

29 January 2021

#### **ASX ANNOUNCEMENT**

# QUARTERLY REPORT 1 October to 31 December 2020

Theta Gold Mines Limited ("Theta Gold" or "Company") (ASX: TGM | OTCQB: TGMGF) is pleased to report on its activities for the period from 1 October to 31 December 2020.

#### **HIGHLIGHTS**

- Pre-feasibility Study (PFS) for the underground near surface mines (Beta Mine/Frankfort) in Q1 2021
- Declare an underground Maiden Mining Reserve in Q1 2021
- PFS to focus on:
  - Maximise recovered Grade with modern mining methods
  - Maximise Gold Recovery with modern gold processing
  - Maximise Production Rates with modern mine planning
- Metallurgical Results provide confidence for Underground PFS
  - Rietfontein 94 % CIL Gold Recovery average from gold face samples
  - O Beta 91% CIL Gold Recovery initial sample
  - Vaalhoek 91 % CIL Gold Recovery initial sample
- Environmental Authorisation for MR83 open-pits approval pending

#### **POST QUARTER Q4 2020**

- Appointment of Debt Advisor and strengthens Execution Team
- Investment in Aura, Jaggards & DigitalX-backed Bullion Asset Management

#### **ENVIRONMENTAL AUTHORISATION - MR83**

The Theta Starter Open-pits permitting amendment for MR83 is progressing through the normal government departments and is currently being reviewed by the Department of Mineral Resources and Energy ("DMRE") in consultation with other stakeholders. The Company will update shareholders as the permitting advances as and when information becomes available.

#### PRE-FEASIBILITY STUDY - UNDERGROUND MINES

In parallel with the Theta Starter-pits development, the Company has assessed how to accelerate the Five-Year >160,000oz per annum production plan by bringing forward the development of the underground mines for early production.

The Board of Theta Gold has approved a Pre-Feasibility Study (PFS) on the potential underground mining operations. The PFS, which will convert more of Theta Gold's Measured and Indicated (M&I) Mineral Resources into a Mining Reserve, will produce a maiden underground mining reserve for the Beta/Frankfort Mines and is targeted to be completed by the end of Q1 2021. This will be the company's first declared underground mining reserve, to be added to Theta Gold's existing 205,000 ounces of open-pit mining reserves from MR83. MR83 is already approved for underground mining.

The cost for the PFS is minimized by targeting only existing M&I Mineral Resources (Appendix A) at the Beta and Frankfort Mines (575koz M&I). Led by the new CEO (Africa), Mitford Mundell, a detailed survey has been completed on old workings where the team has identified easily accessible gold faces with easy access to sampling. The PFS will build on the scoping studies completed in 2017 for the Rietfontein and Beta Mines. The Company has 150 years of exploration and production data to assist with fast tracking the PFS.

The Theta mine team is back onsite following the New Year break and has been strengthened by the appointment of two more ex-Harmony Gold mining experts, Freddy Moketla, (Mine Manager) and Jan Bronkhorst (Project Portfolio Manager), forming part of the mine build and execution team. A highly competent owners team (CEO, COO, Mine Manager, Project Portfolio Manager, Consulting Metallurgist and Consulting Engineer), together with various external specialists and design partners are working towards implementing the most appropriate plant solution, with the flexibility to treat various ore sources from open cast and underground mines.

#### **Pre-feasibility Bulk Metallurgical Sampling**

450kg of bulk samples have been collected from various shallow underground gold faces including at the Rietfontein, Beta and Vaalhoek Gold Mines with all showing excellent gold recovery with Carbon In Leach (CIL).

Theta Gold's technical team is confident that these preliminary metallurgical results can be repeated on a number of other mines. The 91% CIL recovery for the Beta Reef bulk sample was fresh ore which is very typical of that mine which hosts ~1.1 million ounces gold resources. The 91% recovery was well above expectations and demonstrates once again that modern technology can revitalize Theta Gold's broader mining province.

Work completed so far will be included in the PFS to increase the Mine Reserves which includes an underground bulk sampling program, underground workings survey and historical data review. The bulk sampling was carried out to assist metallurgical studies. The bulk sampling program was restricted to easily accessible gold mining faces and dumps to gauge historical Run-of-Mine (ROM) ore.

