

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 MARCH 2021

Aeon Metals Limited (ASX:AML) (**Aeon** or **the Company**) is pleased to present its activities report for the quarter ended 31 March 2021.

### Highlights

- Non-executive director, Dr Fred Hess, appointed to the role of Interim Managing Director and CEO on 12 March 2021.
- Independent review of the key metallurgical elements of the Walford Creek Pre-Feasibility Study (**PFS**) conducted.
- Resulted in decision to suspend completion of the base metal concentrates and heap leaching workstream and to revise the PFS scope to focus on production of a bulk sulphide flotation concentrate followed by leaching via pressure oxidation.
- New approach is expected to deliver increased quantities of higher value copper, cobalt, zinc, silver and nickel metal products.
- A further drilling program is planned to target expansion and classification upgrade of Walford Creek mineral resources, plus sourcing of requisite drill core for new testwork.
- The requirement to source additional Walford Creek core to commence new metallurgical testwork drives the revised PFS completion target of H1 2022.
- Indicative, non-binding funding commitments have been obtained from Aeon lender and major shareholder, OCP Asia, that are expected to enable completion of the revised PFS.
- Update to Walford Creek Mineral Resource Estimate (**MRE**) completed in April 2021 using density weighting of composite samples with dynamic interpolation Ordinary Kriging technique.
- This resulted in a 6% increase in overall tonnage, and average grade increases of 4% for copper and cobalt, 21% for lead, 3% for zinc and 6% for silver (all relative to the December 2019 MRE).
- Over 95% of the total Vardy & Marley MRE remains in the Measured and Indicated classification.
- Results from high-potential regional drilling program at Beauchamp show a large-scale IOCG mineralisation system with target stratigraphy at shallow depths.

### Interim Managing Director and CEO, Dr Fred Hess, commented:

*“Notwithstanding the significant recent changes that have occurred, Aeon is now much better placed to pursue the development of the Walford Creek Copper-Cobalt Project and further greenfield exploration across its highly prospective package of north-west Queensland tenements. A substantial quantity of testwork already underpins the selection of the bulk flotation and leaching by pressure oxidation flowsheet while the decision to resume exploration at both Walford Creek and regionally provides further opportunity to enhance our project development prospects.”*

## Walford Creek Project (100% Aeon)

### Pre-Feasibility Study (PFS) program

Following a recent independent review of the Walford Creek PFS processing workstream, initiated by Aeon's newly appointed Interim Managing Director and CEO, Dr Fred Hess, further work on the incumbent PFS process workstream and the heap leaching pyrite concentrate testwork program was suspended.

The PFS scope of work was revised to focus on a flowsheet design targeting production of a bulk sulphide concentrate (containing copper, lead, zinc, silver, cobalt and nickel valuable metals) that would then be subjected to pressure oxidation leaching to yield saleable end products of both higher quality and quantity.

The benefits of producing a bulk sulphide concentrate over the previous base metal concentrate flowsheet are manifold, including:

- Elimination of the requirement for separate ROM stockpiling of the various metal rich ore types from mining.
- Elimination of the ore sorting step ahead of flotation.
- A much coarser primary grind will suffice since only sulphide / non-sulphide gangue liberation is necessary for effective flotation separation resulting in a downsizing of the comminution circuit and a reduction in associated capital and operating costs (eg energy and steel grinding media consumption).
- A simple flotation circuit and the deletion of multiple concentrate thickening, filtering and storage steps result in a substantial reduction in concentrator flowsheet capital and operating costs.
- Higher valuable metal tenors achievable in the downstream pregnant leach solution and significantly lower final product transport costs (higher grade and potential local markets).
- A significant overall reduction in operational risk.
- A significant reduction in logistics costs.

Testwork is planned to be conducted to demonstrate each of the various downstream processing steps required to isolate and upgrade each valuable metal. It is expected that this will also involve precipitation of deleterious and unwanted metals from solution that will be directed to tailings.

The processing steps envisaged are globally practised already for an extensive range of ores such that the basis for accepting the proposed flowsheet is well-founded (ie copper and zinc solvent extraction and electrowinning to produce LME grade cathode, cobalt and nickel solvent extraction following by purification and recrystallisation to produce saleable cobalt sulphate and nickel sulphate). It is envisaged that any specific issues associated with the new flowsheet can be progressively resolved by the planned testwork program.

