ASX ANNOUNCEMENT **5 OCTOBER 2021**

MINERAL RESOURCES INCREASE AT HENTY GOLD MINE IN TASMANIA

- **Henty mineral resources increase by 13% including gold production in 2020-21**
- **Mineral resources now 2.5 million tonnes @ 4.5g/t Au for 357,400 ounces of gold**
- **Zone 96 more than doubled to 84,500 ounces of gold at 6.9g/t Au**
- **Underground drilling continues to intersect high grade gold mineralisation**

Catalyst Metals Limited (**Catalyst** or the **Company**) (ASX: **CYL**) is pleased to announce that in the six month period since acquisition, it has increased the mineral resources at the Henty Gold Mine and more than replaced ounces mined during the period since the last resource was estimated in June 2020. The gold grade has also been increased and the mineral resource on Zone 96 has more than doubled to 84,500 ounces of gold at a grade of 6.9g/t Au. This is due to the aggressive drilling program undertaken by the Company.

This is a very pleasing result and shows the ability of exploration to create value for shareholders.

CSA Global Pty Ltd (CSA Global), a member of the ERM group of companies, was commissioned by Catalyst Metals Pty Ltd (CYL or "the Company") to prepare a Mineral Resource estimate (MRE) for the Henty Gold Mine (the "Project"), located in Tasmania, Australia. The MRE has been reported in accordance with the JORC Code and is shown in Table 1.

Table 1 MRE by JORC Classification – Henty Deposit

JORC Classification	Tonnage (Mt)	Au (g/t)	Ounces (koz)
Indicated	1.8	4.5	257
Inferred	0.7	4.3	100
Total	**2.5**	**4.5**	**357**

Note:

- *Due to the effect of rounding, totals may not represent the sum of all components.*
- *Tonnages are rounded to the nearest 0.1 million tonnes, ounces are rounded to the nearest 1000 ounces, grades are shown to 2 significant figures.*
- *Reporting criteria are: Indicated and Inferred material (RESCAT = 2 or RESCAT = 3), Au >1.75 g/t (AU>1.75), un-sterilised (STERIL=0) with reasonable prospects of eventual economic extraction (RPEEE=1).*

CSA Global considers that data collection techniques are largely consistent with industry good practice and suitable for use in the preparation of an MRE to be reported in accordance with the JORC Code. Available quality control (QC) data supports the use of the input data.

A 3D block model representing the mineralisation was created using Datamine software. Diamond core and underground face samples were used to interpolate Au grades into blocks using Ordinary Kriging. Several methods validated the block model, including visual review and comparison of sampling and block model grades.

44 Kings Park Road, West Perth WA 6005 PO Box 778, Claremont WA 6910
Telephone: (61-8) 6263 4423 Facsimile: (61-8) 9284 5426
www.catalystmetals.com.au ABN 54 118 912 495

The Mineral Resource is considered to have reasonable prospects for eventual economic extraction (RPEEE) given the access to critical infrastructure, the volume and grade of mineralisation available for mining and the RPEEE criteria which have been applied prior to reporting the Mineral Resource.

On Figure 2, the individual zones that comprise the mineral resources are presented in longitudinal projection.

MINERAL RESOURCE ESTIMATE

The following is a material information summary relating to the MRE, consistent with ASX Listing Rule 5.8.1 requirements. Further details are provided in JORC Table 1, which is included as Appendix A.

1. Geology and Geological Interpretation

The Henty deposit lies within the Mt Read Volcanic (MRV) Belt in western Tasmania (Figure 1). The belt hosts several world-class polymetallic ore bodies including the Hellyer, Que River, Rosebery, Hercules and Mount Lyell deposits.

The most important metallogenic event in Tasmania coincided with the deposition of the MRV, which occurred from the early middle Cambrian to the early late Cambrian. The main mineralised belt of the MRV between Mount Darwin and Hellyer is the Central Volcanic Complex (CVC). The CVC is dominated by proximal volcanic rocks (rhyolite and dacite flows, domes and cryptodomes and massive pumice breccias) and andesite and rare basalt (lavas, hyaloclastites and intrusive rocks) deposited in a marine environment.

Flanking the CVC to the west is the coeval Western Volcano-Sedimentary Sequence (WVS), which is a sequence of lithicwacke turbidite, mudstone, siltstone, shale and subordinate intrusive rocks and lavas, commonly andesitic in composition. Flanking the CVC to the east is the Eastern Quartz-Phyric Sequence (EQPS), which consists of quartz-feldspar-phyric lavas, intrusive porphyries and volcaniclastic sandstone, intruded by magnetite series granites. These rocks are overlain by the Tyndall Group, a unit of quartz-bearing volcaniclastic sandstone and conglomerate of mixed felsic and andesitic provenance, with the latter common towards the base, and minor felsic and andesitic lavas and intrusive rocks and welded ignimbrite.

Mineralisation was constrained to a short time period in the late Middle Cambrian at the top of the CVC, and in places in the overlying Tyndall Group rocks. The whole belt has been overprinted with a regional lower green schist facies metamorphism.

The Henty Fault Zone constitutes a major metallogenic divide within the MRV. To the northwest of the Henty Fault Zone polymetallic Zn-Pb-Au-Ag-Cu deposits dominate – such as the Hellyer, Que River, Rosebery and Hercules deposits. To the southeast Cu-Au and Au deposits dominate – such as the Henty and Mt Lyell deposits.

2. Drilling Techniques

The sampling database for Henty includes data collected by diamond drilling (DD), channel sampling (CH) and sludge sampling (SL) techniques. The sampling database has been compiled from information collected when the Project was under ownership of numerous companies including (listed from most recent):

- Catalyst Metals (2021 to current)
- Diversified Minerals (2016 to 2020)
- Unity Mining (2009 to 2016)
- Barrick Gold (2006 to 2009)
- Placer Dome (2003 to 2006)
- Aurion Gold (2001 to 2003)
- RGC/Goldfields (1996 to 2001).

Details relating to drilling techniques, quality assurance (QA) protocols and quality control (QC) results for data gathered prior to 2009 is largely unavailable. Drilling carried out during this period is collectively termed "Historical Drilling" in this report. For drilling carried out since acquisition of the project by Unity Mining in 2009 a reasonable, although partially incomplete, level of information is typically available describing data collection procedures and relevant QAQC. Drilling carried out during this period is collectively termed "Modern Drilling" in this report.

