ASX Announcement

31 January 2025



Catalyst Metals produces 110koz of gold annually from two operations – Plutonic & Henty.

Its flagship asset is the 40km long Plutonic Gold Belt in Central Western Australia. This belt hosts the Plutonic Gold Mine which currently produces 85koz pa at an AISC of A\$2.192/oz.

Over the next 12 to 18 months, Catalyst plans to bring four new mining areas into production. In so doing, Group production is forecast to reach 200koz of gold.

These projects have a low capital intensity – A\$31m in total. Each is capable of going through the existing, currently underutilised and centrally located processing plant.

Catalyst also owns and operates the high-grade Henty Gold Mine in Tasmania and controls +75km of strike length immediately north of the historic +22Moz Bendigo goldfield. Here, Catalyst has delineated a high-grade, greenfield resource at 26 g/t Au with further discoveries along strike expected.

Capital Structure

Shares o/s: 226m Options: 3.1m Rights: 8.1m

Cash & Bullion: A\$84m

Debt: nil

Reserves and Resources¹

MRE: 3.6Moz at 2.8g/t Au ORE: 1.0Moz at 3.0g/t Au

Corporate Details

ASX: CYL E:investors@catalystmeta ls.com.au

K1 and K3 Mineral Resource Estimate

Re-estimating of historic Resources will better inform project development pipeline

- Since consolidating the Plutonic Gold Belt in July 2023, Catalyst has been re-estimating Reserves and Resources for all deposits
- Catalyst has completed the Resource estimation for K1 and K3 which neighbour the K2 deposit
- K1 and K3 have a Mineral Resource of 75koz at 2.2g/t Au versus the historical estimate of 139koz at 1.9g/t Au¹
- Both of these deposits are historic open pits, last mined in the 1990's. Past production from K1 was 540kt at 3.8g/t Au for 66koz of gold
- Catalyst has now re-estimated most of the deposits across the Plutonic Gold Belt. All deposits have been downgraded with each now more aligned to either historic or current production rates
- This closer reconciliation gives Catalyst greater comfort in the estimate than historical estimates

Catalyst Metals Limited (**Catalyst** or **the Company**) (ASX:CYL) is pleased to provide updated Mineral Resource Estimates for the K1 and K3 (PHB) deposits.

These estimates continue Catalyst's review of previous Mineral Resource Estimates across the Plutonic Belt. To date Catalyst has provided updated Mineral Resource Estimates for K2, Trident, Plutonic East and Plutonic.

Catalyst considers that a new approach to Resource estimation across the Plutonic Gold Belt is appropriate. To date, the improved operating performance of Plutonic has validated this approach.



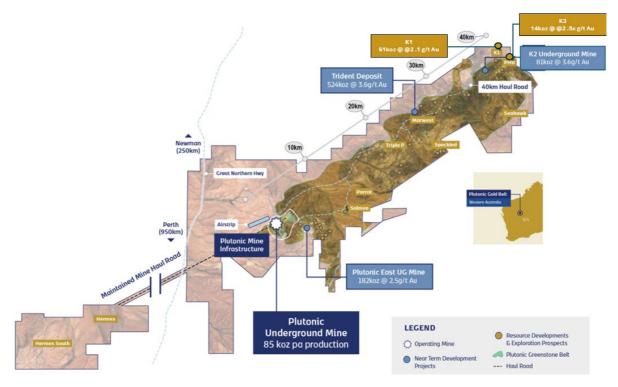


Figure 1: Plutonic Gold Belt showing locations of K1 and K3

K1 Open Pit Mineral Resources

The Mineral Resource Statement for the K1 Open Pit Mineral Resource estimate was prepared during January 2025 and is reported according to the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code') 2012 edition.

The K1 mineralised domains extend approximately 1,500 m along strike (13 domains in total) and to 250m below surface (400mRL).

The Mineral Resource estimate includes 76,987 m of drilling from 1,122 reverse circulation (RC) drill holes and 34 diamond drillholes (DD) including RC holes with diamond tails (RCD, DD/RC) completed since 1990.

In the opinion of Catalyst, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the K1 open pit deposit, based on sampling data from RC, RCD, RC/DD and DD drilling available as of 4 July 2024. Mineral Resources are reported within an optimised pit shell below topography and comprise oxide, transitional and fresh rock.

The K1 Open Pit Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by open pit mining methods. The MRE has been constrained within an open pit optimisation evaluation from the depleted resource model. The pit optimisation has a maximum depth of 100m below surface.

The entire MRE consists of Inferred Mineral Resources. No Indicated or Measured Mineral Resources have been reported at this stage of the project. The model has been depleted for historical open pit mining.



The Mineral Resource Statement is presented in Table 1.

Table 1: K1 Open Pit MRE (Oxide=0.6 g/t Au cut-off, Transitional and Fresh=0.7 g/t Au cut-off)

Classification	Tonnes (Mt)	Grade (g/t Au)	Ounces (Koz)
Inferred	0.89	2.1	61
Total	0.89	2.1	61

Notes:

- Mineral Resource reported within an optimised pit shell: Gold Price AUD\$3,200/oz, Metallurgical Recovery = 91%; Royalties = 2.5%; Base Mining Cost AUD\$5.56/t, Processing and Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore. Approx wall angles = Oxide=39°, Transitional 45°, Fresh 52°. Cut-off grades = Oxide=0.6 g/t Au, Transitional/Fresh of 0.7 g/t Au.
- 2. Numbers may not add up due to rounding.

K3 Open Pit Mineral Resources

The Mineral Resource Statement for the K3 Open Pit Mineral Resource estimate was prepared during January 2025, represents an optimisation of potential open pit material immediately along strike of the K2 deposit, is within the K2 blockmodel and is reported according to the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code') 2012 edition.

The Mineral Resource estimate includes 81,734 m of drilling from 844 reverse circulation (RC) drill holes and 78 diamond drillholes (DD) including RC holes with diamond tails (RCD, DD/RC) completed since 1990.

In the opinion of Catalyst, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the K3 open pit deposit, based on sampling data from RC, RCD, RC/DD and DD drilling available as of 2 May 2024. Mineral Resources are reported within an optimised pit shell below topography and comprise oxide, transitional and fresh rock.

The K3 Open Pit Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by open pit mining methods. The MRE has been constrained within an open pit optimisation evaluation from the depleted resource model. The pit optimisation has a maximum depth of 90m below surface.

The entire MRE consists of Indicated and Inferred Mineral Resources. No Measured Mineral Resources have been reported at this stage of the project. The model has been depleted for both historical open pit mining as well as underground development.

The Mineral Resource Statement is presented in Table 2.

Table 2: K3 Open Pit MRE (Oxide=0.6 g/t Au cut-off, Transitional and Fresh=0.7 g/t Au cut-off)

Classification	Tonnes (Mt)	Grade (g/t Au)	Ounces (Koz)
Indicated	0.10	2.2	7
Inferred	0.08	2.8	7
Total	0.18	2.5	14

Notes:

- Mineral Resource reported within an optimised pit shell:
 Gold Price AUD\$3,200/oz, Metallurgical Recovery = 91%; Royalties = 2.5%; Base Mining Cost AUD\$5.56/t, Processing and
 Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore. Approx wall angles =
 Oxide=39°, Transitional 45°, Fresh 52°. Cut-off grades = Oxide=0.6 g/t Au, Transitional/Fresh of 0.7 g/t Au.
- 2. Numbers may not add up due to rounding.



MINERAL RESOURCE ESTIMATE (K1)

1. Drilling Techniques

All drilling data used in this Mineral Resource Estimate were from Diamond and Reverse Circulation methods.

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 (2023 to current)
- Vango (2013 to 2023)
- Dampier Gold (2012 to 2013)
- Barrick Gold (2001 to 2012)
- Homestake (1999 to 2001)
- Resolute (1990 to 1999).

For the most recent drilling completed by Vango, planned drill hole collars were pegged with a DGPS and marked with wooden pegs hammered into the ground and flagged with high visibility flagging tape.

On completion of drilling, the actual drill hole collar position is measured by survey staff using a DGPS working off a network control of survey stations, to an accuracy of 20 mm from the nearest survey station. These coordinates replace the planned coordinates in the geological database. All reported coordinates are referenced to grid system MGA_GDA94 Zone 50. The topography is relatively flat at the location of drilling.

The survey station network meets the Mine Safety and Inspection Regulations 1995, section 3.49, where the accuracy of a survey must be not less than 1:5000.

The collar locations of historic drill holes were validated from geological logging information from annual reports and the original database when Vango acquired the tenure.

- The majority of drill holes used in the resource estimate have been accurately surveyed by qualified surveyors using DGPS. Downhole surveys have been conducted at regular intervals using industrystandard equipment.
- Some magnetic units have affected the azimuth readings where single shot cameras were used and these records have not been used. Many holes have been surveyed using Gyro tools.

All Vango holes used in the resource estimate have some form of down hole survey. Recent (2023) downhole survey data was collected by Westdrill using an Axis Mining Technology Champ North Seeking Gyro tool. Surveys are conducted at EOH using a north seeking gyroscope reading every 5 m. If early drilling finds strong hole deviation, then surveys are conducted during drilling (collar, 30 m, 60 m, 90 m etc to EOH). Survey deviation is supervised by the geologist onsite, with major deviation discussed with the driller at the time.

Previous downhole survey data was collected using a REFLEX gyro tool and historically with Eastman cameras, with follow-up downhole surveys carried out by Surtron using gyroscopic survey equipment. Historical downhole surveys were reviewed and verified where information was available through direct comparison within the database.

Recent Vango RC drilling was conducted utilizing 5.75 inch face sampling bit.

Diamond drilling was conducted utilising NQ2 core. Core was orientated by spear methodology.

Historical Diamond holes utilised PQ3, HQ3 or NQ2 core diameter, and RC drilling utilised a 5.5 inch drill bit.



2. Historical Drilling

Extensive previous work has been completed by Resolute Mining, Homestake Gold, Battle Mountain Australia, Barrick Mining and Dampier Gold. Previous metallurgical and resource work has been completed by Resolute Mining, Barrick Mining and Dampier Gold. Quality of historical drilling information is varied, but all of the above companies used high quality methodology at the time.

Catalyst consolidated the belt in 2023 following the successful acquisition of Vango Mining and the merger with Superior Gold Inc.

3. Sampling and Sub-Sampling Techniques

Recent Vango RC drilling assays are from 1 m samples split on the cyclone (using a cone splitter). Each RC sample weighs approximately 3–5 kg. 4 m composites from these 1 m splits are taken in the cover sequence.

Vango Diamond drilling assays are from mostly half core and minor quarter core, NQ2 and HQ size core. This is considered to be sufficient material for a representative sample. Core samples were taken at 1 m intervals or at geological boundaries. (between 0.8-1.25 m length) The DD holes were geologically logged to geological boundaries in addition to being structural and geotechnically logged.

Recovery in diamond drilling is based on the measured core returned for each 3 m. RC drilling was bagged on 1 m intervals and an estimate of sample recovery has been made based on the size of each sample.

QAQC protocols include the collection and analysis of field duplicates and the insertion of appropriate commercial standards (certified reference materials) and blank samples. Standards submitted every 20 samples with a tenor similar to those expected in the sampling. Blanks were inserted every 20 samples.

4. Historical Sampling

Historical RC samples were collected as 4 m composite spear samples. Mineralised zones were sampled at 1 m intervals using a 1/8 riffle splitter.

Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.

No assessment of RC chip sample recoveries was undertaken on historical data however a comprehensive historical review of sampling procedures was undertaken which indicates that standard procedures where enacted to ensure minimal sample loss. Where information on the recoveries has been recorded, they have been consistent with those noted by recent drilling.

