

MINERAL RESOURCES LIMITED

QUARTERLY EXPLORATION AND MINING ACTIVITIES REPORT

January to March 2016

HIGHLIGHTS

Iron Ore Operations

- Iron ore exports of 3.09 million tonnes achieved for the quarter.
- Production from MRL's two operating mines of 3.12 million tonnes for the quarter was the highest quarterly output since September 2015.
- Operations at both Iron Valley and Carina continued to be profitable for the quarter. Improving iron ore index prices and a strong Australian dollar have influenced this outcome.
- Continuing strong emphasis in the business on cost control and operational efficiencies.
- In the Yilgarn, production from the new J4 mine commenced in November 2015 with mining operations ramping up to its optimum level.

'000 WMTs	Half 1 FY16		Q3 FY16		YTD	
	Produced	Shipped	Produced	Shipped	Produced	Shipped
<u>Utah Point</u>						
Iron Valley	3,567	3,126	1,812	1,659	5,379	4,785
Other	-	42	-	63	-	105
Total Utah Point	3,567	3,168	1,812	1,722	5,379	4,890
<u>Kwinana Bulk</u>						
<u>Terminal2</u>						
Carina/J4	2,590	2,733	1,305	1,368	3,895	4,101
Total Iron Ore	6,157	5,901	3,117	3,090	9,274	8,991

OPERATIONAL HIGHLIGHTS

Iron Valley Iron Ore Project

- Iron Valley set a milestone subsequent to quarter's end with its 10 millionth tonne mined.
- Iron Valley operations achieved mining and shipping tonnages comparable to the previous quarter.
- Crushing through-put continued above the 7mtpa target rate.
- Efficiency improvements in haulage continuing with further introduction of additional Superquad road trains.

Having commenced operations in October 2014, replacing MRL's wholly owned Phil's Creek mine, the Iron Valley project achieved a milestone with its 10 millionth tonne mined subsequent to quarter's end.

Production and shipping tonnages were comparable to the previous quarter producing 1.8mt and shipping 1.7mt respectively for the current quarter.

After mobilisation of an additional excavator and upgraded haulage trucks to 150t payload units, total mining movements increased by 13% over the previous period as productivity improvements were realised. Road haulage operations have also continued to deliver efficiency improvements with the ongoing introduction of Superquad road trains, allowing an additional 28 tonnes payload over the traditional haulage configurations. The full cost benefit of this initiative will be realised from May 2016.

Crushing plant performance was consistently in line with an annualised rate of 7mtpa realising the targeted output for export.

The next stage of mining for this project requires access to below water table ore. Below water table approvals are currently being processed with the objective that mining commences in the July Quarter 2016. The construction of dewatering infrastructure will commence in late 2016, ready for early stage production.

A continued focus on worker engagement through interactions, initiatives, and recognition programs has maintained a low level of reported incidents while maintaining rigorous reporting standards. This resulted in improvements to key safety statistics.

Iron Valley mining at southern ridge



Excavator loading high grade ore at Iron Valley

Yilgarn Iron Ore Project

- Commencement of shipping from new J4 mine in the quarter.
- Completion of mining at Carina is expected in quarter 4 FY 016 with over 19 million total tonnes mined.
- Progress towards the environmental approvals for proposed J5 and Bungalbin East mines is continuing with Public Environmental Review submissions lodged with EPA subsequent to quarter's end.

In accordance with the regional plan, the Carina pit is progressively ramping down with completion expected in late 2016. Over 19 million tonnes has been mined and exported from the mine.

The new J4 mine commenced mining operations in November 2015 and increased its operational capacity, producing and shipping approximately 800,000 tonnes in the current quarter. This mine has been established with high capacity mining equipment and unique mining methods to significantly improve productivity.

