

ASX ANNOUNCEMENT 04 July 2023

Gold Results from "Star of the East" Drilling

HIGHLIGHTS

- Gold assays received for phase 2 reverse circulation drilling at Star of the East
- Phase 2 drilling assays include:
 - 5m @ 2.45 g/t Au in hole SRC017 from 9m downhole including 3m @ 3.16 g/t Au from 10m downhole
 - o 3m @ 3.24 g/t Au in hole SRC009 from 52m downhole
 - o 3m @ 2.68 g/t Au in hole SRC010 from 34m downhole
- Drilling was designed to extend known mineralisation at the Prospect
- Review of the model is in progress to support final Project evaluation

Star Minerals Limited (ASX: SMS, "the Company" or "Star Minerals") is pleased to advise that it has received the assay results from its phase 2 reverse circulation (RC) gold drilling campaign at the "Star of the East" project.

Star Minerals' Chair, Ian Stuart commented:

"The drill program at Star of the East was efficiently executed, with a strategy to test the deposit for extensions.

Project review on the available data, as validated by Star Mineral's drill testing during phase 1 and now phase 2 is in progress to evaluate the potential value of the deposit."

The phase 2 drilling program consisted of 10 RC holes which were completed for a total of 757m. Including the phase 1 drilling of 294m over 7 holes, Star Minerals have now drilled a total of 17 holes for 1,051m of RC drilling, to ensure a considered evaluation of the Star of the East Project is completed.

Star of the East is a historic high-grade gold mine in the Murchison region of Western Australia, first mined in 1897 after discovery by prospectors. Tenement E51/1561 contains evidence of this historic work, with an old shaft and other remnants of previous activity. Records indicate that the mine produced around 27,700oz gold, working along a main lode down to around 50m depth.¹

Drilling has tested extensions of the Star of the East gold deposit to the east, west and down dip of the existing high density of drilling focused on the turn of the 19th Century mining works in the shallow portion of the deposit.

¹ See Star Minerals Limited (ASX: SMS) ASX announcement dated 28 July 2022 *"Star of the East" gold project Acquisition agreement*'



Star Minerals has right to drill at the Star of the East Project due to an access agreement signed as part of an option agreement for the Project with the holders of the tenement.

Figure 1 shows the wider regional overview with Star of the East part of the Tumblegum South Project Area, around ~40km to the South of Meekatharra; Figure 2 below shows a more detailed view of the Star of the East and Tumblegum South tenements.

