SOUTHERN HEMISPHERE mining limited
ACN 140 494 784

ASX Announcement **19 February 2024**

SUH Drilling Continues to Expand the Llahuin Copper-Gold Project, Chile

Highlights:

- **Assay results of all recent drilling at Llahuin have been received demonstrating advancements in scale of the Project with all targets intersecting mineralisation**
- **Significant intercepts include:**
  - **76m at 0.44% CuEq* in 23LHRD035 from surface, including 14m at 0.79% CuEq from surface**
  - **48m at 0.45% CuEq in 23LHRC042 from surface**
  - **12m at 0.66% CuEq in 23LHRC032 from surface**
  - **14m at 0.54% CuEq in 23LHRC029 from surface**
- **The link between Ferro and Cerro is further advanced by drilling warranting additional drilling to understand the scale**
- **Potential Cerro-Ferro Root-Stock/Feeder zone concept advancing for future drilling**
- **48m at 0.45% CuEq drilled Southeast of Ferro Deposit extends the Cerro-Ferro scale**
- **Mineralised system confirmed at the large Southern Porphyry target with up to 166m mineralised intercepts**

**CuEq means copper equivalent grade, calculated from concentrations of molybdenum, gold and copper, as discussed in the JORC2012 table in the appendix.*

Figure 1. RC and Diamond rigs operating at Cerro De Oro with Central Deposit in the grey rock/workings on the right side of the valley

Southern Hemisphere Mining Limited ("Southern Hemisphere" or "the Company") (ASX: SUH, FWB: NK4) reports encouraging results from expansion drilling at its Llahuin Copper-Gold project in central Chile.

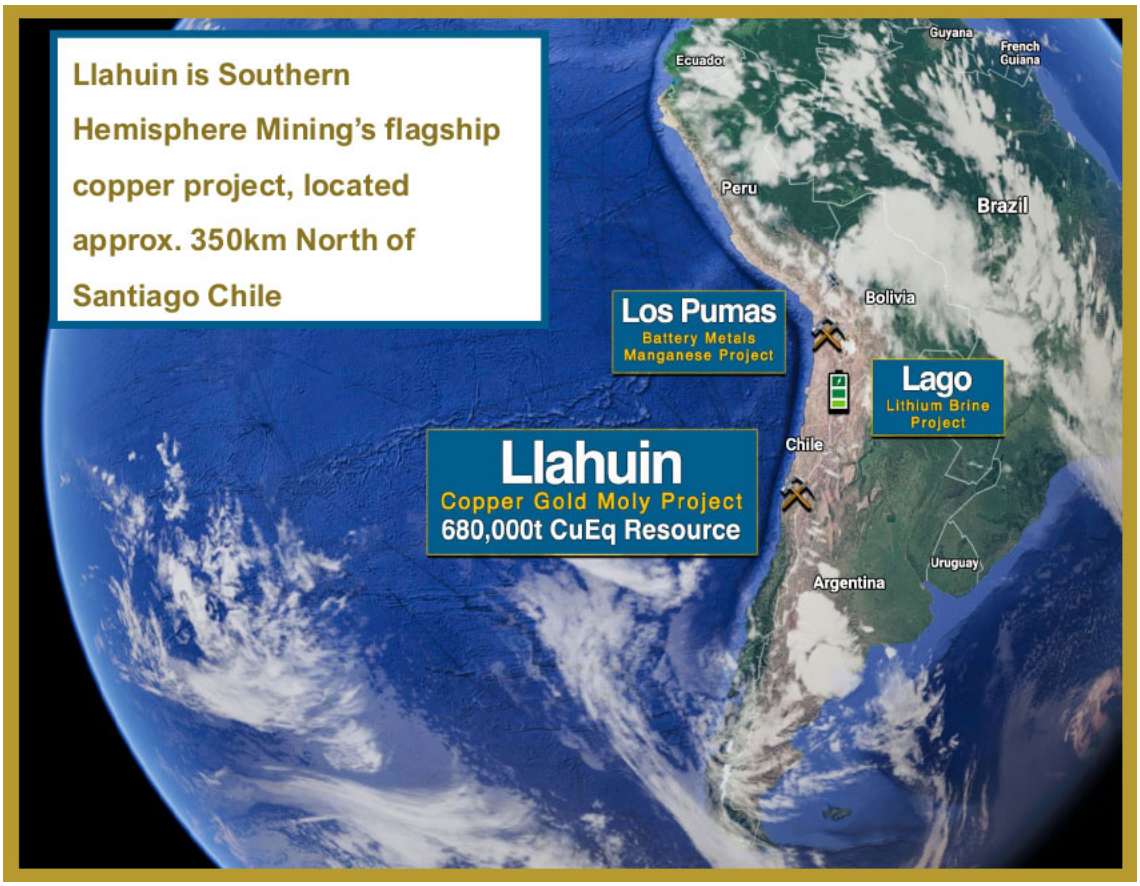

Figure 2. Location map of SUH projects in South America.

Results Discussion

Laboratory results for the final fourteen holes of the seventeen-hole program have been received.

1. The link between Cerro and Ferro is advanced by 23LHRD036, 23LHRC037, and 23LHRD043.
2. New drillhole grades continue to exceed historical grades in the Cerro and Ferro deposits, particularly with regard to the historical RC drilling.
3. Broad porphyry style mineralisation was intersected by two holes at the large greenfields Southern Porphyry target.

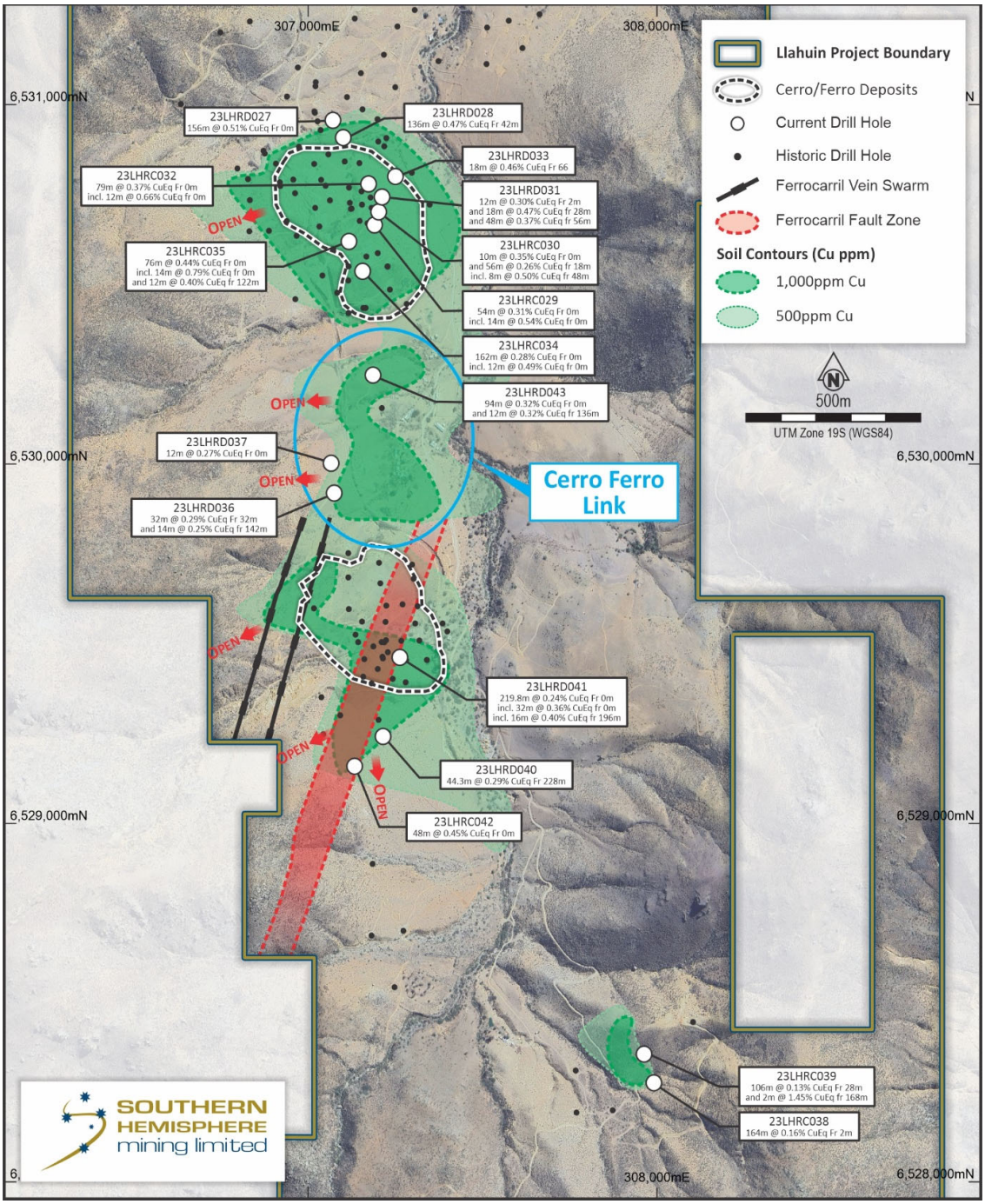

Figure 3. Plan view, showing collar locations, surface geochemical anomalies, and target models discussed in this announcement. Significant intercepts are shown in the Cerro-Ferro Link to demonstrate the exploration potential there.

