ASX ANNOUNCEMENT
3 April 2025

cauldron energy

YANREY URANIUM PROJECT

Maiden Mineral Resource Estimate of 11.1Mlbs eU_3O_8 at Manyingee South Adds to Cauldron's Uranium Inventory at Yanrey

Resource highlights

- Maiden Inferred Mineral Resource Estimate (MRE) at the Manyingee South deposit reported in accordance with the JORC Code, 2012 Edition, of **15.5Mt @ 325 ppm eU_3O_8 for 11.1 Mlbs using a cut-off grade of 100 ppm eU_3O_8**.
- Manyingee South adds to Cauldron's **total Mineral Resources at Yanrey** which now **comprise 42Mlbs of uranium oxide (eU_3O_8)**; a 35% increase to that previously reported for the Project.
- Manyingee South Mineral Resource Estimate based on data from 78 aircore holes (6,576m) completed in 2024, and 5 rotary mud drill holes (437.5m) completed in 2015.
- The margins of the Manyingee South deposit are currently not constrained by drilling with mineralisation remaining open in most directions across the full 1.1km width of the palaeochannel, and over a length of more than 3.0km.
- The discovery of a significant new uranium resource during Cauldron's first exploration drilling campaign since 2015 clearly demonstrates the outstanding potential of the Yanrey Project. Cauldron has identified over twenty (20) high priority targets within its tenement holding, each with the potential to host additional palaeochannel-hosted uranium mineralisation.
- Mineralisation in the Yanrey Uranium Province is hosted within Cretaceous age sediments deposited along an ancient coastal plain that stretches over 140kms from the Carley Bore Uranium deposit in the south, to the Spinifex Well Uranium prospect in the north.
- Cauldron's tenement holdings at Yanrey cover approximately 80km of this palaeo-coastline, encompassing multiple prospective palaeochannel systems draining fertile uranium-bearing granitoid uplands to the east.
- Manyingee South (containing **11.1 Mlbs eU_3O_8**) together with Paladin Energy Ltd's Manyingee deposit (containing **25.9Mlbs eU_3O_8**) and Cauldron's Bennet Well deposit (containing **30.9 Mlb eU_3O_8**) **total ~68 Mlbs eU_3O_8**, and demonstrate the huge potential of the Yanrey Uranium Province.

Cauldron CEO Jonathan Fisher commented:

"The maiden Mineral Resource Estimate for Manyingee South of 11.1Mlb eU_3O_8 marks an important milestone for Cauldron, and adds significantly to our 30.9Mlbs eU_3O_8 at Bennet Well, giving a new total of 42.0 Mlb eU_3O_8. The Manyingee South deposit discovery, from our first exploration drilling programme since 2015, demonstrates the huge potential for additional uranium mineralisation to be discovered at Yanrey. Cauldron is eagerly anticipating extending our exploration to the additional 20+ as yet untested targets within our Project area, and to potentially add substantially more uranium pounds at Yanrey.

I congratulate our technical team on their work in identifying, testing, compiling and reporting of the mineralisation at Manyingee South, culminating in the publishing of this MRE within 9 months from the date of the first hole being drilled".

OVERVIEW

Cauldron Energy Limited's (Cauldron or "the Company") fully owned Yanrey Uranium Project is located approximately 100km south of Onslow in Western Australia and covers an area of ~1,270km^2 (see Figure 1) spanning over 80kms of prospective Cretaceous-age coastal plain and shoreline sediments. It is located within the highly prospective Yanrey Uranium Province, containing multiple uranium deposits including the neighbouring Manyingee deposit (owned by Paladin Energy Ltd).

Cauldron notes that there is currently a ban on uranium mining in the state of Western Australia, and that as such Cauldron's ability to progress its Yanrey project into production will be reliant on a lifting of this ban.

The Yanrey project area hosts the Bennet Well Uranium deposit containing **30.9 Mlb of uranium-oxide (38.9Mt at 360ppm eU_3O_8 (at 150ppm cut-off)**, refer ASX announcement of 17 December 2015 and Appendix A) and the Manyingee South Uranium deposit containing **15.5Mt @ 325 ppm eU_3O_8 for 11.1 Mlbs using a cut-ff grade of 100 ppm U_3O_8** (this announcement).

Cauldron's Mineral Resources at Yanrey now **total 42Mlbs of uranium oxide** in across the Manyingee South and Bennet Well deposits and confirms the Yanrey Uranium Province, and Cauldron's Yanrey Project, as a globally significant uranium region.

Laboratory based testwork has confirmed that Bennet Well is amenable to mining by conventional In-Situ Recovery (ISR) methods and a Scoping Sudy was completed in 2023 (ASX 13 December 2023). Much of the Yanrey Project area remains ineffectively tested or untested, with 22 high priority exploration targets identified for drilling (ASX 24 January 2024).

Manyingee South lies approximately 4.5 kilometres south of the Manyingee deposit, containing an estimated **25.9Mlbs of uranium-oxide (13.8Mt at 850ppm eU_3O_8 at 250ppm cut-off** – ASX: PDN "FY2024 Annual Report").

In February 2025, Cauldron commissioned AMC Consultants Pty Ltd (AMC) to prepare a Mineral Resource Estimate (MRE) for the Manyingee South uranium deposit ('Deposit' or "the Deposit").

The Deposit MRE is supported by 78 aircore drill holes (6,576m) completed in 2024, and 5 rotary mud drill holes (437.5m) completed in 2015. 55 drillholes were used for the MRE interpolation and modelling, as not all holes intersected mineralisation.

The Deposit was sampled using gamma-ray logging results of AC drillholes. Drilling was at variable spacings – from a nominal 200 m by 200 m to 100 m by 50 m spacing.

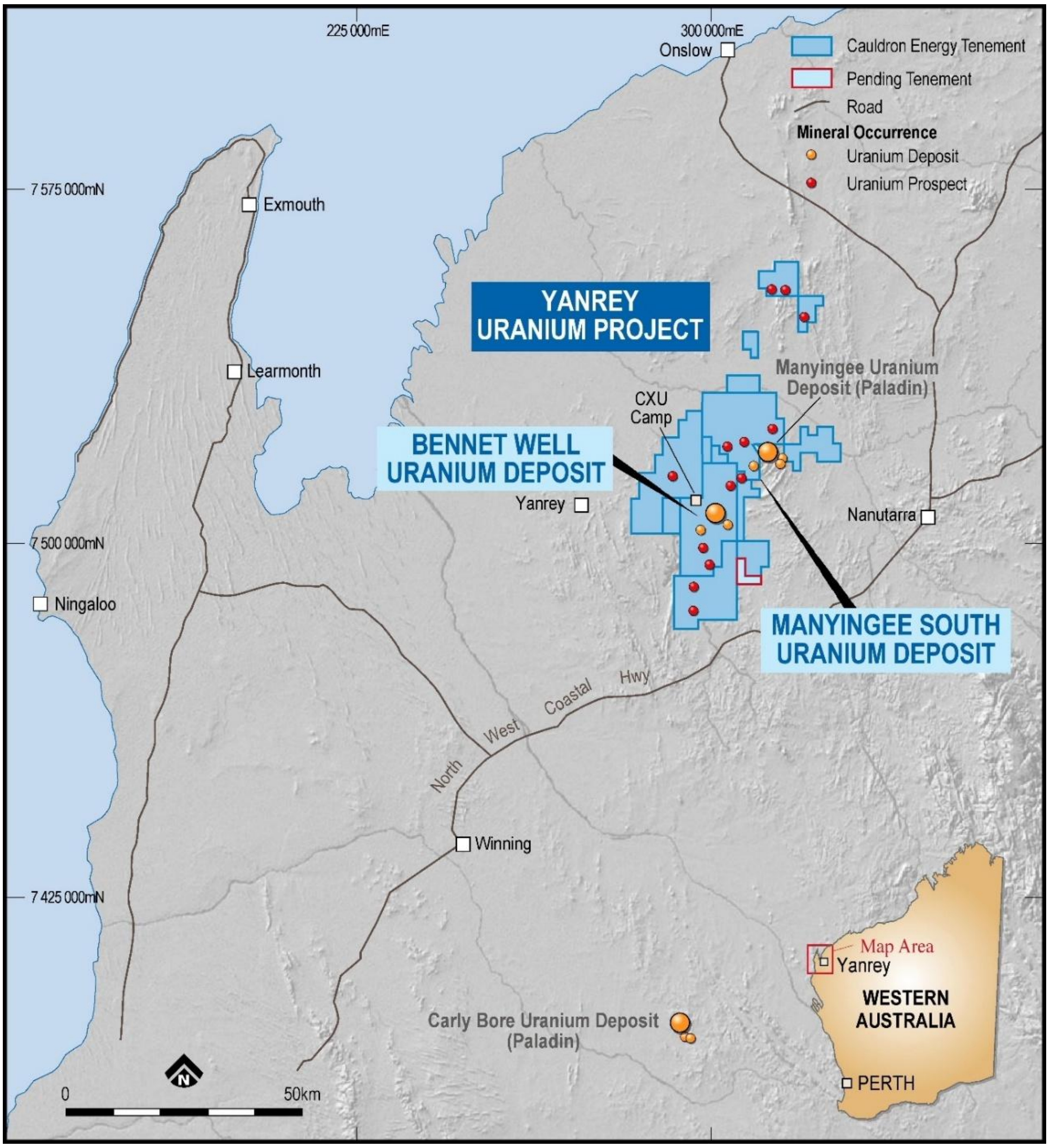

Figure 1. Location of the Yanrey Uranium Project showing Cauldron's tenement holdings

Geological modelling was completed by AMC. The interpretation resulted in wireframes for 6 main mineralised lenses using a nominal cut-off grade of 100 ppm eU_3O_8. Interpreted granite basement and lithological logging were used to control the modelling of the palaeochannel-hosted mineralised lenses.

A block model constrained by the interpreted mineralised lenses was constructed with a parent cell size of 50 mE by 50 mN by 0.5 mRL with standard sub-celling using up to 5 divisions in east and west directions and up to 10 times in vertical direction to maintain the volume resolution of the mineralised lenses.

Drillhole intervals with uranium equivalent grades were composited to entire thickness of mineralised intersections, and these were used to interpolate thickness weighted eU_3O_8 grades into the block model using inverse distance weighted (IDW) interpolation techniques with the power of 2 after statistical analysis. Block grades were validated both visually and statistically.

An average dry bulk density value of 1.74 t/m^3 was applied to all cells in the block model, and it is assumed to be appropriate for the style of mineralisation.

All modelling was completed using MicroMine software.

Table 1 Manyingee South Uranium Deposit Inferred Mineral Resource Estimate

Deposit	Class	Tonnes (Mt)	eU_3O_8 Grade (ppm)	eU_3O_8 (Mlb)
Manyingee South	Inferred	15.5	325	11.1
TOTAL		**15.5**	**325**	**11.1**

Notes:

- *Mineral Resource has been classified in accordance with the guidelines of the JORC Code. All blocks were classified as Inferred.*
- *The Mineral Resource report assumes an ISL mining method with the marginal cut-off of 100 ppm eU_3O_8.*
- *The Bennet Well Radioactive Equilibrium Factor (REF) of 1.07 was applied to the eU_3O_8 grades.*
- *Average dry bulk density value of 1.74 t/m^3 was assigned to all cells in the block model, and it is assumed to be appropriate for the style of mineralization.*
- *Tonnage is reported on a dry basis.*
- *Rows and columns may not add up due to rounding.*

ASX ADDITIONAL INFORMATION

Geology

Regional geology

The Project area lies at the junction 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. 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).

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 palaeo-drainage network developed along the Cretaceous palaeo-coastline. Cauldron's tenement holdings cover at least fifteen (15) major palaeochannels (Figure 2) incising progressively deeper as they flowed north-northwest from outcropping uraniferous granite and granitic gneiss basement in the south and southeast.

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

The Bennet Well palaeochannel is conspicuously straight and follows a NNW-SSE trending faulted half-graben for approximately 10km before entering the Bennet Well estuary system. The Manyingee South project area does not appear to be structurally controlled but does incise a narrow gorge through a ridge of shallow granite at its northern end.

