AMENDED QUARTERLY ACTIVITIES REPORT
Quarter Ended 31 December 2024

Highlights

Shaw Project

- **High-grade iron results received from rock chip sampling program with key results including: 65% Fe, 61% Fe and 3 samples at 60% Fe**
- **>100m wide BIF zone extending over 500m with steeply dipping formations mapped across a 3km strike length**
- **Direct Shipping Ore (DSO) potential identified with low phosphorous levels (~0.055%)**
- **Shaw Western BIF Zone confirmed over 7 km and up to 100m wide**
- **Mapping and sampling programs have enhanced the understanding of structural complexities and mineralisation continuity**
- **Follow up program to target a high-priority zone with a surface footprint exceeding 70000m^2**
- **Reconnaissance sampling and mapping of extensive radiometric anomalies in northern Shaw identifies extensive altered sandstones and conglomerates**

Cooletha Project

- **High-grade Channel Iron Deposits (CID), up to 62% from 200 rock chip samples with key assay results: 62% Fe, 61.3% Fe, 61.1% Fe, 60.8% Fe, 2 of 60.4%, 60.3%, 60.1%, 60% Fe**
- **CIDs with strike lengths of nearly 8km and widths up to 300m**
- **Notable discoveries include Mesa A (2km strike length) and Mesa E (3km strike length, 300m width)**
- **Low phosphorous content (~0.04%) confirms high-quality yield potential**
- **Drill access work planned for early 2025**
- **Drilling programs to commence in Cooletha West region, focusing on high-priority targets**

Corporate

- **Appointment of Stuart Robinson, former Exploration Manager at Fortescue Metals Group (ASX: FMG) as Technical Advisor**

Australian Critical Minerals (**ASX: ACM**, "**Australian Critical Minerals**" or "**the Company**"), is pleased to provide the following report on its activities for the quarter ended 31 December 2024. Exploration activities undertaken at the Company's Shaw and Cooletha Projects within the Pilbara region of Western Australia have demonstrated significant high-grade iron assays.

Managing Director, Dean De Largie commented on the quarterly activities:

> *"We are highly encouraged by the significant progress achieved at our Cooletha and Shaw Projects this quarter, which highlight the exceptional potential of these assets within the Pilbara region. The recent exploration activities have enhanced our geological understanding, providing a great platform to build upon in 2025, with the expertise of our new Technical Advisor, Stuart Robinson.*
>
> *At Shaw, the identification of high-grade iron results, up to 65% Fe and the delineation of extensive Banded Iron Formation zones demonstrate the project's capacity to host premium-quality direct shipping ore. Similarly, at Cooletha, the discovery of substantial Channel Iron Deposits with low impurities reaffirms the region's strong prospects for developing high-quality iron ore resources.*
>
> *As we advance drill planning and access preparations, we are confident that our follow-up exploration activity will provide a great opportunity to create significant value for our shareholders. I encourage investors and shareholders to follow this evolving story."*

SUMMARY OF ACTIVITIES

Pilbara – Cooletha and Shaw Projects

The Pilbara portfolio covers 401 km^2 and includes the Shaw and Cooletha Iron Ore Projects (Figure 1).

