ASX ANNOUNCEMENT

8 August 2024



YANREY URANIUM PROJECT

FIRST DRILL RESULTS CONFIRM AND EXTEND KNOWN URANIUM MINERALISATION AT BENNET WELL DEPOSIT

Key Points

- To date results have been received for 20 holes for a total of 2,663.5 metres
- 18 of the 20 holes were designed as in-fill at Bennet Well Deposit and confirm the position and grade continuity of the uranium palaeochannel
- A twin hole was drilled to confirm the veracity of the drilling technique and returned 7.00m @ 543ppm eU₃O₈, including 2.30m @ 1,083ppm eU₃O₈
- Going forward, drilling will focus on testing extensions of the Bennet Well Deposit to the north and south, as well as the area adjacent to Paladin Energy's Manyingee Deposit

Cauldron Energy Limited (ASX: CXU) ("Cauldron or the Company") is pleased to announce it has successfully intersected uranium mineralisation in the initial holes comprising the infill drill program at Bennet Well, with results meeting expectations of thickness and grade. Results include:

24YRAC001 89.90 − 96.90m, 7.00m @ 543ppm eU₃O₈

Incl.* 92.10 - 94.40m, 2.30m @ 1,083ppm eU₃O₈

24YRAC005 99.60 - 100.42m, 0.82m @ 288ppm eU₃O₈

And 101.52 - 102.48m, 0.96m @ 255 ppm eU₃O₈

24YRAC010 129.73 – 130.25m, 0.52m @ 333ppm eU₃O₈

24YRAC018 131.58 − 133.06m, 1.48m @ 309ppm eU₃O₈

The twin hole, 24YRAC001 confirmed that results from the aircore drilling technique and downhole wireline logging matched the previous drilling results obtained in 2015 using a different drilling technique (rotary mud) and wireline logging system.

Cauldron's Yanrey Uranium Project is located $^{\sim}70$ km south of Onslow and covers an area of $^{\sim}1,270$ km² (Figure 1). It is located within a highly prospective, mineral-rich region containing multiple known economic uranium deposits including the neighboring Manyingee Deposit (owned by Paladin Energy Ltd). The Yanrey project area hosts the Bennet Well Uranium Deposit which contains 30.9 Mlb of uranium-oxide (38.9Mt at 360ppm eU $_3$ O $_8$ at 150ppm cut-off), and is therefore a globally significant project. Laboratory based testwork has confirmed Bennet Well Uranium Deposit is amenable to in situ leaching. Much of the Yanrey project area remains untested, with 22 high priority targets identified for drilling.



Cauldron's 2024 drilling programme is designed to:

- Expand and further upgrade the resource confidence of the existing JORC (2012) Mineral Resource Estimate (MRE) of 38.9Mt @ 360 ppm eU₃O₈ for 30.9 Mlbs of contained uranium oxide (U₃O₈) − (refer ASX:CXU 17 December 2015), and
- Test the potential to substantially increase uranium mineral resources at new targets as identified in the Exploration Target for Yanrey Uranium Project (refer ASX:CXU 24 January 2024) refer to page 11 for Disclaimer and Cautionary Statement.

Cauldron CEO Jonathan Fisher commented:

"We are pleased with the results received so far. They confirm that the drilling technique we are using is producing comparable results to previous drilling in 2014 and 2015. The initial twin hole and the results of the in-fill drilling have returned thicknesses and grades as expected in line with historical drilling at the Bennet Well Uranium Deposit, which can be expected to expand and upgrade the existing JORC (2012) Mineral Resource Estimate at Bennet Well".

"We now move on to the exciting part of the program where we test targets initially north and south of the existing Bennet Well resource envelope with the aim of increasing the MRE tonnage and grade, before moving to other highly prospective locations within the Yanrey project area."

"Our technical team is taking a methodical, systematic and scientific approach to the work at Yanrey, and this will stand us in good stead when it comes to compiling results and converting the results into an updated Mineral Resource Estimate in due course."

"We look forward to regularly updating the market with further results as we test various step out targets at Yanrey over the coming months. Of particular interest is our Maningyee West targets which lie directly adjoining to the Paladin Maningyee deposit. Whilst the short-term sentiment in ASX juniors and the broader uranium market have been challenging recently; the undeniable positive macro trends for the uranium market remain; with nuclear energy to play an increasingly important role in the global push for decarbonization and thus causing a fundamental supply shortage against projected demand."



Drill team in action at Yanrey



YANREY PROJECT

The Yanrey Project is located ~70 km south of Onslow and covers an area of ~1,270km² (see Figure 1 following) and comprises a collection of 12 granted exploration tenements (see Figure 2 following) and one exploration licence under application in the north-west of Western Australia.

The Yanrey Project is regionally prospective for large sedimentary-hosted uranium deposit systems that are amenable to mining by the In Situ Leach (ISL) technique. The uranium mineralisation within the Yanrey Project typically occurs in unconsolidated sands (less than 100m depth) in Cretaceous sedimentary units of the North Carnaryon Basin.

The Yanrey Uranium Project is host to the Bennet Well deposit, Western Australia's fifth largest uranium deposit, which comprises four spatially separate mineralised zones; namely Bennet Well East, Bennet Well Central, Bennet Well South and Bennet Well Channel (Figures 2 and Figure 3).

A Mineral Resource (JORC 2012) for the Bennet Well deposit was completed by Ravensgate Mining Industry Consultants (Ravensgate) in 2015 and summarised in 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". Refer Appendix A for full details.