Deposit geology

The Manyingee South deposit has no surface expression or outcrop, instead it is covered by a thick blanket (up to 56m) of alluvial sediments deposited by the Ashburton River. The Deposit geology is derived from the interpretation of geological information collected from subsurface drilling data.

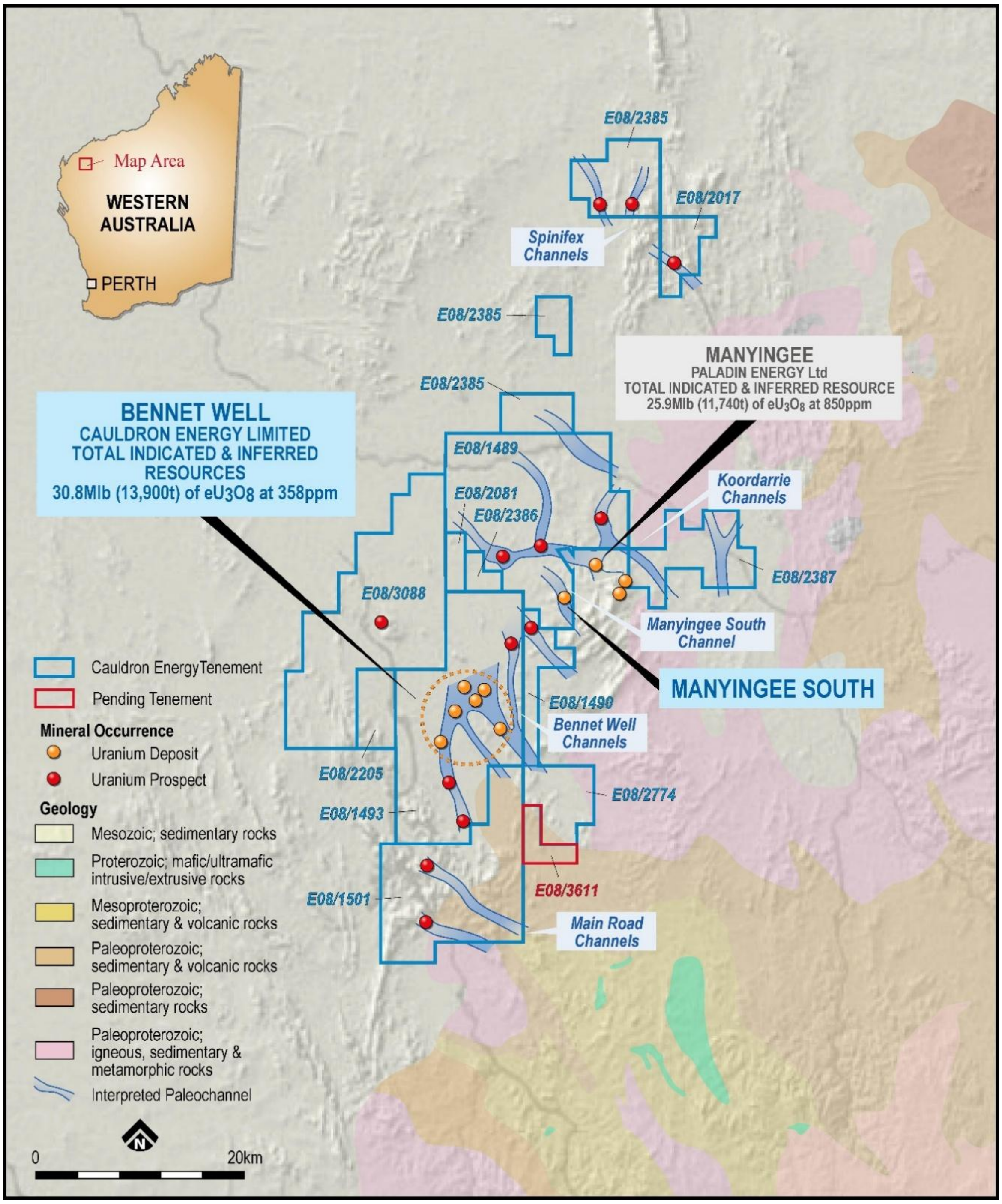

Figure 2. Regional Geological Map

Drilling in 2024 was initially conducted along the interpreted axis of the palaeochannel and aimed to confirm the presence of prospective sediments and test the extent of anomalous intercepts from Cauldron's 2015 drill campaign. The first hole (24YRAC048) drilled straight into high-grade mineralisation associated with multiple tabular zones of mineralisation including a 5.9m thick intercept.

Wide-spaced drilling (400m x 200m) was conducted along and across the north-south trending Manyingee South palaeochannel to delineate the width and extent of uranium mineralisation.

Drilling initially progressed from south to north along the interpreted axis of the palaeochannel to broadly locate the termination of the redox front. Follow-up infill and extension drilling was then undertaken once the broad dimensions of the redox front had been identified (see Figure 3).

A total of 15 east-west sections were completed across the full or partial width of the Manyingee South palaeochannel. Particular attention focused on defining the northern closure of the redox front located between drill holes 24YRAC053 and 24YRAC054, and infill drilling to further define the high-grade zone in the south of the deposit in the vicinity of the drill hole 24YRAC048. This high-grade zone remains open to the east, southeast and southwest (see Figure 3).

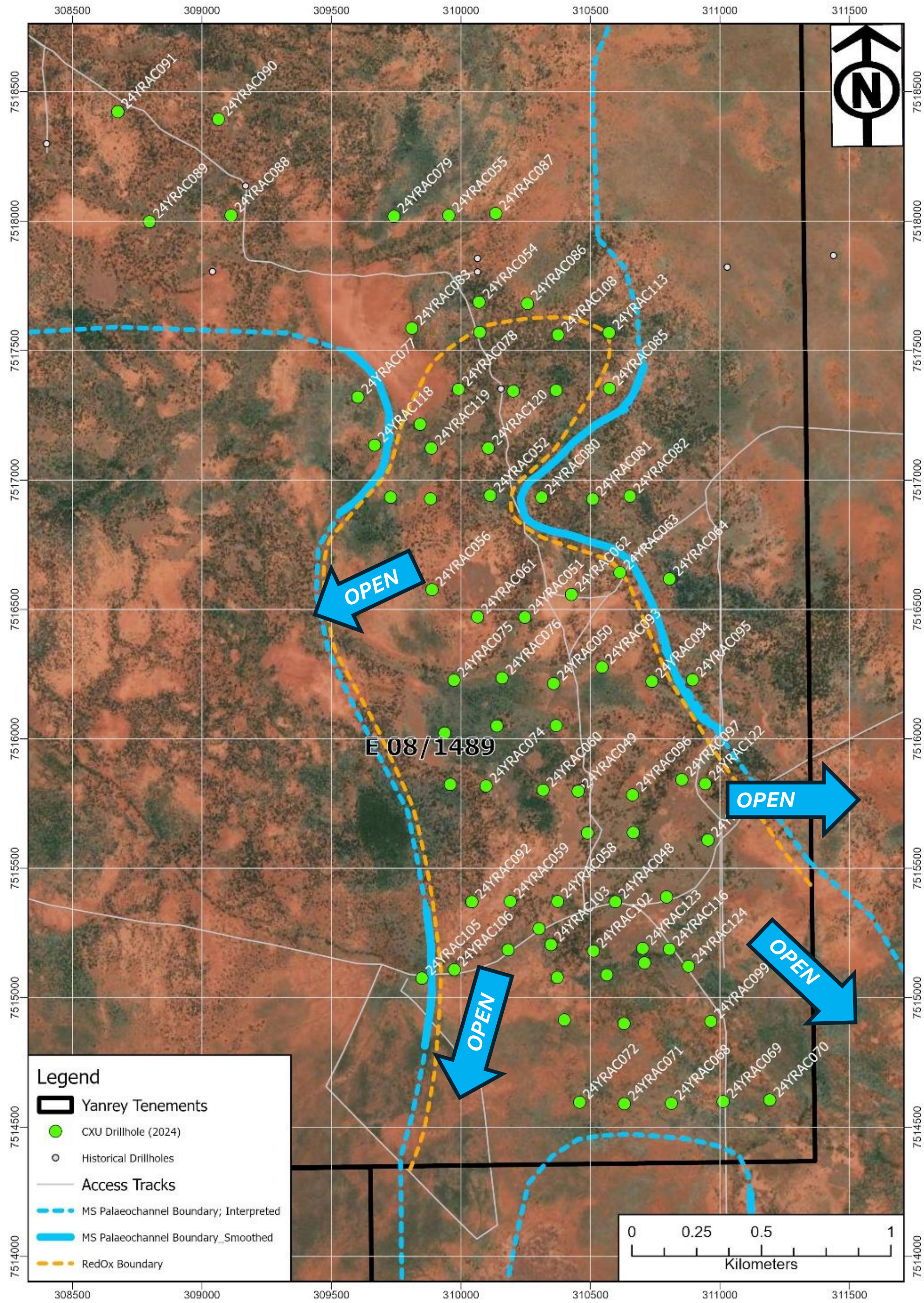

Figure 3. Manyingee South drillhole locations

The Project stratigraphy is very similar to that seen at Bennet Well however, the protective 30-60m thick blanket of marine clays of the Muderong Shale at Bennet Well is largely absent at Manyingee South. Instead, Quaternary sediments deposited by the palaeo-Ashburton River are much better developed, extending down to a maximum depth of 56m in the centre of the deposit where they erode into the upper parts of the Project mineralisation.

The observed palaeo-valley fill at Bennet Well and Manyingee South documents the progressive 'drowning' of the palaeo-coastline in response to eustatic sea-level rise during the early Cretaceous. Onshore sediments of Barrow Group (Yarraloola Conglomerate & Nanutarra Formation) that fill the palaeo-valleys are unconformably overlain by transgressive marine sediments of the Winning Group (Birdrong Sandstone, Mardie Greensand and Muderong Shale) that records a progressive increase in water depth from shallow to deep marine. Palynological dating from the Project indicates an early Cretaceous age (Barremian to Aptian; 130-125Ma) for the host rock units.

Mineralisation & deposit type

The age of mineralisation is unknown, but the mineralisation is hosted within Cretaceous rocks and eroded by Quaternary units. Mineralisation does not continue into permeable Quaternary sediments. Discontinuous mineralisation extends across the full width of the palaeochannel and over 3,000m along the channel (to the tenement's southern boundary) and remains open to the east, west and south. An additional (apparently separate) zone of low(er)-grade mineralisation has been intersected approximately 1,700m further north within entirely reduced sediments.

Mineralisation is located at depths of 45-70m (below the overlying Quaternary sediments) and is hosted primarily within carbonaceous muds and fluvial sands of the Nanutarra Formation. Subordinate mineralisation is hosted within the overlying transgressive shoreface sands of the Birdrong Sandstone. Oxidised zones associated with mineralised redox boundaries, as shown in Figure 4, are typically stained bright yellow.

Figure 4. 24YRAC048 Aircore drilling samples showing mineralised redox boundary over the 60-66m interval grading from brown reduced carbonaceous sands down into bright yellow oxidised sands. Mineralisation occurs on the reduced side of the redox boundary

Note: The results for Hole 24YRAC048 above were reported as part of the Company's ASX announcement of 11 September 2024 titled 'First Holes at Manyingee South Confirm Significant Discovery'. The mineralised intervals for Hole 24YRAC048 reported were 0.78 m @ 400 ppm eU_3O_8 from 51.06 - 51.84 m, 0.94m @ 228 ppm eU_3O_8 from 59.30m to 60.24m, 0.64m @ 236 ppm eU_3O_8 from 60.54m to 61.18m and 5.90 m @ 374 ppm eU_3O_8 from 73.76 - 79.66 m.

Mineralisation is developed at longitudinally and laterally consistent stacked redox boundaries that are interpreted as stratigraphically equivalent to uranium mineralisation observed at the nearby Manyingee deposit. Carbonaceous clay layers act to preserve associated underlying carbonaceous reduced sands from surface oxidation as well as compartmentalising the aquifer and focussing redox-front migration through the sandstones.

