

## NEPEAN NICKEL PROJECT – JORC (2012) MINERAL RESOURCE ESTIMATE

### Highlights

- A JORC (2012) Nepean Nickel Project Mineral Resource Estimate (MRE) has been successfully completed for the known shallow nickel mineralisation only (above 290mRL), resulting in 236kt @ 1.5% Ni and 0.11% Cu for 3,625t of contained nickel (Ni) and 252t of contained copper (Cu)<sup>1</sup>
- Significantly, approximately 50% of the new shallow Nepean MRE is within the Indicated Resources category, with the potential to increase this proportion significantly with minimal additional drilling
- The JORC (2012) MRE will form the basis of pit optimisations and mine studies as part of the Nepean Scoping Study looking into a potential open-pit mining scenario
- Reverse circulation (RC) drill programme to commence next week targeting the high-priority Induced Polarisation (IP) target at Nepean North

Auroch Minerals Limited (ASX:AOU) (Auroch or the Company) is pleased to announce that a JORC (2012) Mineral Resource Estimate (MRE) for the known shallow nickel mineralisation only (above 290mRL) has been successfully completed at the Nepean Nickel Project (Nepean; Auroch Minerals 80%; Lodestar Minerals 20%) in Western Australia.

The shallow MRE for the Nepean Nickel Project is summarised in Table 1 below:

**Table 1 – Nepean Mineral Resource Estimate Above 290mRL (0.6% Ni Cut-off Grade) - September 2022**

Type	Indicated Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Oxide	38	1.3	0.09	0.04	496	34	16
Transitional	44	1.7	0.10	0.03	724	45	14
Fresh	32	2.1	0.13	0.04	682	43	12
<b>Total</b>	<b>114</b>	<b>1.7</b>	<b>0.11</b>	<b>0.04</b>	<b>1,902</b>	<b>121</b>	<b>42</b>
Type	Inferred Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Oxide	46	1.1	0.12	0.03	510	55	16
Transitional	36	1.1	0.08	0.03	399	28	10
Fresh	41	2.0	0.12	0.04	814	47	15
<b>Total</b>	<b>122</b>	<b>1.4</b>	<b>0.11</b>	<b>0.03</b>	<b>1,723</b>	<b>131</b>	<b>40</b>
Type	Total Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Oxide	84	1.2	0.11	0.04	1,006	89	32
Transitional	80	1.4	0.09	0.03	1,123	73	24
Fresh	73	2.1	0.12	0.04	1,496	90	27
<b>Total</b>	<b>236</b>	<b>1.5</b>	<b>0.11</b>	<b>0.03</b>	<b>3,625</b>	<b>252</b>	<b>82</b>

Note: Rounding may cause some computational discrepancies

<sup>1</sup> JORC (2012) Indicated and Inferred Resources at a 0.6% Ni cut-off grade. Refer to Appendices for full details.

The JORC (2012) MRE for the shallow nickel mineralisation at the Nepean Nickel Project is based on both historic drill-holes and drill-holes completed by the Company in 2021. **The MRE was limited to above the 290mRL (i.e. from surface down to ~120m below surface) and incorporates much of the crown pillar of the historic Nepean underground nickel mine. Importantly, the significant high-grade nickel sulphide mineralisation that exists below the 290mRL has not been included in this MRE.**

Auroch Managing Director Aidan Platel commented:

*“We are very pleased with the JORC (2012) MRE for the shallow nickel mineralisation at the Nepean Nickel Project. **Whilst we know there exists significant high-grade nickel sulphide mineralisation at depth in and around the historic underground mine workings, we are currently focussed on the shallow nickel mineralisation above and around the old mine that could potentially be mined in an open-pit scenario.***

*Earlier this year we completed metallurgical testwork that confirmed the shallow nickel sulphide mineralisation is amenable to traditional beneficiation techniques for Kambalda-style nickel sulphides.<sup>2</sup> **Now that we have successfully modelled this small but significant shallow nickel resource, we can commence mine studies and design as part of the Nepean Scoping Study that will assess the potential to fast-track the project towards development and production from a future open pit mining scenario.***

*We are also pleased to commence exploration drilling at Nepean early next week. **The IP target that aligns with the footwall of a high-Mg ultramafic is a high priority nickel sulphide target that we look forward to drill testing, and we will keep the market updated with results as they come to hand.***”

As announced in April 2022, **the Company has successfully completed metallurgical testwork on the shallow nickel sulphide mineralisation.<sup>2</sup> Three composite samples with initial head assay grades ranging between 1.21% Ni to 7.18% Ni were tested, with all three samples returning good nickel recoveries (85 - 94%) and saleable concentrate grades in excess of 13% Ni. The metallurgical test results highlighted the possibility of generating early cash flow from an open-pit mine scenario and was the catalyst to undertake the completion of the shallow JORC (2012) MRE and associated Nepean Scoping Study.**