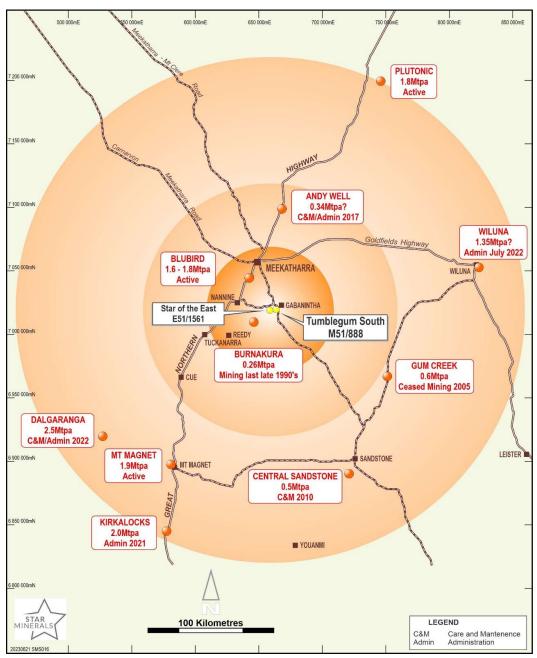


Figure 1 - Star of the East location, part of the Tumblegum South Project area



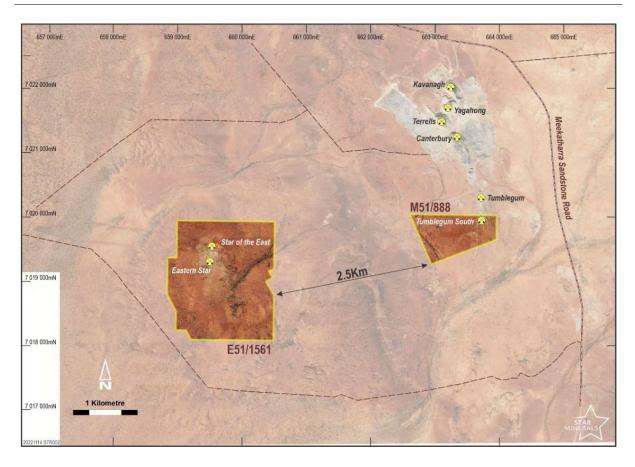


Figure 2 - Star of the East and Tumblegum South tenement location.

Drill collars at the Star of the East Project are shown in Figure 3 below, symbolised by drill era.

Intercepts of significance from phase 2 drilling include:

- o 5m@ 2.45 g/t Au from 9m depth on hole SRC017, including:
 - 3m @ 3.16 g/t Au from 10m depth
- o 3m @ 3.24 g/t Au from 52m depth on hole SRC009
- 3m @ 2.68 g/t Au from 34m depth on hole SRC010.



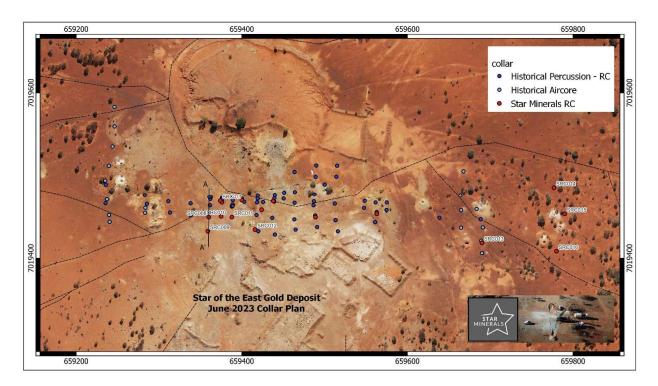


Figure 3 - Drill Collar Plan - MGA94, Zone 50

Figure 4 is a cross section looking towards East, showing the collar, drill trace and significant intercepts of the recently completed drilling, compared to historical drilling and assays. The location of this section is denoted by A-A' on Figure 3.



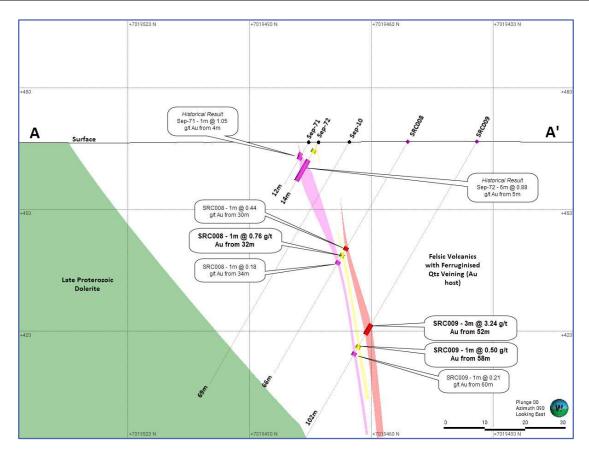


Figure 4 – Section 659360m East showing results for SRC008 and SRC009



Phase 2 drilling results at Star of the East are presented in Table 1 below. All collar details are provided in Table 2.

Table 1 – Star of the East Phase 2 Significant Down Hole Intercepts

| Hole ID | From (m) | To (m) | Interval (m) | Au g/t |
|---------|----------|--------|--------------|--------|
| SRC008 | 32 | 33 | 1 | 0.76 |
| SRC009 | 52 | 55 | 3 | 3.24 |
| SRC009 | 58 | 59 | 1 | 0.50 |
| SRC010 | 28 | 29 | 1 | 0.52 |
| SRC010 | 34 | 37 | 3 | 2.68 |
| SRC010 | 40 | 41 | 1 | 0.70 |
| SRC011 | 28 | 29 | 1 | 0.82 |
| SRC011 | 37 | 43 | 6 | 1.24 |
| SRC012 | 58 | 59 | 1 | 0.63 |
| SRC012 | 69 | 70 | 1 | 1.71 |
| SRC012 | 73 | 74 | 1 | 1.22 |
| SRC013 | 30 | 32 | 2 | 0.92 |
| SRC014 | NSI | | | |
| SRC015 | NSI | | | |
| SRC016 | 87 | 89 | 2 | 2.61 |
| SRC017 | 6 | 7 | 1 | 0.61 |
| SRC017 | 9 | 14 | 5 | 2.45 |

