



September 2016 Quarterly Report

KEY POINTS

- ◆ Final assay results were received from the completion of the recent 2016 drilling campaign (3,082m) at the Mount Morgan Gold-Copper Project in Queensland
- ◆ Drill results have identified new high-grade mineralisation at Mount Morgan at surface in historical mine dumps (ASX: 16 August 2016) with significant high grade results including:
 - 4m at 9.16g/t gold and 0.88% copper from surface in GTC013
 - 10m at 2.86g/t gold and 0.13% copper from surface in GTC009
 - 11m at 2.28g/t gold and 0.14% copper from surface in GTC004
 - 13m at 2.05g/t gold and 0.15% copper from surface in GTC001
 - 12m at 2.09g/t gold and 0.11% copper from surface in GTC006
- ◆ Mount Morgan Total Indicated and Inferred Resources increased to 37.2 Mt at 0.71g/t for 850,000 ounces (ASX: 30 August 2016), comprising:
 - Total Indicated Mineral Resources stand at 394,000 oz
 - Total Inferred Mineral Resources increase to 456,000 oz
- ◆ Timing of the Mount Morgan Definitive Feasibility Study (DFS) was extended into the December quarter following several changes requiring optimization and review (ASX: 26 September 2016)
- ◆ \$7 Million raised in oversubscribed placement (ASX: 1 August 2016)





Mount Morgan Site Activities

Resource Definition Drilling

During the quarter, the Company received the final drill results from its 2016 resource definition drilling program completed as part of the 3,082m drill program that commenced in March 2016 (ASX:16 August 2016). The drilling program was designed as part of the Mineral Resource Estimation process which is underpinning the current work being done on the DFS.

Final drilling results identified new high-grade mineralisation at Mount Morgan in historical mine dumps. These results have contributed to the decision to extend the timing on the completion of the DFS due to their proximity to the proposed location of the Processing Plant in Grasstree Gully.

Drilling at Grasstree Gully has confirmed high-grade historical waste dump mineralisation from surface. Results included:

- ◆ 4m at 9.16g/t gold and 0.88% copper from surface in GTC013
- ◆ 10m at 2.86g/t gold and 0.13% copper from surface in GTC009
- ◆ 11m at 2.28g/t gold and 0.14% copper from surface in GTC004
- ◆ 13m at 2.05g/t gold and 0.15% copper from surface in GTC001
- ◆ 12m at 2.09g/t gold and 0.11% copper from surface in GTC006
- ◆ 14m at 1.45g/t gold and 0.18% copper from surface in GTC003

Sampling from drill holes completed at Frogs Hollow has also identified near-surface oxide tailings mineralisation up to 250m south of the Red Oxide Mineral Resource boundary. Results included:

- ◆ 8m at 0.87g/t gold and 0.23% copper from surface in FH1G
- ◆ 5m at 0.89g/t gold and 0.08% copper from surface in FH1C
- ◆ 3m at 0.84g/t gold and 0.06% copper from 2m in FH1B

Mineral Resources

Updated resource estimates have been prepared for the Red Oxide, Shepherds Gully, Mount Morgan Open Cut In-Pit and Sandstone Gully tailings dumps (ASX:1 August 2016, 9 August 2016 and 30 August 2016).

The total JORC 2012 Mineral Resource for Mount Morgan now stands at 37.2 million tonnes at 0.71g/t for 850,000 ounces of gold, comprised of an Indicated Mineral Resource of 10.2 million tonnes at 1.20g/t for 394,000 ounces of gold and an Inferred Mineral Resource of 27.0 million tonnes at 0.53g/t for 456,000 ounces of gold, using a 0.00 g/t gold cut-off grade (Table 1). This comprises six tailings dumps which make up the project. This new Mineral Resource also includes a total of 7.9 million tonnes of pyrite, 36 thousand tonnes of copper and 49 tonnes of silver.