**Table 2 – Nepean Mineral Resource Estimate (September 2022) at Varying Cut-Off Grades**

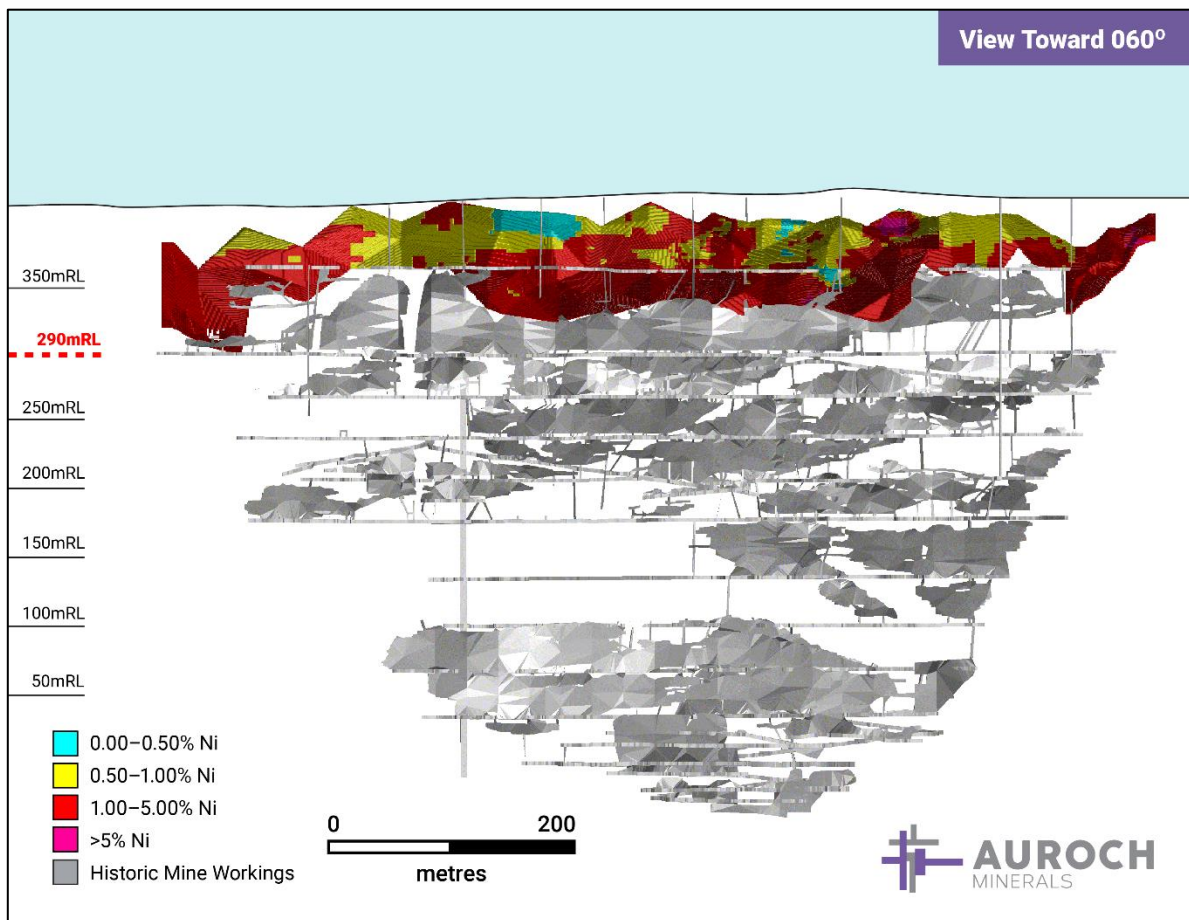
Cut-off Grade % Ni	Tonnage t	Ni %	Cu %	Co %	Ni Tonnes	Cu Tonnes	Co Tonnes
0.30	243,541	1.50	0.10	0.03	3,659	256	84
0.40	240,420	1.52	0.11	0.03	3,648	255	83
0.50	239,228	1.52	0.11	0.03	3,643	254	83
<b>0.60</b>	<b>236,106</b>	<b>1.54</b>	<b>0.11</b>	<b>0.03</b>	<b>3,625</b>	<b>252</b>	<b>82</b>
0.70	224,235	1.58	0.11	0.03	3,547	246	78
0.80	200,849	1.68	0.11	0.03	3,370	231	70
0.90	179,648	1.78	0.12	0.04	3,190	215	63
1.00	154,481	1.91	0.13	0.04	2,951	194	55
1.25	110,107	2.23	0.14	0.04	2,454	153	42
1.50	89,084	2.43	0.15	0.04	2,168	131	35
2.00	54,370	2.88	0.16	0.04	1,564	86	23
2.50	28,608	3.46	0.16	0.05	990	47	13

