

## **FURTHER EXCELLENT TESTWORK RESULTS AT MT KOKEBY**

### ***KEY HIGHLIGHTS:***

- **Attritioning tests reveal over 96% recovery achievable for a >37% Alumina product to a fine -53 µm fraction**
- **Regulatory permits for undertaking due diligence drilling obtained - awaiting drill rig availability in January 2020**

Red Mountain Mining (**RMX** or the **Company**) is pleased to announce the latest attrition test results from the Murray pit due diligence channel sampling.

As announced on 19<sup>th</sup> November and 3<sup>rd</sup> December 2019, a total of nine samples were taken from five locations within the Murray pit area. Initial test results highlighted the ore's ability to produce high recoveries of Al<sub>2</sub>O<sub>3</sub> to the -38 µm fraction and to the -75 µm; ranging from 83.6% to 97.1% at grades ranging from 30.9 to 38.5% Al<sub>2</sub>O<sub>3</sub> and ranging from 87.8% to 99.4% at grades ranging from 31.0 to 38.3% Al<sub>2</sub>O<sub>3</sub> respectively.

Following the above results, a series of attritioning tests were undertaken to optimise both alumina grade and recovery to the finer size fractions. A total of five attrition tests were conducted in two stages assessing the impact of pulp density and duration on the process resulting in an optimal attrition result achieving **over 96.8% recovery** for **>37.5% Al<sub>2</sub>O<sub>3</sub>** reporting to a **-53 µm fraction**.

**Table 1** highlights the results summary and the attrition test cumulative Al<sub>2</sub>O<sub>3</sub> recovery curves are presented in **Figures 1 and 2**.

**Table 1: Varied Duration Attritioning Test -53  $\mu$ m Results Summary**

|                                |              | Master Comp | Test 1     | Test 2     | Test 3     | Test 4     | Test 5     |
|--------------------------------|--------------|-------------|------------|------------|------------|------------|------------|
|                                | Density %    |             | 50% Solids | 40% Solids | 30% Solids | 30% Solids | 30% Solids |
|                                | Duration min |             | 5 min      | 5 min      | 5 min      | 10 min     | 7.5 min    |
| Mass                           | Dist (%)     | 79.43       | 86.44      | 84.21      | 85.21      | 87.80      | 87.38      |
| Al <sub>2</sub> O <sub>3</sub> | Dist (%)     | 87.88       | 95.40      | 93.51      | 94.07      | 96.79      | 96.29      |
|                                | Grade (%)    | 37.75       | 37.67      | 37.73      | 37.73      | 37.50      | 37.51      |
| Fe <sub>2</sub> O <sub>3</sub> | Dist (%)     | 72.91       | 81.31      | 77.89      | 78.65      | 82.82      | 81.31      |
|                                | Grade (%)    | 1.15        | 1.14       | 1.14       | 1.15       | 1.13       | 1.15       |
| Na <sub>2</sub> O              | Dist (%)     | 82.31       | 92.92      | 90.44      | 91.60      | 94.60      | 94.27      |
|                                | Grade (%)    | 0.12        | 0.15       | 0.14       | 0.16       | 0.12       | 0.13       |
| SiO <sub>2</sub>               | Dist (%)     | 71.65       | 78.17      | 75.66      | 77.00      | 79.50      | 79.11      |
|                                | Grade (%)    | 45.22       | 45.51      | 45.28      | 45.38      | 45.58      | 45.41      |
| TiO <sub>2</sub>               | Dist (%)     | 85.44       | 94.10      | 91.85      | 92.67      | 95.49      | 94.99      |
|                                | Grade (%)    | 1.36        | 1.40       | 1.40       | 1.40       | 1.37       | 1.38       |

Figure 1: Cumulative Passing Alumina Recovery Curves

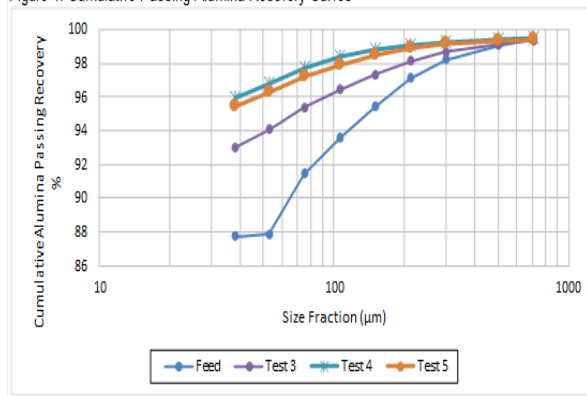
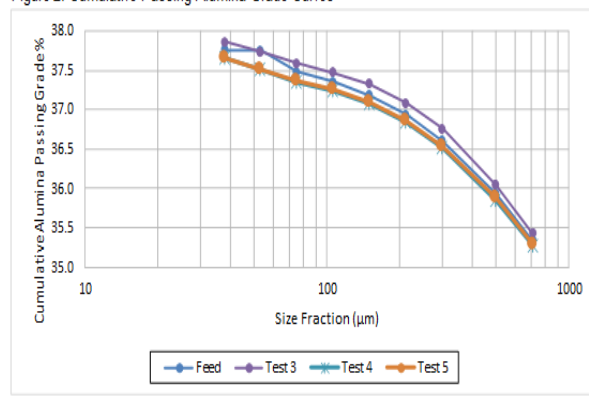


