

HENTY GOLD MINE, TASMANIA

Maiden Reserve advances strategy to grow mine life and production rate

Catalyst continues to build foundations of a more sophisticated operation at Henty with the reporting of a maiden Reserve

Key Points

- Over last 18 months, Catalyst has been progressively building Henty's foundations into that of a more stable operation
- Reporting of this maiden Reserve is a further step in that direction
- Henty's maiden Ore Reserve is 983,000t @ 3.6g/t for 115,000oz Au
- Reserves support a life of mine plan beyond 5 years
- This base provides Catalyst with a stable platform from which to continue executing its strategy of extending mine life and increasing the production rate

Catalyst Metals Limited (Catalyst) (ASX: CYL) is pleased to announce an initial JORC 2012 compliant Ore Reserve Estimate of 983,000t at 3.6g/t for 115,000oz at its Henty Gold Mine in Tasmania.

Catalyst Managing Director & CEO, James Champion de Crespigny said: *"This Reserve is key strategic milestone for Henty because it underpins our growth plan and highlights the project's increasingly strong future."*

"This is shown by the fact that we have been able to convert 55% of the Indicated Resource to Ore Reserve. Importantly, the anticipated Henty mine life now extends beyond five years using a mine plan which incorporates the increased production rates being targeted in coming years".

This maiden Reserve follows the recently released Mineral Resource Estimate (Refer ASX release dated 27 September 2022) which showed that after accounting for the Financial Year 2022 production, there was an increase of 10% in the operation's Mineral Resource and a 20% increase in Resources since Catalyst acquired Henty in January 2021.

The 2022 Reserve has been derived from the Mineral Resource models using ore classified in the Indicated category. Individual stopes may contain up to 20% Inferred ore, and in total these comprise less than 1% of the ORE. Stopes designed within the Life of Mine plan that contain insufficient Indicated Resource will be targeted for upgrade drilling.

This is important because these represent areas where Catalyst can target relatively low cost conversion from Inferred to Indicated Resource, and provide additional material to be assessed in future Reserve estimates.

Table 1 below summarises the Henty 2022 Ore Reserve Estimate (ORE).

Table 1 Henty Ore Reserve Estimate as at 30 June 2022

JORC Classification	Tonnage (Mt)	Au (g/t)	Ounces (koz)
Proved	-	-	-
Probable	983	3.6	115
Total	983	3.6	115

Note: The ORE utilises a 2.7g/t breakeven cut-off, and 1.9g/t incremental cut-off grade respectively i.e. the variable cost for mining, administration and processing. The ORE is based on the same \$2,600/oz gold price as the MRE. Tonnage estimates have been rounded to the nearest 1,000 tonnes

The ORE has been developed from the Life of Mine Plan. The ORE is the subsection of the Life of Mine plan being in the Indicated Resource category. The Mineral Resource Estimate (MRE) on which the ORE is based was prepared by consultants CSA Global based on drill hole data as of 30 June 2022.

HENTY GOLD MINE

The Henty Gold Mine is located 23 kilometres from the town of Queenstown in north western Tasmania, consisting of an underground mine and a nameplate capacity 300,000tpa conventional CIL processing plant.

Catalyst acquired 100% of the Henty Gold Mine and regional exploration tenements, in January 2021. Since acquisition, Catalyst has been pursuing a strategy to increase mining inventory to support higher gold production and lower costs. Catalyst has invested heavily in exploration and recent updates to its Reserve and Resource estimates will inform a life of mine plan to support this strategy.

In the FY22 June quarter production at Henty was 6,397oz at an AISC of A\$2,100oz. Production for FY22 was 25,199oz and Catalyst is targeting an annualised gold production rate of 35,000oz by the end of FY23.

ORE RESERVE ESTIMATION

The Ore Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level that include application of Modifying Factors. The studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

A 'Probable Ore Reserve' is the economically mineable part of an Indicated Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

A Proved Ore Reserve represents the highest confidence category of reserve estimate and implies a high degree of confidence in geological and grade continuity, and the consideration of the Modifying Factors. All Reserves in the 2022 ORE are classified as Probable.

Table 2 below details the Mineral Resource estimate which was reported on 27 September 2022.

Table 2 Mineral Resource estimate by JORC Classification – Henty Deposit

JORC Classification	Tonnage (Mt)	Au (g/t)	Ounces (koz)
Indicated	1.8	4.5	257
Inferred	0.9	4.0	111
Total	2.6	4.3	368

Note: The MRE utilises a 1.7g/t cut-off, the variable cost for mining and processing. The MRE is based on \$2600/oz gold price. Tonnage estimates have been rounded to the nearest 0.1 million tonnes

MINING METHODS

The Henty Mine uses bench mining and flatback mining as the principle means of ore extraction. In selected places where development allows, a modified Avoca method has been used with success. Mining method selection is based on:

- Width and grade of the ore
- Regularity along strike and up dip
- Proximity to the Henty Fault zone
- General ground conditions

Each orebody has unique characteristics. Where conditions permit, benching provides the most cost-effective method of extraction. Where the ore value is high, but ground conditions are critical to minimising dilution flatback mining is preferred.