<sup>2</sup> Refer to 27 April 2022 ASX Announcement - [POSITIVE METALLURGICAL RESULTS FOR SHALLOW HIGH-GRADE NICKEL SULPHIDES AT NEPEAN](#)

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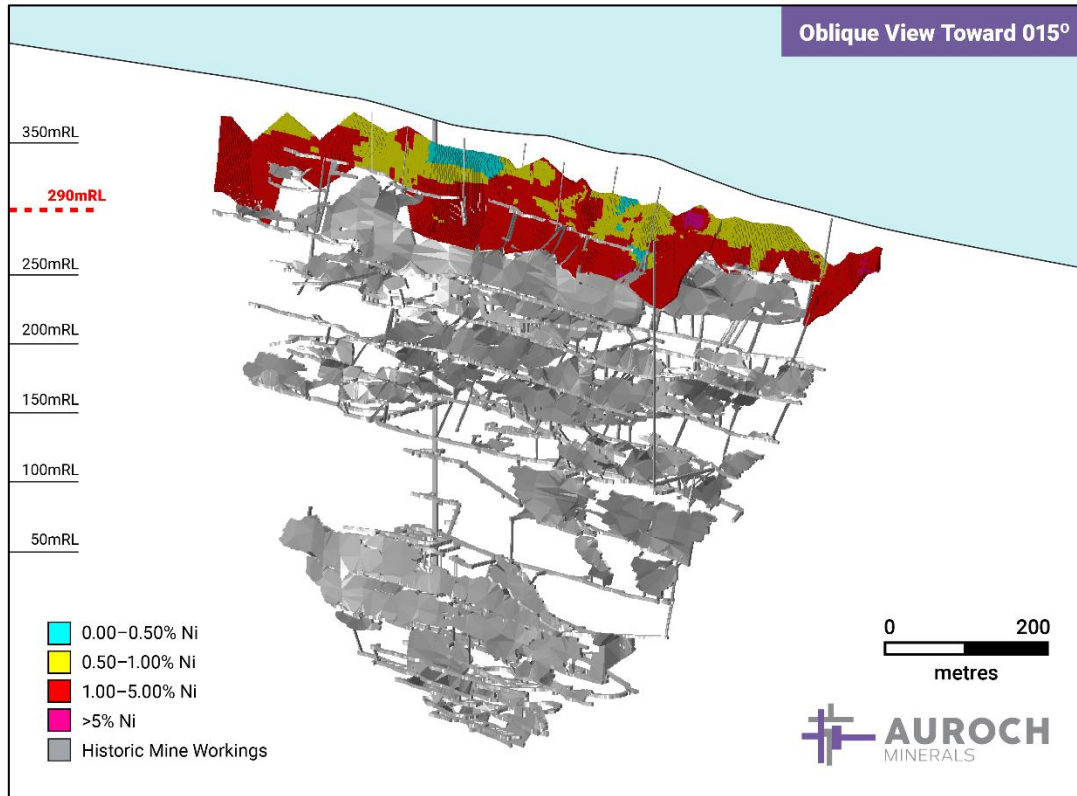
**Nepean Exploration Drill Programme**

A RC drill programme will commence next week to explore a high priority IP target at the Nepean North Prospect (Figure 3). The high chargeability anomaly identified by a ground IP survey is potentially caused by significant sulphide mineralisation, whilst its position on the footwall contact of a magnesium-rich (>40% MgO) ultramafic unit that aligns with an aeromagnetic anomaly increases its potential to represent nickel sulphide mineralisation. The two hole (~700m) programme has been designed to intersect the peak chargeability of this high priority IP target, and may be expanded to include additional drill-holes if the Company deems necessary. The programme is expected to take 1 – 2 weeks.

