

## STEAM ENGINE GOLD PROJECT

### New assays to underpin mining Feasibility Study

#### SUMMARY:

- The 2024 RC drilling program comprising 69 RC holes, was designed to extend the 196koz Mineral Resource along strike at Steam Engine and Eastern Ridge lodes and test the new Windmill East prospect.
- Superior has received assays for 1,532 samples from 17 holes, adding to the 38 holes reported during 2024. The new assays confirm strong near-surface mineralisation, complimenting earlier high grade results, and includes:
  - 18m @ 1.40 g/t Au from 75m depth, including 6m @ 2.68 g/t Au from 85m – Steam Engine Lode (SRC247);
  - 7m @ 1.41 g/t Au from 5m depth, including 1m @ 2.38 g/t Au from 8m – Eastern Ridge Lode (SRC248).
- The flow of assay results from the 2024 program was delayed by the unexpected permanent closure of the external laboratory in Townsville. A new service provider has been contracted, with the remaining 14 holes to be reported in coming weeks.
- To date, results from the 2024 drilling have:
  - upgraded and extended the amount of significant gold mineralisation over a 250m-strike zone at the northern end of the Steam Engine Lode and down dip to approx. 110m depth; and
  - revealed a potential en-echelon system of gold shoots and the development of multiple stacked lodes at the northern end of the Eastern Ridge Lode, positive implications for the Project.
- The Mineral Resource Estimate will be revised after receipt of outstanding assays.
- Scoping Study Financial Model being revised using a significantly higher gold price assumption (2024 Scoping Study assumed \$3,250/oz Au).
- Feasibility Study progressing and will factor-in new Mineral Resource upgrades.

#### Superior's Managing Director, Peter Hwang commented:

*"We are pleased to have received the first batch of assays from 17 of the last 31 drill holes of 2024 that were affected by the closure of SGS Australia's Townsville lab. Once assays for the remaining 14 holes have been received, we will be updating the Mineral Resource Estimate, the results of which will feed into the current Feasibility Study. In the meantime, with the expectation that record gold prices will be sustained at least over the medium term, we are updating the financial model with a substantially higher gold price assumption.*

*"As we have expected, the 2024 Resource Extension drilling has shown that the Steam Engine lode systems are laterally extensive and demonstrate the potential for significant Mineral Resource growth along strike. Extension of near surface Resources is important as it enables expansion of the pit design, enabling very*

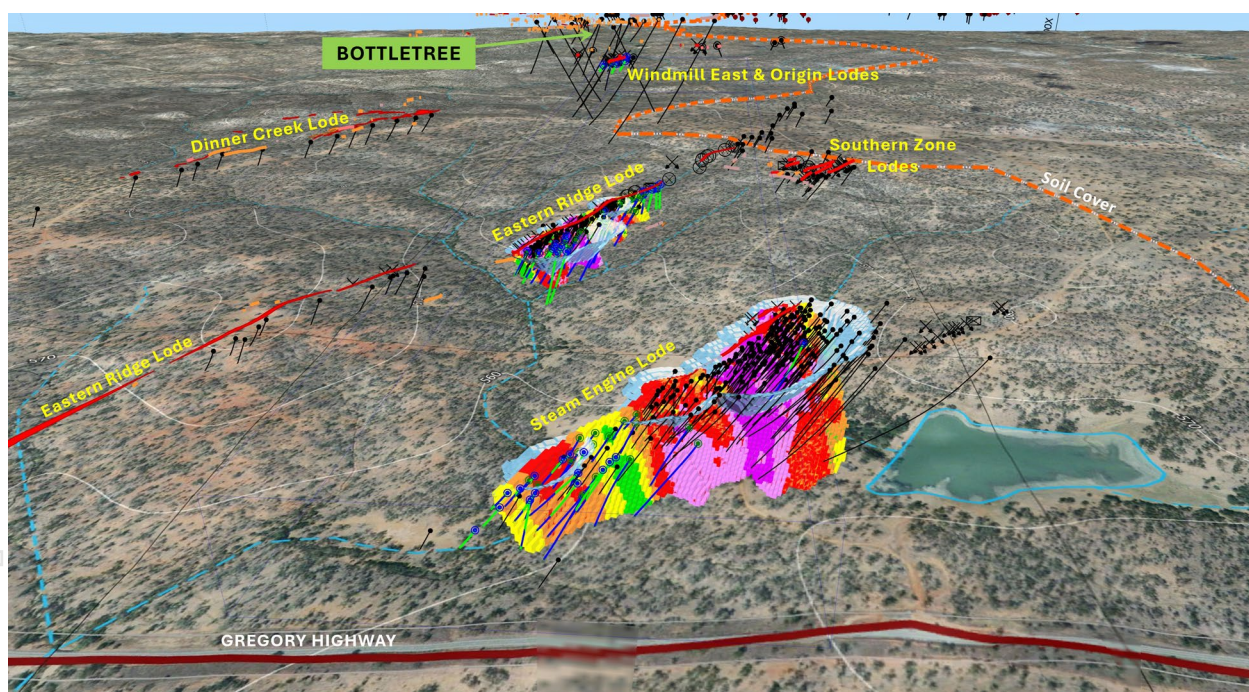
significant increases in the scale of mining operations and project economics. The current batch of assays have certainly strengthened the Resource over 250m of strike at the northern ends of the gold lodes.

“Results for the remaining 14 holes will be interesting as they include a series of holes over a SAM anomaly at the southern end of Eastern Ridge and maiden drilling at the Windmill East Prospect, located 2.5 kilometres south of Eastern Ridge.

“The most anticipated targets, being the SAM targets at the southern end of the Steam Engine Lode and between the two lodes, are yet to be drill tested. These are being programmed for the 2025 field season together with exploratory drilling along the several kilometres of mineralised structure outside the Resource envelope.

“We expect the overall results of the 2024 Program to significantly boost the overall financial outcomes of the Steam Engine Project. Together with, the record rise in the price of gold over the last twelve months, we are expecting a dramatic uplift in the project economics, particularly since the current price is almost 50 percent, or A\$1,600 per ounce higher than the price assumption in the 2024 Scoping Study.

“Upcoming catalysts are planned to commence with the results of the updated Scoping Study financial model, followed by progress updates on the Steam Engine Feasibility Study and pathway to production. Interspersed with the key catalysts will be exploration updates, including some material updates on the copper projects.”



