

# **EXCEPTIONAL SAMPLING RESULTS UP TO 46.5% Cu, 6.58g/t Au**

#### **HIGHLIGHTS:**

- Halls Reward ultra high-grade assays: Mullock and rock chip sampling at Halls Reward has returned further outstanding copper grades together with impressive gold and silver:
  - 46.50% Cu, 6.58g/t Au and 24.5g/t Ag
  - 18.82% Cu, 4.59g/t Au and 56.3g/t Ag
  - o 16.87% Cu, 0.86g/t Au and 84.5g/t Ag
  - o 12.97% Cu, 0.26g/t Au and 21.8g/t Ag
- Historical drill holes and soil Cu geochemistry indicate at least 1.1 kms of unmined extensions of Halls Reward Lode, including: (refer ASX announcement dated 17 February 2025)
  - 4.0m @ 8.8% Cu from 31.6m | incl. 2.4m @ 13.5% Cu (DDH5)
  - o 7.0m @ 3.5% Cu from 64.0m | incl. 1.8m @ 7.6% Cu (DDH3)
- Telegraph high-grade copper confirmed: Reconnaissance mapping and sampling, just 3km northwest of Halls Reward, returned high-grade copper values including:
  - o 10.99% Cu, 0.21g/t Au and 12g/t Ag
  - o 10.91% Cu, 0.14g/t Au and 10g/t Ag
  - o 7.68% Cu, 0.09g/t Au and 13g/t Ag
- Priority VMS Cu-Au targets: Results confirm the presence of exceptionally high-grade copper with significant gold and silver credits, reinforcing Halls Reward and Telegraph as priority VMS Cu-Au targets.
- Follow-up programs: The Company is planning follow-up field and drilling programs to test depth extensions and strike continuity of mineralisation.



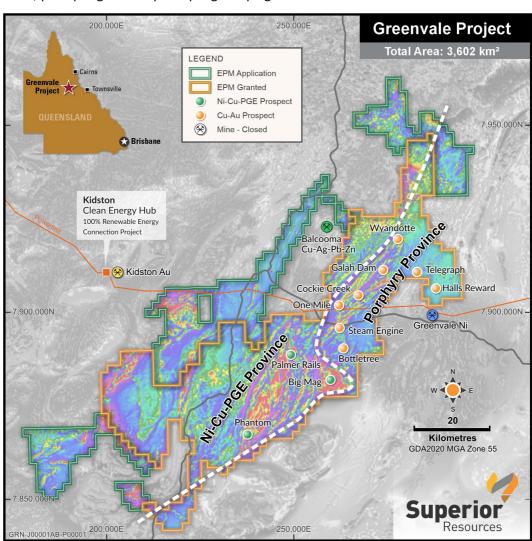


**Superior's Managing Director, Peter Hwang commented:** "These outstanding results confirm Halls Reward and Telegraph as highly compelling copper-gold-silver targets within our Greenvale Project. The tenor of copper grades — up to 46.5% Cu with multi-gram gold and significant silver — places these prospects among our priority high-grade copper targets.

"Telegraph complements the previously announced high-grade polymetallic rock chip and drilling results from Halls Reward associated with visible copper mineralisation<sup>1</sup>. Together, these prospects demonstrate the district-scale potential of Greenvale as a copper-gold project of significance. We are moving quickly towards defining drill targets at these prospects."

**Superior Resources Limited (ASX: SPQ) (Superior, the Company)** is pleased to report exceptionally high-grade rock chip results from the **Halls Reward** and **Telegraph Prospects**, among several high-priority Cu-Au-Ag targets within the Company's **100%-owned Greenvale Project** in northeast Queensland (**Fig. 1**).

The Halls Reward and Telegraph Prospects are located within EPM25691 of the Greenvale Project. Reconnaissance has identified gossanous outcrop, historical artisanal workings and visible copper mineralisation, prompting rock chip sampling campaigns.



**Figure 1.** Greenvale Project regional magnetics with the location of the high-grade Cu-Au-Ag Telegraph and Halls Reward deposits. Additional nearby high-grade Cu potential prospects include Wyandotte deposit and One Mile, alongside the Company's large-scale porphyry Cu-Au discoveries at Bottletree and Cockie Creek.

