

**ASX / MEDIA ANNOUNCEMENT** 

25 July 2016

# Carbine on track to complete Mount Morgan Resource upgrade and DFS following more high-grade results

## Latest assays confirm continuous high-grade nature of the project's Red Oxide Tailings dump

#### **Highlights**

- Initial high-grade assays results have been returned from the Red Oxide tailings dump, which is the last of four recently-drilled tailings dumps that make up the Mount Morgan Gold-Copper Project in Queensland. Results include:
  - 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
  - 8m at 1.61g/t gold and 0.31% copper from 27m in ROX010
  - 6m at 2.33g/t gold and 0.29% copper from 4m in ROX015
  - 5m at 2.19g/t gold and 0.11% copper from 1m in ROX016
- Sampling of the waste dump (including slag) overlying the Red Oxide tailing dump further highlights the additional potential above the tailings first identified at Mundic Gully. Results include:
  - 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
- Final assay results confirm depth extensions and continuity of the Shepherds Gully Tailings Dump.
   Results include:
  - 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
  - 32m at 0.92g/t gold and 0.17% copper from 2m in SHC033
  - 24m at 0.81g/t gold and 0.17% copper from 2m in SHC035
  - 26m at 0.86g/t gold and 0.14% copper from 1m in SHC030
  - 14m at 0.95g/t gold and 0.19% copper from surface in SHC037
- Assays are pending for the final 37 holes.
- Resource upgrades for Mundic, Shepherds and Red Oxide underpinning the Definitive Feasibility
   Study are on track for completion this quarter.



**Carbine Resources Limited (ASX:CRB)** is pleased to announce initial results from the Red Oxide Tailings Dump and final results from the Shepherds Gully Tailing dump at its Mount Morgan Gold-Copper Project near Rockhampton in Queensland.

The results confirm the continuity and consistently high grade of the current Red Oxide Mineral Resource. In addition, sampling of the overburden continues to highlight the potential for significant additional mineralisation in areas currently considered waste above the mineralised tailings.

Assays from drilling at the Shepherds Gully tailings dump confirms thick tailings mineralisation extending below the current Inferred Resource boundary and highlights the potential for additional Mineral Resources.

The results will be incorporated in the Resource upgrade expected to be released in coming weeks. This will in turn form part of the Definitive Feasibility Study (DFS) due for completion later this quarter.

All recent assay results and drill hole information is summarised in Table 1 and Table 2 and pictorially in plan view in Figure 1 and cross sections in Figure 2 and Figure 3.

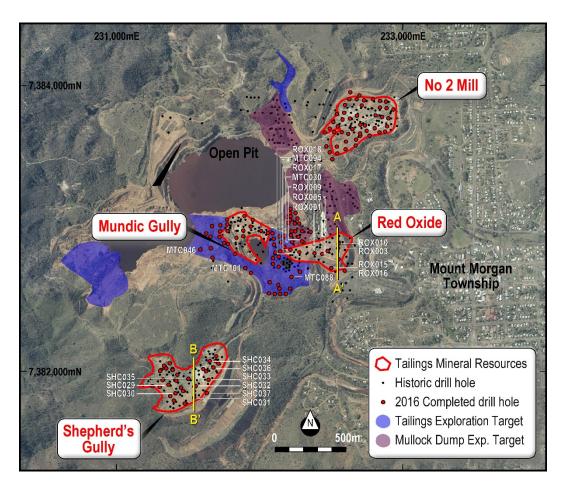


Figure 1: Completed drill holes at Mount Morgan indicating drill hole locations from Red Oxide and Shepherds Gully. Plan view with cross section references.



#### **Red Oxide Tailings Dump**

The Red Oxide tailings dump has a total Mineral Resource of 0.8Mt at 2.19g/t gold, including 0.4Mt at 2.23g/t gold in the Indicated Resource Category and 0.4Mt at 2.15g/t gold in the Inferred Resource Category as shown in Table 3 (Norton Gold Fields Limited ASX announcement 28 October, 2009). A total of 16 drill holes have been completed at the Red Oxide tailings dump, designed to convert the Inferred Resources to Indicated Resources.

