Catalyst Metals

Catalyst Metals produces 110koz of gold annually. It controls three highly prospective gold belts and has a multi asset strategy.

It owns the 40km long Plutonic Gold Belt in Western Australia hosting the Plutonic gold mine and neighbouring underexplored, high-grade resources. The belt has a substantial mineral endowment of 10Moz

It also owns and operates the high-grade Henty Gold Mine in Tasmania which lies within the 25km Henty gold belt. Production to date is 1.4Moz @ 8.9 g/t.

Catalyst also controls +75km of strike length immediately north of the +22Moz Bendigo goldfield and home to high-grade, greenfield resources of 26 g/t Au, at Four Eagles with further discoveries expected.

Capital Structure

Shares o/s: 225.8m
Options: 3.4m
Rights: 4.7m
Cash: $31m
Debt: $7m

Reserves and Resources

MRE: 3.5Moz at 2.9g/t Au
ORE: 0.8Moz at 3.3g/t Au

Board Members

David Jones AM
Non-Executive Chairman

James Champion de Crespigny
Managing Director & CEO

Robin Scrimgeour
Non-Executive Director

Bruce Kay
Non-Executive Director

Corporate Details

ASX: CYL
E:investors@catalystmetals.com.au
W:catalystmetals.com.au

PLUTONIC GOLD BELT

Plutonic East and K2 Mineral Resource Update

Updates provide foundation for near term development plans

- **Since 1 July 2023, Catalyst has been re-estimating Reserves and Resources for all deposits across the Plutonic Gold Belt**
- **K2 and Plutonic East are near term developments for Catalyst and the updated Mineral Resources will underpin Catalyst's organic growth plans**
- **Mineral Resources for K2 are:**
  - **0.7Mt at 3.6g/t Au for 81,000oz**
- **Mineral Resources for Plutonic East are:**
  - **2.2Mt at 2.5g/t Au for 182,000oz**
- **K2 and Plutonic East have existing underground declines. As a result they will have low start-up costs and are incremental ore sources for Plutonic's underutilised mill. These Mineral Resources are an important step toward bringing these deposits into production.**

Catalyst Metals Limited (**Catalyst** or **the Company**) (ASX:CYL) is pleased to provide updated Mineral Resource Estimates for the K2 and Plutonic East underground mines.

Plutonic East and K2 represent near term developments for Catalyst. These Resources provide the foundation for Catalyst's approach to developing and mining these deposits.

Catalyst's MD & CEO, James Champion de Crespigny, said:

"*Catalyst is rapidly progressing developments across the Plutonic Gold Belt. Our strong balance sheet, supported by stable operations will allow us to prudently bring developments into production and utilise the excess mill capacity at Plutonic.*

"The updated Resources at K2 and Plutonic East will form the basis of Catalyst's development and mine planning. They are an important step towards taking these projects into production.

Since consolidating the Plutonic Gold Belt in July 2023, Catalyst has been systematically re-evaluating previous Mineral Resource Estimates across the Plutonic Belt.

Catalyst considered that a new approach to estimation was appropriate. To date, this approach has been validated through the improved operating performance of the Plutonic Gold Mine.

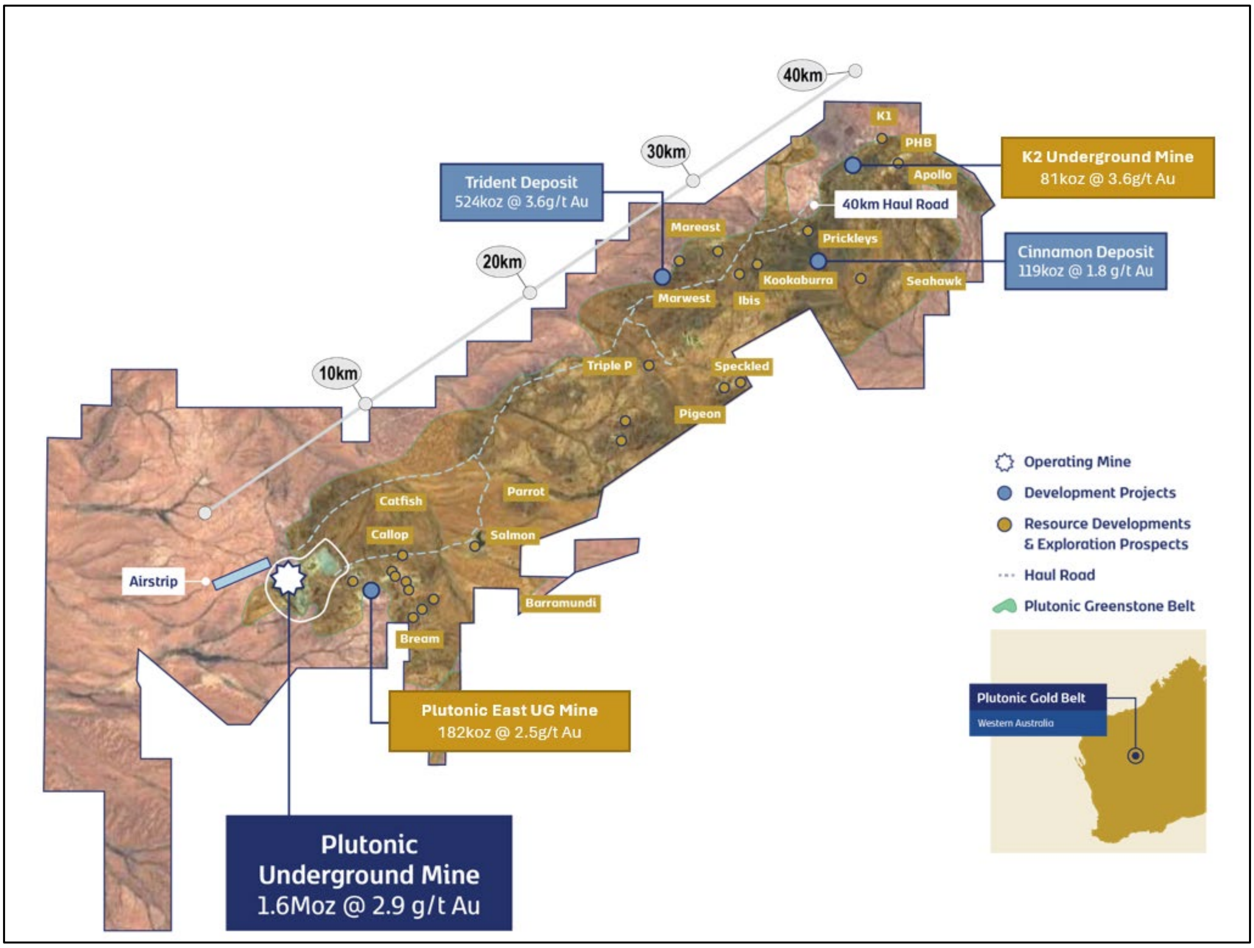

Figure 1: Plutonic Gold Belt showing locations of Plutonic East and K2

K2 Underground Mineral Resources

The Mineral Resource Statement for the K2 Underground Mineral Resource estimate was prepared during July 2024 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. The depth from surface to the current vertical limit of the K2 Underground Mineral Resources is approximately 250m (390 mRL).

In the opinion of Catalyst, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the K2 underground deposit, based on sampling data from RC, RCD, RC/DD and DD drilling available as of 2 May 2024. Mineral Resources are reported below topography and comprise only fresh rock.

The K2 Underground Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by underground mining methods. The MRE has been constrained within an underground Stope Optimiser (SO) evaluation from the depleted resource model.

SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 1.5m, minimum stope length of 5m and minimum stope height of 5m. The orientation of SO's is variable depending on the geometry of the mineralisation resource model.