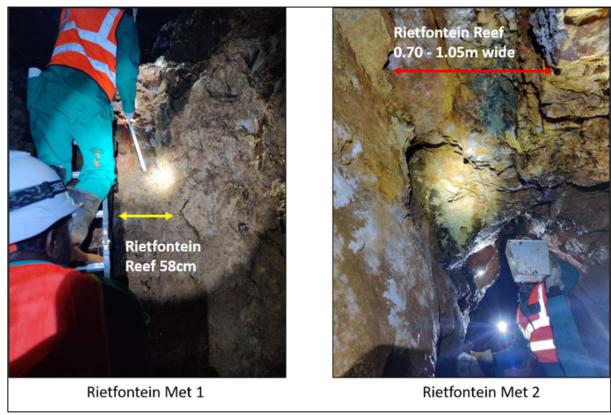


Figure 1: Rietfontein sample points

| Element                        | Unit   | RTF Dump<br>Composite <sup>2</sup> | RTFWRMet 1 Composite <sup>3</sup> | RFTMet 1 Composite <sup>4</sup> | RFTMet 2 Composite <sup>4</sup> | BETMet 1 Composite <sup>4</sup> | VaalHMet<br>Composite <sup>4</sup> |
|--------------------------------|--------|------------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|------------------------------------|
| Au Head Grade                  | g/t    | 1.12                               | 11.60                             | 4.60                            | 5.68                            | 7.76                            | 5.80                               |
| Au (duplicate)                 | g/t    | 1.12                               | 10.90                             | 4.92                            | 5.44                            | 7.48                            | 5.92                               |
| Au (triplicate)                | g/t    | 1.20                               | 11.20                             | 4.84                            | 5.32                            | 7.32                            | 5.96                               |
| Au av Head Grade               | g/t    | 1.15                               | 11.23                             | 4.79                            | 5.48                            | 7.52                            | 5.89                               |
|                                |        | •                                  |                                   |                                 | •                               |                                 |                                    |
| <b>Gravity recoverable</b>     | l loit | RTF Dump                           | RTFWRMet 1                        | RFTMet 1                        | RFTMet 2                        | BETMet 1                        | VaalHMet                           |
| gold                           | Unit   | Composite                          | Composite                         | Composite                       | Composite                       | Composite                       | Composite                          |
| Gravity (80% -75um scout test) | %      | 7.82                               | 7.96                              | 41.05                           | 27.84                           | 12.04                           | 26.03                              |
|                                |        |                                    |                                   |                                 |                                 |                                 |                                    |
| CIL Recovery<br>Results        | %      | 62.74                              | 78.69                             | 95.53                           | 92.09                           | 90.91                           | 91.63                              |

Table 1: Highlights of Gold Bulk Sampling Metallurgical Test Work 1

Notes

- 1 Details of bulk gold sampling program are given in Annexure A
- 2 RTF Dump is a sample derived from composites from the Rietfontein Mine tailings facility
- 3 RTFWRMet1 is a composite sample of fresh rock material on the historic Rietfontein Mine ROM pad (Over 9g/t recovered from CIL TEST)
- 4 Samples RFTMET 1&2, BetMET1, and VaalHMet1 were all collected from underground workings gold faces.
- Frankfort Mine was also sampled and yielded low CIL metallurgical recoveries. Further test work is required (See Annexure A).

#### Prefeasibility Metallurgical flowsheet design

Met 63 is supervising detailed metallurgical test work at Dynamic Engineering's test plant for the underground ore feed. Scope of test work includes analysing:- crushing circuit, Dense Media Separation (DMS) (to reduce ROM feed to plant), milling curves (best grind size for gold liberation), carbon flotation, reagent selection, and build flowsheet for final design of gold plant.



Underground ore samples from mine face 20+ mm sample size (5 tons of sample collected from underground mine)



Primary crush product 12mm + via Jaw crusher

Figure 2: Underground Ore Sample Test Work (Sample preparation via crushing now complete, samples now ready for downstream gold recovery test work)

#### **Pre-feasibility Study Mining Method**

Various mining methods were considered according to suitability, safety, productivity and profitability. The team's preliminary work has been focused on reviewing modern mechanized mining methods, studying historic maps and reports of the operations, and investigating the underground workings. Historically gold reefs were extracted by means of conventional manual methods, which were associated with low productivity, high dilution percentages and gold losses.

Modern methods, together with a favorable gold price, enable significant lowering of cut-off grades and therefore much larger portions of the orebodies become feasible to extract. The preferred method of mining the underground is Mechanised Long Hole Stoping. The Mechanised Long Hole stoping offer a number of advantages -

- Less ore dilution (very accurate cutting of gold reefs, narrower than 60 cm)
- improvement in grade ( as only the channel width of the orebody is mined)
- ore transport costs reduced (less ore to the Mill)

- Environmental footprint reduced (reduced infrastructure requirements)
- improves cost efficiency per ounce (increases production rates and lower operating cost)
- Method well understood by the team (practiced by other narrow reef operators in South Africa)
- Higher levels of safety and better working environment (reduced exposure as no access required into stoping faces)
- lengthens the tailings dam life

Mechanised equipment supplier, Sandvick, and an experienced Rock Engineering consultant conducted preliminary site visits and confirmed the suitability of the mining method.



Figure 3: Sandvick Low Profile long-hole drill rig – operating from the on-reef drill drive



Figure 4: Sandvick low Profile LHD – At a height 1.6 m designed for operation in narrow-reef drill drives

#### APPOINTMENT OF DEBT ADVISOR

The Company has appointed Sydney-based financial advisory firm, Kamara Group, to lead the debt financing efforts for Theta's Starter Open-pits project. Led by ex-Morgan Stanley banker, Mr John Kamara, the group has advised/closed many rounds of debt financing for ASX listed mining/resource clients, including New Century Resources (ASX: NCZ), Horizon Minerals (ASX: HRZ), Wiluna Mining (ASX: WMX) and Kin Mining (ASX: KIN).

#### INVESTMENT IN BULLION ASSET MANAGEMENT

On 20 January 2021, the Company announced that it was taking an equity investment in Bullion Asset Management Services Pte Ltd ("BAM"), a Singapore-based technology company focused on financing, tokenization of physical gold bullion and precious metals trading.

The investment, which is via an all-scrip issue of Theta Gold shares, brings to Theta Gold a strategic partner in Asia that is at the forefront of bullion and precious metals trading and financing.

#### **Transaction Details**

Theta Gold will subscribe for A\$700,000 worth of shares in BAM at an issue price of US\$1.00 per share by the issue of Theta Gold shares at an issue price equal to the volume weighted average price for trades done on the Australian Securities Exchange for the 30 traded days prior to the issue date of the shares ("30-days-VWAP") ("Initial Subscription"). The Initial Subscription was settled on 29 January 2021, with 2,087,682 Theta Gold shares issued to BAM at an issue price of \$0.33 per share. The Theta Gold shares will be subject to 6 months voluntary escrow. This initial investment will make Theta Gold a top 5 shareholder in BAM, holding approximately 5% of the total issued capital of BAM, alongside the 3 largest shareholders DC, Jaggards and DigitalX.