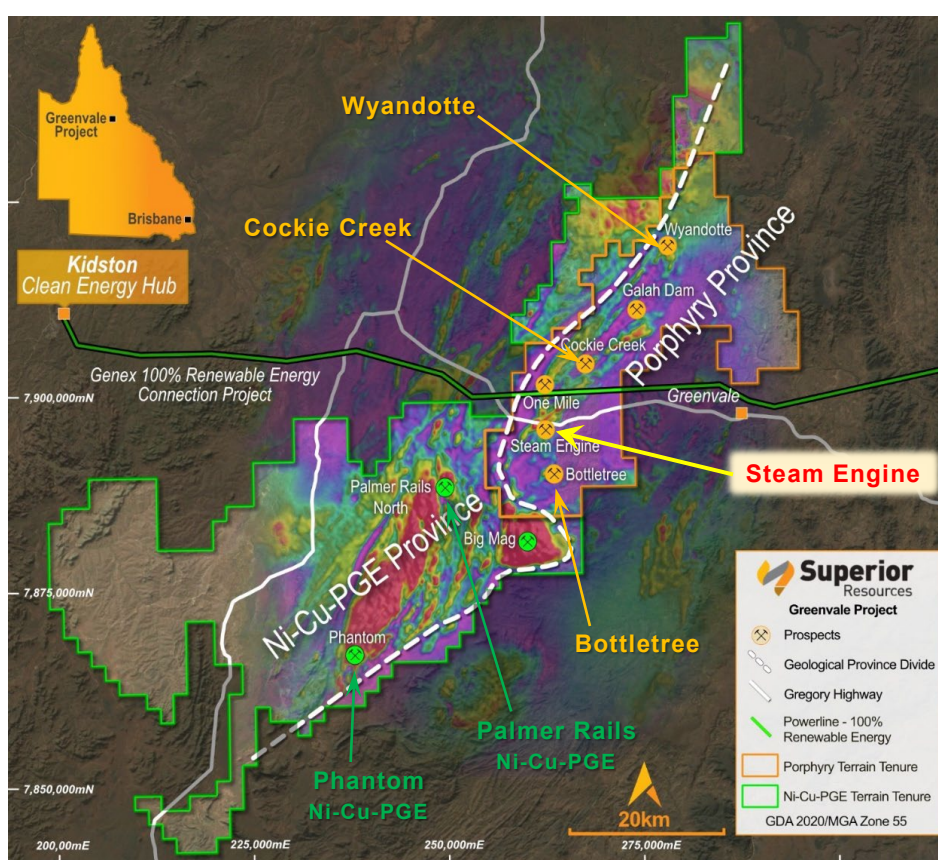
**Figure 1.** Oblique view (towards south) of the Steam Engine and Eastern Ridge lode Mineral Resource block model<sup>1</sup>, showing mapped lode structure outcrops, the Gregory Highway and the Bottletree Porphyry Copper Prospect in the background.

Superior Resources Limited (ASX:SPQ) (Superior, the Company) is pleased to report further results from the 2024 reverse-circulation (RC) Resource Extension drilling program at the Steam Engine Gold Project (Project). Steam Engine is a unique and expanding gold deposit located between several Tier 1-potential porphyry Cu-Au-Mo prospects and a magmatic Ni-Cu-PGE sulphide province within the Company’s 100%-owned Greenvale Project in northeast Queensland (Fig. 2).

Resource definition drilling during 2020 and 2021 expanded the maiden Mineral Resource Estimate (MRE) from 1Mt @ 2.5g/t Au for 85,000oz to the current **4.18 Mt @ 1.5 g/t Au for 196,000oz Au**<sup>1</sup>. The Project presents substantial growth potential as the MRE is established to generally, shallow depths over 1.2kms of at least 10kms of potentially mineralised structure as indicated by soil geochemistry.

The 2024 Scoping Study<sup>2</sup>, based on a gold price assumption of **A\$3,250**, resulted in financially and technically robust cases for both low CAPEX toll treatment and higher CAPEX stand-alone processing development scenarios, with **pre-tax overall cash flows of approximately \$46M (Toll Treatment) and approximately \$71M (Stand-Alone Processing)** and **pre-tax NPVs (at 7% discount rate) of approximately \$38M (Toll Treatment) and approximately \$42M (Stand-Alone Processing)**.

The Company's strategy for Steam Engine is to achieve open-pit mining in the shortest timeframe by conducting a Feasibility Study and regulatory compliance processes for the grant of a mining lease in with parallel programs of Resource expansion drilling.



**Figure 2.** Regional aerial magnetics over the Greenvale Project area showing the newly recognised porphyry province (tenements outlined in amber) and the magmatic Ni-Cu-PGE sulphide province (tenements outlined in green).

<sup>1</sup> Maiden MRE (JORC, 2012) was established in 2017 and comprised 100% Inferred category Resources with a cut-off grade of 1.0g/t Au (refer ASX announcement dated 19 October 2017); the current MRE is based on a cut-off grade of 0.25g/t Au and was established for the purposes of examining a stand-alone processing development scenario. The current MRE for a toll treatment development scenario, based on a cut-off grade of 1.0g/t Au is 2.72 Mt @ 2.0 g/t Au for 171,000 oz Au (refer ASX announcement dated 11 April 2022 and Table 1 for Resource category breakdowns). The Company is not aware of any new information or data that materially affects the MRE as presented and all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

<sup>2</sup> Refer to original ASX announcement: "Positive Steam Engine Gold Scoping Study", dated 16 September 2024. The Company confirms that all the material assumptions underpinning the production target and the forecast financial information derived from the production target in the original ASX announcement continue to apply and have not materially changed.

## Results – remaining batches 2024 drill samples

The 2024 drilling program comprised 69 RC holes for a total of 5,282 metres of drilling (**Table 1**). The specific objectives of the program were to:

- extend shallow open-pittable Resources that would provide immediate uplifts to the economic outcomes of a mining and processing proposal;
- follow up new gold shoot discoveries from Phase 1 of the 2024 program at the northern ends of the Steam Engine and Eastern Ridge lodes;
- drill-test sub-audio magnetic (**SAM**) geophysical targets at southern end of Eastern Ridge Lode; and
- conduct maiden drill-testing of the Windmill East Lode.

**Table 1. 2024 Steam Engine Drilling Program**

	Steam Engine	Eastern Ridge	Windmill East	Holes	Metres
<i>Phase 1</i>					
<b>Holes</b>	16	16	-	<b>32</b>	<b>2,614</b>
<b>Metres</b>	1,230	1,384	-		
<i>Phase 2</i>					
<b>Holes</b>	16	16	5	<b>37</b>	<b>2,668</b>
<b>Metres</b>	1,222	1,201	245		
<b>TOTAL</b>				<b>69</b>	<b>5,282</b>

Assays for 38 of the 2024 program holes were received and reported to the market by EOY 2024 before the Company was unexpectedly notified of the permanent closure of SGS Australia’s Townsville laboratory facilities. Further batches of assay results were delivered by SGS Australia during January 2025, but were not able to be reported to the market due to measurable quality control errors that deemed the results to be unacceptable.

A total of 1,532 samples representing the unacceptable results were re-assayed over the course of February to March 2025 under a new arrangement with Intertek Mineral Assay Laboratories, Townsville. The new assay results for these samples are reported herein.

All remaining 2024 samples (14 drill holes) and future samples from 2025 programs will be processed by Intertek.

### Assay Results

Assays reported herein relate to 17 RC holes that were drilled predominantly at the northern end of the Steam Engine Lode (**Fig. 3**). All significant assays together with interpreted lode zones are set out in **Appendix 2**.

A selection of intercepts include:

- **18m @ 1.40 g/t Au** from 75m – Steam Engine Lode (SRC247)  
incl **6m @ 2.68 g/t Au** from 85m
- **6m @ 1.79 g/t Au** from 22m – Steam Engine Lode (SRC233)  
incl **4m @ 2.42 g/t Au** from 23m
- **10m @ 1.15 g/t Au** from 17m – Steam Engine Hanging Wall 1 Lode (SRC232)  
incl **3m @ 2.93 g/t Au** from 17m  
**5m @ 1.42 g/t Au** from 37m – Steam Engine Lode (SRC232)