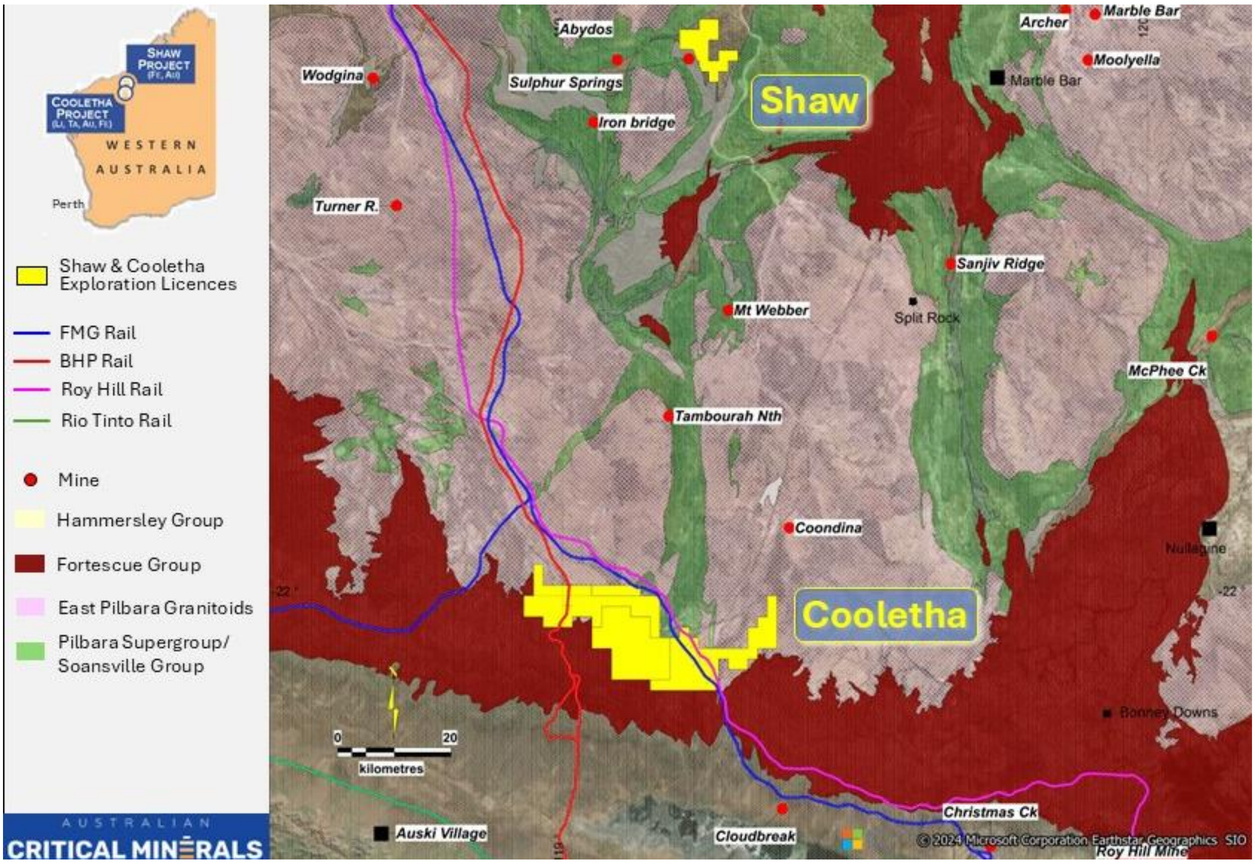

Figure 1 – Map of Pilbara projects

Shaw Project – Iron Ore

The Shaw Project is prospective for Iron Ore hosted in Banded Iron Formation (BIF). The Shaw Project is located adjacent to Hancock Prospecting's Abydos Iron Mine and south of Atlas Iron's Miralga Creek Iron Ore Mine. The Abydos host stratigraphy potentially extends into the Shaw tenements. The project benefits from its proximity to the existing infrastructure at Abydos and Miralga Creek and its proximity to Port Hedland 100km north.

BIF Discovery Process

During the quarter, ACM undertook a rock chip sampling program in November following a reconnaissance program in September 2024, reporting results for a total of 32 samples. (ref: ACM Announcement " Significant Banded Iron Formation Strike Length and Widths Confirmed at Shaw and Cooletha" October 15 2024)

The sampling at Shaw identified a high priority focus zone within the +3km long mapped BIF (Figure 2) on the tenement. The BIF is located in a gently undulating area atop a steep cliff face. The sampling program completed in November successfully accessed the outcropping BIF at the top of the cliff and identified the area for future drilling.

Geological observations indicate that the BIF lithologies at Shaw occur as linear, sub-parallel, folded, and brecciated units within the structurally complex western side of the tenement. The Western BIF Zone consists of up to three sub-parallel horizons, with a combined strike length exceeding 7km. The Eastern BIF Zone has a strike length of approximately 6km, featuring sub-parallel chert and minor BIF horizons. The western BIF zone is the higher priority target. Within the mapped BIF, there is a higher-grade zone of samples exceeding 60% Fe (Figure 2). The Focus Zone which hosts the +60% Fe results features steeply dipping BIF with a surface footprint of over 70,000 m^2.

