

QUARTERLY EXPLORATION AND MINING ACTIVITIES REPORT



October to December 2022 (Q2 FY23)

25 January 2023

Mineral Resources Limited (**ASX:MIN**) (**MinRes** or the **Company**) is pleased to present its Quarterly Exploration and Mining Activities Report for the period to 31 December 2022.

Q2 KEY POINTS

- Safety performance for the quarter remained strong with no Lost Time Injuries. Total Reportable Injury Frequency Rate was 2.72.
- Mining Services production volumes were 70Mt during the quarter, steady qoq and in line with expectations.
- Iron ore shipments were 4.1M wet metric tonnes (wmt) during the quarter, down 9% qoq, in line with the mine plan and FY23 guidance (17.2 – 18.8M wmt).
- Average realised iron ore price was US\$97 per dry metric tonne (dmt), 33% higher qoq and represents a 98% realisation to the Platts 62% IODEX.
- A total of 97k dmt (attributable) of spodumene concentrate was shipped during the quarter, 18% higher qoq.
- A total of 7,418 tonnes (attributable) of lithium hydroxide and lithium carbonate was converted with 6,612 tonnes (attributable) sold during the quarter, up 75% qoq.
- The average realised lithium hydroxide and lithium carbonate revenue was US\$65,996/t (exclusive of China VAT).
- The term of the Mt Marion Tolling Agreement with Jiangxi Ganfeng Lithium Co. Ltd (**Ganfeng**) was extended by one year to the end of CY23 on similar terms and conditions to the existing agreement. This agreement may also be extended by agreement of both parties for a further 12 months to the end of CY24.
- The timing of the Mt Marion expansion of production capacity to 900ktpa (100% basis) has been pushed back slightly due to the delayed supply of processing equipment and labour shortages. The upgrade is now expected to commence during April and ramp up to the full run-rate from July 2023. As a result, Mt Marion's FY23 shipped guidance has been reduced to 250-280k dmt (previously 300-330k dmt) (51% share) of which 40% is expected to be high grade product (unchanged). Mt Marion's FY23 FOB cost guidance has subsequently increased to \$540-590/t (previously \$460-510/t). The capital cost of the project remains at \$120 million (100% basis).
- During the quarter, MinRes announced¹ an off-market scrip takeover bid for Norwest Energy NL (ASX: NWE) (**Norwest**). Norwest is MinRes' minority joint venture partner in the Lockyer Deep conventional gas discovery in the Perth Basin. Post the quarter, Norwest reached agreement with MinRes on the terms of an increase to its current off-market takeover bid. Under the revised offer, accepting Norwest shareholders will receive one (1) fully paid ordinary share in MinRes for every 1,300 Norwest Shares (**Revised Offer**). Norwest Directors have unanimously recommended MinRes' Revised Offer² and the Norwest Directors intend to accept the offer in relation to their shares.

¹ ASX Announcement on 16 December 2022 and 3 January 2023.

² ASX announcement on 24 January 2023

IRON ORE

	Share	Units	Q2 FY23	QoQ Var	PcP Var
Yilgarn Hub					
Mined	100%	k wmt	1,955	1%	10%
Produced	100%	k wmt	2,210	12%	(14%)
Shipped	100%	k wmt	1,931	17%	(6%)
Utah Point Hub					
Mined	100%	k wmt	2,812	9%	(2%)
Produced	100%	k wmt	3,305	14%	12%
Shipped	100%	k wmt	2,212	(23%)	(22%)

During the quarter, iron ore production and shipments across both hubs were in line with the mine plan and FY23 guidance (17.2 – 18.8M wmt). Yilgarn's processing plant was successfully converted to process both lump and fines, with lump shipments commencing during the quarter.

The average realised iron ore price for the quarter was US\$97 per dry metric tonne (dmt), 33% higher qoq and representing a 98% realisation of the Platts 62% IODEX.

MinRes has successfully completed the transition of its iron ore sales portfolio from a final quotation period of two months post shipment to a period of one month post shipment.

