ASX ANNOUNCEMENT **13 April 2023**

New Frontier Has Returned High Grade Gold Rock Chips in the West Bryah.

HIGHLIGHTS

- **High Grade rock chips featuring 35.85g/t Au and 3.31g/t Au.**
- **Confirmation of important historical targets within the highly prospective Narracoota Formation.**
- **Strong indicators of Au in previously known and new prospects.**
- **Tenements cover a large area of the Bryah Basin, which hosts significant gold and copper-gold discoveries.**

Star Minerals Limited (ASX: SMS, "the Company" or "SMS") is pleased to announce a successful reconnaissance trip to its 7 tenements in the West Bryah region. The exercise recognised and confirmed historical workings returning positive gold assays in rock chip samples.

The program has identified multiple key areas including historic workings in the Top Dimble, West Dimble and the East Dimble regions, and highlighted potential new prospects.

The rock chips collected on the reconnaissance of the area recorded gold in multiple samples with one sample returning **35.85g/t** in the Top Dimble region and **3.31g/t** in the West Dimble area. These chips were collected from historical workings with the surface material providing clear evidence for sheared material and strong veining.

Other areas which have shown interest from the reconnaissance include the Mt Padbury area. Mt Padbury is a known mineralized zone which hosts historical results such as 4m @ 2.69g/t (RC) and 1m @ 8.04g/t (RC) drilled by Lachlan Resources in 1998[1]. This area is set to be fully explored and geologically mapped later this year.

The tenements are located in an underexplored region within the Narracoota formation which hosts WestGold's Fortum Mine and the historic Horseshoe Lights mine located nearby. No significant drilling for gold has commenced within the region since the 1990's, however the rich history of the Dimble region shows

[1] Lachlan Resources NL – Annual Report – A54171

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multiple historical workings over a large geographical spread indicating significant potential for significant gold mineralisation.

Star Minerals' CEO, Greg Almond comments:

> *"We are very satisfied to have completed this program and received these superb gold results. The assays provide further encouragement on our efforts to apply modern exploration methods to the significant historical results seen in this area.*
>
> *The assays confirm our previous work that indicated the strong potential of the Narracoota Formation, and the significance of the historical work from the Dimble and Mt Padbury areas.*
>
> *We look forward to our next work programmes revealing more information as we build on these great results with our next phases of mapping, geophysical surveys and drilling, all currently in the planning stage."*

Regional Setting

The West Bryah exploration licences cover an area of 350km^2 over 7 tenements. The tenements cover the large regional East-West trending Padbury Synform, which feature lithological units of the Robinson Range, Wilthorpe formation and Labouchere formation within the centre and the renowned Narracoota formation on the Northern and Southern limbs.

The West Bryah Project is located East of, and partially within the same geological sequence as the Livingstone Gold Project, currently operated by Metal Bank Limited (ASX:MBK). The Homestead project shows an indicated and inferred mineral resource of **40,300 oz Au @ 1.42g/t gold[2],** while the nearby Kingsley deposit hosts an inferred resource of **30,500oz Au @ 1.42 g/t[3]** as an open resource with potential to carry through into the tenements currently owned by Star Minerals. Many of MBK's discoveries have been highlighted via Au soil anomalies in which Star Minerals intends to perform later in the year.

Other major areas of interest within Star Mineral's tenements features the Yarlarweelor Gneiss Complex for potential pegmatite exploration and the Despair Granite which hosts the local Wilthorpe Mine (Au Mine).