At a 150 ppm eU₃O₈ cut-off the Bennet Well JORC 2012 Mineral Resource Estimate is:

Inferred: $16.9 \text{ Mt } @ 335 \text{ ppm } eU_3O_8 \text{ for } 12.5 \text{ Mlb } (5,670 \text{ t}) \text{ contained uranium oxide}$ Indicated: $21.9 \text{ Mt } @ 375 \text{ ppm } eU_3O_8 \text{ for } 18.1 \text{ Mlb } (8,230 \text{ t}) \text{ contained uranium oxide}$

TOTAL: 38.9 Mt @ 360 ppm eU₃O₈ for 30.9 Mlb (13,900 t) contained uranium oxide

Historical work performed by Cauldron affirms that the Yanrey region is a large-scale emerging uranium province, containing potentially significant and as-yet undiscovered, economically important uranium resources.

Equivalent uranium grades (eU_3O_8) are determined from downhole gamma logging and applying density, moisture, and uranium disequilibrium factors (determined from previous drilling). Downhole intervals are logged at 0.02m intervals, so very detailed data is collected. These are composited at various cut-offs and presented in summary herein (see Table 1).

Assay samples collected at the drilling rig over 1m intervals will serve as a check on the downhole logging, but these physical samples, being collected over much larger intervals, will not be directly comparable to the downhole logging. Additionally, aircore drill sample analyses are not regarded as being of sufficient downhole integrity to be used in JORC resource estimates.

Drilling is planned to test several targets at Bennet Well and Yanrey in the current drilling program, including in-fill drilling at Bennet Well Central, Targets 5, 6, 9, 10, 13, 15, 16, 18 and 21 (Figure 4).

Target 15 represents potential extensions of the known Manyingee Uranium Deposit (owned by Paladin Energy Ltd), and is a high priority target for the Company.

Results from the 2024 Drill program are expected to better define limits and extents of prospective palaeochannels and to also extend resource potential.



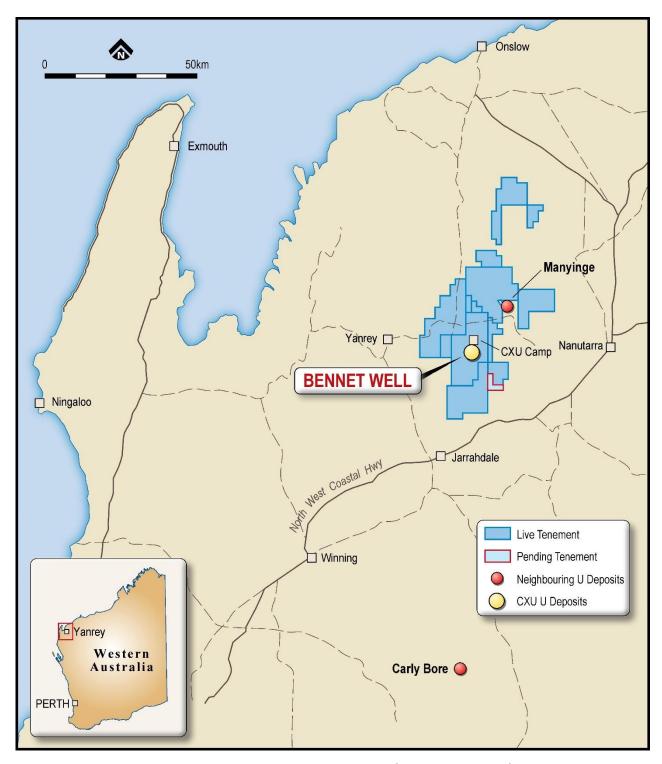


Figure 1: Yanrey Uranium Project Location (Western Australia)



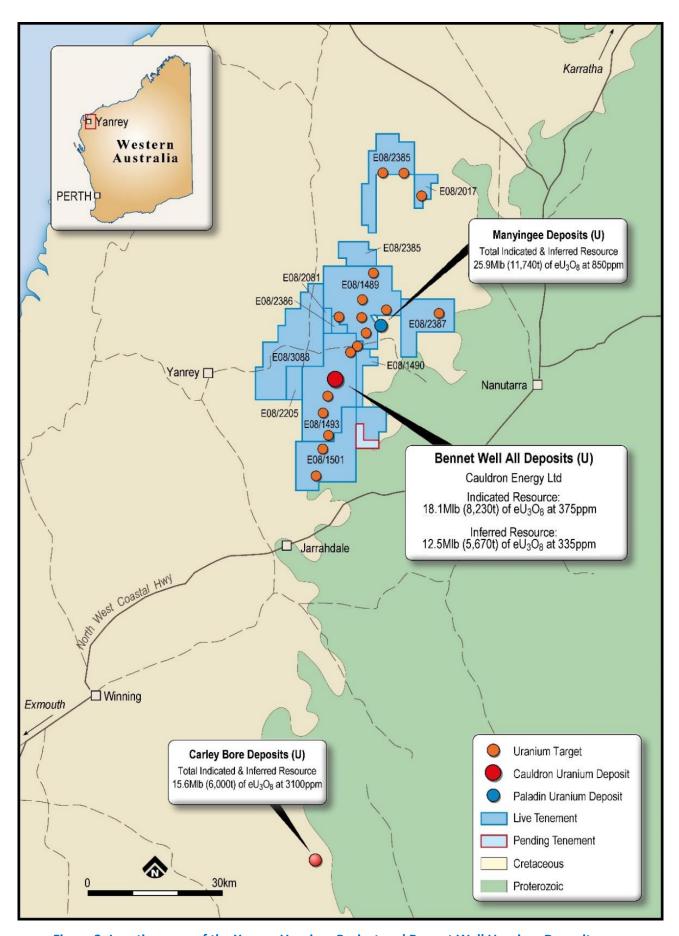


Figure 2: Location map of the Yanrey Uranium Project and Bennet Well Uranium Deposit



