

## Receipt of Stage 2 assays completed: Stage 2 drilling to be included in Steam Engine Scoping Study

### HIGHLIGHTS:

- Results from seven holes targeting a portion of the Eastern Ridge Lode have extended the lode by a further 100m south. Best intersection returned:
  - 10m @ 2.1 g/t Au from 0m (SRC104)
    - incl 1m @ 7.9 g/t Au from 0m
    - incl 2m @ 4.0 g/t Au from 7m
- 2 km-long Eastern Ridge Lode remains open along strike and down dip, with potential for further high grade zones
- Mineral Resource Estimate currently being revised and expected to be completed in about two weeks: Stage 2 results expected to upgrade the Mineral Resource
- Scoping Study restructured to include results from the Stage 2 Drilling Program
- Planning for Pre-Feasibility Study and maiden drilling program at Dinner Creek Zone underway

**Superior Resources Limited (ASX:SPQ)** confirmed today the receipt of all outstanding assays from the Stage 2 Drilling Program at the Company's Steam Engine Gold Deposit, located 210 kilometres west of Townsville, Queensland.

The results are from seven reverse circulation (RC) drill holes totaling 456 metres of drilling in the Stage 2 program. These holes targeted potential lode extensions at an area between 500 and 600 metres north of the historically-mapped southern-most part of the Eastern Ridge Lode.

The drilling has shown that the lode continues to the south with consistent thickness, although most of the intersections were lower than the average grade for the Eastern Ridge Lode. The lode remains open to the south, where historic mapping indicates the continuation of the Eastern Ridge Lode.

With the earlier-than-expected receipt of outstanding assays from the Stage 2 Drilling Program, the Company has expanded the current Scoping Study to incorporate the results from the Stage 2 program.

Superior's Managing Director, Peter Hwang, commented:

*"With the assaying of the Stage 2 program being completed sooner than we originally scheduled, it has enabled us to include the Stage 2 holes in the Scoping Study without disrupting the overall mining assessment plans. This outcome is likely to be beneficial, given that the Stage 2 program identified at least two high grade ore shoots and converted a large low-grade zone in the Steam Engine Lode into the project's highest-grade zone. We expect the Stage 2 results to have a significant positive contribution to the financial analysis within the Scoping Study, which is scheduled to be completed within the next four weeks. In the meantime, we will be updating the Mineral Resource Estimate that was published during December 2020."*

## Stage 2 drilling

The 2020 Stage 2 drilling program at the Steam Engine Gold Deposit commenced on November 11 and concluded on 12 December 2020. The program comprised a total of 40 RC drill holes for a total of 3,055 metres. Drill hole depths ranged from 48 to 120 metres.

The objectives of the Stage 2 drill holes were:

- To extend high-grade zones identified during the first campaign beyond the current Mineral Resource;
- To identify new high-grade extensions at both the Steam Engine and Eastern Ridge lodes; and
- To upgrade low-grade zones within the current Resource envelope.

All outstanding assays from the Stage 2 Drilling Program have now been received.

## Final batch assay results

The third batch of Stage 2 assay results are from 7 RC drill holes for a total of 456 metres of drilling. These holes ranged in depths from 48 to 102 metres and include infill and extension drill holes that tested an area between 500 and 600 metres north of the historically-mapped southern-most part of the Eastern Ridge Lode (Figure 1).

Significant intersections from the assaying of the samples are listed in Table 1, which sets out all intersections greater than 0.4 g/t gold (refer Table 2 for hole collar details). All samples were submitted to SGS Australia Pty Ltd laboratories in Townsville for gold and multi-element analysis. Plan and cross section representation of the assay results from the current batch of results are shown in Figures 1 and 2 in context with previously reported lode intersections.

The drilling has extended the Eastern Ridge Lode mineralisation by an additional 100 metres south from the Stage 1 drill holes, albeit most of the intersections are of lower-than-average grade for the Eastern Ridge Lode. The lode and mineralisation remains open to the south. Further drilling to the south is therefore warranted.

The best intersection from the results was encountered in infill drilling along section line 9700 N that returned 10 metres @ 2.1 g/t from surface (Figure 2).