[2] MBK ASX Release 21 February 2023 "Livingstone delivers updated shallow Mineral Resource at Homestead"
[3] MBK ASX Release 18 January 2022 "Kingsley Deposit Maiden Mineral Resource Estimate and updated Exploration Target"

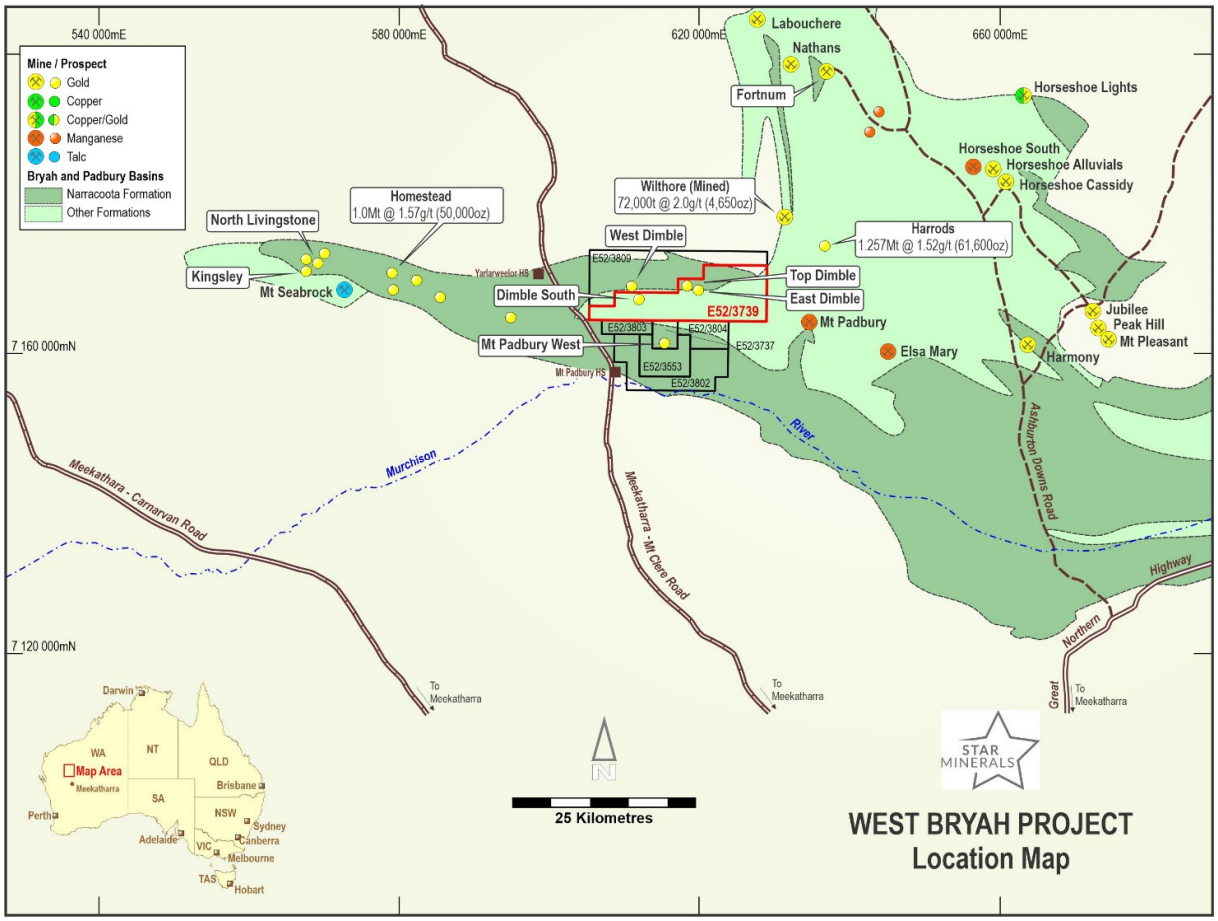

Figure 1: Map of the West Bryah Tenements with Key Areas Highlighted.

Key Sites Identified via the Rock Chips and Historic Data

Dimble South

This area is of great interest to Star Minerals as it hosts significant known historical results, and yet remains an underexplored region. Hunter Resources Limited ("Hunter") discovered gold values up to **3.4 g/t** and **1.83 g/t Au** in rock chip sampling in 1986[4]. Two trenches were dug in 1987, with sampling recording **1m @ 1.79 g/t Au** and a RAB drill intercept of **6m @ 1.42 g/t Au** and **2m @ 2.44 g/t Au**[4]. Other notable exploration

[4] Hunter Resources – Annual Report – A25735

involves Bryah Resources who collected rock chip samples from the waste piles of adjacent shafts and identified two rock chip samples at **58.4 g/t Au** and **8.1 g/t Au**[5].

