Superior Resources

ASX Announcement

4 June 2024

STEAM ENGINE GOLD PROJECT
2024 Resource expansion drilling and mining studies

HIGHLIGHTS:

- **2024 Steam Engine Program comprises revision of 2021 Scoping Study, Resource expansion and exploration drilling programs to accelerate Resource growth by step-out drilling along strike and down dip. New gold lode targets to be drill-tested.**
- **2021 Scoping Study being revised (Base case in 2021: A$2,200 /oz Au; to be revised at A$3,250 /oz Au) along with other mining studies and metallurgical testing.**
- **New geophysical data provides insights to a potential southern extension of the main Steam Engine Lode and previously unknown lode zones.**
- **Compelling size potential: current Mineral Resource calculated only to shallow vertical depths averaging 90m at Steam Engine Lode and 35m at Eastern Ridge Lode. Resource calculated along 1.2 kms of lode strike – at least 10 kms of additional untested lode potential identified by anomalous soil geochemistry, rock chips up to 65.9g/t Au and geophysics.**
- **Total current Mineral Resource (JORC Measured, Indicated and Inferred) stands at** (Refer ASX announcement dated 11 April 2022)**:**

  Lower Grade, Owner-Operated Processing Plant Model (lower cut-off grade of 0.25 g/t Au)
  - **4.18 Mt @ 1.5 g/t Au for 196,000 oz Au**

  High Grade, Toll Treatment Model (higher cut-off grade of 1.0 g/t Au)
  - **2.72 Mt @ 2.0 g/t Au for 171,000 oz Au**
- **Examples of high grade lode intersections** (refer Appendix 1 for original publication of results)**:**
  - **5m @ 38g/t Au** from 49m (SRC077)
    incl. **1m @ 184g/t Au** from 54m
  - **7m @ 20.6g/t Au** from 54m (SRC076)
    incl. **1m @ 135g/t Au** from 55m
  - **5m @ 24.9g/t Au** from 27m (SRC161)
    Incl. **1m @ 115.2g/t Au** from 29m
  - **8m @ 6.3g/t Au** from 19m (SRC136)
    incl. **1m @ 38.8g/t Au** from 23m
  - **15m @ 2.3g/t Au** from 40m (SRC024)
    incl. **6m @ 4.1g/t Au** from 47m
  - **8m @ 3.6g/t Au** from 11m (SRC043)
    incl. **2m @ 10.5g/t Au** from 17m
  - **15m @ 2.3g/t Au** from 33m (SRC067)
    incl. **3m @ 7.5g/t Au** from 43m
  - **14m @ 4.9g/t Au** from surface (SRC034)
    incl. **1m @ 47.5g/t Au** from 7m
    incl. **7m @ 9.2g/t Au** from 7m
  - **10m @ 2.8g/t Au** from 58m (SRC105)
    incl. **1m @ 19.7g/t Au** from 58m
    incl. **4m @ 5.9g/t Au** from 58m
  - **21m @ 2.2g/t Au** from 160m (SRC188)
    incl. **5m @ 5.1g/t Au** from 161m
  - **18m @ 2.4g/t Au** from 21m (SDD006)
    incl. **6m @ 4.6g/t Au** from 33m
    incl. **1m @ 10.9g/t Au** from 37m
  - **17m @ 2.0g/t Au** from 22m (SRC069)
  - **12m @ 5.1g/t Au** from 60m (SRC080)
    incl. **6m @ 7.1g/t Au** from 64m
    incl. **1m @ 12.3g/t Au** from 64m

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Superior's Managing Director, Peter Hwang commented:

"Whilst we have been executing drilling campaigns on our porphyry copper prospects, we have also been busy conducting important geological and resource studies at Steam Engine.

"It is undoubtably fortunate that we have an expanding, high-potential, high-quality gold deposit sitting in the middle of several Tier 1-potential copper and nickel prospects spread across two newly recognised mineral provinces, all secured within our Greenvale Project.

"Considering that some current gold lode development projects have resource inventories calculated down to depths of over 1,000 metres and that drilling to date at Steam Engine reaches average vertical depths of only 90 metres at the Steam Engine Lode and 35 metres at the Eastern Ridge Lode, the project's size potential is considerable.

"It's size potential is not only down-dip, but there is at least 10 kilometres of untested strike extent as identified by soil geochemistry and a recent sub-audio magnetics (SAM) survey. The SAM survey in particular, has highlighted a previously unknown potential southern extension to the main Steam Engine Lode as well as several potential new lode zones that are unrelated to the Steam Engine and Eastern Ridge Lodes. The SAM survey appears to also show depth continuation of these lode zones.

"We are putting Steam Engine to the test this year and we have high expectations, considering the incredible positive movements in the gold market and the upgraded Mineral Resource Estimate, both of which were not factored into the last Scoping Study that was completed in early 2021.

"2024 promises to be an exciting year as we prepare to commence extensive drilling programs at Steam Engine as well as the most anticipated holes to date at Bottletree, backed by the Queensland Government's CEI Critical Minerals grant."

Figure 1. *Aerial view of the Steam Engine Gold Project looking north.*

Superior Resources Limited (**ASX:SPQ**) (**Superior**, the **Company**) is pleased to provide an update on progress being made at the Steam Engine Gold Project (**SEGP**). Steam Engine is a unique gold deposit located between several Tier 1-potential porphyry Cu-Au-Mo prospects and a magmatic sulphide Ni-Cu-PGE province within the Company's 100%-owned Greenvale Project in northeast Queensland (**Figs. 1 and 2**).

The SEGP presents the Company with an opportunity to generate revenue in the short to medium term together with considerable upside potential to grow the Resource base to be a substantial deposit.

This report sets out the Company's 2024 Resource expansion drilling programs and concurrent mining studies that will be conducted with a focus on realising short-term revenue. Significant new findings derived from recent analysis of geochemical and new geophysical survey data highlighting the potential for Resource expansion is also presented.

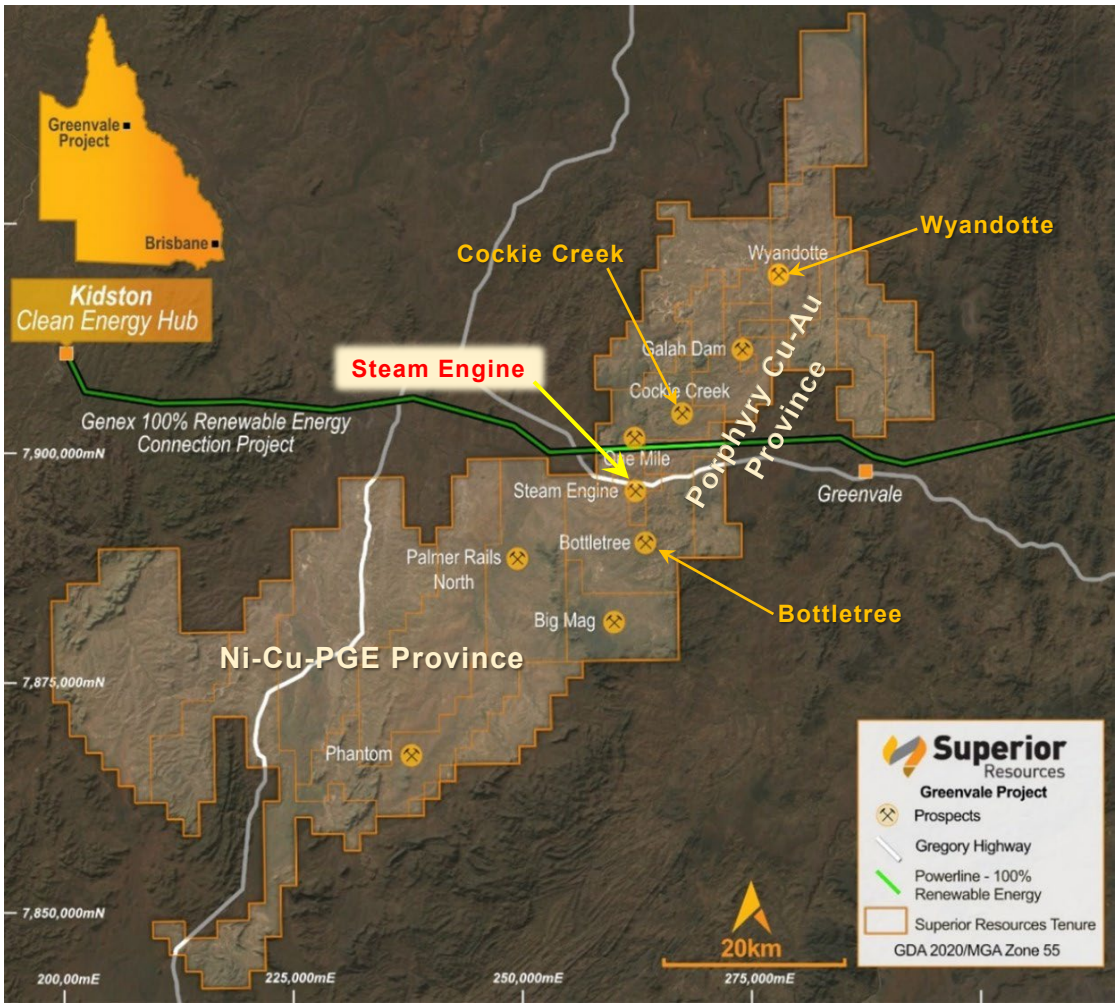


Figure 2. *Map showing the location of the Steam Engine Gold Project within the Greenvale Project tenements and select prospects. The Gregory Highway and the Renewable Energy Power Infrastructure Corridor are also shown.*

Current Mineral Resource

The Steam Engine and Eastern Ridge Lodes within the SEGP have only been drilled to shallow levels with average vertical depths of 90 metres at the Steam Engine Lode and 35 metres at the Eastern Ridge Lode (**Figs. 3 to 5**). However, the Mineral Resource is of high quality with a significant portion of the Resource reaching the JORC 2012 Measured confidence category.

