

## YANREY URANIUM PROJECT

### MORE OUTSTANDING DRILLING RESULTS AT MANYINGEE SOUTH DEMONSTRATE THE SIGNIFICANT POTENTIAL OF THIS URANIUM DISCOVERY

- Results received for a further 8 drill holes (24YRAC052 to 24YRAC059) at Manyingee South, confirming a near-surface, strongly uranium mineralised north-south trend extending for at least 2 kilometres, open to the north and south, and east to west (across the width of the 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 24YRAC058 and 24YRAC059 returned outstanding results with stacked zones of uranium mineralisation (up to 880ppm  $eU_3O_8$  over 3 metres) providing further evidence of roll-front uranium mineralisation:

**Drill hole 24YRAC058;**

2.46 m @ 407 ppm  $eU_3O_8$  from 57.18m,  
*including 0.74m @ 643 ppm  $eU_3O_8$  from 58.34m,*  
 0.66 m @ 339 ppm  $eU_3O_8$  from 60.58m,  
 2.68 m @ 384 ppm  $eU_3O_8$  from 67.30m, and  
 3.00 m @ 880 ppm  $eU_3O_8$  from 75.40m,  
*including 2.40m @ 1,015 ppm  $eU_3O_8$  from 75.68m.*

**Drill hole 24YRAC059;**

0.74 m @ 489 ppm  $eU_3O_8$  from 49.56m,  
 0.54 m @ 226 ppm  $eU_3O_8$  from 52.42m,  
 0.62 m @ 204 ppm  $eU_3O_8$  from 65.98m, and  
 1.44 m @ 208 ppm  $eU_3O_8$  from 69.00m.

- A section across the palaeochannel, encompassing drill-holes 24YRAC057, 24YRAC048, 24YRAC058 and 24YRAC059, intersected uranium mineralisation across a width of ~600m, open to the east and west; indicating the presence of a wide mineralised palaeochannel system.
- Other significant results returned include:

**Drill hole 24YRAC052;**

0.72 m @ 475 ppm  $eU_3O_8$  from 61.50m,  
 0.72m @ 563 ppm  $eU_3O_8$  from 63.22m, and  
 1.44 m @ 297 ppm  $eU_3O_8$  from 70.46m.

**Drill hole 24YRAC056;**

0.50 m @ 264 ppm  $eU_3O_8$  from 52.74m,  
 1.38 m @ 673 ppm  $eU_3O_8$  from 55.78m,  
*including 0.90 m @ 869 ppm  $eU_3O_8$  from 55.92m,* and  
 0.86 m @ 270 ppm  $eU_3O_8$  from 57.70m.

**Drill hole 24YRAC057;**

1.24 m @ 464 ppm  $eU_3O_8$  from 48.08m,  
 0.80 m @ 306 ppm  $eU_3O_8$  from 50.26m, and  
 0.54 m @ 348 ppm  $eU_3O_8$  from 72.54m.

- Further drilling is underway to test for extensions to the identified mineralisation, along strike and on east-west lines to define the width of the mineralised trend.
- 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 adjacent to the Manyingee deposit channel.
- Mineralisation is developed at prominent stacked redox boundaries and is consistent with interpreted roll-front 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 east.
- The Manyingee South channel is just one of at least 15 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 ~1,150km<sup>2</sup> (see 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) (see Figure 2).

The Yanrey project area hosts the Bennet Well Uranium Deposit which contains **30.9 Mlb of uranium-oxide (38.9Mt at 360ppm eU<sub>3</sub>O<sub>8</sub> (at 150ppm cut-off)**, refer ASX announcement of 17 December 2015 and Appendix A), and is therefore a **globally significant project**. Laboratory based testwork has confirmed that the Bennet Well Uranium Deposit 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 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<sub>3</sub>O<sub>8</sub> at 250ppm cut-off – ASX: PDN "FY2024 Annual Report").

