ASX ANNOUNCEMENT

22 May 2025

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EXTENSIVE PALAEOCHANNEL SYSTEMS WITHIN NEWLY ACQUIRED TENEMENTS

Highly Prospective For Uranium Mineralisation

HIGHLIGHTS

- **Review of exploration data over tenements recently acquired from Wyloo Metals Ltd (Wyloo) largely completed**
- **An extensive palaeochannel system, interpreted from airborne EM and passive seismic surveys, is evident**
- **Upstream extension of Manyingee South uranium deposit covered by one of the newly acquired tenements**
- **Tenements acquired cover an area of 177.3 km² and lie adjacent to existing tenements, bringing total tenement coverage at Yanrey owned by Cauldron to 1,327 km²**

Cauldron has been conducting a detailed review of historic exploration information provided as part of the tenement transaction with Wyloo, and integrating that into the broader regional understanding. The Company has been extremely pleased with the quality and quantity of the historic information provided, which has significantly improved the understanding of the regional geology and prospectivity.

Drilling by Cauldron during 2024 discovered substantial uranium mineralisation at Manyingee South. A high-grade zone was located in the south-eastern corner of Cauldron's tenement E08/1489 with mineralisation remaining open and interpreted to extend upstream into the adjacent tenement E08/3204, newly acquired from Wyloo. This has provided high priority step out targets for additional drilling to extend the mineralisation which is not fully constrained.

Manyingee South remains open in most directions with the full width of the palaeo-channel spanning up to 1,100m over a length of more than 3,000m. An exploration program to test the continuation of uranium mineralisation south into the newly acquired tenement E08/3204 and potentially further upstream onto the adjoining tenement E08/3036 is being planned.

The other tenements acquired from Wyloo, include E08/3068, E08/3201, E08/3686 and E08/3688, and lie within an interpreted large embayment where prospective Cretaceous sedimentary rocks blanket extensive exposures of uranium-bearing granites.

Geophysical survey data indicate the likely presence of a substantial palaeodrainage system within the embayment feeding into the Manyingee Deposits. Preliminary drilling undertaken by Wyloo has confirmed the presence of palaeochannels infilled with the same sediments hosting mineralisation at Manyingee and Manyingee South.

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Cauldron considers the area inside the embayment, particularly on its western and southern margins, to be highly prospective for uranium and warrants further exploration.

Cauldron continues to review and compile all available historic data and is planning future exploration including passive seismic and drilling.

Cauldron CEO Jonathan Fisher commented:

"The acquisition of the six tenements from Wyloo was part of our strategy to expand our footprint at Yanrey in a significant, fertile uranium province. The additional data received through the transaction clearly demonstrates the excellent uranium potential of the tenements, which remain relatively poorly tested. Cauldron's technical team is excited about the favourable geological location and setting of the tenements and their uranium prospectivity. We look forward to further updates as we continue to advance our understanding of these newly acquired tenements and the Yanrey Project tenements generally.

Cauldron is confident that there is significant additional uranium still to be discovered at Yanrey; and as we push forward with further exploration programmes, which will include systematically testing our existing Exploration Targets, these new tenements will provide further opportunities to generate additional Exploration Targets at Yanrey."

BACKGROUND

Cauldron Energy Limited's (Cauldron or "the Company") fully owned Yanrey Uranium Project is located approximately 100 km south of Onslow and covers an area of ~1,327km^2 (Figure 1) encompassing over 80 kms of ancient, Cretaceous-age sedimentary coastline prospective for sedimentary-hosted uranium deposits. It is located within a highly prospective, mineral-rich region host to multiple prospective palaeochannel systems sourced by uranium-bearing granitoid uplands to the east and stretching from the Carley Bore Uranium Deposit in the south to the Spinifex Well Uranium prospect and beyond, in the north.

The Yanrey Uranium Province contains at least 85 Mlbs of uranium-oxide, and hosts four currently known uranium deposits so far:

- Cauldron's Bennet Well Uranium deposit containing **30.9 Mlb of uranium-oxide (38.9Mt at 360ppm eU_3O_8)at 150ppm cut-off**, refer ASX announcement of 17 December 2015 and Appendix A),
- Cauldron's Manyingee South Uranium deposit containing **11.1 Mlbs of uranium-oxide (15.5Mt @ 325 ppm eU_3O_8)at 100ppm cut-off**, refer ASX announcement of 3 April 2025 and Appendix B),
- Paladin's (ASX: PDN) Manyingee Deposit containing an estimated **25.9Mlbs of uranium-oxide (13.8Mt at 850ppm eU_3O_8) at 250ppm cut-off** – ASX: PDN "Fy2024 Annual Report"),
- Paladin's Carley Bore Deposit containing **15.6Mlbs of uranium-oxide (22.8Mt at 310ppm eU_3O_8) at 150ppm cut-off** – ASX: PDN "Fy2024 Annual Report"), and
- Energy Metals' (ASX: EME) Manyingee East Deposit containing an estimated **2.85Mlbs of uranium-oxide (2.84Mt at 455ppm eU_3O_8) at 250ppm cut-off** – ASX: EME "Fy2024 Annual Report").

