

ASX Announcement

22 March 2023

New Yandan Geology Model Defines Compelling Targets

HIGHLIGHTS

- Gold mineralisation between Yandan Main to East Hill defines **a kilometre long trend that contains 900,000 oz Au from both historic and the current Mineral Resource Estimate (MRE).**
- The new geological model is specific to the East Hill deposit which has a MRE of 443,000 oz Au with the key geological focus being the **high grade core of 1.1 Mt @ 5.7 g/t Au for 201,000 oz Au.**
- The model for East Hill demonstrates that the known mineralisation is the top of a hot spring epithermal and vein texture system.
- Vein textures and mineralogy suggest drilling to date has only tested the upper parts of the system with potential for stronger grades and more ounces at depth.
- The Generator Fault potentially off-sets the mineralisation to the north and implies that the high grade veins exist below this fault line (reverse fault).
- Significant opportunity for a **high-grade vein gold discovery** under the existing resource.
- Clear analogies to known deposits with bonanza grade veins at depth.

GBM Managing Director and CEO, Peter Rohner, commented: *“Work by our geological team to interpret the Yandan geological setting following drilling in FY22 has identified compelling targets with the potential to yield a new project-making discovery. Our confidence is supported by the geological evidence in several of the holes that penetrated the underlying fault and strong geological parallels that Yandan has with several large, well known, world class epithermal gold deposits. Further work will be focussed on geological characterisation, additional geophysics and spatial definition, to enable us to efficiently drill to maximise our probability of success.”*

GBM Resources Limited (ASX:GBZ) (GBM or the Company) is pleased to announce a **new geological model for East Hill** and the broader Yandan mineral system of a tilted low sulphidation epithermal hot spring system with the top of the system truncated and off-set from possible high-grade veins by a fault. The **new model provides a significant high-grade vein target at Yandan.**

New East Hill Geology Model and Exploration Target

The East Hill deposit is a clear example of a hot spring low sulphidation epithermal system. Volcanic facies contacts at a high angle to the overall stratigraphy suggests that the deposit likely formed in a graben or half graben within the broader Yandan Trough. The style of mineralisation is partly controlled by host rock with breccias generally formed in coarse tuffs and fine-grained tuff and lava hosting veins. The Epiphany Conglomerate with clasts of silica-illite altered andesite, sinter and epithermal veins suggests hydrothermal eruption breccia was present and forms a distinct marker horizon (Figure 1A).

Sedimentary units with hydrothermal components (sinter and Epiphany Conglomerate) interbedded with St Anns Formation limestone and siltstone imply that the East Hill mineral system has been rotated, likely by regional folding, from an original position of horizontal bedding and steeply plunging mineralisation to north dipping bedding and south plunging mineralisation. The Generator Fault that truncates high grade mineralisation at East Hill is now interpreted to be post-mineral and reverse movement is implied by andesite (older) juxtaposed over St Anns Formation siltstone, limestone and Epiphany Conglomerate (younger) (Figure 1B and 1C).

