ASX ANNOUNCEMENT 18 December 2023



MELROSE PROJECT (WEST YILGARN) DRILLING COMMENCES

Air core drilling programme of up to 5,000 metres targeting nickel and copper

Key Points

- Cauldron's maiden drilling programme commenced at the Melrose Project
- Drill contractor Strike Drilling has successfully mobilised to site
- Air core drilling underway testing targets along a linear trend with coincident magnetic and historical geochemical anomalies
- Electromagnetic (EM) Surveys have previously been completed over a portion of the Melrose tenement
- Cauldron's Melrose Project lies near to the western margin of the Yilgarn Craton, ~125 km north of Julimar and ~15 km immediately south of Chalice's Barrabarra Project
- Melrose Project covers an area of approximately 1,507 km² and is the largest contiguous Nickel-Copper-PGE prospective land-holding in the Barrabarra Greenstone Belt portion of the West Yilgarn Craton; and is on accessible private farmland, containing sealed road frontage where native title has been largely extinguished
- This region of the West Yilgarn Craton is receiving increasing activity from various minerals explorers and is of increasing interest to investors

Cauldron Energy Limited (**Cauldron** or the **Company**) (ASX: CXU) is pleased to advise that drilling has commenced at the **Melrose Project**, located in the Dalwallinu region of Western Australia, approximately 250 km north of Perth.

The maiden drill programme for Cauldron at the Melrose Project follows up on historic air core drilling previously undertaken by third parties, magnetic inversion modelling, and EM surveys undertaken by Cauldron (see previous ASX announcements ASX:CXU 11 May 2023, ASX:CXU 9 October 2023, ASX:CXU 10 November 2023).



Cauldron CEO Jonathan Fisher commented:

"We were very pleased to be able to work constructively with local landowners to be able to get on the ground and drilling prior to Christmas. We are excited by the technical information we have compiled on the Project so far, and look forward to further developing our understanding through this initial air core programme. The West Yilgarn remains one of the hottest areas of nickel exploration and we believe the large Melrose landholding and project characteristics position us well for successful discovery."



Photo 1: Cauldron Exploration Manager Angelo Socio with the drill rig up at Site.





Photo 2: Drilling underway at Melrose.

The initial air core drilling program is planned for approximately 100 holes (up to 5,000 metres assuming average exhaustion depth of 50 metres; although exhaustion level may be lower depending on a number of ground specific factors. The programme is testing geochemistry targets, AEM and Magnetic targets; the results of which will be used to plan follow up RC drilling.

Target 1 (see Figure 1) is a 1km long zone of anomalous geochemistry (>1,000pmm Ni) with a coincident magnetic and EM anomaly. Previous drilling there returned 19m @ 0.32% Ni from 17m depth and 4m @ 0.47% Ni from 25m depth. Another target further north (Target 3) shows similar features. The previous geochemical drilling coverage was quite sparse, so it is highly likely further targets will be produced once drilling is completed. Target 2 is also following up on prior geochemical anomalies.

As shown on Figure 1, a linear trend of coincident trend of magnetic, geochemical and now EM targets has emerged. It is hypothesised that the magnetic and geochemical signatures indicate mafic/ultramafic intrusive rocks potentially carrying nickel-copper-PGE mineralisation, and that the EM anomalies indicate zones where more conductive sulphides might be present. Previous ASX announcements (viz. ASX:CXU 11 May 2023, ASX:CXU 9 October 2023, ASX:CXU 10 November 2023) have described the various geochemical and magnetic targets.