In bench stoping, heights are limited to 12-15m. Where it is economic to do so, development is completed top and bottom. The choice of uphole or downhole drilling is based on geometry of the ore. Extraction is bottom up.

As a generality, the mining areas in the lower section of the mine have wider widths, more modest grades and are away from the Henty Fault. Conversely the upper areas of the mine tend to be higher grade, narrow and occasionally interact with the Henty Fault.

Production drilling is carried out using a long hole drill rig equipped with a Minnovare Production Optimiser system for drillhole accuracy. Blasting is carried out using ANFO and electronic detonators.

MINING INVENTORY

A three-dimensional (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. The stopes were created by applying the Shape Optimiser (SO) software in Deswik CAD to the various Mineral Resource models which were completed in Datamine by CSA Global Pty Ltd (CSA).

The parameters used to create the initial stope shapes were:

- All Mineral Resource categories included;
- 16m level intervals, split into 4m vertical slices. The 4m slices were also reviewed for flat backing;
- 4m strike length;
- Minimum mining width (MMW) of 1.5m;
- Minimum dip of 50 degrees;
- Minimum waste pillar between parallel stopes of 5m;
- Initially a 2.7g/t Au breakeven cut-off was applied to create the 4m shapes. A head grade of 3.2g/t for each shape was applied to allow for stope recovery and dilution; and
- An additional 1.9g/t Au incremental cut-off applied to create additional 4m shapes. A head grade of 2.3g/t for each incremental shape was applied to allow for stope recovery and dilution.

In order to convert Inferred Mineral Resources to higher classification categories, further infill drilling is required in parts of the deposit. CSA Global have recommended infill drilling to a spacing of 10–15 m(E) x 10–15 m(RL) along the main mineralised structures to support the delineation of Indicated material.

Table 3. Henty 2022 Probable Ore Reserve Estimate by Orebody

Category	Mine Area	Tonnes (kt)	Au (g/t)	Au (koz)
Proved Total		0	0.0	0
Probable	Darwin Central	33	2.9	3
	Darwin North	60	3.9	8
	Darwin South	186	4.1	24
	Intermediate Zone	73	3.3	8
	Mount Julia	171	3.3	18
	Newton	92	3.5	10
	Sill Zone	86	3.8	10
	Tear Away	16	4.4	2
	Zone 15	91	3.0	9
	Zone 96	174	4.0	22
Probable Total		983	3.6	115
Henty Mine Ore Reserves (P+P)		983	3.6	115

A schematic of the Henty 2022 ORE and Production target can be seen in Figure 4 below.

