

## NEPEAN NICKEL PROJECT – EXPLORATION UPDATE

### Highlights

- Assays received for Nepean RC drill programme comprising four holes for 695m
- Programme comprised two infill holes at the shallow Nepean nickel sulphide resource and two exploration holes at the Nepean North IP target
- Significant results from shallow resource drilling included:
  - 1m @ 2.08% Ni, 0.25% Cu & 0.83g/t PGE from 47m (NPRC083)
- Resource drill-hole results will be used to potentially increase the proportion of Indicated Resources of the shallow (above 290mRL) Nepean Mineral Resource Estimate (MRE) of 236kt @ 1.5% Ni and 0.11% Cu for 3,625t Ni & 252t of Cu<sup>1</sup>

Auroch Minerals Limited (ASX:AOU) (Auroch or the Company) is pleased to announce that assay results have been received for exploration and resource drilling at the **Nepean Nickel Project (Nepean; Auroch Minerals 80%; Lodestar Minerals 20%)** in Western Australia.

A four-hole reverse-circulation (RC) drill programme totalling 695m was conducted over both the shallow Nepean nickel MRE and the Nepean North IP target. Two drill-holes targeted the northern portion of the shallow (top ~120m from surface) MRE at Nepean, **with the aim to potentially upgrade a significant portion of the current Nepean Resource from an Inferred category to an Indicated category.** Significant results from these two holes are listed below:

- 1m @ 2.08% Ni, 0.25% Cu & 0.83g/t PGE's (Pt & Pd) from 47m down-hole (NPRC083), and
- 1m @ 1.18% Ni, 0.11% Cu & 0.49g/t PGE's from 29m within a wider mineralised zone of 4m @ 0.84% Ni, 0.05% Cu from 28m (NPRC083); and
- 1m @ 0.72% Ni, 0.07% Cu & 0.15g/t PGE's from 52m (NPRC082).

**Importantly, these results correlate closely with the results from nearby historic drill-holes used in the current MRE of 236kt @ 1.5% Ni and 0.11% Cu for 3,625t of contained nickel and 252t of contained copper.**<sup>1</sup> The data from both the new drill-holes and the historical drill-holes will be used to update the shallow Nepean MRE, with the aim to materially increase the proportion of Indicated Resources, which is currently approximately Inferred (50%): Indicated (50%). **If as expected, the upgrade in resource category will provide higher confidence in the ongoing internal scoping studies into the viability of a shallow mining operation at Nepean.**

At the Nepean North prospect, two deep RC holes targeted a chargeability anomaly identified during a ground IP survey over the northern strike of the Nepean ultramafics. The chargeability anomaly was positioned on the prospective contact of the komatiitic ultramafic and the footwall basalt unit, and was within proximity to an exploration hole approximately 700m to the south which intercepted fertile magnesium rich (>40% MgO) ultramafics.

The geophysical target was considered a high priority nickel sulphide target and two holes were planned to drill to ~300m and intercept the modelled chargeability anomaly. Drill-holes NPRC084 and

<sup>1</sup> Refer to 1 September 2022 ASX Announcement – [NEPEAN NICKEL PROJECT – JORC \(2012\) MINERAL RESOURCE ESTIMATE](#)