Core sampled was halved using a diamond saw and sampled at 1 m intervals, or to geological contacts. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.

Recovery in diamond drilling based on measured core was returned for each 3 m.

Sampling procedures earlier than 2018 were not available.

5. Sample Analysis Method

Information sourced indicates that several analytical laboratories have been used over the history of the three deposits, and analytical methodologies have varied slightly over time. Typically fire assay with determination by atomic absorption spectrometry (AAS) has been used.



For the recent Vango drilling, all samples were dried, crushed and pulverised then a 50g charge analysed at Intertek Laboratories using an Industry Standard Fire Assay method. Standards were submitted every 20 samples of grade-range/tenor similar to those expected in the sampling. Blanks were also inserted every 20 samples. Field duplicates also analysed.

Standards and Blanks were reported within acceptable accuracy and precision levels around the expected standard value. The results indicate the fire assay results from Intertek are of sufficient quality to be acceptable for use in resource estimation.

For the historical drilling gold was analysed using fire assay with a 25-50g charge for Au within mineralised zones. Some Aqua regia data is included in the resources, generally in lower grade, oxide and transition, areas. Drilling programs carried out by (Homestake Gold of Australia Limited) HGAL have included ongoing QAQC procedures. These included the use of certified standards, blanks, check assay and duplicate sampling. The various programs of QAQC carried out by HGAL have all produced results which support the sampling and assaying procedures used at the site.

Specific QAQC procedures for previous owners were unavailable.

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.

6. Geology and Geological Interpretation

Regionally, the Plutonic Gold Belt lies in the Archaean Plutonic Well Greenstone Belt, an elongate NE trending belt within the Marymia Inlier. The Marymia Inlier is an Archaean basement remnant within the Proterozoic Capricorn Orogen and comprises two mineralised greenstone belts (Plutonic Well and Baumgarten greenstone belts), with surrounding granite and gneissic complexes.

The Marymia Greenstone Belt comprises two corridors of northeast – southwest trending mafic/ultramafic and sedimentary sequences separated by a conglomerate-dominated sedimentary sequence.

Three major structural events are interpreted to have shaped the belt, including D1 low-angle thrusting and isoclinal folding that has emplaced mafic and ultramafic units structurally above the sedimentary units in the northwest side of the belt ("the overthrust terrane"), followed by southeast directed upright D2 folding and faulting, granite/porphyry sheet intrusion then D3 high- angle thrusting, open folding of earlier structures plus reactivation of D1/2-thrusts.

The K1 deposit lies along the northern flank of the Plutonic Well Greenstone Belt within the mining lease M52/183. The geology of the K2 area is dominated by northeast trending, northwest dipping, intercalated mafic, minor ultramafic and metasedimentary units that have been metamorphosed to lower amphibolite facies and intensely deformed. The bedding and dominant foliation orientation is shallow to moderately dipping at 30° to 45°.

Gold mineralisation at K1 is similar to that at Catalyst's Plutonic Gold Mine. It is comprised of an early stratiform lode system within mafic, ultramafic and banded iron formation (BIF) units. Lodes dip to both the east and west depending on the structural control and location in fold hinges or on fold limbs. These lodes are relatively continuous for several hundred metres along strike and can be offset by cross-faults. Higher gold grades occur at local cross-faults and the redox zones, the 'Base of Complete Oxidation' (BOCO) and 'Top of Fresh Rock' (TOFR) due to increased fluid flow.

Alteration minerals in the mafic host rocks include quartz, hornblende, biotite, K-feldspar and calcite with minor scheelite and titanate. Gold is associated with these alteration minerals where higher gold grades are



associated with pyrrhotite rather than pyrite. The main metals accompanying gold mineralisation are Ag, Te, Pb, W and Cu.

A total of 115,956 m of drilling from 34 diamond and diamond tails, 1,122 RC holes, 1,115 Rotary Air blast (RAB) holes, 6 Air Core (AC) and 22 holes of an unknown type were available for interpretation of the MRE and supported by a nominal drill density of 20 x 20m.

Mineralisation domains were interpreted primarily on geological logging and downhole geological contacts, based on lithology, grade distribution, major faults and geometry. Weathering surfaces were created by interpreting the existing drill logging for oxidation state and were extended laterally beyond the limits of the Mineral Resource model.

Interpretations of domain continuity were undertaken in Leapfrog software using all available drillholes. Intercepts correlating to gold mineralisation and underpinned by strike continuity were independently identified and manually selected within Leapfrog prior to creation of an implicit intrusion model. Existing mineralisation wireframes, pit design and site-based observations were used to evaluate geological, structural and mineralisation continuity.

A nominal cut-off grade of 0.2 g/t Au was used to guide the geological continuity of the interpreted mineralisation lodes. Selection of the cut-off grade was based on statistical and spatial analysis of composite data indicating a natural mineralisation population exists above 0.2 g/t Au. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.

CYL considers confidence in mineralisation continuity and distribution, as implied within the Mineral Resource estimate classification of Indicated and Inferred, as low to moderate. Although the Mineral Resources are well-informed by a regularized drill pattern and drill centre spacing (20 m), the identified historical data issues and local poor grade continuity have lowered the confidence to an Inferred Mineral Resources.

The K1 mineralised domains extend approximately 1,500 m along strike (13 domains in total) and to 250m below surface (400mRL).

7. Estimation Methodology

All geological domains used in the K1 MRE were constructed in Leapfrog software. Block modelling and grade interpolation were carried out using Surpac software. Statistical analysis was carried out using Supervisor software.

Block model constraints were created by applying the interpreted mineralised domain wireframes. Subcelling in all domains was 1.25 m x 1.25 m to accurately reflect the volumes of the interpreted wireframes.

All drillhole assay samples were uniquely flagged according to the mineralisation domains. All flagged drill hole samples were composited to 1m downhole using a best-fit methodology and 0.25 m minimum threshold on inclusions. A small number of residual composites were retained in the estimation.

K1 mineralisation is hosted in multiple sub-parallel and sub-vertical tabular lenses ranging in strike length from 100m up to 700m in length. The vertical extent of individual lenses can range from around 70m to 240m vertically. The true width of the lenses ranges from 1m to >10m. The K1 MRE incorporates the estimation of 13 individual mineralised lenses comprising:

K1 – Domains 1500, 1600, 2200, 2500, 3000, 4000, 4500, 5000, 5500, 6400, 6500, 6520, 6560



The distribution of gold grades within the mineralised lenses is highly variable. Some of the better developed domains (4000 and 5000) exhibit distinct cohesive regions of higher tenor gold grades, with clusters of individual values often reaching over fifteen grams per tonne.

Whilst these higher-grade zones often appear reasonably cohesive, they are manifested by a high-degree of short-scale variability, making difficult to manually interpret constraining domains. These internal; high-grade regions are often surrounded by peripheral regions of lower grade mineralisation that is also highly variable.

Raw Coefficients of Variation (CoV) are typically in the order of 2 to 5, indicating moderate to high grade variability.

The moderate to high grade variability and complex spatial continuity of high grades at K1 requires a pseudo non-linear approach to deal with these high grades during estimation. A traditional approach of physical domaining, assay cutting, and linear estimation (IDW or OK) is considered inadequate in dealing with this complexity.

The estimation method combines Categorical Indicator Kriging (CIK) to define internal estimation subdomains domains, together with applying distance limiting at chosen grade thresholds to restrict the influence of the high grade and extreme grade values during grade interpolation.

Prior to estimation, a reference surface for each estimation domain was exported from the Leapfrog. This is calculated as the best fit surface using the hangingwall and footwall surfaces. The reference surface is then imported into Surpac and a dip and dip-direction of each triangle facets is imported into the Surpac block model to provide information for dynamic search and variogram model orientation during interpolation. Dynamic estimation is applied for estimating the CIK indicators and gold grades.

8. Categorical Indicator Kriging Workflow

Two Categorical Indicator values are determined for the CIK domains:

- A low-grade (LG) indicator of 0.2 g/t Au was assigned to differentiate between background 'waste' and low-tenor mineralisation.
- A high-grade (HG) indicator of 1.4 g/t Au was assigned to define broad areas of consistent highertenor mineralisation.

A single indicator variogram was modelled using the median grade (0.23 g/t Au) of the combined set of domains. The median indicator variogram exhibited a moderate nugget effect of around 36% and demonstrated reasonably well-structured continuity of up to 60m.

The medium indicator variogram is considered as a reasonable basis for estimating the broad continuity of the mineralised domains. Both the LG and HG indicator domains were estimated using the median indicator variogram.

The CIK indicators were estimated using Ordinary Kriging into a finely gridded block model with block dimensions of $1.25 \,\mathrm{m} \times 1.25 \,\mathrm{m} \times 1.25 \,\mathrm{m}$. The small block size for the indicator process is beneficial for creating categorical sub-domains at resolution which can be used to accurately back-flag composite data.

Three categorical sub-domains were generated: low-grade (LG), medium-grade (MG) and high-grade (HG) areas. The HG sub-domain was based on an indicator probability threshold of 0.35 and the LG sub-domain was based on an indicator probability threshold of 0.65. The MG sub-domain is assigned to blocks that do not satisfy either the HG or LG sub-domain criteria.



The three categorical block model sub-domains (HG, MG and LG) were used to 'back-flag' the 1m composites from each mine area, thus creating a separate composite file for each sub-domain.

Assay top-cuts are applied to the sub-domain composite files on a domain-by-domain basis and typically in the following ranges:

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HG = 10-50 \text{ g/t Au}
MG = 2-10 \text{ g/t Au}
LG = 1-2 \text{ g/t Au}
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The assay top-cuts were generally between the 97th to 99.9th percentile of the distribution and were aimed at globally limiting extreme values only. Top-cuts are not used as the primary tool to control metal risk. The use of grade thresholds and distance limiting is considered a more objective and influential method in controlling metal risk, while better reflecting the actual localised occurrence of discontinuous high-grade gold mineralisation.

Grade variograms were initially attempted separately for the LG, MG and HG sub-domains, however, this resulted in poorly structured and incoherent variograms. It was decided to use a variogram modelled on the combined grade data set. The combined grade variogram exhibited a moderate nugget effect of 41% with a maximum range of continuity of 60m. Grades were globally top cut to 40 g/t Au for the purposes of variography.

Distance limiting of high grades was applied during estimation to limit the risk of over-estimation from isolated high-grade samples. Grade thresholds for distance limiting were determined from log-probability plots and visual analysis of high-grade continuity. The applied grade-distance limits are as follows:

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0-10 g/t = No Limit
10-30 g/t = 15m
>30 g/t = 10m
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Prior to grade estimation, sub-domain codes from the 1.25m resolution block model are imported into a 2.5m x 2.5m x 2.5m resolution model and the proportion of LG, MG and HG is calculated for each 2.5m block. Grade estimation for the LG, MG and HG domains was undertaken in Surpac software using Ordinary Kriging with grade threshold distance limiting. Kriging Neighbourhood Analysis (KNA) was undertaken to assist with defining estimation parameters. Search routines and variogram orientations are drawn from the prepopulated dynamic search information recorded in each block.

Final block grades at a $2.5 \,\mathrm{m} \times 2.5 \,\mathrm{m} \times 2.5 \,\mathrm{m}$ block resolution were calculated by weighting the estimated grades for each sub-domain by the relevant domain proportion. The parent estimation block size was $2.5 \,\mathrm{m} \times 2.5 \,\mathrm{m} \times 2$

Model validation was completed to check that the grade estimates within the model were an appropriate reflection of the underlying composite sample data, and to confirm that the interpolation parameters were applied as intended. Checks of the estimated block grade with the corresponding composite dataset were completed using several approaches involving both numerical and spatial aspects as follows:

• Semi-Local: Using swath plots in X, Y and Z directions comparing the estimates to the sample data.