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<sup>&</sup>lt;sup>1</sup> Refer ASX announcement dated 17 February 2025



### **Halls Reward Prospect**

The latest rock chip program at Halls Reward Prospect returned four outstanding assays, ranging up to 46.50% Cu, accompanied by gold grades up to 6.58 g/t and silver up to 84.5 g/t, including (Figs. 2 and 3):

- 46.50% Cu, 6.58g/t Au and 24.5g/t Ag
- 18.82% Cu, 4.59g/t Au and 56.3g/t Ag
- 16.87% Cu, 0.86g/t Au and 84.5g/t Ag
- o 12.97% Cu, 0.26g/t Au and 21.8g/t Ag

These assays confirm the exceptional tenor of mineralisation at and near surface and, importantly, highlight the potential for significant copper-rich shoots at depth. The mineralisation style is consistent with sheared massive sulphide and vein-hosted copper mineralisation of Cyprus-style Volcanogenic Massive Sulphide (VMS), with gold and silver providing valuable credits.

Superior's previous Halls Reward announcement<sup>2</sup> confirmed high-grade Cu-Au-Ag rock chip assays around old workings including:

- o 20.13% Cu, 0.21g/t Au and 58g/t Ag
- o 10.11% Cu, 0.46g/t Au and 44g/t Ag
- o 1.62% Cu, 14.48g/t Au and 22g/t Ag
- 2.97% Cu, 6.01g/t Au and 14g/t Ag
- 1.87% Cu, 5.69g/t Au and 9g/t Ag

Additionally, high-grade copper in 1950's drill holes indicate unmined extensions remain in-situ along strike of old mine workings at shallow depths<sup>3</sup>:

- 4.0m @ 8.8% Cu from 31.6m | incl. 2.4m @ 13.5% Cu (DDH5)
- 7.0m @ 3.5% Cu from 64.0m | incl. 1.8m @ 7.6% Cu (DDH3)

Soil geochemical sampling in the 1990's revealed a large 1,300m-long and 300m-wide Cu in soil anomaly (>100 ppm Cu, with a peak of 14,000 ppm Cu), which is considerably more extensive than the Main Lode workings and covers multiple parallel mineralised structures to the west (Fig. 3)<sup>4</sup>. Considering the Main Lode was historically mined along approximately 130m of the lode, there would appear to be at least 1.1 kilometres of additional lode potential.

Follow-up geochemical sampling along strike of the historical workings, and electromagnetic (EM) geophysics to model conductors at depth, are planned with the objective of defining high-grade Cu-Au-Ag drilling targets.

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement dated 17 February 2025

<sup>&</sup>lt;sup>3</sup> Refer ASX announcement dated 17 February 2025

<sup>&</sup>lt;sup>4</sup> Refer ASX announcement dated 17 February 2025 for additional information regarding the potential lode extensions

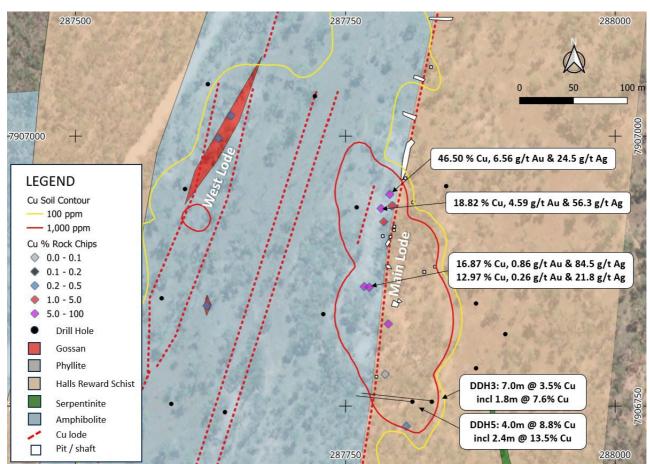




**Figure 2.** Recent mullock and rock chip samples collected from the Halls Reward Prospect. Descriptions are as follows: Sample 3016901 – copper oxide bearing ferruginous quartz, altered rock, iron oxide, native copper and malachite; Sample 3016902 – copper oxide bearing ferruginous quartz, altered rock, iron oxide, native copper, cuprite and malachite;

Sample 3016903 – copper oxide bearing chrysocolla, malachite, ferruginous clay quartz and altered rock; and sample 3016904 – copper oxide bearing ferruginous siliceous gossan, iron oxide, malachite needles, cuprite, spongy silica, clay and altered rock.





