

Significant Iron Ore Strike Length and Widths Confirmed at Shaw and Cooletha

Shaw Project Highlights:

- Two distinct Banded Iron Formation (BIF) zones identified from recent fieldwork - Shaw Western BIF Zone and Shaw Eastern BIF Zone.
- Shaw Western BIF Zone combined strike length of over 7km with mapped and interpreted BIF unit widths over 100m
- Shaw Eastern BIF Zone combined strike length of over 9 km
- 32 samples were collected in September and sent for analysis: results are expected in November 2024
- Further BIF exploration to commence later this quarter

Cooletha Project Highlights:

- Continued integrated targeting has guided ACM's exploration team in collecting an additional 189 rock chip samples of Channel Iron Deposit (CID) mineralisation with results expected in November 2024
- 20 m x 80 m grid sampling completed over a 2 km strike length of CID deposits covering a total area of 300,000m²
- Systematic sampling and mapping of CIDs will be used in a paleo-drainage interpretation and reconstruction to develop new targets

Australian Critical Minerals (ASX: ACM, "Australian Critical Minerals" or "the Company") is pleased to provide the market with an update on recent field sampling and mapping on the Shaw and the Cooletha Projects, in the Pilbara, Western Australia.

Managing Director Dean de Largie said:

"Following the positive first exploration program with the identification of BIF and CID's at our Pilbara tenements earlier in the year, we made the decision to quickly return for a second program. We are delighted that the results from this latest program involving additional recent rock sampling at Shaw and Cooletha has validated the interpreted potential strike lengths of both CID and BIF occurrences and identified significant widths in excess of 100m of BIFs and CIDs at the respective project areas.

“The Company is eagerly awaiting the results from the 221 rock chip samples collected, and we are busily designing a comprehensive follow-up sampling program at Shaw to convert the interpreted BIFs to mapped BIFs”.

Shaw BIF Exploration Process

ACM has expanded on the findings from the Phase 1 program, completed in June 2024, which identified BIFs at the Shaw Project. The rock chip sampling program completed during September 2024, collected 32 samples with mapped BIF occurrences with approximate widths up to 100m (Figure 1). Additionally, interpreted BIF units have been confidently delineated, which will be the focus of a follow-up sampling program scheduled for late November 2024.

The BIF lithologies at Shaw occur as linear, often sub-parallel, folded and brecciated units in the structurally complex western side of the tenement. The Western BIF Zone comprises up to 3 sub-parallel BIF horizons and has a combined mapped and interpreted BIF lithology strike length of over 7km (Figure 2). The Eastern BIF Zone is interpreted to host sub-parallel BIF horizons with a combined strike length of approximately 6km. Additional field observations collected at Shaw have continued to build on the concept that the BIF bearing formations in Shaw are strike extensions of the Cleaverville Formation, which hosts direct shipping ore (DSO) iron ore deposits including Abydos and Miralga Creek Mines.