Assay results for the first 10 infill holes from the Red Oxide tailings dump are confirming the continuous high grade nature of the Red Oxide Mineral Resource (Figure 2).

Sampling of the slag material and waste rock above the Red Oxide tailings in this drill program continues to highlight the potential for additional gold and copper mineralisation within this overburden. This material is currently considered as waste, but has the potential to have a positive impact on the project if a significant mineralised slag or waste resource can be defined. Further drilling would be required to define such a resource.

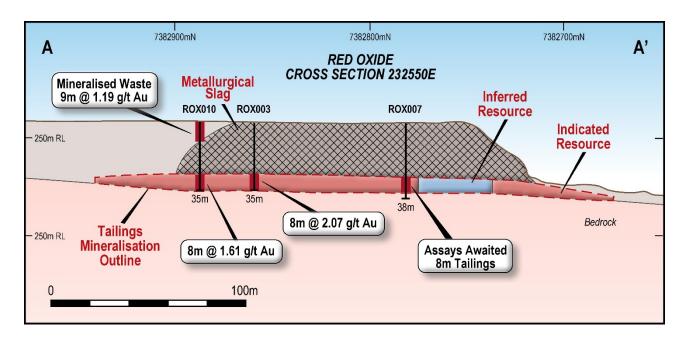


Figure 2: Cross Section 232550E (A-A') at Red Oxide tailings dump showing recent assay results from ROX003 and ROX010. Note consistency of tailings mineralization against the current resource outline and additional mineralized waste intersected from surface in ROX010. Thickness of tailings as intersected in Carbine Resources drill holes is shown in red on the drill traces, with the current Indicated Resource outline in red and the Inferred Resource in blue.



#### **Shepherds Gully Tailings Dump**

The Shepherds Gully tailings dump has a total Inferred Mineral Resource of 3.9Mt at 0.86g/t gold as shown in Table 3 (Norton Gold Fields Limited ASX announcement 28 October, 2009). A total of 37 drill holes have been completed at the Shepherds Gully tailings dump, designed to convert the Inferred Resources to Indicated Resources.

Assay results have now been returned from the last nine of the Shepherds Gully tailings dump drill holes. Results have confirmed the continuity of the thick tailings and the tonnage and consistent grade of the current resource. Significantly, results have also confirmed thicker tailings than previously identified, extending tailings mineralisation below the Inferred Resource boundary. One third of all historical drill holes used in the previous resource estimate at Shepherds Gully did not reach the base of the tailings.

An updated JORC 2012 Mineral Resource Estimate for Shepherds Gully has commenced incorporating these new drill results.

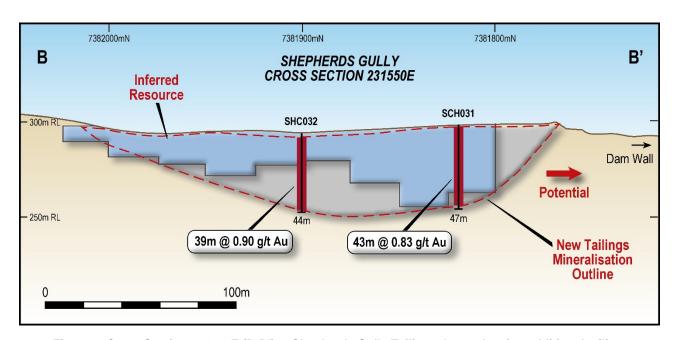


Figure 3: Cross Section 231550E (B-B') at Shepherds Gully Tailings dump showing additional tailings mineralisation intersected below the current Inferred Resource Boundary. Thickness of tailings as intersected in Carbine Resources drill holes is shown in red on the drill traces, with the current Inferred Resource boundary in blue.