incl 2m @ 2.44 g/t Au from 39m

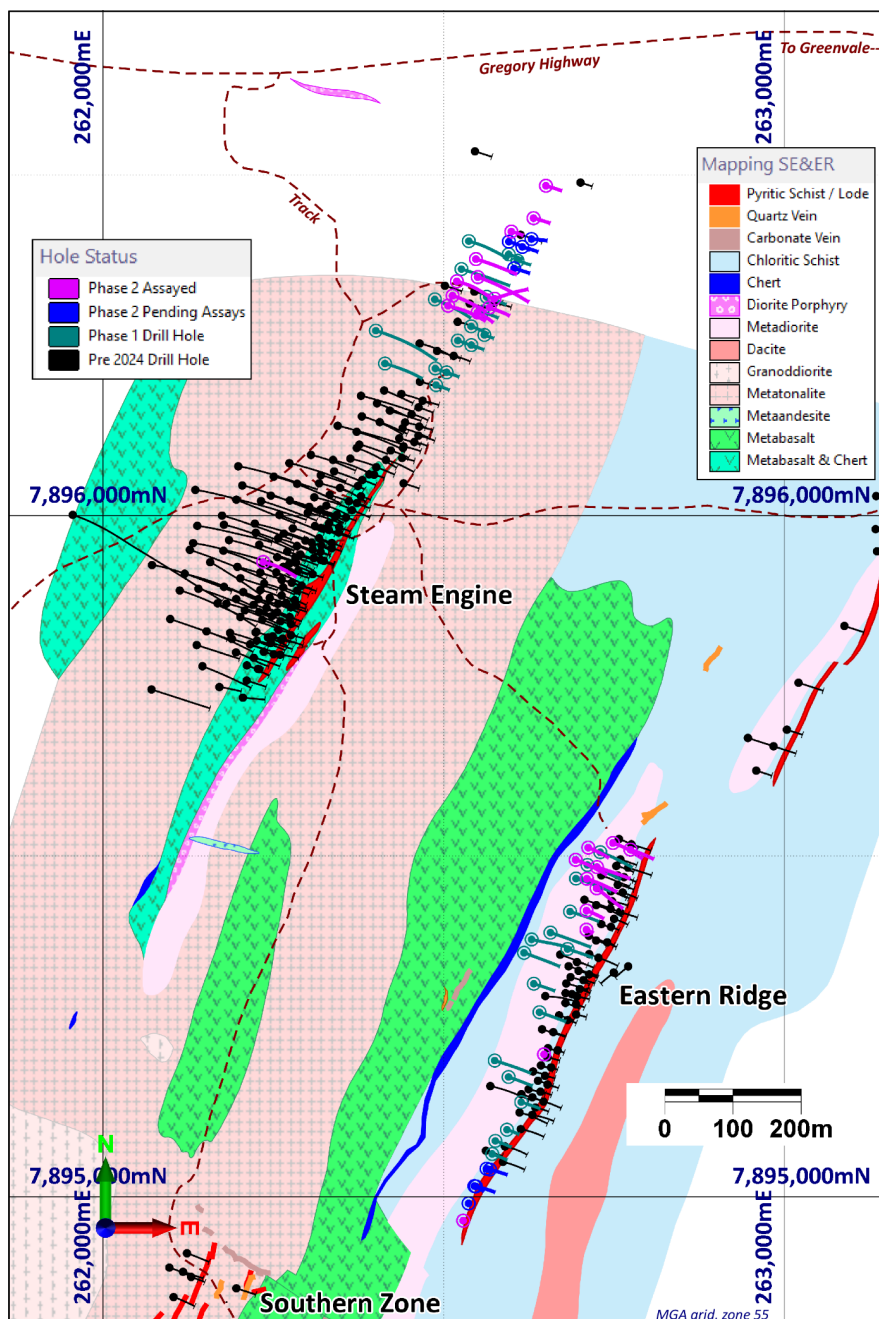
- 7m @ 1.40 g/t Au from 76m – Steam Engine Lode (SRC238)

incl 3m @ 2.75 g/t Au from 79m

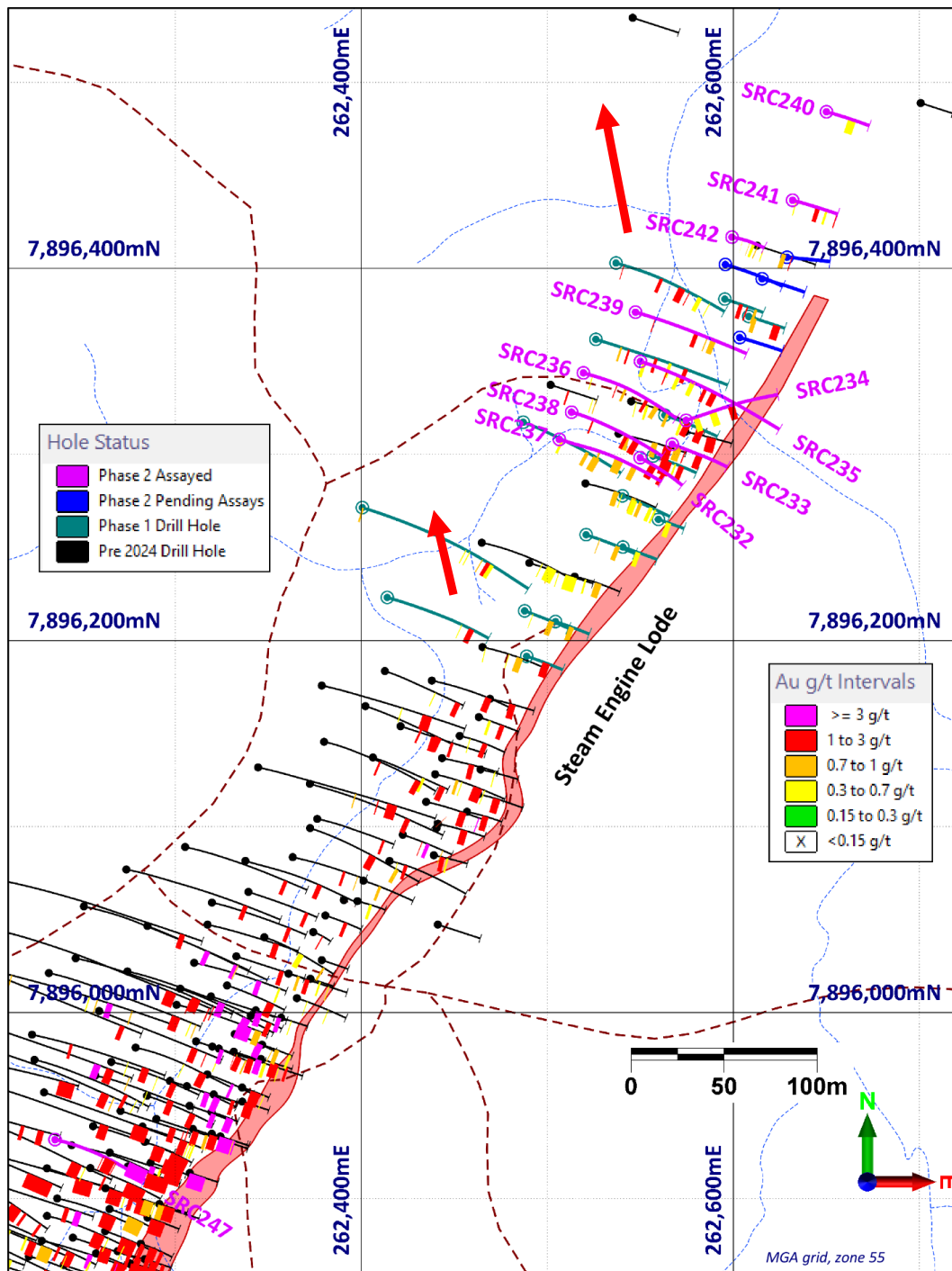
- 7m @ 1.41 g/t Au from 5m – Eastern Ridge Lode (SRC248)

incl 1m @ 2.38 g/t Au from 8m.

Figures 3 and 4 show the location of the 17 drill holes being reported (SRC228 to SRC242 and SRC247 to SRC248) in relation to other Steam Engine and Eastern Ridge lode drill holes, together with an indication of the mineralised intervals for each hole. Cross sections representative of the observations (to date) from the 2024 drilling are shown in Figures 5 and 6. A long section of the Steam Engine Lode is shown in Figure 7.



**Figure 3.** Geological map (plan view) showing the Steam Engine and Eastern Ridge lodes together with all drill holes. Locations of the assayed 2024 Phase 2 drill holes, Phase 2 holes awaiting assaying, 2024 Phase 1 drill holes and pre-2024 drill holes (see Hole Status Legend) are also shown. Note: Windmill East drill holes are not shown (located 3km to the south of Eastern Ridge Lode).