To date, six separate flat-lying layers have been identified developed within the large-scale redox front present within the Manyingee South palaeochannel (see Figure 5).

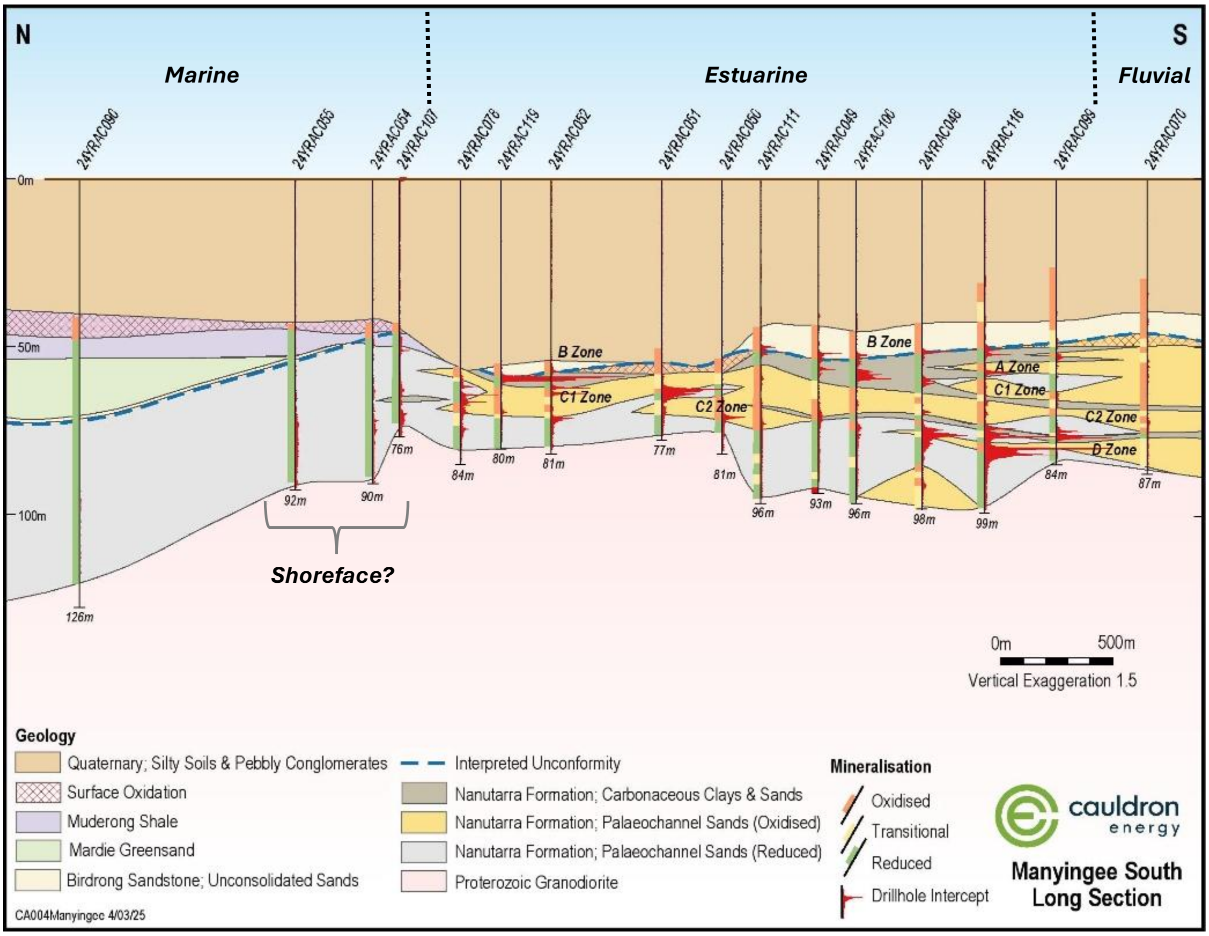

Figure 5. Project longitudinal section showing interpreted palaeogeography

Two high-grade zones have been identified (refer Figure 6):

- In the north, high-grade mineralisation is centred upon 24YRAC119 and is approximately 400m wide by 800m long, its elongated dimensions are the result of the constriction of the palaeochannel at its mouth. A sharp stratigraphic break, reflected in the grade-thickness distribution (Figure 5), occurs at this point with marine influenced sediments being found northwards of 24YRAC107.
- In the south, high-grade mineralisation is centred upon 24YRAC103 and 24YRAC104 and is ~400m wide and extends ~1,000m across the full width of the palaeochannel towards 24YRAC116. This zone is spatially associated with the junction of an interpreted tributary stream entering the Manyingee South channel from the southwest.

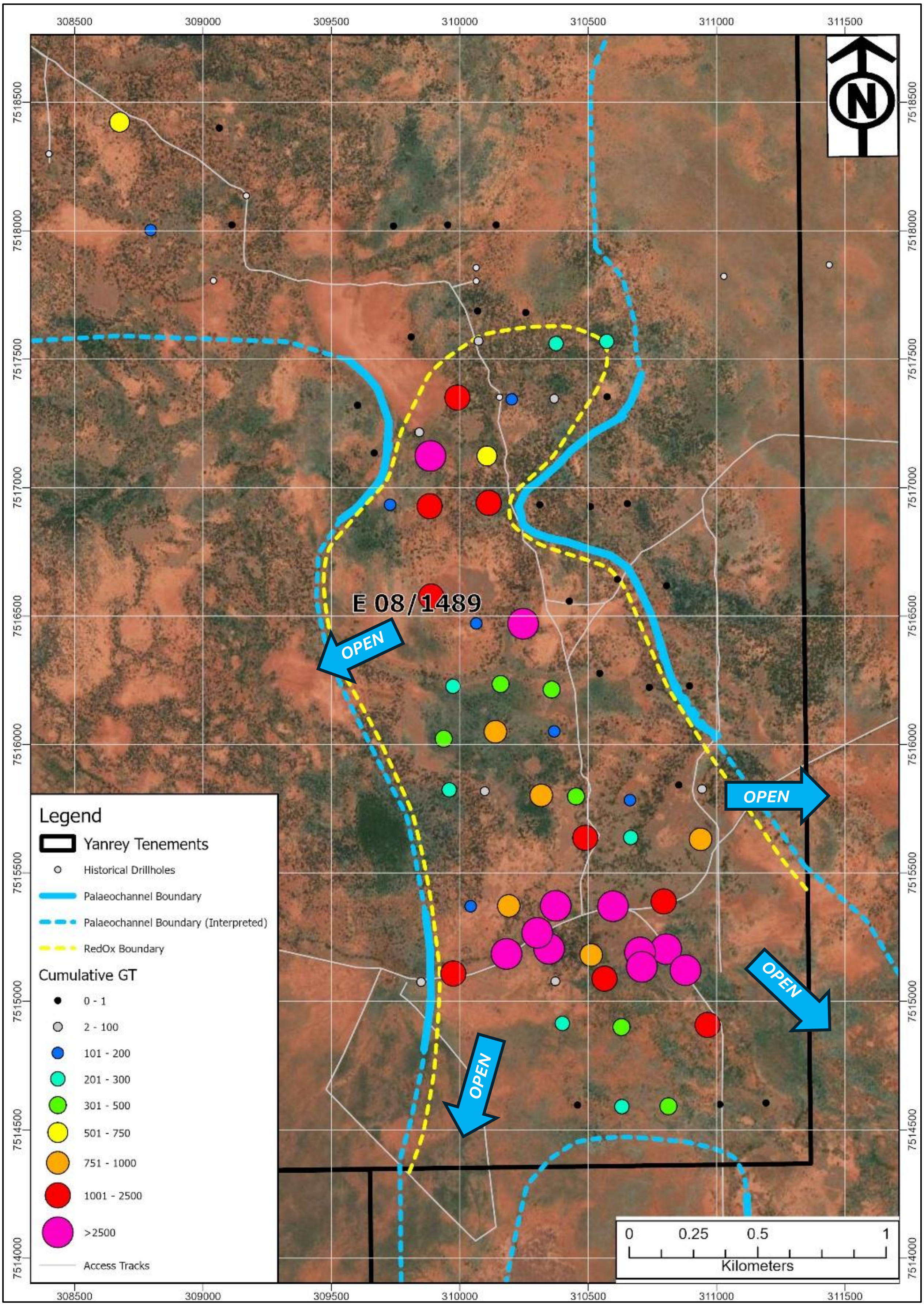

Figure 6. Manyingee South Cumulative GT (ppm x m) map

In both high-grade zones, mineralisation is developed at multiple stacked flat-lying redox fronts (or zones) contained within sandstones separated by laterally continuous carbonaceous clay intervals. The majority of mineralisation intersected is similar to that seen at Paladin's Manyingee deposit although the Project is subject to more erosion by Quaternary units and overprinting by surface oxidation.

Recent drilling indicates that the sub-horizontal mineralised horizons or fronts can bifurcate into an upper C1 and lower C2 redox-front in the vicinity of 24YRAC051 (Figure 4) whilst an additional redox-front, referred to as the D redox-front, is developed in the south of the tenement (intersected by 24YRAC048). Best grades/thicknesses are associated with the closure of the D redox-front and include drillholes 24YRAC103, 24YRAC104 and 24YRAC116.

The deposit style is currently interpreted and modelled as tabular due to the broadly spaced drilling (generally on a 200m x 200m spacing) however, the spatial relationship between high-grade zones and the observed redox boundaries suggests that mineralisation may exhibit, at least in part, roll-front characteristics. Notwithstanding, it must be stressed that the current drill spacing is too broad to confirm this interpretation.

Drilling technique

In 2015 Cauldron undertook limited scout exploration drilling at the Project completing five (5) rotary mud drillholes (at a diameter of 5¼ inch) for a total of 437.5m. Two of these holes intersected lower-grade mineralisation but were never followed up at that time.

In 2024 drilling was undertaken by Wallis Drilling using a Mantis AC drilling rig (Figure 7). 78 drillholes (24YRAC048-24YARC124 inclusive and 24YARC143) were completed at the Project for a total of 6,576m (Figure 3). This represents the first follow-up and systematic drilling campaign conducted at the Project.

Figure 7. Operating Wallis Aircore rig

At completion of the drill hole, collars were surveyed by handheld GPS unit to an accuracy of ±3-5 metres. A DGPS survey is planned to be conducted at the start of field operations in 2025. All holes were drilled vertically. No downhole surveying was conducted as it is considered that the flat-lying geology and relatively short holes are unlikely to result in any material deviation from the collar set-up.

Sampling technique

Drill cuttings

Due to the high water table the majority of the drill cuttings returned were wet. All drill cuttings were collected from the cyclone located on the side of the drilling rig in numbered plastic buckets and laid out on the ground. Samples were collected at 1m intervals. Representative samples for geochemical assay were collected in individually numbered calico bags from the rotary splitter on the side of the drilling cyclone. Calico bag weight was in the order of approximately 1-3kg of sample per calico bag.

Bulk samples were laid out on the ground away from the rig in rows of twenty (20) to facilitate geological logging. The accompanying numbered calico bag was laid out on the ground adjacent to each bulk sample. Samples in calico bags were allowed to air-dry before being collected for dispatch to the laboratory.

Representative samples were collected in chip trays and these trays are stored in a secure storage facility at Cauldron's exploration camp for future reference. All AC chips were geologically logged and used to assist in the interpretation of the downhole geophysical logs. Sample numbers were cross-checked against depth on site as part of geological logging.

After air drying, the samples within the numbered calico bags were collected in green plastic bags on the drill site for transport back to the fenced storage area at Cauldron's exploration camp. Approximately five (5) samples were contained within each green plastic bag making a total weight of 10-15kg. At camp, sample numbers were listed on the outside of the bag and cross-checked against the numbered bags with standards then being inserted before the green bags were zip-tied closed.

Individual green bags were the placed in a large polyester 'bulka-bags' and sealed for transport. Each 'bulka-bag' contained approximately 100 to 250 individual samples. After appropriate radiation safety procedures were followed, the individual 'bulka bags' were then transported from site to the secure haulage yard in Karratha via Light Vehicle. Samples were then dispatched by DG Air Freight services to ALS Laboratories in Perth.

