11 October 2024



YANREY URANIUM PROJECT

FURTHER EXCELLENT DRILLING RESULTS CONTINUE TO GROW MANYINGEE SOUTH URANIUM DEPOSIT

Highlights

- Results have been received for a further 30 drill holes (24YRAC060 to 24YRAC089) completed at Manyingee South, extending the near-surface, strongly uranium mineralised north-south trend to at least 3 kilometres in length.
- Drilling is continuing to define the longitudinal (north-south) and lateral (east-west) extents of the mineralised system within the Manyingee South palaeochannel.
- Cauldron's Manyingee South prospect (Target 15) lies 4.5kms south of Paladin's (ASX: PDN) Manyingee Deposit, a globally renowned ISR uranium deposit.
- Drill-holes 24YRAC060, 24YRAC065, 24YRAC076 and 24YRAC078 returned excellent results with stacked zones of uranium mineralisation (up to 669ppm eU₃O₀ over 2.92 metres) providing strong further evidence of interpreted "roll-front-type" mineralisation:

Drill hole 24YRAC060;

1.00 m @ 384 ppm eU₃O₈ from 49.42m, and 0.80 m @ 402 ppm eU₃O₈ from 51.66m.

Drill hole 24YRAC065;

2.92 m @ 669 ppm eU $_3$ O $_8$ from 54.84m, including 1.80m @ 838 ppm eU $_3$ O $_8$ from 55.06m, and 0.72 m @ 570 ppm eU $_3$ O $_8$ from 61.02m.

Drill hole 24YRAC076;

1.08 m @ 310 ppm eU₃O₈ from 71.78m.

Drill hole 24YRAC078;

0.58 m @ 324 ppm eU₃O₈ from 61.22m, 0.74 m @ 375 ppm eU₃O₈ from 63.60m, 1.46 m @ 290 ppm eU₃O₈ from 65.56m.

- Several east-west sections across the interpreted palaeochannel show uranium mineralisation over widths of ~600m with the mineralised system remaining open to the west and east on most drill lines.
- Drill-logging at Manyingee South indicates that the stratigraphic units show strong similarities to Paladin's adjacent Manyingee Deposit with uranium mineralisation interpreted to lie in a palaeochannel parallel to the Manyingee deposit channel.
- The existence of uranium mineralisation in the furthermost north-western hole 24YRAC089 indicates that the uranium mineralisation appears to have dog-legged to the west (similar to that at Paladin's Manyingee deposit) and extends to the north-west, where a significant co-incident electromagnetic high is evident. This will be the subject of future investigation once heritage clearance is obtained.



- Mineralisation is developed at prominent stacked redox boundaries and is consistent with interpreted roll-front-style uranium mineralisation similar to that reported at Manyingee.
- Cauldron's Yanrey Uranium Project covers more than 80 kms length of ancient, Cretaceous-age sedimentary coastline, host to multiple prospective paleochannel systems sourced by uranium-bearing granitoid uplands to the south and east and stretching from Paladin's Carley Bore Uranium Deposit in the south to Cauldron's Spinifex Well Uranium Prospect in the north.
- The Manyingee South channel is one of several palaeochannels already identified in Cauldron's tenement area with each channel holding potential to host uranium mineralisation and requiring future drill testing.

ABOUT THE YANREY URANIUM PROJECT

Cauldron's fully owned Yanrey Uranium Project is located approximately 100 km south of Onslow and covers an area of ~1,150km² (Figure 1) and is located within a highly prospective, mineral-rich region containing multiple uranium deposits including the neighbouring Manyingee Deposit (owned by Paladin Energy Ltd) (Figure 2). The Yanrey Project covers a prospective northeast-southwest trending Cretaceousage 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.

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, refer ASX announcement of 17 December 2015 and Appendix A), and is a **globally significant uranium deposit**. Laboratory based testwork has confirmed that the Bennet Well uranium mineralisation is amenable to in situ leaching. Much of the Yanrey project area remains ineffectively tested or untested, with 22 high priority targets identified for drilling.

Manyingee South (Target 15) is a high priority exploration target, lying approximately 4.5 kilometres south of 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").