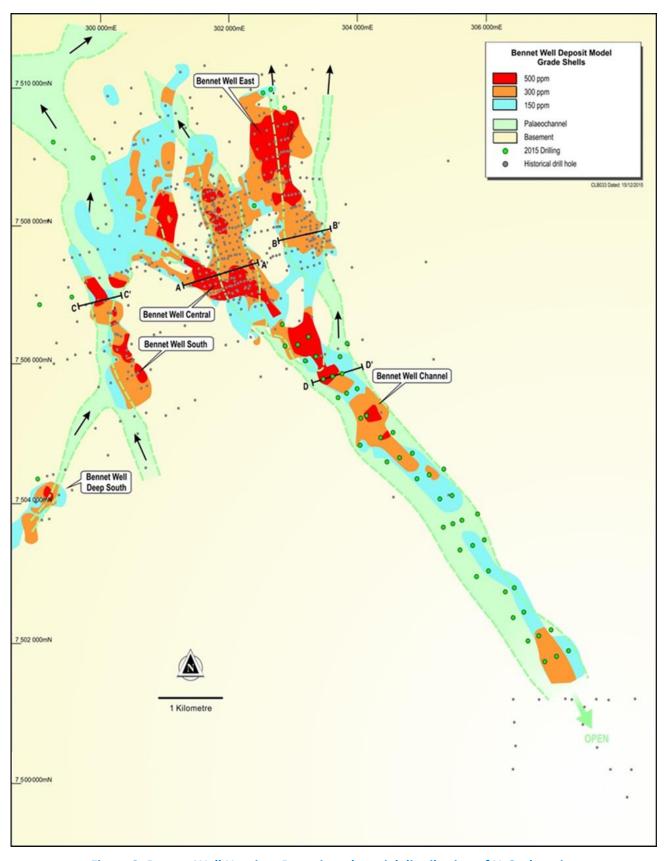


Figure 3: Bennet Well Uranium Deposit and spatial distribution of U₃O₈ domains



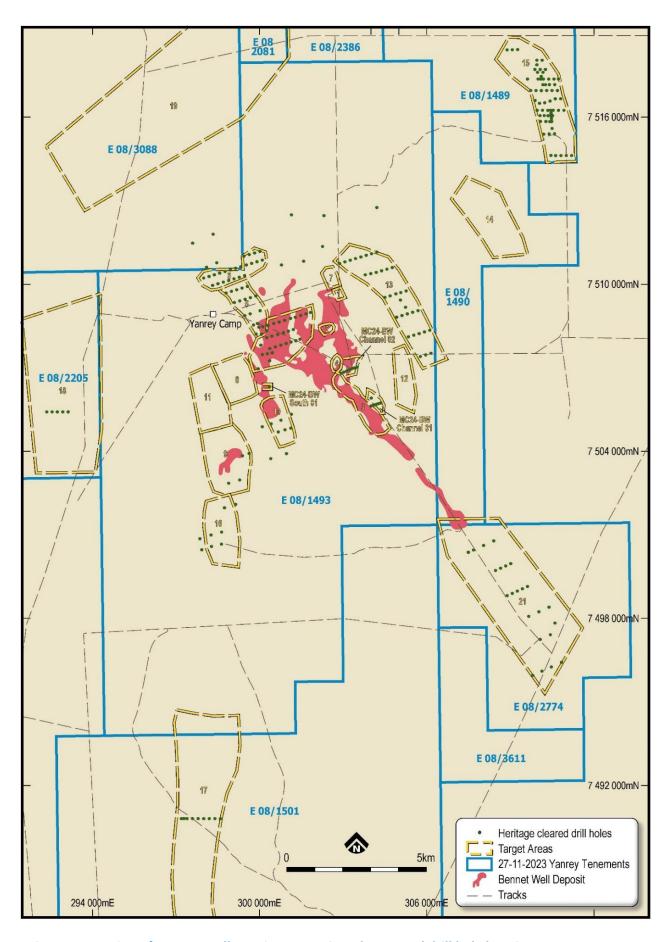


Figure 4: Location of Bennet Well Uranium Deposit and proposed drill hole locations over new targets,

Bennet Well extensions, and Bennet Well infill sites



DEPOSIT GEOLOGY

The Bennet Well uranium deposit is situated where a Cretaceous palaeochannel system enters an estuarine delta environment. Coastal plain and terrestrial sediments of the Nanutarra Formation hosting the mineralisation are unconformably overlain by glauconitic marine sandstones (Birdrong Sandstone) and capped by a thick blanket of impermeable marine clays (Muderong Shale).

The historic resource at Bennet Well largely covers the estuarine delta complex and is about 3.5km long and 3.5km wide at its base. Several larger 'main' branches of the distributary channels, dominated by coarse fluvial sandstones, incise through the delta system. Oxidised uranium-bearing groundwaters preferentially follow these buried channels.

The Bennet Well palaeochannel follows the prevailing underlying structural trends evident in the regional geology with the channel running SSE-NNW and ranging from 500m to >1,000m wide. A smaller (narrower) tributary paleochannel enters the mineralised estuarine delta system on the western side of the resource.

Mineralisation is hosted by coastal plain and terrestrial sediments of the Nanutarra Formation comprising woody organic matter and carbonaceous sands, silts, and mudstones (Figure 5).