No geotechnical data was collected due to the generally flat-lying geology and mostly unconsolidated sediments.

Downhole gamma logging and probe

Downhole gamma logging was performed by Wireline Services Group using a Geovista total count triple-gamma probe, probe number 4322. The logging system consists of the winch mechanism (which controls the movement of the probe in and out of the hole) and the digital data collection device (which interfaces with a portable computer and collects the radiometric data as counts per second (CPS) at defined intervals in the hole. Raw data can be viewed and plotted graphically from WellCAD software, to provide a graphic down-hole plot of CPS.

The total count triple gamma probe (gamma sonde) measures natural gamma radiation from a Sodium Iodide (NaI) scintillation crystal (which can saturate in high grade uranium) and a ZP1320 High-flux Geiger-Muller tube pair which complement the NaI detector in high grade uranium. This combination results in three natural gamma logs collected simultaneously. The three different detector sensitivities, provides accurate CPS where there are wide variations in uranium grade.

Calibration of gamma probe No. 4322 was completed using non-dead-time corrected grade and hole-size correction models. The logging system calibration data was obtained in June 2024, using the former Australian Mineral Development Laboratory's (AMDEL) test pits at Flemington St, Frewville, Adelaide (now administered by the Resource Monitoring Services Unit of the South

Australian Department of Environment, Water and Natural Resources). These pits were established in 1983, under the supervision of the Commonwealth Scientific and Industrial Research Organization (CSIRO), to provide accurate calibration facilities for the many types of drill hole logging systems used in the oil and mining industries. Previous calibrations were performed in the Grand Junction Wyoming Test pits (as the tool was manufactured in the United States and thus initially calibrated there). The AMDEL calibrations agree well with the manufacturer's original calibrations indicating that the tool is performing within specifications and detector drift is minimal.

The calibration determination involved logging test-pits with known grade and thickness (two or three times) to determine the response of the logging system and then calculating a Calibration ("K") Factor, which gives the true grade (i.e. conversion of CPS to equivalent eU_3O_8). From multiple logs of each of the test pits a probe calibration ('K') factor was calculated.

To ensure data quality, the probe is lowered and raised at the same speed of 3m per minute. Whilst "up hole" CPS is typically used for later grade estimation, any irregularity (CPS fluctuation) in this data set can be rectified by substitution or part thereof of the down hole CPS. The digital data created by the radiometric probe is composited to either 5cm (2015) or 2cm (2024) intervals.

The basic analysis that supports the uranium grade reported in the Cauldron database of uranium grades and thickness of drill intercepts is estimated from the down-hole gamma log.

<u>Radiometric grade estimation</u>

The down-hole radiometric probe measures total gamma radiation from all-natural sources, including potassium (K) and thorium (Th) in addition to uranium-bearing minerals. In most uranium deposits, K and Th contribute a minimal component to the total radioactivity, measured by the instrument as CPS. At the Project, the uranium content is high enough that the component of natural radiation that is contributed by K from feldspars in sandstone or conglomerate, and minor Th minerals is considered to be negligible. At the nearby Bennet Well deposit studies have shown that whilst the thorium and uranium measurements from 41 samples show no correlation the thorium values are low and would contribute the equivalent of a few ppm to the eU_3O_8 values calculated from the gamma radiation.

The conversion of CPS to equivalent uranium concentrations is therefore considered a reasonable representation of the in-situ uranium grade. Thus, determined equivalent uranium analyses are typically expressed as ppm eU_3O_8 ("e" for equivalent) and should not be confused with U determination by standard XRF or ICP analytical procedures.

The conversion process can involve one or more data corrections which include the following:

- accounting for water in the hole (water factor) which depresses the gamma response.
- hole diameter variations, as gamma response decreases from source.
- instrumentation lag time in counting (dead time factor) which is typically included as part of the probe calibration.
- corrections for reduced signatures when the readings are taken inside casing (steel casing factor).

The water factor, casing factor and hole diameter factor account for the reduction in CPS that the probe reads while in water, inside casing and inside the hole itself, as the probes are typically calibrated for use in air-filled drill holes without casing. All modifying factors have been applied to the CPS data collected at the Project.

Conversion of the modified CPS to derive an *e*U or eU_3O_8 grade was undertaken by applying the probe's calibration curve or factor.

Cauldron provided AMC with detailed report describing the details of the uranium equivalent grades calculation based on gamma-ray logging results. The report was reviewed by AMC, and it was concluded that the applied methodology of eU_3O_8 calculation is acceptable for Mineral Resource estimation purposes.

Radioactive equilibrium factor (REF)

Geophysical gamma logging data is the primary information source used for uranium resources estimation. From these data, it is then possible to determine:

- mineralised intervals based on gamma logging data.
- conversion of radium grade to uranium grade based on Radioactive Equilibrium Factor (REF) and probe results.

At this time radium grades have not been determined and thus REF cannot be estimated for the Deposit, however, a comparison of the eU_3O_8 based on gamma logging and actual U_3O_8 for 41 assays from the nearby Bennet Well deposit estimated a REF of 1.07. As this REF is likely to be applicable to the style of mineralisation at the Deposit, it was applied to the Deposit's eU_3O_8 values.

Bulk density

Downhole bulk density logging was undertaken by Wireline Geological Services. Open hole density logging was attempted in over 50 drillholes, however, density measurements were only obtainable for the overlying Quaternary units. Unfortunately, the unconsolidated nature of the overlying Quaternary units prevented the drill hole to remain open long enough to permit open hole logging of the Cretaceous units at depth.

However, at the Bennet Well deposit bulk density logging of similar style mineralisation and host rocks to that observed at the Project determined an average dry bulk density value of 1.74 t/m^3, and this density is assumed to be appropriate for the Project and was applied to all cells in the block model.

Mineral Resource estimation

Methodology

AMC developed a block model and estimated the Mineral Resource using Inverse Distance Weighted (IDW) process with the power of 2 based on the available analytical database. As part of the modelling, AMC reviewed and updated wireframe models for the deposit. The geological modelling and Mineral Resource estimation were generated by AMC using MicroMine 2025 SP1 software (25.0.360.1) software.

Statistical assessment and high-grade cutting

Classical statistical analysis was updated twice for the deposit. The first study was carried out to determine the distribution characteristics of the uranium grades.

The histogram for unrestricted uranium grade population has a positively skewed log distribution and demonstrates that there is no apparent mixing of grade populations. The histogram does not indicate an obvious cut-off grade that could be used for interpretation of eU_3O_8 mineralisation. A decision was made to use the same nominal cut-off grade of 100 ppm for the interpretation of mineralised lenses. The adoption of 100 ppm cut-off grade also reduces the residual effect of any radium halos by their exclusion, as gamma data is not accurate or precise below this level.

For the second study, once the eU_3O_8 mineralisation interpretation completed for all drillholes and wireframed, classical statistical analysis was repeated for all intervals within the interpreted envelopes to meet the following objectives:

- To estimate the mixing effect of grade populations for eU_3O_8 within the interpreted mineralised lenses.
- To estimate the necessity of separation of grade populations if more than one population was observed.
- To reveal the possible top-cut grades for eU_3O_8 for grade interpolation.

The input sample file was flagged to exclude those intervals that appeared outside the wireframed mineralised lenses for uranium and the modelled histogram for the uranium grades restricted within mineralised lenses does not demonstrate apparent mixing of grade populations for uranium.

The lognormal histograms and cumulative probability plots were analysed to determine the top-cut grades to be applied to the input gamma-ray logging data before the grade interpolation. All input intervals with eU_3O_8 grades were determined from the gamma logging results for either 2cm or 5cm intervals. A decision was made that **a top-cut of 4,800 ppm eU_3O_8** is applied on the analysed intervals before the length compositing process.

<u>Interpretations and wireframing</u>

Interpretation was completed for six (6) mineralised lenses on sixteen (16) vertical west to east cross sections through the deposit using a nominal cut-off of 100 ppm eU_3O_8. The interpreted mineralisation was based on current drilling and gamma-ray logging data. All interpreted mineralised lenses are shown on Figure 7. Grade composites were created to assist with interpretation.

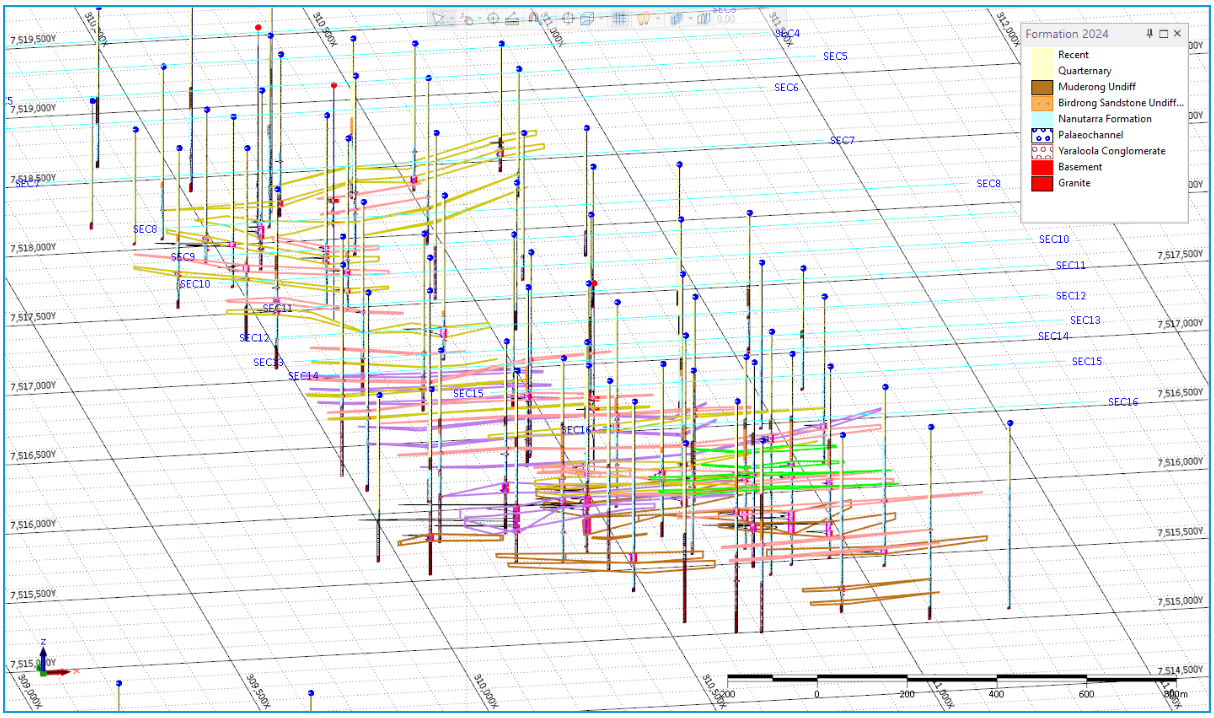

Figure 8. Interpreted mineralised lenses (looking north)

The following techniques were employed while interpreting the mineralisation:

- Each cross section was displayed on screen with a clipping window equal to a half distance from adjacent sections.
- All interpreted strings were snapped to the corresponding composited drillhole intervals (i.e. the interpretation was used to constrain the data in the three dimensions).
- The interpretations were extrapolated to the distance equal to a half distance between exploration lines perpendicular to the corresponding first or last interpreted sections. The general orientation of the mineralised zone was maintained.

The interpreted strings for mineralised lenses were used to generate 3D solid wireframes. Each cross section was displayed on the screen along with the closest interpreted section and the wireframes were then developed for six mineralised lenses. If the corresponding lens did not occur on the next cross section, the lens was projected to a half distance towards the next section, where it was terminated. The nominal drill spacing varied between 50m by 100m and 200m by 200m.

Every interpreted lens was wireframed individually. The strings and wireframes that were created are shown in Figure 9.

