

ASX Announcement

11 December 2024

Interim Drilling Results Demonstrate Major Strike Extension at Llahuin Copper-Gold-Moly Project, Chile

Highlights:

- RC Drilling has extended the already large strike of 1.9km to 2.2km, ahead of H1 2025 JORC resource update including results of:
 - o 81m @ 0.49%CuEq from 2m, incl. 48m @ 0.58% CuEq from 30m 24LHRC055
 - o 122m @ 0.41% CuEq from 2m, incl. 58m @ 0.49% CuEq from 66m 24LHRC048
 - o 16m @ 0.52% CuEq from 102m 24LHRC051
 - Numerous holes open at depth for diamond tails in Q1
- Potential feeder zone at Cerro identified from RC drilling and pre-collar now in place for diamond drilling
- Magneto-Telluric (MT) survey in progress for deep copper targets to complement existing IP, litho-geochem and drill data

Southern Hemisphere Mining Limited ("Southern Hemisphere" or "the Company") (ASX: SUH, FWB: NK4) reports a substantial strike extension from RC drilling south of the Ferro deposit at its Llahuin Copper-Gold-Moly Project in central Chile.



Figure 1. RC rig on location drilling the Ferro extension.





Chairman Mr Stowell reported:

"Our team continues to demonstrate the Llahuin Copper-Gold-Moly deposit's large scale with the latest drill results extending the strike of the Cerro-Ferro deposits by 300m from 1.9km to over 2.2km. The system is still open along strike both north and south with the benefit of mineralisation largely from surface, optimum for open-pit mining configuration.

Importantly, recent results also confirm a significant untested expansion of the Cerro-Ferro deposits, for strike, plunge and dip extensions.

Regionally, the work we have undertaken is also starting to demonstrate what is on offer across the broader Llahuin Copper-Gold-Moly Project.

As previously highlighted, we are particularly interested in the new Curiosity Target at Southern Porphyry, south of Ferro, and have commissioned a more detailed Magneto-Telluric (MT) survey with tighter line spacing than originally completed, and extending this over and past the Cerro and Central deposits.

MT is a passive geophysical method which uses natural time variations of the earth's magnetic and electrical fields to measure the electrical resistivity of the sub-surface deep target geophysics systems. *MT* has been successful in identifying a number of world-class copper porphyry deposits, including the Chilean Valeriano deposit - Atex Resources (TSX: ATX.V).

We are on track to advance the resource towards an updated Mineral Resource Estimate for the Llahuin Copper-Gold-Moly deposits in H1 2025.

It is important to also note that our longer-term exploration journey at Llahuin continues to show that the full potential of this flagship asset extends far beyond what has been published in JORC resources to date.

The Company remains well funded, holding A\$4m in cash at the end of the last quarter."



Figure. 2. Llahuin Copper-Gold-Moly Project location and tenure map.

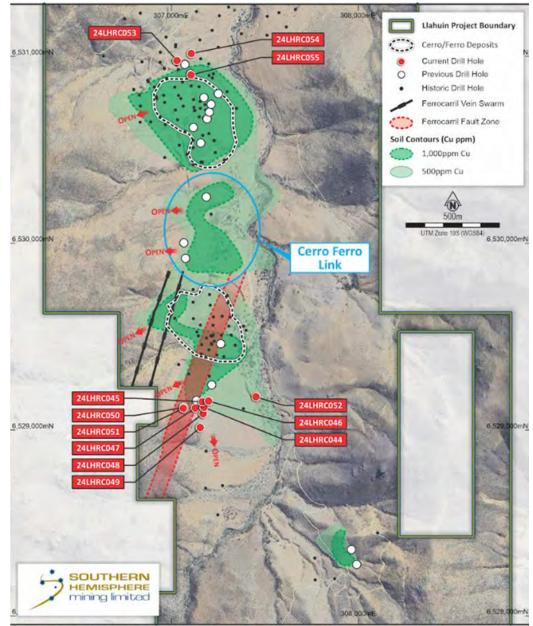


Figure 3. Plan view of all holes drilled this campaign Oct-Dec 2024.