Cauldron CEO Jonathan Fisher commented:

"The drill programme at Manyingee South continues to deliver exciting results. Furthermore, as we continue to learn more about the paleochannel system around Manyingee South we further improve our understanding of the regional prospectivity. Our forward planning is focussing on further paleochannel targets which can be systematically tested in future drilling campaigns.

We look forward to testing the extremities of the known mineralisation further, working with our indigenous partners in order to advance clear additional areas for future drilling outside of previously considered areas, given how our knowledge of the mineralisation and its scale has developed over time."



Image 1: Chairman Ian Mulholland and CEO Jonathan Fisher on site at Yanrey earlier this week



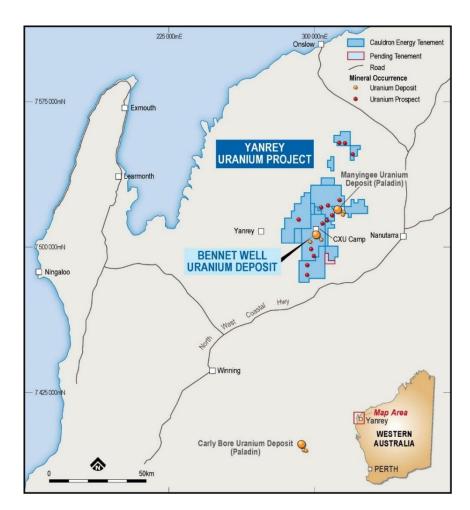


Figure 1: Yanrey Uranium Project Location Map (Western Australia)

MANYINGEE SOUTH EXPLORATION UPDATE

Cauldron Energy Limited (ASX: CXU) ("Cauldron or the Company") is pleased to announce that 42 aircore drill-holes (24YRAC048-24YARC089) for a total of 3,506m have now been completed at Manyingee South (Tables 1 and 2). The Manyingee South palaeochannel (Figure 2) is located approximately 17km to the north-east of Bennet Well and 4.5km south-southwest of Paladin's Manyingee Deposit.

Wide-spaced drilling (400m x 200m) has progressed along and across an interpreted north-south trending palaeochannel to demarcate the width and extent of roll-front(s)-type uranium mineralisation. So far, continuous mineralisation has been shown to extend north-south for at least 3 kilometres and over channel widths of up to 600 metres, with two distinctly higher-grade zones being delineated that will be subject to closer spaced drilling.

The most significant results from the recently completed 27 drill holes include:

Drill hole 24YRAC060 intersected;

1.00 m @ 384 ppm eU $_3$ **O** $_8$ from 49.42m, and 0.80 m @ 402 ppm eU $_3$ O $_8$ from 51.66m.

Drill hole 24YRAC065 intersected;

2.92 m @ 669 ppm eU₃O₈ from 54.84m, including 1.80m @ 838 ppm eU₃O₈ from 55.06m, and 0.72 m @ 570 ppm eU₃O₈ from 61.02m.

Drill hole 24YRAC076 intersected;

1.08 m @ 310 ppm eU₃O₈ from 71.78m.



Drill hole 24YRAC078 intersected;

 $0.58 \text{ m} \ @ \ 324 \text{ ppm eU}_3O_8 \text{ from } 61.22\text{m}, \\ 0.74 \text{ m} \ @ \ 375 \text{ ppm eU}_3O_8 \text{ from } 63.60\text{m}, \text{ and} \\ \textbf{1.46 m} \ @ \ 290 \text{ ppm eU}_3O_8 \text{ from } 65.56\text{m}.$

The aim of this most recent drilling work has been threefold:

- To test for further repetitions and extensions to roll-front-type mineralisation discovered to date at the Manyingee South deposit,
- To better locate and define the closure of the roll-front where mineralisation is typically better developed (thicker) and higher grade.
- To define the eastern and western palaeochannel margins to constrain the mineralised system.

To achieve these aims, drilling has been undertaken on a 200m spacing along lines spaced 400m apart over the interpreted closure of the roll-front and the channel margins. This has entailed drilling holes in areas beyond the oxidation front that are likely to be not mineralised, in order to properly define the limits of the mineralised palaeochannel system. Particular attention has focused on defining the northern termination of the roll front located between drill holes 24YRAC053 & 24YRAC054 (Figures 3 and 4).

