ASX Announcement **28 January 2025**

Higher Grade Copper-Gold Drill Intercepts, Strike Extension - Llahuin Copper-Gold-Moly Project, Chile

Highlights:

- **2024 RC drilling program totals 2,728m drilled in 26 holes**
- **Includes results of:**
  - **24LHRC065 - 105m @ 0.64% CuEq from surface to EOH, incl. 16m @ 0.85% CuEq from surface and 26m @ 0.91% CuEq from 78m**
  - **24LHRC055 - 81m @ 0.49% CuEq from 2m to EOH, incl. 48m @ 0.58% CuEq from 30m**
  - **24LHRC058 – 132m @ 0.48% CuEq from surface incl. 60m @ 0.67% CuEq from surface**
  - **24LHRC048 - 122m @ 0.41% CuEq from 2m, incl. 48m @ 0.52% CuEq from 66m**
  - **24LHRC051 - 16m @ 0.51% CuEq from 102m**
  - **Further drill results pending**
  - **Diamond drilling testing potential depth extensions in Q1 2025**
- **Strike 15% extension of the Cerro-Ferro system by a further 300m to 2.2km, remains open**
- **Magneto-Telluric (MT) survey field data acquisition for refinement of deep potentially large copper targets is complete**

Southern Hemisphere Mining Limited ("Southern Hemisphere" or "the Company") (ASX: SUH, FWB: NK4) reports the progress on expansion of its Llahuin Copper-Gold-Moly Project in Region IV Coquimbo, Chile.

Chairman Mr Mark Stowell reported:

"Our team at the Llahuin Copper-Gold-Moly Project continues to deliver with results like hole 24LHRC065 grading 105m @ 0.64% CuEq from surface to end of hole (EOH) and increasing grade at depth with 26m @ 0.91% CuEq from 78m. Several of these RC holes are now ready for diamond tails to advance the depth and grade potential.

The results reinforce the large scale of the Llahuin Copper-Gold-Moly deposit's to over 2.2km for Cerro-Ferro, and open along strike both north and south. Mineralisation is from surface, optimum for open-pit mining configuration, and results will be particularly interesting as we diamond drill deeper.

A more detailed Magneto-Telluric (MT) survey extending over and past the Cerro and Central deposits and covering the entire Curiosity Target is nearing completion.

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 upgraded Mineral Resource Estimate (MRE) 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."

RC Drilling Program 2024

The 2024 RC drill program completed a total of 2,728m drilled in 26 holes, 24LHRC044 to 069, and from depths of 53m to 168m.

Results to drill hole 24LHRC065 are reported herein, with results including:

- **105m @ 0.64% CuEq from surface to EOH, incl. 16m @ 0.85% CuEq from surface and 26m @ 0.91% CuEq from 78m - 24LHRC065**
- **132m @ 0.48% CuEq from surface incl. 60m @ 0.67% CuEq from surface – 24LHRC058**
- **81m @ 0.49% CuEq from 2m to EOH, incl. 48m @ 0.58% CuEq from 30m - 24LHRC055**
- **120m @ 0.42% CuEq from 2m, incl. 58m @ 0.49% CuEq from 66m - 24LHRC048**
- **16m @ 0.51% CuEq from 102m - 24LHRC051**

These have resulted in the extension of the strike of the Cerro-Ferro system by a further 300m to 2.2km, and open potentially to the north and the south of Ferro.

These results further add to the results from the 2023 drilling campaign which included:

- **156m at 0.51% CuEq from surface in 23LHRD027, incl. 82m at 0.67% CuEq from 46m and 26m at 0.75% CuEq from 48m**
- **136m at 0.47% CuEq from 42m in 23LHRD028, incl. 32m at 0.66% CuEq from 100m**

Assays for the remaining drill holes to 24LHRC069 are in progress at the laboratory and results will be reported in due course.

As shown above, the drilling to date is all shallow, from surface and over a large strike of 2.2km and open. This significantly advances the open pit potential of Llahuin, and validity of testing for longer term large underground mining scope. The area between the Cerro and Ferro deposits remains open for drilling to add significant tonnes to the project.

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 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, but will be subject to further studies for confirmation at the appropriate stage.

Many of the RC holes ended in mineralisation and were stopped early due to water ingress to ensure all RC samples collected were kept dry. These holes will be extended by diamond tails Q1-2.

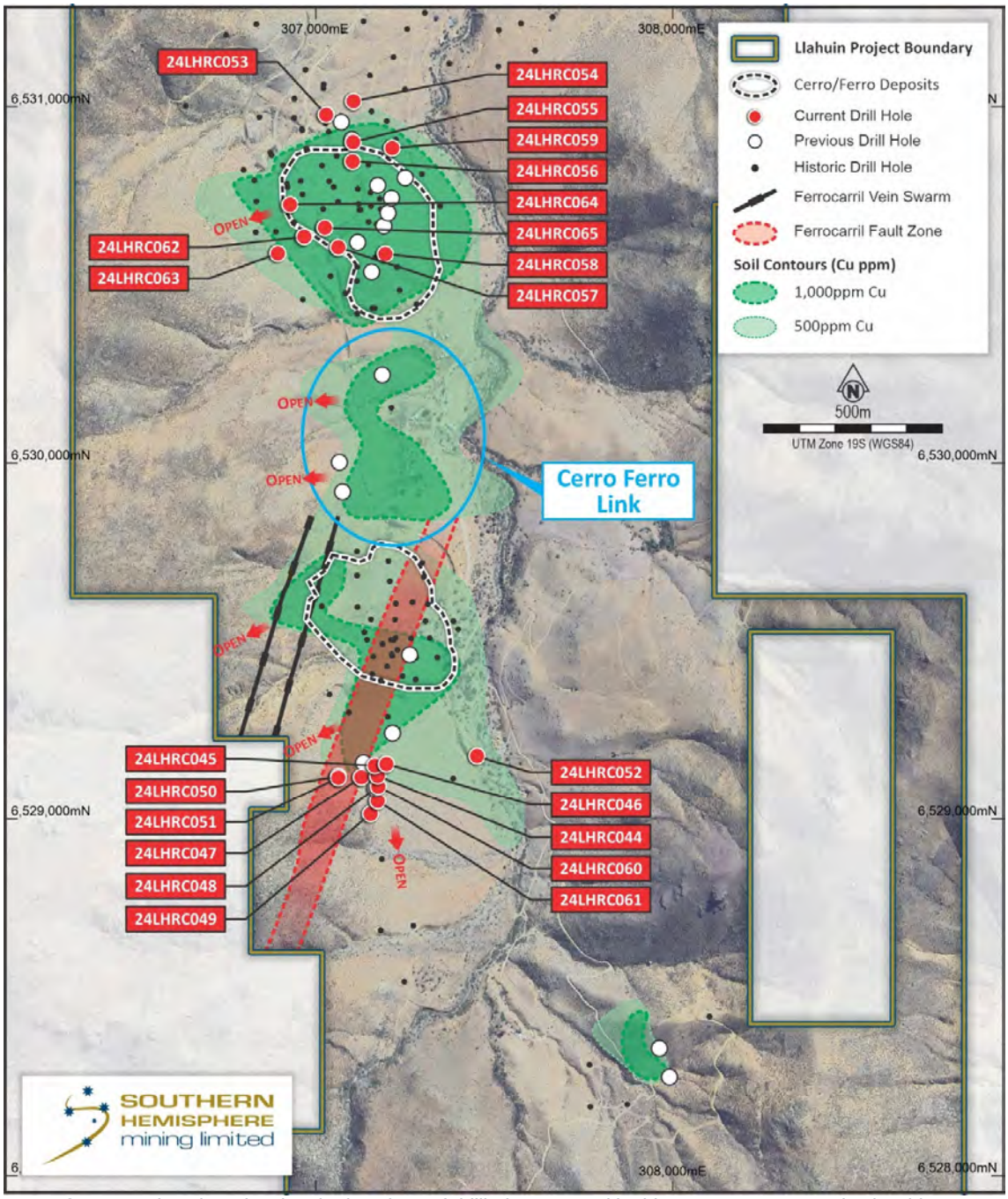

***Figure 1**. Plan view showing the locations of drillholes reported in this announcement. Holes in white are 2023 drill collars.*