 Local: Visual inspection of the estimated block grades viewed in conjunction with the sample data.

9. Bulk Density

Density has been assigned to the resource models using interpreted weathering surfaces determined from drill hole logging. Assigned density is based on historic values previously applied to K1:

- Oxide = 1.98 t/m3
- Transitional = 2.4 t/m3
- Fresh = 2.82 t/m

10. Classification Criteria

All K1 Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes.

Drill hole spacing typically ranges from $10m \times 10m$ to $80m \times 80m$ outside of the historically mined pit areas. Whilst the drill hole spacing is sufficient to define mineralised zones with a reasonable degree of confidence, there is some doubt as to the integrity of several drill hole locations.

Catalyst has not undertaken any confirmatory drilling at the K1 project since acquisition. K1 Mineral Resource classification will be reviewed after some confirmatory drilling has been completed.

11. Cut-off Grade

The K1 open pit Mineral Resources is reported at cut-off grades:

- Oxide = 0.6 g/t Au
- Transitional and Fresh = 0.7 g/t Au

The cut-off grades have been derived from current mining and processing costs and metallurgical parameters. Inputs into the cut-off grade calculation include:

- Base Mining Cost = AUD\$5.56/t
- Processing and Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore
- Metallurgical Recovery = Oxide=91%, Transitional/Fresh=91%
- Approx wall angles = Oxide=39°, Transitional 45°, Fresh 52°
- Royalties = 2.5%
- Gold Price = AUD\$3,200/oz

The K1 MRE has been reported within an open pit optimisation shell evaluation from the undiluted resource model.

12. Assessment of Reasonable Prospects for Eventual Economic Extraction

The K1 Open Pit Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by open pit mining methods. The MRE has been constrained within an open pit optimisation evaluation from the depleted resource model.

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.



13. Mining and Depletion

Historical mining has been undertaken at K1 by Resolute Mining as part of their Marymia Project.

Mining of the K1 and nearby K1SE, K1SW, Airstrip and Tony's deposits commenced in 1991 and continued to 1996. Recorded production during this period was 539,867 tonnes for 66,354oz at 3.82g/t Au.

No dilution or cost factors were applied to the estimate.

14. Metallurgy

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

No metallurgical recovery factors were applied to the Mineral Resources or resource tabulations.

MINERAL RESOURCE ESTIMATE (K3)

1. Drilling Techniques

All drilling data used in this Mineral Resource Estimate were from Diamond and Reverse Circulation methods.

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 (2022 to current)
- Vango (2013 to 2023)
- Dampier Gold (2012 to 2013)
- Barrick Gold (2001 to 2012)
- Homestake (1999 to 2001)
- Resolute (1990 to 1999).

For the most recent drilling completed by Vango, planned drill hole collars were pegged with a DGPS and marked with wooden pegs hammered into the ground and flagged with high visibility flagging tape.

On completion of drilling, the actual drill hole collar position is measured by survey staff using a DGPS working off a network control of survey stations, to an accuracy of 20 mm from the nearest survey station. These coordinates replace the planned coordinates in the geological database. All reported coordinates are referenced to grid system MGA_GDA94 Zone 50. The topography is relatively flat at the location of drilling.

The survey station network meets the Mine Safety and Inspection Regulations 1995, section 3.49, where the accuracy of a survey must be not less than 1:5000.

The collar locations of historic drill holes were validated from geological logging information from annual reports and the original database when Vango acquired the tenure.

- The majority of drill holes used in the resource estimate have been accurately surveyed by qualified surveyors using DGPS. Downhole surveys have been conducted at regular intervals using industrystandard equipment.
- Some magnetic units have affected the azimuth readings where single shot cameras were used and these records have not been used. Many holes have been surveyed using Gyro tools.

All Vango holes used in the resource estimate have some form of down hole survey. Recent (2023) downhole survey data was collected by Westdrill using an Axis Mining Technology Champ North Seeking Gyro tool.



Surveys are conducted at EOH using a north seeking gyroscope reading every 5 m. If early drilling finds strong hole deviation, then surveys are conducted during drilling (collar, 30 m, 60 m, 90 m etc to EOH). Survey deviation is supervised by the geologist onsite, with major deviation discussed with the driller at the time.

Previous downhole survey data was collected using a REFLEX gyro tool and historically with Eastman cameras, with follow-up downhole surveys carried out by Surtron using gyroscopic survey equipment. Historical downhole surveys were reviewed and verified where information was available through direct comparison within the database.

Recent Vango RC drilling was conducted utilizing 5.75 inch face sampling bit.

Diamond drilling was conducted utilising NQ2 core. Core was orientated by spear methodology.

Historical Diamond holes utilised PQ3, HQ3 or NQ2 core diameter, and RC drilling utilised a 5.5 inch drill bit.

2. Historical Drilling

Extensive previous work has been completed by Resolute Mining, Homestake Gold, Battle Mountain Australia, Barrick Mining and Dampier Gold. Previous metallurgical and resource work has been completed by Resolute Mining, Barrick Mining and Dampier Gold. Quality of historical drilling information is varied, but all of the above companies used high quality methodology at the time.

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3. Sampling and Sub-Sampling Techniques

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Vango Diamond drilling assays are from mostly half core and minor quarter core, NQ2 and HQ size core. This is considered to be sufficient material for a representative sample. Core samples were taken at 1 m intervals or at geological boundaries. (between 0.8-1.25 m length) The DD holes were geologically logged to geological boundaries in addition to being structural and geotechnically logged.

Recovery in diamond drilling is based on the measured core returned for each 3 m. RC drilling was bagged on 1 m intervals and an estimate of sample recovery has been made based on the size of each sample.

QAQC protocols include the collection and analysis of field duplicates and the insertion of appropriate commercial standards (certified reference materials) and blank samples. Standards submitted every 20 samples with a tenor similar to those expected in the sampling. Blanks were inserted every 20 samples.

4. Historical Sampling

Historical RC samples were collected as 4 m composite spear samples. Mineralised zones were sampled at 1 m intervals using a 1/8 riffle splitter.

Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.



No assessment of RC chip sample recoveries was undertaken on historical data however a comprehensive historical review of sampling procedures was undertaken which indicates that standard procedures where enacted to ensure minimal sample loss. Where information on the recoveries has been recorded, they have been consistent with those noted by recent drilling.

Core sampled was halved using a diamond saw and sampled at 1 m intervals, or to geological contacts. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.

Recovery in diamond drilling based on measured core was returned for each 3 m.

Sampling procedures earlier than 2018 were not available.

5. Sample Analysis Method

Information sourced indicates that several analytical laboratories have been used over the history of the three deposits, and analytical methodologies have varied slightly over time. Typically fire assay with determination by atomic absorption spectrometry (AAS) has been used.

For the recent Vango drilling, all samples were dried, crushed and pulverised then a 50g charge analysed at Intertek Laboratories using an Industry Standard Fire Assay method. Standards were submitted every 20 samples of grade-range/tenor similar to those expected in the sampling. Blanks were also inserted every 20 samples. Field duplicates also analysed.

Standards and Blanks were reported within acceptable accuracy and precision levels around the expected standard value. The results indicate the fire assay results from Intertek are of sufficient quality to be acceptable for use in resource estimation.

For the historical drilling gold was analysed using fire assay with a 25-50g charge for Au within mineralised zones. Some Aqua regia data is included in the resources, generally in lower grade, oxide and transition, areas. Drilling programs carried out by (Homestake Gold of Australia Limited) HGAL have included ongoing QAQC procedures. These included the use of certified standards, blanks, check assay and duplicate sampling. The various programs of QAQC carried out by HGAL have all produced results which support the sampling and assaying procedures used at the site.

Specific QAQC procedures for previous owners were unavailable.

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.

6. Geology and Geological Interpretation

Regionally, the Plutonic Gold Belt lies in the Archaean Plutonic Well Greenstone Belt, an elongate NE trending belt within the Marymia Inlier. The Marymia Inlier is an Archaean basement remnant within the Proterozoic Capricorn Orogen and comprises two mineralised greenstone belts (Plutonic Well and Baumgarten greenstone belts), with surrounding granite and gneissic complexes.

The Marymia Greenstone Belt comprises two corridors of northeast – southwest trending mafic/ultramafic and sedimentary sequences separated by a conglomerate-dominated sedimentary sequence.

Three major structural events are interpreted to have shaped the belt, including D1 low-angle thrusting and isoclinal folding that has emplaced mafic and ultramafic units structurally above the sedimentary units in the



northwest side of the belt ("the overthrust terrane"), followed by southeast directed upright D2 folding and faulting, granite/porphyry sheet intrusion then D3 high- angle thrusting, open folding of earlier structures plus reactivation of D1/2-thrusts.

The K3 deposit lies 500m along strike from the K2 open pit along the northern flank of the Plutonic Well Greenstone Belt within the mining lease M52/183. The geology of the K2 to K3 area is dominated by north east- south west trending mafic-ultramafic and sedimentary package which has been metamorphosed to lower amphibolite facies and intensely deformed. Foliation and bedding are generally steeply dipping.

Historical open pit mining at K2 focused on three lodes developed along the contact between high iron and high magnesian amphibolite units. The mineralised contact is marked by faulting, shearing, brecciation, quartz and quart-carbonate style veining and extensive alteration. The zones of brecciation are rarely mineralised. The main structures at K2 include the north east-south west trending breccia fault, the east striking K2 cross fault and a series of east- south east trending discontinuous faults in the northern portion of the pit.

Gold mineralisation at K2 demonstrates a close association with lithological contacts, in particular the sheared contact between high iron and high magnesian amphibolite units. These zones display strong silicification and narrow, en echelon quartz ± carbonate vein arrays in high iron amphibolite units which trend parallel to the main foliation and shear structures. The mineralised lodes are generally thin (2 to 4m wide), steeply dipping (70° to 80°) predominantly to the west and strongly sheared. The mineralised lodes are relatively continuous for several hundred meters along strike and have potential to be extended down dip.

A total of 146,492.7 m of drilling from 120 diamond and diamond tails, 1,297 RC holes, 754 Rotary Air blast (RAB) holes, 12 Air Core (AC) and 3 holes of an unknown type were available for interpretation of the MRE and supported by a nominal drill density of 20 x 20m.

Mineralisation domains were interpreted primarily on geological logging and downhole geological contacts, based on lithology, grade distribution, major faults and geometry. Weathering surfaces were created by interpreting the existing drill logging for oxidation state and were extended laterally beyond the limits of the Mineral Resource model.

Interpretations of domain continuity were undertaken in Leapfrog software using all available drillholes. Intercepts correlating to gold mineralisation and underpinned by strike continuity were independently identified and manually selected within Leapfrog prior to creation of an implicit intrusion model. Existing mineralisation wireframes, pit design and site-based observations were used to evaluate geological, structural and mineralisation continuity.

A cut-off grade of 0.2 g/t Au was used to guide the geological continuity of the interpreted mineralisation lodes. Selection of the cut-off grade was based on statistical and spatial analysis of composite data indicating a natural mineralisation population exists above 0.2 g/t Au. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.

CYL considers confidence in mineralisation continuity and distribution, as implied within the Mineral Resource estimate classification of Indicated and Inferred, is moderate to high, given the regularised drill pattern, drill centre spacing (20 m) informing these Mineral Resources.