**Figure 4.** Plan view of northern part of the Steam Engine Lode showing the assayed 2024 Phase 2 drill hole traces (drill hole numbers are shown for reported holes), Phase 2 drill holes that are awaiting assaying, the 2024 Phase 1 drill holes and pre-2024 holes. Red arrows indicate the interpreted plunge direction of the gold shoot zones.

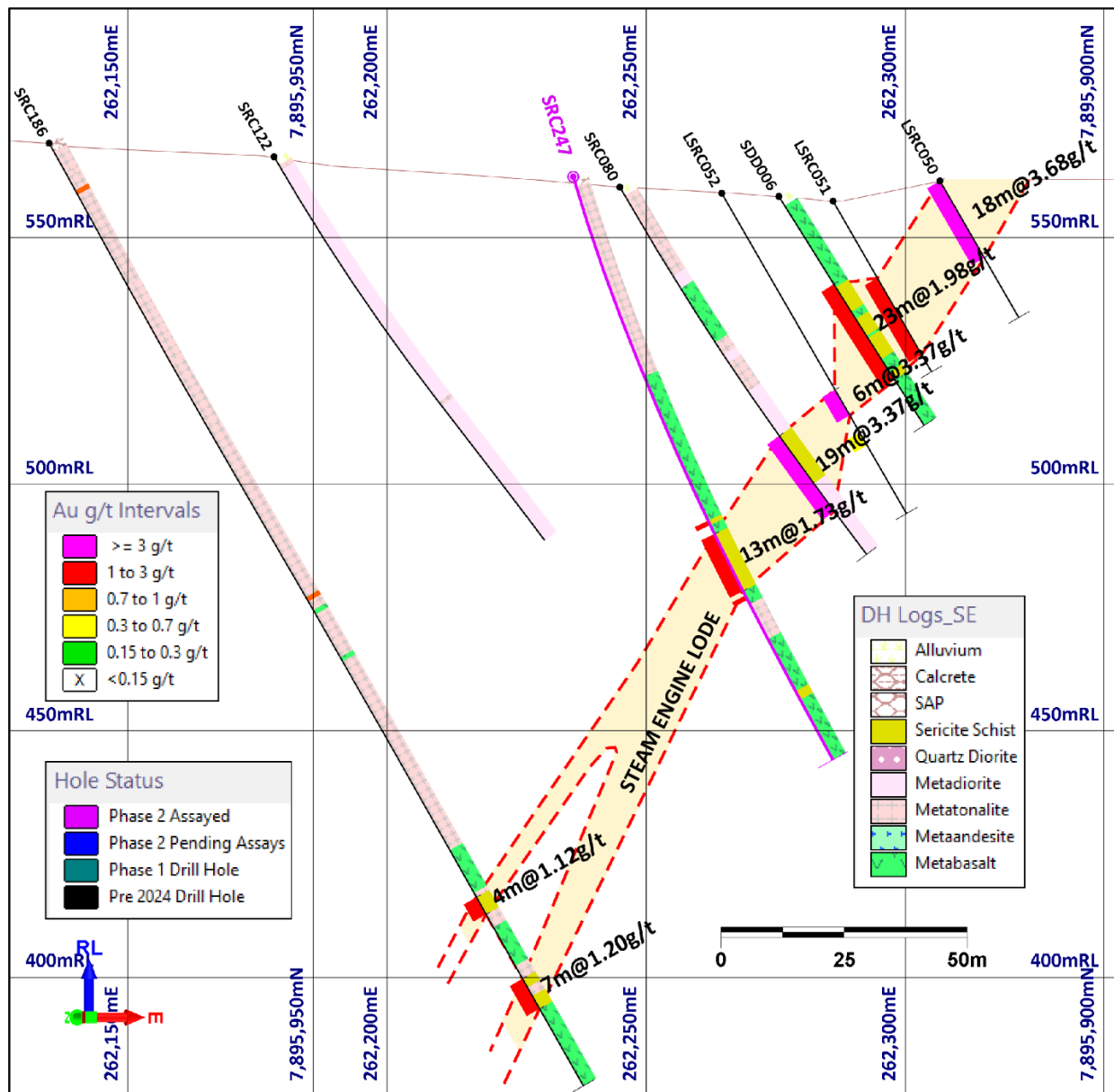


Figure 5. E-W cross section along Phase 2 drill hole SRC247 showing average lode intersection grades, hole status and down-hole logged lithology. The direction of view is towards NNW.

### Multiple Stacked Lodes at Northern Ends of Lodes

As has been observed at the northern end of the Eastern Ridge Mineral Resource, multiple stacked lodes are also developed at the northern part of the Steam Engine Lode (Fig. 6). The individual lodes vary in thickness from 2 metres to over 10 metres and to date, have been observed over a cross-sectional zone of up to 55 metres.

The stacked lodes and the distribution of concentrated zones of stacked lodes may represent an en-echelon structural arrangement. En-echelon structures often develop in shear zones and are expressed as a repeating series of dilational zones within a zone that has undergone shearing deformation. En-echelon structures are typically developed as multiple overlapping dilational structures that are infilled with mineralisation and can be extensive over large areas.

Considerable potential exists for extensive zones of multiple stacked gold lode, along both the Steam Engine and Eastern Ridge lode structures.

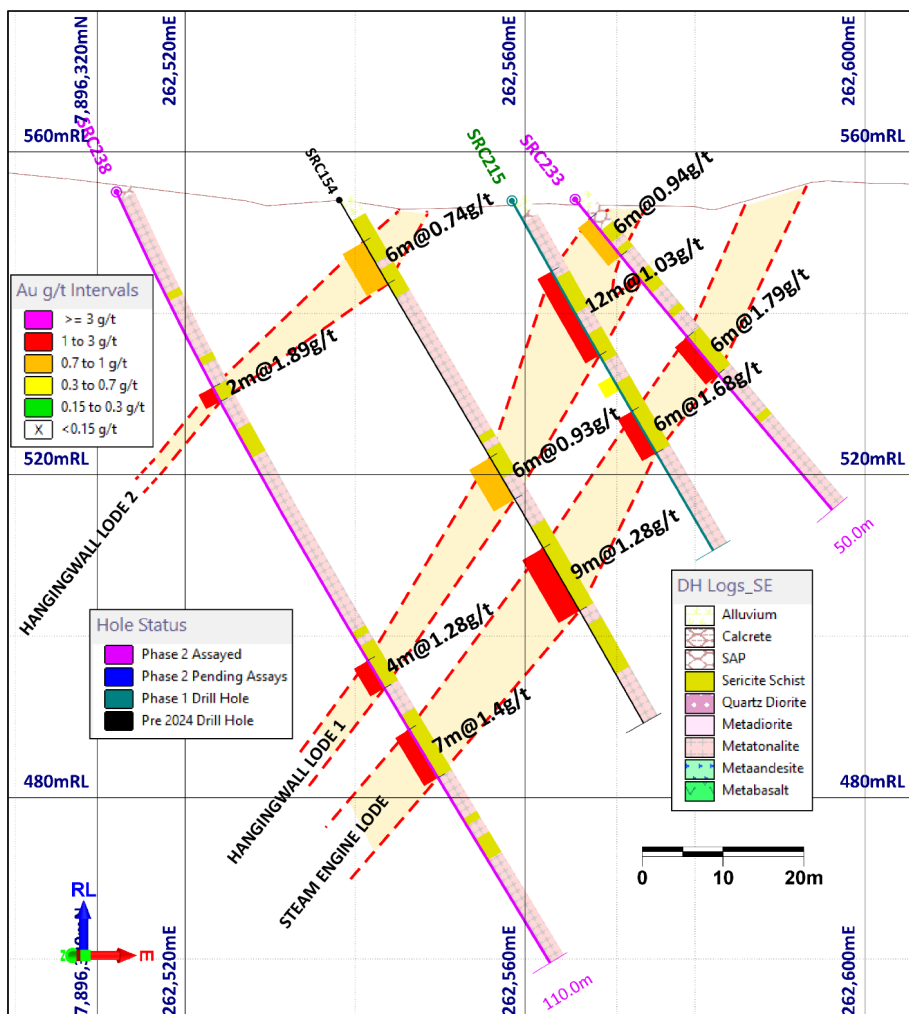


Figure 6. E-W cross section along Phase 2 drill holes SRC233 and SRC238 showing multiple stacked lodes at the northern end of the Steam Engine Lode, average lode intersection grades, hole status and down-hole logged lithology. The direction of view is towards NNW.

