

ASX Announcement

4 October 2022

Llahuin Copper/Gold/Moly 680kt CuEq deposit -Chile-Geological Re-Interpretation Shows Scale

HIGHLIGHTS:

- The Llahuin Copper/Gold/Moly deposits hosts over 680kt CuEq in Central Chile. The Company's team of Geologists have identified a large porphyry/breccia system host at Llahuin from re-interpretation of the geological system following results and logging of recent DDH in conjunction with relogging historic diamond core.
- > This substantial porphyry/breccia system is evident across the whole Central Porphyry deposit which recent diamond drilling suggests may continue across the other two deposits Cerro and Ferro.
- Although a significant process given over 20km of historic diamond core to re-log, this is considered a positive for the project, and will add to the ability to scale up on open pit and deeper underground targets to materially add to its copper/gold endowment.
- A best result of 440m at 0.75% CuEq (Inc 208m at 1.2% CuEq from 2m depth) was intersected in drillhole DDLLA021 at the central deposit.
- Rockchips at Colina2 show many high grade copper oxide targets with a best result of 3.04% Cu (3.88% CuEq) and 92g/t Ag in the northwest of the project area.
- Llahuin and Colina2 sit within the newly recognised NW metallogenic domain which also hosts the giant Los Pelambres Copper Mine.

Southern Hemisphere Mining Limited ("Southern Hemisphere" or "the Company") reports that recent results and work have re-interpreted the whole geological system and upside potential at both the large Llahuin Copper Project (680kt CuEq) and the nearby Colina2 Gold-Copper Project (Figure 1).

Llahuin is a very valuable project with large tonnage, simple open pit mining configuration characteristics, multiplier resource growth potential including good location in an excellent copper country.

We are seeing examples worldwide of car manufacturers actually paying for equity in projects to secure long term supply arrangements. There are very few opportunities with the endowment and optimum configuration like Llahuin independently held in the world today and as we continue advancing the project, we are expecting companies to be interested, which we welcome.

Logging and results from recent diamond drilling, reconnaissance, mapping and sampling of old workings at both Llahuin and Colina2, along with relogging of historical Llahuin core has noted that:

- Mineralisation at Llahuin sits within a large structurally controlled porphyry/breccia system,
- Mineralisation at Colina2 is now interpreted within multiple subvertical fault-controlled lodes,
- > Both systems are hosted in an overall northwest trending mineralised 'corridor'

The Llahuin and Colina2 Projects sit within one of the newly recognised country-wide northwest trending 'metallogenic domains' (as published in recent scientific studies by Yanez and Rivera, 2019) which also hosts the >20Mt Cu Los Pelambres Deposit (Figure 1).



Figure 1. Llahuin/Colina2 Chile Location Map showing Metallogenic Domains

Details of the work on each project are outlined as follows:

LLAHUIN COPPER PROJECT

- A substantial structurally controlled porphyry/breccia system is evident across the whole central deposit, which may continue across the other two deposits Cerro De Oro and Ferrocarril.
- Over 20km of diamond drill core is currently being re-logged to obtain new information considering the revised geological interpretation and is currently at 30% complete.
- Although a significant process this is considered a positive for the project and will add to the ability to scale up on open pit and deeper underground targets to materially add to the copper endowment of the project.

A best result of 440m at 0.75% CuEq (inc 208m at 1.2% CuEq from 2m depth) was previously intersected in drillhole DDLLA021 at the Central Porphyry.

The drillhole sampling locations from recent drilling are shown in Figure 2, with cross section through the Central Porphyry presented in Figure 3.

All of the assays have been received from the ALS Laboratory in Chile and significant results are presented in Table 1.

Drillhole_ID	From	То	Width	Au ppm	Ag ppm	Cu %	Mo ppm	CuEq %
22LHDD025	0	59	59	0.11	0.84	0.44	4	0.53
22LHDD026	0	114	114	0.27	0.17	0.18	7	0.39

Table 1 Significant Intercepts from the Llahuin DDH Drilling Program using a 0.1 Cu% cutoff.

