

## ASX ANNOUNCEMENT

6 February 2023

### RIGOROUS METALLURGICAL TESTWORK AT ABERCROMBY CONFIRMS HIGH GOLD RECOVERIES VIA CONVENTIONAL MILLING (AVERAGE c.95%)

#### **Highlights:**

- Rigorous metallurgical test work undertaken on mineralised Abercromby core confirms free milling ore
- High overall gold recoveries (93% to 95% after 48 hours, with majority of gold leaching in first 8 hours) and low residue grades
- Gravity recoverable gold component demonstrated at between 34% and 41%.
- Low reagent consumption\*
- Composites were representative fresh rock samples (ie free of the influence of weathering)
- A typical gravity/cyanide flowsheet process as per conventional CIL milling processes was used

*\* Noting the use of Perth tap-water for the tests; future test work to utilise local water sources*

West Australian gold explorer BMG Resources Limited (**ASX: BMG**) (**BMG** or the **Company**) is pleased to report that metallurgical test work conducted on Abercromby core samples have confirmed its free milling status and therefore amenability to conventional carbon-in-leach (CIL) processing, with high gold recoveries achieved.

The study was conducted on drill core samples representative of fresh Abercromby mineralisation and results are consistent with, and exceed those from previous, metallurgical test work undertaken at Abercromby – refer ASX announcement on 19 April 2021 *“High Gold Recoveries (Average 90%) from Metallurgical Testwork of Abercromby Drill Samples”*.

This latest testwork was completed by Perth based Extreme Metallurgy and reviewed by GR Engineering Services, which has been retained by BMG to advise on project development for Abercromby.

BMG Managing Director Bruce McCracken said:

*“These excellent results are in line with our expectations from high level test work undertaken previously and represent another important step in our progression of the Abercromby Gold Project.*

*“This second study has reinforced the highly recoverable character of Abercromby gold mineralisation using a conventional gravity/cyanidation flowsheet, and extrapolation of these results implies high gold recoveries for the entire deposit.*

*“Free milling ore with high gold recoveries and low reagent consumption will significantly bolster project economics at Abercromby where BMG is targeting a maiden Resource at the Capital deposit.”*