Top Dimble

Located within the same tenement as Dimble South, Top Dimble is another key target area. Previous exploration within the area in the form of 4 costeans around old gold workings highlighted a costean channel sample of **1m @ 22.4g/t Au**[6].

The project was picked up by Hunter in the mid-1980s who highlighted significant Au anomalism, including a **128.0g/t Au**[7] sample as well as elevated copper values reaching 1300ppm and enrichment in several pathfinder elements (Sb, Bi and As)[7]. From this discovery, Hunter drilled 3 shallow holes under the costeans with the best intercept being **2m @ 1.07g/t Au**[8] from 8m. No further exploration was made to follow up this discovery[8].

Star Minerals intends to complete a more detailed work program in the area as four samples were taken in this area that illustrate the true potential of Top Dimble. Results of the area include **35.85 g/t Au** and **3.31 g/t Au** (Table 1). This area will be followed up through the 2023 year with future exploration plans currently underway.

Dimble East

The Dimble East Prospect is located only 2km East of Top Dimble. Like Top Dimble, this area has returned high-grade historical results. ACM Gold Limited ("ACM") reported anomalous gold rock chip samples from several veins including **56.8 g/t**, **34.6 g/t** and **12.9 g/t Au**[9]. This was followed up with disappointing RC results (3 holes for 60m each) with the best intersection of **5m @ 0.15 g/t Au**[9]. It was noted that the drilling did not intersect the North-dipping veins. This was later confirmed by a follow-up RAB drilling (53 holes for 1,239m) which was orientated South and intersected numerous quartz veins and stringers. The best 5m composite however was **0.55 g/t Au**[9] from the surface. The proximity of Dimble East and Top Dimble highlights the degree of mineralization within this area, highlighting the scale of mineralization[9].

[5] Bryah Resources 'BYH' ASX Release 31 July 2020 "High Grade Rock Chips – Bryah West"
[6] CRA Exploration Pty Wamex Report – A12501
[7] Hunter Resources Wamex Report – A15933
[8] Hunter Resources Wamex Report – A29319
[9] ACM Wamex Report – A33127

West Dimble

West Dimble is another key area that has been highlighted through previous research and the rock chip sampling. Only one sample was taken at this location which gave a reading of **0.96g/t** (Table 1). Although the reading does not break the 1g/t mark it clearly highlights an elevation of gold in the area.