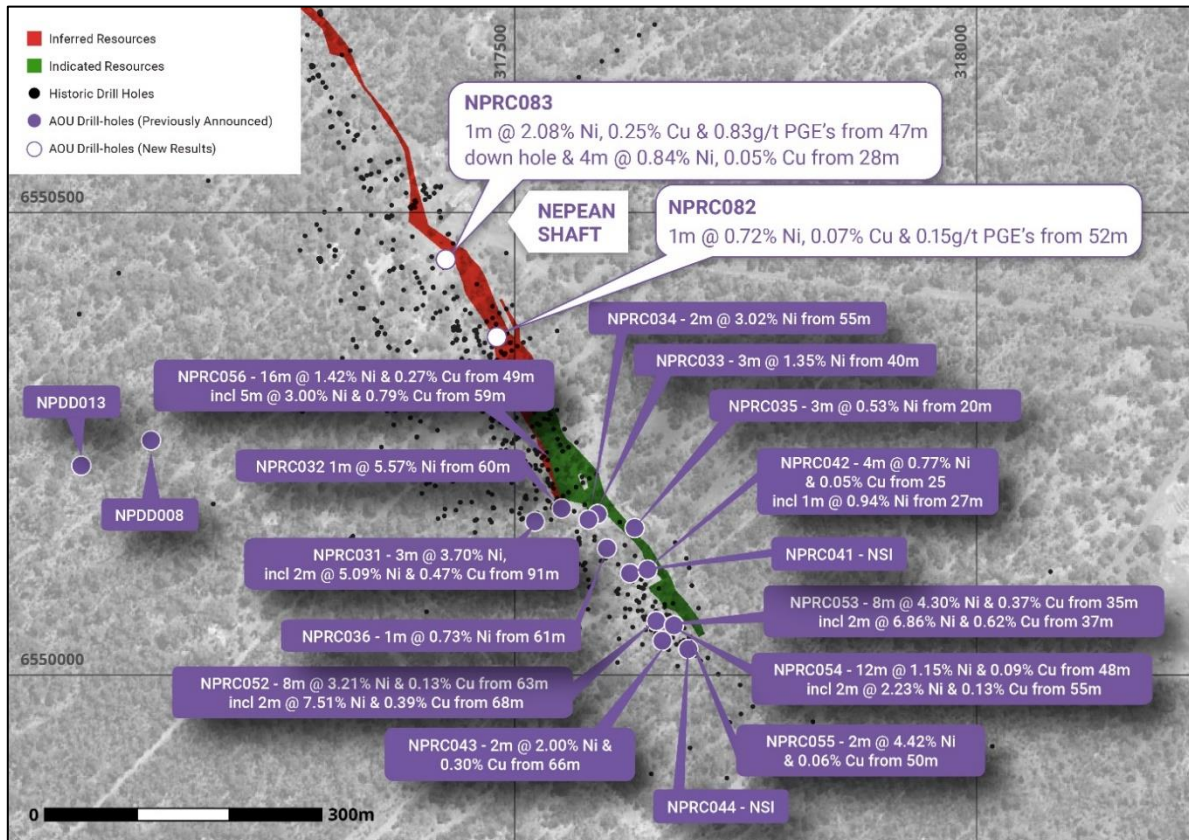
NPRC085 were drilled to 238m and 301m, respectively. Both holes intercepted thick ultramafics, with magnetite observed within the planned target intervals.

Unfortunately, significant ground water was intercepted at approximately 200m depth in both holes which impeded the drilling; however, it was considered that both holes reached an adequate depth to test the IP target. Geochemical assays of the samples from the target intervals produced no significant results and a poor Ni:Cr ratio was observed in both holes, suggesting that the intercepted ultramafic unit was unfavourable for nickel sulphide mineralisation. The Company believes the chargeability anomaly is likely to have been caused by the magnetite mineralisation and possibly the deep saline aquifer.

