennet Well by ISR was planned as the second stage of the CSIRO study, but has yet to be completed.



#### ABN

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## ASX Code

CXU

#### Securities on Issue

451,999,512 shares 6,833,395 Options (exercise price: \$0.03; expiry 31 Dec 2021) 16,666,666 Options (exercise price: \$0.03; expiry 31 Mar 2022) 10,000,0000 Unlisted Options (exercise: \$0.03; expiry 16-Sep-22) 6,000,0000 Unlisted Options (exercise: \$0.05; expiry 16-Sep-23) 45,354,839 Options (exercise price: \$0.05; expiry 30 Nov 2023) 9,000,000 Performance Rights (expiring 10 August 2025)

#### **Board of Directors**

Simon Youds Non-Executive Chairman

Jess Oram Executive Director & Chief Executive Officer

Qiu Derong Non-executive Director

Judy Li Non-executive Director

Chenchong Zhou Non-executive Director

Michael Fry Company Secretary



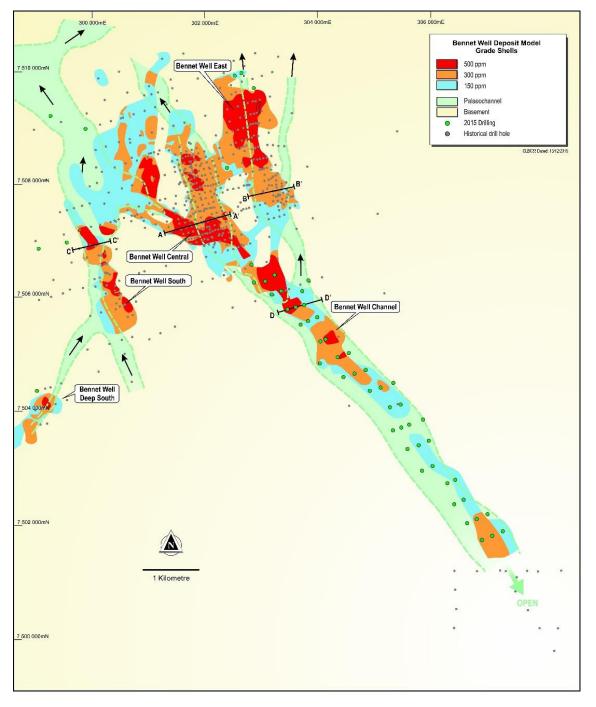


Figure 2: Bennet Well distribution of mineralisation – plan view

Mining by ISR is inherently energy efficient because it does not involve blasting, digging, trucking and milling processes usually involved in mining most deposits. In addition to the energy advantage of mining by ISR, there is no requirement to build the waste and tailings handling systems required to handle the by-products of mining.

Sandstone style uranium deposits mined by ISR have the lowest cost quartile of any deposit in production globally, because of the energy and capital efficiencies involved in mining, milling and construction. This style of potential production gives CXU a head-start in minimising its carbon footprint.



#### **Blackwood Gold Project – Exploration**

The geological and environmental conditions of mineralisation at the Blackwood Gold Project requires a narrow vein hand-held mining approach. Cauldron is completing all exploration activity with this potential mining style as its over-arching strategy. If the exploration is successful the mining operation may proceed on a non-mechanised basis thus reducing the carbon footprint of operation. This style of potential production gives CXU a head-start in minimising its carbon footprint.

#### Western Australian Sands Project – Exploration

Cauldron recently announced the acquisition of several exploration licences, an exploration licence application and a mining lease on three river mouths along the West Australian coast (ASX announcement on 23<sup>rd</sup> December 2020); *the acquisition of which is subject to satisfaction of several conditions precedent which at the date of this report are yet to complete*. The geological and physical characteristics of the construction sands projects is such that there is the potential ability to reduce the transport requirements of shipping and thus improve the economic fundamentals of the potential mining process. This style of potential production gives CXU a head-start in minimising its carbon footprint.

#### END

Authorised for release by Mr Jess Oram, Executive Director and Chief Executive Officer.

For further information please contact:

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#### **Competent Person Statements**

The information in this report that relates to exploration results for the Yanrey Project, Blackwood Gold Project and the Western Australian Sands Project is based on information compiled by Mr Jess Oram, Executive Director of Cauldron Energy Limited. Mr Oram is a Member of the Australasian Institute of Geoscientists.

Mr Oram has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Oram consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

#### Bennet Well Uranium Deposit

The information in this report that relates to Mineral Resources for the Bennet Well Uranium Deposit is extracted from a report released to the Australian Securities Exchange (ASX) on 17 December 2015 titled "Substantial Increase in Tonnes and Grade Confirms Bennet Well as Globally Significant ISR Project" and available to view at <u>www.cauldronenergy.com.au</u> and for which Competent Persons' consents were obtained. Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcement released on 17 December 2015 and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original ASX announcement.