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 1.

Table 1: K2 MRE

Deposit	Measured			Indicated			Inferred			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Total	-	-	-	0.2	4.2	31	0.5	3.4	49	0.7	3.6	81

Notes:

1. Mineral Resource estimated at 1.5g/t Au cut-off and reported within underground Stope Optimiser (SO). SO inputs include: Gold Price AUD$3,200/oz, Metallurgical Recovery = 92%; Royalties = 2.5%; Minimum mining width = 1.5m; Minimum stope length=5m, minimum stope height=5m.
2. Numbers may not add up due to rounding

Plutonic East Underground Mineral Resources

The Mineral Resource Statement for the Plutonic East Underground Mineral Resource estimate was prepared during June 2024 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 288,123m of drilling from 2,301 reverse circulation (RC) drill holes and 1,088 diamond drillholes (DD) and 7,623 Face Samples completed since 1997. The depth from surface to the current vertical limit of the Mineral Resources is approximately 600 m (1110 mRL).

In the opinion of Catalyst, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the Plutonic East underground deposit, based on sampling data from Face Samples, RC and DD drilling available as of 6 June 2024. Mineral Resources are reported below topography and comprise only fresh rock. Historic open pit and underground mining depletion has been removed.

The Plutonic East Underground Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by underground mining methods. The MRE has been constrained within an underground Stope Optimiser (SO) evaluation from the depleted resource model.

SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 2.5m, minimum stope length of 5m and minimum stope height of 5m. The orientation of SO's is variable depending on the geometry of the mineralisation resource model.

The entire MRE consists of Indicated and Inferred Mineral Resources. No Measured Mineral Resources have been reported at this stage of the project.

The Mineral Resource Statement is presented in Table 2.

Table 2: Plutonic East MRE

Deposit	Measured			Indicated			Inferred			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Total	-	-	-	**0.9**	**2.8**	**80**	**1.3**	**2.4**	**102**	**2.2**	**2.5**	**182**

Notes:

1. Mineral Resource estimated at 1.5g/t Au cut-off and reported within underground Stope Optimiser (SO). SO inputs include: Gold Price AUD$3,200/oz, Metallurgical Recovery = 86%; Royalties = 2.5%; Minimum mining width = 2.5m; Minimum stope height=5m, Minimum stope length=5m
2. Numbers may not add up due to rounding

MINERAL RESOURCE ESTIMATE (K2)

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 industry-standard 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, 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.

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.

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.

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 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 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.

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 K2 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. Sub-celling in all domains was 1.25 m x 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 number of residual composites were retained in the estimation.

K2 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 – 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 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 1.25m 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:

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 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/m3

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 K2 underground Mineral Resources is reported at a cut-off grade of 1.5 g/t Au. The cut-off grade has been derived from current mining and processing costs and metallurgical parameters. Inputs into the cut-off grade calculation include:

- Average Mining Cost = AUD$86.93/t

- Processing and Other Costs = AUD$55/t ore
- Metallurgical Recovery = 92%
- Royalties = 2.5%
- Gold Price = AUD$3,200/oz

In addition to applying a cut-off grade of 1.5 g/t Au, the MRE has been reported within an underground Stope Optimiser (SO) evaluation from the undiluted resource model. SO input parameters include a minimum mining width of 1.5m, minimum stope length of 5m and minimum stope height of 5m.

12. Assessment of Reasonable Prospects for Eventual Economic Extraction

The K2 Underground Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by underground mining methods. The MRE has been constrained within an underground Stope Optimiser (SO) evaluation from the depleted resource model.

SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 1.5m, minimum stope length of 5m and minimum stope height of 5m. The orientation of SO's is variable depending on the geometry of the mineralisation.

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.

MINERAL RESOURCE ESTIMATE (PLUTONIC EAST)

1. Drilling Techniques

Over its 33-year production history, the Plutonic deposit has been sampled using numerous drilling and sampling techniques by Catalyst Metals Limited and previous operators. Drilling and sampling techniques by previous operators is assumed to be to industry standard at that time.

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)
- Superior Gold (2016 to 2023)
- Northern Star (2014 to 2016)
- Barrick Gold (2001 to 2014)
- Homestake (1999 to 2001)
- Resolute (1994 to 1999)
- Battle Mountain Australia Inc. (Pre 1994)
- Inco (1969-1971 and 1972-1976)

For Mineral Resource estimation, the Plutonic East area has been based on diamond drilling (DD) from surface and underground platforms, reverse circulation (RC)and underground rock chip face samples (FS).

Diamond core diameters include BQ (36.4 mm), BTW (42 mm), LTK60 (43.9 mm), NQ (47.6 mm), NQ2 (50.7 mm). RC holes were drilled with face hammers and were sampled at one metre down hole intervals. Face chip samples are completed by the mine geologists. The sampling is taken by chipping the face into calico bags with definition by lithological boundaries.

Underground hole collar locations are picked up regularly by site surveyors. Multi-shot cameras are used for down-hole survey. Face chip samples are spatially positioned within underground development voids which are picked up regularly by site surveyors.

2. Historical Drilling

1969-1976 – International Nickel Company (Inco) conducted nickel exploration using geochemistry, geophysics, costeaning, RAB and RC drilling.

1987 – Great Central Mines (GCM) identified an arsenic and gold anomaly by geochemical sampling in the Plutonic tenements.

1987-1993 – Battle Mountain Australia (BMA) undertook regional mapping, Bulk Leach Extractable Gold (BLEG) soil sampling, and RAB drilling. The Triple P, Pelican, Albatross and Flamingo deposits were discovered in 1992. Further RAB, AC, RC and DD programs were conducted to define these deposits.

1988-1994 - Resolute Resources Ltd (75%) and Titan Resources NL (25%) commenced exploration on the Marymia tenements. Gold mineralisation was discovered in the Keillor Shear Zone following regional exploration soil, stream sediment and rock chip sampling and geological mapping. Several phases of follow-up RAB, AC, RC and DD drilling was carried out. K1 deposit was discovered in 1989. Prospect scale geophysical surveys including magnetics and gradient array IP were undertaken between 1989 and 1994.

1990 – GCM carried follow up grid-based mapping, soil and lag geochemical surveys which led to the discovery of the Plutonic deposit.

1990 – GCM discovered satellite deposits at Area4 and Channel. Both were mined by open pit between 1999 and 2001.

1990-1995 – Plutonic Resources exploration division carried out exploration on the Freshwater tenements and discovered a total of 1 underground and 30 surface prospects. Follow up resource definition drilling resulted in conversion of these prospects to 10 open pits and one underground mine, including Area 4 open pit, Plutonic East underground deposit, Salmon, Trout and Perch.

1999-2004 - Homestake Gold of Australia undertook a detailed aeromagnetic and radiometric survey over the entire lease area. Additional IP and moving loop geophysical surveys were undertaken between 2000 and 2004 across several prospects. The largest of which was across the K1-K2 project area in 2004.

2004 - the Plutonic Development department undertook a large soil sampling programme over the northwestern end of the Marymia tenements, in conjunction with the IP survey. These surveys identified a number of targets that were followed up with some additional surface geochemical sampling.

2001-2007 - exploration and resource definition drilling by RAB, RC and diamond core drilling was undertaken by the Plutonic Development department across numerous prospects outside of the Plutonic Mine area. Many of these drilled prospects were proven up to become small satellite open pit mines such as Triple P B-Zone, Albatross, Flamingo, Kookaburra, Ibis, Piranha, to name a few.

2009-2012 - RC and diamond core drilling concentrated on extensions to the known Plutonic deposit. Outside of this area two 2D seismic lines were shot in conjunction with Curtin University and diamond core drill was undertaken at Plutonic West and Cod prospects.

