# **ASX Announcement**

## 20 April 2017

### ANNUAL MINERAL RESOURCES AND ORE RESERVES STATEMENT

Evolution Mining Limited (ASX: EVN) is pleased to release its annual Mineral Resources and Ore Reserves (MROR) estimates as at 31 December 2016.

A focus on extending the average mine life of its asset base has resulted in significant year-on-year improvements to mineral inventory with an average Group reserve life<sup>1</sup> now above eight years. Evolution is committed to building a sustainable business that prospers through the cycle and has therefore used an unchanged and conservative gold price assumption of A\$1,350 per ounce (US\$1,010/oz)<sup>2</sup> to estimate Group Ore Reserves.

#### Highlights

- Group Ore Reserves
  - Gold Ore Reserves increased by 1.14 million ounces (19%) to 6.99 million ounces after accounting for mining depletion of 913,000 ounces
  - Copper Ore Reserves increased by 196,000 tonnes to 212,000 tonnes after accounting for mining depletion of 3,225 tonnes
- Group Mineral Resources
  - Gold Mineral Resources increased by 163,000 ounces to 14.18 million ounces after accounting for mining depletion
  - Copper Mineral Resources increased by 1.00 million tonnes to 1.03 million tonnes after accounting for mining depletion

#### Further growth opportunities

- Testing for reserve extensions at Ernest Henry, Mungari, Mt Carlton, Cracow and Edna May
- Drill testing the Mungari mine corridor for repetitions of high-grade mineralisation along the Zuleika Shear Zone
- Conversion of the significant mineral endowment at Cowal along the 3 km long Galway-Regal trend between E46 and E41
- Progressing Cracow's exploration pipeline by drilling near surface targets at Walhalla and Valykrie
- Evaluating geophysical targets to the west and east of the Mt Carlton V2 open pit with drilling commencing in the June quarter 2017
- Realise the potential of high grade mineralisation in Tennant Creek Field by earning a 65% interest in the joint venture with Emmerson Resources
- Evaluate the opportunity to unlock the value of the Marsden gold and copper resource

Commenting on the updated Mineral Resources and Ore Reserves, Evolution Executive Chairman, Jake Klein, said:

"To increase Ore Reserves by 19% year-on-year after mining depletion is a very pleasing result and demonstrates the sustainability of our business.

"We continue to deliver on our strategy of improving the quality of our asset portfolio and have retained a conservative gold price assumption of A\$1,350 to estimate our Ore Reserves. Importantly, the vast majority of the increase in our Group Ore Reserves in 2016 came from our three lowest cost, highest margin assets – Cowal, Mt Carlton and the acquisition of an economic interest in Ernest Henry.

"The average asset reserve life across the Group is now more than eight years and we are committed to further extending the Group reserve life by continuing to invest in targeted exploration and resource definition drilling."

- 1. Indicative reserve life based on FY17 production level
- 2. Using an AUD:USD exchange rate of 0.75



Group Ore Reserves as at 31 December 2016 are estimated at 6.99 million ounces of gold<sup>1</sup> and 212,000 tonnes of copper compared with the 31 December 2015 estimate of 5.85 million ounces of gold and 16,000 tonnes of copper.

Highly successful resource definition drilling programs totalling 178,380 drilled metres in 2016 resulted in all of Evolution's six 100%-owned operations reporting an increase in Ore Reserves prior to mining depletion.

Changes to the Group Ore Reserves estimate include:

- A 24% increase (679,000 ounces of gold) at Cowal prior to mining depletion of 326,000 ounces, extending mine life at Cowal until at least 2032
- Addition to Ore Reserves, prior to mining depletion, of:
  - 172,000 ounces of gold at Mt Carlton including a maiden Underground Ore Reserve estimate
  - 108,000 ounces of gold at Mt Rawdon
  - 106,000 ounces of gold at Mungari including a maiden Ore Reserve estimate at Mungari Regional
  - 93,000 ounces of gold at Cracow
  - 35,000 ounces of gold at Edna May
- The addition of 964,000 ounces of gold and 182,000 tonnes of copper (11 year mine life) through the acquisition of an economic interest in the Ernest Henry copper-gold operation
- The removal of 107,000 ounces of gold, prior to mining depletion, due to the divestment of Pajingo

The Group Ore Reserve Statement as at 31 December 2016 is provided in Tables 1 and 3.



#### Group Ore Reserve Changes December 2015 to December 2016

1. Inclusive of Cowal Mineral Resources and Ore Reserves reported at 31 December 2016 and details are provided in the report entitled "Cowal Project Approvals Secure Production to 2032" released to the ASX on 16 February 2017





#### Group Ore Reserve Net Changes By Operation Post Mining Depletion December 2015 to December 2016

**Group Mineral Resources** as at 31 December 2016 are estimated at **14.18 million ounces of gold**<sup>1</sup> and **1.03 million tonnes of copper** compared with the estimate at 31 December 2015 of 14.01 million ounces of gold and 28,000 tonnes of copper. This represents a net increase of 163,000 ounces after accounting for mining depletion of 913,000 ounces of gold.

Changes to the Group Mineral Resources estimate include:

- Addition of 1.72 million ounces of gold and 315,000 tonnes of copper through the acquisition of an economic interest in the Ernest Henry copper-gold operation
- Addition of 1.10 million ounces of gold and 670,000 tonnes of copper following the acquisition of the Marsden project
- Addition of 242,000 ounces of gold at Mt Carlton and 319,000 ounces of gold at Cowal, prior to mining depletion
- Decreases at Mungari Regional included 677,000 ounces of gold due to the application of economic constraints (A\$1,800/oz optimisation shell) to align with Evolution estimation and reporting methodologies following acquisition of Phoenix Gold Limited as previously indicated (refer to ASX release Annual Mineral Resources and Ore Reserves Statement" dated 21 April 2016)
- Decrease of 388,000 ounces of gold at Mungari due to the application of economic constraints (A\$1,800/oz mineable shape optimiser) at White Foil underground
- Removal of 574,000 ounces of gold from Pajingo (prior to mining depletion) and 398,000 ounces of gold from Twin Hills following divestment

The Group Mineral Resource Statement as at 31 December 2016 is provided below in Tables 2 and 4. Mineral Resources are reported inclusive of Ore Reserves and include all exploration and resource definition drilling information up to 31 December 2016 and have been depleted for mining to 31 December 2016.

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#### Group Mineral Resource Changes December 2015 to December 2016

Group Mineral Resource Net Changes by Operation Post Mining Depletion December 2015 to December 2016



#### **Commodity Price Assumptions**

Commodity price assumptions used to estimate the December 2016 Mineral Resources and Ore Reserves are unchanged for gold and silver to those used previously (December 2015 Mineral Resources and Ore Reserves):

- Gold: A\$1,350/oz (A\$1,350/oz) for Ore Reserves, A\$1,800/oz (A\$1,800/oz) for Mineral Resources
- Silver: A\$20.00/oz (A\$20.00/oz) for Ore Reserves, A\$26.00/oz (A\$26.00/oz) for Mineral Resources
   Connert: A\$6,000/th (A\$6,000/th) for Ore Reserves, A\$0,000/th (A\$6,000/th) for Mineral Resources
- Copper: A\$6,000/t (A\$6,000/t) for Ore Reserves, A\$9,000/t (A\$6,000/t) for Mineral Resources



#### JORC 2012 and ASX Listing Rules Requirements

The Mineral Resources and Ore Reserves statement included with this announcement has been prepared in accordance with the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code 2012).

