

Diamond drilling at Tumblegum South Gold Project begins

HIGHLIGHTS

- Star Minerals has commenced Stage 3 Resource definition drilling at its Tumblegum South gold project
- 300m drill program initiated to further define and expand on the current gold Resource, with accompanying logging and assays to allow for completion of geological model and Resource update
- Drill targeting intended to extend existing Resource after two successful drilling programs
- Existing Inferred Resource estimate for the project totals 600kt, at a grade of 2.2 g/t Au¹
- Previous Stage 1 and 2 results include:
 - o 14m @ 2.49 g/t Au
 - o 4m @ 15.07 g/t Au
 - o 6m @ 3.07 g/t Au²
 - o 4m @ 16.8 g/t Au
 - o 3m @ 14.74 g/t Au
 - o 4m @ 8.23 g/t Au³

Star Minerals Limited (ASX: SMS, “the Company” or “Star Minerals”) is pleased to advise that it has mobilised to site and commenced the Stage 3 Resource definition drilling program to expand the Resource and add to the Company’s knowledge of the geology and grade characteristics of its Tumblegum South gold project (“Tumblegum South”).

This follows the successful 1,994m Stage 1 and 2,669m Stage 2 drilling programs previously undertaken by Star Minerals which confirmed the existing mineralisation and extended the trends along strike and down dip of the existing resource.

This third drill program since its ASX listing on 27 October 2021 reiterates the Company’s continued commitment to immediately explore and develop Tumblegum South.

Stage 3 drilling has been designed to provide further information on the mineralised structures that are present in the area, to provide more structural information and to provide further data for an updated resource. This work has been designed with the benefit of the results from the earlier Stage 1 and 2 drilling.

The image below (Figure 1) shows the proposed drill traces, targeting the structures modelled using the results from previous works on site.

¹See Star Minerals Limited (ASX: SMS) ASX announcement dated 1 November 2021 ‘Star Minerals Limited commences drilling at Tumblegum South Gold Project’

²See Star Minerals Limited (ASX: SMS) ASX announcement dated 25 January 2022 ‘Gold assay results from Tumblegum South Project Phase 1 drilling’

³See Star Minerals Limited (ASX: SMS) ASX announcement dated 3 August 2022 ‘High-grade gold assay results of Phase 2 Resource definition drilling - Tumblegum South’