3. Sampling and Sub-Sampling Techniques

Exploration DD core is sawn in half along the orientation lines, with half the sample being submitted for assay and the remaining half being retained for reference. Grade control DD core is whole core sampled and sent for analysis. DD core samples were taken at 1 m intervals or at geological boundaries.

RC samples were collected for each metre drilled and passed through a cyclone and riffle splitter to produce a two kg to four kg assay into calico bags.

Rock chip FS are completed by the mine geologists. The sampling is taken by chipping the face into calico bags with definition by lithological boundaries. FS samples are taken perpendicular to the lode orientation in the face. The face sample locations are marked up and measured from fixed survey points.

DD recovery is not noted specifically, though the core is jig sawed back together, and meter marked carefully. Discrepancies to core blocks are brought up with the drill contractor. Occasionally core loss blocks are inserted. Overall drill core recovery is very high due to the competent nature of the ground.

Rock chip FS recoveries are not relevant in this instance.

4. Historical Sampling

The Plutonic Gold Mine has been in operation since 1990 following discovery in 1988. QAQC procedures have changed throughout that period. The current underground Mineral Resources have been identified over a long period of time with a number of companies. All high confidence Mineral Resources are based dominantly on underground DD and FS completed in the last 14 years. Drilling and sampling techniques by previous operators is assumed to be to industry standard at that time.

5. Sample Analysis Method

In recent years, for DD and FS, gold concentration is determined by fire assay using the lead collection technique with a 40gm sample charge weight. An AAS (Plutonic site laboratory) or ICP (ALS and Bureau

Veritas) finish. A Pulverising and Leach (PAL) method was introduced to the Plutonic site laboratory in 2005. Underground GC samples are initially assayed by PAL and where the result is greater than 0.5 g/t Au the sample is re-analysed by 40gm fire assay and the fire assay result is retained for grade estimation purposes. It has been shown that the use of PAL assays is likely to have negligible influence on the Mineral Resource.

Sample preparation procedures for DD and FS includes:

- 1-4 hours drying at 150°C depending on moisture content;
- Crush 85% < 3mm – Essa jaw crusher or rotary Boyd crusher;
- Riffle split 50:50 to<1kg;
- Pulverise ~700-750g to 90% passing 75µm in Labtechnics LM2;
- Scoop 250-300g.
- Scoop to subset to 40gm for fire assay.

Quality control procedures for DD and FS includes:

- FS – blanks added to each face sample with ore zones;
- DD –barren wash and blanks added after each ore interval;
- Crusher duplicates taken at 1:40;
- Pulp duplicates taken at 1:40.

Sample preparation protocols and sample sizes are considered appropriate for the style of mineralisation encountered and should provide representative results.

Certified Reference Material (CRM's) are submitted every 20 samples for DD and once per shift for FS (approx. 1 in 15 samples). CRM's are of similar grade tenor to those expected in the sampling. The CRM insertion rate ensures that there are at least two CRM's per assay batch. CRM's are selected based on their grade range and mineralogical properties with an emphasis on sulphide ores.

Blanks are inserted every 20 samples for DD and for FS they are inserted after any face that contains mineralisation.

The Plutonic Gold Mine has been in operation since 1990 following discovery in 1988. QAQC procedures have changed throughout that period. The current underground Mineral Resources have been identified over a long period of time with a number of companies. All high confidence Mineral Resources are based dominantly on underground DD and FS completed in the last 14 years.

A comprehensive review of the QAQC results was undertaken for both the 2022 and 2023 MRE updates of the Plutonic Underground by Superior Gold and Cube Consulting respectively.

Conclusions from the 2022 MRE Qualified Person include:

- Overall performance of the Plutonic site and external laboratory (ALS) are adequate for estimating and reporting Mineral Resources for the Plutonic underground operations despite some minor shortcomings in the site laboratory;
- The accuracy of the laboratories is within 3% error;
- The variance of the laboratories (precision) based on CRM's is acceptable for underground production purposes;
- Both ALS and Plutonic laboratories performed well on precision and accuracy with ALS lab slightly better precision;
- Coarse duplicates revealed relative errors at 20% for samples with Au >7 g/t and 30% relative errors for samples with Au between 3 and 7 g/t;

- 50% of the errors of the coarse duplicates may have been caused by a coarse gold nugget effect. The remaining errors were likely caused by contamination, other laboratory procedure breaches and human error.

Conclusions from the 2023 MRE Competent Person include:

- Results indicate that the QAQC performance is sufficient for using the data for an underground Mineral Resource Estimate;
- Element of risk in using PAL due to incomplete digestion;
- Site laboratory performance (the majority of the samples) is poorer than off-site commercial laboratories (ALS and Bureau Veritas) due to contamination and percentage of CRM failure;
- Site laboratory shows poorer performance at low levels of Au (0.4 - 0.8 g/t), but effect on underground Mineral Resources likely to be minimal;
- Precision of CRMs for site laboratory poorer than manufacturer.

No review of the QAQC results at Plutonic East were undertaken by CYL during this MRE.

6. Geology and Geological Interpretation

The Plutonic gold deposit is located within 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 Capricorn Orogen is situated between the Pilbara and Yilgarn cratons and is interpreted to be the result of the oblique collision of these two Archaean cratons in the early Proterozoic.

Gold mineralisation occurs in a large number of deposits and prospects in the Belt, with the main deposit at the Plutonic Gold Mine. Mineralisation regularly occurs as shallowly dipping, layer parallel lodes, although steep lodes and minor quartz-vein-hosted deposits also occur. Regionally within the greenstone belt, mineralised host rocks vary from amphibolites to ultramafics and banded iron formation (BIF). Lateritic and supergene enrichment are common throughout the Belt and has been mined locally. Biotite, arsenopyrite, and lesser pyrite/pyrrhotite are common minerals generally accepted to be associated with gold mineralisation.

Mineralisation at Plutonic East is characterised by a series of steep to flat-lying, stacked replacement-style lodes, individually up to five metres wide that are hosted within ductile shear zones oriented slightly oblique to stratigraphy. Lodes are preferentially restricted within the top half of the Mine Mafic, which is a sequence of upper-greenschist to lower amphibolite grade basaltic flows of variable thickness sandwiched between the hanging wall and footwall ultramafic units. Lodes are characterised by intense banding, defined by crude mineral segregation and mineral alignment. Gold where visible, is commonly associated with grey quartz veins and fine-grained arsenopyrite and pyrrhotite.

The main style of gold mineralisation (Plutonic brown-lode) typically occurs as thin (~1 – 3 m wide) lodes that consist predominantly of quartz-biotite-amphibole-titanite-epidote-carbonate-tourmaline-arsenopyrite-pyrrhotite ± chalcopyrite ± scheelite ± gold. Visible gold is considered to have occurred at a late-stage during the evolution of the deposit as it is largely undeformed and overprints most, if not all, of the minerals and fabrics. It is typically associated with thin, discontinuous quartz-calc-silicate veins within the brown-lodes. Where these gold-bearing zones are well developed, they tend to be near-parallel to the stratigraphy as marked by the rare metasedimentary horizons and to the dominant foliation, which is also typically parallel to metasediment horizons. Geochemistry suggests that these lodes developed on the boundary between mafic units or are focused along or adjacent to minor metasedimentary units within the Mine Mafic unit. Lodes may be rich in arsenopyrite or pyrrhotite, and while arsenopyrite is a good indicator of mineralisation, it may not be present in all mineralisation.

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.

Four lithological units containing the bulk of Plutonic East mineralisation were interpretated:

Overthrust Mafic – OTM
Upper Ultramafic – UM1
Mine Mafic – MMA
Lower Ultramafic – UM2

These four lithological units form the basis of the primary estimation domains. Interpretations of the lithological units were undertaken in Leapfrog software using all available data.