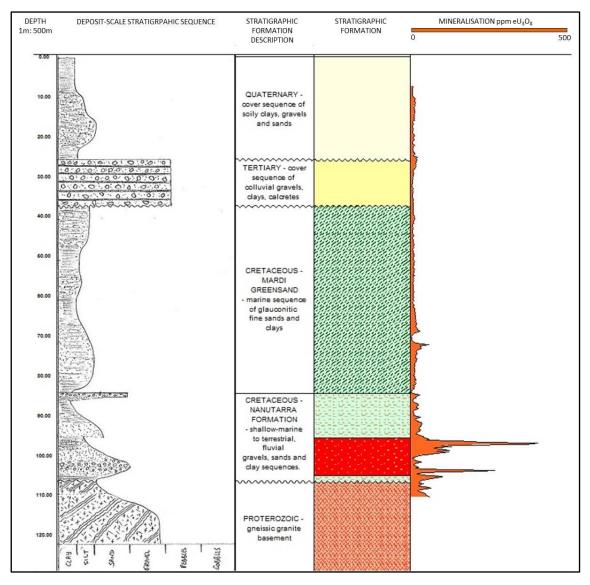


Figure 5: Bennet Well Stratigraphic Column



Historical exploration and resource definition drilling typically encountered mineralisation around 90-110m depth at the redox interface between reduced carbonaceous mudstones which overlie fluvial sandstones. These sandstones are variably reduced and contain a pronounced redox boundary developed along the channel margins.

Mineralisation within the main palaeochannel ranges from 100m to 600m wide (average 350m wide) and continues a 7km further upstream to the SSE.

To date Cauldron has received results from 20 holes for a total of 2,663.5m. This drilling has been conducted as a series of lines, oriented WSW-ENE perpendicular to the palaeochannel orientation. Drilling has focussed on the western side of the resource where broadly spaced (ranging from 400m to 1.2km line spacing) historical drilling from the 1970's and 1980's had not adequately defined the outline of the palaeochannel for exploration purposes (Figure 8).

Infill drilling across the palaeochannel has confirmed that the channel margins are shallow and reduced whilst the palaeovalley thalwegs are deep and contain oxidised sandstones (see Figures 6 & 7 below).



Figure 6: 24YRAC016 Redox boundary & oxidised sands



Figure 7: 24YRAC016 Oxidised sands at 113-114m



Drilling indicates anomalous gamma readings are widespread at the redox boundary with holes **24YRAC006** to **24YRAC010** and **24YRAC017** to **24YRAC019** intersecting potential mineralisation. Mineralised intervals are presented in Table 1.

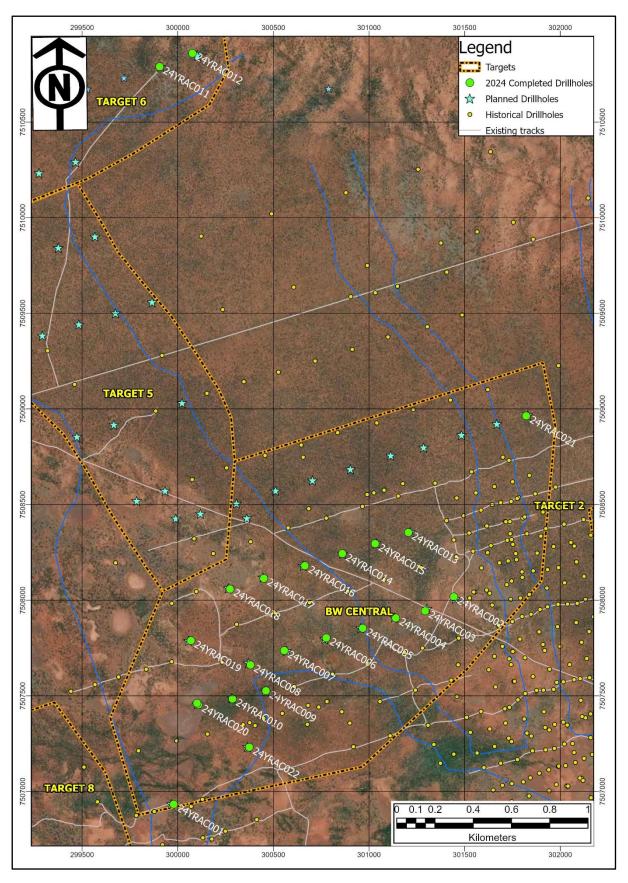


Figure 8: Drill Location Map - Note the blue line marking the historically interpreted palaeochannel



Cauldron's first hole **24YRCAC001** twinned a historical high-grade zone (YNMR077 – drilled by the rotary mud technique, and YNDD018 – drilled by diamond core) within this palaeochannel as a 'test' run to ensure all equipment was working correctly before commencing exploration drilling.

For comparison, at a 150ppm eU₃O₈ cut-off, the three holes had intercepts of:

YNMR077	$87.4 - 88.4 \text{m}, 1.00 \text{m}$ @ $338 \text{ppm eU}_3 \text{O}_8$ $88.9 - 91.3 \text{m}, 2.40 \text{m}$ @ $1,205 \text{ppm eU}_3 \text{O}_8$ $95.9 - 97.5 \text{m}, 1.15 \text{m}$ @ $222 \text{ppm eU}_3 \text{O}_8$
YNDD018	$86.8 - 87.7$ m, 0.90 m @ 425 ppm eU_3O_8 $88.6 - 95.1$ m, 6.52 m @ 650 ppm eU_3O_8 $95.2 - 95.9$ m, 0.80 m @ 214 ppm eU_3O_8
24YRAC001	89.9 – 96.9m, 7.00m @ 543ppm eU₃O ₈

Cauldron's initial hole determined that the previous core hole had terminated at 102.1m on a false bottom of transported saprolitic clays and that neither of the two historical holes penetrated to the base of the channel. Drilling continued a further through a thick succession of palaeochannel sands to fresh bedrock from 131-135m.

Drillholes **24YRAC010**, **24YRAC018**, **24YRAC019**, **24YRAC020**, all drilled on the western end of the drill lines have intersected well-developed palaeochannel sands encountering bedrock in the 130-140m level.

