

## Cauldron extends foothold at Yanrey Uranium Project

### Highlights

- **Cauldron has made application for two new exploration licences at its 100% owned Yanrey Uranium Project.**
- **Cauldron utilised its predictive exploration model to acquire the new tenements prospective for In-situ Recovery (ISR) style uranium mineralisation**
- **The exploration model was generated from understanding the controls on mineralisation learned at the Bennet Well Uranium deposit**
- **Cauldron advances its interests in an emerging uranium province that is potentially of significant scale comparable to any known globally**
- **2020 'Red Book' indicates low-cost mining production from ISR mining**

Cauldron Energy Limited (**Cauldron** or the **Company**) (ASX: CXU) is pleased to announce finalisation of its application for two new exploration licences (**ELA**) at its 100% owned Yanrey Uranium Project.

Cauldron identified the area of interest following the application of its predictive exploration model generated for the district. This exploration model is constructed from many drillholes that help to define geology and mineralisation. In addition, the model uses understandings of controls of uranium mineralisation at Bennet Well, a deposit described by a Mineral Resource (JORC 2012) containing 31 Mlb of uranium oxide (38.9 million tonnes at 360 parts per million  $eU_3O_8$  at 150 ppm cut-off). The exploration model is important intellectual property in understanding this style of mineralisation applicable for in-situ recovery (ISR) style mining method.

The tenement application was made to the Department of Mines, Industry Regulation and Safety (DMIRS) in an area of un-pegged ground to the north of the Yanrey Project, and if granted extends the size of the exploration landholding to 1860 km<sup>2</sup>.

The International Atomic Energy Agency (IAEA) in their biennial publication (Red Book 2020<sup>1</sup>) reports that in the lowest cost quartile (<USD\$36 per pound uranium) more uranium is produced by ISR mining (40.2% of global production) than any other mining method. ISR mining has safest and the lowest cost mining production with no waste dump or tailings legacy issues.

Cauldron is exploring for mineralisation amenable to mining extraction by ISR. When economic these styles of deposit can be mined at the lowest cost quartile of all uranium mined globally. This characteristic makes these deposits extremely attractive for mining at any uranium price.

<sup>1</sup> The 'Red Book' is a joint publication between the International Atomic Energy Agency (IAEA) Nuclear Energy Agency (NEA) produced every second year and it outlines global uranium supply and demand.

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### ASX Code

CXU

### Securities on Issue

455,999,512 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)  
10,000,000 Unlisted Options (exercise: \$0.03; expiry 16-Sep-22)  
6,000,000 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  
Executive Chairman

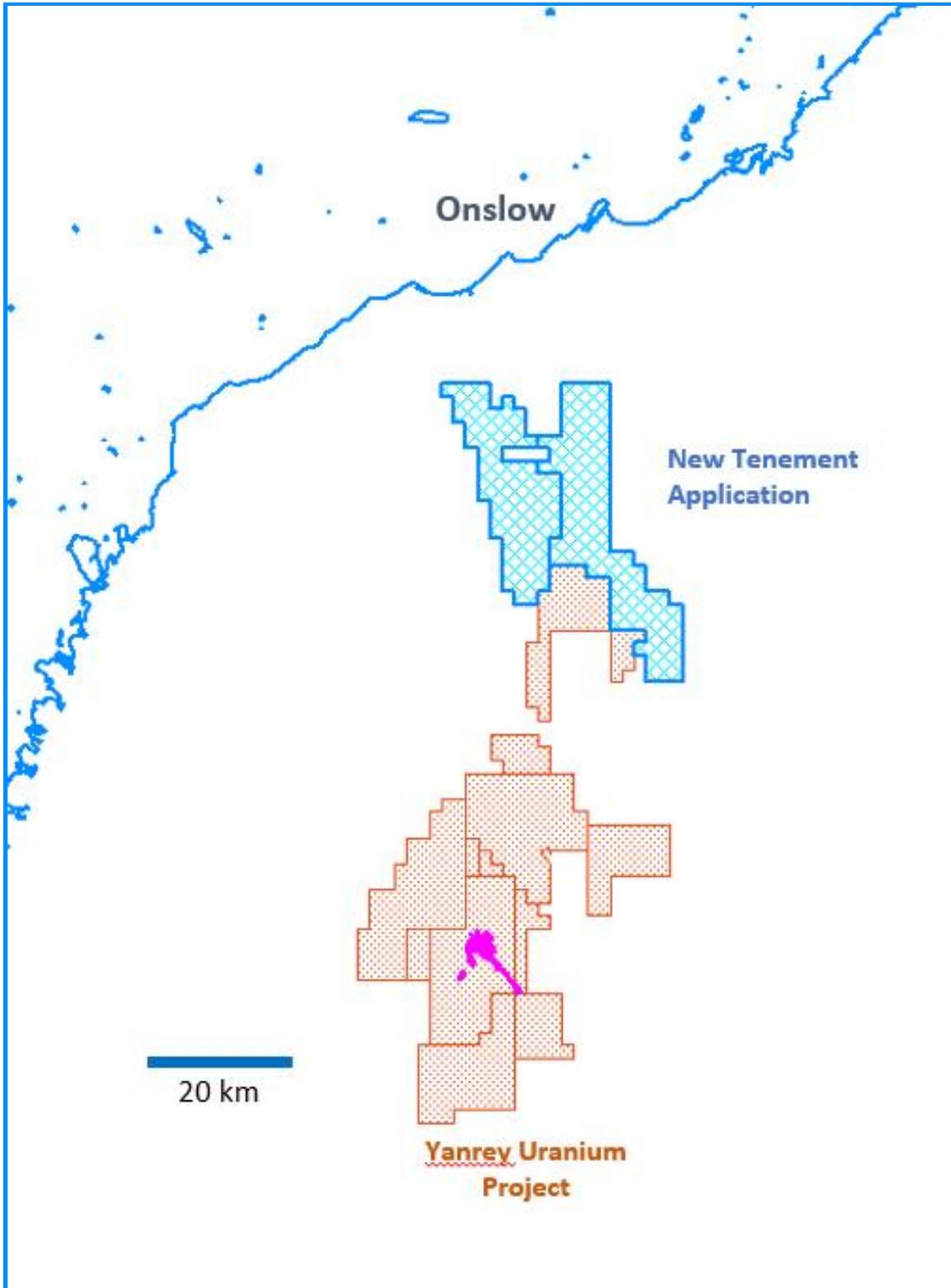
Jess Oram  
Executive Director &  
Chief Executive Officer