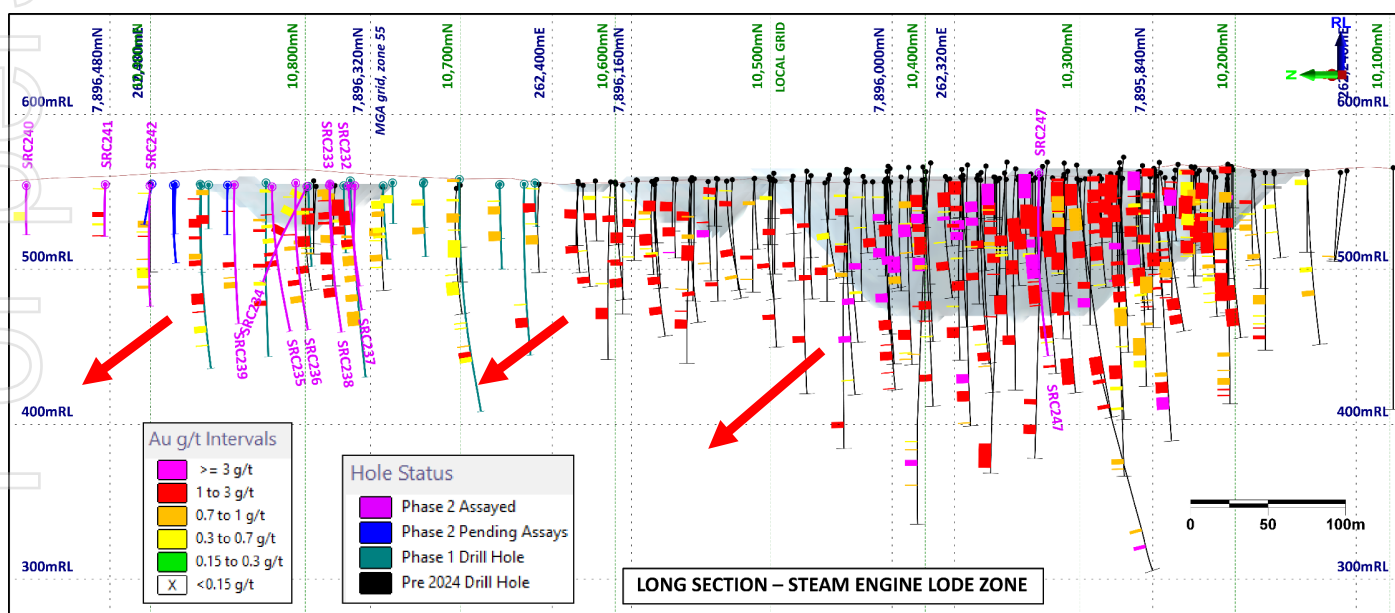


Figure 7. Long section view of the Steam Engine Lode, looking ESE, and showing Au intersections. Drill holes reported in this report are labelled. The 2024 pit optimisations are shown in the background (light grey). Note that the pit outlines are based on the 2022 MRE and do not take into account the results from the 2024 drilling programs or the significantly increased gold prices. Red arrows indicate the interpreted plunge direction of the gold shoot zones.

### Particular Implications for the Steam Engine Lode

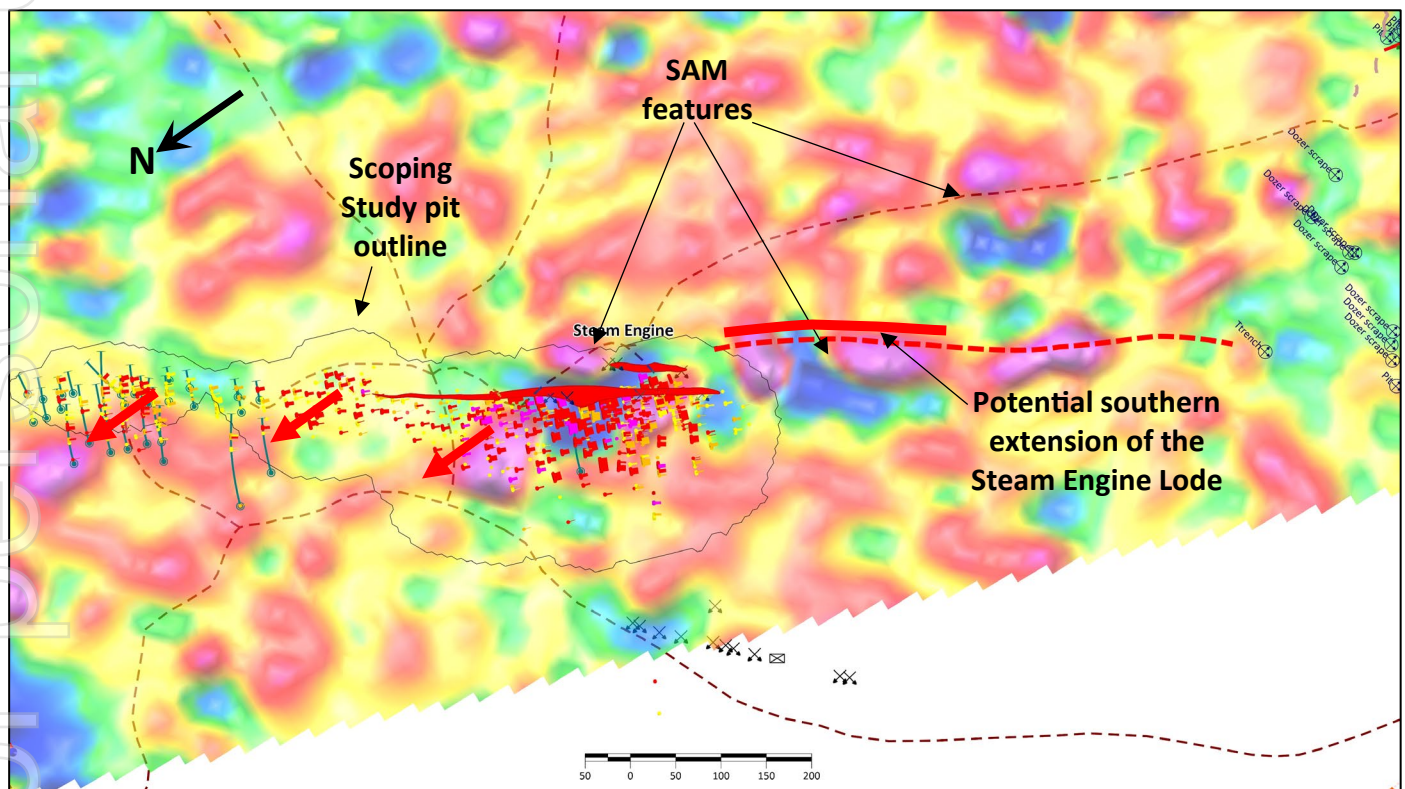
Consistent with the Eastern Ridge Lode, the Steam Engine Lode also shows high grade shoot zones that plunge towards the northwest, albeit at a steeper plunge angle.