As part of the transaction, Theta Gold also has the option to:

- acquire a further 10% of BAM on or before 17 January 2022, taking its shareholding in BAM to approximately 15%
  - First Option Following the Initial Subscription, Theta Gold has the option to subscribe for a further A\$700,000 worth of BAM shares, on or before 17 April 2021, at an issue price of US\$1.00 per share by the issue of further Theta Gold shares at an issue price equal to the 30-days-VWAP prior to the issue date. The Theta Gold shares issued under the First Option will be subject to 9 months voluntary escrow.
  - Second Option Subject to Theta Gold exercising the First Option, the Company has been granted a second option to subscribe for a further A\$700,000 worth of BAM shares, on or before 17 January 2022, at an issue price of US\$1.25 per share by the issue of further Theta Gold shares at an issue price equal to the 30-days-VWAP prior to the issue date.
- appoint a non Australian resident director to the board of BAM after 17 January 2023 if its shareholding in BAM exceeds 10% at that time;
- co-invest in up to 50% of any future gold mining asset acquisitions (advance gold projects or operating mines) by BAM before 31 December 2025.

#### **CORPORATE**

#### **Cash Position and Funding**

As at 31 December 2020, the Group had US\$388,000 in cash.

#### **Annual General Meeting**

The 2020 Annual General Meeting was held on Tuesday 17 November 2020. All resolutions put to the meeting were passed.

#### **Capital Structure**

The following are movements in the capital structure since the end of the previous quarter and up to the date of this report –

- a) 1,218,891 fully paid ordinary shares were issued at A\$0.30 each following the exercise of listed options expiring 31 October 2020 (ASX: TGMO);
- b) 2,087,682 fully paid ordinary shares were issued at A\$0.33 each as consideration for the investment in BAM set out above;
- c) 32,535,772 listed options expiring 31 October 2020 (ASX: TGMO) were not exercised and lapsed;
- d) 1,800,000 unlisted performance rights expiring 27 June 2024 lapsed on 5 October 2020;
- e) 5,000,000 unlisted options exercisable at \$0.50 each on or before 30 June 2022 were issued to shareholders in consideration for extending the escrow period on 53,333,334 shares by 9 months from 31 December 2020 to 30 September 2021;
- f) 6,560,000 unlisted incentive options and performance rights expiring 30 September 2022 and 30 September 2025 were issued to employees of the group;
- g) 2,300,000 unlisted incentive options expiring 31 December 2022 and 31 December 2025 were issued to employees of the group.

The current capital structure of the Company is as follows –

|  | Number      |
|--|-------------|
| Fully paid ordinary shares (ASX: TGM   OTCQB: TGMGF)       | 462,226,030 |
| Unlisted options and performance rights (Refer Annexure B) | 36,418,353  |

This announcement was authorised for release by the Board of Directors.

For more information please visit <a href="www.thetagoldmines.com">www.thetagoldmines.com</a> or contact:

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#### **Competent Persons Statement**

#### Mineral Resources and Ore Reserves

The information in this report relating to Mineral Resources is based on, and fairly reflect, the information and supporting documentation compiled by Mr Uwe Engelmann (BSc (Zoo. & Bot.), BSc Hons (Geol.), Pr.Sci.Nat. No. 400058/08, MGSSA), a director of Minxcon (Pty) Ltd and a member of the South African Council for Natural Scientific Professions.

The information in this report relating to Ore Reserves is based on, and fairly reflects, the information and supporting documentation compiled by Mr Daniel van Heerden (B Eng (Min.), MCom (Bus. Admin.), MMC, Pr.Eng. No. 20050318, FSAIMM, AMMSA), a director of Minxcon (Pty) Ltd and a member of the Engineering Council of South Africa.

#### **Metallurgical Results**

The information in this report relating to exploration results is based on, and fairly reflects, the information and supporting documentation compiled by Mr Phil Bentley (MSc (Geol), MSc (MinEx), Pr.Sci.Nat. No. 400208/05, FGSSA), a consultant to the Company and a member of the South African Council for Natural Scientific Professions.

The original reports titled "Theta Gold increases Mineral Resource to over 6Moz", "Positive Feasibility Study for Theta Project", "Excellent Bulk Metallurgical Results Provides Confidence for Underground PFS" were dated 16 May 2019 and 18 November 2020 and were released to the Australian Securities Exchange (ASX) on those dates. The Company confirms that —

- it is not aware of any new information or data that materially affects the information included in the ASX announcements; and
- all material assumptions and technical parameters underpinning the estimates in the ASX announcements continue to apply and have not materially changed.

#### Mineral Resource - Theta Project MR 83

| Mineral Resource<br>Category in LoM | Pit                              | Grade | Reef<br>Tonnes | Au Co | ontent  |
|-------------------------------------|----------------------------------|-------|----------------|-------|---------|
| Plan                                |                                  | g/t   | kt             | kg    | OZ      |
| Indicated                           |                                  | 2.30  | 489            | 1 124 | 36 135  |
| Inferred                            | Browns Hill                      | 2.03  | 181            | 368   | 11 831  |
| Subtotal                            |                                  | 2.23  | 670            | 1 492 | 47 967  |
| Indicated                           | lata coation of                  | 2.38  | 1 696          | 4 033 | 129 673 |
| Inferred                            | Iota section of<br>Columbia Hill | 5.53  | 83             | 457   | 14 694  |
| Subtotal                            | Columbia mili                    | 2.53  | 1 778          | 4 490 | 144 367 |
| Indicated                           |                                  | 1.60  | 557            | 891   | 28 662  |
| Inferred                            | Theta Hill                       | 1.32  | 438            | 579   | 18 604  |
| Subtotal                            |                                  | 1.48  | 995            | 1 470 | 47 266  |
| Indicated                           |                                  | -     | -              |       |         |
| Inferred                            | Dumps                            | 1.49  | 418            | 622   | 20 007  |
| Subtotal                            |                                  | 1.49  | 418            | 622   | 20 007  |
| Total Indicated                     |                                  | 2.21  | 2 741          | 6 049 | 194 470 |
| Total Inferred                      |                                  | 1.81  | 1 119          | 2 026 | 65 137  |
| Total                               |                                  | 2.09  | 3 861          | 8 075 | 259 607 |