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This large inventory of uranium demonstrates the significant scale of uranium mineralisation identified in the Yanrey Uranium Province to date, and suggests there is still enormous potential to identify further uranium mineralisation and deposits within the region and within Cauldron's Yanrey Project tenements.

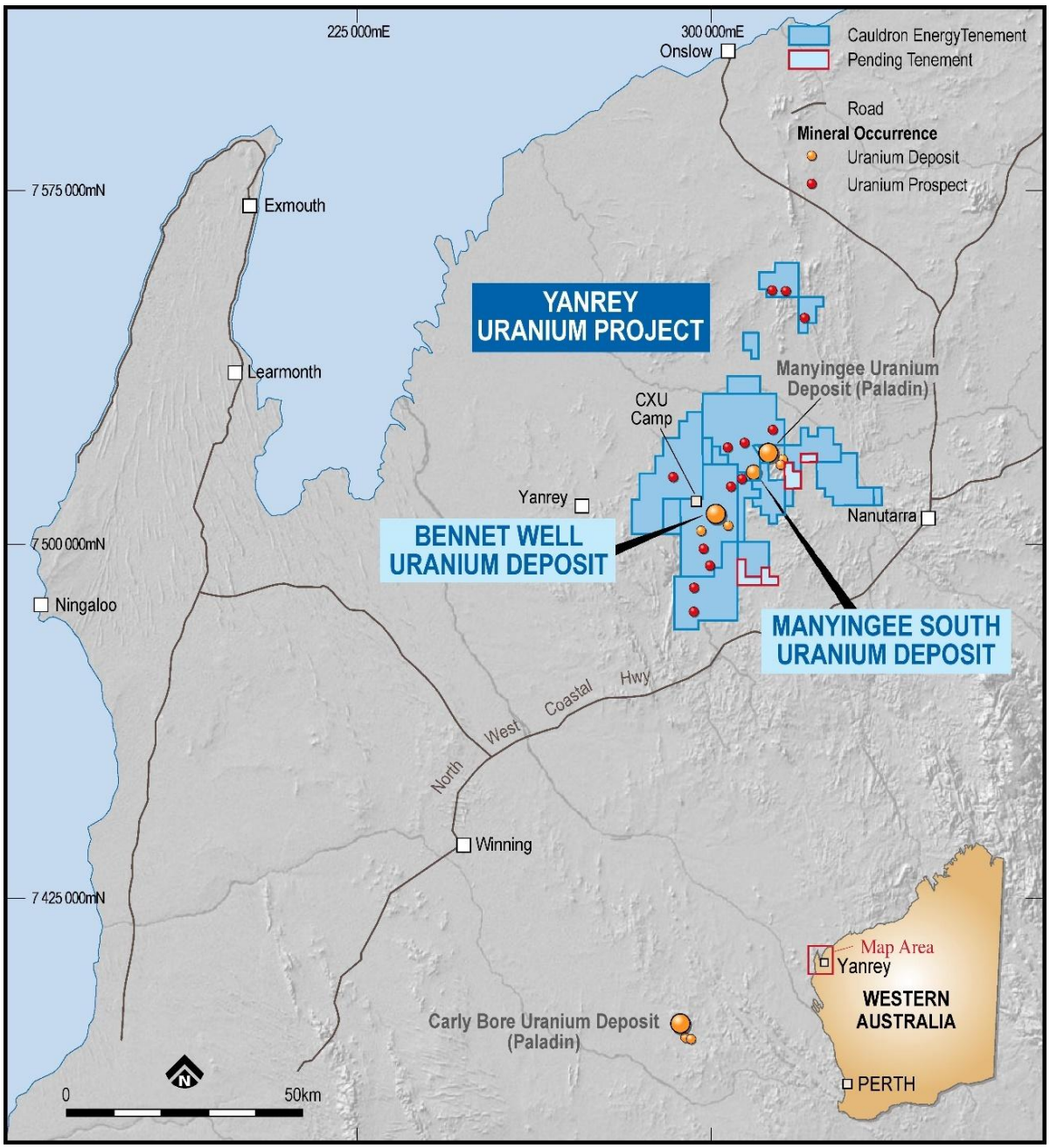


Figure 1. Location of the Yanrey Uranium Project

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TENEMENT ACQUISITIONS

Cauldron recently acquired six tenements from Wyloo Metals Ltd (Wyloo) covering 177.3km^2. Details are set out in the table and on the map below (Figure 2).

