7 October 2022

Lithium Mineral Resources and Reserve Update

Mineral Resources Limited (**ASX:MIN**; **MinRes**) is pleased to provide the attached Mineral Resources and Ore Reserve statements (100% basis) for the Mt Marion and Wodgina hard rock lithium deposits as at 30 June 2022.

Mt Marion and Wodgina are operating mines in the Goldfields and Pilbara regions, respectively, that produce high-quality spodumene concentrate. This is the first time MinRes has released a joint Mineral Resources and Ore Reserve statement for Mt Marion and Wodgina, which also includes a maiden Ore Reserve for Mt Marion.

Highlights

- Wodgina Indicated & Inferred Mineral Resources estimated at 259.2 Mt at 1.17% Li_2O
- Wodgina Ore Reserve estimated at 147.0 Mt at 1.20% Li_2O
- Mt Marion Indicated & Inferred Mineral Resources estimated at 51.4 Mt at 1.45% Li_2O
- Maiden Mt Marion Ore Reserve estimated at 17.2 Mt at 1.56% Li_2O

Mineral Resource and Ore Reserve estimates are in accordance with the ASX listing rules and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012).

Mineral Resources' Managing Director Chris Ellison said:

"We are pleased to report 164 million tonnes of Ore Reserves and more than 310 million tonnes of Mineral Resources, across the Mt Marion and Wodgina deposits. The high quality and scale of these Tier 1 assets in Western Australia underpin MinRes' position as a leading global lithium producer."

"We are ideally placed to continue the major expansions at both projects to ramp up spodumene concentrate output for lithium hydroxide conversion for many decades to come."

"Significant opportunity exists to further expand the mineral endowment at both operations through near mine exploration activities."

NO OFFER: FORWARD LOOKING STATEMENTS

This ASX announcement should not be considered as an offer or invitation to subscribe for or purchase any securities in Mineral Resources or as an inducement to make an offer or invitation with respect to those securities.

This ASX announcement contains forward looking statements that are subject to risk factors associated with ore exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable as of the date of this ASX announcement but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from statements in this ASX announcement, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Mineral Resources. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast.

ENDS

This announcement dated 7 October 2022 has been authorised for release to the ASX by Mark Wilson, Chief Financial Officer and Company Secretary.

For further information, please contact:

Chris Chong

Investor Relations Manager
Mineral Resources Limited
T: +61 8 9315 0213
E: **chris.chong@mrl.com.au**

Peter Klinger

Media Relations
Cannings Purple
T: +61 411 251 540
E: **pklinger@canningspurple.com.au**

About Mineral Resources

Mineral Resources Limited (ASX: MIN) is a Perth-based leading mining services provider, with a particular focus on the iron ore and lithium sectors in Western Australia. Using technical know-how and an innovative approach to deliver exceptional outcomes, Mineral Resources has become one of the ASX's best-performing contractors since listing in 2006. For more information, visit **www.mineralresources.com.au**

APPENDIX 1: MT MARION – ORE RESERVE STATEMENT AS AT 30 JUNE 2022

HIGHLIGHTS

- Maiden Ore Reserve Statement for Mt Marion hard-rock lithium deposit.
- Mt Marion Ore Reserve estimated at 17.2 Mt at 1.56% Li_2O is inclusive of ore surface stockpiles.

The Mt Marion Lithium Project is owned and operated by Reed Industrial Minerals Pty Ltd which is owned 50% by MinRes and 50% by Jiangxi Ganfeng Lithium Co. Ltd.

This Mt Marion Ore Reserve estimate is compiled as at 30 June 2022 and based on the Mineral Resources (as at 30 June 2022), announced 7 October 2022.

All tonnages reported on a dry basis. Note that small discrepancies may occur due to rounding.

MT MARION ORE RESERVE COMMENTARY

The Ore Reserves are based on the Mineral Resource as at 30 June 2022, estimated by MinRes.

The Mt Marion Ore Reserve, using a 0.75% Li_2O cut-off, stands at:

- Probable Reserves of 16.4 million dry tonnes grading 1.57% Li_2O.
- Proved Reserves of 0.8 million dry tonnes grading 1.19% Li_2O. The Proved Reserve is inclusive of ore stockpiles (both run of mine and product).

This Ore Reserve has been prepared by a 2012 JORC-compliant Competent Person (see below) and peer reviewed internally within Mineral Resources Limited. There have been no external reviews of this Ore Reserve estimate.

Mt Marion is a producing spodumene concentrate mine that has been in operation since 2016. Accordingly, this Ore Reserve statement has been prepared based on several years of actual operating performance with respect to operating and capital costs, production rates, Resource reconciliation and processing recovery.

The procedure used in the preparation of the Ore Reserve is as follows:

- A mining model with ore loss and dilution has been produced by regularisation of the sub-celled geological Mineral Resource model using a selective mining unit block size of 5.0m (length) by 5.0m (width) by 5.0m (depth) with cut-off grade application post regularisation.
- This was followed by:
  - Open pit optimisation using Whittle 4X software
  - Sensitivity analysis, pit shell and phase selection
  - Detailed open pit stage designs with a minimum mining width of 30m
  - Mine scheduling and costing.
- Operational waste dump and short-term stockpile designs are in place with conceptual designs for the later phases of stockpiling and waste dump expansion.
- Optimisation shells were used to develop detailed pit design with due consideration of geotechnical and access constraints.
- The Ore Reserve has been classified based on its Mineral Resource classification within the pit design based on a US$585/t SC6 concentrate shell, with only Indicated Mineral Resources converted to Probable Ore Reserves. The pit design used for calculating the Ore Reserve contains 12.6 Mt at 1.54% Li_2O of Inferred Mineral Resources that are included in the mine plans. While no Inferred Mineral Resources are reported in the Ore Reserve, these have the potential to increase the mining inventory with further drilling and metallurgical testing.
- The Ore Reserve is a subset of the Mineral Resource.
- All required environmental approvals are in place for the current Mt Marion mine operation, with the exception of South Pit. With South Pit volumes not required until beyond 2025 ample time remains for approvals to be obtained.
- Planned mining is by use of conventional drill and blast, haul truck and excavator open pit methods. All required infrastructure for mining is currently in place.
- The key parameters used for conversion of the Mineral Resources to Ore Reserve estimates include (but are not limited to) the following:

- Production
  - Annual production rate of 900,000 dry metric tonnes of mixed grade spodumene concentrate (noting that the Ore Reserve is not sensitive to this production rate).
  - Processing of contact ore stockpiles principally at the end of open pit life.
- Processing
  - An overall lithium metal processing recovery assumption aligned to historical performance.
  - A cut-off grade of 0.75% Li_2O was chosen following strategic mine planning analysis which sought to optimise ore extraction against the current marketing plan for MinRes.
  - Ore processing at Mt Marion is completed through a dry crushing plant and a wet concentrator plant.
- Geotechnical
  - Inter-ramp pit slope of 38° to 56° as estimated from geotechnical studies provided by external consultants, reviewed by internal experts, and informed by past and present mining practices.
- Pricing

  Pricing estimates of spodumene products are internal price forecasts based on:
  - Prices received for existing Spodumene products from MinRes lithium operations at Mt Marion
  - Consensus price forecasts obtained from external organisations
  - Exchange rate from MinRes corporate projections.
- Costs
  - Mining costs are based on current actual performance modified for varying haul cycle times (based on changing pit depth).
  - Transportation costs have been estimated using projections of actual operating costs.
  - Government and third-party royalties have been included.
  - Treatment and processing costs have been generated from recorded actual costs for conducting these activities at the site.

MT MARION LITHIUM ORE RESERVE (as at 30 June 2022)

Iron Mineralisation			Proved Reserves		Probable Reserves		Total Reserves	
Deposit	**Type**	**Cut-off (Li_2O %)**	**Tonnes (Mt)**	**Li_2O (%)**	**Tonnes (Mt)**	**Li_2O (%)**	**Tonnes (Mt)**	**Li_2O (%)**
Mt Marion	Open Pit	0.75	-	-	16.4	1.57	16.4	1.57
ROM, Yard & Port	Stockpile	N/A	0.1	1.83	-	-	0.1	1.83
Contact Ore	Stockpile	N/A	0.7	1.10	-	-	0.7	1.10
	Sub-Total		**0.8**	**1.19**	**16.4**	**1.57**	**17.2**	**1.56**

Note; all tonnages reported on a dry basis and that small discrepancies may occur due to rounding.

COMPETENT PERSON'S STATEMENT

The information in this report that relates to the Ore Reserve estimate is based on, and fairly represents, information compiled by Mr Marek Wydmanski, who is a full-time employee of MinRes and a Member of the Australasian Institute of Mining and Metallurgy. Mr Wydmanski has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Wydmanski consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

FORWARD LOOKING STATEMENT

This ASX announcement may contain forward-looking statements that are subject to risk factors associated with lithium ore exploration, mining, and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Reserve estimations, loss of market, industry competition, environmental

risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Mineral Resource Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast.

APPENDIX 1A: JORC COMPLIANT LITHIUM ORE RESERVES

The following information is provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 – Section 4 (Estimation and Reporting of Ore Reserves)

Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results) and Section 3 (Estimation and Reporting) is not being reported in this document.

TABLE 1 - SECTION 4 – ESTIMATION AND REPORTING OF ORE RESERVES – MT MARION

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mt Marion Ore Reserves are based on the corresponding Mt Marion Mineral Resource as announced in the Mineral Resource Statement – Mt Marion Mineral Resource Statement as at 30/06/2022. • The Mineral Resource estimate is not additional to the Ore Reserve estimate. The Ore Reserve estimate is a sub-set of the Mineral Resource estimate.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is Mr Marek Wydmanski (MAusIMM) a full-time employee of MinRes. • Mr Wydmanski has visited the site and confirmed operating assumptions used for estimation of the Ore Reserves.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• Mt Marion is an active mining operation. The conversion of Mineral Resources to Ore Reserves is based on current and forecast on-going production and operating cost. • Financial modelling completed shows that the project is economically viable under current assumptions. In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A cut-off of 0.75% Li_2O has been used to achieve required plant feed grades. The cut-off is based on economic analysis including operating costs, processing recovery and forecast revenues.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	Mining Method • Current mining is by use of conventional drill and blast, haul truck and excavator open pit methods. • Mine designs comprise detailed pit designs for the Life-of-Mine plan. Operational waste dump and short-term stockpile designs are in place with conceptual designs for the later phases of stockpiling and waste dump expansion. • The deposit was optimised using Whittle Optimisation software and the optimisation study was completed in 2020 internally by MinRes' mine planning team. The modification factors, commodity price and FX assumptions were reviewed and updated with regard to current market conditions. The US$585/t 6% concentrate price shell has been selected as the basis for the pit design. • Detailed pit and stage designs were completed based on the selected optimisation pit shell and its revenue factor runs. • An overall slope for oxide and fresh rock types of 36°and 45° respectively has been used for optimisation as estimated from geotechnical design and historic slope performance. • Dilution and ore loss has been modelled by regularisation of the geological Resource model using a selective mining unit of 5.0m (length) by 5.0m (width) by 5m (depth) and ore recovery factor with the cut-off grade applied after regularisation. • A minimum mining width of 30m has been used in the pit designs. • Final pit designs are based on Measured, Indicated and Inferred Resource. • Inferred Mineral Resources present in the optimised pit (12.6 Mt at 1.54% Li_2O) and are included in the mine schedules. No Inferred Mineral Resources have been reported in the Ore Reserves. The risk of use of inferred ore in the mine plan has been assessed (with respect to the potential impact on Ore Reserves) and determined to be negligible. Furthermore, the deposit is undergoing progressive resource definition drilling to upgrade the Resource in advance of mining. • Infrastructure required to support the current mining method is already in place**.**