Group Mineral Resources and Ore Reserves summaries are tabulated on the following pages. Information summaries are also provided for material projects reported for the first time (Mt Carlton underground Ore Reserve) pursuant to ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria in accordance with JORC Code 2012 requirements.

Full details of the December 2016 Group Mineral Resource and Ore Reserve statements are provided on the Company website <u>www.evolutionmining.com.au</u>.

#### For further information please contact:

#### **Investor Enquiries**

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#### About Evolution Mining

Evolution Mining is a leading, growth-focussed Australian gold miner. Evolution operates six wholly-owned mines – Cowal in New South Wales; Mt Carlton, Mt Rawdon, and Cracow, in Queensland; and Mungari and Edna May in Western Australia. In addition Evolution holds an economic interest in the Ernest Henry coppergold mine that will deliver 100% of future gold and 30% of future copper and silver produced from an agreed life of mine area. Outside of the life of mine area Evolution will have a 49% interest in future copper, gold and silver production.

In FY16 Evolution produced 803,476 ounces of gold at an AISC of A\$1,014 per ounce generating a net mine cash flow of A\$428.2 million.

Evolution's revised FY17 Group gold production guidance is 800,000 – 860,000 ounces at an AISC of A\$900 – A\$960 per ounce.



#### **Competent Persons Statement**

The information in this statement that relates to the Mineral Resources and Ore Reserves listed in the table below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears in the same row, who is employed on a full-time basis by Evolution Mining Limited and is a member of the institute named in that row. Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Each person named in the table below is a member of the Australasian Institute of Mining and Metallurgy and consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Activity	Competent Person
Cowal Mineral Resource	Joseph Booth
Cowal Ore Reserve	Jason Floyd
Mungari Mineral Resource	Andrew Engelbrecht
Mungari Ore Reserve	Matt Varvari
Mungari Regional Mineral Resource	Andrew Engelbrecht
Mungari Regional Ore Reserve	Matt Varvari
Mt Carlton Mineral Resource	Matthew Obiri-Yeboah
Mt Carlton Open Pit Ore Reserve	Anthony Wallace
Mt Carlton Underground Ore Reserve	lan Patterson
Edna May Mineral Resource	Greg Rawlinson
Edna May Open pit Ore Reserve	Guy Davies
Edna May Underground Ore Reserve	lan Patterson
Cracow Mineral Resource	Shane Pike
Cracow Ore Reserve	Samuel Myers
Mt Rawdon Mineral Resource	Hans Andersen
Mt Rawdon Ore Reserve	Dimitri Tahan
Marsden Mineral Resources	Michael Andrew

Full details of the Ernest Henry Mineral Resources and Ore Reserves are provided in the report entitled "Glencore Resources and Reserves as at 31 December 2016" released February 2017 and available to view at www.glencore.com. The information in this statement that relates to the Ernest Henry Mineral Resource and Ore Reserve is based on, and fairly represents, information and supporting documentation prepared by Colin Stelzer and Alexander Campbell respectively. Colin and Alexander are members of the Australasian Institute of Mining and Metallurgy and are full-time employees of Glencore. The Company confirms that all material assumptions and technical parameters underpinning the estimates in Glencore's market release continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the Report.



#### Forward looking statements

This report prepared by Evolution Mining Limited (or "the Company") include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control. Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

	Gold			Proved			Probable		Total Reserve				Dec 15 Reserves
Project	Туре	Cut-Off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Competent Person	Gold Metal (koz)
Cowal <sup>1</sup>	Open pit	0.4	43.70	0.71	994	73.02	0.94	2,207	116.71	0.85	3,200	1	2,848
Cracow <sup>1</sup>	Underground	3.5	0.34	6.54	71	0.71	5.25	120	1.05	5.67	192	2	190
Pajingo <sup>1</sup>	Underground	-	-	-	-	-	-	-	-	-	-		107
Edna May <sup>1</sup>	Open pit	0.5	-	-	-	6.88	1.01	224	6.88	1.01	224	3	269
Edna May <sup>1</sup>	Underground	2.5	-	-	-	1.34	4.69	202	1.34	4.69	202	7	202
Edna May <sup>1</sup>	Total		-	-	-	8.22	1.61	426	8.22	1.61	426		471
Mt Carlton <sup>1</sup>	Open pit	0.8	-	-	-	4.67	4.60	691	4.67	4.60	691	4	709
Mt Carlton <sup>1</sup>	Underground	3.7	-	-	-	0.17	7.77	42	0.17	7.77	42	7	0
Mt Carlton <sup>1</sup>	Total		-	-	-	4.84	4.71	733	4.84	4.71	733		709
Mt Rawdon <sup>1</sup>	Open pit	0.3	1.70	0.60	33	30.99	0.84	840	32.69	0.83	873	5	864
Mungari <sup>1</sup>	Underground	2.9	0.45	6.01	87	1.10	4.88	173	1.55	5.21	260	6	357
Mungari <sup>1</sup>	Open pit	0.7	0.58	0.93	18	5.19	1.69	282	5.77	1.61	299	6	309
Mungari <sup>1</sup>	Regional	0.85	-	-	-	0.98	1.35	43	0.98	1.35	43	6	0
Mungari <sup>1</sup>	Total		1.03	3.15	105	7.27	2.13	498	8.30	2.25	602		665
Ernest Henry <sup>2</sup>	Underground	0.9	7.15	0.71	163	52.30	0.48	801	59.45	0.50	964	8	0
		Total	53.92	0.79	1,366	177.35	0.99	5,624	231.27	0.94	6,990		5,853

#### Table 1: December 2016 Group Gold Ore Reserve Statement

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding <sup>1</sup> Includes stockpiles <sup>2</sup> Ernest Henry Operation cut-off 0.9% CuEq Group Ore Reserve Competent Person Notes refer to: 1. Jason Floyd; 2. Sam Myers; 3. Guy Davies; 4. Tony Wallace; 5. Dimitri Tahan; 6. Matt Varvari; 7. Ian Patterson; 8. Alexander Campbell (Glencore) Full details of the Ernest Henry Mineral Resources and Ore Reserves are provided in the report entitled "Glencore Resources and Reserves as at 31 December 2016" released February 2017 and available to view at www.glencore.com