**Table 1.** Significant drill hole intersections from final batch of assays from Eastern Ridge Lode.

Hole ID		From (m)	To (m)	Interval (m)	Au (g/t)	Lode
SRC098		78	79	1	0.7	Eastern Ridge Eastern Ridge Splay
		97	98	1	0.6	
SRC099		5	9	4	0.9	Eastern Ridge Eastern Ridge Splay
		27	28	1	0.6	
SRC100	Including	7	12	5	0.5	Eastern Ridge
		7	8	1	1.4	
SRC101		14	16	2	0.7	Eastern Ridge
SRC102	Including	13	16	3	1.3	Eastern Ridge
		13	14	1	2.9	
SRC103	Including	30	34	4	0.6	Eastern Ridge
		32	33	1	1.4	
SRC104	Including	0	10	10	2.1	Eastern Ridge
		0	1	1	7.9	
	Including	7	9	2	4.0	
		12	13	1	0.8	Eastern Ridge Splay
		20	21	1	0.8	

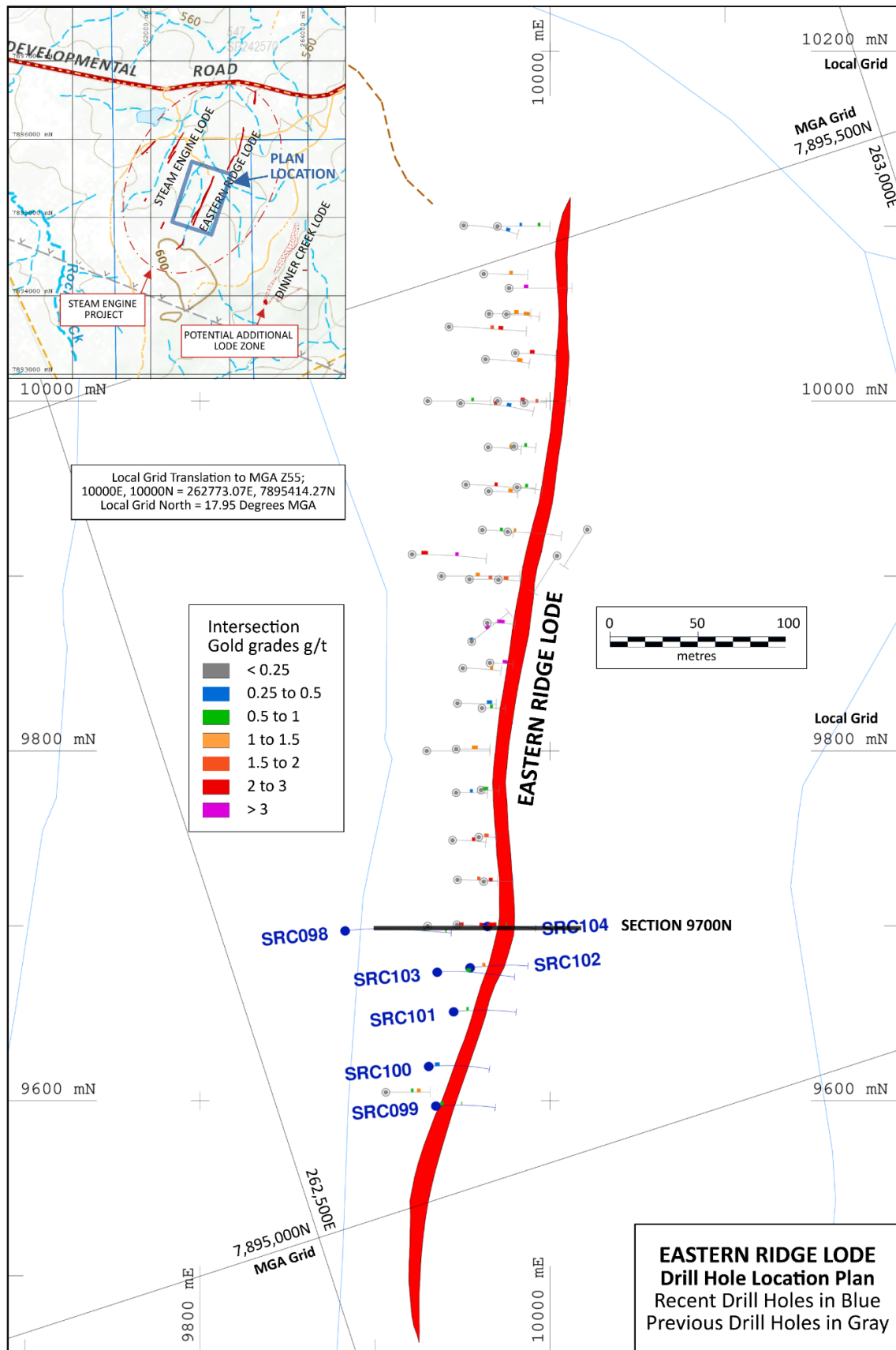


Figure 1. Plan view of portion of Eastern Ridge Lode (in red) showing the locations of the Stage 2 drill holes (in blue) and previously drilled holes. Cross section 9700N in Figure 1 is indicated by a horizontal black line.

## Stage 2 results to be incorporated into Scoping Study

With the earlier-than-expected receipt of outstanding assays from the Stage 2 program, the current Scoping Study will be expanded to incorporate the results from the Stage 2 program. As a preliminary part of this process, the Steam Engine Gold Deposit Mineral Resource (currently 1.6 million tonnes @ 2.2 g/t Au for 112,000 ounces<sup>1</sup>) will be updated and released to the market in approximately two weeks.

The Stage 2 results are expected to significantly upgrade the total Mineral Resource. Of particular significance, the Stage 2 program identified new significant high-grade zones in the infill drilling at the Steam Engine Lode, including the recently announced multi-ounce per tonne intersections<sup>2</sup>.

Additionally, the Stage 2 drilling gave further confirmation of the Steam Engine Lode Northern Extension Zone and indicated that this mineralisation has significant grades closer to surface than was previously understood. The mineralisation at the Northern Extension Zone was confirmed to extend a further 200 metres beyond the currently modelled Mineral Resource, with the mineralisation remaining open to the North and down dip<sup>3</sup>.