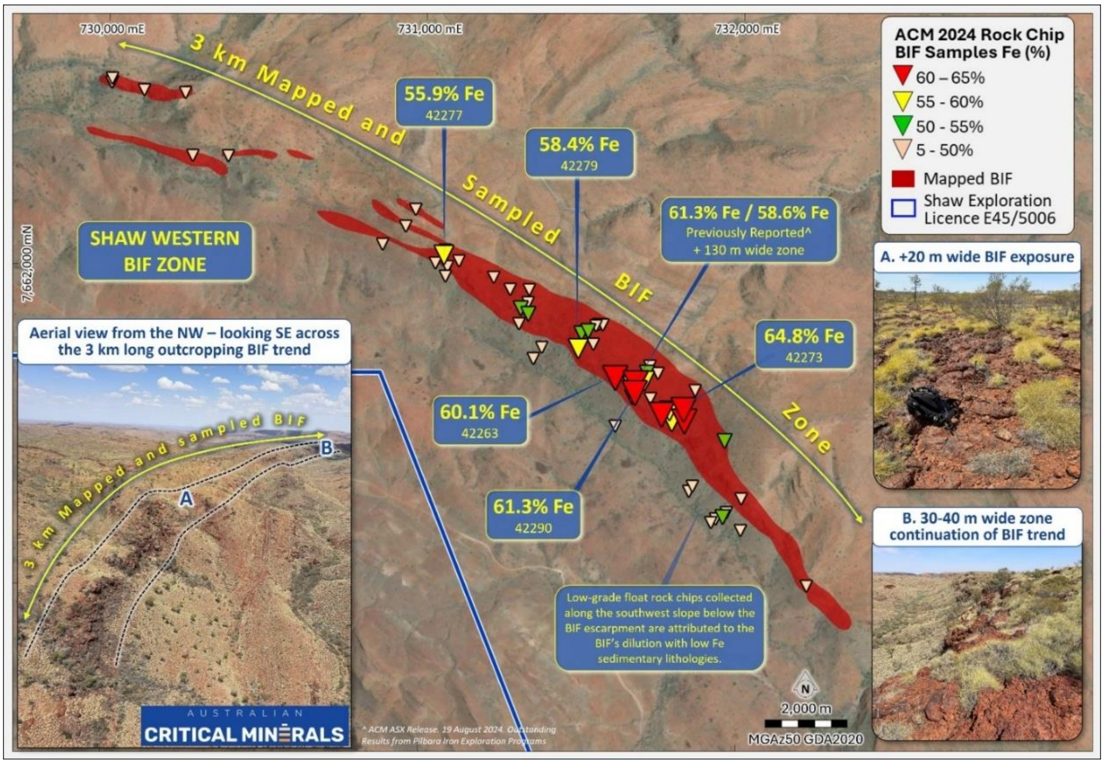

Figure 2 – Shaw Rock Sample Results Thematic

The recognition of the zone of significant Fe grades will aid the ongoing focused exploration of Shaw and the significant higher grade samples provides the basis of drill target locations.

Grades in excess of 60% Fe are considered high quality as they represent material that is generally classed as Direct Shipping Ore (DSO). Massive hematite mineralisation encountered in the Shaw rock sample is spread throughout the Focus Zone as is reflected in the assay results reported during the Quarter (Figure 3) (ref ACM announcement to ASX "High Grade up to 65% Iron Identified At Shaw, Direct Shipping Ore (DSO) Potential " 9 December 2024)

Figure 3 – Massive Hematite Rock Sample from Shaw

Shaw Project – Uranium, Thorium

Extensive areas of conglomerates and sandstones have been mapped in the northern part of the Shaw tenement. Both the sandstones and the conglomerates exhibit pervasive green, yellow, and pink colourations/washes possibly indicating uranium / thorium mineralisation or associated decay processes.

The targeted areas were identified from a radiometric study previously reported. Samples collected were float grab samples in creeks that drained the target areas. Float sampling was chosen as a first pass sampling method to maximise the area of influence of each sample.

Results are pending as of the date of this report. A more thorough sampling program, possibly targeting stream sediment samples is envisaged for future further assessment of this vast area.