More detail on the drill results of each particular target are discussed below:

Cerro Copper-Gold Deposit

These drill holes below were drilled to infill existing resources and provide better geological structural information with some orientated diamond core below the RC collars.

All holes drilled at Cerro returned significant intercepts of copper-gold and molybdenum mineralisation.

Historical RC drilling appears to show significantly lower grades than recent drilling. This suggests that the drilling directions were not optimal in the historical drilling and that there could be sampling bias, with most of the historical holes drilled wet. These issues present a significant opportunity to upgrade the Mineral Resource Estimate (MRE) at the Cerro deposit.

Results include:

- 23LHRC032, 12m at 0.66% CuEq from surface as part of a larger intersection of 79m at 0.37% CuEq from surface.
- 23LHRC030, 10m at 0.35% CuEq from surface, including 56m at 0.26% CuEq from 18m and 8m at 0.50% CuEq from 48m.
- 23LHRC029, 14m at 0.54% CuEq from surface as part of 54m at 0.31% CuEq from surface.
- 23LHRD034, 12m at 0.49% CuEq from surface as part of 162m at 0.28% CuEq from surface.
- 23LHRD035, 14m at 0.70% CuEq from surface as part of 76m at 0.44% CuEq from surface and 12m at 0.40% CuEq from 122m.

Cerro Cross Sections

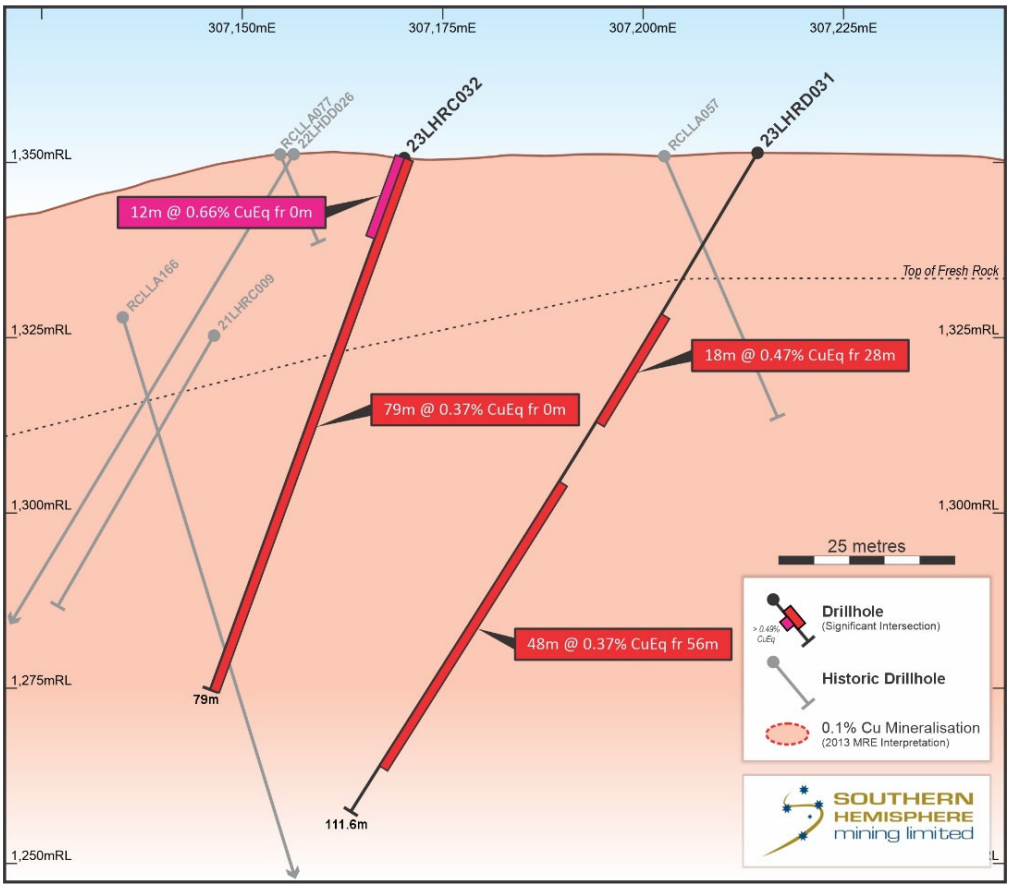

Figure 4. Cross section through 23LHRD031 and 23LHRD032.