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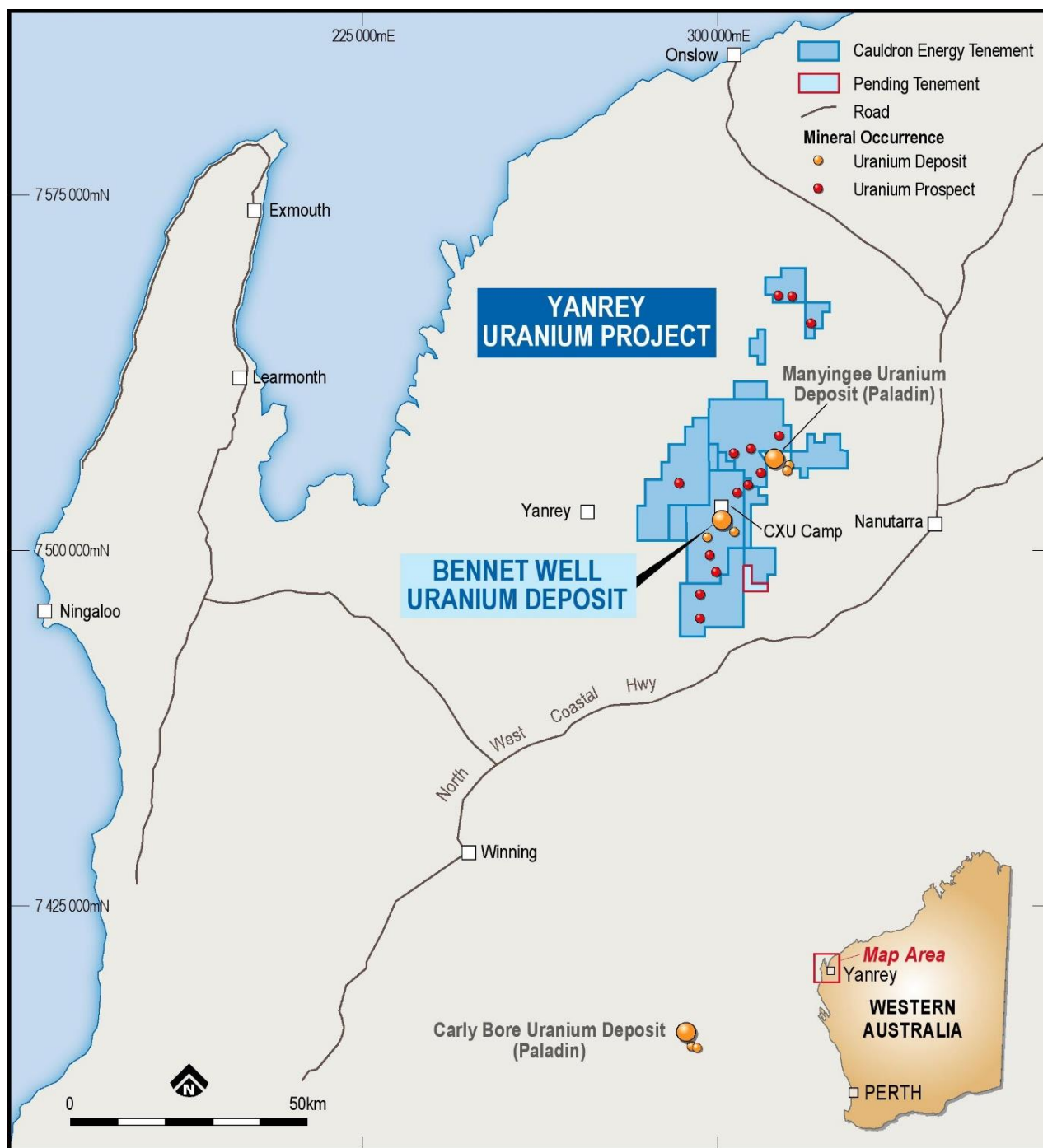
Cauldron CEO Jonathan Fisher commented:

***"I am enormously pleased that Manyingee South continues to deliver robust, high grade uranium mineralised intercepts, now demonstrating at least 2 kilometres of continuous mineralisation along a north-south trend which remains open in width and in both directions along strike.***

***The drilling rig is continuing to evaluate and discover further uranium mineralisation at the Manyingee South target area and we look forward to further drilling results being released to market in quick succession as drilling continues with pace.***

***The excellent results at Manyingee South hasten my excitement to test a number of the other palaeochannel systems in the Company's project area a number of which were considered high-ranking targets of equal priority to that of Manyingee South."***

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**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 the following excellent results from its second batch consisting of a further 8 drill-holes at Manyingee South:

Drill hole **24YRAC052** intersected;

0.72 m @ 475 ppm eU<sub>3</sub>O<sub>8</sub> from 61.50m,  
0.72m @ 563 ppm eU<sub>3</sub>O<sub>8</sub> from 63.22m, and  
**1.44 m @ 297 ppm eU<sub>3</sub>O<sub>8</sub> from 70.46m.**

Drill hole **24YRAC056** intersected;

0.50 m @ 264 ppm eU<sub>3</sub>O<sub>8</sub> from 52.74m,  
**1.38 m @ 673 ppm eU<sub>3</sub>O<sub>8</sub> from 55.78m,**  
*including 0.90m @ 869 ppm eU<sub>3</sub>O<sub>8</sub> from 55.92m, and*  
0.86 m @ 270 ppm eU<sub>3</sub>O<sub>8</sub> from 57.70m.

Drill hole 24YRAC057 intersected;

**1.24 m @ 464 ppm eU<sub>3</sub>O<sub>8</sub> from 48.08m,**  
0.80 m @ 306 ppm eU<sub>3</sub>O<sub>8</sub> from 50.26m, and  
0.54 m @ 348 ppm eU<sub>3</sub>O<sub>8</sub> from 72.54m.

Drill hole 24YRAC058 intersected several highly significant zones of uranium mineralisation, including;

**2.46 m @ 407 ppm eU<sub>3</sub>O<sub>8</sub> from 57.18m,**  
*including 0.74m @ 643 ppm eU<sub>3</sub>O<sub>8</sub> from 58.34m, and*  
0.66 m @ 339 ppm eU<sub>3</sub>O<sub>8</sub> from 60.58m,  
**2.68 m @ 384 ppm eU<sub>3</sub>O<sub>8</sub> from 67.30m, and**  
**3.00 m @ 880 ppm eU<sub>3</sub>O<sub>8</sub> from 75.40m,**  
*including 2.40m @ 1,015 ppm eU<sub>3</sub>O<sub>8</sub> from 75.68m.*