The K2 mineralised domains extend approximately 1200 m along strike (9 domains total) to approximately 400 m below surface (220 mRL).



7. Estimation Methodology

All geological domains used in the K3 MRE were constructed in Leapfrog software. Block modelling and grade interpolation were carried out using Surpac software. Statistical analysis was carried out using Supervisor software.

Block model constraints were created by applying the interpreted mineralised domain wireframes. Subcelling in all domains was $1.25 \text{ m} \times 1.25 \text{ m}$ to accurately reflect the volumes of the interpreted wireframes.

All drillhole assay samples were uniquely flagged according to the mineralisation domains. All drillholes are composited to 1m downhole using a best-fit methodology and 0.5 m minimum threshold on inclusions. All RC and DD samples were composited to 1m downhole using a best-fit methodology and 0.5 m minimum threshold on inclusions. A small number of residual composites were retained in the estimation.

K2/K3 mineralisation is hosted in multiple sub-parallel and sub-vertical tabular lenses ranging in strike length from 150m up to nearly 1,200m in length. The vertical extent of individual lenses can range from around 100m to 400m vertically. The true width of the lenses ranges from 1m to >10m. The K2 July 2024 MRE incorporates the estimation of nine individual mineralised lenses comprising:

K2/K3 – Domains 1001-1005

K2 South East - Domains 2001-2004

The distribution of gold grades within the mineralised lenses is highly variable and is characterised by distinct cohesive regions of higher tenor gold grades, with clusters of individual values often reaching over thirty grams per tonne. Whilst these higher-grade zones appear reasonably cohesive, they are manifested by a high-degree of short-scale variability, making difficult to manually interpret constraining domains. These internal; high-grade regions are often surrounded by peripheral regions of lower grade mineralisation that is also highly variable.

Raw Coefficients of Variation (CoV) are typically in the order of 2 to 14, indicating moderate to high grade variability.

The moderate to high grade variability and complex spatial continuity of high grades at K2/K3 requires a pseudo non-linear approach to deal with these high grades during estimation. A traditional approach of physical domaining, assay cutting, and linear estimation (IDW or OK) is considered inadequate in dealing with this complexity.

The estimation method applied to most of the domains combines Categorical Indicator Kriging (CIK) to define internal estimation sub-domains domains, together with applying distance limiting at chosen grade thresholds to restrict the influence of the high grade and extreme grade values during grade interpolation.

Prior to estimation, a reference surface for each estimation domain was exported from the Leapfrog. This is calculated as the best fit surface using the hangingwall and footwall surfaces. The reference surface is then imported into Surpac and a dip and dip-direction of each triangle facets is imported into the Surpac block model to provide information for dynamic search and variogram model orientation during interpolation. Dynamic estimation is applied for estimating the CIK indicators and gold grades.

8. Categorical Indicator Kriging Workflow

Two Categorical Indicator values are determined for the CIK domains:

• A low-grade (LG) indicator of 0.2 g/t Au was assigned to differentiate between background 'waste' and low-tenor mineralisation.



• A high-grade (HG) indicator of 1.4 g/t Au was assigned to define broad areas of consistent higher-tenor mineralisation.

Indicator variograms were modelled for the LG and HG thresholds for all mine areas. The indicator variograms for both grade thresholds exhibited a moderate nugget effect of around 30%. The LG indicator demonstrated well-structured average continuity of up to 80m. The HG indicator demonstrated less well-structured average continuity of around 20m.

The CIK indicators were estimated using Ordinary Kriging into a finely gridded block model with block dimensions of $1.25 \,\mathrm{m} \times 1.25 \,\mathrm{m} \times 1.25 \,\mathrm{m}$. The small block size for the indicator process is beneficial for creating categorical sub-domains at resolution which can be used to accurately back-flag composite data.

Three categorical sub-domains were generated: low-grade (LG), medium-grade (MG) and high-grade (HG) areas. The HG sub-domain was based on an indicator probability threshold of 0.35 and the LG sub-domain was based on an indicator probability threshold of 0.65. The MG sub-domain is assigned to blocks that do not satisfy either the HG or LG sub-domain criteria.

The three categorical block model sub-domains (HG, MG and LG) were used to 'back-flag' the 1m composites from each mine area, thus creating a separate composite file for each sub-domain.

Assay top-cuts are applied to the sub-domain composite files on a domain-by-domain basis and typically in the following ranges:

HG = 15-75 g/t Au MG = 5-10 g/t Au LG = 0.5-3 g/t Au

The assay top-cuts were generally between the 97th to 99.9th percentile of the distribution and were aimed at globally limiting extreme values only. Top-cuts are not used as the primary tool to control metal risk. The use of grade thresholds and distance limiting is considered a more objective and influential method in controlling metal risk, while better reflecting the actual localised occurrence of discontinuous high-grade gold mineralisation.

Grade variograms were initially attempted separately for the LG, MG and HG sub-domains, however, this resulted in poorly structured and incoherent variograms. It was decided to use a variogram modelled on the combined grade data set. The combined grade variogram exhibited a moderate nugget effect of 35% with a maximum range of continuity of 45m.

Grade thresholds for distance limiting were initially determined for each mine area from log-probability plots and visual inspection. Final distance limits were subsequently optimised following a detailed backward-looking mill reconciliation using historic open pit mining during the period July 1992 to December 1995 (964Kt). The adjustment of grade distance limits was an iterative process until an acceptable reconciliation with the mill was achieved. The final applied grade distance limits are follows:

0-10 g/t = No Limit 10-30 g/t = 20m >30 g/t = 12.5m

Prior to grade estimation, sub-domain codes from the 1.25m resolution block model are imported into a 2.5m x 2.5m x 2.5m resolution model and the proportion of LG, MG and HG is calculated for each 2.5m block. Grade estimation for the LG, MG and HG domains was undertaken in Surpac software using Ordinary Kriging with grade threshold distance limiting. Kriging Neighbourhood Analysis (KNA) was undertaken to assist with defining estimation parameters. Search routines and variogram orientations are drawn from the prepopulated dynamic search information recorded in each block.



Final block grades at a $2.5 \text{m} \times 2.5 \text{m} \times 2.5 \text{m}$ block resolution were calculated by weighting the estimated grades for each sub-domain by the relevant domain proportion. The parent estimation block size was $2.5 \text{m} \times 2.5 \text{m} \times 2.5 \text{m}$. A minimum of 2 and maximum of 12 composites were used for each sub-domain estimate per block. It is possible that up to 36 composites can be used to estimate a parent block where there is a proportion of all three sib-domains present. Block discretisation was set at 3 E x 3 N x 3 RL points (per parent block). A standardised single pass search distance of 45m was used. Octant restrictions were not used. Data spacing varied from <10m x 10m to >40m x 40m.

Model validation was completed to check that the grade estimates within the model were an appropriate reflection of the underlying composite sample data, and to confirm that the interpolation parameters were applied as intended. Checks of the estimated block grade with the corresponding composite dataset were completed using several approaches involving both numerical and spatial aspects as follows:

- Semi-Local: Using swath plots in X, Y and Z directions comparing the estimates to the sample data.
- Local: Visual inspection of the estimated block grades viewed in conjunction with the sample data.

9. Bulk Density

Density has been assigned to the resource using interpreted weathering surfaces determined from drill hole logging. Bulk density was coded by oxidation type:

- Oxide = 1.8 t/m³
- Transitional = 2.2 t/m³
- Fresh = 2.9 t/m^3

10. Classification Criteria

Mineral Resources were classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of RC drilling undertaken, current understanding of mineralisation controls and mining selectivity within an open pit mining environment.

The drilling, surveying and sampling undertaken, and analytical methods and quality controls used, are appropriate for the style of deposit under consideration.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

- The portions of the K2 MRE classified as Indicated have been flagged in areas of the model where average drill hole spacing is typically 20m x 20m or closer. The drill spacing within the Indicated portion of the resource is appropriate for defining the continuity and volume of the mineralised domains, at a nominal 20 m drill spacing on 20 m sections.
- Blocks were interpolated with a neighbourhood largely informed by the maximum number of samples.

Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

 The portions of the MRE classified as Inferred typically represent minor lodes or portions of larger domains where geological continuity is present but not consistently confirmed by 20 m x 20 m drilling.



Further considerations of resource classification include; data type and quality (drilling type, drilling orientations, down hole surveys, sampling and assaying methods); geological confidence and geostatistical considerations.

A final reportable classification is generated post creation of a Stope Optimiser (SO) outcome used for RPEEE. Each SO is assigned a classification based on majority reporting by tonnes of the raw classification scheme.

Mineralisation within the model which did not satisfy the criteria for classification as Mineral Resources remained unclassified.

The delineation of Indicated and Inferred Mineral Resources appropriately reflects the Competent Person's view on continuity and risk at the deposit.

11. Cut-off Grade

The K3 open pit Mineral Resources is reported at cut-off grades:

- Oxide = 0.6 g/t Au
- Transitional and Fresh = 0.7 g/t Au

The cut-off grades have been derived from current mining and processing costs and metallurgical parameters. Inputs into the cut-off grade calculation include:

- Base Mining Cost = AUD\$5.56/t
- Processing and Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore
- Metallurgical Recovery = Oxide=91%, Transitional/Fresh=91%
- Approx wall angles = Oxide=39°, Transitional 45°, Fresh 52°
- Royalties = 2.5%
- Gold Price = AUD\$3,200/oz

The K3 MRE has been reported within an open pit optimisation shell evaluation from the undiluted resource model.

12. Assessment of Reasonable Prospects for Eventual Economic Extraction

The K3 Open Pit Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by open pit mining methods. The MRE has been constrained within an open pit optimisation evaluation from the depleted resource model.

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.

13. Mining and Depletion

Historical mining has been undertaken at K2 by Resolute Mining as part of their Marymia Project.

Between the period of 1992 to 1995 the K2 open pit produced 964,000t of ore grading 4g/t Au for approximately 124,600oz of contained gold mined.



Decline development commenced at K2 Deeps in 1996 from the base of the K2 Open Pit. The decline produced a total of 3,700t of ore grading 1.9g/t Au for 226oz of contained gold when the operation was closed in 1998.

No dilution or cost factors were applied to the estimate.

14. Metallurgy

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

No metallurgical recovery factors were applied to the Mineral Resources or resource tabulations.



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

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Competent person's statement

The information in the report to which this Mineral Resource Statement is attached that relates to the estimation and reporting of gold Mineral Resources at the K1 and K3 open pit deposits is based on information compiled by Mr Andrew Finch, BSc, a Competent Person who is a current Member of Australian Institute of Geoscientists (MAIG 3827). Mr Finch, Geology Manager, at Catalyst Metals Ltd has sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Finch consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

JORC 2012 Mineral Resources and Reserves

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.

Catalyst confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the initial public report continue to apply and have not materially changed.



Section 1 Sampling Techniques and Data

K1 Open Pit Deposit

(Criteria in this section apply to all succeeding sections.)

C			

Commentary

Sampling techniques

No new drilling has been completed by Catalyst since acquisition of the project in 2023.

Vango drilling:

- RC drilling assays were from 1 m samples split on the cyclone for the ultramafic. 1 m splits are taken over entirety of each drill hole using a 1/8 riffle splitter.
- Diamond drilling assays were from mostly half core and minor quarter core, NQ2 and HQ size core. This was considered to be sufficient material for a representative sample. Core samples were taken at 1 m intervals or at geological boundaries.
- Drillholes were generally designed to intersect mineralisation orthogonal to strike and core was oriented. Cutting of core was along the orientation line, in order to be as close as possible to orthogonal to mineralised structures and representative.