Tenement ID	Status	Size (blocks)	Size (km^2)
E08/3036	Granted	2	6.3
E08/3068	Granted	28	88.8
E08/3201	Granted	2	6.3
E08/3204	Granted	17	53.7
E08/3686	Application	5	15.8
E08/3688	Application	2	6.3

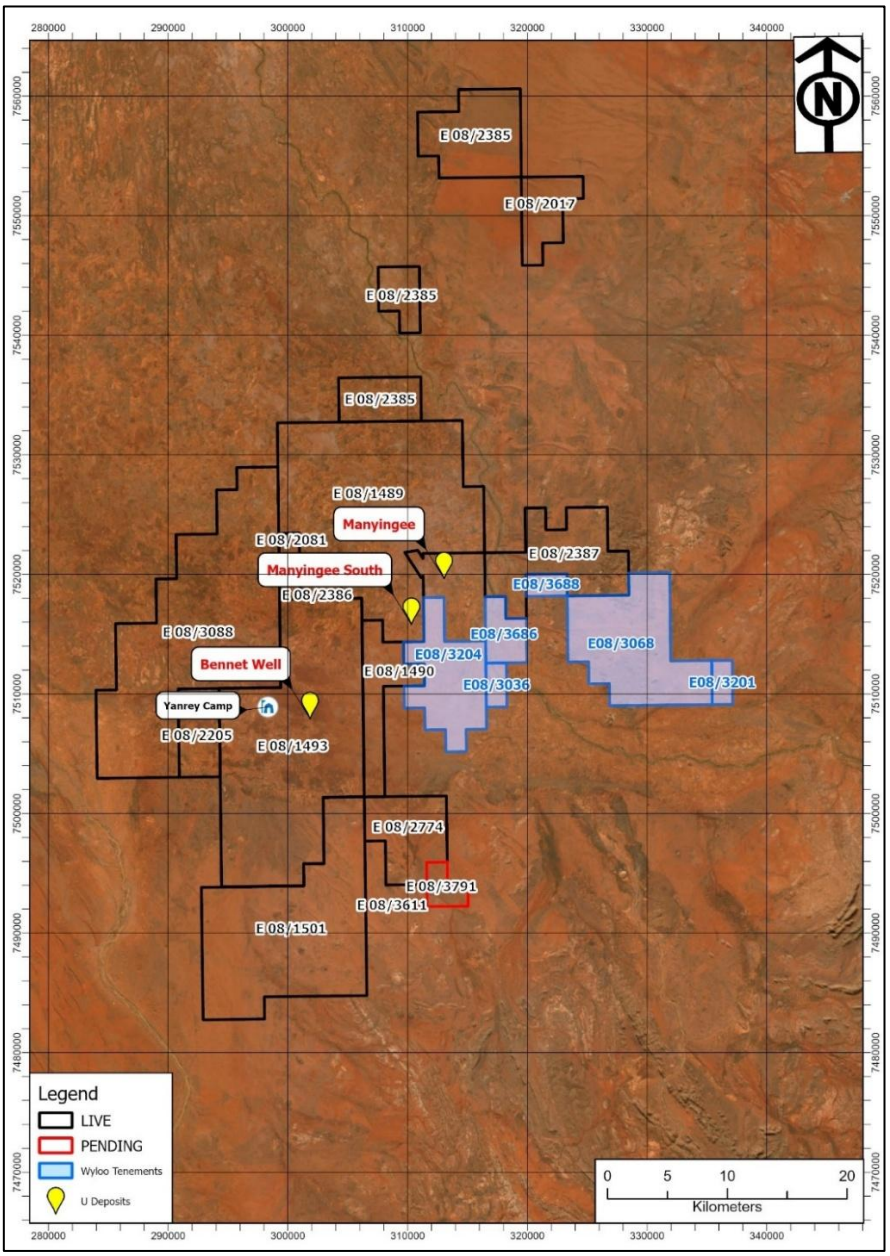


Figure 2. Location of Cauldron's Yanrey Project tenements showing newly acquired Wyloo tenements in blue.

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GEOLOGY

Regional geology

The Project area lies at the margin between Cretaceous aged marine and terrestrial sediments of the Carnarvon Basin to the west, and Proterozoic rocks of the Capricorn Orogen comprising sequences of the Gascoyne and Nabberu Provinces (Figure 2) to the east. The Gascoyne province comprises mostly medium- to high-grade metamorphic rocks intruded by many fertile uraniferous granites. The Nabberu province comprises low metamorphic grade sedimentary and volcanic units (Figure 2).