Carina Iron Ore Mine Rehabilitation

Rehabilitation of ex-pit waste landforms has commenced with the encapsulation of pyritic waste completed and profiling of the final batter slopes 95% completed. Four large scale trials of different seeding, mulching and fertilising methods are underway to revegetate the site. Growth on the rehabilitation trial area has been measured in accordance with industry standard methodology and has shown an acceptable rate of regrowth. Dump batters have now been completed, along with contour ripping and seeding. Rehabilitation of roads and ancillary areas no longer required for operations has also been undertaken.



Southeast corner of Carina waste dump



Carina rehabilitation trial area

Proposed Bungalbin East and J5 Mines

MRL's long term plan for the Yilgarn region is to leverage off its Yilgarn central processing infrastructure hub and rail load out through the staged mining of multiple deposits in the region.

Work on the Environmental Protection Authority (EPA) approvals for the proposed mines at J5 and Bungalbin East continues with the Public Environmental Review (PER) under way including detailed environmental studies. Subsequent to quarter's end, MRL submitted its draft PER to the EPA for assessment. It is expected that this comprehensive environmental impact assessment will be available for public comment once reviewed by the EPA.

COMMUNITY ENGAGEMENT

The Company is engaging with the Southern Cross community to ensure that the public clearly understands MRL's plans and the benefits that the Yilgarn Iron Ore Extension Project delivers to the region. A community information meeting is scheduled in Southern Cross for July 2016.

Further community engagement in the Southern Cross area continues with another edition of its regular newsletter distributed to local residents and businesses. MRL has published dedicated pages on its new web site to supply the public with up to date information about MRL's plans for the Yilgarn region and offer a channel for community feedback.

MRL also runs a comprehensive community sponsorship program through direct contributions to community organisations and participation in community initiatives. In this quarter, the Company has introduced a regional Schools' Sponsorship Program in the Yilgarn region and funds have been allocated to support specific school projects.

MT MARION LITHIUM PROJECT

- First blast at Pit 1 was detonated in March 2016 to commence waste removal in advance of mining ore.
- Civil construction activities including ROM pad and haul road to Pit 1 almost complete.
- Mining of Pit 1 has now commenced according to plan.

MRL has a 30% equity interest in the Mt Marion Lithium Project, with an option to purchase a further 13.1% at an agreed price, bringing its total ownership to 43.1%. The other project participants are Neometals Ltd with a 26.9% interest (moving to 13.8% once MRL exercises its option) and Jiangxi Ganfeng Lithium Co. Ltd (one of the world's largest Lithium producers) with a 43.1% interest.

MRL comprehensively services the project with a life-of-mine, build-own-operate (BOO) contract for the entire mining, processing and supply chain activities from mine to the customer's door. In addition, Ganfeng has entered into an offtake agreement for 100% of the mine's production.

Construction activities commenced at the Mount Marion project site during the previous quarter. In the current period, all site preparation work, installation of site offices and amenities, detailed

engineering design work and construction of concrete civil works for the dry plant have been completed.

Overburden stripping is well progressed and the haul road to pit 1 is close to completion and on schedule according to mine start up plan. Similarly, the ROM pad is expected to be completed in April 2016. The first ore delivery to the ROM expected in early May, once the haul road is operational.

Manufacture and assembly of key on-site equipment is being undertaken at MRL's Kwinana workshop and is progressing as planned.

Procurement of long-lead items is well advanced with the project remaining on schedule to achieve first production during 2016.

Suitable existing mineral storage and ship loading facilities have been identified at both Esperance Port and Fremantle. Arrangements continue to be progressed with the relevant port authorities to secure access. Annual exports of more than 200,000 tonnes of +6% chemical grade spodumene concentrate are planned. An offtake agreement will see the export material purchased by shareholder, Ganfeng Lithium Co. MRL, Ganfeng and Neometals have also entered into an MOU for the production of approximately 80,000 tonnes per annum of 4% Li₂O products. Plant changes are required to facilitate production of this additional product line and the commercial and operational arrangements are being formulated.