Figure 2: Cumulative Passing Alumina Grade Curves



## BRIEF OVERVIEW OF ATTRITION TESTING PROCESS

The initial stage involved three tests with varied standard pulp densities and attritioning durations ranging from 30, 40 and 50% weight pulp density, with the same attritioning time and speed. The various weight pulp densities were achieved by simply adding water to the kaolin sample at the desired ratio. The second stage of attritioning was optimized based on the initial three tests to target improved alumina recovery to the finer fractions, where the preferred pulp density was used and the attritioning time varied.

Full details of the testwork and laboratory analyses are shown within **Appendix A**.



*Attrition test at 30% density (70% water), providing optimal results for high Al<sub>2</sub>O<sub>3</sub> grade and recovery at 10 & 7.5 minutes*

The metallurgical test work program is currently being undertaken and managed by Independent Metallurgical Operations Pty Ltd (**IMO**) in Perth, with the focus to assess the characteristics of the Mt Kokeby Kaolin Ore and its amenability to beneficiation processes for generation of high grade Alumina (Al<sub>2</sub>O<sub>3</sub>) for traditional markets and potential for High Purity Alumina (**HPA**) as part of its due diligence process.

Samples were prepared by IMO using standard procedures. All nine samples were used to provide a composite head sample for the attritioning testwork. A master composite of 33.93% Al<sub>2</sub>O<sub>3</sub> composition was obtained, believed to reflect the pit area. XRD analysis on the master composite resulted in a kaolin concentration of 76%.

## **NEXT STEPS**

With the attrition testwork completed, IMO will assess the amenability of the ore to hydrochloric (HCl) acid leach processes for the generation of High Purity Alumina over the course of the next few months. The Company will provide the market with updates

In addition to this, and as part of the due diligence process, a drilling program is to be undertaken in early 2020 once a drill rig is secured. All regulatory permits for undertaking the drilling have now been obtained. The drill programme will test certain of the historic drill results as well as conduct scout drilling



to test continuation of the kaolin beds, and is considered preliminary to a larger drill programme which would be aimed at generating an initial JORC resource at Mt Kokeby.

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Mark Major. Mr Major is a Member of the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Major consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

## Appendix A

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at the Mt Kokeby Project.

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria  | Commentary   |
|---|--|
| <i>Sampling techniques</i>                            | <ul style="list-style-type: none"> <li>A total of 9 channel samples were taken at 5 site areas within the old open pit area.</li> <li>Each channel was cleaned and excavated to 30cm below surface prior to sampling.</li> <li>Samples MTPS1#1, MTPS1#2, were taken along a length of 2.5m channel; MTPS2#3, MTPS2#4 1.5m lengths; MTPS3#5, MTPS3#6 and MTPS3#7 were taken along 3m channel sections while MTPS4#8 and MTPS5#9 were taken within a 1m excavation.</li> <li>All samples taken were over 10kg and sent to IMO/Metallurgical for sample preparation and analyses.</li> </ul>  |
| <i>Drilling techniques</i>                            | <ul style="list-style-type: none"> <li>No Drilling undertaken</li> </ul>   |
| <i>Drill sample recovery</i>                          | <ul style="list-style-type: none"> <li>No Drilling undertaken</li> </ul>   |
| <i>Logging</i>  | <ul style="list-style-type: none"> <li>No Drilling undertaken</li> </ul>   |
| <i>Sub-sampling techniques and sample preparation</i> | <ul style="list-style-type: none"> <li>Samples were dried at 80 degrees Celsius and then split using standard laboratory techniques.</li> <li>A master composite sample for use in the Attritioning tests was generated by IMO to achieve an alumina head grade in the order of 33.92%. This was done using standard procedures and material from all samples.</li> </ul>  |
| <i>Quality of assay data and laboratory tests</i>     | <ul style="list-style-type: none"> <li>Samples were sent to the IMO's Metallurgical Laboratory for sample prep and management.</li> <li>IMO had the samples assayed at Nagrom Laboratories (XRF) and Intertek-Genalysis (XRD).</li> <li>A full XRF analysis on a range of elements at various size fraction ranging from -38 to 710 µm.</li> <li>Attritioning tests were carried out by IMO laboratory.</li> <li>The QAQC information of the laboratory was used to determine the QAQC of the samples because commercial standards for kaolin are not readily available.</li> <li>All of the duplicates are within tolerance of the original assay and without bias.</li> <li>Mr Major reviewed internal QAQC reports and analysis and confirms that all assay data used has passed standard industry quality assurance/quality control procedures.</li> </ul> |
| <i>Verification of sampling and assaying</i>          | <ul style="list-style-type: none"> <li>No independent verification was undertaken as the results were considered to be reflective of historical assay values.</li> <li>No adjustment to assay data was undertaken.</li> </ul>  |
| <i>Location of data points</i>                        | <ul style="list-style-type: none"> <li>All sample channels have been accurately surveyed using Garmin GPSMAP 64 equipment (+/-5m accuracy) by the geologist on site.</li> <li>The position of the sample was the middle point of the channel sample location for each sample.</li> </ul>   |
| <i>Data spacing and distribution</i>                  | <ul style="list-style-type: none"> <li>Sample sites were selected to represent the entire pit area while focusing on areas where insitu material could be obtained freely. Careful examination of the channels after initial excavation and cleaning was undertaken to avoid sampling non-insitu material such as rubble from the pit rehabilitation works or float to avoid any bias.</li> </ul>  |

