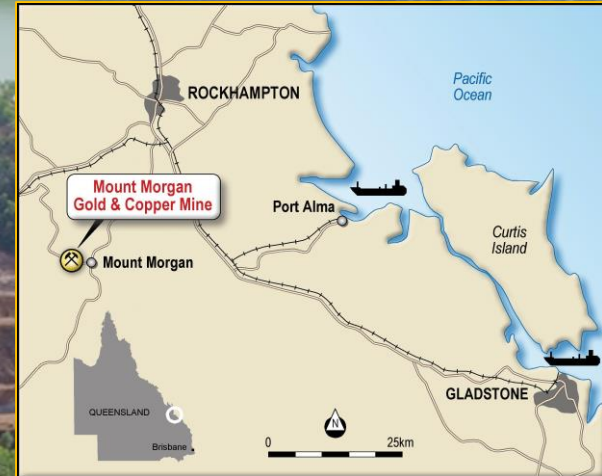


# MOUNT MORGAN GOLD PROJECT



**The Mining 2017 Resources Convention**

29 & 30 August 2017  
Hilton Brisbane Hotel, Queensland

**LONG LIFE PROJECT | SHORT TERM PAYBACK | COMMUNITY AND ENVIRONMENT ENHANCEMENT**



**A VISION OF OPPORTUNITY | A LONG LIFE PROJECT WITH SIGNIFICANT COMMUNITY AND ENVIRONMENTAL BENEFIT**



## SUMMARY INFORMATION AND NOT AN OFFER

The purpose of this presentation is to provide information about Carbine Resources Limited (“Carbine or the “Company”). It is not recommended that any person makes any investment decision in relation to the Company based on this presentation. This presentation is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this presentation. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of Carbine shares in any jurisdiction. To the fullest extent permitted by law, Carbine, its officers, employees, agents and advisers do not (a) make any representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this presentation or (b) accept any liability, including liability arising from fault or negligence on their part, for any loss arising from the use of this announcement or its contents or otherwise in connection with it. All securities transactions involve risks, which include (among other things) the risk of adverse or unanticipated market, financial or political developments.

## SLIDE 2&20 – ARTISTIC IMPRESSIONS

Please note that the pictures shown on slides 2 & 20 are artistic impressions generated by Carbine showing an example of the Mount Morgan site following mining and development of a tourist/cultural precinct. A significant amount of work needs to be completed by all the stakeholders at Mount Morgan to finalise the vision before the completion of the project. This picture has been generated by Carbine to allow people to visualize one of the many opportunities that exist at Mount Morgan.

## DISCLAIMER REGARDING FORWARD LOOKING STATEMENTS

This presentation includes forward looking statements. Forward looking statements are only predictions and the assumptions on which they are based are subject to risk factors related to the conduct of mineral exploration, mining and production activities. Whilst Carbine believes that the expectations as to future matters reflected in these forward looking statements are based on reasonable grounds, they may be affected by changes to underlying assumptions which could cause a material change to actual values, results or events, such as price and currency fluctuation, drilling results, environmental and physical risk, financial market conditions, approvals, legislative and regulatory changes, and cost estimates. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Subject to any continuing obligations under applicable law and ASX Listing Rules, Carbine does not undertake to update or revise any information or any of the forward looking statements in this presentation.

## METAL EQUIVALENTS

Both AuEq (g/t) and PyriteEq (wt%) have been used in this announcement. AuEq was calculated for each ore source based on the different metallurgical recoveries associated with those ore sources. A combined Total AuEq was also determined for representation of the combined effect of the four different ore sources. Please refer to Appendix F to see the detail formulas used for the determination of the metal equivalents.

## EXPLORATION TARGETS

It is common practice for a company to comment on and discuss its exploration in terms of target size and type. Carbine has identified an Exploration Target at the site comprising low grade mullock dumps, slag dumps and retreated tailings from previous operations. In the Exploration Target table of this presentation a range of approximate tonnage and grade has been compiled from extensive review of historic reports and studies by previous owners. Carbine has not yet completed any significant exploration activity on the Exploration Target. The potential quantity 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 a Mineral Resource. The basis for the estimates of tonnage and grade include historic production records, various topographic and volume surveys, drilling by various methods, grab and channel sampling and small scale bulk sampling. Carbine proposes to further evaluate the Exploration Target during the next year by drilling and possible bulk testing to provide material for additional metallurgical test work and to verify tonnage and grade.



## CAPITAL STRUCTURE

|                                    |                        |
|------------------------------------|------------------------|
| ASX Code                           | CRB                    |
| Shares on issue                    | 193 Million            |
| Share Price                        | 7.6 cents <sup>1</sup> |
| Unlisted Options (\$0.05 - \$0.10) | 26.7 Million           |
| Market Cap                         | \$14M                  |
| Cash & Deposits                    | \$4.7M <sup>2</sup>    |

## MAJOR SHAREHOLDERS

|                                       |      |
|---------------------------------------|------|
| Board, management and related parties | 8.0% |
| GR Engineering Services               | 7.9% |

## MOUNT MORGAN PROJECT EARN IN AGREEMENTS

|   |   |
|---|---|
| Carbine & Raging Bull Metals <sup>3</sup> | CRB 6 month option to acquire 100% of project for 25M CRB shares, A\$2.3M and 1% Royalty.<br>Previous milestone payments for initial 75% and remaining 25% after DFS replaced in new agreed option. |
| Raging Bull Metals & Norton Goldfields    | 100% interest transferred on decision to mine and payment \$2M<br>Deferred payment \$13M (via 20% annual EBITDA)  |

