



MINERAL RESOURCES LIMITED

**QUARTERLY EXPLORATION AND
MINING ACTIVITIES REPORT
OCTOBER TO DECEMBER
Q2 FY2017**

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HIGHLIGHTS

- Iron ore exports of 3.29 million tonnes (MT) achieved for the quarter, 5% greater than guidance estimate of 3.125MT.
- All approvals secured to commence below water table mining at the Iron Valley Project, allowing access to the entire ore reserve.
- First production of lithium achieved at Mt Marion.
- Approvals to extend the life of mining operations in the Shire of Yilgarn through the construction of two new mines – Bungalbin East and Jackson 5 (J5) – continue to be progressed.

COMMODITY SHIPMENTS

'000 WMTs	Q1 FY17		Q2 FY17		HALF YEAR FY 2017	
	PRODUCED	SHIPPED	PRODUCED	SHIPPED	PRODUCED	SHIPPED
UTAH POINT						
Iron Valley Manganese	2,103	2,095 146	2,234	2,114	4,337	4,209 146
Total Utah Point	2,103	2,241	2,234	2,114	4,337	4,355
KWINANA BULK TERMINAL 2						
Carina/J4	1,327	1,330	1,261	1,176	2,588	2,506
TOTAL ORE	3,430	3,571	3,495	3,290	6,924	6,861



OPERATIONAL HIGHLIGHTS

IRON VALLEY IRON ORE PROJECT

- Strong, sustained production with
 - 2.2 million tonnes (MT) produced and
 - 2.1 MT shipped
- Secured all approvals to commence below water table mining, allowing access to the entire ore reserve.
- Crushing Plant modifications completed to enable the processing of below water table ore.
- Below water table dewatering program of works well advanced and progressing as planned.

Crushing plant performance remains strong

with production in excess of 8.9 million tonnes per annum (MTPA), rate, 27% greater than the annualised target of 7 MTPA.

By the end of the quarter, water was being discharged from the pit at 300 litres per second with recent upgrades to the dewatering scheme expected to increase discharge rates. The dewatering activities continue to be undertaken in accordance with the Project's licensing requirements, this includes monitoring activities to manage the quality of water discharge.

*Image top left
Iron Valley:
Below water table
dewatering activities
commenced during the
quarter, with water
being discharged from
the pit at 300 litres per
second*

*Image top right
Iron Valley: A new
EX2600 excavator
delivered to site during
the quarter brings
increased efficiencies
for below water table
mining activities*



Image: Yilgarn: Bitumen-sealing was completed on the 75km J4 haul road during the quarter

YILGARN IRON ORE PROJECT

- Strong, sustained production from the Jackson 4 (J4) east pit with
 - 1.2 million tonnes (MT) produced and
 - 1.1 MT shipped
- Clearing activities commenced at the Carina-extended, a source of blending material.
- The application for approvals to extend the life of mining operations in the Shire of Yilgarn through the construction of two new mines – Bungalbin East and Jackson 5 (J5) is ongoing.

Mineral Resources continues to develop the ore bodies within its tenement inventory in the Shire of Yilgarn.

Performance at the J4 east pit continues to be strong, with bitumen-sealing completed on the 75 kilometre haul road that connects the J4 pit to the existing process facilities at Carina. The sealing of the road ensures all weather access allowing operations to continue safely and improving the logistics chain efficiencies from the pit to the port. Mining operations at the J4 west pit are progressing as planned.

Clearing activities commenced at the Carina-extended pit in December. Carina-extended will operate as a satellite open pit, with the ore hauled 2 kilometres to the existing Carina pit facilities for processing. Additional equipment has been mobilised to site in preparation for the commencement of mining operations in the next quarter.

YILGARN PROPOSAL FOR CONTINUED IRON ORE MINING

Mineral Resources Limited (MRL) supports rigorous approvals processes and continues to work through the statutory requirements to extend the life of its iron ore operations in the Shire of Yilgarn through the construction of two new mines Bungalbin East (BE) and Jackson 5 (J5). MRL sought to have this proposal subject to the highest level of assessment, the Public Environmental Review (PER).