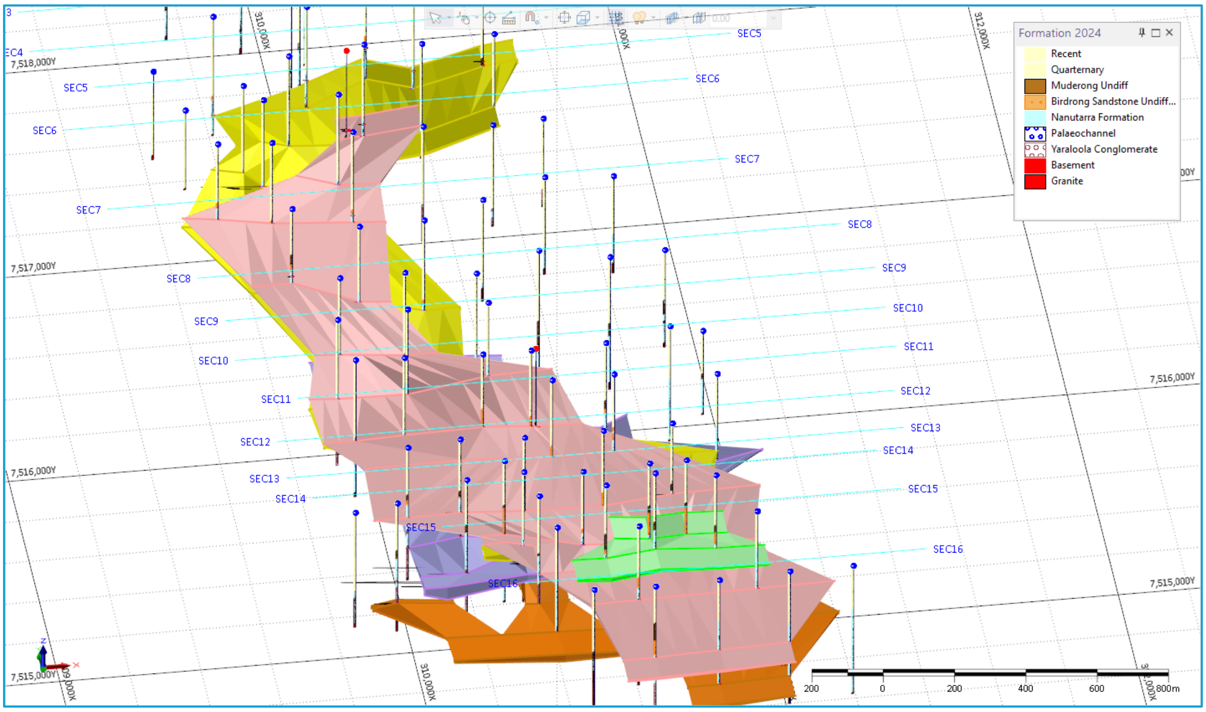

Figure 9. 3D view of the wireframed mineralised lenses (looking north)

<u>Drillhole data coding and length compositing</u>

Selecting and coding drillhole data is a standard process to ensure that correct data are used in statistical analysis and grade interpolation process. For this purpose, the wireframes for all modelled mineralised lenses were used to select and flag the drillhole intervals for individual lens and flagged accordingly.

The historical (2015) and recent (2024) databases with uranium oxide grades were merged into one file and flagged by all modelled mineralised lenses. All flagged intervals were then:

- composited eU_3O_8 grades to the entire length of intersection, then
- the intersection thickness was calculated separately for each lens and each drillhole, then

- a grade times thickness (GT) field was calculated by multiplying the combined vertical intersection length by composited eU_3O_8 grades. The composited grades were calculated after the application of top-cuts.

The minimum intersection thickness was 0.10 m, the maximum 12.64 m, and the average length of mineralised intersections within all mineralised lenses was 2.35 m.

Composites were terminated at all interpreted zone boundaries with the minimum thickness set to 0.1 m.

Bulk density

The data provided to AMC included no bulk density measurements for the Project. Since the data were insufficient to interpolate the bulk density values into the model, it was decided to adopt the average bulk density of the nearby Bennet Well deposit of 1.74 t/m3 which was applied to all cells in the block model.

Volume modelling/block model development

Block modelling was undertaken by AMC using MicroMine software.

An empty block model was created within all closed wireframe models that were created for the mineralised lenses. The block model was coded according to each lens number.

The nominal drillhole spacing at the deposit is 200 m by 200 m with some areas drilled with the spacing of 100 m by 50 m. It was decided that the parent cell size of 50 m(E) x 50 m(N) x 0.5 m(RL) with sub-celling to 10 m(E) x 10 m(N) x 0.05 m(RL) is used for the deposit to maintain the resolution of the mineralised lenses. Sub-celling occurred near the boundaries of the mineralised lenses. Where possible, sub-cells were optimized in the model to form larger cells.

Grade interpolation

Two main parameters – GT (grade x thickness) and accumulated LENGTH were interpolated into the empty block models using IDW interpolation process with the power of 2. The GT was calculated with the top-cut grades applied. Block grades were then back calculated from these estimates.

Model validation

Validation of the grade estimates was completed by:

- Visual checks on screen in cross-sections to ensure that block model grades honour the grade of composite data.
- Statistical comparison of composite and block grades.
- Generation of swath plots to compare input and output grades in a two-dimensional process by easting and northing.

Mining and Metallurgy

The Deposit has favourable geological setting for mining by a conventional In-Situ Recovery (ISR) operation: mineralisation that occurs within confined permeable lithological units at shallow depths within a reasonably well-defined paleochannel.

Mining and hydrological studies have not yet been undertaken due to the very early (discovery stage) of the project.

Similarly, metallurgical and mineralogical studies have not yet been undertaken due to the very early (discovery stage) of exploration at the project. Diamond core drilling to obtain samples for metallurgical and mineralogical test work is a high priority.

MINERAL RESOURCE REPORTING

Reasonable prospects test

Clause 20 of the JORC Code requires that all Mineral Resource estimates must have reasonable prospects for eventual economic extraction, regardless of the classification assigned to the Mineral Resource.

The Competent Person for the mineral Resource (Dmitry Pertel) considers there are reasonable prospects for eventual economic extraction on the following basis:

- The Project has favourable geological setting for ISR operation – reasonably shallow mineralisation that occurs within potentially permeable sandstone and conglomerate lithological units within the paleochannel that is reasonably well understood.
- Mineralisation is confined by aquitards and limited by the granite basement below and clay layers above the modelled lenses.
- The cut-off grade adopted for reporting of Mineral Resources for ISR mining method (100 ppm eU_3O_8) is considered reasonable and justified based on the assumed economic parameters, metal price and non-selective ISR recovery method.
- The Project area is not impacted by any significant cultural activities other than those associated with the pastoral industry. The ISR mining method is considered to have a low environmental impact.
- All government permits and licences are in good standing.
- The Project area is reasonably well-serviced by infrastructure, including roads, electricity, gas and general support services out of both Exmouth and Karratha.

JORC Code Classification

The Mineral Resource has been classified based on the JORC Code. The classification is based upon an assessment of the geological understanding of the deposit, geological and mineralisation continuity, drillhole spacing and QAQC results.

The following approach was adopted:

- Measured Mineral Resources: Not reported.
- Indicated Mineral Resources: Not reported.
- Inferred Mineral Resources: Inferred Mineral Resources are all model blocks that occur within the modelled mineralised lenses that display reasonable strike continuity based on the current drillhole intersections and understanding of the deposit geology.

Mineral Resource estimate report

The MRE for the Manyingee South deposit is based on estimated eU_3O_8 grades in the block model, spatially constrained by interpreted and modelled geological mineralised lenses within sandstone and conglomerate lithological units, generally parallel to the granite basement. The in-situ recovery mining method is the preferred method, given the tenor of grades, deposit geology and the depth of mineralised lenses.

The MRE for the deposit is reported in Table 2, where the material has been classified as Inferred, using a cut-off of 100 ppm eU_3O_8 applied to the model assuming an ISR mining method. The effective date of the estimate is 10 February 2025.

Table 2 Manyingee South Inferred Mineral Resource Estimate as of 10 February 2025

Deposit	Class	Tonnes (Mt)	eU_3O_8 Grade (ppm)	eU_3O_8 (Mlb)
Manyingee South	Inferred	15.5	325	11.1
TOTAL		**15.5**	**325**	**11.1**

Notes:

- *Mineral Resource has been classified in accordance with the guidelines of the JORC Code. All blocks were classified as Inferred.*
- *The Mineral Resource report assumes an ISL mining method with the marginal cut-off of 100 ppm eU_3O_8.*
- *The Bennet Well Radioactive Equilibrium Factor (REF) of 1.07 was applied to the eU_3O_8 grades.*
- *Average dry bulk density value of 1.74 t/m^3 was assigned to all cells in the block model, and it is assumed to be appropriate for the style of mineralization.*
- *Tonnage is reported on a dry basis.*
- *Rows and columns may not add up due to rounding.*

Table 3 below sets out grade-tonnage information with cut-off grades between 0 and 800 ppm eU_3O_8 which is considered useful for sensitivity analysis. The Mineral Resource classification applies to the 100ppm cut-off grade.

Table 3 Grade-Tonnage Table: (Manyingee South Inferred Mineral Resource)

Deposit	eU_3O_8 Cutoff (ppm)	Tonnes (Mt)	eU_3O_8 Grade (ppm)	eU_3O_8 (Mlb)
Manyingee South	0	15.48	324	11.07
	100	**15.47**	**325**	**11.07**
	125	15.42	325	11.06
	150	14.92	331	10.90
	175	14.19	340	10.64
	200	13.12	352	10.19
	250	9.71	396	8.48
	300	7.09	443	6.92
	400	4.40	500	4.84
	500	1.50	622	2.05
	800	0.07	1,056	0.16
Manyingee South Total		**15.47**	**325**	**11.07**

Gridded Seam Model was also created from the block model for all the modelled mineralised lenses combined by projecting all block columns to the horizontal plane. During gridded seam model creation, grades in each column of blocks were averaged and weighted by block volume, and the actual blocks were combined to form a single block for each column.

When these models are visualised, sites with rich mineralisation and the thickest sites with the highest 'productivity' ('productivity' is equal to the orebody thickness multiplied by grade, i.e., 'metal' or GT) are visible. A diagram showing productivity is shown in Figure 10. These diagrams could be used for future exploration planning.

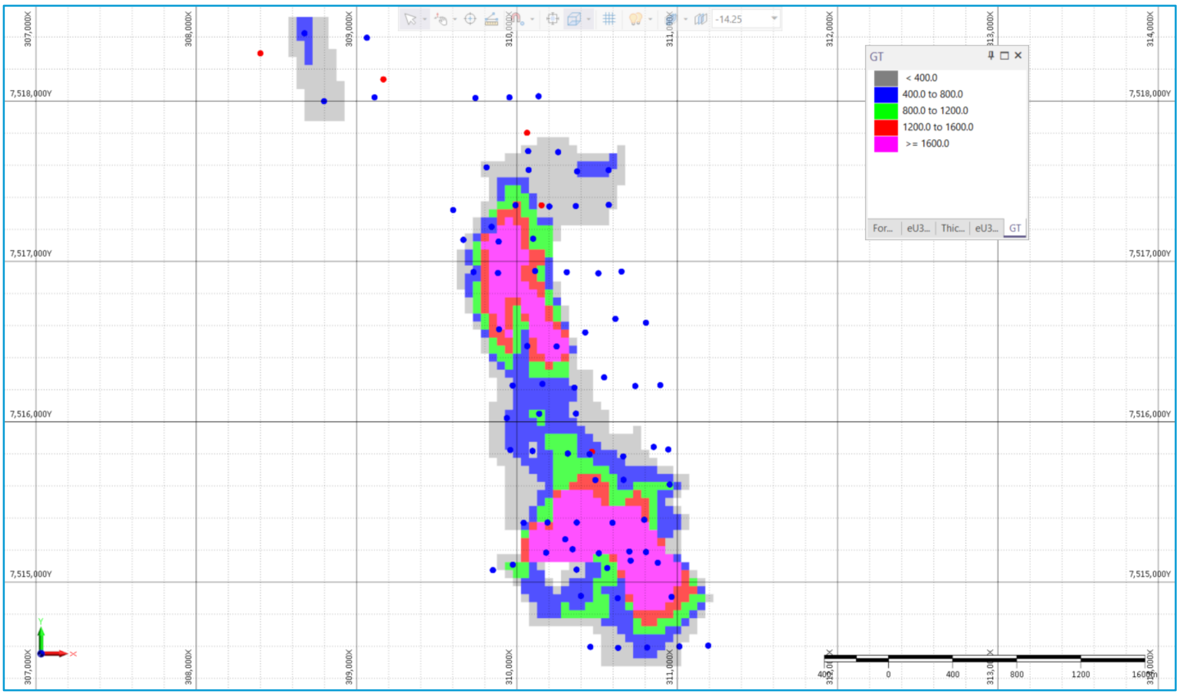

Figure 10. Uranium productivity (GT = eU_3O_8 x thickness, plan view).

