



**ASX Announcement**

**ASX Code: MAR**

**21 December 2018**

## **Lorena Gold Mine Update**

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Malachite Resources Limited (ASX Code: MAR) advises operational performance at the Lorena Gold Mine ("Lorena Project") during the course of November and into December 2018 has continued well below expectations.

The Project is located about 15km east of Cloncurry in northwest Queensland and is a joint venture between Malachite, Cloncurry Gold Recovery Management Pty Ltd ("CGR") and Ore Processing Services (OPS). CGR is the manager of a joint venture between Chinova Resources Pty Ltd (70%) and BIM Gold Pty Ltd (30%). BIM Metals Pty Ltd is the joint venture manager.

Each party's interest in the Open Cut operations at Lorena is as follows:

<b>Joint Venture Participant</b>	<b>Equity Interest in Open Cut - Lorena Gold Project</b>
Malachite	55%
CGR	30%
OPS	15%

The head grade, metallurgical recoveries and plant usage were all lower than forecast over the month of November and into December continuing the trend observed during the September quarter and in October even though the operation has moved into processing of the expected higher grade sulphide ore.

### **Mining**

In November Ore delivered from the pit above 1 g/t totalled 15,634 tonnes at weighted average grade of 1.75 g/t consisting of Low and Medium ore blocks only.

During November the operations continue to experience difficulties with variable distribution of grade inside the mineralised zone. As a result the overall average grade of ore delivered for processing was lower than anticipated throughout the month.

### **Processing**

The site processed 11,145 t of ore at an average rate of 27t/hr during the month of November. Plant utilisation was well under target at 64% due to the stop/start of the processing plant from working capital constraints regarding cyanide purchases. The head grade processed through the plant averaged 3.31 g/t gold with an average recovery of 44 %. This was well below forecast and a function of the stop/start of the processing plant.

The site poured 616 ounces of gold and sold 722 ounces of gold for the month.

**Monthly Mining physicals:**

<b>Lorena EX-Pit</b>	<b>Jan-18</b>	<b>Feb-18</b>	<b>Mar-18</b>	<b>Apr-18</b>	<b>Aug-18</b>	<b>Sep-18</b>	<b>Oct-18</b>	<b>Nov-18</b>	<b>YTD</b>
Fresh Ore (BCM)	3,493	10,282	23,880	21,564	633	1,669	7,856	5,584	<b>74,960</b>
<b>Total Ore Tonnes</b>	<b>8,775</b>	<b>25,830</b>	<b>59,991</b>	<b>54,172</b>	<b>1,588</b>	<b>4,188</b>	<b>21,996</b>	<b>15,634</b>	<b>192,175</b>
<b>Weighted Average Ore Grade g/ t</b>					<b>10.12</b>	<b>5.28</b>	<b>3.39</b>	<b>1.75</b>	
Mineralised Waste (BCM)	1,155	298	-	-	-	-	-		1,453
NAFWaste (BCM)	95,662	84,630	98,101	80,532	19,152	41,471	47,568	22,697	489,813
PAFWaste (BCM)	32,688	18,812	7,015	14,148	396	5,240	26,186	7,565	112,050
Oxide (BCM)	-	-	-	-	-	-	-		-
<b>Total Waste (BCM)</b>	<b>129,505</b>	<b>103,739</b>	<b>105,117</b>	<b>94,680</b>	<b>19,548</b>	<b>46,710</b>	<b>73,754</b>	<b>30,262</b>	<b>603,315</b>
<b>Total ExPit Waste &amp; Ore (BCM)</b>	<b>132,998</b>	<b>114,021</b>	<b>128,997</b>	<b>116,244</b>	<b>20,181</b>	<b>48,379</b>	<b>81,610</b>	<b>35,846</b>	<b>678,276</b>
<b>Miscellaneous</b>									
TSF& Construction BCM	796	1,533	-	6,876	-	-	792		9,996
Rehandle BCM	6,110	72	1,390	-	-	-	396	1,764	9,732