### NOTES

1 - ASX 31 July 2017, 2 - As at 30 June 2017, 3 - ASX: 24 March 2017

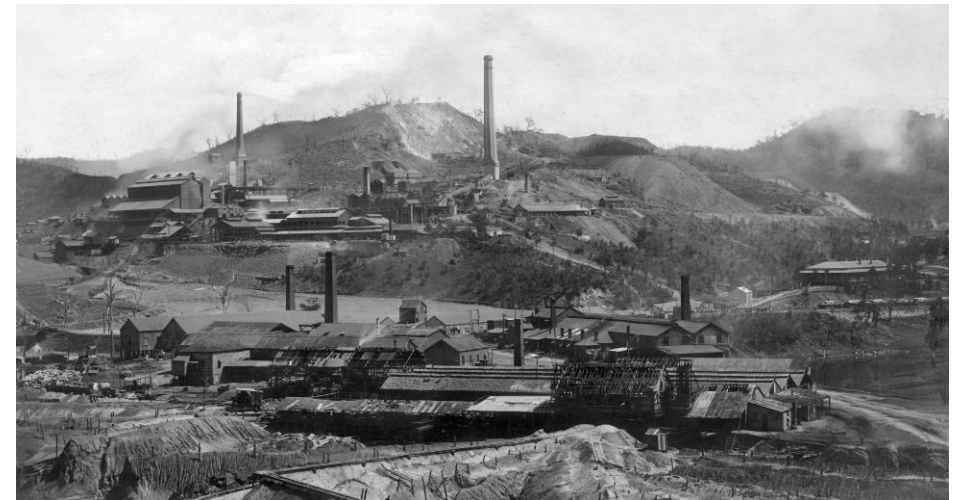
## BOARD & MANAGEMENT

|                                 |                      |
|---------------------------------|----------------------|
| Chairman                        | John Fitzgerald      |
| Managing Director               | Anthony (Tony) James |
| Director                        | Graham Brock         |
| Director                        | Evan Cranston        |
| Chief Operating Officer         | Terry Moylan         |
| Geology Manager                 | Chris Newman         |
| Mount Morgan Project Specialist | Russell Dann         |



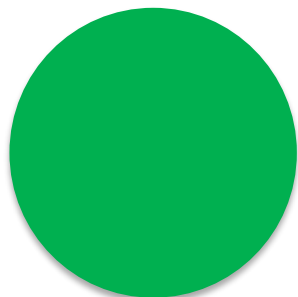


1. MOUNT MORGAN GOLD PROJECT IN CENTRAL QUEENSLAND. THE PROJECT SITS ADJACENT TO THE MOUNT MORGAN TOWNSHIP WITH ESTABLISHED INFRASTRUCTURE
2. CARBINE FEASIBILITY STUDY COMPLETED IN DECEMBER 2016 ON THE TAILINGS RETREATMENT AND ENVIRONMENTAL CLEAN-UP OF FOUR HISTORIC TAILINGS DUMPS<sup>1</sup>
3. THE HISTORICAL MOUNT MORGAN MINE IS ONE OF AUSTRALIA'S PREMIER GOLD AND COPPER MINES WITH PRODUCTION OF OVER 8.5MOZ GOLD, 400KT COPPER AND 1.2MOZ SILVER FROM 1882 TO 1980
4. TAILINGS PREVIOUSLY REPROCESSED VIA A 3MTPA CIL PLANT FROM 1981 TO 1990. LOW RECOVERY AND HIGH COST DUE TO CYANIDE CONSUMPTION AND SOLUBLE COPPER DROVE PREMATURE CLOSURE
5. QUEENSLAND GOVERNMENT ACCEPTED FULL ENVIRONMENTAL AND HERITAGE LIABILITY IN 1993
6. CARBINE NEW BOARD AND MANAGEMENT TEAM ESTABLISHED IN APRIL 2016<sup>2</sup>
7. TECHNICAL AND COMMERCIAL SUCCESSFUL TEAM ESTABLISH NEW 3 STREAM PROCESS FLOW SHEET TO UNDERPIN FEASIBILITY STUDY (GR ENGINEERING SERVICES<sup>3</sup>)
8. \$10M SPENT AND 10 YEARS OF TECHNICAL WORK BY THE VARIOUS COMPANIES INVOLVED UNDERPINS THE PROJECT



#### NOTES

1. Please refer announcement ASX:8 December 2016.
2. Please refer announcement ASX: 13 April 2016.
3. Please refer announcement ASX: 23 December 2015.



CLEANSSED RESOURCE & TECHNICAL DATA (2016)

MAIDEN ORE RESERVE (JORC 2012 – Dec 2016)<sup>1</sup>

LONG LIFE, SHORT PAYBACK FEASIBILITY STUDY (Dec 2016)<sup>1</sup>

RAGING BULL OPTION AGREED<sup>2</sup>

HERITAGE DEVELOPMENT APPLICATION ENDORSED BY QHC & APPROVED BY MINISTER DNRM<sup>3</sup>

REGIONAL PLANNING AUTHORITY APPROVED BY DILGP<sup>5</sup>

PYRITE OFFTAKE AGREEMENT WITH IKING INTERNATIONAL LIMITED<sup>6</sup>

COMMENCE FEED & RIP DEMONSTRATION PLANT<sup>4</sup>

AUGUST/SEPTEMBER

SLAG TRIALS TO COMMENCE CEMENT AUSTRALIA<sup>7</sup>



NEXT  
STEPS

1. QLD REGIONAL JOBS & GROWTH FUND (APPLICATION)

AUGUST/SEPTEMBER

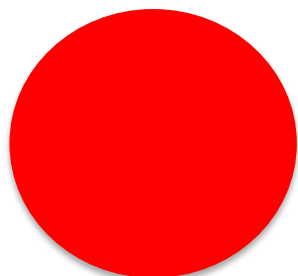
2. ONGOING NORTON GOLDFIELDS DISCUSSIONS RE TIMING OF TITLE TRANSFER

AUGUST/SEPTEMBER

3. ENVIRONMENT AUTHORITY AMENDMENT APPLICATION FORMALLY LODGED 23 AUGUST 2017  
(PREVIOUSLY APPROVED IN 2010)

AUGUST/SEPTEMBER

4. PROJECT FINANCE (PARALLEL DUE DILIGENCE)



NIL

#### NOTES – PLEASE REFER ANNOUNCEMENTS

1. ASX: 8 December 2016.
2. ASX: 24 March 2017.
3. ASX: 27 April & 29 May 2017.
4. ASX: 9 May 2017.
5. ASX: 28 July 2017.
6. ASX: 2 August 2017
7. ASX: 28 August 2017

# FEED (FRONT END ENGINEERING & DESIGN)

## 1. PLANT SITE GEOTECHNICAL ASSESSMENT (GRES)

- COMPLETED FOUNDATION DRILLING AND TEST PITS, SLIGHT MODIFICATION TO PLANT ORIENTATION AS ADDITIONAL TAILINGS FOUND AT SOUTH END OF PLANT SITE