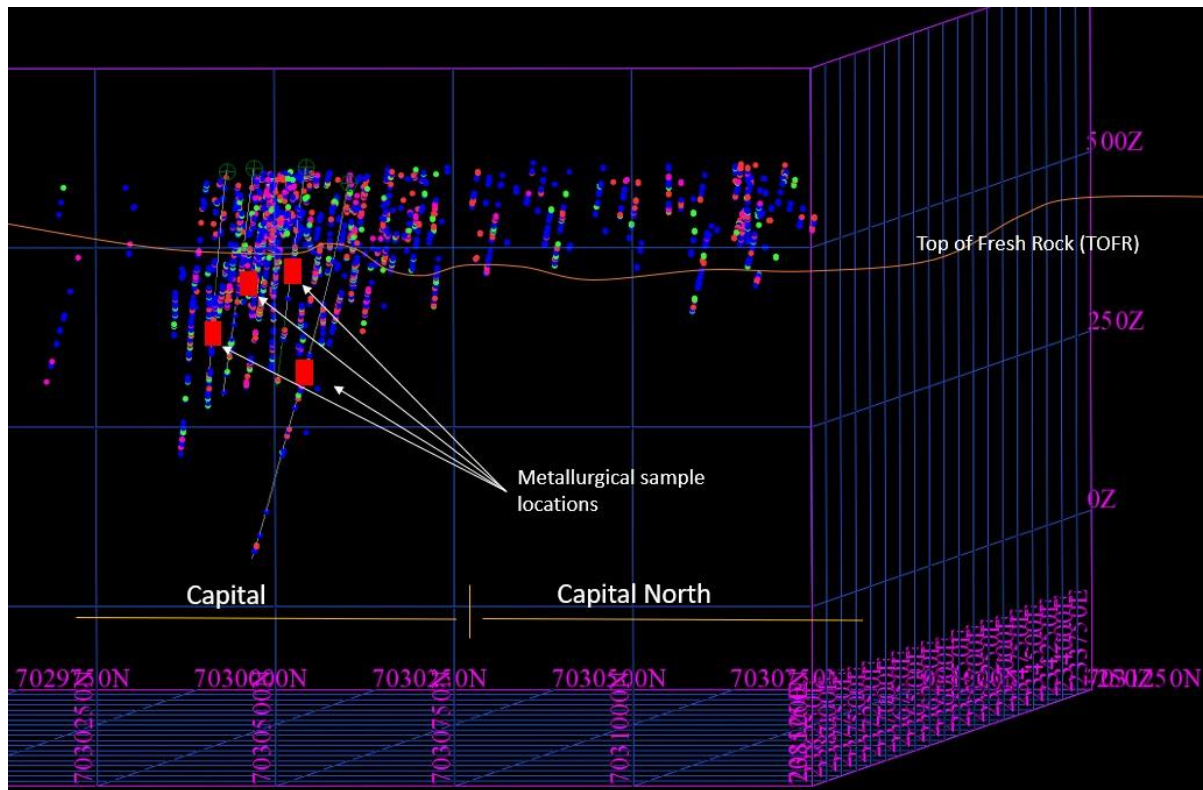
## TECHNICAL DISCUSSION

Test work was conducted on two 50kg, quarter core composites from BMG's Abercromby Project, and followed a typical gravity/cyanidation flowsheet, one that is ubiquitous to most mills in WA.

Samples were selected by BMG's geological team, comprising intervals of fresh, competent, mineralised core, interpreted to be representative of the greater mineralised system and located within the main mineralised portion of the deposit.

Mineralisation is characterised by silica, pyrite, carbonate altered basalt and dolerite, punctuated by quartz and quartz carbonate stockwork veins.

The location of the composites is shown in Figure 1 below; specific details of the drill hole locations are outlined in Schedule 1.



**Figure 1 - Composite Sample Locations below TOFR horizon at Abercromby Gold Project**

Head assays for the two composite samples were 1.35g/t and 1.87g/t respectively, with low silver content and low levels of deleterious elements of Copper and Arsenic.

### Gravity and Cyanidation Testwork

Both samples were tested via typical gravity gold recovery followed by cyanidation by Metallurgy Laboratories in Welshpool.

Both composites achieved high gold recoveries of 93.00% and 94.94% for composite 1 and 2 respectively, each with low gold in tails.

## Reagent Consumption

All testwork was conducted in Perth tap water as no site water was available at the time of the test.

While the reported reagent consumptions are considered low processing in saline/hypersaline water, in practice may increase both lime and cyanide consumption due to water chemistry changes.

Water quality detail is still scarce for the deposit but will be addressed with additional test work in due course to better understand the impact it will have on reagent consumption.

## SUMMARY

The results are a strong indicator of the gold mineralisation being amenable to high overall gold recovery under typical processing conditions. The two composites are free milling and achieved high overall gold recovery, varying from 93-95%. They also had some free gold, as the gravity recovery varied from 34-41%.

The gravity tails (leach feed) also showed good leach recoveries, with a majority of the leaching occurring in the first 8hrs, however the samples continued to leach up to 48hrs.

Lime and cyanide consumption was also low. It would be expected that when processing in saline/hypersaline water conditions that these would increase, and further testwork using site water will be completed in due course.

Overall, the sighter tests conducted on these two composites show that they are free milling and are amenable to typical low-cost metallurgical processes for gold ores common in Western Australia. Extrapolation of these results implies high gold recoveries for the entire deposit when treated via a typical gravity gold recovery and cyanidation process.

## NEXT STEPS

Future work is planned to optimise processing parameters as BMG moves closer to economic evaluation and eventual exploitation of the deposit.

This announcement has been authorised for release by Bruce McCracken, Managing Director of BMG Resources Limited.

