

**Southern Hemisphere
Mining Limited**

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Issued Capital:
244,439,757

Corporate Information:
ASX Code: SUH

Quarterly Activities Report

Southern Hemisphere Mining Limited ("Southern Hemisphere", "SUH" or "the Company") (ASX: SUH) is pleased to provide its Quarterly Activities Report for the period ending 31 December 2020.

CHILEAN PROJECTS:
Colina2 Gold Project - Central Chile (100%)

SUH completed a second field exploration trenching program at its 100% owned Colina2 Project in central Chile Figure 1 below. The trenching program consisted of over 2700m of trenching and is shown in Figure 2 below and follows the interpreted strike of the Colina2 gold discovery to the SW including where the rockchip grading 3.1g/t was taken. The trenching intersected variably altered Diorite intrusives with gold mineralization.

- The phase two trenching program was completed at Colina 2 with 15 gold trenches for 2,230m and 1,115 two metre composite samples collected.
- Best result of 14m @ 2.59g/t Au from 4m (Inc 2m @ 12.8g/t Au from 16m) in trench T19Au in the SW of the licence.
- Follow up diamond drilling is planned to start in late March 2021 with an initial 1,000m program to test the better results in the trenching.
- New licences applied for around Colina2 to increase the projects footprint in the area based on the latest results.
- SUH has engaged the services of a UWA PhD geologist in Chile to manage the Company's on-going exploration programs during 2021.



Figure 1: Location map of the Colina2 Project central Chile

The Colina2 project covers an area of approximately 259Ha and the company has applied for a number of adjacent concessions to expand the prospect across additional areas of interest. Colina2 is, located 9km to the northwest of Sociedad Punta del Cobre S.A. (Pucobre) El Espino Copper Mine which is advancing towards development.

Llahuin Copper Gold Molybdenum Project (100%)

The Llahuin copper project hosts a 149Mt @0.41%CuEq resource. Exploration activities at the Llahuin project during the quarter were completed by Sociedad Punta del Cobre S.A. (Pucobre). Pucobre is a copper producer listed on the Santiago Stock Exchange.

Pucobre have been evaluating the metallurgical recoveries of the Llahuin mineralisation with testwork which is evaluating if SUH's Llahuin copper resource would be complimentary to the development schedule of their El Espino Copper Mine 8km away, (20km by existing road). Results of the Pucobre testwork were reviewed by Sedgman Perth and a report was issued..

From the Sedgman review of the available testwork the following can be concluded:

1. The samples that were tested all had low copper grades ranging from 0.277 % Cu to 0.461% Cu and averaged 0.369% Cu, note these are resource grade;
2. Molybdenum and gold grades were also low with averages of 0.008% Mo and 0.095 g/t Au, resource average gold grade is 0.125g/t;
3. The Bond ball mill work indices ranged from 12.94 kWh/t to 16.40 kWh/t and averaged 13.89 kWh/t indicating moderate hardness;
4. A single Bond abrasion index of 0.2287 indicate that the ore was moderately abrasive;
5. LCTs conducted at a primary grind size P_{80} of 140 μm and a regrind size P_{80} of 45 μm generated final copper concentrate grades that averaged 28.2% Cu and an average copper recovery of 81.4%;
6. The flotation performance seems to be controlled by a constant tails copper grade model rather than a constant copper recovery model;
7. Final tails copper grades ranged from 0.040% Cu to 0.071% Cu and averaged 0.053% Cu, which indicates that there would little likelihood of significant increases in copper recovery resulting from finer primary or regrind sizes;
8. It may be possible to increase the copper recovery by decreasing the final concentrate grade;
9. There is potential for generating separate saleable copper and molybdenum concentrates;
10. There is potential for gold to add to the revenue of the Llahuin Copper Project;

The following recommendations were made for the Llahuin Copper Project:

1. Repeat the flotation testwork on drill core that represents the overall resources copper grade,
2. Repeat the flotation testwork on samples from the higher copper grade central zone,
3. Confirm the primary grind size by conducting rougher flotation tests at P_{80} s of 150 μm , 125 μm , 106 μm and 90 μm ,
4. Confirm the regrind size by conducting cleaner flotation tests at P_{80} s of 63 μm , 45 μm , 35 μm and 25 μm ,
5. Conduct confirmatory LCTs at the optimum primary grind and regrind sizes, using two stages of cleaner flotation, targeting a final concentrate grade of approximately 26% Cu to 28% Cu and minimising the circulating load,
6. Assay all tests for Cu, Fe, S, Mo, and Au,
7. Submit selected final concentrates for detailed chemical analysis using ICP scans to determine payable elements and to confirm the low levels of penalty elements.