	Gold			Measured		Indicated			Inferred		Total Resource			Competent	Dec 15 Resource	
Project	Туре	Cut- off	Tonnes (Mt)	Gold Grade (g/t)	Gold Metal (koz)	Competent Person	Gold Metal (koz)									
Cowal <sup>1</sup>	Total	0.4	43.70	0.71	994	129.71	0.93	3,861	4.24	1.35	184	177.65	0.88	5,039	1	5,046
Cracow <sup>1</sup>	Total	2.8	0.24	10.89	83	1.21	6.64	258	1.85	3.06	181	3.29	4.94	522	2	504
Pajingo	Open pit	0.75	-	-	-	-	-	-	-	-	-	-	-	-		14
Pajingo <sup>1</sup>	Underground	2.5	-	-	-	-	-	-	-	-	-	-	-	-		560
Pajingo	Total		-	-	-	-	-	-	-	-	-	-	-	-		574
Edna May <sup>1</sup>	Open pit	0.4	-	-	-	15.96	0.95	487	2.19	0.85	60	18.15	0.94	547		539
Edna May	Underground	2.5	-	-	-	1.12	7.68	278	0.09	7.63	23	1.22	7.68	301		301
Edna May	Total		-	-	-	17.09	1.39	765	2.28	1.13	83	19.37	1.36	848	4	840
Mt Carlton <sup>1</sup>	Open pit	0.35	0.52	1.67	28	8.94	2.74	788	0.74	4.48	107	10.21	2.81	923		858
Mt Carlton	Underground	2.4	-	-	-	0.16	8.01	42	0.05	8.36	14	0.22	8.09	56		27
Mt Carlton	Total		0.52	1.67	28	9.10	2.84	830	0.79	4.76	121	10.43	2.92	979	5	885
Mt Rawdon <sup>1</sup>	Total	0.2	1.70	0.60	32	45.60	0.74	1,089	3.49	0.58	65	50.79	0.73	1,186	6	1,238
Mungari <sup>1</sup>	Open pit	0.5	0.58	0.93	17	6.38	1.74	357	0.04	0.75	1	7.00	1.67	376		476
Mungari <sup>1</sup>	Underground	2.5/1.5	0.97	7.88	247	3.98	3.56	456	1.60	2.19	113	6.55	3.87	815		1,287
Mungari <sup>1</sup>	Total		1.55	5.29	264	10.35	2.44	813	1.64	2.16	114	13.55	2.73	1,191	3	1,763
Mungari Regional	Total	0.5	-	-	-	32.47	1.01	1,040	11.44	1.50	552	43.91	1.13	1,592	3	2,767
Ernest Henry <sup>2</sup>	Total	0.9	12.10	0.70	272	68.70	0.59	1,303	9.00	0.50	145	89.80	0.60	1,720	7	0
Marsden	Total		-	-	-	160.00	0.21	1,070	15.00	0.07	30	180.00	0.20	1,100	8	0
$Twin\ Hills^{*}$	Open pit	0.5	-	-	-	-	-	-	-	-	-	-	-	-		204
$Twin\;Hills^*$	Underground	2.3	-	-	-	-	-	-	-	-	-	-	-	-		194
Twin Hills <sup>+</sup>	Total		-	-	-	-	-	-	-	-	-	-	-	-		399
Total			59.81	0.87	1,673	474.24	0.72	11,029	49.73	0.92	1,475	588.79	0.75	14,178		14,016

#### Table 2: December 2016 Group Gold Mineral Resource Statement

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding Mineral Resources are reported inclusive of Ore Reserves. <sup>1</sup> Includes stockpiles <sup>2</sup>Ernest Henry Operation cut-off 0.9% CuEq Group Mineral Resources Competent Person Notes refer to 1. Joseph Booth; 2. Shane Pike; 3. Andrew Engelbrecht; 4. Greg Rawlinson; 5. Matthew Obiri-Yeboah; 6. Hans Andersen; 7. Colin Stelzer (Glencore); 8. Michael Andrew Full details of the Ernest Henry Mineral Resources and Ore Reserves are provided in the report entitled "Glencore Resources and Reserves as at 31 December 2016" released February 2017 and available to view at www.glencore.com. 9

	Copper			Proved			Probable		-	Total Reserve			Dec 15
		•	_	•	Copper	_	•	Copper	_	•	Copper	Competent	Reserves
Project	Туре	Off	(Mt)	Copper Grade (%)	Metal (kt)	(Mt)	Grade (%)	Metal (kt)	(Mt)	Copper Grade (%)	Metal (kt)	Person	Copper Metal (kt)
Ernest Henry <sup>2</sup>	Total	0.9	2.13	1.41	30	15.69	0.96	151	17.82	1.02	182	8	0
Mt Carlton <sup>1</sup>	Open pit	0.8	-	-	-	4.67	0.62	29	4.67	0.62	29	4	16
Mt Carlton <sup>1</sup>	Underground	3.7	-	-	-	0.17	0.70	1	0.17	0.70	1	7	0
Mt Carlton <sup>1</sup>	Total		-	-	-	4.84	0.62	30	4.84	0.62	30		
	Total		2.13	1.41	30	20.53	0.88	181	22.66	0.94	212		16

#### Table 3: December 2016 Group Copper Ore Reserve Statement

#### Table 4: December 2016 Group Copper Mineral Resource Statement

	Copper			Measured			Indicated			Inferred		То	tal Resour	се		Dec 15 Reserves
Project	Туре	Cut- Off	Tonnes (Mt)	Copper Grade (%)	Copper Metal (kt)	Competent Person	Copper Metal (kt)									
Marsden <sup>1</sup>	Total	-	-	-	-	160.00	0.40	640	15.00	0.19	30	180.00	0.38	670	8	0
Ernest Henry <sup>2</sup>	Total	0.9	3.63	1.33	48	20.61	1.15	237	2.70	1.10	30	26.94	1.17	315	7	0
Mt Carlton <sup>1</sup>	Open pit	0.35	0.52	0.25	1	8.94	0.44	40	0.74	0.82	6	10.21	0.47	47		27
Mt Carlton	Underground	2.4	-	-	-	0.16	0.74	1	0.05	1.74	1	0.22	0.98	2		1
Mt Carlton	Total		0.52	0.25	1	9.10	0.45	41	0.79	0.89	7	10.43	0.47	49	5	28
Total			4.15	1.18	49	189.71	0.48	918	18.49	0.36	67	217.37	0.48	1,034		28

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding Mineral Resources are reported inclusive of Ore Reserves. <sup>1</sup> Includes stockpiles <sup>2</sup> Ernest Henry Operation cut-off 0.9% CuEq

Group Ore Reserve Competent Person Notes refer to: 4. Tony Wallace; 7. Ian Patterson; 8. Alexander Campbell (Glencore)

Group Mineral Resources Competent Person Notes refer to: 5. Matthew Obiri-Yeboah; 7. Colin Stelzer (Glencore); 8. Michael Andrew

Full details of the Ernest Henry Mineral Resources and Ore Reserves are provided in the report entitled "Glencore Resources and Reserves as at 31 December 2016" released February 2017 and available to view at www.glencore.com.



#### MATERIAL INFORMATION SUMMARY

A Material Information Summary pursuant to ASX Listing Rules 5.8 and 5.9 is provided below for Mt Carlton as the underground Ore Reserve is being reported for the first time, together with commentary on changes between the December 2015 and December 2016 Mineral Resources and Ore Reserves. The Assessment and Reporting Criteria in accordance with JORC Code 2012 is presented in Appendix 1.

#### 1.0 MT CARLTON

#### Mineral Resource

The Mt Carlton Mineral Resource consists of the V2 gold-silver-copper deposit and stockpiled material.

The December 2016 Mt Carlton Mineral Resource estimate for V2 of 10.42Mt at 2.90g/t gold, 30.60g/t silver and 0.47% copper for 979koz gold, 10.2Moz silver, and 49kt copper represents an increase of 94koz gold, 3.36Moz silver and 21kt copper post mining depletion compared to the December 2015 estimate of 8.62Mt at 3.19g/t gold, 25g/t silver and 0.32% copper for 885koz gold, 6.88Moz silver, and 28kt copper.