Ferro South Extension

Recent RC drilling has started to define a new zone south of the Ferro zone with wide intercepts recorded in the drilling. The drilling has extended the zone for over 300m to the southwest and the mineralisation is open in that direction and requires more drilling to better define the extension. The Company's exploration programs have been targeted at increasing the resources at the Llahuin Project and this program is doing just that. The soil anomaly drilled last year disappears to the southwest as the area is covered with colluvium so the SW part is blind to geochemistry. Three sections have been completed to date and show the mineralisation to be flat lying higher than resource grade manto-style mineralisation at this stage.

The relevant area is circled in yellow in the map below.

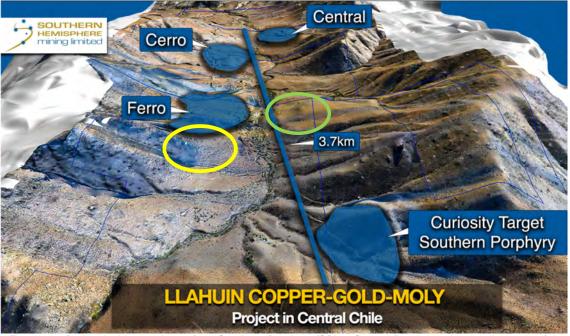


Figure 4. 3D view looking northeast from Southern Porphyry (SP) to Central Porphyry, showing the scale of the Llahuin mineralising system with Ferro extension in yellow circle, and the newly identified East Porphyry zone in the green circle (colluvium covered up to 5m deep).

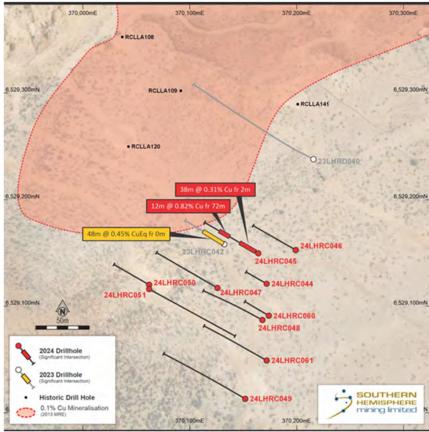
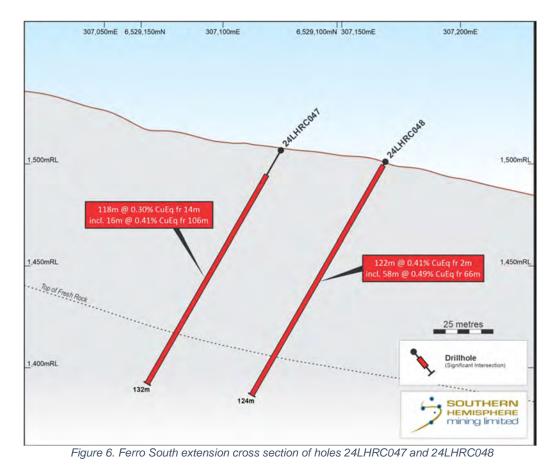


Figure. 5. Ferro South extension plan view of drillholes.



Cerro Feeder Zone identified for deeper drilling

Drilling at Cerro has intersected similar near surface mineralisation testing the western extents at Cerro with holes 24LHRC054 and 24LHRC055. RC holes are drilled dry and are stopped when the sample goes wet so are ready for diamond tails to be completed next year.

Successful RC drilling has defined a feeder zone within the Cerro Deposit for diamond drilling to extend to depth in the next round of diamond drilling.

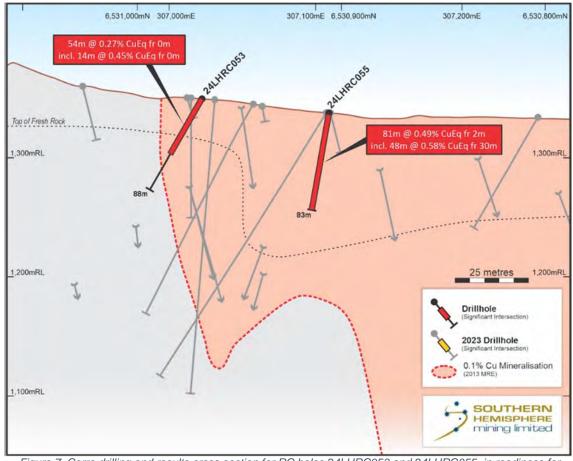


Figure 7. Cerro drilling and results cross section for RC holes 24LHRC053 and 24LHRC055, in readiness for diamond tail extension to depth in hole 24LHRC055.