The somewhat perplexing truncation of the lode at the southern end of the Steam Engine Lode together with the lack of any obvious structural displacement or faulting, may represent the southern edge of a (very) large dilatational zone, possibly developed within an en-echelon regime.

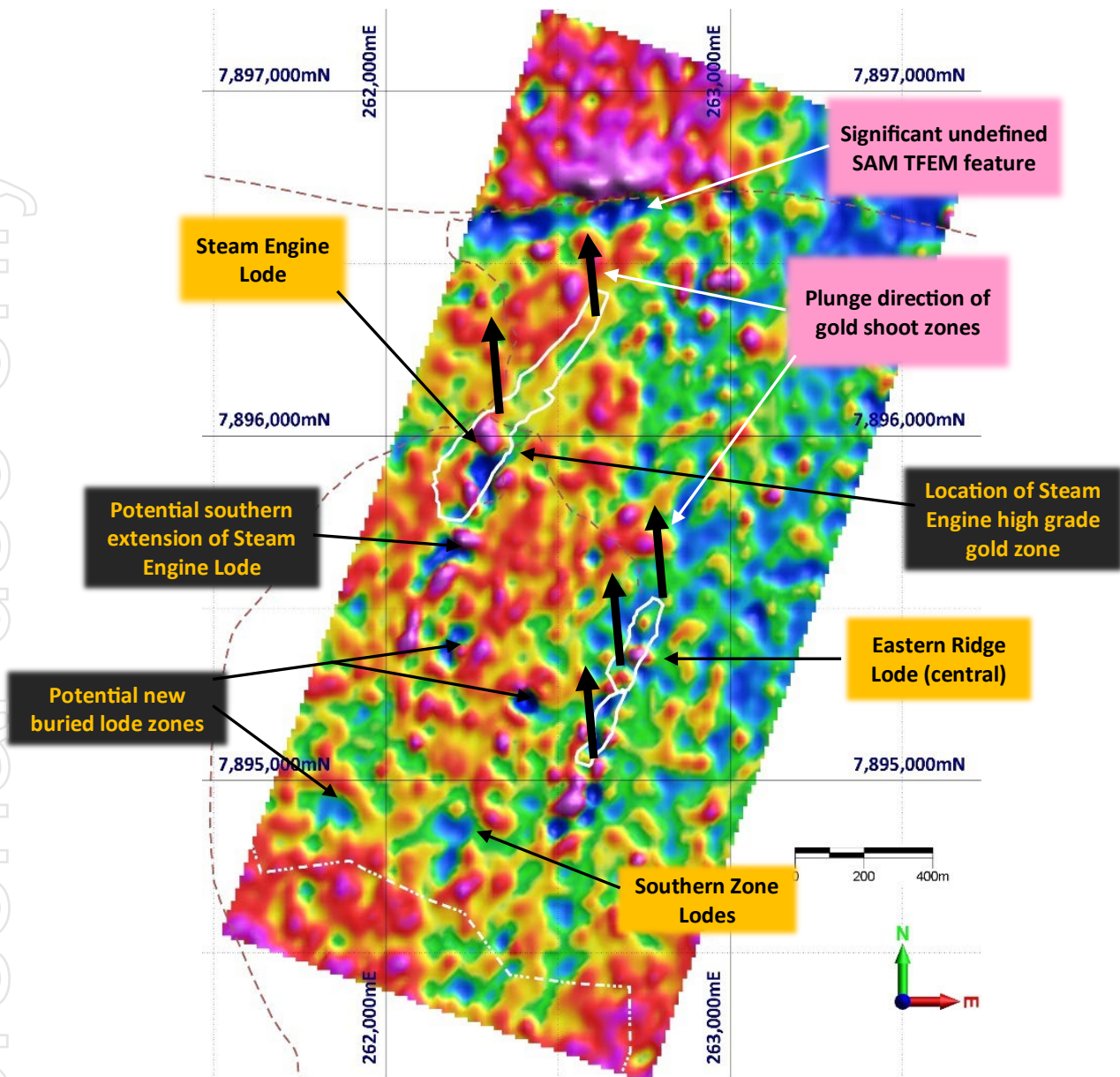
This observation has elevated the significance of an intense SAM total field electromagnetics (TFEM) chargeability anomaly located immediately to the south of the southern end of the Steam Engine Lode (**Figs. 8 and 9**). This SAM anomaly is currently unexplained but resembles the SAM anomaly that is perfectly coincident with the highest grade and largest gold shoot zone within the Steam Engine Lode.

The above observations would be consistent with a second Steam Engine high grade lode that is in an en-echelon spatial and structural arrangement to the main Steam Engine Resource.

The second SAM anomaly will be drill tested with highest priority as soon as cultural heritage clearance is obtained. Any significant gold mineralisation that is intersected would significantly lift the overall project economics.



**Figure 8.** Modelled SAM TFEM geophysical survey data (background) showing the Steam Engine Lode and mineralisation drill intersections. Note the intense low SAM TFEM chargeability feature coincidentally located with the most intensely mineralised part of the lode. Note also a similar SAM feature to the south of the Steam Engine Lode. An outline of the Scoping Study optimised pit is also shown.



**Figure 9.** Image of late channel (Channel 16) SAM TFEM responses over the Steam Engine and Eastern Ridge lodes. Discrete areas of low SAM 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.

## Next Steps

The following sets out the key catalysts and work units that are planned over the next Quarter:

1. Reporting of updated Scoping Study financial model using a substantially higher gold price assumption.
2. Continuation of Feasibility Study work units;
3. Receive and report on outstanding 2024 drill sample assays. These will mainly comprise assay results from the SAM target at the southern end of the Eastern Ridge Lode and maiden drilling from the Windmill East Lode;
4. Progress updates on the Steam Engine Feasibility Study and pathway to production;
5. Mineral Resource re-modelling and upgrade;

6. Cultural heritage surveys over priority SAM targets;
7. Discussions / negotiations with third party toll processing parties;
8. Metallurgical and other mining study related work relating to Feasibility Study; and
9. Establish a maiden Ore Reserve.
10. Maiden Mineral Resource Estimate on the Cockie Creek Porphyry Copper Prospect.