The high degree of confidence in the Mineral Resource enables ready progression to feasibility and mining studies.

The SEGP is characterised by a significant high grade ore zone, which dominates the Steam Engine Lode. Bonanza grade gold mineralisation occurs within this zone.

The Mineral Resource Estimate (**MRE**) was established in 2022 and stands at (refer also to **Table 1**):

Lower Grade, Owner-Operated Processing Plant Model (lower cut-off grade of 0.25 g/t Au)

- **4.18 Mt @ 1.5 g/t Au for 196,000 oz Au**

High Grade, Toll Treatment Model (higher cut-off grade of 1.0 g/t Au)

- **2.72 Mt @ 2.0 g/t Au for 171,000 oz Au**

Table 1. SEGP – Mineral Resource Estimate (Refer ASX announcement dated 11 April 2022)

Model	Classification	Tonnes	Grade (g/t Au)	Ounces (Au)
OWNER OPERATOR MODEL (0.25 g/t Au block grade cut-off)	MEASURED	800,000	2.1	53,000
	INDICATED	1,420,000	1.5	68,000
	INFERRED	1,960,000	1.2	75,000
	TOTAL	**4,180,000**	**1.5**	**196,000**
TOLL TREATMENT MODEL (1.0 g/t Au block grade cut-off)	MEASURED	590,000	2.6	49,000
	INDICATED	1,020,000	1.9	62,000
	INFERRED	1,110,000	1.7	60,000
	TOTAL	**2,720,000**	**2.0**	**171,000**

The MRE incorporates results from a total of 314 drill holes for 22,733 metres of drilling, with the Steam Engine Lode accounting for 16,182 metres of drilling and the Eastern Ridge Lode, 3,983 metres.

The estimation process considered two scenario models, requiring the modelling of two separate MREs:

1. High Grade Model – Toll treatment model; and
2. Low Grade Model – Owner-operated on-site processing plant model.

The two scenarios used 2022 pricing and costing assumptions. The purpose for assessing the two scenarios was to assist in determining the most beneficial development pathway for the SEGP.

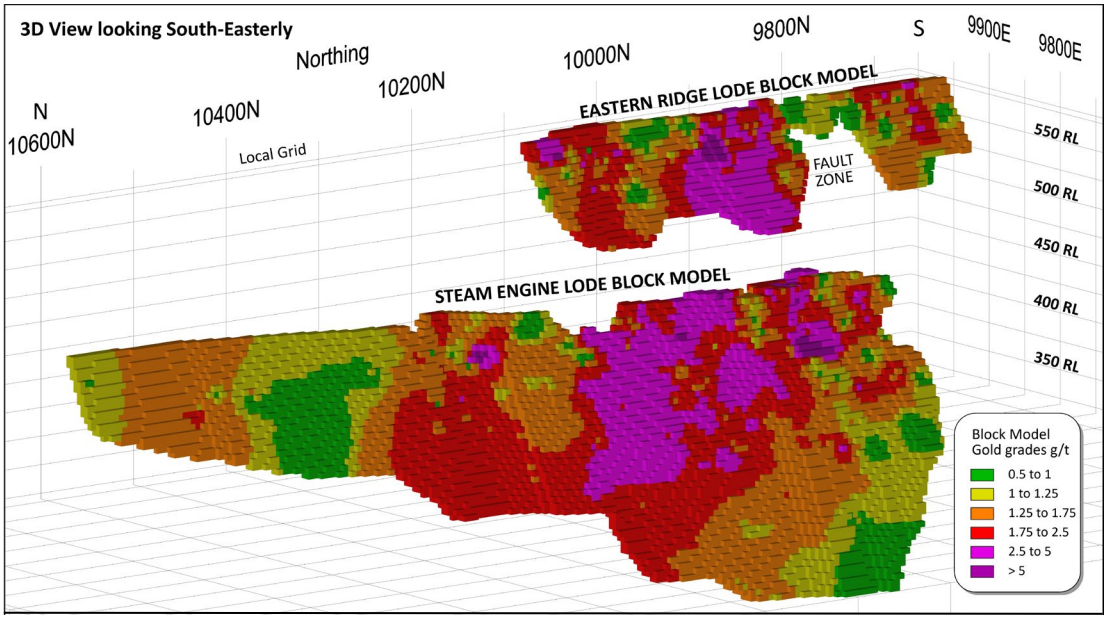


Figure 3. *Oblique view of the Steam Engine and Eastern Ridge Lode block models (1.0g/t Au cut-off).*

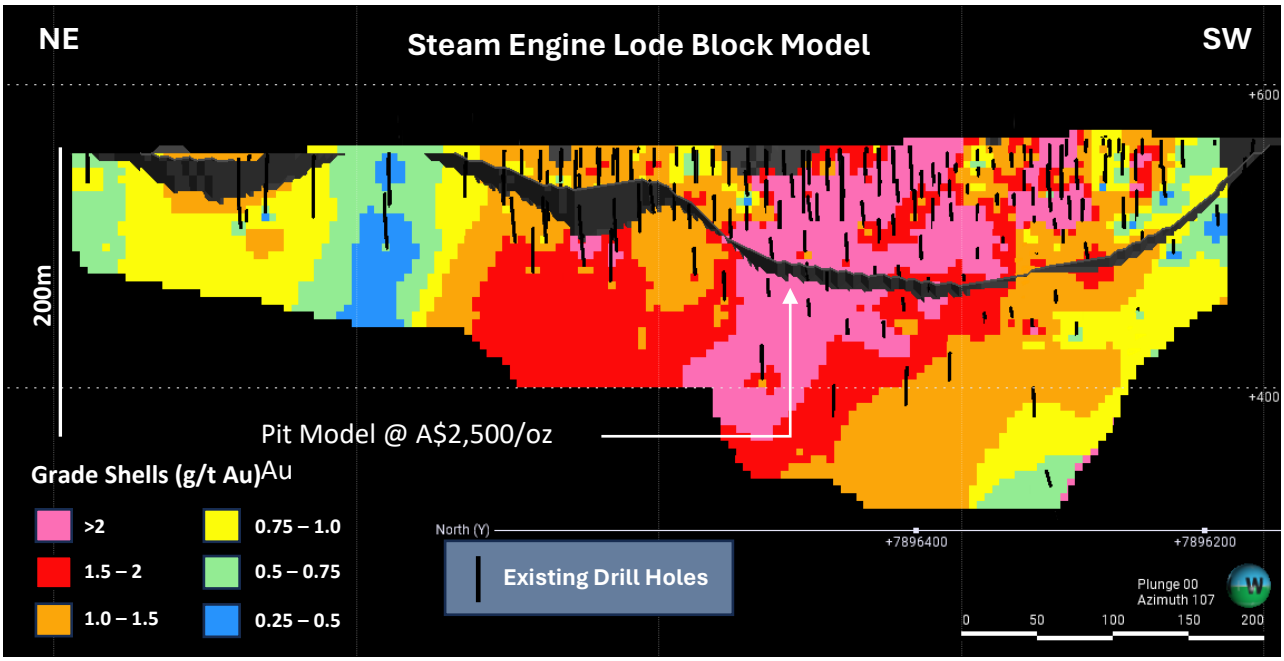


Figure 4. *Block model of the Steam Engine Lode (0.25g/t Au cut-off) showing block grade categories and drill traces of the near-lode portions of existing drill holes.*

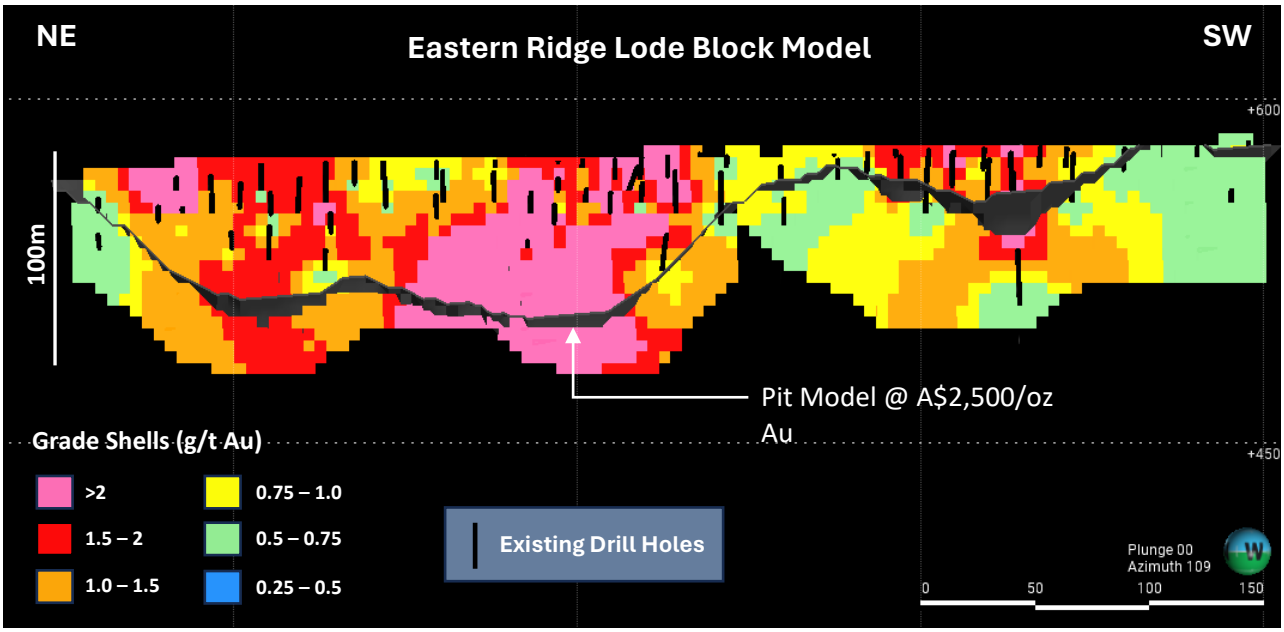


Figure 5. *Block model of the Eastern Ridge Lode (0.25g/t Au cut-off) showing block grade categories and drill traces of the near-lode portions of existing drill holes.*