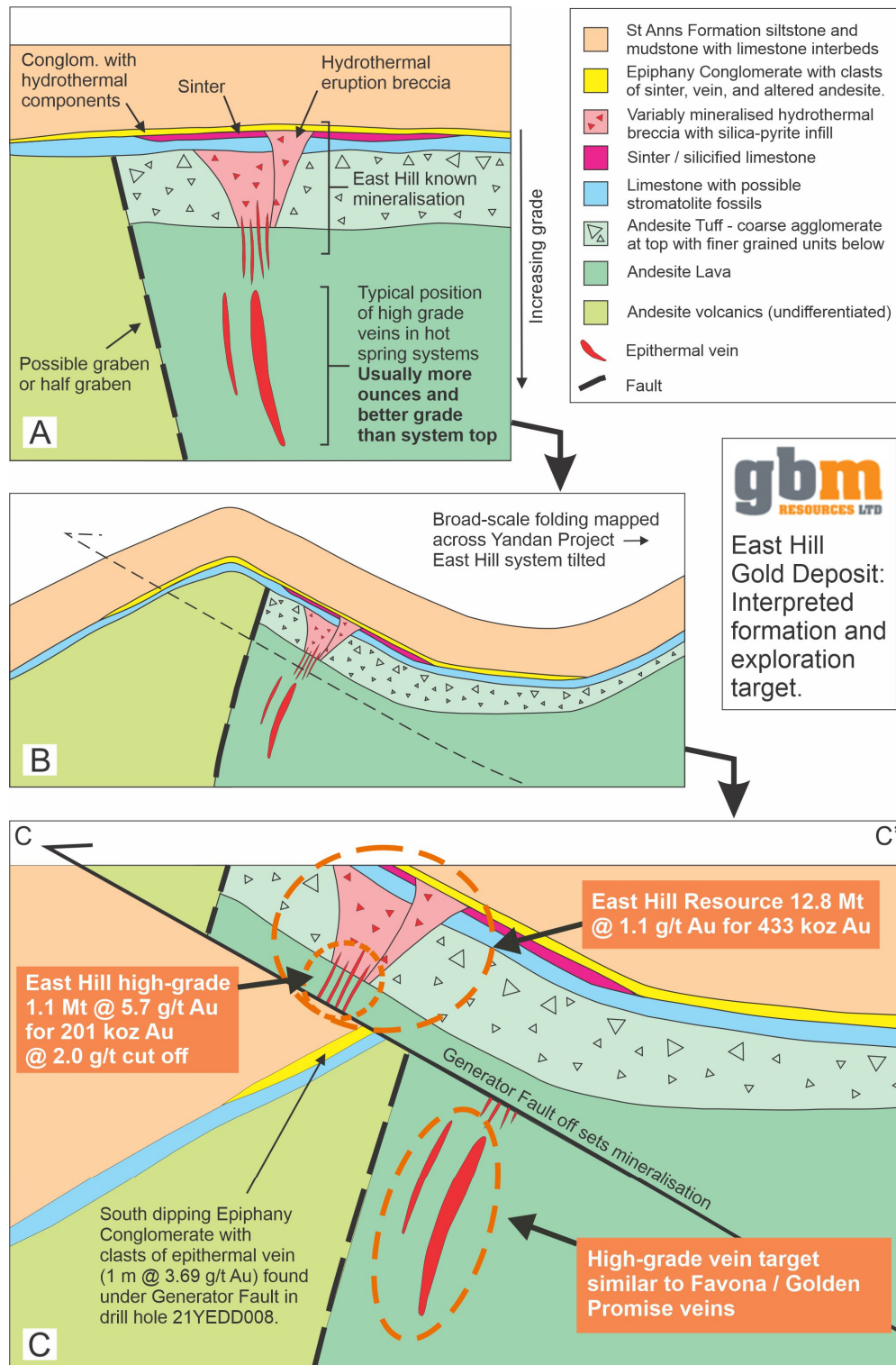


Figure 1. Schematic cross-sections illustrating the interpreted development of the East Hill gold deposit showing (A) Formation of the East Hill gold deposit as a hot spring style low sulphidation epithermal system, possibly in a graben, overlain by sinter and conglomerate containing clasts of sinter and epithermal veins, (B) Regional folding resulting in tilting of the deposit, (C) The Generator Fault cuts mineralisation and juxtaposes andesite (older) over St Anns Formation (younger). Erosion to the present day showing currently defined East Hill mineralisation and the target zone at depth. Note that sections are not to scale. The general position of the schematic section 1C is shown in Figure 2.

Vein composition and textures at East Hill clearly demonstrate that the known mineralisation represents the top half of the hot spring and vein texture model (Berger and Eimon, 1982., Morrison et al., 1990). The presence of hydrothermal alteration and epithermal veins below the Generator Fault together with gold grades that increase down plunge suggest that the Yandan system remains open at depth with potential for better grades and significantly more ounces. With strong similarities to well know epithermal deposits Favona in New Zealand and Golden Promise in USA, it appears likely that high-grade veins exist below the Generator Fault (Figure 1C). These high-grade veins are our key exploration target at Yandan.

Target Location

Yandan mineralisation (Yandan Main to East Hill) defines a 1 km trend that contains 900,000 oz Au (historic and current resources). Hot spring epithermal systems often have better grades and more ounces at depth with high-grade veins present underneath similar epithermal systems at Favona (Figure 6) and Golden Promise (Figure 7). The geological model developed for East Hill implies that the Generator Fault off-sets mineralisation to the south. Initial drilling will likely target locations immediately to the north of known mineralisation (Figure 2).