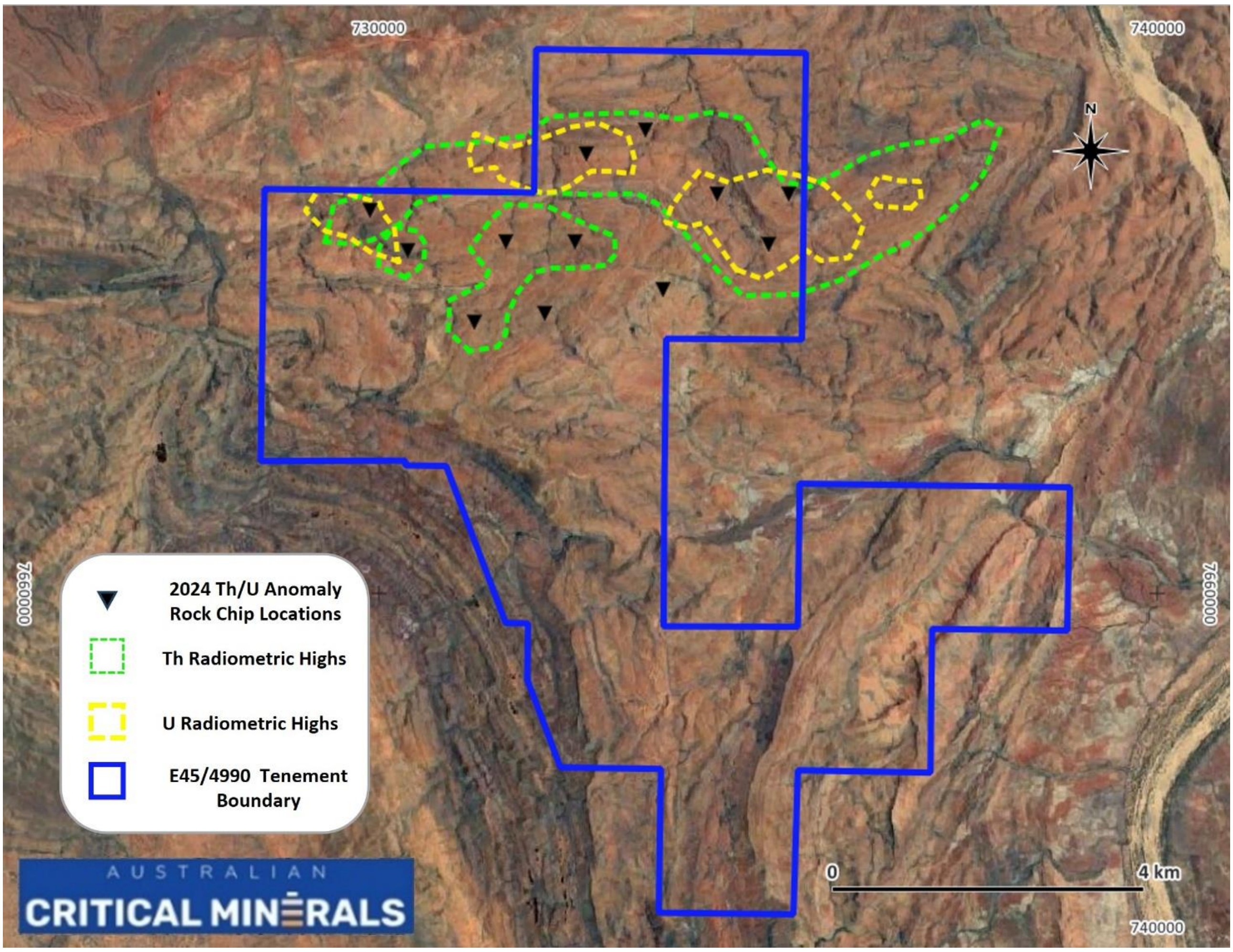

Figure 4 – Radiometric anomalies and sample locations northern Shaw

Cooletha Project

At Cooletha, ACM holds 251km^2 of granted tenure and 150km^2 of tenement applications with approximately half of this area containing the stratigraphy of the Fortescue Group, which is prospective for CIDs. The Project is located north of Fortescue Metals Group's (**ASX: FMG**) East Pilbara Complex and north-west of Hancock Prospecting's Roy Hill Mine. The Cooletha Project has excellent infrastructure with BHP, FMG and Hancock Prospecting's rail infrastructure transecting the tenements (Figure 5).