**Auroch Managing Director Aidan Platel commented:**

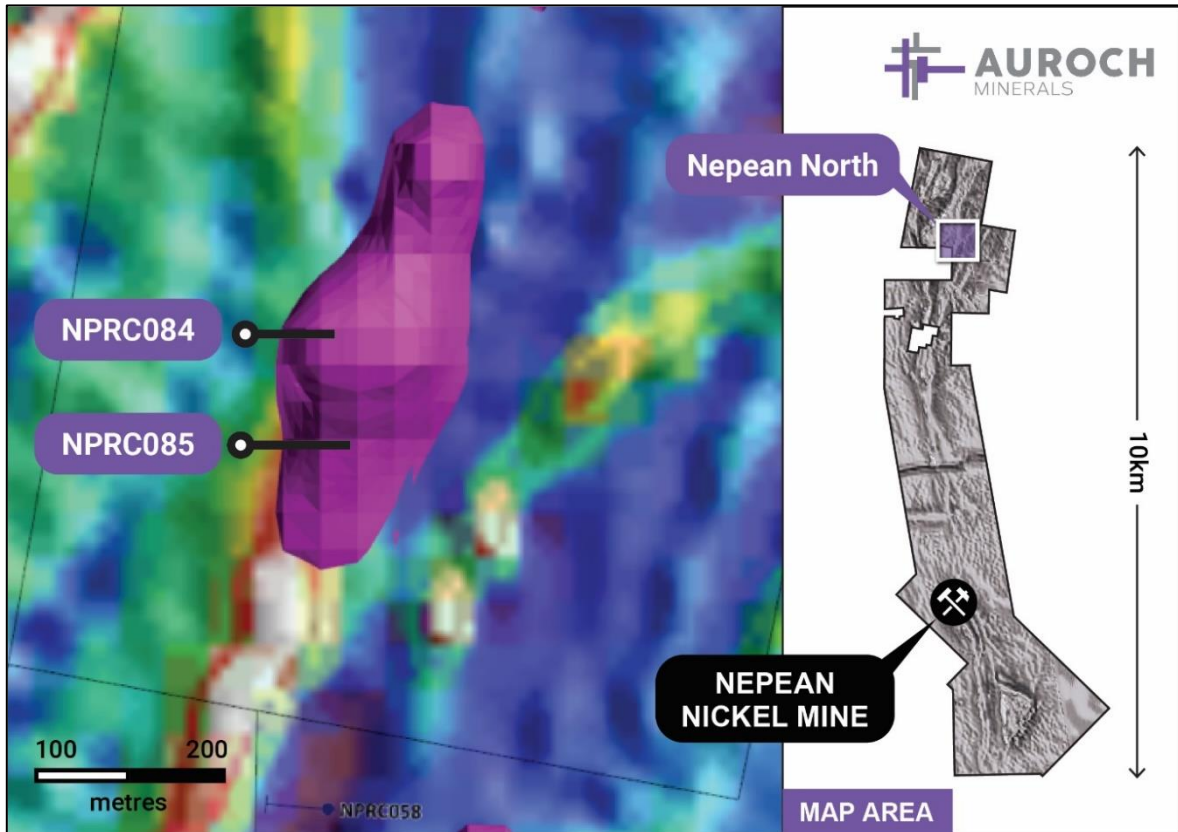
*“The results from the recent RC drilling into the shallow nickel mineralisation correlated well with the historic drilling in the area, which is a great result as it means we can now update the MRE and potentially increase the proportion of Indicated Resources, which is important to the ongoing Scoping Study looking towards potential short-term mining of the shallow nickel mineralisation.*

*On the exploration front we continue to work up new targets and systematically test them for potential new nickel sulphide discoveries.”*



**Figure 1 – Plan view of the current shallow (above 290mRL) MRE block model at the Nepean Nickel Project, showing the split between Inferred and Indicated Resources**

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**Figure 2 – Completed RC drill-holes into the Nepean North Chargeability Anomaly over RTP1VD Aeromagnetics**

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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**Competent Persons Statement**

*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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**Table 1 – Table of Significant Intercepts, Nickel Grades >0.6%**

HOLE ID	Depth From (m)	Depth To (m)	Ni (%)	Cu (%)	PGE (Pt+Pd) (ppm)
NPRC082	24	25	0.66	0.00	0.02
NPRC082	28	29	0.60	0.00	0.03
NPRC082	52	53	0.72	0.07	0.15
NPRC083	11	12	0.66	0.01	0.07
NPRC083	12	13	0.66	0.00	0.04
NPRC083	13	14	0.74	0.00	0.04
NPRC083	14	15	0.90	0.01	0.04
NPRC083	15	16	0.69	0.00	0.05
NPRC083	16	17	0.74	0.00	0.05
NPRC083	18	19	0.61	0.00	0.04
NPRC083	19	20	<b>1.19</b>	0.01	0.05
NPRC083	20	21	<b>1.15</b>	0.01	0.03
NPRC083	21	22	0.77	0.01	0.04
NPRC083	22	23	0.99	0.00	0.03
NPRC083	23	24	0.67	0.00	0.03
NPRC083	24	25	0.61	0.00	0.04
NPRC083	28	29	0.80	0.06	0.18
NPRC083	29	30	<b>1.19</b>	0.11	0.49
NPRC083	30	31	0.72	0.03	0.03
NPRC083	31	32	0.64	0.01	0.02
NPRC083	47	48	<b>2.08</b>	<b>0.26</b>	<b>0.83</b>
NPRC084	0	238	NSI	NSI	NSI
NPRC085	0	301	NSI	NSI	NSI