Additionally, a review of the drilling, rock chip and geophysical data by the SUH team is currently in progress and looking at upside opportunities both within the currently defined resources and in areas outside these at Llahuin where it appears considerable upside gold potential exists which will determine the future work programs at Llahuin. Ongoing collaboration with Pucobre continues.

Los Pumas Manganese Project (100%)

This advanced manganese development project is available for joint venture or sale. Resources include 23.73 million tonnes of Manganese ore at 7.81% Mn as per the details noted below. There is excellent potential to increase the size of the resource and metallurgical studies have demonstrated a >38% Mn concentrates are achievable by DMS with low impurities and high silica product.

Corporate:

On 24 December 2020 the company completed a rights issue at 2.5c, raising \$2m.

Expenditure:

As outlined in the attached Appendix 5B (section 6.1), during the quarter approximately \$20,000 in cash payments were made to related parties and their associates for director salaries, consultancy fees, superannuation and other related costs. The Company spent approximately \$176,000 on exploration during the quarter and \$55,000 on administration and corporate costs.

For the purpose of ASX Listing Rule 15.5, the Board has approved for this announcement to be released.

CONTACTS:

For further information on this update or the Company generally, please visit our website at www.shmining.com.au or contact the company on :

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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 Porphyry Copper-Gold Project, both of which were discovered by SUH, and the recently identified Colina 2 Gold prospect.

Llahuin Copper 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
Measured plus Indicated	149	0.29	0.12	0.008	0.41
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= $\text{Cu \%} + \text{Au (g/t)} \times 0.72662 + \text{Mo \%} \times 4.412$ 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 ₂ %	Fe ₂ O ₃ %	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
Measured plus Indicated	18.34	7.58	55.82	2.91	5.62	2.91	0.05
Inferred	5.39	8.59	51.44	2.72	5.49	2.69	0.06
Total	23.73	7.81					

Metallurgical studies have demonstrated greater than 38% Mn concentrates are achievable by DMS with low impurities and high silica product.

In relation to the above resources, the Company confirms that it is not aware of any new information or data that materially affects the information in the announcements, and all material assumptions and technical parameters in the announcements underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

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.

The information in this report that relates to metallurgical testwork is based on information compiled by Peter Hayward of Sedgman who is a Fellow of the AusImm. Mr Hayward has sufficient experience in copper metallurgical testwork and to the activity which he is undertaking. For further information, please refer to the Technical Reports and News Releases on the Company's website at 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.

Southern Hemisphere Mining Limited Group Tenement Schedule						
<i>Los Pumas, Chile</i>						
Tenement ID	Status	Location	Area	Area Units	Ownership	Registered Holders
AWAHOU 1 AL 20	Granted	General Lagos	200	Hectares	100%	MHS
EMANUEL 1 AL 20	Granted	General Lagos	200	Hectares	100%	MHS
LLUTA I 1 AL 60 RED 1/54	Granted	Putre	249	Hectares	100%	MHS
LLUTA II 1 AL 300 RED 1/285	Granted	Putre	285	Hectares	100%	MHS
PUTRE 6, 1 AL 20 RED 1/11	Granted	Putre	65	Hectares	100%	MHS
PUTRE I 1 AL 20	Granted	Putre	86	Hectares	100%	MHS
PUTRE II 1 AL 20	Granted	Putre	124	Hectares	100%	MHS
<i>Colina 2 Project</i>						
Tenement ID	Status	Location	Area	Area Units	Ownership	Registered Holders
COLINA 2 1 AL 30	Granted	Canela	259	Hectares	100%	Llahuin
COLINA 2 A01	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A02	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A03	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A04	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A05	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A06	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A07	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A08	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A09	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A10	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A11	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A12	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
COLINA 2 A13	Pedimento	Canela	*TBC	*TBC	100%	Llahuin
<i>Llahuin Project</i>						
Tenement ID	Status	Location	Area	Area Units	Ownership	Registered Holders
AMAPOLA 1 1 AL 20	Granted	Llahuin	200	Hectares	100%	Llahuin
AMAPOLA 2 1 AL 20	Granted	Llahuin	196	Hectares	100%	Llahuin
AMAPOLA 3 1 AL 20	Granted	Llahuin	195	Hectares	100%	Llahuin
AMAPOLA 4 1 AL 20 RED 1/18	Granted	Llahuin	180	Hectares	100%	Llahuin
AMAPOLA I 1 AL 228	Granted	Llahuin	228	Hectares	100%	Llahuin
AMAPOLA II 1 AL 256	Granted	Llahuin	256	Hectares	100%	Llahuin
<i>Rincon Project</i>						
Tenement ID	Status	Location	Area	Area Units	Ownership	Registered Holders
RINCON 7 1 AL 30	Granted	Salamanca	300	Hectares	100%	MHS

*TBC - Tenements are currently under application. Area to be confirmed when application granted.