Resolute

Annual Ore Reserve and Mineral Resource Statement

as at 31 December 2018

13 February 2019

Resolute maintains class-leading Gold inventory

Mineral Resources of 17Moz

Ore Reserves of 6Moz

Highlights

- Resolute's Ore Reserves and Mineral Resources as at 31 December 2018, net of mining and stockpile depletion, have been maintained
- Global Ore Reserves of **5.8Moz** of gold
  - 21% increase in Buck Reef West reserves to 636,000oz
- Global Mineral Resources of **16.6Moz** of gold
  - Incremental resource increases at Buck Reef West and Syama
  - Managed Mineral Resources at Syama, Ravenswood and Bibiani total 15.2Moz of gold
  - Attributable Mineral Resources from equity investments of 1.4Moz of gold
- Discovery cost of A$33 per Reserve ounce and A$19 per Resource ounce

Resolute Mining Limited (ASX: RSG, Resolute or the Company) is pleased to announce the Company's Annual Ore Reserve and Mineral Resource Statement as at 31 December 2018. Global Ore Reserves have been maintained at 5.8 million ounces (Moz) of gold and Global Mineral Resources have been maintained at 16.6Moz of gold. Global Ore Reserves and Global Mineral Resources include, on a 100% basis, gold inventories managed and controlled by Resolute (referred to below as Managed Ore Reserves and Managed Mineral Resources respectively) and, on an attributable basis, gold inventories held within the Company's strategic equity investments. These balances are consistent with the Company's previously published position as at 30 June 2018 (see ASX Announcement dated 16 August 2018).

A detailed breakdown of the Company's Ore Reserves and Mineral Resources as at 31 December 2018 is presented in the tables below. The 2018 Annual Ore Reserve Statement is included at Table 4 and the 2018 Annual Mineral Resource Statement is included at Table 5. On a fully attributable basis, recognising Resolute's direct share as at 31 December 2018, the Company held Ore Reserves of 5.1Moz and Mineral Resources of 14.8Moz.

Managing Director and CEO, Mr John Welborn, was pleased to confirm Resolute's updated Ore Reserves and Mineral Resources Statement maintained the Company's peer group leading gold inventory:

"Resolute's Ore Reserves and Mineral Resources at Syama, Ravenswood and Bibiani underpin our focus on long life mines and support our ambition to produce more than 500,000 ounces of gold annually. Our investment in exploration continues to create value by increasing the range and quality of our mineral resources. Resolute is a profitable dividend paying gold miner with a unique and growing gold inventory."

"Resolute controls six million ounces of gold in Ore Reserves which are located immediately beneath existing mills and processing plants which we own and operate with strong recoveries. The Company is commissioning the world's first, purpose built, fully automated sublevel cave gold mine at Syama which will be powered by the world's largest site-based hybrid power plant. The ongoing expansion of our gold reserves and resources, coupled with successful implementation of industry leading technologies, will provide opportunities for growth in production and greater gold value per Resolute share."

"Our currently budgeted investment in exploration in Mali at Tabakoroni and Nafolo is expected to result in further growth in Resolute's gold reserves and resources."

Ore Reserves

MANAGED ORE RESERVES (100% BASIS)									
ORE RESERVES	PROVED			PROBABLE			TOTAL RESERVES		
As at December 2018	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)
Syama	2,830	2.4	220	39,580	2.5	3,180	42,410	2.5	3,410
Ravenswood	33,030	0.7	780	36,850	0.8	960	69,880	0.8	1,730
Bibiani				6,400	3.3	660	6,400	3.3	660
Managed Ore Reserves	**35,860**	**0.9**	**1,000**	**82,830**	**1.8**	**4,800**	**118,690**	**1.5**	**5,800**

Table 1: Managed Ore Reserves

Managed Ore Reserves at 31 December 2018, on a 100% basis, have been maintained at 5.8Moz after accounting for small increases in Ore Reserves at Ravenswood and Bibiani as well as mining and stockpile depletion at Syama and Ravenswood of 129,200oz. Resolute's asset ownership is 100% of Ravenswood, 80% of Syama (Mali Government 20%), 90% of Tabakoroni (Mali Government 10%) and 90% of Bibiani (Ghana Government 10%). As such, the Company's fully attributable Managed Ore Reserves position, net Government interests is 5.1Moz of gold.