**Table 2 – Drill-hole Location Table (MGA94, Zone 51S)**

HOLE ID	EASTING (m)	NORTHING (m)	ELEVATION (m)	AZIMUTH	DIP	FINAL DEPTH (m)
NPRC082	317435	6550432	418	060	-55	84
NPRC083	317490	6550352	418	060	-60	72
NPRC084	317359	6558736	370	090	-60	238
NPRC085	317342	6558593	370	090	-60	301

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

CRITERIA	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 1m samples from which 3kg was pulverised to produce a 30g 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>	<p>Drilling Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Nickel mineralisation at Nepean has been sampled from the following drilling techniques:</li> <li>Diamond Core - half core samples with a maximum of 1.2m and minimum 0.2m length.</li> <li>RC drilling - 1m samples of pulverised chips, approximately 3kg's is collected in individual calico bags</li> <li>Air Core drilling creates single metre sample of drill chips; however samples are composited every 3 metres, with the end of hole sample consisting of a 1m sample.</li> </ul> <p>Air Magnetic Survey: Contractor: UTS Client: St Francis Mining Ltd Year: 1996 Aircraft: Fletcher Instrumentation: Caesium Vapour Sample Interval: ~5m Flight Line Spacing: 50 and 100m Flight Line Direction: 068°-248°, 158°-338°, 090°-270° Tie Line Spacing: 500m and 1000m Mean Terrain Clearance: 25m Navigation: Differential GPS</p> <p><b>IP Parameters</b> Contractor: Vortex Geophysics Receiver: 1-2x GDD 16 channel IP Receiver Transmitter: Vortex VIP-30 transmitter system rated at 1500V, 30A and 15KVA Configuration: Dipole-Dipole Line Spacing: 200m Dipole spacing: 100m Domain/Cycle: Time domain – 2 seconds or 0.125Hz</p> <p><b>DHEM Parameters:</b> Contractor: SGC Niche Acquisition Configuration: Down-hole EM (DHEM) Tx Loop size: 300x300m to 350x450m, single turn Transmitter: TTX2 Receiver: Smartem24 Sensor: DigiAtlantis Station spacing: 2m to 10 m Tx Freq: 0.5 Hz</p>

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CRITERIA	EXPLANATION	COMMENTARY
		Duty cycle: 50% Current: ~68-75 Amp Stacks: 64 Readings: 2-3 repeatable readings per station  • A Moving Loop Transient Electromagnetic (MLTEM) ground survey was completed at the Nepean extended mine corridor/sequence. The MLTEM survey commenced late April 2021 and was completed late June 2021.  MLTEM configuration:  • NORDICem24 receiver • CSIRO LANDTEM HT SQUID B-field sensor • ORE_HPTX transmitter • Loop size – 200x200m • 200m line spacing • 100m station spacing • Sensor offset – slingram, 200m east of loop centre • 0.5Hz base frequency • 200A current • ~1msec ramp time • Multiple readings at 64 stacks  MLTEM surveys are an industry standard practice for definition of bedrock conductors representing potential mineralised massive sulphide bodies. Source: 22,500lb Vibroseis Vehicle Line Length: ~6km Total Number of Channels: 1211x2 (2422) Active Receiver Spread (min): 600 Full Receiver Spread (max): 1200 Receiver Spacing: 5m Receiver X-line Spacing: 30m Total Number of Source Points: 1209 Source Point Spacing: 5m Source Skid (distance from each line): 15m Nominal Fold: 300 Max Offset: +/- 1500m
<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>• Diamond Core (DD) drilling is oriented and retrieved via double or triple tube methods.</li> </ul>