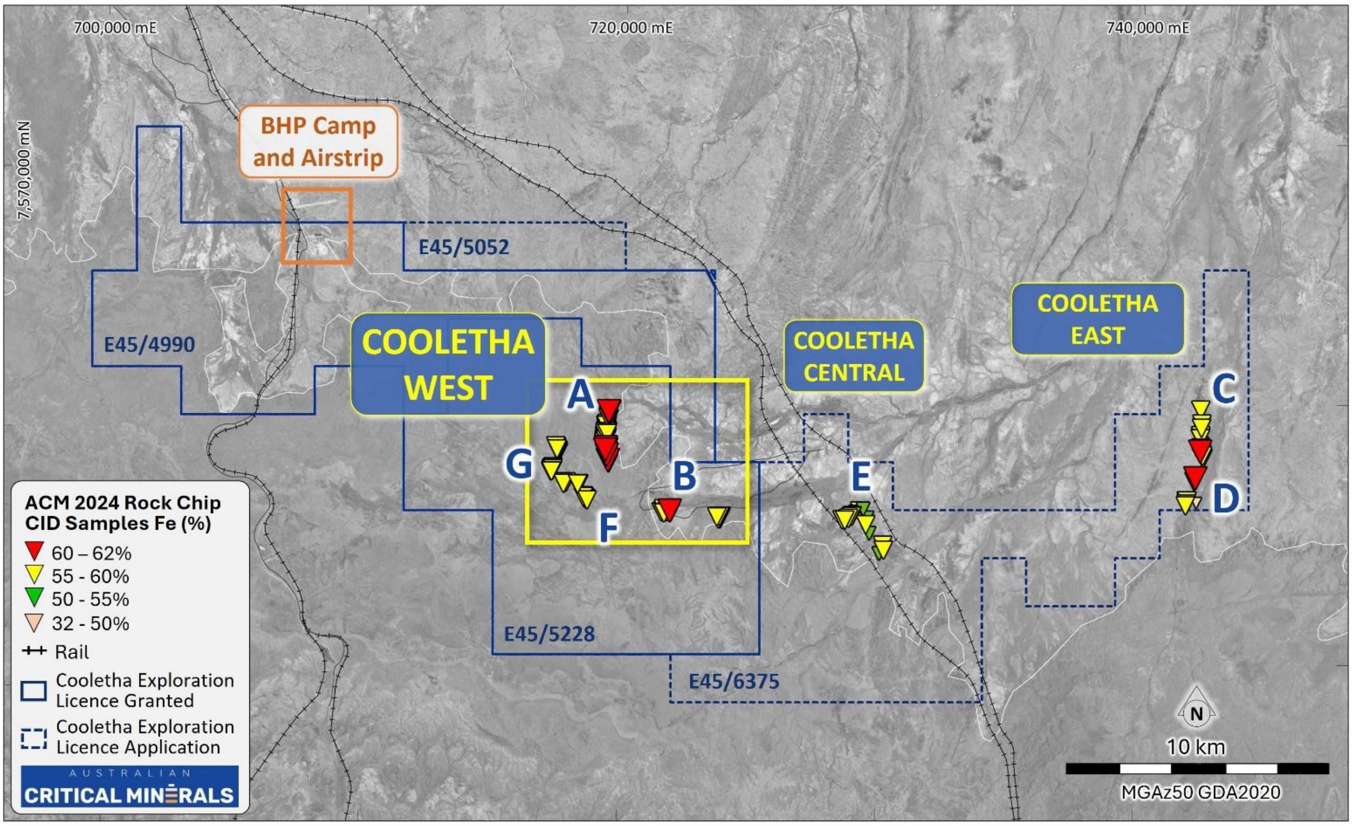

Figure 5 – Overview of Cooletha, named CIDs, results, and proximal rail, camp and airstrip infrastructure

The sampling campaign at Cooletha has confirmed significant potential for high-quality iron ore deposits and revealed multiple outcropping Channel Iron Deposits (CIDs) with Fe concentrations ranging between 56% and 62%, with 63% of samples reporting Fe grades above 55%. The average phosphorus content is a low 0.04%, and assay results indicate minimal deleterious elements in samples exceeding 45% Fe. The deposits at Cooletha span a combined strike length of 7.7 km, with consistent iron concentrations and minimal impurities, signaling strong beneficiation potential and high-quality ore yield. (ref ACM announcement to ASX "Significant +60 % Fe Results from Pilbara Iron Exploration" 27 Nov 2024)

Table 1: Averages of Key Elements at Cooletha

Fe %	Al2O3%	SiO2%	P%
56.5	4.92	4.58	0.04

Key discoveries include Mesa A, a standout CID at Cooletha West, featuring a 2 km strike length, up to 130 m in width, and rising over 5 m above the surrounding terrain. Mesa A averages 54% Fe, with nine samples exceeding 60% Fe and a peak grade of 62%. Mesa E in Central Cooletha boasts a 3 km strike length, widths up to 300 m, and thickness exceeding 10 m. Additional mesas across Cooletha, with strike lengths ranging from 300 m to 1 km, collectively form a significant CID package (Figures 6 and 7).