Scoping Study Revision

As a result of significant shifts in the fundamental price and cost assumptions used in financial modelling, the Company considered that a revision of the 2021 Scoping Study is necessary. A revision of the Scoping Study is currently underway and will investigate both toll treatment and on-site processing plant models using updated financial inputs as well as the current MRE.

It is notable that the 2021 Scoping Study (refer ASX Announcement dated 27 April 2021):

- used a base-case gold price of A$2,200 per ounce (using $0.76 AUD/USD);
- was based on extracting only 70,000 oz Au; and
- was based on an outdated MRE.

The revised Scoping Study is expected to return significantly improved outcomes compared to the 2021 study (**Table 2, Fig. 6**).

Table 2. 2021 Scoping Study financial summary (Toll Treatment Model, discount rate 7%)

Parameter	Base Case (A$2,200 /oz Au)	Upside (A$2,500 /oz Au)
Ore Mined and Processed	1.31Mt @ 2.31 g/t Au	1.30Mt @ 2.24 g/t Au
Gold Produced	70,000 ounces	79,000 ounces
Post-tax Overall Cash Flow	A$24.2M	A$41.0M
Post-tax NPV	A$21.2M	A$35.9M
Return on Capital	475%	806%
Payback Period	11 months	9 months

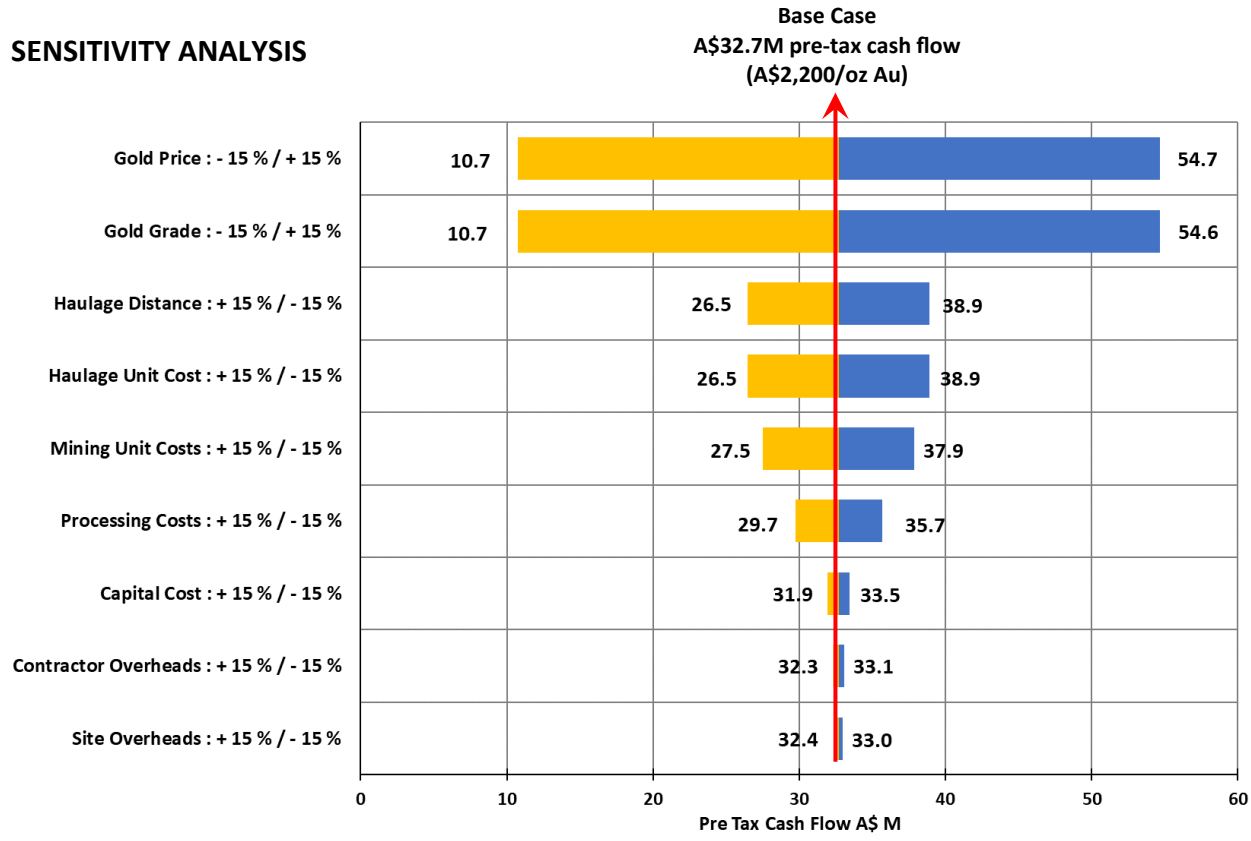


Figure 6. *Pre-Tax Cash Flow sensitivity analysis showing the effects on the 2021 Scoping Study A$32.7M Pre-Tax Cash Flow (Base Case) using ± 15% variability in select parameters.*

SEGP Resource Expansion Potential

Almost all exploration work to date at the SEGP has been focussed on the two historically known lode zones, the Steam Engine Lode and the Eastern Ridge Lode. During 2020 and 2021, the Company conducted intense drilling campaigns with the aim of producing and expanding a JORC, 2012-compliant Mineral Resource. The drilling campaigns enabled the incorporation of 314 drill holes totalling 22,733 metres of drilling into the most recent Mineral Resource Estimate that was completed during 2022.

Gold mineralisation at the SEGP is contained within significant geological structures that, to varying degrees, comprise localised shear zones.

SOIL GEOCHEMISTRY AND ROCK CHIPS

Gold-mineralised structures are highlighted geochemically by anomalous zones of elevated Au-in-soil geochemistry (**Fig. 7**).