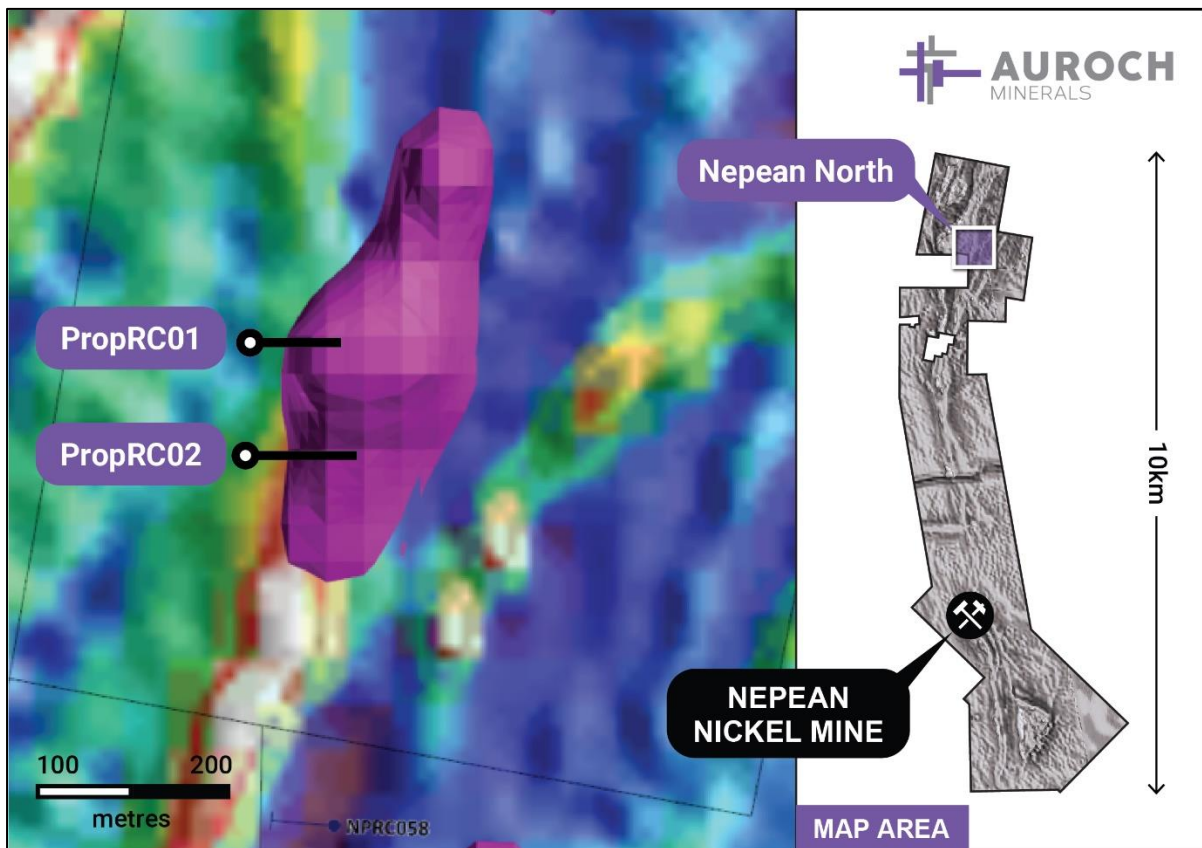


**Figure 1 – Long-section (looking toward 060°) of the JORC (2012) MRE block model in relation to historic mine workings at the Nepean Nickel Project**

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**Figure 2 – Oblique section (looking toward 015°) of the JORC (2012) MRE block model in relation to historic mine workings at the Nepean Nickel Project**



**Figure 3 – Proposed drill-holes to test high chargeability IP target, shown over aeromagnetics (RTP 1VD)**

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## Material Information Summary – Mineral Resource Estimation

Pursuant to ASX listing rule 5.8.1 and complementing JORC Table 1, Sections 1, 2 and 3 contained in the annexures to this announcement, Auroch provides the following summary in regard to the Mineral Resource Estimation (MRE).

The MRE has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code (2012).

All Mineral Resources figures reported in the table above represent estimates as at 1 September 2022. Mineral Resource Estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition) (**JORC Code (2012)**).

### Geology and Geological Interpretation

The Nepean deposit is an Archaean Kambalda-style, komatiite-hosted, massive nickel sulphide deposit. The Nepean tenement package incorporates over 10km of strike of Kambalda-style komatiites, flanked by granites. The mine sequence at Nepean is regarded as a near conformable mafic-ultramafic assemblage intercalated with minor metasedimentary units. The sequence has been subsequently intruded by pegmatite and minor aplite dykes, particularly at depth. Mineralisation at Nepean is interpreted to be similar to the Kambalda style, with nickel sulphides dominantly associated with the basal unit of komatiite flows in the stratigraphic package – also referred to as Sill 2 and Sill 3. Nickel mineralisation is dominated by pentlandite – pyrrhotite – pyrite, with minor chalcopyrite, cubanite, mackinawite and valerite. Mineralogy in the oxidised zone is dominated by violarite, magnetite and pyrite.

### Sampling and Sub-Sampling Techniques

Historical drill core was sampled as sawn half or quarter core, generally in continuous lengths with sampling consistently on the same side of the core.

For Auroch drill-holes, nickel sulphide mineralisation was sampled with the following techniques:

- Diamond core - half core samples with a maximum of 1.2m and minimum 0.2m length, sampled predominantly at 1m intervals or to geological contacts. Core was sawn in half with half sent for assaying and the other half retained for future reference; and
- RC drill-holes - 1m samples of pulverised chips, sampled by a rig mounted cone splitter, with approximately 3kg collected in individual calico bags.

