

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 DECEMBER 2020

Aeon Metals Limited (ASX:AML) (**Aeon** or **the Company**) is pleased to present its activities report for the quarter ended 31 December 2020.

Highlights

- Key PFS workstreams continued during the quarter:
 - Mine schedule development and optimisation under different process configurations
 - Intensive testwork on various cobalt and nickel extraction process routes
 - LOI signed with Sun Cable for provision of solar power system under BOO structure
- Results from high-potential regional drilling program at Beauchamp show a large-scale IOCG mineralisation system with target stratigraphy at shallow depths.

Walford Creek Project (100% Aeon)

Pre-Feasibility Study (PFS) program

The Walford Creek Project PFS is being co-ordinated by leading consultant engineering firm, Ausenco, with expert consultants utilised for each discipline. It is set to incorporate the updated Walford Creek Mineral Resources estimates (released December 2019) and a maiden Ore Reserve estimate underpinning the PFS-optimised mine schedule.

The front-end PFS flowsheet design to produce copper, zinc and lead concentrate products (with contained silver credits) has been finalised.

As announced in late September 2020, PFS-level evaluation of the back-end agitated bioleach processing route (outlined in the Walford Creek Scoping Study) had indicated that capital and operating cost forecasts were likely to be significantly higher for this part of the circuit than originally anticipated. In response, Aeon has been pursuing alternative back-end bioleach pathways including lower capital intensive heap leaching and vat leaching routes.

Detailed evaluation of proposed alternative back-end flowsheet designs (to produce cobalt and nickel precipitate products) is ongoing. This work has proven more time-intensive than initially estimated and further metallurgical testwork is required before a preferred back-end route can be selected.

While the Walford Creek PFS remains targeted for completion in the current quarter, this extended period of back-end testwork and evaluation may result in some slippage to this timeframe.

Mining

Mine schedule development and optimisation work was undertaken across a variety of different project and process configuration scenarios during the quarter.

Processing

Intensive testwork was undertaken during the quarter across a variety of alternative cobalt and nickel extraction process routes. This included evaluation of lower capital intensive leaching options such as heap (column testing) and vat leaching, precipitation circuit options (mixed sulphide or carbonate precipitates), third party cobalt extraction routes and broader cobalt and nickel product marketing considerations.

While results to date are encouraging, key portions of this testwork activity remain ongoing or pending results submission. Selection and optimisation of the preferred cobalt extraction route remains subject to these continuing testwork outcomes.

Infrastructure & Logistics

In October 2020, Aeon advised that it had selected a solar energy primary power solution for the Walford Creek Project.

The planned energy system provides solar generation capacity, with an accompanying battery storage facility, alongside full back-up/supplementary diesel generation capacity. The system is to be constructed at the Walford Creek Project and delivered under a Build-Own-Operate (**BOO**) structure.

The system is to be provided by Sun Cable Pty Ltd (**Sun Cable**). Sun Cable is an Australian-based company specialising in solar energy developments. Its largest current project is planned to produce approximately 20% of Singapore's electricity requirements through solar power, sourced from northern Australia and transmitted via High Voltage Direct Current cable. Major investors in Sun Cable include Grok Ventures (the family investment firm of Mike and Annie Cannon-Brookes) and Squadron Energy (a company of Tattarang).

Aeon has executed a non-binding Letter of Intent (**LOI**) with Sun Cable in relation to the provision of this energy system for the Walford Creek Project via BOO arrangement.

The key benefits to Aeon of adopting this power solution and delivery mechanism include:

- A substantial reduction in projected carbon emissions associated with the life-of-mine operations, with a forecast renewable energy penetration of over 90%;
- Removal of almost all pre-production capital cost associated with power generation;
- Substantial power operating cost savings across the life-of-mine, even after allowance for capital amortisation and operating margin under the BOO structure; and
- Full back-up diesel generation capacity delivering strong baseload assurance and swing capacity.

For further information on the Sun Cable solar energy power solution for Walford Creek, see Aeon ASX release dated 30 October 2020, *Substantial Power Cost Savings for Walford Creek*.

Environmental

Environmental consultant group, Epic Consulting, has continued to manage the environmental permitting process for the Walford Creek Project.