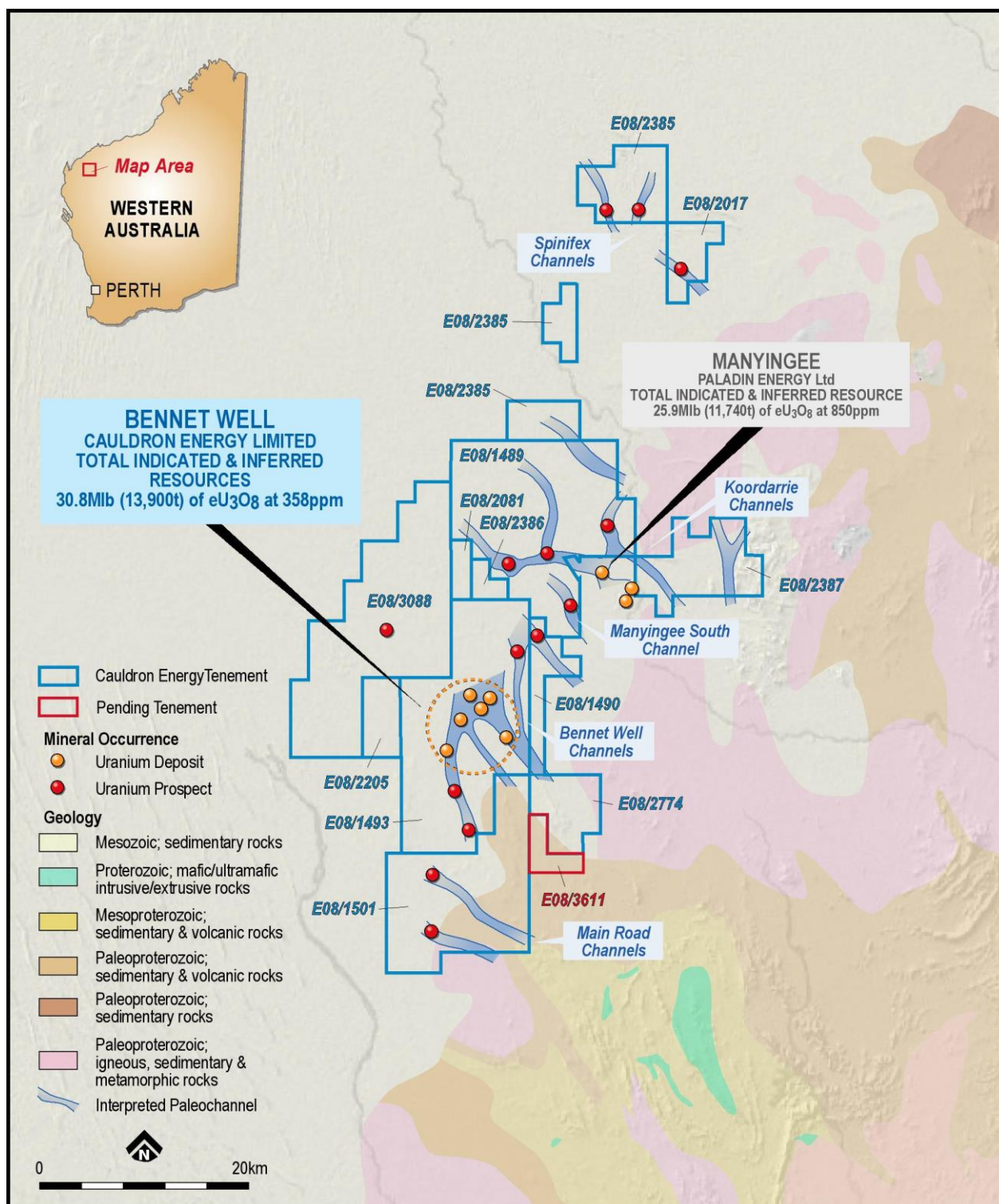
Drill hole 24YRAC059 intersected;

0.74 m @ 489 ppm eU<sub>3</sub>O<sub>8</sub> from 49.56m,  
0.54 m @ 226 ppm eU<sub>3</sub>O<sub>8</sub> from 52.42m,  
0.62 m @ 204 ppm eU<sub>3</sub>O<sub>8</sub> from 65.98m, and  
**1.44 m @ 208 ppm eU<sub>3</sub>O<sub>8</sub> from 69.00m.**

The Manyingee South palaeochannel (Target 15) is located approximately 17kms to the north-east of Bennet Well and 4.5 kilometres south-southwest of Paladin’s Manyingee Deposit.

The prospective northeast-southwest trending Cretaceous-age coastal plain developed along the western margin of the Pilbara block extends for at least 140kms, of which Cauldron holds 80 kilometres of strike length under tenement (see Figure 2).