## 2. BATCH TEST WORK (90% COMPLETE)

- TO ESTABLISH BASE PARAMETERS PRIOR TO CONTINUOUS RUN
- USING INITIAL ORE BLEND AND FOCUS ON COPPER AND CYANIDE RIP CIRCUITS
- MIRAH SITE VISIT (GRES & GREENGOLD)

## 3. CONTINUITY TEST WORK

- CLEAR DEMONSTRATION OF PROCESS FLOW SHEET
- RESULTS IN AUGUST/SEPTEMBER



BATCH TESTING



RIP DEMONSTRATION VATS



MILL FOUNDATIONS GEOTECHNICAL DRILLING



# PYRITE EXPORT SOLUTION

## 1. BINDING OFFTAKE

- CARBINE SIGNS KEY CHINESE OFFTAKE WITH IKING INTERNATIONAL LIMITED (Please refer announcement ASX: 2 August 2017)
- CARBINE APPOINT PYRITE MARKETING SPECIALIST
- LOI's RECEIVED FROM END USERS FOLLOWING TESTWORK

## 2. CHINA CONSUMING 16MTPA PYRITE

- 10 LARGEST CONSUMERS ACCOUNT FOR OVER 5MTPA
- INITIAL FOCUS ON 3 REGIONAL AREAS,
  - SHANDONG/HEBEI    ● YANTZE    ● SOUTHERN
- PLANTS FOCUSED ON IRON FINES PRODUCTION (65%Fe), SULPHURIC ACID & POWER CREDITS



IRON FINES RESIDUE FROM ROASTER



PYRITE ROASTER

JIHENG LANTIAN CHEMICAL COMPANY, HEBEI

| PROVINCES: |           |    | AUTONOMOUS REGIONS: |    | CENTRAL GOVERNMENT-CONTROLLED MUNICIPALITIES: |                                 | SPECIAL AUTONOMOUS REGIONS: |           |
|------------|-----------|----|---------------------|----|---|---------------------------------|-----------------------------|-----------|
| AH         | Anhui     | HL | Hainan              | SD | GX  | Guangxi Zhuang (Inner Mongolia) | Beijing                     | Hong Kong |
| FJ         | Fujian    | HL | Heilongjiang        | NM | NM  | Nei Mongol                      | Chongqing                   | Macau     |
| GD         | Guangdong | HN | Hunan               | SN | SN  | Shaanxi                         | Shanghai                    |           |
| GS         | Gansu     | JL | Jilin               | SX | SX  | Shanxi                          | Tianjin                     |           |
| GZ         | Guizhou   | JS | Jiangsu             | YN | YN  | Yunnan                          |                             |           |
| HA         | Henan     | JX | Jiangxi             | ZJ | ZJ  | Zhejiang                        |                             |           |
| HB         | Hubei     | LN | Liaoning            |    |   |                                 |                             |           |
| HE         | Hebei     | QH | Qinghai             |    |   |                                 |                             |           |





## 1. LONG LIFE PROJECT / SHORT TERM PAYBACK<sup>1</sup>

- 9.5 YEAR ORE RESERVE BASE CASE & 20 YEAR EXPANDED CASE
- 2 YEAR PROJECT PAYBACK PERIOD
- \$549/AU OUNCE AISC
- PEAK AT 60OZS AUEQ ANNUAL PRODUCTION

## 2. ENVIRONMENTAL LEGACY

- QLD GOVERNMENT ACID MINE DRAINAGE LEGACY +\$500M
- COPPER (2KTPA) & PYRITE (200KTPA) BY-PRODUCTS REMOVED FROM SITE
- TAILINGS CLEANED OUT OF OLD WATER WAYS & ORIGINAL GULLIES RESTABLISHED
- BINDING PYRITE OFFTAKE AGREEMENT WITH IKING<sup>2</sup>

## 3. COMMUNITY

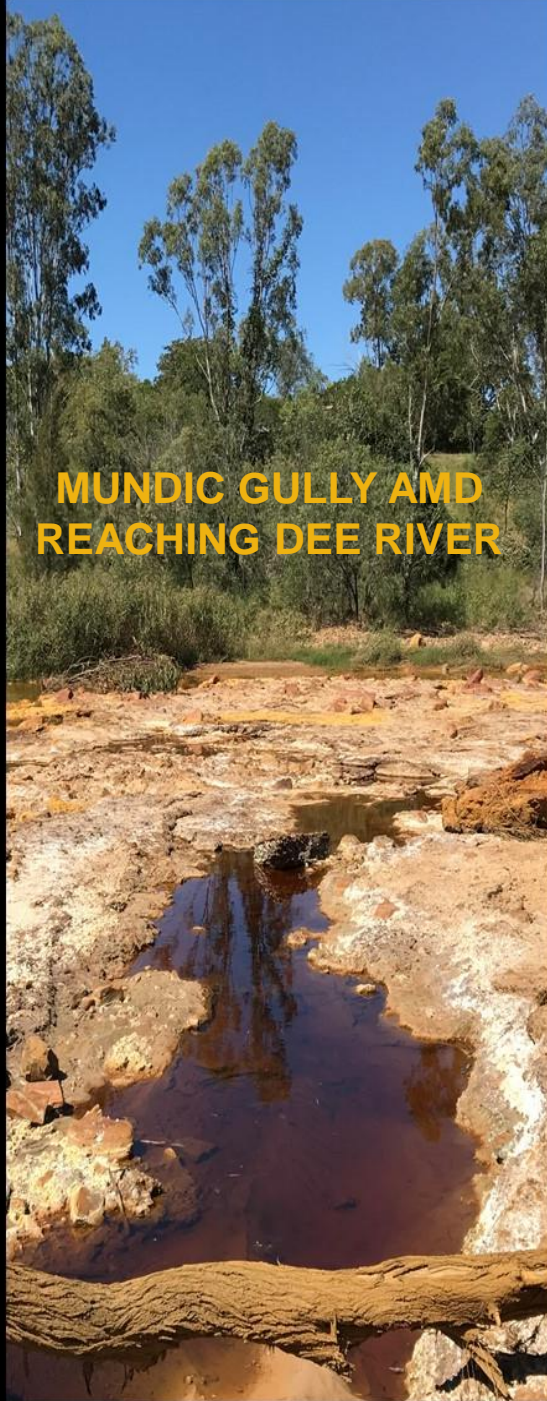
- 12 MONTH CONSTRUCTION PERIOD WITH \$85M SPEND
- 20 YEAR OPERATING COSTS +\$45M/YEAR
- 60 DIRECT JOBS, NO FIFO, MOUNT MORGAN HAS 13% UNEMPLOYMENT
- ENVIRONMENTAL CLEANUP & HERITAGE VISION LINKED TO GREEN TOURISM OPPORTUNITY
- OPERATING MINE “MULTIPLYER EFFECT” INTO REGIONAL COMMUNITY