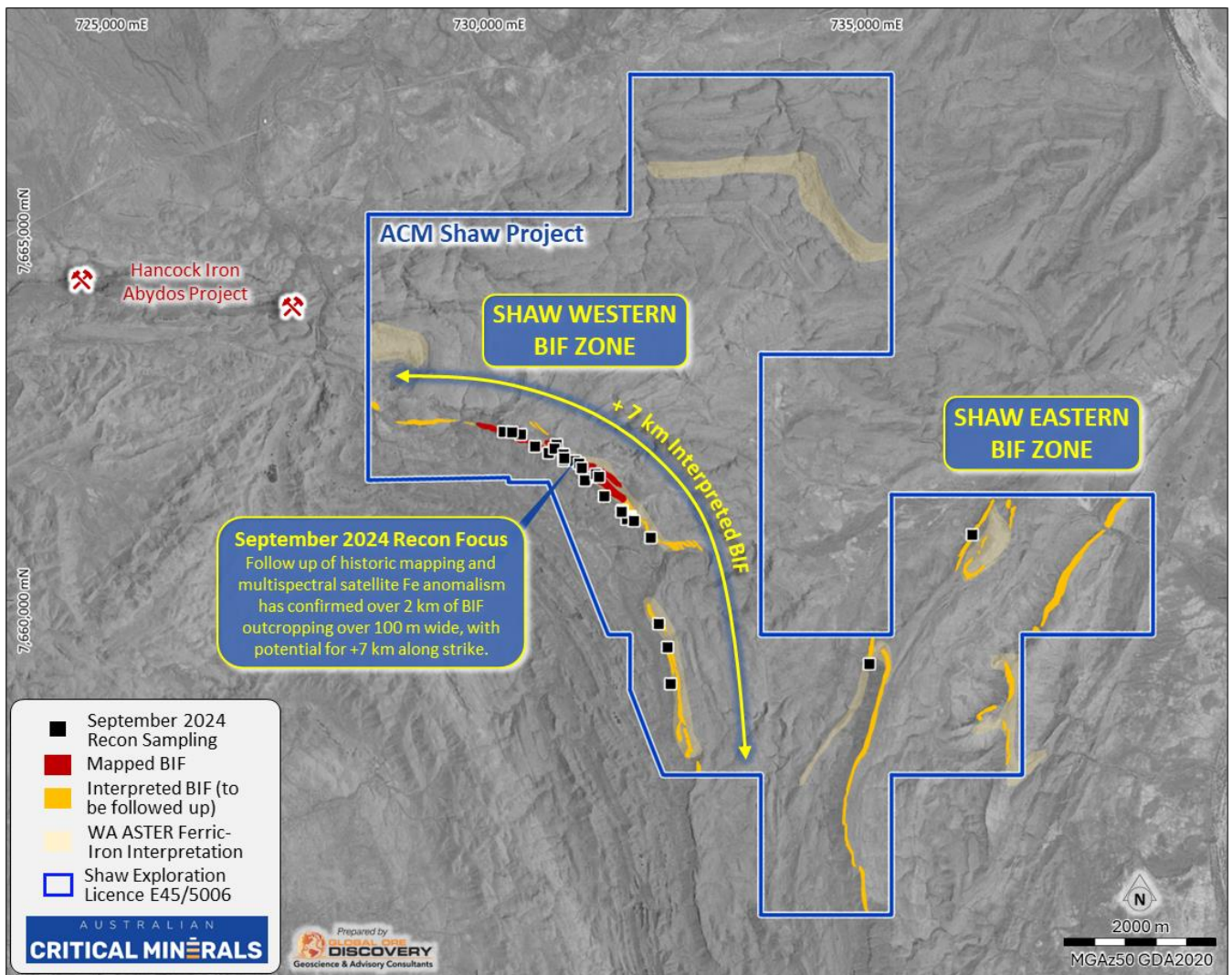


Figure 1 Location of ACM Shaw Project's BIF Zones and September 2024 reconnaissance sampling

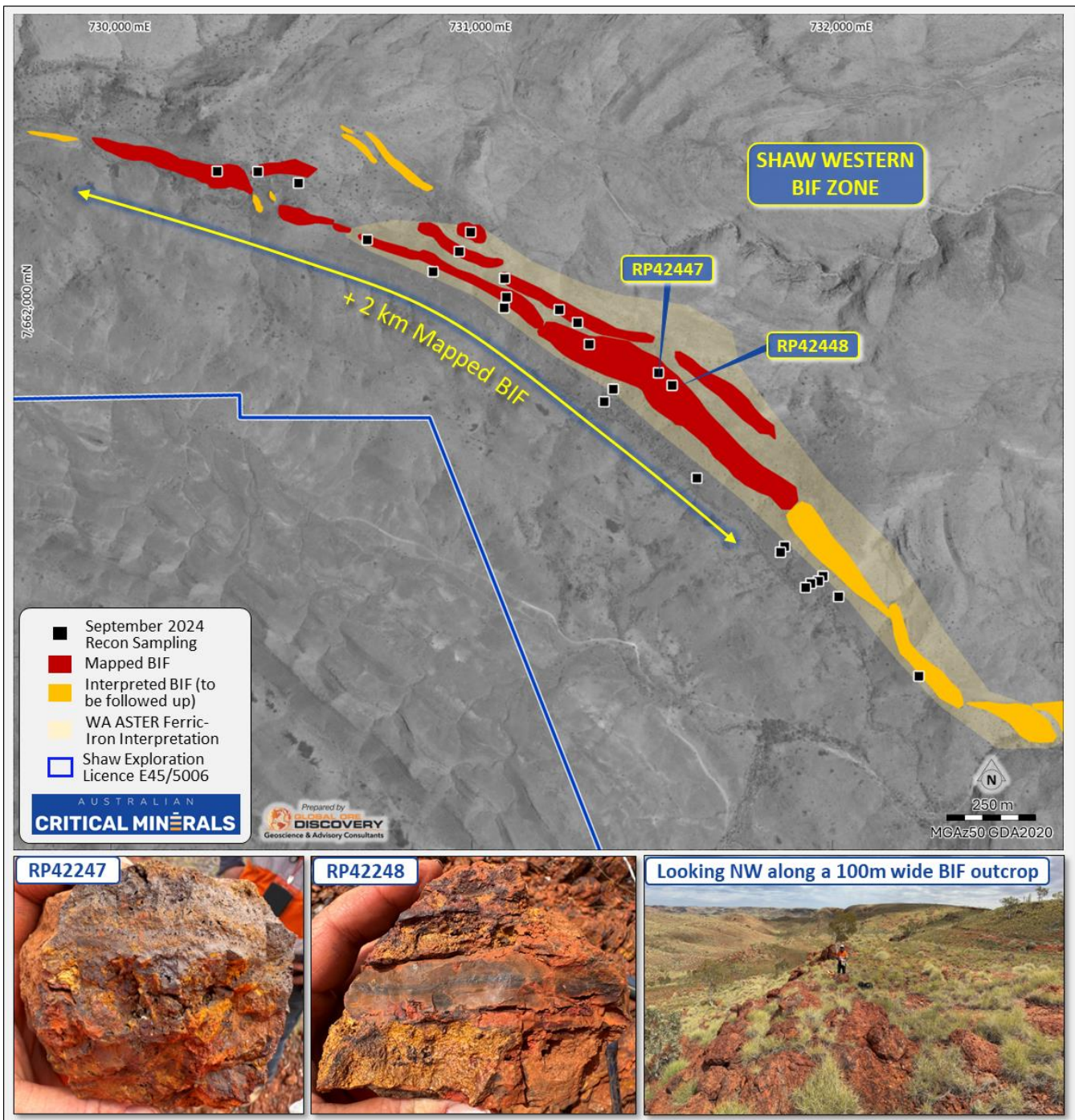


Figure 2 Shaw Project Western BIF Zone comprises up to 3 sub-parallel BIF horizons over a combined strike length of +7 km.
RP42247/48 – laminated BIF with >80% hematitic layers,

Cooletha CID Discovery Process

ACM has a significant tenement position, totalling 403 km² (of which 252 km² are granted tenure, and 151 km² are tenement applications at Cooletha). Large areas of this tenure are considered prospective for CIDs.