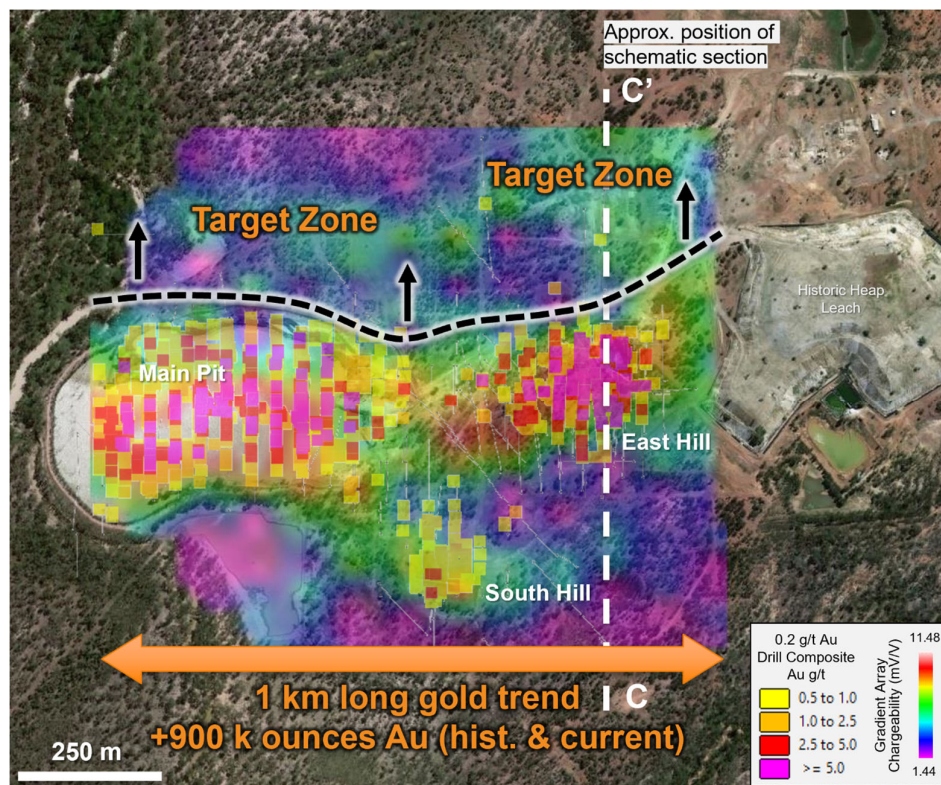


Figure 2. A plan showing key targets zones for the new Yandan exploration model overlain on gradient array chargeability and down hole gold with air photo background. The Yandan mineralisation (Yandan Main to East Hill) defines a 1 km trend that contains 900,000 oz Au (historic and current resources). Hot spring epithermal systems often have better grades and more ounces at depth with high-grade veins present underneath similar epithermal systems. Note the approximate position of the schematic sections shown in Figure 1.

East Hill – Drilling Results and Geology

GBM's FY22 drill program at Yandan tested the high-grade core of the East Hill resource and the potential for strike and dip extensions to mineralisation. Drill holes 21YEDD006A and 21YEDD007 returned the best results of **214.1 m @ 1.56 g/t Au** from 236 m including **26 m @ 5.37 g/t Au** from 321 m, and **189 m @ 2.01 g/t Au** from 255 m including **16 m @ 4.64 g/t Au** from 321 m respectively (Refer ASX:GBZ releases 11 November 2021 and 16 August 2021).

East Hill gold mineralisation is hosted in the Yandan andesite, and to lesser extent siltstone and limestone, at the base of the Saint Anns Formation. A sinter / silica replacement horizon is present at the top of the system and clasts of sinter and epithermal veins were noted in a thin layer of conglomerate overlying the sinter. Map patterns show km-scale open folds of stratigraphy that have been cut by a series of E to NE and N to NW trending faults.

Mineralisation at East Hill is developed over a 380 m vertical interval and is associated with an As, Sb and Zn plume that encloses the gold deposit (Refer ASX:GBZ release 31 March 2021). Near surface the system comprises extensive hydrothermal breccia and associated stockwork veins with massive silica-pyrite infill and grades of 0.2 – 2.0 g/t Au. The breccia typically occurs in coarse-grained andesite tuff and agglomerate while veins are generally hosted by finer grained tuffs and lava.

At depth, mineralisation manifests as sheeted colloform/crustiform and bladed textured quartz-chalcedony-carbonate-adularia-pyrite veins (Figure 3) generally < 10 cm wide but up to 2.1 m thick (**2.1 m @ 20.5 g/t Au** from 382.7 m in 21YEDD007). Individual assays of **5 – 25 g/t Au are common** with a maximum recorded assay of **347 g/t Au over 1 m** from 335.5 in YAN010 (Refer ASX:GBZ release 23 December 2020).

The highest density veining and highest gold grades are developed in the hanging wall of the moderately NW dipping Generator Fault (Refer ASX:GBZ release 14 March 2023). The key timing relationship between formation of mineralisation and the Generator Fault and the age of the rocks below the Fault was previously unclear.



Figure 3. A photograph of an East Hill high-grade vein from 350.5 m in YAN010 that assayed at 145 g/t Au (Refer ASX:GBZ release 23 December 2020). Note the colloform, crustiform, and bladed textures.

Definition of the East Hill Hydrothermal System

A review of the East Hill FY22 drilling was conducted with the aim of understanding the potential for more and better ore at Yandan. Work focused on defining the overall hydrothermal system including, host lithology, mineralisation style and controls on ore distribution. Mapping the distribution of the host lithologies defined volcanic facies contacts perpendicular to stratigraphy. Lava, tuff, and agglomerate juxtaposed against other volcanics suggests the presence of a NW striking graben or half graben that is coincident with the East Hill mineralisation. Though the presence of the graben is yet to be confirmed, low sulphidation epithermal systems are hosted by similar structures worldwide.

A conglomerate with clasts of sinter, epithermal vein and altered andesite, overlying well laminated sinter and strongly silicified and variably brecciated limestone was intersected by 21YEDD002. Herein termed the Epiphany Conglomerate, this unit was previously unrecognised and given the clast types is interpreted to represent reworked hydrothermal eruption breccia.