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• Ore is processed on site to produce spodumene concentrates that are transported to Esperance for export. • Beneficiation of the ore includes crushing and dense medium separation; processes that generate concentrate products and waste tailings streams. Metallurgical process data from 4 years of production has been used to support the Ore Reserve estimate. • Processing of contact ore stockpiles at the end of the open pit life. MinRes has successfully demonstrated the recovery and product grade performance while processing ore from these stockpiles through multiple trials and in a production environment.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• All required environmental approvals are in place for current ore and waste mining operation at Mt Marion with the exception of South Pit and further life extension exploration and development. • A small volume of Potentially Acid Forming waste and Potentially Fibrous Materials are known to occur onsite. These are managed under approved Management Plans. • Surface water and groundwater assessments and management plans are in place for all existing approved activities. • A geotechnical drilling and assessment program is currently underway to finalise LoM stability assessment, required to be completed by the end of 2023. • Mine designs consist of detailed Life-of-Mine pits, waste dumps, stockpile designs, haul roads and associated infrastructure.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• All Infrastructure requirements are in place for the current ore and waste mining operations at Mt Marion.

Criteria	JORC Code Explanation	Commentary
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital requirements have been estimated through the MinRes group's internal specialist engineering capability. • Operating costs are based on budget forecasts of current actual costs and include fixed and variable for crushing, maintenance, mining, ore haulage, labour, administration, accommodation, railing and shipping. • Transportation costs have been estimated using projections of actual operating costs. • Government and third-party royalties have been included in the costs. • Treatment and processing costs have been estimated based on various existing MinRes Crushing and Lithium Ore processing operations. • The cost estimates are in AUD with the exchange rate sourced internally from MinRes corporate projections.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The exchange rate has been sourced internally from MinRes corporate projections. • Treatment and processing costs have been estimated based on various existing MinRes Crushing and Lithium Ore processing operations. • Pricing estimates of Spodumene products are internal price forecasts based on prices received for existing Spodumene products from MinRes lithium operations at Mt Marion and external price forecast studies.

Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*
	• *A customer and competitor analysis along with the identification of likely market windows for the product.*
	• *Price and volume forecasts and the basis for these forecasts.*
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*
		• External assessments forecast high Lithium demand underpinned by battery storage demand assessed through:
		  ○ Competitor analysis evaluating future commodity environments.
		  ○ Price and volume forecasts.
		• MinRes currently markets and manages lithium concentrate products and specifications utilising in-house marketing expertise. Product from the mine is either purchased or toll treated by the 50% equity partner Jiangxi Ganfeng Lithium Co. noting the MinRes has the right to independently market its share (51%) of production.
		• Projected pricing estimates spodumene concentrate products based on consideration of:
		  - Prices received for existing spodumene. concentrate products from Mt Marion.
		  - External Lithium Pricing Forecasts.

Criteria	JORC Code Explanation	Commentary
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The inputs into the economic analysis for the Ore Reserve are described above. • The Ore Reserve has been evaluated through a financial model. All operating and capital costs as well as revenue factors stated in this document were included in the financial model. • A discount rate of 12% was used to determine the Net Present Value (NPV) of the project cash flows. • The project provides a positive NPV at the assumed price for Ore Reserve estimation.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• MinRes has not identified or encountered any obstruction to gaining licence to operate. The Company has close working relationships with the local communities.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• Granted Mining Lease tenure and pre-1899 Crown Grant lands (Hampton Lease Area Location 53) all held by Reed Industrial Minerals. • Project currently operating under approved Mining Proposals. • Product from the mine is either purchased or toll treated by the 50% equity partner Jiangxi Ganfeng Lithium Co.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The Ore Reserves have been classified based on their Mineral Resource classification within detailed pit design, with all Indicated Mineral Resources converted to Probable Ore Reserves. • The total inventory contained on ore stockpiles (with the exception of the contact ore stockpile) has been deemed of measured accuracy and has been converted to a Proved Reserve. • The contact ore stockpile, due to potential contamination, has maintained the ex-pit Probable Reserve status despite the increased certainty of its volume. • This classification appropriately reflects the Competent Person's view.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• There have been no external audits or reviews of the Ore Reserve estimates.

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Ore Reserve estimate is prepared within the Guidelines of the 2012 JORC code. The relative confidence of the estimates contained fall within the criteria of Proved and Probable Reserves. • Factors other than revenue/price and cost factors that may affect the global tonnages and grade estimates include: the geological interpretation; ore recovery and mining dilution estimates; and processing performance. • Reconciliation of the current mining model to date against production demonstrates a recovery of 94.5% of tonnes. A 95% recovery factor has therefore been used in the LOM plan that supports the Ore Reserve. • No other assessments of the relative accuracy or confidence limits of the Ore Reserve have been undertaken.

APPENDIX 2: MT MARION MINERAL RESOURCE STATEMENT AS AT 30 JUNE 2022

MINERAL RESOURCE STATEMENT

Mt Marion's Indicated & Inferred Mineral Resources are reported as 51.4 Mt at 1.45% Li_2O (Table 1)

This has resulted in a change since the previous statement reported in June 2019 (Table 2)

The Indicated & Inferred Mineral Resources as at 30 June 2022 includes the following changes:

- Reduction in Inferred material assessed against an optimised Whittle shell
- Depletions based on the end-of-month mining surface for May 2022 and a further 108 kt of Indicated Mineral Resources that represented the June 2022 production actuals.
- Re-estimation using exploration drilling data acquired in 2021 and 2022.

The June 2022 Mineral Resources estimate is reported above a cut-off grade of 0.5% Li_2O. The global in-situ resource is summarised in Table 1.

Table 1 - **MT MARION MINERAL RESOURCE AS OF 30 JUNE 2022**
reported above 0.5% Li_2O cut-off

Commodity: Lithium						
Deposit	**Type**	**Tonnes (Mt)**	**Li_2O (%)**	**Fe (%)**	**MgO (%)**	**Resource Category**
Mt Marion	Pegmatite-Hosted	21.4	1.54	0.74	0.31	Indicated
		30.0	1.38	0.80	0.36	Inferred
Total		51.4	1.45	0.77	0.34	All

Note: small discrepancies may occur due to rounding

Table 2 - **MT MARION MINERAL RESOURCE AS OF 30 JUNE 2019**
reported above 0.5% Li_2O cut-off

Commodity: Lithium						
Deposit	**Type**	**Tonnes (Mt)**	**Li_2O (%)**	**Fe (%)**	**MgO (%)**	**Resource Category**
Mt Marion	Pegmatite-Hosted	21.7	1.33	1.04	0.78	Indicated
		51.2	1.38	1.06	0.66	Inferred
Total		72.9	1.37	1.05	0.69	All

Note: previously reported

COMPETENT PERSONS STATEMENT

The information in this Statement that relates to the Mineral Resource Estimate is based on and fairly represents information compiled by Mr A Doorgapershad. Mr A Doorgapershad is a General Manager Exploration & Geology and a full-time employee of Mineral Resources Limited. He is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM). Mr Doorgapershad has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

APPENDIX 2A

The following information has been provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 – Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results) and Section 3 (Estimation and Reporting of Mineral Resources).

Section 4 (Estimation and Reporting of Ore Reserves) is not being reported in this document.

MT MARION DEPOSIT
JORC CODE 2012 EDITION – TABLE 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• The bulk of the data used for resource estimation is based on the logging and sampling of reverse circulation drilling (approximately 94% of the data). Reverse circulation (RC) samples were collected at 1 m intervals within the logged pegmatite using a static cone splitter mounted below the cyclone. RC samples were split using a static cone splitter with approximately 2 kg to 3 kg samples collected. Sample bags were pre-numbered.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Samples were collected in line with the Reed Resources Limited Sampling techniques used for drilling at Mt Marion, and the Mineral Resources Limited (MinRes) RC Logging and Sampling Procedure.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 100-200 g charge for assay. Metallurgy designated diamond core was marked up to 1 m down hole intervals from which 3 kg was pulverised to produce a 100-200 g charge for assay.

Criteria	JORC Code Explanation	Commentary
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The vast majority (~94% of drilled metres) of drilling was completed using vertical RC holes with a face sampling bit. Water injection was used for the 2015-2022 drill programs on account of the presence of fibrous materials in the surrounding ultramafic host rocks. • Some diamond core drilling (NQ, HQ3 and PQ3 diameter core) was undertaken to collect samples for metallurgical/geotechnical test work. Additionally, diamond tails were drilled at Area 2W in the deep feeder zone. • Historical drilling completed in the 1970s accounts for less than 1% of the drilled metres, with the remainder drilled by Reed Resources Ltd (Reed) and Reed Industrial Minerals Pty Ltd (RIM) in 2009 to 2011 and MinRes in 2015 to 2022.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• RC recovery was estimated for 76 RC drill holes during the 2011 drilling campaign at the Area 4 deposit by weighing the residue bags, with an average recovery of 95% (with a range of 86% up to 100% recovery). • Core recovery from the 2015 and 2016 diamond drilling averages 98%, with a standard deviation of 15% recovery. • Sample recovery was visually estimated for the 2015 to 2022 RC drilling programs.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Maximisation of sample recovery and ensuring the representative nature of the samples was controlled by the driller and drill crew. Methods used included backing the hammer off the drill face at the end of each drill meter to allow rock chip samples time to clear the sampling system, levelling the sampling system using a spirit level, and cleaning out the sampling system at the end of each hole and when hung up with clay-like material.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No relationship was observed between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Qualitative geological logging of most drill hole intervals was done with sufficient detail to meet the requirements of resource estimation.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Logging is qualitative in nature. Core and chip tray photography has been completed.
	• *The total length and percentage of the relevant intersections logged.*	• Most of the waste and pegmatite mineralisation intervals have been logged. • 28% of the pre-2015 drilling do not have any geological logging.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Diamond drillholes, were sampled using quarter core (2009 to 2011) or half core (2016 Area 2W diamond tails) samples, cut with a diamond saw.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• Pre-2009 non-core samples within and adjacent to the pegmatite were split using a riffle splitter. Post-2009 non-core samples within and adjacent to the pegmatite were split using a cone splitter. Non-core samples in the waste were scoop sampled from ground spoils into 6 m composites. • Pre-2015 non-core samples were drilled dry. Post-2015 non-core samples were drilled wet.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Laboratory sample preparation conducted at Genalysis, ALS, SGS and the site lab at Mt Marion follow very similar processes comprising: - Drying at 105°C - Crush to a nominal top size of 6.3 mm - Pulverising to 80% passing 75 µm - Approximate 200 g subsample collected from pulp using a rotary divider (Genalysis, ALS, SGS & Mt Marion) or by scooping (Nagrom).
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• For the Pre-2015 drilling, a single field duplicates were taken from each drill hole. For Post-2015 drilling, field duplicates were taken every 20th sample. • Field duplicates were not collected on the core.
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	• Field duplicates were analysed for precision and accuracy using scatter plots. As expected, precision improves as duplicates and repeats were taken further along the preparation process due to the sample becoming more homogenised with each advancing stage of preparation. Field duplicates had a low to moderate level of precision, lab duplicates had a moderate to high level of precision, and lab repeats had a high level of precision. No grade bias was observed.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Some sampling error was observed in the field data, however there was no grade bias. Possible factors impacting sampling error include spodumene crystal size relative to sample size and the orientation of drilling to bedding structure/crystal alignment. Overall, the sample sizes are considered to be reasonable to correctly represent the mineralisation based on the style of mineralisation (spodumene-bearing pegmatite), the thickness and consistency of intersections and the drilling methodology.