This announcement has been authorised for release by Ian Mulholland, Cauldron's non-executive Chairman.

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

Jonathan Fisher
Chief Executive Officer
Cauldron Energy Limited
M: +61 407 981 867
jonathan.fisher@cauldronenergy.com.au

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

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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 ~1,150km^2, located approximately 85 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.

Competent Person Statements

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 prepared by Mr Dmitry Pertel, Principal Geologist of AMC Consultants Pty Ltd (AMC). The Mineral Resources were reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

Mr Pertel completed the Mineral Resource Estimate. The Quality Assurance and Quality Control (QAQC) analysis was completed by Mr John Higgins, a full-time employee of Cauldron, assisted by Mr Robert Annett, a 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. Mr Pertel assumes Competent Person status for the reported Mineral Resources, Mr Higgins and Mr Annett assume Competent Person status for the QAQC analysis, and Mr Wilson assumes Competent Person for the reported eU3O8 grades. A site visit was completed by Mr Annett.

Each of Mr Pertel, Higgins, Annett and Wilson are a Member of the Australasian Institute of GeoScientists and have the necessary qualifications and relevant experience in the style of mineralisation at Manyingee South to qualify as Competent Persons under the JORC Code. Each of Mr Pertel, Higgins, Annett and Wilson consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Exploration Results – Yanrey Uranium Project

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

The information in this report that relates to Exploration Results for the Yanrey Uranium Project, is based on information compiled by Mr. John Higgins, B.Sc. (Hons), GCPG&G, who is a member of the Australian Institute of Geoscientists. Mr. Higgins is a 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) listed in the table below and which are available to view at www.cauldroneneergy.com.au and for which the Competent Persons' consents were obtained. Unless otherwise stated, where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

Table 2: Historical Exploration Results Announcements

Date of Release	Title
02-11-2015	CXU Cauldron Identifies Mineralisation South of Manyingee
17-12-2015	Substantial Increase in Mineral Resource at Bennet Well
24-01-2024	Yanrey Uranium Project Exploration Target
08-08-2024	First Drill Results Confirm and Extend Known Uranium Mineralisation at Bennet Well Deposit
27-08-2024	Further Drilling Adds to Uranium Mineralisation at Bennet Well Deposit
11-09-2024	First Holes at Manyingee South Confirm Significant Discovery
18-09-2024	More Outstanding Results Grow Manyingee South
11-10-2024	Further Excellent Results Expand Manyingee South
05-11-2024	Further Excellent Drilling Results at Manyingee South
25-11-2024	Further Excellent Drilling Results Demonstrate Size and Potential of Manyingee South Uranium Deposit
19-12-2025	CY2024 Drilling Completed at Yanrey Project

Mineral Resource Estimate – Bennet Well Deposit

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

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

Disclaimer

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

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

Appendix A: Bennet Well Mineral Resource Estimate

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

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

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

The Mineral Resource (JORC 2012) estimate is:

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

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

Deposit	Cutoff (ppm eU_3O_8)	Deposit Mass (t)	Deposit Grade (ppm eU_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (lbs)
Bennet Well_Total	125	39,207,000	355	13,920,000	30,700,000
Bennet Well_Total	**150**	**38,871,000**	**360**	**13,990,000**	**30,900,000**
Bennet Well_Total	175	36,205,000	375	13,580,000	29,900,000
Bennet Well_Total	200	34,205,000	385	13,170,000	29,000,000
Bennet Well_Total	250	26,484,000	430	11,390,000	25,100,000
Bennet Well_Total	300	19,310,000	490	9,460,000	20,900,000
Bennet Well_Total	400	10,157,000	620	6,300,000	13,900,000
Bennet Well_Total	500	6,494,000	715	4,640,000	10,200,000
Bennet Well_Total	800	1,206,000	1175	1,420,000	3,100,000

Deposit	Cutoff (ppm U_3O_8)	Deposit Mass (t)	Deposit Grade (ppm U_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (lbs)
BenWell_Indicated	125	22,028,000	375	8,260,000	18,200,000
BenWell_Indicated	**150**	**21,939,000**	**375**	**8,230,000**	**18,100,000**
BenWell_Indicated	175	21,732,000	380	8,260,000	18,200,000
BenWell_Indicated	200	20,916,000	385	8,050,000	17,800,000
BenWell_Indicated	250	17,404,000	415	7,220,000	15,900,000
BenWell_Indicated	300	13,044,000	465	6,070,000	13,400,000
BenWell_Indicated	400	7,421,000	560	4,160,000	9,200,000
BenWell_Indicated	500	4,496,000	635	2,850,000	6,300,000
BenWell_Indicated	800	353,000	910	320,000	700,000

Deposit	Cutoff (ppm U_3O_8)	Deposit Mass (t)	Deposit Grade (ppm U_3O_8)	Mass U_3O_8 (kg)	Mass U_3O_8 (lbs)
BenWell_Inferred	125	17,179,000	335	5,750,000	12,700,000
BenWell_Inferred	**150**	**16,932,000**	**335**	**5,670,000**	**12,500,000**
BenWell_Inferred	175	14,474,000	365	5,280,000	11,600,000
BenWell_Inferred	200	13,288,000	380	5,050,000	11,100,000
BenWell_Inferred	250	9,080,000	455	4,130,000	9,100,000
BenWell_Inferred	300	6,266,000	535	3,350,000	7,400,000
BenWell_Inferred	400	2,736,000	780	2,130,000	4,700,000
BenWell_Inferred	500	1,998,000	900	1,800,000	4,000,000
BenWell_Inferred	800	853,000	1285	1,100,000	2,400,000

Note 1: table shows rounded numbers therefore units may not convert nor sum exactly **Note 2**: preferred 150 ppm cut-off shown in bold

Appendix B

JORC Code Table 1

Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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 pulverized 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	All 2024 holes used in the MRE were aircore drilling (AC), whilst 5 historical holes were rotary mud (RM). Drilling has been used to obtain gamma-ray logging results, that were subsequently used to estimate uranium equivalent grades. All drillholes were logged for lithological and other attributes. All holes drilled during 2024 were probed using a calibrated Geovista Triple Spectral Gamma probe No.4322 (60mm diameter), to obtain a total gamma count reading (CPS) at 2cm intervals (see below for tool calibration information). Downhole geophysical log data was collected by contractors, Wireline Services Group of Perth WA using equipment manufactured by Mount Sopris or GeoVista. Gamma logging is a common method used to estimate uranium grade where the radiation contribution from thorium and potassium is small. Gamma radiation is measured from a volume surrounding the drillhole with a radius of approximately 35 cm. The gamma probe therefore samples a much larger volume than common diameter drill samples. Accordingly, radiometric gamma logging was the primary sampling method used to define mineralisation at the Deposit. 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 eU_3O and in-situ formation density data. All eU_3O grades are determined from the gamma (counts per second) logs using the (non dead-time corrected) calibrated gamma probe, HQ drill casing correction, hole-size correction, moisture correction. Drillhole formation density was estimated from the calibrated dual density probe (short spaced and long spaced measurements). Estimates of eU_3O concentrations, derived from gamma-ray measurements, are based on the assumption that the uranium is in secular equilibrium with its daughter radionuclides, which are the principal gamma ray emitters in the U-series decay chain. If uranium is in disequilibrium as a result of the redistribution (depletion or addition) of uranium relative to its daughter radionuclides, then the true uranium concentration in holes logged by gamma probe will be higher or lower than those estimated. However, no special investigations of secular disequilibrium have been completed at Manyingee South so far. As such the previously established (2007) disequilibrium factor of 1.07 at Bennet Well, was applied to the Deposit's eU_3O_8 data. In the opinion of the Competent Person, the sampling techniques were appropriate for the geology, scale of deposit, and are of an acceptable standard for the purpose of data used in estimating an Inferred Mineral Resource.

Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	AC drilling (HQ; external diameter 97.5mm) was used at the Manyingee South uranium deposit (Deposit). Holes were drilled at a nominal 200 m by 200 m spacing, closing down in places to 100m by 50m. Hole depth varied between 54m and 126m with an average depth of 84m. Drill holes were vertical to optimally intersect the mineralisation in sub-horizontal beds. In the opinion of the Competent Person, the drilling techniques are suitable for estimating Mineral Resources. The core sizes are appropriate. The data obtained using drilling techniques are acceptable for the definition of a Mineral Resource.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No quantitative sample recovery data (sample weights) were collected as gamma-ray logging was used instead of conventional drill cutting sampling. Cauldron geologists logged the drill holes and assessed the sample recovery during the drilling process which was deemed to be acceptable.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Not applicable as gamma-ray logging was used to estimate uranium equivalent grades however, representative samples for confirmatory geochemical assay were collected from a rotary splitter mounted on the drilling cyclone.
	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 as gamma-ray logging was used to calculate uranium equivalent grades. Cauldron has not identified any relationship between sample recovery and the determination of uranium assay from gamma ray data. Variations in uranium grade caused by changing drillhole size is minimised through an accurate measurement of hole diameter using a calliper tool and application of a hole-size correction factor. Hole-size correction models have been determined by Wireline Services Group, using data collected at the Department of Water calibration facility at Regency Park in Adelaide; with a hole-size correction factor derived as a function of drillhole diameter.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	As noted above, all holes were gamma logged. All drill chip samples were qualitatively logged and recorded digitally with information on stratigraphy, weathering, lithology, colour, oxidation state and intensity, significant minerals, grainsize, sorting, rounding, clay and sand ratio and estimated porosity, carbonate content, the presence of pyrite, glauconite and organic carbon. All coded data was verified using Cauldron standard logging look-up tables. Chip trays are archived at Cauldron's sample storage facility on site.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	All AC samples collected by Cauldron in 2024 have been photographed and geologically logged as part of the exploration programme. 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 total length and percentage of the relevant intersections logged.	The entire drillhole was gamma ray logged with results appended to the database and were used together with the geology and mineralogy information to establish the eU_3O_8 intervals interceptions used in the MRE.

Criteria	JORC Code explanation	Commentary
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Radiometric logging was used as the primary sampling method and because gamma radiation is measured from the entire volume surrounding the drill hole at a radius of approximately 35 cm it can be regarded as representative of the in-situ material.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Whilst not applicable to the MRE (as eU_3O_8 grades were used), Cauldron collected sample material directly from the cyclone splitter into industry standard individually numbered calico bags to obtain up to 3 kg of material representing every 1 metre drilled. The remaining (approx. 90%) of sample material was collected from the cyclone splitter and put on the ground. Each bag contained sample material equivalent to a 1 metre interval. Notes were registered in the logging when there was a wet sample.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	AC drilling allows the passage of "in-rod" geophysical probes which are an appropriate method for estimate of uranium grades and intervals. Whilst not applicable to the MRE, Cauldron collected sample material directly from the cyclone splitter into industry standard calico bags to obtain up to 3 kg of material representing every 1 metre drilled and samples from mineralised intervals as determined from the downhole gamma logs, were sent for multi-element laboratory analysis.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	No subsampling was undertaken for the eU_3O_8 grades that were estimated using gamma probes. Cauldron completed one drillhole as a reference hole. This hole was cased with 50mm PVC and remains open in order to permit repeat logging in the future to provide a regular check on the repeatability of the gamma probe. This cross-check was also used to check if the correct calibration factors are applied to the probe(s), and to ascertain potential spurious results from a damaged probe or a probe that drifts out of its calibration range.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Each hole was logged by WSG both down and up, inside the AC drill rods. These two runs provide a "field duplicate" of the CPS values and is collected for all holes. First and final inspection of the duplicate CPS traces is undertaken in the field by the logging operator, and for all holes the observed CPS (down and up) were within instrument specification and to industry standard
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The Competent Persons consider that the sample sizes are appropriate to the material being sampled.

