

MINERAL RESOURCES LIMITED QUARTERLY EXPLORATION AND MINING ACTIVITIES REPORT Quarter 1, FY 2016 - September 2015

HIGHLIGHTS

Iron Ore Production and Exports

- Mine production from MRL's two operating mines was just over 3 million tonnes for the quarter with production from Iron Valley increasing by 9% compared with the previous quarter.
- Total export volumes for the quarter of 2.6 million tonnes were marginally higher compared with the previous quarter.

'000 WMTs	Q4 FY15		Q1 FY16	
	Produced	Shipped	Produced	Shipped
Utah Point				
Iron Valley	1,616	1,262	1,764	1,401
Phil's Creek	0	29	0	6
Spinifex Ridge	0	1	0	17
Poondanao	0	0	0	0
Total Utah Point	1,616	1,283	1,764	1,424
KBT2 / Carina	1,312	1,323	1,316	1,212
Total Iron Ore	2,928	2,606	3,080	2,636

• Operations at both Iron Valley and Carina continued to be profitable for the quarter.

Operational Highlights

Iron Valley

- Record quarterly production levels achieved at Iron Valley
- Further cost reductions and productivity enhancements achieved
- Iron Valley ore loaded and hauled to Utah Point on a first Super Quad road train in late September.

Carina

- Further cost reductions and productivity enhancements achieved
- Construction of the haul road connecting J4 to the Carina central processing infrastructure hub and development of the mine at J4 both progressed as planned.
- MRL continued to progress its application for environmental approvals for J5 and Bungalbin East. The scope of the Public Environmental Review (PER) has been agreed with the Environmental Protection Authority and detailed environmental studies are underway.

1 Sleat Road, Applecross, Western Australia 6153. Locked Bag 3, Canning Bridge, Applecross, Western Australia 6153 **P** +61 8 9329 3600 **F** +61 8 9329 3601 **W** www.mineralresources.com.au

IRON VALLEY MINE

Iron Valley mining and crushing operations achieved budgeted performance for the quarter. Haulage and shipping of product were marginally below budget.

Further cost reductions and productivity enhancements were achieved during the quarter principally through:

- Modifications to mining fleet payloads along with improved cycle times and higher levels of utilisation;
- Optimisation of drill and blast design and associated activities; and
- New fly-in-fly-out arrangements which have delivered reduced flight costs and more efficient shift change overs.

Export of stockpiled fines product continued in the quarter as part of the previously advised 1 million tonne parcel of iron ore fines, which has been forward sold for delivery through until January 2016. A further 500,000 tonne parcel of fines was forward sold at a fixed price during the quarter for delivery through until February 2016.

Super Quad Road Trains

As part of its strategy to reduce road haulage costs, MRL has continued to progress the implementation of Super Quad road trains on the Iron Valley to Port Hedland road haulage route. The Super Quads are 60 metres in length and carry an additional 28 tonnes of ore compared with conventional road trains, thereby reducing the overall number of truck movements on the haulage route and reducing haulage costs. The first haulage of Iron Valley product to Utah Point by a Super Quad was achieved in late September. Additional Super Quads will be progressively introduced on the haulage route over the balance CY 2015.



Photo: First Super Quad delivery of Iron Valley product to Utah Point

Bulk Ore Transportation System (BOTS)

The development of BOTS is progressing as planned. The elevated track and rolling stock design modifications now incorporate standard rail componentry that significantly reduces operational and technology risk. In addition, the design now incorporates more than 60% of the track at a maximum height of 2 metres above ground, which has reduced track costs and improved the rolling stock efficiency by increasing the gross wagon load capacity from 20 tonnes to 60 tonnes per wagon.

BOTS will be developed and operated under a State Agreement Act as this is the most appropriate regulatory/legislative mechanism to enable MRL to achieve its objectives. Negotiations with the Department of State Development (as the lead Government agency) are underway.

Negotiations with tenement holders, traditional owner groups and pastoralists along the 331km initial BOTS corridor between Iron Valley and Port Hedland, continued during the quarter. Preparation of the environmental approval referral to the Environmental Protection Authority (EPA) for BOTS was also progressed during the quarter. The referral is expected to be lodged with the EPA during Q2 FY 2016.

In conjunction with BOTS, MRL is continuing to pursue a multi-user/transhipping facility in the Port Hedland inner harbour to address issues relating to the high costs, capacity constraints and ship size limitations associated with the use of the State Government owned Utah Point facility.

The final investment decision on BOTS is targeted for 2016, subject to confirmation of project costs, formalisation of route approvals with third parties and the iron ore market remaining stable.



CARINA MINE

Carina mining, crushing and haulage operations achieved budgeted performance for the quarter. Shipping of product was below budget due to throughput restrictions at the KBT2 ship loader during the quarter.

Further cost reductions and productivity enhancements principally achieved through:

- In pit dumping of waste resulting in reduced mining fleet hours, fuel usage and labour;
- Modifications to the operation of airstrip which enables aircraft to arrive earlier and has reduced shift change over times by up to 3 hours;
- Crusher optimisation resulting in increased throughput; and
- Increased total train tonnages by altering payload to meet actual carriage tare weights.

YILGARN MINE EXPANSION PROJECT

The focus in the Yilgarn remains on maximising the utilisation of the Carina central processing infrastructure hub, through the mining of the satellite deposits at J4, J5 and Bungalbin East. This will enable MRL to leverage Carina's established infrastructure and significantly prolong project life in the Yilgarn region.

The construction of the haul road to connect J4 to the central processing infrastructure hub and the development of the mine at J4, both progressed as planned during the quarter. Mining commenced at J4 during the quarter and first ore is expected to be hauled to the Carina crushing plant during Q2 FY 2016.

MRL also continued to progress its application for environmental approvals for J5 and Bungalbin East. The scope of the Public Environmental Review (PER) is agreed with the Environmental Protection Authority and detailed environmental studies to support MRL's mining applications, are underway. The completed PER is expected to be published for public review in FY 2016.



MT MARION LITHIUM PROJECT

Financial closure and a final investment decision for the Mt Marion project were both achieved during quarter and the project is now in the construction phase.

MRL retains a 30% interest in the project and is responsible for the construction and operation of the infrastructure and mining/processing operations, on a build-own-operate basis. The other project participants are Neometals Ltd with a 45% interest and Jiangxi Ganfeng Lithium Co. Ltd with a 25% interest. Jiangxi Ganfeng Lithium Co. Ltd (China's second largest lithium producer) has entered into a life-of-mine Offtake Agreement for the project.

First production is anticipated by mid-2016. Annual production of 200,000 tonnes of high-value 6% chemical grade spodumene concentrate is expected once the plant becomes fully operational. Arrangements to transport the concentrate to Esperance by road and utilise existing mineral storage and ship loading facilities at the port, are being progressed.

A drilling program is planned to commence in the second quarter of FY 2016. The objective of the program is to do both infill drilling in the area of known mineralisation and extension drilling to expand the resource base on both the existing tenement and the recently acquired lithium rights on Metals X Ltd's acreage.



EXPLORATION

Whilst MRL continues to work through the Environmental and Mining approvals processes, minimal iron ore exploration activity has been undertaken. Field mapping activities aimed at reassessing all of the Yilgarn and Pilbara tenure continues.