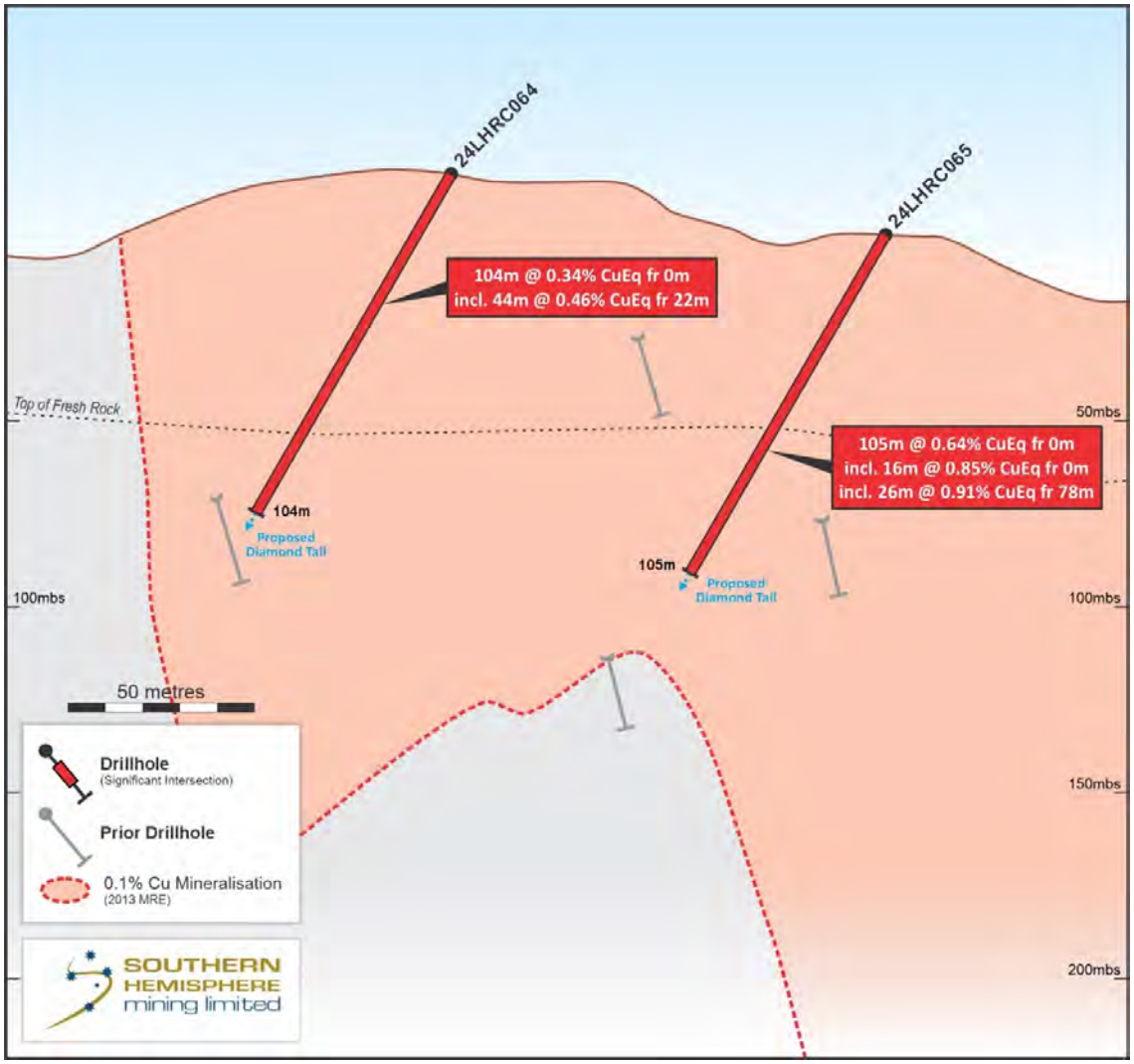

Figure 2. *Cross section showing holes 24LHRC064 and 24LHRC065, which are both planned for diamond tails in the upcoming drilling campaign.*

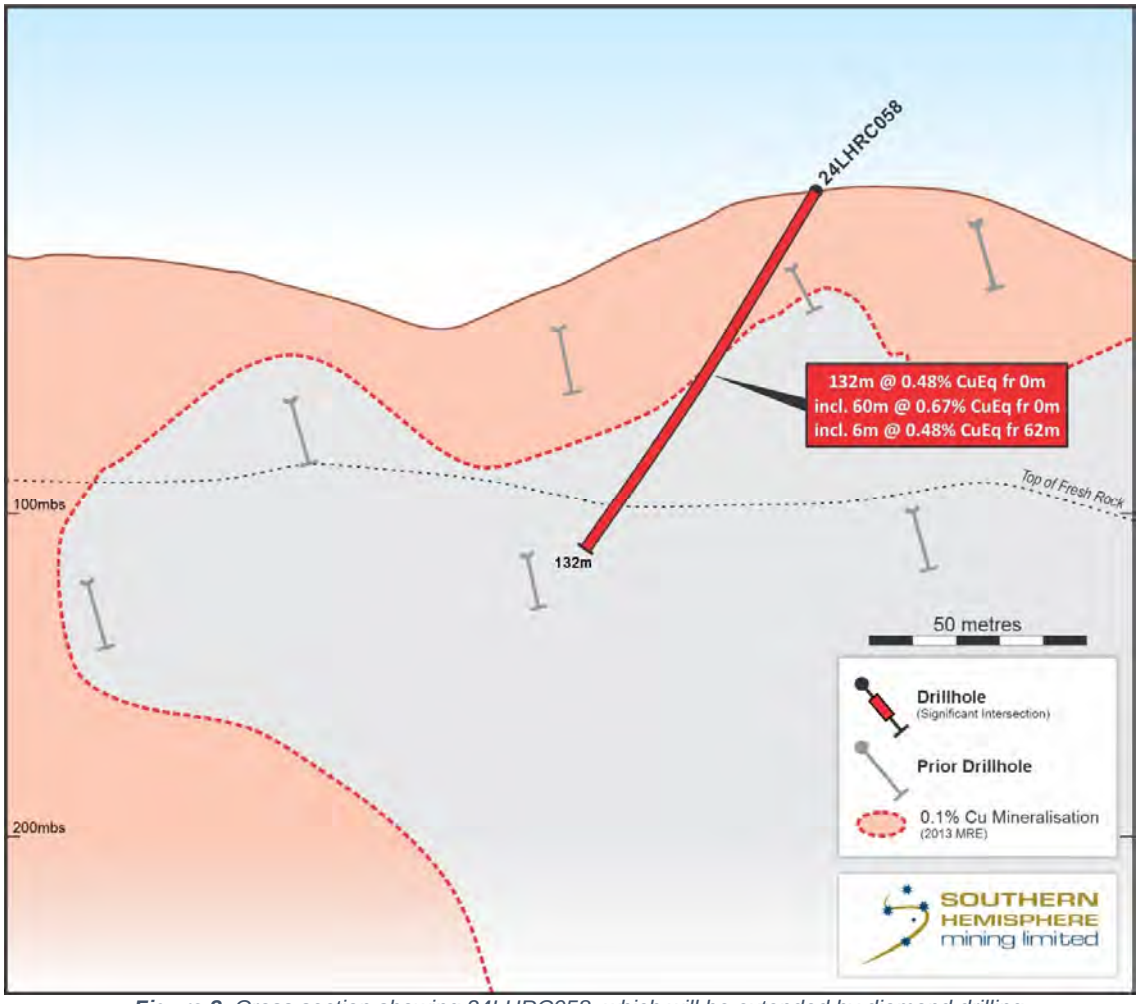

Figure 3. *Cross section showing 24LHRC058, which will be extended by diamond drilling.*