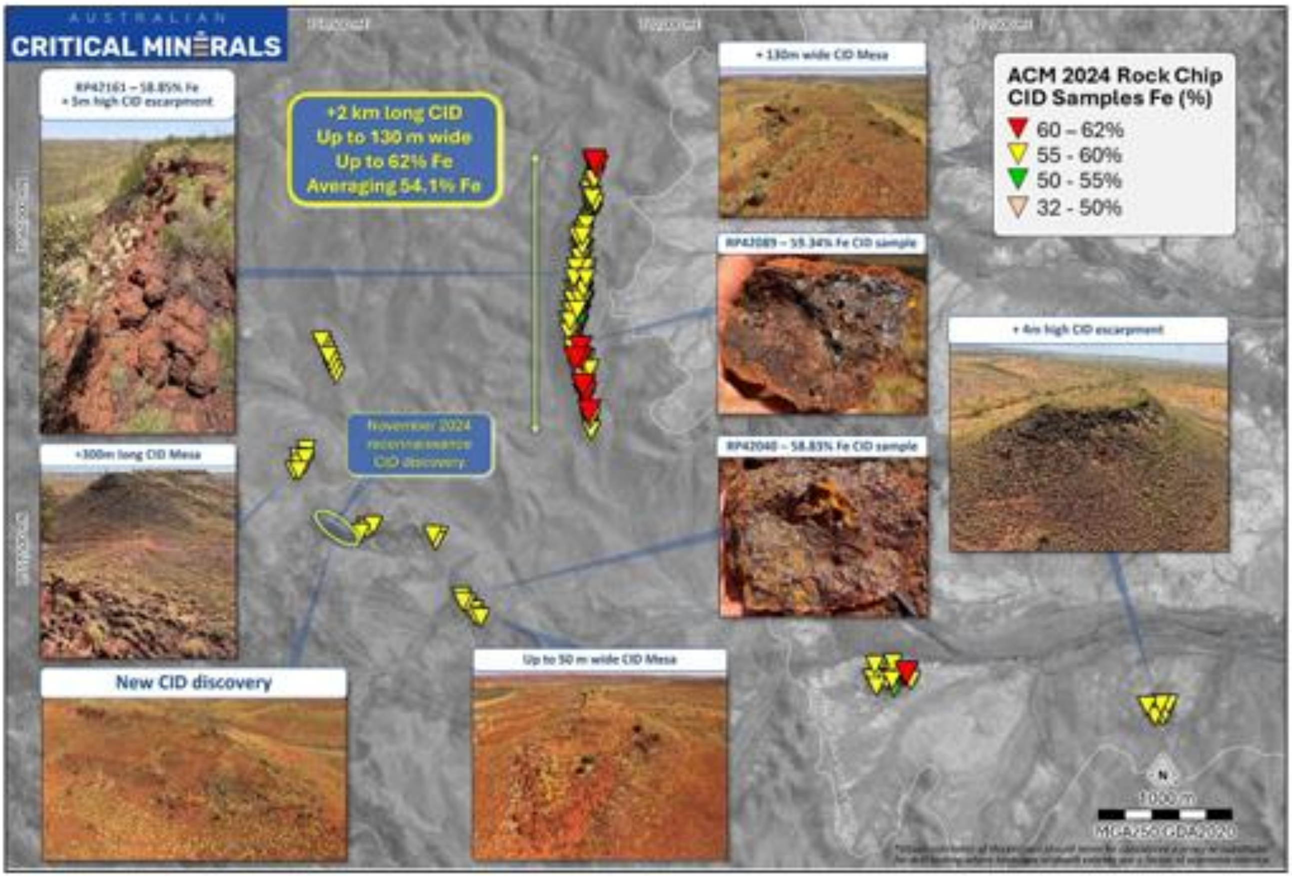

Figure 6 – Cooletha West CIDs, results, aerial photography and select hand samples

Field observations suggest that the true thickness of these deposits may be understated due to scree-covered slopes, limiting visibility to lower portions. This, coupled with the iron-rich regolith extending beyond Mesa A and other mesas, presents further exploration targets. Cooletha's proximity to rail infrastructure owned by Roy Hill, Fortescue Metals Group and BHP enhances its development potential through strategic partnerships.