**DEE RIVER ABOVE MUNDIC  
GULLY, SUNDAY 30 APRIL  
2017**



**MUNDIC GULLY AND  
REACHING DEE RIVER**



**DEE RIVER BELOW  
MUNDIC GULLY, SUNDAY 30  
APRIL 2017**





---

# **MOUNT MORGAN GOLD PROJECT**

## **ADDITIONAL INFORMATION**



## 1. LONG LIFE PROJECT (1.1MTPA THROUGHPUT)

- 9.5 YEAR BASE CASE<sup>1</sup>
- 20 YEAR EXPANDED CASE<sup>1</sup>

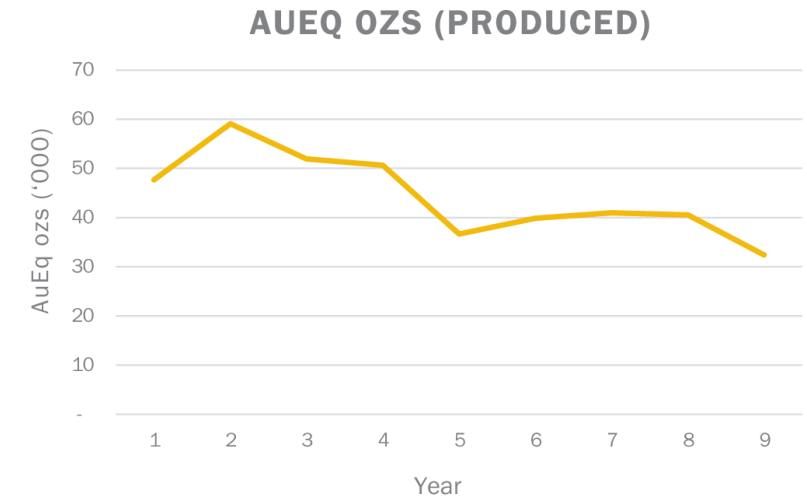
## 2. LOW COST - AISC<sup>2</sup> OF A\$549/AU OZ

## 3. SHORT TERM PAYBACK - 2 YEAR PAYBACK

## 4. PRE-PRODUCTION CAPITAL<sup>3</sup> OF A\$85M, WHICH INCLUDES

- PROCESSING PLANT \$75.6M

## 5. MAIDEN ORE RESERVE OF 9.9MT @ 1.8 G/T AUEQ<sup>4</sup> (1.2G/T AU, 0.16% CU, 21% PYRITE)



### NOTES

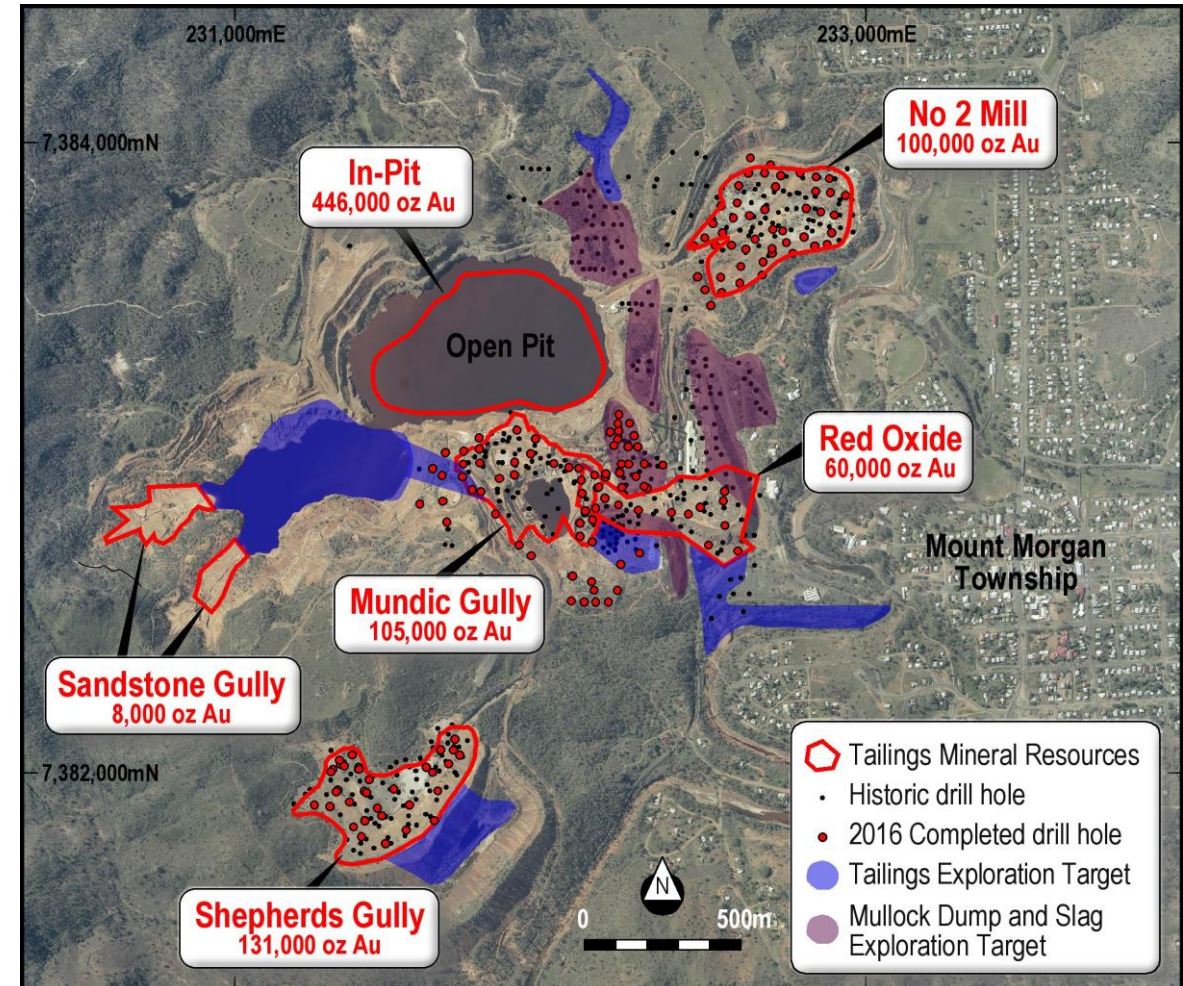
1. Please refer announcement ASX:8 December 2016.
2. AISC = C1 + royalties + sustaining capital costs (C1 = Direct cash operating costs produced net of by-product credits),
3. Preproduction capital is capital spent prior to first gold production.
4. AuEq reference formula Appendix F:



## 1. 20 YEAR PROJECT IS AN EXTENSION TO ORE RESERVE (“BASE CASE”)

## 2. EXPANDED CASE - 22MT @ 1.6G/T AUEQ<sup>1</sup>, (0.9G/T AU, 0.12% CU, 21% PYRITE)

- First 9.5 years – “Base Case”, Ore Reserve
- +9.5 years to achieve 20 years expansion (same throughput rate) includes;
  - 10.8Mt @ 0.63g/t Au (47% of total Inferred Mineral Resources)<sup>2</sup>
  - 1.9Mt @ 1.2g/t Au (Low range Exploration Target)<sup>2</sup>
- Exploration Target is combination of oxide and sulphide waste and tailings dumps. Exploration Target is conceptual in nature, there has been insufficient exploration to estimate Mineral Resources and it is uncertain further exploration will result in estimation of the Mineral Resources or that the production target will be realised.
- Historical Production data and detailed technical review support reasonable grounds for inclusion of a portion of Inferred Mineral Resources in the Expanded Case. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.
- The project is not dependent on the Expanded Case to be economic



### NOTES

1. AuEq reference formula Appendix F:
2. Mount Morgan Resource increases by 215% to 850,000oz (ASX: 30 August 2016)

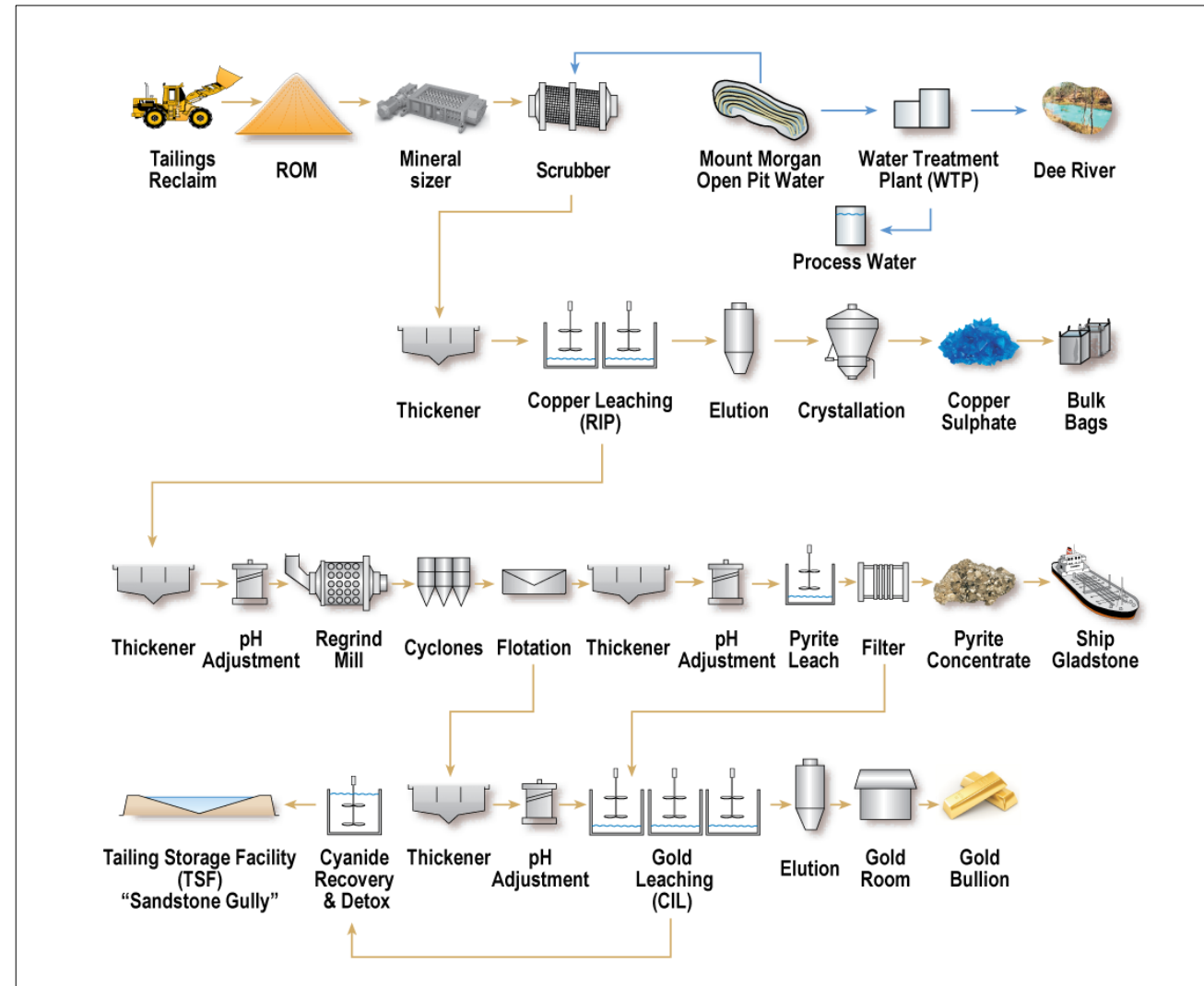


## THREE STREAM PROCESSING FACILITY PRODUCING COPPER SULPHATE, UNROASTED PREMIUM IRON PYRITE AND GOLD

- COPPER RESIN LEACHING (RIP)
- PYRITE CONCENTRATE FLOTATION
- GOLD CARBON LEACHING (CIL)