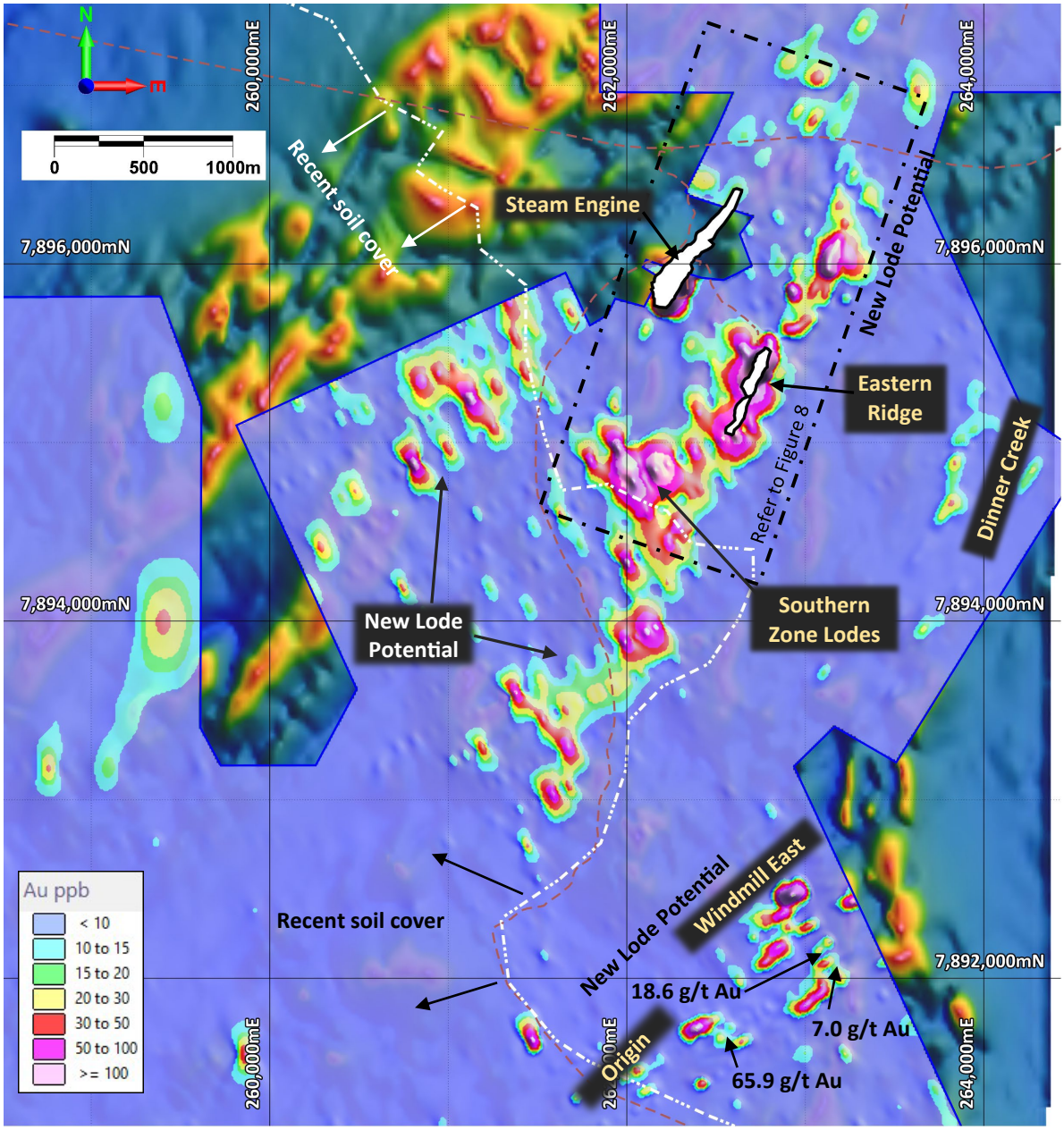


Figure 7. *Plan showing gridded Au soil geochemistry over background RTP airborne magnetics data. The Steam Engine and Eastern Ridge lode Mineral Resource outlines are shown as white polygons together with areas of potential new lode zones. The Southern Zone, Windmill East and Origin mineralised zones are also shown.*

The SEGP Mineral Resource is developed over a total of 1.2 kilometres of this structure. Gold-in-soil geochemistry indicates that gold mineralisation exists along structures with a total strike length of at least 10 kilometres (**Fig. 7**). It is evident that significant potential exists to extend gold lode mineralisation along strike to the north and south of the Steam Engine and Eastern Ridge lodes (**Fig. 7**). Furthermore, strong gold mineralisation exists over a large area at the Windmill East and Origin Prospects, with rock chip assays up to 65.9 g/t Au.

SUB-AUDIO MAGNETICS SURVEY

Analysis of data acquired by a recent sub-audio magnetics (**SAM**) geophysical survey over the Steam Engine and Eastern Ridge lodes indicates that the SAM geophysical technique may be particularly effective at identifying more intensely mineralised gold lodes as well as lodes that have significant depth extent to the mineralisation. Late channel responses from the total field electromagnetics (**TFEM**) component of the SAM survey appears to effectively highlight the Steam Engine and Eastern Ridge lodes and in particular, depth extensions to the high-grade zones within the lodes (**Fig. 8**).

Importantly, the TFEM has highlighted a potential southern extension of the Steam Engine Lode. It has been thought that the Steam Engine Lode may have been truncated at it's southern end by faulting or shearing. However, such structures are not observed in the SAM survey data or the ground magnetics data.

Furthermore, several other previously unknown potential lode zones with significant depth extent are also highlighted by the SAM TFEM data (**Fig. 8**). This is an important finding and if new lodes are present at these locations, a rapid and substantial expansion of the Steam Engine Resource may result.

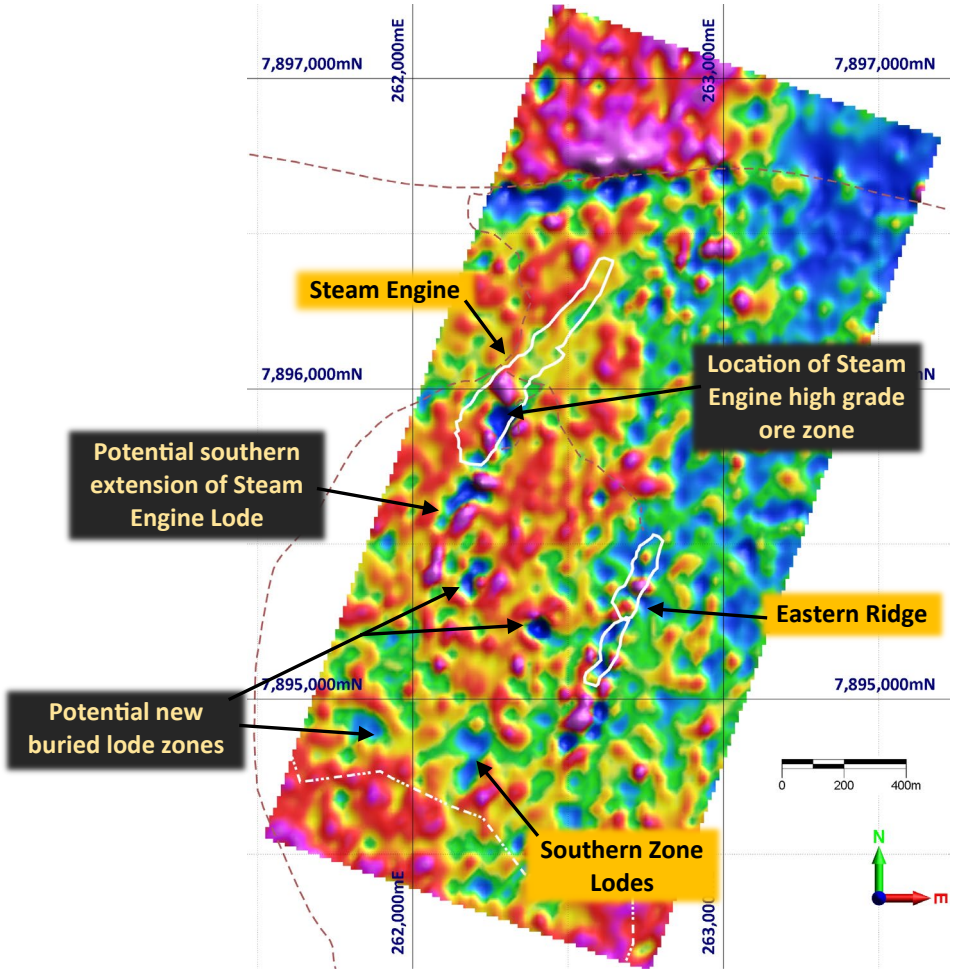


Figure 8. *Image of late channel (Channel 16) total field electromagnetics (TFEM) responses over the Steam Engine and Eastern Ridge lodes. Discrete areas of low TFEM response are coincident with the most intensely mineralised parts of the gold lodes. A possible southern extension to the Steam Engine Lode is visible as well as other potential lode zones.*

Forward Exploration and Drilling Programs

RESOURCE EXPANSION DRILLING PROGRAM

The strong and continuous nature of gold mineralisation at the Steam Engine and Eastern Ridge lodes is amenable to effective and rapid Resource expansion by step-out drilling to follow the lodes down dip and along strike.

A total of 45 reverse-circulation (**RC**) drill holes totalling approximately 4,500 metres across the Steam Engine and Eastern Ridge lodes have been planned with the objective of significantly expanding the SEGP Mineral Resource (**Fig. 9**). The program is planned to commence during July 2024 and is estimated to take six weeks to complete.