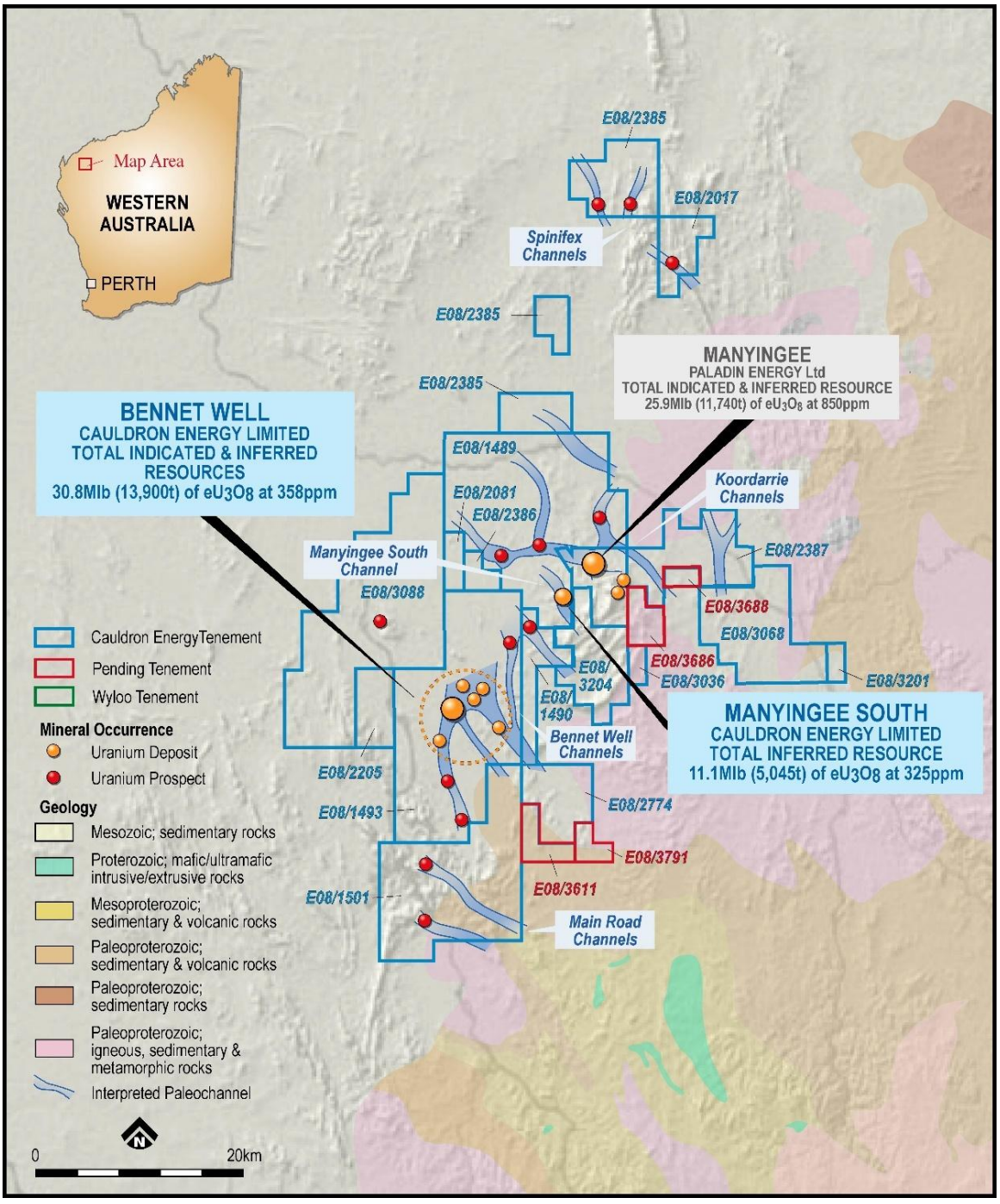


Figure 3. Yanrey Uranium Project regional geology.