#### Notes:

- 1. Theta Project (Theta Hill, Browns Hill and Iota) cut-off is 0.35 g/t;
- The gold price used for the cut-off calculations is USD 1,500/oz;
   Geological losses applied are 10% for inferred and 5% for Indicated and Measured;
- 4. Theta Hill and Browns Hill Upper Theta Reef, Lower Theta Reef and Beta Reef are diluted grades over 100 cm;
- 5. Geological losses applied are, 10% for inferred and 5% for Indicated and Measured;
- 6. Historical mine voids have been depleted from the Mineral Resource;
- 7. The inferred Mineral Resources have a high degree of uncertainty and it should not be assumed that all or a portion thereof will be converted to Ore Reserves;
- 8. Mineral Resource fall within the mining right 83MR and 341MR.
- 9. No Geological losses applied to dumps
- 10. The inferred Mineral Resources have a high degree of uncertainty and it should not be assumed that all or a portion thereof will be converted to Ore Reserves;

#### **JORC Global Mineral Resources**

#### Mineral Resources for Underground Operations as at 1 May 2019

| Resource       | Mine              | Reef                 | Reef<br>Grade | Stope<br>Grade | Reef<br>Width | Stope<br>width | Content | Reef<br>Tonnes | Stope<br>Tonnes | Au Co  | ntent |
|----------------|-------------------|----------------------|---------------|----------------|---------------|----------------|---------|----------------|-----------------|--------|-------|
| Classification |                   |                      | g/t           | g/t            | cm            | cm             | cmgt    | Mt             | Mt              | Kg     | koz   |
| Measured       | Frankfort         | Bevetts              | 7.13          | 5.37           | 73            | 103            | 520     | 0.069          | 0.091           | 489    | 15.7  |
| Total Measured |                   |                      | 7.13          | 5.37           | 73            | 103            | 520     | 0.069          | 0.091           | 489    | 15.7  |
|                | Frankfort         | Bevetts              | 7.86          | 5.13           | 58            | 96             | 452     | 0.243          | 0.373           | 1,912  | 61.5  |
|                | CDM               | Rho                  | 13.19         | 3.80           | 23            | 90             | 307     | 0.258          | 0.895           | 3,401  | 109.4 |
|                | Beta              | Beta                 | 21.66         | 6.58           | 23            | 90             | 499     | 0.716          | 2.357           | 15,506 | 498.5 |
| Indicated      | Rietfontein       | Rietfontein          | 14.57         | 8.20           | 52            | 92             | 755     | 0.517          | 0.919           | 7,534  | 242.2 |
|                | Vaalhoek          | Vaalhoek             | 13.90         | 6.34           | 36            | 90             | 499     | 0.064          | 0.140           | 887    | 28.5  |
|                | Olifantsgera amte | Olifantsger<br>aamte | 16.97         | 4.62           | 25            | 90             | 416     | 0.026          | 0.091           | 422    | 13.6  |

| Total Indicated            | 16.26 | 6.21 | 36 | 91 | 591 | 1.824 | 4.774 | 29,661 | 953.7 |
|----------------------------|-------|------|----|----|-----|-------|-------|--------|-------|
| Total Measured & Indicated | 15.93 | 6.20 | 38 | 91 | 600 | 1.893 | 4.865 | 30,150 | 969.4 |

| Resource<br>Classification | UG Mine             | Reef                 | Reef<br>Grade | Stope<br>Grade | Reef<br>Width | Stope<br>width | Content | Reef<br>Tonnes | Stope<br>Tonnes | Au Co   | ntent   |
|----------------------------|---------------------|----------------------|---------------|----------------|---------------|----------------|---------|----------------|-----------------|---------|---------|
| Classification             |                     |                      | g/t           | g/t            | cm            | cm             | cmgt    | Mt             | Mt              | Kg      | koz     |
|                            | Frankfort           | Bevetts              | 7.41          | 4.27           | 48            | 93             | 356     | 0.343          | 0.596           | 2,543   | 81.8    |
|                            | CDM                 | Rho                  | 10.06         | 3.02           | 24            | 90             | 244     | 0.544          | 1.811           | 5,472   | 175.9   |
|                            | Beta                | Beta                 | 16.51         | 5.43           | 25            | 90             | 414     | 1.107          | 3.367           | 18,285  | 587.9   |
|                            | Rietfontein         | Rietfontein          | 14.06         | 8.52           | 57            | 94             | 803     | 1.190          | 1.962           | 16,721  | 537.6   |
|                            | Olifantsgera amte   | Olifantsger<br>aamte | 18.33         | 4.68           | 23            | 90             | 422     | 0.059          | 0.248           | 1,162   | 37.3    |
|                            | Vaalhoek            | Vaalhoek             | 16.28         | 4.77           | 22            | 90             | 361     | 0.873          | 2.980           | 14,209  | 456.8   |
| Inferred                   | Vaalhoek            | Thelma<br>Leaders    | 12.18         | 9.47           | 96            | 123            | 1166    | 0.023          | 0.030           | 284     | 9.1     |
|                            | Glynns<br>Lydenburg | Glynns               | 15.87         | 5.19           | 25            | 90             | 397     | 3.218          | 9.833           | 51,078  | 1,642.2 |
|                            | Ponieskrantz<br>*   | Portuguese           | 13.26         | 3.99           | 22            | 90             | 287     | 0.064          | 0.213           | 849     | 27.3    |
|                            | Frankfort<br>Theta* | Theta                | 7.22          | 3.24           | 34            | 90             | 244     | 0.099          | 0.220           | 714     | 23.0    |
|                            | Nestor*             | Sandstone            | 5.54          | 2.92           | 41            | 90             | 225     | 0.101          | 0.193           | 562     | 18.1    |
| Total Inferred             |                     |                      | 14.68         | 5.22           | 31            | 91             | 458     | 7.622          | 21.452          | 111,880 | 3,597.0 |