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• No QAQC of historical drilling, however, this comprises less than 1% of drilled metres and is not considered material. • Pulps from 2009 – 2011 samples were forwarded to the Genalysis laboratory in Perth, Western Australia for analysis. Samples from the 2015 – 2016 drilling were prepared and analysed at the Nagrom laboratory in Perth, Western Australia. Samples from the MinRes (Exploration) 2018 – 2022 drilling were prepared and analysed at the Mt Marion laboratory on Site and at the ALS and Nagrom laboratories in Perth, Western Australia. Samples from the MinRes (Mining) 2019 – 2022 drilling were prepared and analysed at the Mt Marion laboratory and SGS Kalgoorlie laboratory. • Li20 determined by four-acid digest with AAS finish for 2009 – 2011 data and by peroxide fusion digest with ICP finish for the MinRes (EXPL & MINING) 2015 – 2022 samples. • MinRes Exploration samples were analysed using XRF for the following analytes: Al_2O_3, CaO, Cr_2O_3, Fe, K_2O, MgO, MnO, Na_2O, Nb, P, SiO_2, SO_3, Ta and TiO_2. Loss on ignition (LOI) at 1000°C measured by thermogravimetric analysis (TGA). • MinRes Mining samples were analysed using XRF for the following analytes: Al_2O_3, CaO, Fe, K_2O, MgO, MnO, S, SiO_2 and TiO_2. Loss on ignition (LOI) at 1000°C measured by thermogravimetric analysis (TGA). • In-house pulp standards generated by Gannet Holdings Ltd from Mt Marion material. The standards were not certified, with the standard results assessed by RIM in 2009 – 2011 against the raw average of the round robin assays. • 2009 – 2011 drilling: Quality control samples, including field duplicates and uncertified standards, were inserted in each sample batch. One uncertified standard was inserted every 20 samples along with one field duplicate sample per drillhole. A total of 230 field duplicates were collected. • 2015 – 2022 MinRes (EXPL) drilling: Quality control samples, including field duplicates and uncertified standards, were inserted in each sample batch. One uncertified standard was inserted every 25 samples and one field duplicate every 20 samples. • 2019 – 2021 MinRes (Mining) drilling: Quality control samples, including field duplicates and standards were inserted in each sample batch. One standard was inserted every 50 samples and one field duplicate every 50 samples.

Criteria	JORC Code Explanation	Commentary
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• Analysis was carried out using Inductively Coupled Plasma Mass Spectrometry (ICP-MS), Atomic Absorption Spectrometry (AAS), x-ray fluorescence (XRF), and thermogravimetric analysis.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Results show reasonable accuracy and precision was achieved during sampling, sample preparation and assaying. • The in-house standards used from 2009 – 2016 do not have a certified expected value or standard deviation and only provide an indicative assessment of the analytical accuracy. • Early-stage bowl splits and pulps processed at the Mt Marion laboratory during the 2019-2020 drill programs were sent to the Nagrom Laboratory in Perth, Western Australia to carry out an external laboratory check. No precision or grade bias issues were identified.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Inspection of diamond core photographs and RC chip trays was used as a means of independently verifying significant intersections.
	• *The use of twinned holes.*	• Ten early-stage RC drill holes have been twinned by RC drill holes. Analysis of the twinned holes shows reasonable grade reproduction between the two drilling programs.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Logging was completed electronically using Tough Books directly at the drill rig. Code validation was set-up to ensure that only valid codes could be entered. Drill hole detail along with sampling information was entered and validated using Acquire and again using Micromine prior to estimation.
	• *Discuss any adjustment to assay data.*	• Values below the analytical detection limit were replaced with half the detection limit value. Due to the different generations of data some assay conversions from ppm to percent were made (by dividing by 10,000). Additionally, in some cases conversion from Li to Li_2O, from Fe_2O_3 to Fe, from P_2O_5 to P, From SO_3 to S, and from Ta to Ta_2O_5 was required. No other adjustments have been made to the assay data.

Criteria	JORC Code Explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• The location of the drill hole collars from 2009 onwards have been accurately surveyed by a contractor or mine site surveyor using real time kinematic (RTK) GPS devices with a nominal accuracy of 20mm horizontally and 30mm vertically. Approximately 87% of the drill holes are vertical of which less than 10% are downhole surveyed. For the angled drill holes 25% are downhole surveyed. Most of the drill holes at the Mt Marion project are relatively shallow with 76% of the drill holes less than 100 m and 83% less than 130 m in depth. Downhole deviation is not considered to be a major risk with respect to the resource in the shallower areas of the deposits where drill hole depth is less than 100 m. Studies have confirmed that deviation becomes problematic at depths below ~100 m, materially impacting the true versus planned spatial location of data points at these depths.
	• *Specification of the grid system used.*	• The grid is based on the MGA94 Zone 51 grid system.
	• *Quality and adequacy of topographic control.*	• A LIDAR topographic survey based on 1 m contours, completed in 2015 by AAM Group is available across the tenement package. The topographic surface is validated by the drill hole collar surveys.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• The drilling was completed along a set of east-west trending sections for Areas 1, 2, 2W, 4, 5, 7 and 8. The drill sections are oriented northeast-southwest for Area 6. The drill spacing ranges from 30 m to 40 m apart (in the along strike and down dip directions) for most of the deposit. The northern portions of Area 2, 2W and 6 areas are drilled to a nominal spacing of 80 m along strike and 40 m across strike. • The MinRes Mining team has closed the drill spacing to 20 m along strike and 20 m across strike in parts of the North and Central pit areas.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the resource classifications that were applied.
	• *Whether sample compositing has been applied.*	• The drilling was composited downhole using a 1 m interval within the pegmatite and 6 m within the surrounding host rocks.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Most of the drilling is vertical, to target sub-horizontal pegmatite sills. Angled drill holes have been used to target sub-vertical pegmatite dykes.

Criteria	JORC Code Explanation	Commentary
geological structure	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The location and orientation of most of the Mt Marion drilling is appropriate given the strike and morphology of the lithium pegmatite mineralisation. Angled drill holes have been used to target the sub-vertical feeder zone at Area 2W.
Sample security	• *The measures taken to ensure sample security.*	• No specific measures have been taken to ensure sample security. Once received at the laboratory, samples were compared by the laboratory to the sample dispatch documents. Sample security is not considered to pose a major risk to the integrity of the assay data used in the Mineral Resource estimate.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Snowden Group carried out an independent review of the drilling, sampling and assaying protocols, and the assay database, for the Mt Marion project for the 2016 Mineral Resource estimate. No critical issues were found. • MinRes has carried out an internal review of the drilling, sampling and assaying protocols, and the assay database, for the Mt Marion project for the 2022 Mineral Resource estimate. No critical issues were found.

SECTION 2 - REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• Granted Mining Leases M15/717, M15/999 and M15/1000. Leases granted to Reed Industrial Minerals Pty Ltd (RIM), which is a joint venture between Mineral Resources Limited (50%) and Jiangxi Ganfeng Lithium Co. Ltd (50%). • The northern portion of project occurs on Hampton Area Location 53, which is owned by Metals X Limited. RIM has agreed to lease the lithium mining rights over a portion of Hampton Area Location 53, adjoining the Mt Marion project. The agreement allows RIM to explore and develop the lithium project within the agreed portion of Hampton Area Location 53. For details, refer to Neometals Ltd announcement dated 7 July 2015 entitled "Completion of transaction with Metals X".
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The tenements are in good standing with no known impediments.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Initial drilling at Mt Marion was completed by Western Mining Corporation in the 1970s. WMC drilling accounts for 0.5% of the total exploration drill meters. Further drilling was carried out by Reed Resources and later by RIM between 2009 and 2011 for a total of 17.3% of the total exploration drill meters. All remaining drilling has been carried out by MinRes between 2015 and 2022.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Mt Marion lithium mineralisation is hosted within several sub-parallel, northeast to northwest trending pegmatite intrusive bodies which dip at between 10° and 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 1,500 m and average 15 m to 20 m in thickness, but vary locally from less than 2 m to up to 35 m thick. The pegmatites intrude the mafic volcanic host rocks of the surrounding greenstone belt. • To the southwest of Area 2W, large intervals of spodumene-bearing pegmatite intersected during the 2016 and 2020 drilling are interpreted to be part of a sub-vertical, northeast striking feeder zone. The feeder zone is interpreted to be around 40 m to 70 m wide, extending approximately 400 m along strike and down to over 400 m below surface, and is open at depth. • The lithium occurs as 5 cm to 30 cm long grey-white spodumene crystals within medium grained pegmatites comprising primarily of quartz, feldspar, spodumene and muscovite. The spodumene crystals are broadly oriented orthogonal to the pegmatite contacts. Some zoning of the pegmatites parallel to the contacts is observed, with higher concentrations of spodumene occurring close to the upper contact.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.*	• Not included for this statement.
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drill hole information not used to inform the Resource grade estimation has been excluded due to limited downhole survey data.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Data was aggregated based on mineralisation domain. Grade for Li_2O were weight averaged based on sample interval length. No grade cutting has been applied.
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Grades in each respective mineralisation domain were weight averaged based on sample interval length.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No metal equivalent values are being reported.

Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.*
	  • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*
	  • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*
		• The drilling direction is roughly perpendicular to the strike and dip of the mineralisation, with vertical (-90°) drill hole angles used to define the sub-horizontal pegmatite sills, and inclined drill holes (-60°) used to define the sub-vertical pegmatite dyke. Intercepts are close to true width.

Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Not included for this statement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Reporting of exploration results are interval weight averaged across each mineralisation domain.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other material exploration data to report.

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Both exploration and mine development drilling are ongoing across the project. • Planned exploration work includes RC and Diamond drill programs. The RC drilling component of this work aims to increase the Mineral Resource confidence constrained to the North and Central pits and the future South deposit. In addition, the RC component is expected to convert a large portion of the current Inferred Resource to an Indicated Resource status to support the mine plan in optimising the pit design for maximum ore recovery. The diamond drilling component of this program will inform the geotechnical investigations to support mine design to the base of the final pit depth as well as metallurgical test work to inform and improve yield parameters through the processing plant. • The purpose of the mining drill program is to support the short term mine plan.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The detail Mineral Resource Report shows all diagrams and drilling to date.

SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• MinRes stores all the Mt Marion drilling information in an AcQuire database. The database is managed by Mineral Resources Ltd.
	• *Data validation procedures used.*	• Basic checks of the data for potential errors were carried out in Micromine 2018 SP6 as a preliminary step to compiling the May 2022 resource estimate. No significant flaws were identified.

Criteria	JORC Code explanation	Commentary
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• The Competent Person visited the Mt Marion project on 15th & 28th March 2022. He was given a guided tour of the site, observing the North pit, face and floor exposures of pegmatites in the N8 N4 and N7 Pits, and an opportunity to see the PXD drill rig and attending MinRes field crew actively drilling out the feeder zone. • The site visits also included a review of collar pickup, logging, sampling and assay selection procedures, downhole survey methodology, and the sample chain of custody. Discussions were had with the on-site geologists regarding observed lithologies through the feeder zone and their interpretation of the geology.
	• *If no site visits have been undertaken indicate why this is the case.*	• Not applicable.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	• The local geology is reasonably well understood because of work undertaken by RIM and MinRes. Lithium mineralisation occurs as spodumene crystals which are hosted within quartz-feldspar-muscovite pegmatites. • Outcrops and exposure of the in-pit pegmatite confirms the validity of the geological interpretation based on the drilling in the shallower parts of the deposit.
	• *Nature of the data used and of any assumptions made.*	• The geological data used to construct the geological model includes logging of RC/diamond core drilling and associated geochemical assays.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	• Down hole surveys carried out on a small number of the deeper vertical drill holes around the 2W feeder zone have demonstrated that drill path deviation from plan increases with depth. The deviation may impact the true depth and width of the interpreted intersections in the deeper parts of the pegmatite, potentially lifting and thinning pegmatite in these areas. Alternative interpretations of the mineralisation are unlikely to significantly change the overall volume of the mineralised envelopes in terms of the reported classified resources.

Criteria	JORC Code explanation	Commentary
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	• The spodumene-bearing pegmatites were interpreted and wireframed in section based largely on the geological logging of pegmatite intersections, along with geochemistry (e.g., Li_2O, Fe and MgO content). The pegmatite intersections are easily identified in the drilling. • Pegmatite mineralisation was modelled, along with the surrounding host rock domains. Pegmatites with the Areas 5, 7 and 8 were modelled based on geological logs in conjunction with MgO and Fe assay threshold values below 2% and a Li_2O threshold value above 0%. • Pegmatites within the Areas 1, 2, 2W, 4 and 6 have been clipped to exclude peripheral zones of spodumene bearing samples where the MgO assay threshold values exceed 1.5% or the Li_2O threshold value is below 0.5%. Samples falling outside these parameters have been re-designated as waste rock, with Li_2O values grade capped to 0.2%. The MgO threshold is designed to exclude pegmatite bearing samples on the edges of these lenses which are diluted with MgO rich waste rock. The pegmatites have been clipped so that only clean spodumene bearing ore which is amenable to beneficiation is classified as a Resource for mine planning purposes.
	• *The factors affecting continuity both of grade and geology.*	• Lateritic weathering and hydration zone were investigated for impact on grade and geology. The impact was considered negligible. • No lithium speciation has been observed in the deposit. Spodumene is the only lithium mineral present. • Grade zonation by depth in the sub-horizontal pegmatites has been addressed using a maximum number of samples per drill hole during estimation and domain unfolding (dynamic anisotropy).
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Mt Marion lithium mineralisation is hosted within a number of sub-parallel, northeast to northwest trending pegmatite intrusive bodies which dip at between 10° and 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 1,500 m and average 15 m in thickness but vary locally from less than 2 m to up to 35 m thick. The pegmatite sills are currently defined to a depth of up to 300 m below surface. The feeder zone is interpreted to be around 40 m to 60 m wide, extending approximately 500 m along strike and down to 380 m below surface while remaining open at depth.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Estimation of Li_2O was carried out using ordinary block kriging. • Estimation of Al_2O_3, CaO, Fe, K_2O, MgO, MnO, Na_2O, P, S, SiO_2, Ta_2O_5, TiO_2 and LOI1000 was carried out using inverse distance squared weighting. • Top cuts were only applied to the waste rock domains. Probability plots were used to define top-cut values. Top-cuts were used to minimise the impact of localised high grade samples spearing grade into surrounding waste blocks. • Dynamic anisotropy was used to adjust the search ellipse and variogram orientation based on the local dip and dip direction of the geological interpretation. Grade estimation was completed using Micromine 2018 SP6. • The block model was constructed using a parent block size of 15 mE by 15mN by 2.5mRL based on half the nominal drillhole spacing along with an assessment of grade continuity. The search ellipse orientation and radius was based on the results of the Li_2O grade continuity analysis, with the same search neighbourhood parameters used for all analytes to maintain the metal balance and correlations between analytes. • The interpolation was carried out in two search passes, with each subsequent pass having more relaxed criteria. The first pass search radius was based on the variogram total sill for each respective domain. The second pass search radius was expanded to 1.5 times the variogram range. Where the interpolation failed to populate blocks with grades by the second search pass, then those blocks were given a default grade equivalent to the domain average. • Pegmatite mineralisation was modelled, along with the surrounding host rock domains.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• The OK Li_2O estimates were validated against inverse distance squared and nearest neighbour estimates for each pegmatite lens. Check estimates confirmed the primary OK results.
	• *The assumptions made regarding recovery of by-products.*	• No by-products are present or modelled.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• Along with Li_2O, Al_2O_3, CaO, Fe, K_2O, MgO, MnO, Na_2O, P, S, SiO_2, Ta_2O_5, TiO_2 and LOI1000 have been estimated into the pegmatite lenses and the waste rock domains.

Criteria	JORC Code explanation	Commentary
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• Block dimensions are 15 mE by 15 mN by 2.5 mRL with sub-cells to 5 mE by 5 mN by 0.5 mRL. • The block size was based on half the nominal drillhole spacing along with an assessment of grade continuity. The search ellipse orientation and radius was based on the results of the Li_2O grade continuity analysis, with the same search neighbourhood parameters used for all analytes to maintain the metal balance and correlations between analytes.
	• *Any assumptions behind modelling of selective mining units.*	• Block size in the RL dimension was chosen to align with the mine planning requirements of two mining flitches per each 5 m bench height.
	• *Any assumptions about correlation between variables.*	• Correlation between variables is low. No assumptions were made.
	• *Description of how the geological interpretation was used to control the resource estimates.*	• The geological interpretation in conjunction with geochemistry was used to define the mineralisation domain. The mineralisation domain was used to constrain composite data and model blocks during the resource estimation process.
	• *Discussion of basis for using or not using grade cutting or capping.*	• Grade capping was only applied to the mafic (1) and ultramafic (2) domains. Caps were applied to the composite grades to prevent overestimation and smearing of relatively high values into surrounding block estimates. • Inspection of the probability plots guided the choice of which composite analytes to cap and where to place the grade capping value.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Validation of the final Resource has been carried out in several ways, including: Drillhole section comparison, swath plot validation, model versus declustered composites by domain. All modes of validation have produced acceptable results.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 0.5% Li_2O has been used for the stated Mineral Resource estimate. • MinRes mines the pegmatite lenses to the ore / mineralised waste contact. The ore is selectively divided into parcels based on a series of cut-off grades. The current lowest acceptable ore material grade is set at 0.75% Li_2O. Material below this grade is considered semi-barren and is only stockpiled where there has been minimal waste rock contamination during the blasting and mining process. This material may be used as blending material over the life of the mining operation. • The sensitivity of the Mineral Resource to the reporting cut-off grade is minimal at cut-off grades below 0.5%, with a difference of 6% in the reported tonnage between using a 0% Li_2O cut-off and 0.5% Li_2O cut-off.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining method is open pit. Dilution from blast movement and during digging is expected. • An MgO threshold not exceeding 1.5% has been used as an estimation hard boundary to clip the pegmatite lenses in the 1, 2, 2W, 4 and 6 Areas. The MgO threshold is designed to exclude pegmatite bearing samples on the edges of these lenses which are diluted with MgO rich waste rock. The pegmatites have been clipped so that only clean spodumene bearing ore which is amenable to beneficiation is classified as a Resource for mine planning purposes.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• To date, all encountered mineralisation across the project area occurs as spodumene. • A mixed grade spodumene concentrate is produced on site by the Mt Marion processing plant via a combination of gravity separation, dense media separation and flotation. • Metallurgical recovery properties are not being modelled or reported as part of the Resource estimation.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Mining waste is considered to be non-acid forming ("NAF") and formed waste dumps will conform to WA standards. In the case of fibre mitigation, MinRes uses industry standard procedures. • No environmental factors have been identified that would stop further development at the Mt Marion site.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	• Bulk density measurements have been completed by the Genalysis laboratory and the Nagrom laboratory using exploration drill core. Between 2010 and 2018, a total of 96 pieces of diamond core were tested using the Archimedes principle. 10cm pieces of core were collected from both the pegmatite and waste rock domains and divided into weathering profile. Core was measured using uncoated, wax-coated, and cling wrap techniques. The wax-coated method was chosen to best represent the dry bulk density of the rocks in the project area. • Density values are based on data collected up to April 2020. Density data is comprised of a total of 517 blasted rock pegmatite samples and 730 waste rock samples collected by the mining team and tested using the wax-coated technique.
	• *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*	• The weathering profile in the project area is shallow with fresh rock occurring close to surface. Both the pegmatite and waste rocks in the project area are devoid of vugs and have low porosity. The majority of rocks are above the water table and have low moisture contents. For these reasons the wax-coated technique for measuring the bulk density for bulk material is considered appropriate.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Based on the available bulk density data, bulk density values have been applied to the 2022 model blocks as follows: - Oxidised Pegmatite: 2.60 t/m3 - Transitional Pegmatite: 2.70 t/m3 - Fresh Pegmatite: 2.72 t/m3 - Oxidised Mafic: 2.20 t/m3 - Transitional Mafic: 2.60 t/m3 - Fresh Mafic: 2.80 t/m3 - Oxidised Ultramafic: 2.40 t/m3 - Transitional Ultramafic: 2.70 t/m3 - Fresh Ultramafic: 2.90 t/m3

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• The Mineral Resource has been classified where it is contained within pit constraints that are based on long term pricing assumptions. Remaining mineralisation has been left as unclassified. • Indicated and Inferred Resources were classified using the following criteria: • Indicated Resource – Mineralisation with good geological continuity and defined by drilling on a 40 mE x 40 mN grid or better and supported by acceptable down the hole survey control (~100 m depth from collar or less than 100 m depth from the last survey control point). The indicated resource is limited to an extrapolation distance of 40 m from the nearest informing composite data point. • Inferred Resource – Mineralisation with assumed good geological continuity based on drill hole data that cannot be spatially located with confidence due to lack of down the hole survey control (greater than ~100 m depth from the collar position or greater than 100 m depth from last survey control point). The inferred resource is limited to an extrapolation distance of 60 m from the nearest informing drill hole.
	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	• See above.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• See above.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has been externally reviewed by Stuart Masters of SC-2 Consulting. The estimate is robust with no fatal flaws identified.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The Mineral Resource has been validated both globally and locally against the input composite data using sections, swath plots and averages by domain.
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*	• The reported Resource is a global estimate.