Production drilling at Pit 1, blast number 3



Plant works well progressed at Mt Marion

Mt MARION EXPLORATION PROGRAM

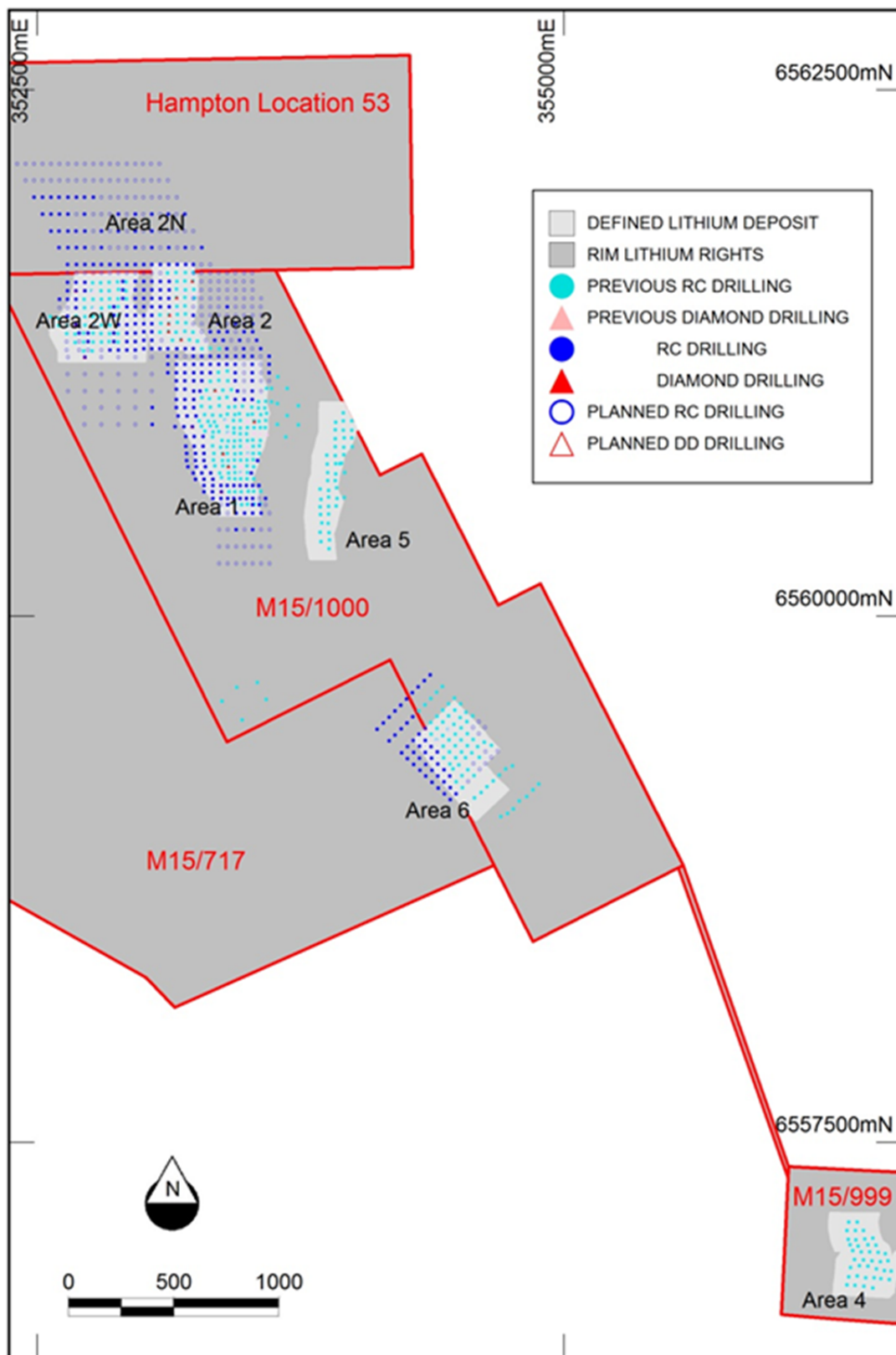
In 2015, the project partners approved an exploration drilling program to extend the Mt Marion lithium resource. This drilling programme is ongoing. The first phase of the resource infill and extension project is targeted at extending the size and increasing the classification of the existing resources at Areas 1, 2, 2West and 6, and newly acquired lithium, rights on part of Hampton Location 53, or Area 2N (see plan below).