**Table 1: Drilling Summary** 

HOLE ID	AREA	DRILL TYPE	EAST	NORTH	RL	Dip	EOH DEPTH
MTCO94	Red Oxide	TUBEX/ Aircore	232144	7382832	258	-90	30
ROX001	Red Oxide	TUBEX/ ROBIT	232381	7382822	258	-90	35
ROX003	Red Oxide	TUBEX/ Aircore	232548	7382858	258	-90	35
ROX005	Red Oxide	TUBEX/ Aircore	232436	7382817	258	-90	34
ROX009	Red Oxide	TUBEX	232305	7382900	258	-90	23
ROX010	Red Oxide	TUBEX/ Aircore	232550	7382889	258	-90	35
ROX015	Red Oxide	ROBIT	232510	7382715	230	-90	11
ROX016	Red Oxide	ROBIT	232590	7382694	224	-90	6
ROX017	Red Oxide	TUBEX/ Aircore	232211	7382849	260	-90	33
ROX018	Red Oxide	TUBEX/ Aircore	232279	7382828	258	-90	30
MTC030	Mundic	TUBEX	232225	7382901	259	-90	25
MTC046	Mundic	RC	231585	7382848	305	-90	27
MTC088	Mundic	RC	232224	7382660	251	-90	5
MTC101	Mundic	TUBEX/ Aircore	231900	7382718	290	-90	40
SHC029	Shepherds	RC	231360	7381912	293	-90	35
SHC030	Shepherds	RC	231411	7381848	292	-90	29
SHC031	Shepherds	RC	231542	7381820	296	-90	47
SHC032	Shepherds	RC	231548	7381900	292	-90	44
SHC033	Shepherds	RC	231640	7381943	292	-90	38
SHC034	Shepherds	RC	231649	7382073	292	-90	26
SHC035	Shepherds	RC	231500	7381946	293	-90	28
SHC036	Shepherds	RC	231673	7382030	292	-90	35
SHC037	Shepherds	RC	231630	7381848	297	-90	57



Table 2: Assay Results Summary (true width approximates down hole width)

HOLE ID	FROM (m)	TO (m)	INTERCEPT (m)	GOLD (g/t)	SILVER (g/t)	COPPER (%)	IRON (%)	SULPHUR (%)	COMMENT
MTCO94	4	6	2	34.2	0.2	0.26	11.5	0.8	Slag / Dump
	26	30	4	2.40	0.4	0.12	9.8	0.4	Red Oxide Tails
ROX001	0	5	5	1.43	1.2	0.63	22.9	0.8	Slag
	27	34	7	2.26	0.6	0.37	12.1	0.3	Red Oxide Tails
ROX003	27	35	8	2.07	0.7	0.33	12.0	0.1	Red Oxide Tails
ROX005	0	3	3	1.08	0.5	0.32	8.5	0.6	Slag
	22	34	12	2.50	0.7	0.40	15.9	0.2	Red Oxide Tails
ROX009	1	2	1	2.93	0.8	0.71	17.8	1.4	Dump / Slag
	19	20	1	0.79	<0.2	0.22	9.5	0.6	Red Oxide tails
ROX010	0	9	9	1.19	1.1	0.10	11.5	4.1	Dump
	27	35	8	1.61	0.7	0.31	12.0	0.5	Red Oxide Tails
ROX015	4	10	6	2.33	0.6	0.29	10.1	0.3	Red Oxide Tails
ROX016	1	6	5	2.19	0.4	0.11	8.0	0.3	Red Oxide Tails
ROX017	3	4	1	2.44	0.9	0.24	11.4	2.8	Dump
	28	32	4	1.60	0.5	0.18	7.9	0.7	Red Oxide Tails
ROX018	28	29	1	0.73	0.5	0.21	9.6	0.6	Red Oxide Tails
MTC030	0	2	2	2.49	2.9	0.61	12.0	1.5	Dump
MTC046				No.	Significant	Intersection			
MTC088	0	1	1	0.73	0.6	0.24	7.6	1.2	Mundic Tails
MTC101		•	•	No.	Significant	Intersection		•	
SHC029	2	32	30	0.70	2.3	0.23	14.7	10.2	Tails
SHC030	1	27	26	0.86	1.1	0.14	14.3	10.7	Tails
incl:	20	27	7	1.30	0.9	0.15	12.9	7.9	
SHC031	1	44	43	0.83	1.5	0.16	16.8	15.0	Tails
incl:	1	11	10	1.07	2.8	0.23	14.2	9.7	
SHC032	3	42	39	0.90	1.3	0.15	15.6	13.1	Tails
incl:	22	31	9	1.45	1.2	0.16	14.1	10.2	
SHC033	2	34	32	0.92	1.3	0.17	16.9	15.7	Tails
SHC034	2	24	22	0.73	1.6	0.19	18.6	17.7	Tails
SHC035	2	26	24	0.81	1.8	0.17	15.0	11.8	Tails
incl:	5	15	10	1.00	1.6	0.16	14.9	11.6	
SHC036	2	34	32	0.69	1.4	0.15	16.5	15.0	Tails
SHC037	0	14	14	0.95	1.9	0.19	16.8	15.8	Tails
	51	56	5	0.71	1.3	0.10	14.9	11.1	Tails under Dam Wall