Criteria	JORC Code explanation	Commentary
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.	The gamma tool used for downhole gamma measurements was calibrated in Adelaide using the former Australian Mineral Development Laboratory's (AMDEL) test pits at Flemington St, Frewville, Adelaide (now administered by the Resource Monitoring Services Unit of the South Australian Department of Environment, Water and Natural Resources). Previous calibrations were performed in the Grand Junction Wyoming Test pits (as the tool was manufactured in the United States and thus initially calibrated there). The AMDEL calibrations agree well with the manufacturer's original calibrations indicating that the tool is performing within specifications and detector drift is minimal. The gamma probe was calibrated in Adelaide on 5th June 2024 just prior to deployment to the Project. The technique is considered to be total for eU_3O_8 data. However, the data has been adjusted for radioactive equilibrium factor (REF) and hence the uranium content may vary (usually by a small amount either positively or negatively) from the eU_3O_8 data.
	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.	Downhole gamma logging was performed by Wireline Services Group using a Geovista total count triple-gamma probe, probe number 4322. The logging system consists of the winch mechanism (which controls the movement of the probe in and out of the hole) and the digital data collection device (which interfaces with a portable computer and collects the radiometric data as counts per second (CPS) at defined intervals in the hole. Raw data can be viewed and plotted graphically from WellCAD software, to provide a graphic down-hole plot of CPS. The total count triple gamma probe (gamma sonde) measures natural gamma radiation from a Sodium Iodide (NaI) scintillation crystal (which can saturate in high grade uranium) and a ZP1320 High-flux Geiger-Muller tube pair which complement the NaI detector in high grade uranium. This combination results in three natural gamma logs collected simultaneously. The three different detector sensitivities, provides accurate CPS where there are wide variations in uranium grade. Calibration of gamma probe No. 4322 was completed using non-dead-time corrected grade and hole-size correction models. The conversion of CPS to equivalent eU_3O_8 concentrations is therefore considered a reasonable proxy for the in-situ uranium grade (subject to understanding of the REF). Thus, determined equivalent uranium analyses are typically expressed as ppm *e*U_3O_8 ("e" for equivalent) and should not be confused with U determination by standard XRF or ICP analytical procedures. The conversion process can involve one or more data corrections which include the following • accounting for water in the hole (water factor) which depresses the gamma response. • hole diameter variations, as gamma response decreases from source. • instrumentation lag time in counting (dead time factor) which is typically included as part of the probe calibration.

Criteria	JORC Code explanation	Commentary
		• corrections for reduced signatures when the readings are taken inside casing (steel casing factor). The various calibration factors and *e*U_3O_8 determinations were compiled and/or calculated by Mr David Wilson from 3D Exploration based in Perth, Western Australia
	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.	Due to the collapse of the AC drill holes after the rods were pulled, no repeat open-hole gamma logging was possible however, each hole was logged by WSG both down and up, inside the AC drill rods. These two runs provide a "field duplicate" of the CPS values and is collected for all holes. First and final inspection of the duplicate CPS traces is undertaken in the field by the logging operator, and for all holes the observed CPS (down and up) were within instrument specification and to industry standard. The Competent Person considers the gamma tool data is suitable for use in the Mineral Resource estimation, based on assessment of the quality control results and is of a suitable accuracy and precision.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The conversion of downhole gamma grades to estimated *e*U_3O_8 grades was undertaken by Mr David Wilson who is a consultant to Cauldron Energy and is a full-time employee of 3D Exploration. Mr Wilson has more than 50 years mineral exploration experience of which 22 years was predominately in uranium exploration, and the estimation of equivalent uranium grades from gamma sonde(s). The conversion of downhole gamma grades to estimated *e*U_3O_8 grades was also undertaken by WSG. Significant intersections estimated by 3D Exploration and WGS are comparable in both tenor and width. There has been no verification of uranium grades and thus REF using a PFN tool.
	The use of twinned holes.	No twinned holes were drilled for the MRE purposes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The MRE was prepared using all drilling data available as at 10 February 2025 with data supplied by Cauldron. The data is stored in MicroMine and Excel databases. The logging and the digital data collection of radiometric data as counts per second (CPS) at defined intervals in the hole is stored, viewed and plotted graphically from WellCAD software. These databases are stored at Cauldron' head office in Perth and is regularly backed up offsite in a "cloud-based" system. Additional copies are held by 3D Exploration, Robert Annett and WGS, all off-site from Cauldron.
	Discuss any adjustment to assay data.	No adjustments by way of deconvolution of the data (smoothing, edge sharpening) were made to the estimated *e*U_3O_8 grades. A radioactive equilibrium factor (REF) of 1.07 was applied to the *e*U_3O_8 values. Further work is needed to establish the definitive REF characteristics of the deposit.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	The 2015 collars were located from LiDAR data (+/- 0.15m accuracy). 2024 collars were located by handheld GPS with an accuracy of ±3-5m. This accuracy is appropriate given the large extent (over 3km) of the deposit and the very

Criteria	JORC Code explanation	Commentary
		flat nature of the terrain. The holes will be surveyed by differential RTK GPS for very high precision. As all holes were vertical no inclination measurements or down-hole surveys were undertaken. The Competent Person, Mr Robert Annett inspected several drillhole collars at the Project and completed measurements of the collar location using a hand-held Garmin GPS. The GPS coordinates were then compared with the corresponding ones in the database. The collar coordinates were found to be within generally better than several metres of the database records. The survey measurements and controls are considered satisfactory.
	Specification of the grid system used.	Deposit data utilised GDA2020 Zone 50.
	Quality and adequacy of topographic control.	The primary topographic control is from SRTM. This technique is sufficient for the MRE given the very flat-lying nature of the terrain.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	For the 2024 program, most AC drill holes are drilled along lines approximately 200m apart and oriented east-west. These lines were previously heritage cleared in 2015 with additional heritage clearing surveys completed during 2024. Drillhole spacing (East-West) was generally 200m along these lines. Additional drilling was conducted along the side of existing access roads. Elsewhere drilling density is down to 100m by 50m in areas of higher grade or thickness. The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the Mineral Resource classification that was applied.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The data spacing and distribution is sufficient to provide a reasonable continuity in both lithology and grade. It is sufficient to support the estimation and classification of the Mineral Resource according to the definition of Mineral Resource in the JORC Code.
	Whether sample compositing has been applied.	Downhole gamma readings were collected at 5 cm spacing in 2015, and 2 cm spacing in 2025. The gamma data is not composited for the purpose of raw eU_3O_8 data held in the drillhole database
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.	Uranium mineralisation is hosted by stratiform sandstone or conglomerate sediments associated with a paleo-channel system and exhibits no structural control other than the palaeochannel itself. All exploration drill holes were vertical and drilled to an average depth of 84m. Drilling was therefore intersecting flat-lying mineralisation at the most optimal angle. AMC considers there is no sample bias of the mineralisation due to hole orientation.
	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.	Mineralisation is controlled by physical and chemical characteristics of the host rock such as permeability and is influenced by fluctuations in the groundwater table and groundwater flow. Drilling has been conducted perpendicular to the bedding that hosts the mineralised zones. Sampling is in a vertical plane and perpendicular to generally flat lying mineralised horizons thereby minimising any

Criteria	JORC Code explanation	Commentary
		possible sampling bias related to orientation of these zones. Overall, there is considered to be no sampling bias from the orientation of the drilling due to the nature of mineralisation.
Sample security	The measures taken to ensure sample security.	eU_3O_8 grades have been determined primarily from downhole gamma logging data. The data was collected and stored on-site by WGS. This data is electronically transferred at certain times to WGS head office where it is securely retained. All measures taken to ensure sample security are considered by AMC to be 'industry standard'.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Probing techniques and data were reviewed by the Competent Person, Mr Robert Annett, during a site visit over 3 days and completed in October 2024. The review did not reveal any fatal flaws. The logging and data collection techniques are considered to be to an acceptable industry standard. Data on REF needs to be considered.

Section 2 – Reporting of Exploration Results

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td rowspan="2">Mineral tenement and land tenure status</td><td>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.</td><td>All Project tenure is wholly owned by Cauldron and listed below. The Deposit is located wholly within Cauldron's exploration licence (E) 08/1489 tenement
<table>
<tr><td>Tenement</td><td>Expiry Date</td></tr>
<tr><td>E08/2385</td><td>18/01/28</td></tr>
<tr><td>E08/2386</td><td>18/01/28</td></tr>
<tr><td>E08/2387</td><td>18/01/28</td></tr>
<tr><td>E08/3088</td><td>04/03/25</td></tr>
<tr><td>E08/2205</td><td>14/06/25</td></tr>
<tr><td>E08/2774</td><td>03/07/26</td></tr>
<tr><td>E08/2081</td><td>01/08/26</td></tr>
<tr><td>E08/2017</td><td>12/08/26</td></tr>
<tr><td>E08/1489</td><td>28/11/25*</td></tr>
<tr><td>E08/1490</td><td>28/11/25*</td></tr>
<tr><td>E08/1493</td><td>28/11/25*</td></tr>
<tr><td>E08/1501</td><td>28/11/25*</td></tr>
</table></td></tr>
<tr><td>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.</td><td>No impediments to continued tenure are known at the time of reporting. All tenure is in good standing with the various authorities.</td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>Exploration of the Project area started in 1979 by Minatome with the first 3 holes being drilled, continued by CRAE with 6 additional holes in 1981, and then Cauldron from 2006 with multiple drill campaigns. Cauldron commenced drilling in the vicinity of the Deposit in 2015 (5 holes) and undertook drilling of a further 78 holes in 2024 utilising surface aircore (AC) drilling.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Deposit contains a number of stacked and flat-lying tabular uranium lenses hosted within Early Cretaceous palaeochannel sandstones. 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 Proterozoic granitic and metamorphic rocks of the Capricorn Orogen which lies along the ancient coastline. These palaeochannels incised into the underlying Proterozoic-aged granite and metamorphic rocks, and have been 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 palaeo-coastline.
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: • Easting and northing of the drillhole collar • Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar • Dip and azimuth of the hole • Downhole length and interception depth • Hole length.	Drill hole information is provided in the report relevant to support the MRE. All exploration results have been previously reported to the ASX.
	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.	Drill hole information is provided in the report relevant to support the MRE. All exploration results have been previously reported to the ASX.
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.	Exploration Results are not being reported. The historical (2015) and recent (2024) *e*U_3O_8 grades were composited to the entire length of intersection.
	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.	Exploration Results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported. No metal equivalent values are being reported.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Exploration Results are not being reported.
	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	Exploration Results are not being reported.
	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g.	Exploration Results are not being reported. Intercept widths are true down hole widths. The Deposit's mineralised zones were drilled using vertical

Criteria	JORC Code explanation	Commentary
	'downhole length, true width not known').	holes to intersect the mineralised lenses at optimal angle. The mineralised lenses are sub-horizontal and have a strike from southeast to northwest with azimuth of approximately 340°, and without dip nor plunge.
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 drillhole collar locations and appropriate sectional views.	Relevant maps and diagrams are included in the body of this technical 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 misreading reporting of Exploration Results.	Exploration Results are not being reported. All exploration results have been representatively reported to the ASX.
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.	Other exploration data if meaningful and relevant to the MRE is included in the report.
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).	Planned further work recommendations include: • Passive seismic surveys to map the Manyingee South palaeochannel(s) • Additional drilling to upgrade the Mineral Resource classification, to infill known mineralisation and to locate extensions to mineralisation along strike. • Diamond (DD) Core drilling in order to provide samples for metallurgical and disequilibrium studies and confirmatory geochemical assay. • Completion of a Scoping Study based on the MRE and other reports. • Completing of tests for potential secular uranium disequilibrium (REF).
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams were used for the MRE and included: • Geological maps with drillholes. • Cross sections.

Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	All data, including location, geological and analytical data, were supplied in MicroMine format. One database was provided for the MRE – drillholes for all exploration programmes, including recent drilling completed by Cauldron in 2024. All holes drilled before 2015 were excluded from the MRE. The database was developed by Cauldron. The database was supplied to AMC for the resource estimate. Data used in the Mineral Resource estimate is sourced from calculated eU_3O_8 grades from the results of

Criteria	JORC Code explanation	Commentary
		gamma logging. The eU_3O_8 grades were calculated for 5cm intervals in 2015 and 2 cm intervals in 2024 using LAS files. When performing differential interpretation of eU_3O_8 grades, corrections for moisture content, gamma-ray absorption by drilling mud, casing pipes and other parameters were introduced into the measured intensities. All drillholes were logged, and the analytical database included deconvolved uranium grades. The drillhole data supplied by Cauldron for the MRE were stored in MicroMine databases. All the database changes are strictly regulated according to Cauldron protocols.
	Data validation procedures used.	For the Mineral Resource estimation, the following error checks were carried out during final database creation: • Duplicate drillhole names. • Any drillhole collar coordinates missing in the collar file. • Either FROM or TO absent in the assay file. • FROM > TO in the downhole intervals of the assay file. • Consecutive sample intervals that are not contiguous in the assay file (gaps exist between the assays). • Sample intervals that overlap in the assay file. • First sample interval is not equal to 0 m in the assay file. Drillhole data were selectively verified against source documentation. All identified error were not material and corrected by AMC (such as typo errors).
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Robert Annett (Consulting Geologist, who assumed responsibility for the QAQC) visited the Manyingee South uranium deposit site from 11th October 2024 for a period of 3 days. He observed drilling, logging and gamma-ray logging operations at the site, visited a number of hole collars, verified collar locations, reviewed the deposit geology and reviewed the access roads including from the main NW Coastal Hwy and Twitchen Rd to the camp, thereafter from camp along various station tracks. The observations found no material risks to the reporting of an MRE. Competent Person for the Mineral Resource, AMC's Dmitry Pertel, has not been to site. Cauldron and its consultants are responsible for all activities and data leading up to this Mineral Resource estimate.
	If no site visits have been undertaken, indicate why this is the case.	Not applicable; a site visit was completed by the Competent Person in October 2024.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is a reasonable degree of confidence in the geological model of deposit, based on current understanding of the deposit geology, which was modelled to control mineralisation and orientation of the main mineralised lenses. The geological interpretation is based on detailed observational logging of rock characteristics in the field, gamma logging and the mineralogical composition identified from drill cuttings. Drillhole intervals are grouped into consistent lithological codes, developed by Cauldron. AMC reviewed these codes and the geological data and found it to be consistent and reasonable.
	Nature of the data used and of any assumptions made.	Drillhole intercept logging and gamma logging results for eU_3O_8 have formed the basis for the interpretation of the mineralized zones.

Criteria	JORC Code explanation	Commentary
		The Bennet Well radioactive disequilibrium factor (REF) of 1.07 was applied to the eU_3O_8 values due to lack of adequate Project data. As a paleochannel deposit with narrow roll-front characteristics, the REF will be material to determining a Mineral Resource of higher confidence. Bulk density is assumed from Bennett Well data.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	AMC believes the geological interpretation is reasonable for the deposit type and level of complexity of the geology, and possible variations to the geological interpretation would not materially affect the estimate.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	Solid wireframe models were created from strings, which define the mineralised envelopes (≥ 100 ppm eU_3O_8). The geological logging was used to assist with interpretation of mineralised lenses, as all main lithological domains have been determined and logged separately. Geological boundaries were used to guide the interpretation of mineralised lenses. Due to the simplicity of the deposit type, density of drilling and ease in recognition of mineralised material AMC are confident that the geological interpretation of the mineral deposit is sufficient and an accurate representation of the distribution of mineralisation.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The mineral resource is made up of one mineralised domain with 6 modelled lenses. The deposit is oriented northwest-southeast and considered as part of one palaeochannel system for the block model. Total dimensions are approximately 4.2kms north-south 1.1kms east-west. Mineralisation occurs at a depth of between 50m and 85m, ranges between 0.1m and 12.6m thick and averaging 2.3m thickness.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used	Geological modelling and resource estimation were completed using MicroMine 2025 software. The wireframe models (eU_3O_8 ≥ 100ppm) have been used for constraining the block model. The MRE is based on AC drilling and gamma derived eU_3O_8 data using inverse distance weighted method with the power of 2 to inform blocks with the parent cell size of 50 m by 50m by 0.5m. The block model was constrained by interpreted mineralised lenses. Hard boundaries were used between the modelled mineralised lenses. The drillhole data were composited to a total thickness of modelled mineralised intersections separately for each modelled lens. The interpolation strategy and parameters were based on three incremental searches as follows: • Run 1: 400 by 350 by 100 m, minimum 6 composites from a minimum of 6 drillholes, maximum 12 composites with no sectors. • Run 2: 800 by 700 by 200 m, minimum 6 composites from a minimum of 6 drillholes, maximum 12 composites with no sectors. • Run 3: 1600 by 1400 by 300, minimum 6 composites from a minimum of 6 drillholes, maximum 12 composites with no sectors. The degree of discretization was 5 x 5 x 2 points. the grade estimation in the centre of the block consisted of the simple average of the discretization points throughout the block volume.

Criteria	JORC Code explanation	Commentary
		Based on statistical analysis, it was decided that a top-cut of 4,800 ppm eU_3O_8 is applied to all intervals before length compositing. Software used – MicroMine 2025.
	The availability of check estimates, previous estimates and/or mine production records and whether the MRE takes appropriate account of such data.	AMC is not aware of any previous estimates, and the deposit has no history of production. AMC estimated the Mineral Resources on a global basis and reported them using a cut-off of 100 ppm eU_3O_8. AMC modelled 6 main mineralised lenses.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding recovery of by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterization).	No deleterious elements or other non-grade variable of economic significance were modelled.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	An empty block model was created within the closed wireframe models that were created for 6 mineralised zones. The block model was coded according to the deposit individual mineralised lens. The block model used a parent cell size of 50m(E) x 50m(N) x 0. m(RL) with sub-celling to 10 m(E) x 10m(N) x 0.05m(RL) to maintain the resolution of the mineralised zones. The sub-celling occurred near the boundaries of the mineralised zones. The sub-celling size was chosen to maintain the resolution of the mineralised lenses. The sub-cells were optimized in the model where possible to form larger cells. The parent cell size in relation to the sample spacing represented about ¼ of the nominal dense of exploration grid which was 200 m by 200 m.
	Any assumptions behind modelling of selective mining units.	No assumptions have been made regarding selective mining units. Recovery by ISR has unique limitations regarding selectivity.
	Any assumptions about correlation between variables	No assumptions about correlation between variables were made. Only eU_3O_8 has been estimated.
	Description of how the geological interpretation was used to control the resource estimates.	The interpretation and wireframing were initially completed by Cauldron geologist and then reviewed and edited by AMC. Interpretations were completed for 6 mineralised zones on 16 vertical WE cross sections through the deposit using a nominal cut-off of 100 ppm eU_3O_8. The interpreted mineralisation was based on current drilling and eU_3O_8 data with deconvolved data. Grade composites were created to assist with interpretation. The following techniques were employed while interpreting the mineralisation: Each cross section was displayed on screen with a clipping window equal to a half distance from adjacent sections. All interpreted strings were snapped to the corresponding composited drillhole intervals (i.e. the interpretation was used to constrain the data in the three dimensions). The interpretations were extrapolated to the distance equal to a half distance between exploration lines perpendicular to the corresponding first or last interpreted sections. The general orientation and stratigraphic position of the mineralised zone was maintained.

Criteria	JORC Code explanation	Commentary
		The interpreted strings for mineralised zones were used to generate 3D solid wireframes. Each cross section was displayed on the screen along with the closest interpreted section and the wireframes were then developed for 6 mineralised zones. If the corresponding zone did not occur on the next cross section, the zone was projected to a half distance towards the next section, where it was terminated. The nominal drill spacing varied between 50m by 100m and 200m by 200m. Every interpreted zone was wireframed individually.
	Discussion of basis for using or not using grade cutting or capping.	Top-cutting was carried out to reduce the influence of outlier grades on the local estimation. The outlier grades were identified based on the analysis of the log probability plot, histogram data and coefficient of variation for each element in each modelled domain. Based on the analysis, it was decided that top-cut of 4,800 ppm eU_3O_8 being applied to all deconvolved uranium oxide grades before the full zone width length compositing process.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Grade estimation was validated using visual inspection of interpolated block grades vs sample data, statistically and swath plots.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A reporting cut-off grade of 100 ppm eU_3O_8 was used to report the Mineral Resource. This was based on general experience, limitation of the gamma tool at low-levels of radioactive material, and expected mining method using relatively non-selective ISR for recovery of the uranium. No special estimation of cut-off grade was used at this stage.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Assumption made regarding possible mining method which was In-Situ Recovery.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	There have been no special investigations of metallurgical parameters. Special investigations to be considered in the future include extraction of uranium from sedimentary deposits by ISR and either acidic or alkaline solutions. Host rocks for the mineralization are assumed to be adequately permeable for ISL, but permeability is subject to further data and testing. REF for further factoring of the eU3O8 data needs to be derived from additional data that is not yet available.

Criteria	JORC Code explanation	Commentary
	explanation of the basis of the metallurgical assumptions made.	No metallurgical modifying factors have been applied to the MRE.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered, this should be reported with an explanation of the environmental assumptions made.	No environmental factors or assumptions were made. Special investigations to be considered in the future include extraction of uranium from sediment deposits by ISR and either acidic or alkaline solutions.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	A bulk density value of 1.74 t/m3 was used for resource estimation purposes. This bulk density is based on 63 Bennet Well bulk density determinations by Scimitar in 2007. The Bennet Well geology is considered to be very similar to geology at Paladin's Manyingee South.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	The assumed bulk density determination method adequately accounts for void spaces, moisture and differences between rock and alteration zones.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	It was assumed that the bulk density value for the mineralised sandstone is the same as the value for mineralised conglomerate, which might not be the case, but sufficient for the current confidence of the MRE and the assumption is reflected in the Mineral Resource classification.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource has been classified based on the JORC Code. The classification is based upon an assessment of geological understanding of the deposit, geological and mineralisation continuity, drillhole spacing, QAQC results, and search and interpolation parameters. The following approach was adopted: • Measured Mineral Resources: Not reported. • Indicated Mineral Resources: Not reported. • Inferred Mineral Resources: Inferred Mineral Resources are all model blocks that occur within the modelled mineralised zones that display reasonable strike continuity based on the current drillhole intersections and understanding of the deposit geology.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Data quality, geological continuity, grade continuity and drill spacing were assessed by AMC to form an opinion regarding MRE confidence.

Criteria	JORC Code explanation	Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification reflects the Competent Person, Dmitry Pertel's, assessment of the deposit and confidence in the model.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The AMC Mineral Resource block model was peer reviewed internally. No external audits have been conducted.
Discussion of relative accuracy/ confidence	Where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	Industry standard modelling techniques were used, including but not limited to: Classical statistical analysis, cut-off selection and domaining Interpretation and wireframing. Top-cutting and interval compositing. Statistical analysis for the modelled element. Block modelling and grade interpolation techniques. Model classification, validation and reporting. Quality and distribution of drilling samples. The resource classification is considered reasonable based on validation through multiple processes, including visual and graphical review of the estimates. The relative accuracy of the estimate is reflected in the classification of the deposit.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The statement relates to the global estimate of the deposit and is suitable for use in a subsequent Scoping Studies and further development at the deposit.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	There is no production data available to compare the MRE against.