Mt Marion's current total Indicated and Inferred Mineral Resources are 23.24Mt at 1.39% Li₂O and 1.43% Fe₂O₃, at a lithological cut-off grade of 0% Li₂O (Refer to ASX announcement dated 21 September 2015 for full details of the Mineral Resource Estimate).

During the March 2016 Quarter, 3 RC rigs drilled a total of 208 RC Holes for 20,404m. Additionally 10 PQ3 diamond holes were completed for 525m for metallurgical test work. Of these diamond holes, 5 were pre-collared by RC for 182m.

The infill and extension drilling program has prioritised the near surface mineralisation. The drilling to date has identified that the mineralisation is laterally wider to the east, open to the north and east and possibly faulted off to the west. Generally, the ore horizon is thicker than previously reported.

The metallurgical diamond drilling program has been completed and the diamond rig has demobilised. It will be required to return to site in the July quarter to complete a geotechnical program once the pit designs have been identified. The RC drilling continues through the current quarter. Updated Mineral Resource and Ore Reserve estimates are planned for completion in the July Quarter.



Plan: Mt Marion drill hole locations

Comments on the preliminary results from specific drill areas are as follows:

Area 6

Results have been positive with consistent pegmatite intercepts ranging from an average 15-30m (true thickness) extending down dip to the west of previous (2015) drilling. The area is potentially open to the north-east where the pegmatite outcrops at surface. It is also open to the north of the current drill lines at depth (down dip).

A major potential structure appears to run northwest to southeast down the western margin of Area 6 resulting in structural displacement of the ore body with no pegmatite intercepts in the westernmost holes on the northern 8 lines.

Area 1

Three RC rigs were concentrated in the area in order to complete 1st phase drilling prior to pre-mining activities commencing in April. Consecutive drill lines and drill holes up the western side of Area 1 intercepted significant pegmatite intervals. These intercepts are a continuation of the known Area 1 mineralisation; the unit appears to flatten out at depth (from a 15-25° westerly dip), has good thickness (up to 30m), visible spodumene throughout and is open at depth to the west. Further drilling will be undertaken in the western side of the southern portion of Area 1.

To the north-west drilling was completed on a 40m x 40m grid pattern linking Area 1 to Area 2. Here, the pegmatite sills are continuous though narrower than those intercepted both to the north and south (averaging approx. 8-10m thick).

Drilling continued along the north-eastern boundary of Area 1 effectively closing off the mineralisation with shallow intercepts thinning to the north and east.

The southern boundary of Area 1 has the spodumene bearing pegmatites narrowing and thinning to completely pinching out just north of 6560410N.

Area 2, 2W, 2N

At Area 2 North (the Hampton Area – north of the power line) drilling continues to extend the known deposits (2 and 2W) to the north. Results to date are encouraging with continuous west dipping pegmatite intercepts from 6m thick in the east to >30m intercepts to the west.

Limited extensional drilling to the east of Area 2 did not identify significant mineralisation.

A second pegmatite sill has been intercepted on the western side of Area 2 North, this unit has a low westerly dip and intercepts to date range from 6m - 24m (true thickness) from surface. Further drilling is recommended for the western side of Area 2 North. Infill drilling between Areas 2 and 2 West have proven the pegmatite unit is continuous though narrow (averaging ~10m true thickness below 80-90m of waste).