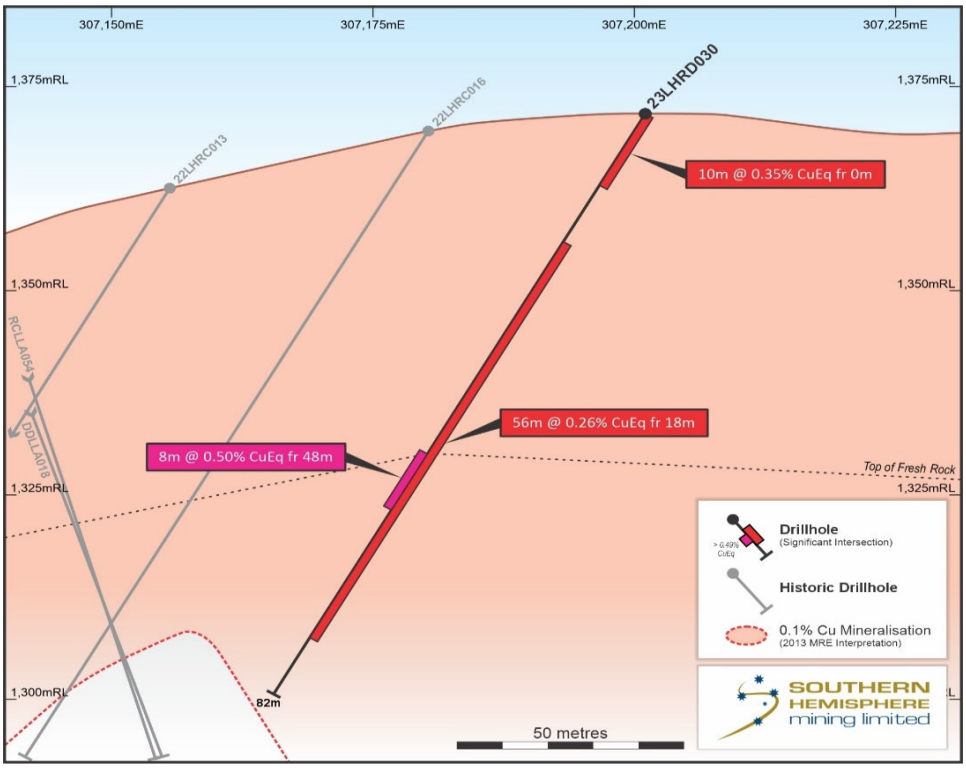

Figure 5. Cross section through 23LHRD034

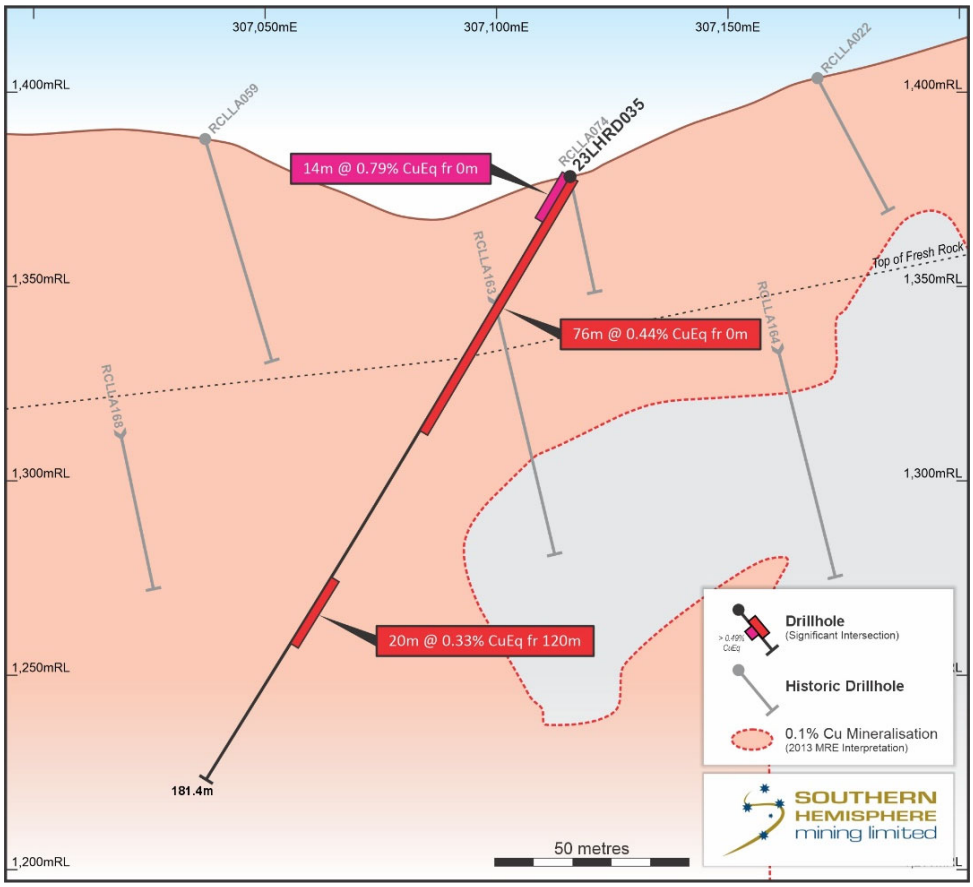

Figure 6. Cross section through 23LHRD035

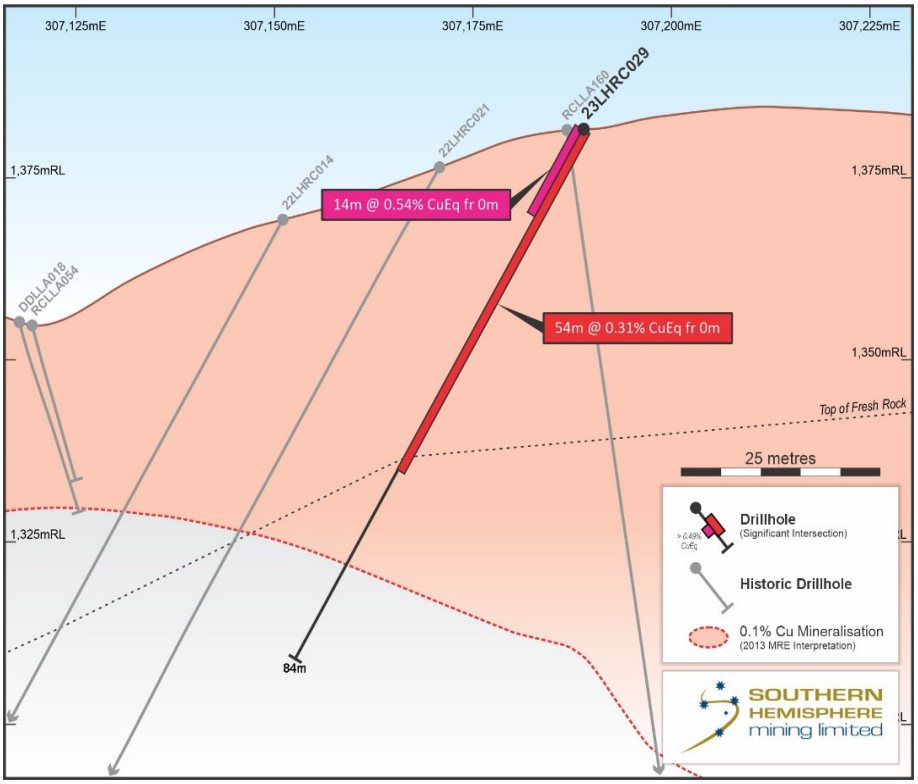

Figure 7. Cross section through 23LHRC029

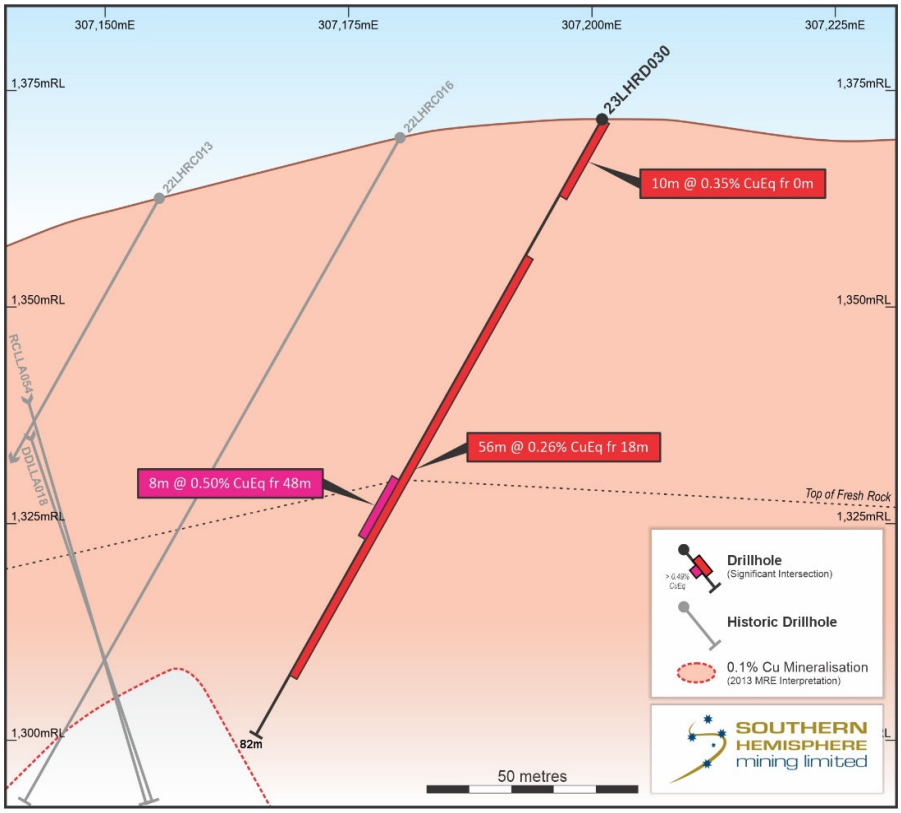

Figure 8. Cross section of 23LHRD030

Cerro-Ferro Copper-Gold Deposits Link

These drillholes were designed to test the western edge of the link between the Cerro and Ferro deposits and confirmed the geochemistry and geophysical interpretations. Next drilling locations will be across the higher geochemical anomaly East of these holes.

Three holes were drilled in the previously untested area between the Cerro and Ferro deposits. All holes returned significant mineralised intersections. The stand-out hole was 23LHRD043, which returned 94m at 0.32% CuEq from surface.

The results in this area represent a significant upside for the Project. The surface geochemical footprint of the Cerro-Ferro Link target is approximately 600m long (NS) by 400m wide (EW).

Importantly, these findings potentially confirm that Cerro and Ferro are a single mineralised system, spanning over at least a 1.9km strike length, running North-Northeast. This not only confirms the potential to increase the near surface MRE, combining Cerro and Ferro, but provides further confidence in the concept of a root stock or feeder zone beneath providing a deeper, potentially higher-grade zone for future drilling.

- 23LHRD036, 32m at 0.29% CuEq from 32m, and 14m at 0.25% CuEq from 142m.
- 23LHRC037, 12m at 0.27% CuEq from surface at the Southern Porphyry.
- 23LHRD040, 44.3m at 0.29% CuEq to EOH from 228m.
- 23LHRD043, 94m at 0.32% CuEq, including 12m at 0.24% CuEq from 136m.