Historical drilling:

- Quality of historical sampling information is varied. Previous work has been dominated by Resolute, BMA, Homestake, Barrick Resources and Dampier Gold, all of which are considered to have used high quality methodology for the time.
- RC samples were collected as 4 m composite spear samples. Mineralised zones were sampled at 1 m intervals using a 1/8 riffle splitter.
- Core samples were taken at 1m intervals or at geological boundaries from NQ2 and HQ3 Core.
- Where sampling methods have not been recorded, results are consistent with, and of a similar
 quality, to results where methodology is known, including Vango methodology i.e. the Industry
 Standard approach above.

Drilling techniques

Vango drilling:

- Reverse Circulation drilling was conducted utilizing a 5.75 inch face sampling bit.
- Diamond drilling was conducted utilising NQ2 core. Core was orientated by spear methodology.

Historical drilling:

- NQ/NQ2 and HQ3 Diamond drill-core.
- Face Sampling, Reverse Circulation (RC) hammer.
- Minor Aircore, RAB, and Blasthole drilling in oxide zones of some open pit resource areas.

Drill sample recovery

- RC drilling was bagged on 1 m intervals and an estimate of sample recovery has been made on the size of each sample.
- Recovery in diamond drilling based on measured core was returned for each 3 m.
- No assessment of RC chip sample recoveries was undertaken on historical data however a
 comprehensive historical review of sampling procedures was undertaken which indicates that
 standard procedures where enacted to ensure minimal sample loss. Where limited information on
 the recoveries has been recorded, they have been consistent with those noted by recent drilling.

Logging

Vango drilling:

- Reverse Circulation holes were logged on 1 m intervals.
- Magnetic Susceptibility (KT 10) was recorded.
- Diamond holes were:
 - o logged in detail based on geological boundaries.
 - \circ logged on 1 m intervals for geotechnical data.
 - photographed prior to cutting and sampling.
 - o Geotechnically logged including RQD, recovery and FF
 - o sampled for Metallurgical testwork from logged HQ diamond holes

Historical drilling:

 Previous work included examining historical Geological logs (WAMEX) in both hard copy and digital files. Logging codes have varied, but careful reconstruction of the geological sections has shown good correlation with the broad lithological logging.
 Historical procedures are generally similar to that used currently.



Criteria Commentary

Sub-sampling techniques and sample preparation

Vango drilling:

- RC Drilling was sampled on 1 m samples using a cone splitter within the cyclone.
- Half and quarter Diamond Drill Core, on selected intervals of between 0.8-1.25 m length. Core sampling was done using a diamond saw.
- RC Drilling sampled on 1 m samples using a cone splitter within the cyclone.
- In less prospective lithologies these 1 m samples were composited using a scoop over 4 m intervals
- Standards submitted every 20 samples of similar tenor to those expected in the sampling.
- Blanks were inserted every 20 samples.
- Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.

Historical Drilling:

- RC 1 m samples collected at the rig using a 1:8 riffle splitter. Each sample was riffle split each 1 m sample to collect approximately 3 kg samples in calico bags, with the remaining sample retained on site in plastic bags. Four metre composite samples were also collected with any samples assaying greater than 0.1 g/t Au being re-split to 1 m intervals.
- Core sampled was halved using a diamond saw and sampled at 1 m intervals, or to geological contacts.
- Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.
- Sampling procedures for the Resolute drilling were not available.

Quality of assay data and laboratory tests

Vango drilling:

- All samples were dried, crushed and pulverised then a 50g charge analysed at Intertek Laboratories using an Industry Standard Fire Assay method.
- Standards submitted every 20 samples of grade-range/tenor similar to those expected in the sampling.
- Blanks were inserted every 20 samples also.
- Field duplicates also analysed.
- Standards and Blanks were reported within acceptable accuracy and precision levels around the expected standard value
- The results indicate the fire assay results from Intertek are of sufficient quality to be acceptable for use in resource estimation.

Historical Drilling:

- Gold was analysed at Amdel and MinLabs in Perth, and at Plutonic Mine using fire assay with a 25-50g charge for Au with AAS finish within the mineralised zones. Some aqua regia data is included in the resources, generally in lower grade, oxide and transition areas.
- Drilling programs carried out by HGAL have included ongoing QAQC procedures. These included the use of certified standards, blanks, check assay and duplicate sampling.
- The various programs of QAQC carried out by HGAL have all produced results which support the sampling and assaying procedures used at the site.
- Specific QAQC procedures for previous owners were unavailable.

Verification of sampling and assaying

Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place.

Vango drilling:

- Data was provided from the field as paper logs for geology, DGPS files for locations, and CSV files from the laboratory for assays, validated and stored in the Terra Search Explorer3 RDBMS system.
- Historical drilling data has undergone extensive validation including cross referencing to Annual reporting and internal data sources.
- Analytical results from previous workers have been audited and, where possible, verified with
 reference to historical reports. Vango infill drilling has largely confirmed the thickness and tenor
 of previous drilling.
- Scissored/twinned (<10m) holes have confirmed mineralised zones at many prospects in the area



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Criteria	Commentary
Location of data points	 Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place. All collar co-ordinates and downhole surveys were checked against historical data. The RLs of the collar positions were checked against a current drone topography surface and underground voids DTMs. Adjustments were made to erroneous data before estimation. Downhole surveys are visually inspected in 3D software for anomalous changes in drill trace, (i.e. does the drill hole apparently bend inordinately).
	Vango drilling:
	DGPS has been used to locate all drillholes.
	REFLEX Gyro Tool used for downhole surveys on all holes
	Historic drilling:
	Previous downhole survey data collected by REFLEX gyro tool and historically with Eastman
	cameras with follow-up down-hole surveys carried out by Surtron using gyroscopic survey equipment.
	 Where single shot cameras were used some magnetic units have affected the azimuth readings and these have not been used. Many holes have been surveyed using Gyro tools.
Data spacing and distribution	• Drill spacing of approximately 20 m (along strike) by 20 m (on section) was considered adequate to establish both geological and grade continuity.
	 Closer spaced RC grade control drilling 5x5m is located in the pit areas
	 Broader spaced drilling up to 80 x 80 m has also been modelled but with lower confidence. Some sections have closer spacing in high grade zones confirming the continuity and structural understanding.
Orientation of data in relation	• The orientation of a majority of the drilling is approximately perpendicular to the strike and dip of the mineralisation and is unlikely to have introduced any sampling bias.
to geological structure	 Certain holes have drilled parallel to key structures, but density of drilling and drilling on other orientations has allowed detailed geological modelling of these structures and hence any sampling bias in a single hole has been removed.
Sample security	 Samples were bagged and labelled by company geologists or geological assistants and sealed in bulk bags with a security seal that remains unbroken when delivered to the lab.
	 No specific information has been obtained relating to historical sampling security.
Audits or reviews	 Historical reviews of standards, blanks and duplicates indicate sampling and analysis has been completed with no issues discovered.
	 Historical reviews of the database for the Marymia area have been examined previously and a proportion of holes were compared to original data sources and found to be consistent wherever checked.

Section 2 Reporting of Exploration Results

K1 Open Pit Deposit

(Criteria listed in the preceding section also apply to this section.)

•	e preceding section also apply to this section.
Criteria	Commentary
Mineral tenement and land tenure status	 Located in the Marymia - Plutonic Greenstone Belt ~218 km northeast of Meekatharra in the Midwest mining district in WA K3 is located on the M52/183 granted tenement and is in good standing. The tenements predate Native title interests but is covered by the Gingirana Native Title claim. The tenements are 95.9% owned by Vango Mining Limited and subsidiary Dampier (Plutonic) Pty Ltd, who have been acquired by Catalyst Metals Ltd. The remaining 4.1% interest is owned by Zuleika Gold Ltd. Gold production will be subject to a 2.5% government royalty.
Exploration done by other parties	 Extensive previous work by Resolute Mining, Homestake Gold, Battle Mountain Australia, Barrick Mining and Dampier Gold. Previous metallurgical and resource work has been completed by Resolute Mining, Barrick Mining and Dampier Gold.



Cuitouia	Commonwhat
Criteria	Commentary
	Mining of the K1 and nearby K1SE, K1SW, Airstrip and Tony's deposits commenced in 1991 by Resolute Mining and continued to 1996. Recorded production during this period was 539,867 tonnes for 66,354oz at 3.82g/t Au.
Geology	 Extensive previous work by Resolute Mining, Homestake Gold, Battle Mountain Australia, Barrick Mining and Dampier Gold. Previous metallurgical and resource work has been completed by Resolute Mining, Barrick Mining and Dampier Gold. Mining of the K1 and nearby K1SE, K1SW, Airstrip and Tony's deposits commenced in 1991 by Resolute Mining and continued to 1996. Recorded production during this period was 539,867 tonnes for 66,354oz at 3.82g/t Au.
Drill hole Information	 Vango Work: Location of drillholes based on historical reports and data, originally located on surveyed sites, and DGPS. Northing and easting data generally within 0.1 m accuracy RL data +-0.2 m Down hole length =+- 0.1 m
	 Historical Work: The majority of drill holes used in the resource estimate have been accurately surveyed by qualified surveyors using DGPS. Down hole surveys have been conducted at regular intervals using industry- standard equipment. Where single shot cameras were used some magnetic units have affected the azimuth readings and these have not been used. Many holes have been surveyed using Gyro tools. All Diamond and Reverse Circulation (RC) holes have been included.
Data aggregation methods	 All RAB/AC drilling has been excluded from the resource estimations. No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Relationship between mineralisation widths and intercept lengths	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Diagrams	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Balanced reporting Other	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
substantive exploration data	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Further work	Further drilling is planned at both K2 and K3.



Section 3 Estimation and Reporting of Mineral Resources K1 Open Pit Deposit

	tion 1, and where relevant in section 2, also apply to this section.)
Criteria	Commentary
Database integrity	 Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place. Various validation checks in GEOVIA Surpac™ and Seequent Leapfrog Geo™ 3D software and data queries in MS Access were undertaken such as overlapping samples, duplicate entries, missing data, sample length exceeding hole length, unusual assay values and a review of below detection limit samples. A visual examination of the data was also completed to check for erroneous downhole surveys and co-ordinates. All drillhole traces were checked against historical data. The data validation process has identified some drill hole data issues where holes conflicted with surrounding data and these were excluded on a hole by hole basis by flagging the collar file in the 'resinvalid' field. Database checks included the following: Checking for duplicate drill hole names and duplicate coordinates in the collar table. Checking for missing drill holes in the collar, survey, assay and geology tables based on drill hole names. Checking for survey inconsistencies including dips and azimuths <0°, dips >90°, azimuths >360° and negative depth values. The drillhole database to May 2, 2024, comprised 22,991 Collar records, 55,757 Survey records, and 242,074 Assay records. The compiled database used for resource estimation comprised 22,981 Collar
	records, 56,748 Survey records, and 243,738 Assay records.
Site visits	 The Competent Person undertakes frequent site visits to the Plutonic Gold Operation and associated Marymia tenements.
Geological interpretation	 Regionally, the Plutonic Gold Belt lies in the Archaean Plutonic Well Greenstone Belt, an elongate NE trending belt within the Marymia Inlier. The Marymia Inlier is an Archaean basement remnant within the Proterozoic Capricorn Orogen and comprises two mineralised greenstone belts (Plutonic Well and Baumgarten greenstone belts), with surrounding granite and gneissic complexes. The Marymia Greenstone Belt comprises two corridors of northeast – southwest trending mafic/ultramafic and sedimentary sequences separated by a conglomerate-dominated sedimentary sequence. The K1 deposit lies along the northern flank of the Plutonic Well Greenstone Belt within the mining lease M52/183. The K1 deposit lies within northeast trending, northwest dipping, intercalated mafic, minor ultramafic and metasedimentary units that have been metamorphosed to lower amphibolite facies and intensely deformed. The bedding and dominant foliation orientation is shallow to moderately dipping at 30° to 45°. The gold mineralisation is relatively continuous for several hundred metres along strike where higher gold grades and zones of mineralisation are observed around redox zones associated with the BOCO and TOFR surfaces. A total of 115,956 m of drilling from 34 diamond and diamond tails, 1,122 RC holes, 1,115 Rotary Air blast (RAB) holes, 6 Air Core (AC) and 22 holes of an unknown type were available for interpretation of the MRE and supported by a nominal drill density of 20 x 20m. A nominal cut-off grade of 0.2 g/t Au was used to guide the geological continuity of the interpreted mineralisation zones and internal dilution was included where necessary to maintain grade continuity. Catalyst considers confidence is moderate to high in the geological interpretation and continuity of the mineralisation domains.
Dimensions	 The K1 mineralised domains extend approximately 1,500 m along strike (13 domains in total) and to 250m below surface (400mRL). The domains strike northeast-southwest and have variable dips ranging from moderately to steeply dipping. The mineralisation domains range in thickness from 2m to 30m delineated at a nominal 0.2g/t cut-off.
Estimation and modelling techniques	 All geological domains used in the MRE were constructed in Leapfrog software. Block modelling and grade interpolation were carried out using Surpac software. Statistical analysis was carried out using Supervisor software.



