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Excellent 'Coarse Particle Flotation' results identify upside for Hillside

Test work to evaluate the applicability of the Coarse Particle Flotation undertaken by Rex Minerals Ltd (Rex or the Company) at the Hillside Copper Project in South Australia has delivered excellent results.

The outcome confirms that our ore is very amenable to this technology and offers us the opportunity to increase annual copper production, by increasing mill capacity of the current process plant from 6Mtpa up to 7 - 8Mtpa, whilst maintaining similar copper recoveries.

Rex is assessing methods and timing for integration of this technology to the Hillside Process Flow Sheet and the associated benefits. This HydroFloat technology has already been deployed and proven at existing operations in Australia and worldwide.

Coarse Particle Flotation may translate into numerous benefits for the Hillside Project, including:

- Increased mill capacity/production rate
- Reduction in grind power and energy savings per tonne
- Significant improvement to the management of tailings
- Reduction in grind media.

Rex's Managing Director, Richard Laufmann, said: "*Basically, the 'coarse float' technology is a game changer. It's an evolution of technology, that (for some ore types) allows bubbles to stick to very small exposed surfaces, whilst maintaining very high recovery. So instead of grinding every tonne in Stage 1 to 150 microns (0.15mm), we can achieve the similar results and only have to grind to a much coarser size – more like medium beach sand.*

"At Hillside, an increase of the overall mill capacity throughput to around 8Mtpa is pretty significant. This opens the door to a range of options to bring revenue forward, including the earlier treatment of low-grade ore, and/or acceleration of the mine rate. If implemented, this technology promises to enhance Hillside's sustainability benefits including a reduction of energy consumption per tonne, through to improved management of tailings and water."

Hillside Coarse Particle Flotation Test Work Summary

The existing flowsheet has Stage 1 crushing and grinding the ore to a size of P_{80} 125 microns for the first two years, then the plant reverts to crushing and grinding to P_{80} 150 microns for subsequent years.

Test work completed at ALS laboratory (Perth) by Eriez Australia, to test coarser grind options saw Stage 1 HydroFloat recoveries of:

- 96% Cu rougher recovery at 355 microns, and
- 93.5% Cu rougher recovery at 450 microns.

The coarse grind test program consisted of desliming the ground ore samples using a CrossFlow classifier at 106 microns. The CrossFlow classifier underflow was separated using the HydroFloat flotation. These results achieved similar copper recoveries to the current grind size of 150 microns.

Samples were sized and assayed at the ALS Laboratory and photos of the test work are shown below.

Photo 1 (left) : *Flotation reagents being added to copper-gold ore*

Photo 2 (centre): *HydroFloat coarse particle copper-gold flotation*

Photo 3 (right): *Coarse particle copper-gold concentrate*

This announcement has been authorised for release by the Company's Chief Executive Officer.

For more information about the Company and its projects, please visit our website https://www.rexminerals.com.au/ or contact:

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Steven Olsen who is a Member of the Australasian Institute of Mining and Metallurgy and is an employee of Rex Minerals Ltd. Mr Olsen has sufficient experience which is 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'. Mr Olsen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to metallurgy is based on, and fairly reflects, information compiled by Mr John Burgess who is a Fellow of the Australasian Institute of Mining and Metallurgy and a consultant to Rex Minerals Ltd. Mr Burgess has sufficient experience which is 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'. Mr Burgess consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

Appendix 1 – Assessment and Reporting Criteria Table Mineral Resource – JORC 2012

Section 1 – Sampling Techniques and Data

Criteria	Commentary
Sampling techniques *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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *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 (eg. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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 (eg. submarine nodules) may warrant disclosure of detailed information.*	• Samples taken for the coarse particle floatation test work were derived from existing diamond drilling which was available as half NQ2 (50.5mm) and half HQ3 (63.5mm) drill core size. • Representative samples and a combined weighted average grade close to the average Mill feed grade for the planned Hillside mine were selected for the test work.
Drilling techniques *Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg. 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.).*	• Samples derived from Diamond (HQ3 and NQ2) standard and triple tube drilling.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Diamond core recovery was good with an average of 96.9% recovered throughout the deposit.
Logging *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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	• Prior to December 2011, core was logged into an excel spreadsheet logging system with drop down list pick fields. • Post December 2011, core was logged into proprietary software developed by Rex with drop down list pick fields. • Logging of geology (lithology and alteration), mineralisation, veining, structure and geotechnical parameters was undertaken as routine data collection at Hillside. • Every metre (100%) of drilling at Hillside has been logged as per the logging criteria above. • Core was photographed prior to being logged by the geologist. • All core is stored at the Hillside core shed.
Sub-sampling techniques and sample preparation *If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Diamond core is orientated along the bottom of hole and then half-core samples are taken using a diamond core saw.