^{*}Intercepts calculated greater than 0.5g/t (uncut) with no more than 1m internal waste. All widths are downhole widths – true width unknown.

Table 2 – Star of the East Phase 2 Collar Details

| Hole ID | Depth | East | North | RL | Dip | Azimuth |
|---------|-------|--------|---------|-----|-----|---------|
| SRC008 | 66 | 659361 | 7019451 | 462 | -60 | 0 |
| SRC009 | 102 | 659360 | 7019434 | 463 | -60 | 0 |
| SRC010 | 66 | 659376 | 7019452 | 462 | -60 | 0 |
| SRC011 | 72 | 659389 | 7019451 | 462 | -60 | 0 |
| SRC012 | 108 | 659417 | 7019436 | 463 | -60 | 0 |
| SRC013 | 66 | 659691 | 7019420 | 461 | -60 | 0 |
| SRC014 | 54 | 659778 | 7019487 | 461 | -60 | 0 |
| SRC015 | 78 | 659791 | 7019455 | 461 | -60 | 0 |
| SRC016 | 109 | 659781 | 7019410 | 462 | -60 | 0 |
| SRC017 | 36 | 659375 | 7019471 | 462 | -60 | 0 |

SUMMARY

The Star of the East project has historical workings and numerous workers have completed drilling in the area since the 1980s. This latest round of drilling adds to the geological understanding of the Star of the East gold deposit.

Star of the East is located approximately 40km south of the town of Meekatharra in Western Australia. The existing lease E51/1561 is located 2km to the west of ML51/888, which is the location of Star Minerals Tumblegum South project.



NEXT STEPS

Evaluation of the value of acquisition of the Star of the East Project is in progress based on two successfully executed drill programs.

Star Minerals continue to progress sale options for the Tumblegum South gold Mineral Resource, while progressing the Bryah West gold – copper project.

For further information, please contact: lan Stuart, Chair +61 8 9226 1860

This announcement has been produced in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

ABOUT STAR MINERALS LIMITED

SMS is focused on development and exploration of its copper and gold projects. The Company will be using the data gathered to complete the required works to bring the Tumblegum South project up to the necessary level for a decision to mine to be made. In addition, it will use the latest exploration techniques as well as results of previous exploration work undertaken by Bryah Resources and other explorers to investigate the potential of both the Tumblegum South and West Bryah projects.

The Board's strategy is to advance the exploration and development of its deposits wherever possible, utilising established mining operations and infrastructure to achieve low risk early production outcomes.

In addition, the Company intends to continue to investigate ways to grow its business by:

- acquisition, application, or joint venturing into areas surrounding and adjacent to the Projects; and
- acquisition, application, or joint venturing into other, unrelated but economically attractive projects compatible with the Company's goals and capabilities if, and when opportunities of this type come available.

Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Tony Standish, who is a Member of the Australian Institute of Geoscientists. Mr Standish is a consultant to Star Minerals Limited and Bryah Resources Limited. Mr Standish has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Standish consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



Forward Looking Statements

This report may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.