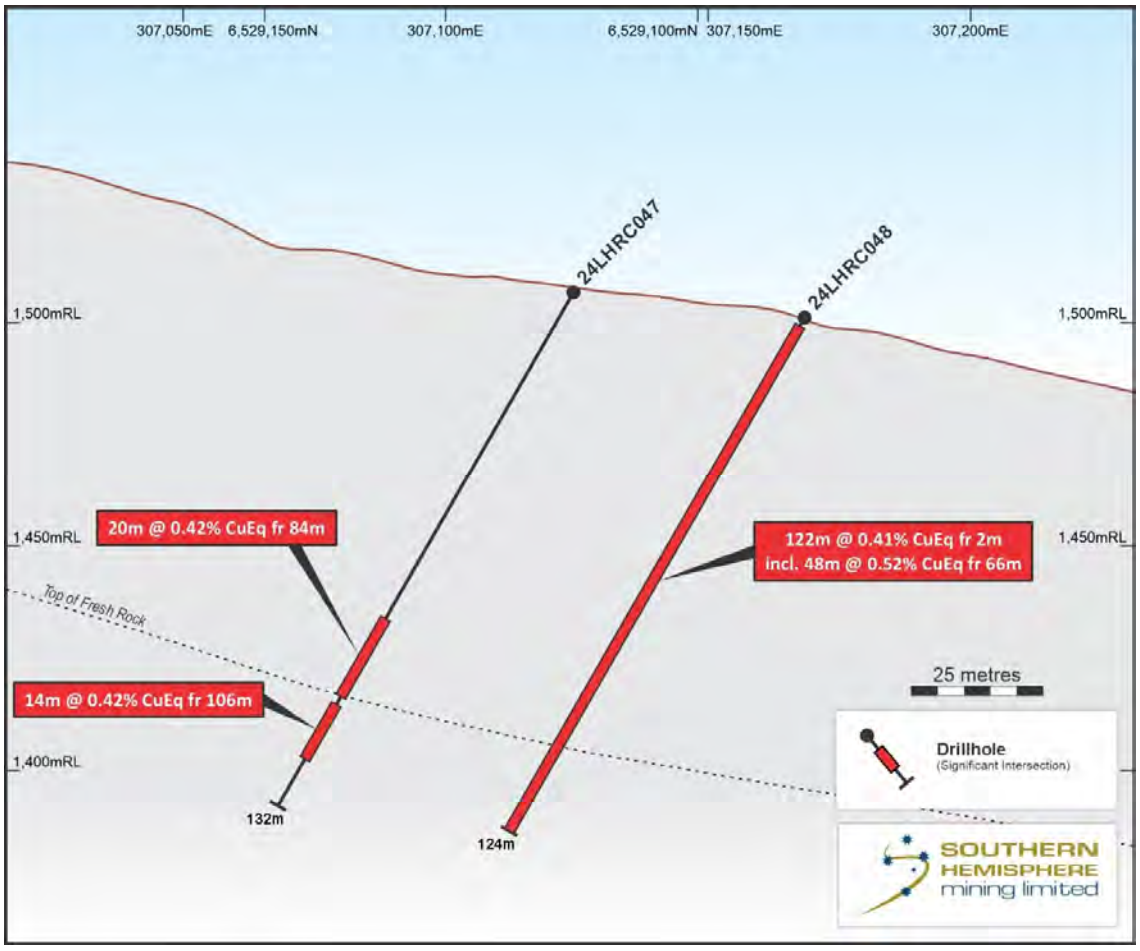

Figure 4. *Cross section showing 24LHRC047 and 24LHRC048. This is a new area of mineralisation outside of the current Mineral Resource, potentially adding tonnage.*

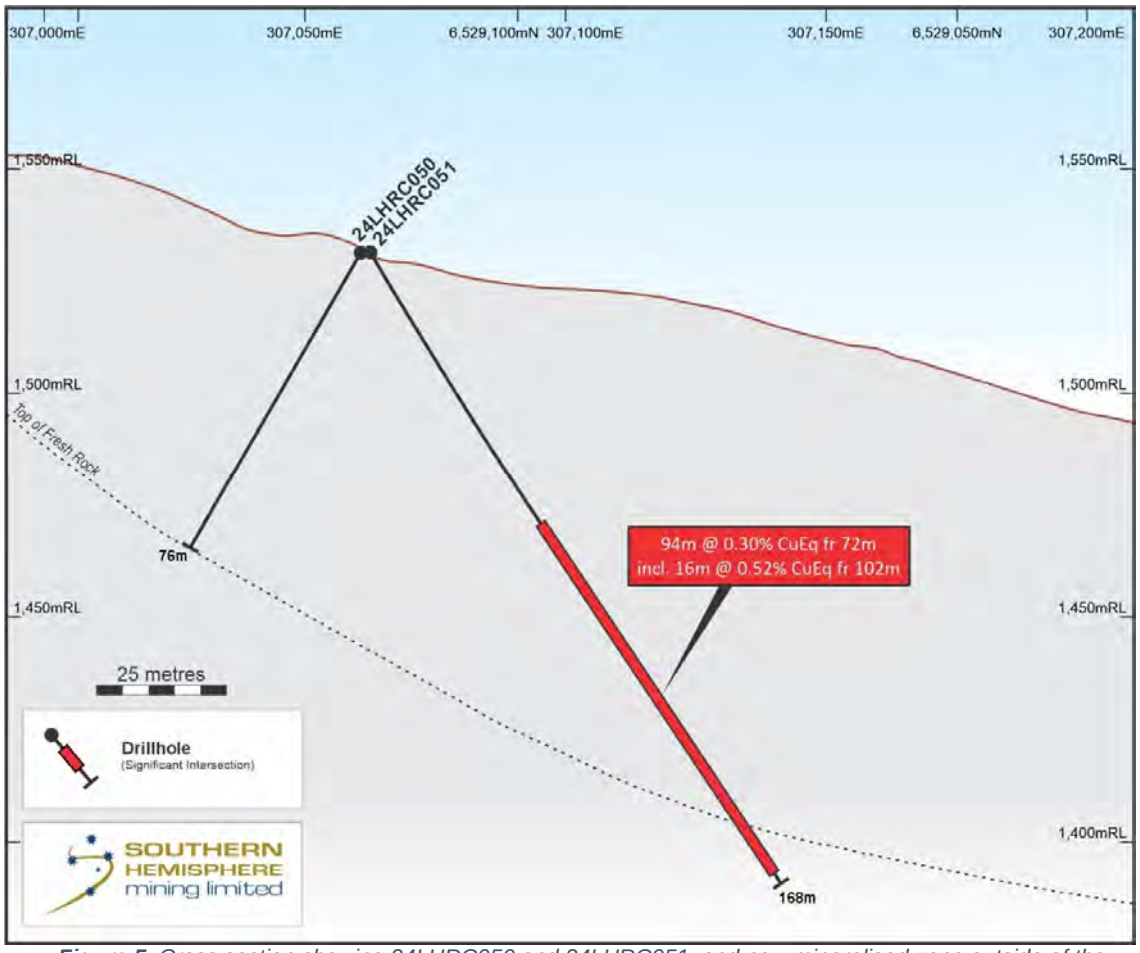

***Figure 5**. Cross section showing 24LHRC050 and 24LHRC051, and new mineralised zone outside of the current Mineral Resource.*