Qiu Derong  
Non-executive Director

Judy Li  
Non-executive Director

Chenchong Zhou  
Non-executive Director

Michael Fry  
Company Secretary



**Figure 1; New tenement application in Yanrey Project (tenement application in blue, granted tenement in orange, outline of Bennet Well Uranium Deposit in magenta)**

Commenting on the applications for new exploration licences, Chief Executive Officer Jess Oram said: “The application for the new tenements shows the great confidence we have in the exploration model that has contributed to tripling the size of known mineralisation reported at Bennet Well. We believe the Yanrey Project is slowly being uncovered and potentially having a scale comparable to the best endowed provinces globally. When these tenement applications are granted, we will explore them to find new prospects that can be added to the project pipeline. Filling that pipeline provides the greatest potential to discover new mineralisation with the ultimate goal of increasing the known resource inventory”.

ISR uranium mining is extremely energy efficient, it therefore has the lowest mining cost, with lowest carbon footprint. Uranium as an energy commodity is slowly being recognised as the solution to the energy issues facing the globe. Cauldron retains the key exploration intellectual property for uncovering more of this climate change moderating commodity. Management of Cauldron is extremely heartened by the report of Dennis Shanahan in The Australian newspaper on the 23<sup>rd</sup> June, describing the federal Liberal government attempts to gain bi-partisan support for the establishment of nuclear energy in Australia. As a country we can do more than just add material to the base of the nuclear fuel cycle. The shift to utilising nuclear energy will help de-carbonise the economy at a cost that does not hurt energy intensive industry.

### Bennet Well Deposit Summary

The Bennet Well Deposit is located within the North 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 km<sup>2</sup> 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 eU<sub>3</sub>O<sub>8</sub> for total contained uranium-oxide of 12.5Mlb (5,670 t) at 150 ppm cut-off;
- Indicated Resource: 21.9Mt at 375 ppm eU<sub>3</sub>O<sub>8</sub> for total contained uranium-oxide of 18.1Mlb (8,230 t) at 150 ppm cut-off;
- total combined Mineral Resource: 38.9 Mt at 360 ppm eU<sub>3</sub>O<sub>8</sub>, for total contained uranium-oxide of 30.9 Mlb (13,990 t) at 150 ppm cut-off.

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

Deposit	Cutoff (ppm eU <sub>3</sub> O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U <sub>3</sub> O <sub>8</sub> (lbs)
Bennet Well_Total	125	39,207,000	355	13,920,000	30,700,000
<b>Bennet Well_Total</b>	<b>150</b>	<b>38,871,000</b>	<b>360</b>	<b>13,990,000</b>	<b>30,900,000</b>
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

Deposit	Cutoff (ppm U <sub>3</sub> O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm U <sub>3</sub> O <sub>8</sub> )	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U <sub>3</sub> O <sub>8</sub> (lbs)
BenWell_Indicated	125	22,028,000	375	8,260,000	18,200,000
<b>BenWell_Indicated</b>	<b>150</b>	<b>21,939,000</b>	<b>375</b>	<b>8,230,000</b>	<b>18,100,000</b>
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 U <sub>3</sub> O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm U <sub>3</sub> O <sub>8</sub> )	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U <sub>3</sub> O <sub>8</sub> (lbs)
BenWell_Inferred	125	17,179,000	335	5,750,000	12,700,000
<b>BenWell_Inferred</b>	<b>150</b>	<b>16,932,000</b>	<b>335</b>	<b>5,670,000</b>	<b>12,500,000</b>
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

**END**

Authorised for release by Mr Simon Youds, Executive Chairman.

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## Mineral Resource Estimates

- The information in this report that relates to Mineral Resources 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 [www.cauldronenergy.com.au](http://www.cauldronenergy.com.au) 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.

## Competent Person Statement

The information in this Announcement that relates to the Yanrey Uranium 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.

## Disclaimer

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