In Mali, mining commenced at Tabakoroni in October 2018 with open pits planned to exploit the oxide and transitional Ore Reserves. Processing of stockpiles at Syama, along with mining from the Syama Underground Mine contributed to minor depletion of the Syama Sulphide Ore Reserves.

At Ravenswood in Australia, following an extensive infill drilling program at Buck Reef West, an updated resource estimation was undertaken which resulted in an increase in overall Mineral Resources and the upgrading of Inferred Mineral Resources to the Indicated category. The increased Measured and Indicated Mineral Resources at Buck Reef West corresponded with a 21% increase in open pit Ore Reserves to 636,000oz. Ore Reserves at Sarsfield were marginally reduced following pit re-optimisations and design changes related to the Ravenwood Expansion Project study update (see ASX Announcement dated 11 July 2018).

At Bibiani in Ghana, the Ore Reserves increased marginally relative to the previously published position following design changes related to the updated Bibiani study (see ASX Announcement dated 13 July 2018).

Mineral Resources

MANAGED MINERAL RESOURCES (100% BASIS)												
MINERAL RESOURCES	MEASURED			INDICATED			INFERRED			TOTAL RESOURCES		
As at December 2018	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	Oz (000s)	Tonnes (000s)	g/t	oz (000s)
Syama	12,920	3.0	1,250	58,900	2.9	5,480	27,320	1.3	1,170	99,140	2.5	7,900
Ravenswood	44,380	0.8	1,190	75,050	0.9	2,110	66,950	0.7	1,460	186,380	0.8	4,760
Bibiani				13,260	3.5	1,490	8,440	3.7	1,010	21,690	3.6	2,500
Managed Mineral Resources	**57,300**	**1.3**	**2,450**	**147,210**	**1.9**	**9,080**	**102,710**	**1.1**	**3,640**	**307,210**	**1.5**	**15,170**

Table 2: Managed Mineral Resources

Managed Mineral Resources (inclusive of Managed Ore Reserves) at 31 December 2018, on a 100% basis, is 15.2Moz of gold. The Company's fully attributable Managed Mineral Resources position, net of Government interests is 13.4Moz

of gold. Mineral Resources were maintained from the previously published position as at 30 June 2018 following incremental increases at Syama and Buck Reef West.

In Mali, ongoing drilling programs at Syama and Nafolo are increasing the mineralisation footprint and the overall Mineral Resource is routinely re-estimated with the most recent version completed since the previously published statement dated 30 June 2018. The Mineral Resource at Syama and Nafolo is 6.1Moz which is an increase of 200,000oz relative to 30 June 2018. Mineral Resources for Tabakoroni remain unchanged apart from mining depletion. An updated Mineral Resource estimate for Tabakoroni is scheduled for completion in Q1 CY2019.

At Ravenswood, extensive infill drilling at Buck Reef West led to a 7% increase in Mineral Resources to 1.5Moz of gold. This updated Mineral Resource estimate contributed to a 19% increase in Measured and Indicated Resources to 1.3Moz of gold.

Strategic Equity Investments

Resolute has built a portfolio of investments in emerging African gold explorers with a view to expanding its project pipeline and providing a source of medium-term growth opportunities. Resolute holds a 15.8% interest in Orca Gold Inc, a 27% interest in Loncor Resources Inc, and a 27% interest in Kilo Goldmines Inc. On a 100% basis, the Mineral Resources of these companies are 4.1Moz, 1.2Moz and 1.7Moz respectively. Based on its attributable equity interest in these companies, Resolute's proportionate share of these Mineral Resources is 1.4Moz.