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

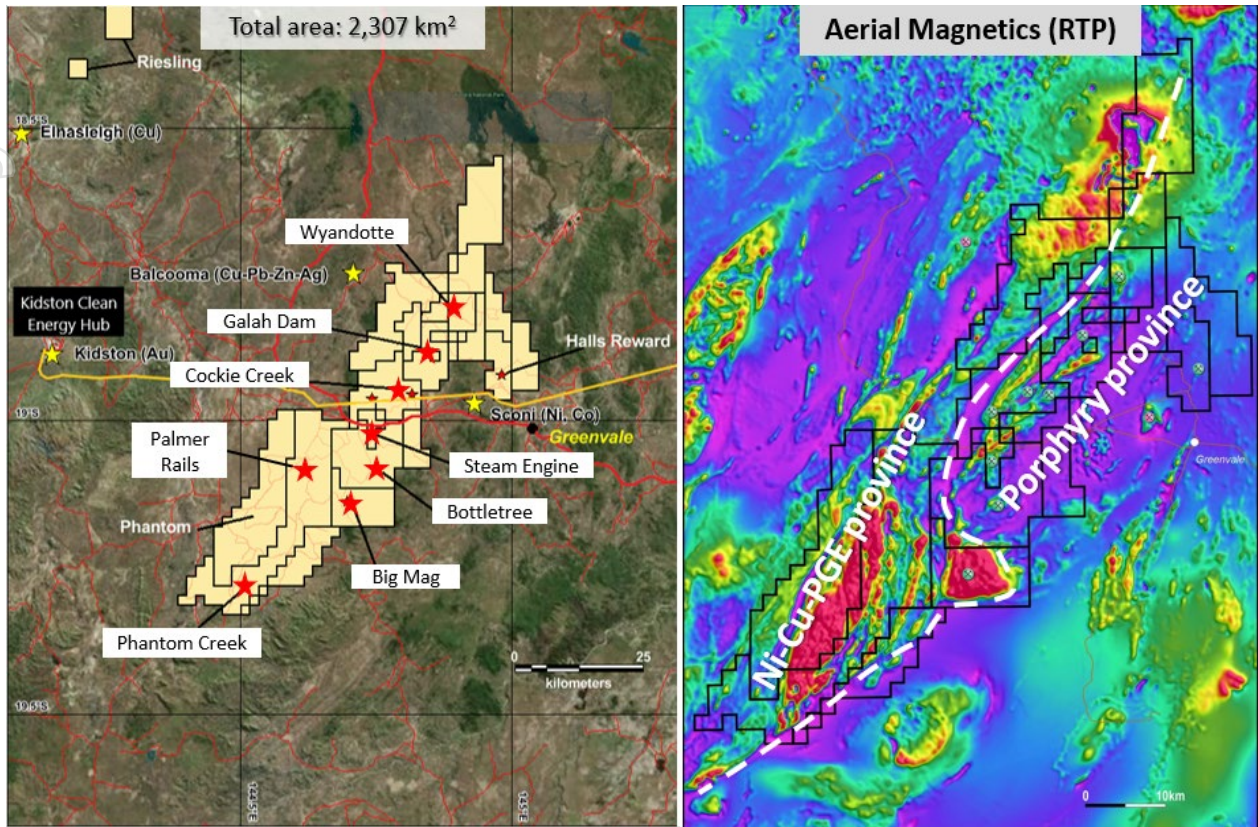
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## Greenvale – Juxtaposed porphyry and magmatic Ni-Cu-PGE sulphide provinces

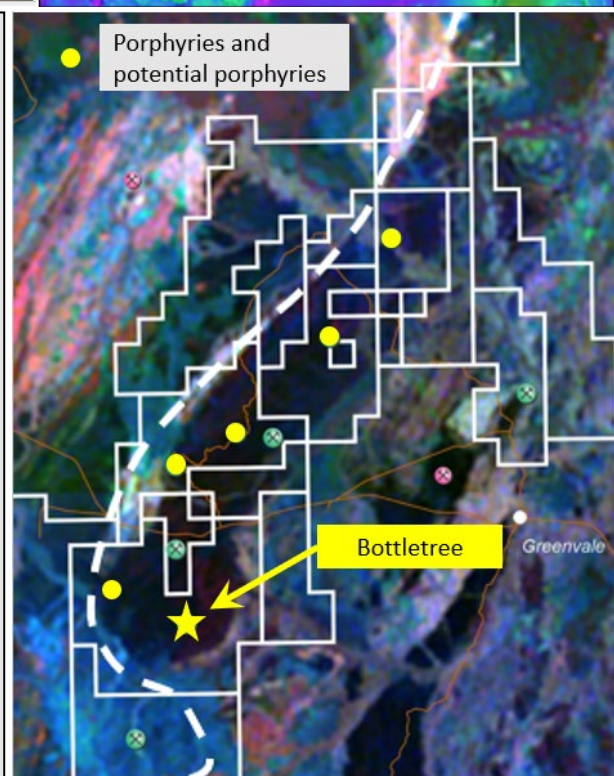


Superior has long recognised the copper potential within the Lucky Creek Corridor. However, recent exploration drilling at Bottletree, coupled with regional geological investigations over several years has enabled the characterisation of the Lucky Creek Corridor as a fossil island arc porphyry province,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



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## 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](http://www.superiorresources.com.au).

**Reporting of Exploration Results:** Information contained in this report that relates to the reporting of Steam Engine Gold Project exploration results is based on information compiled by Mr Kevin Richter who is a full-time employee of Superior Resources Limited. Mr Richter is a Member of the Australasian Institute of Mining and Metallurgy 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 Richter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Other information contained in this report relating to Exploration Results, Mineral Resource Estimations, Scoping Study outcomes and exploration interpretations reflect information that has been previously reported in ASX market announcements as referenced within this report.

Information in this report relating to the Steam Engine Gold Project 2024 Scoping Study is a summary of information contained in original ASX announcement: "Positive Steam Engine Gold Scoping Study", dated 16 September 2024.

Information in this report relating to Mineral Resource Estimates (MRE) and associated block models is a summary of information contained in original ASX announcement: "Material upgrade in Steam Engine Resource to 196,000 oz Au with 80.6% increase to Measured and Indicated categories", dated 11 April 2022. The Competent Person relevant to the original ASX announcement is Mr Kevin Richter. The Company is not aware of any new information that materially affects the MRE as presented and all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

**Reliance on previously reported information:** Information contained in this report relating to the findings and outcomes of the Company's 2024 Scoping Study is provided on the basis of material assumptions that applied at the time of the original reporting of the Scoping Study. The Company confirms that all the material assumptions underpinning the production target and the forecast financial information derived from the production target in the original ASX announcement continue to apply and have not materially changed.

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## APPENDIX 1

### Reported drill hole collar details

Holes	Easting (m)	Northing (m)	RL (m)	Depth (m)	Dip°	Azimuth°
SRC228	262693.7	7895494.5	567.4	135	-70.6	108.2
SRC229	262712.1	7895512.5	568.1	125	-76.0	109.5
SRC230	262748.4	7895519.2	570.1	90	-60.7	107.2
SRC231	262774.0	7895509.5	570.7	70	-60.7	109.0
SRC232	262549.9	7896298.2	553.7	70	-68.5	119.1
SRC233	262567.1	7896305.4	554.1	50	-51.3	110.4
SRC234	262574.6	7896318.3	553.4	80	-50.2	72.2
SRC235	262550.1	7896350.0	553.2	125	-50.2	107.5
SRC236	262519.4	7896343.8	555.7	110	-60.6	105.0
SRC237	262506.4	7896308.1	553.9	100	-56.9	107.4
SRC238	262513.0	7896322.7	555.0	110	-65.6	105.2
SRC239	262547.4	7896376.5	554.5	110	-56.9	106.1
SRC240	262650.1	7896484.1	554.1	40	-55.5	104.9
SRC241	262631.9	7896436.6	554.7	42	-55.2	104.7
SRC242	262599.3	7896416.8	554.0	80	-80.0	99.6
SRC247	262235.3	7895931.7	562.3	130	-73.6	102.0
SRC248	262528.7	7894964.8	582.8	65	-89.5	99.2

*Note: Locations reported are in MGA Zone 55. Location information is derived from DGPS data.*

## APPENDIX 2

### Intersections from drill holes SRC228 - SRC242 & SRC247 - SRC248

Hole	From	To	Interval (m)	Au g/t	Lode
SRC228	No significant intersections				
SRC229	No significant intersections				
SRC230	19	20	1	0.50	
SRC230	48	52	4	0.33	Eastern Ridge
Including	48	49	1	0.94	
SRC231	No significant intersections				
SRC232	17	27	10	1.15	SE Hangingwall 1
Including	17	20	3	2.93	
Including	18	19	1	5.76	
SRC232	37	42	5	1.42	Steam Engine
Including	39	41	2	2.44	
SRC233	3	9	6	0.94	SE Hangingwall 1
Including	5	6	1	2.73	
SRC233	12	13	1	1.09	SE HW1 Splay
SRC233	22	28	6	1.79	Steam Engine
Including	23	27	4	2.42	
Including	24	25	1	4.49	
SRC234	6	11	5	0.58	SE Hangingwall 1
Including	9	10	1	1.41	
SRC234	20	25	5	0.69	SE Splay
Including	23	25	2	1.12	
SRC234	36	42	6	1.17	Steam Engine
SRC235	2	5	3	0.47	