3. Sampling and Subsampling

Historical Drilling

Information relating to the "Historical Drilling" is largely incomplete. However, the information provided indicates that sampling techniques and sample preparation was broadly similar to that of the "Modern Drilling". QA protocols were employed, in some form, for the analytical data gathered during this period.

Modern Drilling

For drillhole data either whole core or half core is generally submitted. In areas where infill drilling is required, whole core may be submitted given that there are other holes available with half core for future reference. Sample recovery is recorded for DD core samples as part of geotechnical logging (DVM, 2020d).

Samples are taken at 0.2–1.2 m intervals and honour lithological boundaries, with intervals entered in the same spreadsheet that is used for logging. Core is cut with an automatic core saw. Samples are placed in calico bags and then into polyweave bags for transport to the laboratory. Certified reference materials (CRM's) and blank material is inserted in the sample stream to monitor analytical bias and carry-over contamination, respectively.

For underground workings channel sampling is carried out at grade height (~1.5 m). A duplicate sample is taken on all faces to monitor sample precision. Samples are taken at 0.2–1.2 m intervals and honour different rock types, alteration zones and mineralised zones. CRM's and blank material is inserted in the sample stream in order to monitor analytical bias and carry-over contamination respectively.

Samples are placed in an oven on site after the geologist returns from underground. The primary laboratory (ALS in Burnie) collects the samples each morning and generally provides results later that day, giving a 24 to 36-hour sample turnaround.

4. Sample Analysis Method

Historical Drilling

Information relating to the "Historical Drilling" is largely incomplete. However, the information provided indicates that several analytical laboratories have been used over the history of the Project, and analytical methodologies have varied slightly over time. Typically fire assay with determination by atomic absorption spectrometry (AAS) has been used.

Although sample collection, sample preparation, sample logging and analytical techniques have varied over the project's history, all can be considered as industry standard at the time. The amount of QC data that was collected has also varied over the project's history, but overall is considered as being acceptable to support the MRE.

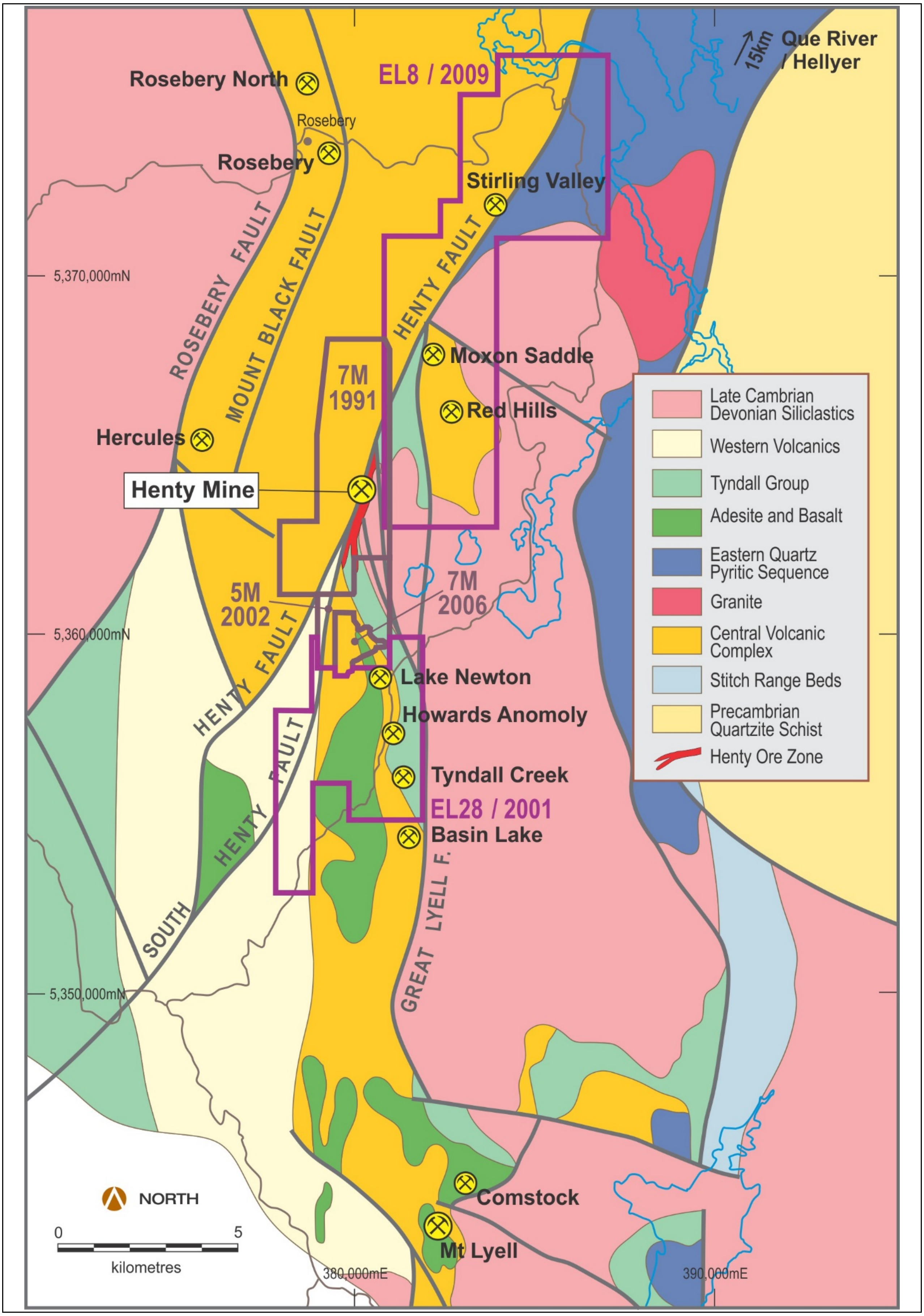

Figure 1: Regional Geology map showing location of the Henty Gold Mine, other mineral deposits and major faults