7. Estimation Methodology

Gold mineralisation at Plutonic East exhibits very similar style and spatial behaviour to that observed at the Plutonic mine located approximately 4km to the west. Indeed, the bulk of Plutonic East mineralisation is hosted in the same Mine Mafic (MMA) unit that hosts almost the entire Plutonic deposit.

Approximately 94% of economic gold mineralisation at Plutonic East is hosted within the Mine Mafic Unit (MMA). Plutonic East mineralisation is characterised by a significant population of high to extreme gold grades that demonstrate very poor spatial continuity (only a few meters at best). Raw Coefficients of Variation (CoV) are typically in the order of 8-27, indicating extreme statistical variability.

The estimation approach adopted for Plutonic East was identical to that used for the November 2023 Plutonic MRE. Four primary domains were separately estimated for Plutonic East:

Mine Mafic Unit (MMA-1000)
Upper Ultramafic Unit (UM1 – 2000)
Lower Ultramafic Unit (UM2 – 3000)
Overthrust Mafic Unit (OTM – 4000)

Given the similarities to the nearby Plutonic mine, most of the estimation parameters were applied as the average of parameters used for the November 2023 Plutonic MRE.

The estimation method developed for the MRE combines Categorical Indicator Kriging (CIK) to define broad estimation 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 closely spaced set of structural surfaces are developed in LeapFrog reflecting the primary controls on mineralisation within the primary lithological units. 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 grade interpolation. Dynamic estimation is applied for estimating the CIK indicators and gold grades.

All DD and FS data are composited to 1m downhole and data within dolerite dykes or vein zones are removed. Composited data was split into the eight mine areas.

Two Categorical Indicator values are determined for each mine area:

- A low-grade (LG) indicator to differentiate between background 'waste' and low-tenor mineralisation – 0.5 g/t Au.
- A high-grade (HG) indicator to define broad areas of higher-tenor mineralisation – 1.4 g/t Au.

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 and demonstrated well-structured continuity up to 30m. 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 for 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.

Standardised assay top-cuts are applied to the composite files for each domain area as follows:

CIK Sub-Domain	MMA (1000) Au g/t	UM1 (2000) Au g/t	UM2 (3000) Au g/t	OTM (4000) Au g/t
HG	300	60	20	200
MG	20	10	5	10
LG	2	2	2	2

The assay top-cuts were generally above the 99th 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.

Given the similar spatial characteristics of mineralisation between Plutonic East and the Plutonic Mine, it was decided to use average grade variogram values modelled for the LG, MG and HG sub-domains for all mine areas from the Plutonic November 2023 MRE.

The HG grade variograms exhibited a very high nugget effect (average 79%) with maximum ranges of only a few meters (average 3.4m). Grade variography undertaken on the HG domain confirms the extremely variable nature of Plutonic and Plutonic East mineralisation. Grade variography on the MG and LG domains resulted in lower nuggets effects and longer ranges.

Grade thresholds for distance limiting were also applied using averages from the Plutonic November 2023 MRE. Grade thresholds and distance limits from the Plutonic November 2023 MRE were optimised following a detailed backward-looking mill reconciliation using mine stope voids for the period January 2023 to August 2023 (550Kt).

The final applied grade distance limits for Plutonic East are follows:

0-8 g/t = No Limit

8-70 g/t = 10m

>70 g/t = 5.5m

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 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 3 and maximum of 12 (1 m composite) samples per block were used. It is possible that up to 36 composites can be used to estimate a parent block where there is a proportion of all three sub-domains present. Block discretisation was set at 3 E x 3 N x 3 RL points (per parent block).

A standardised search ellipse of 25m x 25m x 6.25m was used. Octant restrictions were not used.

Typical data spacing varied from 3m x 3m to >40m x 40m.

The model was validated by comparing statistics of the estimated blocks against the composited sample data; visual examination of the of the block grades versus assay data in section; swath plots; and reconciliation against previous production.

8. Bulk Density

Bulk density is determined from drill core using a weight in air/weight in water method. Currently there is a database of over 3,800 bulk density measurements which have been taken from mineralised and unmineralised intervals, with an ongoing sampling program in place.

Samples of between 0.5 and 2.0kg are weighed in air and weighed in water. The following equation is used to derive bulk density Bulk Density = Wd / $(Wd - Ww)$.

Bulk density was directly assigned by oxidation type and rock type:

- Fresh MMA and Ultramafic = 2.9 t/m^3
- Transitional MMA and Ultramafic = 2.2 t/m^3
- Oxide MMA and Ultramafic = 1.8 t/m^3
- Pit Backfill and Surface Dumps = 1.8 t/m^3

Mining depletion to July 31st 2024 was applied to the model. Mining depletion is represented (at a 1.25m subcell size) through both a depletion inside all surveyed cavities and a reset to background of estimated grades within in a 2.5m skin around all historic stopes. Additionally, density has been modified for portions of any subcell that contacts a surveyed void by way of void proportion attribute.

9. Classification Criteria

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

The supplied drilling database represents an appropriate record of the drilling and sampling undertaken at the project. In general drilling, surveying, sampling, analytical methods and controls are considered appropriate for the style of mineralisation under consideration.

The continuity and volume of the mineralised domains has been established by surface and underground diamond drilling, together with extensive underground development and production history.

The estimation method and the associated search and interpolation parameters used are considered appropriate for estimation of the Mineral Resources and have been calibrated to recent production reconciliation.

The Competent Person has considered all the relevant criteria and has classified the estimated Mineral Resources as Indicated and Inferred Mineral Resource.

Due to the high degree of grade variability and short-scale continuity of mineralisation, the portions of the MRE classified as Indicated are typically based on data spacing (DD and FS) less than or equal to 15m x 15 m and located within close proximity to underground development. This drill spacing is appropriate for defining the continuity and volume of the mineralised domains and estimating robust global Mineral Resources.

The portions of the MRE classified as Inferred typically represent peripheral areas of the deposit where geological continuity is present but not consistently confirmed by 15 m x 15 m drilling or closer.

Further considerations of resource classification include; data type and quality, geological understanding, amount of historical development and stoping, and historical and recent production reconciliation performance.

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 classification appropriately reflects the view of the Competent Person.

10. Cut-off Grade

The Plutonic East Underground Mineral Resources is reported at a cut-off grade of 1.5 g/t Au. The cut-off grade has been derived from current mining and processing costs and metallurgical parameters. Inputs into the cut-off grade calculation include:

- Average Mining Cost = AUD$85.20/t
- Processing and Other Costs = AUD$40/t ore
- Metallurgical Recovery = 86%
- Royalties = 2.5%
- Gold Price = AUD$3,200/oz

In addition to applying a cut-off grade of 1.5 g/t Au, the Mineral Resource has been reported within an underground Stope Optimiser (SO) evaluation from the undiluted and depleted resource model. SO input parameters include a minimum mining width of 2.5m, minimum stope length of 5m, minimum stope height of 5m.

11. Assessment of Reasonable Prospects for Eventual Economic Extraction

The Plutonic East Underground Mineral Resource (MRE) has been undertaken with a focus on delineating areas of the MRE with Reasonable Prospects for Eventual Economic Extraction (RPEEE) by underground mining methods. The MRE has been constrained within an underground Shape Optimiser (SO) evaluation from the depleted resource model.

SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 2.5m, minimum stope length of 5m and minimum stope height of 5m. The orientation of SO's is variable depending on the geometry of the mineralisation 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.

12. Mining and Depletion

Mining depletion to July 31, 2024, was applied to the model.