NB: Copper Equivalent CuEq% calculated using Cu \$3.20lb, Au \$1650/oz Ag \$20/oz and Mo \$30/kg

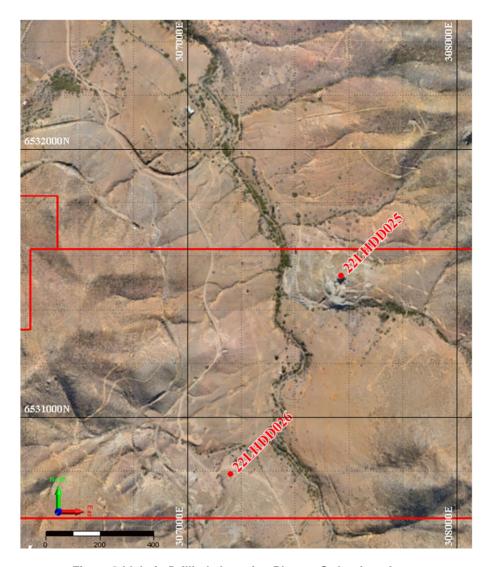


Figure 2 Llahuin Drillhole Location Plan on Orthophoto Image

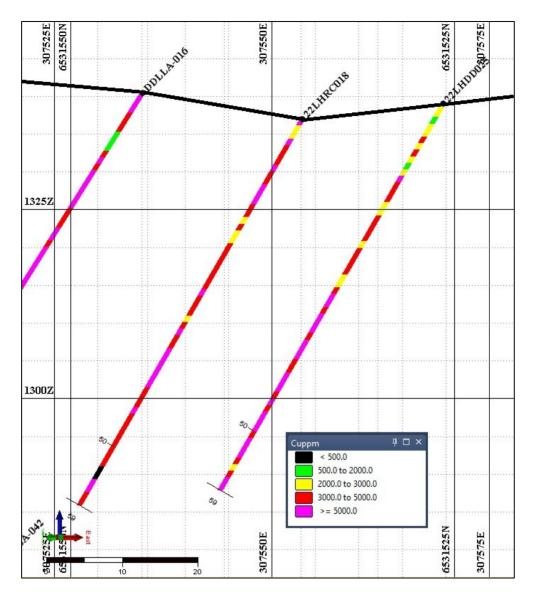


Figure 3 Cross Section with new diamond hole 22LHDD025 and current Block Model

NEXT PROGRAMS AT LLAHUIN

Over 20km of historic diamond core is being re-logged (30% complete) as a result of the recent diamond drilling which lead to a re-interpretation of the regional and local geology. This is a significant process, however a positive for the project, and will add to the ability to scale up on open pit and deeper underground targets to potentially materially add to the copper endowment of the projects. The re-logging is aiming to obtain new information to further evolve the deposit/regional geological interpretation and controls on mineralisation.

Soil sampling programs are well underway and have been targeted at areas considered to have higher prospectively given the reinterpretation. Concurrent mapping and rock chip sampling of the numerous gold workings on the Llahuin concessions is also in progress.

COLINA 2 GOLD-COPPER PROJECT

Drilling results show the recent diamond drill program was successful in identifying the gold mineralising structures and recognising the extent of the nuggety gold nature of the system, which was further confirmed via petrological thin section shown below.

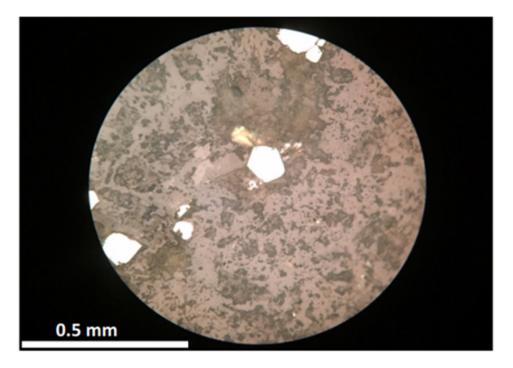


Figure 4: TS4 polished thin section showing gold grains. 21CLRC003 - 6.25 Au ppm 27-28 meters depth.