MINERAL RESOURCES FROM STRATEGIC EQUITY INVESTMENTS

MINERAL RESOURCES	MEASURED			INDICATED			INFERRED			TOTAL RESOURCES		
As at December 2018	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)	Tonnes (000s)	g/t	oz (000s)
Orca Gold (100%)				79,900	1.3	3,340	18,500	1.2	710	98,400	1.3	4,050
Resolute Share (16%)				**12,620**	**1.3**	**530**	**2,920**	**1.2**	**110**	**15,550**	**1.3**	**640**
Loncor Resources (100%)				2,200	8.7	610	3,200	5.3	550	5,400	6.7	1,160
Resolute Share (27%)				**590**	**8.7**	**170**	**860**	**5.3**	**150**	**1,460**	**6.7**	**310**
Kilo Goldmines (100%)							20,800	2.5	1,670	20,800	2.5	1,670
Resolute Share (27%)							**5,620**	**2.5**	**450**	**5,620**	**2.5**	**450**
Total Attributable to Resolute				**13,220**	**1.6**	**690**	**9,400**	**2.4**	**710**	**22,620**	**1.9**	**1,410**

Table 3: Mineral Resources from Strategic Equity Investments

Global Mineral Resources

Resolute's Global Mineral Resources, taking into account its Managed Mineral Resources and its attributable Mineral Resources from its strategic equity investments is 16.6Moz of gold.

Exploration Budget and Discovery Cost

Resolute's total investment in exploration and discovery since 2010 has been A$193m. Based on increases during this period in Ore Reserves of 2.9Moz and in Mineral Resources of 7.0Moz, and production of 2.9Moz of gold, Resolute's historical discovery cost over this period has been calculated as A$33 per Reserve ounce and A$19 per Resource ounce.

Ore Reserves Statement

ORE RESERVES STATEMENT										
ORE RESERVES	**PROVED**			**PROBABLE**			**TOTAL RESERVES**			**Group Share**
As at December 2018	**Tonnes (000s)**	**g/t**	**oz (000s)**	**Tonnes (000s)**	**g/t**	**oz (000s)**	**Tonnes (000s)**	**g/t**	**oz (000s)**	**oz (000s)**
Australia										**100%**
Sarsfield	31,530	0.7	720	18,250	0.7	360	49,780	0.7	1,080	1,080
Buck Reef West	970	1.3	40	18,590	1.0	600	19,570	1.0	640	640
Stockpiles (O/C)	360	0.6	10	10	1.6	0	370	0.6	10	10
Sub Total O/C	**32,860**	**0.7**	**760**	**36,850**	**0.8**	**960**	**69,720**	**0.8**	**1,720**	**1,720**
Mt Wright	160	2.2	10	0	0.0	0	160	2.2	10	10
Stockpiles (UG)	0	0.0	0	0	0.0	0	0	0.0	0	0
Sub Total UG	**160**	**2.2**	**10**	**0**	**0.0**	**0**	**160**	**2.2**	**10**	**10**
Australia Total	**33,030**	**0.7**	**780**	**36,850**	**0.8**	**960**	**69,880**	**0.8**	**1,730**	**1,730**
Mali										**80%**
Syama Underground	0	0.0	0	35,040	2.7	2,980	35,040	2.6	2,980	2,390
Syama Stockpiles	100	2.5	10	2,270	1.3	100	2,360	1.4	100	80
Sub Total (Sulphides)	**100**	**2.5**	**10**	**37,310**	**2.6**	**3,080**	**37,410**	**2.6**	**3,090**	**2,470**
Satellite Deposits	0	0.0	0	0	0.0	0	0	0.0	0	0
Stockpiles (satellite deposits)	970	1.4	40	1,630	1.1	60	2,600	1.2	100	80
Sub Total Satellite Deposits	**970**	**1.4**	**40**	**1,630**	**1.1**	**60**	**2,600**	**1.2**	**100**	**80**
										90%
Tabakoroni	1,450	3.2	150	640	2.4	50	2,090	3.0	200	180
Tabakoroni Stockpiles	320	2.1	20	0	0.0	0	320	2.1	20	20
Sub Total Tabakoroni	**1,770**	**3.0**	**170**	**640**	**2.4**	**50**	**2410**	**2.8**	**220**	**200**
Mali Total	**2,830**	**2.4**	**220**	**39,580**	**2.5**	**3,180**	**42,410**	**2.5**	**3,410**	**2,750**
Ghana										**90%**
Bibiani	0	0.0	0	6,400	3.3	660	6,400	3.3	660	590
Ghana Total	**0**	**0.0**	**0**	**6,400**	**3.3**	**660**	**6,400**	**3.3**	**660**	**590**
Total Ore Reserves	**35,860**	**0.9**	**1,000**	**82,830**	**1.8**	**4,800**	**118,690**	**1.5**	**5,800**	**5,070**