Ongoing integrated targeting has guided ACM's exploration team to collect an additional 189 rock chip samples of CID mineralisation. Field mapping, analysis and reconstruction of paleo-drainage systems may lead to the discovery of CIDs concealed beneath tertiary or quaternary sediments. This concept will be further investigated while ACM waits for the results from this round of rock chip sampling.

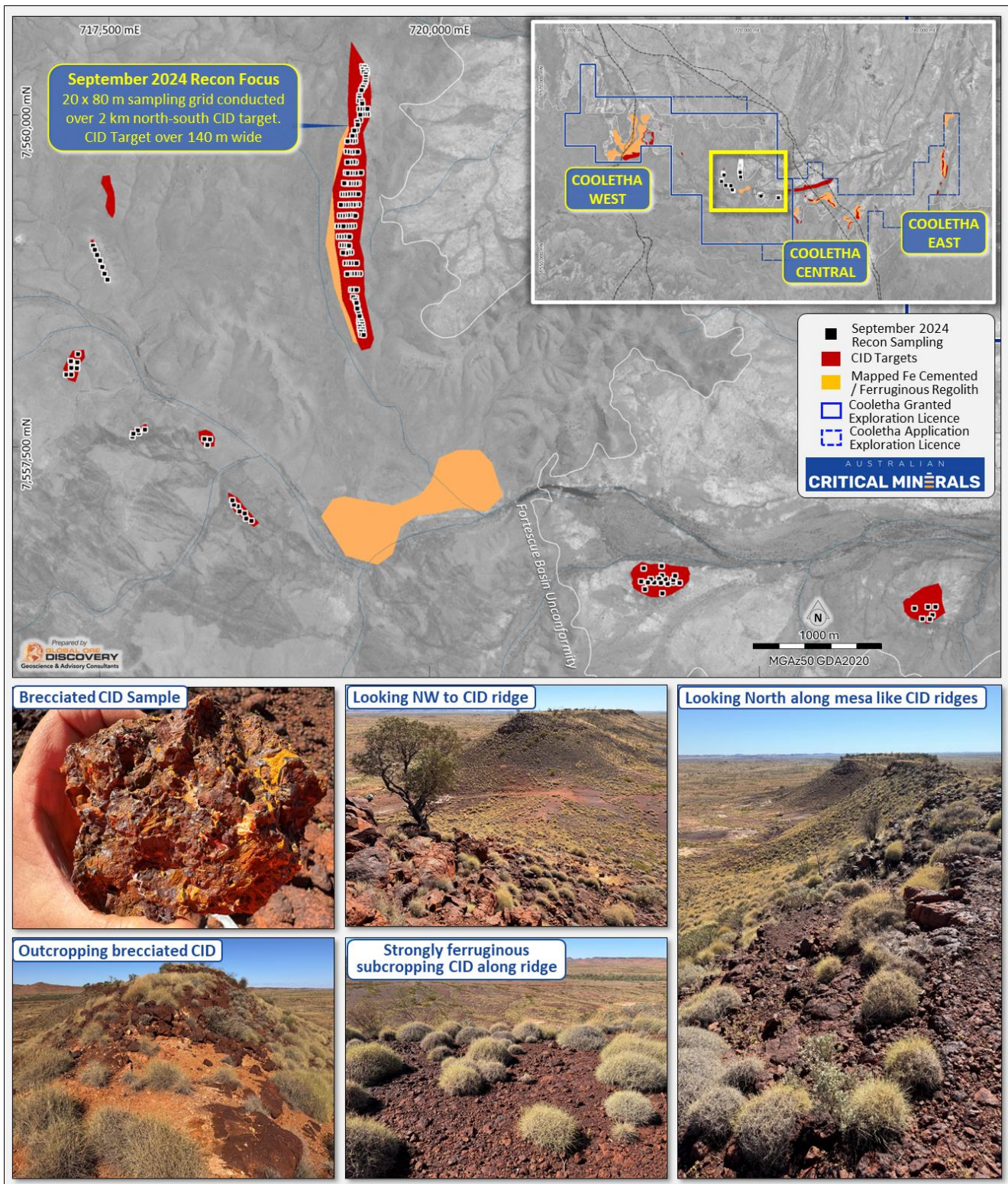


Figure 3 Cooletha Project Central CID Target Zone

Future Plans

The following work programs are planned at Shaw and Cooletha:

1. Reconnaissance rock chip sampling of interpreted BIF lithologies at the Shaw Western and Eastern BIF zones
2. Analysis and reconstruction of paleo-drainage systems at Cooletha to explore for concealed CID.
3. Drill program scoping and access assessments at Shaw and Cooletha projects.