Geophysics and Modelling

A fault zone model has been completed by Fathom Geophysics to advance the understanding of the mineralising and barren faults using geophysics for better targeting of future drilling.

The Company has engaged Southern Rock Geophysics to extend and infill the historical MT survey at Llahuin. Work on the MT survey at Llahuin began on Wednesday 4 December 2024 and is expected to take two weeks to complete. The MT survey is expected to assist with deep hole targeting at Cerro-Ferro and the Southern Porphyry target and will complement the Fathom deposit footprint models, as well as the IP Dataset that covers most of the concession holdings and key targets.

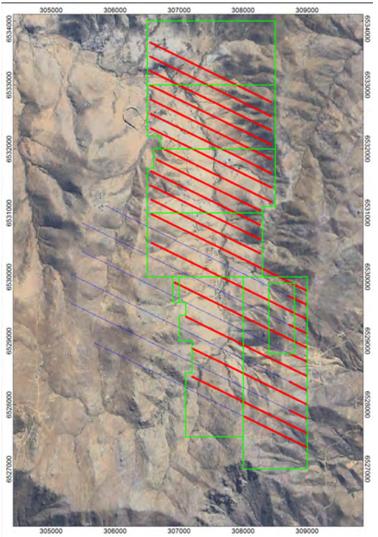


Figure 8. MT lines -blue existing data, red, infill and extension north and east.

The Fathom, IP, MT work to date, as well as the Santa Maria epithermal vein system workings correlate to the large Curiosity Copper target south of the Ferro deposit. The current MT program will infill the line spacing from 400m to 200m, possible infill to 100m and extend the MT north across the Cerro and Central deposits and evaluate potential north of those.

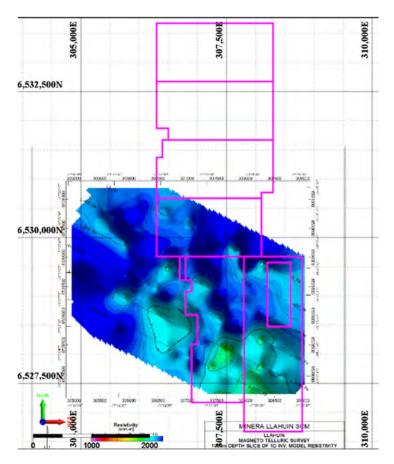


Figure 9. MT survey data prior to the new program underway, showing the large Curiosity Copper target which coincides with the Fathom litho-geochem target as well as IP.

Ferro East

Rock chip sampling has identified a new large target at Ferro East. This work was a follow up of a soil anomaly which shows elevated copper 1,300ppm and moly 17ppm in soil. A total of 44 samples were collected in outcrops exposed in streams and the main river (Figure. 3), 33 samples in the mainstream direction NS and 11 samples in the secondary stream direction EW. The area is interesting with exposed intrusive with in parts extensive stockwork veining with elevated copper, moly and gold was panned from the subvertical component of the stockwork veins exposed in the main river in the northern part of the exposure on the main creek at Llahuin. Note the elevated soil was in a small area of residual soil in an area covered with significant colluvium thus all colluvium area's soil sampled need to be further checked.