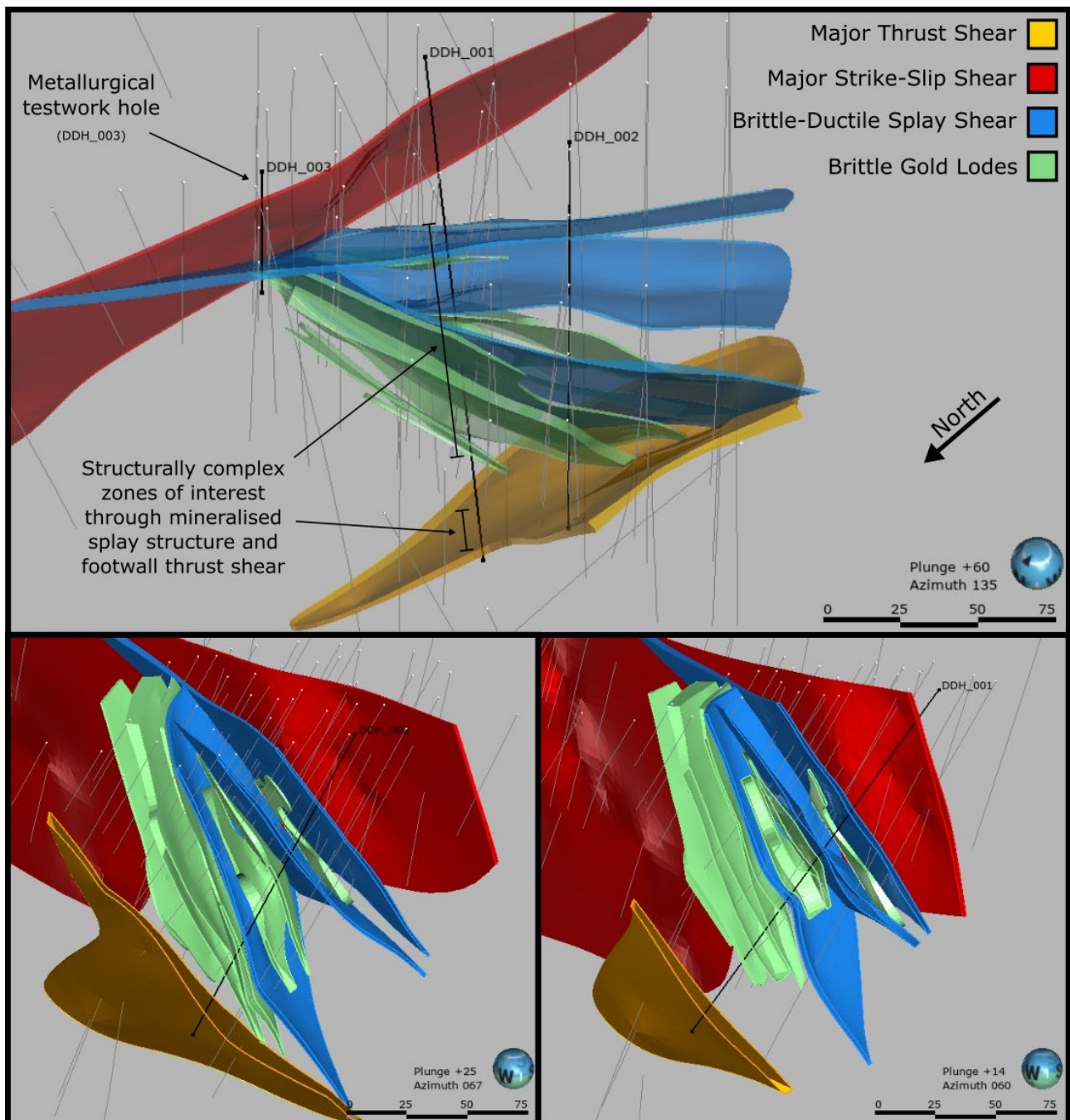


Figure 1 - Tumblegum South planned diamond Phase 3 Resource definition drilling - indicating the trace of the two proposed holes, DDH001 and 002, and their planned path, running between the two identified shear structures (Red and Yellow) and through the identified gold mineralisation lodes (Green).

Planned Phase 3 Resource drilling totals approximately 320m although as with the Stage 1 and Stage 2 drill programs, holes may be extended if they remain in mineralisation. It is envisaged the program will be completed in 12 days.

Star Minerals' CEO, Greg Almond comments:

"We are excited to be back on site at Tumblegum South and looking forward to following up the great results we saw from the last round of drilling, building on the success of our RC drilling campaigns.

This will encourage our shareholders, as it demonstrates our further confidence in the asset we have at Tumblegum South, and the potential to increase our knowledge of the deposit as we follow up from the results of the previous stages of drilling and modelling."

Tumblegum South has an existing Inferred Resource estimate which totals 600kt, at a grade of 2.2 g/t Au. This work was undertaken by Bryah Resources Limited in January 2020.

Tumblegum South is located approximately 40km south of the town of Meekatharra in Western Australia (see Figure 2). The existing mining lease ML51/888 is directly along strike from the Tumblegum Pit which was mined by Dominion during the 1987–1992 Gabanintha Gold Mine Joint Venture. The Company's current focus is on gold, but there is also significant copper potential on the lease.