### Drilling Techniques

Historical and Auroch drilling included RC drilling with 5.5 inch hammer and diamond core of HQ and NQ diameter with standard and/or triple tube.

**Classification Criteria**

The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 20m by 15m, and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 20m by 15m and less than 40m by 30m; where small, isolated pods of mineralisation occur outside the main mineralised zones, and to the deeper zones intersected with historical drilling. Deeper mineralised units were not classified, as there has been no recent drilling conducted to these areas by Auroch.

**Sample Analysis Method**

For drilling undertaken by Focus Minerals Limited, samples were sent to ALS Minerals in Perth, WA for analysis. Multi element analysis utilised a AD02 ICP (4 Acid Digest) with analysis for Ni, Cu & Co. No further details are available for historical assay analysis.

For drilling undertaken by Auroch, samples were sent to ALS Minerals in Perth, WA for analysis. Multi element analysis method ME-ICP61 was utilised for all samples, consisting of multi acid digestion with HF and ICP-AES analysis. Over limit method Ni-OG62H for ore grade Ni consisting of four acid digestion with ICP-AES analysis. PGM-ICP23 fire assay ICP-AES finish method was used selectively for samples considered to contain Pt, Pd & Au. All methods are considered suitable for the style of mineralisation targeted.

**Estimation Methodology**

The mineralisation was constrained by mineralisation envelopes prepared using a nominal 0.6% nickel cut-off grade for sulphide mineralisation. A minimum down-hole length of 1m was adopted for the interpretation.

Samples were composited to 1m based on an analysis of sample lengths inside the wireframes. Top cuts were not applied to the composite data after review of the composite statistics.

The block model was created and estimated in Surpac using Ordinary Kriging (“OK”) grade interpolation using parameters derived from modelled variograms in up to three passes. Linear grade estimation was deemed suitable for the Nepean Mineral Resource Estimate due to the geological control on mineralisation.

The block dimensions used in the model were 10m NS by 5m EW by 5m vertical with sub-cells of 1.25m by 0.3125m by 0.625m. This was selected as the optimal block size as a result of kriging neighbourhood analysis (“KNA”).

A total of 698 bulk density measurements were taken on core samples collected from diamond holes drilled at the deposit using the water immersion technique. Bulk densities for the transitional mineralisation were assigned in the block model based on the average of the measurements of 2.75 t/m<sup>3</sup>. Bulk densities for oxide and fresh mineralisation were applied (2.2t/m<sup>3</sup> for oxide and 3.2t/m<sup>3</sup> for fresh) based on assumed values for those material types. Average waste densities were assigned based on lithology and weathering from measurements.

**Cut-off Grade**

The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a nickel cut-off grade of 0.6% for the shallow Nepean mineralisation that could potentially be mined with open pit techniques.

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### **Mining and Metallurgical Methods and Parameters**

It is assumed the Nepean material can be extracted with open pit mining methods and toll treating.

Head assays were initially taken for the three composite drill-core samples with nickel grades up to 7.18% nickel for the massive sulphide sample. Results from the metallurgical testwork indicated all samples responded well to conventional froth flotation, with rougher recoveries for nickel between 85% and 97%. Saleable concentrate grades in excess of 13% nickel were achieved for all three composite samples, albeit at a lower recovery (30%) for sample 1 (disseminated/matrix), which is the subject of ongoing optimisation testwork.

All samples demonstrated minor non-sulphide nickel (NSNi) present. Sulphur speciation for the samples also indicated some degree of sulphide oxidation has occurred, consistent with the petrology which identified violarite as the dominant nickel sulphide species. No talc or deleterious elements were detected during the testwork.

This announcement has been authorised by the Board of Directors of the Company.

**-END-**

For further information visit [www.aurochminerals.com](http://www.aurochminerals.com) or contact:

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**Managing Director**

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### **Competent Persons Statement**

*The information in this release that relates to Mineral Resources is based on information compiled by Mr Shaun Searle who is a Member of the Australasian Institute of Geoscientists. Mr Searle is an employee of Ashmore Advisory Pty Ltd and independent consultant to Auroch Minerals Limited. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.*

*The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Mr Robin Cox BSc (E.Geol), a Competent Person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Cox is the Company's Senior Geological Officer and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cox consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.*

### **Forward-Looking Statements**

*This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Auroch Minerals Limited's planned exploration programmes and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential", "should," and similar expressions are forward-looking statements. Although Auroch Minerals Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.*