This announcement was authorised for release by the Board of Australian Critical Minerals.

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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.

Competent Persons Statement

The information in this report that relates 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 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, and the Company does not undertake to update or revise any forward-looking information this is included herein, except in accordance with applicable securities laws.

Table 1 Location of samples collected at Shaw and Cooletha Projects

SampleID	Project	MGA_E	MGA_N	Lithology	Description
RP42003	Shaw	736471	7660896	CID	BIF brecciated with veinlets and stockworking
RP42009	Shaw	735083	7659214	BIF	
RP42016	Shaw	731951	7661195	BIF	BIF brecciated, laminated, very cherty
RP42017	Shaw	731939	7661182	BIF	BIF brecciated with semi massive hematite
RP42018	Shaw	731917	7661175	BIF	BIF Bx massive hematite, Cherty
RP42019	Shaw	731902	7661164	BIF	BIF cherty, low Fe
RP42020	Shaw	731605	7661470	BIF	BIF cherty, low Fe
RP42021	Shaw	731377	7661719	BIF	BIF structurally complex brecciate and reworked
RP42022	Shaw	731350	7661685	BIF	BIF structurally complex brecciate and reworked
RP42023	Shaw	730512	7662299	BIF	Meta andesite
RP42028	Shaw	732213	7660915	BIF	ferruginous sediment reworked
RP42029	Shaw	731994	7661138	BIF	BIF cherty reworked
RP42030	Shaw	732302	7659777	BIF	Breccia with clasts of intrusive, mafic volcanic and chert BIF brecciated, laminated, very cherty
RP42031	Shaw	732418	7659472	BIF	BIF with slickensides, reworked
RP42032	Shaw	732450	7658990	BIF	BIF 15% voids, mm-cm scale laminated beds
RP42033	Shaw	731846	7661279	BIF	BIF 15% voids, mm-cm scale laminated beds
RP42034	Shaw	731834	7661263	BIF	BIF Bx cherty
RP42242	Shaw	730987	7662157	BIF	BIF, 60% hematitic bands beds, 20m wide, tightly folded, subvertical
RP42243	Shaw	731077	7661947	BIF	50% hematitic bands beds, 5m wide
RP42244	Shaw	731230	7661940	BIF	50% hematitic bands, 10m wide, trc mag
RP42245	Shaw	731280	7661903	BIF	60% hematitic bands beds, 20m wide.
RP42246	Shaw	731312	7661843	BIF	crude banding, 75% hematitic bands, 10% vuggs, 50m wide.
RP42247	Shaw	731503	7661762	BIF	crude banding

RP42248	Shaw	731540	7661727	BIF	crude banding, laminated, 80% hematitic bands.
RP42249	Shaw	730287	7662335	BIF	well banded, 70% hematitic bands, trc mag l swing magnet.
RP42250	Shaw	730399	7662332	BIF	50% hematitic bands, tightly folded, approx. 5m wide.
RP42251	Shaw	730608	730608	BIF	20% vuggs, highly porous, 5 to 20m wide. Strike 290, possible fault?
RP42252	Shaw	730700	7662140	BIF	90% hematitic bands, 10% vugs, Strike 298
RP42253	Shaw	730881	7662049	BIF	10m wide, 20% vuggs, 30% clay/chert, 50% hematitic bands beds.
RP42254	Shaw	730955	7662104	BIF	brecciated BIF, 60% chert, 30% hematitic bands, 10% vugg, angular clasts. S
RP42255	Shaw	731079	7662028	BIF	90% hematitic bands, trc qv, qtz frags, 5m wide.
RP42256	Shaw	731084	7661976	BIF	20m wide, BIF, 60% hematitic bands, hematitic bands filled fract perp to S0
RP42035	Cooletha	718597	7556929	CID	CID 20% void He Go Li
RP42036	Cooletha	718557	7556946	CID	CID 5% void He Li Go
RP42037	Cooletha	718548	7556987	CID	CID 10% void He Li Go
RP42038	Cooletha	718508	7557000	CID	CID 15% void He Go Li
RP42039	Cooletha	718495	7557041	CID	CID 10% void He Go Li
RP42040	Cooletha	718465	7557052	CID	CID 10% void He Go Li
RP42041	Cooletha	718455	7557087	CID	CID 10% void Go He Li
RP42042	Cooletha	718269	7557507	CID	CID 10% void Go He Li
RP42043	Cooletha	718247	7557553	CID	CID 10% void Go He Li
RP42044	Cooletha	718292	7557548	CID	CID 10% void Go He Li
RP42045	Cooletha	717797	7557629	CID	CID 10% void Go He Li
RP42046	Cooletha	717753	7557603	CID	CID 10% void Go He Li
RP42047	Cooletha	717744	7557622	CID	CID 10% void He (15%) Go Li
RP42048	Cooletha	717703	7557575	CID	CID 10% void He Go Li
RP42049	Cooletha	717710	7557599	CID	CID 10% void Go Li He
RP42050	Cooletha	717299	7558203	CID	CID 15% void He (15%) Go Li