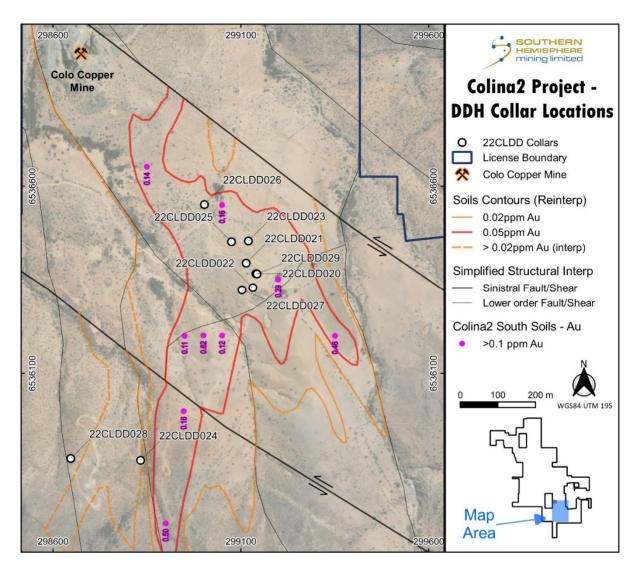


Figure 5 Colina2 Drillhole Location Plan

Collar locations are presented in Figure 5.

Results from the Colina2 diamond drilling are presented in Table 2.

Drillhole ID	From	То	Width	Au g/t	Ag g/t	Cu %
22CLDD020	57	60	3	1.08	1.1	-
22CLDD022	54	57	3	1.03	8.4	0.2
22CLDD024	27	34	7	0.88	1.2	-
22CLDD027	80	83	3	1.25	0.5	0.03

Table 2 Results from Colina2 Diamond Drilling 2022

The nuggety nature of the gold explains why recent diamond drill hole gold grades did not replicate the gold grades achieved in the prior RC drilling. The cut diamond core sample is ~3kg vs RC ~30kg; samples from the core saw cuttings and diamond drill rig sludge samples (outside return) contained significant gold with grades ranging from 0.05 to 1.8g/t in the rig sludge samples and 0.5g/t from the coresaw sludge sample. The Company recognised the issue on receipt of results for initial diamond holes and acted accordingly with cessation of the industry-standard sampling methodology of cutting the core using a core saw, switching to a core splitter.

The area of the highest soil sample results (reported ASX 8th Sept 2022) are yet to be drill tested.

Company Geologists are mapping and sampling the underexplored, yet abundant copper-rich outcrops (Figure 6 and Inset 2 of Figure 8) and old copper workings, including the historic Colo Copper mine (Figure 7).



Figure 6. Malachite outcrop Colina2 trending NW (See location map)



Figure 7 Historical Cu-Au Colo Mine at Colina2

Rockchip results received to date, presented in Table 3 and shown on Figure 8, demonstrate the Project has significant unrealised potential for significant near surface copper/silver+-gold mineralisation which also demonstrates the potential for sulphide potential at depth.

Sample ID	Cu%	Agppm	Auppm	CuEq%
22CLR000012	1.88	30	0.003	2.15
22CLR000013	1.46	22	0.003	1.65
22CLR000016	2.79	33	0.013	3.10
22CLR000020	1.07	21	0.04	1.29
22CLR000021	1.83	35	0.12	2.23
22CLR000022	1.42	35	0.09	1.80
22CLR000030	2.5	54	0.01	3.00
22CLR000031	1.43	38	0.007	1.78
22CLR000032	1.63	50	0.02	2.10
22CLR000033	2.1	67	0.02	2.73
22CLR000115	3.04	92	0.005	3.88
22CLR000116	0.4	41.5	0.143	0.89
22CLR000117	0.67	40	0.155	1.15