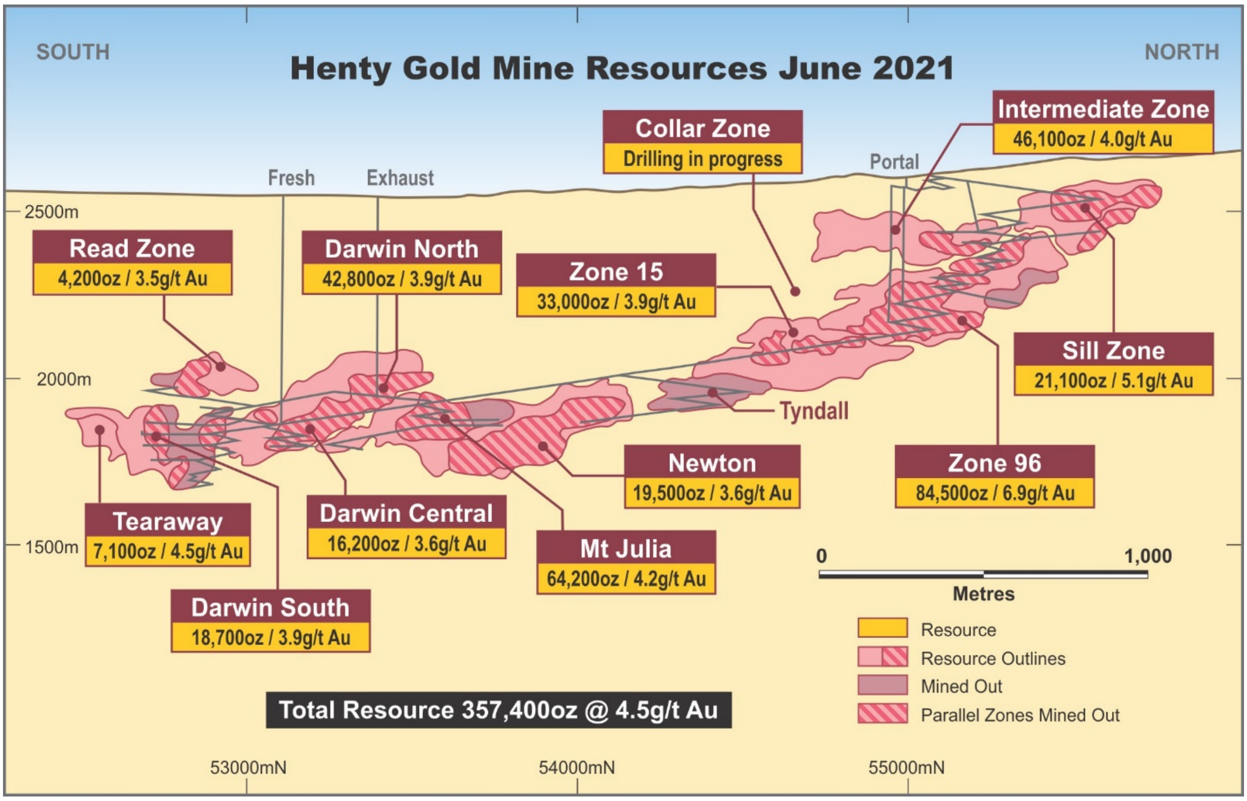

Figure 2: Longitudinal projection of Henty Gold Mine showing 2021 resource zones.

Modern Drilling

All samples are submitted to ALS Burnie for gold analysis. Samples are crushed and pulverised prior to selection of a 30 g subsample for fire assay with determination by atomic absorption spectrometry (AAS).

Occasionally, Bi, Ag, Cu, Pb, Zn, As and Mo analyses are completed to assist with understanding the nature of the mineralisation and for metallurgical assessment. Cu, for example, may consume cyanide during processing. If required, pulps are sent from Burnie to ALS Townsville for multielement determination.

For “Modern Drilling” carried out under DVM and CYL ownership, blank results returned from the laboratory show no signs of carry-over contamination and have performed well. CRM results returned have also performed well, with a low overall failure rate of 3% for all CRM’s combined. Overall field duplicate results and pulp duplicate results are in line with expectations. Overall, the analytical results are considered as being acceptable to support the MRE.

5. Resource Estimation Methodology

All geological domains used in the MRE were constructed by DVM using Datamine software. Block modelling and grade interpolation were carried out by CSA Global using Datamine software. Statistical analysis was carried out by CSA Global using Snowden Supervisor software.

All drillhole assay samples were flagged according to the geological and mineralisation envelopes. Sample populations were statistically analysed and estimation domains defined. 1 m composites with top-cuts applied to Au values were used for grade interpolation. For grade variables other than Au interpolation was carried out into the same parent cell/sub-cell scheme via inverse distance methodology using 1 m composites with top-cuts applied.

Quantitative kriging neighbourhood analysis was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids.

Grade interpolation for Au was carried out by ordinary kriging into either:

- 1.25 m(E) x 5 m(N) x 5 m(RL) parent cells, sub-celled down to 0.25 m(E) x 0.5 m(N) x 0.5 m(RL) (for the Sill Zone, Intermediate Zone, Zone 15 and Zone 96 model areas), or
- 2.5 m(E) x 5 m(N) x 5 m(RL) parent cells, sub-celled down to 0.5 m(E) x 0.5 m(N) x 0.5 m(RL) (all other model areas).

Dynamic anisotropy was employed to ensure undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses). A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate. Initial search ellipse dimensions were set to honour the maximum variogram ranges determined in the three principal directions. Search ellipse expansion for second and third pass interpolations were set to two times and 10 times the initial search ellipse ranges respectively.

All interpolated grades variable utilise the same search and sample selection plan. Sample selection was either:

- A minimum of 4 and maximum of 12 samples per estimate, with a maximum number of samples per drillhole of 3 (for block schemas of 1.25 m(E) x 5 m(N) x 5 m(RL) parent cells); or
- A minimum of 6 and maximum of 16 samples per estimate, with a maximum number of samples per drillhole of 4 (for block schemas of (2.5 m(E) x 5 m(N) x 5 m(RL) parent cells).

The interpolated grades were validated by way of visual review of cross sections (block model and drill samples presented with same colour legend), swath plots, and comparison of estimation domain mean grades with de-clustered distribution data.

Density was measured from core billets using the water displacement method. Samples were not wax coated prior to immersion. Density has been applied on a global basis as follows:

- 2.76 g/cm3 for all model areas.

6. Classification Criteria

The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1.

After giving due consideration to the integrity of all input data, available QC results, data distribution, geological and grade continuity, areas of the deposit were classified as Indicated where geological continuity is reasonable, and the deposit has been drilled on a 10-15 m E x 10-15 m RL pattern (or denser). Given the complexity of the deposit, CSA Global considers that a drill pattern of approximately 10–15 m E by 10–15 m RL is required to enable the broad architecture of the deposit to be discerned prior to level development. This is also the spacing that is roughly required to assume geological and grade continuity between points of observation.

Areas with broader drill spacing (but still denser than 50 metres) and within the modelled mineralisation envelopes were classified as Inferred.