RP42051	Cooletha	717244	7558150	CID	CID 15% void He (15%) Go Li
RP42052	Cooletha	717293	7558143	CID	CID 15% void He (20%) Go Li
RP42053	Cooletha	717289	7558098	CID	CID 15% void He 120%) Go Li
RP42054	Cooletha	717246	7558100	CID	CID 15% void He (20%) Go Li
RP42056	Cooletha	717210	7558050	CID	CID 5% void Go Li He (5%)
RP42057	Cooletha	717245	7558050	CID	CID 5% void Go Li He (5%)
RP42058	Cooletha	719443	7558439	CID	CID 5% void Go Li He (5%)
RP42059	Cooletha	719434	7558421	CID	CID 5% void Go Li He (5%)
RP42060	Cooletha	719451	7558419	CID	CID 10% void Go Li He (5%)
RP42061	Cooletha	719439	7558401	CID	CID 15% void He (20%) Go Li
RP42062	Cooletha	719457	7558401	CID	CID 15% void He (20%) Go Li
RP42063	Cooletha	719460	7558380	CID	CID 15% void He (20%) Go Li
RP42064	Cooletha	719439	7558381	CID	CID 15% void He (20%) Go Li
RP42065	Cooletha	719442	7558361	CID	CID 15% void He (20%) Go Li
RP42066	Cooletha	719461	7558360	CID	CID 15% void He (20%) Go Li
RP42067	Cooletha	719465	7558342	CID	CID 15% void He (20%) Go Li
RP42068	Cooletha	719448	7558340	CID	CID
RP42069	Cooletha	719449	7558321	CID	CID
RP42070	Cooletha	719466	7558318	CID	CID
RP42071	Cooletha	719422	7558540		Calcretised sed
RP42072	Cooletha	719308	7558996	CID	CID
RP42073	Cooletha	719328	7558995	CID	CID
RP42074	Cooletha	719347	7558997	CID	CID
RP42075	Cooletha	719366	7558993	CID	CID
RP42076	Cooletha	719378	7558940	CID	CID
RP42077	Cooletha	719359	7558941	CID	CID
RP42078	Cooletha	719341	7558936	CID	CID
RP42079	Cooletha	719320	7558940	CID	CID
RP42080	Cooletha	719338	7558860	CID	CID
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RP42084	Cooletha	719420	7558859	CID	CID

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RP42091	Cooletha	719377	7558659	CID	CID
RP42092	Cooletha	719393	7558660	CID	CID
RP42093	Cooletha	719416	7558660	CID	CID
RP42094	Cooletha	719411	7558599	CID	CID
RP42095	Cooletha	719390	7558603	CID	CID
RP42096	Cooletha	719407	7558581	CID	CID
RP42097	Cooletha	719414	7558560	CID	CID
RP42098	Cooletha	719438	7558461	CID	CID
RP42100	Cooletha	719429	7558499	CID	CID- laminated siltstone with minor Fe chert bands
RP42101	Cooletha	719422	7558518		Laminated siltstones, basaltic providence
RP42102	Cooletha	719485	7560340	CID	CID
RP42103	Cooletha	719504	7560334	CID	CID
RP42104	Cooletha	719492	7560319	CID	CID
RP42105	Cooletha	719517	7560313	CID	CID
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RP42107	Cooletha	719495	7560300	CID	CID
RP42108	Cooletha	719512	7560282	CID	CID
RP42109	Cooletha	719512	7560261	CID	CID
RP42110	Cooletha	719511	7560239	CID	CID
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RP42112	Cooletha	719498	7560201	CID	CID
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RP42116	Cooletha	719459	7560104	CID	CID
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RP42122	Cooletha	719502	7560020	CID	CID
RP42123	Cooletha	719517	7560021	CID	CID
RP42124	Cooletha	719517	7559978	CID	CID
RP42125	Cooletha	719499	7559981	CID	CID
RP42126	Cooletha	719482	7559980	CID	CID

RP42127	Cooletha	719463	7559979	CID	CID
RP42128	Cooletha	719462	7559939	CID	CID
RP42129	Cooletha	719440	7559926	CID	CID
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RP42136	Cooletha	719403	7559779	CID	CID
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RP42141	Cooletha	719402	7559698	CID	CID
RP42142	Cooletha	719422	7559700	CID	CID
RP42143	Cooletha	719440	7559700	CID	CID
RP42145	Cooletha	719422	7559620	CID	CID
RP42146	Cooletha	719404	7559623	CID	CID
RP42147	Cooletha	719381	7559622	CID	CID
RP42148	Cooletha	719363	7559621	CID	CID
RP42149	Cooletha	719350	7559542	CID	CID
RP42150	Cooletha	719384	7559539	CID	CID
RP42151	Cooletha	719364	7559540	CID	CID
RP42152	Cooletha	719401	7559539	CID	CID
RP42153	Cooletha	719420	7559540	CID	CID
RP42154	Cooletha	719438	7559539	CID	CID massive very fine voids
RP42155	Cooletha	719462	7559540	CID	CID rubbly pisolithic
RP42156	Cooletha	719444	7559462	CID	CID
RP42157	Cooletha	719427	7559460	CID	CID
RP42158	Cooletha	719405	7559460	CID	CID
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RP42164	Cooletha	719342	7559379	CID	CID
RP42165	Cooletha	719359	7559379	CID	CID
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RP42167	Cooletha	719402	7559380	CID	CID
RP42168	Cooletha	719423	7559380	CID	CID