Table 3: Mount Morgan Tailings JORC 2004 Resource Table

DEPOSIT	CATEGORY	TONNES (kt)	GRADE (g/t)	OUNCES (koz)
Mundic	Indicated	833	1.93	52
	Inferred	357	1.82	21
Red Oxide	Indicated	390	2.23	28
	Inferred	445	2.15	31
Shepherds	Indicated	-	-	-
	Inferred	3,960	0.86	106
Total		5,985	1.24	238

(Norton Gold Fields Limited ASX announcement 28 October, 2009 – excluding No 2 Mill)

Table 4: Mount Morgan Tailings JORC 2012 Resource Table - No 2 Mill

Туре	Category	Tonnage (Mt)	Gold (g/t)	Gold (Koz)	Copper (%)	Copper Metal (t)	Silver (g/t)	Silver Metal (kg)	Sulphur (%)	Pyrite Equiv. (wt %)
Total	Indicated	2.823	1.10	100.0	0.12	3,239	1.16	3,286	13.3	
Sulphide	Indicated	2.707	1.11	97.0	0.12	3,184	1.14	3,078	13.7	25.6
Oxide	Indicated	0.115	0.80	3.0	0.05	55	1.80	207	4.0	

(Carbine Resources Limited ASX announcement 18 July, 2016)

Further assay results will be reported as they become available.

#### For further information, please contact:

#### <u>Investors</u> <u>Media</u>

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#### **Competent Person Statement**

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 1 June and 29 June 2016 have not materially changed.



The information in this report that relates to the JORC 2004 Mundic, Red Oxide and Shepherds 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 in the ASX announcement 28 October, 2009. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The information in this report that relates to the JORC 2012 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. This information was prepared and first disclosed under the JORC Code 2012 in the ASX announcement 18 July, 2016 and has not materially changed since it was last reported.



## Reporting criteria presented in the Section 1 of the JORC Table 1

## (Sampling techniques and data)

Criteria of	Explanation given in the JORC	Comments / Findings
JORC Code	Code 2012	
2012		
(1.1.) Sampling techniques	□Nature and quality of sampling (eg cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Drilling completed over the western edge of Red Oxide and Shepherd utilised a Universal RC/Diamond drill rig (UDR650) equipped to collect full sample through cyclone or alternatively by PQ triple tube coring. Hole diameter 4.75 inches in the case of RC and PQTT (83mm). Samples are collected regularly, at 1m intervals.  Drilling completed over the bulk of Red Oxide utilised a custom built J&S Drilling rig with capacity to drill overburden and precollar with TUBEX or ROBIT gear of varying diameter bit/casing configuration to allow telescoping down (TUBEX 190mm comprising pilot bit at 190mm and excentric reamer to 237mm then TUBEX-115mm or TUBEX 190MM/ROBIT 168.3mm gear with casing shoe to 127.5mm) with capacity to continue sampling tailings with this gear or with aircore at <115mm bit diameter.
	☐ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drilling is vertical, which is optimal for flat lying tailings, dump, and slag mineralization.  1m samples are well suited for estimation of resources for the mineralised tailings
	☐ Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	Drilling and sampling procedures were performed using industry standard techniques and equipment.  1m samples were collected in total with average sample size around 20kg and transported in its entirety to Preplab at Rockhampton. The split of the sample was obtained in the initial sample preparation stage following drying of entire sample, crushing to 2mm and rotary splitting to 2 x 3kg splits and duplicate.  Entire subsample (3kg) is pulverised using LM5 pulveriser requiring manual feeding.