Changes to the Mineral Resource estimate for the V2 deposit are largely due to:

- Mining depletion at V2 during the period -148koz Au, -904koz Ag, and -2,396t Cu
- 214koz gold increase due to model update

The increase in the model update is the result of extension to mineralisation along strike and down dip from resource definition drilling conducted during the reporting period. Assessment of the Mineral Resource provided additional resource estimations for open cut and underground options.

			Gold -	Mt Carlto	n Mineral	Resource	s - Decem	ber 2016				
	l	Measured	1		Indicated			Inferred		Tot	al Resou	rce
Mineral Resource	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)									
V2 Open-cut	-	-	-	8.94	2.74	788	0.74	4.48	107	9.69	2.90	895
V2 Underground	-	-	-	0.16	8.01	42	0.05	8.36	14	0.22	8.10	56
V2 Stockpile	0.52	1.67	28	-	-	-	-	-	-	0.52	1.70	28
Total	0.52	1.67	28	9.11	2.80	830	0.80	4.70	121	10.42	2.90	979

			Silver - N	It Carlton	Mineral	Resource	es - Decem	nber 2016				
	N	leasured			Indicated			Inferred		Tot	al Resou	rce
Mineral Resource	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)
V2 Open-cut	-	-	-	8.94	28.72	8,255	0.74	56.61	1,355	9.69	30.90	9,610
V2 Underground	-	-	-	0.16	14.96	79	0.05	30.66	51	0.22	18.70	130
V2 Stockpile	0.52	30.16	500	-	-	-	-	-	-	0.52	30.16	500
Total	0.52	30.20	500	9.11	28.50	8,334	0.80	54.90	1,406	10.42	30.60	10,241

Copper - Mt Carlton Mineral Resources - December 2016												
		Measured	I		Indicated			Inferred		Tot	al Resou	rce
Mineral Resource	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)									
V2 Open-cut	-	-	-	8.94	0.44	39.62	0.74	0.82	6.11	9.69	0.47	46
V2 Underground	-	-	-	0.16	0.74	1.23	0.05	1.74	0.90	0.22	0.98	2
V2 Stockpile	0.52	0.26	1.33	-	-	-	-	-	-	0.52	0.26	1
Total	0.52	0.26	1.33	9.11	0.45	40.85	0.80	0.88	7.01	10.42	0.47	49

#### Notes:

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding Mt Carlton V2 deposit Mineral Resources have been reported above a cut-off grade of 0.35g/t gold. The open cut resources have been reported within an optimised shell based on an A\$1,800/oz gold price, A\$26/oz silver price and A\$4.08lb copper price. The V2 underground resource has been constrained within an optimised shell based on a 2.4g/t gold cut-off



#### Ore Reserve

The December 2016 Mt Carlton Ore Reserve estimate for V2 of 4.84Mt at 4.7g/t gold, 35g/t silver and 0.64% copper for 733koz gold, 5.46Moz silver and 31kt copper represents an increase of 24koz gold, 1,885koz silver and 15kt copper post mining depletion compared to the December 2015 estimate of 4.62Mt at 4.8g/t gold, 24.1g/t silver and 0.35% copper for 709koz gold, 3.58Moz silver and 16kt copper.

Changes to the Ore Reserve estimate for the V2 deposit are largely due to:

- Geological re-interpretation and optimisation of estimation parameters (-13koz Au, +713koz Ag, and +4,048t Cu)
- Mining depletion during the period (-164koz Au, -1,130koz Ag, and -3,225t Cu)
- Design change (+196koz Au, +1,843koz Ag and +12,704t Cu)

		G	old - Mt Carlt	on Ore Rese	rves - Decer	nber 2016			
		Proved			Probable		٦	Total Reserve	•
Ore Reserve	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)	Tonnes (Mt)	Grade Au (g/t)	Cont. Metal Au (koz)
V2 Open-cut	-	-	-	4.15	5.0	662	4.15	5.0	662
V2 Underground	-	-	-	0.17	7.8	42	0.17	7.8	42
V2 Stockpile	-	-	-	0.52	1.7	28	0.52	1.7	28
Total	-	-	-	4.84	4.7	733	4.84	4.7	733

#### Silver - Mt Carlton Ore Reserves - December 2016

		Proved			Probable		Total Reserve				
Ore Reserve	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)	Tonnes (Mt)	Grade Ag (g/t)	Cont. Metal Ag (koz)		
V2 Open-cut	-	-	-	4.15	36	4,879	4.15	36	4,879		
V2 Underground	-	-	-	0.17	15	83	0.17	15	83		
V2 Stockpile	-	-	-	0.52	30	500	0.52	30	500		
Total	-	-	-	4.84	35	5,462	4.84	35	5,462		

		Co	pper - Mt Car	Iton Ore Res	serves - Dece	ember 2016			
		Proved			Probable		٦	Total Reserve	e
Ore Reserve	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)	Tonnes (Mt)	Grade Cu (%)	Cont. Metal Cu (kt)
V2 Open-cut	-	-	-	4.15	0.68	28	4.15	0.68	28
V2 Underground	-	-	-	0.17	0.7	1	0.17	0.7	1
V2Stockpile	-	-	-	0.52	0.25	1	0.52	0.25	1

4.84

0.64

31

4.84

0.64

#### Notes:

Total

-

-

Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding V2 Ore Reserves are reported above a 0.80g/t gold cut-off

-

31



#### 1.1 Mt Carlton Mineral Resources

#### 1.1.1 Geology and Geological Interpretation

The Mt Carlton project covers the northern margin of the Permian Bowen Basin, in particular the basal Lizzie Creek Volcanics with minor Back Creek Group sediments.

Mineralisation is hosted in the basal sequence of felsic to silicic volcanics un-conformably overlying the Lower Carboniferous Glen Alpine Adamellite. Mineralisation is hosted exclusively within Rhyodacitic volcanics. The Rhyodacites have been cross cut by numerous steeply dipping basic dykes. Gold, silver, and copper mineralisation occurs in strata-bound silicified layers, stock-works, breccia zones, and in banded epithermal veins with mineralisation primarily as enargite, polybasite and some native gold.

Two distinct areas of mineralisation occur. To the south west is the silver rich A39 pit (mined and closed) in a vertical, east striking fault containing high grade epithermal silver veins. The second distinct area of mineralisation at Silver Hill is a gold, copper-silver sulphides zone, known as V2. Mineralisation occurs as matrix in-fill to a north west dipping breccia or fracture zone at the intersection of north north-east and north north-west trending enargite-pyrite veins.

Mineralisation lies in the fresh rock under 20-25m of oxidised and weathered cover.

#### 1.1.2 Sampling and Sub-sampling

RC samples were collected using cone splitter at 1m intervals. All samples were collected dry. Field duplicates were collected in the same manner as original samples at a frequency of 1 in 20. RC and diamond core were logged for lithology, alteration, texture, weathering and mineralisation. Texture and structure data were recorded for core only. Core was routinely photographed after logging. Core was cut using a core saw and sampled at nominal one meter intervals from the same side in the tray at all times.

Samples were also collected using geological controls at preferential intervals. Core was cut in half through marked orientation lines or on core axis. Quarter core was taken where check samples were required whiles whole core was taken for geotechnical test work. Geotechnical logging was undertaken for oriented core, data collected included; core recovery, RQD, weathering, alteration, estimated rock strength, joint spacing, joint condition, lithological description/units, number of defects, defect type, roughness, infill and infill thickness.