Table of Significant Drill Intercepts at Mt Marion

Hole	Area	Tenement	Date Complete	MGAZ51 Easting	MGAZ51 Northing	RL	Significant Intercept (Metres x % Li2O)
MMRC0065	Area 6	M15/717	20/01/2016	354283	6559520	400	24m @ 1.43% from 48m
MMRC0066	Area 6	M15/717	21/01/2016	354249	6559491	390	19m @ 1.34% from 61m
MMRC0067	Area 6	M15/717	22/01/2016	354227	6559469	394	12m @ 1.58% from 74m
MMRC0072	Area 2	M15/1000	13/01/2016	353087	6561544	428	4m @ 0.96% from 56m
MMRC0072	Area 2	M15/1000	13/01/2016	353087	6561544	428	5m @ 1.21% from 63m
MMRC0073	Area 2	M15/1000	13/01/2016	353047	6561545	369	11m @ 1.66% from 79m
MMRC0074	Area 2	M15/1000	16/01/2016	353007	6561544	416	8m @ 1.06% from 86m
MMRC0075	Area 2	M15/1000	17/01/2016	352966	6561542	408	8m @ 1.55% from 78m
MMRC0076	Area 2	M15/1000	17/01/2016	353122	6561593	422	10m @ 1.72% from 47m
MMRC0077	Area 2	M15/1000	19/01/2016	353086	6561584	436	11m @ 1.64% from 58m
MMRC0078	Area2	M15/1000	20/01/2016	353045	6561589	430	11m @ 1.72% from 71m
MMRC0079	Area2	M15/1000	20/01/2016	353007	6561589	435	9m @ 1.96% from 77m
MMRC0082	Area 1	M15/1000	22/01/2016	353527	6560615	401	5m @ 1.2% from 19m
MMRC0083	Area 1	M15/1000	23/01/2016	353493	6560615	400	5m @ 1.1% from 8m
MMRC0083	Area 1	M15/1000	23/01/2016	353493	6560615	400	7m @ 1.3% from 35m
MMRC0084	Area 1	M15/1000	23/01/2016	353467	6560614	402	9m @ 0.97% from 46m
MMRC0085	Area 1	M15/1000	24/01/2016	353434	6560615	401	6m @ 1.63% from 42m
MMRC0085	Area 1	M15/1000	24/01/2016	353434	6560615	401	7m @ 1.6% from 53m
MMRC0086	Area 1	M15/1000	25/01/2016	353405	6560612	403	5m @ 1.94% from 64m
MMRC0086	Area 1	M15/1000	25/01/2016	353405	6560612	403	9m @ 1.13% from 70m
MMRC0092	Area 6	M15/717	24/01/2016	354200	6559438	392	7m @ 0.85% from 99m
MMRC0094	Area 6	M15/717	25/01/2016	354298	6559494	391	22m @ 1.17% from 29m
MMRC0095	Area 6	M15/717	27/01/2016	354272	6559464	391	20m @ 1.48% from 48m
MMRC0096	Area 6	M15/717	28/01/2016	354257	6559429	400	4m @ 0.68% from 58m
MMRC0096	Area 6	M15/717	28/01/2016	354257	6559429	400	19m @ 1.21% from 66m
MMRC0097	Area 6	M15/717	29/01/2016	354226	6559417	383	12m @ 1.53% from 85m
