

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 30 JUNE 2020

Aeon Metals Limited (ASX:AML) (“**Aeon**” or “**the Company**”) is pleased to present its activities report for the quarter ended 30 June 2020.

### Highlights

- Pre-Feasibility Study (**PFS**) workstreams on the Walford Creek Project continue
- Mining study well advanced and nearing completion
- Processing testwork and assessment approaching completion
  - Flotation (for copper, lead and zinc concentrate products)
    - Copper flotation testwork complete
    - Lead and zinc flotation – results to date exceed Scoping Study<sup>1</sup>
  - Hydromet (for copper precipitate and cobalt-nickel sulphide products)
    - Iron-arsenic removal pilot plant – results to date in line with Scoping Study<sup>1</sup>
    - Copper precipitation pilot plant – product quality and recovery in line with Scoping Study<sup>1</sup>
    - Cobalt-nickel precipitation in process
- Engineering studies, including process plant, logistics, site layout and water supply, nearing completion; detailed assessment of solar power solution being undertaken
- Ongoing COVID-19 related impacts see Walford Creek PFS completion now expected in 4Q 2020 (previously 3Q 2020)
- Experienced mining executive, Andrew Greville, appointed as a non-executive director

### Walford Creek Project (100% Aeon)

#### Pre-Feasibility Study progress

The Pre-Feasibility Study (**PFS**) on the Walford Creek Project continued during the quarter. The PFS is being run by leading consultant engineering firm, Ausenco, with expert consultants utilised for each discipline. The PFS is set to incorporate the updated Walford Creek Mineral Resources estimates<sup>2</sup> (previously released) and a maiden Ore Reserve estimate underpinning the PFS optimised mine schedule.

Challenges stemming from ongoing COVID-19 restrictions are expected to delay the completion of a key outstanding PFS workstream into September. As a result, the Walford Creek PFS is now expected to be completed in 4Q 2020 (previously 3Q 2020).

<sup>1</sup> Refer to ASX release dated 21 October 2019, *Walford Creek Scoping Study*

<sup>2</sup> Refer to ASX release dated 17 December 2019, *Substantial Walford Creek Resource Upgrade*

## **Mining**

As outlined in the Scoping Study, extraction of the Vardy and Marley Resources is via a combination of open pit and underground mining. An updated PFS mining optimisation shows that open pit mining is now expected to continue for approximately 9 years, with underground mining starting in Year 5.

Work on finalising the PFS mine design, mining schedule, waste dump design, and backfilling schedule continued during the quarter.

Testwork for underground paste fill continued during the quarter. An underground ventilation and escapeway study was conducted to assist the mine design and to allow sizing of the primary ventilation shafts and fans.

## **Processing**

Ausenco has completed the process flow sheets for the plant and are now compiling detailed PFS-level capital and operating cost estimates. The site layout is well advanced as are the earthworks designs, heap leach pads and tailings storage facilities.

## **Metallurgical Testwork**

During the quarter, metallurgical testwork and assessment continued for the PFS process flowsheet. This included:

- A. **Lead and Zinc Evaluation** – in progress at ALS Burnie, Tasmania
  - Comminution evaluation in line with Scoping Study.
  - Lead composite flotation results to date, with modified reagent scheme, exceed Scoping Study estimates.
  - Lead-zinc composite flotation results to date, with modified reagent scheme, exceed Scoping Study estimates.
  - Zinc composite flotation results to date, with modified reagent scheme, exceed Scoping Study estimates.
  
- B. **Product Purification Pilot Plant – Iron-Arsenic Removal** – undertaken at ALS Burnie, Tasmania (19 - 25 May 2020)
  - 1000 litres of bioleach pregnant solution was treated in the iron-arsenic removal pilot plant.
  - Iron and arsenic removal rates of >99% were achieved, with minor cobalt loss.
  - Performance was in line with both the Outotec pilot and the Scoping Study.
  