Cauldron's drilling indicates that the poorly defined western tributary palaeochannel is considerably deeper than originally interpreted. Historical drilling suggests the palaeochannel in this area is narrower (200-500m in width) with recent drilling indicating it is much more deeply incised than originally thought (Figure 9).

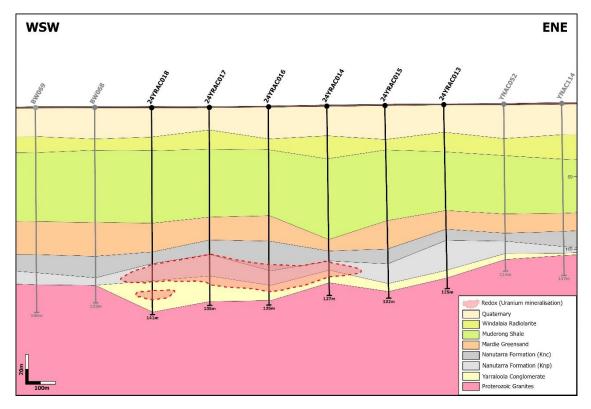


Figure 9: Drill Cross Section - 24YRAC018



Encouragingly drilling in the deeper parts of the palaeochannel has intercepted additional mineralisation at depths >125m. Hole **24YRAC010** intersected 0.52m @ 333ppm eU_3O_8 whilst hole **24YRAC018** intersected 1.48m @ 309ppm eU_3O_8 .



Figure 10. 24YRAC018 chip trays showing the prominent redox boundary at 107m and thick succession of oxidised sands and gravels below. Mineralisation is developed in the carbonaceous muddy sands immediately above this boundary. Note the more subtle mineralised lower redox boundary at 132m. Bedrock comprises granitic gneiss below 139.5m. Stratigraphic codes refer to Table 1.

Drillhole **24YRAC008** similarly intersected deep paleochannel sediments but was unable to be logged to depth because of free running sands infilling the rods. Drillhole **24YRAC020** was abandoned for similar reasons but downhole logging managed to get sufficiently deep enough to confirm the presence of anomalous gamma readings at the redox boundary at ~103m. Both these holes will be redrilled in the near future.

Interpretation of exploration drilling results indicates a prospective redox boundary is well-developed along the eastern margin of the tributary palaeochannel. Cauldron has not yet located the termination of this redox boundary and is planning further drilling to following this mineralised boundary downstream (NNW) and to locate its counterpart on the western side of the channel.

Additional exploration potential lies further upstream with drilling planned to investigate the continuation of the palaeochannel upstream to the SSW with approximately 2km of untested strike extent towards historical high-grade mineralisation intersected in previous drilling (YNDD021 and YNMR088).



Table 1: Bennet Well Drill Results - Holes 24YRAC001 to 24YRAC020

	Drillhole	Details				Summary In	tercept De	tails	
Hole	North	East	Depth (m)	From (m)	To(m)	Interval (m)	eU₃O ₈	Grade x Thickness (m.ppm eU ₃ O ₈)	Target
24YRAC001	7,506,931	299,978	135.0	87.7	88.4	0.70	368	258	BW Central
				89.9	96.9	7.00	543	3,801	u
			Incl.*	92.1	94.4	2.30	1,083	2,491	u
24YRAC002	7,508,016	301,442	83.5	NSR					BW Central
24YRAC003	7,507,943	301,293	118.0	NSR					BW Central
24YRAC004	7,507,906	301,139	95.0	NSR					BW Central
24YRAC005	7,507,852	300,966	126.0	99.6	100.4	0.82	288	236	BW Central
				101.5	102.5	0.96	255	245	u
24YRAC006	7,507,802	300,776	141.0	NSR					BW Central
24YRAC007	7,507,735	300,556	150.0	100.8	101.1	0.24	165	40	BW Central
24YRAC008	7,507,661	300,379	150.0	DNRT					BW Central
24YRAC009	7,507,676	300,391	146.0	100.2	100.8	0.58	202	117	BW Central
				101.5	102.3	0.80	229	183	и
				104.2	104.5	0.24	184	44	и
				110.2	110.6	0.40	182	73	u
24YRAC010	7,507,487	300,283	141.0	129.7	130.3	0.52	333	173	BW Central
24YRAC011	7,510,784	299,109	153.0	NSR					6
24YRAC012	7,510,859	300,076	159.0	NSR					6
24YRAC013	7,508,353	301,205	126.0	NSR					BW Central
24YRAC014	7,508,242	300,859	129.0	NSR					BW Central
24YRAC015	7,508,294	301,031	132.0	104.8	105.1	0.30	183	55	BW Central
24YRAC016	7,508,179	300,664	135.0	NSR					BW Central
24YRAC017	7,580,113	300,449	135.0	96.6	96.9	0.24	211	51	BW Central
24YRAC018	7,508,057	300,272	141.0	105.8	106.2	0.32	197	63	BW Central
				131.6	133.1	1.48	309	457	и
24YRAC019	7,507,787	300,068	141.0	109.8	110.1	0.30	196	59	BW Central
24YRAC020	7,507,452	300,107	127.0	101.6	102.0	0.40	223	89	BW Central

Notes:

- All holes drilled at -90° dip and 0° azimuth
- All holes have nominal RL = 44m +/- 1m AHD
- Grid coordinates GDA94: Zone 50, collar positions determined by hand held GPS
- Aircore Drilling using 55mm bit, with 1m samples collected for assay
- Downhole Wireline Logging recording gamma and density at 0.02m intervals
- eU_3O_8 determined from gamma logs, and density estimations, using a moisture factor of 1.11 and a disequilibrium factor of 1.07 (as determined in previous drilling programs)
- ullet Cut-Off grade for reporting 150ppm eU₃O₈, with minimum width of 0.2m and internal dilution maximum of 0.2m
- Results above 250ppm eU₃O₈ highlighted
- Incl. * = result at 500ppm eU₃O₈ cut-off
- Hole 24YRAC001 was a twin of previous holes YNDD018 and YNMR077
- DNRT = Did not reach target due to drilling difficulties
- NSR = No Significant Result



This announcement has been authorised for release to market by Ian Mulholland, Non-Executive Chairman of Cauldron Energy Limited.