Mining depletion is represented (at a 1.25m subcell size) through both a depletion inside all surveyed cavities and a reset to background of estimated grades within in a 2.5m skin around all historic stopes.

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

Investors and Media:

Craig Dingley
Catalyst Metals
T: +61 (8) 6324 0900
investors@catalystmetals.com.au

Fiona Marshall
White Noise Communications
T: +61 400 512 009
fiona@whitenoisecomms.com

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 Plutonic East underground deposit and the K2 deposit 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.

Section 1 Sampling Techniques and Data
K2 Underground Deposit
(Criteria in this section apply to all succeeding sections.)

Criteria	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 ultramafics. 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 HQ 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 HQ Diamond drill-core, minor BQ diamond drill-core from underground K2. • 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.
	    o logged on 1 m intervals for geotechnical data.
	    o 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:
	    o 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.
	    o 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 2 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 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 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 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 to geological structure	• 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. • 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
K2 Deposit
(Criteria listed in the 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 • K2 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 100% owned by Vango Mining Limited and subsidiary Dampier (Plutonic) Pty Ltd, who are being acquired by Catalyst Metals 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.

Criteria	Commentary
Geology	• The K2 deposit 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 K2 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 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. • 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 report. This section is not relevant to this report on Mineral Resource and ore Reserves.
Balanced reporting	• 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.
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 K2.

Section 3 Estimation and Reporting of Mineral Resources
K2 Underground Deposit
(Criteria listed in section 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 identified no major drill hole data issues that would materially affect the MRE outcomes. • Database checks included the following: o Checking for duplicate drill hole names and duplicate coordinates in the collar table. o Checking for missing drill holes in the collar, survey, assay and geology tables based on drill hole names. o 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 22,961 Collar records, 56,668 Survey records, and 243,715 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 mafic-ultramafic and sedimentary package which has been metamorphosed to lower amphibolite facies and intensely deformed. Foliation and bedding are generally steeply dipping. • A total of 146492.7 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). • 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 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 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 – 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 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.
	<u>Categorical Indicator Kriging Workflow</u>
	• 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 1.25m 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 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	• K2 underground Mineral Resources are reported at a cut-off grade of 1.5 g/t Au. The cut-off grade has been derived from current mining and processing costs and metallurgical parameters.
	• Inputs into the cut-off grade calculation include:
	  • Average Mining Cost = AUD$86.93/t
	  • Processing and Other Costs = AUD$55/t ore
	  • Metallurgical Recovery = 92%
	  • Royalties = 2.5%
	  • Gold Price = AUD$3,200/oz

Mining factors or assumptions	• The K2 underground Mineral Resource estimate is reported within an underground Shape Optimiser (SO) evaluation from the undiluted and depleted resource model. SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 1.5m, minimum stope length of 5m, minimum stope height of 5m and a gold price of AUD$3,200/oz. • The orientation of SO's is variable depending on the geometry of the mineralisation.

Criteria	Commentary
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 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.
	  ◦ 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.

Section 1 Sampling Techniques and Data
Plutonic East Deposit
(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	• The Plutonic deposit has been sampled using numerous drilling and sampling techniques by Billabong Gold Pty Ltd (Billabong - 100% owned Catalyst Metals Limited) and previous operators. Drilling and sampling techniques by previous operators is assumed to be to industry standard at that time. • The drilling database underpinning the Mineral Resource Estimation (MRE) for Plutonic East is based on diamond drilling (DD) from surface and underground platforms, underground rock chip face samples (FS) and Reverse Circulation (RC) drilling. • For DD samples, downhole depth is recorded by the drillers on core blocks after every run. This is checked and compared to the measurements of the core by a geologist to honour geological boundaries (lithology, mineral assemblage, alteration etc). Sample lengths typically vary between 0.3m and 1.0m. • DD core is orientated using a Reflex ACT device and detailed structural measurements and logging is carried out. Exploration DD core is sawn in half along the orientation lines, with half the sample being submitted for assay and the remaining half being retained for reference. Grade control DD core is whole core sampled and sent for analysis. • RC samples were collected for each metre drilled and passed through a cyclone and riffle splitter to produce a two kg to four kg assay into calico bags. • FS samples are completed by the mine geologists. The sampling is taken by chipping the face into calico bags with definition by lithological boundaries. FS samples are taken perpendicular to the lode orientation in the face. The face sample locations are marked up and measured from fixed survey points.
Drilling techniques	• Diamond core diameters include BQ (36.4 mm), BTW (42 mm), LTK60 (43.9 mm), NQ (47.6 mm), NQ2 (50.7 mm). • RC holes were drilled with face hammers and were sampled at one metre down hole intervals.
Drill sample recovery	• DD recovery is not noted specifically, though core is though the core is jig sawed back together and meter marked carefully. Discrepancies to core blocks are brought up with the drill contractor. Occasionally core loss blocks are inserted. Overall drill core recovery is very good. • Billabong diamond drilling practice results in high core recovery due to the competent nature of the ground. • Chip sample recoveries are not relevant in this instance. • RC and DD by previous operators is assumed to be to industry standard at that time. • There is no known relationship between sample recovery and grade; diamond drill sample recovery is very high.
Logging	• DD core, RC samples and FS chip samples have been logged by qualified geologists to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Logging and face mapping is qualitative and quantitative. Visual estimates of sulphide (percentage) and alteration (intensity scale) are recorded. Core Logging and face mapping notes lithology, alteration, mineralisation and structures. Structural readings are taken at relevant structures and where the foliation is relatively consistent. • All DD core is digitally photographed and logged. Faces are mapped and sampled when access permits.
Sub-sampling techniques and sample preparation	• If the DD core was BQ, LTK48 or BTW it was sampled as full core and dispatched to the laboratory for analysis. Most LTK60 and NQ2 DD core is cut in half with an Almonté diamond core saw; the top half of the core was sent to the laboratory for analysis and the other half was placed back in the core tray, transferred onto pallets, and moved to the core yard library. All GC drilling, regardless of core size, is whole core sampled. • RC samples were collected for each metre drilled and passed through a cyclone and riffle splitter to produce a two kg to four kg assay into calico bags. Depending on the oxidation state of the rock, the sample weight varied between three and five kilograms. A duplicate sample was also collected and retained in a temporary sample storage facility for further check sampling. The RC drilling and sampling were supervised at the drill site by a company sampler and geologist. The riffle splitter was cleaned using compressed air after every sample and the cyclone was cleaned every 40 m, or more regularly at the geologists' discretion. Wet or damp RC samples were allowed to dry before riffle splitting.