Note: \* Manual Mineral Resources

Mineral Resources for Open Pit Operations as at 1May 2019

| Resource<br>Classification | Open Pit Mine          | Reef        | Reef<br>Grade | Reef<br>Width | Content | Reef<br>Tonnes | Au Co  | ntent |
|----------------------------|------------------------|-------------|---------------|---------------|---------|----------------|--------|-------|
| Classification             |                        |             | g/t           | cm            | cmgt    | Mt             | Kg     | koz   |
|                            | Hermansburg            | Elluvial    | 1.79          | 0             | 0       | 0.505          | 905    | 29.1  |
|                            | DG1                    | Elluvial    | 1.37          | 0             | 0       | 0.159          | 217    | 7.0   |
|                            | DG2                    | Elluvial    | 0.76          | 0             | 0       | 1.174          | 892    | 28.7  |
|                            | Vaalhoek               | Vaalhoek    | 17.25         | 33            | 574     | 0.111          | 1920   | 61.7  |
|                            | Theta & Browns<br>Hill | Shale       | 1.02          | 200           | 204     | 0.439          | 402    | 12.9  |
|                            | Theta & Browns<br>Hill | Bevetts     | 1.10          | 221           | 244     | 0.891          | 886    | 28.5  |
| Indicated                  | Theta & Browns<br>Hill | Upper Theta | 2.41          | 100           | 241     | 0.724          | 1568   | 50.4  |
|                            | Theta & Browns<br>Hill | Lower Theta | 3.70          | 100           | 370     | 0.888          | 2956   | 95.0  |
|                            | Theta & Browns<br>Hill | Beta        | 2.49          | 100           | 249     | 0.383          | 859    | 27.6  |
|                            | lota                   | Bevetts     | 2.89          | 114           | 330     | 0.105          | 303    | 9.7   |
|                            | lota                   | Upper Rho   | 2.43          | 393           | 956     | 0.808          | 1965   | 63.2  |
|                            | lota                   | Lower Rho   | 2.51          | 550           | 1381    | 0.815          | 2047   | 65.8  |
|                            | lota                   | Upper Theta | 1.08          | 114           | 123     | 0.158          | 171    | 5.5   |
| otal Indicated             |                        |             | 2.11          | 179           | 378     | 7.161          | 15,091 | 485.2 |

| Resource<br>Classification | Open Pit Mine          | Reef           | Reef<br>Grade | Reef<br>Width | Content | Reef<br>Tonnes | Au Co  | ntent |
|----------------------------|------------------------|----------------|---------------|---------------|---------|----------------|--------|-------|
| Classification             |                        |                | g/t           | cm            | cmgt    | Mt             | Kg     | koz   |
|                            | Hermansburg            | Elluvial       | 0.88          | 0             | 0       | 0.110          | 97     | 3.1   |
|                            | DG1                    | Elluvial       | 2.95          | 0             | 0       | 0.293          | 864    | 27.8  |
|                            | DG5                    | Elluvial       | 0.76          | 0             | 0       | 0.101          | 77     | 2.5   |
|                            | Vaalhoek               | Vaalhoek       | 20.32         | 43            | 880     | 0.213          | 4,319  | 138.9 |
|                            | Vaalhoek               | Thelma Leaders | 14.25         | 97            | 1,388   | 0.293          | 4,172  | 134.1 |
|                            | Theta & Browns<br>Hill | Shale          | 1.11          | 216           | 240     | 0.703          | 666    | 21.4  |
| Inferred                   | Theta & Browns<br>Hill | Bevetts        | 1.07          | 213           | 227     | 0.648          | 589    | 19.0  |
| ,                          | Theta & Browns<br>Hill | Upper Theta    | 1.86          | 100           | 186     | 1.071          | 1692   | 54.4  |
|                            | Theta & Browns<br>Hill | Lower Theta    | 8.11          | 100           | 811     | 1.643          | 11329  | 364.3 |
|                            | Theta & Browns<br>Hill | Beta           | 2.23          | 100           | 223     | 0.748          | 1417   | 45.6  |
|                            | lota                   | Upper Rho      | 5.13          | 106           | 544     | 0.099          | 507    | 16.3  |
| Total Inferred             |                        |                | 4.35          | 115           | 502     | 5.922          | 25,730 | 827.3 |

Mineral Resources for Tailings Dams as at 1 May 2019

| Resource        | Surface              | Reef     | Tonnage | Gold<br>Grade | Gold Content |       |  |
|-----------------|----------------------|----------|---------|---------------|--------------|-------|--|
| Classification  | Operation            |          | Mt      | g/t           | Kg           | koz   |  |
|                 | Glynn's<br>Lydenburg | Tailings | 1.211   | 0.80          | 972          | 31.3  |  |
|                 | Blyde 1              | Tailings | 0.590   | 0.73          | 434          | 14.0  |  |
|                 | Blyde 2              | Tailings | 0.280   | 0.83          | 234          | 7.5   |  |
| Indicated       | Blyde 3              | Tailings | 0.316   | 0.87          | 275          | 8.8   |  |
|                 | Blyde 4              | Tailings | 0.164   | 0.72          | 119          | 3.8   |  |
|                 | Blyde 5              | Tailings | 0.022   | 0.61          | 14           | 0.4   |  |
|                 | TGME Plant           | Tailings | 2.661   | 0.87          | 2,325        | 74.8  |  |
| Total Indicated |                      |          | 5.244   | 0.83          | 4,373        | 140.6 |  |

| Resource       | Surface   | Reef     | Tonnage | Gold<br>Grade | Gold Content |     |
|----------------|-----------|----------|---------|---------------|--------------|-----|
| Classification | Operation |          | Mt      | g/t           | Kg           | koz |
| Inferred       | Blyde 3a  | Tailings | 0.023   | 0.57          | 13           | 0.4 |
| Total Inferred |           |          | 0.023   | 0.57          | 13           | 0.4 |

Mineral Resources for Rock Dumps as at 1 May 2019

| Mineral<br>Resource | Surface   | Reef      | Tonnage | Gold<br>Grade | Gold Content |     |
|---------------------|-----------|-----------|---------|---------------|--------------|-----|
| Category            | Operation |           | Mt      | g/t           | Kg           | koz |
| Inferred            | Vaalhoek  | Rock Dump | 0.121   | 1.64          | 199          | 6.4 |
| Total Inferred      |           |           | 0.121   | 1.64          | 199          | 6.4 |

#### Notes:

- 1. Columns may not add up due to rounding.
- 2. Gold price used for the cut-off calculations is USD1,500/oz.

