# **ASX Announcement** 26 May 2025



# **Update and Reissue of Announcement: Extensive Palaeochannel System in Newly Acquired Tenements**

Cauldron Energy Limited (**Cauldron** or the **Company**) (ASX: CXU) advises that following consultation with ASX, Cauldron has elected to update and reissue the ASX announcement released on 22 May 2025 titled 'Extensive Palaeochannel Systems Within Newly Acquired Tenements" to include further information as detailed below.

The information that Cauldron has added to the original announcement is as follows:

- i) cross references to previous ASX announcements in relation to geophysical information included in Figures 4, 5 and 6 previously released by Cauldron or where not previously published, the source of that geophysical information; and
- ii) JORC Code Table 1, Sections 1 and 2 in relation to the geophysical information.

The amended announcement with the above information added follows.

This announcement has been authorised for release to market by Michael Fry, Director and Company Secretary.

Yours sincerely CAULDRON ENERGY LIMITED

**MICHAEL FRY** 

DIRECTOR, COMPANY SECRETARY

For further information, visit <a href="www.cauldronenergy.com.au">www.cauldronenergy.com.au</a> or contact:

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

jonathan.fisher@cauldronenergy.com.au

Michael Fry
Director and Company Secretary
Cauldron Energy Limited
M: +61 417 996 454
michael.fry@cauldronenergy.com.au

## **ASX ANNOUNCEMENT**

22 May 2025



# EXTENSIVE PALAEOCHANNEL SYSTEMS WITHIN NEWLY ACQUIRED TENEMENTS

## **Highly Prospective For Uranium Mineralisation**

#### **HIGHLIGHTS**

- Review of exploration data over tenements recently acquired from Wyloo Metals Ltd (Wyloo) largely completed
- An extensive palaeochannel system, interpreted from airborne EM and passive seismic surveys, is evident
- Upstream extension of Manyingee South uranium deposit covered by one of the newly acquired tenements
- Tenements acquired cover an area of 177.3 km<sup>2</sup> and lie adjacent to existing tenements, bringing total tenement coverage at Yanrey owned by Cauldron to 1,327 km<sup>2</sup>

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

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

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

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

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



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

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

#### **Cauldron CEO Jonathan Fisher commented:**

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

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

#### **BACKGROUND**

Cauldron Energy Limited's (Cauldron or "the Company") fully owned Yanrey Uranium Project is located approximately 100 km south of Onslow and covers an area of ~1,327km² (Figure 1) encompassing over 80 kms of ancient, Cretaceous-age sedimentary coastline prospective for sedimentary-hosted uranium deposits. It is located within a highly prospective, mineral-rich region host to multiple prospective palaeochannel systems sourced by uranium-bearing granitoid uplands to the east and stretching from the Carley Bore Uranium Deposit in the south to the Spinifex Well Uranium prospect and beyond, in the north.

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

- Cauldron's Bennet Well Uranium deposit containing 30.9 Mlb of uranium-oxide (38.9Mt at 360ppm eU₃O₃) at 150ppm cut-off, refer ASX announcement of 17 December 2015 and Appendix A),
- Cauldron's Manyingee South Uranium deposit containing 11.1 Mlbs of uranium-oxide (15.5Mt @ 325 ppm eU₃O₃) at 100ppm cut-off, refer ASX announcement of 3 April 2025 and Appendix B),
- Paladin's (ASX: PDN) Manyingee Deposit containing an estimated 25.9Mlbs of uranium-oxide (13.8Mt at 850ppm eU₃O₃) at 250ppm cut-off ASX: PDN "Fy2024 Annual Report"),
- Paladin's Carley Bore Deposit containing 15.6Mlbs of uranium-oxide (22.8Mt at 310ppm eU₃O₃) at 150ppm cut-off ASX: PDN "Fy2024 Annual Report"), and
- Energy Metals' (ASX: EME) Manyingee East Deposit containing an estimated 2.85Mlbs of uranium-oxide (2.84Mt at 455ppm eU₃O₃) at 250ppm cut-off – ASX: EME "Fy2024 Annual Report").