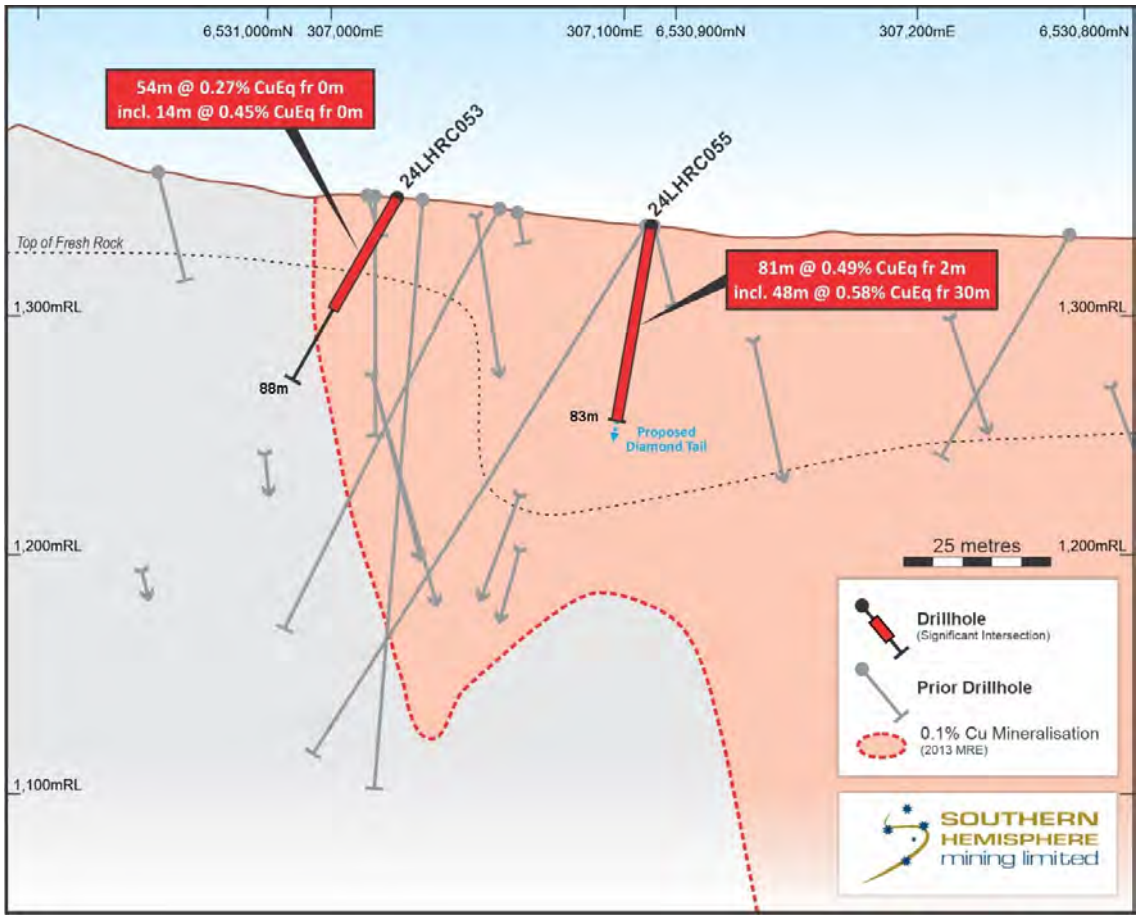

***Figure 6**. Cross section showing 24LHRC053 and 24LHRC055. 24LHRC055 will be extended with a diamond tail.*

Regional Context

Llahuin is located 8km east of the El Espino project, which is in construction. This project is owned by Pucobre (a Santiago listed copper producer) and Resource Capital Funds as minority partner. Annual planned production of 26,000t Cu and 13,000oz Au per annum is from a ~5mtpa throughput plant. The CAPEX is approximately US$490m. (www.pucobre.cl)

