

JORC Report

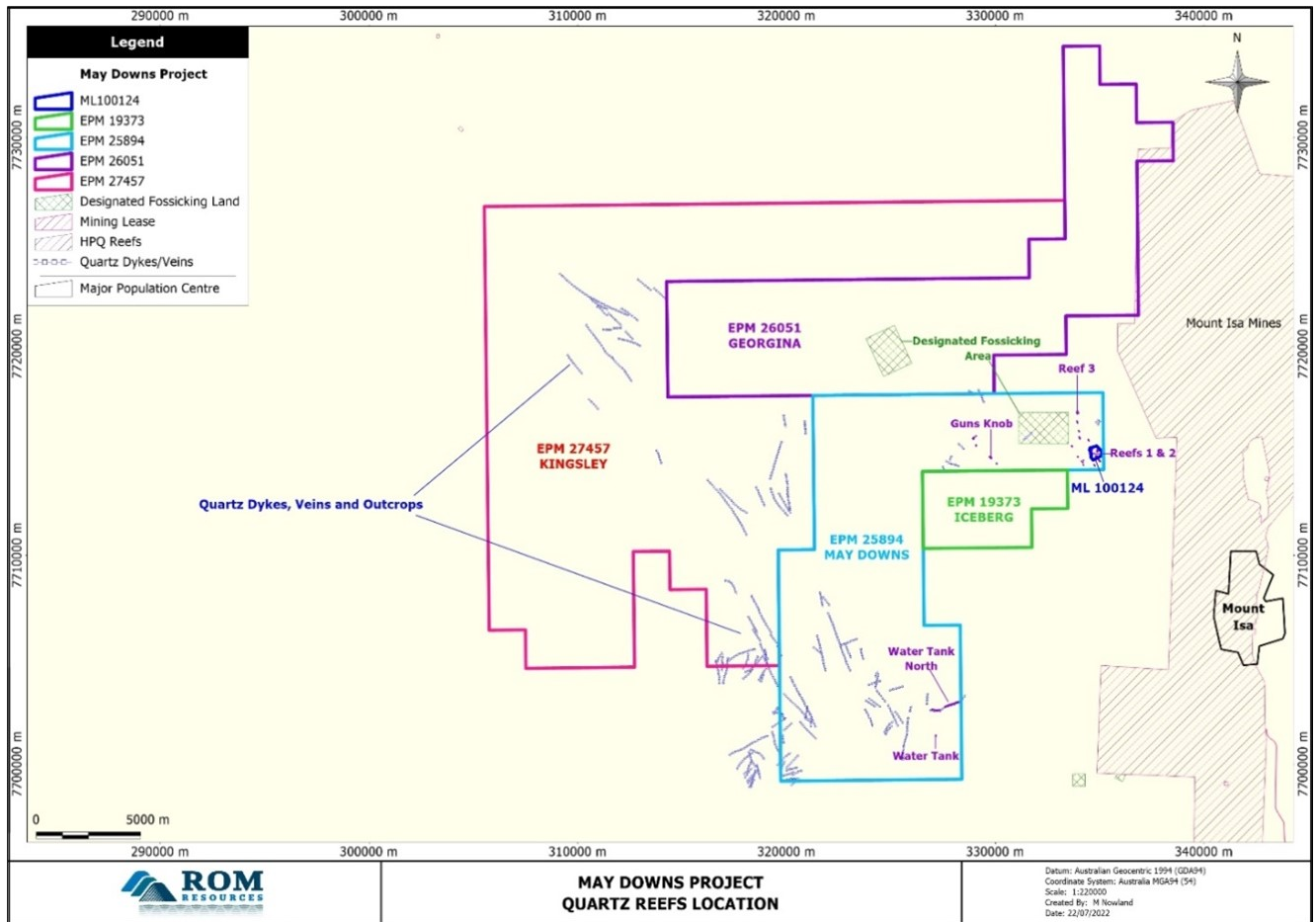
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Resource Estimation Report

JORC Report

In 2017 the Company commissioned ROM Resources (ROM) to prepare a preliminary JORC-compliant Mineral Resource Estimate for EPM 25894 to support an application by the Company for a Mining Lease to enable commencement of mining. On 15th August 2019, the Queensland Department of Natural Resources and Mines (DNRM) granted the Company a license to mine, initially on ML100124 which includes the May Downs quartz reefs.

In 2021, the Company commissioned ROM to prepare an upgraded resource estimate report to include additional quartz reefs. A further updated report was requested from ROM in June 2022 and received on 9 August 2022 to include the results from an additional drill program and a revised SiO₂ grade estimation procedure.