**\*\*\*ENDS\*\*\***

## Competent Person Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Ben Pollard, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Pollard is the Principal of Cadre Geology and Mining Pty Ltd and has been retained to provide technical advice on mineral projects.

Mr Pollard has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Pollard consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Disclaimer**

*Forward looking statements are statements that are not historical facts. Words such as "expects", "anticipates", "believes", "potential", "may" and similar expressions are intended to identify forward looking statements. These statements include, but are not limited to, statements regarding future production, resources and reserves and exploration results. All such statements are subject to risks and uncertainties many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in or implied by the forward looking statements. Investors should not construe forward looking statements as guarantees of future performance due to the inherent uncertainties therein.*

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## Schedule 1 – Drill Hole Details for Metallurgical Samples

Hole ID	Prospect	East	North	RL	Depth	Azi	Dip	Comment
20ABRCD001	Capital	235082	7030151	511	420.8	248	-60	NA
20ABRCD002	Capital	234918	7030249	512	360.8	248	-60	NA
21ABDD002	Capital	234956	7030179	511	366.4	248	-60	NA
21ABDD005	Capital	235059	7030320	493	660.0	248	-60	NA

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## Schedule 2 – TABLE 1. JORC Code, 2012 Edition

### Section 1: Sampling Techniques and Data

Criteria	JORC 2012 Explanation	Comment
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling was used to produce these samples referred to in this announcement.</li> <li>50kg composite samples were made from ¼ core from previously drilled holes.</li> <li>The whole of each sample was homogenised and crushed before being exhaustively tested for various metallurgical properties like gravity gold content and leach response.</li> <li>All samples were prepared and assayed by an independent commercial laboratory whose instrumentation are regularly calibrated.</li> </ul>
Drilling Techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was via diamond coring methods.</li> <li>Core size was NQ and HQ.</li> <li>All holes were surveyed using a reflex Gyro north seeking gyroscopic instrument (or equivalent) to obtain accurate down-hole directional data where ground conditions allowed.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	<ul style="list-style-type: none"> <li>Drilling recoveries are logged and recorded and captured within the project database. Core loss is noted where it occurs.</li> <li>Overall, recoveries are generally considered good and there has been no significant loss of sample material due to ground or drilling issues in the results reported in the RC. In the diamond drilling, some intervals of core loss exist in the regolith – where assays have been reported in these intervals, the missing interval has diluted the reported result (that is, it has been accounted for at zero g/t Au)</li> <li>Each individual sample is visually checked for recovery, moisture, and contamination. The style of expected mineralisation and the consistency of the mineralised intervals are expected to preclude any issue of sample bias due to material loss or gain.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All core has been geologically logged using predefined lithological, mineralogical, and physical characteristic (colour, weathering etc.) logging codes.</li> <li>DDH was logged by geological intervals for geological (alteration, lithology, mineralogy), structural information (including detailed geotechnical logging) and oxidation state.</li> <li>Logging was predominately qualitative in nature, although vein and sulphide percent was estimated visually. All new core has been photographed wet and dry.</li> <li>All holes are logged in full</li> </ul>

Criteria	JORC 2012 Explanation	Comment
Sub-sampling techniques and sampling preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Core comprising the composite sample was cut using a core saw in half, then in quarters. This quarter core was used in the metallurgical testing.</li> <li>At the lab, the whole 50kg sample was crushed and homogenised, prior to test work.</li> <li>The sample was tested for various metallurgical properties and was selected based on its fresh weathering state.</li> <li>Sample sizes are considered to be appropriate to correctly represent the geological model and the style of mineralisation.</li> </ul>
Quality of assay data laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>BMG has relied upon advice from independent experts Extreme Metallurgy in the design and execution of the testwork.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All data is validated by the supervising geologist and sent to the Perth office for further validation and integration into a Microsoft Access database.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were located using handheld GPS.</li> <li>Drill hole collar positions will be accurately surveyed utilising DGPS survey equipment to an accuracy of +/- 0.01m. Down holes surveys were completed using gyro.</li> <li>The grid system used for locating the collar positions of drillholes is GDA2020.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>NA</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is predominantly conducted at -60 degrees orthogonal to strike and as such drill holes intersect the mineralisation close to perpendicular. As such, the orientation of drilling is not likely to introduce a sampling bias.</li> </ul>
Sample Security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody protocols used for the new BMG drill samples ensures sample security and integrity.</li> </ul>
Audits and Reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of the sampling techniques and data have been undertaken to date.</li> </ul>