Criteria	JORC Code explanation	Commentary
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Comparison of the May 2022 Resource model with the GC Dig model between the mining period 30th June 2019 to 31st May 2022 shows that the Mining Team identified an additional tonnage of 20% over that predicted by the Resource model, at the expense of lower Li_2O grades (1.3 Li_2O% vs 1.6 Li_2O%) and higher contaminant grades (2.2 MgO% vs 0.3 MgO% and 1.3 Fe% vs 0.6 Fe%). The majority of the additional recovered tonnages is directly attributed to mining dilution of the ore body.

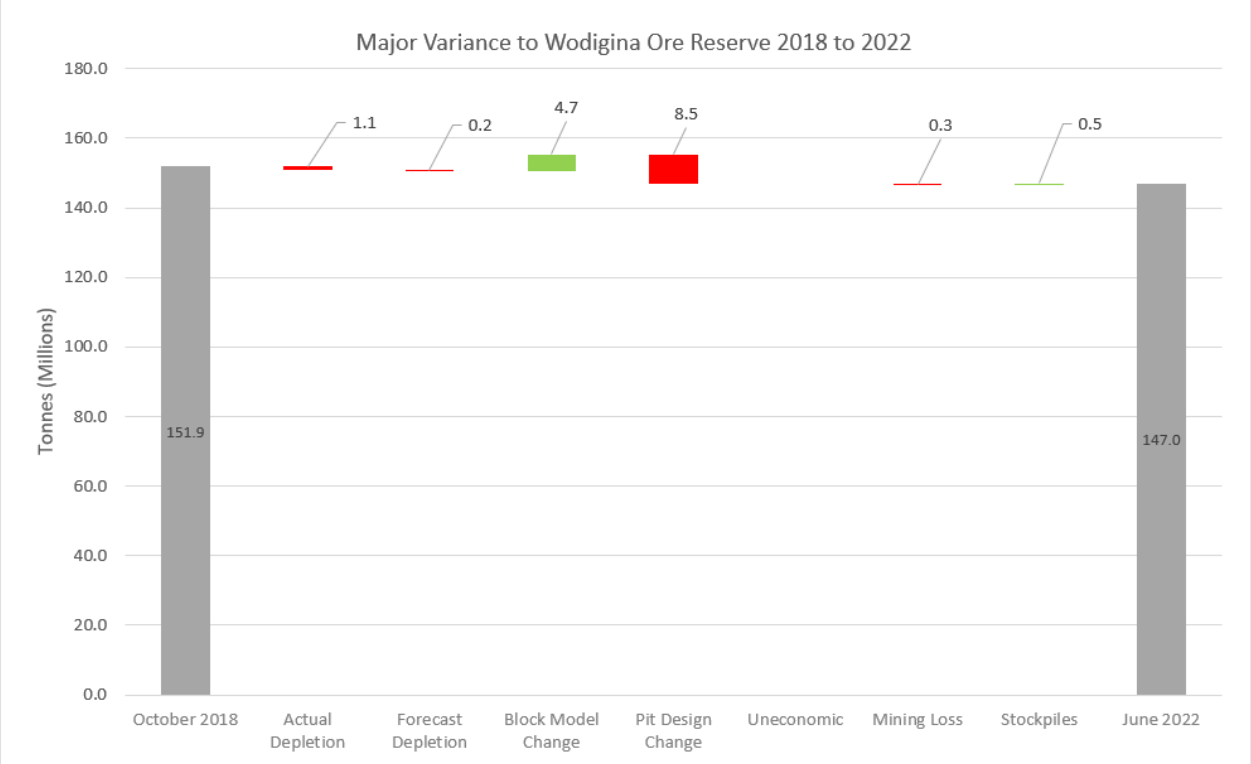
APPENDIX 3: WODGINA ORE RESERVE STATEMENT AS AT 30 JUNE 2022

HIGHLIGHTS

- Total Wodgina Ore Reserve decreased from 151.9 Mt at 1.17% Li2O to 147.0 Mt at 1.20% Li2O including the ore stockpiles and effects of mining model re-blocking.
- 4.9 Mt decrease in the Wodgina in-situ Ore Reserve from October 2018 update as a result of mining depletion, pit design change and mining loss.

Following a review of the Wodgina deposits and updating of the Mineral Resource Estimates by external consultancy Widenbar and Associates Pty Ltd, MinRes has reviewed and compiled the Ore Reserve as at 30 June 2022.

The Ore Reserve for Wodgina has been re-estimated to account for mining depletion to end of June 2022, block model change, pit design change and mining loss.



Waterfall Chart Definitions:

- *Actual Depletion* - This is the net change of the Ore Reserves depletion within the final pit design between the end of month surfaces for October 2018 to May 2022 inclusive.
- *Forecast Depletion* - This is the net change of the Ore Reserves depletion within the final pit design between the end of month surfaces for May 2022 and the forecast face position to the end of June 2022.
- *Block Model Change* - This occurs where change in the Ore Reserve base is driven by a change in either the methodology or interpretation of the resource estimate that can include new drilling data to the model.
- *Pit Design Change* - This occurs where a change in the pit design parameters has taken place and/or an improved pit design has been completed.
- *Uneconomic* - This occurs when material is deemed uneconomic after grade control drilling has been completed.
- *Mining Loss* - This occurs when there is a loss of ore due to mining or other constraints within the economic pit limits.
- *Stockpiles* - This captures the net change to stockpiled material for the reporting.

WODGINA ORE RESERVE COMMENTARY

The previous Ore Reserve is based on the Mineral Resources update released by MinRes on 23 October 2018. The total Wodgina Ore Reserve has decreased by 4.9 Mt to 147.0 M dry tonnes grading 1.20% Li_2O.

This Ore Reserve has been prepared by a 2012 JORC-compliant Competent Person (see below) and peer reviewed internally within Mineral Resources Limited. There have been no external reviews of this Ore Reserve estimate.

The Wodgina Ore Reserve as at 30 June 2022 includes the following changes:

- The Probable Ore Reserve estimate has decreased from the October 2018 estimate by 5.4 Mt due primarily to a change in the pit design. The previous publicly reported Probable Ore Reserve Estimate in October 2018 was 151.9 M dry tonnes grading 1.17% Li_2O. The Wodgina Lithium Operation restarted in March 2022 after it was placed into care and maintenance in November 2019.
- The Proved Ore Reserve has increased by 0.5 Mt in surface stockpiles.

The reserve procedure used in the preparation of the update is similar to the last reserve estimate in October 2018 and as follows:

- A mining model with ore loss and dilution has been produced by regularisation of the sub-celled geological Mineral Resource model using a selective mining unit block size of 5.0m (length) by 5.0m (width) by 2.5m (depth) with cut-off grade application post regularisation.
- This was followed by:
  - Open pit optimisation using Whittle 4X software
  - Sensitivity analysis, pit shell and phase selection
  - Detailed open pit stage designs with a minimum mining width of 30m
  - Mine scheduling and costing.
- Operational waste dump and short-term stockpile designs are in place with conceptual designs for the later phases of stockpiling and waste dump expansion.
- The Wodgina aerodrome construction was completed in 2019 and is now operational.
- The Ore Reserve has been classified based on the Mineral Resource classification within the pit design, which was in turn based on the US$540/t at FX of 0.75 AUD/USD equating to a 0.17 Revenue Factor (RF) shell. Only Indicated Mineral Resources have been converted to the Probable Ore Reserves. The pit design used for calculating the Ore Reserve contains 26.5 Mt at 1.13% Li_2O of Inferred Mineral Resources that are included in the mine plans. No Inferred Mineral Resources are reported in the Ore Reserve. The Ore Reserve is a subset of the Mineral Resources estimate.
- All required environmental approvals are in place for the current Wodgina mine, spodumene concentrate processing plant, 65MW power station and tailings storage facilities.
- All required native title and heritage agreements are in place for the current operation. These include Native Title and Heritage agreements with the Karriyarra people.
- Additional approvals for expansion of mining and infrastructure are currently being sought.

- Current and planned mining is by use of conventional drill and blast, haul truck and excavator open pit methods. All required infrastructure for mining is currently in place.
- Waste rock characterisation studies have been completed and indicate Potentially Acid Forming (PAF) materials exist in the pit. PAF waste is being managed in accordance with the approved PAF Management Plan.
- The key parameters used for conversion of the Mineral Resources to Ore Reserves estimates include (but are not limited to) the following:
  - Production
    - First train constructed and commissioned successfully in the last quarter of 2019.
    - Trains 2 and 3 have been constructed and water commissioned with full commissioning to take place upon resumption of operations. Trains 2 and 3 will be operational in July 2022 and July 2023 respectively.
  - Processing
    - A cut-off grade of 0.5% Li_2O as required to achieve target plant feed grades and is based on economic analysis including operating costs, processing recovery and forecast revenues.
  - Geotechnical / Mining
    - North, south and west walls designed to an inter-ramp angle (IRA) of 43° as estimated from geotechnical design and historic slope performance.
    - East wall designed to 32º IRA to maintain stability along an identified bedding plane.
    - Ore dilution and loses modelled through regularisation of mining model.
  - Pricing

    Pricing estimates of spodumene products are internal price forecasts based on:
    - Prices received for spodumene products from MinRes lithium operations
    - Consensus price forecasts obtained from external organisations
    - Exchange rate from MinRes corporate projections
    - No deleterious content discounts have been applied.
  - Costs
    - Mining costs based on actual performance modified for varying haul cycle times (based on changing pit depth).
    - Transportation costs have been estimated using projections of actual operating costs
    - Government royalties have been included.
    - Treatment and processing costs have been estimated based on various existing commercial MinRes crushing and processing operations.