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

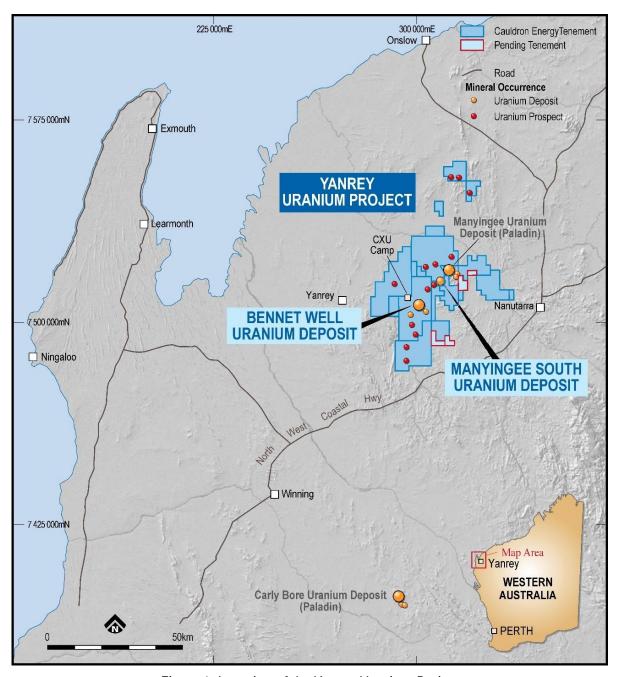


Figure 1. Location of the Yanrey Uranium Project



### **TENEMENT ACQUISITIONS**

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

Tenement ID	Status	Size (blocks)	Size (km²)
E08/3036	Granted	2	6.3
E08/3068	Granted	28	88.8
E08/3201	Granted	2	6.3
E08/3204	Granted	17	53.7
E08/3686	Application	5	15.8
E08/3688	Application	2	6.3

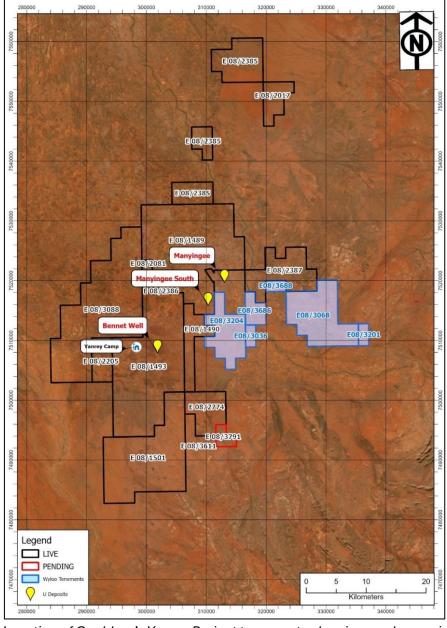


Figure 2. Location of Cauldron's Yanrey Project tenements showing newly acquired Wyloo tenements in blue.



#### **GEOLOGY**

#### Regional geology

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

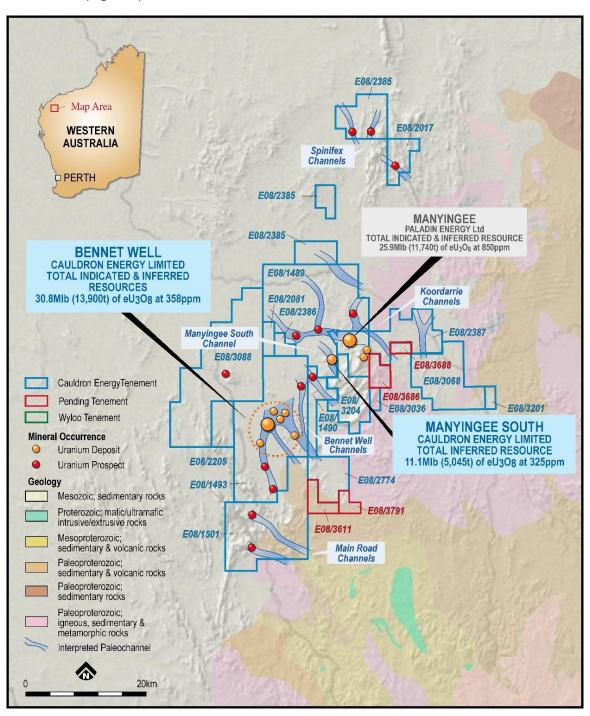


Figure 3. Yanrey Uranium Project regional geology.