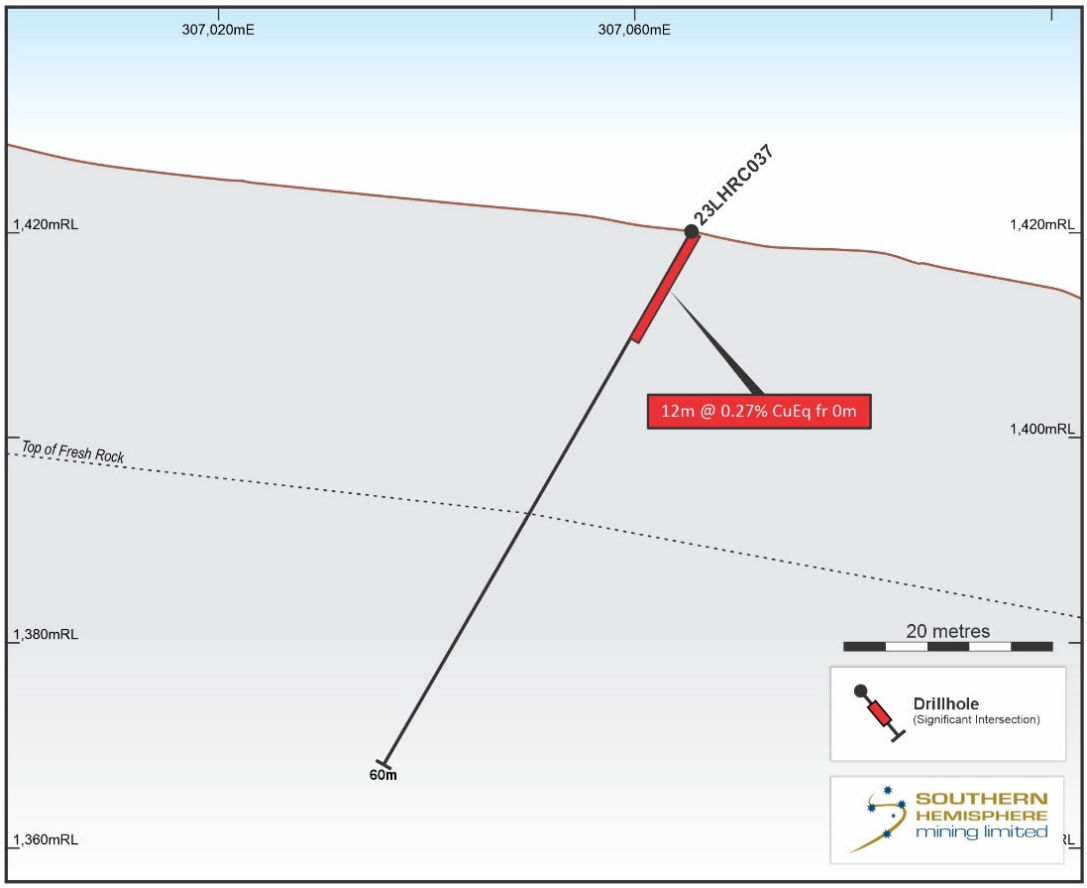

Figure 9. Cross section of 23LHRC037

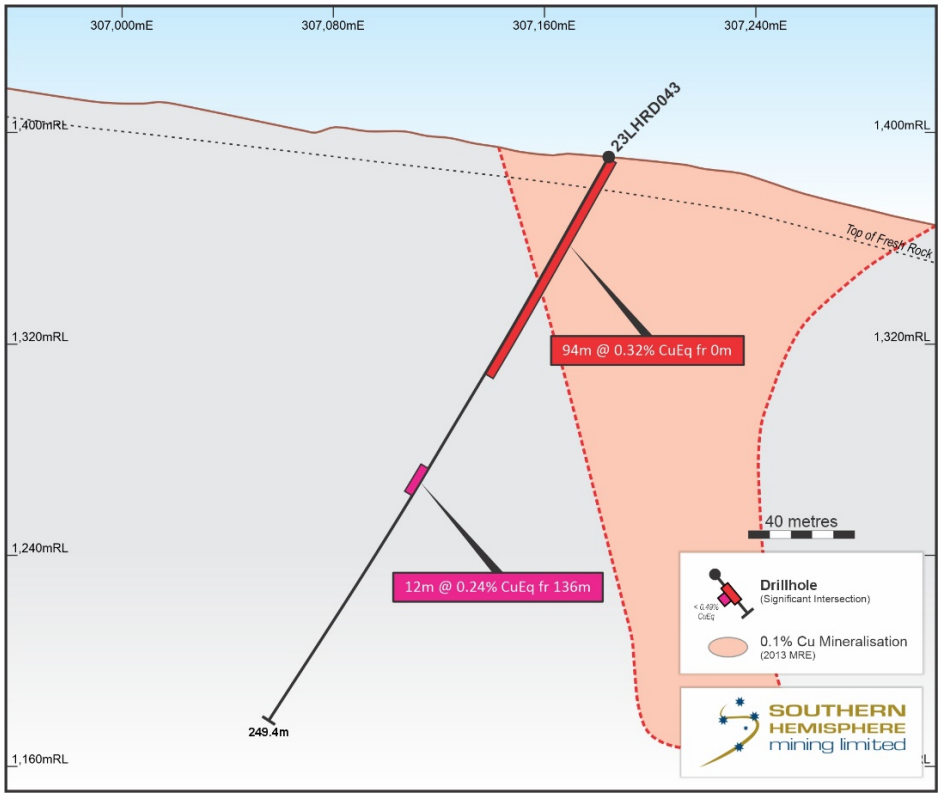

Figure 10. Cross section of 23LHRD043

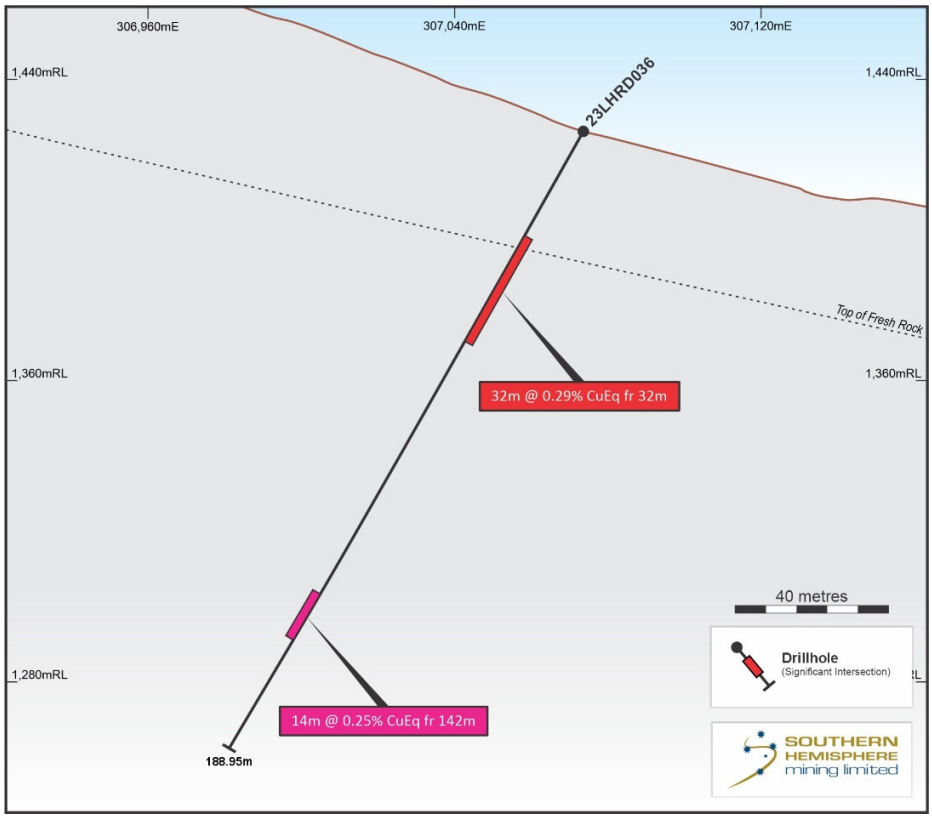

Figure 11. Cross section of 23LHRD036

Ferro Copper-Gold Deposit

Drillhole 23LHRD041 was designed to obtain orientated core through the Ferro orebody to assist with the structural interpretation. Hole 23LHRD042 was designed to test a geochemical extension of Ferro, and intersected higher grade than the existing model and remains open to the East and South. The hole location was also testing the western boundary of the target, so future drilling will be required to the East.