A preliminary scope of work and timetable for the revised PFS indicates finalisation in H1 2022. This timing is primarily driven by the need to source fresh drill core to provide sufficient representative samples for the extensive new testwork program planned (and the fact that exploration activities in the Walford Creek region are largely confined to the May to November dry season).

Key components of the future work program include:

- Walford Creek exploration program over the dry season (May to November).
- Preparation of a preliminary flowsheet design specification to support a more detailed capital and operating cost assessment and revised financial model.
- Reassessment of proposed cut-off grades and their impact on existing and future mining inventory.

- Grind and flotation optimisation testwork to support a coarser primary grind and the option of a regrind step.
- Pressure oxidation optimisation testwork to confirm autoclave operating conditions of temperature, pressure and oxygen addition.
- Pregnant leach solution testwork to optimise sequential extraction steps for metals and removal of impurities.

In conjunction with the embrace of this new flowsheet, the Aeon Board resolved to pursue an exploration program that is targeted at expanding, and upgrading the classification of, the existing Walford Creek mineral resource. The objective of this program is to extend mine life and/or facilitate an increase in project scale.

For further information on the revised PFS program for Walford Creek, see Aeon ASX release dated 15 April 2021, *Walford Creek PFS Update and Next Steps*.

### Mineral Resource Estimate (MRE)

Independent geological consultants, H&S Consultants Pty Ltd (**H&SC**), were retained to complete an updated MRE for the Walford Creek Project. H&SC also completed the previous MRE for Walford Creek in December 2019.

The revised update to the MRE was conducted using density weighting of the composite samples with the dynamic interpolation Ordinary Kriging technique.

The total Vardy & Marley MRE now stands at 38.6Mt (+6%) extending over a strike of 3.6km. Of this total, over 95%, or 36.7Mt, of the MRE tonnage is classified as Measured and Indicated.

The Vardy & Marley **Copper Mineral Resources** have increased to 19.6Mt @ 1.08% Cu, 0.15% Co, 31g/t Ag, 1.03% Pb, 0.73% Zn and 0.07% Ni. The previous Copper Mineral Resources were 18.4Mt @ 1.05% Cu, 0.14% Co, 29g/t Ag, 0.90% Pb and 0.72% Zn. No nickel numbers were estimated previously.

**Table 1: Vardy/Marley Copper Mineral Resource (0.5% Cu cut-off)**

Category	Mt	Cu %	Pb %	Zn %	Ag ppm	Co %	Ni %	Pyrite %	Density t/m <sup>3</sup>
Measured	6.4	1.17	1.02	0.88	27.9	0.15	0.07	42.8	3.47
Indicated	12.2	1.03	1.03	0.66	31.8	0.15	0.07	39.0	3.40
Inferred	1.0	1.05	1.13	0.73	36.2	0.14	0.06	41.9	3.43
<b>Total</b>	<b>19.6</b>	<b>1.08</b>	<b>1.03</b>	<b>0.73</b>	<b>30.8</b>	<b>0.15</b>	<b>0.07</b>	<b>40.4</b>	<b>3.42</b>

The Vardy & Marley **Cobalt Peripheral Mineral Resources** increased to 19mt @ 0.24% Cu, 0.09% Co, 21g/t Ag, 0.96% Pb, 1.07% Zn and 0.04% Ni. The previous Cobalt Peripheral Mineral Resources were 17.4Mt @ 0.26% Cu, 0.09% Co, 20g/t Ag, 0.80% Pb and 1.01% Zn. No nickel numbers were estimated previously.

**Table 2: Vardy/Marley Cobalt Peripheral Mineral Resource (600ppm Co Cut-off on blocks that are outside of Copper Mineral Resource)**

Category	Mt	Cu %	Pb %	Zn %	Ag ppm	Co %	Ni %	Pyrite %	Density t/m <sup>3</sup>
Measured	6.4	0.24	0.85	1.20	19.45	0.10	0.04	44.4	3.41
Indicated	11.7	0.25	0.99	1.03	21.82	0.09	0.04	38.5	3.32
Inferred	0.9	0.20	1.27	0.72	23.67	0.09	0.04	39.3	3.32
<b>Total</b>	<b>19.0</b>	<b>0.24</b>	<b>0.96</b>	<b>1.07</b>	<b>21.11</b>	<b>0.09</b>	<b>0.04</b>	<b>40.5</b>	<b>3.35</b>

As a result of the increase MRE tonnage and average grades, there has been an overall increase in contained copper, cobalt and zinc metal of around 9%, and an increase in contained lead and silver metal of 21% and 12%, respectively. Density has increased by 2.7%.