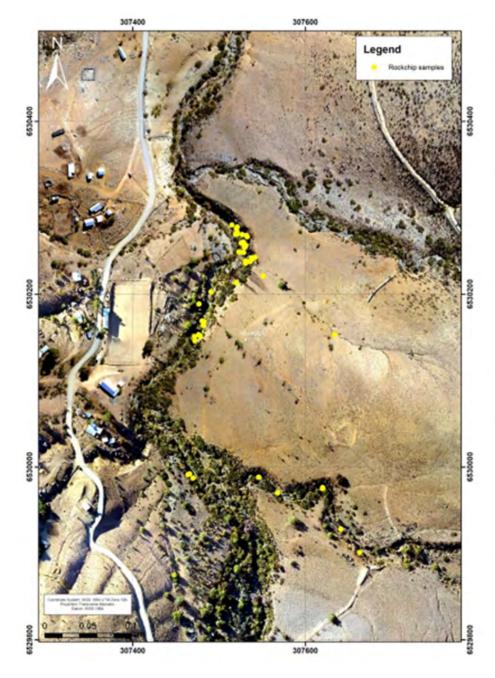


Figure 10. Rock samples from new target East Porphyry east of the Ferro deposit, mostly covered by colluvium so largely blind to geochemistry.

PhD Copper Porphyry Experts

The Company has hosted a number of porphyry copper experts at site, and they have provided invaluable input to the Project and its potential. This work is being incorporated into modelling and planning of ongoing programs.

Water

All holes drilled in this campaign have intersected water at 40-60m, and a water test on hole 24LHRC053 demonstrated a flow rate of 40 litres per minute. Water test work indicates that it is fresh but not potable. This is a significant positive for future development of Llahuin having water from the site that could be used in mine operations, potentially all sourced from the mine itself which would be subject to further studies for confirmation at the appropriate stage.

Results from the RC drill campaign continue to be received from the laboratory and will be reported in due course, along with other exploration advancements.

Approved by the Board for release.

CONTACTS:

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

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Media:

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X: \$SUH.AX

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-Moly Project and the Los Pumas Manganese Project, both 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 (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
Total M+I+I	169	0.28	0.128	0.008	0.40

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:

Notes on copper recovery from historical test work

- "Recoveries of copper vary between 75% Cu and 91% Cu with the weighted average of the results being 84% Cu, which is a typically acceptable commercial level";
- "Recoveries of gold vary between 41% Au and 57% Au, which is in line with expectations given the relatively low gold grades within the deposit'; and
- "Flotation concentrates produced during testing contained the resource weighted average copper grade of 28% Cu and 4.9g/t
 Au. They also contained low levels of deleterious materials in the concentrate. Given that these tests were designed to set parameters and were not optimised, the results indicated good flotation process characteristics".

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 (2012) Compliant. As announced to the market on 3 May 2023.

Resource (at 2.5% Mn cut-off)	Tonnes	Mn %	Al%	Fe2O3%	К%	Р%	SiO2%	SG%
Indicated	23,324,038	6.21	5.71	2.78	2.98	0.05	57.07	2.15
Inferred	6,940,715	6.34	5.85	3.05	2.83	0.05	54.61	2.14
Indicated plus Inferred	30,264,753	6.24	5.74	2.84	2.95	0.05	56.50	2.15

Total JORC Resources for the Los Pumas Manganese Project at a 2.5% Mn cut-off.

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.

Hole_ID	M_from	M_to	INTERVAL	Cu_plot_%	Mo_ppm	Au_ppm	TYPE	CuEq%
24LHRC044	0	42	42	0.108	22.4	0.059	AT	0.183
24LHRC044	0	4	4	0.214	17.4	0.112	INCLUDING	0.342
24LHRC045	0	102	102	0.226	33.5	0.087	AT	0.337
24LHRC045	2	30	28	0.320	23.3	0.084	INCLUDING	0.423
24LHRC045	32	40	8	0.288	17.7	0.087	INCLUDING	0.390
24LHRC045	72	90	18	0.247	69.6	0.114	INCLUDING	0.409
24LHRC047	14	132	118	0.184	41.7	0.091	AT	0.305
24LHRC047	80	104	24	0.209	34.9	0.163	INCLUDING	0.403
24LHRC047	106	122	16	0.234	159.5	0.077	INCLUDING	0.406
24LHRC048	2	124	122	0.251	40.0	0.129	AT	0.411
24LHRC048	8	50	42	0.259	6.6	0.138	INCLUDING	0.410
24LHRC048	66	124	58	0.287	77.4	0.146	INCLUDING	0.487
24LHRC049	72	86	14	0.161	2.4	0.068	AT	0.235
24LHRC049	118	124	6	0.155	2.1	0.060	AT	0.220
24LHRC051	72	166	94	0.197	15.0	0.091	AT	0.302
24LHRC051	102	118	16	0.346	6.9	0.161	INCLUDING	0.521
24LHRC053	0	54	54	0.210	6.4	0.051	AT	0.268
24LHRC053	0	14	14	0.379	4.2	0.062	INCLUDING	0.447
24LHRC055	2	83	81	0.216	112.4	0.202	AT	0.494
24LHRC055	30	78	48	0.237	171.6	0.231	INCLUDING	0.581