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	Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Sampling protocol is based on sampling nomogram constructed using theoretically deduced fundamental sampling error.
Drilling techniques (1.2.)	□ Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Drilling completed over the western edge of Red Oxide and Shepherd utilised a Universal RC/Diamond drill rig (UDR650) equipped to collect full sample through cyclone or alternatively by PQ triple tube coring. Hole diameter 4.75 inches in the case of RC and PQTT (83mm). Samples are collected regularly, at 1m intervals.  Drilling completed over the bulk of Red Oxide utilised a custom built J&S Drilling rig with capacity to drill overburden and precollar with TUBEX or ROBIT gear of varying diameter bit/casing configuration to allow telescoping down (TUBEX 190mm comprising pilot bit at 190mm and excentric reamer to 237mm then TUBEX-115mm or TUBEX 190MM/ROBIT 168.3mm gear with casing shoe to 127.5mm) with capacity to continue sampling tailings with this gear or with aircore at <115mm bit diameter.
Drill sample recovery (1.3.)	☐ Method of recording and assessing core and chip sample recoveries and results assessed.	Obtained samples were weighed in the preparation laboratory in Rockhampton which was used as a non-direct control for possible sample loss.
	☐ Measures taken to maximise sample recovery and ensure representative nature of the samples.	This was based on adjusting the drilling parameters to obtain the best recovery by collection and processing of the entire sample. Coring was preferred where tailings were unconsolidated and overly soft for effective collection by RC or TUBEX technique.
	☐ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No bias is expected as tails mineralization and slag mineralisation are relatively uniform in grainsize and nature.
Logging (1.4.)	☐ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral	Geological logging concentrated on the diagnostic of tailing materials. Tails had to be logged separate from the surficial material, which was classified as either 'mixed', mullock waste rock, subsurface gravels, metallurgical slag or basement rocks.



Resource estimation, mining studies Oxidised or Sulphidised tailings were identified and metallurgical studies. separately. Qualitative logging, primarily focused on the ☐ Whether logging is qualitative or quantitative in nature. Core (or diagnostic of tailing materials. Core samples were costean, channel, etc) photography. photographed. ☐ The total length and percentage of 100% of intersections were logged the relevant intersections logged. Where applicable, Full PQ core samples were Sub- $\square$  If core, whether cut or sawn and whether quarter, half or all core taken collected, after being photographed after extraction. sampling techniques All samples were collected in entirety to be ☐ *If non-core, whether riffled, tube* and sample sampled, rotary split, etc and whether subsequently dried, then crushed and split by rotary preparation sampled wet or dry. splitting into 3kg sub-samples for assay. (1.5.) $\square$  For all sample types, the nature, Initial sample preparation involving quality and appropriateness of the crushing and rotary splitting was undertaken by Preplab of Rockhampton. 3kg splits were freighted sample preparation technique. to ALS Townsville for remaining preparation following the standard post-crushing preparation technique. Samples (3kg) are pulverised using LM5 pulveriser requiring manual feeding. Aliquots are dissolved using 4 acid digest (near complete dissolution) and peroxide fusion (complete dissolution). Results are compared one digest against the other The preparation approach, is standard and commonly used for medium grade gold mineralisation ☐ Quality control procedures adopted For all subsampling stages, duplicate samples are collected and analysed. Namely, these coarse field for all sub-sampling stages duplicates (5-7%) after first splitting make 2mm maximise representivity of samples. size fraction, and pulp duplicates (>3%) after entire collected subsample is pulverized. OA/OC procedures also include using standard samples and blanks. Measures taken to ensure that the Field duplicates and twin holes have been sampling is representative of the in incorporated into the entire drill program. No twin holes are present from the drill holes in this situ material collected, including for announcement.