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RP42170	Cooletha	719440	7559301	CID	CID
RP42171	Cooletha	719417	7559301	CID	CID
RP42172	Cooletha	719403	7559298	CID	CID
RP42173	Cooletha	719381	7559302	CID	CID
RP42174	Cooletha	719362	7559300	CID	CID
RP42175	Cooletha	719344	7559301	CID	CID
RP42176	Cooletha	719324	7559299	CID	CID
RP42177	Cooletha	719308	7559299	CID	CID
RP42178	Cooletha	719300	7559219	CID	CID
RP42179	Cooletha	719320	7559219	CID	CID
RP42180	Cooletha	719340	7559220	CID	CID
RP42181	Cooletha	719359	7559220	CID	CID massive hematitic bandsatite
RP42182	Cooletha	719378	7559222	CID	CID
RP42183	Cooletha	719400	7559222	CID	CID
RP42184	Cooletha	719416	7559219	CID	CID
RP42185	Cooletha	719403	7559141	CID	CID
RP42186	Cooletha	719384	7559139	CID	CID
RP42187	Cooletha	719365	7559138	CID	CID
RP42188	Cooletha	719345	7559139	CID	CID
RP42189	Cooletha	719283	7559140	CID	CID
RP42190	Cooletha	719304	7559140	CID	CID
RP42191	Cooletha	719324	7559140	CID	CID
RP42192	Cooletha	719289	7559060	CID	CID
RP42193	Cooletha	719309	7559061	CID	CID
RP42194	Cooletha	719328	7559061	CID	CID
RP42195	Cooletha	719349	7559062	CID	CID
RP42196	Cooletha	719368	7559061	CID	CID
RP42197	Cooletha	723610	7556199	CID	CID
RP42198	Cooletha	723771	7556208	CID	CID
RP42199	Cooletha	723713	7556209	CID	CID
RP42200	Cooletha	723748	7556147	CID	CID
RP42201	Cooletha	723727	7556116	CID	CID
RP42202	Cooletha	723669	7556119	CID	CID
RP42203	Cooletha	721563	7556531	CID	CID
RP42204	Cooletha	721699	7556544	CID	CID
RP42205	Cooletha	721834	7556416	CID	CID
RP42206	Cooletha	721787	7556419	CID	CID
RP42207	Cooletha	721786	7556440	CID	CID
RP42208	Cooletha	721744	7556413	CID	CID
RP42209	Cooletha	721727	7556446	CID	CID

RP42210	Cooletha	721702	7556473	CID	CID
RP42211	Cooletha	721679	7556448	CID	CID
RP42212	Cooletha	721692	7556418	CID	CID
RP42213	Cooletha	721643	7556422	CID	CID
RP42214	Cooletha	721618	7556447	CID	CID
RP42215	Cooletha	721593	7556422	CID	CID
RP42216	Cooletha	721543	7556431	CID	CID
RP42217	Cooletha	721801	7556469	CID	CID
RP42218	Cooletha	717425	7559020	CID	CID
RP42219	Cooletha	717454	7558948	CID	CID
RP42220	Cooletha	717437	7558988	CID	CID
RP42221	Cooletha	717475	7558905	CID	CID
RP42222	Cooletha	717493	7558857	CID	CID
RP42223	Cooletha	717509	7558808	CID	CID
RP42224	Cooletha	717531	7558763	CID	CID
RP42235	Cooletha	721570	7556371	CID	CID
RP42236	Cooletha	721704	7556338	CID	CID

JORC CODE 2012 EDITION, TABLE 1

Section 1. Sampling Techniques and Data

This Table 1 refers to the 2024 mapping and rock chip sampling completed by Australian Critical Minerals (ACM) at the companies Coolletha Projects.

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representativity 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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	ACM Rock Chip Rock chip outcrop samples were taken at the discretion of the supervising geologist and given a sample number correlating with the observation point ID. - Outcrop samples were taken of Channel Iron Deposits (CID) at Coolletha and Banded Iron Formation (BIF) at Shaw project areas. - Data spacing is variable due to the inherent irregular nature of outcrops and is determined by the supervising geologist. - A total of 189 rock chip samples have been taken from Coolletha and 32 rock chip samples from Shaw at the time of this release. ACM Coolletha and Shaw Rock Chip Assays - Samples have been submitted to ALS, Perth, an ISO-certified contract laboratory in Perth. - Sample preparation for the Coolletha and Shaw samples comprised drying, crushing, splitting and pulverisation prior to analysis (PREP22). - All samples will be assayed by fusion X-ray fluorescence spectroscopy (XRF) for elements Al₂O₃, As, Ba, CaO, Cl, Co, Cr₂O₃, Cu, Fe, K₂O, MgO, Mn, Na₂O, Ni, P, Pb, S, SiO₂, Sn, Sr, TiO₂, V, Zn, Zr (ME_XRF21u). Loss-on-Ignition (LOI) was calculated at 1000°C (GRA05x). The XRF analysis is determined in conjunction with loss-on-ignition at 1000°C. The resulting data from both determinations are combined to produce a "total" calculation. Sampling - Rock samples were taken by hammer and chisel of rock outcrop. - Samples were localised, and care was taken to achieve a representative sample of each site. - Samples were placed in a numbered calico sample bag. Secured in Polyweave sacks and delivered for assay by ACM personnel
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-	No drilling has been reported.