The results at Ferro follow a similar theme to those already outlined at Cerro validating the new approach to drilling orientations and techniques at both deposits.

Two drillholes at Ferro 23LHRD040 and 23LHRD041, were extended to intersect an interpreted fault zone, the "Ferrocarril Fault Zone". Both holes intersected the mineralised fault zone and ended in mineralisation. This is another high-priority target area for future drilling.

23LHRC042 extends the mineralisation at Ferro to the South. Mineralisation remains open in all directions from this position providing a significant drill target for 2024.

- 23LHRD041, 219.8m at 0.24% CuEq (from surface to end of hole), including 32m at 0.36% CuEq from surface, and 16m at 0.4% CuEq from 196m.
- 23LHRC042, 48m at 0.45% CuEq from surface.

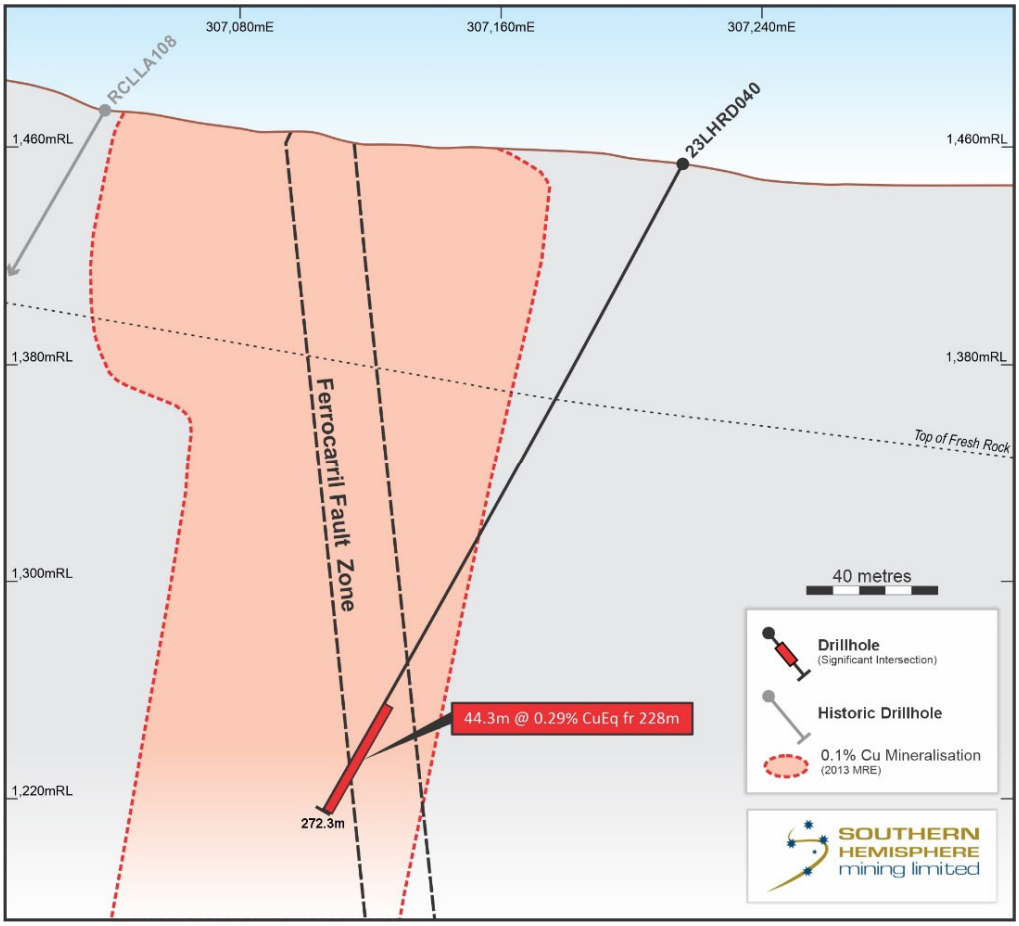

Figure 12. Cross section of 23LHRD040

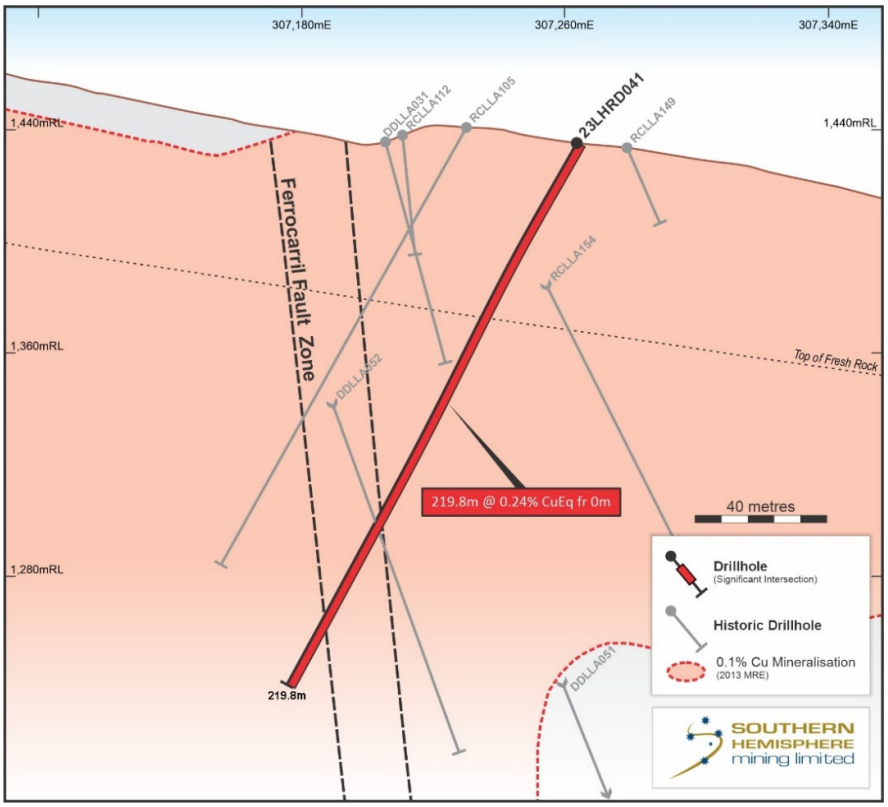

Figure 13. Cross section of 23LHRD041

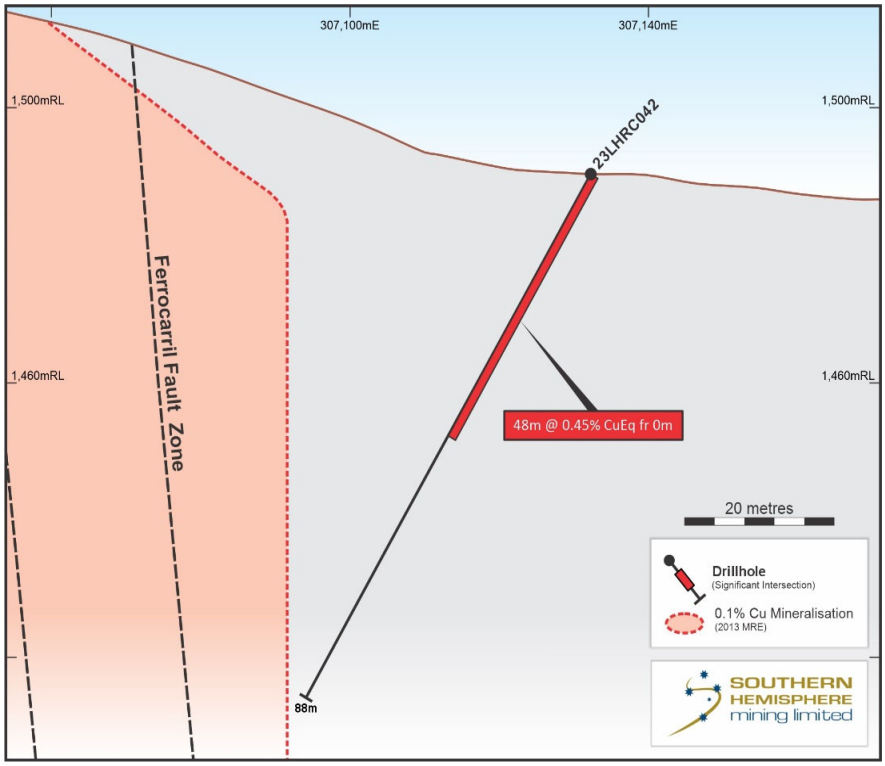

Figure 14. Cross section of 23LHRC042

Southern Porphyry Copper-Gold Target

Two RC holes were drilled to test the Southern Porphyry target and were successful in intersecting the outer halo of this large target. The soil geochemical anomaly is likely a small vein through that area. From these results and further recent surface work 200m higher up the hill the main target is Southeast of these holes and the subject of further studies into vectoring future drillholes into the higher grade central and feeder zones.