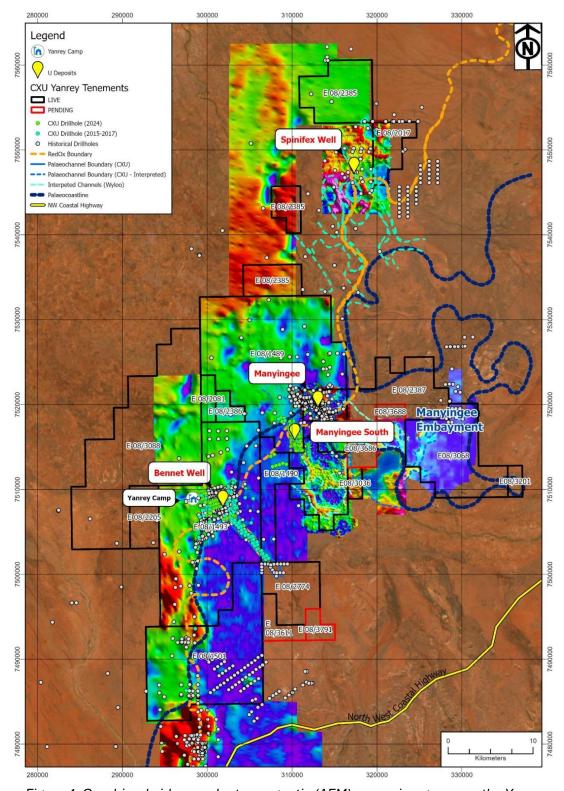


Figure 4. Combined airborne electromagnetic (AEM) survey imagery over the Yanrey region showing Cauldron's tenement holdings over the extensive Cretaceous palaeochannel system. Note Cauldron's newly acquired tenements east of Manyingee/Manyingee South covering the Manyingee Embayment.

Geophysical images in Figures 4 and 5 show a combination of Cauldron's airborne EM data previously published (see Cauldron ASX Announcements 21 Feb 13, 02 Sep 15, 22 Sep 2015, 02 Nov 15 and 23 Nov 21), along with airborne EM survey data extracted from the following surveys publicly available on Department of Energy, Mines, Industry, Regulation and Safety of WA (DEMIRS): Manyingee RepTEM (2007), Manyingee East SkyTEM (2007) and Uaroo VTEM Area 2 (2022) Refer Appendix C.



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

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

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

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

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

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

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

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



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

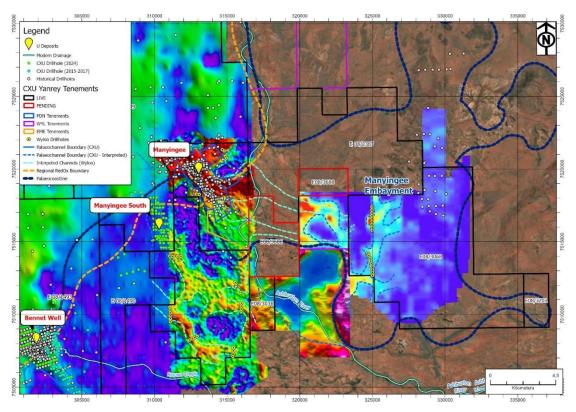


Figure 5. Combined airborne electromagnetic (AEM) survey imagery over the Manyingee Embayment. Hotter colours = more conductive (thicker palaeochannel sediments), cooler colours = non-conductive (resistive) bedrock.

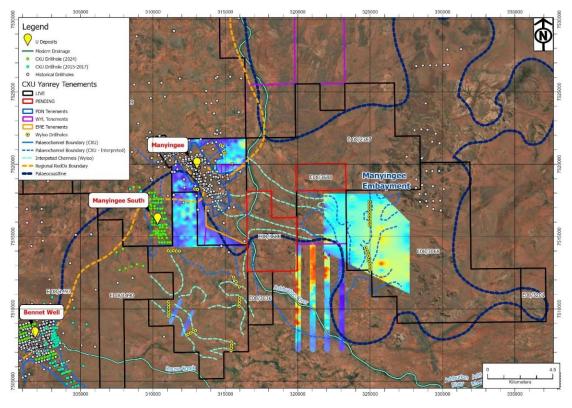


Figure 6. Wyloo passive seismic survey imagery over the Manyingee Embayment (Refer Appendix C). Hotter colours = shallow, cooler colours = deeper.