LITHIUM

Mt Marion

	Share	Units	Q2 FY23	QoQ Var	PcP Var
Mt Marion³					
Spodumene concentrate					
Mined	100%	k dmt	529	20%	(12%)
Produced	100%	k dmt	121	12%	24%
Shipped	100%	k dmt	116	5%	(14%)
Shipped	51%	k dmt	59	5%	(14%)
Lithium Hydroxide					
Sold	51%	t	4,322	15%	N/A

Mt Marion production was 12% higher qoq due to increased mining activity and improved plant performance. Mt Marion shipped 59k (51% share) dmt of spodumene concentrate over the quarter, up 5% qoq.

The timing of the Mt Marion expansion of production capacity to 900ktpa (100% basis) has been pushed back slightly due to the delayed supply of processing equipment and labour shortages. The upgrade is now expected to commence during April and ramp up to the full run-rate from July 2023. As a result, Mt Marion's FY23 shipped guidance has been reduced to 250-280k dmt (previously 300-330k dmt) (51% share) of which 40% is expected to be high grade product (unchanged). Mt Marion's FY23 FOB cost guidance has subsequently increased to \$540-590/t (previously \$460-510/t). The capital cost of the project remains at \$120 million (100% basis).

³ MinRes operates 100% of the Mt Marion project, in which it has a 50% equity interest and a 51% offtake share of spodumene concentrate produced. MinRes' spodumene concentrate offtake is currently being toll-converted into lithium hydroxide.

The average realised spodumene concentrate price at Mt Marion was US\$4,151/dmt, inclusive of grade adjustments and product discounts. The average SC6 equivalent FOB reference price for Mt Marion shipments of spodumene has reverted to spot indices, effective from 1 July 2022. As a result, the Q1 average realised spodumene concentrate price has been restated to US\$3,262/dmt (previously US\$2,364/dmt).

MinRes' 51% offtake share of Mt Marion spodumene concentrate for the quarter of 59k tonnes was converted into 4,322 tonnes of lithium hydroxide and sold under the toll-treating agreement with Ganfeng. The average achieved price of lithium hydroxide for the quarter was US\$73,830/t (exclusive of China VAT), up 3.5% qoq.

Wodgina

	Share	Units	Q2 FY23	QoQ Var	PcP Var
Wodgina⁴					
Spodumene concentrate					
Mined	100%	k dmt	973	78%	N/A
Produced	100%	k dmt	92	43%	N/A
Shipped	100%	k dmt	95	45%	N/A
Shipped	40%	k dmt	38	45%	N/A
Lithium Hydroxide & Carbonate					
Produced	40%	t	3,096	233%	N/A
Sold	40%	t	2,290	N/A	N/A

Mining and processing continued to ramp up, with increases qoq on all metrics. During the quarter 38k dmt (40% share) of spodumene concentrate was shipped, up 45% qoq, with 9k dmt of spodumene concentrate (attributable) sold at US\$5,131/dmt as directed by Albemarle. The remaining 29k dmt (attributable) is expected to be converted offshore by Albemarle to lithium battery chemicals over the coming months.

Wodgina remains on track to achieve FY23 shipped guidance of 190-210k dmt (MinRes 50% share)³. Wodgina spodumene concentrate earnings will be recognised once converted into lithium battery chemicals and sold.

The Wodgina spodumene reference price formula is unchanged as disclosed in Q1 at US\$4,187/dmt for the period July to December 2022. Based on this pricing formula, from 1 January to 30 June 2023, the average spodumene concentrate 6% FOB equivalent price to be applied on Wodgina shipments that are to be converted to lithium battery chemicals is US\$5,957/dmt.

During the quarter, 23k dmt of MinRes' share of Wodgina spodumene concentrate production was converted by Albemarle, with 3,096 tonnes of lithium hydroxide and carbonate produced. 2,290 tonnes of lithium hydroxide and carbonate were sold during the quarter at an average realised price of US\$51,209/t (exclusive of China VAT) under the Albemarle marketing agreement, which included long-term offtake contracts. Future sales of lithium hydroxide and carbonate are expected to be in line with market indices.