## WATER TREATMENT PLANT UTILISATION AND CONTINUED TREATED WATER DISCHARGE INTO DEE RIVER

| METAL RECOVERY | MUNDIC GULLY | NO 2 MILL | RED OXIDE | SHEPHERDS | TOTAL |
|----------------|--------------|-----------|-----------|-----------|-------|
| GOLD           | 72%          | 71%       | 74%       | 70%       | 71%   |
| PYRITE         | 96%          | 93%       | 0%        | 87%       | 90%   |
| COPPER         | 66%          | 65%       | 48%       | 51%       | 56%   |

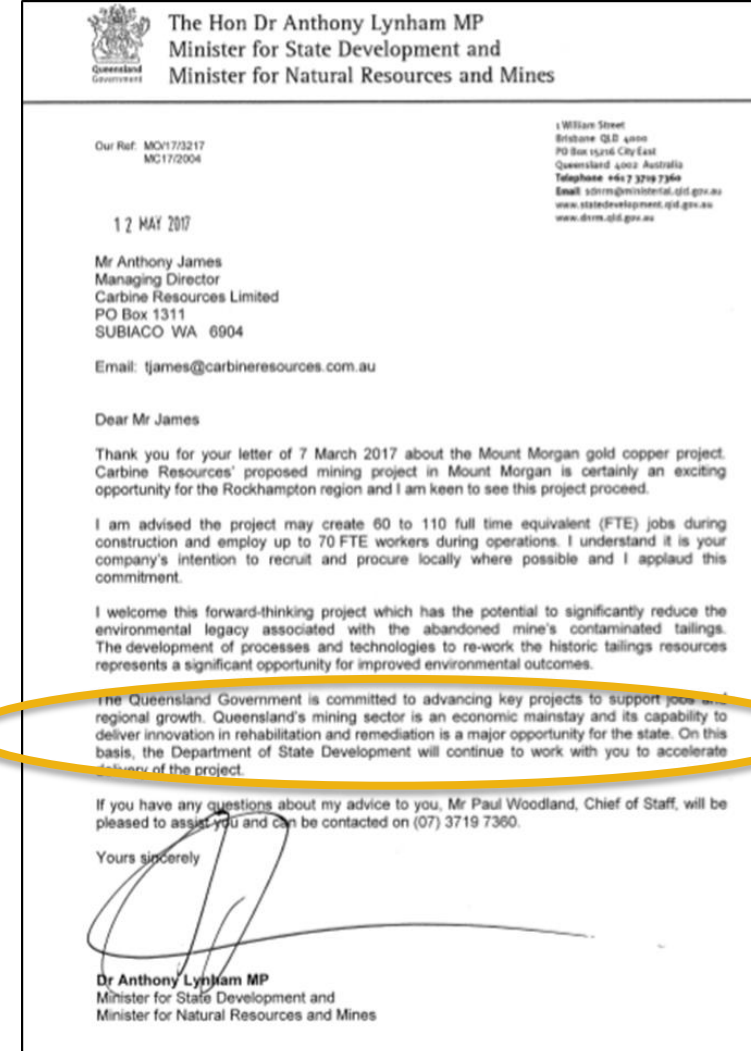



“The Queensland Government is **committed** to advancing key projects to support **jobs** and **regional growth**. Queensland’s mining sector is an **economic** mainstay and its capability to deliver **innovation in rehabilitation and remediation** is a major opportunity for the state. **On that basis the Department of State Development will continue to work with you to accelerate delivery of the project” ...**



**Jobs and Regional Growth Fund**

**\$130 million fund**  
Backing business and jobs in regional Queensland



 The Hon Dr Anthony Lynham MP  
Minister for State Development and  
Minister for Natural Resources and Mines

Our Ref: MCY17/3217  
MC17/2004

1 William Street  
Brisbane QLD 4000  
PO Box 15961 City East  
Queensland 4002 Australia  
Telephone +61 7 3719 7360  
Email [sdrrms@ministerial.qld.gov.au](mailto:sdrrms@ministerial.qld.gov.au)  
[www.statedevelopment.qld.gov.au](http://www.statedevelopment.qld.gov.au)  
[www.derm.qld.gov.au](http://www.derm.qld.gov.au)

12 MAY 2017

Mr Anthony James  
Managing Director  
Carbine Resources Limited  
PO Box 1311  
SUBIACO WA 6904

Email: [tjames@carbineresources.com.au](mailto:tjames@carbineresources.com.au)

Dear Mr James

Thank you for your letter of 7 March 2017 about the Mount Morgan gold copper project. Carbine Resources' proposed mining project in Mount Morgan is certainly an exciting opportunity for the Rockhampton region and I am keen to see this project proceed.


I am advised the project may create 60 to 110 full time equivalent (FTE) jobs during construction and employ up to 70 FTE workers during operations. I understand it is your company's intention to recruit and procure locally where possible and I applaud this commitment.

I welcome this forward-thinking project which has the potential to significantly reduce the environmental legacy associated with the abandoned mine's contaminated tailings. The development of processes and technologies to re-work the historic tailings resources represents a significant opportunity for improved environmental outcomes.

The Queensland Government is committed to advancing key projects to support jobs and regional growth. Queensland's mining sector is an economic mainstay and its capability to deliver innovation in rehabilitation and remediation is a major opportunity for the state. On this basis, the Department of State Development will continue to work with you to accelerate delivery of the project.

If you have any questions about my advice to you, Mr Paul Woodland, Chief of Staff, will be pleased to assist you and can be contacted on (07) 3719 7360.

Yours sincerely



Dr Anthony Lynham MP  
Minister for State Development and  
Minister for Natural Resources and Mines

## EXPANDED CASE – CAUTIONARY STATEMENT

**The expanded case referred to in this announcement has been undertaken to show the likely extension of the 9 year Mineral Reserve base case out to 20 years.**

It is a preliminary technical and economic study of the potential viability of the Mount Morgan project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Carbine will be in a position to estimate any ore reserves.

The expanded case is based on the material assumptions outlined in Section 15 and Appendix 1 of the announcement (ASX: 8 December 2016). These include assumptions about the availability of funding. While Carbine considers all of the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated in the expanded case will be achieved.

To achieve the range of outcomes indicated in the expanded case, funding of in the order of \$90 -\$100M will likely be required. Investors should note that there is no certainty that Carbine will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may dilute to or otherwise affect the values of Carbine's existing shares.