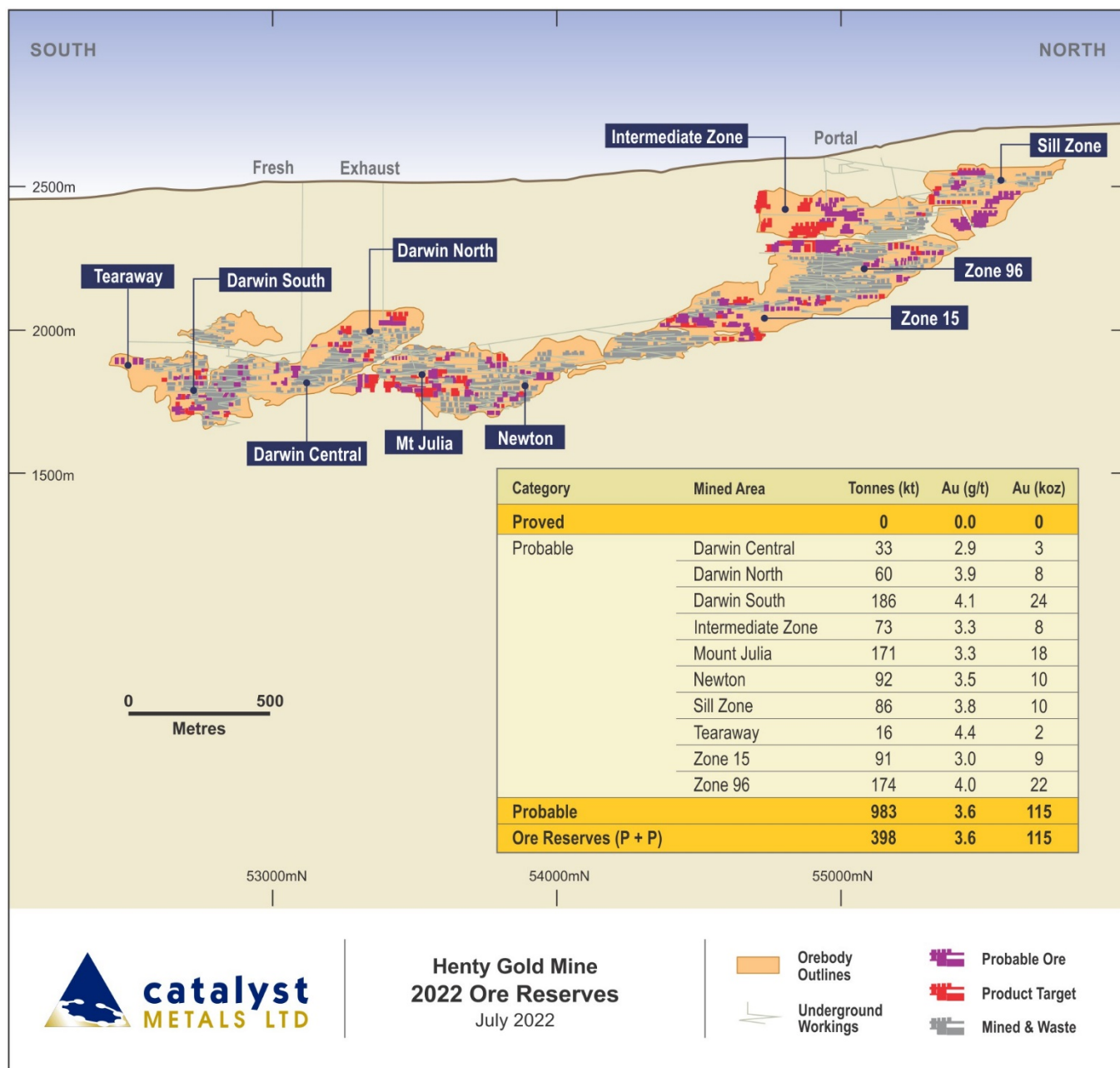


Figure 4: Longitudinal projection of Henty Gold Mine showing 2022 Reserve zones.

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

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Competent person's statement for JORC 2012 Ore Reserves

The information in this report that relates to Ore Reserve Estimate is based on, and fairly reflects, information compiled by Mr John McKinstry, a Competent Person, who is a full-time employee of Catalyst Metals Limited. Mr McKinstry has sufficient experience relevant to estimation, assessment, evaluation and economic extraction of Ore Reserves 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 McKinstry consents to the disclosure of information in this report in the form and context in which it appears.

Mr McKinstry verifies that the Ore Reserve section of this report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to the Ore Reserves.

JORC 2012 Mineral Resource

Catalyst confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.

JORC Table 1, Section 1 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i> <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i> 	<ul style="list-style-type: none"> The 2022 ORE is based on the following Mineral Resource block models: <ul style="list-style-type: none"> Darwin Central (dc_12_210720wd.m.dm) Darwin North (dn_32.1_220808wd.m.dm) Darwin South (ds_36.4_220721wd.m.dm) Intermediate Zone (iz_16.4_220815wd.m.dm) Mount Julia (mj_10.1_220812wd.m.dm) Newton Zone (nmj_32_210805wd.m.dm) Sill Zone (sz_21.1_220805wd.m.dm) Tear Away Zone (ta_19_210730wd.m.dm) Zone 15 (z15_2.2_220729wd.m.dm) Zone 96 (z96_29.4_220725wd.m.dm) The MRE includes the ORE.
Site visits	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> The Henty ORE was produced by John McKinstry, who is a fulltime employee of Catalyst Metals and has good knowledge of the project, with assistance from Anthony Allman, director of ANTICIA Consulting Pty Ltd.
Study status	<ul style="list-style-type: none"> <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i> <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i> 	<ul style="list-style-type: none"> The ORE is based on current operating parameters of the Henty Mine. The study considered all material modifying factors and concluded that the proposed mine plan was technically feasible and economically viable.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> The cut-off value of 2.7g/t for stoping and 1.9g/t for incremental stoping was used based on current operating costs at Henty. Ore development used a 1.0g/t cut-off. Cut-off values incorporated all operating costs including development, stoping, haulage, processing and administration. (Table 6)
Mining factors or assumptions	<ul style="list-style-type: none"> <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i> <i>The choice, nature and appropriateness of the selected</i> 	<ul style="list-style-type: none"> Only stopes containing no more than 20% Inferred Mineral Resource were considered for the ORE. The amount of Inferred ore in the ORE is less than 1% of the total The mining method used for the LOM is a combination of Longhole Benching and Flatbacking