Table 3 Significant Rockchip results Colina2 Project

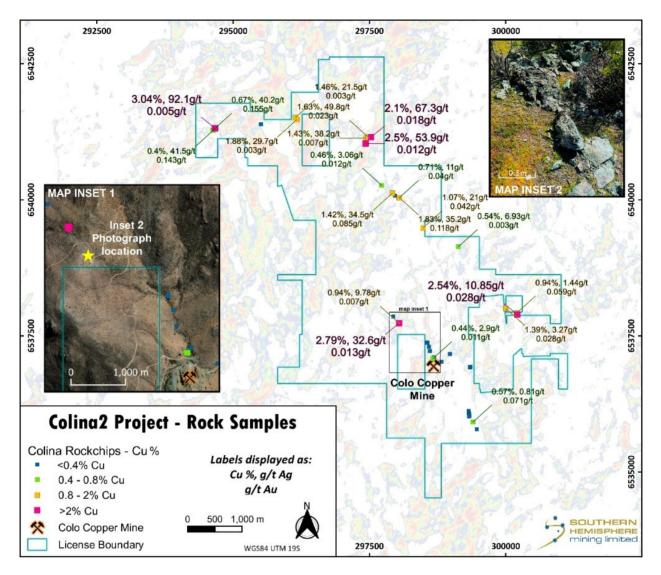


Figure 8 Rockchip Sample Location Map Colina2

Further low-cost soil and rock chip sampling targeting copper, gold and silver, is in progress and will add to the geological understanding of the Colina2 gold system and generate further drill targets for evaluation.

As exploration work progresses at both the Llahuin and Colina2 Projects, the Company's Geological Team continue to evolve the interpretation and apply this knowledge to targeting new and untested areas. The Company is also reviewing several projects within trucking distance of Llahuin to try and identify higher grade potential for the project.

Approved by the Board for release.

CONTACTS:

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

cosec@shmining.com.au

Telephone: +61 8 6144 0590

ASX Releases referred to:

- > ASX 16th May 2012
- > ASX 28th April 2022
- > ASX 17th May 2022
- ASX 9th June 2022
- ASX 17th June 2022

Reference:

Yáñez Carrizo, Gonzalo, Herrera, Orlando Rivera (2019) Crustal dense blocks in the fore-arc and arc region of Chilean ranges and their role in the magma ascent and composition: Breaking paradigms in the Andean metallogeny. *Journal of South American Earth Sciences*, 93. 51-66 doi:10.1016/j.jsames.2019.04.006

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 include the Llahuin Porphyry Copper-Gold Project, the Colina 2 Gold/Copper prospect near Llahuin, and the Los Pumas Manganese Project, all of which were discovered by the Company.

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

Resource	Tonnes	Cu %	Au g/t	Mo %	Cu Equiv*
(at 0.28% Cu Equiv cut-off)	Millions				
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= $Cu \% + Au (g/t) \times 0.72662 + Mo \% \times 4.412$ 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 %	К%	Р%
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.

For further information, please refer to the Technical Reports and News Releases on the Company's website at www.shmining.com.au.

Appendix 1 Drillhole Collar Data

Drillhole ID	EastWGS	NorthWGS	RL	Depth	Dip	Azimuth
22LHDD025	307571	6531528	1339	59.65	-60	300
22LHDD026	307159	6530789	1348	131.25	-60	300
22CLDD020	299140	6536367	1284	61.95	-60	130
22CLDD021	299114	6536395	1276	96.6	-60	130
22CLDD022	299132	6536329	1284	88	-50	90
22CLDD023	299120	6536454	1272	56.35	-50	90
22CLDD024	298833	6535868	1298	52.05	-50	90
22CLDD025	299075	6536452	1269	160	-50	90
22CLDD026	299003	6536551	1250	127.15	-50	90
22CLDD027	299103	6536323	1276	128.5	-50	90
22CLDD028	298647	6535873	1357	165	-60	90
22CLDD029	299143	6536366	1282	151	-60	90