	instance results for field duplicate/second-half sampling.	
	☐ Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample size is 15-20kg. Further subsampling is made strictly following optimal sampling protocols. According to estimates, this will achieve precision error less than 10% which is considered excellent for gold mineralisation.
Quality of assay data and laboratory tests (1.6.)	☐ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were assayed at the ALS laboratory. Gold was assayed using conventional fire-assay method with AAS finish. Reported detection limit is 0.01 g/t Au.  Cu, Ag, Fe and S have been analysed by ICP-AES by ALS Townsville by method ME-ICP41 (post
		aqua regia digestion) to determine levels of chalcopyrite and pyrite. Detection limits are Ag-0.2ppm; Cu-1ppm; Fe- 0.01% and S- 0.01%. Sulphur results >10%S have lower accuracy and precision.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable
	☐ Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack	Internal standards were used by ALS laboratory.  Pulp duplicates have been assayed in the current program showing the excellent repeatability of the assay results.
	of bias) and precision have been established.	Standards and blanks are incorporated into batches at greater than one standard or blank per 10 samples. No issues were identified.
		External Laboratory checks at SGS have been completed on field duplicates showing acceptable repeatability.



Verification of sampling and assaying	☐ The verification of significant intersections by either independent or alternative company personnel.	Verification of all results was undertaken after a site visit by the Geology Manager – Carbine.
(1.7.)	☐ The use of twinned holes.	Twin holes have been completed in the entire drill program. Good repeatability is observed.
	☐ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Assays are obtained from the ALS laboratory in electronic form and stored in a special folder created on the Carbine Resources Server
	☐ Discuss any adjustment to assay data.	No adjustments were needed. Assay results are reported as obtained from the lab
Location of data points (1.8.)	☐ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Hole collars were surveyed in MGA94 Zone 56 grid using differential GPS.
	☐ Specification of the grid system used.	MGA94 Zone 56 grid
	☐ Quality and adequacy of topographic control.	Pre-mining topographic surface prepared from detailed ground and mine surveys completed historically. Current topographic surface prepared from 2016 airborne Lidar survey.
Data spacing and distribution (1.9.)	☐ Data spacing for reporting of Exploration Results.	Distance between drill holes is approximately 50m which is sufficient for accurately reporting the Exploration Results and likely sufficient for estimation of Indicated Resources
	☐ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Distance of 50 m is likely to be sufficient for estimation of Indicated Resources. The purpose of this drilling is to convert Inferred to Indicated Resources and add additional Mineral Resources through near-mine extensions.
	☐ Whether sample compositing has been applied.	No sample compositing has been applied. All samples assayed by 1m intervals.



Orientation of data in relation to geological structure	☐Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	All drill holes were drilled vertically which provides the best possible intersection to the flat lying mineralised tailings, dumps and slag.
(1.10.)	☐ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Not applicable. Drill hole intersect the tailings at 90 degrees.
Sample security (1.11.)	☐ The measures taken to ensure sample security	Sample bags were collected by the Carbine Resources representative and delivered to the lab. The samples were not left unattended on site
Audits or reviews (1.12.)	☐ The results of any audits or reviews of sampling techniques and data.	Not applicable



## Reporting criteria presented in the Section 2 of the JORC Table 1

## (Reporting of Exploration Results)

Criteria of JORC Code 2012	Explanation given in the JORC Code 2012	Comments / Findings
Mineral tenement and land tenure status (2.1)	☐ Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  ☐ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Mount Morgan project has been secured by Mining Leases: ML 5589, ML 5602, ML 5608 – ML 5069, ML 5612 – ML 5628, ML 5633 – ML 5635, ML 5648, ML 5649, ML 5658 – ML 5660, ML 6692 issued to the Norton Gold Fields Limited. Carbine Resources entered inti JV agreement with Norton Gold Fields Limited.  There is no known native title related restrictions nor known environmental or social obstructions. Some areas of the site are currently listed on the Queensland Heritage Register.  All MLs expire on the 31/08/2025
Exploration done by other parties (2.2)	☐ Acknowledgment and appraisal of exploration by other parties.	The tailings have been deposited from over a hundred years of mining and processing. In-pit tailings have been historically processed in the 1980's. Several parties have explored and tested the remaining untreated tails over the last twenty years. Most recently (2009) Norton Gold Fields Limited completed preliminary due diligence of treating the tails mineralization, however the tailings were only partially drill tested and the economic significance was not fully assessed. Slag mineralization has been identified as an exploration target, but little drilling and sampling has been undertaken to test it.
Geology (2.3)	Deposit type, geological setting and style of mineralisation.	The historic tailings and metallurgical slag waste from the processing of primary and oxide gold-copper-pyrite ores from the Mount Morgan mine
Drill hole Information (2.4)	☐ A summary of all information material to the understanding of the exploration results including a tabulation of the following	