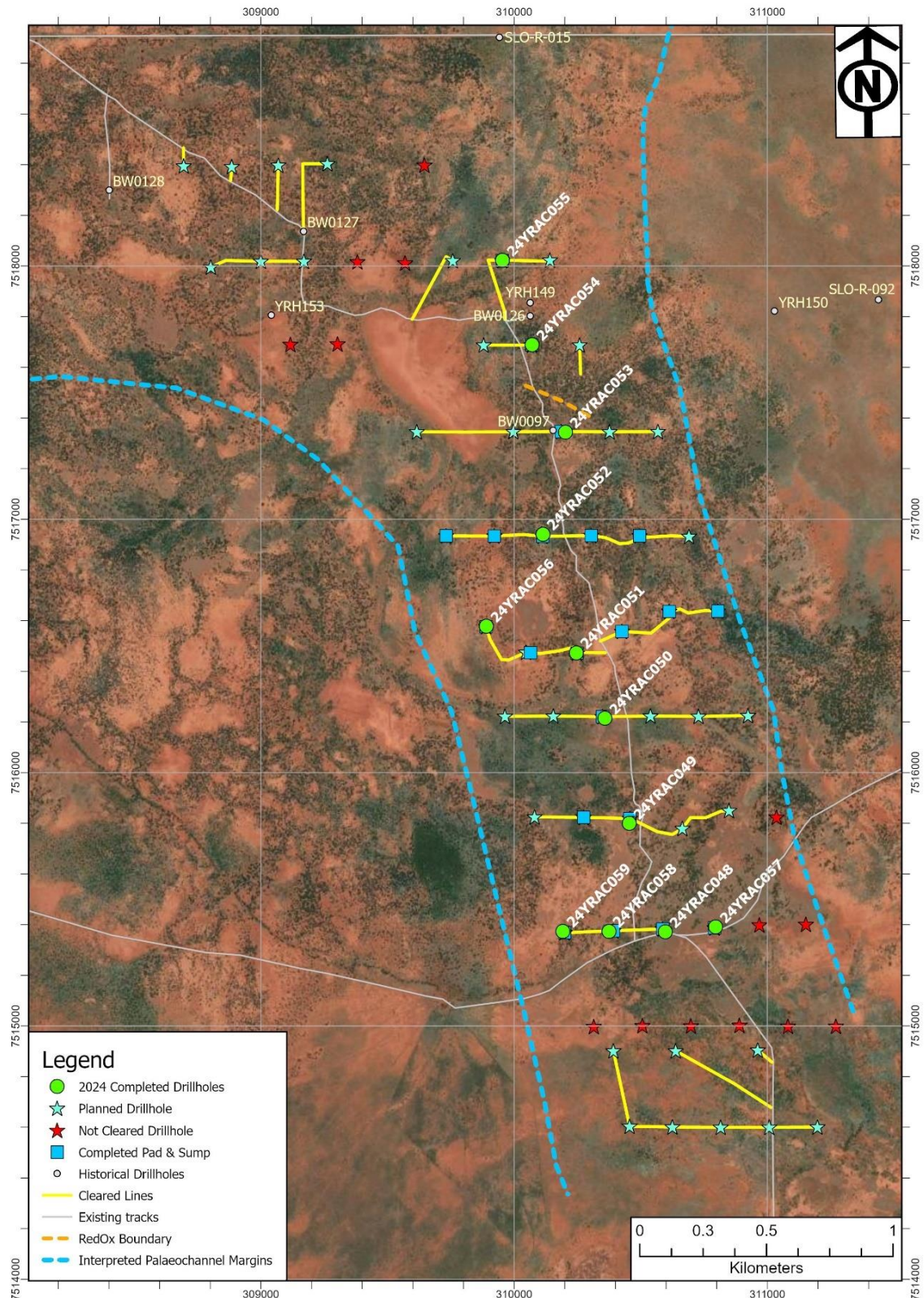




**Figure 2: Yanrey Uranium Project highlighting local geology and prospective palaeochannels**



A total of twelve (12) holes for a total of 1,090m have now been drilled at the Manyingee South prospect (see Table1). Drilling has progressed from south to north along the interpreted axis of the palaeochannel in order to broadly locate the termination of the roll-front(s) for follow-up drilling. A total of 8 holes have been drilled along the longitudinal axis (24YRAC048 – 24YRAC055), one hole (24YRAC056) along the western side of the palaeochannel, and an additional three holes (24YRAC057 - 24YRAC059) to complete a cross-section on the initial discovery line (see Figure 3).



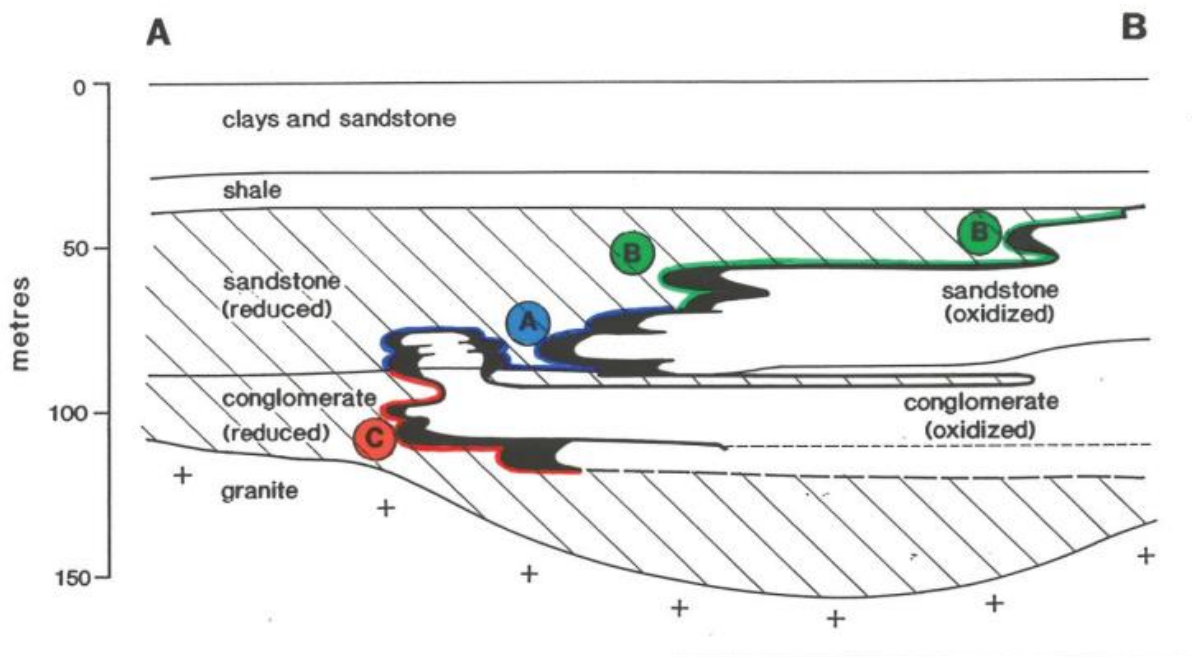
**Figure 3: Manyingee South Target 15 showing location of drill holes and interpreted palaeochannel**