The Amy MRE remains unchanged at 5.1Mt @ 1.25% Cu, 0.15% Co, 37g/t Ag, 1.35% Pb, 0.63% Zn and 0.08% Ni (all Inferred).

For further information on the updated MRE, see Aeon ASX release dated 19 April 2021, *Walford Creek Resource Update*. Aeon confirms that all material assumptions underpinning the MRE outlined above continue to apply and have not materially changed.

### **Beauchamp (100% Aeon)**

Final assay results were returned for the three diamond drill holes (totalling 2,322m) 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.

The results from the three drill holes confirm the presence of a large scale IOCG system, containing copper and gold mineralisation, with broad regional alteration observed and target stratigraphy 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.

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**

Hamish Collins resigned as Managing Director and CEO on 12 March 2020. He was replaced by independent non-executive director, Dr Fred Hess, who was appointed to the role of Interim Managing Director and CEO. A search process has commenced for the appointment of Aeon's next permanent CEO.

Aeon expended approximately A\$0.5 million on exploration and evaluation activities for the Walford Creek Project during the quarter.

As at 31 March 2021, the Company had cash of approximately A\$2.2 million.

Aeon's existing loan facility balance with OCP Asia increased to A\$24.0 million during the quarter (maturity date of 17 December 2021).

Following preliminary discussions with lender and major shareholder, OCP Asia, held post the end of the quarter, the Aeon Board has received an indicative, non-binding term sheet for an increase in the existing

OCP loan facility and maturity extension. All other terms of the existing facility are to remain unchanged and the fee for this facility revision is expected to be broadly commensurate with that paid for similar previous revisions of the facility.

### **ASX Additional Information**

ASX listing rule 5.3.1: Exploration and evaluation expenditure during the quarter was A\$0.5m Details of exploration activity during the March 2021 quarter are set out in this report and are mostly associated with costs relating to its Walford Creek project.

ASX listing rule 5.3.2: There were no substantive mining production or development activities during the quarter.

ASX listing rule 5.3.5: Appendix 5B, Section 6.1 – description of payments: During the March 2021 quarter, Aeon paid directors fees of \$99,118 to non-executive directors, \$352,394 to the Managing Directors during the period.

### **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:**

Dr Fred Hess, Interim 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.

A Pre-Feasibility Study on the Walford Creek Project is targeted for completion in H1 2022.

## APPENDIX 1 - TENEMENT HOLDINGS AS AT 31 MARCH 2021

TENEMENT HOLDER	TENEMENT I.D.	LOCATION	INTEREST HELD
Aeon Metals Limited	EPM 14628	Northwest of Monto, Qld	100%
Aeon Metals Limited	EPM 15921	Northwest of Monto, Qld	100%
Aeon Metals Limited	EPM 17001	Northwest of Monto, Qld	100%
Aeon Metals Limited	EPM 17002	Northwest of Monto, Qld	100%
Aeon Metals Limited	EPM 17060	West of Monto, Qld	100%
Aeon Metals Limited	EPM 27604	Northwest of Monto, Qld	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 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	100%
Aeon Walford Creek Limited	EPM 15186	Constance Range	80%
Aeon Walford Creek Limited	EPM 15911	Mount Isa South	100%
Aeon Walford Exploration Pty Ltd	EPM 27535	Constance Range	100%
Aeon Walford Exploration Pty Ltd	EPM 27311	Walford Creek	100%
Aeon Walford Exploration Pty Ltd	EPM 27312	Walford Creek	100%
Aeon Walford Exploration Pty Ltd	EPM 27435	Mount Isa West	100%
Aeon Walford Exploration Pty Ltd	EPM 27436	Mount Isa West	100%
Aeon Isa Exploration Pty Ltd	EPM 27743	Mount Isa West	100%
Aeon Isa Exploration Pty Ltd	EPM 27744	Mount Isa West	100%
Aeon Isa Exploration Pty Ltd	EPM 27745	Mount Isa West	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 Creek Limited	EPM 27512	Walford Creek	100%
Footprint Resources Pty Ltd	EPM 26316	Walford Creek	Farm In

## **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.