In the northern area of the Manyingee South prospect, drilling has begun to locate the margins of the palaeochannel, with hole 24RYAC077 (Figures 3 and 4) drilling into the western bank of the palaeochannel whilst 24YRAC064, 24YRAC081 and 24YRAC082 intersected the eastern bank of the palaeochannel. Drillholes on lines further south of this location have yet to intersect either bank of the palaeochannel which is thought to be at least 1 kilometre wide and likely to extend further westward for a considerable distance.

The prospect is interpreted as being hosted in a restricted embayment where carbonaceous sediments were preferentially deposited under estuarine conditions with marine-influenced sediments outside the river mouth. Bedrock intersections in the north suggest that the mouth of the estuary is restricted in width whilst it broadens to the south.

The palaeochannel appears to have a moderate degree of sinuosity with carbonaceous sediments restricted to the central and western side of the channel whilst sandy, non-carbonaceous facies occur on the palaeochannel margins where they are interpreted as a lateral sand bar (Figure 4), and in the vicinity of tributary junctions. Mineralisation is strongly associated with the presence of these regionally extensive carbonaceous clay beds that compartmentalise the sandstone aquifer and act to focus roll-front flow into the sandstones and to precipitate uranium along their margins.

Drilling has now largely closed out the majority of the roll front in the north, however, strong potential remains for extensions further to the NW and NE. Current roll-front dimensions within the tenement are in the range of 600-800m wide and ~3,000m long.

Whilst the terminal redox boundary has been largely located, the most recent drillhole (24YRAC089) intersected low-grade mineralisation at 48-49m (see Table 1) within carbonaceous clays of the Nanutarra Formation just below an erosional unconformity separating it from marine influenced sands of the overlying Birdrong Sandstone. This mineralisation is located at the stratigraphic equivalent of the 'A Roll' and its occurrence suggests that mineralisation may exit the channel mouth and continue 'downstream' to the northwest. Future drilling is planned for this area with a Program of Works application having been recently approved by the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS).

Ongoing drilling at Manyingee South has continued to successfully intersect mineralisation developed at longitudinally consistent prominent stacked redox boundaries, that are interpreted as being stratigraphically equivalent to uranium mineralisation observed at Paladin's nearby Manyingee deposit. Cauldron's drilling has intersected the same three roll-fronts as described by Paladin at Manyingee.



The majority of mineralisation intersected is equivalent to Paladin's 'A Roll' and 'C Roll' with the uppermost 'B Roll' at Manyingee South being subject to erosion by Quaternary units.

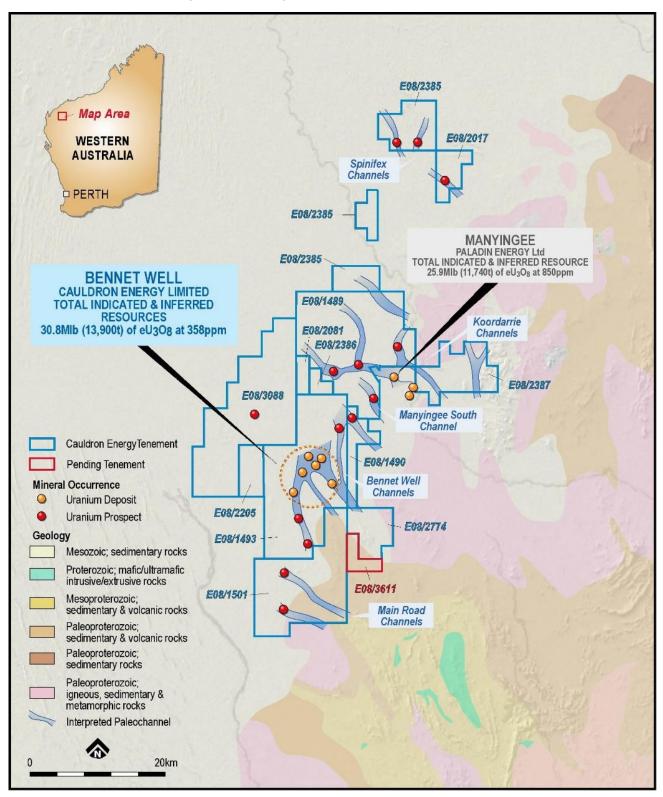


Figure 2: Yanrey Uranium Project highlighting local geology and prospective palaeochannels