All drillholes have been drilled to bedrock which comprises ubiquitous fresh granodiorite. Maximum depth to basement to date has been 113m with most holes intersecting bedrock in the 75-95m range.

Roll-front uranium mineralisation within the Manyingee South palaeochannel is hosted predominantly by carbonaceous and lignitic muds and fluvial sands of the Nanutarra Formation (as defined by Hocking & Van de Graaf, 1977) and to a lesser extent by overlying shoreface sands of the Birdrong Sandstone. Carbonaceous clay layers compartmentalise the aquifer and act to focus roll-front flow into the sandstones and to precipitate uranium along their margins.

Drilling at Manyingee South has continued to successfully intersect mineralisation developed at longitudinally consistent prominent stacked redox boundaries, that are (interpreted as) stratigraphically equivalent to uranium mineralisation observed at Paladin's nearby Manyingee deposit.

The Manyingee South palaeochannel shows strong similarities with Paladin's Manyingee channel with oxidation and mineralisation patterns suggesting that Cauldron's drilling has intersected the same three roll-fronts as described by Paladin at Manyingee (see Figure 4). In particular, drilling has determined that a laterally consistent carbonaceous clay layer is developed in the Manyingee South palaeochannel, similar to that separating the A and C roll-fronts at Manyingee.



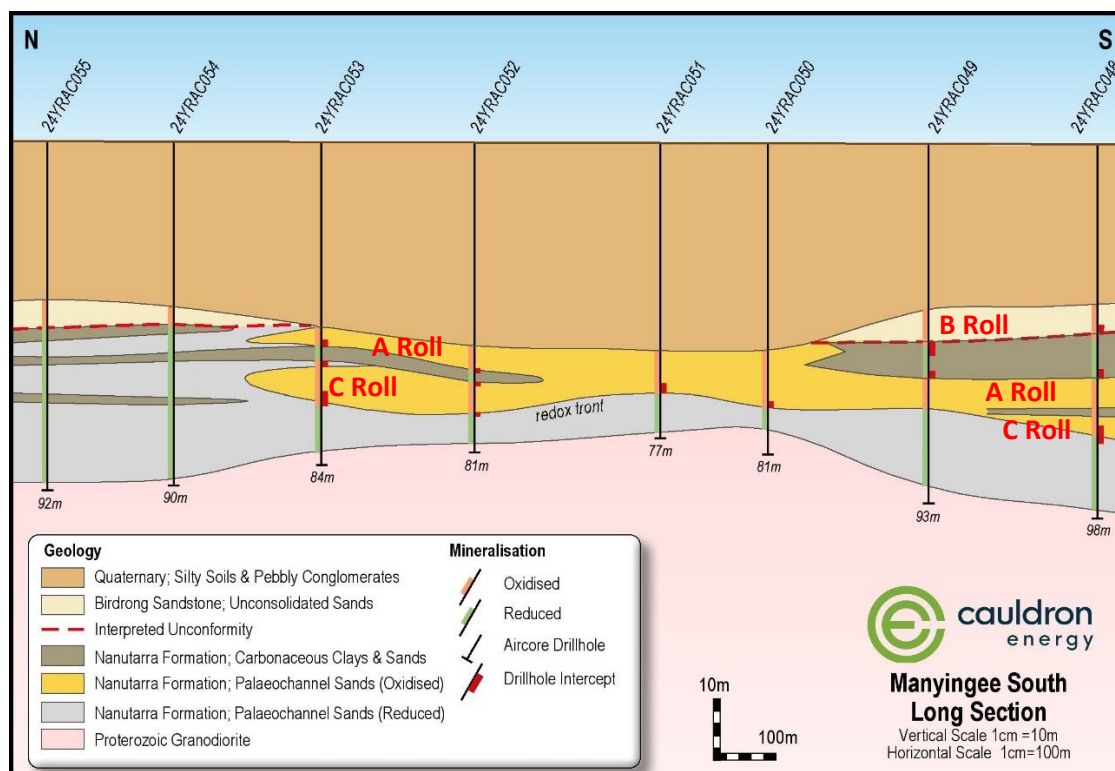
**Figure 4: Published long-section from Paladin's Manyingee deposit.**

It is noted that mineralisation at Manyingee is asymmetrically developed and favours the western side of the Manyingee channel. It is suspected that a similar situation may occur at Manyingee South, so the intersection of the redox boundary between 24YRAC052 and 24YRAC053 implies that the roll-front(s) may not be closed off downstream.