Tenement ID	Status	Size (blocks)	Size (km²)	Comments
E08/3036	Granted	2	6.3	Small tenement located upstream in the headwaters of the Manyingee South palaeochannel.
E08/3068	Granted	28	88.8	Tenement covers the majority of the central Manyingee Embayment.
E08/3201	Granted	2	6.3	Small tenement located upstream in the headwaters of the Manyingee palaeochannel.  Large outcrop of Yarraloola Conglomerate within the tenement.
E08/3204	Granted	17	53.7	Highly prospective tenement containing known palaeochannel sediments. Adjoining and immediately upstream of Manyingee South Uranium Deposit.
E08/3686	Application	5	15.8	Upstream extension of Manyingee Palaeochannel
E08/3688	Application	2	6.3	Small tenement covering downstream end of Peepingee Creek. Potential to host upstream continuation of Manyingee Palaeochannel.

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

For further information, visit <a href="www.cauldronenergy.com.au">www.cauldronenergy.com.au</a> or contact:

#### **Jonathan Fisher**

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

jonathan.fisher@cauldronenergy.com.au

#### Michael Fry

Director and Company Secretary
Cauldron Energy Limited

M: +61 417 996 454

michael.fry@cauldronenergy.com.au

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#### **About Cauldron**

Cauldron Energy Limited is an ASX-listed uranium-focussed company, 100% owner of the Yanrey Uranium Project, covering an area of ~1,327km², located approximately 100 km south of Onslow and within a highly prospective, mineral-rich region containing multiple uranium deposit. The Yanrey Project covers a prospective northeast-southwest trending Cretaceous-age coastal plain developed along the western margin of the Pilbara block. This prospective trend extends for at least 140km in length, of which Cauldron holds ~80km under granted tenement.



#### **Disclaimer**

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

#### **Competent Person Statements**

#### **Exploration Results - Yanrey Uranium Project**

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

This report also contains information that relates to exploration results extracted from company announcements released to the Australian Securities Exchange (ASX). Unless otherwise stated, where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

#### Mineral Resource Estimate - Bennet Well Deposit

The information in this report that relates to Mineral Resources for the Bennet Well Deposit is extracted from a report released to the Australian Securities Exchange (ASX) on 17 December 2015 titled "Substantial Increase in Tonnes and Grade Confirms Bennet Well as Globally Significant ISR Project" and available to view at www.cauldronenergy.com.au and for which Competent Persons' consents were obtained. Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

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

#### Mineral Resource Estimate - Manyingee South Deposit

The information in this report that relates to Mineral Resources for the Manyingee South Deposit is extracted from a report released to the Australian Securities Exchange (ASX) on 3 April 2025 titled "Maiden MRE for Manyingee South Deposit" and available to view at www.cauldronenergy.com.au and for which Competent Persons' consents were obtained. Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcement released on 3 April 2025 and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original ASX announcement



#### **Appendix A: Bennet Well Mineral Resource Estimate**

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

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

The Bennet Well deposit is comprised of four spatially separate deposits; namely Bennet Well East, Bennet Well Central, Bennet Well South and Bennet Well Channel.

The Mineral Resource (JORC 2012) estimate is:

- Inferred Resource: 16.9 Mt at 335 ppm eU<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  $eU_3O_8$  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<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 A: Bennet Well Deposit Mineral Resource (JORC 2012) at various cut-off grades.

Deposit	Cutoff (ppm eU₃O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm eU₃O8)	Mass U₃O₃ (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
Bennet Well_Total	150	38,871,000	360	13,990,000	30,900,000
Bennet Well_Total	175	36,205,000	375	13,580,000	29,900,000
Bennet Well_Total	200	34,205,000	385	13,170,000	29,000,000
Bennet Well_Total	250	26,484,000	430	11,390,000	25,100,000
Bennet Well_Total	300	19,310,000	490	9,460,000	20,900,000
Bennet Well_Total	400	10,157,000	620	6,300,000	13,900,000
Bennet Well_Total	500	6,494,000	715	4,640,000	10,200,000
Bennet Well_Total	800	1,206,000	1175	1,420,000	3,100,000