Criteria Commentary

- Block model constraints were created by applying the interpreted mineralised domain wireframes. Subcelling in all domains was 1.25 m x 1.25 m to accurately reflect the volumes of the interpreted wireframes.
- All drillhole assay samples were uniquely flagged according to the mineralisation domains. All drillholes
 are composited to 1m downhole using a best-fit methodology and 0.25 m minimum threshold on
 inclusions. A small number of residual composites were retained in the estimation. RAB and AC holes
 were excluded from the composites and the estimation.
- K1 mineralisation is hosted in multiple sub-parallel and sub-vertical tabular lenses ranging in strike length from 100m up to 700m in length. The vertical extent of individual lenses can range from around 70m to 240m vertically. The true width of the lenses ranges from 1m to >10m. The K1 MRE incorporates the estimation of 13 individual mineralised lenses comprising:
 - K1 Domains 1500, 1600, 2200, 2500, 3000, 4000, 4500, 5000, 5500, 6400, 6500, 6520, 6560.
- The distribution of gold grades within the mineralised lenses is highly variable. Some of the better developed domains (4000 and 5000) exhibit distinct cohesive regions of higher tenor gold grades, with clusters of individual values often reaching over 15 g/t Au.
- Whilst these higher-grade zones often appear reasonably cohesive, they are manifested by a highdegree of short-scale variability, making it difficult to manually interpret constraining domains. These internal; high-grade regions are often surrounded by peripheral regions of lower grade mineralisation that is also highly variable.
- Raw Coefficients of Variation (CoV) are typically in the order of 2 to 5, indicating moderate to high grade variability.
- The moderate to high grade variability and complex spatial continuity of high grades at K1 requires a
 pseudo non-linear approach to deal with these high grades during estimation. A traditional approach
 of physical domaining, assay cutting, and linear estimation (IDW or OK) is considered inadequate in
 dealing with this complexity.
- The estimation method combines Categorical Indicator Kriging (CIK) to define internal estimation subdomains, together with applying distance limiting at chosen grade thresholds to restrict the influence of the high and extreme grade values during grade interpolation.
- Prior to estimation, a reference surface for each estimation domain was exported from the Leapfrog Project. This is calculated as the best fit surface using the hangingwall and footwall surfaces. The reference surface is then imported into Surpac and a dip and dip-direction of each triangle facet is imported into the Surpac block model to provide information for dynamic search and variogram model orientation during interpolation. Dynamic estimation is applied for estimating the CIK indicators and gold grades.

Categorical Indicator Kriging Workflow

- Two Categorical Indicator values are determined for the CIK domains:
 - A low-grade (LG) indicator of 0.2 g/t Au was assigned to differentiate between background 'waste' and low-tenor mineralisation.
 - A high-grade (HG) indicator of 1.4 g/t Au was assigned to define broad areas of consistent highertenor mineralisation.
- A single indicator variogram was modelled using the median grade (0.23 g/t Au) of the combined set of
 domains. The median indicator variogram exhibited a moderate nugget effect of around 36% and
 demonstrated reasonably well-structured continuity of up to 60m.
- The medium indicator variogram is considered as a reasonable basis for estimating the broad continuity
 of the mineralised domains. Both the LG and HG indicator domains were estimated using the median
 indicator variogram.
- The CIK indicators were estimated using Ordinary Kriging into a finely gridded block model with block dimensions of 1.25m x 1.25m x 1.25m. The small block size for the indicator process is beneficial for creating categorical sub-domains at resolution which can be used to accurately back-flag composite data.
- Three categorical sub-domains were generated: low-grade (LG), medium-grade (MG) and high-grade (HG) areas. The HG sub-domain was based on an indicator probability threshold of 0.35 and the LG sub-domain was based on an indicator probability threshold of 0.65. The MG sub-domain is assigned to blocks that do not satisfy either the HG or LG sub-domain criteria.
- The three categorical block model sub-domains (HG, MG and LG) were used to 'back-flag' the 1m composites from each mine area, thus creating a separate composite file for each sub-domain.



Criteria Commentary

Assay top-cuts are applied to the sub-domain composite files on a domain-by-domain basis and typically
in the following ranges:

HG = 10-50 g/t Au MG = 2-10 g/t Au LG = 1-2 g/t Au

- The assay top-cuts were generally between the 97th to 99.9th percentile of the distribution and were aimed at globally limiting extreme values only. Top-cuts are not used as the primary tool to control metal risk. The use of grade thresholds and distance limiting is considered a more objective and influential method in controlling metal risk, while better reflecting the actual localised occurrence of discontinuous high-grade gold mineralisation.
- Grade variograms were initially attempted separately for the LG, MG and HG sub-domains, however, this resulted in poorly structured and incoherent variograms. It was decided to use a variogram modelled on the combined grade data set. The combined grade variogram exhibited a moderate nugget effect of 41% with a maximum range of continuity of 60m. Grades were globally top cut to 40 g/t Au for the purposes of variography.
- Distance limiting of high grades was applied during estimation to limit the risk of over-estimation from isolated high-grade samples. Grade thresholds for distance limiting were determined from logprobability plots and visual analysis of high-grade continuity. The applied grade-distance limits are as follows:

0-10 g/t = No Limit 10-30 g/t = 15 m>30 g/t = 10 m

- Prior to grade estimation, sub-domain codes from the 1.25m resolution block model are imported into
 a 2.5m x 2.5m x 2.5m resolution model and the proportion of LG, MG and HG is calculated for each 2.5m
 block. Grade estimation for the LG, MG and HG domains was undertaken in Surpac software using
 Ordinary Kriging with grade threshold distance limiting. Kriging Neighbourhood Analysis (KNA) was
 undertaken to assist with defining estimation parameters. Search routines and variogram orientations
 are drawn from the pre-populated dynamic search information recorded in each block.
- Final block grades at a 2.5m x 2.5m x 2.5m block resolution were calculated by weighting the estimated grades for each sub-domain by the relevant domain proportion. The parent estimation block size was 2.5m x 2.5m x 2.5m. A minimum of 2 and maximum of 12 composites were used for each sub-domain estimate per block. It is possible that up to 36 composites can be used to estimate a parent block where there is a proportion of all three sib-domains present. Block discretisation was set at 3 E x 3 N x 3 RL points (per parent block). A standardised single pass search distance of 80m was used. Octant restrictions were not used. Data spacing varied from <10m x 10m to >40m x 40m.
- Model validation was completed to check that the grade estimates within the model were an
 appropriate reflection of the underlying composite sample data, and to confirm that the interpolation
 parameters were applied as intended. Checks of the estimated block grade with the corresponding
 composite dataset were completed using several approaches involving both numerical and spatial
 aspects as follows:
 - Semi-Local: Using swath plots in X, Y and Z directions comparing the estimates to the sample data.
 - Local: Visual inspection of the estimated block grades viewed in conjunction with the sample data.

Moisture

All estimations were carried out using a 'dry' basis.

Cut-off parameters

- K1 open pit Mineral Resources are reported at cut-off grades derived from current mining and processing costs and metallurgical parameters as follows:
 - Oxide 0.6 g/t Au
 - Transitional and Fresh 0.7 g/t Au
- Inputs into the cut-off grade calculation include:
 - Base Mining Cost = AUD\$5.56/t
 - Processing and Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore
 - Metallurgical Recovery = Oxide=91%, Transitional/Fresh=91%
 - Approx wall angles = Oxide=39°, Transitional 45°, Fresh 52°
 - Royalties = 2.5%
 - Gold Price = AUD\$3,200/oz



Criteria	Commentary
Mining factors or assumptions	 The K1 open pit Mineral Resource estimate is reported within an optimised pit shell evaluation from the undiluted and depleted resource model. No additional mining modifying factors were applied. Gold price of AUD\$3,200/oz.
Metallurgical factors or assumptions	 It is assumed the material will be trucked and processed at the Plutonic Gold Plant. Recovery factors are assigned based on lab test work. No metallurgical assumptions have been built or applied to the resource model.
Environmental factors or assumptions	 A conventional storage facility is used for the process plant tailings. Waste rock is stored in a traditional waste rock landform 'waste dump'. Due to low sulphide content and the presence of carbonate alteration the potential for acid content is considered low.
Bulk density	 Density has been assigned to the resource models using interpreted weathering surfaces determined from drill hole logging. Assigned density is based on historic values previously applied to K1: Oxide =1.98 Transitional=2.4 Fresh=2.82
Classification	 The entire K1 Mineral Resource was classified as Inferred for the following reasons: No confirmatory drilling has been undertaken by Catalyst. There are some doubts as to the integrity of several drill hole locations. There is a lack of reliable historic mining reconciliation data. There is a lack of reliable historic QAQC information. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	 The geological interpretation, estimation parameters and validation of the resource model was peer reviewed by Catalyst staff. No external reviews of the resource estimate had been carried out at the time of writing.
Discussion of relative accuracy/confidence	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to the global estimates of tonnes and grade.