The Epiphany Conglomerate was also intersected below the Generator Fault in 21YEDD001 and 008. In the latter drill hole, a 1 metre interval containing clasts of epithermal quartz vein with well-developed bladed textures assayed 1 m @ 3.69 g/t Au from 599 m (Figure 4 A, B, and C) (Refer ASX:GBZ release 11 November 2021). Other stratigraphy below the Fault comprises siltstones interbedded with fossiliferous limestone / marl layers that display a moderate dip to the south consistent with mapped prospect-scale folding. **Previous geological models interpreted the rocks underneath the Generator Fault to be Ukalunda Formation and part of the basement.** Given the presence of Epiphany Conglomerate and fossiliferous limestone we now ascribe the units below the Generator Fault to the St Anns Formation that overlies the East Hill deposit. **This was the significant breakthrough in geological understanding compared to previous work.**

Extensive brecciation is intimately linked with mineralisation at East Hill and was observed in many of the 2021 drill holes. The extent and significance of the brecciation was not previously recognised and must be included in any system model. Vein styles and mineralisation types had been well documented by previous workers except for the relationship to brecciation. Veins vary with increasing depth from silica-pyrite to massive chalcedony and chalcedony with bladed replacement of carbonate, to banded crustiform colloform quartz-chalcedony-adularia carbonate veins with local bladed replacement, to veins with moss, needle and crystalline adularia and quartz overprinting chalcedony in the deeper central part of the system. Vein textures and compositions suggest drilling has only tested the chalcedonic zone (i.e., upper part) of a low sulphidation epithermal system (Dong et al., 1995). Quartz textures typical of the deeper parts of an epithermal system were not observed.

Veins with bladed textures and brecciated andesite with silica-illite alteration were also intersected underneath the Generator Fault (Figure 4 D and E). Together with the reinterpreted geology model above, GBM now believes the Generator Fault crosscuts and offsets mineralisation. Similar to previous workers (Morrison and Beams, 1995) GBM interprets Yandan to be a hot spring style system (Figure 5) that may have been localised in a graben. Sinter is underlain by hydrothermal breccia which is overprinted by chalcedonic and crustiform-colloform banded veins. The veins are more prominent deeper in the system and have potential to continue at higher grade underneath the Generator Fault.