It is also possible that Carbine could pursue other 'value realization' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Carbine's proportionate ownership of the project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the expanded case.

|                                      | DESCRIPTION  | FS BASE CASE | EXPANDED CASE |
|--------------------------------------|--|--------------|---------------|
| <b>MINING</b>                        | Ore Reserve (Mt)                                   | 9.9          | 9.9           |
|                                      | Additional Material – Expanded Case (Mt)           | 0            | 12.5          |
|                                      | Ore Reserve + Additional Material (Mt)             | 9.9          | 22.4          |
|                                      | Gold Grade (g/t)                                   | 1.19         | 0.9           |
|                                      | Contained Gold (ozs)                               | 380,000      | 660,000       |
|                                      | Copper Grade (%)                                   | 0.16         | 0.12          |
|                                      | Contained Copper (t)                               | 16,000       | 27,000        |
|                                      | Pyrite Grade (Wt %) <sup>4</sup>                   | 21           | 21            |
|                                      | Contained Pyrite (t)                               | 2,300,000    | 5,100,000     |
| <b>PROCESSING</b>                    | Ore Processed (Mt)                                 | 9.5          | 22            |
|                                      | Polymetallic AuEq (g/t) <sup>1</sup>               | 1.8          | 1.6           |
|                                      | Gold Grade (g/t)                                   | 1.23         | 0.9           |
|                                      | Copper Grade (%)                                   | 0.17         | 0.12          |
|                                      | Pyrite Grade (Wt %)                                | 22           | 21            |
|                                      | Average Annual Gold Production (ozpa)              | 30,000       | 23,000        |
|                                      | Average Annual Copper Sulphate Production (tpa)    | 3,800        | 2,700         |
|                                      | Average Annual Pyrite Concentrate Production (tpa) | 214,000      | 200,000       |
| <b>PROJECT ECONOMICS<sup>2</sup></b> | Mine life (years)                                  | 9.5          | 20            |
|                                      | Payback (years) <sup>3</sup>                       | 2            | 2             |
|                                      | C1 (A\$/Au oz) <sup>4</sup>                        | 395          | 384           |
|                                      | AISC (A\$/Au oz) <sup>5</sup>                      | 549          | 576           |
|                                      | Pre-production Capital (A\$M)                      | 85.1         | 85.1          |

### Table Notes (Ref announcement ASX: 8 December 2016):

- AuEq ozs have been determined using the AuEq grade for each case as outlined in Table 2 above. The AuEq calculation has been done with respect to the commodity prices shown in point 3 below and suitable metal recovery factors. Please refer to Section 1.6 of announcement and Appendix F this presentation for detailed description of calculation of Metal Equivalents used in this presentation.
- Project economics shown above includes the capital payment of A\$2 million to Norton Gold Fields Limited at the commencement of the project to obtain ownership rights and includes deferred payment of A\$13 million from future profits.
- Payback was determined using a AUD/USD FX 0.75, and with commodity prices of US\$1,200/oz gold, US\$60/t unroasted iron pyrite for years 1 & 2 then US\$80/t for the remaining years, US\$5,800/t copper. Copper sulphate revenue is based on copper LME price for approximately 25% copper grade plus A\$500/t premium for copper sulphate.
- C1 is defined as the direct cash operating costs produced, net of by-product credits, divided by the amount of payable gold produced. Direct cash costs include all mining and processing costs, general and administration costs, and transport and port costs net of revenue credits from the sale of by-products (pyrite and copper sulphate).
- AISC is the "All in sustaining cost" includes C1 costs, plus royalties and sustaining capital and are presented net of by-product credits, divided by the amount of payable gold produced.



# APPENDIX B – COMPETENT PERSON STATEMENT



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.

The information in this report that relates to Ore Reserves for Mount Morgan is based on, and fairly represents, information and supporting documentation prepared by Mr. A James, who is a Competent Person according to the JORC 2012 Code. Mr. A James is a fulltime employee of Carbine Resources as the Managing Director of the company and he holds shares in the company. He is 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'. Mr. A James consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. The information in this report is extracted from previous company releases 'ASX: 8 December 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 Ore Reserves, 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 C – MINERAL RESOURCES

JORC 2012 MINERAL RESOURCE TABLE REPORTED AT A 0.00G/T CUT-OFF (REFER ASX ANNOUNCEMENT DATED 30 AUGUST 2016). ROUNDING ERRORS CAN OCCUR.

| 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         | 0.8         | 3          | 0.05        | 55               | 1.8          | 207               | 4           |                      |
| MUNDIC GULLY           | Sulphide               | Indicated        | 1.7          | 1.91        | 104        | 0.17        | 2,822            | 0.9          | 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         | 0.3         | 2,495            | 0.6          | 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              | 1.2          | 301               | 12          | 22.4                 |
|                        | Oxide                  | Inferred         | 0.02         | 0.85        | 1          | 0.07        | 14               | 1.2          | 24                | 2           |                      |
| IN-PIT TAILS           | Sulphide               | Inferred         | 26.67        | 0.52        | 446        | 0.07        | 18,672           | 1.38         | 36,884            | 11.3        | 21.1                 |
| <b>TOTAL INDICATED</b> | <b>Total Indicated</b> | <b>Indicated</b> | <b>10.19</b> | <b>1.2</b>  | <b>394</b> | <b>0.16</b> | <b>16,750</b>    | <b>1.2</b>   | <b>12,207</b>     | <b>11.4</b> |                      |
|                        | Sulphide               | Indicated        | 9.24         | 1.12        | 333        | 0.15        | 14,200           | 1.24         | 11,500            | 12.4        | 23.2                 |
|                        | Oxide                  | Indicated        | 0.95         | 2           | 61         | 0.27        | 2,550            | 0.74         | 706               | 1           |                      |
| <b>TOTAL INFERRERD</b> | <b>Total Inferred</b>  | <b>Inferred</b>  | <b>26.99</b> | <b>0.53</b> | <b>456</b> | <b>0.07</b> | <b>18,986</b>    | <b>1.38</b>  | <b>37,246</b>     | <b>11.3</b> |                      |
|                        | 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         |                      |

# APPENDIX D – EXPLORATION TARGET

## EXPLORATION TARGET TABLE (ASX:30 AUGUST 2016).

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.