TABLE OF SIGNIFICANT DRILL RESULTS (received to date from the lab)

Copper equivalent calculation is determined using the following metal prices and without metallurgical recovery %: Copper % + gold g/t x 1.0625 + moly ppm x 0.005714 =CuEq

Copper	US\$3.50 per lb- CuEq factor: 1
Gold	US\$2,550 per oz- CuEq factor g/t: 1.0625
Moly	US\$20 per lb -CuEq factor ppm: 0.0005714

Drill collar co-ordinates in UTM, depth and azimuth

HOLE ID	х	Y	Z	Max Depth	Azimuth	Dip from North
24LHRC044	307172	6529121	1495.568	86	300	-75
24LHRC045	307164.1	6529149	1512.1	116	300	-60
24LHRC046	307199.2	6529153	1473.84	92	300	-60
24LHRC047	307126	6529117	1507	132	300	-58
24LHRC048	307168	6529087	1508	124	298	-60
24LHRC049	307152	6529013	1530	150	300	-60
24LHRC050	307062	6529120	1546	76	300	-60
24LHRC051	307062	6529116	1540	168	120	-60
24LHRC052	307451	6529177	1430	70	300	-60
24LHRC053	307027	6530976	1349.5	88	300	-60
24LHRC054	307105.2	6531015	1340.336	76	300	-60
24LHRC055	307103.7	6530899	1337.956	83	300	-80

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. 	 Historical riffle split RC samples were collected for each metre of RC 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 or two 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 at 70 degrees Celsius for up to 24hrs then the entire samples on a one metre basis and were submitted to ALS in La Serena. Samples of the historical drillcore recently sampled were half HQ core samples are dried at 70 degrees Celsius for up to 24hrs then the entire sample is crushed to -2mm and a 1kg sample is plit and pulverized to 80% passing 150mes
		collected on a 1m basis and put through a three tier "Jones type" riffle splitter

- to get an approx. 3kg sample. Samples are then bagged into larger labelled plastic bags and sent to ALS Laboratory 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 and pulverized to 80% passing 150mesh. A 400 gram pulp is split off and a 30gram charge taken for Fire Assay and a 0.25gram charge for the multi element assays using ICPMS and OES. Diamond core was cut in half and sampled on a metre basis with samples sent to ALS La Serena where they are crushed to 2mm and then the above described sample preparation and assay were completed.
- 2023 RC and diamond samples were collected as 2m samples and also

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Criteria JORC Code explanation

Commentary

subject to the same procedure sample preparation procedure described above. Assays were industry standard four acid digest and Fire Assay with ICPMS finish for gold and ALS multi-element method MEMS61 for 48 elements. Elements and detection limits are presented below. Some near surface drill samples were also assayed for acid soluble copper.

- Recent rockchips were collected using a geological hammer from outcrops or old workings in the field. Additional rockchips for the Fathom study were collected on an approximate 200m by 200m spaced grid. The samples are photographed bagged and sent to ALS La Serna Laboratory for analysis. The samples have an average weight of 4kg. The laboratory procedure is to log the samples into their tracking system and dry them then they are crushed to -2mm from which a 1kg sample is split and pulverized to 85% passing -75µm and a 30gram charge is taken for industry 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.
- Fathom rockchips were collected on a nominal 200m spaced grid over most of the concession area. Where available drill pulp samples or previously collected rockchip pulps were re-assayed. All these samples were subject to four acid digest and ICPMS multi-element assay.