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SRC235	23	24	1	1.87	
SRC235	32	35	3	0.66	SE Hangingwall 2
SRC235	44	48	4	0.60	SE Hangingwall 1
SRC235	56	59	3	1.19	SE Splay
SRC235	63	68	5	1.20	Steam Engine
Including	65	66	1	3.12	
SRC236	10	11	1	0.61	
SRC236	38	39	1	1.35	
SRC236	47	50	3	0.68	SE Hangingwall 2
Including	48	49	1	1.67	
SRC236	72	76	4	1.29	SE Hangingwall 1
SRC236	84	89	5	0.99	Steam engine
Including	88	89	1	1.70	
SRC237	39	41	2	0.79	
SRC237	55	63	8	0.72	SE Hangingwall 1
Including	55	56	1	2.85	
SRC237	71	76	5	0.74	Steam Engine
Including	71	72	1	1.25	
SRC238	27	29	2	1.89	SE Hangingwall 2
SRC238	66	70	4	1.28	SE Hangingwall 1
Including	67	68	1	2.64	
SRC238	76	83	7	1.40	Steam Engine
Including	79	82	3	2.75	
SRC239	20	21	1	1.26	
SRC239	60	64	4	1.65	SE Hangingwall 1
Including	60	63	3	2.11	
Including	60	61	1	2.90	
SRC239	72	73	1	0.90	SE Splay
SRC239	76	81	5	0.86	Steam Engine
Including	79	81	2	1.49	
SRC240	21	28	7	0.40	Steam Engine
Including	27	28	1	1.24	
SRC241	3	4	1	0.63	
SRC241	22	26	4	1.91	Steam Engine
Including	23	24	1	3.25	
SRC241	31	33	2	0.61	
SRC241	41	42	1	1.05	
SRC242	30	31	1	0.56	SE Hangingwall 1
SRC242	48	49	1	0.82	SE Splay
SRC242	54	61	7	0.70	Steam Engine
Including	60	61	1	2.38	
SRC242	66	68	2	0.94	SE Splay
<i>Note: SRC243 to SRC246 - Assays Pending</i>					
SRC247	75	93	18	1.40	Steam Engine
Including	78	91	13	1.73	
Including	85	91	6	2.68	
Including	90	91	1	4.21	
SRC248	5	12	7	1.41	Eastern Ridge
Including	8	9	1	2.38	

## APPENDIX 3

### 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>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</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. Assaying for gold was via fire assay of a 50-gram charge.</li> <li>• Samples of the gold mineralisation over 0.1g/t Au were also submitted for multi-element assaying using a four-acid digest.</li> <li>• The sample preparation was conducted by SGS Laboratories in Townsville for all 2024 samples.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling from surface was performed using standard RC drilling techniques as applicable to the hole drilled.</li> <li>• RC Drilling was conducted by AED (Associated Exploration Drillers) using a Schramm 660 drilling rig with 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 compressor. Sampling was by the use of a face-sampling hammer bit.</li> <li>• All holes were surveyed using a Reflex Gyro north-seeking gyroscopic instrument to</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>obtain accurate down-hole directional data.</p>
<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 a Pinata contractor, Terra Search contractors and Superior’s representatives.</li> <li>• The volume of sample collected for assay is considered to be representative of each 1m interval.</li> <li>• 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> <li>• No relationship is evident between sample recovery and grade.</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 Pinata 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 for the RC drill holes. A spear was used to produce representative samples for the logging of RC holes.</li> <li>• All logging data is digitally compiled and validated before entry into Superior’s database.</li> <li>• The level of logging detail is considered appropriate for Resource drilling.</li> <li>• The RC chip trays were all 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> <li>• <i>Whether sample sizes are appropriate to the grain size of the</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>• 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.</li> <li>• The sample sizes are considered appropriate to the style of mineralisation being assessed.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<p><i>material being sampled.</i></p> <ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All samples were submitted to SGS Laboratories in Townsville for gold. Samples of the gold mineralisation above 0.1g/t Au were also submitted for multi-element assaying 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 the gold mineralisation using a four-acid digestion followed by an ICP-OES/MS finish using methods GO_ICP41Q100 and GO_IMS41Q100.</li> <li>The following 35 elements were assayed: Ag, Al, As, Ba, Bi, Ca, Ce, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sn, Sr, Te, Th, Tl, Ti, U, V, W, Zn and Zr.</li> <li>Certified gold, multi-element standards and blanks were included in the samples submitted to the laboratories for QAQC. Some quality control issues were identified from check assaying of standards. This required the re-assay of mineralised zones for Au to assure quality control. The re-assayed results passed quality control QAQC, and whilst not varying considerably from the original assays assured confidence in the reported results. The re-assaying was conducted by Intertek Australia Laboratories (Townsville) using a 50-gram sample by method FA50/OE04 for Au.</li> <li>The laboratories used a series of their 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><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>The reported significant intersections have been verified by Pinata and Superior geologists against the representative drill chips collected and the drill logs.</li> <li>No holes drilled by Superior were twinned.</li> <li>Logs were recorded by Pinata 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>

Criteria	JORC Code explanation	Commentary
<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> <li>• Quality and adequacy of topographic control.</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 locations were further defined using DGPS to give sub one metre accuracy.</li> <li>• 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.</li> <li>• The area is located within MGA Zone 55.</li> <li>• 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).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole spacing is variable at the Steam Engine Project area, due to the different stages of Resource evaluation at the Project.</li> <li>• 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.</li> <li>• Most intersections reported in this report are weighted composites of smaller sample intervals as is standard practice.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• The orientation of the drill holes is generally 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>• The measures taken to ensure sample security.</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 SGS Laboratories by Pinata and Terra Search contractor employees.</li> <li>• Sample security measures within SGS and Intertek laboratories are considered</li> </ul>

Criteria	JORC Code explanation	Commentary
		adequate.
<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 lie within Exploration Permit for Minerals 26165, which is 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 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 historic 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 shear zones.</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 consists of a predominant pyrite sulphide assemblage +/- minor arsenopyrite, pyrrhotite, and chalcopyrite (all fine grained).</li> <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 about 500m to the east of</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>the Steam Engine Lode zone.</p> <ul style="list-style-type: none"> <li>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.</li> <li>The important features of the lodes are their continuity and persistent dips 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 tables with significant intersections are included in this announcement and previous ASX announcements including those dated: 20 December 2024, 18 November 2024, 3 October 2024, 23 September 2024, 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.</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 hole intersections.</li> <li>No top cutting has been applied to the exploration results.</li> <li>No metal-equivalent values are reported.</li> </ul>
<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</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>length, true width not known’).</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Included.</li> <li>Further relevant maps and sections are included in previous ASX announcements as referred to in this report, including the announcements dated 20 December 2024, 18 November 2024, 3 October 2024, 23 September 2024, 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.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill Hole collar tables with significant intersections are included in this announcement and previous ASX announcements as referred to in this report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>A summary of the metallurgical test work undertaken so far has concluded an average recovery for the Steam Engine Lode of approximately 82% and approximately 95% for the Eastern Ridge Lode.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Additional work programs include: <ul style="list-style-type: none"> <li>Cultural heritage surveys</li> <li>Drill testing of SAM and geochemical targets</li> <li>Mineral Resource remodelling</li> <li>Further Metallurgical studies</li> <li>Soil surveys</li> <li>Geotechnical studies</li> <li>Toll treatment negotiations</li> <li>Preliminary mining and rehabilitation planning</li> <li>Preliminary environmental studies</li> </ul> </li> </ul>