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CRITERIA	EXPLANATION	COMMENTARY
<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>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) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Drill core is lithologically and structurally logged by Geologists in the field.</li> <li>Drill chips are lithologically logged by Geologists in the field</li> <li>Logging is qualitative, recording rock type and mineral abundance</li> <li>Logging of RC &amp; AC chips is conducted on a 1 metre sample size.</li> <li>Logging of DD core is conducted on lithological boundaries.</li> </ul> <p>Historic:</p> <ul style="list-style-type: none"> <li>Geological logging data collected to date is sufficiently detailed. At this stage detailed geotechnical logging is not required.</li> <li>Geological logging is intrinsically qualitative.</li> <li>Historic drill holes were geologically logged by previous operators and these data are available to Auroch Minerals.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Diamond core is sawn in half with half used for sampling and the other half retained for future reference.</li> <li>1m RC percussion, sample is split via a cyclone and cone splitter attached to the drill rig to produce a bagged 3kg sample.</li> <li>Certified reference material and blank material are inserted every 20 samples as per company QAQC procedure for both DD &amp; RC.</li> <li>Field duplicates collected from the Cyclone and cone splitter are inserted every 60 samples</li> <li>No further sub sampling has been conducted</li> <li>3m AC sample composites are scooped from sample piles to create a 3kg bagged sample.</li> <li>Certified reference material are inserted every 30 samples as per the company Air Core QAQC procedure.</li> </ul>

CRITERIA	EXPLANATION	COMMENTARY
		Historic: <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 operators not fully documented.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	Auroch Minerals Limited: <ul style="list-style-type: none"> <li>ALS Minerals, multi element analysis method ME-ICP61 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 used selectively for samples considered to contain Pt, Pd &amp; Au. All methods are considered suitable for the style of mineralisation targeted.</li> <li>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.</li> <li>Field duplicates collected from the Cyclone and cone splitter are inserted every 60 samples</li> </ul> Historic: <ul style="list-style-type: none"> <li>Focus Minerals at Nepean – utilised a 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> </ul>

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CRITERIA	EXPLANATION	COMMENTARY
<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>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>No third party verification has been completed to date</li> <li>Drill holes have not been twinned</li> <li>All primary paper data is held on site, digitised data is held in a managed database off site.</li> <li>No adjustments to assays have occurred.</li> </ul> <p>Historic:</p> <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 Auroch’s Geologists.</li> <li>No indication of drill holes being twinned by previous workers has been observed or documented.</li> <li>It is assumed that industry best practice was used for collection, verification and storage of historic data.</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>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Drill collars were surveyed in GDA94/MGA Zone 51 datum for Nepean and GDA94/MGA Zone 54 for Arden, by handheld GPS +/-5m accuracy</li> <li>At completion of programme drill collars will be surveyed using a Differential GPS +/- 0.1m accuracy.</li> </ul> <p>Historic:</p> <ul style="list-style-type: none"> <li>Drill collars were surveyed in GDA94/MGA Zone 51 datum for Nepean and GDA94/MGA Zone 54 for Arden</li> <li>At Nepean hole series NP07 &amp; NP08 have been resurveyed in the field by Auroch Minerals utilising Differential GPS with accuracy ±0.1m</li> </ul> <p>Air Magnetic Survey:</p> <ul style="list-style-type: none"> <li>Differential GPS was used during flight 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>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Drill data spacing of historic drill data is sufficient to establish the degree of geological and grade continuity appropriate for this stage of exploration and understanding of mineralisation</li> </ul> <p>Historic:</p> <ul style="list-style-type: none"> <li>Typically sampled in 1-4 metre intervals, skipping intervals of no interest and increasing the frequency of sampling depending on the geology observed in diamond drill core.</li> </ul>

CRITERIA	EXPLANATION	COMMENTARY
		<ul style="list-style-type: none"> <li>Drill data spacing of historic drill data is sufficient to establish the degree of geological and grade continuity appropriate for estimating an Inferred Ni Resource.</li> </ul> <p>Air Magnetic Survey:</p> <ul style="list-style-type: none"> <li>Flight-line spacing 50-100m</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>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Drill holes azimuth is nominally planned perpendicular to stratigraphic strike</li> <li>Drill hole dip is regarded suitable for subvertical stratigraphy and provides a near true width intersection to minimise orientation bias.</li> </ul> <p>Historic:</p> <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>The measures taken to ensure sample security.</li> </ul>	<p>Auroch Minerals Limited:</p> <ul style="list-style-type: none"> <li>Drill samples are collected in labelled polyweave bags and closed with tight zip ties.</li> <li>Samples are transported within 1-2days of hole completion by field staff directly to ALS laboratories.</li> <li>Diamond core samples are dispatched once all cutting and sampling of drill core is complete. Drill core is maintained in a secure core yard or onsite facility.</li> </ul> <p>Historic:</p> <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> </ul>
<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 independent audit or review has been undertaken.</li> </ul>

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