Kemerton

The Kemerton Train 1 conversion plant is producing product that remains subject to the qualification process. The Kemerton Train 2 conversion plant is progressing through commissioning as planned.

⁴ MinRes has a 40% equity interest in the Wodgina project. MinRes continues to work with Albemarle to negotiate binding agreements for the expansion of the MARBL JV. The expansion proposal has been updated since the original announcement of the non-binding agreement with Albemarle. The proposed amendments to the MARBL JV, which include an increase in MinRes' equity interest in Wodgina to 50%, are subject to MinRes and Albemarle negotiating and entering into binding agreements to give effect to the transaction. There is no guarantee that the final agreement will reflect the terms outlined in the FY22 presentation dated 29 August 2022.

EXPLORATION AND DEVELOPMENT ACTIVITY

IRON ORE

Onslow Iron Project

The Onslow Iron Project is designed to be a 30+ year project at a 30+ Mtpa export rate, with infrastructure capable of 35 Mtpa and comprising a new mine, processing plant, airport, accommodation resorts, sealed 150km private haul road, port, marine infrastructure and transhipping vessel fleet.

Construction is progressing at the Ken's Bore mine site construction camp and the A320 aircraft-capacity airport. Initial earthworks are underway at the Port of Ashburton. Contracts have been issued for the procurement of stackers and reclaimers, a gas-fired power station and resort accommodation for both Ken's Bore and Onslow.

Infill drilling continues to progress well at the Ken's Bore and Upper Cane deposits, with a total 12,253m of reverse circulation (RC) and 1,418m of diamond core drilled across the deposits.



Airport development



350-person development camp



Port development



Transhipper construction



Transhipper construction

Yilgarn Hub

The Koolyanobbing Magnetite Phase 1 drilling program continued throughout the quarter. A total of 13,245m of RC and 1,923m of diamond core was drilled. The Phase 1 30,000m program is following up on the promising results that were received from the proof-of-concept drilling program undertaken in FY22. The aim of the Phase 1 program is to scope the resource potential of an initial mining area footprint.

Pilbara

Project development activities at the Marillana deposit continued throughout the quarter, including a hydrogeology drilling campaign and commencement of a drill spacing study. A total of 2,920m RC was drilled out of a planned 10,000m program. An updated resource model has also been completed as a basis for the new RC drill data. Pilot plant geometallurgical test work on the 622t of ore collected through a bulk sampling drilling program is ongoing.

LITHIUM

Mt Marion

Drilling for the purpose of ore body knowledge and exploration continued throughout the quarter. A total of 567m of diamond core was drilled for metallurgical test work studies to optimise product yield through the processing plant. A further 14,314m of near-mine RC drilling was also completed.

Wodgina

Geometallurgical studies to support plant optimisation are ongoing.

ENERGY

Perth Basin

During the quarter, Energy Resources (EnRes, a wholly owned subsidiary of Mineral Resources) continued to plan for a drilling campaign for up to seven wells in the onshore Perth Basin.

Lockyer-2, to appraise the Lockyer Deep discovery, will be the first well to be drilled once the contracted Ensign Rig 970 has mobilised to the Perth Basin. The timing for the drilling program to commence is contingent upon all necessary regulatory approvals being finalised and the ability to mobilise the rig from its current location in the Northern Territory. Wet weather and flooding across northern Australia have led to road closures and transport restrictions that may delay the arrival of the rig in the Perth Basin.

Following completion of drilling of the Lockyer-2 well, the drilling of exploration well North Erregulla Deep-1 will commence. Each well is expected to take approximately 60 days for drilling and mobilisation, with the cost to drill, test and complete these wells in the Perth Basin circa \$20 million per well.

Additional wells in the campaign include an exploration well in MinRes' 100%-owned EP 507, an exploration well in MinRes' 100%-owned EP 389 that, if successful, will enable the restart of the Red Gully 10 TJ/day gas processing facility (currently on care and maintenance) as well as two additional appraisal wells – Lockyer-3 and Lockyer-4 – to further test the greater Lockyer structure.