Appendix 2 Rockchip Sample Locations

Sample ID	EastWGS	NorthWGS	RL
22CLR000012	296166	6541472	1147
22CLR000013	296146	6541514	1153
22CLR000016	298045	6537733	1287
22CLR000020	298486	6539485	1132
22CLR000021	298048	6540040	1130
22CLR000022	297920	6540122	1130
22CLR000030	297430	6541033	1104
22CLR000031	297441	6541132	1110
22CLR000032	297480	6541150	1122
22CLR000033	297529	6541152	1132
22CLR000115	294665.4	6541316	1123
22CLR000116	294652.6	6541291	1127
22CLR000117	294624.8	6541276	1119

Criteria	JORC Code explanation	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 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. 	 Riffle split RC samples were collected for each metre of drilling to obtain 1m samples from which approx. 4kg was split and sent to the ALS laboratory in Chile. The 4kg sample is crushed to -2mm from which a 1kg sample is split and pulverized to 85% passing -75µm and a 30g charge is taken for standard fire assay with AAS finish. Any multi-element assays are done using Multi-Element Ultra Trace method combining a four-acid digestion with ICP-MS instrumentation. A four-acid digest is performed on 0.25g of sample to quantitatively dissolve most geological materials. Elements and detection limits are presented below. Drillcore is cut in half with a diamond saw and the same side of the half core is sampled on a one metre intervals. Historical RC samples are collected at 1m intervals from RC-LLA-001 to RC-LLA-014 and then 2m intervals in RC holes numerically thereafter. Historical RC drilling samples were collected on a 2m basis and split to around 3kg using a single tier riffle splitter and sent to ALS Chile for sample preparation and analysis. Samples are dried at 70 degrees Celsius for up to 24hrs then the entire sample is crushed to -2mm and a 1kg sample is split and pulverized to 80% passing 150mesh. A 400 gram pulp is split off and a 30gram charge taken for Fire Assay and Cu and Mo with all assays by AAS. The AAS analytical procedures are ISO 9001:2008 certified and are in accordance with ISO/IEC 17025 Samples of the historical drillcore recently sampled were half HQ core samples on a one metre basis and were submitted to ALS in La Serena. Samples are dried at 70 degrees Celsius for up to 24hrs then the entire sample is crushed to -2mm and a 1kg sample is split off and a 30gram charge taken for Fire Assay and multi element assays using ICPMS and OES. Recent rockchips were collected using a geological hammer from outcrops or old workings in the field. The samples are photographed bagged and sent to ALS La Serna Laboratory for analysis. The samples have an avera