Deposit	Cutoff (ppm U₃O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm U₃O <sub>8</sub> )	Mass U <sub>3</sub> O <sub>8</sub> (kg)	Mass U₃O <sub>8</sub> (lbs)
BenWell_Indicated	125	22,028,000	375	8,260,000	18,200,000
BenWell_Indicated	150	21,939,000	375	8,230,000	18,100,000
BenWell_Indicated	175	21,732,000	380	8,260,000	18,200,000
BenWell_Indicated	200	20,916,000	385	8,050,000	17,800,000
BenWell_Indicated	250	17,404,000	415	7,220,000	15,900,000
BenWell_Indicated	300	13,044,000	465	6,070,000	13,400,000
BenWell_Indicated	400	7,421,000	560	4,160,000	9,200,000
BenWell_Indicated	500	4,496,000	635	2,850,000	6,300,000
BenWell_Indicated	800	353,000	910	320,000	700,000

Deposit	Cutoff (ppm U₃O <sub>8</sub> )	Deposit Mass (t)	Deposit Grade (ppm U₃O₅)	Mass U₃O <sub>8</sub> (kg)	Mass U₃O <sub>8</sub> (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: Manyingee South Resource Estimate**

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

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

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

The Mineral Resource (JORC 2012) estimate is:

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

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

Deposit	Cutoff	Tonnes	el	U₃O <sub>8</sub>
	(ppm eU₃O <sub>8</sub> )	(Mt)	Grade (ppm)	Metal (Mlbs)
Manyingee South Inferred	0	15.48	324	11.07
Manyingee South Inferred	100	15.47	325	11.07
Manyingee South Inferred	125	15.42	325	11.06
Manyingee South Inferred	150	14.92	331	10.9
Manyingee South Inferred	175	14.19	340	10.64
Manyingee South Inferred	200	13.12	352	10.19
Manyingee South Inferred	250	9.71	396	8.48
Manyingee South Inferred	300	7.09	443	6.92
Manyingee South Inferred	400	4.4	500	4.84
Manyingee South Inferred	500	1.5	622	2.05
Manyingee South Inferred	800	0.07	1056	0.16

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



## Appendix C: JORC (2012) Table 1

### **Section 1: Sampling Techniques and Data**

This table pertains to geophysical images presented in this report obtained from private and publicly available geophysical survey data over the Manyingee Embayment. No drilling or results of drilling are being reported.

Criteria	JORC Code explanation	Commentary
Sampling	Nature and quality of sampling (e.g. cut	No sampling or drilling was undertaken.
techniques	channels, random chips, or specific specialised industry standard measurement	The information in this table pertains to geophysical images over the Manyingee Embayment .
	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	Geophysical data displayed in in Figure 4 and 5 of this announcement comprises the following airborne electromagnetic surveys:
	limiting the broad meaning of sampling.	Manyingee RepTEM (2007)
		Manyingee East SkyTEM (2007)
		Uaroo VTEM Area 2 (2022).
		Passive seismic data displayed in Figure 6 shows the results of separate surveys undertaken by Wyloo Metals Pty Ltd in 2022 and provided to Cauldron as part of the recent tenement transfer (Cauldron ASX Announcement 09 Apr 2025)
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Not applicable – no sampling undertaken
	Aspects of the determination of mineralisation that are Material to the Public Report.	The geophysical data in Figures 4 and 5 displays the combination of Cauldron Airborne EM data previously released to the ASX (See Cauldron ASX Announcements 21 Feb 13, 02 Sep 15, 22 Sep 2015, 02 Nov 15 and 23 Nov 21), along with airborne EM survey data from the following surveys publicly available on Department of Energy, Mines, Industry, Regulation and Safety of Western Australia (DEMIRS):  • Manyingee RepTEM (2007), and • Manyingee East SkyTEM (2007) and • Uaroo VTEM Area 2 (2022).  Passive seismic data displayed in Figure 6 shows the results of separate surveys undertaken by Wyloo Metals Pty Ltd in 2022.
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Not applicable – no sampling was undertaken
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	No drill results are being reported in this announcement.  Historical drilling within the Manyingee area consists of various phases of rotary mud, aircore and diamond core drilling



	diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	conducted between 1979 (historical) and 2024 (CXU). The breakdown of programs is as follows:
		¬ pre-2005: historical drilling consisting mostly of aircore with subordinate rotary mud and diamond drilling, was undertaken by Minatome, CRA Exploration and Total Mining over the 1979-1985 period.
		¬ post 2005: Since grant of its first tenement in 2005, Cauldron has completed numerous drilling programs comprising a total of 686 holes for over 68,098m drilled metres.
		Following a pause in drilling of some 8 years, Cauldron recommenced exploration activities on ground in 2024. A total of 143 aircore drillholes were completed in 2024 for a total of 14,813.5m and resulted in the discovery of the Manyingee South Uranium Deposit.
		A maiden Mineral Resource Estimate (MRE) for Manyingee South was released on 02 Apr 2025 totalling 15.5Mt @ 325 ppm eU <sub>3</sub> O <sub>8</sub> for 11.1 Mlbs using a 100 ppm eU <sub>3</sub> O <sub>8</sub> cut-off grade.
		Wyloo Metals Pty Ltd undertook drilling of a total of 101 aircore drillholes during 2024 for a total of 6,442m. The majority of these holes were not located on the tenements recently acquired by Cauldron Energy Ltd.
		54 holes for a total of 2,268 m are located on the newly acquired tenements. Wyloo did not undertake downhole gamma logging of these holes and their exploration work is not being reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling results are being reported in this announcement.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable - no drilling results are being reported in this announcement.
	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.	Not applicable - no drilling results are being reported in this announcement.
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.	Not applicable - no drilling results are being reported in this announcement.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not applicable - no drilling results are being reported in this announcement.
	The total length and percentage of the relevant intersections logged.	Not applicable - no drilling results are being reported in this announcement.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	No sampling or results of sampling is being reported in this announcement.



sample	If non-core, whether riffled, tube sampled,	Not applicable – no sampling or results of sampling is being
preparation	rotary split, etc and whether sampled wet or dry.	reported in this announcement.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	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.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not applicable – no sampling or results of sampling is being reported in this announcement.
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.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	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 - no downhole surveying results are being reported.
	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.	Not applicable – no sampling or results of sampling is being reported in this announcement.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	The use of twinned holes.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable – no sampling or results of sampling is being reported in this announcement.
	Discuss any adjustment to assay data.	Not applicable – no sampling or results of sampling is being reported in this announcement.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other	The details of the publicly available geophysical survey data are not available to Cauldron.
	locations used in Mineral Resource estimation.	Passive seismic survey points are presumed to have been located with a handheld or differential RTK GPS.
	Specification of the grid system used.	Geophysical survey data has utilised GDA94 Zone 50 and GDA2020 Zone 50.
	Quality and adequacy of topographic control.	The primary topographic control is from SRTM. This technique is adequate given the generally flat-lying nature of the sediments.



Data spacing and
distribution

Data spacing for reporting of Exploration Results.

The geophysical data in Figures 4 and 5 displays the combination of Cauldron Airborne EM data previously released to the ASX (See Cauldron ASX Announcements 21 Feb 13, 02 Sep 15, 22 Sep 2015, 02 Nov 15 and 23 Nov 21), along with airborne EM survey data from the following surveys: Manyingee RepTEM (2007), Manyingee East SkyTEM (2007) and Uaroo VTEM Area 2 (2022). Passive seismic data displayed in Figure 6 shows the results of separate surveys undertaken by Energy Metals Ltd and Wyloo Metals Pty Ltd.

- The Manyingee RepTEM (2007) survey was commissioned by Energy Metals Ltd and undertaken by GPX Airborne. The survey was completed on 23-Oct-2007 and comprised 599 line km of airborne magnetics, electromagnetics, and elevation surveying. Line orientation was 055° and line spacing was 200m with a nominal flight height of 70m.
- The Manyingee East SkyTEM (2007) survey was commissioned by Gladiator Resources Pty Ltd and undertaken by Geoforce Pty Ltd. The survey was completed on 01-Apr-2007 and comprised 224 line km of airborne electromagnetics and elevation surveying. Line orientation was 180° and line spacing was 400m with a nominal flight height of 30m.
- The Uaroo VTEM 2022 Area 2 (2022) survey was commissioned by Wyloo Metals Pty Ltd and undertaken by Geotech Airborne Limited. The survey was completed on 09-Sep-2022 and comprised 198 line km of airborne magnetics, electromagnetics, and elevation surveying. Line orientation was 180° and line spacing was 200m with a nominal flight height of 35m.

Passive seismic surveying was undertaken by Wyloo Metals Pty Ltd in 2022 and comprised two phases of surveying. The first phase comprised:

 4 lines totalling 19.0 line km. Lines were oriented north south at a line spacing of 2 km. Survey points were spaced every 50m along these lines.