#### **Bennet Well Deposit Summary**

The Bennet Well Deposit is located within the Carnarvon Basin approximately 100 km to the south of Onslow in the northwest region of Western Australia. The town of Exmouth is about 240 km to the northwest. The Yanrey – Bennet Well Project can be accessed from Exmouth via the major North West Coastal highway linking Exmouth and Karratha.

The Yanrey – Bennet Well Project is 100% owned and operated by Cauldron, possessing title in full to a contiguous package of twelve exploration tenements covering 1,280 km2 around the Bennet Well deposit.

The Bennet Well deposit is comprised of four spatially separate deposits; namely Bennet Well East, Bennet Well Central, Bennet Well South and Bennet Well Channel, refer to Figure 2.

Ravensgate Mining Industry Consultants completed the Mineral Resource (JORC 2012) estimate for the Bennet Well deposit, The Mineral Resource (JORC 2012) estimate is:

- Inferred Resource: 16.9Mt at 335 ppm eU3O8 for total contained uranium-oxide of 12.5Mlb (5,670 t) at 150 ppm cut-off;
- Indicated Resource: 21.9Mt at 375 ppm eU3O8 for total contained uranium-oxide of 18.1Mlb (8,230 t) at 150 ppm cutoff;
- total combined Mineral Resource: 38.9 Mt at 360 ppm eU3O8, for total contained uranium-oxide of 30.9 Mlb (13,990 t) at 150 ppm cut-off.

Deposit	Cutoff	Deposit Mass (t)	Deposit Grade (ppm	Mass U₃O <sub>8</sub> (kg)	Mass U₃O <sub>8</sub> (lbs)
	(ppm eU₃Oଃ)		eU₃Oଃ)		
Bennet Well_Total	125	39,207,000	355	13,920,000	30,700,000
Bennet Well_Total	150	38,871,000	360	13,990,000	30,900,000
Bennet Well_Total	175	36,205,000	375	13,580,000	29,900,000
Bennet Well_Total	200	34,205,000	385	13,170,000	29,000,000
Bennet Well_Total	250	26,484,000	430	11,390,000	25,100,000
Bennet Well_Total	300	19,310,000	490	9,460,000	20,900,000
Bennet Well_Total	400	10,157,000	620	6,300,000	13,900,000
Bennet Well_Total	500	6,494,000	715	4,640,000	10,200,000
Bennet Well_Total	800	1,206,000	1175	1,420,000	3,100,000

#### Table 1: Mineral Resource (JORC 2012) at various cut-off

Deposit	Cutoff	Deposit Mass (t)	Deposit Grade (ppm	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U <sub>3</sub> O <sub>8</sub> (lbs)
	(ppm U₃Oଃ)		U₃O8)		
BenWell_Indicated	125	22,028,000	375	8,260,000	18,200,000
BenWell_Indicated	150	21,939,000	375	8,230,000	18,100,000
BenWell_Indicated	175	21,732,000	380	8,260,000	18,200,000
BenWell_Indicated	200	20,916,000	385	8,050,000	17,800,000
BenWell_Indicated	250	17,404,000	415	7,220,000	15,900,000
BenWell_Indicated	300	13,044,000	465	6,070,000	13,400,000
BenWell_Indicated	400	7,421,000	560	4,160,000	9,200,000
BenWell_Indicated	500	4,496,000	635	2,850,000	6,300,000
BenWell_Indicated	800	353,000	910	320,000	700,000

Deposit	Cutoff (ppm U₃Oଃ)	Deposit Mass (t)	Deposit Grade (ppm U₃Oଃ)	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U₃O <sub>8</sub> (lbs)
BenWell_Inferred	125	17,179,000	335	5,750,000	12,700,000
BenWell_Inferred	150	16,932,000	335	5,670,000	12,500,000
BenWell_Inferred	175	14,474,000	365	5,280,000	11,600,000
BenWell_Inferred	200	13,288,000	380	5,050,000	11,100,000
BenWell_Inferred	250	9,080,000	455	4,130,000	9,100,000
BenWell_Inferred	300	6,266,000	535	3,350,000	7,400,000
BenWell_Inferred	400	2,736,000	780	2,130,000	4,700,000
BenWell_Inferred	500	1,998,000	900	1,800,000	4,000,000
BenWell_Inferred	800	853,000	1285	1,100,000	2,400,000

Note: table shows rounded numbers therefore units may not convert nor sum exactly