Criteria	Commentary
	• FS chip samples are taken by chipping the face into calico bags with definition by lithological boundaries. • Sample preparation procedures for DD and FS includes: o 1-4 hours drying at 150°C depending on moisture content; o Crush 85% < 3mm – Essa jaw crusher or rotary Boyd crusher; o Riffle split 50:50 to<1kg; o Pulverise ~700-750g to 90% passing 75µm in Labtechnics LM2; o Scoop 250-300g; o Scoop to subset to 40gm for fire assay. • Quality control procedures for DD and FS includes: o FS – blanks added to each face sample with ore zones; o DD –barren wash and blanks added after each ore interval; o Crusher duplicates taken at 1:40; o Pulp duplicates taken at 1:40. • Sample preparation protocols and sample sizes are considered appropriate for the style of mineralisation encountered and should provide representative results.
Quality of assay data and laboratory tests	• The Plutonic Gold Mine has been in operation since 1990 following discovery in 1988. QAQC procedures have changed throughout that period. The current underground Mineral Resources have been identified over a long period of time with a number of companies. All high confidence Mineral Resources are based dominantly on underground DD and FS completed in the last 14 years. • In recent years, for DD, and FS, gold concentration is determined by fire assay using the lead collection technique with a 40gm sample charge weight. An AAS (Plutonic lab) or ICP (ALS and Bureau Veritas) finish. • A Pulverising and Leach (PAL) method was introduced to the Plutonic site laboratory in 2005. Underground GC samples are initially assayed by PAL and where the result is greater than 0.5 g/t Au the sample is re-analysed by 40gm fire assay and the fire assay result is retained for grade estimation purposes. It has been shown that the use of PAL assays is likely to have negligible influence on the MRE. • Although PAL is not considered to be a total gold analysis, the larger sample size still produces a representative result. Fire assay gold analysis is considered to be total gold. • Samples are dried, crushed and pulverised prior to analysis. • Certified Reference Material (CRM's) are submitted every 20 samples for DD and once per shift for FS (approx. 1 in 15 samples). CRM's are of similar grade tenor to those expected in the sampling. The CRM insertion rate ensures that there are at least two CRM's per assay batch. CRM's are selected based on their grade range and mineralogical properties with an emphasis on sulphide ores. • Blanks are inserted every 20 samples for DD and for FS they are inserted after any face that contains mineralisation. • Grind checks or sizing was carried out on a frequency of 1 in 40 on both pulp residues and crush residues prior to January 2020. Since January 2020, crush sizing analysis is conducted randomly. The data is collected throughout the shift with results calculated at the end of shift. Pulp residues are expected to have 90% passing ≤75µm. The crush residue is expected to have 80% passing ≤3 mm. This data is monitored by the Laboratory Supervisor. Grind times can be lengthened accordingly. • Field, crush and pulp duplicates, occur at a frequency of 2.5%. • Current procedures dictate a process of validation and checking of laboratory results when data is returned by the laboratory as it is loaded into the acQuire database. A standard set of plots and checks are undertaken, and if results fall outside of the expected limits, then re-assaying is requested. Monthly QAQC reports are generated by the database administrator and documented from automated routines out of the database. • A comprehensive review of the QAQC results was undertaken for both the 2022 and 2023 MRE updates of the Plutonic Underground by Superior Gold and Cube Consulting respectively. • Conclusions from the 2022 review include: o Overall performance of the Plutonic site and external laboratory (ALS) are adequate for estimating and reporting Mineral Resources for the Plutonic underground operations despite some minor shortcomings in the site laboratory; o The accuracy of the laboratories is within 3% error; o The variance of the laboratories (precision) based on CRM's is acceptable for underground production purposes;

Criteria	Commentary
	○ Both ALS and Plutonic laboratories performed well on precision and accuracy with ALS lab slightly better precision; ○ Coarse duplicates revealed relative errors at 20% for samples with Au >7 g/t and 30% relative errors for samples with Au between 3 and 7 g/t; ○ 50% of the errors of the coarse duplicates may have been caused by a coarse gold nugget effect. The remaining errors were likely caused by contamination, other laboratory procedure breaches and human error. At the Plutonic Laboratory there was: ○ some low-level contamination at crushing stage; ○ some minor procedural non-compliance at crushing, pulverising, and instrument assaying stage; ○ periodic increased assaying uncertainty may be caused by possible human errors; ○ the extent of the laboratory contamination is unknown given the random nature of the blank insertion; ○ upper limit for blanks of 0.2 g/t is too high to effectively detect contamination. At ALS Laboratory there was: ○ there was insignificant contamination at the lab during the period; ○ the laboratory has performed consistently well; ○ laboratory precision test on CRM's indicated a better performance than CRM manufacturer. • Conclusions from the 2023 MRE Competent Person include: ○ Results indicate that the QAQC performance is sufficient for using the data for an underground Mineral Resource Estimate; ○ Element of risk in using PAL due to incomplete digestion; ○ Site laboratory performance (the majority of the samples) is poorer than off-site labs (ALS and Bureau Veritas) – contamination and percentage of CRM failure; ○ Site laboratory shows poorer performance at low levels of Au (0.4 - 0.8 g/t), but effect on underground Mineral Resources likely to be minimal; ○ Precision of CRMs for site laboratory poorer than manufacturer. • No review of the QAQC results at Plutonic East were undertaken by CYL during this MRE.
Verification of sampling and assaying	• DD, RC and face logging is completed electronically on laptops. Database protocols and rules are applied upon data entry. • Visual validation and check logging of face and drill data. • Drill and face sample data is stored in an AcQuire database. All maintained full-time Database Administrator. • All face and drill data within site databases are regularly validated using both internal database systems and external validation tools. • Validation of pre-Billabong data is completed periodically. • There is no requirement for twinned holes in a production setting. • Conversion of lab non-numeric codes to numeric for estimation.
Location of data points	• UG hole collar locations are picked up regularly by site surveyors. • Multi shot cameras are used for down-hole survey. • Development faces are spatially located using MineMapper and Vulcan 3D software. • Underground development voids are picked up regularly by site surveyors. Stopes voids are generally all surveyed by CMS (where practical and safe to do so).
Data spacing and distribution	• Plutonic East underground Mineral Resources are primarily based on DD, RC and FS data. • Given the high degree of grade variability and spatial complexity at Plutonic East (extremely high nugget effect and minimal short-scale spatial continuity), it is difficult to generate local scale grade estimates that would adequately satisfy a Measured Resource classification. For this reason, no Measured material has been included in the June 2024 MRE. Indicated Resources can be reasonably well-defined with DD spacing up to 20m × 20m. Average data spacing for Indicated resources for the MRE is within 10m x 10m. Inferred resources are assigned to areas where DD spacing is generally greater than 20m × 20m. • Grade control DD spacing typically required for stope definition is between 8m × 8m to 10m ×10m. Close spaced FS are also used for stope definition. • The data spacing and distribution is sufficient to establish geological and/or grade continuity appropriate for the Mineral Resource and classifications to be applied, with known likelihood of local variability.

Criteria	Commentary
	• The drill core is logged and divided into sample intervals that have a minimum sample length of 0.3m and a maximum sample length of 1.0m. Intervals should honour geological boundaries such as faults and lithological contacts. Most nominal sample lengths were at 1m intervals; sample compositing is not applied until the estimation stage. • Compositing of the data to 1m was used in the estimate. • No recent RC drilling has been undertaken
Orientation of data in relation to geological structure	• Drilling is orientated as close to perpendicular to mineralisation where possible. However, orientation to lode may be compromised by access to suitable drill platforms. Drillholes are extended to Mine Mafic boundary where required and practicable. • Face sampling is orientated perpendicular to lode orientation. • The variable drill orientation relative to mineralisation is not thought to make a material difference in the resource estimation.
Sample security	• All cut drill core is kept in an unfenced core farm adjacent to the core cutting and processing shed. This is not regarded as a security risk due to the remote location of the mine with no community development near the mine. All core is photographed and records kept electronically. • Geologists are responsible for marking the sample intervals and placement of Blanks and Standards within the sampling stream for both faces and core. The Project Geologist and Senior Geologist complete quality control checks on the face data daily. • Field Staff are primarily responsible for the collection of samples from the face as chips, as well as the cutting and sampling of core. Also generating the sample numbers for core submission, creating a sample submission sheet for core and faces, randomly selecting and recording the standards to be sent to the laboratory and the transportation of the samples to the laboratory. • Once a hole has been sampled, the sample calculation and check geology documents are handed to the Database Administrator (DBA) who converts the digital copy of the sample calculation to a .csv file which is then imported into the AcQuire database. • Upon receiving the digital file for the assay data, the DBAs import the file into the master AcQuire database. This data is not accessible for assessment until it has been validated as complete and correct by the QAQC Geologist and DBA. Face data is received in the same format and is entered into the AcQuire database. • Pulp rejects from assayed samples are kept in wooden boxes on top of the waste dump. These are visited frequently as samples are taken for research and other purposes. • Drill logs are kept in hard copy and electronically and are available for checking and due-diligence.
Audits or reviews	• A review by Jacqui Coombes (Coombes, 2009) concluded that it was reasonable to combine the drillhole and face sampling data for the Plutonic deposit – report sighted. • A previous review by Roscoe Postle and Associates (RPA) in 2012 concluded that the data verification systems were adequate for Mineral Resource estimation. • Previous estimation process review by Optiro (2015) identified that reduced manning levels were having an impact on the quantity and quality of the data being generated in 2015, however, overall, the data collection systems which support the Mineral Resource estimation process were found to be best practice – report unsighted. • In 2022, SnowdenOptiro completed a technical review of the 2022 Plutonic Underground Mineral Resource Estimate prior to a public release. This report indicated some concerns about smearing of high grades into low grade areas, the assignment of Measured and Indicated resources in areas of low data density and the lack of a reconciliation analysis against the estimate. • No external audits or reviews have been undertaken on the June 2024 Mineral Resource Estimate.