Criteria	JORC Code explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - 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.	No drilling has been reported.
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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	None of the information in this announcement is intended to support a Mineral Resource Estimation. ACM Coolletha and Shaw Rock Chip Sampling - Rock chip samples were logged in the field at the time the samples were collected by an appropriately experienced geologist. - Geological information for rock chip samples was recorded qualitatively, including colour, rock type, weathering, dominant alteration mineral and mineralisation. - Sample type was recorded as an outcrop, subcrop, float or continuous rock chip. - Each sample was given a unique sample ID. - Most samples were photographed on top of the sample bag with the sample ID showing.
Sub- sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality, and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - 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. - Whether sample sizes are appropriate to the grain size of the material being sampled.	ACM Coolletha and Shaw Rock Chip Sampling - Outcrop samples were taken using a geopick and block hammer at the supervising geologist's discretion. - Data spacing is variable due to the inherent irregular nature of outcrops and is determined by the supervising geologist. - Samples range between 3-5kg in weight. - Field duplicates were taken at a rate of 3 in every 100 samples. - Certified Reference Material (CRM) materials were inserted into the sampling sequence at a rate of 4 in 100. - Coarse Blanks were inserted into the sampling sequence at a rate of 3 in 100. - ALS Perth, an ISO-certified contract laboratory, provided sample preparation. - ALS Perth preparation code for analysis was PREP22 (Dry, crush, split, pulverise core/rock <3kg).
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.	No assay results have been received at the time of this news release. ACM Coolletha and Shaw Rock Chip Sampling

Criteria	JORC Code explanation	Commentary														
	- 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. - Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	- Most samples are photographed on top of the sample bag with the sample number displayed. - Most QA/QC analytical standards are photographed, and the standard ID is removed before it is placed into a sample bag. - Samples have been submitted to ALS, Perth, an ISO-certified contract laboratory in Perth. - Sample preparation comprised drying, crushing, splitting and pulverisation prior to analysis (PREP22). - All samples will be assayed by fusion X-ray fluorescence spectroscopy (XRF) for elements Al2O3, As, Ba, CaO, Cl, Co, Cr2O3, Cu, Fe, K2O, MgO, Mn, Na2O, Ni, P, Pb, S, SiO2, Sn, Sr, TiO2, V, Zn, Zr (ME_XRF21u). Loss-on-Ignition (LOI) was calculated at 1000°C (GRAV05x). The XRF analysis is determined in conjunction with loss-on-ignition at 1000°C. The resulting data from both determinations are combined to produce a “total” calculation. - ALS quality control procedures include blanks, standards, pulverisation repeat assays, weights and sizings. <table><tr><th rowspan="2">Lab Batch #</th><th colspan="4">Insertion Rate Per 100 Samples</th></tr><tr><th>Analytical Standards (CRMs)</th><th>Blank</th><th>#Orig</th><th>#Orig+QC</th></tr><tr><td>Awaiting</td><td>9</td><td>7</td><td>221</td><td>237</td></tr></table>	Lab Batch #	Insertion Rate Per 100 Samples				Analytical Standards (CRMs)	Blank	#Orig	#Orig+QC	Awaiting	9	7	221	237
Lab Batch #	Insertion Rate Per 100 Samples															
	Analytical Standards (CRMs)	Blank	#Orig	#Orig+QC												
Awaiting	9	7	221	237												
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, and data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	ACM Cooletha and Shaw Rock Chip Sampling - Location data was recorded using a Garmin 62 series GPS and transferred to a Microsoft Excel spreadsheet. - All data is stored on a private cloud NAS server featuring multi-site replication (Resilio Connect), redundancy (RAID), and onsite and offsite backups (via tape and cloud backup). These servers are protected via FortiGate Firewalls with IPS/IDS, with least privilege access, regular security patching, and proactive security monitoring, including regular audits by the consultant IT team. - Certified Reference Material (CRM) materials were inserted into the sampling sequence at a rate of 4 in 100. - Coarse Blanks were inserted into the sampling sequence at a rate of 3 in 100.														
Location of data points	- Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used.	ACM Cooletha and Shaw Rock Chip and Channel Sampling The grid system used is GDA94 datum and MGA Zone 50 map projection for easting/northing/RL.														

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	- Garmin GPSMAP 62 series handheld GPS was used to record observation and sample points with an accuracy of +/- 4m. - RLs were obtained using a Garmin GPSMAP 62 series handheld GPS which is adequate for the reconnaissance nature of the exploration.
Data spacing and distribution	- Data spacing for reporting of Exploration Results. - 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. - Whether sample compositing has been applied.	None of the information in this announcement is intended to support a Mineral Resource Estimation. ACM Cooletha and Shaw Rock Chip Sampling - Data spacing is variable due to the inherent irregular nature of outcrops and determined by the supervising geologist. - No sample compositing has been applied.
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. - 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.	ACM Cooletha Rock Chip Sampling - Rock chip sampling is conducted along strike of targeted structures or outcrops determined by the supervising geologist and assisted by GPS and GIS polygons. - Sampling was also conducted perpendicular to the strike of the targeted structures to explore for parallel structures.
Sample security	The measures taken to ensure sample security.	Sample security protocols adopted by ACM are documented. ACM site personnel with the appropriate experience and knowledge manage the chain of custody protocols for rock chip samples from site to laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews undertaken.