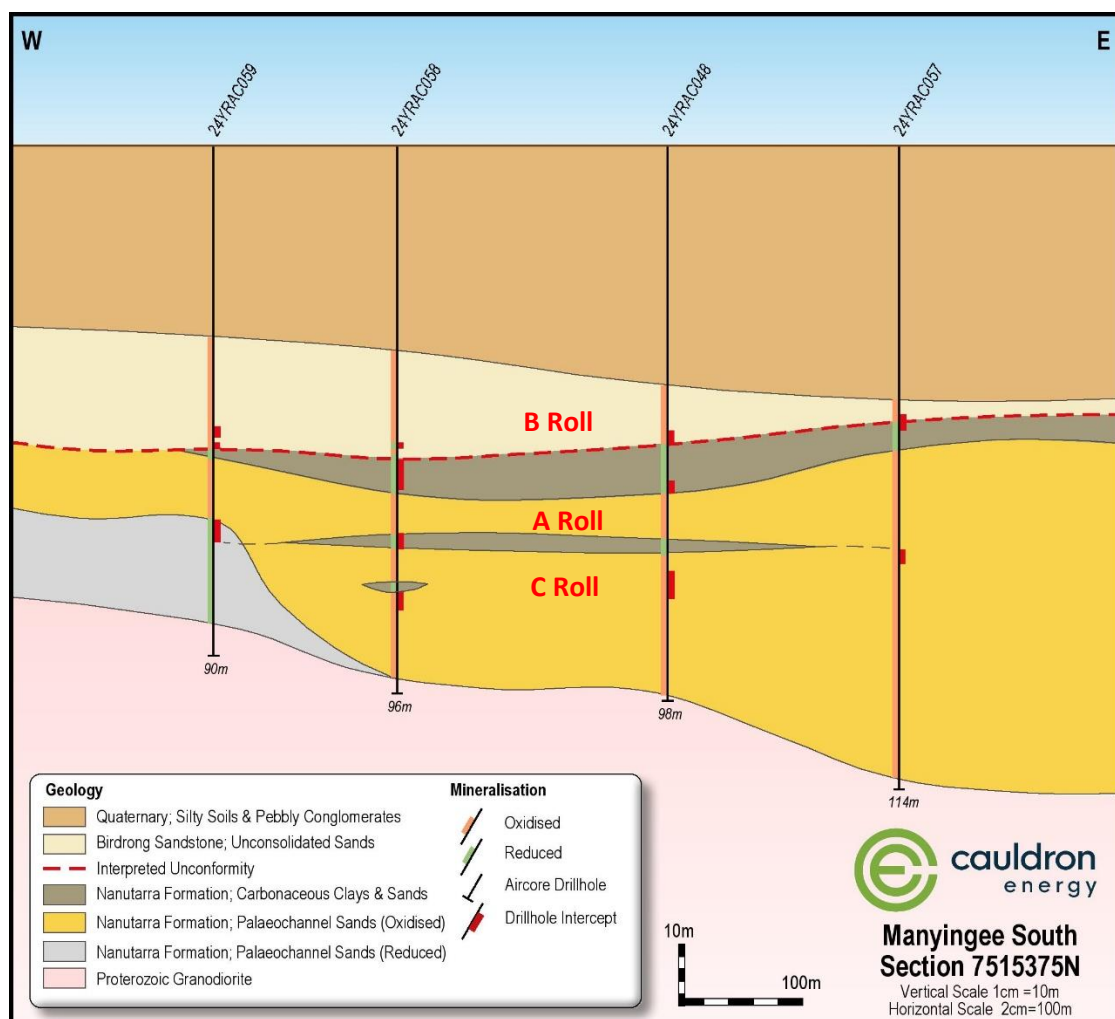
Historical palaeochannel boundaries are crudely interpreted from geophysical (AEM) data. Drilling has not yet extended sufficiently westwards or eastwards to be able to determine the limits of the palaeochannel.

The current maximum extent of the redox front(s) and associated mineralisation within the palaeochannel is ~2,000m in length and 600m in width with the interpreted closure of the roll lying between 24YRAC052 and 24YRAC053. Note that this is the current extent of drilling only and the actual Manyingee South palaeochannel may ultimately prove to be up to 3km in length.





**Figure 5. Manyingee South: Long-Section down axis of the palaeochannel.**



**Figure 6. Manyingee South: 7515375N Cross-Section.**



Mineralisation within the palaeochannel remains open to the south whilst the lateral margins of the roll-front and palaeochannel (to the east and west) have not yet been defined.

Ongoing drilling plans to drill on the two planned lines south of 24YRAC048 in order to extend mineralised intercepts further southwards towards the tenement boundary.