Section 2 Reporting of Exploration Results
Plutonic East Deposit
(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	• The Plutonic Gold Mine group includes 30 granted exploration and mining tenements (24 mining leases, 2 exploration licences, and 4 prospecting licences) (as such term is defined in the (Western Australian) Mining Act 1978 (the "Mining Act")) • All rents to Department of Mines, Industry Regulation and Safety ("DMIRS") have been paid and made within one month after the anniversary commencement date of the tenement as allowed under the Mining Act. • All tenement Shire rates have either been paid or will be paid within the required timeframes. • All compliance reporting including Form 5 Reports, have been lodged within the timeframes allowed under the Mining Act 1978 as amended. • All Geological Reports have been lodged. • There are no other unexpected encumbrances registered or recorded against the tenements. • There are no Forfeiture proceedings against any tenements.
Exploration done by other parties	• 1969-1976 – International Nickel Company (Inco) conducted nickel exploration using geochemistry, geophysics, costeaning, RAB and RC drilling. • 1987 – Great Central Mines (GCM) identified an arsenic and gold anomaly by geochemical sampling in the Plutonic tenements. • 1987-1993 – Battle Mountain Australia (BMA) undertook regional mapping, Bulk Leach Extractable Gold (BLEG) soil sampling, and RAB drilling. The Triple P, Pelican, Albatross and Flamingo deposits were discovered in 1992. Further RAB, AC, RC and DD programs were conducted to define these deposits. • 1988-1994 - Resolute Resources Ltd (75%) and Titan Resources NL (25%) commenced exploration on the Marymia tenements. Gold mineralisation was discovered in the Keillor Shear Zone following regional exploration soil, stream sediment and rock chip sampling and geological mapping. Several phases of follow-up RAB, AC, RC and DD drilling was carried out. K1 deposit was discovered in 1989. Prospect scale geophysical surveys including magnetics and gradient array IP were undertaken between 1989 and 1994. • 1990 – GCM carried follow up grid-based mapping, soil and lag geochemical surveys which led to the discovery of the Plutonic deposit. • 1990 – GCM discovered satellite deposits at Area4 and Channel. Both were mined by open pit between 1999 and 2001. • 1990-1995 – Plutonic Resources exploration division carried out exploration on the Freshwater tenements and discovered a total of 1 underground and 30 surface prospects. Follow up resource definition drilling resulted in conversion of these prospects to 10 open pits and one underground mine, including Area 4 open pit, Plutonic East underground deposit, Salmon, Trout and Perch. • 1999-2004 - Homestake Gold of Australia undertook a detailed aeromagnetic and radiometric survey over the entire lease area. Additional IP and moving loop geophysical surveys were undertaken between 2000 and 2004 across several prospects. The largest of which was across the K1-K2 project area in 2004. • 2004 - the Plutonic Development department undertook a large soil sampling programme over the northwestern end of the Marymia tenements, in conjunction with the IP survey. These surveys identified a number of targets that were followed up with some additional surface geochemical sampling. • 2001-2007 - exploration and resource definition drilling by RAB, RC and diamond core drilling was undertaken by the Plutonic Development department across numerous prospects outside of the Plutonic Mine area. Many of these drilled prospects were proven up to become small satellite open pit mines such as Triple P B-Zone, Albatross, Flamingo, Kookaburra, Ibis, Piranha, to name a few. 2009-2012 - RC and diamond core drilling concentrated on extensions to the known Plutonic deposit. Outside of this area two 2D seismic lines were shot in conjunction with Curtin University and diamond core drill was undertaken at Plutonic West and Cod prospects.
Geology	• The gold deposits at Plutonic are hosted by an Archaean greenstone sequence and occur mainly as a multiple lode system with variable dip (horizontal to vertical) hosted almost exclusively by a mafic amphibolite sequence that is referred to as the 'Mine Mafic'. • Mineralisation regularly occurs as shallowly dipping, layer parallel lodes, although steep lodes and minor quartz-vein hosted deposits also occur. Mineralisation at Plutonic is characterized by a series

Criteria	Commentary
	of moderately-dipping to very flat-lying, stacked replacement-style lodes, individually up to five metres wide, that are hosted within ductile shear zones, oriented slightly oblique to stratigraphy.
Drill hole Information	• No exploration results are being reported as part of this MRE update.
Data aggregation methods	• No exploration results are being reported as part of this MRE update.
Relationship between mineralisation widths and intercept lengths	• No exploration results are being reported as part of this MRE update.
Diagrams	• No exploration results are being reported as part of this MRE update.
Balanced reporting	• No exploration results are being reported as part of this MRE update.
Other substantive exploration data	• No additional exploration data is included in this release.
Further work	• Grade control and extensional drilling programs are underway, and will continue in line with mine development and production requirements.

Section 3 Estimation and Reporting of Mineral Resources
Plutonic East Deposit
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
Database integrity	• The Plutonic East MRE database is regularly validated by Catalyst staff using data validation modules of Vulcan, Leapfrog and AcQuire software programs to identify any inconsistencies or logical errors in the data. Mine staff also visually check the drill hole data on-screen on a regular basis. • Surface and underground drill hole and face data is validated to produce a digital database free of detected errors. This is undertaken by passing data through embedded macros and queries of the drill hole database software by table (collar, assay, lithology, survey, and grout). • Crosschecks are also undertaken to ensure that each drill hole has data from collar, assays, lithology, survey, and grout files. By undertaking the above procedures, all drill hole and face data is rigorously checked, verified, and corrected where necessary to ensure limited failures. • Surface and underground drill hole and face data is validated to produce a digital database free of detected errors. This is undertaken by passing data through embedded macros and queries of the drill hole database software by table (collar, assay, lithology, survey, and grout). • Crosschecks are also undertaken to ensure that each drill hole has data from collar, assays, lithology, survey, and grout files. By undertaking the above procedures, all drill hole and face data is rigorously checked, verified, and corrected where necessary to ensure limited failures. • The Plutonic East database bounded by an area of >=7000 and <=11,500 East and >=9500 and <=12,500 North available on May 17 2024 comprised 14,140 Collar records, 31,594 Survey records, 429,876 Assay records and 102,549 Lithology records. The compiled database used for resource estimation comprised 12,738 Collar records, 38,970 Survey records, 412,318 Assay records and 95,403 Lithology records.
Site visits	• The Competent Person undertakes frequent site visits to the Plutonic Gold Operation and associated Marymia tenements.
Geological interpretation	• The confidence in the geological interpretation is high with all the information and over 30 years of open pit and underground operation used in the generation of the models. • All available geological data was used in the interpretation, including drilling face sampling and mapping. • The modelling approach takes advantage of many thousands of structural measurements from orientated diamond holes and underground development faces to build structural trend surfaces, and uses these trend surfaces to determine the mineralisation trend in domaining and grade estimation. Mineralisation regularly occurs as shallowly dipping, layer parallel lodes, although steep lodes and minor quartz-vein hosted deposits also occur. Plutonic style mineralisation is characterised by a

Criteria	Commentary
	significant population of high to extreme gold grades that demonstrate very poor spatial continuity (only a few meters at best). These high-grade populations tend to occur in 'clusters' or cohesive zones on a large scale, however, the actual spatial continuity is very poor at a local scale, making it difficult to define robust zones of continuity without introducing significant bias.
Dimensions	• Mineralisation extends over a strike length (East – West) of approximately 1400 m and down-dip up to 600 m. Mineralisation currently extends to a depth of approximately 400 m below surface.