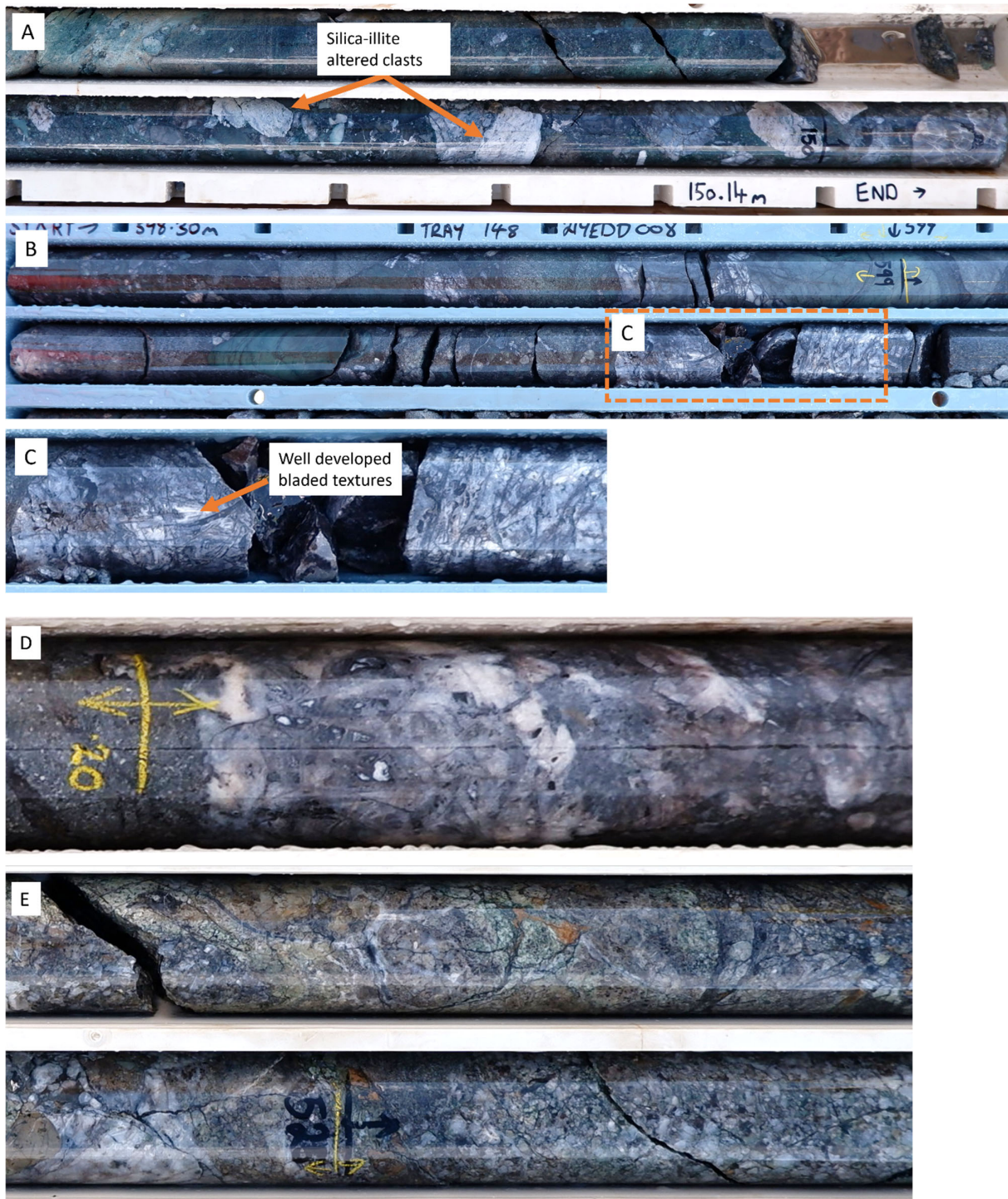
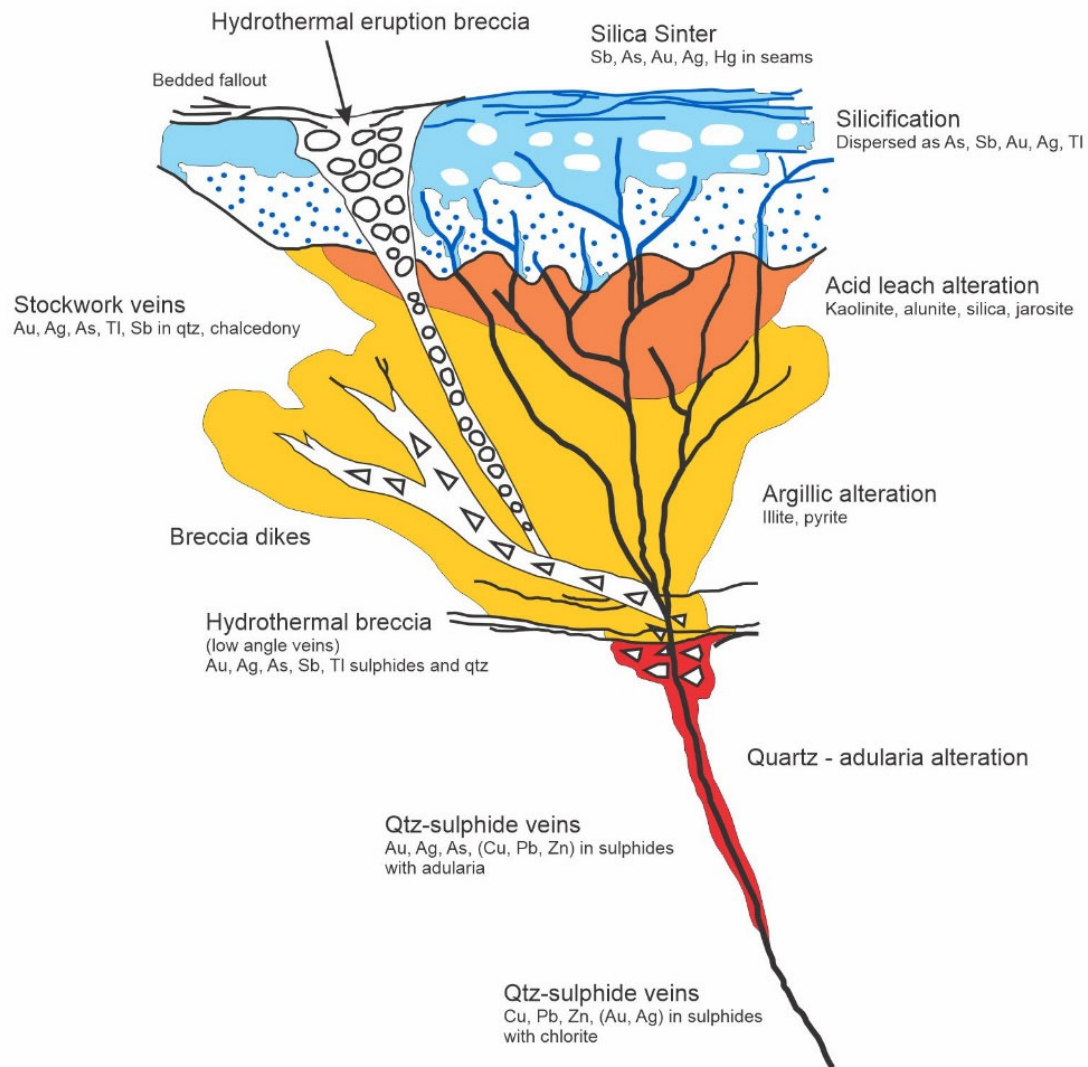


Figure 4. Photographs of East Hill drill core showing (A) the Epiphany Conglomerate (reworked hydrothermal breccia) from above the sinter in 21YEDD002 at ~ 150 m. Note the silica-illite altered clasts. This alteration is typical of deeper parts of the system. (B) the Epiphany Conglomerate from below the Generator Fault. Note the clasts of epithermal vein with well-developed bladed textures (C). This interval returned 1 m @ 3.69 g/t Au from 599 m in 21YEDD008. (D) Veins with bladed textures from below the Generator Fault at 490.3 m in 21YEDD001. (E) Brecciated and silica-illite altered andesite from below the Generator Fault at ~ 524 m in 21YED001.



After Berger and Eimon (1982)

Figure 5. Diagrammatic representation of a hot spring epithermal system.