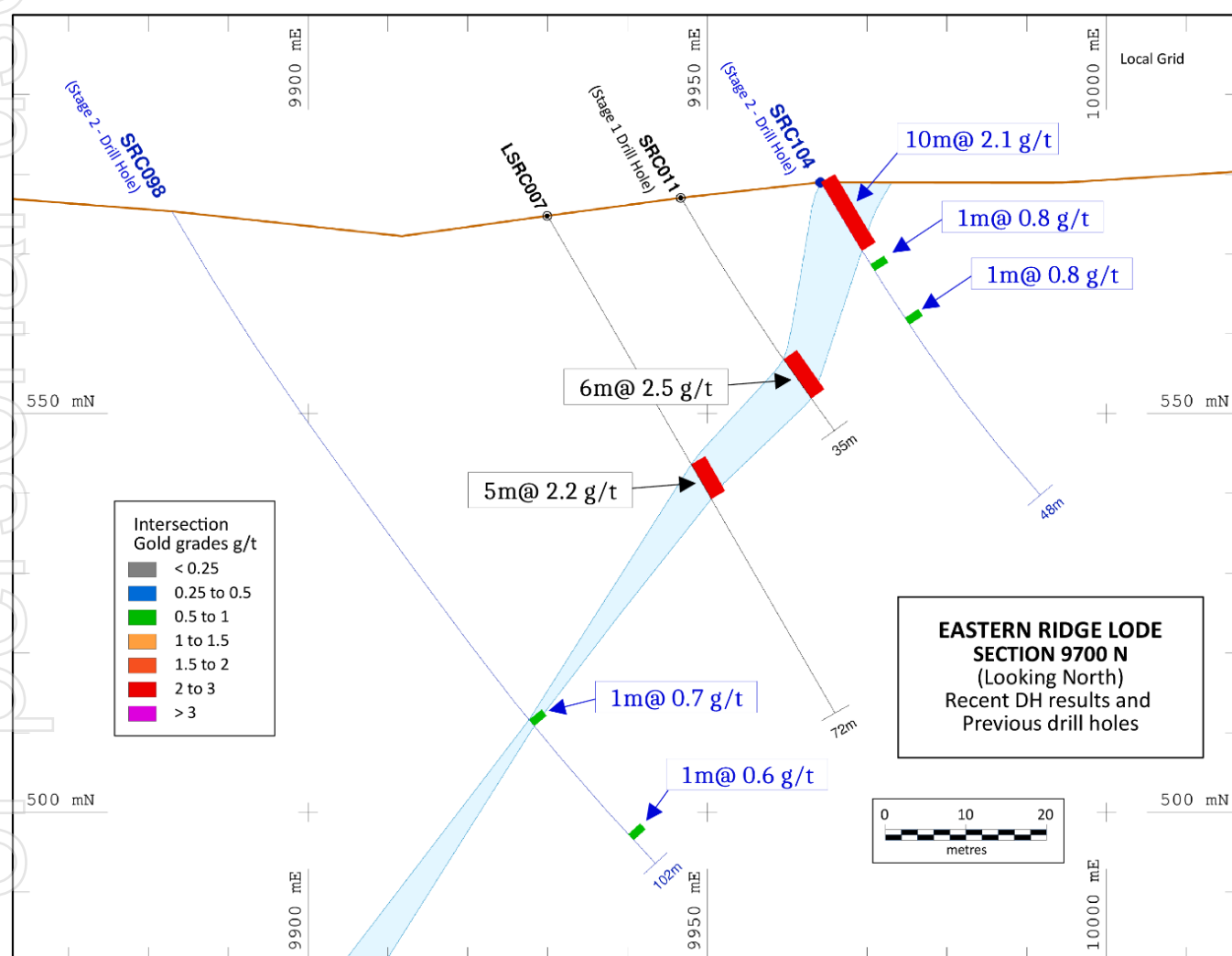


Figure 2. Cross Section 9700N (local grid) on the Eastern Ridge Lode showing the significant intersections (Stage 2 drill hole intersections shown in blue).

<sup>1</sup> Refer to Revised Mineral Resource Estimate: ASX announcement 14 December 2020

<sup>2</sup> Refer ASX announcements dated 30 September 2020 and 18 January 2021

<sup>3</sup> Refer ASX announcement dated 11 February 2021

**Table 2.** Collar details for the reported holes, MGA Zone 55.

Holes	Easting (m)	Northing (m)	RL (m)	Depth (m)	Azimuth°	Dip°
SRC098	262568	7895162	575	102	102	-60
SRC099	262587	7895051	582	60	102	-60
SRC100	262590	7895074	579	60	102	-60
SRC101	262613	7895099	579	60	102	-60
SRC102	262630	7895120	579	54	102	-60
SRC103	262611	7895124	577	72	102	-60
SRC086	262380	7896146	557	120	102	-60

<ENDS>

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**About Superior Resources Limited**

Superior Resources Limited (ASX:SPQ) is an Australian public company exploring for large lead-zinc-silver, copper, gold and nickel-copper-cobalt deposits in northern Queensland which have the potential to return maximum value growth for shareholders. The Company has a dominant exploration position within the Carpentaria Zinc Province and the Greenvale Ordovician rock sequences. The Carpentaria Zinc Province is one of the world's richest mineral producing regions and the Company is focused on multiple Tier-1 equivalent exploration targets. At Greenvale, the Company holds ground covering the majority of the Ordovician sequences in the region, which includes at least three significant copper-gold porphyry and VMS prospects, an advancing high-grade gold deposit and a regionally large magmatic sulphide nickel-copper-cobalt prospect.

**About Greenvale Project**

The Greenvale Project covers a region of volcanic and intrusive rocks of Ordovician Age that are similar in type and age to the porphyry copper belt in New South Wales. The New South Wales belt of rocks host the large Cadia and North Parkes porphyry copper mines. The sequence of rocks in the Greenvale area are likely to be the northern-most extension of the remnant New South Wales Ordovician Macquarie Arc rocks.