Table 4: Ore Reserves Statement as at 31 December 2018

Notes:

1. *Mineral Resources include Ore Reserves. Differences may occur due to rounding.*
2. *Reserves at Buck Reef West and Sarsfield are reported above 0.4 g/t cut off.*
3. *Mt Wright Reserves are reported above 2.3 g/t cut off.*
4. *Bibiani Reserves are reported above 2.75 g/t cut off.*
5. *Syama Underground Reserves are reported above 1.9 g/t cut off.*
6. *Tabakoroni Reserves are reported above 1.1g/t.*
7. *Syama Reserves are based on August 2017 Resource model.*

Mineral Resources Statement

MINERAL RESOURCES STATEMENT													
MINERAL RESOURCES	MEASURED			INDICATED			INFERRED			TOTAL RESOURCES			Group Share
As at December 2018	Tonnes	g/t	oz	Tonnes	g/t	oz	Tonnes	g/t	oz	Tonnes	g/t	oz	oz
	(000s)		(000s)	(000s)		(000s)	(000s)		(000s)	(000s)		(000s)	(000s)
Projects where Resolute has a controlling interest													
Australia													100%
Sarsfield	43,250	0.8	1,120	38,500	0.7	880	22,080	0.7	520	103,830	0.8	2,520	2,520
Buck Reef West	830	1.5	40	36,550	1.0	1,220	8,660	1.0	280	46,040	1.0	1,540	1,540
Sarsfield Mineralised Waste	0	0.0	0	0	0.0	0	33,700	0.4	400	33,700	0.4	400	400
Sub Total O/C	**44,090**	**0.8**	**1,160**	**75,040**	**0.9**	**2,110**	**64,440**	**0.6**	**1,200**	**183,570**	**0.8**	**4,460**	**4,460**
Mt Wright	290	3.6	30	0	0.0	0	470	3.6	60	770	3.7	90	90
Welcome Breccia	0	0.0	0	0	0.0	0	2,040	3.2	210	2,040	3.2	210	210
Stockpiles (UG)	0	0.0	0	10	1.6	0	0	0.0	0	10	1.6	0	0
Sub Total UG	**290**	**3.6**	**30**	**10**	**1.6**	**0**	**2,510**	**3.3**	**260**	**2,810**	**3.3**	**300**	**300**
Australia Total	**44,380**	**0.8**	**1,190**	**75,050**	**0.9**	**2,110**	**66,950**	**0.7**	**1,460**	**186,380**	**0.8**	**4,760**	**4,760**
Mali													80%
Syama Underground	8,740	3.3	930	44,390	3.2	4,580	5,650	2.8	500	58,780	3.2	6,010	4,810
Stockpiles (sulphide)	100	2.5	10	2,270	1.3	100	0	0.0	0	2,360	1.4	100	80
Sub Total (Sulphides)	**8,840**	**3.3**	**930**	**46,660**	**3.1**	**4,680**	**5,650**	**2.8**	**500**	**61,140**	**3.1**	**6,110**	**4,890**