Table 1: Mount Morgan Tailings JORC 2012 Mineral Resource Summary

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	3,184	1.14	3,078	13.7	25.6
	Oxide	Indicated	0.12	0.80	3	0.05	55	1.80	207	4.0	
Mundic Gully	Sulphide	Indicated	1.70	1.91	104	0.17	2,822	0.90	1,533	10.5	19.6
	Sulphide	Inferred	0.02	1.86	1	0.24	40	1.24	21	10.6	19.9
Shepherds	Sulphide	Indicated	4.83	0.84	131	0.17	8,195	1.42	6,889	12.4	23.2
Red Oxide	Oxide	Indicated	0.83	2.17	58	0.30	2,495	0.60	499	0.6	
	Oxide	Inferred	0.03	2.05	2	0.29	85	0.58	17	0.5	
Sandstone Gully	Sulphide	Inferred	0.25	0.85	7	0.07	175	1.20	301	12.0	22.4
	Oxide	Inferred	0.02	0.85	1	0.07	14	1.20	24	2.0	
In-Pit Tails	Sulphide	Inferred	26.67	0.52	446	0.07	18,672	1.38	36,884	11.3	21.1
Total Indicated	Total Indicated	Indicated	10.19	1.20	394	0.16	16,750	1.20	12,207	11.4	
	Sulphide	Indicated	9.24	1.12	333	0.15	14,200	1.24	11,500	12.4	23.2
	Oxide	Indicated	0.95	2.00	61	0.27	2,550	0.74	706	1.0	
Total Inferred	Total Inferred	Inferred	26.99	0.53	456	0.07	18,986	1.38	37,246	11.3	
	Sulphide	Inferred	26.94	0.52	454	0.07	18,887	1.38	37,205	11.3	21.1
	Oxide	Inferred	0.05	1.56	2	0.2	99	0.84	41	1.1	

(Carbine Resources Limited ASX announcements 18 July, 2016, 27 July, 2016, 1 Aug, 2016 and 9 Aug, 2016.

Rounding errors can occur.)

An update to the Mount Morgan Exploration Target has also been completed in conjunction with this 2016 Carbine Resource Estimate Update (ASX: 30 August 2016). This study involved a detailed review of previous studies, the existing and new Mineral Resource estimates, all known historical drill and trench data, historical reports, plans and site photos, and visual site inspection of all visible mine dumps.

The new Exploration Target incorporating all near-surface tailings, dumps and metallurgical slag mineralization is 1.9Mt-4.9Mt at 1.2g/t for 70,000 -190,000 ounces of gold (Table 2). The potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of the Mineral Resource.

Table 2: Carbine 2016 Exploration Target Summary

Category	Drillhole Number	Low Range					High Range				
		Tonnes (kt)	Au Grade (g/t)	Au (koz)	Copper %	Sulphur %	Tonnes (kt)	Au Grade (g/t)	Au (koz)	Copper %	Sulphur %
Oxide Waste Dumps	54	290	1.8	16	0.1	2	600	2.3	40	0.1	2
Oxide Slag Dumps	5	280	1.0	9	0.4	1	1,000	0.8	26	0.6	1
Oxide Tailings Dumps	34	220	1.0	7	0.1	3	700	0.9	22	0.1	3
Total Oxide	93	800	1.3	32	0.2	2	2,300	1.2	88	0.3	2
Sulphide Waste Dumps	34	430	1.2	17	0.1	12	600	1.4	30	0.1	13
Sulphide Tailings Dumps	10	660	1.0	22	0.1	9	2,000	1.2	77	0.1	12
Total Sulphide	46	1,100	1.1	39	0.1	10	2,600	1.3	106	0.1	12
Total Sulphide and Oxide	139	1,900	1.2	70	0.2	6.7	4,900	1.2	190	0.2	7.5

(The potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of the Mineral Resource. Rounding Errors will occur.)



Definitive Feasibility Study

In order to adequately assess several changes contemplated at the Mount Morgan Project, the Company announced that the finalisation of the Definitive Feasibility Study (DFS) would be postponed to the December quarter 2016. The additional time will allow the Company to evaluate changes associated with the relocation of the proposed processing plant and also complete plant throughput and optimization work. Work is also being done on the Pyrite Primary Offtake agreement and the project's regulatory approvals.

The DFS includes the same processing flow sheet as the flowsheet described in the previously completed Pre-feasibility study (ASX: 13 August 2015). The selected processing flow sheet delivers three separate mineral products in gold, unroasted iron pyrite concentrate and copper sulphate.

Plant relocation and throughput optimisation

The Company is undertaking an assessment of the proposed processing plant relocation from the original Mundic Gully to Sandstone Gully. Also ongoing evaluations and optimization are being completed on the plant throughput rate. Initial investigations have shown that several benefits with the proposed new plant location exist from an engineering and technical point of view, including:

- Removal of the plant location from the heritage listed area removing the risk of timing delays associated with the heritage reentry approval.
- Removal of the additional time required in the construction schedule for cleanup and demolition of any unsafe structures prior to work commencing.
- Revision of foundation earthwork quantities and work program to minimize site pre-work prior to construction commencing.
- Enabling the company to further assess the oxide mineralisation identified below the original plant location in Grass Tree Gully (ASX: 16 August 2016).
- Locating the plant site closer to the new Tailings Storage Facility (TSF) in Sandstone Gully.
- Locating the plant in Sandstone Gully improves any operating constraints that may be associated with visual and noise issues due to the project location near to the township of Mount Morgan.