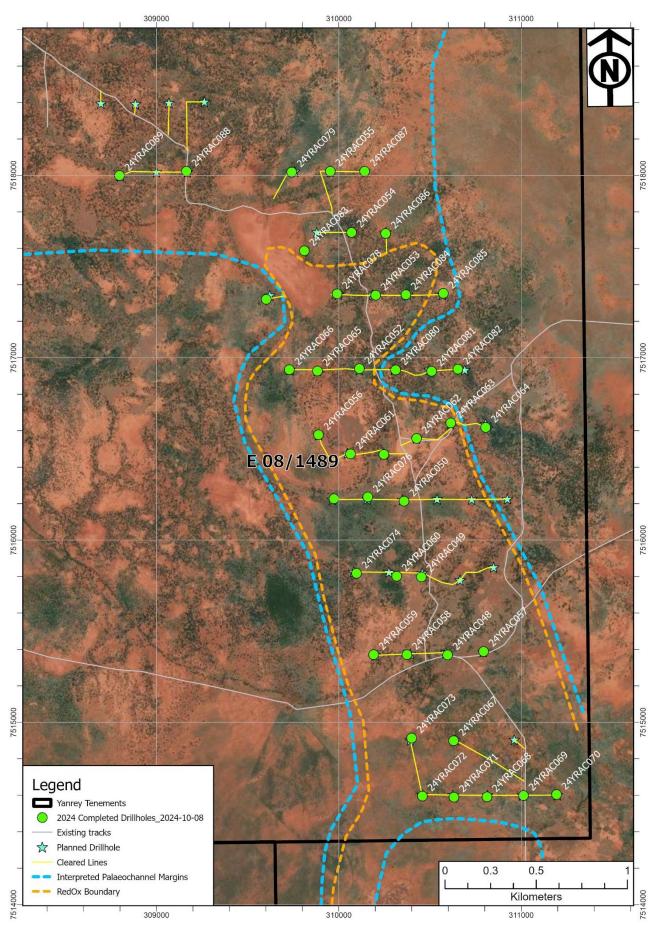


Figure 3: Yanrey Uranium Project highlighting local geology and prospective palaeochannels



