



**CARBINE RESOURCES**  
LIMITED

ASX Announcement

29 July 2016

## June 2016 Quarterly Report

### KEY POINTS

- ◆ **Completion of the 3,082m resource definition drill program at the Mount Morgan Gold-Copper Project, with assay results received for 116 of the total 153 drill holes completed.**
- ◆ **Drill results have confirmed the continuity and consistent grade of the tailings mineralisation, and identified extensions to all four of the tailings dumps that were drilled.**
- ◆ **Significant high grade results include:**
  - 31m at 2.85g/t gold and 0.24% copper from 6m in MTC025
  - 19m at 3.24g/t gold and 0.28% copper from 1m in MTC095
  - 14m at 3.48g/t gold and 0.16% copper from 16m in MTC006
  - 14m at 3.45g/t gold and 0.51% copper from 3m in MTC013
  - 12m at 2.50g/t gold and 0.40% copper from 22m in ROX005
- ◆ **Mineral Resource Estimates completed at both the No 2 Mill and Mundic Gully Tailings Dumps:**
  - Indicated Mineral Resource at No 2 Mill tailings dump more than doubled to 2.82Mt at 1.10g/t gold for 100,000oz
  - Indicated Mineral Resource at Mundic Gully tailings dump doubled to 1.70Mt @ 1.91g/t gold for 104,000oz.
- ◆ **Progression of the Definitive Feasibility Study continued with activities including drilling, assaying, mine planning, tailings storage design, port handling, road haulage, process flow design and confirmation of process design criteria.**
- ◆ **Mount Morgan DFS on target to complete by end September 2016**



## Mount Morgan Site Activities

### *Resource Definition Drilling*

During the quarter and to date, the Company has received results for 116 of the total 153 drill holes completed as part of the 3,082m drill program that commenced in March 2016. Assays for the remaining 37 holes are currently pending.

Assay results were received from the 47 drill holes completed at the No 2 Mill (ASX: 9 May 2016 and 1 June 2016). Results have confirmed the continuity of the tailings and identified extensions to the previous Mineral Resource estimate. Best results for the No 2 Mill tailings dump drilling included:

- ◆ 28m at 1.34g/t gold and 0.15% copper from 3m in 2ML022
- ◆ 28m at 1.33g/t gold and 0.15% copper from 3m in 2ML011
- ◆ 23m at 1.38g/t gold and 0.14% copper from 2m in 2ML023
- ◆ 25m at 1.22g/t gold and 0.12% copper from 2m in 2ML019

Results for the 55 drill holes at the Mundic Gully tailings dump confirmed the continuity and consistent grade of the previous Mineral Resource in addition to confirming thick, high-grade extensions outside the previous Mineral Resource boundary (ASX: 1 June 2016, 29 June 2016 and 11 July 2016). Best results for the Mundic Gully included:

- ◆ 31m at 2.85g/t gold and 0.24% copper from 6m in MTC025
- ◆ 19m at 3.24g/t gold and 0.28% copper from 1m in MTC095
- ◆ 14m at 3.48g/t gold and 0.16% copper from 16m in MTC006
- ◆ 14m at 3.45g/t gold and 0.51% copper from 3m in MTC013

The Company has also received results for the 37 drill holes completed at Shepherds Gully, the youngest tailings dump at Mount Morgan. Results have confirmed thick tailings mineralisation that extends significantly below the current Mineral Resource boundary (ASX: 29 June 2016 and 25 July 2016). Better results included:

- ◆ 43m at 0.83g/t gold and 0.16% copper from 1m in SHC031
- ◆ 39m at 0.90g/t gold and 0.15% copper from 3m in SHC032
- ◆ 44m at 0.74g/t gold and 0.16% copper from 2m in SHC005
- ◆ 42m at 0.76g/t gold and 0.16% copper from 4m in SHC017
- ◆ 30m at 0.75g/t gold and 0.18% copper from 1m in SHC027





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Initial high-grade assay results were returned from the Red Oxide tailings dump, the last of the four recently-drilled tailings dumps at the Mount Morgan Project (ASX: 25 July 2016). Results included:

- ◆ 12m at 2.50g/t gold and 0.40% copper from 22m in ROX005
- ◆ 7m at 2.26g/t gold and 0.37% copper from 27m in ROX001
- ◆ 8m at 2.07g/t gold and 0.33% copper from 27m in ROX003

Sampling of the overburden waste dump (including slag) overlying the Mundic Gully and Red Oxide tailings has highlighted the additional potential outside the tailings in areas currently considered waste (ASX: 11 July 2016 and 25 July 2016). Results included:

- ◆ 18m at 0.84g/t gold and 0.54% copper from surface in MTC104
- ◆ 2m at 34.2g/t gold and 0.26% copper from 4m in MTC094
- ◆ 9m at 1.19g/t gold and 0.10% copper from surface in ROX010
- ◆ 5m at 1.43g/t gold and 0.63% copper from surface in ROX001

### ***Water Treatment Plant***

During the quarter, the Company continued to work with Department of Natural Resource and Mining (DNRM) with operational improvements to the Mount Morgan Water Treatment Plant. Plant modifications continued during the quarter and additional casual labor was employed in the later weeks of the quarter to enable continuous water treatment and establish operating guidelines for the full automation of the plant. The company entered into an agreement with the DNRM for the management of the water treatment activities at Mount Morgan (ASX 29 October 2015).