Criteria	JORC Code explanation	C	ommen	tary										
			with A Ultra instru	AS fi Traco ment itativ	nish. e me ation ely (Any method . A food dissolv	nulti-e com ur-aci ve m	elemen bining d dige nost	nt ass g a fest is geolo	says ar four-ac perfoi ogical	e don cid di rmed	e using gestio on 0.2	g Mult on wit 25g of	fire assa ti-Elemer th ICP-W sample t ents an
			REPOR		E ELE		SAND							_
				AA23		Analyte Au		Unit ppm		Lower	r Limit 0.005		er Limit 10.	.0
			ME-MS61	Analytes a	ind Reporti Lower	ng Ranges Upper		'n	Lower	Upper		L	.ower U	Jpper
			Analyte Ag	Units ppm	Limit 0.01	100	Analyte Al		Limit 0.01		Analyte As	Units L	Limit L	Limit 10000
			Ba Ca	ppm %	10 0.01	10000	Be Cd	ppm ppm	0.05	1000 1000	Bi Ce	, ,	0.01 1	10000 500
			Co Cu	ppm ppm	0.1	10000 10000	Cr Fe	ppm %	0.01	10000	Cs Ga		0.05 0.05	500 10000
			Ge K	ppm %	0.05	500 10	Hf La	ppm ppm	0.1	500 10000	ln Li	ppm 0	0.005 0.2 1	500 10000
			Mg Na	% %	0.01	50 10	Mn Nb	ppm ppm	5 0.1	100000	Mo Ni	ppm ppm		10000 10000
		•	P	ppm	10	10000	Pb	ppm	0.5	10000	Rb	ppm	0.1	10000
			Re	ppm	0.002	50	S	%	0.01			ppm	0.05	10000
			Sc Sr	ppm	0.1	10000	Se Ta	ppm	0.05	1000		ppm	0.2	500 500
			Th	ppm	0.01	10000	Ti	ppm %	0.005			ppm	0.03	
			U	ppm	0.1	10000	٧	ppm	1	10000		ppm	0.1	10000
		•	Y	ppm	0.1	500	Zn	ppm	2	10000	Zr	ppm	0.5	500
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hamme blast, auger, Bangka, sonic, etc) and details (eg core dial or standard tube, depth of diamond tails, face-sampling by type, whether core is oriented and if so, by what method,	meter, triple it or other	a face Histor three	samı ical D differ	oling rilling ent d	hamm gacros rilling	er withs the comp	th a 5. Llahu anies.	25ind Iin Pr The	ch dian oject a y inclu	neter l area h de HS	bit by F as bee B Sonc	R Muñ en com dajes, (ng rig usir foz drillin npleted k Geosupp Historic

Criteria	JORC Code explanation	Commentary
		diamond drilling was HQ core size and was not orientated. Recent diamond drilling was completed by RMunoz using a Sandvik 710 model diamond drilling rig drilling HQ3 triple tube technique and the core was orientated using a Reflex electronic core orientation tool. Orientations were checked using the traditional spear and crayon method and found to match very well.
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. 	 Recent RC Samples were weighed and weights recorded to ensure recovery is acceptable. RC driller lifts off between each metre to ensure sample separation between each metre. There doesn't appear to be a relationship between sample recovery and grade as sample recovery is excellent. A booster and auxiliary compressor were utilized to keep all RC samples dry. Historical RC drilling encountered water table ie wet samples between 20 to 100m depth. The water table is generally encountered between 20m and 100m from surface. Where the water table is encountered, a rotary splitter is used to assist with RC sample quality. Approximately sixty percent (60%) of the RC samples are reported to be wet. This issue has been partially remediated by using diamond drilling in preference to RC drilling for all further historical resource definition drilling. AMS concluded no significant bias in using the wet RC drill holes. Historical RC and DC drilling and data collection methods applied by SHM have been reviewed by AMS during successive site visits for the historical drilling. Recent diamond drilling core recovery was measured to be 95%. Recent diamond drilling showed assays to be less than expected for gold at Colina2 and the sludge from the coresaw was sampled and sent to ALS La Serena for gold analysis. Samples of the drilling sludge were also collected in 3m downhole intervals to check the amount of gold in the outside return. Both types of samples were assayed for gold returned values of 0.512 g/t gold from the coresaw sludge sample and from 0.05 to 1.87 g/t gold in the drilling sludge samples. The core from holes