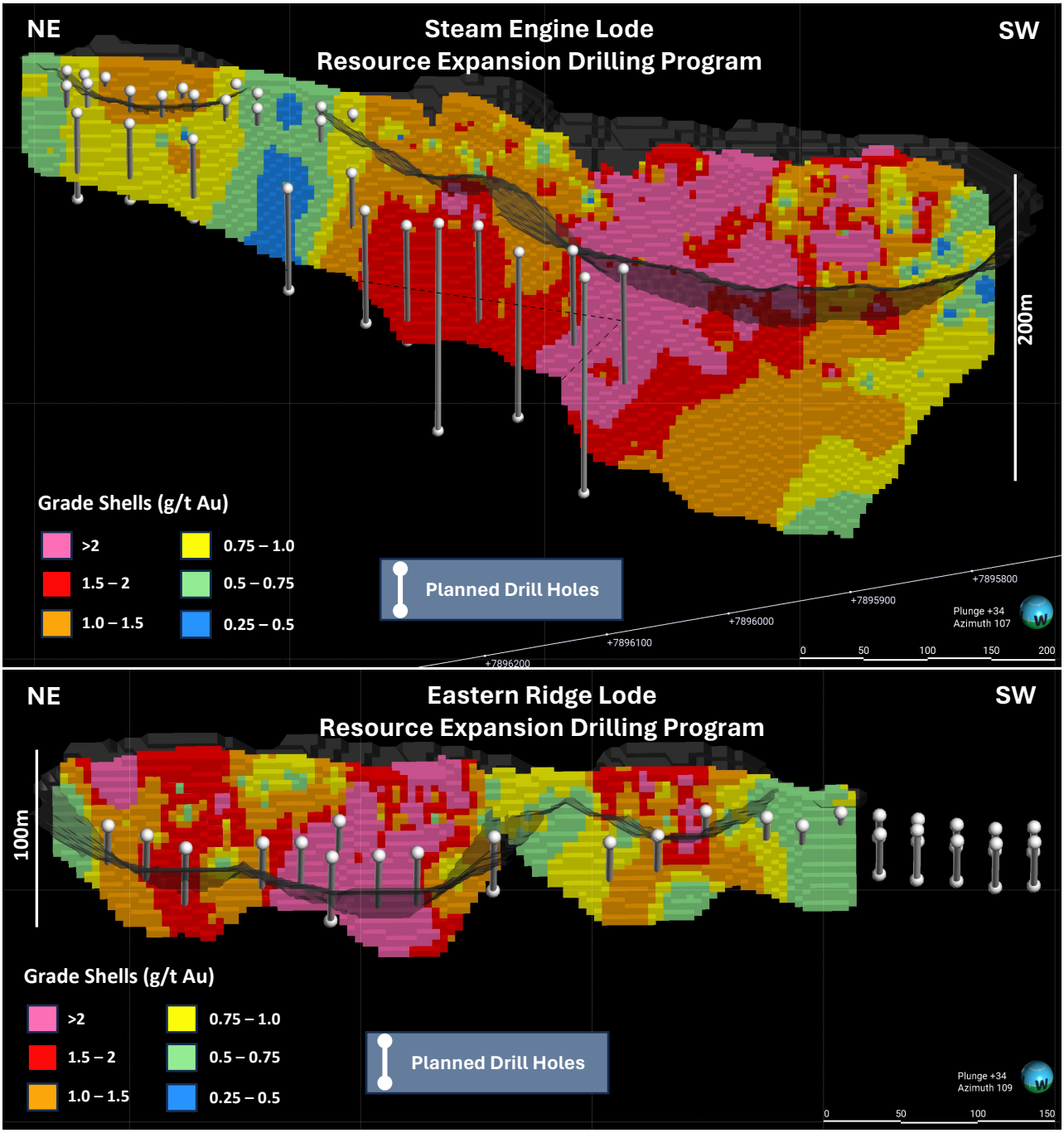


Figure 9. *Block models of the Steam Engine and Eastern Ridge lodes showing the forward Resource expansion drilling program.*

EXPLORATION PROGRAM

The forward exploration at the SEGP is focussed on the identification of new lode zones that have the potential to contribute Resources to an open-cut mining operation. The program comprises initial soil geochemistry sampling programs and follow up slimline RC drilling programs.

Two programs of soil sampling are planned: a higher density program to assist in determining drill hole locations along the interpreted new lode zones; and a lower density program to extend the soil geochemistry coverage outside of the known geochemically anomalous zones (**Fig. 10**).

An intense program of slimline RC drilling will follow the completion of the higher density soil sampling program.

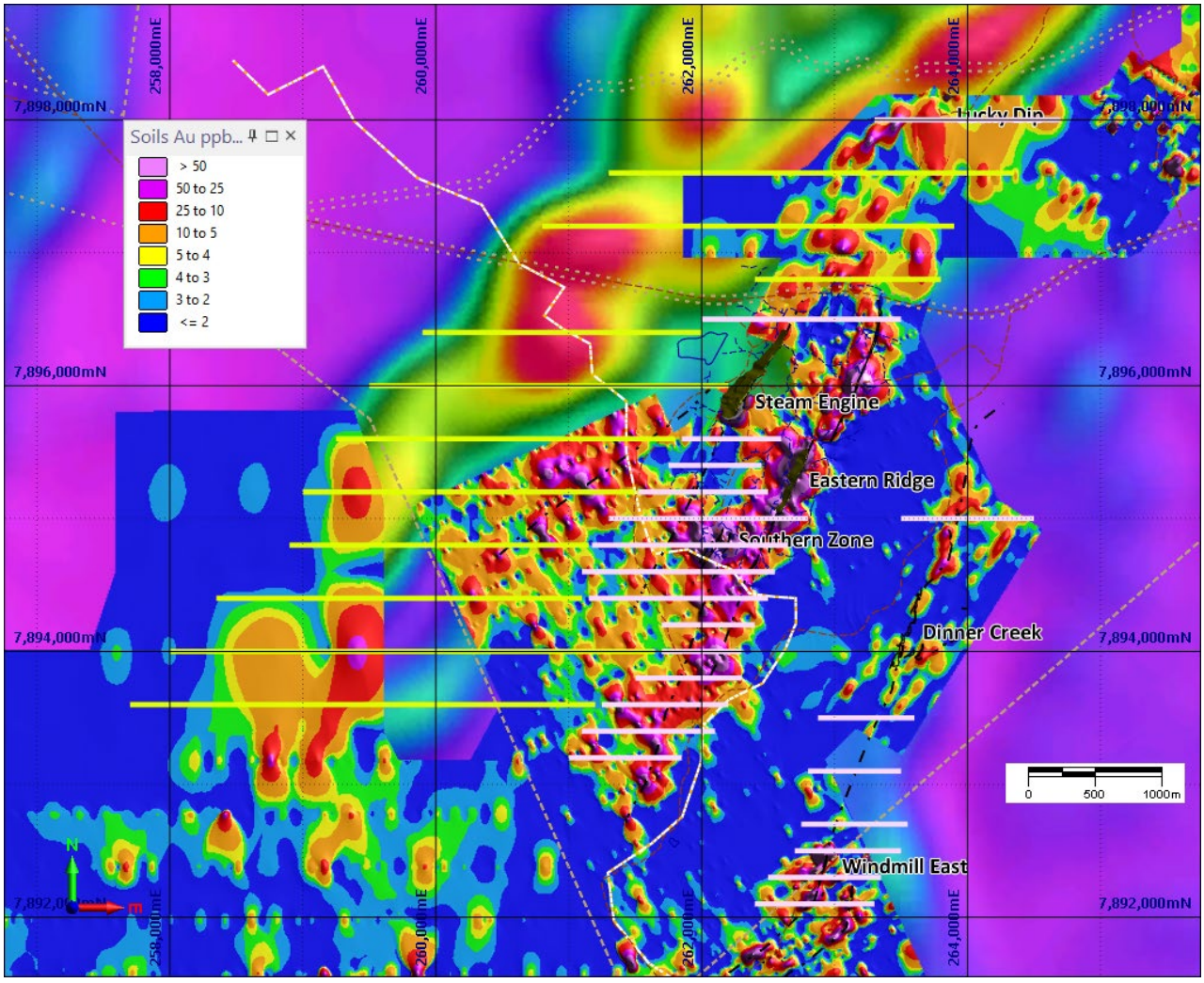


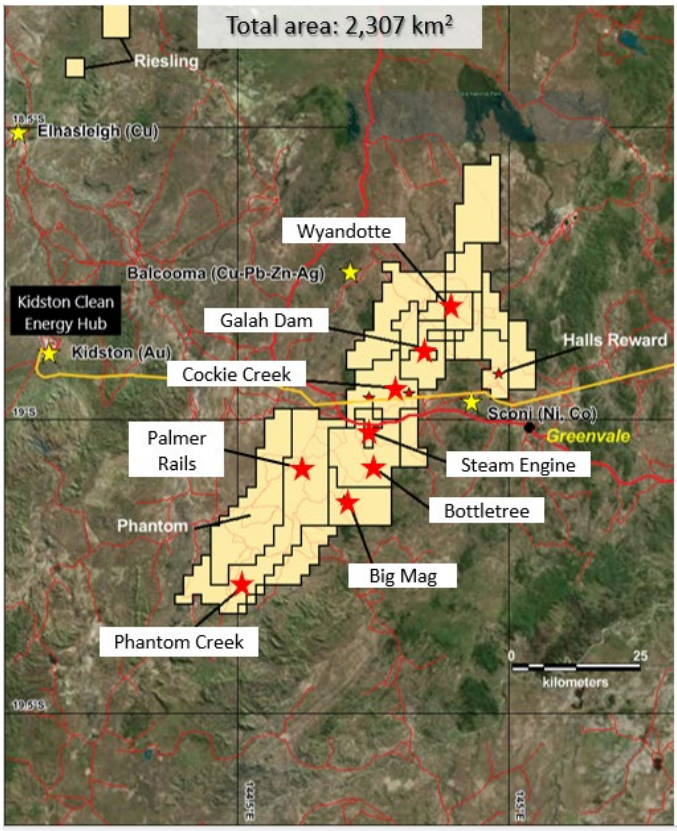
Figure 10. *Plan of gridded Au soil geochemistry over background RTP airborne regional magnetics data showing planned soil geochemistry sampling lines. Pink E-W lines represent a higher density soil sampling program consisting of sample interval spacings of 25m and sample line spacings of 200m. Yellow E-W lines represent a lower density soil sampling program comprising 50m sample intervals along 400m spaced sample lines.*

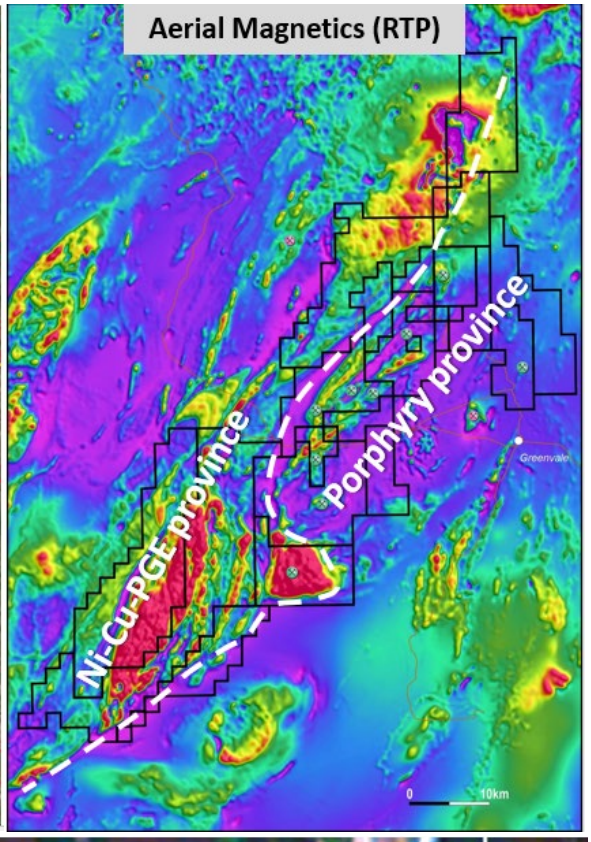
Next Steps

The following sets out the key programs of work planned to be conducted over the next Quarter, most of which are expected to be reportable to the market:

1. Geophysical modelling of **SAM survey data**;
2. **Results from updated Scoping Study** and Pit Optimisation exercise incorporating updated input assumptions and outcomes from the METS Processing Options Study;
3. Commencement of **SEGP Resource Expansion drilling program**, expected during July 2024;
4. Systematic flow of **assays from Resource Expansion Drilling Program**;
5. Commencement of SEGP soil sampling programs;
6. Metallurgical and other mining study related work;
7. Commencement of SEGP Exploration Drilling Program;
8. **Scoping Study revision** and/or **Prefeasibility Study**; and
9. Commencement of the **Bottletree CEI Critical Minerals Grant** drilling program.