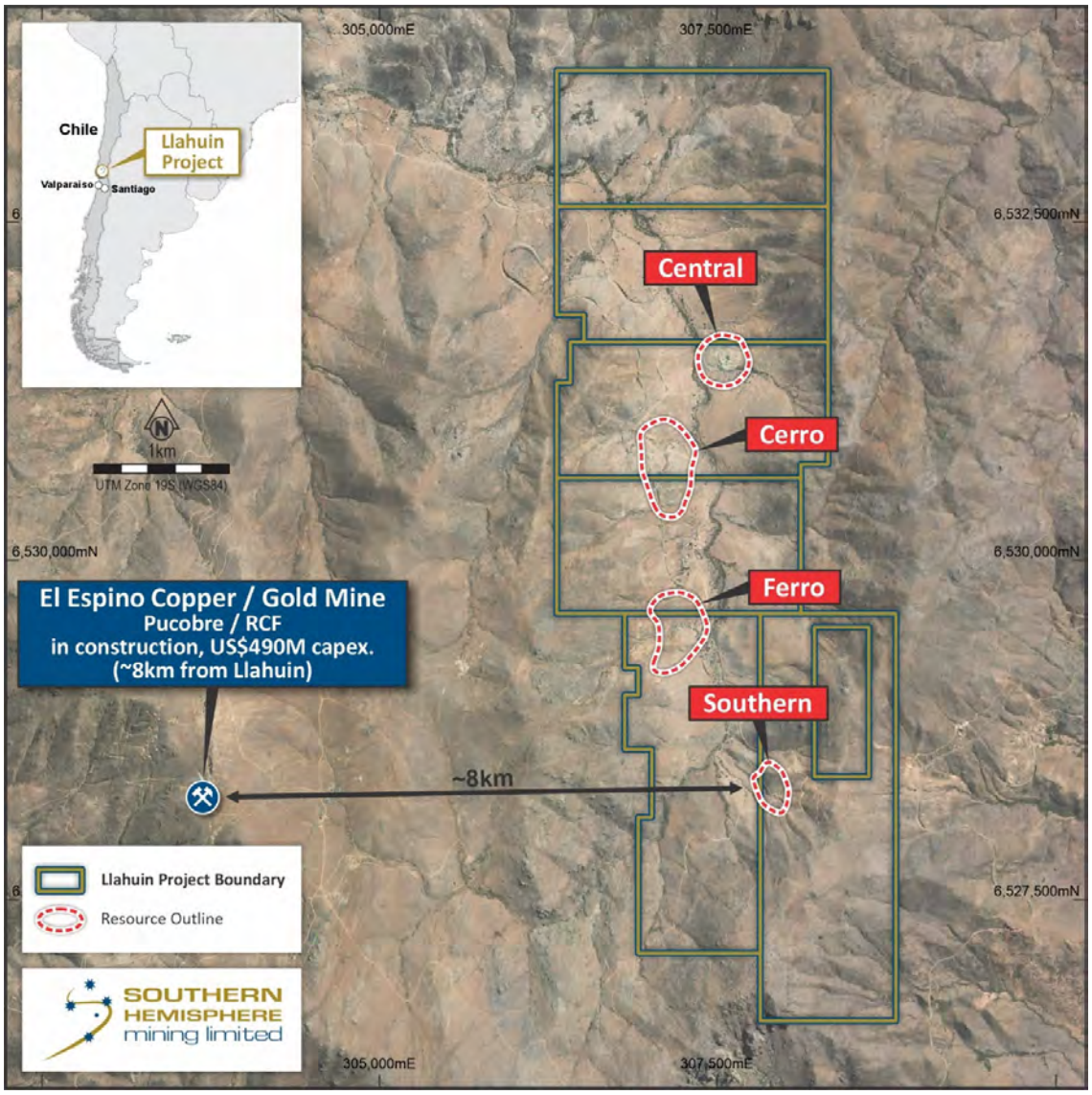

Figure 7. *Map showing the location of Llahuin and El Espino project locations.*

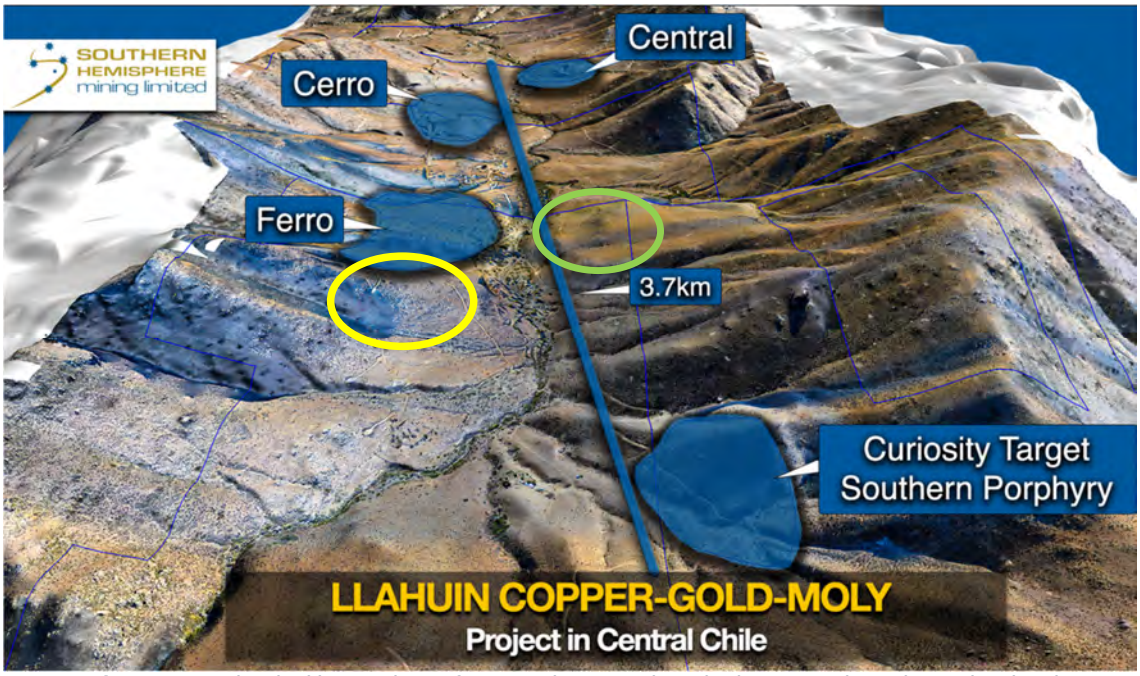

***Figure 8**. 3D view looking northeast from Southern Porphyry (SP) to Central Porphyry, showing the scale of the Llahuin mineralising system with Ferro extension in yellow circle, and the newly identified East Porphyry zone in the green circle (colluvium covered up to 5m deep).*

The Magneto-Telluric Deep Target Study

Magneto-telluric (MT) data acquisition at the site for refinement of deep large copper targets has been completed and the data is being processed and integrated with the Company's existing MT data covering part of the Curiosity Target in the Southern Porphyry done some years ago.

The MT dataset will be integrated with and interrogated against the existing IP, aeromagnetic, and geochemical prospectivity mapping datasets. The aim is to identify new "blind" shallow targets under the colluvial cover sequence covering most of the area in Figure 8 above, and augment and refine the deeper targets beneath Cerro/Ferro and Curiosity.

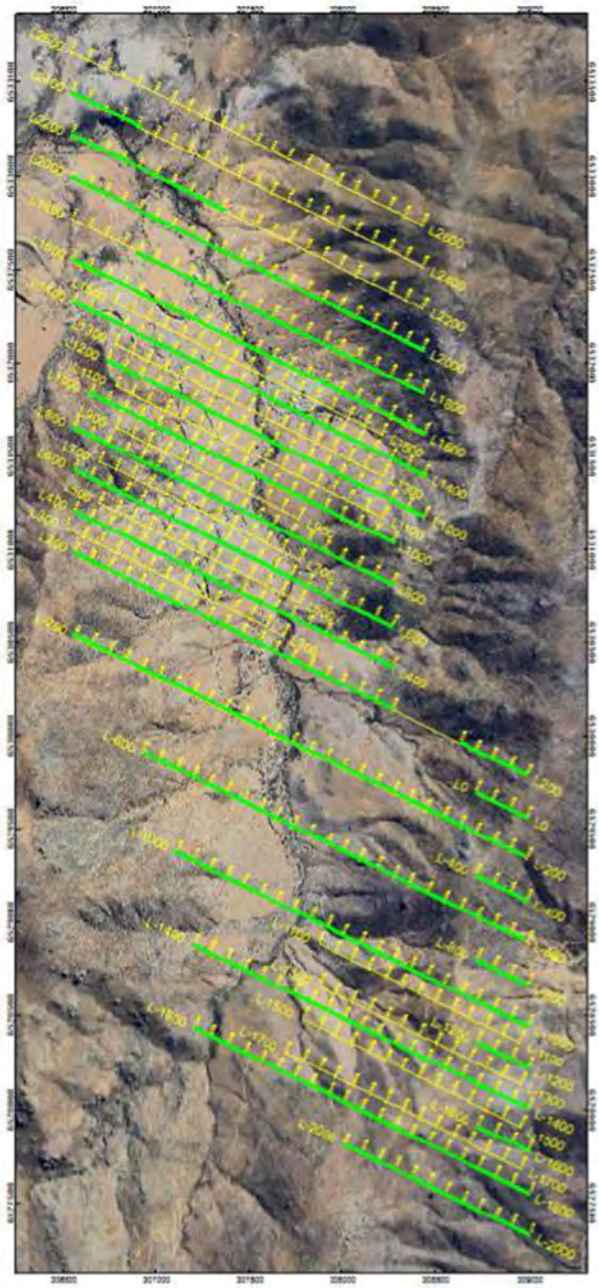

***Figure 9**. MT data collection – green lines are the completed survey. Infill yellow lines recently determined not required.*

Figure 10. *MT equipment in operation at Llahuin.*

The deeper targets emerging beneath Curiosity and Cerro/Ferro compare with the geometry and development stage of the Filo Del Sol deposit (Filo Mining-Argentina) in 2018. After 2018, deeper drilling was completed at Filo Del Sol, transforming the project.