Section 1 Sampling Techniques and Data K3 Open Pit Deposit

(Criteria in this sec Criteria	tion apply to all succeeding sections.)
	Commentary
Sampling techniques	No new drilling has been completed by Catalyst since acquisition of the project in 2023.
	Vango drilling:
	 RC drilling assays were from 1 m samples split on the cyclone for the ultramafic. 1 m splits are taken over entirety of each drill hole using a 1/8 riffle splitter.
	 Diamond drilling assays were from mostly half core and minor quarter core, NQ2 and HQ size core. This was considered to be sufficient material for a representative sample. Core samples were taken at 1 m intervals or at geological boundaries.
	 Drillholes were generally designed to intersect mineralisation orthogonal to strike and core was oriented. Cutting of core was along the orientation line, in order to be as close as possible to orthogonal to mineralised structures and representative.
	Historical drilling:
	 Quality of historical sampling information is varied. Previous work has been dominated by Resolute, BMA, Homestake, Barrick Resources and Dampier Gold, all of which are considered to have used high quality methodology for the time.
	 RC samples were collected as 4 m composite spear samples. Mineralised zones were sampled at 1 m intervals using a 1/8 riffle splitter.
	 Core samples were taken at 1m intervals or at geological boundaries from NQ2 and HQ3 Core.
	 Where sampling methods have not been recorded, results are consistent with, and of a similar quality, to results where methodology is known, including Vango methodology i.e. the Industry Standard approach above.
Drilling	Vango drilling:
techniques	 Reverse Circulation drilling was conducted utilizing a 5.75 inch face sampling bit. Diamond drilling was conducted utilising NQ2 core. Core was orientated by spear methodology.
	Historical drilling:
	NQ/NQ2 and HQ3 Diamond drill-core.
	Face Sampling, Reverse Circulation (RC) hammer.
	Minor Aircore, RAB, and Blasthole drilling in oxide zones of some open pit resource areas.
Drill sample recovery	 RC drilling was bagged on 1 m intervals and an estimate of sample recovery has been made on the size of each sample.
	Recovery in diamond drilling based on measured core was returned for each 3 m.
	 No assessment of RC chip sample recoveries was undertaken on historical data however a
	comprehensive historical review of sampling procedures was undertaken which indicates that
	standard procedures where enacted to ensure minimal sample loss. Where limited information on
Logging	the recoveries has been recorded, they have been consistent with those noted by recent drilling. Vango drilling:
Logging	 Reverse Circulation holes were logged on 1 m intervals.
	Magnetic Susceptibility (KT 10) was recorded.
	Diamond holes were:
	 logged in detail based on geological boundaries.
	 logged on 1 m intervals for geotechnical data.
	 photographed prior to cutting and sampling.
	 Geotechnically logged including RQD, recovery and FF sampled for Metallurgical testwork from logged HQ diamond holes
	Historical drilling:
	Previous work included examining historical Geological logs (WAMEX) in both hard copy
	and digital files. Logging codes have varied, but careful reconstruction of the geological sections has shown good correlation with the broad lithological logging.
	Historical procedures are generally similar to that used currently.



Criteria Commentary

Sub-sampling techniques and sample preparation

Vango drilling:

- RC Drilling was sampled on 1 m samples using a cone splitter within the cyclone.
- Half and quarter Diamond Drill Core, on selected intervals of between 0.8-1.25 m length. Core sampling was done using a diamond saw.
- RC Drilling sampled on 1 m samples using a cone splitter within the cyclone.
- In less prospective lithologies these 1 m samples were composited using a scoop over 4 m intervals
- Standards submitted every 20 samples of similar tenor to those expected in the sampling.
- Blanks were inserted every 20 samples.
- Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.

Historical Drilling:

- RC 1 m samples collected at the rig using a 1:8 riffle splitter. Each sample was riffle split each 1 m sample to collect approximately 3 kg samples in calico bags, with the remaining sample retained on site in plastic bags. Four metre composite samples were also collected with any samples assaying greater than 0.1 g/t Au being re-split to 1 m intervals.
- Core sampled was halved using a diamond saw and sampled at 1 m intervals, or to geological
 contacts.
- Field duplicate sampling was completed by passing the bulk reject sample from the plastic bag through a riffle splitter. In addition, ¼ core was routinely submitted. Duplicate sample intervals were designated by the geologist.
- Sampling procedures for the Resolute drilling were not available.

Quality of assay data and laboratory tests

Vango drilling:

- All samples were dried, crushed and pulverised then a 50g charge analysed at Intertek Laboratories using an Industry Standard Fire Assay method.
- Standards submitted every 20 samples of grade-range/tenor similar to those expected in the sampling.
- Blanks were inserted every 20 samples also.
- Field duplicates also analysed.
- Standards and Blanks were reported within acceptable accuracy and precision levels around the expected standard value
- The results indicate the fire assay results from Intertek are of sufficient quality to be acceptable for use in resource estimation.

Historical Drilling:

- Gold was analysed at Amdel and MinLabs in Perth, and at Plutonic Mine using fire assay with a 25-50g charge for Au with AAS finish within the mineralised zones. Some aqua regia data is included in the resources, generally in lower grade, oxide and transition areas.
- Drilling programs carried out by HGAL have included ongoing QAQC procedures. These included the use of certified standards, blanks, check assay and duplicate sampling.
- The various programs of QAQC carried out by HGAL have all produced results which support the sampling and assaying procedures used at the site.
- Specific QAQC procedures for previous owners were unavailable.

Verification of sampling and assaying

 Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place.

Vango drilling:

- Data was provided from the field as paper logs for geology, DGPS files for locations, and CSV files from the laboratory for assays, validated and stored in the Terra Search Explorer3 RDBMS system.
- Historical drilling data has undergone extensive validation including cross referencing to Annual reporting and internal data sources.
- Analytical results from previous workers have been audited and, where possible, verified with
 reference to historical reports. Vango infill drilling has largely confirmed the thickness and tenor
 of previous drilling.
- Scissored/twinned (<10m) holes have confirmed mineralised zones at many prospects in the area



Criteria	Commentary
Location of data points	 Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place. All collar co-ordinates and downhole surveys were checked against historical data. The RLs of the collar positions were checked against a current drone topography surface and underground voids DTMs. Adjustments were made to erroneous data before estimation. Downhole surveys are visually inspected in 3D software for anomalous changes in drill trace, (i.e. does the drill hole apparently bend inordinately).
	Vango drilling:
	DGPS has been used to locate all drillholes.
	REFLEX Gyro Tool used for downhole surveys on all holes
	Historia dellica.
	 Historic drilling: Previous downhole survey data collected by REFLEX gyro tool and historically with Eastman
	cameras with follow-up down-hole surveys carried out by Surtron using gyroscopic survey equipment.
	 Where single shot cameras were used some magnetic units have affected the azimuth readings and these have not been used. Many holes have been surveyed using Gyro tools.
Data spacing and distribution	 Drill spacing of approximately 20 m (along strike) by 20 m (on section) was considered adequate to establish both geological and grade continuity.
	 Closer spaced RC grade control drilling 5x5m is located in the pit areas
	 Broader spaced drilling up to 80 x 80 m has also been modelled but with lower confidence. Some sections have closer spacing in high grade zones confirming the continuity and structural understanding.
Orientation of data in relation	 The orientation of a majority of the drilling is approximately perpendicular to the strike and dip of the mineralisation and is unlikely to have introduced any sampling bias.
to geological structure	 Certain holes have drilled parallel to key structures, but density of drilling and drilling on other orientations has allowed detailed geological modelling of these structures and hence any sampling bias in a single hole has been removed.
Sample security	
	bulk bags with a security seal that remains unbroken when delivered to the lab.
	 No specific information has been obtained relating to historical sampling security.
Audits or	Historical reviews of standards, blanks and duplicates indicate sampling and analysis has been
reviews	completed with no issues discovered.
	Historical reviews of the database for the Marymia area have been examined previously and a
	proportion of holes were compared to original data sources and found to be consistent wherever checked.

Section 2 Reporting of Exploration Results

K3 Open Pit Deposit (Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Cilleila	Commentary
Mineral tenement and land tenure status	 Located in the Marymia - Plutonic Greenstone Belt ~218 km northeast of Meekatharra in the Midwest mining district in WA K3 is located on the M52/183 granted tenement and is in good standing. The tenements predate Native title interests but is covered by the Gingirana Native Title claim. The tenements are 95.9% owned by Vango Mining Limited and subsidiary Dampier (Plutonic) Pty Ltd, who have been acquired by Catalyst Metals Ltd. The remaining 4.1% interest is owned by Zuleika Gold Ltd. Gold production will be subject to a 2.5% government royalty.
Exploration done by other parties	 Extensive previous work by Resolute Mining, Homestake Gold, Battle Mountain Australia, Barrick Mining and Dampier Gold. Previous metallurgical and resource work has been completed by Resolute Mining, Barrick Mining and Dampier Gold.



	METALS L
Criteria	Commentary
Geology	 The K3 deposit lies directly along strike from the K2 deposit and is located at the north-eastern end of the Plutonic Well Greenstone Belt, which forms part of the Marymia Inlier. The Marymia Inlier is a granite-greenstone terrane situated between the Yilgarn and Pilbara Cratons in Western Australia. The Plutonic Well Greenstone Belt is a north-easterly trending belt approximately 50km long and 10km wide. It consists of predominantly mid to upper greenschist facies metamorphosed ultramafic volcanics, tholeiitic basalts, minor felsic volcanics and sediments. The local geology of the K2 to K3 area is composed of a series of north-east, south-west trending mafics, ultramafics and metasedimentary lithologies metamorphosed to lower amphibolite facies. Marymia mineralisation is structurally controlled, orogenic, mesothermal (amphibolite metamorphic facies) in style, associated with the late tectonic D3 high-angle thrusting event and open folding/flexing and dilation of earlier - including D1/D2 thrusts. Gold mineralisation within the K2 pit showed a strong association with lithological contacts and high grade zones at the contact between a high Fe and high-Mg amphibolite unit.
Drill hole	Vango Work:
Information	 Location of drillholes based on historical reports and data, originally located on surveyed sites, and DGPS.
	 Northing and easting data generally within 0.1 m accuracy RL data +-0.2 m
	• Down hole length =+- 0.1 m
	Historical Work:
	 The majority of drill holes used in the resource estimate have been accurately surveyed by qualified surveyors using DGPS. Down hole surveys have been conducted at regular intervals using industry- standard equipment. Where single shot cameras were used some magnetic units have affected the azimuth readings and these have not been used. Many holes have been surveyed using Gyro tools.
	All Diamond and Reverse Circulation (RC) holes have been included.
	 Air Core and RAB drilling have been excluded from the resource calculations.
Data aggregation methods	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Relationship between mineralisation widths and intercept lengths	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Diagrams	No exploration has been reported in this release, therefore there are no drill hole intercepts to
Balanced	 report. This section is not relevant to this report on Mineral Resource and ore Reserves. No exploration has been reported in this release, therefore there are no drill hole intercepts to
reporting	report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Other substantive exploration data	 No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Further work	Further drilling is planned at both K2 and K3.