**Figure 3.** Halls Reward plan showing new rock chip results at the Halls Reward main lode, gossan trends and geochemical anomaly. Historical diamond core drill holes DDH3 and DDH5 are also identified. Refer also to ASX announcement dated 17 February 2025 for additional information on geological mapping at Halls Reward.

### **Telegraph Prospect**

At **Telegraph Prospect**, located 3km northwest of Halls Reward, artisanal workings targeted gossanous, copper-rich material. Mineralisation occurs as a series of pods within west-northwest trending shears over a 200m x 300m area. Potential strike extensions to the west are obscured by alluvium (**Fig. 4**).

Sampling of mullock dumps at Telegraph Prospect returned copper values with up to 10.99% Cu including:

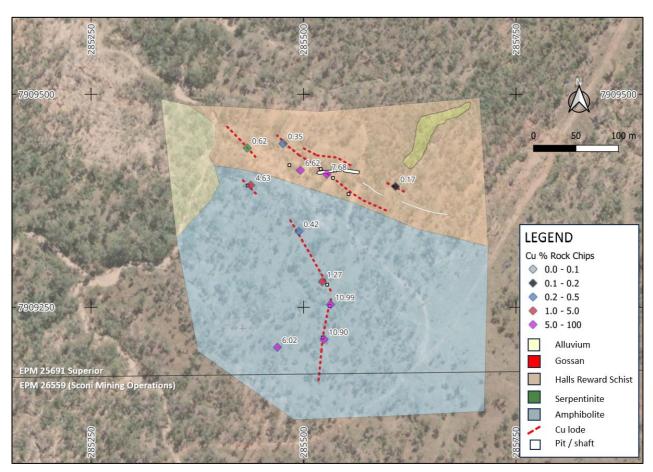
- 10.99 % Cu, 0.21 g/t Au and 12 g/t Ag
- o 10.91 % Cu, 0.14 g/t Au and 10 g/t Ag
- 7.68 % Cu, 0.09 g/t Au and 13 g/t Ag
- o 6.62 % Cu, 0.10g/t Au and 8 g/t Ag
- o 6.02% Cu, 0.26 g/t Au and 8 g/t Ag

Gossans at Telegraph are composed almost entirely of goethite framework with secondary copper minerals including malachite (**Fig. 5**), which suggests that the original unweathered mineralisation was comprised almost entirely of massive sulphide, as at Halls Reward mine. Chalcocite was not observed in the gossanous material, which suggests the shallow artisanal workings did not exploit high-grade supergene-enriched material which may occur at greater depths, as at Halls Reward.

The interpreted high sulphide content of the lodes suggests they are likely to have the same high grade supergene chalcocite enrichment as Halls Reward at depth (40-50m). The high sulphide content also



suggests that EM geophysics is likely to be the most effective method for detecting significant shoots of unweathered mineralisation at greater depths (>50m).



**Figure 4.** Plan of the Company's reconnaissance mapping and rock chip sampling at Telegraph Prospect, showing high-grade copper rock chip results associated with gossans and historical workings.



Figure 5. Sample NT0104 shows malachite staining on fractures within gossanous material, assayed 6.62% Cu, 0.10 g/t Au and 8 g/t Ag.



### **Telegraph West – Anomalous Soil Copper**

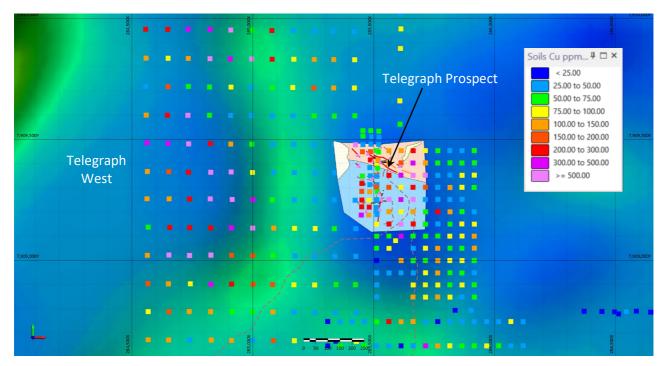
Of note is the existence of a broad zone of anomalously high soil copper geochemistry located 1.5 kilometres to the west of the main Telegraph Prospect area (**Fig. 6**).