Satellite Deposits	0	0.0	0	6,840	2.1	460	1,450	2.2	100	8,290	2.1	560	450
Stockpiles (satellite deposits)	970	1.4	40	1,630	1.1	60	50	1.1	0	2,650	1.2	100	80
Sub Total Satellite Deposits	**970**	**1.4**	**40**	**8,470**	**1.9**	**520**	**1,500**	**2.1**	**100**	**10,940**	**1.9**	**660**	**530**
Old Tailings	0	0.0	0	0	0.0	0	17,000	0.7	370	17,000	0.7	370	290
													90%
Tabakoroni	2,800	2.9	260	3,770	2.2	280	3,180	2.0	200	9,740	2.4	740	660
Tabakoroni Stockpiles	320	2.1	20	0	0	0	0	0	0	320	2.1	20	20
Sub Total Tabakoroni	3,120	2.8	280	3,770	2.2	280	3,180	2.0	200	10,060	2.3	760	680
Mali Total	**12,920**	**3.0**	**1,250**	**58,900**	**2.9**	**5,480**	**27,320**	**1.3**	**1,170**	**99,140**	**2.5**	**7,900**	**6,400**
Ghana													90%
Bibiani	0	0.0	0	13,260	3.5	1,490	8,440	3.7	1,010	21,690	3.6	2,500	2,250
/Ghana Total	**0**	**0.0**	**0**	**13,260**	**3.5**	**1,490**	**8,440**	**3.7**	**1,010**	**21,690**	**3.6**	**2,500**	**2,250**
Controling Interest Total	**57,300**	**1.3**	**2,450**	**147,210**	**1.9**	**9,080**	**102,710**	**1.1**	**3,640**	**307,210**	**1.5**	**15,170**	**13,410**
Projects where Resolute has an equity interest													
Sudan													16%
Galat Sufar South	0	0.0	0	11,940	1.3	490	2,670	1.2	100	14,620	1.3	590	590
Wadi Doum	0	0.0	0	680	2.1	40	250	1.3	10	930	1.7	50	50
Sudan Total	**0**	**0.0**	**0**	**12,620**	**1.3**	**530**	**2,920**	**1.2**	**110**	**15,550**	**1.3**	**640**	**640**
DRC (Loncor)													27%
Makapela	0	0.0	0	590	8.7	170	860	5.3	150	1,460	6.7	310	310
DRC (Kilo)													27%
Adumbi	0	0.0	0	0	0.0	0	5,620	2.5	450	5,620	2.5	450	450
DRC Total	**0**	**0.0**	**0**	**590**	**8.7**	**170**	**6,480**	**2.9**	**600**	**7,080**	**3.4**	**760**	**760**
Equity Interest Total	**0**	**0.0**	**0**	**13,210**	**1.6**	**700**	**9,400**	**2.4**	**710**	**22,630**	**1.9**	**1,400**	**1,400**
Total Resolute Resources													
Total Mineral Resources	**57,300**	**1.3**	**2,450**	**160,430**	**1.9**	**9,770**	**112,110**	**1.2**	**4,360**	**329,830**	**1.6**	**16,570**	**14,820**

