

ASX Announcement

30 September 2020

**Southern Hemisphere  
Mining Limited**

ABN: 17 140 494 784

Suite 2  
11 Ventnor Avenue  
WEST PERTH, WA  
Australia, 6005

**Postal Address:**  
PO Box 1240  
West Perth WA 6872

Phone: +61 (0) 8 6245 2050  
Fax: +61 (0) 8 6245 2055

**Website:** [shmining.com.au](http://shmining.com.au)

**Directors:**

**Chairman**  
Mark Stowell

**Directors**  
David Lenigas  
Keith Coughlan

**Company Secretary:**  
Jessamyn Lyons

**Issued Capital:**  
162,959,838

**Corporate Information:**  
ASX Code: SUH



## Rock chip with 3.11g/t Au - 540m to the SW of previous trenching confirms 1km strike of Colina2

### Highlights

- A rock chip sample grading 3.1g/t Au was taken 540m SW of the previous trenching
- A 2,800m trenching program has commenced following up the positive gold results from the first program
- A 2,500m drilling program of both Diamond and RC is also being planned

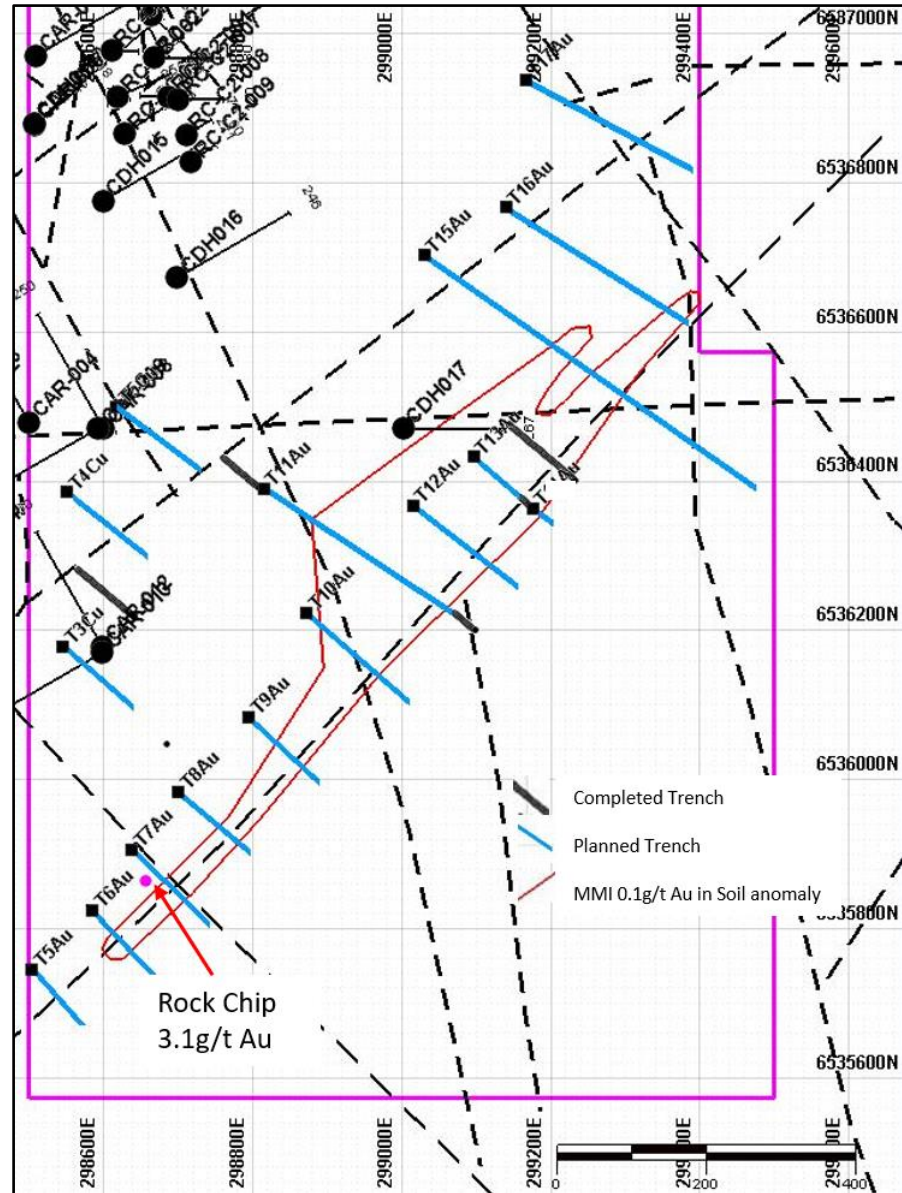
Southern Hemisphere Mining Limited ("Southern Hemisphere" or the "Company") reports that a 2,800m trenching program at its 100% owned Colina2 Gold Project in Chile has commenced.