7. Reasonable Prospects for Eventual Economic Extraction

The Mineral Resource is considered to have reasonable prospects for eventual economic extraction (RPEEE) given the access to critical infrastructure, the volume and grade of mineralisation available for mining and the RPEEE criteria which have been applied prior to reporting the Mineral Resource.

To define areas of "sterilised" material (either previously mined or not likely to be accessible) string files were developed by DVM. The following approach was adopted for developing the string files:

- Initially a long section view was created, aligned approximately parallel to the overall strike of the mineralised zones.

- Wireframe models for each individual mineralised zone were viewed in conjunction with the available mined out area wireframe models and areas of intersection (i.e. model depletion) identified.
- A string representing a 5m buffer zone was digitised around the depletion intersections for each individual mineralised zone. The 5m buffer zone standoff was adopted as this was considered as representing the smallest practical pillar width that could be utilised for mining around previously depleted areas.
- Finally, the strings for each individual mineralised zone were adjusted to exclude any additional mineralised zone volume outside of the 5m buffer zone that was deemed to be inaccessible, and therefore "sterilised" for the purposes of future mining.

The "sterilisation strings" developed from this process were then used to select and code block model cells to reflect the "sterilisation" status of the model cells for each individual mineralised zone. Sterilised blocks were then excluded from the reported Mineral Resource estimate.

While CSA Global acknowledges this approach is imperfect in terms of capturing the local scale details of model depletion, globally the MRE has been appropriately depleted for previous mining. Additionally, the application of "sterilisation" coding via the process outlined assists in addressing the reasonable prospects for eventual economic extraction (RPEEE) criteria for the final Mineral Resource as is a requirement under the JORC code.

8. Reporting Cut-off Grades

The Mineral Resource reported above a cut-off grade of 1.75 g/t Au. The adopted cut-off grade is the current incremental cut-off grade for underground development ore.

9. Mining and Metallurgical Methods and Parameters

Henty is an operating mine and there are no material metallurgical issues that are known to exist.

10. Competent Person Statement

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr Chris Adams, a Competent Person, who is an employee of CSA Global Pty Ltd and a Member of the Australian Institute of Geoscientists (#5359). Mr Adams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Adams consents to the disclosure of information in this report in the form and context in which it appears.

This announcement has been approved for release by the Board of Directors of Catalyst Metals Limited.

John McKinstry
Chief Executive Officer

For further information contact:

John McKinstry	Bruce Kay	Steve Boston
CEO	Technical Director	Chairman
T: +61 421 987 643	+61 400 613 180	+61 409 574 515

Appendix A: JORC 2012 Table 1

JORC Table 1, Section 1 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling database for Henty includes data collected by diamond drilling (DD), channel sampling (CH) and sludge sampling (SL) techniques. SL samples were not used for grade estimation. The sampling database has been compiled from information collected when the project was under ownership of numerous companies including (listed from most recent): 1 Catalyst Metals (2021 to current) 2 Diversified Minerals (2016 to 2020) 3 Unity Mining (2009 to 2016) 4 Barrick Gold (2006 to 2009) 5 Placer Dome (2003 to 2006) 6 Aurion Gold (2001 to 2003) 7 RGC/Goldfields (1996 to 2001). Details relating to drilling techniques, quality assurance (QA) protocols and quality control (QC) results for data gathered prior to 2009 is largely unavailable. Drilling carried out during this period is collectively termed “Historical Drilling” herein. For drilling carried out since acquisition of the project by Unity Mining in 2009 a reasonable, although partially incomplete, level of information is typically available describing data collection procedures and relevant QAQC. Drilling carried out during this period is collectively termed “Modern Drilling” herein.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For drillhole data, either whole core or half core is generally submitted. In areas where infill drilling is required, whole core is typically submitted given that there are other holes available with half core for future reference. Samples are taken at 0.2–1 m intervals and honour different rock types, alteration zones and mineralised zones as defined by geologists. Face sampling is carried out at grade height (~1.5 m). A duplicate sample is taken on all faces to assist in monitoring sample precision and representivity. Samples are taken at 0.2–1 m intervals and honour different rock types, alteration zones and mineralised zones as defined by geologists.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. “RC 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.	Diamond drilling and face sampling methods were used to obtain 0.2 m to 1 m length samples which were subsequently pulverised to produce a 30 g charge for fire assay with determination by atomic absorption spectrometry (FA/AAS) for gold.

Criteria	JORC Code explanation	Commentary
Drilling techniques	*Drill type (e.g. core, RC, 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.).*	Underground mobile diamond drill rigs are utilised to produce either LTK60 or NQ2 size core. Drill core is not routinely oriented.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Drilling recoveries are recorded for diamond core samples as part of geotechnical logging.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Recovery of drill core is maximised by using drilling techniques and drilling fluids suited to the particular ground conditions.
	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.	No relationship between grade and recovery has been identified.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	**Drilling** For drillhole data, logging is completed on a lap top computer directly into an Excel based spreadsheet which has been designed for the mine site. Logging is carried out at a core shed with adequate facilities including roller-racks, lighting, core photograph facilities and an automatic core saw. A template with project-specific codes has been set up to ensure consistent collection of relevant geological information. Alteration, geotechnical, structure and rock type information are collected into separate tables using standalone codes. Zones of core loss are also recorded. **Face Mapping/Sampling** For underground workings, the backs are mapped 6 m from the face to provide a check for the mapping from the previous round. If a round is missed, then 9 m requires mapping to provide the 3 m overlap for checking. Faces are photographed for future reference.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is generally qualitative in nature. All core is stored at site and has been photographed wet.
	The total length and percentage of the relevant intersections logged.	All diamond core has been geologically logged in full (100%).
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	**Drilling** Diamond samples are generally half-core, with core sawn in half using a core-saw. In areas where infill drilling is required, whole core may be submitted given that there are other holes available with half core for future reference. An automatic core saw is used to cut the core.

Criteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	**Face Sampling** Face sampling is carried out at grade height (~1.5 m). A duplicate sample is taken on all faces to assist in monitoring sample precision and representivity. An effort is made to collect representative samples and reduce the potential for contamination.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Several laboratories and assay techniques have been used throughout the Project's history. Typically, samples are initially crushed in a jaw crusher to a size of 10 mm. The jaw crusher is cleaned by compressed air between samples. The sample is then riffle split down to 1 kg, with the remaining samples returned as coarse reject to site and stored under cover for future reference. The 1 kg sample is pulverised using an LM5 pulveriser to a size of 85% passing 75 microns, and the mill cleaned with a barren silica flush between samples. 200 g of this fine material is taken via scoop, from which 30 g is taken for fire assay (FA50).
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Subsampling is performed during the sample preparation stage according to the assay laboratories' internal protocols.
	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.	Field duplicates of diamond core, i.e. other than half of cut core, have not been routinely assayed. Field duplicate samples are taken on all underground faces to assist in monitoring sample precision and representivity.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the material being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The techniques are considered total. 8 All samples are currently submitted to ALS Burnie for gold analysis. Samples are crushed and pulverised prior to selection of a 30 g subsample for fire assay with determination by atomic absorption spectrometry (AAS). Previous owners have adopted similar methods. Occasionally, Bi, Ag, Cu, Pb, Zn, As and Mo analyses are completed to assist with understanding the nature of the mineralisation and for metallurgical assessment. Cu, for example, may consume cyanide during processing. If required, pulps are sent from Burnie to ALS Townsville for determination via ICP analysis.
	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.	No geophysical tools were used to support the preparation of this Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
	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.	Details relating QA protocols and QC results for data gathered prior to 2009 is largely unavailable. Monthly QC reports were compiled by Unity Mining for the period 2010 to 2015. The available QC data compiled by Unity Mining was reviewed by CSA Global and considers the results as suitable to support the data gathered. Monthly QC reports compiled by CYL between February and June 2021 have also been reviewed by CSA Global and found to be reasonable. QA protocols that have been adopted since 2016 are summarised below. **Drilling** CYL specifies inclusion of field blanks at a rate of one blank every 30 samples submitted. The blanks are composed of barren basalt material, which is obtained from a commercial distributor in the town of Devonport on the north coast of Tasmania. CYL specifies inclusion of certified reference materials (CRMs) at a rate of two CRM's every 30 samples of core samples submitted, and two CRM's for every batch of channel/sludge samples submitted. Commercially available CRM's covering ranges considered as representing low, moderate and high values for gold were obtained from OREAS. Inclusion of field duplicates for core samples is not routinely carried out by CYL Pulp duplicates insertion rates are not specified by CYL. Assay laboratory internal QA protocols are relied upon for analysis of pulp duplicates. Results are not routinely monitored to the best of CSA Global's knowledge. **Face Sampling** CYL specifies two CRMs and a blank are submitted with each batch to monitor analytical bias and cross-sample contamination respectively. The quality control samples are suffixed A, B and C at the end of each submission sheet. Low, medium and high-grade CRMs are used. CYL specify a field duplicate interval is taken and submitted for analysis for each heading sampled, with final results averaged across the two samples submitted for each interval. Pulp duplicates insertion rates are not specified by CYL. Assay laboratory internal QA protocols are relied upon for analysis of pulp duplicates. Results are not routinely monitored to the best of CSA Global's knowledge. The Competent Person has reviewed all available data and considers that acceptable levels of precision and accuracy have been established for the modern drilling dataset. There is a greater degree of uncertainty attached to the historical dataset.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by alternative CYL company personnel.
	The use of twinned holes.	No twinning has been completed.

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The summary below relates to current methods. Historical methods are not known with any certainty. **Drilling** Logging is completed on a lap top computer directly into an Excel based spreadsheet which has been designed for the mine site. Logging is carried out at a core shed with adequate facilities including roller-racks, lighting, core photograph facilities and an automatic core saw. A template with project-specific codes has been set up to ensure consistent collection of relevant geological information. Alteration, geotechnical, structure and rock type information are collected into separate tables using standalone codes. Core is photographed wet at the core shed. Core photographs are stored on the server for future reference. **Face Mapping/Sampling** Face mapping and sampling data is entered in a face mapping sheet, along with the face number, distance to the nearest survey station, the width and the height of the face, over-break estimate, time and date, scale and name of geologist and classification of face (run of mine (ROM) or waste). Once the geologist returns to the office, the data is entered in an Excel spreadsheet. The location of the face is then determined in Datamine using the query line command. The face sample is treated as a short drillhole, with collar and survey information. The output of the query line command is entered in the Excel spreadsheet which then updates the collar information. 9 Core logging and sampling data is saved in the same logging and sampling spreadsheet that is used for face sampling. The data is then manually exported to a specific directory. The exported files and Datashed database are then opened, and data from each sheet of the export document is then copied into the relevant Datashed table. Data is then exported from Datashed as CSV files ready for import into Datamine. 10 Analytical data is imported directly into the Datashed database from files sent by the laboratory.
	Discuss any adjustment to assay data.	No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.

Criteria	JORC Code explanation	Commentary
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The summary below relates to current methods. Historical methods are not known with any certainty; however, the Competent Person considers it is reasonable to assume that industry standard techniques have been adopted over the Projects history. Diamond drillhole collar positions are set out by mine surveyors. The drilling crew has an azi-reader device that enables them to set up at the correct azimuth and dip according to the drillhole plan. Final collar positions are then picked up by Mine Surveyors at hole completion. Downhole surveys are completed using a Devi-flex tool, with surveys taken every few metres. Development drives are regularly picked up by Mine Surveyors. At stope completion, a cavity monitoring system (CMS) is generally used to model the final voids. There are historical stopes that have not been picked up, however.
	Specification of the grid system used.	The grid system used is Geocentric Datum of Australia 1994 (GDA94).
	Quality and adequacy of topographic control.	A topographic fie was not used in the preparation of this Mineral Resource estimate.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Areas that remain in situ are generally drilled at 10–20 m E by 10–20 m RL spacings in the Mineral Resource area. The drill spacing varies between deposits, and lenses within a deposit. Areas towards the periphery of the lenses are often drilled at broader spacings.
	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.	The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classifications applied to the Mineral Resources given the drill pattern. Mineral Resource estimation procedures are also considered appropriate give the quantity of data available and style of mineralisation under consideration.
	Whether sample compositing has been applied.	Compositing was not applied at the sampling stage.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The drilling has been undertaken at various orientations, given the limited platforms available underground. For the most part, holes are drilled at a high angle to the mineralisation. Some holes, however, have been drilled close to sub-parallel to the mineralisation. Face sampling is carried out close to orthogonal to the mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	*The measures taken to ensure sample security.*	The summary below relates to current methods. Historical methods are not known with any certainty; however, the Competent Person considers it is reasonable to assume that industry standard techniques have been adopted over the Projects history. Core is transported to the core shed for processing, which is locked at the end of each day. Core samples are placed in a polyweave sack for transportation to the laboratory. Face samples are placed in an oven on site after the geologist returns from underground. The primary laboratory (ALS in Burnie) collects the samples each morning.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	CSA Global completed a review of data collection techniques in 2017.