The second phase comprised:

- 4 lines totalling 29.4 line km over the Ashburton River.
   Lines were oriented north south at a line spacing of 1 km with survey points spaced every 50m along these
- 2 lines totalling 3.6 km line km over the Cheetara Palaeochannel. Lines were oriented NNW-SSW south at a line spacing of 1 km with survey points spaced every 50m along these lines. Gridded seismic surveying over E08/2896 (currently held by Wyloo Metals Pty Ltd) and E08/3204 (currently held by Cauldron Energy Ltd). These tenements adjoin Paladin Energy's granted tenements over the Manyingee Uranium Deposit. Passive seismic surveying was undertaken at a total of 1,147 survey points using a north-oriented, 400m spaced grid. This was infilled to 200m spacing in the northern part of the survey.

These spacings were considered optimal for:

 known palaeochannel widths and strike lengths from other, better explored regional areas of the Yanrey Uranium Project.



		<ul> <li>providing the appropriate palaeochannel target resolution within a first-pass survey.</li> </ul>
	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.	Not applicable – no reporting of a Mineral Resource or Ore Reserve is being reported in this announcement.
	Whether sample compositing has been applied.	Not applicable – no sampling or results of sampling is being reported in this announcement.
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.	Follow up 'confirmatory' passive seismic sampling was conducted either on a N-S oriented grid to provide 3D coverage, or oriented perpendicular to the palaeochannel orientation interpreted from airborne EM surveying.
	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.	Not applicable – no drilling is being reported in this announcement.
Sample security	The measures taken to ensure sample security.	Not applicable – no sampling or results of sampling is being reported in this announcement.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques and data are not being reported. Historical exploration data has been reviewed by Cauldron's Competent Person.

## **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 comprised 11 granted exploration tenements and two exploration licences 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 plus E08/3611 and E08/3791) in northwest Western Australia. covering a total area of 1,162.5 km².  Cauldron has also recently acquired 4 granted exploration tenements (E08/3068, E08/3201, E08/3204 and E08/3036) and two exploration licences under application (E08/3686 and E08/3688) totalling 177.75 km² as part of a legal settlement with Wyloo Metals Pty Ltd (see Cauldron ASX announcement 09 Apr 2025).  Cauldron now holds comprised 15 granted exploration tenements and 4 exploration licences under application covering a total of 1,340.25 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.  In 2024 Cauldron discovered the Manyingee South Uranium Deposit.
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.  Tenements recently acquired from Wyloo cover the Manyingee Embayment, a 20km deep indentation in the Cretaceous coastline infilled with prospective palaeochannel sediments.
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.	No drilling results are being reported.
	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 - no drilling results are being reported.
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.	Not applicable - no drilling results are being reported.
	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.	Not applicable - no drilling results are being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are used.
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.	Not applicable - no drilling results are being reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable - no drilling results are being reported.



intercept lengths	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').	Not applicable - no drilling results are being reported.
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.	Balanced reporting has been adhered to. See previous announcements referred to in the body of this report.  No geophysical work was undertaken by Cauldron Energy.  Reporting pertains to geophysical images obtained from private, and publicly available open source (see below) geophysical survey data over the Manyingee Embayment.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The Manyingee East SkyTEM (2007) survey data became available to the public on 17 Oct 2011. Survey details can be viewed on the DEMIRS MAGIX server at https://magix.dmirs.wa.gov.au/surveys/view-survey/1442  The Manyingee RepTEM (2007) survey data became available to the public on 14 Oct 2017. Survey details can be viewed on the DEMIRS MAGIX server at https://magix.dmirs.wa.gov.au/surveys/view-survey/1890  The Uaroo VTEM 2022 Area 2 (2022) survey data is still confidential and was supplied to Cauldron by Wyloo Metals Pty Ltd. Survey details can be viewed on the DEMIRS MAGIX server at https://magix.dmirs.wa.gov.au/surveys/view-survey/3777
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 or RM exploration drilling (accompanied by downhole geophysical surveying), followed by limited DD diamond core drilling will be undertaken at the Manyingee South deposit to facilitate metallurgical and mineralogical test work. Passive seismic surveys will be undertaken over identified target areas to further map palaeochannels and will be followed by further AC or RM exploration drilling (accompanied by downhole geophysical surveying) 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.