MMRC0107	Area 6	M15/717	3/02/2016	354345	6559295	359	26m @ 1.06% from 21m
MMRC0138	Area 6	M15/717	8/02/2016	354394	6559350	381	26m @ 1.76% from 19m
MMRC0125	Area 1	M15/1000	16/02/2016	353522	6560485	374	5m @ 1.62% from 59m
MMRC0149	Area 1	M15/1000	15/02/2016	353254	6560643	401	18m @ 1.78% from 119m
MMRC0165	Area 1	M15/1000	10/03/2016	353250	6560952	417	17m @ 0.86% from 79m
MMRC0166	Area 1	M15/1000	12/03/2016	353209	6560950	415	22m @ 1.48% from 100m
MMRC0168	Area 1	M15/1000	14/03/2016	353201	6561001	417	7m @ 1.66% from 81m
MMRC0168	Area 1	M15/1000	14/03/2016	353201	6561001	417	14m @ 1.14% from 94m
MMRC0171	Area 1	M15/1000	18/02/2016	353322	6560683	402	22m @ 1.69% from 82m
MMRC0172	Area 1	M15/1000	18/02/2016	353282	6560676	404	18m @ 1.88% from 106m
MMRC0173	Area 1	M15/1000	19/02/2016	353243	6560674	397	18m @ 1.64% from 121m
MMRC0175	Area 1	M15/1000	21/02/2016	353259	6560707	402	22m @ 2.09% from 107m
MMRC0184	Area 1	M15/1000	2/03/2016	353210	6560804	405	26m @ 1.45% from 101m
MMRC0186	Area 1	M15/1000	4/03/2016	353294	6560850	419	25m @ 1.41% from 95m
MMRC0187	Area 1	M15/1000	5/03/2016	353251	6560847	417	29m @ 1.5% from 93m
MMRC0188	Area 1	M15/1000	6/03/2016	353205	6560859	386	26m @ 1.81% from 100m
MMRC0189	Area 1	M15/1000	7/03/2016	353198	6560906	426	29m @ 1.69% from 95m
MMRC0203	Area 2N	Hamptons	2/03/2016	352999	6561684	411	8m @ 1.32% from 11m
MMRC0203	Area 2N	Hamptons	2/03/2016	352999	6561684	411	10m @ 1.75% from 94m
MMRC0204	Area 2N	Hamptons	3/03/2016	353042	6561686	403	5m @ 1.37% from 0m
MMRC0204	Area 2N	Hamptons	3/03/2016	353042	6561686	403	10m @ 1.76% from 90m
MMRC0205	Area 2N	Hamptons	4/03/2016	353087	6561684	418	9m @ 1.61% from 75m
MMRC0206	Area 2N	Hamptons	5/03/2016	353122	6561690	421	8m @ 1.54% from 71m
MMRC0207	Area 2N	Hamptons	6/03/2016	353164	6561690	424	7m @ 1.36% from 53m
MMRC0208	Area 2N	Hamptons	7/03/2016	352967	6561684	420	13m @ 1.31% from 23m
MMRC0208	Area 2N	Hamptons	7/03/2016	352967	6561684	420	8m @ 1.64% from 94m
MMRC0218	Area 1	M15/1000	20/03/2016	353242	6561194	402	12m @ 2.07% from 0m
MMRC0230	Area 1	M15/1000	8/03/2016	353153	6560896	408	18m @ 1.85% from 106m