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- 3. UG Mineral Resources are reported at a cut-off of 160 cm.g/t, open pit at 0.5 g/t and 0.35 g/t, tailings and rock dumps at 0.35 g/t.
- 4. Fault losses of 5% for Measured and Indicated, 10% for Inferred Mineral Resources.
- 5. Mineral Resources are stated as inclusive of Ore Reserves.
- 6. Mineral Resources are reported as total Mineral Resources and are not attributed.

## Theta Gold Mines Limited Unlisted Options and Performance Rights

| Number      | Performance Hurdle/Vesting Date (if applicable)  | Exercise<br>Price | Expiry Date |
|-------------|--|-------------------|-------------|
| OPTIONS     |  |                   |             |
| 3,158,353   |  | \$0.40            | 27 Apr 2022 |
| 5,000,000   |  | \$0.50            | 30 Jun 2022 |
| 800,000     | Options will vest on 1 October 2021  | \$0.30            | 30 Sep 2022 |
| 400,000     | Options will vest on 3 and 4 January 2022  | \$0.30            | 31 Dec 2022 |
| 9,358,353   | TOTAL OPTIONS  |                   |             |
| DERECRMANCE | RIGHTS/OPTIONS   |                   |             |
|             |  | Niil              | 27 Jun 2024 |
| 50,000      | All systems, licences, insurances, regulatory and statutory compliance in place to meet South Africa Mining regulations, laws, Mining Charter 111, commercial contacts. (Mine ready).                | Nil               | 27 Jun 2024 |
| 3,220,000   | Delineating a total of 300,000 ounces of gold ore reserves (in accordance with the JORC Code 2012 <sup>1</sup> ) at grade of at least 2.5g/t Au.   | Nil               | 27 Jun 2024 |
| 4,420,000   | Decision to Mine (Board approval to commence development of a gold mining operation) with all regulatory approvals secured.  This performance hurdle must be achieved on or before 27 Sep 2021.      | Nil               | 27 Jun 2024 |
| 5,730,000   | Achieving annualised production of 50,000 ounces of gold per annum over a consecutive period of 3 months.  This performance hurdle must be achieved on or before 27 Sep 2022.                        | Nil               | 27 Jun 2024 |
| 5,980,000   | Achieving annualised production of 100,000 ounces of gold per annum over a consecutive period of 3 months.  This performance hurdle must be achieved on or before 27 Mar 2024.                       | Nil               | 27 Jun 2024 |
| 1,200,000   | Decision to Mine   | \$0.40            | 30 Sep 2025 |
| 800,000     | Production Commencement  | \$0.40            | 30 Sep 2025 |
| 1,200,000   | 3 months production (ounces) on schedule as per<br>Theta Project Optimised Feasibility Study or from<br>underground mine production, or the combination<br>thereof, at AISC of US\$855/oz (+/- 10%)  | \$0.40            | 30 Sep 2025 |
| 640,000     | 12 months production (ounces) on schedule as per<br>Theta Project Optimised Feasibility Study or from<br>underground mine production, or the combination<br>thereof, at AISC of US\$855/oz (+/- 10%) | Nil               | 30 Sep 2025 |
| 320,000     | Production of over 25,000 ounces of gold over a consecutive period of 3 months   | \$0.50            | 30 Sep 2025 |
| 640,000     | Production of over 25,000 ounces of gold over a consecutive period of 3 months   | Nil               | 30 Sep 2025 |
| 320,000     | Production of over 37,500 ounces of gold over a consecutive period of 3 months   | \$0.50            | 30 Sep 2025 |
| 640,000     | Production of over 37,500 ounces of gold over a consecutive period of 3 months   | Nil               | 30 Sep 2025 |
| 500,000     | Production of over 12,500 ounces of gold over a consecutive period of 3 months   | \$0.50            | 31 Dec 2025 |

| 600,000    | Production of over 25,000 ounces of gold over a consecutive period of 3 months | \$0.50 | 31 Dec 2025 |
|------------|--|--------|-------------|
| 800,000    | Production of over 37,500 ounces of gold over a consecutive period of 3 months | \$0.50 | 31 Dec 2025 |
| 27,060,000 | TOTAL PERFORMANCE RIGHTS/OPTIONS   |        |             |
| 36,418,353 | TOTAL OPTIONS AND PERFORMANCE RIGHTS/OPTIONS                                   |        |             |

#### **ABOUT THETA GOLD MINES LIMITED**

Theta Gold Mines Limited (ASX: TGM | OTCQB: TGMGF) is a gold mining development company that holds a range of prospective gold assets in a world-renowned South African gold mining region. These assets include several surface and near-surface high-grade gold projects which provide cost advantages relative to other gold producers in the region.

Theta Gold's core project is located next to the historical gold mining town of Pilgrim's Rest, in Mpumalanga Province, some 370km northeast of Johannesburg by road or 95km north of Nelspruit (Capital City of Mpumalanga Province). Following small scale production from 2011 – 2015, the Company is currently focussing on the construction of a new gold processing plant within its approved footprint at the TGME plant, and for the processing of the Theta Open Pit oxide gold ore. Nearby surface and underground mines and prospects are being evaluated.

The Company aims to build a solid production platform to over 160 kozpa based primarily around shallow, open-cut or adit-entry hard rock mining sources. Theta Gold has access to over 43 historical mines and prospect areas that can be accessed and explored, with over 6.7Moz of historical production recorded.