JORC 2012 Table 1, Section 2 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Land tenure consists of three Mine Leases, 7M/1991, 5M/2002 and 7M/2006. Two Exploration Licences adjoin the Mine Leases; EL 8/2009 to the north and east and EL 28/2001 to the south.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Other companies to have held the project leases include: 11 Unity Mining (2009 to 2016) 12 Barrick Gold (2006 to 2009) 13 Placer Dome (2003 to 2006) 14 Aurion Gold (2001 to 2003) 15 RGC/Goldfields (1996 to 2001).
Geology	*Deposit type, geological setting and style of mineralisation.*	The Henty deposit lies within the Mt Read Volcanic (MRV) Belt in western Tasmania. The belt hosts several world-class polymetallic ore bodies including the Hellyer, Que River, Rosebery, Hercules and Mount Lyell deposits. The whole belt has been overprinted with a regional lower green schist facies metamorphism. Mineralisation consists of a series of small high-grade lenses of gold mineralisation hosted in quartz-sericite altered volcaniclastic and volcanic rocks that occupy a large sub-vertical quartz-sericite alteration shear zone. Gold is present as both free gold and as gold-rich electrum associated with chalcopyrite and galena in the main mineralised zone.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar* • *Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar* • *Dip and azimuth of the hole* • *Downhole length and interception depth* • *Hole length.*	Exploration results are not being reported.
	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.	Exploration results are not being reported.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	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.	Exploration results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Exploration results are not being reported.
	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	Exploration results are not being reported.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Exploration results are not being reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Relevant maps and diagrams are included in the body of the report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results are not being reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No substantive exploration data not already mentioned in this table has been used in the preparation of this Mineral Resource estimate.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Further work will be focused on testing for dip extensions and strike extensions and to confirm grade and geological continuity implied by the current block model.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report.

JORC 2012 Table 1, Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	The summary below relates to current methods. Historical methods are not known with any certainty; however, the Competent Person considers it is reasonable to assume that industry standard techniques have been adopted over the Projects history. Geological logging was completed onto templates using standardised logging codes. Analytical results received by CYL are imported directly into the Datashed database by a database specialist.
	Data validation procedures used.	CSA Global completed numerous checks on the data. Absent collar data, multiple collar entries, suspect downhole survey results, absent survey data, overlapping intervals, negative sample lengths and sample intervals which extended beyond the hole depth defined in the collar table were reviewed. Only minor validation errors were detected which were communicated to CYL and corrected prior to the preparation of the Mineral Resource estimate.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Site visits have been completed by Aaron Meakin and Chris Adams, CSA Global consultants, from 2017 through 2020. Chris Adams assumes Competent Person status for the Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Geological controls on the mineralistion are relatively well understood and have developed over the operating life of the mine. Mineralised zone interpretations were completed by DVM. Peer review of the interpretations was completed by CSA Global.
	Nature of the data used and of any assumptions made.	Sample intercept logging and assay results from drill core and face sampling form the basis for the geological interpretations. Geological mapping information has also been used to assist with developing the geological interpretations. A 1 g/t to 1.2 g/t Au cut-off grade value, in conjunction with geological logging information, has been used to develop the mineralised zone interpretations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local but not global basis.
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	Geological logging and underground mapping have been used to guide the geological interpretations. The controls on the mineralisation are both lithological and structural, and this understanding has governed the resource estimation approach.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The main part of the resource extends for a strike length of approximately 3,300 m. Plan width varies from 2 m to 5 m for some lodes up to 10–20 m wide for the main mineralised structures. The reported Mineral Resource

Criteria	JORC Code explanation	Commentary
		plunges to the south and occurs between 50 m and 850 m of surface. The reported Mineral Resource is comprised of 11 separate model areas covering the dimensions of the deposit as follows: 16 Sill Zone 17 Intermediate Zone 18 Zone 15 19 Zone 96 20 Newton Zone 21 Mt Julia 22 Read Zone 23 Darwin North 24 Darwin Central 25 Darwin South 26 Tear Away Zone.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	All geological domains used in the MRE were constructed by CYL using Datamine software. Block modelling and grade interpolation were carried out by CSA Global using Datamine software. Statistical analysis was carried out by CSA Global using Snowden Supervisor software. Quantitative kriging neighbourhood analysis was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. Grade interpolation for Au was carried out by ordinary kriging into either: 27 1.25 m(E) x 5 m(N) x 5 m(RL) parent cells, sub-celled down to 0.25 m(E) x 0.5 m(N) x 0.5 m(RL) (for the Sill Zone, Intermediate Zone, Zone 15 and Zone 96 model areas), or 28 2.5 m(E) x 5 m(N) x 5 m(RL) parent cells, sub-celled down to 0.5 m(E) x 0.5 m(N) x 0.5 m(RL) (all other model areas). 1 m composites with top-cuts applied to Au values were used for grade interpolation. For grade variables other than Au interpolation was carried out into the same parent cell/sub-cell scheme via inverse distance methodology using 1 m composites with top-cuts applied. Dynamic anisotropy was employed to ensure undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses). A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the

Criteria	JORC Code explanation	Commentary
		block estimate. Initial search ellipse dimensions were set to honour the maximum variogram ranges determined in the three principal directions. Search ellipse expansion for second and third pass interpolations were set to two times and 10 times the initial search ellipse ranges respectively. 29 All interpolated grades variable utilise the same search and sample selection plan. Sample selection was either: o A minimum of 4 and maximum of 12 samples per estimate, with a maximum number of samples per drillhole of 3 (for block schemas of 1.25 m(E) x 5 m(N) x 5 m(RL) parent cells); or o A minimum of 6 and maximum of 16 samples per estimate, with a maximum number of samples per drillhole of 4 (for block schemas of (2.5 m(E) x 5 m(N) x 5 m(RL) parent cells).
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	No previous Mineral Resource estimates reported in accordance with the JORC Code were available for comparison. Production data was not available in a format that could be utilised to reconcile against the block models for each area.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding the recovery of by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Non-grade variables (i.e. variables other than Au) estimated for metallurgical characterisation are Ag, Cu, Pb, Zn, As and Bi.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A 2.5 m E x 5 m N x 5 m RL, or 1.25 m E x 5 m N x 5 m RL parent cell size was used to honour wireframe boundaries. The drillhole data spacing is variable throughout the deposit but approximates 10 m to 15m along strike by 10 m to 15 m down-dip. The block size therefore represents approximately half the drillhole spacing.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	A 1 g/t to 1.2 g/t Au cut-off grade value, in conjunction with geological logging information, has been used to develop the mineralised zone interpretations. Each mineralised zone interpretation is considered as being a separate estimation domain. Dynamic anisotropy was used to ensure undulation in the mineralisation domains was captured by the search ellipses during grade interpolation.
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was applied to all grade variables prior to grade interpolation. Histograms and log-probability plots were reviewed for to understand the distribution of grades and assess the requirement for grade capping for each estimation domain. A visual inspection in Datamine