Greenvale – Juxtaposed porphyry and magmatic Ni-Cu-PGE sulphide provinces



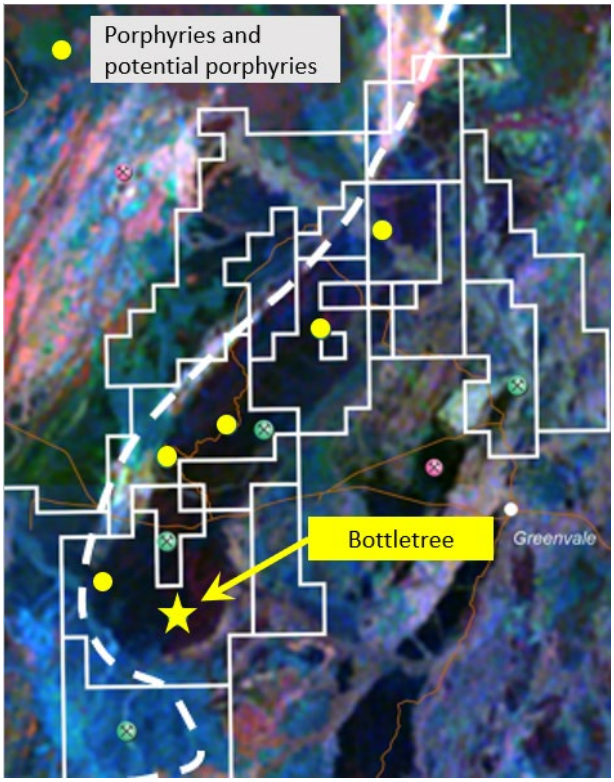


Superior has long recognised the copper potential within the Lucky Creek Corridor. However, recent exploration drilling at Bottletree, coupled with regional geological investigations over several years has enabled the characterisation of the Lucky Creek Corridor as a fossil island arc porphyry province, hosting numerous porphyry and potential porphyry systems recurring along a 50 km zone.

Superior is taking the lead with Tier-1 potential copper-gold porphyry exploration in this part of Australia.

Juxtaposed against the Greenvale Porphyry Province is a second province formed by a completely different geological genesis model. Originally formed at a much deeper crustal level, the Greenvale Magmatic Nickel-Copper-PGE Sulphide Province has been technically proven in terms of the presence of such mineralising systems. However, the province remains practically unexplored.

Superior enjoys a first mover advantage over the entire province, which presents as one of the best sulphide Ni-Cu-PGE propositions in Australia.



About Superior

Superior Resources Limited (ASX:SPQ) is an Australian public company exploring for large copper, 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: *Where relevant, some of the information relating to exploration results, Mineral Resources and geology reflect information that has been reported in announcements published on the ASX Announcements Platform, as noted within this report. Other information in this report as it relates to exploration results has been compiled by Mr Peter Hwang, Managing Director of Superior Resources Limited. Mr Hwang is a Member of the Australian Institute of Geoscientists and 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 Hwang consents to the inclusion in the report of the matters based on the 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 or Mineral Resources, Superior confirms that it is not aware of any new information or data that materially affects the information, results or conclusions contained in the original reported document. Information contained in this report relating to the findings and outcomes of the Company's 2021 Scoping Study is provided on the basis of material assumptions that applied at the time of the original reporting of the Scoping Study.*

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Approved for release by the Board of Directors

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APPENDIX 1

REFERENCES

- ASX Announcement dated 14 September 2020, “Strong drill results reinforce Steam Engine Mineral Resource”.
- ASX Announcement dated 30 September 2020, “Latest drilling delivers outstanding 47.5g/t shallow gold intercept at Steam Engine”.
- ASX Announcement dated 15 October 2020, “Further strong results confirm northern extension to Steam Engine Lode”.
- ASX Announcement dated 5 November 2020, “Strong drill results continue at Steam Engine Project”.
- ASX Announcement dated 18 January 2021, “First assays from Stage 2 drilling deliver spectacular results up to 184g/t Au at Steam Engine”.
- ASX Announcement dated 11 February 2021, “Stage 2 drilling continues to strengthen Steam Engine Lode”.
- ASX Announcement dated 27 April 2021, “Scoping Study delivers robust case for development of Steam Engine Gold Project”.
- ASX Announcement dated 16 August 2021, “Exploration work confirms Steam Engine’s large-scale potential: 5,000m extension to drill program commencing immediately”.
- ASX Announcement dated 29 September 2021, “Steam Engine continues to deliver with grades up to 38.8g/t Au”.
- ASX Announcement dated 18 October 2021, “Steam Engine returns spectacular intersection grading 115.2g/t Au”.
- ASX Announcement dated 22 November 2021, “Steam Engine continues to strengthen with latest drilling showing potential for significant Resource growth”.
- ASX Announcement dated 18 January 2022, “Rock chip assays up to 65.9g/t Au and mapping at new Windmill East/Origin Prospects confirm expanded, very large-scale gold potential for Steam Engine Gold Project”.
- ASX Announcement dated 11 April 2022, “Material upgrade in Steam Engine Resource to 196,000oz Au with 80.6% increase to Measured and Indicated categories”.

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	• *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.* • *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 (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.*	Current Sampling • Reverse Circulation (**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 used for assaying. • Diamond core drill samples are collected by quartering of the NQ core from Diamond drilling. Approximately 1 to 1.5 kg of sample was collected over each one metre interval used for assaying. • The drill bit sizes used in the drilling were consistent in size and are considered appropriate to indicate the degree and extent of mineralisation. • 1m representative samples were assayed for gold at laboratories in Townsville. Assaying for gold was via fire assay of a 50 gram charge. • Samples of the gold mineralisation were also submitted for multi-element assaying using a four-acid digest. • The sample preparation at Intertek (2021) and SGS (2020) laboratories in Townsville for all samples is considered to be of industry standard. Historic Sampling • Information relating to historic results relies on data contained in reports submitted to the Queensland Department of Natural Resources and Mines as part of the Company Report System attaching to granted Exploration Permits. • The sampling techniques, where reported, used standard industry approaches. These include: 1. splitting off a sample of material delivered to the top of the hole during RC drilling to produce a sample for assay accompanied by geological logging of the sample. 2. Halving of drill core from diamond drilling to produce an assay sample accompanied by geological logging of the core.

Criteria	JORC Code explanation	Commentary
		• Assaying of samples was completed by commercial laboratory methods that were appropriate at the time the samples were collected. Sample intervals of 4m were commonly used for initial determination of the presence of gold by a geochemical method followed by more detailed sampling of mineralised intervals at usually 1m intervals using a more precise method. • Whilst it is not possible to determine the reliability of historic assay results, no issues arose during compilation and interpretation of the results that would suggest that the assay results were not reasonable. Additional to this, the recent sampling and assaying completed during 2020 and 2021 by Superior shows that the various previous drilling phases have given consistently similar results when compared to those of the more recent sampling.
Drilling techniques	• *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.).*	Current Drilling • Drilling from surface was performed using standard RC and diamond core drilling techniques as applicable to the hole drilled. • RC Drilling was conducted by AED (Associated Exploration Drillers) using a UDR 650 or McCulloch's DR 950 drilling rig using a 5.5 inch drill bit. Additional to the on-board air compressor of the drilling rig being used, additional compressed air was available as necessary via a separate booster truck. Sampling was by the use of a face-sampling hammer bit. • Diamond drilling was conducted by AED (Associated Exploration Drillers) using a UDR 650 or McCulloch's DR 950 drilling rig and NQ drill rods and wireline to retrieve the core. Drill core was oriented to allow structural measurements. The deeper drill holes were first pre-collared using the RC Drilling methods outlined above. • All holes were surveyed using a Reflex Gyro north-seeking gyroscopic instrument to obtain accurate down-hole directional data. Historic Drilling • RC and diamond drilling are the only drilling techniques relied on in the historic drilling. Historic open hole percussion and RAB holes have only been used in terms of constraining the extent of the mineralisation, where applicable, and not for any estimation purposes (Note: Where recent drilling is available this has been used instead of historical open hole percussion and/or RAB holes in determining the extents of the mineralisation).