- C. **Product Purification Pilot Plant – Copper Precipitation** – undertaken at ALS Burnie, Tasmania (9 - 25 June 2020)
  - 1000 litres of bioleach pregnant solution was treated in the copper precipitation pilot plant.
  - Copper recovery to precipitate was in line with both the Outotec pilot and the Scoping Study.
  - Copper recovery from PLS to precipitate varied from 91% to 98%, producing a precipitate of typically 45% copper.

**Figure 1: Progressive extraction of copper from Pregnant Leach Solution (PLS) (PLS in bucket second from left showed maximum copper extraction with minimum cobalt loss)**



**D. Product Purification Pilot Plant – Cobalt-Nickel Precipitation – in progress at ALS Burnie, Tasmania**

- Semi-continuous cobalt-nickel precipitation tests are in progress to confirm conditions for the 1000 litre cobalt-nickel precipitation pilot plant.

**Figure 2: Co-Ni PLS (feed stock for Cu-Ni precipitation pilot plant)**



**Infrastructure & Logistics**

Aeon is undertaking detailed assessment of a third-party solar power solution (with associated battery storage and back-up diesel generation facilities) for the Walford Creek Project. If selected, this energy system is anticipated to be provided under a Build-Own-Operate (**BOO**) arrangement. The third-party proponent is a well-known and highly credentialed party.

The logistics study fieldwork that was previously delayed (due to COVID-19 movement restrictions) is now complete with the outcomes to be included in the PFS.

## Environmental

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

As a component of the EIS, stakeholder management fact sheets were prepared and provided to both the main Indigenous Groups as well as the Doomadgee and Burketown Councils as part of the community engagement process. Community engagement processes are somewhat challenged in the COVID-19 environment however every effort is being made to safely streamline this activity.

Further collection of site background baseline data was completed during the quarter. This included weather information and checking of the Stevenson Screen on site, gathering of dust collection site samples for analysis, and the checking of wet season creek flows and water quality gauges. A detailed seasonal flora study was undertaken on site during the quarter.

Kinetic leach testwork of the waste rock and tailings continues, with results being used to plan waste disposal by RGS Consultants. This work feeds into the rigorous mine closure planning required as part of the approvals process.