East Hill Deposit Analogues

Hot spring epithermal systems with sinter and hydrothermal breccia underlain by high-grade veins are well documented at the Favona Deposit, New Zealand (Figure 6) and the Golden Promise Deposit, USA (Figure 7). At both Favona and Golden Promise and at other hot spring style epithermal deposits the main ore body sits below the sinter and breccia as a steeply dipping vein. Gold grades and contained ounces are typically higher in the vein than the breccia above. GBM believes there is potential for a significant vein to have developed underneath the East Hill and this represents the main exploration target at Yandan.

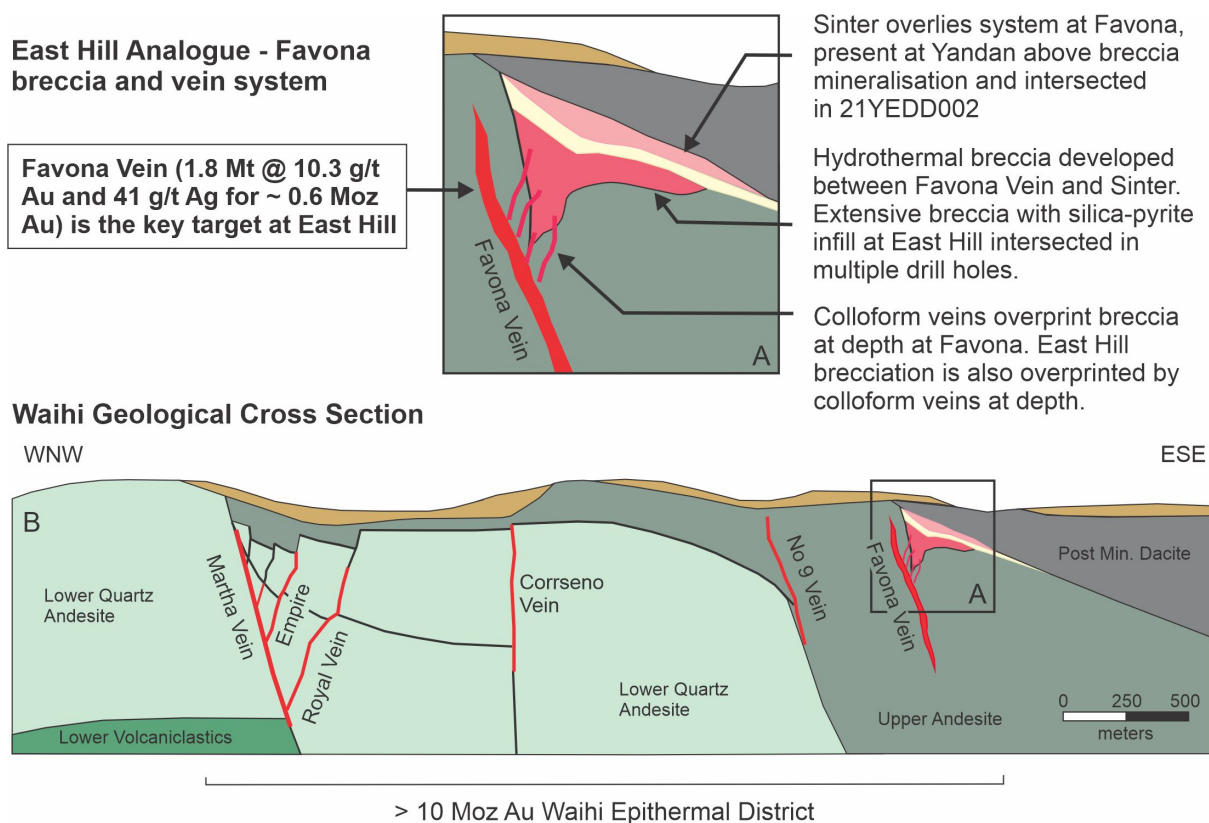


Figure 6. Geological cross-sections through (A) Favona and (B) the broader Waihi area adapted from Feebrey, C., 2021 and Simpson and Mauk, 2007. Note the similarity between East Hill and Favona. GBM will target high grade veins below known East Hill mineralisation.