REPORTABLE ELEMENTS AND RANGES

Method Code			Analyte		Un	it	Lov	ver Limit		pper Limi	
Au-	AA23		Au		pp	m		0.00	5		10.0
ME-MS61	Analytes	and Report	ing Ranges	Rich Control of Contro							
Analyte	Units	Lower Limit	Upper Limit	Analyte	Units	Lower Limit	Upper Limit	Analyte	Units	Lower Limit	Upper Limit
Ag	ppm	0.01	100	Al	%	0.01	50	As	ppm	0.2	10000
Ba	ppm	10	10000	Be	ppm	0.05	1000	Bi	ppm	0.01	10000
Ca	%	0.01	50	Cd	ppm	0.02	1000	Ce	ppm	0.01	500
Co	ppm	0.1	10000	Cr	ppm	1	10000	Cs	ppm	0.05	500
Cu	ppm	0.2	10000	Fe	%	0.01	50	Ga	ppm	0.05	10000
Ge	ppm	0.05	500	Hf	ppm	0.1	500	In	ppm	0.005	500
K	%	0.01	10	La	ppm	0.5	10000	Li	ppm	0.2	10000
Mg	%	0.01	50	Mn	ppm	5	100000	Мо	ppm	0.05	1000
Na	%	0.01	10	Nb	ppm	0.1	500	Ni	ppm	0.2	10000

	Criteria	JORC Code explanation	Сс	ommen	tary										
				Р	ppm	10	10000	Pb	ppm	0.5	10000	Rb	ppm	0.1	10000
				Re	ppm	0.002	50	S	%	0.01	10	Sb	ppm	0.05	10000
				Sc	ppm	0.1	10000	Se	ppm	1	1000	Sn	ppm	0.2	500
				Sr	ppm	0.2	10000	Ta	ppm	0.05	500	Te	ppm	0.05	500
				Th	ppm	0.01	10000	Ti	%	0.005	10	TI	ppm	0.02	10000
				U	ppm	0.1	10000	۷	ppm	1	10000	W	ppm	0.1	10000
O				Y	ppm	0.1	500	Zn	ppm	2	10000	Zr	ppm	0.5	500
For personal use	Drilling techniques Drill sample recovery	 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). 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. 	 2023 RC and diamond drilling was completed by DV Drilling from La Serenusing an EDM 2000 RC utilizing a face sampling hammer and a Fordia 1400 diamond rig (similar to a Longyear 44). Historical Drilling across the Llahuin Project area has been completed by three different drilling companies. They include HSB Sondajes, Geosuppl and R Muñoz Ltd for both RC drilling and diamond drilling. Historical diamond drilling was HQ core size and was not orientated. Recent 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 wele All 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 supple separation between each metre. 								r pulp mixed acid grig using z drilling. a Serena rdia 1400 pleted by Beosupply Historical diamond diamond prientated e checked very well. to ensure r to be a				
		 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. 		relati excel	onshij lent. /	p betv A boos	veen s ster ar	ample d aux	e reco ciliary	overy comp	and gr ressor	ade a were	is sam utilized	nple re d to ke	ecovery is ep all RC d as sucl

Criteria	JORC Code explanation	Commentary
r personal use only		 when the hole went wet the RC was stopped and the hole was extended with a HQ size diamond tail where necessary. 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. All recent diamond drilling core recovery was measured to be approx. 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 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.
	 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-samplin techniques	 If core, whether cut or sawn and whether quarter, half or all core taken. 	 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

	Criteria	JORC Code explanation	Commentary
rsonal use only	and sample preparation	 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. 	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
For be	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. 	 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