**Figure 1: Colina2 Gold Copper Project Location Map showing the locations of significant Gold Deposits in Chile**

A recent sampling result has been received of 3.1g/t gold, 540m to the SW along strike from the previous trenching results. This rockchip result confirms the gold mineralisation has a strike length of at least 1km.

The trenching program shown in Fig 2 below follows the interpreted strike of the Colina2 gold discovery to the SW including where the rockchip grading 3.1g/t was taken, on approximately 100m spaced lines and will provide enough information to target the RC and diamond drilling program.



**Figure 2: Colina2 planned trench Locations.**

Trench T10Au located 100m to the SW of the last trench from the previous program has been completed and intersected volcanic rocks, cut by equigranular to porphyritic dioritic intrusives. Mineralization was logged as veinlets of hematite-limonite and some sericite, possibly derived from veinlets of pyrite which are strongly hydrothermally altered with pyrite boxworks filled with limonite and hematite. (See Fig 3 below)



***Figure 3 Sample from Trench T10Au at Colina2 with strong limonite/hematite alteration***

The drilling program will consist of approx. 2500m of both Diamond and RC to test the width and tenor of the gold mineralisation down dip on 100m spaced sections. Surface mapping shows the structure to dip to the SE coincident with the NE-SW trending fault on the eastern side of the anomaly, which was identified in a re-interpretation of the MMI sampling and the geophysics.

The Colina2 project covers an area of approximately 259Ha, located 9km to the northwest of Sociedad Punta del Cobre S.A. (Pucobre) El Espino Copper Mine, which is advancing towards development.

Results from the programs will be reported as they become available from the laboratory.

#### **CONTACTS:**

For further information on this update or the Company generally, please visit our website at [www.shmining.com.au](http://www.shmining.com.au) or contact:

Keith Coughlan- Director  
[kcoughlan@shmining.com.au](mailto:kcoughlan@shmining.com.au)  
 Telephone: +61 (0) 419 996 333

This announcement is authorised by the board.



## BACKGROUND INFORMATION ON SOUTHERN HEMISPHERE MINING:

Southern Hemisphere Mining Limited is an experienced minerals explorer in Chile, South America. Chile is the world's leading copper producing country and one of the most prospective regions of the world for major new copper discoveries. The Company's projects also include the Los Pumas Manganese Project and the Llahuin Copper-Gold Moly Project, both of which were discovered by SUH, and the recently discovered Colina 2 Gold prospect.

**Llahuin Copper Gold Moly Project: Total Measured and Indicated Resources - JORC (2004) Compliant. As announced to the market on 18 August 2013.**

Resource (at 0.28% Cu Equiv cut-off)	Tonnes Millions	Cu %	Au g/t	Mo %	Cu Equiv*
Measured	112	0.31	0.12	0.008	0.42
Indicated	37	0.23	0.14	0.007	0.37
<b>Measured plus Indicated</b>	<b>149</b>	<b>0.29</b>	<b>0.12</b>	<b>0.008</b>	<b>0.41</b>
Inferred	20	0.20	0.19	0.005	0.36

**Note: \*Copper Equivalent ("Cu Equiv"):** The copper equivalent calculations represent the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result. It is the Company's opinion that elements considered have a reasonable potential to be recovered as evidenced in similar multi-commodity natured mines. Copper equivalent conversion factors and long-term price assumptions used are stated below:

Copper Equivalent Formula= Cu % + Au (g/t) x  
0.72662 + Mo % x 4.412 Price Assumptions- Cu  
(\$3.40/lb), Au (\$1,700/oz), Mo (\$15/lb)

**Los Pumas Manganese Project: Total Measured and Indicated Resources - JORC (2004) Compliant. As announced to the market on 25 March 2011.**