ENDS

For further information, visit www.cauldronenergy.com.au or contact:

Jonathan Fisher Chief Executive Officer Cauldron Energy Limited M: +61 407 981 867

jonathan.fisher@cauldronenergy.com.au

Michael Fry
Director and Company Secretary
Cauldron Energy Limited
M: +61 417 996 454

michael.fry@cauldronenergy.com.au

Competent Person Statements

Exploration Results - Yanrey Uranium Project

The information in this report that relates to deconvolved eU_3O_8 results for the Yanrey Uranium Project, is based on information compiled by Mr David Wilson BSc., MSc., who is a member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a consultant to Cauldron Energy Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr. Wilson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results for the Yanrey Uranium Project, is based on information compiled by Mr. Angelo Socio BSc., who is a member of the Australian Institute of Geoscientists. Mr. Socio is an employee of Cauldron Energy Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr. Socio consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

This report also contains information that relates to exploration results extracted from company announcements released to the Australian Securities Exchange (ASX) listed in the table below and which are available to view at www.cauldroneneergy.com.au and for which the Competent Persons' consents were obtained.

Unless otherwise stated, where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

Date of Release	Title
17-12-2015	Substantial Increase in Mineral Resource at Bennet Well
24-01-2024	Yanrey Uranium Project Exploration Target

Mineral Resource Estimate - Bennet Well Deposit

The information in this report that relates to Mineral Resources for the Bennet Well 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 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.



Disclaimer

This market update has been prepared by Cauldron Energy Limited ("Company"). The material contained in this market update is for information purposes only. This market update is not an offer or invitation for subscription or purchase of, or a recommendation in relation to, securities in the Company and neither this market update nor anything contained in it shall form the basis of any contract or commitment.

This market update may contain forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Cauldron Energy Limited's business plans, intentions, opportunities, expectations, capabilities, and other statements that are not historical facts. Forward-looking statements include those containing such words as could-plan-target-estimate-forecast-anticipate-indicate-expect-intend-may-potential-should or similar expressions. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and which could cause actual results to differ from those expressed in this market update. Because actual results might differ materially to the information in this market update, the Company does not make, and this report should not be relied upon as, any representation or warranty as to the accuracy, or reasonableness, of the underlying assumptions and uncertainties. Investors are cautioned to view all forward-looking statements with caution and to not place undue reliance on such statements.



Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The principal sampling method for all drilling conducted at the Bennet Well and larger Yanrey project area has been by downhole geophysical gamma logging to determine uranium assay and in-situ formation density data. Data collected at 2 cm sample rate comprised gamma ray (Triple Gamma / Geiger Probe), single point resistivity and dual density. Downhole geophysical log data was collected by contractors, Wireline Services Group of Perth WA using Mount Sopris and GeoVista made downhole slim-line tools. All uranium grades are determined from the gamma (counts per second) logs using the (non dead-time corrected) calibrated gamma probe, the application of a smoothing filter on the raw data, HQ drill casing correction, hole-size correction, moisture correction, and a correction for secular disequilibrium. Drill hole formation density was estimated from the calibrated dual density probe (short spaced and long spaced measurements). These data were corrected for the high background gamma environment of the mineralised zone (by running the probe without the source in grades above 800 ppm eU ₃ O ₈) and for variations in hole-size by applying a hole-size correction model derived from the AMDEL calibration facility.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Downhole gamma logging was performed by Wireline Services Group using a Geovista 4322 total count gamma probe. Calibration of gamma probe was completed using non-dead-time corrected grade and hole-size correction models, and for the density sonde using a density model and a hole-size correction model. The probes were calibrated in Adelaide at the Department of Water facility in Regency Park.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Data was collected at 2 cm sample intervals down the length of the drillhole. Uranium assay grades were determined from gamma logs using a non dead-time corrected calibrated gamma probe, a smoothing filter on the raw data, hole-size correction, moisture correction, and a correction for secular disequilibrium. Downhole geophysical logging was undertaken by contractors, Wireline Services Group of Perth WA, using GeoVista made downhole slimline tools. Secular disequilibrium was established for the uranium mineralization at Yanrey during the previous exploration, by Cauldron Energy Ltd, in 2014. The equilibrium samples were from various mineralized intercepts at Yanrey and analyzed by ANSTO in Sydney.
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Not applicable.
Drilling techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka,	Air-core drilling completed during July and August 2024.



	sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Historical drilling within the Bennet Well – Yanrey project consists of various phases of rotary mud, aircore and diamond core drilling conducted between 1979 (historical) and 2014 (CXU). All holes were drilled vertically. The breakdown of programs is as follows: — pre-2013: historical drilling consisting mostly of aircore,
		comprising 285 holes for a total of 29,065 m and rotary mud, consisting of 95 holes for 8,993 m.
		¬ 2013: diamond core drilling comprising a total of 8 holes, consisting of 356 m rotary mud pre-collars and 257 m of HQ diamond core tails. The rotary mud pre-collars were drilled at a diameter of 5 ¾" while the diamond core tails were drilled with triple-tube PQ (diameter 83mm) in areas of hard drilling, and subsequently HQ (61mm) when the target zone of mineralisation was intersected.
		¬ 2014: approximately 90 % of the drill program was comprised of rotary mud (diameter for a total of 67 holes (5,785 m), while 10% consisted of triple tube diamond-drilled PQ core for a total of 6 holes (534m). The bore wall was stabilised by bentonite muds and chemical polymers.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Cauldron geologists logged the drill holes and assessed the sample recovery during the process.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Cauldron logged the drill holes and samples and used quality controls such as blanks, standards, and duplicates.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Cauldron has not identified any relationship between sample recovery and the determination of uranium assay from gamma ray data. Variations in uranium grade caused by changing drillhole size is minimised through an accurate measurement of hole diameter using a caliper tool and application of a hole-size correction factor. Hole-size correction models have been determined by Wireline Services Group, using data collected at the Department of Water calibration facility at Regency Park in Adelaide; with a hole-size correction factor derived as a function of drillhole diameter.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All air-core samples are collected and geologically logged to assist in the interpretation of the resistivity and density profiles derived from the downhole geophysical probes. Uranium assay for a potential in-situ leach project requires mineralisation to be hosted in a porous sedimentary sequence that is readily leachable. Porosity is estimated from the dual density data. No geotechnical data was collected due to the generally flat-lying geology and mostly unconsolidated sediments.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The geological logging completed was both qualitative (sediment/rock type, colour, degree of oxidation, etc.) and quantitative (recording of specific depths and various geophysical data). The samples were sieved and photographed wet (lightly sprayed with water) and dry. The logged intervals were sampled in calico bags at 1m and samples from intervals > 100ppm eU $_3$ O $_8$ will be sent for laboratory analysis of U and V.
	The total length and percentage of the relevant intersections logged.	The gamma ray results were logged to the database and were used together with the geology and mineralogy information to establish U interceptions with are being reported in this announcement.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.



cample	If non-care whether riffled tube compled	Couldren collected a comple material directly from the evalence
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Cauldron collected a sample material directly from the cyclone splitter into industry standard calico bags to obtain up to 3 kg of material representing every 1 metre drilled. The remaining (approx. 90%) of sample material was collected in large green plastic bags (majority dry) from the cyclone splitter and put on the ground. Each bag contained sample material equivalent to a 1 metre interval. Notes were registered in the logging when there was a wet sample.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Air-core drilling allows the passage of geophysical probes which can derive assay for uranium mineralisation. A check against assay and density derived from gamma and density probes, respectively, will be completed using physical sampling derived from core drilled during the 2014 program. Cauldron collected a sample material directly from the cyclone splitter into industry standard calico bags to obtain up to 3 kg of material representing every 1 metre drilled and samples from intervals > 100ppm eU ₃ O ₈ will be sent for laboratory analysis of U and V.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	A reference drill hole, containing uranium mineralization, was established to provide a regular check on the repeatability of the gamma probe. This cross-check is also used to check if the correct calibration models are applied to the data, and to ascertain potential spurious results from a damaged probe or a probe that drifts out of calibration range.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Quality controls such as blanks, standards, and duplicates were also utilised.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is believed to be appropriate and will include further crushing and pulverising at the laboratory
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	No assay results are being reported.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	No assay results are being reported.
	The verification of significant intersections by either independent or alternative company personnel.	No assay results are being reported.



Verification of sampling and assaying	The use of twinned holes.	24YRCAC001 twinned a historical high-grade zone (YNMR077/YNDD018) within this palaeochannel as a 'test' run to ensure all equipment was working correctly before commencing exploration drilling. For comparison, at a 150ppm eU $_3$ O $_8$ cut-off, the three holes had intercepts of: YNMR077 87.4 – 88.4m, 1.00m@ 338ppm eU $_3$ O $_8$ 88.9 – 91.3m, 2.40m@ 1,205ppm eU $_3$ O $_8$ 95.9 – 97.5m, 1.15m@ 222ppm eU $_3$ O $_8$
		YNDD018
		24YRAC001 89.9 – 96.9m, 7.00m @ 543ppm eU ₃ O ₈
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	No assay results are being reported.
	Discuss any adjustment to assay data.	No assay results are being reported.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Cauldron has surveyed the collar positions of the drill holes with handheld GPS, and the survey provided good precision and accuracy. The holes will soon be surveyed by differential RTK GPS for very high precision. The quality of survey data is fit for the purpose of planning exploration programs, generating targets for investigation, and further resource definition. No Mineral Resource or Ore Reserve has been estimated.
	Specification of the grid system used.	Cauldron utilised GDA2020 zone 50.
	Quality and adequacy of topographic control.	The primary topographic control is from SRTM. This technique is adequate given the generally flat-lying nature of the sediments. The highly accurate RTK pickups of collars from the 2013-2015 drilling is for only a small portion of the total drilling of the deposit. Lidar DTM was used for topographic control over the 2015 drilling at Bennet Well resource. Outside the Bennet Well resource, the SRTM derived data provide the best means to mitigate against level-busts that would occur with RL derived from two different methods. Cauldron has surveyed the collar positions of the drill holes reported in this announcement with handheld GPS, and the survey provided good precision and accuracy. The holes will soon be surveyed by differential RTK GPS for very high precision.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	For the present drilling program, most air-core drill holes are spaced along lines at between 150m and 250m W-E. The drill lines were 400-500m apart, as shown in Figure 8. Spacing of holes drilled historically is variable between 30 and
		200m on individual fence lines, and 50m to 1,100m between fence lines along the strike. Spacing of the core holes from the 2013 drilling program varied between 350m and 800m within individual prospects.
		The spacing of the drill holes from the 2014 program varied between 10 m and 800 m within individual prospects.