| DESCRIPTION                     | DRILLHOLE NUMBER | TONNES (KT)  | AU GRADE (G/T) | AU (KOZ)  | COPPER %   | SULPHUR %  | TONNES (KT)  | AU GRADE (G/T) | AU (KOZ)   | COPPER %   | SULPHUR %  |
|---------------------------------|------------------|--------------|----------------|-----------|------------|------------|--------------|----------------|------------|------------|------------|
| OXIDE WASTE DUMPS               | 54               | 285          | 1.8            | 16        | 0.1        | 2          | 555          | 2.3            | 40         | 0.1        | 2          |
| OXIDE SLAG DUMPS                | 5                | 280          | 1              | 9         | 0.4        | 1          | 1,000        | 0.8            | 26         | 0.6        | 1          |
| OXIDE TAILINGS DUMPS            | 34               | 215          | 1              | 7         | 0.1        | 3          | 715          | 0.9            | 22         | 0.1        | 3          |
| <b>TOTAL OXIDE</b>              | <b>93</b>        | <b>780</b>   | <b>1.3</b>     | <b>32</b> | <b>0.2</b> | <b>2</b>   | <b>2,270</b> | <b>1.2</b>     | <b>88</b>  | <b>0.3</b> | <b>2</b>   |
| SULPHIDE WASTE DUMPS            | 34               | 430          | 1.2            | 17        | 0.1        | 12         | 635          | 1.4            | 30         | 0.1        | 13         |
| SULPHIDE TAILINGS DUMPS         | 12               | 660          | 1              | 22        | 0.1        | 9          | 2,000        | 1.2            | 77         | 0.1        | 12         |
| <b>TOTAL SULPHIDE</b>           | <b>46</b>        | <b>1,090</b> | <b>1.1</b>     | <b>39</b> | <b>0.1</b> | <b>10</b>  | <b>2,635</b> | <b>1.3</b>     | <b>106</b> | <b>0.1</b> | <b>12</b>  |
| <b>TOTAL SULPHIDE AND OXIDE</b> | <b>139</b>       | <b>1,870</b> | <b>1.2</b>     | <b>71</b> | <b>0.2</b> | <b>6.7</b> | <b>4,905</b> | <b>1.2</b>     | <b>194</b> | <b>0.2</b> | <b>7.5</b> |

# APPENDIX E – ORE RESERVE

## MINERAL RESERVE TABLE (ASX: 8 DECEMBER 2016).

This estimate has been prepared in accordance with JORC Code (2012) guidelines. Further details for the estimate can be found in FS announcement and the JORC code table 1 located at the back of that announcement. Some discrepancies in total may occur due to the rounding of numbers:

2 – Au Eq(g/t) refers to the calculated Au equivalent grade formula for which is stated in Appendix F:

3 – PyriteEq(wt %) refers to the calculated Pyrite equivalent grade formula for which is stated in Appendix F

| LOCATION     | RESERVE CATEGORY | QUANTITY (MT) | AUEQ (G/T) <sup>2</sup> | AUEQ (KOZ) <sup>2</sup> | AU (G/T)    | CU (%)      | S (%)       | PYRITE (WT%) <sup>3</sup> |
|--------------|------------------|---------------|-------------------------|-------------------------|-------------|-------------|-------------|---------------------------|
| MUNDIC       | Proven           |               |                         |                         |             |             |             |                           |
|              | Probable         | 1.52          | 2.57                    | 126                     | 2.04        | 0.17        | 10.1        | 18.9                      |
| RED OXIDE    | Proven           |               |                         |                         |             |             |             |                           |
|              | Probable         | 0.73          | 2.48                    | 58                      | 2.11        | 0.3         | 0.4         | -                         |
| No 2 Mill    | Proven           |               |                         |                         |             |             |             |                           |
|              | Probable         | 2.82          | 1.73                    | 156                     | 1.1         | 0.11        | 13.1        | 24.4                      |
| SHEPHERDS    | Proven           |               |                         |                         |             |             |             |                           |
|              | Probable         | 4.83          | 1.49                    | 232                     | 0.84        | 0.17        | 12.4        | 23.1                      |
| <b>TOTAL</b> | <b>Proven</b>    |               |                         |                         |             |             |             |                           |
|              | <b>Probable</b>  | <b>9.9</b>    | <b>1.8</b>              | <b>573</b>              | <b>1.19</b> | <b>0.16</b> | <b>11.3</b> | <b>21.1</b>               |



## **BOTH AUEQ (G/T) AND PYRITEEQ (WT%) HAVE BEEN USED IN THIS ANNOUNCEMENT.**

AuEq was calculated for each ore source based on the different metallurgical recoveries associated with those ore sources. A combined Total AuEq was also determined for representation of the combined effect of the four different ore sources. The following formulas shows the various calculations for the AuEq values seen in this announcement. The AuEq value is determined by multiplying the recovered metal by the metal prices and dividing by the gold price to determine the equivalent gold grade. Consideration is also given to the fact that the end product for Copper is Copper Sulphate and for Pyrite is Pyrite Concentrate. The total AuEq is determined by taking a weighted average of the four separate AuEq grades.

Mundic Gully AuEq = Au (g/t) + Cu(%)\*172.11 + PyriteEq (wt%)\*1.30

No2 Mill AuEq = Au (g/t) + Cu(%)\*172.76 + PyriteEq (wt%)\*1.73

Red Oxide AuEq = Au (g/t) + Cu(%)\*122.83

Shepherds AuEq = Au (g/t) + Cu(%)\*138.83 + PyriteEq (wt%)\*1.79

Metal prices used in this calculation are US\$ 1,200/oz gold, US\$ 60/t unroasted iron pyrite for years 1&2 and US\$ 80/t thereafter, \$5,800/t copper. Copper Sulphate revenue is based on copper LME price for approximately 25% Copper grade plus \$500/t premium for copper sulphate. Metal recoveries are provided in section 6, Processing Physicals. It is Carbine's view that all the metals included within this formula are expected to be recovered and sold.

Pyrite (wt%) – Sulphur (S,wt %) grade has been converted into "pyrite equivalent" (wt,%) using stoichiometry of the pyrite

Formula – FeS<sub>2</sub>

Chemical composition Fe – 46.6%, S – 53.4% (this corresponds to 100wt% of pyrite in a sample)

---