The Rococo 3D seismic survey commenced late in the quarter in EP 368 and EP 426 and will continue until the end of the March 2023 quarter, after which data processing and interpretation will commence. This dataset is designed to optimise future development well locations and define gas reserves.

During the quarter, the Company announced⁵ an off-market scrip takeover bid for Norwest, MinRes' minority joint venture partner in the Lockyer Deep conventional gas discovery in the Perth Basin.

Post the quarter, Norwest reached agreement with MinRes on the terms of an increase to its current off-market takeover bid. Under the revised offer, accepting Norwest shareholders will receive one (1) fully paid ordinary share in MinRes for every 1,300 Norwest Shares. Norwest Directors have unanimously recommended MinRes' Revised Offer⁶ and the Norwest Directors intend to accept the offer in relation to their shares.

The Revised Offer represents attractive value and a premium for Norwest shareholders and allows them to become a shareholder in a leading ASX-listed company with a proven ability to deliver exceptional shareholder returns.

Subsequent to quarter's end, MinRes announced that it had acquired a 19.17% strategic shareholding in Warrego Energy Limited (ASX: WGO) as part of its Perth Basin business strategy.

Carnarvon Basin

During the quarter, MinRes and Buru Energy Limited (**Buru**) were successful in the application for two additional prospective petroleum areas in the onshore Carnarvon Basin.

Areas L22-2 and L22-4 were part of the recent Western Australia Government Petroleum Acreage Release 2 of 2022 and have been offered to the Joint Venture of MinRes as Operator (75%) and partner Buru (25%). The conversion to exploration permits is subject to completion of Native Title agreements. These areas sit immediately to the south of permit EP 510, under a similar joint venture between MinRes and Buru. The addition of the two new areas totals 11,348km² and will further facilitate optimisation of exploration activities in the region.

The successful applications increase MinRes' total onshore acreage across Western Australia to 24,941km². MinRes is the largest acreage holder of onshore conventional gas exploration permits in the Carnarvon and Perth basins.

These permits are strategically located adjacent to the Dampier to Bunbury natural gas pipeline and are also close to MinRes' Onslow Iron Project.

CONFERENCE CALL

MinRes' investor relations team will be conducting a quarterly results conference call on **25 January 2023** at **9:30am AWST**.

To register use this link: <https://s1.c-conf.com/diamondpass/10027324-ybc2lt.html>. Dial-in details and individual PIN will be received upon registration.

ENDS

⁵ ASX announcements on 16 December 2022 and 3 January 2023.

⁶ ASX announcement on 24 January 2023

This announcement dated 25 January 2023 has been authorised for release to the ASX by Mark Wilson, Chief Financial Officer and Company Secretary of Mineral Resources Limited.

Further Information

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About Mineral Resources

Mineral Resources Limited (ASX: MIN) (MinRes) is a leading diversified resources company, with extensive operations in lithium, iron ore, energy and mining services across Western Australia. With a focus on people and innovation, MinRes has become one of the ASX's best-performing companies since listing in 2006. For more information, visit www.mineralresources.com.au.

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OPERATING PERFORMANCE SUMMARY