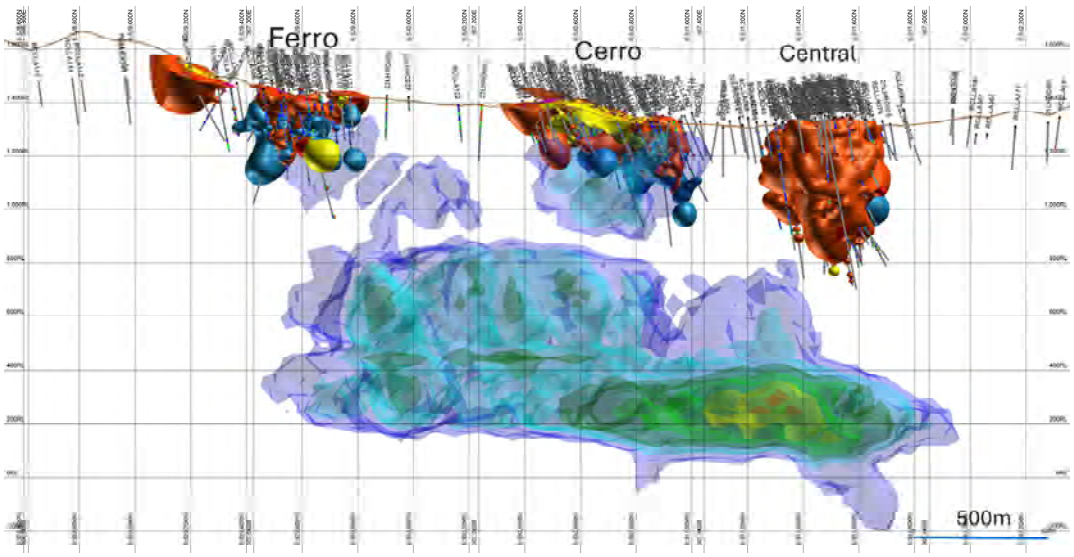

Figure 11*. Long section through Central Porphyry to Ferro, showing the conceptual fathom geochemical models, and implicit geochemical models based on existing drilling. Note the similar geometries of the following examples from the Filo Del Sol deposit below. (Filo Mining - TSX Presentation dated 2/2/2022).*