WODGINA LITHIUM ORE RESERVE (as at 30 June 2022)

Mineralisation			Proved Reserves		Probable Reserves		Total Reserves	
Deposit	**Type**	**Cut-off (Li_2O %)**	**Tonnes (Mt)**	**Li_2O**	**Tonnes (Mt)**	**Li_2O**	**Tonnes (Mt)**	**Li_2O**
Wodgina	Type	0.5	-	-	146.5	1.20	146.5	1.20
ROM & Yard	Stockpile	N/A	0.5	1.53	-	-	0.5	1.53
TSF Resource	Stockpile	N/A	-	-	-	-	-	-
	Sub-Total		**0.5**	**1.53**	**146.5**	**1.20**	**147.0**	**1.20**

Note: all tonnages reported on a dry basis. Note that small discrepancies may occur due to rounding.

COMPETENT PERSON'S STATEMENT

The information in this report that relates to the Ore Reserve estimate is based on, and fairly represents, information compiled by Mr Marek Wydmanski, who is a full-time employee of MinRes and a Member of the Australasian Institute of Mining and Metallurgy. Mr Wydmanski has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Wydmanski consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

FORWARD LOOKING STATEMENT

This ASX announcement may contain forward looking statements that are subject to risk factors associated with ore exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of MinRes. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast.

APPENDIX 3A: JORC COMPLIANT LITHIUM ORE RESERVES

The following information is provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 – Section 4 (Estimation and Reporting of Ore Reserves)

Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results) and Section 3 (Estimation and Reporting) is not being reported in this document.

TABLE 1 - SECTION 4 – ESTIMATION AND REPORTING OF ORE RESERVES – WODGINA

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mineral Resource estimate used for conversion to Ore Reserves dated 18 October 2018 was compiled by Mr Lynn Widenbar of Widenbar and Associates Pty Ltd and is based on: historical drilling information provided and prepared by Cube Consulting during September 2013; and exploration drilling completed by MinRes: from September 2016 to July 2017; February to April 2018; and May to October 2018. • The Mineral Resource estimate is based on a cut-off grade of 0.5% Li_2O. • The Mineral Resource estimate is not additional to the Ore Reserve estimate. The Ore Reserve estimate is a sub-set of the Mineral Resource estimate.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is Mr Marek Wydmanski (MAusIMM) a full-time employee of MinRes. • Mr Wydmanski has visited the site in February 2022 and confirmed operating assumptions used for estimation of the Ore Reserves.

Criteria	JORC Code Explanation	Commentary
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• The Ore Reserve estimate is based on feasibility level studies undertaken by MinRes and the results of production to date with the site operating since February 2017.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 0.5% Li_2O has been used to achieve required plant feed grades. The cut-off is based on economic analysis including operating costs, processing recovery and forecast revenues.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	**Mining Method** • Current and planned mining is by use of conventional drill and blast, haul truck and excavator open pit methods. Expected mine production fleet comprises of a 230t excavator, 106t FELs and rigid body dump trucks with payloads of 133wmt. • Future stage ramp-up will include the addition of 360t excavators and rigid body dump trucks with payloads of 183wmt. • Mine designs comprise of detailed pit designs for the Life-of-Mine plan. Operational waste dump and short-term stockpile designs are in place with conceptual designs for the later phases of stockpiling and waste dump expansion. **Optimisation** • The deposit was optimised using Whittle Optimisation software. • Indicated and Inferred Mineral Resource categories were used in the Whittle Optimisation process. The risk to Reserves by the inclusion of inferred material in the optimisation has been assessed visually and analytically and is deemed low. • An IRA of between 32° (east wall) and 43° (all other walls) has been used for optimisation as estimated from geotechnical design and historic slope performance. • Dilution and ore loss has been modelled by regularisation of the geological resource model using a selective mining unit of 5.0m (length) by 5.0m (width) by 2.5m (depth) with the cut-off grade applied after regularisation. • A minimum mining width of 30m has been used in the pit designs. • A 0.5% Li_2O cut-off and a 95% ore recovery factor has been applied in the optimisation and generation of the pit shells. • The US$540/t shell at FX 0.75 AUD/USD (RF0.17) has been selected as the basis for the pit design. **Mine Plan** • Inferred Mineral Resources are present in the optimised pit (26.5Mt at 1.13% Li_2O) and are included in the mine schedules. The majority of the Inferred Resources are scheduled >20 years from commencement of mining and hence represent a low level of risk to the plan. No Inferred Mineral Resources have been reported in the Ore Reserves. **Infrastructure requirements of the selected mining method** • All infrastructure required for mining and processing activities are in place.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• An upgrade of the existing processing facilities and site infrastructure at Wodgina has been completed to support a 750ktpa spodumene plant producing 6.0% spodumene concentrate. This plant, currently complete with train 1 successfully commissioned, will be delivered in three trains, each with a capacity of 250ktpa. • The plant design was based on representative metallurgical tests on samples from the pit which have routinely been validated during the DSO operations. • The processing plant consists of: ○ A three-stage crushing circuit – primary crushing, secondary crushing, high-pressure grinding rollers (HPGRs) with capacity of 10mtpa. ○ A modular wet processing plant – three parallel trains each producing 250ktpa of spodumene. ○ Ball milling, de-sliming and iron removal stages. ○ A conventional spodumene flotation circuit. ○ Filtration of the spodumene concentrate to <10% moisture for transport to Port Hedland for shipping.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• All required environmental approvals are in place for the Wodgina mine start-up operation, including process plant, power station and tailings storage facility. • Waste rock characterisation studies have been completed and indicate Potentially Acid Forming (PAF) material. Waste characterisation is undertaken as part of ongoing operations and any PAF found is managed according to the approved plan. • Additional approvals for expansion of mining and tailings activities are currently being sought.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Processing and non-process infrastructure to support the full nameplate production capacity is in place on site or on proximate leases. • This includes: ○ Crushing and concentrator plant. ○ Concentrate storage. ○ Workshops, administration and stores buildings. ○ Water supply and purification infrastructure. ○ 65MW Power station. ○ 750 room accommodation facility. ○ Airstrip capable of landing jet aircraft.

Criteria	JORC Code Explanation	Commentary
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Sustaining capital requirements have been estimated through the MinRes group's internal specialist engineering capability. • Future operating costs were estimated using a combination of previous DSO operating costs with adjustments from spodumene concentrate plant budget estimates and actual commissioning data to reflect the new operating costs for the spodumene concentrate plant. No DSO products will be produced. • The cost estimates are in AUD with the exchange rate sourced internally from MinRes corporate projections. • Transportation costs have been estimated using actual operating costs incurred during DSO operations. • Government and third-party royalties have been included in the costs. • No deleterious content discounts have been applied.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The exchange rate has been sourced internally from MinRes corporate projections. • Shipping costs have been estimated using projections from actual operating costs. • No deleterious content discounts have been applied as the product conforms to accepted specifications. • There are no third-party treatment costs. • Pricing estimates for Spodumene are made internally based on prices received for existing Spodumene production at MinRes lithium operations and independent external price forecasts.

Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*
	• *A customer and competitor analysis along with the identification of likely market windows for the product.*
	• *Price and volume forecasts and the basis for these forecasts.*
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*
		• Numerous external assessments forecast high future Lithium demand underpinned by Electric Vehicle and rechargeable battery demand assessed through:
		  ○ A competitor analysis undertaken evaluating future commodity environments.
		  ○ Price and Volume forecasts.
		• MinRes currently markets and manages lithium concentrate products and specifications to customers utilising in house marketing expertise.
		• Consensus external Lithium Pricing Forecasts inform internal pricing models.

Criteria	JORC Code Explanation	Commentary
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Whittle 4X analysis was undertaken to identify the economic portions of the deposit. • Sensitivity analysis using +/- 20% from assumed values indicates the project is most sensitive to direct revenue factors such as price, and metallurgical recovery. While there is some sensitivity to processing and mining costs, these are understood due to operation of site while producing spodumene concentrate and the extended commissioning / operation of Train 1.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• All required native title and heritage agreements are in place for the recommencement of operations. These include Native Title and Heritage agreements with the Karriyarra people. • Agreements for life extension areas are currently underway.

Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*
	• *Any identified material naturally occurring risks.*
	• *The status of material legal agreements and marketing arrangements.*
	• *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*
		• Identified risks to the Ore Reserve include the following:
		  ○ Geotechnical design for the final pit requires investigation to improve confidence. The Reserve could be negatively impacted if the investigation reveals previously unknown structures, however sensitivity analysis shows the downside is limited.
		  ○ Required approvals are in place to facilitate re-commencement of operations. Further approvals are required to enable the Life of Mine plan, however MinRes has a procedural right to obtain these approvals and does not anticipate unresolvable issues.

Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The Ore Reserves have been classified based on their Mineral Resource classification within the US$540/t at FX of 0.75 AUD/USD equating to a RF 0.17 shell, with all Indicated Mineral Resources converted to Probable Ore Reserves. • The total inventory contained in ore stockpiles has been deemed of measured accuracy and has been converted to a Proved Reserve. • This classification appropriately reflects the Competent Person's view.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• N/A

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Factors other than revenue/price and cost factors that may affect the global tonnages and grade estimates include: the geological interpretation; ore recovery and mining dilution estimates; and processing performance. • No other assessments of the relative accuracy or confidence limits of the Ore Reserve have been undertaken. • Reconciliation between April and October 2019 (prior to the mine entering a period of care and maintenance) achieved a favourable 106% Li_2O recovery against the mining model. • Insufficient data has been collected between recommencement of operations and June 30 2022 to review this reconciliation.

APPENDIX 4: WODGINA MINERAL RESOURCES STATEMENT AS AT 30 JUNE 2022

MINERAL RESOURCES STATEMENT

As at 30 June 2022, Wodgina total Mineral Resources are reported as 259.2 Mt at 1.17% Li_2O.

The Indicated & Inferred Pegmatite Mineral Resources are 236.9 Mt at 1.19% Li_2O reported at a 0.5% Li_2O cut-off.

The Tailings Mineral Resources are 22.3 Mt at 0.96% Li_2O.

The Indicated & Inferred Pegmatite Mineral Resources as at 30 June 2022 includes the following changes:

- 25.3 Mt (12%) increase in the hard-rock Mineral Resources from MinRes' May 2018 update:
  - In the northeast area, infill drilling has downgraded some material slightly, that was previously classified as Indicated; and
  - On the western margins where there is new drilling, previous Inferred and Unclassified material has been converted to the Indicated and Inferred categories, respectively.
- Re-sampling and infill drilling data as at 18 October 2018 to produce a new Mineral Resource Estimate for the Wodgina Lithium Deposit.
- Mineral Resources classification changes between the May 2018 and October 2018 models.