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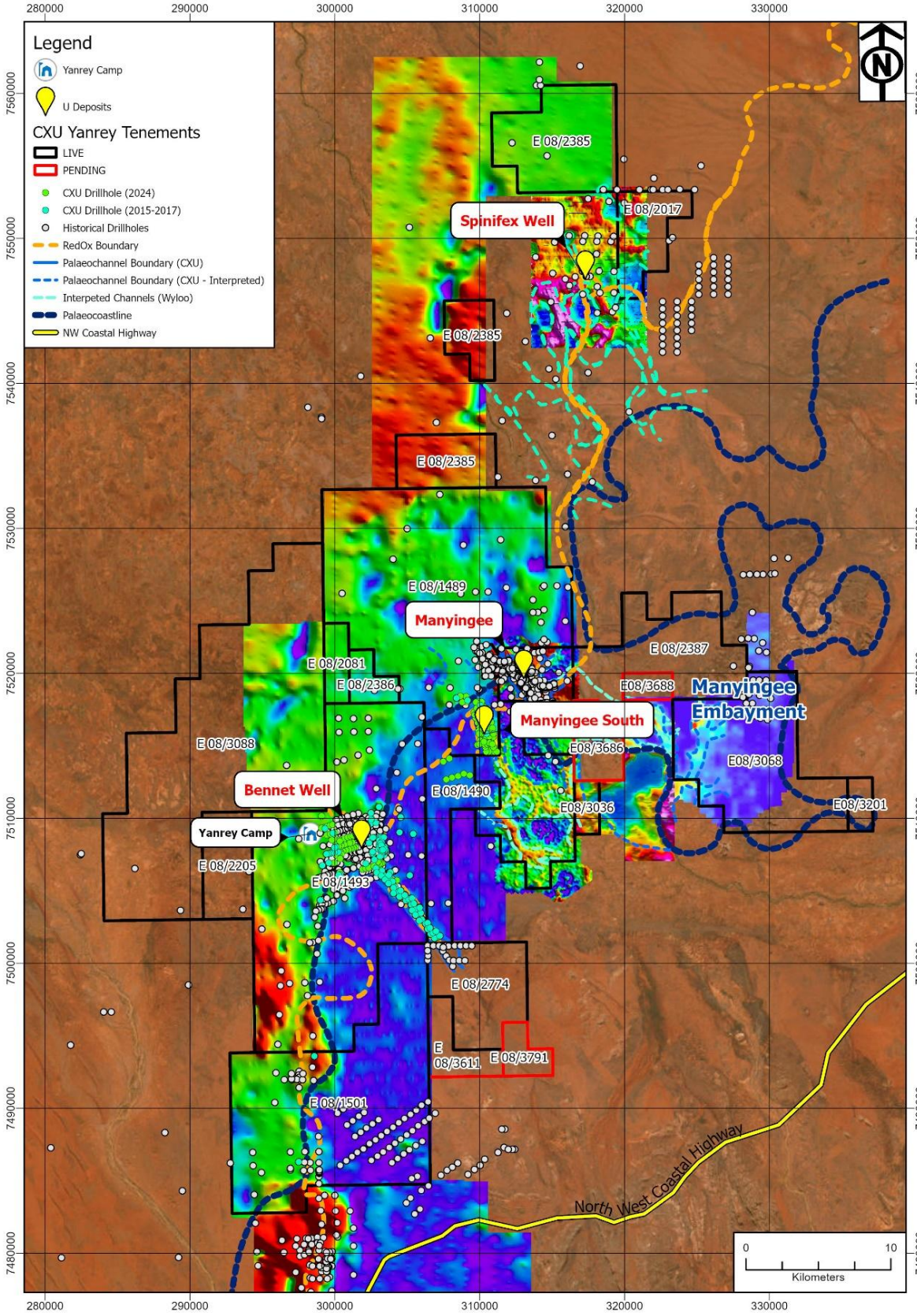


Figure 4. Combined airborne electromagnetic (AEM) survey imagery over the Yanrey region showing Cauldron's tenement holdings over the extensive Cretaceous palaeochannel system. Note Cauldron's newly acquired tenements east of Manyingee/Manyingee South covering the Manyingee Embayment.

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Cretaceous units at Yanrey onlap the Proterozoic bedrock and represent the onshore component of the North Carnarvon Basin. These sediments were deposited in response to the continental breakup of Gondwana in this region of northwestern Western Australia when the continent lay at subantarctic latitudes. The contact between the Cretaceous and Proterozoic rocks represents the ancient coastline along the margins of the continental rift.

An extensive palaeodrainage network is developed along the Cretaceous palaeo-coastline. Cauldron's tenement holdings cover at least 15 major palaeochannels (Figure 3, Figure 4) incising progressively deeper as they flowed north-northwest from outcropping uraniferous granite and granitic gneiss basement in the south and southeast.

Uranium in solution has been transported via the flow of oxidised groundwater downstream from its source in the granitic hinterland, downstream to reduced trapsites within carbonaceous estuarine and fluvial sediments/deposits developed along the palaeo-coastline.

Regional structures are dominantly north-northwest to south-southeast with a secondary northeast to southwest orientation. Coastal embayments formed at the junctures of cross-cutting fault structures where downfaulted fault blocks created depressions and half-grabens.

Broadly speaking the tenements acquired from Wyloo cover the majority of the Manyingee Embayment, a >20km deep indentation in the Cretaceous coastline infilled with prospective Cretaceous coastal plain and marginal marine sediments (Nanutarra Formation & Yarraloola Conglomerate). Cretaceous rocks are extensively exposed within the east of the embayment where they onlap onto extensive exposures of uraniferous granites.

Cauldron's Manyingee South deposit and Paladin's Manyingee deposit lie on the western end of this embayment where estuarine sediments were deposited along the interpreted Early Cretaceous shoreline. Drilling by Paladin Resources and Energy Metals Ltd indicates that mineralisation at Manyingee is not closed out and is likely to extend to the north (onto ground held by Cauldron) and further upstream to the east. Cauldron's recently acquired tenements lie immediately upstream of the Manyingee and Manyingee South Uranium Deposits and cover the prospective upper estuarine and fluvial portions of the palaeodrainage system within the embayment.