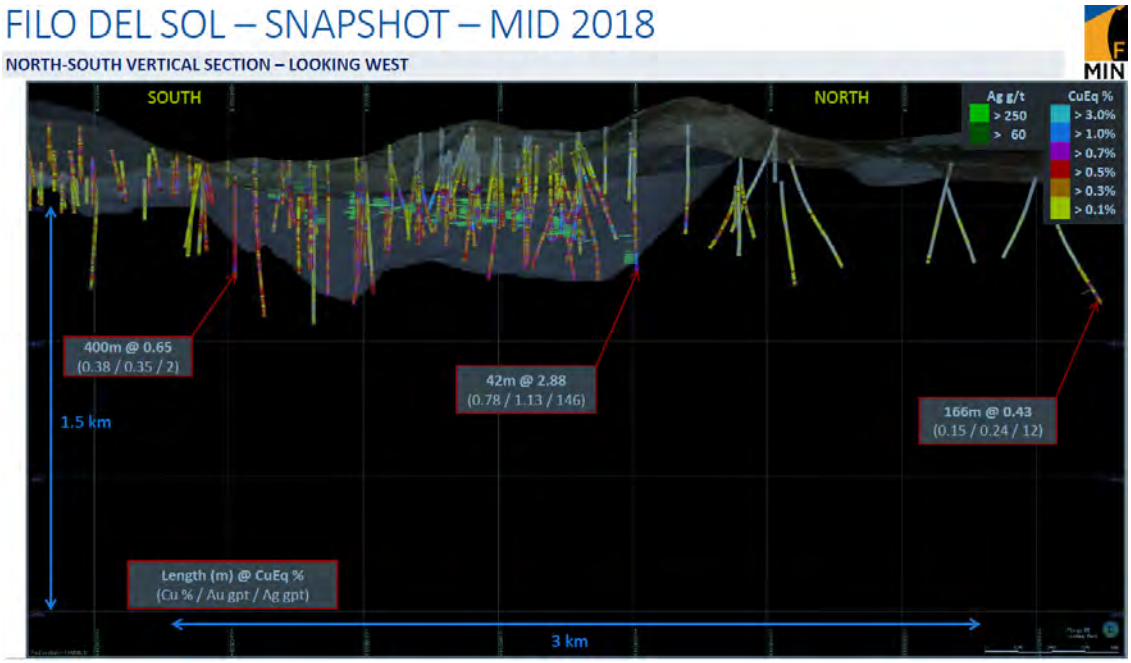

***Figure 12**. Filo Del Sol as at 2018, at a similar scale to Figure1.*

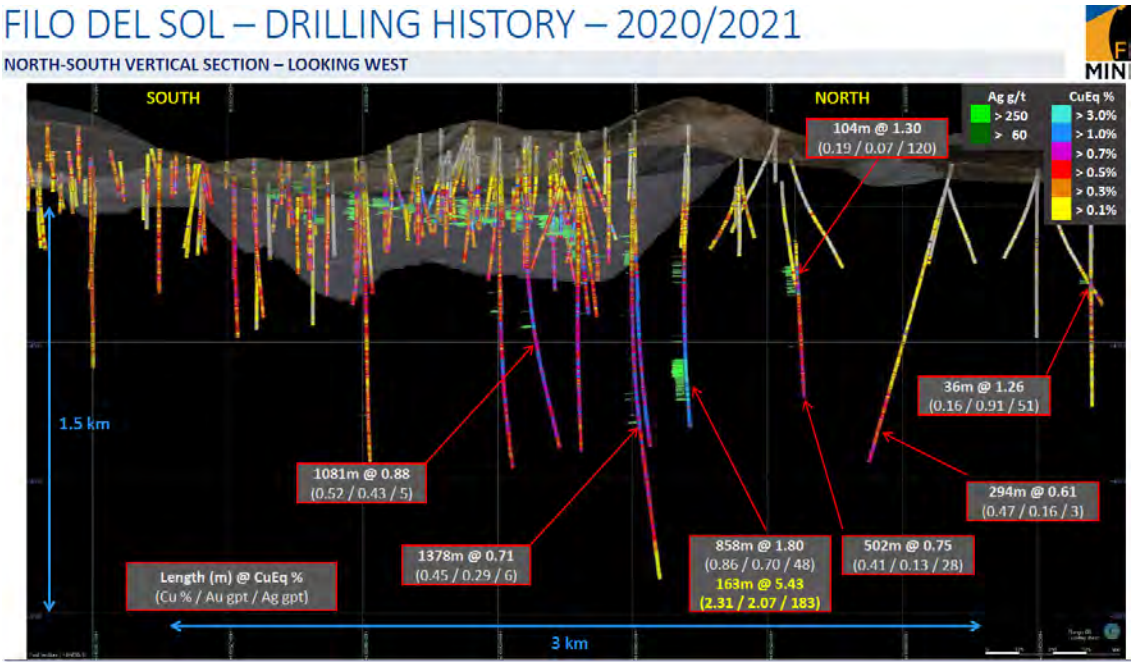

***Figure 13**. Update on Figure 2 as of 2021.*

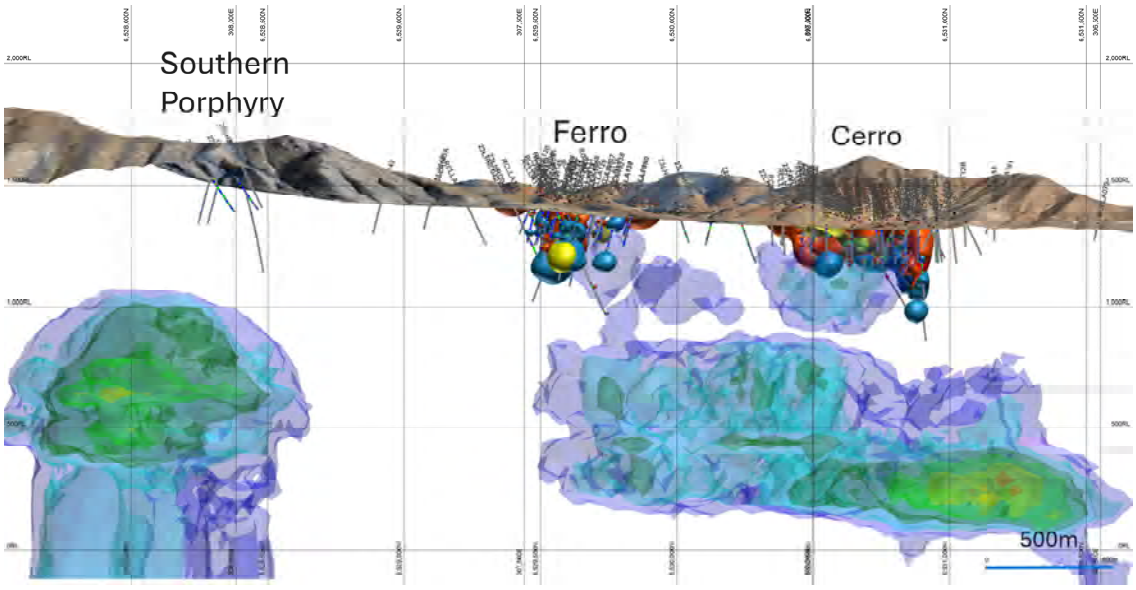

***Figure 14**. A similar long section to Figure 1, this time showing from Southern Porphyry (Curiosity Target at depth) to Cerro, showing similar spatial relationships.*

Diamond Drilling

Once all results are received and geological modelling is updated, diamond tails and deeper diamond holes will be commenced in order of priority value add.

Further results will be reported in due course.

Approved by the Board for release.

CONTACTS:
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Prior company announcements results of which included herein:
ASX 15 January 2024 156m @ 0.51% CuEq
ASX 13 December 2024: Interim Drilling Results – Amended

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%	K%	P%	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.

TABLE OF DRILL RESULTS

Hole_ID	M_from	M_to	INTERVAL	Cu_plot_%	Mo_plot_ppm	Au_plot_ppm	TYPE	CuEq%
24LHRC044	0	42	42	0.11	22	0.06	AT	0.18
24LHRC044	0	2	2	0.27	16	0.13	INCLUDING	0.41
24LHRC045	0	102	102	0.23	34	0.09	AT	0.34
24LHRC045	2	30	28	0.32	23	0.08	INCLUDING	0.42
24LHRC045	72	90	18	0.25	70	0.11	INCLUDING	0.41
24LHRC046	0	4	4	0.12	9	0.03	AT	0.16
24LHRC046	36	40	4	0.04	17	0.08	AT	0.13
24LHRC047	84	104	20	0.22	33	0.18	AT	0.42
24LHRC047	106	120	14	0.25	166	0.08	AT	0.43
24LHRC048	**2**	**124**	**122**	**0.25**	**40**	**0.13**	**AT**	**0.41**
24LHRC048	**66**	**114**	**48**	**0.32**	**46**	**0.17**	**INCLUDING**	**0.52**
24LHRC048	116	124	8	0.16	247	0.04	INCLUDING	0.34
24LHRC049	78	82	4	0.26	2	0.08	AT	0.35
24LHRC050	NSI							
24LHRC051	72	166	94	0.20	15	0.09	AT	0.30
24LHRC051	**102**	**118**	**16**	**0.35**	**7**	**0.16**	**INCLUDING**	**0.52**
24LHRC052	2	14	12	0.08	4	0.04	AT	0.13
24LHRC052	16	22	6	0.13	3	0.02	AT	0.15
24LHRC052	46	48	2	0.07	4	0.03	AT	0.10
24LHRC053	0	54	54	0.21	6	0.05	AT	0.27
24LHRC053	0	14	14	0.38	4	0.06	INCLUDING	0.45
24LHRC054	NSI							
24LHRC055	**2**	**83**	**81**	**0.22**	**112**	**0.20**	**AT**	**0.49**
24LHRC055	**30**	**78**	**48**	**0.24**	**172**	**0.23**	**INCLUDING**	**0.58**
24LHRC056	0	90	90	0.18	64	0.15	AT	0.37
24LHRC056	66	72	6	0.21	121	0.23	INCLUDING	0.53
24LHRC056	80	90	10	0.22	107	0.19	INCLUDING	0.49
24LHRC057	4	56	52	0.21	18	0.20	AT	0.44
24LHRC058	0	132	132	0.16	6	0.30	AT	0.48
24LHRC058	0	60	60	0.21	4	0.43	INCLUDING	0.67
24LHRC058	62	68	6	0.14	7	0.41	INCLUDING	0.58
24LHRC059	36	42	6	0.29	91	0.06	AT	0.40
24LHRC059	56	62	6	0.16	121	0.15	AT	0.39
24LHRC059	58	60	2	0.28	196	0.32	INCLUDING	0.73
24LHRC060	4	114	110	0.19	36	0.10	AT	0.32
24LHRC060	12	30	18	0.30	5	0.20	INCLUDING	0.52
24LHRC061	26	132	106	0.26	6	0.11	AT	0.38
24LHRC061	40	94	54	0.35	1	0.13	INCLUDING	0.48
24LHRC062	0	106	106	0.18	36	0.14	AT	0.35
24LHRC062	38	74	36	0.24	43	0.20	INCLUDING	0.47
24LHRC063	0	76	76	0.12	39	0.11	AT	0.26
24LHRC063	28	38	10	0.16	2	0.20	INCLUDING	0.37
24LHRC064	0	104	104	0.18	22	0.14	AT	0.34
24LHRC064	22	66	44	0.25	10	0.20	INCLUDING	0.46
24LHRC065	**0**	**105**	**105**	**0.26**	**60**	**0.33**	**AT**	**0.64**
24LHRC065	**0**	**16**	**16**	**0.28**	**14**	**0.52**	**INCLUDING**	**0.85**
24LHRC065	**78**	**104**	**26**	**0.29**	**194**	**0.48**	**INCLUDING**	**0.91**

Copper equivalent calculation is determined using the following metal prices and without metallurgical recovery %:
– Copper US$3.50/lb, Gold US$2550/oz and Molybdenum US$20/lb with no recovery factors applied.

DRILL COLLAR CO-ORDINATES IN UTM, DEPTH & AZIMUTH

HOLE ID	X	Y	Z	Max Depth	Azimuth	Dip from North
24LHRC044	307172	6529121	1496	86	300	-75
24LHRC045	307164	6529149	1512	116	300	-60
24LHRC046	307199	6529153	1474	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	1350	88	300	-60
24LHRC054	307105	6531015	1340	76	300	-60
24LHRC055	307103	6530899	1338	83	300	-80
24LHRC056	307101	6530845	1339	90	300	-60
24LHRC057	307062	6530604	1385	56	300	-60
24LHRC058	307194	6530586	1410	132	300	-60
24LHRC059	307213	6530883	1332	76	230	-60
24LHRC060	307174	6529091	1503	114	300	-76
24LHRC061	307172	6529049	1509	132	300	-59
24LHRC062	306966	6530634	1405	106	60	-76
24LHRC063	306892	6530587	1395	76	45	-60
24LHRC064	306926	6530724	1410	104	300	-60
24LHRC065	307024	6530659	1398	105	300	-60

JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques & Data
(Criteria in this section apply to all succeeding sections)

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 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 multi element assays using ICPMS and OES. • RC samples for drilling completed in 2021 and 2022 at Llahuin were 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

Criteria	JORC Code explanation	Commentary
		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 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. • 2024 RC drill samples were collected on a 2m basis and split using a ri9ffle splitter at the drilling rig. The bulk samples are weighed prior to splitting and RC recovery was deemed to be averaging about 95%. The split sample are then bagged into sealed polyweave bags and transported by company personnel to Llapel where they are loaded onto an ALS contracted transported and driven directly to the ALS facility in Santiago. The samples are logged into the Labs system and then fine crushed to -2mm then a 250 gram split is pulverised to better than 85% passing -75µm. A 30 gram charge is taken for industry standard fire assay with ICPMS read. The multielement assay uses a four acid digest and the 48 elements are read by a combination of ICPMS and ICPOES. • 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

Criteria	JORC Code explanation	Commentary

to four acid digest and ICPMS multi-element assay.