Criteria	JORC Code explanation	Commentary
		22CLDD026 to 029 was split using a core splitter to reduce gold being lost in the coresaw. Sample bias to lower grades is therefore evident with gold being lost in the drilling process and the core cutting process. RC will be utilized as the preferred drilling technique in future drilling programs.
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. 	 The samples were geologically logged on site. Logging was both qualitative and quantative in nature for both recent drilling and historical drilling. All drillcore and RC drillholes were logged in entirety. All core was photographed and the photographs catalogued.
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. 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. 	 RC samples were collected into a green plastic bag which is then riffle split into a numbered calico bag for each metre of drilling. The majority of the RC samples were dry as holes were stopped if the RC drilling went wet. If significant groundwater was encountered an auxiliary compressor and booster were utilized to keep the sample dry. Field duplicates were not collected but can be split later to confirm results. Historical DC samples are taken on 2m intervals. In some places, this sample interval overlaps lithological contacts, although contacts are hard to determine in places due to pervasive alteration. Drill core has not been orientated for structural measurements. The core is cut lengthways with a diamond saw and half-core is sent for assay. The half-core is bagged every 2m and sent for preparation, while the remaining half-core is returned to the labelled cardboard core box. A cardboard lid is placed on the box, and it is stored in a newly constructed weatherproof storage facility (warehouse) for future reference There is no relationship between the sample size and the grain size of the material being sampled at Llahuin. Recent HQ3 diamond drilling was initially cut with an industry standard core saw until it was realized that gold was being lost in the core saw and a core splitter was used after hole 22CLDD025. Sample size is considered important with nuggety gold and thus one hole (22CLDD026) had whole core submitted to see if the gold grades improved. No apparent difference was seen in the gold grade. Compared to the RC drilling where much higher grades were intersected it is thought the much larger sample

Criteria	JORC Code explanation	Commentary
		size of the RC (30kg/metre vs 3kg for the core) is a more representative sample.
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. 	 The assay technique utilized is "industry Standard" fire assay with AAS finish for gold which is a total digestion technique. For the recent RC drilling appropriate industry standard CRM's and blanks were inserted into the sample stream at a rate of 1:10 samples for both standards and blanks. This is considered above industry standard for the recent drilling and there is no apparent bias of any significance at Llahuin. Historical drilling - Blanks and field duplicates are inserted at irregular intervals, at a range of between 1:20 and 1:50. A total of 1,738 laboratory standards have been analysed in a large variety of Cu and Au grade ranges, and there is no apparent bias of any significance (AMS June 2013) A total of 462 blanks have been inserted into the sample stream (RC and DDH). Recent diamond core samples had CRM's and blanks inserted at a rate of approximately 1:20. Additionally coarse crush duplicates of the samples were split by ALS and assayed to give duplicate data at 1:20. Duplicate data shows a very good comparison.
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. 	 The company's exploration manager (QP) has made a site visit and inspected the sampling methods and finds them up to industry standard for all the recent drilling. Prior to March 2012, DDH was performed predominantly as tails at the termination of some of the RC holes. DDH performed from April 2012 has been from the surface with a total of 4 diamond drill holes twinned to preexisting RC drill holes. Twin hole drilling was completed across the Central Porphyry and Cerro De Oro zones. AMS concluded that there is insufficient data to make a definitive comparison, and that the twins are sufficiently far enough apart to explain some of the grade differences. No new drilling has been twinned yet. Logging is completed into standardized excel spreadsheets which can then be loaded into an access front end customized database. There have been no adjustments to the assay data. Historical sampling and assaying techniques were independently verified

Criteria	JORC Code explanation	Commentary
		by Mr. Bradley Ackroyd of Andes Mining Services who undertook a site visit to the Llahuin Copper-Gold Project between 5th and 8th of May 2013. He inspected the drill sites, drill core and chips, logging, sample collection and storage procedures as well as the office set-up and core processing facilities. Mr. Ackroyd also observed all the available surface exposures of the deposit across the Llahuin project area. In addition, Mr. Ackroyd undertook a short review of the quality control and assurance procedures employed at the project site.
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. 	The precision of the standard hand held GPS units is poor in this region of Chile so a licensed surveyor was employed to pick up the new drillhole locations and the topography. The survey was performed by Mr. Luciano Alfaro Sanders using a total station instrument. The collars picked up to within 0.1m accuracy. This accuracy was not able to be checked, however the relative positions of the drill holes has been confirmed during the site visits.
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. 	 The recent drillhole spacing is approx. 20 to 40m spaced holes in various locations. Drilling was completed within an existing resource and scout type drilling was completed in previously undrilled areas at Llahuin. Historical drilling was completed at The Central Porphyry, Cerro de Oro and Ferrocarril zones have been drilled on a nominal spacing of 50m by 50m in the upper portions and 100m x 100m in the lower portions of the deposits. No sample compositing has been applied in the recent drilling and 2m composites were taken in part of the historical drilling.
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 drilling was done perpendicular to the interpreted strike of the mineralisation to reduce sampling bias.
Sample security	The measures taken to ensure sample security.	 Samples were collected by a qualified consulting geologist and the samples were delivered to the lab by a company employee. Competent Person Reg No 0336.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Andes Mining Services completed an external audit and review in 2013 of the historical drilling and sampling procedures. No external audit or review has been conducted on the recent sampling procedures. The QP has reviewed the current QAQC data and found the data to be acceptable.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	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 Llahuin Project is 100% owned by SUH. The security of tenure is considered excellent as the licence is 100% owned by SUH.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Previous drilling on the licence before SUH has been done to industry standard as per AMS report (SUH press release 19th August 2013).
Geology	Deposit type, geological setting and style of mineralisation.	 Exploration is targeting porphyry Cu-Au style-gold style mineralization hosted in Miocene intrusives (diorite) at Llahuin and potential IOCG type gold copper mineralisation at Colina2.
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. 	• Appendix 1