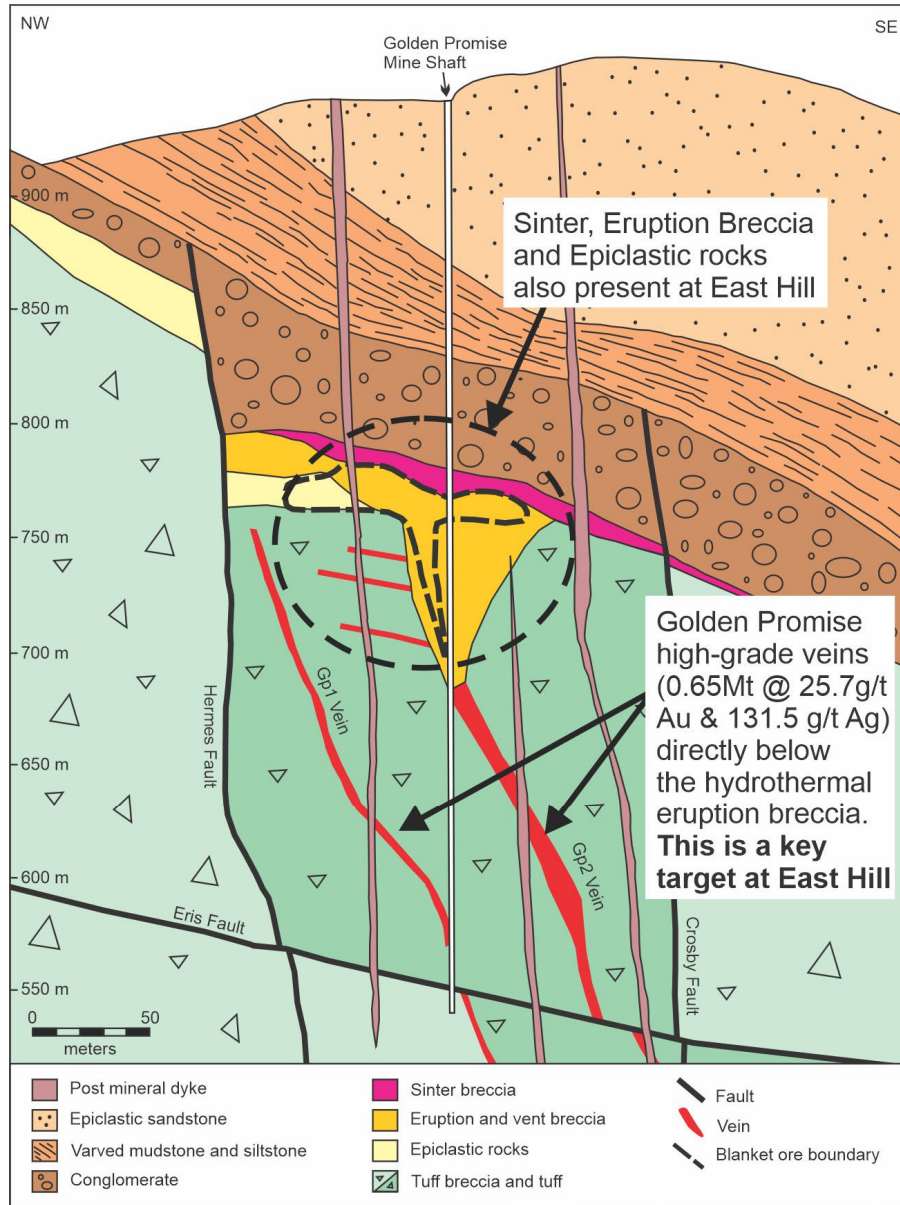


Figure 7. Geological cross-sections through the Golden Pride Deposit that forms part of the 3 Moz Au Republic low sulphidation epithermal district (Modified from Fifarek et al., 1996). Two high-grade veins grading 0.65 Mt @ 25.7 g/t Au & 131.5 g/t Ag occur directly underneath the hydrothermal eruption breccia. High-grade veins underneath the East Hill breccias are the key target for GBM.

Forward Plans

Yandan continues to be a key project for GBM. Future exploration will initially focus on confirming the new geological model and establishing vein texture, alteration, and metal zoning patterns to reconstruct the system and vector to the centre and feeder veins. The results of this work will be used to define the most effective geophysics method and confirm then to confirm drill targets.

References

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Simpson, M.P., and Mauk, J.L., 2007. The Favona Epithermal Gold-Silver Deposit, New Zealand. *Economic Geology* v102, pp 817-839.

This ASX announcement was approved and authorised for release by:

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About GBM Resources

GBM Resources Limited (ASX: GBZ) is a well-funded Queensland based mineral exploration and development company focused on the discovery of world-class gold and copper deposits in Eastern Australia. The company has a high calibre project portfolio, hosting district scale mineral systems, located in several premier metallogenic terrains.

GBM's flagship project in the Drummond Basin (QLD) holds ~1.84 Moz of gold in JORC resources (Mt Coolon, Yandan and Twin Hills). Some tenements in the Basin have recently become the subject of a A\$25m farm-in with Newcrest. 2023 will see an expanded drilling program which is aiming to define 2-3 Moz and support GBM's transition into a mid-tier Australian gold company.

Separately GBM also holds tenements in the Mt Morgan district, in the Mt Isa Inlier in Queensland (JV with Nippon Mining Australia - 54%) and also holds a 100% interest in the White Dam Gold-Copper Project in South Australia. Divestment of these non-core assets is in progress.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Dr Mark Lindsay, who is a Member of The Australian Institute of Geoscientists. Dr Lindsay is an employee of the company and is a holder of options in the company. Dr Lindsay 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'. Dr Lindsay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the respective announcements and all material assumptions and technical parameters underpinning the resource estimates within those 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.