#### 1.1.3 Sample Analysis Methods

Half core samples averaging 2-3<sup>1</sup>/<sub>2</sub>kg along with quarter core samples are prepared and analysed at ALS Townsville facility. Weights of samples dried at 105°C are recorded and crushed to 6mm. Samples are split

and excess bagged if crushed weight is greater than 3kg. LM5's are used to pulverise samples to 85% passing 75um. A 200g pulp split is taken for analysis which comprise; a 50g charge fire assay with AA finish and ICP-AES for multi-element suite.

#### 1.1.4 Drilling Techniques

RC and diamond drilling (HQ diameter) methods were used to sample the V2 resource areas. Data for the current estimates were collected from January 2016 to December 2016. Holes were drilled on 50m centres angled steep to 135 degrees grid azimuth to optimally intersect strike of mineralisation. Areas of significant mineralisation and structural complexity were in-filled to 25m x 25m spacing.

#### 1.1.5 Estimation Methodology

At V2 a categorical indicator estimate using ordinary kriging was used for the current model with a block dimension of 10m x 10m x 5m. In addition to the estimation of economic metals the Mt Carlton resource model incorporates details of weathering and major lithology (including barren dykes) for both mineralised and waste blocks.

Eight domains (High Grade and Low Grade domains within the east and west of V2, further split by the dominance of grade control drilling or resource drilling data) were used to constrain the estimate. The estimate was defined using 3,881 drill holes, consisting of a mix of 10m x 10m spaced grade control RC drilling, and 25m x 25m diamond drilling. These were composited into 182,292 1m composites for gold, silver and copper.

#### 1.1.6 Resource Classification

Blocks in the resource model have been allocated a confidence category based on the number and location of samples used to estimate the grade of each block. The approach is based on the principle that larger numbers of samples, which are more evenly distributed throughout the search neighbourhood, will provide a more reliable estimate.

Blocks within the current pit design were deemed to have an appropriate level of confidence to be classified as indicated. Blocks that were estimated in the high grade resource domains outside the current pit design were queried on 50m spaced sections, and classified as indicated if they had sufficient sample support; nominally more than one drill hole within 25m on section. Blocks in the high grade resource domains outside these criteria were classified in the Inferred category.

Density values of 2.65 were assigned to the model.

#### 1.1.7 Cut-off Grade

The cut-off of 0.35g/t Au and 2.4g/t Au was used for V2 open cut and underground resource.

1.1.8 Mining and Metallurgical Methods and parameters and other modifying factors considered to date

See sections 1.2.3 and 1.2.4 below.

#### 1.2 Mt Carlton Underground Ore Reserve

#### 1.2.1 Material Assumptions for Ore Reserves

The Mt Carlton underground Ore Reserve estimate is defined with underground development and stope design which is based on detailed geotechnical design parameters, practical mining considerations and fundamental mine design principles. The Ore Reserve cost base assumptions are based on a 'bottom up' costing model and has been validated against contractor fixed and variable rates.

#### 1.2.2 Ore Reserve Classification

All of the in-situ Ore Reserves are currently derived from Indicated Resources. The only Probable Reserves derived from Measured Resources are those reported in known and quantified stockpiles.

#### 1.2.3 Mining Method

The proposed underground mining method is transverse open stoping with backfill. The stopes height ranges from 15 to 20m and width varies from 10 to 30m. Parameters derived in geotechnical study work where used in the mining method selection.

#### 1.2.4 Processing method

The ore is processed through the Mt Carlton Bulk Sulphide Flotation Concentrator commissioned in 2013 and is comprised of the following unit operations: crushing; ore reclaim; SAG Mill; cyclone classification; bulk flotation and concentrate regrind; concentrate thickening and filtration. This technology is well tested globally for polymetallic orebodies and the successful treatment of Mt Carlton ores.

It has been assumed that deleterious elements will be managed operationally to be blended below the limits set in the Chinese smelter off take agreements as performed since the 2013 commissioning of the processing plant.

The current and estimated future average recoveries at V2 are 91% for Au, 80% for Ag and 93% for Cu. Recent operating history since commissioning supports the metallurgical parameters used in the Ore Reserve estimation. Detailed metallurgical characterisation test work of V2 extension lodes is in progress to confirm amenability of the existing Mt Carlton flowsheet.

Concentrate agreements with Chinese smelters to accept gold and silver concentrate contain recoverable payment terms based on concentrate grade. The Ore Reserve has been estimated that the concentrate will deliver above the specification payable grades over the life of the mine.

Recent operating history since commissioning supports the metallurgical parameters used in the Ore Reserve estimation.

#### 1.2.5 Cut-off Grade

Cut-off grades are not used to estimate the Ore Reserve. They are more a generalisation of economic areas. There are numerous cut-off values dependent on costs structure applied. A fully costed stoping cut-off grade of 4.2g/t is representative of a mine cut-off grade.

All Ore Reserves are fully costed within an economic model and based on the proportion of operation and/or capital development required for ore extraction. Thus the cut-off grade varies dependent on these factors, and no one cut-off grade has been used for the Ore Reserves estimation.

#### 1.2.6 Estimation Methodology

See section 1.1.5 above.

#### 1.2.7 Material Modifying Factors

There are no concerning material modifying factors that need to be highlighted with the Ore Reserve. All regulatory leasing, approvals, licensing, agreements and current infrastructure are in place, which considers this estimation higher than that of a feasibility study.

#### APPENDIX 1: JORC CODE 2012 ASSESMENT AND REPORTING CRITERIA

The following information is provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012 -Section 1 (Sampling Techniques and Data), Section 2 (Reporting of Exploration Results), Section 3 (Estimation and Reporting of Mineral Resources) and Section 4 (Estimation and Reporting of Ore Reserves).