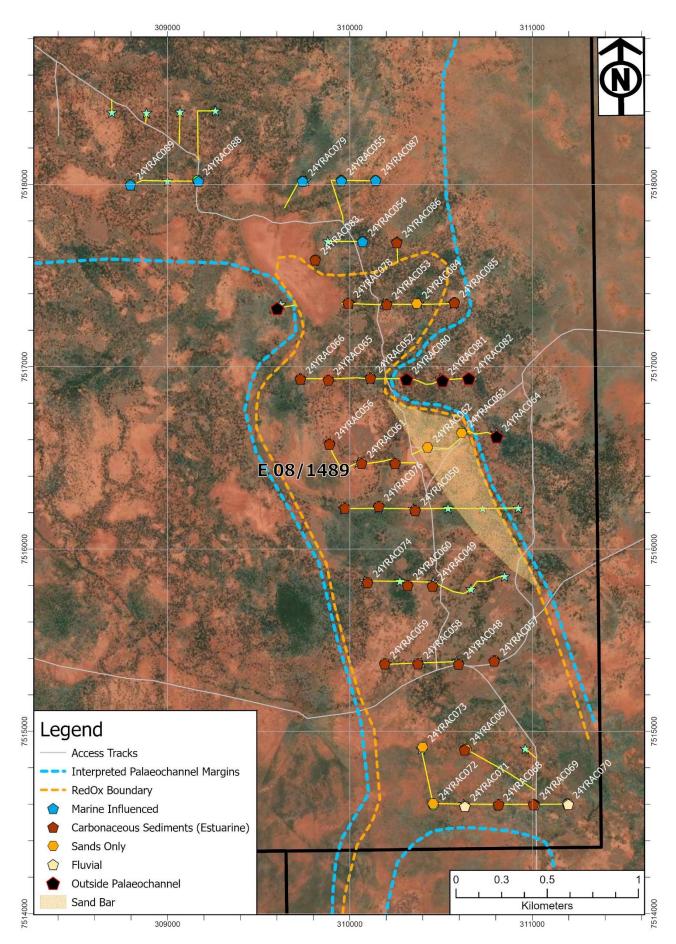


Figure 1: Manyingee South - Interpreted Palaeogeography



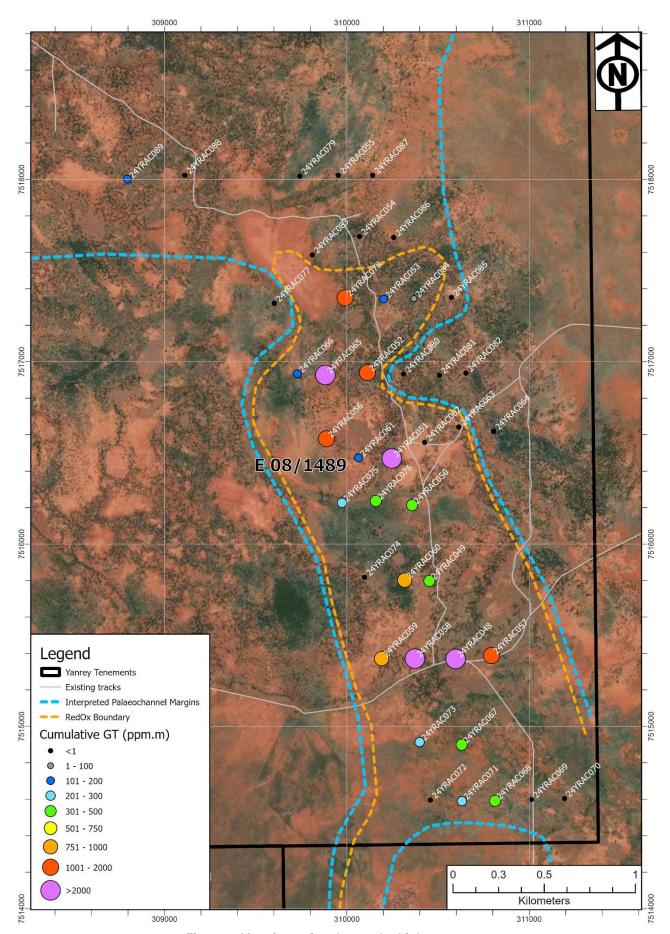


Figure 5: Manyingee South – grade thickness map.

Note the strong correlation between grade and carbonaceous sediments shown in Figure 4.



NEXT STEPS

Following on from the exploration success at Manyingee South (Target 15), Cauldron is keen to utilise the drilling rig currently on-site to test uranium targets west of the northern extent of Manyingee South and at Target 14, located approximately 2.5km south-west from the southern part of Manyingee South Target 15.

Manyingee South

Additional drilling to the west of Manyingee South is planned for this field season (Figure 6). To the north-west of the currently known mineralisation at Manyingee South, electromagnetic (EM) anomalies show a similar signature to EM anomalies which characterise the presence of uranium mineralisation at Manyingee South and Bennet Well and extend in a westerly direction for approximately 4 kilometres.

The Buurabalayji Thalanyji Aboriginal Corporation ("Thalanyji") has located field Monitors at Yanrey this week for an additional 10-day field-work period to enable additional drilling rig access and sump establishment at several new drill site locations, including the target areas west and north-west of Manyingee South. Program Of Work (POW) applications for both areas lodged with the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) have recently been approved for drilling.

The north-west target area drill sites are located on lines previously Heritage cleared by Thalanyji, but the drill sites along the western side of Manyingee South will require Ethnographic and Archaeological Clearance Surveys by Thalanyji prior to the commencement of drilling activities.

TARGET 14

Exploration Target 14 (Figure 7) is a large north-west trending target area, one of five parallel target zones over a 15km zone between the Manyingee Deposit in the north-east and the Bennet Well deposits in the south-west.

Target 14 is similar in length (3km from north to south) to the Manyingee South deposit. It is characterised by a discrete electromagnetic (EM) anomaly, with a similar signature to EM anomalies at Manyingee, Manyingee South and Bennet Well.