APPENDIX 1: GBM Mineral Resource Estimate for Mt Coolon, Yandan and Twin Hills Projects

Deposit	Resource Category									Total			Cut-off
	Measured			Indicated			Inferred						
	000' t	Au g/t	Au oz	000' t	Au g/t	Au oz	000' t	Au g/t	Au oz	000' t	Au g/t	Au oz	
Koala - ML													
Open Pit				670	2.6	55,100	440	1.9	26,700	1,120	2.3	81,800	0.4
UG Extension				50	3.2	5,300	260	4	34,400	320	3.9	39,700	2.0
Tailings	114	1.7	6,200	9	1.6	400				124	1.6	6,600	1.0
Sub Total	114	1.7	6,200	729	2.6	60,800	700	2.7	61,100	1,563	2.5	128,100	
Eugenia													
Oxide - Open Pit				885	1.1	32,400	597	1.0	19,300	1,482	1.1	51,700	0.4
Sulphide - Open Pit				905	1.2	33,500	1,042	1.2	38,900	1,947	1.2	72,400	0.4
Sub Total				1,790	1.1	65,900	1,639	1.1	58,200	3,430	1.1	124,100	
Glen Eva - ML													
Sub Total - Open Pit				1,070	1.6	55,200	580	1.2	23,100	1,660	1.5	78,300	0.4
Yandan - ML													
East Hill - Open Pit				4,860	1.5	240,000	7,900	0.8	203,000	12,800	1.1	443,000	0.4
Yandan South - Open Pit							900	0.6	16,000	900	0.6	16,000	0.3
Sub Total				4,860	1.5	240,000	8,800	0.8	219,000	13,700	1.0	459,000	
Illamahta													
Oxide - Open Pit							1,147	0.7	26,900	1,147	0.7	26,900	0.4
Sulphide - Open Pit							1,045	0.9	28,600	1,045	0.9	28,600	0.4
Sub Total							2,192	0.8	55,500	2,192	0.8	55,500	
Twin Hills - ML													
309 - Open Pit	830	2.5	73,900	5,480	1.3	235,200	3,650	1.1	129,800	9,960	1.4	438,900	0.4
309 - UG				190	4.0	24,500	480	3.9	59,900	670	3.9	84,400	2.0
Lone Sister - Open Pit				5,250	1.3	277,300	6,550	0.9	188,500	11,800	1.1	415,800	0.4
Lone Sister - UG				370	2.9	34,300	310	2.6	25,800	680	2.7	60,100	2.0
Sub Total	830	2.5	73,900	11,290	1.6	571,300	10,990	1.1	404,000	23,110	1.3	999,200	
Drummond Basin Total	944	2.6	80,100	19,739	1.6	993,200	24,901	1.0	820,900	45,655	1.26	1,844,200	
White Dam - ML													
Hannaford - Open Pit				700	0.7	16,400	1,000	0.8	26,900	1,700	0.8	43,300	0.2
Vertigo - Open Pit				300	1.0	9,400	1,400	0.6	29,000	1,700	0.7	38,400	0.2
White Dam North - Open Pit				200	0.5	2,800	1,000	0.6	17,600	1,200	0.5	20,400	0.2
Sub Total				1,200	0.7	28,600	3,400	0.7	73,500	4,600	0.7	101,900	
cut-off grade is 0.20 g/t Au for all, Vertigo is restricted to above 150RL (~70m below surface)													
Malmsbury - RL , Note Malmsbury ounces referred to in this table are subject to the SPA completion, Refer ASX:GBZ release 10 March 2023													
Sub Total - UG							820	4.0	104,000	820	4.0	104,000	2.5
Sub Total - UG - GBM Share							410	4.0	52,000	410	4.0	52,000	2.5
GBM Total	1,998,100												

The announcements containing the Table 1 Checklists of Assessment and Reporting Criteria relating to the 2012 JORC compliant Resources are:

- Koala/Glen Eva and Eugenia – GBM ASX Announcement, 4 December 2017, Mt Coolon Gold Project Scoping Study, note these resources have not been verified by Newcrest and are on tenements subject to a recent farm-in agreement with Newcrest
- Yandan – GBM ASX Announcement, 23 December 2020, Mt Coolon and Yandan Combined Resources Total 852,000 oz, following completion of Yandan acquisition, GBM ASX Announcement, 14 March 2023, Results of Yandan Mineral Resource Update
- Twin Hills – GBM ASX Announcements, 18 January 2019, Mt Coolon and Twin Hills Combined Resource Base Approaches 1 Million Ounces, 2 February 2022, Significant Resource Upgrade at Twin Hills Project and 5 December 2022, Twin Hills Gold Project Upgrades to ~1 Moz Mineral Resource
- White Dam – GBM ASX Announcement, 18 August 2020, White Dam Maiden JORC 2012 Resource of 102 koz
- Malmsbury – GBM ASX Announcement, 4 July 2019, Malmsbury Resource Upgraded to JORC 2012

- a) The preceding statements of Mineral Resources conforms to the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition"
- b) All tonnages are dry metric tonnes
- c) Data is rounded to ('000 tonnes, 0.0 g/t and '000 ounces). Discrepancies in totals may occur due to rounding.
- d) Resources have been reported as both open pit and underground with varying cut-off based off several factors as discussed in the corresponding Table 1 which can be found with the original ASX announcement for each Resource