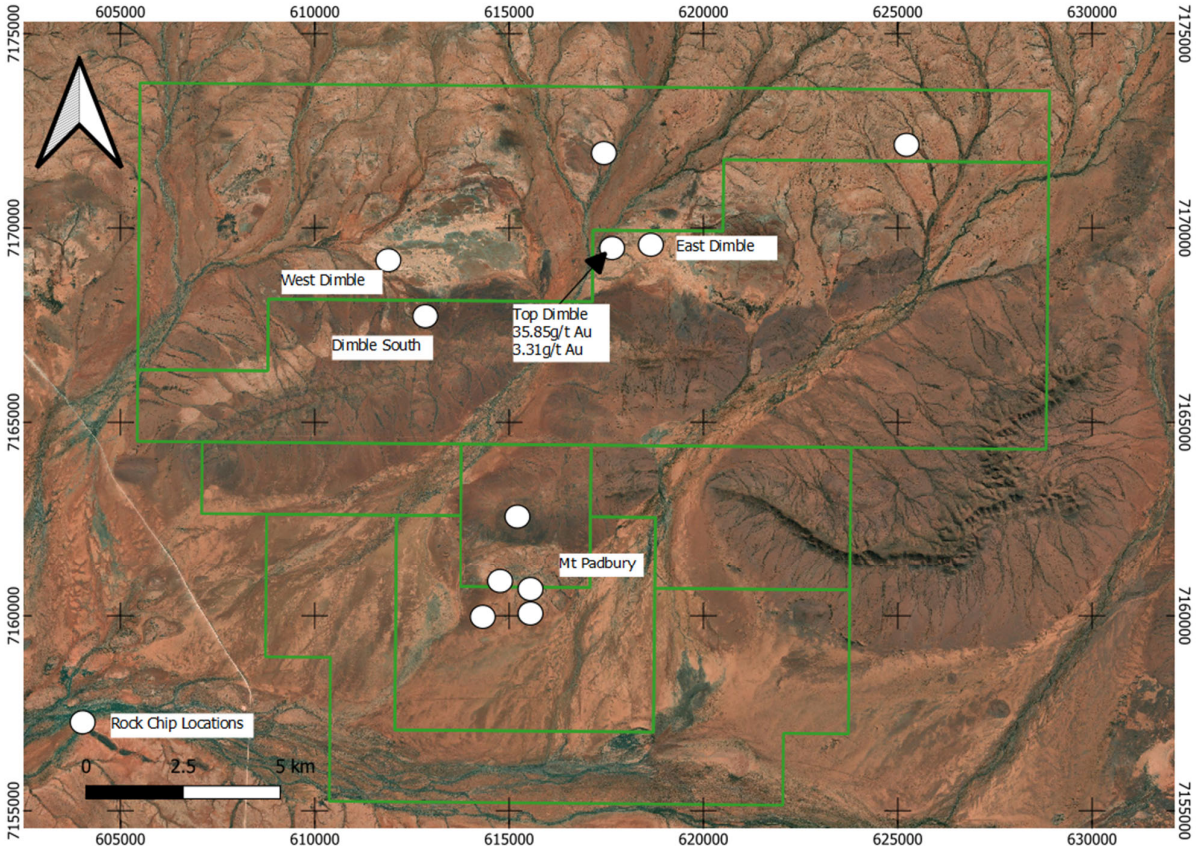

Figure 2: Map of Key Area in the West Bryah Region.

Future Activities Planned

- Significant Auger Sampling program across key areas of Top Dimble, East and West Dimble.
- Geophysical surveys including seismic and magnetics data to define exploration targets and methods, and provide further information on the depth of alluvial cover.
- Geological mapping in key identified areas including new prospects.
- RC Drilling of generated targets around Mt Padbury and Dimble.
- RC Drilling of generated targets.

Appendix 1

Table 1: Rock Chip Sample Results. *(X signifies the result was below the detection limit).*

SAMPLE DESCRIPTION	Au (ppm)	Au-Rp1 (ppm)	GDA94_50 East	GDA94_50 North
DETECTION LIMIT	0.005	0.005		
SMRK005	X		625265	7172105
SMRK006	0.007		617503	7171892
SMRK007	0.006		617555	7169418
SMRK008	0.382		617728	7169507
SMRK009	25.542	35.846	617728	7169507
SMRK010	0.502		617645	7169424
SMRK011	2.776	3.312	617645	7169424
SMRK012	0.01		618637	7169592
SMRK013	0.059		611864	7169157
SMRK014	0.958		611864	7169157
SMRK015	0.006		611904	7169145
SMRK016	0.024		611904	7169145
SMRK017	X		615500	7160071
SMRK018	X		614245	7160014
SMRK019	X		614302	7160018
SMRK020	X		614387	7160022
SMRK021	X		614758	7160929
SMRK022	0.015		615522	7160736
SMRK037	X		584059	7168816
SMRK038	X		583245	7168802
SMRK039	0.019		615200	7162582
SMRK040	0.159		612832	7167762
SMRK046	X		618637	7169592
SMRK047	X		595775	7164674

For further information, please contact:

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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.
- 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.