## Section 2: Reporting of Exploration Results

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

Criteria	JORC 2012 Explanation	Comment
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The gold and other mineral rights (ex uranium and thorium) hosting the Abercromby deposit are owned 100% by BMG. No material issues exist with the underlying tenure.</li> <li>The tenements are in good standing.</li> </ul>
Exploration done by other parties.	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Gold exploration at the Project area has been carried out by three previous explorers – CRA in 1995/97, Outokumpu in 2001 and Perilya in 2004.</li> <li>CRA initially identified gold mineralisation at Abercromby in 1995. They completed 84 drill holes – 82 reverse circulation (RC)/Percussion and 2 RC/diamond in the Capital area. Holes were initially drilled on 200m, and some infill 100m, spaced traverses. Holes were generally 60m and lesser 120m apart. All bar 6 of the RC holes drilled to the west at -60 degrees. Final hole depths varied from 75m to 183m deep. The remaining 6 RC holes were drilled vertically.</li> <li>Though CRA located and drilled tested the gold mineralisation the hole spacing is relatively broad and considered ineffective to test potential continuity between holes.</li> <li>Outokumpu completed a small number of drill holes. It is believed the company did not pursue the gold opportunity but instead focused on nickel exploration at Honeymoon Well which was their priority target.</li> <li>Perilya was the last dedicated gold explorer at the Project under a joint venture earn-in arrangement. Whilst further work was planned to follow-up on initial gold intersections, Perilya elected to pursue other 100% owned exploration opportunities in its portfolio.</li> <li>Norilsk Nickel completed some drilling on the project in 2007/2008 but mostly to satisfy expenditure commitments.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Abercromby is a lode hosted orogenic gold deposit typical in type to much of the gold occurrences in Western Australia's Eastern Goldfields.</li> <li>The lode is developed amongst Archaean mafic rocks and gold is generally hosted by the sheared and quartz veined host.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The details of drill holes material to the exploration results/mineral resource are presented in Table 1 of schedule 1 in the document.</li> </ul>



Criteria	JORC 2012 Explanation	Comment
Data aggregation methods	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Length weighted averaging of the drill hole intercepts are applied. No maximum or minimum grade truncations are used in the calculations.</li> <li>The reported assays have been length weighted averages. A lower arbitrary cut off is not applied, rather, intervals are selected based on continuous anomalism, with no top cut applied. High grade intercepts internal to broader zones of mineralisation are reported as included intervals. If an interval includes core loss, the lost interval is accounted for at zero g/t Au.</li> <li>No metal equivalents have been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole intersections may not be true widths – but generally thought to be around 90% of true width.</li> <li>The gold mineralisation identified to date at Abercromby consists of a number of interpreted mineralised lodes striking approximately 340° and dipping steeply (80°-85°) to the east. Drilling is predominantly conducted at -60 degrees orthogonal to strike and as such drill holes intersect the mineralisation as close to perpendicular as possible.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to Figures in the text.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>All significant results are reported.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>All significant results are reported.</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration within the Abercromby Project is ongoing.</li> <li>BMG Resources is focusing on staged development drilling at Abercromby in addition to mine planning, metallurgical studies and development studies as required.</li> <li>Exploration drilling at priority targets over the next 12 months is planned.</li> <li>Future exploration programs may change depending on results and strategy.</li> </ul>