- Soil samples were collected on a nominal 200 x 50m grid and infilled to 100 x 25m in anomalous areas for copper or gold. The procedure involved digging a 20cm hole to avoid potential surface contamination then sieving a 200-300 sample of -2mm sieved soil into a paper geochem type bag sealed on site. A portion of this material is then loaded into a numbered chip tray with a gap between samples and is then read with a Vanta m series pXRF for multi-element including copper. A total of 210 samples were checked at the ALS laboratory in La Serena for copper. The Lab vs pXRF showed a 0.99 correlation coefficient which is considered to be an excellent correlation and from then on the pXRF was used for copper readings. All samples were analysed for gold by industry standard “fire assay” with an AA read.

Au-AA23	Ag-AA62	Cu-AA62
Au	Ag	Cu

REPORTABLE ELEMENTS AND RANGES

Method Code	Analyte	Unit	Lower Limit	Upper Limit
Au-AA23	Au	ppm	0.005	10.0

ME-MS61 Analytes and Reporting Ranges

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	Mo	ppm	0.05	10000
Na	%	0.01	10	Nb	ppm	0.1	500	Ni	ppm	0.2	10000

Criteria	JORC Code explanation	Commentary
		 • ALS Multielement package MEMS61for 2021 and 2022 and 2023 drilling • Pulp composites were collected from the Llahuin pulp library where exactly 10grams is measured by electronic scale and put into a new paper pulp bag for the required ten metre interval. The pulp composite is then mixed and read by a Olympus M series Vanta pXRF. Intervals were then selected for assay and a sample of the pulp composite is then sent for four acid digest ICPMS assay at ALS in Santiago.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Recent RC drilling was completed using a Schramm 685 RC drilling rig using a face sampling hammer with a 5.25inch diameter bit by R Muñoz drilling. • 2023 RC and diamond drilling was completed by DV Drilling from La Serena using 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, Geosupply 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 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*	• The 2024 drilling program was drilled by RMonoz using a Schramm 685 RC drilling rig equipped with a 350psi/1250cfm compressor and a SULLAIR – 900XHH/1150XH auxiliary compressor. Samples were collected on a 2m basis into bags and weighed to allow approx. recovery to be calculated.

Criteria	JORC Code explanation	Commentary
	and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• 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 relationship between sample recovery and grade as sample recovery is excellent. A booster and auxiliary compressor were utilized to keep all RC samples dry. The 2023 RC drilling utilized a single compressor and as such 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.
Logging	• *Whether core and chip samples have been geologically and*	• The samples were geologically logged on site. Logging was both qualitative

Criteria	JORC Code explanation	Commentary
	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.*	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. Historical 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 at Colina 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 size of the RC (30kg/metre vs 3kg for the core) is a more representative sample.
Quality of assay data and	• *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*	• 2024 assays were a fire assay for gold with ICPMS read and four acid digest for multielement inc copper with an ICPMS read. Appropriate standards and blanks at a rate of 1:20 were inserted into the assay stream. • The assay technique utilized is “industry Standard” fire assay with AAS finish for gold which is a total digestion technique.

Criteria	JORC Code explanation	Commentary
laboratory tests	*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.*	• For the recent RC drilling appropriate industry standard CRM' s and blanks were inserted into the sample stream at a rate of approximately 1:20 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 1:40. • 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 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.
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 pre-existing 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

Criteria	JORC Code explanation	Commentary
		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. • In October 2024 Steve Hyland of HGMC made a five day site visit reviewing drilling and sampling procedures and overall site geology. • 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 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.
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.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering*	• The drilling was done perpendicular to the **interpreted strike** of the mineralisation to reduce sampling bias.

Criteria	JORC Code explanation	Commentary
geological structure	*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.*	
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.
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 current QP Steve Hyland 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 Cretaceous intrusives (diorite) at Llahuin and potential IOCG type gold copper and gold mineralisation at Colina2.

Criteria	JORC Code explanation	Commentary
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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 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 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 $3.77/lb, Au $1,900/oz, Ag $23/oz and Mo at $17/lb.
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.

Criteria	JORC Code explanation	Commentary
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 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

Criteria	JORC Code explanation	Commentary
		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), Tl (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. • MT survey parameters and processing are described below • **CHJ # 2424 – Llahuin Audio-frequency Magneto-Telluric Survey** • Survey mode: Modified scalar and sparse tensor Audio-frequency Magneto-Tellurics (AMT) • Survey configuration: Twenty-three 200m-spaced survey lines, oriented at 116.2°, with a total of 34.7 line-km. Acquired with contiguous 100m E_x-field dipoles and sparse E_y-field dipoles nominally every 500m, and sparse H_x/H_y-field high band induction coils. Total of 347 Zxy|Zxx sites of which 73 also included Zyx|Zyy impedance data. Mutual magnetic field remote referencing. • Data acquisition: Full time series data acquisition, predominantly during daytime, with sampling rates of 32768Hz and 2048Hz, with some data also at sampling rates of 512 and 128Hz. Time series records of up to 2^{22} samples for each, repeated several times in the acquisition schedule. Timing provided by internal GPS-PPS. Impedance data was generally obtained between about 0.5 and 8000Hz. • Acquisition system: Advanced Geophysical Technologies' gDAS^{32} data acquisition system with Zonge ANT-6 and Geometrics G20k or G100k induction coils. Instrument calibrations and system checks carried out according to manufacturer's recommendations. • Data processing: Advanced Geophysical Technologies' gDASPro v.2.4 used for data management and processing. Processing based on the use of Fast Fourier Transforms with spectral averaging and stacking of cross- and auto-power spectra to enhance the estimations of impedance. Automated rejection of impedance estimates with lower coherency coefficients and data quality weightings is used prior to robust averaging. Data from the overlapping bands is re-sampled

Criteria	JORC Code explanation	Commentary
		to a consistent set of frequencies using a high-order spline. Results are saved to the SQLite database. Following final data review and editing, industry standard EDI format (SEG) files are generated. • Data quality: Zxy component (electric field along survey line) data had a median coherency of 0.96, with estimated errors in apparent resistivity of 0.8% and impedance phase of 0.11°. • Data modelling: 1D and 2D inversion models of the MT data are generated with Viridien's Geotools™ v.4.0.4 software. 3D inversion modelling is carried out though Geotools with RLM3D. The inversion model results are imported to Geosoft Oasis Montaj for presentation as sections, plan maps or 3D visualizations. Modelling incorporated Magneto-Telluric data from a previous survey carried out in 2012. • 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 **Metallurgical Testwork - Llahuin Copper-Gold Project** **Closed Loop Flotation Testwork (Diamond Drill Core Samples)** Sample | % of Resource | Feed Grade % Cu | Feed Grade g/t Au | Cu Recovery % | Au Recovery % | Concentrate Grade % Cu | Concentrat Grade g/t 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 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 diamond drilling of extensions to known mineralisation is planned for Llahuin in 2025. • Geochemical footprint modeling has been completed • Additional rockchip sampling is continuing following up copper gold molybdenum soil anomalies. • Detailed 1:1000 scale geological mapping