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JORC Code, 2012 Edition, Table 1  
Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>For historical drilling, nickel mineralisation at Nepean has been sampled from Reverse Circulation (RC) 1m chip samples &amp; diamond core samples.</li> <li>Auroch drilling included diamond core - half core samples with a maximum of 1.2m and minimum 0.2m length and RC drilling - 1m samples of pulverised chips, approximately 3kg's is collected in individual calico bags.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>The project has been held by various companies since the 1960's, with numerous phases Percussion and Diamond drilling completed. In total over 830 drill holes (excluding underground diamond drilling) have completed over the Nepean tenure. Focus Minerals Ltd (Focus) drilled 80 RC holes to a maximum depth of 230m and one diamond drill hole to a depth of 188.5m.</li> <li>Auroch drilling included RC drilling with 5.5 inch hammer and diamond core of HQ and NQ diameter with standard and/or triple tube.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Sample recoveries were not documented by historical operators.</li> <li>RC recovery is estimated by Auroch staff and contractors. DD core recovery is measured and recorded by Auroch staff and contractors.</li> <li>No relationship between sample recovery and grade has been yet observed and no sample bias is believed to have occurred.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging of historic drill holes was reviewed by Auroch using historic statutory reports and databases compiled by previous operators.</li> <li>Geological logging data collected to date is sufficiently detailed to support a Mineral Resource Estimate at Nepean.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p>photography.</p> <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>For Auroch drilling, all diamond core undergoes geotechnical and geological logging to a level of detail (quantitative and qualitative) sufficient to support use of the data in all categories of Mineral Resource estimation. All core was photographed wet and dry. RC chips were logged for quantitative and qualitative attributes with chips stored in chip trays for future reference. All drill holes were logged in full.</li> </ul>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>1m RC percussion, maximum 1m length core samples, or as close as reasonable within geological boundaries, are considered appropriate for the style of mineralisation being targeted.</li> <li>Historic drill holes were logged at level of detail to ensure sufficient geological understanding to allow representative selection of sample intervals.</li> <li>Sampling QAQC measures taken by previous operator and Focus minerals have not been documented.</li> <li>It is assumed that Focus sample sizes were appropriate for the type, style and thickness of mineralisation tested.</li> <li>For Auroch drilling, nickel sulphide mineralisation has been sampled with the following techniques: diamond core - half core samples with a maximum of 1.2m and minimum 0.2m length, sampled predominantly at 1m intervals or to geological contacts. Core was sawn in half with half sent for assaying and the other half retained for future reference; RC drilling - 1m samples of pulverised chips, sampled by a rig mounted cone splitter, with approximately 3kg collected in individual calico bags.</li> <li>Based on the distribution of mineralisation the sample size is considered adequate for representative sampling.</li> </ul>
<p><b>Quality of assay data and Laboratory tests</b></p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Focus utilised an AD02 ICP (4 Acid Digest) Ni, Cu &amp; Co analysis performed by ALS.</li> <li>It is assumed that industry standard commercial laboratory instruments were used by ALS to analyse historical drill samples from the Nepean prospect.</li> <li>It is assumed that industry best practice was used by previous operators to ensure acceptable assay data accuracy and precision. Historical QAQC procedures are not recorded in available documents.</li> <li>For Auroch drilling, samples were sent to ALS Minerals in Perth, WA for analysis. Multi element analysis method ME-ICP61 was utilised for all samples, consisting of multi acid digestion with HF and ICP-AES analysis. Over limit method Ni-OG62H for ore grade Ni consisting of four acid digestion with ICP-AES analysis. PGM-ICP23 fire assay ICP-AES finish method</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>was used selectively for samples considered to contain Pt, Pd &amp; Au. All methods are considered suitable for the style of mineralisation targeted.</p> <ul style="list-style-type: none"> <li>For Auroch drilling, QAQC included Certified Reference Material (CRM's) and quartz blank (Blanks) samples are inserted 1:20 for DD &amp; RC and 1:30 for AC as part of Auroch's QAQC procedure. Accuracy and performance of CRM's and Blanks are considered after results are received. Field duplicates collected from the cyclone and cone splitter are inserted every 60 samples.</li> <li>After conducting a Q-Q analysis on the various companies assay data, the reasonable results of the plots give confidence in the precision of the assays across various drilling campaigns and companies.