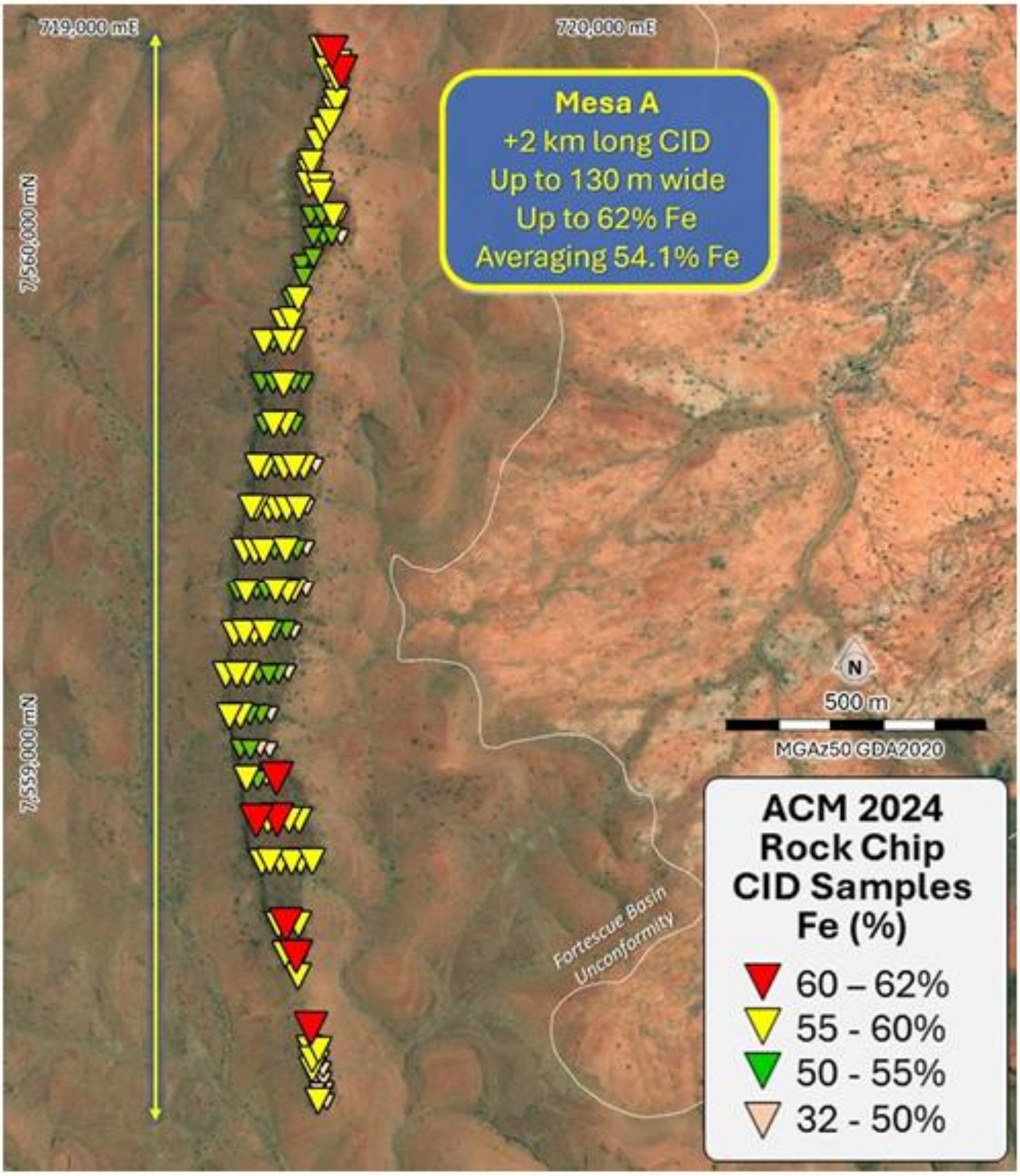

Figure 7 – Mesa A: Fe assay thematic showing the extensive +55% Fe region

Upcoming Exploration Activities

ACM is set to advance exploration at both the Cooletha and Shaw Projects with a series of focused programs designed to build on recent discoveries. Planning for drill rig access to the priority area at Shaw has commenced.

At Cooletha, preparations are underway for a Program of Works to establish drill access tracks and construct drill pads, with activities scheduled to begin in early 2025. Drilling is planned to initially focus on the Cooletha West region.

CORPORATE

Appointment of Technical Advisor

During the quarter, Mr Stuart Robinson, one of Australia's most experienced iron ore experts, was appointed as Technical Advisor. A highly accomplished geologist, Mr Robinson is a Fellow of the Australian Institute of Mining and Metallurgy and brings extensive expertise gained during an impressive 18-year tenure with Fortescue Metals Group (FMG).

As Exploration Manager, he played a pivotal role in transforming FMG from a junior explorer into the globally significant iron ore producer it is today. His leadership was instrumental in providing key geological interpretations, assessing projects and results and managing the exploration of FMG's key assets. Prior to FMG, Mr Robinson made several discoveries during his nearly two decades with Esso Minerals including the well-known Scuddles Pb-Zn-Ag VMS deposit. This success was achieved by his mineral-systems approach to exploration which aligns strongly with ACM's exploration methodology.

Under Mr Robinson's guidance, ACM intends to unlock the value of its iron ore assets with the delivery of exploration and commercial outcomes for the Company.

Annual General Meeting

ACM's held its Annual General Meeting of Shareholders of the Company on 27 November 2024, at 7 Havelock Street, West Perth WA 6005. All resolutions were passed on a poll.

Financial

The Company's cash position at 31 December 2024 was $1,728,000

Additional ASX Information

Summary of Exploration Expenditure (ASX Listing Rule 5.3.1)

In accordance with Listing Rule 5.3.1, the Company advises the cash outflows on its mining exploration activities reported in 1.2(1) of its Appendix 5B for the December 2024 quarter and detailed above were, Cooletha $104,844, Shaw $95,772 and other $14,009.

Mining Production and Development (ASX Listing Rule 5.3.2)

There were no substantive mining production and development activities during the quarter.

Payment to Related Parties (ASX Listing Rule 5.3.5)

The Company advises the payments in section 6.1 of Appendix 5B for the quarter related to director fees..

Finance and Use of Funds (ASX Listing Rule 5.34)

Pursuant to ASX Listing Rule 5.34, the Company provides a comparison of its actual expenditure to the estimated expenditure as set out in section 4.6 of the Company's Prospectus.

