

**Tharisa plc**

(Incorporated in the Republic of Cyprus with limited liability)

(Registration number HE223412)

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('Tharisa' or the 'Company')

**THARISA EXTENDS THE OPEN PIT LIFE OF MINE BY AN ADDITIONAL 7 YEARS TO 2041**

***Open-pit tonnage increased by 30% to 94.2Mt with improvements in both 3PGE+AU and CR<sub>2</sub>O<sub>3</sub> mineral content***

Tharisa, the platinum group metals (PGMs) and chrome co-producer dual-listed on the Johannesburg and London stock exchanges, announces an extension of the open pit Life of Mine (LOM) at its flagship Tharisa Mine, following an annual review of its Mineral Resource and Mineral Reserve statement.

**Highlights**

- The September 2021 Mineral Resource and Mineral Reserve statement for the Tharisa Mine indicates a significant extension to the LOM, increasing from 13 years to 20 years
- Open pit production will now continue until 2041
- The revised LOM schedule also mitigates the risks associated with the transition to underground mining, with portal development taking place as open pit mining continues
- Open-pit tonnage has increased by 30%, to 94.2 Mt, with total open pit and underground Mineral Reserves of 113.1 Mt at PGM grades of 1.09 g/t (3PGE+Au) and chrome grades of 18.6%.
  - Containing a total of 4.0 Moz PGMs (3PGE+Au)
  - Containing a total of 21.3 Mt of chrome

|   | Unit | Total 2021<br>open pit and<br>underground | Total 2020<br>open pit and<br>underground | Percentage<br>change |
|---|------|---|---|----------------------|
| Tonnes  | Mt   | 113.1                                     | 97.5                                      | 16                   |
| 5PGE + Au grade   | g/t  | 1.42                                      | 1.43                                      | -0.7                 |
| 3PGE + Au grade   | g/t  | 1.09                                      | 1.10                                      | -0.9                 |
| Cr <sub>2</sub> O <sub>3</sub> grade                    | %    | 18.6                                      | 18.6                                      | -                    |
| Contained 3PGE + Au <sup>(1)</sup>                      | Moz  | 4.0                                       | 3.4                                       | 17.6                 |
| Contained Cr <sub>2</sub> O <sub>3</sub> <sup>(2)</sup> | Mt   | 21.3                                      | 18.2                                      | 17.0                 |

### Tharisa Mine Review

The Mineral Reserve estimate for September 2021 was based on a revised and updated LOM for the open pit. This estimation was underpinned by an updated mining model and incorporates the current economic conditions, current on-mine mining methodology and survey depletion. Appropriate technical aspects were considered in the mine design and schedule as the basis for the Mineral Reserve estimate, including economic pit limits, geotechnical parameters, mining methodology and sequence, pit access, ramp placement, equipment capability, production rates and practical mining considerations. The mining-related modifying factors applied included geological losses, mining losses, mining dilution and metallurgical recovery. As part of the LOM process, a reconciliation was done as the basis for the modifying factors to be applied.

### Phoevos Pouroulis, CEO of Tharisa, commented:

*"Following an annual review of the Company's Mineral Resource and Mineral Reserve, the Tharisa Mine's open-pit mining will continue through to 2041, seven years longer than previously indicated. This development further cements the reputation of the Tharisa Mine as a world-class, long-life asset that underpins our business and will continue to provide a sustainable, low-cost platform for over 50 years.*

*This growth follows Tharisa's demonstration of the consistency of its operations and proven ability to successfully move volume whilst maintaining a strong production profile, resulting in shareholder value accretion. The ability to extend the open pit at the Tharisa Mine also allows us to take further advantage of this unique asset and provides the platform for our growth strategy.*

*Amid a global scramble for commodities as we head towards a sustainable future, Tharisa remains positioned to fulfil its goal of becoming an enabler of the global energy transition and is set to play a major role in not only the sustainable exploitation of resources but also the beneficiation of our commodities.*

*With other components of our 6-pillar growth strategy evolving rapidly, underpinned by a solid business model of operating long life, mechanised and open-pit assets, I am confident these latest developments will only contribute further to positive returns for all stakeholders."*

## 2021 Mineral Resource and Mineral Reserve inventory review

The results of this review saw the Mineral Reserve tonnage increased by 15.6 Mt due to the final pit limit increase of the open pits. Pit design and updated MG chromitite layers accounted for a 26.4 Mt increase, mining depletion accounted for a 4.5 Mt decrease and the underground Mineral Reserves reduced by 6.2 Mt.