Wyloo undertook initial exploration work involving airborne EM surveys that defined an extensive palaeodrainage system within the region. This was later followed up by confirmatory passive seismic surveying over the interpreted palaeochannels and surrounding the Manyingee deposit. Comparison of airborne EM (Figure 5) and passive seismic (Figure 6) shows a good fit between the methodologies. Wyloo then drilled select lines of holes between 5-10km apart as 'proof of concept'. Hole locations are shown in Figure 5 & Figure 6.

The majority of these holes intersected <50m of generally oxidised palaeochannel sediments confirming the movement of oxidising waters down the palaeochannel towards the Manyingee and Manyingee South Deposits. However, drillhole logs indicate prospective redox boundaries associated with reduced sediments were also encountered within the palaeovalley thalwegs in approximately 30% of their drillholes. Inspection of cuttings samples within the Cheetara Palaeochannel (draining into Cauldron's Target 14) indicated the presence of lignite and oxidised sands. Crucially downhole logging of these drillholes was not undertaken. Instead geochemical assays of composite samples, and scanning of samples with a handheld RadEye radiation detector was the method used to identify mineralisation. Cauldron considers this method of sampling to be sub-optimal given the large sample intervals and therefore dilution that would result.

Cauldron is currently reviewing the available geophysical and drilling data in order to plan follow up passive seismic surveys and other exploration.

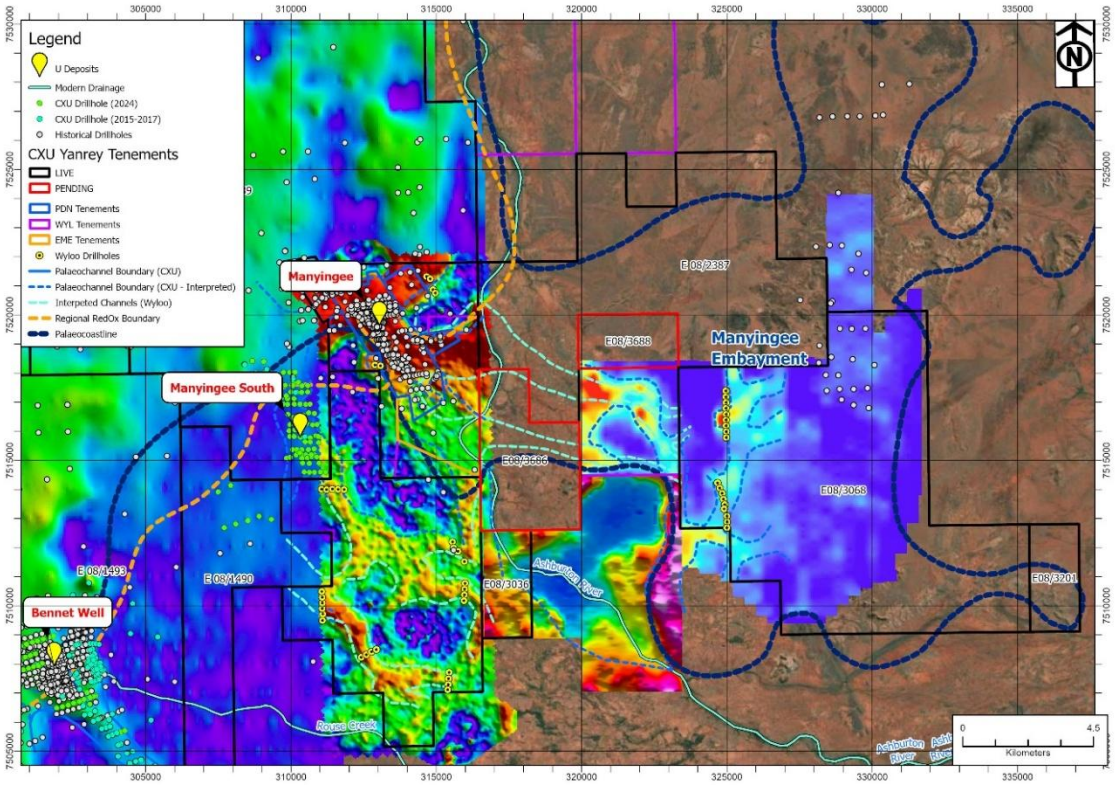


Figure 5. Combined airborne electromagnetic (AEM) survey imagery over the Manyingee Embayment. Hotter colours = more conductive (thicker palaeochannel sediments), cooler colours = non-conductive (resistive) bedrock.