Activity Description	Funds allocated	Actual to date (18 months)
Exploration (2 yrs)	$3,500,100	$867,991
Administration (2 yrs)	$974,791	$981,518
Repayment of Borrowings	$147,005	$147,005

The mining tenement interests acquired or relinquished during the quarter and their location:

Tenement Number	Project	Status Update
E 70/5772	Kojonup	Relinquished
E 70/5773	Kojonup	Relinquished
E 70/5774	Kojonup	Relinquished
E 70/5775	Kojonup	Relinquished
E 70/5608	Kondinin	Relinquished
E 70/5609	Kondinin	Relinquished
E 70/5610	Kondinin	Relinquished
E 70/5574	Beverley	Relinquished
E 70/6148	Beverley	Relinquished
E 77/2709	Rankin Dome	Removed from Option
E 77/2753	Rankin Dome	Removed from Option

Table 2: Tenement portfolio changes

This release has been approved by the Board of Australian Critical Minerals Limited.

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About Australian Critical Minerals

Australian Critical Minerals is an exploration company focused on developing a quality portfolio of critical minerals projects in Western Australia. The key projects are the Shaw and Cooletha (Pilbara) Lithium/Iron Projects and the Rankin Dome (Southern Cross) Rare Earth Project.

Battery metals, including rare earths and lithium, are fundamental in the clean energy transition to net zero transmissions. ACM intends to be pivotal in delivering the processed minerals needed for a clean energy future.

ACM has established a highly experienced management team with a proven record of exploration and corporate success in the mining industry.

Reference to Previous Announcements

Investors can refer to the Company's previous News releases for further disclosure on information in this Announcement and all of the Company's Projects.

Competent Persons Statement

The information in this report related to Exploration Targets and Exploration Results is based on information compiled by Mr. Dean de Largie. Mr. de Largie is the Managing Director of Australian Critical Minerals Limited and is a Fellow of the Australian Institute of Geoscientists and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Mr. de Largie has verified the data disclosed in this release and consented to including the matters based on the information in the form and context in which it appears.

Forward-Looking Statement

This news release contains "forward-looking information" within the meaning of applicable securities laws. Generally, any statements that are not historical facts may contain forward-looking information. Forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects", or "does not expect", "is expected", "budget" "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or indicates that certain actions, events or results "may", "could", "would", "might" or "will be" taken, "occur" or "be achieved." Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to continued exploration activities, commodity prices, the estimation of initial and sustaining capital requirements, the estimation of labour costs, the estimation of mineral reserves and resources, assumptions concerning currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the project, permitting and such other assumptions and factors as set out herein.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: risks related to changes in commodity prices; sources and cost of power and water for the Project; the estimation of initial capital requirements; the lack of historical operations; the estimation of labour costs; general global markets and economic conditions; risks associated with exploration of mineral deposits; the estimation of initial targeted mineral resource tonnage and grade for the project; risks associated with uninsurable risks arising during the course of exploration; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support exploration activities; risks associated with changes in the mining regulatory regime governing the Company and the Project; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalisation and liquidity risks including the risk that the financing necessary to fund continued exploration and development activities at the project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issuance of additional common shares of the Company; the risk of litigation.

Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated, or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this announcement. The Company does not undertake to update or revise any forward-looking information included herein except in accordance with applicable securities laws.

TENEMENT INFORMATION (ASX Listing Rule 5.3.3)

The table below shows the interest in tenements held by Australian Critical Minerals and its wholly owned subsidiaries and is provided in accordance with ASX Listing Rule 5.3.3.

COOLETHA PROJECT					
Tenement ID	HOLDER	INTEREST	STATUS	GRANT DATE	AREA BLOCKS
E 45/4990	PROTEROZOIC GOLD PTY LTD	100%	GRANTED	24/10/2019	39
E 45/5228	PROTEROZOIC GOLD PTY LTD	100%	GRANTED	29/07/2019	40
E 45/5052	PROTEROZOIC GOLD PTY LTD	100%	PENDING	-	5
E 45/6375	PROTEROZOIC GOLD PTY LTD	100%	PENDING	-	42

RANKIN DOME PROJECT					
Tenement ID	HOLDER	INTEREST	STATUS	GRANT DATE	AREA BLOCKS
E 77/2768	KULA GOLD LIMITED	EARNING 51%	GRANTED	26/03/2021	36

SHAW PROJECT					
Tenement ID	HOLDER	INTEREST	STATUS	GRANT DATE	AREA BLOCKS
E 45/5006	PROTEROZOIC GOLD PTY LTD	100%	GRANTED	4/07/18	29