This highly anomalous soil copper anomaly is particularly interesting as it:

- is large 1.5kms x 0.5kms and is truncated by the western edge of the soil survey area;
- shows high order Cu values, despite being covered by at least 1.5m of alluvium and colluvium
   (Fig. 7); and
- appears to be centred over a magnetic low that is adjacent to a moderate magnetic feature, likely
  to be a mafic or ultramafic intrusion. This is consistent with copper mineralisation at Halls Reward
  and the main Telegraph Prospect.

Telegraph West has not been followed up with any form of exploration work or drilling.

An ultra-fine soil survey to cover and extend on the Telegraph and Telegraph West prospects is planned, including a ground EM geophysical survey to identify sulphide mineralisation.



**Figure 6.** Plan of regional magnetics (RTP) over the Telegraph and Telegraph West Prospects, overlain with soil copper geochemistry survey and mapped geology at the Telegraph Prospect.





**Figure 7.** Creek bank exposure at Telegraph West showing alluvium cover lying over weathered, mottled and variably veined and altered serpentinite bedrock. Alluvial cover would typically dilute or obscure underlying bedrock geochemical signatures, such that the detection of strong copper values at Telegraph West is particularly encouraging.

### **Broader Greenvale Project**

The **Greenvale Project** is strategically located in Northeast Queensland, covering two volcanic suites known to be highly prospective for **VMS Cu-Au-Ag** and **porphyry Cu-Au-Mo** systems. The district has a rich history of artisanal copper production but remains underexplored by modern techniques.

Superior now has multiple advanced copper-gold prospects within the project:

- Telegraph Newly confirmed high-grade Cu-Au-Ag with rock chips up to 10.99% Cu;
- Telegraph West New prospect with similar characteristics to Telegraph and Halls Reward;
- Halls Reward High-grade Cu-Au-Ag system with historic workings and considerable untested potential; and
- **Regional targets** Numerous untested geophysical anomalies and historic workings that present further discovery opportunities.

Together, these prospects reinforce the Company's belief that Greenvale represents a district-scale copper-gold opportunity.

### **Synopsis**

The latest assays from Halls Reward and Telegraph confirm the outstanding grade potential of the Greenvale Project, with copper values up to 46.5% Cu and significant gold-silver credits. These prospects provide a dual focus of high-grade targets, alongside the Company's large-scale porphyry Cu-Au-Mo systems at Bottletree and Cockie Creek, underpinning Greenvale's status as an emerging district-scale copper-gold project.



## **Next Steps**

Superior is advancing exploration at Telegraph, Telegraph West and Halls Reward with the following planned activities:

- Detailed geological mapping and geochemical sampling to extend known mineralised zones and targeting additional historical workings;
- Expanded ultra-fine soil geochemistry survey over the Telegraph West Prospect;
- Ground-based EM geophysics to define potential sub-surface targets at each of the prospects; and
- Drill program design to test resulting targets at Telegraph, Telegraph West and Halls Reward.

#### Approved for release by the Board of Directors

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#### **About Superior**

Superior Resources Limited (ASX:SPQ) is an Australian public company exploring for high-grade copper-gold-silver, large copper-gold porphyries, nickel-copper-cobalt-PGE, lead-zinc-silver and gold deposits in northern Queensland, which have the potential to return maximum value growth for shareholders. The Company is focused on multiple Tier-1 equivalent exploration targets and has a dominant position within the Carpentaria Zinc Province in NW Qld and Ordovician rock belts in NE Qld considered to be equivalents of the NSW Macquarie Arc.

For more information, please visit our website at www.superiorresources.com.au.

Reporting of Exploration Results: The information in this report that relates to Exploration Targets and Exploration Results from the Halls Reward and Telegraph prospects is based on exploration information compiled by Mr Cain Fogarty, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Fogarty is an independent consulting geologist, with sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Fogarty consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Targets and Exploration Results from the Telegraph West Prospect is based on exploration information compiled by Mr Peter Hwang, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Hwang, Managing Director of the Company, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hwang consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Reliance on previously reported information:** In respect of references contained in this report to previously reported Exploration Results, the Company confirms that it is not aware of any new information or data that materially affects the information, results or conclusions contained in the originally reported document.