Unroasted iron pyrite primary offtake agreement

Carbine currently has in place a pyrite offtake agreement with Talana Limited (ASX: 26 October 2015). The agreement is based on a maximum of 225,000 DMT per annum with initial sales price of US\$80/t FOB. The agreement allows for annual price negotiations based on product demand commencing prior to the first shipment. The agreement also requires that the expected first shipment of Pyrite occurs prior to 30 June 2017 (or later date as agreed by the parties). Either party can terminate the agreement if the first shipment date is not achieved. Based on the current expected timing associated with the DFS, the first shipment timing will not be achieved and Carbine and Talana are currently reviewing potential extensions to this agreement.

Pyrite pricing associated with large volumes of concentrate are specifically related to Sulphuric Acid production by Pyrite Roasting techniques. Sulphuric Acid production is also achieved by burning elemental sulphur. The pyrite price is therefore indirectly related to the sulphur price for those acid producers who are able to manufacture by both techniques. In recent times, the sulphur price has been in decline due to oversupply particularly from the Middle East oil and gas sector.



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Regulatory Approvals

The DFS also requires that the Company has reasonable grounds for the project to proceed following receipt of the required regulatory approvals. The three significant approvals associated with the Mount Morgan Project are the Development by the State Application under section 71 of the Queensland Heritage Act 1992, Environmental Authority Amendment and Resource Development Application in a Priority Living Area.

The Development by the State Application under section 71 of the Queensland Heritage Act 1992 has commenced and is being led by the Department of Natural Resources and Mines (DNRM). The formal development application is currently being lodged by the DNRM. The outcome of the application is not expected to be known until early 2017. Carbine is of the current view that the Heritage application will be granted although certain conditions may apply. The granting of the application is subject to approval by the Minister of the Department of Environment and Heritage Protection (DEHP).

The Environmental Authority Amendment application will proceed following the completion of the project planning associated with DFS. Environmental Authority was previously approved for the project in 2010.

The Resource Development Application in a Priority Living Area (PLA) approval under the Regional Planning Interests Act 2014 has commenced. When the Act was passed in 2014 the Mount Morgan Mine site was designated as a priority living area in the Central Queensland regional plan in 2013. The Company is of the view that the PLA approval will be achieved subsequent to the Heritage and Environmental Authority Amendment Approval.

Water Treatment Plant

During the quarter, the Company continued to work with Department of Natural Resources and Mining (DNRM) on operational improvements to the Mount Morgan Water Treatment Plant. The plant ceased treatment of water in late August primarily due to the lack of fresh water required for lime slaking. The water used for lime slaking was being sourced from nearby Dam 8. The Company is currently considering engineering options to generate fresh water by alternative means and plans to implement one of those options following adequate review. 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.

Corporate Activities

Placement

The Company successfully completed a placement to domestic and international sophisticated investors raising \$7.0 million before costs (ASX: 1 August 2016). The placement comprised the





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issue of 35,000,000 shares at an issue price of \$0.20 per share pursuant to ASX Listing Rules 7.1 and 7.1A ("New Shares"). The issue price at \$0.20 per share represented a 4.7% discount to the last closing price on 27 July of \$0.21 per share.

For further information, please contact:

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Competent Person Statements

The information in this report that relates to Exploration Targets, Exploration Results and the Inferred Mineral Resources for Mount Morgan In-Pit and Sandstone Gully is based on, and fairly represents, information and supporting documentation prepared by Mr. C Newman, who is a Competent Person according to the JORC 2012 Code. Mr. C Newman is a fulltime employee of Carbine Resources and a Fellow of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralization and the type of deposit under consideration and to the activity being undertaken 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'. The information in this report is extracted from previous company releases 'ASX: 16 August 2016 and 30 August 2016', and is available to view on the Carbine Resources website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this report that relates to the Mineral Resources for Mundic Gully, Shepherds Gully, No 2 Mill and Red Oxide 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. The information in this report is extracted from previous company releases 'ASX: 18 July 2016, 27 July 2016, 1 August 2016 and 9 August 2016, and is available to view on the Carbine Resources website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.





Appendix 1: Carbine's Tenement Interest

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

Mount Morgan, Queensland	Tenement Reference	Interest
	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%
Many Peaks, Queensland		
	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.