Criteria	JORC Code explanation	Commentary
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.*	Current Drilling • Sample recovery was performed and monitored by Terra Search contractor and Superior's representatives. • The volume of sample collected for assay is considered to be representative of each 1m interval. • 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. • For diamond core drilling a wireline was used to retrieve core samples that are then placed in core trays. Historic Drilling • Recoveries for the historic RC drill holes were not recorded. • Recoveries for historic diamond drill core samples were recorded for most holes drilled at Steam Engine. These recoveries were usually of the order of 100% indicating that recoveries should not be an issue if the results are used for estimating resources. • No relationship is evident between sample recovery and grade.
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.*	Current Drilling • 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. • All holes were logged in their entirety at 1m intervals for the RC drill holes. A spear was used to produce representative samples for the logging of RC holes. • Intact entire diamond drill hole core was use for the logging of diamond core. The core was used to record RQD, as well as structural information and the geological logging. • All logging data is digitally compiled and validated before entry into the Superior database. • The level of logging detail is considered appropriate for resource drilling. • The RC chip trays and diamond core trays were all photographed.

Criteria	JORC Code explanation	Commentary
		Historic Drilling • Geological logging of most of the historic drill holes is available in the Company Report System. Logs for holes drilled at the infill 25m sections have not been located at this stage. The available logging is of a good standard. No geotechnical logs have been reported and it is assumed that these were not done. Diamond drill hole logs usually include structural data that has been compiled in digital form. • The logging is generally of a qualitative nature. No core or chip photography is available in the reports. • Available logging of all material has been completed.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Current Sampling • The sample collection methodology is considered appropriate for RC and diamond core drilling and was conducted in accordance with standard industry practice. • RC drill hole samples are split with a riffle splitter at 1m intervals as drilled. Split 1 metre samples are regarded as reliable and representative. Approximately 1-3kg of sample was collected over each 1m interval. Samples were collected as dry samples. Duplicate samples are taken and assayed in each batch processed for assaying. • Diamond core drill hole samples were collected from quartered core over 1 metre intervals. Approximately 1 to 1.5 kg of sample was collected over each one metre interval used for assaying. Quartered NQ core samples are regarded as reliable and representative. Samples were collected as dry samples. • The sample sizes are considered appropriate to the style of mineralisation being assessed. Historic Sampling • The diamond drill core hole samples were collected from halved core. • Details of the approach taken for sampling of RC drill holes are not available, but it is expected to be of industry standard for the time.
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*	Current Assaying • All samples were submitted to Intertek (2021) or SGS laboratories (2020) in Townsville for gold. Samples of the gold mineralisation were also submitted for multi-element assaying using a four-acid digest.

Criteria	JORC Code explanation	Commentary
	analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *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.*	• Samples were crushed, pulverised to ensure a minimum of 85% pulp material passing through 75 microns, then analysed for gold by fire assay method FA50/OE04 (Intertek in 2021) or GO_FA50V10 (SGS in 2020) using a 50-gram sample. • Multi-element analyses were conducted on the gold mineralisation using a four acid digestion followed by an OES finish using method 4A/OE33 (Intertek in 2021) or ICP-AES finish using method GO_ICP41Q100 (SGS in 2020). The following 33 elements: 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, Zn were assayed for in 2021 and 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 were assayed in 2020. • Certified gold, multi-element standards and blanks were included in the samples submitted to the laboratories for QAQC. Laboratory assay results for these quality control samples are within 5% of accepted values. • Additionally, the laboratories used a series of their own standards, blanks, and duplicates for the QC of the elements assayed. Historic Assaying • Sampling and assaying techniques used during various phases of the previous drilling were done by commercial laboratories using industry standard procedures used at the time of drilling. • Assay data reviewed within the historic reports include some duplicate assaying. It is unknown in detail what other quality control procedures were adopted. • The recent sampling and assaying completed in 2020 and 2021 by Superior shows that the various historical drilling phases show consistent results when compared to those from the recent drilling.
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.*	Current Sampling • The reported significant intersections have been verified by Terra Search and Superior geologists against the representative drill chips and diamond drill core collected and the drill logs. • No Superior holes were twinned. • Logs were recorded by Terra Search field geologists on hard copy sampling sheets

Criteria	JORC Code explanation	Commentary
		which were entered into spreadsheets for merging into a central database. • Laboratory assay files were merged directly into the database. • The data is routinely validated when loading into the database. • No adjustments to assay data were undertaken. Historic Sampling • Close spaced recent drilling by Superior Resources (2020 and 2021) to the historic drill holes confirms the order of the drill gold intersections obtained by the historic drilling. • To date, no dedicated twinned holes have been drilled by Superior on the historic drill holes, however very close spaced recent drill holes to the historic drilling has resulted in very similar results both in terms of widths and grades. • Most of the historic drill hole data was captured and stored on paper. The compilation of that data in digital form has been completed by the Competent Person. • No adjustments have been made to historic sample assay data as there was no apparent reason for such adjustment.
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.*	Current Drilling • Drill hole collars have been recorded in the field using handheld GPS with three metre or better accuracy. The locations have also been further defined using DGPS to give sub one metre accuracy. • The drill hole spacing and drilling technique are appropriate to establish the degree of geological and grade continuity for the Mineral Resource estimation procedures that have been applied. The gold mineralised system remains open and further infill, depth and strike extension drilling is required to confirm the full extent of the ore bodies. • The area is located within MGA Zone 55. • Topographic control is currently from DGPS pickup that has been merged with RL adjusted contours. This arrangement will be upgraded prior to any possible mining when further definition of the topography would be needed (e.g. a LIDAR survey). Historic Drilling • Noranda Australia (and subsidiaries) controlled exploration of the Steam Engine area using a local grid. As the property was advanced, a surveyor was used to provide a

Criteria	JORC Code explanation	Commentary
		more accurate local grid control with a local height datum being implemented. Their data has been originally compiled using the local grid coordinates. • Drill holes completed by Beacon Minerals Limited were reported using handheld GPS collar coordinates with a likely accuracy of about ± 5m. An accurate translation from GPS coordinates to local grid coordinates has been used to convert the Beacon drill hole data to local coordinates. • Many of the historic drill hole collars are still evident at the prospect. Superior completed surveying of most of the previous drill hole collars using a DGPS system. The DGPS surveying validates the accuracy of Noranda's reported collar locations and provided an additional level of location confidence to the historic drill hole data.
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.*	• Drill hole spacing is variable at the Steam Engine Project area, due to the different stages of the resource evaluation at the Project. • The drill hole spacing is sufficient in the central portions of the Steam Engine and Eastern Ridge lodes to allow estimation of resources when all the necessary information is compiled. • Most intersections reported in this report are weighted composites of smaller sample intervals as is standard practice.
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 orientation of the drill holes is generally ideal for reporting of the intersection results. • No orientation sample bias has been identified at this stage.
Sample security	• *The measures taken to ensure sample security.*	• Sub-samples selected for assaying were collected in heavy-duty polyweave bags which were immediately sealed. • These bags were delivered directly to the Townsville laboratories (Intertek in 2021 and SGS in 2020) by Terra Search and Superior's employees. • Sample security measures within Intertek and SGS laboratories are considered adequate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of the sampling techniques and data have been undertaken to date.

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 areas reported lie within Exploration Permit for Minerals 26165 and is held 100% by Superior. • Superior holds much of the surrounding area under granted exploration permits. • Superior has agreements or other appropriate arrangements in place with landholders and native title parties with respect to work in the area. • No regulatory impediments affect the relevant tenements or the ability of Superior to operate on the tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• All historic drilling reported in this report has been completed and reported in accordance with their current regulatory regime. • Compilation in digital form and interpretation of the results of that work in digital form has been completed by the Competent Person.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Steam Engine and Eastern Ridge gold deposits are hosted within shear zones. • 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. • The gold mineralisation phase consists of a predominant pyrite sulphide assemblage +/- minor arsenopyrite, pyrrhotite, and chalcopyrite (all fine grained). • 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 about 500m to the east of the Steam Engine Lode zone.

Criteria	JORC Code explanation	Commentary
		• The lodes are typically interpreted as being of the mesothermal lode type. Recent studies undertaken by Superior suggest the Steam Engine mesothermal gold mineralisation is most similar to orogenic style mineralisation. • The important features of the lodes are their continuity and a persistent dip to the west.

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) 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.*
		• Drill Holes collar tables with significant intersections are included in previous ASX announcements for the drill holes including the announcements dated 22 November 2021, 18 October 2021, 29 September 2021, 1 September 2021, 12 August 2021, 19 February 2021, 11 February 2021, 18 January 2021, 5 November 2020, 15 October 2020, 30 September 2020, 14 September 2020 and 14 August 2017.

Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results are reported as a length weighted average of all the assays of the hole intersections. • No top cutting has been applied to the exploration results. However, the recent addition of some ounce/tonne gold grades in some assays means that grade cutting of very high values has been applied to the resource estimation. The 2020/2021 drilling has contained a few intersections of very high gold assay metre intervals (for further information see ASX reports dated 29 September 2021, 18 January 2021 and 30 September 2020). These very high-grade plus ounce/tonne assays suggest a new high-grade population (i.e., likely high grade gold shoots within the ore zone). A top cut of 60 g/t has been used on these assays. The top-cut represents an average reduction for the 3 assays that were over 60g/t Au by more than 50% from their original values. Together with the surrounding assays and an inverse power of 3 in the block modelling this top cut ensures that the effect of these three individual assays remains significant only in their localised location and that their effect is therefore not excessive. This top cut will again be re-assessed as future drilling is carried out. • No metal equivalent values are reported.