A single historic rotary mud drill hole (YRH126), drilled to a depth of 60.1 metres by CRA in September 1980 within Target 14 intersected 0.6m @ 370ppm eU_3O_8 from 50.5 metres depth in a geological succession similar to that observed at other uranium deposits at Yanrey.

Drill sites at Target 14 have been previously Heritage cleared, and a Progamme Of Work (POW) application has recently been approved. Thalanyji field monitors are on site to supervise site access works.



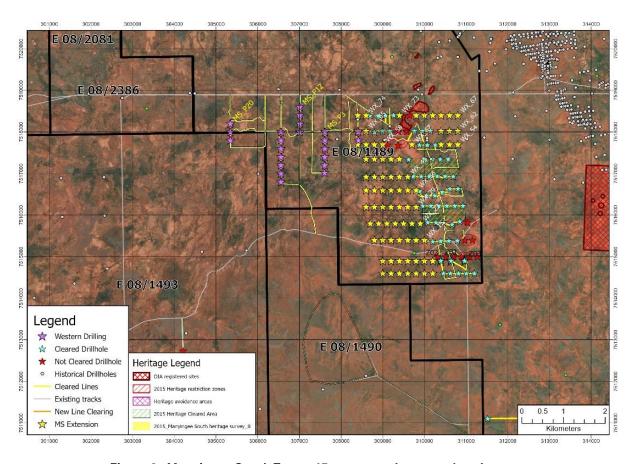


Figure 6: Manyingee South Target 15 – proposed western/north-east extension drilling (purple and yellow stars)

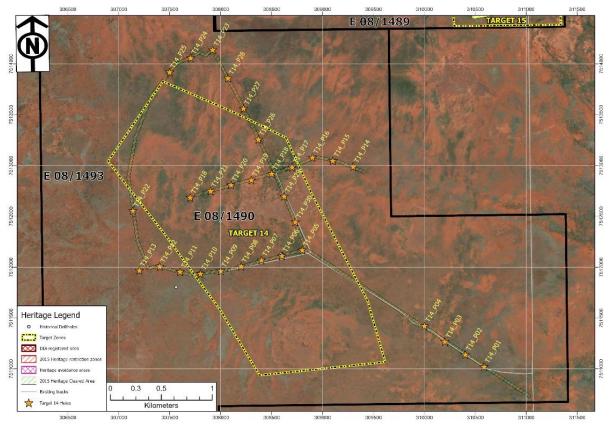


Figure 7: Target 14 - proposed exploration drilling sites



Table 1. Manyingee South Significant Intercepts (all holes with results received to date)

Drillhole	Depth From	Depth To	Thickness	eU₃O₃ Av. Grade	Grade Thickness	eU₃O₃ Max. Grade	Manyingee Stratigraphic Zone
	(m)	(m)	(m)	(ppm)	(ppm x m)	(ppm)	
24YRAC060	49.42	50.42	1.00	384	384	677	A Roll
	51.66	52.46	0.80	402	321	767	A Roll
24YRAC061	51.28	51.90	0.62	254	158	343	A Roll
24YRAC065	54.84	57.76	2.92	669	1,953	1,331	B Roll
	61.02	61.74	0.72	570	410	1,177	A Roll
24YRAC066	59.28	59.80	0.52	219	114	286	A Roll
24YRAC067	50.06	50.56	0.50	200	100	267	B Roll
	52.48	53.22	0.74	295	219	393	A Roll
24YRAC068	47.56	48.18	0.62	292	181	422	B Roll
	71.16	71.82	0.66	183	121	221	C Roll
24YRAC071	48.34	49.04	0.70	345	241	517	B Roll
24YRAC073	71.04	71.68	0.64	216	138	267	C Roll
24YRAC075	52.22	52.94	0.72	177	127	235	A Roll
24YRAC076	71.78	72.86	1.08	310	335	555	C Roll
24YRAC078	61.22	61.80	0.58	324	188	479	C Roll
	63.60	64.34	0.74	375	278	858	C Roll
	65.56	67.02	1.46	290	423	636	C Roll
24YRAC084	60.42	60.62	0.20	154	31	160	C Roll
24YRAC089	48.14	48.72	0.58	186	108	227	B Roll
Note: Minimum cut-	Note: Minimum cut-off 150ppm eU₃O ₈ and 0.2m minimum thickness.						