LIMITED

	information for all Material drill	All relevant data is reported in the tables of the
	holes:	ASX announcement
	☐ Easting and Northing of the drill	
	hole collar.	
	☐ Elevation or RL (Reduced Level	All relevant data is reported in the tables of the
	– elevation above sea level in	ASX announcement
	metres) of the drill hole collar.	
	$\Box$ dip and azimuth of the hole.	All relevant data is reported in the tables of the
		ASX announcement
	☐ down hole length and	All relevant data is reported in the tables of the
	interception depth	ASX announcement
	□hole length.	All relevant data is reported in the tables of the
		ASX announcement
	☐ If the exclusion of this	No exclusions have been made
	information is justified on the basis	
	that the information is not Material	
	and this exclusion does not detract	
	from the understanding of the	
	report, the Competent Person	
	should clearly explain why this is the case.	
Data .	☐ In reporting Exploration Results,	Intersection grade is estimated as arithmetic mean,
aggregation	weighting averaging techniques,	no weighting was applied because all samples were
methods (2.5)	maximum and/or minimum grade	1m long and composed of the same material (i.e. tailings). The entire intersection of tailings or slag
	truncations (eg cutting of high grades) and cut-off grades are	is reported only, and is not extended to incorporate
	usually Material and should be	mineralised basement or overlying waste rock
	stated.	unless tailings or slag are reported as 'Mixed'
		within the 1m sample.
		High grade cut off is generally not needed because
		distribution of the gold grade is relatively uniform.
		Grade in Shepherds tailings generally lies in the
		narrow range from 0.4-1.5 g/t. No assays higher
		than 1.5g/t was recorded, with zones >1.0g/t
		reported separately.



		Grade in tailings at Red Oxide generally lies in the narrow range from 1.2-3.5 g/t. No assays higher than 3.5g/t was recorded.  Grade in reported overlying mineralized slag and waste rock varies generally from 0.5g/t to 3.0g/t. MTC096 is an exception where individual assays returned were 22.1g/t from 4-5m and 46.2g/t from 5-6m. A duplicate sample for 4-5m returned 34.3g/t.
	☐ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Generally not applicable as grade in tails and slag is relatively uniform in grade within a narrow range between 0.5g/t and 3.5g/t. The individual high grade result in MTC096 is reported separately in Table 2.
	☐ The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable
Relationship between mineralisation widths and intercept lengths (2.6)	☐ These relationships are particularly important in the reporting of Exploration Results. ☐ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Tailings occur as a flatbed filling the topographic depression, therefore geometry of mineralisation is well understood. Drill holes are drilled vertical which provides the optimal intersection at right angle to the mineralisation plane with downhole width estimating true width. The entire intersection of tailings is reported, and is not extended to incorporate mineralised basement or overlying waste rock unless tailings are reported within the 1m sample.
	☐ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Orientation of the drill hole and geometry of the tailings and slag are well known. Reported intersections represents a true width of mineralised tailings and slag
Diagrams (2.7)	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill	See Figures within the ASX announcement



	hole collar locations and appropriate sectional views.	
Balanced reporting (2.8)	☐ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All assay results received that pertain to tailings, dump and slag are presented for all Carbine 2016 drilling.
Other substantive exploration data (2.9)	☐ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable
Further work (2.10)	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	These results are part of a series of expected assay results from a recently completed drill program (see Figure 1). Further exploration for mineralized tailings and historic mineralized waste dumps and slag will be ongoing in future exploration programs.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Figure 1 highlights the key exploration target areas for both mineralized tailings and historic mineralized waste dumps.