Criteria	Commentary
Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *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.* *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.*	• HydroFloat metallurgical test work on diamond drill core selected from the fresh ore component of the Hillside orebody was completed in the ALS laboratory (Perth) by Eriez Australia. • The coarse grind test program consisted of desliming the ground ore samples using a CrossFlow classifier at 106 microns. The CrossFlow classifier underflow was separated using the HydroFloat flotation at 355 and 450 microns, achieving similar copper recoveries to the current grind size of 150 microns. • Samples were sized and assayed at the ALS Laboratories.
Verification of sampling and assaying *The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• No duplication or additional verification of the results were completed.
Location of data points *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.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	• All drill holes were surveyed and recorded in the Rex SQL database. • All drill-holes have magnetic down-hole surveys taken at approximate 24m intervals using a single shot down-hole survey instrument. An azimuth adjustment of +8 degrees was applied for the conversion to MGA Zone 53 (GDA 94) for all magnetic surveys. • In addition to the magnetic down-hole surveys, the diamond holes were surveyed using a Reflex gyro or North Seeking Gyro. • Priorities are set within the database as to which survey is used in defining drill hole traces. • Down hole surveys were checked mathematically and visually for excessive deviation or unlikely hole traces. No obvious problems were identified. • All drill hole collar coordinates were surveyed in MGA94_53 using a Differential Global Positioning System (DGPS) A surface digital terrain model created from a detailed gravity survey was used as an elevation reference for all drill holes and as verification for the elevation readings from the DGPS and GPS.

Criteria	Commentary
Data spacing and distribution *Data spacing for reporting of Exploration Results.* *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.* *Whether sample compositing has been applied.*	• No exploration results were reported in this statement. • Samples for the test work were selected from the main mineralised domains from fresh rock spread representatively throughout the existing Mineral Resource.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *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.*	• The majority of drilling at Hillside has been completed on nominal east-west sections which intersect the strike of the orebody. • There is no expected bias due to the orientation of drilling and the continuity of the orebody along strike. • The drill hole intersection angle is between 60 and 75 degrees through the five main mineralised structures (Dart, Zanoni, Parsee, Omero and Songvaar).
Sample security *The measures taken to ensure sample security.*	• Not Applicable. No new assay results were reported in this announcement.
Audits or reviews *The results of any audits or reviews of sampling techniques and data.*	• No additional audits or reviews were undertaken with regard to the reported test work.

Section 2 – Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status *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.* *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.*	• The Hillside Project is 100% owned by Rex Minerals. • The Hillside Project is located within Exploration Licence, EL6245. • Rex has been granted a Mineral Lease over the Hillside Project. The Mineral Lease number is ML6438.
Exploration done by other parties *Acknowledgment and appraisal of exploration by other parties.*	• Rex Minerals has held EL6245 since 2007. Prior to 2007, limited exploration was completed by other parties with only a small amount of geochemical sampling results obtained by the company. Importantly, this geochemical data was spread throughout EL6245 with no information directly associated with Hillside. • No drilling of any kind was completed over the Hillside target prior to Rex's involvement. • There is a historic copper mine at the northern end of the Hillside ore body. This was noted by previous explorers but never followed up in detail.
Geology *Deposit type, geological setting and style of mineralisation.*	• The Hillside Iron Oxide Copper Gold (IOCG) Mineral Resource occurs on the Yorke Peninsula, just south of the town of Ardrossan and close to the historic mines of Moonta and Wallaroo. The Hillside Mineral Resource is located within the Moonta Subdomain of the Olympic Cu-Au Province of the eastern Gawler Craton of South Australia, which is host to the Olympic Dam, Prominent Hill, Carrapateena, and Moonta-Wallaroo deposits.
Drill hole information *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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth hole length.* *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.*	• Not Applicable. No new drilling information reported in this release.
Data aggregation methods *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually Material and should be stated.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• 117kg of half diamond NQ2 and HQ3 core from 16 diamond drillholes were combined as a single sample with a weighted average grade close to the average mill feed for the planned Hillside mine.

Relationship between mineralisation widths and intercept lengths *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not Applicable. No new drilling information reported in this release.
Diagrams *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*	• Not Applicable. No new drilling information reported in this release.
Balanced reporting *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.*	• Not Applicable. No new drilling information reported in this release.
Other substantive exploration data *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.*	• No further exploration information to report.
Further work *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further test work to optimise the grind size will be undertaken.