Table 1 - **WODGINA TOTAL MINERAL RESOURCE ESTIMATE**

Commodity: Lithium								
Deposit	**Type**	**Tonnes (Mt)**	**Li_2O (%)**	**Fe (%)**	**Al_2O_3 (%)**	**SiO_2 (%)**	**Ta_2O_5 (%)**	**Resource Category**
Wodgina	TOTAL	196.9	1.17	1.95	15.51	71.50	0.02	Indicated
		62.3	1.16	1.82	15.47	72.08	0.01	Inferred
Total		**259.2**	**1.17**	**1.92**	**15.50**	**71.64**	**0.02**	

Table 2 - **WODGINA TOTAL PEGMATITE MINERAL RESOURCE ESTIMATE**

Commodity: Lithium								
Deposit	**Type**	**Tonnes (Mt)**	**Li_2O (%)**	**Fe (%)**	**Al_2O_3 (%)**	**SiO_2 (%)**	**Ta_2O_5 (%)**	**Resource Category**
Wodgina	Pegmatite	177.0	1.19	1.61	15.61	71.92	0.02	Indicated
		59.9	1.19	1.62	15.49	72.43	0.01	Inferred
Total		**236.9**	**1.19**	**1.61**	**15.58**	**72.05**	**0.02**	

Table 3 - **WODGINA TAILINGS STORAGE FACILITY MINERAL RESOURCE ESTIMATE**

Commodity: Lithium								
Deposit	**Type**	**Tonnes (Mt)**	**Li_2O (%)**	**Fe (%)**	**Al_2O_3 (%)**	**SiO_2 (%)**	**Ta_2O_5 (%)**	**Resource Category**
Wodgina	TSF	19.9	1.02	5.00	14.64	67.70	0.02	Indicated
		2.4	0.43	6.76	14.93	63.38	0.02	Inferred
Total		**22.3**	**0.96**	**5.19**	**14.67**	**67.23**	**0.02**	

COMPETENT PERSONS STATEMENT

The information in this Statement that relates to the Mineral Resource Estimates is based on and fairly represents information compiled by Mr A Doorgapershad. Mr A Doorgapershad is a General Manager Exploration & Geology at, and a full-time employee, of Mineral Resources Limited. He is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Doorgapershad has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

APPENDIX 4A

The following information has been provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 – Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results) and Section 3 (Estimation and Reporting of Mineral Resources).

Section 4 (Estimation and Reporting of Ore Reserves) is not being reported in this document.

WODGINA DEPOSIT
JORC CODE 2012 EDITION – TABLE 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Samples have been derived from RC drill hole pulps stored from previous drilling campaigns. Historic RC chip samples were collected at 1m intervals and split with a riffle splitter prior to 2008. RC samples were split with a cone splitter after 2008, to produce a sub-sample of 3-5kg for analysis.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Samples have also been collected from the MinRes drilling campaigns conducted between July 2016 and October 2018.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• RC – Rig mounted cone splitter used, with samples falling through an inverted cone splitter, splitting the sample in 90/10 ratio. 10% off-split retained in a calico bag. 90% split residue stored on ground. All pegmatite intercepts sampled at 1m intervals plus 2m of adjacent waste sent for lab analysis. Deposits have been sampled by RC drilling.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The original database consists of 1,691 holes of which 1,167 holes are RC, 39 holes are diamond and 155 are RAB holes. 330 holes are unknown type. 1,510 of these holes are logged in detail and used for pegmatite modelling. • The MinRes campaigns currently consist of 295 RC holes with ten diamond hole tails and two diamond holes. Samples for Li_2O analysis were taken from relatively recent Historic RC drill holes. • RC drilling was carried out using a face sampling hammer and a 142mm diameter bit. Blast hole drilling was carried out with Atlas Copco BH rigs using a 140mm diameter bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Sample recoveries for historic RC and diamond drilling are recorded on original logs but are not available in a digital format. • Historic sample recoveries are near 100% in the pegmatite, sample loss mainly occurs in shear zones and occasionally on contacts. Most loss is recorded at the start of holes, near collars. • MinRes recoveries are almost all logged as 80%.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• There is a low probability of preferential loss of sample having an effect on the grade of pegmatites. RC – Approximate recoveries are recorded as a percentage based on visual and weight estimates of the sample. Percussion – Approximate recoveries are not recorded.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• All historic holes (diamond & RC) are geologically logged in as much detail as possible. Main rock type is logged and then a secondary rock type if present such as on contacts, mineralisation and any alteration as well as accessory minerals are logged in detail. MinRes holes are logged for lithology, colour, mineralogy, grain size, texture, alteration, weathering and hardness. Oxidation surfaces and weathering are logged. Diamond holes were orientated and core logged for geotechnical qualities. Chip samples have been logged by qualified Geologists to a level of detail sufficient to support a MRE, mining studies and metallurgical studies.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Logging is qualitative and quantitative.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	• RC – logging was carried out on a metre-by-metre basis and at the time of drilling. All intervals were logged. Percussion – blast hole logging was carried out on a hole-by-hole basis using visual controls and geochemical analysis to split the lithology into pegmatite and waste.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Historic RC chip samples are collected at 1m intervals and split with a riffle splitter prior to 2008. RC samples were split with a cone splitter after 2008, to separate a sub-sample of 3-5kg for analysis. Occasionally the sample was <1kg but generally at near surface positions.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• When moist or wet ground conditions were experienced in historic drilling, the cyclone was washed out between each sample and run further to ensure no inter-sample contamination. The rig had a dust collection system that involved the injection of water into the sample pipe before the sample reached the cyclone. This water injection prevented fines being lost out of the top of the cyclone. This system was employed to minimise dust fines being released into the atmosphere in the work area and to minimise the possibility of the sample being positively biased by the loss of the lighter minerals such as quartz, feldspar, and mica, thus effectively concentrating the heavier ore minerals such as tantalite. • RC – Cyclone mounted cone splitter used.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• RC chips were dried at 100°C. All samples below approximately 4kg were totally pulverised in LM5's to nominally 85% passing a 75µm screen. The few samples generated above 4kg were crushed to <6mm and riffle split first prior to pulverisation.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• The measures taken to ensure the RC sampling is representative of the in-situ material collected included the insertion of a duplicate sample at an incidence of 1 in 20. • Commercially prepared certified reference materials (CRM) were inserted amongst the drill samples.
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	• For RC samples, no formal heterogeneity study has been carried out or nomographed. An informal analysis suggests that the sampling protocols currently in use are appropriate to the mineralisation encountered and should provide representative results. As such sample sizes are considered appropriate. For the BH percussion drilling samples of 3-5kg were collected for testing.

Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The measures taken to ensure the BH percussion sampling is representative of the in-situ material collected included the insertion of a duplicate sample with each sample submission.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The original RC pulps were subject to stringent QAQC and laboratory preparation procedures and are considered reliable for the purposes for which they are being used. • QAQC protocols used for the RC drill samples included the insertion of one of three types of CRM's at an incidence of 1 in 36, and the repeat analysis of field duplicate samples at an incidence of 1 in 20. Lab protocols included duplicate analysis at an incidence of 1 in 20 and pulp repeat analysis at an incidence of 1 in 20. • Li_2O has been assayed by ICP005 at Nagrom Laboratories.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• No handheld analytical instruments were used in the field.
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The level of accuracy and precision of the assay determination is considered to be sufficient to form the basis for the Resource estimation and is reflected in the Resource classification. • QAQC data is assessed on import into the database and reported as a single set and by drill program
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Significant intersections not verified.
	• *The use of twinned holes.*	• Some twinned holes were originally drilled, but there are no twins available for the current Li_2O assays. Primary data was made available in a validated access database that had been previously used for a JORC 2012 compliant MRE.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Sample data is stored using a standardised access database using semi-automated or automated data entry. Hard copies of primary data stay in the field during the exploration campaign. To be brought back to the Perth office post campaign for storage.
	• *Discuss any adjustment to assay data.*	• No adjustments were made to the assay data.

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Historic collar locations were surveyed by a real-time differential GPS which achieves an accuracy of ± 0.01m. All down-hole survey data was converted to Wodgina Mine Grid and corrected for magnetic declination. For the 2016, 2017 and 2018 RC drilling, all except for a few collapsed holes were gyro surveyed to compare the data. Gyro-derived data was recorded at the surface and 5m intervals down-hole to the end of the hole. North seeking (NS) gyros were used to survey both vertical and inclined drill holes. Ultimately, the NS gyro-surveyed data was accepted as the most-accurate of the down-hole surveys and this data was adopted into the database to project the drill hole strings. For earlier (pre-2008) RC drilling programs down-hole surveying took place using a single shot Eastman down-hole camera, equipped with a "high-dip" compass for all vertical holes. For diamond holes survey shots were taken every 20m and at the end of hole. The RC holes had camera shots taken at either 40m or 50m intervals, as well as the end of hole. All camera shots were taken inside the 6m stainless steel starter rod. Collar positions were recorded using a hand held GPS. Post-drilling collar positions were recorded using a Differential GPS.
	• *Specification of the grid system used.*	• The grid system is MGA Zone 51 (GDA94) for horizontal data and AHD (based on AusGeoid09) for vertical data. • All data used in the estimation was in MGA94; elevation is standardised to AHD.
	• *Quality and adequacy of topographic control.*	• Topographic control is from Digital Elevation Contours (DEM) 2016 based on 1m contour data.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drilling for the historic data at the Cassiterite pit is generally on a 25m-by-25m grid, with some infill holes drilled as close as 10m by 10m. Drill spacing for the new infill data to test for Li_2O is typically 25m x 25m in Cassiterite pit, There was a 200m gap between the two areas with no Li_2O data. The recent MinRes drill program has in-filled the area of missing assays to approximately 50m x 50m. • RC holes at Cassiterite NE are generally based on 40m x 40m drill spacing.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The data spacing and distribution is sufficient to establish geological and or grade continuity appropriate for future Mineral Resource and classifications to be applied.