Criteria	JORC Code explanation	Commentary
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 (e.g. 'down hole length, true width not known').*	• For the Steam Engine lode zone 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. • For the Eastern Ridge lode zone an interpreted westerly dip of approximately 45 to 55° and drill holes that generally dip to the east at around 60° (or less) result in true widths at or above 0.9 times the intersection lengths reported.
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.*	• Included. • Further relevant maps and sections are included in previous ASX announcements for the drill holes including the announcements dated 22 November 2021, 18 October 2021, 29 September 2021, 1 September 2021, 12 August 2021, 19 February 2021, 11 February 2021, 18 January 2021, 5 November 2020, 15 October 2020, 30 September 2020, 14 September 2020 and 14 August 2017.
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.*	• Drill Holes collar tables with significant intersections are included in previous ASX announcements for the drill holes including the announcements dated; 22 November 2021, 18 October 2021, 29 September 2021, 1 September 2021, 12 August 2021, 19 February 2021, 11 February 2021, 18 January 2021, 5 November 2020, 15 October 2020, 30 September 2020, 14 September 2020 and 14 August 2017.
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.*	• Three batches of metallurgical tests from composited samples have been conducted between 2020 to 2022 involving a total of 31 samples (24 for Steam Engine and 7 from Eastern Ridge) • A summary of the metallurgical test work undertaken between concludes an average recovery for the Steam Engine lode of 82% and for the Eastern Ridge lode of 95%. • A Sub-Audio Magnetics (SAM) survey was conducted over the Steam Engine and Eastern Ridge Lodes during July to August 2022 by Gap Geophysics. The objective of the survey was to map geological structures that are associated with gold mineralisation. • The SAM survey covered an area of approximately 3.8 square kilometres with 50 metre line spacing and using one energising dipole. • The SAM survey receiver instrumentation used included a Gap Geophysics TM-7 SAM receiver, Geometrics G-822 Cs vapour sensor, Geometrics G-857 magnetometer and a

Criteria	JORC Code explanation	Commentary
		Trimble Ag332 GPS system. • The SAM survey transmitter system comprised a HPTX-70 system transmitter.

Further work	• *The nature and scale of planned further work (e.g. 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.*
		• Subsequent to this Mineral Resource estimate additional work programs will now include:
		  • Pit optimisation studies
		  • Further Metallurgical studies
		  • Geotechnical studies
		  • Toll treatment negotiations
		  • Preliminary mining and rehabilitation planning
		• Preliminary environmental studies

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• This report is based on data compilations from recent Superior drilling (2021) and drilling carried out as reported in previous resource estimations conducted by competent persons working for Superior. • Data validation for the recent drilling (2020/2021) has been carried out by the Competent Person by matching up the original field records with the digital information to ensure the information is correct. Data validation for the previous drilling was carried out by the inspection of the previous reports dating back to the earliest phases of drilling. • Data validation processes were also carried out using mining software to make the data ready for use.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Site visits have been undertaken by a competent person to confirm the drill hole locations and to undertake geological and mineralisation interpretations, as well for the additional drilling carried out.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.*	• In general, a higher level of confidence exists for the Steam Engine main lode zone, than for the Steam Engine footwall lode zone (due to patchy grades) and for the

Criteria	JORC Code explanation	Commentary
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	Eastern Ridge lode zone (due to less drilling). • The geological Interpretations are consistent with the previous interpretation by Noranda. • The data includes drill hole data and surface exposures, but there are no current underground ore exposures. • No alternative interpretations are evident or have been considered. • Lode geology is fundamental to the interpretations. • The lack of underground exposures and the soil cover in the area may obscure crosscutting faults, but significant displacement on these mineralisation zones is not generally apparent in the sectional data except as noted.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral.*	• These are apparent on the various diagrams included with this report.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to*	• Further detail on the resource estimation process is included in the main body of this announcement. • Inverse distance block modelling was used for the resource estimations. When properly constrained by wireframing, block modelling is a good method for the estimation of this kind of resource. An inverse power of 3 was used to more closely map the grade distributions present in vein zones. An appropriate search radius was used for the lode zones and the estimation method used. • Check estimates were carried out using global estimates from the wireframes. These gave similar tonnages to the global block model estimates. While the wireframe estimate uses weighting of the intersectional grades it does not use any weighting in relation to distance from those intersections. However, as a comparative method it shows that the tonnages are correct and even gave relatively close gold grade values to the block model. • Checks against previous resource estimations also showed similar tonnages and grades over the portions of the resource that have been previously estimated by Superior. • The estimate is for gold only. No by-products are considered likely. • Incomplete assay data from early drilling does not allow estimation of other elements.

Criteria	JORC Code explanation	Commentary
	control the resource estimates. • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Some arsenic occurs within the gold mineralisation where it has been assayed. • The 2020/2021 drilling contained a few intersections containing a very high gold assay metre interval (for further information see ASX reports dated 29 September 2021, 18 January 2021 and 30 September 2020). These very high grade plus ounce/tonne assays suggests a new high grade population (very high grade gold shoot). A top cut of 60 g/t has been used on these assays. The top-cut represents an average reduction for the 3 assays that were over 60g/t Au by more than 50% from their original values. Together with the surrounding assays and an inverse power of 3 in the block modelling this top cut ensures that the effect of these three individual assays remain significant only in the localised location and that their effect it is not excessive. This top cut will again be re-assessed as future drilling is carried out. • Interpolation for inferred resources has allowed for up to approximately 100 metres along strike between drill holes in some cases if it conforms to the current geological interpretation. • Extrapolation for inferred resources (outside of the drilling extents) has allowed for up to approximately 70 metres of extension, predominantly on dip, where holes either side along strike have indicated the continuation of the mineralisation. However, extension down dip was moderated by the width of the mineralisation, and if that mineralisation was considered wide enough to be feasible for future extraction. • No intersection data below 2m true thickness was used in the estimation. • No correlation between variables. • The lode geology was a fundamental element of the modelling and controlled the modelling process. • Validation was carried out by checking each stage of the modelling process against the resource intersections and assay values. As mentioned above global wireframe estimates also gave close values to the block modelling process.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The rock types encountered in the drilling are very low porosity/non-porous rocks including metamorphic/magmatic rocks. The SG's have been based on dry core samples weighing between 1 to 4 kgs and tested for SG by ALS laboratories using method OA_GRA08.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• An arbitrary intersection cut-off grade of 1 g/t was used based on a likely cut-off grade required for a toll treatment gold operation in the area.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the JORC Code explanation Commentary process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Open cut mining appears to be the most likely extraction method. The depth to which that might be possible is uncertain until further studies have been done. • Internal dilution zones within the mineralised downhole intervals were included in the estimates. • A minimum width of the mineralised zone (including waste as necessary) was used to develop what are hoped to be mine practical widths down to a minimum of 3m in some cases (at the Eastern Ridge lode zone and at the extremities of the Steam Engine Lode). • Further mining dilution effects will need to be considered during the any reserve estimation processes.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Three batches of metallurgical tests from composited samples have been conducted between 2020 to 2022 involving a total of 31 samples (24 for Steam Engine Lode and 7 from Eastern Ridge Lode). • A summary of the metallurgical test work undertaken concludes an average recovery for the Steam Engine Lode of 82% and for the Eastern Ridge Lode of 95%.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• These factors have yet to be studied and some preliminary assumptions for this have been adopted based on the known geology of the ore and waste. Ore and waste characterisation tests are due to be carried out soon and will include acid generation tests.

Criteria	JORC Code explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Laboratory tests of the SG used diamond core from the oxide and sulphide zones. The tests to date give an average for the oxide ore zone of SG 2.7 and for the sulphide ore zone of SG 2.9 . • The mineralization rock types encountered in the drilling are very low porosity/non-porous rocks including metamorphic/magmatic rocks. The SG's have been based on dry core samples weighing between 1 to 4 kgs and tested for SG by ALS laboratories using method OA_GRA08.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Confidence levels for classification were based on similar classifications that have been made on similar deposits and by the degree of continuity of the lode zone, the density of the existing drilling, and the apparent reliability of the historical data (having been confirmed by the recent 2020/2021 drilling). • The additional infill drilling in 2020/2021 has led to an improved level of classification, of the areas previously estimated. Further additional exploration drilling has also led to new resource at the northern end and at depth at the Steam Engine Lode. The drilling continues to confirm the continuity of the additional mineralisation that is being outlined. • The result appropriately reflects the competent person's current view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• An audit of the Steam Engine Gold Project Mineral Resource was conducted during July-August 2023 by CSA Global Mining Industry Consultants. A summary of the fatal flaw review of the Steam Engine Project block model was provided by CSA Global as follows: "*CSA Global considers the Steam Engine block models to be reasonable global estimates, but that the level of smoothing in the models is high away from the drillhole intercepts, particularly in the inferred material and in the OP only portion of the OP model.* *The quality of the input drillhole data is likely to be reasonably high and should provide a sounds basis for geological modelling and MR estimation. The documentation of the data quality and estimation process, though, is missing critical detail such as QAQC, density determination, statistical analysis and estimation parameters. This reduces the*

Criteria	JORC Code explanation	Commentary
		overall confidence in the results and substantially limits the "transparency" aspect of the MR reporting. *Whilst the issues identified may not, individually, appear to be fatal flaws CSA Global strongly recommends completing an updated model addressing all the identified issues in the report prior to commencing any mining studies."*
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The factors that could affect the relative accuracy or confidence of the estimates include all drilling data quality issues, data density, modelled grade continuity and the used resource model assumptions. All of these are adequately discussed in the information above. • This approach provides an estimate within any area of the lode that is locally based. • No comparisons with production data are currently possible.