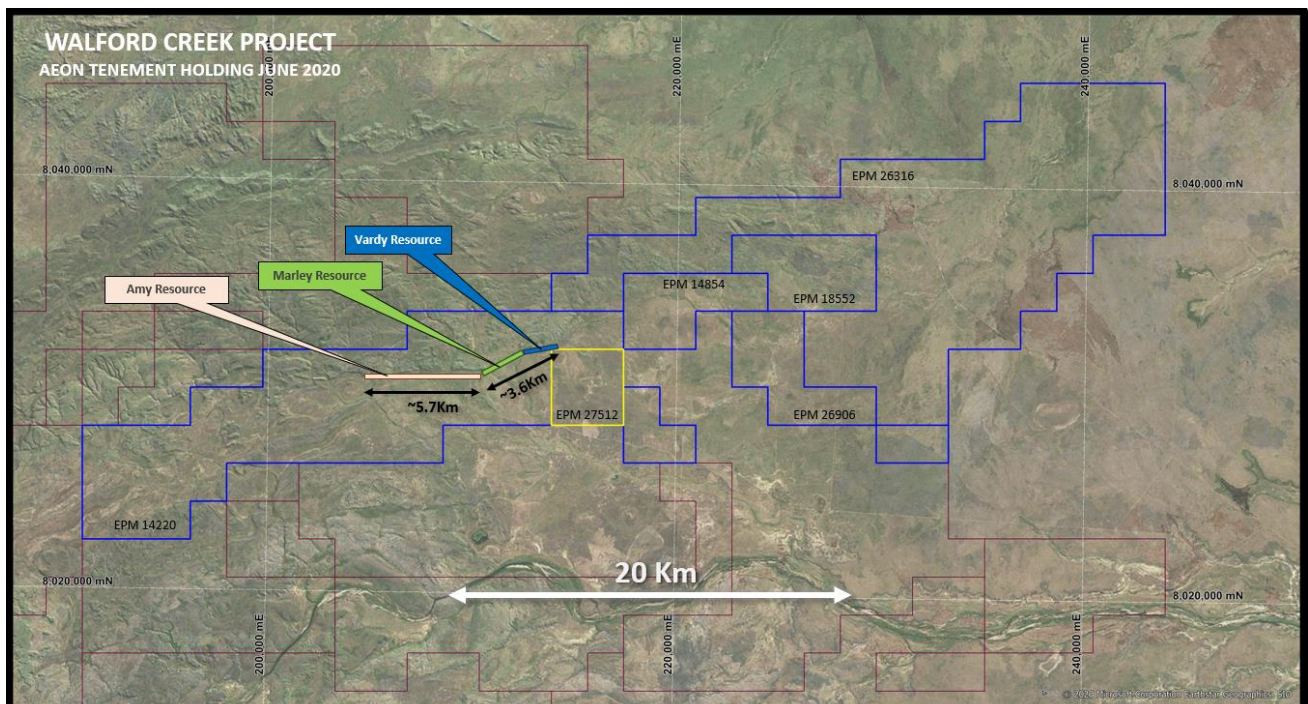
## Exploration and Evaluation

Although no on-ground exploration was undertaken during the quarter, further assessment of Aeon's current exploration tenure continued.

### Additional Walford Creek tenement simplifies mine design

At Walford Creek, EPM 27512 was applied for and granted on 9 July 2020. Although only four sub-blocks in size, its location (being only a few hundred metres from the planned Vardy open pit) allows for substantial improvement to the mine design (the mine design had previously needed to work around this tenement as it was held by a third party). The eastward continuation of the Fish River Fault also tracks closely along this northern tenement boundary and some opportunity now exists for the testing of the Walford mineral system at depth along strike within this new tenement.

**Figure 3: EPM 27512 granted allowing site layout flexibility**



## Other

The Company has also been reassessing its ground holding in the Monto area of south-east Queensland and is looking to consolidate its tenure in that region.

## Safety

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

## Corporate

Aeon expended approximately A\$2.1 million on exploration and evaluation activities at the Walford Creek Project during the quarter.

As at 30 June 2020, the Company had cash of approximately A\$2.5 million. Aeon's existing loan facility balance with OCP Asia is A\$18.5 million, with a maturity date of 17 December 2021.

On 15 May 2020, the Company announced the appointment of Andrew Greville as an independent non-executive director. Andrew is a senior international mining executive with over 36 years' experience in the sector and a track record of success. His expertise is particularly strong in the fields of business development, mergers and acquisitions, product marketing and strategy.

For further details of Andrew's appointment and professional experience, refer to Aeon ASX release dated 15 May 2020 (*Independent Director Appointment*).

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

For more information, please contact:

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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 has completed a Scoping Study in October 2019 on the development of a 3.5Mtpa open pit and underground mining operation at the Walford Creek Project producing approximately 146kt copper and 22kt cobalt (plus zinc, lead, silver and nickel) for sale to global metal markets. This Scoping Study demonstrated that the Walford Creek Project represents a technically robust and highly economic mine development. A Pre-Feasibility Study (**PFS**) on the Walford Creek Project is expected to be completed in 4Q 2020.

Aeon confirms that all material assumptions underpinning the production target and forecast financial information within the Scoping Study continue to apply and have not materially changed.

## APPENDIX 1 - TENEMENT HOLDINGS AS AT 30 JUNE 2020

TENEMENT HOLDER	TENEMENT I.D.	LOCATION	INTEREST HELD
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%
Footprint Resources Pty Limited	EPM 26316	Walford Creek	Farm In
Aeon Walford Creek Limited	EPM 27311	Walford Creek	100%
Aeon Walford Creek Limited	EPM 27312	Walford Creek	100%
Aussie NQ Resources Pty Limited	EPM 18359	South of Georgetown, Qld	100%
SLW Queensland Pty Limited	EPM 19029	West of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	EPM 14628	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	EPM 15921	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	EPM 17001	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	EPM 17002	Northwest of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	EPM 17060	West of Monto, Qld	100%
Aeon Monto Exploration Pty Limited	MDL 462	Northwest of Monto, Qld	100%
Aeon Walford Exploration Pty Limited	EPM 27535	North of Mount Isa	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.