## **Mt Carlton**

# JORC Code 2012 Edition – Table 1

## **Section 1 Sampling Techniques and Data**

Criteria	Commentary
Sampling techniques	Reported assay data for this report is based on PQ, HQ and NQ diameter core. PQ was drilled largely through weathered zones and broken ground of weak mineralisation then followed with HQ and NQ diamond core to end of hole. Oxidised core (PQ) is usually sampled using a kitchen knife while competent core HQ and NQ size was cut with a diamond saw along orientation lines. Nominal sampling intervals for all core is 1m lengths. Shorter or longer core (<2m) sampling lengths occur when adjustments are required to core loss, alteration or lithology changes. The length of each core recovered from a drill run is recorded and the percentage recovered calculated. Field core recovery records are validated at the core shed prior to cutting and sampling. Bottom half of split core was preserved and the other half sent for analysis. This is done consistently to avoid sampling bias. A duplicate quarter core sample is taken for every 20 <sup>th</sup> core sample. Half core samples averaging 2-3 <sup>1</sup> / <sub>2</sub> kg along with quarter core samples are prepared and analysed at ALS Townsville facility. Weights of samples dried at 105 <sup>o</sup> C are recorded and crushed to 6mm. Samples are split and excess bagged if crushed weight is greater than 3kg. LM5s are used to pulverise samples to 85% passing 75um. A 200g pulp split is taken for analysis which is comprised of a 50g charge fire assay with AA finish and ICP-AES for multi-element suite.
Drilling techniques	Diamond drilling was undertaken with PQ, HQ and NQ bits. Holes were usually started with PQ and completed with HQ or NQ when poor ground conditions occur. Coring was by triple tube and all core is oriented using Reflex Act RD2 orientation tool.
Drill sample recovery	Field recovery records for core are reconciled with driller's depth blocks. Percentage core recovery is calculated and stored in a database along with geotechnical records. Drillers are informed of the importance of core recovery, all necessary care is taken to ensure every drill run has maximum core recovered. Shot core runs were done in bad ground to ensure core loss is significantly minimised. Areas of poor core recovery were noted during logging. "CL" is marked on depth blocks denoting core loss. Intervals of core loss are considered during sampling and referenced when assessing assay data. No discernible relationship between core loss and grade has been identified. Mineralisation is hosted within fresh advance argillic rhyodacite unit where core recoveries are in excess of 90%. Bonanza gold grade occurs within feeder zones with fracture filled enargite and hydrothermal breccias veining cemented in silicic alteration overprinted by sulphur salts with random acid leached zones. Core loss sometimes occurs in the acid leach zones and sheared contacts bordering mafic dykes and rhyodacite. Drillers take great care drilling through such zones to minimise sample loss. Overall recovery is in excess of 90% and core loss is volumetrically insignificant. In weathered overlying lithology where oxidation has occurred between sheared lithology contacts, core loss is unavoidable but recovery is generally in excess of 85%. Mineralisation in the lithology overlying the rhyodacite is generally weak and therefore has less impact on modelled bonanza high grade.
Logging	Geology logging is undertaken for all drill core. Structural and geotechnical logging occurs for core only. Detailed logging is undertaken for the entire drillhole in domains of alteration, mineralisation and lithology. Densities of various lithological units, ASD and magnetic susceptibility data are captured as part of the logging process. Lithogeochemical samples are collected in areas where lithology units are not easily discernible. The logging process is appropriate for Mineral Resource estimates, mining and metallurgical studies. General logging data captured are; qualitative (descriptions of the various geological features and units) and quantitative (numbers representing alteration intensities, vein densities, rock mass quality and defect planes)

Criteria	Commentary
	Drill holes (all core) were logged as full core prior to photographing (dry and wet) and cutting.
Sub-sampling techniques and sample preparation	Core was cut using diamond core saw along orientation lines and sampled at nominal one metre intervals from the same side in the tray at all times. All core samples submitted to ALS, Townsville for analysis are half core except for duplicate core which is quarter core. The remaining half/quarter core is persevered in the tray for further test work or re-logging if required.
	Core sample preparation involves oven drying, coarse crushing to ~6mm followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size 85% passing 75 micron. A 50g sub-sample is utilised for fire assay. Sample preparation and analysis follows industry best practise and appropriate for the mineralisation. Certified reference material along with blanks and field duplicates are inserted into sample stream along with the original samples. Standards, blanks and field duplicates cover 5% of sample volume to monitor sample preparation and the analytical process.
	The high sulphidation epithermal mineralisation at Mt Carlton occurs in zones of highly silicic altered hydrothermal breccias overprinted by several phases of sulphur salts containing bonanza gold grades and anomalous base-metal grades. Core sample size of 2-3 <sup>1</sup> / <sub>2</sub> kg sample length over 1m is suitable for the mineralisation type.
	The sample sizes are considered appropriate for the material sampled. Grain size does not appear to impact on sampled material.
Quality of assay data and laboratory tests	All core samples are analysed at ALS Townsville. Gold was analysed using 50g charge fire assay followed by AAS finish. Base metal and other elements are analysed using ICP-AES following a four acid digest. The analytical method used by ALS approaches total dissolution of high sulphidation epithermal mineral assemblages of the Mt Carlton deposit. The sample preparation and assay techniques meet industry best practise.
	Spectral data is collected consistently at a spot within a meter mark using short wave infrared spectrometer (ASD TerraSpec 4 Hi-Res). Data is processed using TerraSpec/TSG Pro software in the context of the project geology. The accuracy and spread of "Standard" data is acceptable within 2 standard deviations. Any outlier between the second and third standard deviation triggers an anomaly and is investigated. An entire batch is re-analysed when a sample plots outside three standard deviations. Blanks are acceptable within 10Xpractical detection limit, five samples preceding and following the outlier are re-analysed. The internal QAQC data of ALS is accessible online. The analytical system at ALS captures data at all stages of the sample preparation and analytical process. The system minimises human error and ensures high data integrity. ALS participates in an international "Round Robin" QAQC program to ensure best industry practice is maintained. Based on quality assurance and quality control acceptable performance, assay data is suitable for use in Mineral Resource estimation.
Verification of	Significant mineralisation intercepts are verified by other geologists within the company.
assaving	There were no twinned holes drilled.
	Data documentation, verification and validation are conducted in accordance with Evolution's Data Storage Standard Operating Procedure. Logging is undertaken in significant detail for entire drillhole in domains of alteration, mineralisation and lithology. Data validation is conducted by the Project Geologist prior to uploading into the Database. Digital copies of logs are kept in dedicated folders on the Company server and backed up regularly. Audit trail of all changes that occur in the Database can be tracked.
Location of data	No adjustment of calibrations were made to any assay data used in this report.
Location of data points	All drillhole collars are marked and picked up by Evolution mining surveyors using Total stations and Differential Global Position System (DGPS). Downhole surveys are conducted using Reflex digital camera and uploaded into the Database.
	Bench mark and temporary survey stations are checked annually by a third party (Minstaff Survey Pty).
Data spacing and distribution	Drillholes are planned on 50m spaced lines at 25m drill centres. Drillhole spacing was planned to test strike and down dip extensions of the high grade bonanza lodes plunging north-east. Statistical assessment of drill results to date suggest a nominal 25m x 25m drill centres are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures and classifications for the Mt Carlton high sulphidation deposit. No compositing of samples was applied.
Orientation of	Results to date have not identified any bias attributed to sampling orientation.

Criteria	Commentary
geological structure	
Sample security	Chain of custody is managed by Evolution Mining. Core is stacked safely and stored by hole number at a secure compound. Samples are delivered to ALS Townsville laboratory by company personnel or through a third party trucking company. Samples that are delivered after hours to the laboratory facility are stored in locked yards prior to receipt. A reconciliation report is sent via email from the Laboratories acknowledging sample receipt.
Audits or reviews	Internal audits and reviews are conducted by Evolution's Specialist Technical Services Group. Unannounced Laboratory visits and reviews from site personnel form part of a compliance audit. Database and QAQC audit is conducted bi-annually by Evolution Specialist Technical Group.

# Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Mt Carlton Project is covered by Mining Lease ML10343. The ML area covers 1151.9 ha. Native title agreements are in place for activities within the Mining Lease, and surrounding EPMs. ML 10343 is surrounded by a number of EPMs forming the Mt Carlton project area, with ML10343 within EPM10164. The Mt Carlton project currently covers 875km2, the EPM's are in good standing with no significant risk regarding land access which inhibit future work. A royalty agreement is currently in place between Conquest Mining Pty Ltd and Gold Fields Australasia Pty Ltd whose interest has been transferred to Maverick Pty Ltd since January 2017.
Exploration done by other parties	Exploration within the Mt Carlton EPM's and ML10343 commenced in the 1970s, with BHP, Ashton Mining, MIM exploration and others exploring the Capsize Range area within the current EPM10164 for porphyry copper and epithermal styles of mineralisation. In 2006, Conquest Mining discovered the V2 high sulphidation epithermal Au-Cu deposit, and Ag rich A39 deposit, with follow up work within the ML10343.
Geology	The Mt Carlton high sulphidation deposit is located in the Early Permian Lizzie Creek. Mineralisaton is hosted within porphyritic rhyodacite which underlay a package of andesite lavas and fragmental volcanics. Basaltic to andesitic dykes crosscut mineralisation and mirror pre-existing structures. Gold mineralisation at V2 is associated with enargite-tennantite copper and silver minerals.
Drill hole Information	No exploration results have been reported in this release.
Data aggregation methods	No exploration results have been reported in this release.
Relationship between mineralisation widths and intercept lengths	Mt Carlton mineralisation generally trends north east and dips moderately to the west. Brecciated silica ledges which control bonanza lodes dips steeply to the west and plunges north east. These zones are discrete and discontinuous. Mineralised zones are based on interpreted geology and structural trends from drillhole data and pit mapping. No exploration results have been reported in the release.
Diagrams	No exploration results have been reported in the release, therefore no diagrams have been produced.
Balanced reporting	No exploration results have been reported in the release.
Other substantive exploration data	No significant exploration activities have occurred during the reporting period.
Further work	Infill Resource definition is planned to convert Inferred category to Indicated category and to find extensions to mineralisation along strike and down-dip.

# Section 3 Estimation and Reporting of Mineral Resources

Database integrity Data is collected and stored using Maxwell's Datashed™ geological database system. User access	
the database is regulated by specific user permissions, and validation checks and relational steps at part of the process to ensure data remains valid. Routine validation is conducted by site personnel during data importation through the use dedicated import templates with automatic flags for erroneous data. Data management is supported by Evolution's database specialists who conduct routine validation	s to are of tion

Criteria	Commentary
	and historical verification of the data. Regular back-ups of the database is conducted and stored remotely.
Site visits	The Competent Person is a full-time employee of Evolution and based at the Mt Carlton site. The Perth based Evolution Technical Service Group has oversight responsibilities of Mineral Resource estimation and geological modelling activities. They visit site regularly to ensure compliance with Group standards and also in alignment with JORC Code 2012.
Geological interpretation	A high degree of confidence in the geological interpretation supports the Mineral Resource estimate from logged drillholes and mapped open-pit exposures stored in datasets are the basis of geological interpretation. Mineralised domains were defined by wireframes based on a nominal 0.1g/t cut-off generated on 50m sections orientated at 135 degrees azimuth. This orientation aligns with majority of drilling which optimally intercepts mineralisation. Two major domains (East and West) were created based on mineralisation style. Wireframes for lithology, structure and alteration were also created to ensure mineralised domains are well constrained. The deposit was further split into 9 sub domains based on data density, structure, alteration and localised mineralisation trends. This interpretational approach is very robust, aligns with spatial continuity and reduces estimation risk.
	Domain 101       Domain 103         West)       Domain 104         Domain 102 and 201 (west)       Domain 202-205         East)       East)
	The Competent Person deems that the geological model used to define the Mineral Resource estimate is suitable to estimate the global Mineral Resource.
Dimensions	The V2 Deposit forms the eastern limb of a large planar stratiform bounded gently dipping antiform feature. The strike of the V2 Deposit is approximately 1,000m by an average width of 500m and 50m in thickness.
Estimation and modelling techniques	The estimation of the V2 Deposit was made using Surpac <sup>™</sup> software, with OrePack <sup>™</sup> software and Supervisor <sup>™</sup> software. The principal element estimated at V2 is gold (Au) with Ag and Cu estimated as secondary elements of significance. The V2 estimate also includes S.
	The V2 estimate was performed using the Ordinary Kriging (OK) interpolation method for Au, Ag, Cu and S after first differentiating the resource into high grade and low grade zones using categorical indicator kriging (CIK) into a number of mineralised domains. All domain boundaries were based on a nominal 0.1g/t Au cut-off, generated on 50m spaced sections on an orientation of 135 degrees. These zones were further split into grade control drilling dominant, resource drilling dominant, and western and eastern zones.
	The block model was generated and estimated in MGA grid Zone 55.
	Block model (centroids) extents range between 558,200mE to 560,000mE, 7,757,700mN to 7,758,850mN and -250mRL to 250mRL based on block sizes of 10m by 10m by 5m (X, Y and Z). Block sizes are selected to reflect the selective mining unit (SMU) at Mt Carlton and are smaller than the average drill spacing of 25m by 25m.
	The Mineral Resource assay database remained uncomposited with typical sample lengths of 1m providing a dataset of 182,292 composites from 3,881 holes comprising the main elements estimated.
	Top cuts were not used in the high grade zone estimates. In the low grade zone estimates, top cuts were used for gold estimates, based on the gold value that was used to split the domains between high grade and low grade zones. The top-cuts were applied to limit the influence of extreme grades during the estimate.
	Block estimation was performed by three search passes for the OK interpolations. Search parameters were extended and criteria relaxed accordingly with each subsequent search. Search
	22

Criteria	Commentary
	distances were based on the maximum variogram model ranges.
	The OK estimation used a first search with a radius of half of the maximum variogram range which required a minimum of 12 composites and restricted to a maximum of 48 composites. The second pass radius was expanded to the maximum variogram range. The third pass removed the search range with a minimum of 4 composites required.
	Routine validation of the estimate was completed using grade and tonnage comparisons with previous estimates, swath plots, visual inspection and statistical analysis comparing estimated grades with input composite grades.
	Review and validation of the estimate was also completed by Evolution personnel. The estimate process is considered appropriate regarding the assumptions implied by the geological understanding at the time of the estimate.
Moisture	Tonnages are estimated on a dry basis. The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	The cut-off parameter is 0.35g/t Au for V2 open cut and 2.4g/t Au for underground in the stated company Mineral Resource estimate.
	Cut-off parameters are based on Evolution's mining (open-pit) and milling costs. The cut-off reflects the current and anticipated mining strategy and practices.
Mining factors or assumptions	The Mineral Resource is further constrained and reported within an A\$1,800/oz gold optimisation shell for V2 and underground MSO shapes. V2 open-pit Mineral Resources are reported after mining depletion using the surveyed surface for the pit as of the 31st December 2016.
	Current production is by conventional truck and excavator open-pit mining methods with 5m benches taken in two individual 2.5m flitches.
	Block heights are matched to a panel height of 5m which matches the blasted bench height.
	Dilution attributed to the difference of the panel to SMU block size is quantified using Blast movement monitor vectors (BMM's). Ore blasts are monitored by electronic directional transmitter balls which tracks pre and post blast movements. Ore boundaries are translated to reflect measured movement which reduce misclassification. This technology is widely in the mining industry it is developed by Blast Movement Technology.
Metallurgical factors or assumptions	The ore is processed through a bulk sulphide flotation plant. Comprised of the following operational units; primary crusher, SAG mill, pebble crushing, cyclone classification, bulk flotation, concentrate regrind, concentrate thickening, filtration and bagging. It is well tested technology used throughout the world for polymetallic orebodies.
	Deleterious elements are managed operationally through blending to achieve specification set in the smelter off-take agreement.
	The current and estimated future average recoveries at V2 are 91% for Au, 83% for Ag and 94% for Cu.
	Historical metallurgy parameters and operational data are used in the Mineral Resource and Ore Reserve estimation.
	Concentrate is sold to a Chinese smelter company based on an off-take agreement containing recoverable payment terms.
Environmental factors or assumptions	Mt Carlton operates under permitted environmental guidelines with no material concerns defined that will impact the operations viability.
Bulk density	Density values of 2.65t/m <sup>3</sup> were assigned to the model.
	Density has been based on the statistical assessment of a dataset consisting of 23,780 measurements collected from Mineral Resource definition drilling prior to the 2009 Definitive Feasibility Study (DFS). Grab samples are routinely collected from active bench faces to validate modelled density.
	Density measurements were attained using the Archimedes principle technique.
	Density values are deemed appropriate and are validated by routinely collecting samples from active bench faces from the V2 pit.
Classification	The Mineral Resource is stated inclusive of Ore Reserves and depleted to the mined surface as of 31 December 2016 for the V2 pit.
	The classification of Mineral Resources was assigned to groups of blocks based on the density of