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### **APPENDIX 1**

## **REPORTED ROCK CHIP DETAILS – HALL'S REWARD**

Sample	Easting (m)	Northing (m)	RL (m)	Cu %	Au g/t	Ag g/t	Zn %
3016901	287772	7906860	450	12.97	0.26	21.8	0.23
3016902	287772	7906860	450	16.87	0.86	84.5	0.57
3016903	287791	7906946	450	46.50	6.56	24.5	0.02
3016904	287783	7906933	450	18.82	4.59	56.3	0.34

## **REPORTED ROCK CHIP DETAILS – TELEGRAPH**

Sample	Easting (m)	Northing (m)	RL (m)	Cu %	Au g/t	Ag g/t	Zn %
NT0100	285608	7909391	450	0.17	0.01	<5	0.37
NT0101	285495	7909339	450	0.42	0.03	<5	0.17
NT0102	285496	7909411	450	6.62	0.10	8	0.06
NT0103	285476	7909442	450	0.35	0.03	<5	0.06
NT0104	285469	7909203	450	6.02	0.26	8	0.03
NT0105	285524	7909212	450	10.90	0.14	10	0.26
NT0106	285532	7909253	450	10.99	0.21	12	0.12
NT0107	285522	7909280	450	1.27	0.16	6	0.15
NT0108	285438	7909393	450	4.63	0.28	6	0.15
NT0109	285434	7909437	450	0.62	0.04	<5	0.12
NT0110	285527	7909406	450	7.68	0.09	13	0.07

Note: Locations reported are in MGA Zone 55. Eastings and northings derived from GPS to  $\sim$ 5-10m. RL is approximate. Ag <5 g/t is below detection limit.



## **APPENDIX 2**

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Mullock and Rock Chip Sampling at Halls Reward specifically referred to in this report:         <ul> <li>Sampling includes rock chip &amp; mullock grab sampling.</li> </ul> </li> <li>Mullock and rock chip samples weighed 1-2kg and assayed at Intertek Laboratories in Townsville for Au (fire assay) and Ag and Cu and other elements using ICP.</li> <li>Sampling generally at Halls Reward Prospect:         <ul> <li>Sampling includes diamond core (DD) drilled by Qld Department of Mines in 1953, RC drilling and soil sampling by CRAE Ltd in the 1990's, and rock chip &amp; mullock grab sampling undertaken by Superior in 2020.</li> <li>For DD drilling, samples were combined from core and sludges according to standard practice at the time. Sample lengths varied to match the logging intervals and ranged from approximately 20cm to 90cm (intervals originally measured in feet and inches). Only Cu was analysed, the lab and method are not known.</li> <li>Reverse Circulation (RC) drill samples were collected as 1m samples and composited to 3m samples; Higher grade 3m composites were subsequently assayed on the original 1m splits. The sample collection and compositing methods are not documented. Samples were analysed by Amdel Laboratories in Townsville for Au using fire assay (FA3), and Ag and Cu and other elements using ICP.</li> <li>CRAE's soil geochemical samples were collected from the B horizon at 25m spacings on 200m-spaced east-west lines, using an 8" auger blade on a "Dingo Digger" and sieved to -4mm fraction on site. Samples were analysed by Amdel Laboratories in Townsville for Au using fire assay (FA3), and Ag and Cu and other elements using ICP.</li> <li>Superior's mullock and rock chip samples weighed 1-2kg and assayed at SGS Laboratories in Townsville for Au (fire assay) and Ag and Cu and other elements using ICP.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		Historical Sampling at Telegraph and Telegraph West prospects:
		<ul> <li>At Telegraph Prospect, during 1995, Pancontinental (in JV with tenement owner Homestake Australia Ltd) conducted -80# soil geochemical sampling on a 50m x 50m grid covering an area of 400m x 600m. Sampling details are not available. Samples processed at ALS laboratories in Townsville.</li> </ul>
		<ul> <li>At Telegraph West Prospect, during 1969 – 1971, Anthony, McKenna and Partners Pty Ltd conducted soil sampling on an approximate 100m x 100m grid. Sampling details are not available.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</li> </ul>	Not applicable.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Drill recovery is not applicable. Copper-mineralised and gossanous samples were selected for rock chip and mullock sampling to determine copper tenor and associated metals of economic or pathfinder interest.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Mullock and rock chip samples were qualitatively logged (summary lithology) and photographed.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>At this reconnaissance stage of exploration, the sample types and methods are considered appropriate to indicate the tenor of mineralisation. Field duplicates were not used owing to the preliminary stage of exploration.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory	<ul> <li>considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision</li> </ul>	<ul> <li>Mullock and rock chip samples were crushed, pulverised to ensure a minimum of 85% pulp material passing through 75 microns, then analysed for gold by fire assay Intertek method FA50/OE using a 50-gram sample.</li> </ul>
tests		<ul> <li>Multi-element analyses were conducted on the gold mineralisation using a four-acid digestion followed by an ICP-OES finish using method 4A/OE. The following 35 elements were assayed: Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W and Zn.</li> </ul>
		<ul> <li>Certified gold and multi-element standards were included in the samples submitted to the laboratories for QAQC.</li> </ul>
	have been established.	<ul> <li>Intertek laboratories used a series of their own standards, blanks, and duplicates for the QC of the elements assayed.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Data compilation into the Company's digital database is ongoing.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Mullock and rock chip samples were collected in the field using handheld GPS with 5m to 10m accuracy in MGA 94 Zone 55 grid.</li> <li>There is no height datum or relative level control; currently all surface samples have been assigned an RL of 450m. For the time being this is considered an acceptable assumption given the low topographic relief over the project area, although with further planned activity accurate topographic control should be obtained.</li> </ul>



Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Mullock and rock chip samples were obtained at irregular intervals along the mineralised structures (see figures in the body of the report); this spacing is considered appropriate for the preliminary stage of exploration to indicate the tenor of mineralisation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Not applicable. No orientation sample bias has been identified at this stage.
Sample security	The measures taken to ensure sample security.	Sample security measures were not documented.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No additional audits or reviews of the sampling techniques and data have been undertaken to date owing to the preliminary stages of assessment.</li> </ul>

## 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	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint	<ul> <li>Halls Reward and Telegraph are located within Exploration Permit for Minerals EPM 25691 held 100% by Superior.</li> </ul>
land tenure status	ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	• Superior has agreements or other appropriate arrangements in place with landholders and native title parties with respect to work in the area.
	• 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.	<ul> <li>No regulatory impediments affect the relevant tenements or the ability of Superior to operate on the tenements.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historical small scale mining activity, diamond drilling by the Queensland Department of Mines in the 1950's, and RC and geochemical surveys by CRAE in the 1990's has led</li> </ul>



Criteria	JORC Code explanation	Commentary
		to the definition of significant mineralisation. Based on results to date, Halls Reward and Telegraph are attractive exploration targets for high-grade Cu-Au-Ag.
Geology	Deposit type, geological setting and style of mineralisation.	• Mineralisation at Telegraph is interpreted to be similar to Halls Reward, which is oxide near surface and primary sulphide at deeper levels. Mineralisation is strongly structurally controlled, and may have been deformed post-deposition on the basis of quartz vein strings within the shear zone. The local geology comprised of highly- deformed metasediments and amphibolites indicates the geological setting is that of an accreted magmatic arc, with the structure, alteration and metal assemblage indicating the Cu-Au-Ag mineralisation is possibly Cyprus VMS style. Cyprus style deposits typically occur in clusters along structural corridors.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See Appendix 1 sample details.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No top cutting has been applied to the exploration results given the early stages of exploration assessment.</li> <li>No metal-equivalent values are reported.</li> </ul>
Relationship between mineralisation	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill</li> </ul>	Not applicable.



Criteria	JORC Code explanation	Commentary
widths and intercept lengths	<ul> <li>hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	
Diagrams	<ul> <li>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.</li> </ul>	Included in the report body.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>See Appendix 1 for a complete tabulation of sample results.</li> <li>Superior's rock chip sampling results are provided in full on figures in the report with the tenor of Cu mineralisation indicated by colour coding.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Interesting Zn values &gt;0.10% in a number of CRAE's RC drill holes are not economic, but support the interpretation that Halls Reward is a Cyprus VMS style of deposit.</li> <li>No other exploration reporting is required for a balanced understanding of the results.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work programs will include:</li> <li>Soil sampling grids over outlier historical workings.</li> <li>Primary and secondary Cu mineralisation is expected to be highly electrically conductive. An EM geophysical survey is planned to map conductors associated with Cu mineralisation at depth, which together with surface geochemical data is expected to lead to additional drilling targets.</li> <li>Drilling.</li> </ul>