

10 May 2022

The Manager
Listings Compliance
ASX, Sydney

RE: ONEDIN METALLURGICAL TESTWORK PROGRAM UPDATE

The Board of AuKing Mining Limited (**AKN** or **the Company**) is pleased to provide this update as to progress with the metallurgical testwork program at Onedin.

Introduction

As part of its re-listing on the ASX last year, AKN explained that one of the key reasons the Company sought to acquire interests in Koongie Park was the understanding that the Onedin deposit occurred in a carbonate-style mineral system and, if that was the case, AKN had confidence that the significant copper, zinc and other mineralization would leach at commercially viable recovery rates.

Initial Results

Significant early activities of the testwork program included the conduct of sequential recovery analyses and also completion of a mineralogy scan (“mineral liberation analysis” or “MLA”) on certain indicative samples from Onedin.

AKN is pleased to confirm that although more detailed testwork is required (on larger samples and across a broader range of samples at Onedin), the initial testwork has established the following:

- (a) The existence of secondary carbonate species in the Onedin mineralized zone; and
- (b) The potential to achieve recovery rates (>75%) for the Cu, Zn and other minerals that are hosted within those carbonates.

These are significant initial findings for AKN as this was the fundamental basis for the Company to proceed with Koongie Park from the outset.

Stage 1 Testwork Program

Stage 1 of the Onedin testwork program is being conducted in conjunction with Perth-based Simulus Laboratories and involves the following:

- optimization of reagent usage and doses;
- initial processing kinetics;
- demonstration of economic metal recoveries;
- comparison with conventional process treatments; and
- likely final product options.

Another feature of the Onedin material that has been observed in early testwork is that in the heavily weathered material (from depths of approx. 0-85m) a significant amount of the lower grade Cu, Zn and other mineralization appears to be dominated by the existence of Fe oxide/hydroxide material. It should be noted that traditional leaching techniques show low recovery rates on these materials. The distribution and extent of this mineralisation style across this section of the Onedin deposit is yet to be established, but AKN's technical group is focusing on establishing a recovery pathway for this material because it would otherwise be discarded as overburden in an open pit mining operation.

AKN believes the solution to recovering commercial quantities of Cu, Zn and other minerals from the Fe oxide/hydroxide material will be achieved from a combination of the following factors:

- Pre-treatment reagents and reductants, prior to the ammonia leaching process (all of which is part of the AmmLeach® process);
- Time over which the treatment agents are applied; and
- Operational conditions under which the agents are applied to the material

Further results from these tests should be available within the next 3-4 weeks. Once an optimal recovery strategy has been established AKN will then commence larger-scale tests utilizing the extensive core sample inventory that was created from drilling last year.

Commonwealth R&D Application

AKN previously lodged an R&D Tax Incentive application with AusIndustry in respect of the Onedin metallurgical testwork program. That application has since achieved registration and, subject to final processing from Australian Taxation Office, a refund in excess of \$550,000 is expected in relation to research works completed during AKN's 2021 Financial Year.

AKN CEO, Paul Williams said that *"AKN is pleased with initial results from its metallurgical testwork program at Onedin, which has secured Commonwealth R&D registration. We have established the existence of carbonate minerals in the Onedin system and initial leaching tests have shown recovery rates of at least 75% in those carbonates. That's why we went after Koongie Park in the first place!*

"The testwork program is ongoing and the current focus of testwork is to identify a suitable means of processing the significant levels of iron oxides/hydroxides in the weathered part of the Onedin deposit, with results from that activity available shortly."

This announcement is authorised by:

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