The variance between the 2020 and 2021 Mineral Reserve estimation is due to:

- Mining depletion
- Updated geological model and an updated coding of the MG Chromite Layers in the western pit area
- Updated open pit design based on the updated pit optimisation results
- Removal of a portion of the underground Mineral Reserves due to the increase of the open pit depths.

The open pit LOM schedule was based on a targeted ROM production rate of 5.64 Mtpa over a period of 15 years at which time the East open pit will be depleted and an additional five years for the depletion of the West pit, albeit at lower mining rates. The final open pit ROM material will be produced during 2041. The open pit LOM increased by seven years due to the increase in the open pit limits. The East open pit transitions to underground mining from 2036 onwards and the West open pit from 2041 onwards.

## Tharisa Mine Open Pit and Underground Mineral Reserve Statement

| Total open pit and underground 2021                     | Unit | Proved | Probable | Total |
|---|------|--------|----------|-------|
| Tonnes  | Mt   | 83.4   | 29.7     | 113.1 |
| 5PGE + Au grade   | g/t  | 1.43   | 1.33     | 1.42  |
| 3PGE + Au grade   | g/t  | 1.11   | 1.03     | 1.09  |
| Cr <sub>2</sub> O <sub>3</sub> grade                    | %    | 18.7   | 17.5     | 18.6  |
| Contained 3PGE + Au <sup>(1)</sup>                      | Moz  | 2.9    | 1.0      | 4.0   |
| Contained Cr <sub>2</sub> O <sub>3</sub> <sup>(2)</sup> | Mt   | 15.7   | 5.6      | 21.3  |
| Total open pit and underground 2020                     | Unit | Proved | Probable | Total |
| Tonnes  | Mt   | 74.3   | 23.2     | 97.5  |
| 5PGE + Au grade   | g/t  | 1.42   | 1.48     | 1.43  |
| 3PGE + Au grade   | g/t  | 1.09   | 1.13     | 1.10  |
| Cr <sub>2</sub> O <sub>3</sub> grade                    | %    | 18.5   | 18.9     | 18.6  |
| Contained 3PGE + Au                                     | Moz  | 2.5    | 1.0      | 3.4   |
| Contained Cr <sub>2</sub> O <sub>3</sub>                | Mt   | 13.8   | 4.4      | 18.2  |

\* Due to rounding up of the figures, some totals may not add up in the table

<sup>(1)</sup> Average PGE process plant recovery estimates range from 78.9% to 83.9%

<sup>(2)</sup> Average Chrome yield estimates range from 33.9% to 37.8%

### **Statement by Competent Person ('CP')**

Ken Lomborg of Pivot Mining Consultants Proprietary Limited (previously Coffey Mining South Africa Proprietary Limited) is the CP for the Mineral Resource declaration and is registered with the South African Council for Natural Scientific Professions registration number 400038/01. He holds BSc (Hons) Geology, BCom and MEng (Mining Engineering) degrees. Mr Lomborg is a geologist with 35 years' experience, including the Mineral Resource estimation in respect of PGM and chromitite in the Bushveld Complex.

The Mineral Reserve declaration is by Jaco Lotheringen of Ukwazi Mining Studies who is the CP for the Mineral Reserve declaration. He holds a BEng (Mining). He is registered with the Engineering Council of South Africa, registration number 20030022. He is a principal mining engineer with appropriate experience in the estimation, assessment and evaluation of relevant Mineral Reserves based on the class of deposit and mining methodology.

The Company has written confirmation from Messrs Lomborg and Lotheringen that the information disclosed is in compliance with the SAMREC Code (2016) and that they have consented to the inclusion of this information in the form and context in which it appears.

### **Availability of 2021 Mineral Resource and Mineral Reserve**

Tharisa's comprehensive analysis of its 2021 Mineral Resource and Mineral Reserve statement is available on the Tharisa website at [www.tharisa.com](http://www.tharisa.com)

Paphos, Cyprus

18 November 2021

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**About Tharisa**

Tharisa is an integrated resource group critical to the energy transition and decarbonisation of economies. It incorporates mining, processing, exploration and the beneficiation, marketing, sales, and logistics of PGMs and chrome concentrates, using innovation and technology as enablers. Its principal asset is the Tharisa Mine located in the South-Western Limb of the Bushveld Complex, South Africa. The mechanised mine has a 20-year open pit life and the ability to extend operations underground by at least an additional 40 years. Tharisa also owns Salene Chrome, a development stage, low cost, open pit asset, located adjacent to the Great Dyke in Zimbabwe. Tharisa plc is listed on the Johannesburg Stock Exchange (JSE: THA) and the Main Board of the London Stock Exchange (LSE: THS)