Criteria	Commentary
	drilling providing the number of samples and location of samples used to estimate each block; in addition to orebody experience obtained during mining.
	It is the Competent Person's view that the classifications used for the Mineral Resources are appropriate.
Audits or reviews	A review of the Mineral Resource estimate was undertaken by Evolution Technical Service Group.
Discussion of relative accuracy/ confidence	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per guidelines of the 2012 JORC Code.
	The statement relates to global estimates of tonnes and grade.
	Stated Mineral Resources are rounded to 2 significant figures relevant to the accuracy of the estimate.
	The Mineral Resource estimate was compared with production data for the 2016 calendar period and found to routinely be within a $+/-3\%$ tolerance to the reported milled outcome.
	The reconciliation outcome supports the reported confidence and material classification methodology for Mineral Resource as of 31 December 2016.

# Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The estimation of Mineral Resources are outlined in Section 3, however all and Measured and Indicated resource classifications where considered for conversion to Ore Reserves. Mineral Resources are reported inclusive of Ore Reserves.
Site Visits	Regular site visits have been completed throughout the year to gain an understanding of the geological setting, and geotechnical factors applied to the Ore Reserves.
Study Status	A Pre-Feasibility Study (PFS) was undertaken to convert Mineral Resources to underground Ore Reserves. Mt Carlton has been operating since 2012 and as such this PFS focuses on near extensions of the V2 open pit rather that new open pits sources.
Cut-off parameters	Cut-off grades are not used to estimate Ore Reserves, they are more a generalisation of economic areas. There are numerous cut-off values dependent on costs structure applied. A fully costed stoping cut-off grade of 4.2 g/t is representative of a mine cut-off grade. All Ore Reserves are fully costed within an economic model and based on the proportion of operation and/or capital development required for ore extraction. Thus the cut-off grade varies dependent on these factors, and no one cut-off grade has been used for the Ore Reserves estimation.
Mining factors or assumptions	<ul> <li>Mineable panels have been created based on typical 20m level and 15m intervals for a bench stoping mining method which suits the geotechnical parameters.</li> <li>The East zone has a minimum mining width of 5m and maximum stope width of 30m. Whilst the Link zone has a fixed mining width of 10m due to less component argillic material intersecting the upmost level.</li> <li>Geotechnical data has been obtained by logging of core (48 holes), laboratory testing of material properties, structural logging of core and pit mapping of structures. The Pre-Feasibility incorporates a geotechnical component which is the basis for parameters applied.</li> <li>Dilution varies from mine areas based on stope size and zone which ranges from 10% to 15%. Lower grade does surround the mined stopes and as such mining dilution has been given a grade of 0.5g/t A mining recovery factor of 98% is applied for operational recoveries of the ore.</li> </ul>
Metallurgical factors or assumptions	The ore is processed through the Mt Carlton Bulk Sulphide Flotation Concentrator commissioned in 2013 and is comprised of the following unit operations: crushing; ore reclaim; SAG Mill; cyclone classification; bulk flotation and concentrate regrind; concentrate thickening and filtration. This technology is well tested globally for polymetallic orebodies and the successful treatment of Mt Carlton ores. It has been assumed that deleterious elements will be managed operationally to be blended below the limits set in the Chinese smelter off take agreements as performed since the 2013 commissioning.

Criteria	Commentary
	of the processing plant.
	The current and estimated future average recoveries at V2 are 91% for Au, 80% for Ag and 93% for Cu. Recent operating history since commissioning supports the metallurgical parameters used in the Ore Reserve estimation. Detailed metallurgical characterisation test work of V2 extension lodes is in progress to confirm amenability of the existing Mt Carlton flowsheet.
	Concentrate agreements with Chinese smelters to accept gold and silver concentrate contain recoverable payment terms based on concentrate grade. The Ore Reserve has been estimated that the concentrate will deliver above the specification payable grades over the life of the mine.
	Recent operating history since commissioning supports the metallurgical parameters used in the Ore Reserve estimation.
Environmental factors or assumptions	Mt Carlton is current with all environmental approvals and compliant to those conditions set out in such approvals.
Infrastructure	The mine is currently operational. The underground extension does not currently add to the mine life thus infrastructure is adequate to support future operation.
Costs	Costs were derived from a 'bottom up' cost model which can be used for budgeting purposes. The costs were validated against a contractor's fixed and variable schedule and found to be in the required order of accuracy for a Pre-Feasibility study. State Royalties - 5%; Third party royalty – 2.5%
Revenue factors	Revenue is calculated using a gold price of A\$1,350/oz, silver price of \$20/oz and copper price of A\$6,000/t and A\$9,000/t for Mineral Resource
Market assessment	Gold and silver concentrate is sold to Chinese smelters under commercial agreements. These agreements are for life of mine terms.
Economic	The Ore Reserves have been economically evaluated through a standard financial model. All operating and capital costs as well as revenue factors were included in the financial model. This process has demonstrated that the Ore Reserves for the underground operation has a positive NPV.
Social	Currently have agreements with Traditional Owners and on good terms with neighbouring pastoralists.
Classification	Classification of each panel is assessed on the proportion of metal in each resource classification. If the metal in the panel is greater than 50% Measured then it is classified as a Proven Ore Reserve. For stope panels greater than 50% Measured and Indicated it is classified as a Probable Ore Reserve. Stope panels that have greater than 50% of Inferred material are excluded from the Ore Reserve estimate.
	This process leads to some Inferred Resources being included in the Ore Reserve estimate as they will be mined as part of the Ore Reserve panels. This amount is less than 5% of the Ore Reserve estimate.
Audits or reviews	Internal peer review by Evolution personnel has been conducted in accordance with Evolution's standards which confirms the stated Ore Reserve and supports the estimation parameters applied. This Ore Reserve has not been audited externally.
Discussion of relative accuracy/ confidence	The accuracy of the estimates within this Ore Reserve are mostly determined by the order of accuracy associated with the Mineral Resource model, the metallurgical input and the long term cost adjustment factors used.
	In the opinion of the Competent Person, the modifying factors and long term cost assumptions used in the Ore Reserve estimate are reasonable.