	<p><i>mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></p> <ul style="list-style-type: none"> <i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre- production drilling.</i> <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> <i>The mining dilution factors used.</i> <i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i> <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> <i>The infrastructure requirements of the selected mining methods.</i> 	<ul style="list-style-type: none"> The ORE include an average of 11% of unplanned dilution. The ORE also includes an average of 23% of planned dilution due to minimum mining width and practical stope shapes. Sub level intervals vary from 12-15m for the benching. This is based on appropriate method for control of dilution, reduction of pillars and ore loss, ground control, safety and regional stability. A minimum stoping width of 1.5m has been used. Stable stope dimensions using a maximum HR=4m have been based on geotechnical assessment. Practical designs have been included for ventilation, power, pumping and drainage as well as second means of egress. Majority of the stopes will be filled using unconsolidated rock fill trucked from surface or underground development waste. This will improve stope stability and increase ore recovery while minimising the backfill costs. Stopes will be filled with waste rock from development where possible to minimise the trucking requirements.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> <i>Any assumptions or allowances made for deleterious elements.</i> <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i> <i>For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications</i> 	<ul style="list-style-type: none"> The ORE is based on current performance of the Henty CIL circuit
Environmental	<ul style="list-style-type: none"> <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites,</i> 	<ul style="list-style-type: none"> Mine waste rock characterisation and process tailings characterisation remain unchanged. The Henty Mine has been in operation since 1996.

	<i>status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i>	
Infrastructure	<ul style="list-style-type: none"> <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i> 	<ul style="list-style-type: none"> All Henty Mine infrastructure is in place The Henty TSF is approved for a further 6m height lift which will allow production through to 2030.
Costs	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> <i>Allowances made for the content of deleterious elements.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</i> <i>The source of exchange rates used in the study.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i> 	<ul style="list-style-type: none"> Capital costs for decline development and accesses were included in the financial evaluation. Other capital such as surface and underground infrastructure have been included in the financial evaluation. Operating costs for mining were based on FY22 costs Tasmania operates under a two-tiered system where royalty is paid as a percentage of net sales and of profit. The formula for the payment of royalty is specified in Regulation 7 of the MRR. Royalty is payable at the rate of 1.9% of Net Sales, plus profit. A rebate of up to 20% is available for the production of a metal within the State. Maximum royalty payable is 5.35% of net sales. There is a royalty payable to royalty company Black Flag of 3% NSR (excluding transport and refining) There is a royalty payable to royalty company Franco-Nevada of 1% of gold metal
Revenue factors	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i> 	<ul style="list-style-type: none"> An AUD gold price of AUD2600/oz was used for both MRE and ORE Average realised gold price in FY22 was AUD2529/oz
Market assessment	<ul style="list-style-type: none"> <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> 	<ul style="list-style-type: none"> The outlook for the gold market remains positive

	<ul style="list-style-type: none"> • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract 	
Economic	<ul style="list-style-type: none"> • The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	<ul style="list-style-type: none"> • A financial LOM model of the Henty has been completed by suitably qualified and experienced accounting and financial staff employed by Catalyst Metals. The financial model demonstrates a positive NPV. • The confidence in the inputs is consistent with the assigned Probable classification of the ORE. Confidence in the economic inputs is appropriate to the level of study given that the mining cost inputs are current costs from the Henty operation. • Sensitivity analysis work has been undertaken on variables such as mining costs, processing costs, foreign exchange rate and metal price, with the NPV proving most sensitive to changes in the AUD gold price.
Social	<ul style="list-style-type: none"> • The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> • All mining permits are current
Other	<ul style="list-style-type: none"> • To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the Ore Reserve is contingent. 	<ul style="list-style-type: none"> • There are no foreseeable risks associated with the Henty Mine which are expected to impact on the ORE.

Classification	<ul style="list-style-type: none"> • The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	<ul style="list-style-type: none"> • The ORE is based on the MRE. Indicated Mineral Resources within stopes have been converted to Probable ORE. • To ensure practical stope shapes certain areas included unclassified waste material at zero grade. This was included as planned dilution. • It is the competent person's view that the classifications used for the ORE are appropriate.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of Ore Reserve estimates. 	<ul style="list-style-type: none"> • No external audit of this ORE has been completed, but the process has been internally reviewed by Henty Mine Management
Discussion of relative accuracy/ confidence		<ul style="list-style-type: none"> • The ORE is mostly determined by the order of accuracy associated with the MRE model, the metallurgical inputs and the cost adjustment factors used. • The ORE is based on design and financial model inputs which are well understood and as such has a corresponding level of confidence. • Considerations in favour of a high confidence in the ORE include; • Catalyst is investing heavily on underground drilling to improve confidence, expand the known Resource and find new potential orebodies. • Considerations in favour of a lower confidence in ORE include; • Future gold price and exchange rate forecasts carry an inherent level of risk • There is a degree of uncertainty associated with geological estimates. The Ore Reserve classifications reflect the levels of geological confidence in the estimates.