Resource (at 4% Mn cut-off)	Tonnes Millions	Mn %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Al %	K %	P %
Measured	5.27	7.39	57.85	2.78	5.62	2.88	0.05
Indicated	13.06	7.65	55	2.96	5.64	2.92	0.05
<b>Measured plus Indicated</b>	<b>18.34</b>	<b>7.58</b>	<b>55.82</b>	<b>2.91</b>	<b>5.62</b>	<b>2.91</b>	<b>0.05</b>
Inferred	5.39	8.59	51.44	2.72	5.49	2.69	0.06
<b>Total</b>	<b>23.73</b>	<b>7.81</b>					

## COMPETENT PERSON / QUALIFIED PERSON STATEMENT:

The information in this report that relates to copper and gold exploration results for the Company's Projects is based on information compiled by Mr Adam Anderson, who is a Member of The Australasian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr Anderson 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 Anderson is a consultant for the Company and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. For further information, please refer to the Technical Reports and News Releases on the Company's website at [www.shmining.com.au](http://www.shmining.com.au).

#### **FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE:**

This announcement may contain forward looking statements that are subject to risk factors associated with the oil and gas industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by many variables which could cause actual results or trends to differ materially.

**Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.**

This announcement may contain forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations, estimates, projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of the Company's control. Actual results and developments may differ materially from those expressed or implied. To the maximum extent permitted by applicable laws, the Company makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for (1) the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this announcement and (2) without prejudice to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this announcement.

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
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.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Trench grab samples collected on one metre intervals from the wall of the trench. Approximately 5kg (average) of material was collected per sample. The entire sample is then crushed to &lt;3mm and a 2kg coarse crusher split is taken for pulverizing to produce a 30gram charge for gold Fire Assay with an AA finish. Multi-elements are analysed in a suite by ICPMS. Rockchip is a grab sample.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported</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 may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

Criteria	JORC Code explanation	Commentary
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) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The samples were geologically logged on site and photographs of each sample location were provided</li> </ul>
Sub-sampling techniques and sample 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>Field duplicates were not considered appropriate a duplicate of the coarse crusher sample would be more appropriate but as these samples are grabs and as such are NOT to be used in any resource calculation work.</li> </ul>
Quality of assay data and 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>The assay technique utilized is "industry Standard" fire assay with AA finish for gold which is total digestion technique.</li> <li>Appropriate industry standard CRM' s and blanks were inserted into the sample stream at a rate of 1:20 samples for both standards and blanks. Again this is industry standard</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</li> </ul>	<ul style="list-style-type: none"> <li>Not possible due to COVID travel restrictions but photos and videos of the trenches and samples are sufficient documentary evidence.</li> <li>Data was entered into excel spreadsheet and then plotted in Micromine</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</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>Handheld GPS coordinates in WGS 84</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>1m long samples on variably spaced trenches 65m to 250m spacing.</li> <li>Not applicable.</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 sampling was done perpendicular to the interpreted strike of the mineralisation to reduce 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>Samples were collected by a qualified consulting geologist who then delivered all the samples to the lab by the consulting geologist. Competent Person Reg No 0336.</li> </ul>
Audits or 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 external audits or reviews were conducted.</li> </ul>



## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Colina2 Project is 100% owned by SUH and there are no Royalties or third parties.</li> <li>The security of tenure is considered excellent as the licence is 100% owned by SUH.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Previous drilling on the licence before SUH has been done to industry standard.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration is targeting epithermal style-gold style mineralization hosted in Miocene intrusives (quartz diorites).</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling not being reported on.in the release.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</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>No data aggregation methods have been used.</li> <li>No metal equivalents have been used.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<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 (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
<i>Diagrams</i>	<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>Appropriate maps have been included.</li> </ul>
<i>Balanced reporting</i>	<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>A range of gold grades were included in the release</li> </ul>
<i>Other substantive exploration data</i>	<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>Not applicable.</li> </ul>
<i>Further work</i>	<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,</i></li> </ul>	<ul style="list-style-type: none"> <li>Further trenching is in progress</li> <li>Drilling is planned to test the downdip extent of the mineralisation discovered to date</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>provided this information is not commercially sensitive.</i>	

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit has not yet been undertaken by the Competent Person due to COVID travel restrictions.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration is at a very early stage and no deposits have been discovered.</li> </ul>