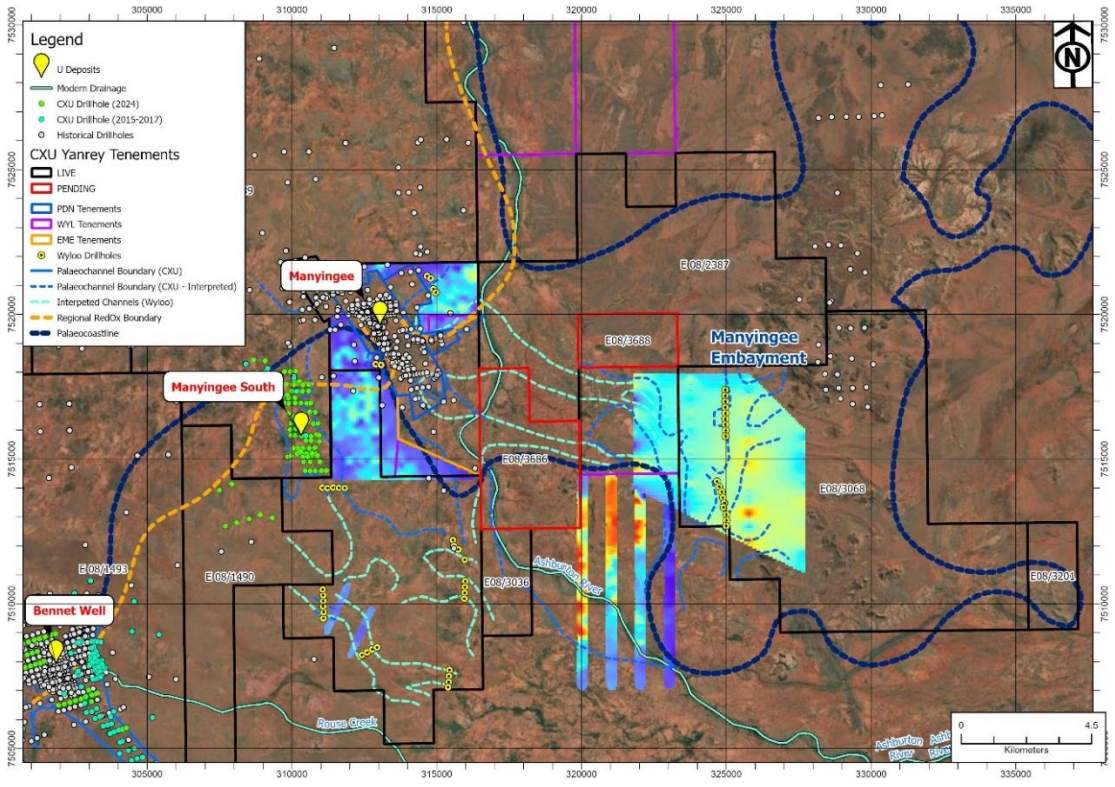


Figure 6. Combined passive seismic survey imagery over the Manyingee Embayment. Hotter colours = shallow, cooler colours = deeper.

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Tenement ID	Status	Size (blocks)	Size (km^2)	Comments
E08/3036	Granted	2	6.3	Small tenement located upstream in the headwaters of the Manyingee South palaeochannel.
E08/3068	Granted	28	88.8	Tenement covers the majority of the central Manyingee Embayment.
E08/3201	Granted	2	6.3	Small tenement located upstream in the headwaters of the Manyingee palaeochannel. Large outcrop of Yarraloola Conglomerate within the tenement.
E08/3204	Granted	17	53.7	Highly prospective tenement containing known palaeochannel sediments. Adjoining and immediately upstream of Manyingee South Uranium Deposit.
E08/3686	Application	5	15.8	Upstream extension of Manyingee Palaeochannel
E08/3688	Application	2	6.3	Small tenement covering downstream end of Peepingee Creek. Potential to host upstream continuation of Manyingee Palaeochannel.

This announcement has been authorised for release by Ian Mulholland, Cauldron Non-Executive Chairman.

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

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About Cauldron

Cauldron Energy Limited is an ASX-listed uranium-focussed company, 100% owner of the Yanrey Uranium Project, covering an area of ~1,327km^2, located approximately 100 km south of Onslow and within a highly prospective, mineral-rich region containing multiple uranium deposit. The Yanrey Project covers a prospective northeast-southwest trending Cretaceous-age coastal plain developed along the western margin of the Pilbara block. This prospective trend extends for at least 140km in length, of which Cauldron holds ~80km under granted tenement.

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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.

Competent Person Statements

Exploration Results – Yanrey Uranium Project

The information in this report that relates to Exploration Results for the Yanrey Uranium Project, is based on information compiled by Mr. John Higgins, B.Sc (Hons), GCPG&G, who is a member of the Australian Institute of Geoscientists. Mr. Higgins is a full time 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. Higgins 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). 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.