		The spacing of the drill holes from the 2015 program varied between 50m and 250m within individual prospect.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The area occupied by the deposit is very large and therefore drill spacing has always been Variable. No Mineral Resources or Ore Reserves have been estimated based on the reported drill holes, drilled between July and August 2024.
	Whether sample compositing has been applied.	For the present AC drilling program, downhole geophysical data was collected at 2 cm sample intervals. All downhole geophysical data was later composited to 0.01 m increments for reporting the AC drilling results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	All drill holes were drilled vertically since the sediments are mostly unconsolidated and generally flat-lying. All holes therefore, sample the true width of mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No sampling bias is observed by the orientation of the drill holes.
Sample security	The measures taken to ensure sample security.	Chips collected from each aircore drill hole are stored securely in a locked sea-container at the Bennet Well Exploration Camp. Diamond drill core from the 2008 and 2013 drill programs is also stored at a secure location on the project site, in lockable sea containers. When sample bags (calico) transported to Perth for lab assaying, the following procedure is followed:
		 A Ludlum Alpha/Gamma Surface meter is then used to measure the concentration of alpha/gamma particles (if any) being emitted from each of the pallets. Pending the results of these surveys, and in accordance with the Safe Transport of Radioactive Material guidelines issued by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), the appropriate transport documentation was inserted into the top layer of plastic pallet wrap in such a way as to be visible to the transporter, if required. Upon arrival at the desired destination in Perth, the samples are finally inspected by senior Cauldron personnel to check that sample integrity has been maintained.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Cauldron's Competent Person has verified all sampling techniques and data collection is of high standard and no reviews are required at this stage.



Section 2: Report of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Yanrey Uranium Project comprises 12 granted exploration tenements and one exploration licence under application (E08/1489, E08/1490, E08/1493, E08/1501, E08/2017, E08/2081, E08/2205, E08/2385, E08/2386, E08/2387, E08/3088, E08/2774 and E08/3611) in northwest Western Australia. covering a total area of 1,270 km ² .
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All tenements are in good standing and Cauldron is unaware of any impediments to exploration of these licences.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	A 70 km long regional redox front and several palaeochannels were identified by open hole drilling by CRA Exploration Pty Ltd (CRAE) during the 1970s and early 1980s. CRAE drilled over 200 holes in the greater Yanrey Project area, resulting in the discovery of the Manyingee Deposit and the identification of uranium mineralisation in the Bennet Well channel and the Spinifex Well Channel. Uranium mineralisation was also identified in the Ballards and Barradale Prospects.
Geology	Deposit type, geological setting and style of mineralisation.	At least 15 major palaeochannels have been identified in the greater Yanrey project area at the contact between the Cretaceous aged marine sediments of the Carnarvon Basin and the Proterozoic Yilgarn Block which lies along the granitic and metamorphic ancient coastline. These palaeochannels have incised the underlying Proterozoic-aged granite and metamorphic rocks, which are subsequently filled and submerged by up to 150m of mostly unconsolidated sand and clay of Mesozoic, Tertiary and Quaternary age. The channels sourced from the east enter into a deep north-south trending depression that was probably caused by regional faulting and may be a depression formed at the former Mesozoic-aged coastline.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: o easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Refer to table one above titled "Table 1: Bennet Well Drill Results – Holes 24YRAC001 to 24YRAC020"
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Not applicable.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Average reporting intervals are derived from applying a cut- off grade of 150 ppm U3O8 for a minimum thickness of 0.20m.



	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	The length of assay sample intervals varies for all results, therefore a weighted average on a 0.20m composite has been applied when calculating assay grades to take into account the size of each interval. The higher-grade intervals quoted in Table 1 are derived by length averaging intervals greater than 0.20m width that have assays above 500ppm eU $_3$ O $_8$; sometimes these higher grade intervals appear inside a lower grade zone defined by the lower 150 ppm cutoff. A maximum internal dilution of 0.20m was used to aggregate a thin barren zone within bounding higher-grade material as long as the grade-thickness of the entire interval was above cutoff (= 150 x 0.20m).
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	All drilling at Bennet Well is vertical. The 2015 3D interpretation and establishment of a mineralisation model has determined that the uranium mineralisation dips very shallowly (no more than 2-3°) to the west at Bennet Well East, yet at Bennet Well Central the mineralisation is observed to follow the contours of the underlying granitic basement. The overall dip of the mineralisation in the Bennet Well Resource Area could be described as sub-horizontal therefore, all mineralisation values could be considered the true width.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The 2015 3D interpretation and establishment of a mineralisation model has determined that the uranium mineralisation dips very shallowly (no more than 2-3°) to the west at Bennet Well East, yet at Bennet Well Central the mineralisation is observed to follow the contours of the underlying granitic basement. The overall dip of the mineralisation in the Bennet Well Resource Area could be described as sub-horizontal therefore, all mineralisation values could be considered the true width.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The 2015 3D interpretation and establishment of a mineralisation model has determined that the uranium mineralisation dips very shallowly (no more than 2-3°) to the west at Bennet Well East, yet at Bennet Well Central the mineralisation is observed to follow the contours of the underlying granitic basement. The overall dip of the mineralisation in the Bennet Well Resource Area could be described as sub-horizontal therefore, all mineralisation values could be considered the true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Included in the body of this report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All drill locations are shown in Table 1; intercepts that are greater than 150 ppm for at least 0.20m in thickness.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk	Metallurgical sighter testing was completed by the Australian Nuclear Science and Technology Organisation (ANSTO) for the diamond core drilled in 2013, with further testing drilled in 2014 and 2015. Geochemical assaying was also completed for the diamond core from both 2013, 2014 and 2015.



	density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further AC and Core drilling to increase the Mineral Resource of the Bennet Well deposit. Further passive seismicity surveys to further map paleochannels and exploration drilling is required to identify extensions to mineralisation.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Plans and sections have been included in this report.