	Share	Units	Q2 FY23	Q1 FY23	Q2 FY22
Safety					
TRIFR			2.72	2.43	2.25
LTIFR			0.00	0.00	0.10
Mining Services					
Contract Tonnes		M wmt	70	69	71
Yilgarn Hub					
Iron ore mined	100%	k wmt	1,955	1,929	1,781
Iron ore produced	100%	k wmt	2,210	1,972	2,571
Iron ore sales	100%	k wmt	1,931	1,657	2,050
Lump weighting		%	14%	-	-
Fe grade		%	58.1%	56.5%	56.8%
Realisation		%	98%	69%	56%
Revenue		US\$/dmt	96.7	71.0	60.8
Moisture		%	5.4%	6.4%	5.1%
Revenue		\$/wmt	137.9	97.5	80.7
Utah Point Hub					
Iron ore mined	100%	k wmt	2,812	2,582	2,869
Iron ore produced	100%	k wmt	3,305	2,907	2,963
Iron ore sales	100%	k wmt	2,212	2,885	2,850
Lump weighting		%	31%	23%	27%
Fe grade		%	58.1%	58.2%	57.8%
Realisation		%	99%	71%	59%
Revenue		US\$/dmt	98.1	73.9	65.0
Moisture		%	11.8%	12.8%	10.4%
Revenue		\$/wmt	125.5	92.7	81.3
Total Iron Ore					
Iron ore sales	100%	k wmt	4,144	4,542	4,900
Lump weighting		%	23%	15%	16%
Fe grade		%	56.4%	57.6%	57.4%
Realisation		%	98%	70%	58%
Revenue		US\$/dmt	97.4	72.8	63.2
Moisture		%	8.8%	10.5%	8.2%
Revenue		\$/wmt	150.2	94.1	76.9

	Share	Units	Q2 FY23	Q1 FY23	Q2 FY22
Mt Marion⁷					
Spodumene ore mined	100%	k dmt	529	441	601
Spodumene concentrate production:					
Spodumene concentrate produced	100%	k dmt	121	108	98
Spodumene concentrate shipped	51%	k dmt	59	56	69
High grade product contribution		%	32.7%	24.9%	58.1%
Spodumene concentrate revenue ⁸		US\$/dmt	4,151	3,262	1,153
Lithium hydroxide uplift:					
Lithium hydroxide sold	51%	t	4,322	3,772	-
Lithium hydroxide revenue (excluding VAT) ⁹		US\$/t	73,830	71,329	-
Wodgina¹⁰					
Spodumene ore mined	100%	k dmt	973	546	-
Spodumene concentrate production:					
Spodumene concentrate produced	100%	k dmt	92	64	-
Spodumene concentrate shipped	40%	k dmt	38	26	-
Spodumene concentrate sold (spot sales)	40%	k dmt	9	-	-
Spodumene concentrate revenue (spot sales)		US\$/dmt	5,131	-	-
Spodumene concentrate (for conversion)		k dmt	29	26	-
Spodumene concentrate (for conversion)		US\$/dmt	4,208	3,559 ¹¹	-
Lithium battery chemicals:					
Spodumene concentrate feed	40%	k dmt	23	7	-
Lithium hydroxide and carbonate produced	40%	t	3,096	931	-
Lithium hydroxide and carbonate sold	40%	t	2,290	-	-
Lithium hydroxide and carbonate revenue (excluding VAT)		US\$/t	51,209	-	-

⁷ MinRes operates 100% of the Mt Marion project, in which it has a 50% equity interest and a 51% offtake share of spodumene concentrate produced which is toll-converted into lithium hydroxide.

⁸ The average SC6 equivalent FOB reference price for Mt Marion shipments of spodumene has reverted to spot indices, effective for shipments from 1 July 2022. As a result, the Q1 average realised spodumene concentrate price has been restated to US\$3,262/dmt (previously US\$2,364/dmt).

⁹ Revenue on sale of Mt Marion lithium hydroxide is recognised in the Financial Statements as the net earnings under the tolling arrangement, being the achieved price less the cost of spodumene feed, China VAT and conversion. The Lithium hydroxide revenue is shown exclusive of China VAT. Q1 lithium hydroxide prices have been restated to exclude China VAT for comparative purposes.

¹⁰ MinRes has a 40% equity interest in the project. MinRes continues to work with Albemarle to negotiate binding agreements for the expansion of the MARBL JV. The expansion proposal has been updated since the original announcement of the non-binding agreement with Albemarle. The proposed amendments to the MARBL JV are subject to MinRes and Albemarle negotiating and entering into binding agreements to give effect to the transaction. There is no guarantee that the final agreement will reflect the terms outlined in the FY22 presentation dated 29 August 2022.

¹¹ This includes 7.3k dmt (40% share) priced at the October to December 2022 reference price of US\$1,770/dmt