Superior's Greenvale Project is highly prospective for VMS and porphyry copper, gold, zinc and silver deposits and contains at least ten mineral prospects. The project is located within an area of notable economic significance, being proximal to the Kidston, Balcooma, Surveyor and Dry River South deposits.

**About Steam Engine Gold Deposit**

The Steam Engine Gold Deposit is an extensive mesothermal gold lode system on which a Measured, Indicated and Inferred Mineral Resource Estimate of 1.6 million tonnes at 2.2 g/t for 112,000 ounces of gold has been established (refer ASX announcement 14 December 2020). The Resource has been modelled on only 30 percent of at least 2.5 kilometres of strike length of outcropping lode and only modelled to relatively shallow depths.

Currently, three gold lode zones have been identified: (1) the Steam Engine Lode; (2) the Eastern Ridge Lode; and (3) the Southern Zone of lodes. The deposit has the potential to contain significant greater tonnages high-grade gold ore shoots that may extend to significant depths. The mineralisation is hosted within structures that are sheared to a greater extent than many similar lode gold deposits, which increases the potential for significant thicknesses of gold lode mineralisation.

The Eastern Ridge Lode zone, being the longest lode structure, potentially represents the primary ore conduit. Although the lode has been mapped at surface to be at least 1.4 kilometres long, gold surface soil geochemistry indicates that the structure is closer to at least 4 kilometres long. Many shorter structures exist on the hanging wall side of the Eastern Ridge lode zone, such as the Steam Engine lode and numerous other zones have mainly only been identified from historic gold soil sampling.

Large portions of the world's economic deposits of gold are found in vein systems of this kind and they can hold impressive amounts of valuable ore. The veins and shoot zones typically can extend to significant depths with gold grades typically higher than other types of gold deposits.

**Reporting of Exploration Results and Mineral Resources:** The re-statement of previously reported exploration results in this report reflects information that was originally reported in market announcements as referenced in various parts of this report. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant original market announcement.

Other information contained in this report that relates to exploration results is based on information compiled by Mr Kevin Richter, an employee of Superior Resources Limited, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Richter 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 Richter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Information contained in this report that relates to Exploration Activities is based on information evaluated by Mr Peter Hwang, an executive director and shareholder of Superior Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Hwang has sufficient experience which is relevant to this style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person under the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hwang consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