Estimation and modelling techniques	• Gold mineralisation at Plutonic East exhibits very similar style and spatial behaviour to that observed at the Plutonic mine located approximately 4km to the west. Indeed, the bulk of Plutonic East mineralisation is hosted in the same Mine Mafic (MMA) unit that hosts almost the entire Plutonic deposit.
	• Approximately 94% of economic gold mineralisation at Plutonic East is hosted within the Mine Mafic Unit (MMA). Plutonic East mineralisation is characterised by a significant population of high to extreme gold grades that demonstrate very poor spatial continuity (only a few meters at best). Raw Coefficients of Variation (CoV) are typically in the order of 8 to 27, indicating extreme statistical variability.
	• The estimation approach adopted for Plutonic East was identical to that used for the November 2023 Plutonic MRE. Four primary domains were separately estimated for Plutonic East:
	Mine Mafic Unit (MMA-1000)
	Upper Ultramafic Unit (UM1 – 2000)
	Lower Ultramafic Unit (UM2 – 3000)
	Overthrust Mafic Unit (OTM – 4000)
	• Given the similarities to the nearby Plutonic mine, most of the estimation parameters were applied as the average of parameters used for the November 2023 Plutonic MRE.
	• The estimation method developed for the MRE combines Categorical Indicator Kriging (CIK) to define broad estimation 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 closely spaced set of structural surfaces are developed in LeapFrog reflecting the primary controls on mineralisation within the primary lithological units. 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 grade interpolation. Dynamic estimation is applied for estimating the CIK indicators and gold grades.
	• All DD and FS data are composited to 1m downhole and data within dolerite dykes or vein zones are removed. Composited data was split into the eight mine areas.
	• Two Categorical Indicator values are determined for each mine area:
	  • A low-grade (LG) indicator to differentiate between background 'waste' and low-tenor mineralisation – 0.5 g/t Au.
	  • A high-grade (HG) indicator to define broad areas of higher-tenor mineralisation – 1.4 g/t Au.
	• 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 and demonstrated well-structured continuity up to 30m. 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 for 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.
	• Standardised assay top-cuts are applied to the composite files for each domain area as follows:

Criteria	Commentary

CIK Sub-Domain	MMA (1000) Au g/t	UM1 (2000) Au g/t	UM2 (3000) Au g/t	OTM (4000) Au g/t
HG	300	60	20	200
MG	20	10	5	10
LG	2	2	2	2

- The assay top-cuts were generally above the 99th 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.
- Given the similar spatial characteristics of mineralisation between Plutonic East and the Plutonic Mine, it was decided to use average grade variogram values modelled for the LG, MG and HG sub-domains for all mine areas from the Plutonic November 2023 MRE.
- The HG grade variograms exhibited a very high nugget effect (average 79%) with maximum ranges of only a few meters (average 3.4m). Grade variography undertaken on the HG domain confirms the extremely variable nature of Plutonic and Plutonic East mineralisation. Grade variography on the MG and LG domains resulted in lower nuggets effects and longer ranges.
- Grade thresholds for distance limiting were also applied using averages from the Plutonic November 2023 MRE. Grade thresholds and distance limits from the Plutonic November 2023 MRE were optimised following a detailed backward-looking mill reconciliation using mine stope voids for the period January 2023 to August 2023 (550Kt).
- The final applied grade distance limits for Plutonic East are follows:

  0-8 g/t = No Limit

  8-70 g/t = 10m

  >70 g/t = 5.5m
- 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 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 3 and maximum of 12 (1 m composite) samples per block were used. 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 search ellipse of 25m x 25m x 6.25m was used. Octant restrictions were not used.
- Typical data spacing varied from 3m x 3m to >40m x 40m.
- The model was validated by comparing statistics of the estimated blocks against the composited sample data; visual examination of the of the block grades versus assay data in section; swath plots; and reconciliation against previous production.

Moisture

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

Cut-off parameters

- Plutonic East Mineral Resources are reported at a cut-off grade of 1.5 g/t Au. The cut-off grade has been derived from current mining and processing costs and metallurgical parameters.
- Inputs into the cut-off grade calculation include:
  - Average Mining Cost = AUD$85.20/t
  - Processing and Other Costs = AUD$40/t ore
  - Metallurgical Recovery = 86%
  - Royalties = 2.5%

Criteria	Commentary
	• Gold Price = AUD$3,200/oz
Mining factors or assumptions	• The Plutonic East Mineral Resource estimate is reported within an underground Shape Optimiser (SO) evaluation from the undiluted and depleted resource model. SO input parameters include a 1.5 g/t Au cut-off, minimum mining width of 2.5m, minimum stope length of 5m, minimum stope height of 5m and a gold price of AUD$3,200/oz. • The orientation of SO's is variable depending on the geometry of the mineralisation.
Metallurgical factors or assumptions	• It is assumed the material will be processed at the Plutonic Gold Plant. Recovery factors are assigned based on-going experience. • No metallurgical modifying factors or assumptions have been built or applied to the resource model.
Environmental factors or assumptions	• The Plutonic underground operation is a going concern and as such previous practices have proven to be effective and practical. • 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 drainage formation is considered to be low.
Bulk density	• Bulk density is determined from drill core using a weight in air/weight in water method. Currently there is a database of over 3,800 bulk density measurements which have been taken from mineralised and unmineralised intervals, with an ongoing sampling program in place. • Samples of between 0.5 and 2.0kg are weighed in air and weighed in water. The following equation is used to derive bulk density Bulk Density = Wd / (Wd–Ww). • Bulk density was directly assigned by oxidation type and rock type: MMA/Mafic/Ultramafic/Dolerite Fresh = 2.9 t/m^3 Transitional = 2.2 t/m^3 Oxide = 1.8 t/m^3 Pit Backfill and Surface Dumps = 1.8 t/m^3

Classification	• Factors considered when classifying the model include:
	  • Due to the high degree of grade variability and short-scale continuity of mineralisation, the portions of the MRE classified as Indicated are typically based on data spacing (DD and FS) less than or equal to 15m x 15 m and located within close proximity to underground development. This drill spacing is appropriate for defining the continuity and volume of the mineralised domains and estimating robust global Mineral Resources.
	  • The portions of the MRE classified as Inferred typically represent peripheral areas of the deposit where geological continuity is present but not consistently confirmed by 15 m x 15 m drilling or closer.
	  • 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 classification 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. • The estimation method adopted for the June 2024 MRE is believed to be appropriate for dealing with the high-degree of grade variability at Plutonic East. • The estimated uncertainty for an Indicated Mineral Resource is typically +/- 20% over an annual production period. • In most cases it is considered that only development/face sampling in conjunction with <10m x 10m drill spacing is sufficient to attain enough confidence for stoping.