Table 2. Manyingee South Drill Hole Locations

HoleID	GDA2020 Easting	GDA2020 Northing	Zone	DIP	AZI	Base of Channel	ЕОН
	(mE)	(mN)		(°)	(°)	(m)	(m)
24YRAC060	310,317	7,515,802	50	-90	0	83	84
24YRAC061	310,064	7,516,472	50	-90	0	74	90
24YRAC062	310,426	7,516,557	50	-90	0	68	69
24YRAC063	310,614	7,516,642	50	-90	0	40	66
24YRAC064	310,805	7,516,618	50	-90	0	50	66
24YRAC065	309,882	7,516,928	50	-90	0	74	90
24YRAC066	309,729	7,516,934	50	-90	0	71	75
24YRAC067	310,629	7,514,900	50	-90	0	98	108
24YRAC068	310,812	7,514,592	50	-90	0	81	83
24YRAC069	311,013	7,514,599	50	-90	0	84	90
24YRAC070	311,193	7,514,604	50	-90	0	85	87
24YRAC071	310,631	7,514,590	50	-90	0	89	90
24YRAC072	310,458	7,514,596	50	-90	0	83	84
24YRAC073	310,399	7,514,914	50	-90	0	88	89
24YRAC074	310,097	7,515,818	50	-90	0	98	99
24YRAC075	309,973	7,516,226	50	-90	0	85	86
24YRAC076	310,159	7,516,236	50	-90	0	82	83
24YRAC077	309,602	7,517,321	50	-90	0	57	60



24YRAC078	309,991	7,517,351	50	-90	0	83	84
24YRAC079	309,741	7,518,019	50	-90	0	72	75
24YRAC080	310,311	7,516,933	50	-90	0	53	78
24YRAC081	310,508	7,516,926	50	-90	0	68	69
24YRAC082	310,652	7,516,937	50	-90	0	48	60
24YRAC083	309,810	7,517,587	50	-90	0	80.5	81
24YRAC084	310,367	7,517,346	50	-90	0	71	78
24YRAC085	310,573	7,517,353	50	-90	0	58	60
24YRAC086	310,257	7,517,682	50	-90	0	74	75
24YRAC087	310,141	7,518,023	50	-90	0	99	102
24YRAC088	309,112	7,518,023	50	-90	0	96	102
24YRAC089	308,796	7,518,003	50	-90	0	59	63



Image 2: Geological team members reviewing drill samples and discussing progress

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

ENDS

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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 Geoscientists. 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. John Higgins, B.Sc (Hons), GCPG&G, who is a member of the Australian Institute of Geoscientists. Mr. Higgins 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. 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) 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.

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.

Table 2: Historical Exploration Results Announcements

Date of Release	Title
02-11-2015	CXU Cauldron Identifies Mineralisation South of Manyingee
17-12-2015	Substantial Increase in Mineral Resource at Bennet Well
24-01-2024	Yanrey Uranium Project Exploration Target
08-08-2024	First Drill Results Confirm and Extend Known Uranium Mineralisation at Bennet Well Deposit
27-08-2024	Further Drilling Adds to Uranium Mineralisation at Bennet Well Deposit
11-09-2024	First Holes at Manyingee South Confirm Significant Discovery
27-08-2024	More Outstanding Results Grow Manyingee South

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-plantarget-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.



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 Bennet Well is a shallow accumulation of uranium hosted in unconsolidated sands close to surface (less than 100 m downhole depth) in Cretaceous sedimentary units of the Ashburton Embayment.

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

Deposit	Cutoff (ppm eU₃O₃)	Deposit Mass (t)	Deposit Grade (ppm eU₃O₅)	Mass U₃O₃ (kg)	Mass U₃O 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	Deposit Mass (t)	Deposit Grade (ppm	Mass U ₃ O ₈ (kg)	Mass U ₃ O ₈ (lbs)
	(ppm U ₃ O ₈)		U ₃ O ₈)		
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 U₃O ₈)	Deposit Mass (t)	Deposit Grade (ppm U ₃ O ₈)	Mass U₃O ₈ (kg)	Mass U₃O 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.