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	• RC samples are composited to 1m through the mineralisation and two metres either side. 93% of the assays are 1m in length; 1m composites have been calculated for Resource estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• More than half the historic holes are drilled vertical and the rest varies between -50° and -80°, drilled to the east and west. The mineralised pegmatites are predominantly interpreted to be a series of flat to shallow west and east dipping lenses (on the Wodgina local grid). Holes have been orientated accordingly to intersect the mineralised pegmatites perpendicular where possible. A set of near vertical pegmatites interpreted in the western margin of the deposit have been less optimally drilled and the classification reflects this.
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The orientation of sampling is designed to be perpendicular to the main mineralisation trends where possible. MinRes holes are predominantly drilled at -60° or -90° so as to intersect the local pegmatites at approximately right angles. The orientation achieves unbiased sampling of all possible mineralisation and the extent to which this is known.
Sample security	• *The measures taken to ensure sample security.*	• Sample security is not considered an issue. RC – All samples are bagged in numbered calico bags, grouped into larger tied polyweave bags, and placed in a large bulka bag with a sample submission sheet. The bulka bags are transported via freight truck to Perth, with consignment note and receipted by external laboratory (NAGROM). • All sample submissions are documented and all assays are returned via email. Sample pulp splits are stored in MinRes facilities. • The historic RC samples were sourced on site from storage containers.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling procedures have been reviewed as part of the current MinRes process and are considered adequate by the Competent Person. • All recent sample data has been reviewed internally by MinRes Geologists. No external audits have been carried out on the sample data

SECTION 2 - REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The drilling is located on M45/50-I and M45/365-I held in the name of Wodgina Lithium a 40% subsidiary of MinRes. M45/50-I is not up for renewal until 2026 and M45/365-I is not up for renewal until 2030. The tenements were previously wholly owned by Global Advanced Metals Wodgina Pty Ltd (formerly Talison Wodgina Pty Ltd). • Wodgina is located wholly within Mining Licence M45/50, M45/353, M45/383 and M45/887. The tenements are within the Karriyarra native title claim and are subject to the Land Use Agreement dated March 2001 between the Karriyarra People and Gwalia Tantalum Ltd (now Global Advanced Metals & superseded by Wodgina Lithium).
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The tenements are in good standing with no known impediments.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The original proponent of the project, Pan West Tantalum Pty Ltd, began mining and processing tantalite ore at Wodgina in August 1989, from the Wodgina open pit. • Drilling at Mt Cassiterite has been carried out by a number of different drilling contractors and by a variety of different methods over the years. Drilling carried out by the Pan West JV included 3,825m of air track; 1,145m of RC drilling and 204m of diamond drilling. • Since Sons of Gwalia Ltd purchased the project in 1995, six development-drilling programs have been completed at Mt Cassiterite. The first, in 1996, involved a track mounted RC rig completing a 3,464m drilling program, a Resource extension program during 1998-99 comprised 17,586m of RC drilling and 2,225m of diamond drilling, a further Resource extension program in 2001 comprised 18,694m of RC drilling, a RC infill-drilling program in Mt Tinstone area was commenced in February 2002 and totalled 5,432m, further Resource drilling was conducted in 2002/03 consisting of 12,805m of RC drilling, as a result of this program, an infill-drilling program was carried out which targeted the East Ridge mining area, which totalled 2,948m. • Additional Resource drilling, completed in March 2004, consisted of 3,866m RC drilling and later infill-drilled for a total of 12,930m. • MinRes has carried out RC drilling of 294 holes between September 2016 and August 2018 for a total of 75,797m. • A total of 34,042 assays from the 2016-2018 program were available for use in the MRE. • All exploration during the current reporting period was carried out by MinRes.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The 3600-2800Ma North Pilbara basement terrane consists of a series of ovoid multiphase granitoid-gneiss domes bordered by sinuous synformal to monoclinal greenstone belts. • The Wodgina Greenstone Belt is a north to northeast plunging synclinal structure 25km long and 5km wide, preserved as a roof pendant separating the Yule and Carlindi granitoid complexes. It is composed principally of interlayered mafic and ultramafic schists and amphibolite, with subordinate komatiite, clastic sediments, BIF and chert. The komatiitic and metasedimentary units within the Wodgina area are tentatively correlated to the Kunagunarrina and Leilira Formations respectively. • Archean volcanic activity and sedimentation was followed by the intrusion of Archean granitic batholiths with consequent deformation and metamorphism of the sequence. Late-stage granitic intrusions resulted in the emplacement of simple and complex pegmatite sills and barren quartz veins. • The Wodgina pegmatite district contains a number of prospective pegmatite groups, including the Wodgina Deposit. • The Wodgina lithium mineralisation is hosted within a number of sub-parallel, sub-horizontal, northeast trending pegmatite intrusive bodies with a dip at between 5° to 30° to the west-southwest. • At this time individual pegmatites vary in strike length from approximately 200m to 400m. The thinner near surface pegmatites vary from 10m to 30m in thickness but vary locally from less than 2m to up to 35m thick. The massive basal pegmatite varies from 120m to 200m thick. The pegmatites intrude the mafic volcanic and metasedimentary host rocks of the surrounding greenstone belt. • The lithium in the Cassiterite Pit and shallower pegmatites occurs as 10 - 30 cm long grey-white spodumene crystals within medium grained pegmatites comprising primarily of quartz, feldspar, spodumene and muscovite. Typically, the spodumene crystals are oriented orthogonal to the pegmatite contacts. Some zoning of the pegmatites parallel to the contacts is observed, with higher concentrations of spodumene occurring close to the upper contact. In the massive basal pegmatite, the spodumene is distributed within fine-grained quartz, feldspar, spodumene and muscovite matrix.

Criteria	JORC Code explanation	Commentary
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.*	• The assets of the Wodgina Tantalum Project have been held in a private equity entity since August 2007. As a result, exploration results for the Wodgina Project have not been made public since that time.
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• The assets of the Wodgina Tantalum Project have been held in a private equity entity since August 2007. As a result, exploration results for the Wodgina Project have not been made public since that time.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Reported exploration results are uncut. • Reported aggregate Li_2O intercepts based on geological intervals of continuous pegmatite greater than or equal to 2m.
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• Reported aggregate Li_2O intercept grades are a weighted average based on assay interval length.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• True thickness as down hole length is reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Not applicable
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All holes related to the Wodgina drilling program are reported here.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other meaningful data to report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Exploration drilling is ongoing.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• As part of Mineral Resource Report.

SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The historic database has been previously validated for a JORC 2012 compliant MRE. • The database has also been reviewed and validated using Micromine software. • Raw assay files provided digitally by the laboratory have been used and imported.
	• *Data validation procedures used.*	• The MinRes drilling data has been captured using MinRes' standardised database procedures. • No database issues have been noted.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• The Competent Person visited site on 28-29 March 2022, and reviewed geology in the Cassiterite Pit, RC drilling, sampling and excavations in the TSF3 area. The site visit also included a review of collar pickup, logging, sampling and assay selection procedures, downhole survey methodology, and the sample chain of custody. Discussions were had with the on-site geologists regarding observed lithologies through the feeder zone and their interpretation of the geology.
	• *If no site visits have been undertaken indicate why this is the case.*	• Not applicable.

Criteria	JORC Code explanation	Commentary
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	• Confidence in the geological interpretation is considered to be moderately high, outcrop is exposed in open pit floors and walls and drilling data at a spacing of 25x25m, which provides sufficient information to define the mineralised pegmatite lenses.
	• *Nature of the data used and of any assumptions made.*	• The structural controls on the pegmatites are relatively complex resulting in folded and faulted outcomes, which prevent a high level of certainty. This is most apparent to the west where vertical pegmatites are interpreted, without appropriately orientated drilling.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	• Uncertainty related to the identification of the mineralisation has been simplified by the assumption that all mineralisation is contained within pegmatite – a readily identified rock contrasting strongly with the surrounding host rocks.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	• The logged, interpreted and wireframe geology has been assumed to be the mineralisation boundary.
	• *The factors affecting continuity both of grade and geology.*	• As above.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Pegmatite three dimensional wireframes have been created using an unfolded indicator modelling methodology. • Comparison with previous manual interpretations shows a good correlation. • The pegmatite lenses have been interpreted to a maximum depth of 400m below the surface. • The Li_2O area of the Resource consists of two main areas of the Cassiterite deposit, respectively 200m x 300m and 100m x 200m.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• All modelling and estimation have been carried out in Micromine 20181SP2 software. • A conventional rotated, sub-celled block model framework has been set up. Cell sizes are based on approximately half to one quarter the nominal drill hole spacing. (5m East x 10m North x 2.5m RL). Sub-cells are 1m East, 1m North and 0.5m RL to provide a detailed representation of the pegmatites. • Block model grade estimates have been generated using Ordinary Kriging interpolation. Search and sample number parameters have been set up following variography and Kriging Neighbourhood Analysis. • Estimation is carried out in three passes, with a first search of 60m x 60m x 10m, a second search of 120m x 120m x 10m and a final pass of 200m x 200m x 25m. • Primary estimation is carried out on Li_2O%. • Estimation is limited to material coded as pegmatite. • Estimation is carried out in unfolded space.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• Block model validation has been carried out by several methods, including: - Drill Hole Plan and Section Review - Model versus Data Statistics by Domain - Easting, northing and RL swathe plots
	• *The assumptions made regarding recovery of by-products.*	• No assumptions made as part of this estimate
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	N/A
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	N/A
	• *Any assumptions behind modelling of selective mining units.*	• No assumptions made as part of this estimate

Criteria	JORC Code explanation	Commentary
	• *Any assumptions about correlation between variables.*	• No assumptions made as part of this estimate
	• *Description of how the geological interpretation was used to control the resource estimates.*	• Uncertainty related to the identification of the mineralisation has been simplified by the assumption that all mineralisation is contained within pegmatite – a readily identified rock contrasting strongly with the surrounding host rocks.
	• *Discussion of basis for using or not using grade cutting or capping.*	• A top cut of 5% Li_2O has been used to mitigate the effect of a small number of high-grade outliers.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• All validation methods have produced acceptable results.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Economic analysis is not available as yet, so the Resource has been reported at a range of cut-offs.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining is by conventional open pit. No mining factors have been applied to the Resource model. • As the pegmatite lenses interpolated for Li_2O have relatively limited vertical extent (generally less than 200m below the current topography) no lower limit has been placed on the likelihood of extraction.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No assumptions applied
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Wodgina Project is an active mining area and has a history of mining. • No environmental assumptions have been made or considered as part of this estimate.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	• Dry Bulk density of the rock types within the estimated area has been assigned based on the division of rock type and weathering condition. • The source data was the conclusions of the May 2006 Study by Arthur and MacDonald. In this study specific gravity determinations were obtained for over 200 different samples. These results were compared to core bulk density measurements and values used historically. The conclusion derived a table of recommended bulk density values to be used in future Resource modelling work.

Criteria	JORC Code explanation	Commentary
	• *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*	• A value of 1.8gm/cm3 has been assigned to unconsolidated fill within the pits.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A review of MinRes down hole geophysical logging data has resulted in a density of 2.80 being applied to pegmatites in the Top Dump area and 2.73 in the Cassiterite Pit area.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• The Mineral Resource has been classified in the Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: ○ Geological and grade continuity. ○ Data quality. ○ Drill hole spacing. ○ Modelling technique and kriging output parameters.
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	• As above
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Competent Person agrees with this classification of the resource.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits have been carried out; internal reviews have been carried out by MinRes staff.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The risk assessment review which has been carried out on the Wodgina Pegmatites Li_2O Resource Estimate is qualitative in nature and based on the general approach used by Resource estimation practitioners and consultants to indicate in relative terms the level of risk or uncertainty that may exist with respect to Resource estimation which have cumulative effects on project outcomes.
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*	• The reported Resource is a global estimate.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Relative levels of risk have been assessed as generally low occasionally tending towards moderate with respect to certain aspects of the estimation.