New regional drilling program completed

Aeon is pleased to advise that assay results have been returned for the three diamond drill holes completed at the Beauchamp Iron-Oxide-Copper-Gold (**IOCG**) target (EPM 18769). The first hole of this program was fully funded by a CEI grant from the Queensland State Government.

The Beauchamp target is a regional scale gravitational and magnetic anomaly located approximately 100km to the west of Mt Isa. It has clear similarities with the geophysical signatures of a number of world-class IOCG deposits (including Olympic Dam, Ernest Henry and Carrapateena). Beauchamp represents a low-cost opportunity for Aeon to leverage its proven exploration discipline into potential large-scale regional exploration upside. The Company's core focus however remains on the advancement of the world-class Walford Creek Project.

Key outcomes

The results show a large-scale IOCG mineralisation system with assays returning low levels of copper and gold mineralisation. The Aeon geological team is excited by the broad regional alteration observed and that the target stratigraphy is at shallow depths. The Company has subsequently secured three further tenements over associated structures with coincident magnetic and gravity responses. This region west of Mt Isa is seen as a potential new IOCG province and supports the excellent work undertaken by Geoscience Australia and the Geological Survey of Queensland.

The maiden drilling program has also allowed Aeon to collect a large amount of assay, geological, structural, density and magnetic susceptibility data which will be applied to better understand this large, underexplored system – and to plan for further follow up work, including detailed geophysical surveys and further target drilling during the 2021 exploration program.

Beauchamp drilling results

The first drill hole at Beauchamp BCDH001 (991.2m) was reported in an announcement on 4 November. Holes BCDH002 (723.7m) and BCDH003 (606.8m) were geologically similar to the first hole in that they intersected Proterozoic basement rock at approximately 100m to 125m from surface.

The mafic volcanic host sequence rocks have undergone various amounts of alteration including late-stage minor copper sulphide infill mineralisation which included minor chalcopyrite both as disseminated blebs, rare fracture fill in calcite veining and within late overprinting over the vesicles in the amygdaloidal basalt flow tops.

The three exploration drill holes totalled 2,322m as shown in Figure 2.