Criteria	JORC Code explanation	Commentary
		of any potential clustering of very high-grade sample data was then carried out prior to selecting a capping value. The drill samples were composited (1 m) prior to capping assessment and application.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drillhole and block model statistics were compared. Trend plots were then created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. The block model reflected the tenor of the grades in the drillhole samples both globally and locally.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis. No moisture data is available.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The Mineral Resource reported above a cut-off grade of 1.75 g/t Au. The adopted cut-off grade is the current incremental cut-off grade for underground development ore.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	In selecting the cut-off grades, it was assumed that the current incremental cut-off grade will be applicable for future mining activities.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Henty is an operating mine and there are no material metallurgical issues that are known to exist.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should*	Henty is an operating mine with environmental permits in place.

Criteria	JORC Code explanation	Commentary
	be reported with an explanation of the environmental assumptions made.	
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density determinations adopted the water displacement method.
	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.	Samples were not wax coated prior to immersion.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Density has been applied on a global basis as follows: • 2.76 g/cm^3 for all model areas.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. After giving due consideration to the integrity of all input data, available QC results, data distribution, geological and grade continuity, areas of the deposit were classified as Indicated where geological continuity is reasonable and the deposit has been drilled on a 10-15 m E x 10-15 m RL pattern (or denser). Given the complexity of the deposit, CSA Global considers that a drill pattern of approximately 10–15 m E by 10–15 m RL is required to enable the broad architecture of the deposit to be discerned prior to level development. This is also the spacing that is roughly required to assume geological and grade continuity between points of observation. Areas with broader drill spacing (but still denser than 50 m) and within the modelled mineralisation envelopes were classified as Inferred.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors*	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table. High-grade gold mines are particularly susceptible to Mineral Resource uncertainty. The presence significant

Criteria	JORC Code explanation	Commentary
	that could affect the relative accuracy and confidence of the estimate.	short scale variability increases the likelihood of "unexpected" resource and financial results.
	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.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No collated mine production records were available to enable meaningful comparison with the block model estimates.

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	The sampling database for Henty includes data collected by diamond drilling (DD), channel sampling (CH) and sludge sampling (SL) techniques. SL samples were not used for grade estimation. The sampling database has been compiled from information collected when the project was under ownership of numerous companies including (listed from most recent): • Diversified Minerals (2016 to 2020) • Unity Mining (2009 to 2016) • Barrick Gold (2006 to 2009) • Placer Dome (2003 to 2006) • Aurion Gold (2001 to 2003) • RGC/Goldfields (1996 to 2001). Details relating to drilling techniques, quality assurance (QA) protocols and quality control (QC) results for data gathered prior to 2009 is largely unavailable. Drilling carried out during this period is collectively termed "Historical Drilling" herein. For drilling carried out since acquisition of the project by Unity Mining in 2009 a reasonable, although partially incomplete, level of information is typically available describing data collection procedures and relevant QAQC. Drilling carried out during this period is collectively termed "Modern Drilling" herein.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For drillhole data, either whole core or half core is generally submitted. In areas where infill drilling is required, whole core is typically submitted given that there are other holes available with half core for future reference. Samples are taken at 0.2–1 m intervals and honour different rock types, alteration zones and mineralised zones as defined by geologists. Face sampling is carried out at grade height (~1.5 m). A duplicate sample is taken on all faces to assist in monitoring sample precision and representivity. Samples are taken at 0.2–1 m intervals and honour different rock types, alteration zones and mineralised zones as defined by geologists.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. "RC 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	Diamond drilling and face sampling methods were used to obtain 0.2 m to 1 m length samples which were subsequently pulverised to produce a 30 g charge for fire assay with determination by atomic absorption spectrometry (FA/AAS) for gold.

Criteria	JORC Code explanation	Commentary
	inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*Drill type (e.g. core, RC, 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.).*	Underground mobile diamond drill rigs are utilised to produce either LTK60 or NQ2 size core. Drill core is not routinely oriented.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Drilling recoveries are recorded for diamond core samples as part of geotechnical logging.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Recovery of drill core is maximised by using drilling techniques and drilling fluids suited to the particular ground conditions.
	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.	No relationship between grade and recovery has been identified.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	**Drilling** For drillhole data, logging is completed on a lap top computer directly into an Excel based spreadsheet which has been designed for the mine site. Logging is carried out at a core shed with adequate facilities including roller-racks, lighting, core photograph facilities and an automatic core saw. A template with project-specific codes has been set up to ensure consistent collection of relevant geological information. Alteration, geotechnical, structure and rock type information are collected into separate tables using standalone codes. Zones of core loss are also recorded. **Face Mapping/Sampling** For underground workings, the backs are mapped 6 m from the face to provide a check for the mapping from the previous round. If a round is missed, then 9 m requires mapping to provide the 3 m overlap for checking. Faces are photographed for future reference.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is generally qualitative in nature. All core is stored at site and has been photographed wet.
	The total length and percentage of the relevant intersections logged.	All diamond core has been geologically logged in full (100%).
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	**Drilling** Diamond samples are generally half-core, with core sawn in half using a core-saw. In areas where infill drilling is required, whole core may be submitted given that there are other holes available with half core for future reference. An automatic core saw is used to cut the core.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	**Face Sampling** Face sampling is carried out at grade height (~1.5 m). A duplicate sample is taken on all faces to assist in monitoring sample precision and representivity. An effort is made to collect representative samples and reduce the potential for contamination.