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

Drillhole	Depth From	Depth To	Thickness	eU <sub>3</sub> O <sub>8</sub> Av. Grade	Grade Thickness	eU <sub>3</sub> O <sub>8</sub> Max. Grade	Manyingee Stratigraphic Zone
	(m)	(m)	(m)	(ppm)	(ppm x m)	(ppm)	
24YRAC048*	51.06	51.84	0.78	400	312	834	B Roll
	59.30	60.24	0.94	228	214	429	A Roll
	60.54	61.18	0.64	236	151	307	A Roll
	<b>73.76</b>	<b>79.66</b>	<b>5.90</b>	<b>374</b>	<b>2,207</b>	<b>1,043</b>	<b>C Roll</b>
24YRAC049*	51.52	52.02	0.50	356	178	548	B Roll
	56.04	56.62	0.58	268	155	371	A Roll
24YRAC050*	<b>69.76</b>	<b>70.86</b>	<b>1.10</b>	<b>328</b>	<b>360</b>	<b>568</b>	<b>C Roll</b>
24YRAC051*	<b>61.48</b>	<b>65.60</b>	<b>4.12</b>	<b>622</b>	<b>2,563</b>	<b>1,885</b>	<b>C Roll</b>
24YRAC052	61.50	62.22	0.72	475	342	919	A Roll
	63.22	63.94	0.72	563	406	1,070	C Roll
	<b>70.46</b>	<b>71.90</b>	<b>1.44</b>	<b>297</b>	<b>428</b>	<b>606</b>	<b>C Roll</b>
24YRAC056	52.74	53.24	0.50	264	132	418	C Roll
	<b>55.78</b>	<b>57.16</b>	<b>1.38</b>	<b>673</b>	<b>929</b>	<b>1,096</b>	<b>C Roll</b>
	57.70	58.56	0.86	270	232	587	C Roll
24YRAC057	<b>48.08</b>	<b>49.32</b>	<b>1.24</b>	<b>464</b>	<b>576</b>	<b>1,035</b>	<b>B Roll</b>
	50.26	51.06	0.80	306	245	616	A Roll
	72.54	73.08	0.54	348	188	616	C Roll
24YRAC058	<b>57.18</b>	<b>59.64</b>	<b>2.46</b>	<b>407</b>	<b>1,002</b>	<b>967</b>	<b>B Roll</b>
	60.58	61.24	0.66	339	224	620	A Roll
	<b>67.30</b>	<b>69.98</b>	<b>2.68</b>	<b>384</b>	<b>1,030</b>	<b>1,454</b>	<b>A Roll</b>
	<b>75.40</b>	<b>78.40</b>	<b>3.00</b>	<b>880</b>	<b>2,639</b>	<b>2,104</b>	<b>C Roll</b>
24YRAC059	49.56	50.30	0.74	489	362	854	B Roll
	52.42	52.96	0.54	226	122	282	A Roll
	65.98	66.60	0.62	204	126	225	C Roll
	<b>69.00</b>	<b>70.44</b>	<b>1.44</b>	<b>208</b>	<b>300</b>	<b>330</b>	<b>C Roll</b>
Note: Minimum cut-off 150ppm eU <sub>3</sub> O <sub>8</sub> and 0.5m minimum thickness.							
Note: Stratigraphic interpretation relates to stratigraphic position as shown in Figure 4.							
Note: * denotes previously released drill hole results.							

**Table 2. Manyingee South Drill Hole Locations**

HoleID	GDA2020 Easting	GDA2020 Northing	Zone	DIP	AZI	Base of Channel	EOH
	(mE)	(mN)		(°)	(°)	(m)	(m)
24YRAC048*	310,596	7,515,370	50	-90	0	97	98
24YRAC049*	310,453	7,515,798	50	-90	0	91	93
24YRAC050*	310,358	7,516,213	50	-90	0	74	81
24YRAC051*	310,245	7,516,471	50	-90	0	76	77
24YRAC052	310,113	7,516,940	50	-90	0	79	81
24YRAC053	310,202	7,517,343	50	-90	0	80	84
24YRAC054	310,070	7,517,688	50	-90	0	89	90
24YRAC055	309,953	7,518,023	50	-90	0	90	92
24YRAC056	309,888	7,516,577	50	-90	0	79	84
24YRAC057	310,794	7,515,389	50	-90	0	113	114
24YRAC058	310,373	7,515,372	50	-90	0	95	96
24YRAC059	310,191	7,515,372	50	-90	0	90	90

*Note: \* denotes previously released drill hole information.*

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<sub>3</sub>O<sub>8</sub> 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.cauldronenergy.com.au](http://www.cauldronenergy.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](http://www.cauldronenergy.com.au) and for which Competent Persons’ consents were obtained. Each Competent Person’s consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

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

**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-Sep-2024	First Holes at Manyingee South Confirm Significant Discovery

## 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.*



## 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<sub>3</sub>O<sub>8</sub> 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<sub>3</sub>O<sub>8</sub> 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<sub>3</sub>O<sub>8</sub>, for total contained uranium-oxide of 30.9 Mlb (13,990 t) at 150 ppm cut-off.

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

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

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

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

**Note 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	<i>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.</i>	<p>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.</p> <p>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<sub>3</sub>O<sub>8</sub>) and for variations in hole-size by applying a hole-size correction model derived from the AMDEL calibration facility.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	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.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<p>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.</p> <p>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 ANSTO in Sydney.</p>
	<i>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.</i>	Not applicable.