Greentech tenement outlines with larger quartz reefs mapped from airborne and satellite imagery. Reefs mentioned in the text are also identified. Taken from ROM Resources (Annexure C, Biggs 2022).

The quartz veins, also known as “reefs” or “blows” are en echelon elongated bodies that intrude the Alpha Centauri Metamorphics, the Sybella Granite and the May Downs Gneiss Complex, and are traceable in stereoscopic satellite imagery with individual strike lengths up to about 3km. About eighty (80) reefs have been mapped this way and rock chip sampling across strike has occurred at eleven (11) of the larger reefs. The rock chips have then been subjected to detailed major oxide and trace element laboratory analyses using the inductively coupled plasma mass spectrometric (ICPMS) method at Australian Laboratory Services Pty Ltd (ALS) laboratories in Australia. The results indicate an average SiO₂ content of 99.91%, with loss-on-ignition between 0.03% and 0.06% and major impurities totalling less than 500 parts per million

(ppm)

The reefs rise between about 1.5m to 36m above the surrounding flattish plain and although the contacts with the metamorphic rocks are concealed at some of the sites visited, the larger reefs are about 10m to 20m wide and steeply inclined. Where the quartz extends above the ground surface along the full strike length, this tonnage has been estimated in accordance with the 2012 JORC Code with a total Indicated Mineral Resource of 160,800t of quartz.



Field photograph of quartz reef from within ML 100124. Taken by Hugh Dai, Executive Director of the Company.

The Mineral Resource Estimates from the 11 reefs that have been sampled and whose surface extents have been mapped are summarized in Table 3.1, which is taken from the IGR (Derisk, 2022).

HPQ Resource Estimates of reefs from ROM (2022); after IGR Table 8-2 (Derisk, 2022, p.33).

Measured wireframes were generated around the bulk sample sites and are surrounded by, but separate from, the Indicated wireframes. A total of 71,500t of Measured Mineral Resources was estimated. The combined Measured and Indicated Mineral Resources totalling 232,300 tonnes of quartz are all above the surrounding land surface. If the reef is assumed to extend a short distance below the ground surface (distance varies per reef between 5m- 30m), then there is an additional estimated Inferred Mineral Resource of quartz of approximately 155,000t. These resource estimates refer to only those reefs within easy road access, although many more exist in less accessible terrain.

Prospect	Tenement	Measured (kt)	Indicated (kt)	Inferred (kt)	Total (kt)	SiO ₂ (%)
Reef 1	ML 100124	5	1	3	10	99.93
Reef 1A	ML 100124	-	<1	<1	1	99.96
Reef 2	ML 100124	9	4	5	19	99.96
Reef 3	EPM 25894	20	19	12	51	99.95
Reef 3A	EPM 25894	-	7	5	12	99.95
Reef 4	EPM 25894	-	3	2	4	99.96
Reef 6	EPM 25894		<1	<1	1	99.96
Guns Knob	EPM 25894	38	78	6	121	99.96
Reef_WT	EPM 25894	-	<1	2	2	99.96
Reef_WT_N1	EPM 25894	-	12	30	42	99.96
Reef_WT_N2	EPM 25894	-	36	89	124	99.96
TOTAL		72	161	155	388	99.96

Note:

1. Competent Person for estimation and reporting – Mark Biggs
2. Derisk has rounded resource sub-totals to reflect the accuracy of estimates, and this may lead to rounding errors.
3. No cut-off criterion for SiO₂ content was applied.
4. SiO₂ contents ignore determination of loss-on-ignition (LOI), which is typically between 0.03 and 0.06%

In addition to the Resources listed above, ROM has estimated from the 69 reefs an Exploration Target based on actual

exploration completed to date. ROM reported a range from 160,000 to 540,000 tonnes of quartz at an estimated grade range of 99.0 – 99.9% SiO₂ (Biggs, 2022).

In June and July 2022, the Company took advantage of the short-term availability of a diamond drilling rig in the area to drill six short core holes beneath two of the reefs within ML 100124 (Reefs 1 and 2). The drill holes were designed to test for extensions of the quartz reefs beneath the lower limits of the estimated Mineral Resources in Table 3.1. The holes beneath Reef 2 indicated that the drilled section of reef thinned at 5 to 10m below the surface, limiting additional resources there.

However, the holes beneath Reef 1 intersected down-hole lengths of up to 8m of visually clean quartz (e.g., IGR, Figures 8.2, 8.3), indicating that this reef continues at least 10m below the surface. The Company considers that this variability in subsurface extent of the reefs is consistent with geological understanding, and that the drill results provide confidence that the Mineral Resource of some of the 11 reefs already estimated will increase as the Company explores further.