Both holes at the Southern Porphyry intersected broad zones of mineralisation and alteration. This demonstrates that it is a large mineralising system. The drilling targeted a strong copper in soil anomaly, which represents a small portion of the larger target area in the magnetics.

Geological mapping and drill results indicate that drilling to date is located on the western side of the porphyry host target. Work is ongoing to identify the best location for follow-up drilling of this potentially extensive mineralised system.

The mapping and surface geochemistry and topography highlight the transition to gold-dominated epithermal surface showings Southeast of the known target area. These may represent additional blind porphyry targets.

- 23LHRC038, 164m at 0.16% CuEq (0.1% Cut-off) from 2m.
- 23LHRC039, 106m at 0.13% CuEq (0.1% Cut-off) from 28m, including 2m at 1.45% CuEq from 168m.

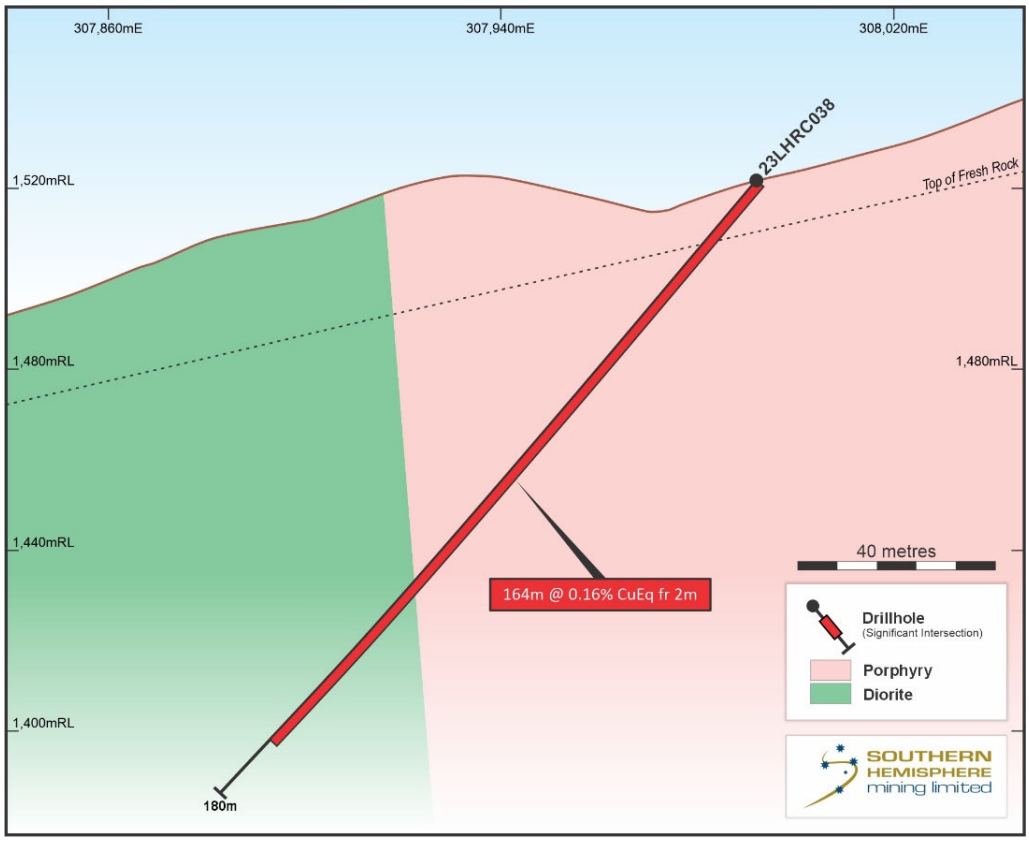

Figure 15. Cross section of 23LHRC038

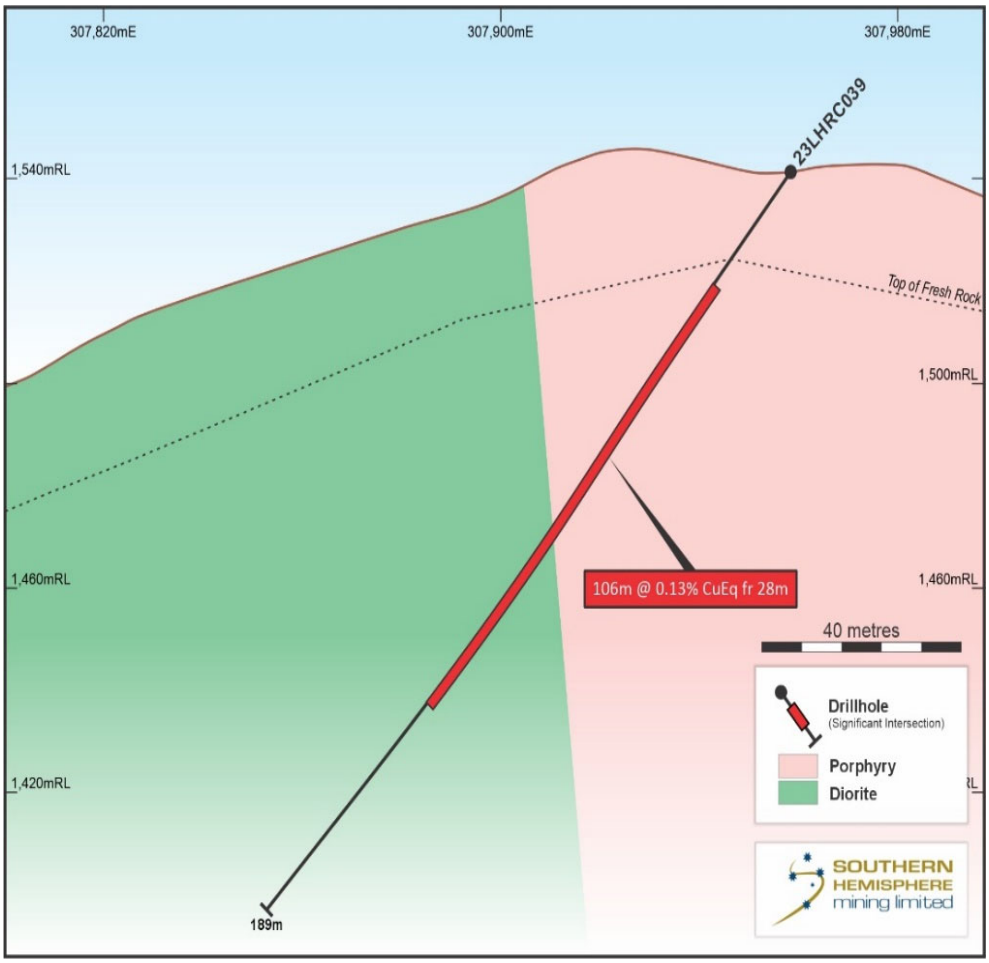

Figure 16. Cross section of 23LHRC039

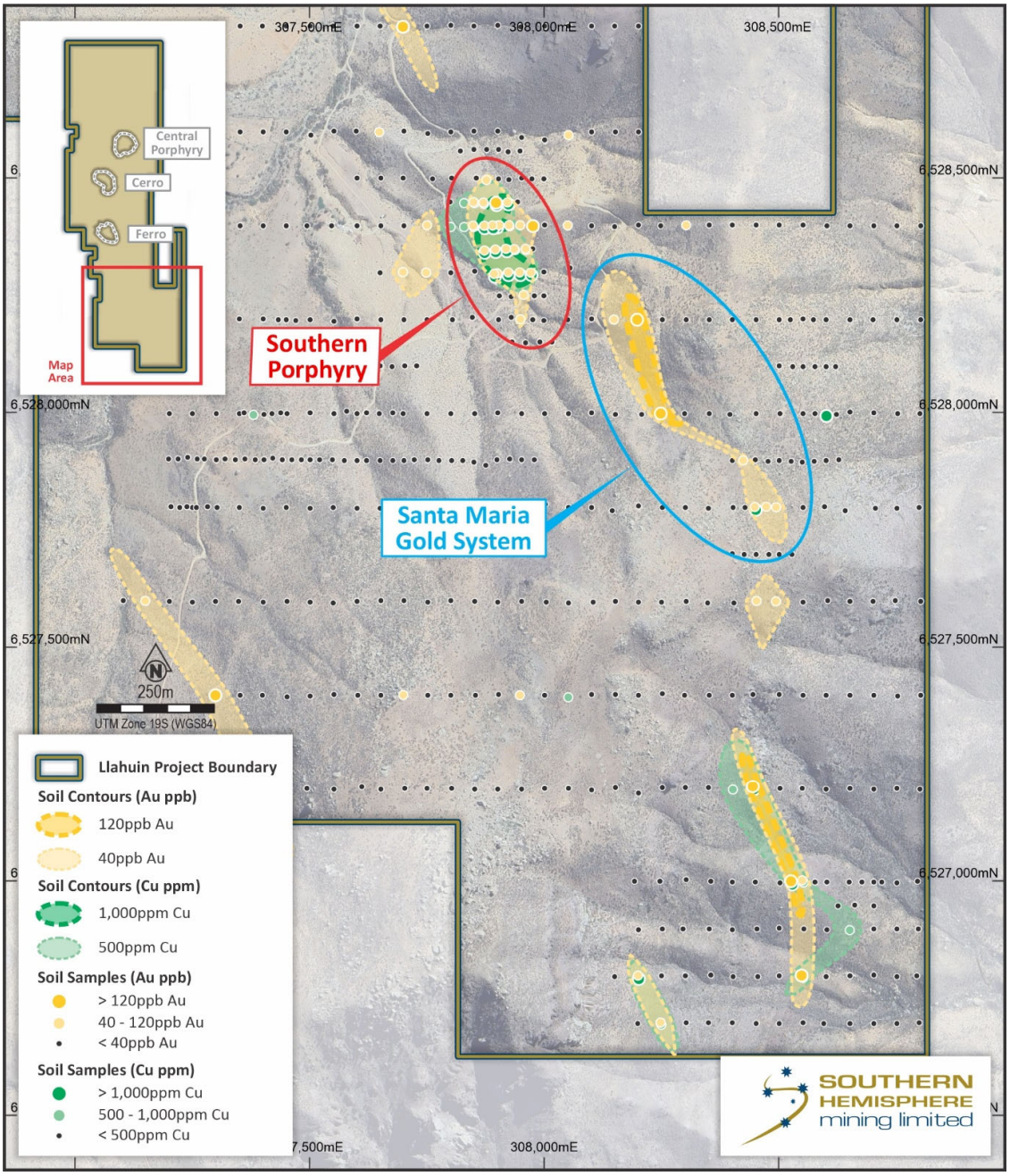

Figure 17. Map of the Southern Porphyry greater target area, showing the transition from copper dominated soil anomalies at Southern Porphyry, to gold dominated to the South.

Background Work, Ongoing Programs, and Findings

Systematic programs of surface geochemistry, surface mapping, structural interpretation, historical hole re-logging and multi-element assaying were used to plan the current drilling program. This lead-up work has proved critical in identifying zones for substantial expansion and drill locations.

A geological mapping program nearing completion covers the area from the Southern Porphyry to Cerro. Several key relationships and conceptual targets are emerging from this work. The full results of this program will be reported in a follow-up announcement.

Terraspec mapping of drillcore is in progress in order to produce a 3D alteration model of the deposits. In addition, a first pass batch of samples has been sent for 4 acid digestion with ICPMS finish to provide low detection limit data for 3-D "deposit footprint" modelling work.