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.

Mineral Resource Estimate – Manyingee South Deposit

The information in this report that relates to Mineral Resources for the Manyingee South Deposit is extracted from a report released to the Australian Securities Exchange (ASX) on 3 April 2025 titled "Maiden MRE for Manyingee South Deposit" 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 3 April 2025 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

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Appendix A: Bennet Well Mineral Resource Estimate

A Mineral Resource Estimate (JORC 2012) for the mineralisation at Bennet Well was completed by Ravensgate Mining Industry Consultants (Ravensgate) in 2015 and is based on information compiled by Mr Jess Oram, Executive Director of Cauldron Energy at that time and Mr Stephen Hyland, who was a Principal Consultant of Ravensgate. Mr Oram is a Member of the Australasian Institute of Geoscientists and Mr Hyland is a Fellow of the Australasian Institute of Mining and Metallurgy.

The mineralisation at Manyingee South is a shallow accumulation of uranium hosted in unconsolidated sands close to surface (less than 100 m downhole depth) developed within a palaeochannel of Early Cretaceous age.

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.

The Mineral Resource (JORC 2012) estimate is:

- Inferred Resource: 16.9 Mt at 335 ppm eU_3O_8 for total contained uranium-oxide of 12.5 Mlb (5,670 t) at 150 ppm cut-off;
- Indicated Resource: 21.9 Mt at 375 ppm eU_3O_8 for total contained uranium-oxide of 18.1 Mlb (8,230 t) at 150 ppm cut-off;
- total combined Mineral Resource: 38.9 Mt at 360 ppm eU_3O_8, for total contained uranium-oxide of 30.9 Mlb (13,990 t) at 150 ppm cut-off.

Table A: Bennet Well Deposit Mineral Resource (JORC 2012) at various cut-off grades.

Deposit	Cutoff (ppm eU_3O_8)	Deposit Mass (t)	Deposit Grade (ppm eU_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (lbs)
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

Deposit	Cutoff (ppm U_3O_8)	Deposit Mass (t)	Deposit Grade (ppm U_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (lbs)
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 U_3O_8)	Deposit Mass (t)	Deposit Grade (ppm U_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (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 1: table shows rounded numbers therefore units may not convert nor sum exactly, **Note 2***:* preferred 150 ppm cut-off shown in bold

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Appendix B: Manyingee South Resource Estimate

A Mineral Resource Estimate for the mineralisation at Manyingee South was completed by AMC Consultants Pty Ltd (AMC) in 2025.

The Mineral Resources were reported in accordance with the JORC (2012) Code. The MRE was completed by Mr Dmitry Pertel, Principal Geologist of AMC. Geological information and Quality Assurance and Quality Control (QAQC) analysis was completed by Cauldron's Exploration Manager, Mr John Higgins and assisted by Mr Robert Annett, consulting geologist engaged by Cauldron. The conversion of downhole gamma grades to estimated eU3O8 grades was undertaken by Mr David Wilson, Principal Geoscientist with 3D Exploration. Dmitry assumes Competent Person status for the reported Mineral Resources, John and Robert assume Competent Person status for the Geological information and QAQC analysis, and David assumes Competent Person status for the reported eU3O8 grades.

The mineralisation at Manyingee South is a shallow accumulation of uranium hosted in unconsolidated sands close to surface (less than 100 m downhole depth) developed within a palaeochannel of Early Cretaceous age.

The Mineral Resource (JORC 2012) estimate is:

- Inferred Resource: 15.5 Mt at 325 ppm eU_3O_8 for total contained uranium-oxide of 11.1 Mlbs (5,045 t) at 100 ppm eU_3O_8 cut-off.

Table B: Manyingee South Deposit Mineral Resource (JORC 2012) at various cut-off grades.

Deposit	Cutoff	Tonnes	eU_3O_8	
	(ppm eU_3O_8)	*(Mt)*	*Grade (ppm)*	*Metal (Mlbs)*
Manyingee South Inferred	0	15.48	324	11.07
Manyingee South Inferred	**100**	**15.47**	**325**	**11.07**
Manyingee South Inferred	125	15.42	325	11.06
Manyingee South Inferred	150	14.92	331	10.9
Manyingee South Inferred	175	14.19	340	10.64
Manyingee South Inferred	200	13.12	352	10.19
Manyingee South Inferred	250	9.71	396	8.48
Manyingee South Inferred	300	7.09	443	6.92
Manyingee South Inferred	400	4.4	500	4.84
Manyingee South Inferred	500	1.5	622	2.05
Manyingee South Inferred	800	0.07	1056	0.16

Manyingee South grade tonnage report with cut-off grades between 0 and 800ppm eU_3O_8 applied to Uranium oxide grades. The Mineral Resource classification applies to the 100ppm cut-off grade.