Theta Gold holds 100% issued capital of its South African subsidiary, Theta Gold SA (Pty) Ltd ("SGSA"). SGSA holds a 74% shareholding in both Transvaal Gold Mining Estates Limited ("TGME") and Sabie Mines (Pty) Ltd ("Sabie Mines"). The balance of shareholding is held by Black Economic Empowerment ("BEE") entities. The BEE shareholding in TGME and Sabie Mines is comprised of a combination of local community trusts, an employee trust and a strategic entrepreneurial partner.



#### **DISCLAIMER**

This announcement has been prepared by and issued by Theta Gold Mines Limited to assist in informing interested parties about the Company and should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this announcement.

This announcement may contain forward looking statements. Whilst Theta Gold has no reason to believe that any such statements and projections are either false, misleading or incorrect, it does not warrant or guarantee such statements. Nothing contained in this announcement constitutes investment, legal, tax or other advice. This overview of Theta Gold does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the Company's prospects. Before making an investment decision, you should consult your professional adviser, and perform your own analysis prior to making any investment decision. To the maximum extent permitted by law, the Company makes no representation and gives no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no liability for, the authenticity, validity, accuracy, suitability or

completeness of, or any errors in or omissions, from any information, statement or opinion contained in this announcement. This announcement contains information, ideas and analysis which are proprietary to Theta Gold.

#### FORWARD LOOKING AND CAUTIONARY STATEMENTS

This announcement may refer to the intention of Theta Gold regarding estimates or future events which could be considered forward looking statements. Forward looking statements are typically preceded by words such as "Forecast", "Planned", "Expected", "Intends", "Potential", "Conceptual", "Believes", "Anticipates", "Predicted", "Estimated" or similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, and may be influenced by such factors as funding availability, market-related forces (commodity prices, exchange rates, stock market indices and the like) and political or economic events (including government or community issues, global or systemic events). Forward looking statements are provided as a general reflection of the intention of the Company as at the date of release of the document, however are subject to change without notice, and at any time. Future events are subject to risks and uncertainties, and as such results, performance and achievements may in fact differ from those referred to in this announcement. Mining, by its nature, and related activities including mineral exploration, are subject to a large number of variables and risks, many of which cannot be adequately addressed, or be expected to be assessed, in this document. Work contained within or referenced in this report may contain incorrect statements, errors, miscalculations, omissions and other mistakes. For this reason, any conclusions, inferences, judgments, opinions, recommendations or other interpretations either contained in this announcement, or referencing this announcement, cannot be relied upon. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates. The Company believes it has a reasonable basis for making the forward looking statements contained in this document, with respect to any production targets, resource statements or financial estimates, however further work to define Mineral Resources or Reserves, technical studies including feasibilities, and related investigations are required prior to commencement of mining. No liability is accepted for any loss, cost or damage suffered or incurred by the reliance on the sufficiency or completeness of the information, opinions or beliefs contained in this announcement.

The Feasibility Study referred to in this announcement is based on technical and economic assessments to support the estimation of Ore Reserves. There is no assurance that the intended development referred to will proceed as described, and will rely on access to future funding to implement. Theta Gold believes it has reasonable grounds the results of the Feasibility Study. At this stage there is no guarantee that funding will be available, and investors are to be aware of any potential dilution of existing issued capital. The production targets and forward looking statements referred to are based on information available to the Company at the time of release, and should not be solely relied upon by investors when making investment decisions. Theta Gold cautions that mining and exploration are high risk, and subject to change based on new information or interpretation, commodity prices or foreign exchange rates. Actual results may differ materially from the results or production targets contained in this release. Further evaluation is required prior to a decision to conduct mining being made. The estimated Mineral Resources quoted in this release have been prepared by Competent Persons as required under the JORC Code (2012). Material assumptions and other important information are contained in this release.

### Appendix 5B

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

| THETA GOLD MINES LIMITED |                                   |
|--------------------------|-----------------------------------|
| ABN                      | Quarter ended ("current quarter") |
| 30 131 758 177           | 31 December 2020                  |

| Con | solidated statement of cash flows  | Current quarter<br>\$US'000 | Year to date<br>(6 months)<br>\$US'000 |
|-----|--|-----------------------------|--|
| 1.  | Cash flows from operating activities   |                             |  |
| 1.1 | Receipts from customers  |                             |  |
| 1.2 | Payments for   |                             |  |
|     | (a) exploration & evaluation (if expensed)   | (235)                       | (454)                                  |
|     | (b) development  |                             |  |
|     | (c) production   |                             |  |
|     | (d) staff costs  | (132)                       | (243)                                  |
|     | <ul><li>(e) administration and corporate costs<br/>(includes Sydney, Johannesburg and<br/>Pilgrim's Rest minesite offices)</li></ul> | (321)                       | (1,133)                                |
| 1.3 | Dividends received (see note 3)  |                             |  |
| 1.4 | Interest received  | 1                           | 1                                      |
| 1.5 | Interest and other costs of finance paid   | (6)                         | (6)                                    |
| 1.6 | Income taxes paid  |                             |  |
| 1.7 | Government grants and tax incentives   |                             |  |
| 1.8 | Other (provide details if material)  |                             |  |
| 1.9 | Net cash from / (used in) operating activities   | (693)                       | (1,835)                                |

| 2.  | Са  | sh flows from investing activities        |       |         |
|-----|-----|---|-------|---------|
| 2.1 | Pa  | yments to acquire:                        |       |         |
|     | (a) | entities                                  |       |         |
|     | (b) | tenements                                 |       |         |
|     | (c) | property, plant and equipment             | (6)   | (32)    |
|     | (d) | exploration & evaluation (if capitalised) | (454) | (1,096) |
|     | (e) | investments                               |       |         |
|     | (f) | other non-current assets                  |       |         |