### ***Other Site Activities***

During the quarter, other work on site included baseline environmental monitoring and various site visits for consultants/contractors and specialists working on the DFS.

### ***Mineral Resources***

Updated resource estimates have been prepared for the No 2 Mill and Mundic Gully tailings dumps, with resource estimates to be updated for Red Oxide and Shepherds Gully in the September quarter.

The Indicated Mineral Resource at the No 2 Mill tailings dump has more than doubled from 1.26Mt at 1.16g/t gold for 47,000oz to 2.82Mt at 1.10g/t gold for 100,000oz (above a 0.00g/t gold cut-off grade). This also represents an increase of 14% over the previous combined Inferred and Indicated Mineral Resource estimate completed in 2009, with 100% of the Mineral Resource now reported in the Indicated category (ASX: 18 July 2016).





The Indicated Mineral Resource at the Mundic Gully tailings dump has doubled to 1.70Mt at 1.91g/t gold for 104,000oz (above a 0.00g/t gold cut-off grade) from 0.83Mt at 1.93g/t gold for 52,000oz. This also represents an increase of 45% over the previous combined Inferred and Indicated Mineral Resource estimate completed in 2009, with 99% of the Mineral Resource now reported in the Indicated category (ASX: 27 July 2016).

The results support the Company's plan to utilise the higher grade tailings at Mundic Gully in the early part of the mine plan to maximise short term cash flow and accelerate payback.

**Table 1. Carbine Resources JORC 2012 Mineral Resource Table for Mundic Gully and No 2 Mill tailings dumps (reported at a 0.00g/t cut-off).**

Area	Type	Category	Tonnage (Mt)	Gold (g/t)	Gold (Koz)	Copper (%)	Copper Metal (t)	Silver (g/t)	Silver Metal (kg)	Sulphur (%)	Pyrite Equiv. (wt %)
No 2 Mill	Sulphide	Indicated	2.71	1.11	97	0.12	3,180	1.14	3,080	13.7	25.6
	Oxide	Indicated	0.12	0.80	3	0.05	60	1.80	210	4.0	
Mundic Gully	Sulphide	Indicated	1.70	1.91	104	0.17	2,820	0.90	1,530	10.5	19.6
	Sulphide	Inferred	0.02	1.86	1	0.24	40	1.24	20	10.6	19.9
<b>Total</b>		<b>Indicated</b>	<b>4.52</b>	<b>1.41</b>	<b>204</b>	<b>0.13</b>	<b>6,060</b>	<b>1.06</b>	<b>4,820</b>	<b>12.2</b>	
<b>Total</b>		<b>Inferred</b>	<b>0.02</b>	<b>1.86</b>	<b>1</b>	<b>0.24</b>	<b>40</b>	<b>1.21</b>	<b>20</b>	<b>10.6</b>	

(Carbine Resources Limited ASX announcements 18 July, 2016 and 27 July, 2016)

In addition to the above resources, the Red Oxide and Shepherds Mineral Resources are currently reported under JORC 2004 guidelines. Revised JORC 2012 resource estimates for Shepherds Gully and Red Oxide are underway incorporating all new drill results. Results from all four areas will be included in the Definitive Feasibility Study.

**Table 2: Mount Morgan Tailings JORC 2004 Resource Table**

DEPOSIT	CATEGORY	TONNES (kt)	GRADE (g/t)	OUNCES (koz)
Red Oxide	Indicated	390	2.23	28
	Inferred	445	2.15	31
Shepherds	Indicated	-	-	-
	Inferred	3,960	0.86	106

(Norton Gold Fields Limited ASX announcement 28 October, 2009)

## Definitive Feasibility Study

In May the Company announced that the Definitive Feasibility Study (DFS) would be completed in the September Quarter. This was later than the previously advised mid-year due to delays in the turnaround of mineral assays required for the Mineral Resource estimation upgrades being completed as part of the DFS work. During the quarter, the Company continued to work with GR Engineering and other technical consultants/specialists on the Mount Morgan DFS. Work currently being done or completed to date includes:

- ◆ Mine/plant design, including capital and operating cost estimates
- ◆ Plant layout and site infrastructure design and configuration



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- ◆ Ion Exchange processing development in association with GR Engineering and Clean TeQ Limited
- ◆ Tailings site geotechnical drilling/assessment and design by Golder Associates
- ◆ Plant site geotechnical drilling/assessment by Cardno Environmental Consultants
- ◆ Mine design, planning and scheduling by GHD Limited
- ◆ DFS metallurgical optimisation testwork by ALS Metallurgy
- ◆ Environmental assessments by Australasian Resource Consultants including work on the Environmental Authority Amendment (EAA) required for the project approval process
- ◆ Site water management planning by ATC Williams
- ◆ Road haulage studies by McMurtrie Consulting Engineers
- ◆ Port storage and handling design by GRES and Gladstone Port Authority
- ◆ Heritage assessment and reviews in consultation with DNRM

The DFS program will be completed during the current quarter. The Company will update the market of any material developments with the DFS as it progresses.