Section 2. Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Comments
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as	The Greater Cooletha exploration area is currently made up of two licences E45/4990 (Cooletha) and E45/5228 (Cooletha South)

Criteria	JORC Code Explanation	Comments
	joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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.	E45/4990 (Cooletha) - E45/4990 was granted to Proterozoic Gold, a 100% subsidiary of Great Southern Gold Pty, on the 24th of October 2019 for a period of 5 years. The licence at granting consisted of 39 blocks. - On 27/03/2023, 100% of E45/4990 was acquired by Australian Critical Minerals Ltd (ACM). - The licence is currently due to expire on the 23 October 2024. E45/5228 (Cooletha South) - E45/5228 was granted to Proterozoic Gold, a 100% subsidiary of Great Southern Gold Pty, on 29 July 2019 for a period of 5 years. The licence at granting consisted of 40 blocks. - On 27/03/2023, 100% of E45/4990 was acquired by Australian Critical Minerals Ltd (ACM). - The licence is currently due to expire on the 28th of July 2029. E45/5006 (Shaw) - E45/5006 was was granted to Proterozoic Gold, a 100% subsidiary of Great Southern Gold Pty, on 4 July 2018 for a period of 5 years. An application for renewal was accepted in 2023 for a further 5 year period. The licence currently consists of 29 blocks. - On 27/03/2023, 100% of E45/4990 was acquired by Australian Critical Minerals Ltd (ACM). - The licence is currently due to expire on the 3rd of July 2028. Additionally, ACM has the following licences in applications. - E45/5052 (Cooletha North), consisting of 5 blocks, is currently in application. The application was submitted on 23 Oct 2017. - E45/6375 (Cooletha East), consisting of 42 blocks, is currently in application. The application was submitted on 12 Oct 2022. - No impediments to granted tenure exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical work conducted at Cooletha and Shaw that has been reported to DMIRS was documented in the ACM IPO prospectus – ASX:ACM 29 June 2023.
Geology	Deposit type, geological setting, and style of mineralisation.	Cooletha Project - Deposit types – Lithium Caesium Tantalum (LCT) pegmatite, Channel Iron Deposits. - Geological Setting – The project area straddles the southern contact of the Pilbara craton and the Fortescue basin. The Split Rock Supersuite and East Pilbara granitoid rocks are proposed to be the likely source of the pegmatites that have been emplaced into the mafic sequences of the Pilbara Supergroup and Soansville group. - Style of Mineralisation – Li and Ta mineralisation is targeted in highly fractionated pegmatites. Channel Iron Deposits

Criteria	JORC Code Explanation	Comments
		above the Fortescue Group and Conglomerate hosted gold and manganese shales at the base of the Fortescue Group. Shaw Project ▪ Deposit types – Banded Iron formation (BIF), Conglomerate hosted gold, Uranium. ▪ Geological Setting – The geology of the Shaw Project is dominated by volcanic and sedimentary rocks of the De Grey Supergroup, as well as domal granitic complexes, minor intrusions, and outliers of the Mount Bruce Supergroup (Fortescue Group). ▪ Style of Mineralisation – ACM is targeting multiple, stacked gold-bearing conglomerate reefs of similar style to Purdy's Reward and Loudens Patch on the outcropping NW edge of the Pilbara Craton, in the Archaean Lalla Rookh Sandstone Formation, within the Croydon Group of the De Grey Supergroup. Additionally, BIF iron deposits occurring west and south of the Lalla Rookh Sandstone Formation and potentially related to the Abydos Iron Ore Mine indicate potential for BIF development within the license.

Criteria	JORC Code Explanation	Comments
Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, - dip and azimuth of the hole down hole length and interception depth hole length. - 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	No drilling reported
Data aggregation methods	- In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. - 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. - The assumptions used for any reporting of metal equivalent values should be clearly stated.	- No weighting or averaging techniques have been used on this data as no drilling and no drill results are reported. - No resource estimation is reported in this announcement.
Relationship between mineralisation, widths and intercept lengths	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., down hole length, true width not known’). - Appropriate maps and sections	No drilling reported
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant	Sample location maps are included in the announcement.

Criteria	JORC Code Explanation	Comments
	discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No drilling reported
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 banding survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	- Refer to ACM news release dated 29th June 2023 – Prospectus - Refer to ACM Company Presentation dated 13 December 2023 - Refer to ACM news release dated 23rd November 2023 – Lithium Prospectivity Confirmed At Cooletha Project - Refer to ACM news release dated 26th September 2023 – Cooletha Lithium Sampling and Rankin Dome Drilling Update - Refer to ACM news release dated 28 August 2023 – Cooletha Exploration Update - Refer to ACM news release dated 19 August 2024 – Outstanding results from Pilbara iron ore exploration programs
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). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Proposed work programs include: - Reconnaissance rock chip sampling of interpreted BIF lithologies at the Shaw Western and Eastern BIF zones. - Analysis and reconstruction of paleo-drainage systems at Cooletha to explore for concealed CID. - Drill program scoping and access assessments at Shaw and Cooletha projects.