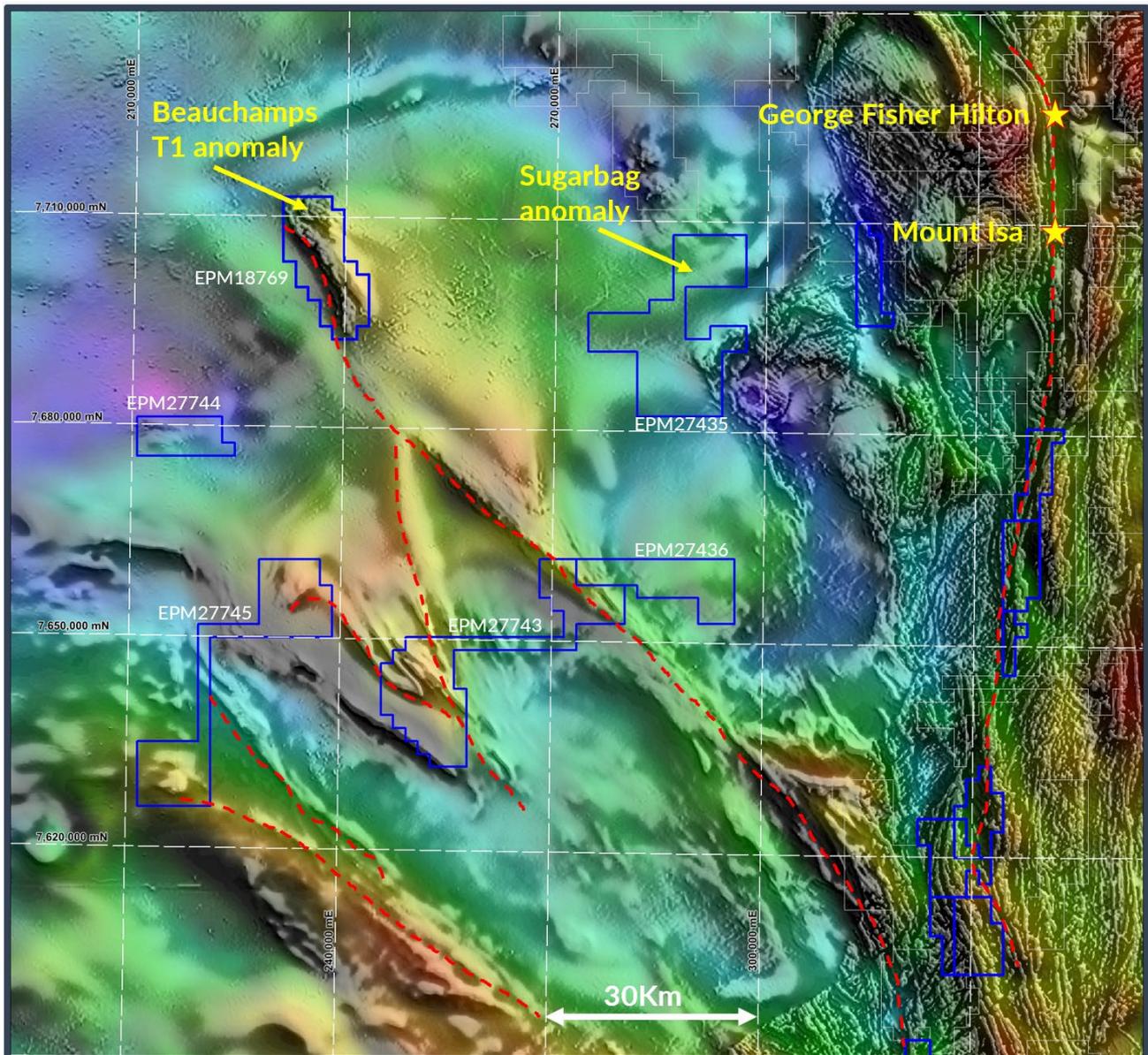


Figure 1 Map shows the Beauchamp tenement and other recently secured tenure covering magnetic and gravity anomalies on district scale structures west of the Mt Isa Copper-Zinc-Lead mine. All Aeon tenure in blue.

BCDH001 intersected a Cambrian limestone / dolomite unit and then intersected a highly comminuted (rounded) coarse sandstone before intercepting the Proterozoic basement at 137m down hole. A true basement depth of 122m is much shallower than previously estimated. A similar cover sequence was intercepted in the other two holes although at slightly shallower depths.

The basement rock is a heavily hematite altered mafic to intermediate volcanic which has progressed from a hematite calcite dominated domain into a progressively magnetite chlorite epidote part of this large system. It is interpreted that there is a degree of prior oxidation of the upper portion of the Proterozoic basement in the area drilled and that leads to no remaining sulphides instead replaced by hematite and calcite with minor quartz. This however does not preclude the possibility of a supergene blanket of mineralisation existing in such a setting.