The results of the 2023 drilling program were very encouraging. The key findings were as follows:

- Historical drilling at Cerro and Ferro potentially demonstrates sub-optimal drilling orientations and sample bias in the historical RC drilling.
- Cerro and Ferro are part of a single mineralised system, with a potential feeder system at depth which current work is targeting to provide a future drill target.
- Southern Porphyry is a large mineralising and alteration system with the potential to host a significant copper-gold porphyry deposit.
- Shallow zones of mineralisation are open to the West and East at Cerro and Ferro.
- Mineralisation at Ferro is open to the South, Southwest, and Southeast.

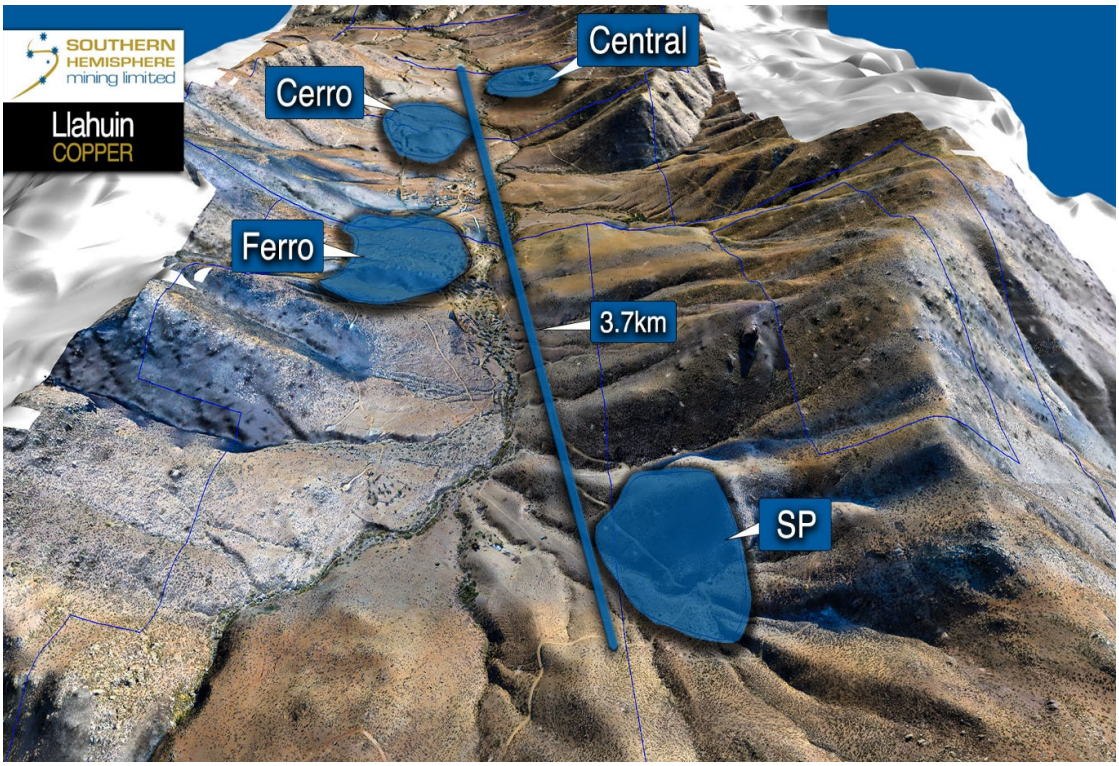

Figure 18. 3D view looking northeast from Southern Porphyry (SP) to Central Porphyry, showing the scale of the Llahuin mineralising system.

The Company will be presenting the Llahuin Copper-Gold Project at the PDAC conference in Toronto 3-6 March 2024.

Further results will be reported in due course.

Approved by the Board for release.

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

cosec@shmining.com.au
Telephone: +61 8 6144 0590

BACKGROUND INFORMATION ON SOUTHERN HEMISPHERE MINING:

Southern Hemisphere Mining Limited is an experienced minerals explorer in Chile, South America. Chile is the world's leading copper-producing country and one of the most prospective regions of the world for major new copper discoveries. The Company's projects include the Llahuin Porphyry Copper-Gold Project 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 ($3.20/lb), Au ($1,700/oz), Mo ($12.50/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 1. Drillhole Location Data and Results. Intercepts are calculated by length weighted average at a cut off of 0.2% CuEq and a maximum internal dilution of 6m, unless stated otherwise.