Section 3 Estimation and Reporting of Mineral Resources K3 Open Pit Deposit

	ction 1, and where relevant in section 2, also apply to this section.)
Criteria	Commentary
Database integrity	 Catalyst houses all drilling data in AcQuire software, the database was exported to MS Access and audited before resource estimation. Data is visually checked in 3D software before estimation takes place. Various validation checks in GEOVIA Surpac™ and Seequent Leapfrog Geo™ 3D software and data queries in MS Access were undertaken such as overlapping samples, duplicate entries, missing data, sample length exceeding hole length, unusual assay values and a review of below detection limit samples. A visual examination of the data was also completed to check for erroneous downhole surveys and co-ordinates. All drillhole traces were checked against historical data. The data validation process has identified some drill hole data issues where holes conflicted with surrounding data and these were excluded on a hole by hole basis by flagging the collar file in the 'resinvalid' field. Database checks included the following: Checking for duplicate drill hole names and duplicate coordinates in the collar table. Checking for missing drill holes in the collar, survey, assay and geology tables based on drill hole names. Checking for survey inconsistencies including dips and azimuths <0°, dips >90°, azimuths >360° and negative depth values. The drillhole database to May 2, 2024, comprised 22,991 Collar records, 55,757 Survey records, and 242,074 Assay records. The compiled database used for resource estimation comprised 22,981 Collar
	records, 56,748 Survey records, and 243,738 Assay records.
Site visits	 The Competent Person undertakes frequent site visits to the Plutonic Gold Operation and associated Marymia tenements.
Geological interpretation	 Regionally, the Plutonic Gold Belt lies in the Archaean Plutonic Well Greenstone Belt, an elongate NE trending belt within the Marymia Inlier. The Marymia Inlier is an Archaean basement remnant within the Proterozoic Capricorn Orogen and comprises two mineralised greenstone belts (Plutonic Well and Baumgarten greenstone belts), with surrounding granite and gneissic complexes. The Marymia Greenstone Belt comprises two corridors of northeast – southwest trending mafic/ultramafic and sedimentary sequences separated by a conglomerate-dominated sedimentary sequence. The K2 deposit lies along the northern flank of the Plutonic Well Greenstone Belt within the mining lease M52/183. The geology of the K2 area is dominated by north east- south west trending maficultramafic and sedimentary package which has been metamorphosed to lower amphibolite facies and intensely deformed. Foliation and bedding are generally steeply dipping. A total of 146,492.7 m of drilling from 120 diamond and diamond tails, 1,297 RC holes, 754 Rotary Air blast (RAB) holes, 12 Air Core (AC) and 3 holes of an unknown type were available for interpretation of the MRE and supported by a nominal drill density of 20 x 20m. Gold mineralisation at K2 demonstrates a close association with lithological contacts, in particular the sheared contact between high iron and high magnesian amphibolite units. A cut-off grade of 0.2 g/t Au was used to guide the geological continuity of the interpreted mineralisation lodes. Catalyst considers confidence is moderate to high in the geological interpretation and continuity of the mineralisation domains.
Dimensions	 K2 mineralised domains extend approximately 1,200 m along strike (9 domains total) and to 400m below surface (250mRL). K3 represents a historically defined subset of the larger K2 mineralised system. The domains strike north east-south west and are sub-vertical with an average thickness of 2 to 4 m. Mineralisation has been delineated at a nominal 0.2g/t cut-off.
Estimation and modelling techniques	 All geological domains used in the MRE were constructed in Leapfrog software. Block modelling and grade interpolation were carried out using Surpac software. Statistical analysis was carried out using Supervisor software.



Criteria Commentary

- Block model constraints were created by applying the interpreted mineralised domain wireframes.
 Sub-celling in all domains was 1.25 m x 1.25 m to accurately reflect the volumes of the interpreted wireframes.
- All drillhole assay samples were uniquely flagged according to the mineralisation domains. All
 drillholes are composited to 1m downhole using a best-fit methodology and 0.5 m minimum threshold
 on inclusions. All RC and DD samples were composited to 1m downhole using a best-fit methodology
 and 0.5 m minimum threshold on inclusions. A small of residual composites were retained in the
 estimation.
- K2/K3 mineralisation is hosted in multiple sub-parallel and sub-vertical tabular lenses ranging in strike length from 150m up to nearly 1,200m in length. The vertical extent of individual lenses can range from around 100m to 400m vertically. The true width of the lenses ranges from 1m to >10m. The K2 July 2024 MRE incorporates the estimation of nine individual mineralised lenses comprising:

K2/K3 - Domains 1001-1005

K2 South East - Domains 2001-2004

- The distribution of gold grades within the mineralised lenses is highly variable and is characterised by distinct cohesive regions of higher tenor gold grades, with clusters of individual values often reaching over thirty grams per tonne. Whilst these higher-grade zones appear reasonably cohesive, they are manifested by a high-degree of short-scale variability, making difficult to manually interpret constraining domains. These internal; high-grade regions are often surrounded by peripheral regions of lower grade mineralisation that is also highly variable.
- Raw Coefficients of Variation (CoV) are typically in the order of 2 to 14, indicating moderate to high
 grade variability.
- The moderate to high grade variability and complex spatial continuity of high grades at K2/K3 requires
 a pseudo non-linear approach to deal with these high grades during estimation. A traditional
 approach of physical domaining, assay cutting, and linear estimation (IDW or OK) is considered
 inadequate in dealing with this complexity.
- The estimation method applied to most of the domains combines Categorical Indicator Kriging (CIK) to
 define internal estimation sub-domains domains, together with applying distance limiting at chosen
 grade thresholds to restrict the influence of the high grade and extreme grade values during grade
 interpolation.
- Prior to estimation, a reference surface for each estimation domain was exported from the Leapfrog.
 This is calculated as the best fit surface using the hangingwall and footwall surfaces. The reference
 surface is then imported into Surpac and a dip and dip-direction of each triangle facets is imported
 into the Surpac block model to provide information for dynamic search and variogram model
 orientation during interpolation. Dynamic estimation is applied for estimating the CIK indicators and
 gold grades.

Categorical Indicator Kriging Workflow

- Two Categorical Indicator values are determined for the CIK domains:
 - A low-grade (LG) indicator of 0.2 g/t Au was assigned to differentiate between background 'waste' and low-tenor mineralisation.
 - A high-grade (HG) indicator of 1.4 g/t Au was assigned to define broad areas of consistent highertenor mineralisation.
- Indicator variograms were modelled for the LG and HG thresholds for all mine areas. The indicator variograms for both grade thresholds exhibited a moderate nugget effect of around 30%. The LG indicator demonstrated well-structured average continuity of up to 80m. The HG indicator demonstrated less well-structured average continuity of around 20m.
- The CIK indicators were estimated using Ordinary Kriging into a finely gridded block model with block dimensions of 1.25m x 1.25m x 1.25m. The small block size for the indicator process is beneficial for creating categorical sub-domains at resolution which can be used to accurately back-flag composite data.
- Three categorical sub-domains were generated: low-grade (LG), medium-grade (MG) and high-grade (HG) areas. The HG sub-domain was based on an indicator probability threshold of 0.35 and the LG sub-domain was based on an indicator probability threshold of 0.65. The MG sub-domain is assigned to blocks that do not satisfy either the HG or LG sub-domain criteria.
- The three categorical block model sub-domains (HG, MG and LG) were used to 'back-flag' the 1m composites from each mine area, thus creating a separate composite file for each sub-domain.
- Assay top-cuts are applied to the sub-domain composite files on a domain-by-domain basis and typically in the following ranges:



Criteria Commentary

HG = 15-75 g/t Au MG = 5-10 g/t Au LG = 0.5-3 g/t Au

- The assay top-cuts were generally between the 97th to 99.9th percentile of the distribution and were aimed at globally limiting extreme values only. Top-cuts are not used as the primary tool to control metal risk. The use of grade thresholds and distance limiting is considered a more objective and influential method in controlling metal risk, while better reflecting the actual localised occurrence of discontinuous high-grade gold mineralisation.
- Grade variograms were initially attempted separately for the LG, MG and HG sub-domains, however, this resulted in poorly structured and incoherent variograms. It was decided to use a variogram modelled on the combined grade data set. The combined grade variogram exhibited a moderate nugget effect of 35% with a maximum range of continuity of 45m.
- Grade thresholds for distance limiting were initially determined for each mine area from log-probability plots and visual inspection. Final distance limits were subsequently optimised following a detailed backward-looking mill reconciliation using historic open pit mining during the period July 1992 to December 1995 (964Kt). The adjustment of grade distance limits was an iterative process until an acceptable reconciliation with the mill was achieved. The final applied grade distance limits are follows:

0-10 g/t = No Limit 10-30 g/t = 20m >30 g/t = 12.5m

- Prior to grade estimation, sub-domain codes from the 1.25m resolution block model are imported into a 2.5m x 2.5m x 2.5m resolution model and the proportion of LG, MG and HG is calculated for each 2.5m block. Grade estimation for the LG, MG and HG domains was undertaken in Surpac software using Ordinary Kriging with grade threshold distance limiting. Kriging Neighbourhood Analysis (KNA) was undertaken to assist with defining estimation parameters. Search routines and variogram orientations are drawn from the pre-populated dynamic search information recorded in each block.
- Final block grades at a 2.5m x 2.5m x 2.5m block resolution were calculated by weighting the estimated grades for each sub-domain by the relevant domain proportion. The parent estimation block size was 2.5m x 2.5m x 2.5m. A minimum of 2 and maximum of 12 composites were used for each sub-domain estimate per block. It is possible that up to 36 composites can be used to estimate a parent block where there is a proportion of all three sib-domains present. Block discretisation was set at 3 E x 3 N x 3 RL points (per parent block). A standardised single pass search distance of 45m was used. Octant restrictions were not used. Data spacing varied from <10m x 10m to >40m x 40m.
- Model validation was completed to check that the grade estimates within the model were an
 appropriate reflection of the underlying composite sample data, and to confirm that the interpolation
 parameters were applied as intended. Checks of the estimated block grade with the corresponding
 composite dataset were completed using several approaches involving both numerical and spatial
 aspects as follows:
 - Semi-Local: Using swath plots in X, Y and Z directions comparing the estimates to the sample
 - Local: Visual inspection of the estimated block grades viewed in conjunction with the sample data.

Moisture

All estimations were carried out using a 'dry' basis.

Cut-off parameters

- K3 open pit Mineral Resources are reported at cut-off grades derived from current mining and processing costs and metallurgical parameters as follows:
 - Oxide 0.6 g/t Au
 - Transitional and Fresh 0.7 g/t Au
- Inputs into the cut-off grade calculation include:
 - Base Mining Cost = AUD\$5.56/t
 - Processing and Haulage Costs = Oxide=AUD\$49.90/t ore, Transitional=AUD\$50.90/t ore, Fresh = AUD\$52.90/t ore
 - Metallurgical Recovery = Oxide=91%, Transitional/Fresh=91%
 - Approx wall angles = Oxide=39°, Transitional 45°, Fresh 52°
 - Royalties = 2.5%
 - Gold Price = AUD\$3,200/oz



Criteria	Commentary
Mining factors or assumptions	The K3 open pit Mineral Resource estimate is reported within an optimised pit shell evaluation from the undiluted and depleted resource model. No additional mining modifying factors were applied.
Metallurgical factors or assumptions	 It is assumed the material will be trucked and processed at the Plutonic Gold Plant. Recovery factors are assigned based on lab test work. No metallurgical assumptions have been built or applied to the resource model.
Environmental factors or assumptions	 A conventional storage facility is used for the process plant tailings. The small amount of waste rock is stored in a traditional waste rock landform 'waste dump'. Due to low sulphide content and the presence of carbonate alteration the potential for acid content is considered low.
Bulk density	 Density has been assigned to the resource models using interpreted weathering surfaces determined from drill hole logging. Oxide =1.8 Transitional=2.2 Fresh=2.9
Classification	 Factors considered when classifying the model include: The portions of the K3 MRE classified as Indicated have been flagged in areas of the model where average drill hole spacing is typically 20m x 20m or closer. The drill spacing within the Indicated portion of the resource is appropriate for defining the continuity and volume of the mineralised domains, at a nominal 20 m drill spacing on 20 m sections. The portions of the MRE classified as Inferred typically represent minor lodes or portions of larger domains where geological continuity is present but not consistently confirmed by 20 m x 20 m drilling. Further considerations of resource classification include; data type and quality (drilling type, drilling orientations, down hole surveys, sampling and assaying methods); geological confidence and geostatistical considerations. A final reportable classification is generated post creation of a Stope Optimiser (SO) outcome used for RPEEE. Each SO is assigned a classification based on majority reporting by tonnes of the raw classification scheme. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	 The geological interpretation, estimation parameters and validation of the resource model was peer reviewed by Catalyst staff. No external reviews of the resource estimate had been carried out at the time of writing.
Discussion of relative accuracy/confidence	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to the global estimates of tonnes and grade.