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| Con | solidated statement of cash flows              | Current quarter<br>\$US'000 | Year to date<br>(6 months)<br>\$US'000 |
|-----|--|-----------------------------|--|
| 2.2 | Proceeds from the disposal of:                 |                             |  |
|     | (a) entities                                   |                             |  |
|     | (b) tenements                                  |                             |  |
|     | (c) property, plant and equipment              | 4                           | 39                                     |
|     | (d) investments                                |                             |  |
|     | (e) other non-current assets                   |                             |  |
| 2.3 | Cash flows from loans to other entities        |                             |  |
| 2.4 | Dividends received (see note 3)                |                             |  |
| 2.5 | Other (provide details if material)            |                             |  |
| 2.6 | Net cash from / (used in) investing activities | (456)                       | (1,089)                                |

| 3.   | Cash flows from financing activities  |      |       |
|------|---|------|-------|
| 3.1  | Proceeds from issues of equity securities (excluding convertible debt securities)       | 259  | 3,211 |
| 3.2  | Proceeds from issue of convertible debt securities                                      |      |       |
| 3.3  | Proceeds from exercise of options   |      |       |
| 3.4  | Transaction costs related to issues of equity securities or convertible debt securities | -    | (312) |
| 3.5  | Proceeds from borrowings  | 319  | 319   |
| 3.6  | Repayment of borrowings   | (15) | (53)  |
| 3.7  | Transaction costs related to loans and borrowings                                       |      |       |
| 3.8  | Dividends paid  |      |       |
| 3.9  | Other (provide details if material)   |      |       |
| 3.10 | Net cash from / (used in) financing activities  | 563  | 3,165 |

| 4.  | Net increase / (decrease) in cash and cash equivalents for the period |       |         |
|-----|---|-------|---------|
| 4.1 | Cash and cash equivalents at beginning of period                      | 973   | 147     |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above)       | (693) | (1,835) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above)       | (456) | (1,089) |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above)      | 563   | 3,165   |

ASX Listing Rules Appendix 5B (01/12/19) + See chapter 19 of the ASX Listing Rules for defined terms.

| Con | solidated statement of cash flows                 | Current quarter<br>\$US'000 | Year to date<br>(6 months)<br>\$US'000 |
|-----|---|-----------------------------|--|
| 4.5 | Effect of movement in exchange rates on cash held |                             |  |
| 4.6 | Cash and cash equivalents at end of period        | 388                         | 388                                    |

| 5.  | Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter<br>\$US'000 | Previous quarter<br>\$US'000 |
|-----|---|-----------------------------|------------------------------|
| 5.1 | Bank balances   | 388                         | 973                          |
| 5.2 | Call deposits   |                             |                              |
| 5.3 | Bank overdrafts   |                             |                              |
| 5.4 | Other (provide details)   |                             |                              |
| 5.5 | Cash and cash equivalents at end of quarter (should equal item 4.6 above)   | 388                         | 973                          |

| 6.  | Payments to related parties of the entity and their associates                          | Current quarter<br>\$US'000 |
|-----|---|-----------------------------|
| 6.1 | Aggregate amount of payments to related parties and their associates included in item 1 | 29 <sup>(1)</sup>           |
| 6.2 | Aggregate amount of payments to related parties and their associates included in item 2 |                             |

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

<sup>&</sup>lt;sup>(1)</sup> Payments to related parties in item 6.1 above are for director fees and consulting fees.

# 7. Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity. 7.1 Loan facilities 7.2 Credit standby arrangements

| Total facility<br>amount at quarter<br>end<br>\$US'000 | Amount drawn at quarter end \$US'000 |
|--|--------------------------------------|
| 3,970  | 3,470                                |
|  |                                      |
|  |                                      |
| 3,970  | 3,470                                |

7.4 Total financing facilities

Other (please specify)

7.3

#### 7.5 Unused financing facilities available at quarter end

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

Details of the loan facilities are set out in Note 14 of the Company's Financial Report for the year ended 30 June 2020.

In addition, a shareholder has provided the Company with a A\$1,000,000 short term loan facility during the quarter. The loan is interest-free and is to be repaid from the proceeds of the next capital raising.

| 8.  | Estimated cash available for future operating activities               | \$US'000 |
|-----|--|----------|
| 8.1 | Net cash from / (used in) operating activities (Item 1.9)              | (679)    |
| 8.2 | Capitalised exploration & evaluation (Item 2.1(d))                     | (454)    |
| 8.3 | Total relevant outgoings (Item 8.1 + Item 8.2)                         | (1,133)  |
| 8.4 | Cash and cash equivalents at quarter end (Item 4.6)                    | 388      |
| 8.5 | Unused finance facilities available at quarter end (Item 7.5)          | 500      |
| 8.6 | Total available funding (Item 8.4 + Item 8.5)                          | 888      |
| 8.7 | Estimated quarters of funding available (Item 8.6 divided by Item 8.3) | 0.78     |

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
  - 1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

| Answer: |  |  |  |
|---------|--|--|--|
|         |  |  |  |

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: The Company has appointed financial advisors to undertake a capital raising. The Company believes that it will be successful in obtaining additional funding.

Pending the capital raising, a shareholder has provided the Company with a A\$1,000,000 short term loan facility, such facility to be repaid from the proceeds of the next capital raising.

ASX Listing Rules Appendix 5B (01/12/19)

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes, the Company expects to be able to raise fund to continue its activities. The Company owns the Theta Project which is ready for development, subject to permitting approval and finance (ASX announcement 20 April 2020). In parallel with the Theta Project development, the Company is also assessing potential underground mines development as part of its Five-Year >160,000oz per annum production plan. A Pre-Feasibility Study on selected underground mines is currently underway.

The group's large tenement holding in South Africa is potentially very prospective and remains largely unexplored using modern technology. The Theta Project, potential underground mines development and the prospective tenement holding should underpin the company's ability to raise funds for its business needs.

#### Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

| Date:           | 29 January 2021  |
|-----------------|--|
|                 |  |
| Authorised by:  | Board of Directors   |
| Additionsed by. | (Name of body or officer authorising release – see note 4) |

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.