Star of the East Deposit (Reverse Circulation Drill Results) JORC Code, 2012 Edition – Table 1 Exploration Results

Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|-----------------------|---|--|
| Sampling techniques | Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. | At Star of the East, Star Minerals drilled 10 angled Reverse Circulation (RC) holes for 757m in May 2023 (this announcement). RC drilling was drilled to generally accepted industry standard producing 1 metre samples which were collected beneath the cyclone and then passed through a cone splitter. The splitter reject sample was collected in green plastic bags and stored on site in rows of 30. The samples were collected directly from the splitter in as 1m calico bagged splits. The full length of each hole drilled was sampled. All Star Minerals samples collected were submitted to a contract commercial laboratory for drying, crushing and homogenising the sample to produce a 50g charge for fire assay finish. |
| Drilling techniques | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). | All Reverse Circulation (RC) holes were drilled with a contract RC drilling rig. RC holes were drilled using a 140 mm face-sampling drilling bit. |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | The calico samples submitted to the laboratory were weighed. To ensure maximum sample recovery and the representivity of the samples, an experienced Company geologist was present during drilling to monitor the sampling process. Any issues were immediately rectified. Sample recovery was recorded by the Company geologist and this was based on how much of the sample is returned from the cyclone and cone splitter. This is recorded as good, fair, poor or no sample. Star is satisfied that the RC holes have taken a sufficiently representative sample of the mineralisation and minimal loss of fines has occurred in the RC drilling resulting in minimal sample bias. No twin RC drill holes have been completed to assess sample bias. At this stage no investigations have been made into whether there is a relationship between sample recovery and grade. |



| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. | All the 1m RC samples were sieved and representative washed chip sample collected into 20 compartment chip trays for geological logging of colour, weathering, lithology, texture, alteration and mineralisation. RC logging is both qualitative and quantitative in nature. All chip trays will be returned to Perth for storage in company storage and be photographed (not yet undertaken). The total length of all the RC holes were logged. Where no sample was returned due to cavities/voids it was recorded as such. Magnetic susceptibility readings were collected for each 1 metre sample (calico or green plastic bag), recorded with sampling data and transcribed into digital format. |
| Sub-sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. | Sampling technique: All RC samples from the RC rig were collected in the cyclone and then passed through a cone splitter. The samples were generally dry, and all attempts were made to ensure the collected samples were dry. Sample dryness was recorded for every metre. The cyclone and splitter were cleaned with compressed air at the end of every 6 m RC drill rod. The sample sizes were appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and percent value assay ranges for the primary elements. Quality Control Procedures A duplicated sample was collected every 20 samples for the 1 m samples, with either a CRM every 50 samples and a blank ("Bunbury Basalt") inserted at the end of each hole; overall QAQC insertion rate of 1:14.3 samples. Certified Reference Material (CRM) samples were inserted in the field every 50 samples containing a range of gold and base metal values. Laboratory repeats taken and standards inserted at pre-determined level specified by the laboratory. Quartz wash samples were used during sample preparation through intervals of expected gold mineralisation, with 1 in 10 quartz wash samples also assayed. No evidence of smearing was detected. Sample preparation occurred in the Bureau Veritas (Kalgoorlie, WA) laboratory. The samples were weighed and dried, then crushed to -2mm using a jaw crusher, and pulverised to -75 microns for a 50g Lead collection Fire Assay to |



| Criteria | JORC Code explanation | Commentary |
|--|--|---|
| | | create a homogeneous sub-sample. The sample sizes are considered appropriate to correctly represent the gold mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and the assay value ranges expected for both gold and copper. |
| Quality of assay data and laboratory tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. | QAQC procedures described above. All samples were assayed for gold using fire assay on a 50 gram charge. These methods are all considered appropriate for full determination of assay values. |
| Verification of sampling and assaying | The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. | Significant intersections have been independently verified by alternative company personnel. The use of twinned holes has not been implemented, due to the scale of this program. The Competent Person has visited the site and supervised the drilling and sampling process in the field. All primary data related to logging are either captured digitally using LogChief for lithology and sampling on paper logs and entered into validating Excel templates prior to load to the Company SQL database by independent Database Manager. All paper copies of data have been stored. No adjustments or calibrations were made to any assay data, apart from resetting below detection values to half positive detection. |
| Location of data points | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. | In 2023, collar pegs were set out using a handheld GPS. Topographic control is currently through a digital elevation model derived from an aerial survey completed in 2018. As yet, the collars have not been independently surveyed. The hole collars will be independently surveyed by a Licensed Surveyor using a real time kinematic differential GPS for accurate collar location and RL – not yet undertaken. Downhole surveys were completed on all the RC drill holes by the drillers. They used a Reflex EZ-Shot gyro downhole multi-shot tool to collect the surveys every |



| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| | | 30m down the hole. • The grid system for the Star of the East project is MGA_GDA94 Zone 50. |
| Data spacing and distribution | Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. | extension of the mineralised system, which is about 100m east of previous drilling. |
| Orientation of data in relation to geological structure | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | The drilling was mostly drilled at nominally -60 degrees toward 360 degrees (north) where targeting a generally E-W striking structure hosting the mineralisation which previous drilling has defined. The attitude of the lithological units is predominantly northerly dipping to sub-vertical. Therefore, most holes were drilled with an azimuth of 360 degrees to the north to intersect the structures at right angles to the orientation of the lithological units. Due to locally varying intersection angles between drillholes and lithological units all results are defined as downhole widths. No drilling orientation and sampling bias has been recognized at this time and it is not considered to have introduced a sampling bias. |
| Sample security | The measures taken to ensure sample security. | The calico samples are packed into polyweave sacks and then placed inside sealed Bulker Bags. The Bulker Bags are then delivered to a 3rd party dispatch point in Meekatharra by Company staff. Chain of Custody was managed by the Company. The samples were transported to the relevant Kalgoorlie laboratory by professional transport companies, or company personnel. Once received at the laboratory, samples were stored in a secure yard until analysis. The lab receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch. Sample security was not considered a significant risk to the project. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | The Company database has been compiled from primary data by independent database consultants and was based on original assay data and historical database compilations. A regular review of the data and sampling techniques is carried out internally. |



Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
|---|---|--|
| Mineral tenement and land tenure status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | The relevant tenement is 100% owned by Messrs. Williams and Lockyer. Star has the right to perform works acquired through an option agreement signed with Williams and Lockyer. At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenements are in good standing. |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | Star of the East was a historic gold mining operation, with a costean dug in 1892, with a shaft sunk in 1894, and mining occurring up until 1909. Dominion Mining Ltd completed significant exploration in the area, resulting in mining of the Gabanintha deposits roughly 4km to the east of Star of the East between 1987 and 1992. They also drilled two rounds of percussion/RC (SEP001 – 050, then SEP 067 – 085. Other workers have also completed significant exploration for gold in the immediate surrounds, including SAMINCO then Giralia in 1987 and 1988 explored with regional RAB lines. Swick and Granich acquired the vacant ground in 2000, and completed some aircore drilling before floating Cougar Metals in 2003. Cougar completed the last significant drilling in in 2004 with 6 deeper RC holes drilled beneath the Dominion drilling at Star of the East. |
| Geology | Deposit type, geological setting and style of mineralisation. | The gold mineralisation is within Archaean greenstone-hosted shear zones (typically within ferruginised quartz veining) is within the mafic basalt, and acid volcanic rock units just south of a Proterozoic dolerite dyke in the Yilgarn Craton of Western Australia. Gold has predominantly been mined in the weathered supergene part of the deposit, with minimal mineralisation identified deeper. |
| Drill hole Information | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: Begin easting and northing of the drill hole collar Belowation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar Belowation of the drill hole collar Belowation above sea level in metres) of the drill hole collar Belowation of the hole odown hole length and interception depth Belowation hole length. Belowation information is justified on the basis that the | Refer to Table 1 and Table 2 in the body of this Announcement. |



| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| | information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | |
| Data aggregation methods | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. | A nominal 0.5 g/t Au Cut-off grade was applied in reporting of significant intercepts. Intercepts reported are length weighted averages. Up to 2m of internal waste was accepted within intercepts. No high-grade cuts have been applied to the reporting of exploration results. No metal equivalent values have been used. |
| Relationship between mineralisation widths and intercept lengths | These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). | Due to locally varying intersection angles between drill holes and lithological units all results are defined as downhole widths. |
| Diagrams | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | See attached figures within this announcement. |
| Balanced reporting | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | All exploration results are reported in Table 1 and previous ASX announcements. |
| Other substantive exploration data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | Down hole geological information was recorded by the rig geologist at the time of drilling. |
| Further work | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Following a full review of the drilling and geological data, additional drilling may be undertaken by the Company at a future date. |