| Criteria   | Commentary   |
|--|--|
| <i>Orientation of data in relation to geological structure</i> | <ul style="list-style-type: none"> <li>All samples are believed to have been taken within the upper layer of the kaolin bed with the exception of sample MPTS3#6 and MPTS3#7 which were collected below the main bed.</li> <li>Samples are not considered to be bias.</li> </ul> |
| <i>Sample security</i>   | <ul style="list-style-type: none"> <li>Samples were collected and transported to the laboratories by Mr. Major.</li> </ul>   |
| <i>Audits or reviews</i>                                       | <ul style="list-style-type: none"> <li>None completed</li> </ul>   |

## Section 2 Reporting of Exploration Results

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

| Criteria  | Commentary   |
|---|--|
| <i>Mineral tenement and land tenure status</i>                          | <ul style="list-style-type: none"> <li>The Mt Kokeby Project consists of one granted exploration license (E70\5205) and one application exploration license (E70\5284) covering an area of 84km<sup>2</sup>.</li> <li>The project area is located within freehold land. The traditional owners of the land are the Gnaala Karla Booja People. The Noongar Standard Heritage Agreement and private land access agreement will need to be signed prior to commencing exploration activities. Permits can be obtained to enter which will allow samples to be collected.</li> </ul> |
| <i>Exploration done by other parties</i>                                | <ul style="list-style-type: none"> <li>Please refer to the company's press release dated October 1, 2019 for all relevant historical data.</li> <li>Exploration of the Murray Deposit was first undertaken by King Mountain Mining N.L who engaged Aminco and Associates Pty Ltd to conduct field investigations.</li> </ul>   |
| <i>Geology</i>  | <ul style="list-style-type: none"> <li>The project area comprises undulating topography with broad valleys and low rising hills which have resulted from the Precambrian granites which outcrop in places to form prominent hills.</li> <li>The kaolin at the Mt Kokeby area is seen to be overlain by colluvial sands, gravel and sandy soil and is noted by Feldtman (1919) to have formed as a transported lacustrine deposit. GSWA Bulletin 19, p66 states the kaolin of the Murray Deposit to be residual on granite.</li> </ul>  |
| <i>Drill hole Information</i>   | <ul style="list-style-type: none"> <li>No drill holes were drilled as part of this report.</li> <li>All channel sample details are presented in Appendix A.</li> </ul>   |
| <i>Data aggregation methods</i>   | <ul style="list-style-type: none"> <li>No data aggregation or metal equivalents have been used.</li> </ul>   |
| <i>Relationship between mineralisation widths and intercept lengths</i> | <ul style="list-style-type: none"> <li>The sample intersections are reported as surface lengths within a pit wall.</li> <li>The pit walls slope was measured to be between 78 to 82 degrees.</li> </ul>  |
| <i>Diagrams</i>   | <ul style="list-style-type: none"> <li>Maps and appropriate plans are included in this announcement</li> </ul>   |
| <i>Balanced reporting</i>   | <ul style="list-style-type: none"> <li>All results are tabulated in the Appendices and shown on figures in this announcement.</li> </ul>   |
| <i>Other substantive exploration data</i>                               | <ul style="list-style-type: none"> <li>Please refer to the company's press release dated October 1, 2019 and November 11, 2019 for all relevant other/ historical exploration data.</li> </ul>   |
| <i>Further work</i>   | <ul style="list-style-type: none"> <li>Acid Leach processing testwork is being undertaken on these samples to asses the amenability of the ore for generation of High Purity Alumina.</li> <li>Additional sampling and assay work, from drilling beside numerous historical drill sites will be undertaken once a drill rig is obtained.</li> </ul>  |