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## APPENDIX 1

### 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC drill samples are collected as drilled via a riffle splitter attached to the drill rig cyclone and collected as 1m riffle-split samples. Approximately 1-3kg of sample was collected over each 1m interval and used for assaying.</li> <li>The drill bit sizes used in the drilling were consistent in size and are considered appropriate to indicate the degree and extent of mineralisation.</li> <li>1m representative samples were assayed for gold at SGS laboratories in Townsville.</li> <li>Samples with assays of 0.5 g/t Au and above were also submitted for multi-element assaying using a four-acid digest.</li> <li>Assaying for gold was via fire assay of a 50-gram charge.</li> <li>Sample preparation at SGS laboratories in Townsville for all samples is considered to be of industry standard procedure.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Drilling from surface was performed using standard Reverse-Circulation (RC) drilling techniques.</li> <li>Drilling was conducted by Associated Exploration Drillers (AED) using a UDR 650 drill rig and 5.5 inch drill bit. Additional to the on-board air compressor of the drill rig, additional compressed air was available as necessary via a separate booster truck.</li> <li>Sampling was by the use of a face-sampling hammer bit.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>All holes were surveyed using a Reflex Gyro north-seeking gyroscopic instrument to obtain accurate down-hole directional data.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample recovery was performed and monitored by Terra Search contractor and Superior Resources' representatives.</li> <li>The volume of sample collected for assay is considered to be representative of each 1m interval.</li> <li>The RC drill rod string delivered the sample to the rig-mounted cyclone which is sealed at the completion of each 1m interval. The riffle splitter is cleaned with compressed air at the end of each 1m interval and at the completion of each drill hole.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Geological logging was conducted during the drilling of each hole by a Terra Search geologist having sufficient qualification and experience for the mineralisation style expected and observed at each hole.</li> <li>All holes were logged in their entirety at 1m intervals. A spear was used to produce representative samples for logging.</li> <li>All logging data is digitally compiled and validated before entry into the Superior database.</li> <li>The level of logging detail is considered appropriate for resource drilling.</li> <li>The RC Chip trays were photographed.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sample collection methodology is considered appropriate for RC drilling and was conducted in accordance with standard industry practice.</li> <li>The RC drill hole samples are split with a riffle splitter at 1m intervals as drilled. Split 1m samples are regarded as reliable and representative.</li> <li>Approximately 1-3kg of sample was collected over each 1m interval.</li> <li>Samples were collected as dry samples.</li> <li>Duplicate samples are taken and assayed in each batch processed for assaying.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The sample sizes are considered appropriate to the style of mineralisation being assessed.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is 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 have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were submitted to SGS laboratories in Townsville for gold. Gold assays at or above 0.5 g/t were additionally assayed for a full suite of 38 additional elements using a four-acid digest.</li> <li>Samples were crushed, pulverised to ensure a minimum of 85% pulp material passing through 75 microns, then analysed for gold by fire assay method GO_FA50V10 using a 50-gram sample.</li> <li>Multi-element analyses were conducted on assays of 0.5 g/t gold or above using a four-acid digestion followed by an ICP-AES finish using method GO_ICP41Q100 for the following 38 elements: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sn, Sr, Te, Th, Ti, U, V, W, Y, Zn, Zr.</li> <li>Certified gold, multi-element standards and blanks were included in the samples submitted to the laboratory for QAQC.</li> <li>Additionally, SGS used a series of its own standards, blanks, and duplicates for the QC of the elements assayed.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The reported significant intersections have been verified by Terra Search geologists against representative drill chips collected and the drill logs.</li> <li>No holes were twinned.</li> <li>Logs were recorded by Terra Search field geologists on hard copy sampling sheets which were entered into spreadsheets for merging into a central database.</li> <li>Laboratory assay files were merged directly into the database.</li> <li>The data is routinely validated when loading into the database.</li> <li>No adjustments to assay data were undertaken.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars have been recorded in the field using handheld GPS with three metre or better accuracy. The collar locations have been further defined using DGPS to give sub-one metre accuracy.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole spacing and drilling technique are appropriate to establish the degree of geological and grade continuity of the mineral resources estimation procedures that will be applied. The mineralised system remains open and further infill and depth and strike extension drilling is required to confirm the full extent of the mineralisation.</li> <li>The area is located within MGA Zone 55.</li> <li>Topographic control is from current DGPS point data that has been merged with RL-adjusted contours. This arrangement will be upgraded prior to pre-feasibility when further definition of the topography is planned using a LIDAR survey.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole spacing is variable at the Steam Engine area, due to the different stages of the resource evaluation at the project.</li> <li>The drill hole spacing is sufficient in the central portions of the Steam Engine Lode and the Eastern Ridge Lode to allow estimation of resources when all the necessary information is compiled. An updated resource statement will be carried out at the completion of the current exploration phase.</li> <li>Most intersections reported in this report are weighted composites of smaller sample intervals, as is standard industry practice.