Criteria	JORC Code explanation	Commentary
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. 	 No data aggregation methods have been used. A copper equivalent was reported using the following metal prices Cu \$3.20, Au \$1650/oz, Ag \$20/oz and Mo \$30/kg. The copper equivalent for the rockchips is reported using Cu \$3.20, Au \$1650/oz and Ag \$20/oz.
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'). 	 Exploration drilling was targeting near surface material in a porphyry Cu-Au system. Therefore the mineralised widths are much greater than the drillhole depths for the Central Porphyry. Drilling at Cerro De Oro is partly infilling historical drilling so therefore downhole widths have been reported and true widths are not established yet as the historical drilling appears to be too widely spaced. Drilling in all areas has been conducted perpendicular to the regional trend observed in outcrop. Exploration at Colina2 was targeting potential IOCG type gold and recent drilling was orientated perpendicular to the regional trend observed in outcrop.
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. 	Appropriate maps have been included in the 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. 	 A range of grades were included in the 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. 	 A drone magnetics survey was completed over the project area in 2021 by GFDas UAV Geosciences Santiago Chile. Survey specifications provided below. Company: GFDAS Drones and Mining Line direction: 90°-270° Line separation: 25m Tie line Direction: 0-360 Tie lines separation: 250m Flight Height: around 25m AGL following topography (according to

Criteria	JORC Code explanation	Commentary
		operational safety conditions) Registration Platform Mag: DJI M300 Drone Registration Platform Topo/ortho: DJI Phantom RTK Pro Drone Geoidal Model: EGM08 Flight speed: 5-10m/s Mobile sampling: Fluxgate magnetometer, 25 Hz Resolution: Digital Elevation Model 1 m and Resolution: Orthophoto with 20 cm/pixel Base sampling: Geometrics magnetometer sampling 30s. Positioning: Phantom 4 RTK
		Survey Module: The flight module uses a VTOL drone, powered by rechargeable electric batteries and a positioning system with three GPS antennas. The registration module was miniaturized, simplified and made of low weight components suitable for lifting by the drone. These correspond to the magnetometer, acquirer and analogue-digital converter.
		Magnetic Survey: The data was corrected for Diurnal variances, micro levelled with the use of the tie lines by GFDAS Drones and Mining. They also applied the Reduction to the Pole process on the data (inclination -32.3° and 0.4° declination) that was supplied to our company.
		Topographic flight plan: Due to the strong differences in the elevations of the terrain, it was flown from different points within the north-south polygons with differentiated flight height, to achieve a pixel resolution as requested. These flight heights had a range between 350 m and 460 m (AGL flight height). The overlaps of flight lines were between 75% and 80%, this was done depending on the flight height and detail required.
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. 	 Additional soil sampling is planned for the Llahuin Project. Additional soil and rockchip sampling are planned for Colina2.