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All historic drilling data including collar coordinates, hole orientation surveys, total depth, sampling intervals and lithological logging were collated from statutory annual reports and historic digital data files and verified by the database manager.</li> <li>It is assumed that industry best practice was used for collection, verification and storage of historic data.</li> <li>No twin holes were drilled, however selected infill drilling by Auroch has verified thickness and tenor of the mineralisation.</li> <li>No adjustments to assay data were undertaken.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill collars were surveyed in GDA94/MGA Zone 51 datum by Focus.</li> <li>Hole Series NP07 &amp; NP08 have been resurveyed in the field by Auroch Minerals utilising Differential GPS with accuracy ±0.1m.</li> <li>All historical location data for the Mineral Resource were collected in AGD84 datum and transformed to GDA94 datum, MGA Zone 51.</li> <li>For Auroch collars, RC and DD holes were surveyed with DGPS equipment using the MGA94, Zone 51 coordinate system. Mineral Resource estimation was carried out on this grid.</li> <li>A topographic surface was provided by Auroch and renamed by Ashmore to 'nepean_topo_202208.dtm'. The topography was generated from 10m resolution SRTM data.</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</li> </ul>	<ul style="list-style-type: none"> <li>Drill data spacing of all drill data is sufficient to establish the degree of geological and grade continuity appropriate for estimating a Mineral Resource.</li> <li>Drill hole spacing ranges from 7.5m by</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>7.5m in the most well-drilled portion of the deposit and broadens to approximately 40m by 30m over the remaining areas. Spacing is adequate to establish the degree of geological and grade continuity for estimating a Mineral Resource.</p> <ul style="list-style-type: none"> <li>• Samples were composited to 1m lengths prior to Mineral Resource estimation.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical drill holes were oriented, as far as reasonably practical, to intersect the centre of the targeted mineralised zone perpendicular to the interpreted strike orientation of the mineralised zone.</li> <li>• The geometry of drill holes relative to the mineralised zones achieves unbiased sampling of this deposit type.</li> <li>• No orientation-based sampling bias has been identified.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• It is assumed that due care was taken historically with security of samples during field collection, transport and laboratory analysis.</li> <li>• For Auroch drilling, diamond core samples were dispatched once all cutting, and sampling of drill core was complete. Drill core was maintained in a secure core yard or onsite facility.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No independent audit or review has been undertaken.</li> </ul>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Project consists of two Mining Leases and nine prospecting leases: M15/709, M15/1809, P15/5738, P15/5740, P15/5741, P15/5742, P15/5743, P15/5749, P15/5750, P15/5963, P15/5965. The package is held in joint venture between Auroch (80%) and Goldfella Pty Ltd (20%). Auroch's 80% is held in Eastern Coolgardie Goldfields Pty Ltd, a wholly owned subsidiary of Auroch.</li> <li>• All of the tenements are current and in good standing.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration drilling has been conducted by the previous lease holders including Metals Exploration NL, Endeavour, St Francis Mining, Anaconda, Spinifex Nickel, Ausminex NL - Consolidated Nickel Pty Ltd.</li> <li>• Focus Minerals Ltd owned the project between 2007-2020.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Nepean Nickel Project is regarded as an Archaean komatiite-hosted nickel sulphide deposit.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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 – elevation above sea level in metres) 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>Exploration results are not being reported.</li> <li>All drill hole information relevant to this resource report/statement has been included in the appendices. No relevant drill hole information has been excluded.</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 not being reported.</li> <li>Not applicable as a Mineral Resource is being reported.</li> <li>Metal equivalent values have not been used.</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 length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Most drill holes were angled to 060° so that intersections were orthogonal to the orientation of mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Relevant diagrams have been included within the Mineral Resource report main body of text.</li> </ul>
<b>Balanced Reporting</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>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported, refer to Section 3.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>No other substantive data exists.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work by Auroch may include a Scoping Study for the Nepean Mineral Resource estimate.</li> <li>Refer to diagrams in the body of text within the Mineral Resource report.</li> </ul>