<p><i>Drilling techniques</i></p>	<p><i>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).</i></p>	<p>Air-core drilling was undertaken over the period from July to September 2024. Drilling is ongoing at the time of writing.</p> <p>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:</p> <ul style="list-style-type: none"> <li>– 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 .</li> <li>– 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.</li> <li>– 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.</li> </ul>
<p><i>Drill sample recovery</i></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<p>Cauldron geologists logged the aircore drill holes and assessed the sample recovery during the process. The entire sample interval was collected from the drill cyclone and placed on the ground for geological logging. A representative sample was placed in a chip-tray for reference.</p>
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p>Cauldron logged the drill holes and samples and used appropriate quality control methods with blanks, standards, and duplicates in a 1/20 ratio.</p>
	<p><i>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.</i></p>	<p>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.</p>
<p><i>Logging</i></p>	<p><i>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.</i></p>	<p>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.</p>
	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p>	<p>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 in the chip trays whilst wet. The logged intervals were sampled in calico bags at 1m sample intervals. Mineralised zone identified on the downhole gamma log were then selected for sample with approximately a 10m buffer</p>



		above and below. These 1m samples were dispatched to the laboratory for conventional multi-element geochemical analysis.
	<i>The total length and percentage of the relevant intersections logged.</i>	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. Approximately 30-50% of the samples at Manyingee South are being dispatched for assay. No material is assayed from holes with no mineralisation evident in the downhole gamma logs.
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	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. The majority of the palaeochannel samples are wet as they occur within a charged aquifer.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	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. Sample zones for assay were then selected based on the downhole gamma logs in accordance with industry standard techniques.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	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.
	<i>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.</i>	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. QA/QC standards, and duplicates were inserted on a 1/20 ratio.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size is believed to be appropriate and will include further crushing and pulverising at the laboratory
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	No assay results are being reported.
	<i>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.</i>	Not applicable.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether</i>	No assay results are being reported.

	<i>acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No assay results are being reported.
	<i>The use of twinned holes.</i>	<p>24YRCAC001 twinned a historical high-grade zone (YNMR077/YNDD018) within the Bennet Well palaeochannel as a 'test' run to ensure all equipment was working correctly before commencing exploration drilling. For comparison, at a 150ppm eU<sub>3</sub>O<sub>8</sub> cut-off, the three holes had intercepts of:</p> <p>YNMR077      87.4 – 88.4m, 1.00m @ 338ppm eU<sub>3</sub>O<sub>8</sub>  88.9 – 91.3m, 2.40m @ 1,205ppm eU<sub>3</sub>O<sub>8</sub>  95.9 – 97.5m, 1.15m @ 222ppm eU<sub>3</sub>O<sub>8</sub></p> <p>YNDD018      86.8 – 87.7m, 0.90m @ 425ppm eU<sub>3</sub>O<sub>8</sub>  88.6 – 95.1m, 6.52m @ 650ppm eU<sub>3</sub>O<sub>8</sub>  95.2 – 95.9m, 0.80m @ 214ppm eU<sub>3</sub>O<sub>8</sub></p> <p>24YRAC001      89.9 – 96.9m, 7.00m @ 543ppm eU<sub>3</sub>O<sub>8</sub></p> <p>Drilling at Manyingee South prospect is a new exploration area</p>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	No assay results are being reported.
	<i>Discuss any adjustment to assay data.</i>	No assay results are being reported.
Location of data points	<i>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.</i>	Cauldron has surveyed the collar positions of the drill holes with handheld GPS, and the survey provided good precision and accuracy. Upon completion of the drilling program the holes will 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.
	<i>Specification of the grid system used.</i>	Cauldron utilised GDA2020 zone 50.
	<i>Quality and adequacy of topographic control.</i>	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	<i>Data spacing for reporting of Exploration Results.</i>	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 various Figures in this report.

		<p>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.</p> <p>Spacing of the core holes from the 2013 drilling program varied between 350m and 800m within individual prospects.</p> <p>The spacing of the drill holes from the 2014 program varied between 10 m and 800 m within individual prospects.</p> <p>The spacing of the drill holes from the 2015 program varied between 50m and 250m within individual prospect.</p>
	<i>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.</i>	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.
	<i>Whether sample compositing has been applied.</i>	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. No sample compositing has been used for physical samples for assay.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	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.
	<i>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.</i>	No sampling bias is observed by the orientation of the drill holes.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<p>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:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Upon arrival at the desired destination in Perth, the samples are finally inspected by laboratory personnel to check that sample integrity has been maintained.</li> </ul>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	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 <sup>2</sup> .
	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 palaeochannel and the Spinifex Well Channel. Uranium mineralisation was also identified in the Ballard's 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: <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth hole length.</li> </ul>	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 <sub>3</sub> O <sub>8</sub> 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).

	<p><i>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.</i></p>	<p>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.</p> <p>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<sub>3</sub>O<sub>8</sub>; 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).</p>
	<p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>No metal equivalents are used.</p>
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p>	<p>All drilling at Manyingee South is vertical.</p> <p>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.</p>
	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	<p>All drilling at Manyingee South is vertical.</p> <p>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.</p>
	<p><i>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').</i></p>	<p>All drilling at Manyingee South is vertical.</p> <p>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.</p>
Diagrams	<p><i>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.</i></p>	<p>Included in the body of this report.</p>
Balanced reporting	<p><i>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.</i></p>	<p>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.</p>
Other substantive exploration data	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey</i></p>	<p>Metallurgical sighter testing was completed by the Australian Nuclear Science and Technology Organisation (ANSTO) for the diamond core drilled in 2013, with further</p>



	<i>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.</i>	testing drilled in 2014 and 2015. Geochemical assaying was also completed for the diamond core from both 2013, 2014 and 2015.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further AC and Diamond Core drilling to increase the Mineral Resource of the Manyingee South and Bennet Well deposits. Further passive seismicity surveys to further map palaeochannel(s) and exploration drilling is required to identify extensions to mineralisation.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Plans and sections have been included in this report as appropriate.