Appendix B:

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 Manyingee South prospect and larger Yanrey project area has been by downhole geophysical gamma logging to determine uranium assay and <i>in-situ</i> 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 2cm (0.02m) 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 slim-line tools. Secular disequilibrium was established for the uranium mineralisation at Yanrey during the previous exploration, by Cauldron Energy Ltd, in 2014. The equilibrium samples were from various mineralized intercepts at Yanrey and analysed by
	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.	ANSTO in Sydney. Not applicable.



Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, 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).	Air-core drilling completed during over the period from July to September 2024. 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 ¼" 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.
rill 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 calliper 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 in chip trays 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 $> 100 \text{ppm} \text{eU}_3 \text{O}_8$ 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 sample	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.
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 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 $_3O_8$ 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 mineralisation, 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.	(YNMR077/YNDE a 'test' run to e before commend 150ppm eU₃O₃ cd YNMR077 YNDD018 24YRAC001	twinned a historical high-grade zone 2018) within the Bennet Well palaeochannel as ensure all equipment was working correctly cing exploration drilling. For comparison, at a ut-off, the three holes had intercepts of: 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 86.8 – 87.7m, 0.90m @ 425ppm eU ₃ O ₈ 88.6 – 95.1m, 6.52m @ 650ppm eU ₃ O ₈ 95.2 – 95.9m, 0.80m @ 214ppm eU ₃ O ₈ 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.	with handheld GF accuracy. Upon will be surveyed The quality of si exploration progi	provided the collar positions of the drill holes PS, and the survey provided good precision and completion of the drilling program the holes by differential RTK GPS for very high precision. The urvey data is fit for the purpose of planning trams, generating targets for investigation, and definition. No new Mineral Resource or Ore in estimated.
	Specification of the grid system used.	Cauldron utilised	d GDA2020 zone 50.
	Quality and adequacy of topographic control.	is adequate gives sediments. The head sediments are sediments. The head sediments are sediments. The head sediments are sediments are sediments are sediments are sediments. The head sediments are sediments are sediments are sediments are sediments. The head sediments are sediments are sediments are sediments. The head sediments are sediments are sediments are sediments. The head sediments are sediments are sediments are sediments. The head sediments are sediments are sediments are sediments.	•
Data spacing and distribution	Data spacing for reporting of Exploration Results.	spaced along lin lines were 400-5 report. Spacing of holes 200m on individu	drilling program, most air-core drill holes are es at between 150m and 250m W-E. The drill 00m apart, as shown in various Figures in this drilled historically is variable between 30 and ual fence lines, and 50m to 1,100m between
		-	the strike. ore holes from the 2013 drilling program varied nd 800m within individual prospects.



	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 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. 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 September 2024.
	Whether sample compositing has been applied.	For the present AC drilling program, downhole geophysical data was collected at 2cm (0.02m) sample intervals. All downhole geophysical data was later composited to 0.10m 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 1,150 km².
	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.	An 80 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 Proterozoicaged 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 o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth hole length.	Refer to the tables above.
	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 U_3O_8 for a minimum thickness of 0.50m and maximum internal dilution of 0.20m. A maximum internal dilution of 0.20m was used to aggregate a less mineralised zone within bounding higher-grade material for thick intervals, as long as the grade-thickness of the interval was above cutoff (= 150 x 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 account of 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 interval was above cutoff (= 500 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 Manyingee South is vertical. The overall dip of the mineralisation at the Manyingee South prospect is presumed to be near-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.	All drilling at Manyingee South is vertical. The overall dip of the mineralisation at the Manyingee South prospect is presumed to be near-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').	All drilling at Manyingee South is vertical. The overall dip of the mineralisation at the Manyingee South prospect is presumed to be near-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 2; intercepts that are greater than 150 ppm for at least 0.50m in thickness, are shown in Table 1.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey	Metallurgical sighter testing was completed by the Australian Nuclear Science and Technology Organisation (ANSTO) for the diamond core drilled in 2013, with further



	results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	testing drilled in 2014 and 2015. Geochemical assaying was also completed for the diamond core from both 2013, 2014 and 2015.
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 Diamond Core drilling to increase the Mineral Resource of the Bennet Well deposit. Further passive seismicity surveys to further map palaeochannel(s) 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 as appropriate.