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The orientation of the drill holes is ideal for reporting of the intersection results.</li> <li>No orientation sample bias has been identified at this stage.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sub-samples selected for assaying were collected in heavy-duty polyweave bags which were immediately sealed.</li> <li>These bags were delivered directly to the SGS assay laboratory in Townsville by Terra Search and Superior Resources employees.</li> <li>Sample security measures within SGS laboratories are considered adequate.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of the sampling techniques and data have been undertaken to date.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The areas reported on lie within Exploration Permit for Minerals 26165 and held 100% by Superior.</li> <li>Superior holds much of the surrounding area under granted exploration permits.</li> <li>Superior has agreements or other appropriate arrangements in place with landholders and native title parties with respect to the conduct of exploration work in the area.</li> <li>No regulatory impediments affect the relevant tenements or the ability of Superior to operate on the tenements.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All historical drilling reported in this report has been completed and reported in accordance with their current regulatory regime.</li> <li>Compilation in digital form and interpretation of the results of that work in digital form has been completed by the Competent Person.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Steam Engine and Eastern Ridge gold deposits are hosted within a shear zone.</li> <li>The gold mineralisation occurs within a number of north-northeast trending, west-dipping pyritic quartz-muscovite-carbonate schist lodes within metamorphosed intermediate to basic intrusives and metasediments. Significant chlorite-epidote and sericite type alteration zones exist in the shear zones, with the mineralisation appearing to be mostly linked with heavily sericite altered sections of the host rock.</li> <li>The gold mineralisation phase itself consists of a mainly pyrite sulphide assemblage +/- minor arsenopyrite, pyrrhotite, and chalcopyrite (all fine grained).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Several gold-bearing lodes occur in the area, of which the Steam Engine Lode zone is the most notable. The Eastern Ridge Lode zone is located some 500m east of the Steam Engine Lode zone. The Southern Lode zone is located approximately 600m South West of the current Eastern Ridge mineral resource area and lies geologically in-between the Steam Engine and Eastern Ridge lodes.</li> <li>The lodes are typically interpreted as being of the mesothermal lode type. Recent studies undertaken by Superior suggest that the Steam Engine mesothermal gold mineralisation is most similar to orogenic style mineralisation.</li> <li>The important features of the Steam Engine and Eastern Ridge lodes are their continuity and a persistent dip to the west.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Drill hole collar and significant intersection tables are included in the main body of the announcement. These tables include information relevant to an understanding of the results reported.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Exploration results are reported as a length-weighted average of all the assays of the intersections.</li> <li>No top cutting has been applied to the exploration results. The recent addition of multiple ounce/tonne gold grades in some of the assays means that grade cutting of very high values will need to be applied in the next resource estimation.</li> <li>No metal equivalent values are reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 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>	<ul style="list-style-type: none"> <li>For the Steam Engine Lode, an interpreted westerly dip of approximately 50 to 60° and drill holes which generally dip to the east at around 60° (or less) result in near true widths at or above 0.87 times the intersection lengths as reported.</li> <li>For the Eastern Ridge Lode, an interpreted westerly dip of approximately 40 to 50° and drill holes that generally dip to the east at around 60° (or less) result in near true widths at or above 0.9 times the intersection lengths as reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Included.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Reporting of all RC drill holes with intersections on the Steam Engine Lode at or above 0.4 g/t gold has been included in tables within the report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Preliminary metallurgical leach test work was undertaken in October and November 2020 by ALS Laboratories to confirm the amenability of the ore to conventional CIP / CIL leaching. Six sample composites were generated from material which was of ore grade and considered representative of the ore to be mined, with two samples of each of the three main ore zones.</li> <li>Grind size for the test work was P80 (80% passing size of 75 microns).</li> <li>The leach test conditions comprised sodium cyanide dosage of 1.5 kg/t, density of 40% solids, pH of 10 to 10.5, with dissolved oxygen at 15 to 20 ppm.</li> <li>Leach tests were run for 48 hours with a sample taken after 24 hours to assist in understanding the leach kinetics.</li> <li>The results for the Eastern Ridge samples (5223045 and 5223046) were excellent with 97 and 98 percent of the gold being extracted respectively, and with virtually all of this extracted after 24 hours.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The results for the Steam Engine lode were lower with the average grade samples (5223044, 5223042 and 5223043) returning total gold extraction of 84, 80 and 73 percent respectively.</li> <li>At this stage, no test work has been done to investigate options to improve the gold recovery in the Steam Engine Lode samples.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Additional exploration drilling programs are currently being planned for the Steam Engine Project, including the associated nearby Dinner Creek prospect.</li> <li>Additional work for the pre-feasibility phase of the Steam Engine deposit includes: <ul style="list-style-type: none"> <li>Metallurgical studies;</li> <li>Geotechnical studies;</li> <li>Toll treating negotiations;</li> <li>Preliminary mining and rehabilitation planning; and</li> <li>Preliminary environmental studies.</li> </ul> </li> </ul>