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Several laboratories and assay techniques have been used throughout the Project's history. Typically, samples are initially crushed in a jaw crusher to a size of 10 mm. The jaw crusher is cleaned by compressed air between samples. The sample is then riffle split down to 1 kg, with the remaining samples returned as coarse reject to site and stored under cover for future reference. The 1 kg sample is pulverised using an LM5 pulveriser to a size of 85% passing 75 microns, and the mill cleaned with a barren silica flush between samples. 200 g of this fine material is taken via scoop, from which 30 g is taken for fire assay (FA50).
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Subsampling is performed during the sample preparation stage according to the assay laboratories' internal protocols.
	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.	Field duplicates of diamond core, i.e. other than half of cut core, have not been routinely assayed. Field duplicate samples are taken on all underground faces to assist in monitoring sample precision and representivity.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the material being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The techniques are considered total. All samples are currently submitted to ALS Burnie for gold analysis. Samples are crushed and pulverised prior to selection of a 30 g subsample for fire assay with determination by atomic absorption spectrometry (AAS). Previous owners have adopted similar methods. Occasionally, Bi, Ag, Cu, Pb, Zn, As and Mo analyses are completed to assist with understanding the nature of the mineralisation and for metallurgical assessment. Cu, for example, may consume cyanide during processing. If required, pulps are sent from Burnie to ALS Townsville for determination via ICP analysis.
	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.	No geophysical tools were used to support the preparation of this Mineral Resource estimate.
	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.	Details relating QA protocols and QC results for data gathered prior to 2009 is largely unavailable. Monthly QC reports were compiled by Unity Mining for the period 2010 to 2015. The available QC data compiled by Unity Mining has been reviewed by CSA Global and considers the results as suitable to support the data gathered during this time period. QA protocols that have been adopted since 2016 are summarised below. **Drilling** DVM specifies inclusion of field blanks at a rate of one blank every 30 samples submitted. The blanks are composed of barren basalt material, which is obtained from a commercial distributor in the town of Devonport on the north coast of Tasmania. DVM specifies inclusion of certified reference materials (CRMs) at a rate of two CRM's every 30 samples of core samples submitted, and two CRM's for every batch of channel/sludge samples submitted. Commercially available CRM's covering ranges considered as representing low, moderate and high values for gold were obtained

Criteria	JORC Code explanation	Commentary
		from OREAS. Inclusion of field duplicates for core samples is not routinely carried out by DVM. Pulp duplicates insertion rates are not specified by DVM. Assay laboratory internal QA protocols are relied upon for analysis of pulp duplicates. Results are not routinely monitored to the best of CSA Global's knowledge. **Face Sampling** DVM specifies two CRMs and a blank are submitted with each batch to monitor analytical bias and cross-sample contamination respectively. The quality control samples are suffixed A, B and C at the end of each submission sheet. Low, medium and high-grade CRMs are used. DVM specify a field duplicate interval is taken and submitted for analysis for each heading sampled, with final results averaged across the two samples submitted for each interval. Pulp duplicates insertion rates are not specified by DVM. Assay laboratory internal QA protocols are relied upon for analysis of pulp duplicates. Results are not routinely monitored to the best of CSA Global's knowledge. The Competent Person has reviewed all available data and considers that acceptable levels of precision and accuracy have been established for the modern drilling dataset. There is a greater degree of uncertainty attached to the historical dataset.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by alternative DVM company personnel.
	The use of twinned holes.	No twinning has been completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The summary below relates to current methods. Historical methods are not known with any certainty. **Drilling** Logging is completed on a lap top computer directly into an Excel based spreadsheet which has been designed for the mine site. Logging is carried out at a core shed with adequate facilities including roller-racks, lighting, core photograph facilities and an automatic core saw. A template with project-specific codes has been set up to ensure consistent collection of relevant geological information. Alteration, geotechnical, structure and rock type information are collected into separate tables using standalone codes. Core is photographed wet at the core shed. Core photographs are stored on the server for future reference. **Face Mapping/Sampling** Face mapping and sampling data is entered in a face mapping sheet, along with the face number, distance to the nearest survey station, the width and the height of the face, over-break estimate, time and date, scale and name of geologist and classification of face (run of mine (ROM) or waste). Once the geologist returns to the office, the data is entered in an Excel spreadsheet. The location of the face is then determined in Datamine using the query line command. The face sample is treated as a short drillhole, with collar and survey information. The output of the query line command is entered in the Excel spreadsheet which then updates the collar information. Core logging and sampling data is saved in the same logging and sampling spreadsheet that is used for face sampling. The data is then manually exported to a specific directory. The exported files

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		and Datashed database are then opened, and data from each sheet of the export document is then copied into the relevant Datashed table. Data is then exported from Datashed as CSV files ready for import into Datamine. Analytical data is imported directly into the Datashed database from files sent by the laboratory.
	Discuss any adjustment to assay data.	No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	The summary below relates to current methods. Historical methods are not known with any certainty; however, the Competent Person considers it is reasonable to assume that industry standard techniques have been adopted over the Projects history. Diamond drillhole collar positions are set out by mine surveyors. The drilling crew has an azi-reader device that enables them to set up at the correct azimuth and dip according to the drillhole plan. Final collar positions are then picked up by Mine Surveyors at hole completion. Downhole surveys are completed using a Devi-flex tool, with surveys taken every few metres. Development drives are regularly picked up by Mine Surveyors. At stope completion, a cavity monitoring system (CMS) is generally used to model the final voids. There are historical stopes that have not been picked up, however.
	Specification of the grid system used.	The grid system used is Geocentric Datum of Australia 1994 (GDA94).
	Quality and adequacy of topographic control.	A topographic fie was not used in the preparation of this Mineral Resource estimate.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Areas that remain in situ are generally drilled at 10–20 m E by 10–20 m RL spacings in the Mineral Resource area. The drill spacing varies between deposits, and lenses within a deposit. Areas towards the periphery of the lenses are often drilled at broader spacings.
	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.	The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classifications applied to the Mineral Resources given the drill pattern. Mineral Resource estimation procedures are also considered appropriate give the quantity of data available and style of mineralisation under consideration.
	Whether sample compositing has been applied.	Compositing was not applied at the sampling stage.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The drilling has been undertaken at various orientations, given the limited platforms available underground. For the most part, holes are drilled at a high angle to the mineralisation. Some holes, however, have been drilled close to sub-parallel to the mineralisation. Face sampling is carried out close to orthogonal to the mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	*The measures taken to ensure sample security.*	The summary below relates to current methods. Historical methods are not known with any certainty; however, the Competent Person considers it is reasonable to assume that industry standard techniques have been adopted over the Projects history. Core is transported to the core shed for processing, which is locked at the end of each day. Core samples are placed in a polyweave sack for transportation to the laboratory. Face samples are placed in an oven on site after the geologist returns from underground. The primary laboratory (ALS in Burnie) collects the samples each morning.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	CSA Global completed a review of data collection techniques in 2017.