<b>ROM Stocks</b>	<b>Tonnes Au g/ t</b>	
Medium Grade (Oxides)	39,376	3.63
Low Grade (Oxides)	20,888	2.55
Old Heap Leach (Oxides)	19,463	3.20
Low Grade 1-2g/ t (Fresh)	4,878	1.06
Med Grade 2-5g/ t (Fresh)	-	-
High Grade 5g/ t +(Fresh)	-	-
Crushed Low Grade (1-2g/ t)	5,571	1.06
Crushed Med Grade (2-5g/ t)	9,138	2.36
Crushed High Grade (5g/ t +)	371	4.78
<b>Total &amp; Average Grade of Stocks</b>	<b>99,685</b>	<b>2.94</b>

**Monthly Processing physicals:**

<b>Processing Monthly Physicals Jul-18</b>	<b>Aug-18</b>	<b>Sep-18</b>	<b>Oct-18</b>	<b>Nov-18</b>	<b>YTD</b>	
Crushed Tonnes (dmt)	18,606	14,925	13,768	22,605	16,519	<b>86,423</b>
Tonnes Processed (dmt)	15,453	10,225	12,794	16,535	11,145	<b>66,152</b>
Feed Rate (dmt/op.hr)	27	23	27	27	27	<b>26.3</b>
Mill Run Time	576	435	469	612	418	<b>2,511</b>
Mill Utilisation (%)	91%	69%	77%	91%	64%	<b>80%</b>
Gold Head Grade (g/t)	3.21	3.43	3.41	3.86	3.31	<b>3.46</b>
Tail Grade (g/t)	0.94	0.83	0.82	1.04	1.85	<b>1.08</b>
Gold Recovery %	71%	76%	76%	73%	44%	<b>69%</b>
Total Gold Production (oz)	1,128	855	1,065	1,499	523	<b>5,071</b>
Gold Poured (Oz)	799	1,111	563	1,134	616	<b>4,224</b>
<i>Gold in Circuit @ Month End (Oz)</i>	<i>1,016</i>	<i>760</i>	<i>1,262</i>	<i>1,627</i>	<i>1,534</i>	

The maintenance team completed several projects during the month including a ball loader for the mill and laying the groundwork to upgrade the cyclone feed pump to allow the plant to achieve throughput rates well above 30t/hr.

The weighted average plant head grade over the last two months has been only 3.63 g/t gold. This was below the expected grade of >6g/t gold.

Cyanide demand continues to be much higher than anticipated which has added to the processing costs.

### **Joint Venture Matters**

Chinova Resources Pty Ltd (Chinova) has withdrawn a working capital financing facility, which they had previously extended to joint venture participants to fund ongoing operations.

Operations at the processing plant were recently suspended by the Joint Venture Manager pending receipt of adequate working capital funds to fund the processing operations. It is now anticipated that this suspension will continue at least until after the Christmas New Year break and thereafter until such time as the joint venture parties resolve outstanding issues and adequate working capital is provided. The Joint Venture Manager has advised that mining operations are continuing as scheduled.

Malachite has repeatedly requested that the Joint Venture Manager provide detailed information in relation to project cash calls issued by the Joint Venture Manager to Chinova and paid by Chinova on behalf of the Company. Malachite has also requested detailed project information and presentations presented to joint venture partners so that the Malachite Board can properly assess project returns. Malachite is unable to properly assess its position in relation to the joint venture and future cash calls until this information is provided by the Joint Venture Manager.

Malachite has resolved to proceed with the appointment of Behre Dolbear Australia to conduct an independent technical review of the project.

### **Further Information**

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For further information, please contact the Company on (02) 9251 0032 or by email at [info@malachite.com.au](mailto:info@malachite.com.au) or visit the Company's website at [www.malachite.com.au](http://www.malachite.com.au)