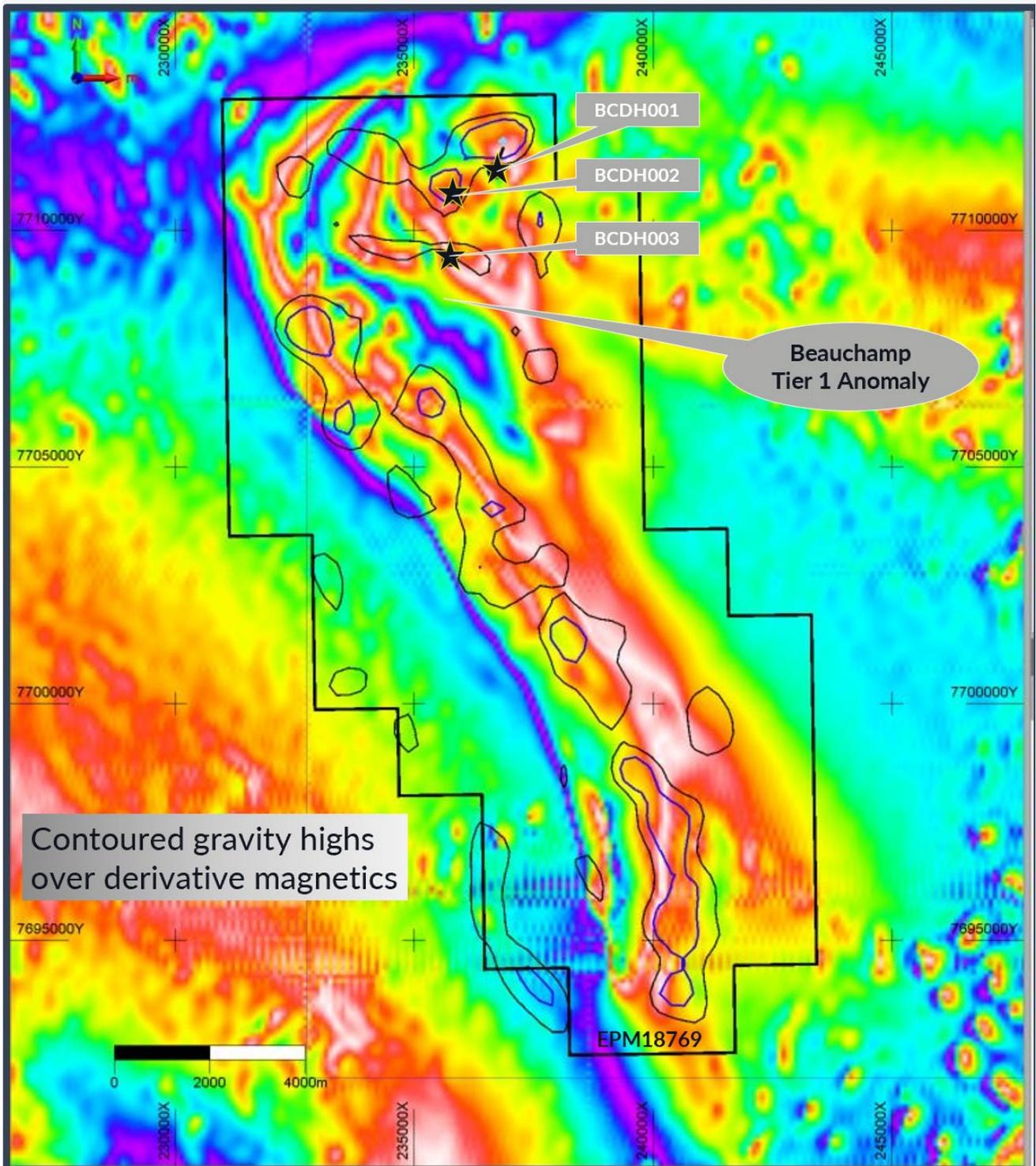


Figure 2 Location of the three drill holes at the northern end of the Beauchamp magnetic and gravity anomaly.

The geology intercepted in the holes to date confirms the presence of a very altered mafic to intermediate package of rocks showing acicular basalts through to flow top andesites. The alteration and veining are variably intense throughout the three holes drilled. The presence of both chalcopyrite dominant over pyrite and the presence of some blebs of bornite in red rock potassic feldspar, hematite and calcite veins indicates a typical part of a large IOCG system. Its presence around the transition between the hematite dominated upper part of the hole below cover and the lower more magnetite dominated portion of the drill hole is highly encouraging given these are the first drill holes to test this system.



Figure 3 Shows alteration of clasts within the hemitic red rock and calcite altered protolith with minor chalcopyrite within the clasts



Figure 4 Shows the amygdaloidal nature with alteration assemblages of actinolite, epidote, potassium (K) feldspar with quartz, calcite and minor chalcopyrite.

Table 1: Drill Hole Details

Hole ID	Easting	Northing	RL	Azimuth	Dip	Total Depth
BCDH001	236700	7711270	236	010	-65	991.2m
BCDH002	235835	7710750	242	350	-70	723.7m
BCDH003	235747	7709406	238	000	-76	606.8m

For further information on the regional drilling activities and results, see Aeon ASX release dated 28 January 2021, *Beauchamp IOCG Exploration Update*, and 4 November 2020, *IOCG Mineralised System at Beauchamp*.

Safety

There were no reported injuries at the Walford Creek Project during the quarter.

Corporate

Aeon expended approximately A\$1.6 million on exploration and evaluation activities for the Walford Creek Project during the quarter.