*Significant intercept: Interval of continuous pegmatite >= 4m

**Li2O grades: Weighted average using assay interval length

A further 152 holes were drilled that intercepted pegmatite. Assays and analysis are awaited for these holes and will be reported next quarter.

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Derrick Kettlewell, who is a full time employee of Mineral Resources Limited. Mr Kettlewell is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Competent Person consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 Report: Mt Marion exploration drilling – As at 31 March 2016

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	<ul style="list-style-type: none"> Deposits have been sampled by diamond drilling (DD) and Reverse Circulation (RC) drilling. DD – Sampled sections are PQ3. Core sample intervals are defined by the geologist to honour geological boundaries. 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 and sampled using a 'spear' sampling tool. All intervals sampled as 1m composites. 1m composites of mineralisation and adjacent waste sent for lab analysis. Remaining waste composited from split residue using a 'spear' into 6m composites and sent to the lab. All intervals were drilled wet. Where asbestiform minerals were identified in the waste, lab analysis was not commissioned.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> RC – Reverse circulation drilling was carried out using a face sampling hammer and a 142mm diameter bit. DD – Diamond drilling was carried out using PQ3 (triple tube) technique. Drill holes are vertical, core was not orientated.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> RC – Approximate recoveries are recorded as a percentage based on visual and weight estimates of the sample. DD – Recoveries are recorded as absolute values calculated from measured core versus drilled interval. There is no known relationship between sample recovery and grade, diamond drill recovery is very high.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Core and chip samples have been logged by qualified Geologists to a level of detail sufficient to support a Mineral Resource estimate, mining studies and metallurgical studies. RC – logging was carried out on a metre by metre basis and at the time of drilling. All intervals were logged. DD – logging was carried out according to geological boundary. All intervals were logged. Logging is qualitative and quantitative. All core was photographed both wet and dry.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> DD – Resource definition drilling uses PQ3: All core is taken. Sample intervals are defined by a qualified geologist to honour geological boundaries. All mineralised zones are sampled. Core is sampled on the width of the geological/mineralised structure in recognized ore zones. RC – Cyclone mounted cone splitter used. All samples drilled wet.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Diamond core is not dried. Sample cut to requirement based on geological logging. Whole sample crushed to -5.6mm prior to being passed through a rotary splitting device (RSD) to generate 5kg or 1/10th subsamples and reserved for Size by Assay. Remainder retained for compositing. RC chips were dried at 100C. All samples below approximately 4kg were totally pulverized 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 pulverization. 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 25. No commercially prepared certified reference materials (CRM) or blanks were inserted amongst the drill samples. 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.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	<ul style="list-style-type: none"> The lab QAQC protocols used for the RC drill samples included the insertion of a duplicate sample at an incidence of 1 in 20, one of four types of CRM's at an incidence of 1 in 10, and repeats at an incidence of 1 in 10. No hand held analytical instruments were used in the field. QAQC data is assessed on import into the database and reported yearly.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections not verified. Diamond holes twinning existing RC holes have been drilled for metallurgical purposes. Currently waiting on Diamond assay results. Sample data is stored using a customized 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. No adjustments were made to the assay data.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Collar positions were recorded using a hand held Global Positioning System (GPS). All holes were drilled vertically. The grid system is MGA Zone 51 (GDA94) for horizontal data and AHD (based on AusGeoid09) for vertical data. Topographic control is from Digital Elevation Contours (DEM) 2015 based on 0.25m contour data.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> RC holes are generally based on 40m x 40m drill spacing. DD holes are spaced to provide representative samples from the larger deposits for the purpose of metallurgical test work. 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
		<ul style="list-style-type: none"> RC samples are composited to 1m through the mineralisation and two metres either side. Remaining waste is composited to 6m. Diamond core is sampled to geology; sample compositing is not applied until the estimation stage.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> The orientation of sampling is perpendicular to the main mineralisation trends. The orientation achieves unbiased sampling of all possible mineralisation and the extent to which this is known.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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). DD – All core trays are loaded onto a pallet, held in place with steel cable. The core tray pallets 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 Mineral Resources Limited (MRL) Facilities.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> All recent sample data has been reviewed internally by MRL geologists. No external audits have been carried out on the sample data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The drilling is located on M15/1000 held in the name of Reed Industrial Minerals Pty Ltd (RIM). MRL is a 30% shareholder in RIM. The other project participants are Neometals Ltd with a 45% interest and Jiangxi Ganfeng Lithium Co. Ltd with a 25% interest. M15/1000 is not up for renewal until 2030. All WA EP Act and Mining Act approvals are in place for the commencement of the project and construction is underway.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> All exploration during the current reporting period was carried out by MRL.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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° to 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 700 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. The lithium 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.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> A summary of the exploration drilling into the Mt Marion deposits is attached.
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Reported exploration results are uncut. Reported aggregate Li₂O intercepts based on geological intervals of continuous pegmatite greater than or equal to 4m. Reported aggregate Li₂O intercept grades are a weighted average based on assay interval length.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Apparent thickness as downhole length is reported.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Plan view and typical cross section of Mt Marion showing drill collars is attached.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All holes related to the Mt Marion drilling program for the December 2015 reporting period are reported here.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No other meaningful data to report.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Exploration drilling is ongoing. As part of the main document (Plan View).