West Bryah Rockchips

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.	• Rock chips were selectively taken from interesting geological sites. Some were taken from historic workings. • 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 and a separate sample for 56 element analysis using 4 Acid Digest with MS finish. • RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1990, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral exploration reports (WAMEX) (dmp.wa.gov.au) database. No detailed description of sampling methods, and assay techniques and laboratory details were often minimally described in these reports, so as such the results need to be considered in this context.
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).	• RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1990, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral exploration reports (WAMEX) (dmp.wa.gov.au) database. No detailed description of drilling methods, and assay techniques and laboratory details were often minimally described in these reports, so as such the results need to be considered in this context. • No Star Minerals drilling results are contained in this report.
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	• No Star Minerals drilling results are contained in this report • RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1990, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral

Criteria	JORC Code explanation	Commentary
	of fine/coarse material.	exploration reports (WAMEX) (dmp.wa.gov.au) database. No detailed description of drill sample recovery is described in these reports, so as such the results need to be considered in this context.
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.	• No Star Minerals drilling results are contained in this report. • RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1990, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral exploration reports (WAMEX) (dmp.wa.gov.au) database. The level of drill hole logging is variably described in these reports, so as such the results need to be considered in this context.
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 in-situ 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.	• No Star Minerals drilling results are contained in this report. • RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1990, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral exploration reports (WAMEX) (dmp.wa.gov.au) database. The nature of drill hole sampling methods is variably described in these reports, so as such the results need to be considered in this context.
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.	• All rock chip samples were assayed for gold using fire assay on a 50-gram charge. Multi-element data on the was collected using 4 Acid Digest with MS finish. • The quality of results presented in WAMEX reports is inherently variable and not always known, and as such these results can only be considered in this context.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes.	• No Star Minerals drilling results are contained in this report RAB and RC drilling was noted in historic reports by CRA Exploration, Hunter

Criteria	JORC Code explanation	Commentary
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	Resources, ACM and Lachlan Resources. This work was undertaken between 1982 and 1998, and reported in limited detail in the Annual Reports to the Mines Department as is available at Mineral exploration reports (WAMEX) (dmp.wa.gov.au) database. The drilling was generally conducted as initial investigation and variably described in these reports, so as such the results have not been verified and need to be considered in this context.
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.	• All sample points were located by the Field Geologist using a hand-held GPS. • The grid system for the Bryah West 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.	• No Star Minerals drilling results are contained in this report. • There is insufficient drilling to undertake any resource estimation.
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.	• There is insufficient drilling to reliably understand the orientation of geological structures.
Sample security	• The measures taken to ensure sample security.	• Chain of Custody was managed by the Company. • The samples were transported to the relevant Perth laboratory by professional transport companies, or company personnel. • 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 (E52/3739) is 100% owned by Star Minerals Limited (Star). • 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.	• A summary of the significant historical exploration activities of previous explorers is set out in this announcement and appropriately referenced to various WAMEX Reports. • The activities were appropriate for the period that such exploration took place.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Bryah West exploration licence is located on the north side of the western spur of the Bryah Basin, where the Proterozoic units dip south off the underlying Archaean gneiss belt. The tenement covers a lithological contact with the volcanic Narracoota Formation to the north and sedimentary rocks of the Robinson Range Formation to the south, preserved on the northern limb of a regional East-West trending synform. • Gold mineralisation within the tenement appears to be quartz-vein hosted within ultramafic talc-chlorite schists.
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: ○ easting and northing of the drill hole collar. ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar. ○ dip and azimuth of the hole. ○ down hole length and interception depth. ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• No Star Minerals drilling results are contained in this report.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high	• No cutting of high-grade results has been applied.

Criteria	JORC Code explanation	Commentary
	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.	
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').	• Historical results are reported as downhole intercepts and insufficient data exists to estimate true width.
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 figures and Table 1 included in 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 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.	• All substantive exploration data pertaining to Star Minerals exploration is included in this report.
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.	• Refer to this announcement for details of proposed future exploration activities.