As at 31 December 2020, the Company had cash of approximately A\$3.1 million.

Aeon's existing loan facility balance with OCP Asia increased to A\$23.3 million during the quarter (maturity date of 17 December 2021).

During the quarter, payments were made to related parties (as set out in section 6 of the Appendix 5B) as director fees.

Appendix 5B

The Company's Appendix 5B cash report has also been released today.

This ASX release has been authorised for and on behalf of the Aeon Board by:

Hamish Collins, Managing Director and CEO

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ABOUT AEON METALS

Aeon Metals Limited (**Aeon**) is an Australian based mineral exploration and development company listed on the Australian Securities Exchange (ASX: AML). Aeon holds a 100% ownership interest in the Walford Creek Copper-Cobalt Project (**Walford Creek Project**) located in north-west Queensland, approximately 340km to the north north-west of Mount Isa.

Aeon completed a Scoping Study on the Walford Creek Project in October 2019. A Pre-Feasibility Study is targeted for completion in 1Q 2021.

APPENDIX 1 - TENEMENT HOLDINGS AS AT 31 DECEMBER 2020

TENEMENT HOLDER	TENEMENT I.D.	LOCATION	INTEREST HELD
Aeon Monto Exploration Pty Ltd	EPM 14628	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Ltd	EPM 15921	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Ltd	EPM 17001	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Ltd	EPM 17002	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Ltd	EPM 17060	West of Monto, Qld	100%
Aeon Monto Exploration Pty Ltd	EPM 27604	In Application	100%
Aussie NQ Resources Pty Ltd	EPM 18359	South of Georgetown, Qld	100%
SLW Queensland Pty Ltd	EPM 19029	West of Monto, Qld	60%
Aeon Walford Creek Limited	EPM 11898	Mount Isa West	80%
Aeon Walford Creek Limited	EPM 13412	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 13413	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 13682	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 14040	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 14220	Walford Creek	100%
Aeon Walford Creek Limited	EPM 14233	Mount Isa South	72%
Aeon Walford Creek Limited	EPM 14694	Mount Isa North	80%
Aeon Walford Creek Limited	EPM 14712	Constance Range	80%
Aeon Walford Creek Limited	EPM 14821	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 14854	Walford Creek	100%
Aeon Walford Creek Limited	EPM 14935	Constance Range	80%
Aeon Walford Creek Limited	EPM 15156	Mount Isa South	80%
Aeon Walford Creek Limited	EPM 15911	Mount Isa South	100%
Aeon Walford Creek Limited	EPM 18552	Walford Creek	100%
Aeon Walford Creek Limited	EPM 18769	Mount Isa West	100%
Aeon Walford Creek Limited	EPM 26906	Walford Creek	100%
Aeon Walford Exploration Pty Ltd	EPM 26316	Walford Creek	Farm In
Aeon Walford Creek Limited	EPM 27311	Walford Creek	100%
Aeon Walford Creek Limited	EPM 27312	Walford Creek	100%
Aeon Walford Creek Limited	EPM 27314	In Application	100%
Aeon Walford Creek Limited	EPM 27315	In Application	100%
Aeon Isa Exploration Pty Ltd	EPM 27435	Mount Isa West	100%
Aeon Isa Exploration Pty Ltd	EPM 27436	Mount Isa West	100%
Aeon Walford Creek Limited	EPM 27512	Walford Creek	100%
Aeon Walford Exploration Pty Ltd	EPM 27535	Walford Creek	100%
Aeon Isa Exploration Pty Ltd	EPM 27743	In Application	100%
Aeon Isa Exploration Pty Ltd	EPM 27744	In Application	100%
Aeon Isa Exploration Pty Ltd	EPM 27745	In Application	100%

APPENDIX 2 - COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results for the Walford Creek Deposit is based on information compiled Mr Dan Johnson who is a Member of the Australian Institute of Geoscientists and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the "JORC Code"). Mr Dan Johnson is a full-time employee of Aeon Metals Limited and consents to the inclusion in the presentation of the Exploration Results in the form and context in which they appear.

The data in this report that relates to Mineral Resource Estimates is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of Mineral Resource Estimates in the form and context in which they appear.