### Section 3: Sampling Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole data used to estimate the Nepean Mineral Resource have been captured in an Access database. Drill hole information within the Access database was validated against relevant historical annual reporting datasets submitted by Metals Exploration NL, Endeavour, St Francis Mining, Anaconda, Spinifex Nickel, Ausminex NL - Consolidated Nickel Pty Ltd. And Focus Minerals Limited.</li> <li>It is assumed that due care was taken historically with the process of transcribing data from field notes into digital format for statutory annual reporting.</li> <li>All assays were reported by laboratories in digital format reducing the likelihood of transcription errors.</li> <li>Historic data has been verified by checking historical reports on the Nepean nickel project. Validation was carried out during data import and by onscreen visual validation.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit was conducted by Shaun Searle during August 2022. The site visit included inspection of the geology, drill chips, the site layout and the topographic conditions present at the site as well as infrastructure. During the site visit, Mr Searle had open discussions with Auroch personnel on technical aspects relating to the relevant issues and in particular the geological data.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation</li> </ul>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation is considered to be good</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>of the mineral deposit.</p> <ul style="list-style-type: none"> <li>• Nature of the data used and of any assumptions made.</li> <li>• The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>• The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>• The factors affecting continuity both of grade and geology.</li> </ul>	<p>and is based historical and Auroch drilling, including diamond core.</p> <ul style="list-style-type: none"> <li>• Geochemistry and geological logging has been used to assist identification of lithology and mineralisation.</li> <li>• The Project consists of NE dipping lodes, striking approximately 330°. The current interpretation is considered robust.</li> <li>• Structural observations on diamond core confirm the geometry of the mineralisation.</li> <li>• Recent drilling by Auroch has confirmed the geological and grade continuity.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• 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 Resource.</li> </ul>	<ul style="list-style-type: none"> <li>• The Nepean Mineral Resource area extends over a NNW strike length of 800m (from 6,550,030mN – 6,550,710mN) and includes the 120m vertical interval from 405mRL to 285mRL.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>• Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Nepean Mineral Resource due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 10m down-dip beyond the last drill holes on section. This was equivalent to approximately half drill hole spacing in this portion of the deposit and classified as Inferred Mineral Resource. Extrapolation was generally half drill hole spacing between drill holes.</li> <li>• The total metal content of the 2022 estimate is comparable with historical estimates.</li> <li>• There is potential to receive credits for copper and cobalt in the produced concentrate. In addition, platinum and palladium were estimated but is not of sufficient grade to be considered economic.</li> <li>• Nickel, copper, cobalt, platinum and palladium are considered to be the economic or potentially economic metals. MgO was interpolated as it could be a deleterious element, however additional metallurgical studies are required to confirm this.</li> <li>• The parent block dimensions used were 10m NS by 5m EW by 5m vertical with sub-cells of 1.25m by 0.3125m by 0.625m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the Saints dataset. In the southern extension of the Sill 3 unit (Domain 3), drill spacing was reduced to approximately 8m by 7m. Therefore, grade was interpolated into a smaller block size of 5m (Y) by 2.5m (X) for this area.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography. Three passes were used. The first pass had a range of 40m, with a minimum of 4 samples. For the second pass, the range was 80m, with a minimum of 2 samples. For the third pass, the range was extended to 150m, with a minimum of 1 sample. A maximum of 16 samples was used for all three passes.</li> <li>No assumptions were made on selective mining units.</li> <li>Strong positive correlations exist between nickel and all the remaining elements apart from MgO. Nickel and MgO have a moderate negative correlation. The correlations are typical of komatiite hosted nickel sulphide deposits in WA.</li> <li>The mineralisation was constrained by mineralisation envelopes prepared using a nominal 0.6% nickel cut-off grade for sulphide mineralisation. A minimum down-hole length of 1m was adopted for the interpretation. The wireframes were applied as hard boundaries in the estimate.</li> <li>Statistical analysis was carried out on data from 8 lodes. The low coefficient of variation of nickel grades observed in the basic statistics for all domains suggested that no top cuts were necessary.</li> <li>Validation of the model included detailed comparison of composite grades and block grades by strike panel and elevation. Validation plots showed reasonable correlation between the composite grades and the block model grades.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a nickel cut-off grade of 0.6% for the shallow Nepean mineralisation that could be mined with open pit techniques.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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 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</li> </ul>	<ul style="list-style-type: none"> <li>Ashmore has assumed that the deposit could potentially be mined using open pit mining techniques with toll treatment of the ore at a third party concentrator.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Head assays were initially taken for the three composite drill-core samples with nickel grades up to 7.18% nickel for the massive sulphide sample. Results from the metallurgical testwork indicated all samples responded well to conventional froth flotation, with rougher recoveries for nickel between 85% and 97%. Saleable concentrate grades in excess of 13% nickel were achieved for all three composite samples, albeit at a lower recovery (30%) for sample 1 (disseminated/matrix), which is the subject of ongoing optimisation testwork.</li> <li>All samples demonstrated minor non-sulphide nickel (NSNi) present. Sulphur speciation for the samples also indicated some degree of sulphide oxidation has occurred, consistent with the petrology which identified violarite as the dominant nickel sulphide species. No talc or deleterious elements were detected during the testwork.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Auroch will work to mitigate environmental impacts as a result of any future mining or mineral processing.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>A total of 698 density measurements were taken from diamond drill core at the Saints Project, analysed using the water immersion technique.</li> <li>It is assumed there are minimal void spaces in the rocks within the Nepean deposit.</li> <li>Bulk densities for the transitional mineralisation were assigned in the block model based on the average of the measurements of 2.75t/m<sup>3</sup>. Bulk densities for oxide and fresh mineralisation were applied (2.2t/m<sup>3</sup> for oxide and 3.2t/m<sup>3</sup> for fresh) based on assumed values for those material types. Average waste densities were assigned based on lithology and weathering from measurements.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate is</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resources into varying confidence categories.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 20m by 15m, and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 20m by 15m and less than 40m by 30m; where small, isolated pods of mineralisation occur outside the main mineralised zones, and to the deeper zones intersected with historical drilling. Deeper mineralised units were not classified, as there has been no recent drilling conducted to these areas by Auroch.</p> <ul style="list-style-type: none"> <li>• The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by recent infill drilling conducted by Auroch, which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The lode geometry and continuity has been adequately interpreted to reflect the applied level of Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• The total metal content of the 2022 estimate is comparable with historical estimates.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"><li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	

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