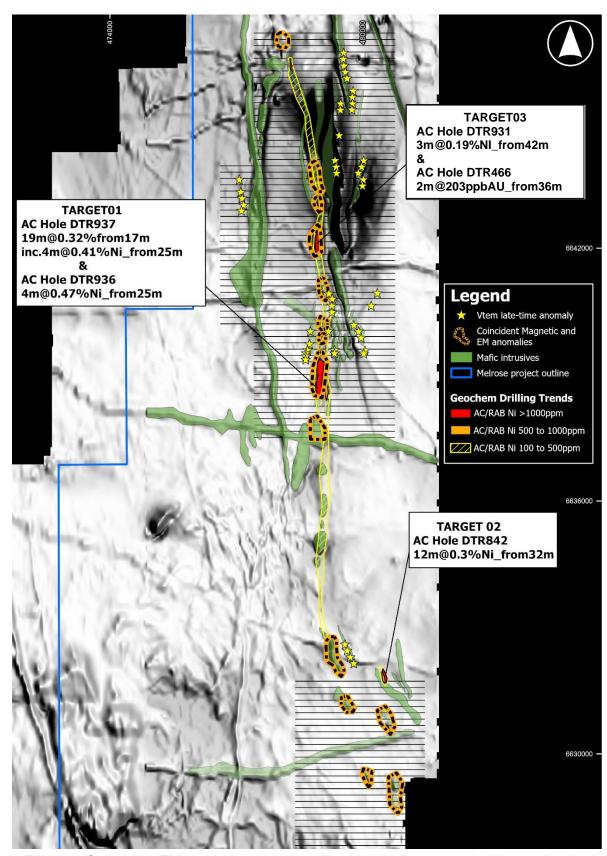


Figure 1: Coincident EM and Magnetic anomalies along a linear trend, with geochemical anomalies also shown over a background of greyscale aeromagnetics



Melrose Project - Background and New Tenements Granted

The Melrose Project is located in the Dalwallinu region of Western Australia, approximately 250 km north of Perth (Figure 2).



Figure 2: Location Map - Melrose Project

The Melrose Project covers an area of approximately 1,507 km² and comprises E70/6160 covering an area of ~169 km² and the area immediately west and south of E70/6160 covering a further area of ~1,338 km² (pegged by Cauldron; represented by Applications E70/6463, 6466, 6467, 6468 and 6469).

Of the areas pegged, two have recently been granted (E70/6467 and E70/6468), and three remain as tenement applications (E70/6463, 6466, and 6469).

Cauldron's Melrose Project is the largest contiguous Nickel-Copper-PGE prospective land-holding in the Barrabarra Greenstone Belt portion of the West Yilgarn Craton.

The Melrose Project area is 13 km south of Chalice's Barrabarra Ni-Cu-PGE project. Chalice have described Barrabarra as containing a ~15 km long unexplored interpreted mafic-ultramafic complex, with anomalous Ni-Cu in soils, and a similar geophysical signature to the Julimar Complex. Barrabarra is about 140 km north of Chalice's Julimar project.

On an adjacent tenement Nickel X has identified two very strong EM conductors associated with magnetic anomalies that they plan to drill test soon. Both Chalice and Nickel X are targeting Julimar style Ni-Cu-PGE deposits in the region (Figure 3).



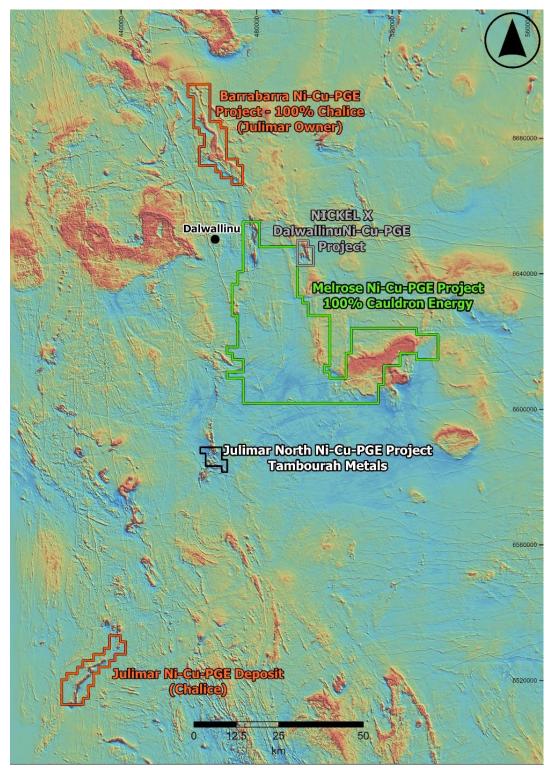


Figure 3: Melrose project - nearby projects over regional aeromagnetics



Authorisation For Release

Authorised for release by Mr Ian Mulholland, Non-Executive Chairperson of Cauldron Energy Limited

For further information please contact:

Jonathan Fisher Chief Executive Officer Cauldron Energy Limited T: (08) 6270 4693

M: +61 407 981 867

jonathan.fisher@cauldronenergy.com.au

Michael Fry Director, Company Secretary Cauldron Energy Limited T: (08) 6260 4693

M: +61 417 996 454

michael.fry@cauldronenergy.com.au

Competent Person Statement

The information in this report that relates to exploration results is extracted from reports 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 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.

Date of Release	Title
11-May-2023	Option over Melrose Project, Dalwalinu, WA
11-May-2023	Additional Information - Melrose Project
03-Jul-2023	Highly promising Geophysical Response at Melrose Project
26-Jul-2023	Another Highly promising Geophysical Response at Melrose Project
9-October-2023	Melrose RM Survey Identifies Several Drill Targets
10-November-2023	Brief Corporate and Project Update

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