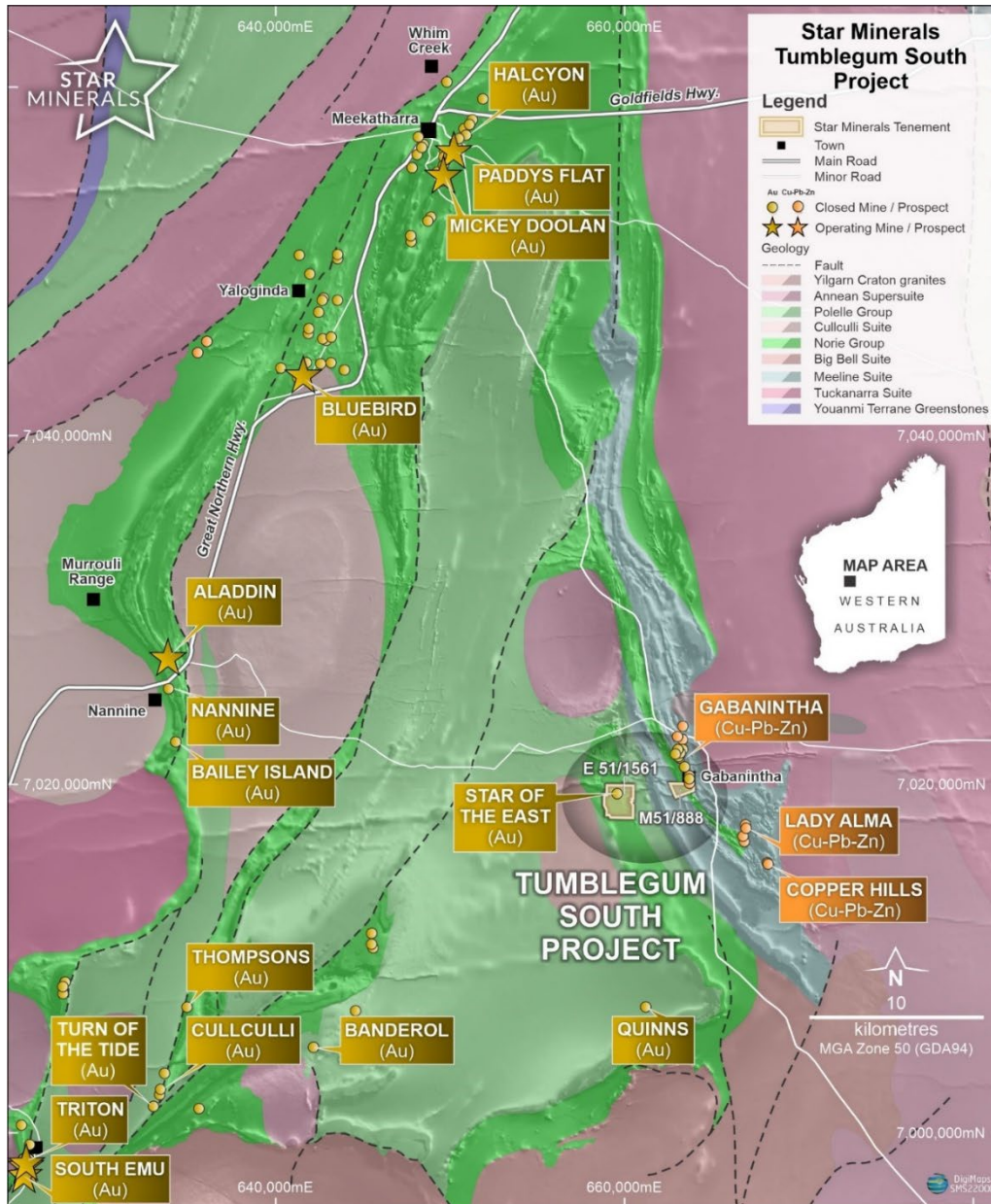


Figure 1 Tumblegum South Gold Project Geology and Location

The current focus is on completing the work at Tumblegum South, and the completion of geology modelling and Resource update ready for further works to bring Tumblegum South into production.

There is also planning underway to commence drilling at Star of the East soon. Star of the East is a recently optioned property, just 2km to the west of the M51/888 lease that holds the Tumblegum South deposit.⁴

⁴See Star Minerals Limited (ASX: SMS) ASX announcement dated 28 July 2022 “Star of the East” gold project Acquisition agreement’

Reporting Confirmation

The information in this report that relates to current mineral resources is extracted from the Company's following ASX announcement:

- 1 November 2021 Tumblegum South Gold Project Drilling Underway

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

The information in this report that relates to Exploration Results is extracted from the Company's following ASX announcements:

- 25 January 2022 Gold assay results from Tumblegum South Project Phase 1 drilling
- 3 August 2022 High-grade gold assay results of Phase 2 Resource definition drilling - Tumblegum South

The Company confirms that it is not aware of any new information or data that materially affects the information included in the above market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

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; 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.

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.