Hole ID	Depth	Collar Location WGS84			Dip	Azimuth	From	To	Cu Grade	Mo Grade	Au Grade	CuEq	Width	Intersection Description
		East	North	RL			m	m	%	ppm	ppm	%	m	
23LHRD027	197.2	307066	6530956	1348	-60	300	0	156	0.41	62.74	0.09	0.51	156	156m at 0.51% CuEq
23LHRD028	261.9	307104	6530903	1342	-57	300	42	178	0.27	167.24	0.17	0.47	136	136m at 0.47% CuEq
23LHRD033	107.4	307249	6530799	1344	-60	300	66	84	0.25	82.88	0.24	0.46	18	18m at 0.46% CuEq
23LHRD031	111.6	307211	6530742	1352	-60	300	2	14	0.16	3.86	0.19	0.30	12	12m at 0.30% CuEq
							28	46	0.18	23.26	0.40	0.47	18	18m at 0.47% CuEq
							56	104	0.19	38.76	0.22	0.37	48	48m at 0.37% CuEq
23LHRC032	79	307172	6530778	1349	-70	300	0	79	0.23`	10.31	0.30	0.37	79	79m at 0.37% CuEq
			Including				0	12	0.31	8.43	0.50	0.66	12	12m at 0.66% CuEq
23LHRC030	82	307201	6530700	1372	-60	300	0	10	0.22	6.61	0.17	0.35	10	10m at 0.35% CuEq
							18	74	0.13	19.67	0.16	0.26	56	56m at 0.26% CuEq
			Including				48	56	0.24	9.73	0.35	0.50	8	8m at 0.50% CuEq
23LHRC029	84	307189	6530664	1382	-60	300	0	54	0.15	14.34	0.22	0.31	54	54m at 0.31% CuEq
			Including				0	14	0.27	17.26	0.38	0.54	14	14m at 0.54% CuEq
23LHRD034	234.8	307155	6530535	1414	-60	300	0	162	0.18	15.85	0.13	0.28	162	162m at 0.28% CuEq
			Including				0	12	0.28	14.44	0.29	0.49	12	12m at 0.49% CuEq
23LHRD035	181.4	307116	6530618	1378	-60	300	0	76	0.2	7.2	0.34	0.44	76	76m at 0.44% CuEq
			Including				0	14	0.3	4.56	0.67	0.79	14	14m at 0.79% CuEq
							122	134	0.23	0	0.23	0.4	12	12m at 0.40% CuEq
23LHRD036	188.95	307074	6529918	1426	-60	280	32	64	0.17	64.67	0.13	0.29	32	32m at 0.29% CuEq
							142	156	0.14	109.35	0.08	0.25	14	14m at 0.25% CuEq
23LHRC037	60	307065	6530000	1424	-60	280	0	12	0.18	6.04	0.13	0.27	12	12m at 0.27% CuEq
23LHRC038	180	307994	6528405	1570	-50	290	2	166	0.08	16.2	0.1	0.16	164	164m at 0.16% CuEq (0.1% Cut-off)
23LHRC039	189	307962	6528357	1542	-50	300	28	134	0.07	14.21	0.07	0.13	106	106m at 0.13% CuEq (0.1% Cut-off)
							168	170	0.04	3.54	1.97	1.45	2	2m at 1.45% CuEq
23LHRD040	272.3	307216	6529238	1459	-60	300	228	272.3	0.23	71.14	0.04	0.29	44.3	44.3m at 0.29% CuEq to EOH)
23LHRD041	219.8	307264	6529463	1440	-60	300	0	219.8	0.14	73.94	0.09	0.24	219.8	219.8m at 0.24% CuEq (to EOH)
			Including				0	32	0.25	6.49	0.15	0.36	32	32m at 0.36% CuEq
			Including				196	212	0.24	193.32	0.1	0.4	16	16m at 0.4% CuEq
23LHRC042	88	307132	6529158	1496	-60	300	0	48	0.38	12.69	0.09	0.45	48	48m at 0.45% CuEq
23LHRD043	249.4	307185	6530250	1395	-60	270	0	94	0.18	108.1	0.12	0.32	94	94m at 0.32% CuEq
							136	148	0.14	111.9	0.08	0.24	12	12m at 0.24% CuEq

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 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 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

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. 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.

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
		<table><tr><td>P</td><td>ppm</td><td>10</td><td>10000</td><td>Pb</td><td>ppm</td><td>0.5</td><td>10000</td><td>Rb</td><td>ppm</td><td>0.1</td><td>10000</td></tr><tr><td>Re</td><td>ppm</td><td>0.002</td><td>50</td><td>S</td><td>%</td><td>0.01</td><td>10</td><td>Sb</td><td>ppm</td><td>0.05</td><td>10000</td></tr><tr><td>Sc</td><td>ppm</td><td>0.1</td><td>10000</td><td>Se</td><td>ppm</td><td>1</td><td>1000</td><td>Sn</td><td>ppm</td><td>0.2</td><td>500</td></tr><tr><td>Sr</td><td>ppm</td><td>0.2</td><td>10000</td><td>Ta</td><td>ppm</td><td>0.05</td><td>500</td><td>Te</td><td>ppm</td><td>0.05</td><td>500</td></tr><tr><td>Th</td><td>ppm</td><td>0.01</td><td>10000</td><td>Ti</td><td>%</td><td>0.005</td><td>10</td><td>Tl</td><td>ppm</td><td>0.02</td><td>10000</td></tr><tr><td>U</td><td>ppm</td><td>0.1</td><td>10000</td><td>V</td><td>ppm</td><td>1</td><td>10000</td><td>W</td><td>ppm</td><td>0.1</td><td>10000</td></tr><tr><td>Y</td><td>ppm</td><td>0.1</td><td>500</td><td>Zn</td><td>ppm</td><td>2</td><td>10000</td><td>Zr</td><td>ppm</td><td>0.5</td><td>500</td></tr></table> • ALS Multielement package MEMS61for 2021 and 2022 and 2023 drilling
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 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

Criteria	JORC Code explanation	Commentary
		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 geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The samples were geologically logged on site. Logging was both qualitative and quantative in nature for both recent drilling and historical drilling. All drillcore and RC drillholes were logged in entirety. All core was photographed and the photographs catalogued.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• 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

Criteria	JORC Code explanation	Commentary
	• *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.*	determine in places due to pervasive alteration. Drill core has not been orientated for structural measurements. The core is cut lengthways with a diamond saw and half-core is sent for assay. The half-core is bagged every 2m and sent for preparation, while the remaining half-core is returned to the labelled cardboard core box. A cardboard lid is placed on the box, and it is stored in a newly constructed weatherproof storage facility (warehouse) for future reference. • There is no relationship between the sample size and the grain size of the material being sampled at Llahuin. • Recent HQ3 diamond drilling 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 laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The assay technique utilized is “industry Standard” fire assay with AAS finish for gold which is a total digestion technique. • For the recent RC drilling appropriate industry standard CRM’ s and blanks were inserted into the sample stream at a rate of 1:20 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 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.

Criteria	JORC Code explanation	Commentary
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 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 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.

Criteria	JORC Code explanation	Commentary
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 geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The drilling was done perpendicular to the **interpreted strike** of the mineralisation to reduce sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by a qualified consulting geologist and the samples were delivered to the lab by a company employee. Competent Person Reg No 0336. 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 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	JORC Code explanation	Commentary
	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.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Exploration drilling was targeting near surface material in a porphyry Cu-Au system. Therefore the mineralised widths are much greater than the drillhole depths for the Central Porphyry. Drilling at Cerro De Oro is partly infilling historical drilling so therefore downhole widths have been reported and true widths are not established yet as the historical drilling appears to be too widely spaced. Drilling in all areas has been conducted perpendicular to the regional trend observed in outcrop. • Exploration at Colina2 was targeting potential IOCG type gold and recent drilling was orientated perpendicular to the regional trend observed in outcrop.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps have been included in the release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• A range of grades were included in the release.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• A drone magnetics survey was completed over the project area in 2021 by GFDas UAV Geosciences Santiago Chile. Survey specifications provided below. • Company: GFDAS Drones and Mining Line direction: 90°-270° Line separation: 25m Tie line Direction: 0-360 Tie lines separation: 250m Flight Height: around 25m AGL following topography (according to 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.
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 recently generated soil geochemical anomalies is planned for Llahuin. Geochemical footprint modeling is being evaluated.