	Criteria	JORC Code explanation	Commentary
\geq	•		• Recent diamond core samples had CRM's and blanks inserted at a rate of approximately 1:20. Additionally coarse crush duplicates of the DDH samples were split by ALS and assayed to give duplicate data at 1:20. Duplicate data shows a very good comparison. A total of 77 Umpire assays were completed at 1:40 for recent RC and diamond core sample by Andes Analytical Assay in Santiago and showed correlation coefficients for the paired data for all elements was above 0.9.
FOF DEFSONAL USE ON	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 several site visits and inspected the sampling methods and finds them up to industry standard for all the recent drilling. Ian Dreyer completed a site visit in October 2023 and reviewed the new drilling and some of the better historical intersections. 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 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. No adjustments have been made to the assay data.
	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. 	A licensed surveyor was employed to pick up the new drillhole locations. 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. The recent (2021-2023) drilling collar surveys were done by Misure a

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	Criteria	JORC Code explanation	Commentary
			company from La Serena using an RTK total station. Downhole surveys were done by Misure using a downhole gyroscope. Rockchips and soil samples are located with a Garmin handheld GPS unit accurate to 3m which is considered good enough for the type of exploration work being done.
al use only	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 the majority of the historical drilling. Rockchips typically don't have a set sample spacing as they are taken from outcrops. Some continuous chip samples were taken along road cuttings. The soil sampling grid used an initial 200m by 50m grid with final infill typically 50m by 25m.
erson	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.
Õ	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. Recent samples from 2021-2023 are taken to ALS La Serena by a company representative in a company supplied vehicle.
Ļ	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. Ian Dreyer reviewed the current sampling procedures and concluded they were acceptable to industry standard. 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. There are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Previous drilling on the licence by 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 Porphyry style mineralization hosted in Miocene intrusives (diorite) at Llahuin and potential IOCG type gold copper and gold 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
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 	 No data aggregation methods have been used. A copper equivalent in the Mineral Resource Estimate is reported using the following metal prices Cu \$3.20/lb, Au \$1,700/oz and Mo \$12.50/kg. The copper equivalent for the rockchips is reported using Cu \$3.20/lb, Au \$1,650/oz and Ag \$20/oz. The copper equivalent for the 2023 drilling is reported using Cu

	Criteria	J	ORC Code explanation	Commentary					
		٠	such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.		\$3.77/lb, Au \$1,900/oz, Ag \$23/oz and Mo at \$17/lb.				
se oniv	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.				
al US	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.				
rson	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 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				

Criteria

JORC Code explanation

Commentary

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.

- Fathom Geophysics applies its proprietary 3D porphyry footprint modelling method on recently collected rock chip and drillhole pulp data at Llahuin. This method uses eleven elements (As (arsenic), Bi (bismuth), Cu (copper), Li (lithium), Mo (molybdenum), Sb (antimony), Se (selenium), Sn (tin), Te (tellurium), TI (thallium), and W (tungsten), to map idealised deposit model zonation and thresholds based on the Halley et al., (2015) geochemical model. Deliverables from this work are a set of wireframe shells representing probabilities of the presence of a porphyry system at a given point in 3D space.
- A bulk density sampling program for historical and new drillcore was completed for every 20m downhole. The BD measurements for this program were completed by ALS in La Serena method OA-GRA08a. A total of 511 new samples were measured and combined with the historical 232 samples (743 total) with an average BD of 2.67.
- Summary of Historical Metallurgical testwork results

Criteria	JORC Code explanation	Co	mmentary							
			Metallurgical <u>Testwork</u> - <u>Llahuin</u> Copper-Gold Project Closed Loop Flotation <u>Testwork</u> (Diamond Drill Core Samples)							
			Sample	% of - Resource	Feed Grade	Feed Grade g/t Au	Cu Recovery %	Au - Recovery %	Concentrate Grade % Cu	Concentr Grade g Au
			UGM-01	37	0.46	0.142	85	47	32	6.1 -
			UGM-02	11	0.44	0.150	91	57	31	8.8 -
6			UGM-03/06	11	0.28	0.067	75	52	16	2.6
-			UGM-04	13	0.33	0.046	81	41	28	2.3
			UGM-09	16	0.33	0.066	88	41	26	3.4 -
		•	TOTAL/WT AV.	88	0.39	0.106	84	47	28	4.9
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. 	•	Follow up drilling of extensions to known mineralisation is planned for Llahuin. Geochemical footprint modeling is in progress Additional rockchip sampling is being evaluated. Pulp composite assaying							