## Corporate Activities

### ***Appointment of highly experienced Board and Management team***

During the quarter, the Company appointed an experienced mining executive team to drive the development of the Mount Morgan Gold-Copper Project through final feasibility and into the construction and ultimately the operations phase.

The appointments comprise:

- ◆ John Fitzgerald as Non-Executive Chairman,
- ◆ Anthony (Tony) James as Managing Director,
- ◆ Graham Brock as Non-Executive Director, and
- ◆ Chris Newman as Geology Manager.

### ***Placement***

In conjunction with the Board and Management changes, the Company undertook a placement of 3.33 million shares at 15 cents to the incoming Board members, executives and their associates. The issue price represented a 9.9% discount to the 30 day VWAP.





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## ***Annual Report and General Meeting of Shareholders***

During the quarter the Company released its Annual Report to Shareholders (ASX: 2 May 2016). The Annual General Meeting of Shareholders was held on 31 May 2016, with all resolutions passing on a show of hands (ASX: 31 May 2016).

### **For further information, please contact:**

**Tony James:** +61 417 919 569

### **Competent Person Statements**

*The information in this report that relates to the Exploration Results is based upon information compiled by Mr Chris Newman, who is a fulltime employee of the Company and is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Newman has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity in which he is undertaking to qualify as a Competent Person under 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Newman consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Results initially reported to the ASX on 9 May 2016, 1 June 2016, 29 June 2016, 11 July 2016 and 25 July 2016 have not materially changed.*

*The information in this report that relates to the JORC 2012 Mundic Gully and No 2 Mill Mineral Resources is based on information compiled by Dr M. Abzalov, who is a Competent Person according to the JORC 2012 Code. Dr M. Abzalov is a Fellow of the Australasian Institute of Mining and Metallurgy. He has sufficient experience in estimation of resources of gold mineralisation, and has a strong expertise in the all aspects of the data collection, interpretation and geostatistical analysis to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves'. Dr M. Abzalov is independent consultant, contracted to Carbine Resources for providing the technical guidelines for resource definition drilling at the Mount Morgan tailings project and in estimating the Mineral Resources. Dr M. Abzalov consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. The information for No 2 Mill and Mundic Gully was prepared and first disclosed under the JORC Code 2012 in the ASX announcements 18 July, 2016 and 27 July, 2016, and the Company confirms that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed since it was last reported.*

*The information in this report that relates to the JORC 2004 Shepherds and Red Oxide Mineral Resources of the Mount Morgan Mine project was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Troy Lowien, Resource Geologist, of consultants Coffey Mining Pty Ltd, who is a Member of The Australasian Institute of Mining and Metallurgy ("AusIMM") and has a minimum of five years of experience in the estimation, assessment and evaluation of Mineral Resources of this style and is the Competent Person as defined in the JORC Code. Troy Lowien conducted the geological modelling, statistical analysis, variography, grade estimation, and report preparation. This report accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004 on 28 October 2009. It has not been updated since to comply with the JORC Code 2012 on the basis that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed since it was last reported.*



## Appendix 1: Carbine's Tenement Interest

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 30 June 2016:

<b>Mount Morgan, Queensland</b>	<b>Tenement Reference</b>	<b>Interest</b>
	ML5628	Option to Acquire 100%
	ML5613	Option to Acquire 100%
	ML5616	Option to Acquire 100%
	ML5660	Option to Acquire 100%
	ML5608	Option to Acquire 100%
	ML5617	Option to Acquire 100%
	ML5609	Option to Acquire 100%
	ML5619	Option to Acquire 100%
	ML5602	Option to Acquire 100%
	ML5618	Option to Acquire 100%
	ML5658	Option to Acquire 100%
	ML5635	Option to Acquire 100%
	ML5622	Option to Acquire 100%
	ML5620	Option to Acquire 100%
	ML5623	Option to Acquire 100%
	ML5627	Option to Acquire 100%
	ML5615	Option to Acquire 100%
	ML5589	Option to Acquire 100%
	ML5659	Option to Acquire 100%
	ML5634	Option to Acquire 100%
	ML5626	Option to Acquire 100%
	ML5633	Option to Acquire 100%
	ML5621	Option to Acquire 100%
	ML5624	Option to Acquire 100%
	ML5625	Option to Acquire 100%
	ML6692	Option to Acquire 100%
	ML5612	Option to Acquire 100%
	ML5649	Option to Acquire 100%
	ML5614	Option to Acquire 100%
	ML5648	Option to Acquire 100%
<b>Many Peaks, Queensland</b>		
	ML3640	Option to Acquire 100%
	ML3641	Option to Acquire 100%
	MDL30	Option to Acquire 100%
	EPM14918	Option to Acquire 100%

There were no mining tenements or interests in farm-in/farm-out agreements acquired or disposed of during the quarter.