Public submissions to the PER prepared by MRL, closed on 31 October 2016 after an 8 week open public review. MRL considered and responded to the Environmental Protection Agency (EPA) on the matters raised via the PER in December 2016. The EPA will prepare a report and make a recommendation to the Minister for Environment. The Government of WA will then make a conclusive determination based on that advice and on broad environmental, social and economic considerations as to whether the mining proposal will proceed and under what conditions. MRL is committed to operating in an environmentally and socially responsible manner. MRL's ongoing mining operations in the Shire of Yilgarn will support the continuation of more than 1,400 WA jobs, providing a significant financial contribution to the WA economy which last year included payments to the WA community through taxes, charges, rates, royalties and fees of \$66.9 million.



Performance at the J4 east pit continues to be strong with 1.2 million tonnes of iron ore produced during the quarter



LITHIUM WODGINA PROJECT

- 28 reverse circulation (RC) exploration holes completed during the quarter totalling 5,128 metres.
- Drilling capacity increased following the mobilisation of an additional rig and the commencement of nightshift operations.
- Regional reconnaissance activities underway to identify new prospects.

Exploration drilling activities have commenced since Mineral Resource Limited (MRL) completed its purchase of the Wodgina mine in September 2016. Infill drilling activities continued within the existing lithium resource at Cassiterite pit. Twenty-eight reverse circulation (RC) holes were completed at the pit, for 5,128 metres, to define the extent of the mineralised zone. Drilling activities continue to yield encouraging results, with drilling capacity increasing during the quarter following the mobilisation of an additional drill rig to site. Subsequent to the quarters end, an additional two rigs will be

mobilised to site which is expected to create further drilling efficiencies.

Regional reconnaissance activities commenced during the quarter to identify prospects outside the existing lithium resource area. RC drilling will commence in the prospective areas as drilling capacity increases.

As part of its acquisition of the Wodgina assets, Mineral Resources acquired first right of refusal or a 2.5% royalty over the Pilgangoora lithium tenements owned by Pilbara Minerals.

During the quarter Mineral Resources entered into a formal agreement with Pilbara Minerals to relinquish these rights in exchange for an 8.3% stake in Pilbara Minerals. This decision has now enabled both parties to move forward and Mineral Resources to focus on creating a safe, low-cost operation. Mineral Resources and Pilbara Minerals will cooperate in the development of mining and operating activities in the region where it suits both parties to do so.

*Image top left:
Wodgina: Aerial of
mine site*

*Image top right:
Wodgina: At dusk*



MT MARION PROJECT

- Beneficiation plant primary and secondary DMS circuit construction completed.
- Beneficiation plant commissioning ongoing throughout November and December with first production achieved during the quarter.
- First shipment of lithium imminent.

The first production of lithium was achieved during the quarter, with the beneficiation plant being methodically commissioned and ramped up towards its full nameplate capacity of 2.2 million tonnes per annum (MTPA). This

follows the completion of the crushing plant in the same quarter, which was constructed and fully commissioned within an industry-leading timeframe of 8 months.

The first shipment of approximately 15,000 tonnes of lithium concentrate is expected to depart Kwinana early in the forthcoming quarter.

The MRL-operated Mt Marion Project is a joint project between MRL (43.1%), Neometals Limited (13.85%) and one of the world's largest lithium producers, Jiangxi Gangfeng Lithium Co (43.1%).

*Image:
Mt Marion:
Lithium production
commenced during
the quarter*



Mt Marion: MRE's LNG fuelled power station in operation at the MRL-operated Mt Marion Project

MINERAL RESOURCES ENERGY

Following the successful installation of a 10 megawatt power station fuelled by liquefied natural gas (LNG) at the Mineral Resources operated Mt Marion Lithium Project in the quarter, Mineral Resources Energy (MRE) continues building a commercial division to provide revolutionary and reliable power generation options to the resource sector and regional communities.

During the quarter MRE has focussed on developing internal capability in downstream gas processing, which has been combined with an existing power generation

engineering team, to provide a very unique Independent Power Provider platform.

The business will continue to utilise innovative methods to enable cost effective usage of Liquefied Natural Gas (LNG) as an alternative fossil fuel to Diesel.

MRE is actively tendering to provide power solutions for both green and brown field projects for the resource sector and regional communities.



Image: Wodgina: Night shot

FURTHER INFORMATION

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Matthew Watson, who is a full time employee of Mineral Resources Limited. Mr Watson 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.

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