Table 5: Mineral Resources Statement as at 31 December 2018

Notes:

1. *Mineral Resources include Ore Reserves. Differences may occur due to rounding.*
2. *Resources are reported above 0.4 g/t cut-off for Sarsfield and Buck Reef West.*
3. *Mt Wright Resources are reported above 1.8 g/t cut off.*
4. *Syama Underground Resources quoted above 1.5g/t cut off.*
5. *Resources for Satellite deposits are reported above a cut off of 1.5g/t.*
6. *Resources for the Tabakoroni Open Pit are reported above a cut off of 1.0g/t.*
7. *Bibiani Resources are reported above 2.0 g/t cut off.*
8. *Galat Sufar South resources reported above a 0.6g/t cut-off.*
9. *Wadi Doum resources reported above a 0.6g/t cut-off.*
10. *Makapela resources reported above a 2.75g/t cut-off.*
11. *Adumbi resources reported above a 0.9g/t cut-off.*
12. *Mineral Resources held by Orca Gold, Loncor and Kilo Gold are reported as NI43-101 compliant estimates.*

Competent Persons Statement

The information in this announcement that relates to data quality, geological interpretation and Mineral Resource estimation for the various projects unless specified in the list below is based on information compiled by Bruce Mowat, a Competent Person who is a Member of the Australian Institute of Geoscientists and a full-time employee of Resolute Corporate Services Pty Ltd, a wholly-owned subsidiary of Resolute Mining Limited. Mr Mowat has sufficient experience that is relevant to the styles of mineralisation and type of deposits under consideration and to the activity being undertaken as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012). Mr Mowat consents to the inclusion in this announcement of the material compiled by him in the form and context in which it appears. The information in this statement that relates to the Mineral Resources and Ore Reserves listed below is based on information and supporting documents prepared by the Competent Person identified. Each person specified in the list has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Mr Bignell is a full-time employee of Resolute Corporate Services Pty Ltd, a wholly-owned subsidiary of Resolute Mining Limited. Mr Long and Mr Mackay are is a full-time employees of Carpentaria Gold Pty Ltd, a wholly-owned subsidiary of Resolute Mining Limited. Mr Johnson is a full-time employee of MPR Geological Consultants Pty Ltd. Mr Millbank is a full-time employee of Proactive Mining Solutions. Mr Cervoj and Ms Havlin are employees of Optiro Pty Ltd. Mr David Lee is a full-time employee of AMC Consultants Pty Ltd. Each person identified in the list below consents to the inclusion in this announcement of the material compiled by them in the form and context in which it appears.

Activity	Competent Person	Membership Institution
Syama Resource	Susan Havlin	Australasian Institute of Mining and Metallurgy
Syama Reserve	Ian Bignell	Institute of Materials, Minerals and Mining
Syama Satellites Resource	Nic Johnson	Australian Institute of Geoscientists
Syama Tailings Facility	Susan Havlin	Australasian Institute of Mining and Metallurgy
Mt Wright Resource	Nic Johnson	Australian Institute of Geoscientists
Mt Wright Reserve	Stuart Long	Australasian Institute of Mining and Metallurgy
Welcome Resource	Nic Johnson	Australian Institute of Geoscientists
Buck Reef West Resource	Susan Havlin	Australian Institute of Geoscientists
Buck Reef West Reserve	John Millbank	Australasian Institute of Mining and Metallurgy
Sarsfield Reserve	David Mackay	Australasian Institute of Mining and Metallurgy
Sarsfield Resource	Nic Johnson	Australian Institute of Geoscientists
Nolans East Reserves	John Millbank	Australasian Institute of Mining and Metallurgy
Bibiani Resource	Kahan Cervoj	Australasian Institute of Mining and Metallurgy
Bibiani Reserve	David Lee	Australasian Institute of Mining and Metallurgy
Tabakoroni Resource	Nic Johnson	Australian Institute of Geoscientists
Tabakoroni Reserves	Ian Bignell	Institute of Materials, Minerals and Mining
Sarsfield Mineralised Waste	Susan Havlin	Australasian Institute of Mining and Metallurgy

For further information, contact:

John Welborn
Managing Director & CEO

Jeremy Meynert
General Manager – Business Development & Investor Relations

ASX:RSG Capital Summary

Fully Paid Ordinary Shares: 758,094,588
Current Share Price:
A$1.07 as at 12 February 2019
Market Capitalisation:
A$807 million
FY19 Guidance (to 30 June):
300,000oz @ AISC US$960/oz (A$1,280/oz)

Board of Directors

Mr Martin Botha *Non-Executive Chairman*
Mr John Welborn *Managing Director & CEO*
Ms Yasmin Broughton *Non-Executive Director*
Mr Mark Potts *Non-Executive Director*
Ms Sabina Shugg *Non-Executive Director*
Mr Peter Sullivan *Non-Executive Director*

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Appendix

ORE RESERVES COMPARISON TO 30 JUNE 2018											
Reserves and Resources comply with the Australasian Code for Reporting of Mineral Resources and Reserves (The JORC Code 2004 and JORC Code 2012)											
ORE RESERVES	Dec-18					Jun-18					
	Tonnes (000s)	Gold grade (g/t)	Ounces (000s)	Group Share %	Group Share Ounces	Tonnes (000s)	Gold grade (g/t)	Ounces (000s)	Group Share %	Group Share Ounces	Comment on Changes
	Proved					Proved					
Australia											
Mt Wright	160	2.2	10	100%	10	170	2.7	10	100%	10	Depletion due to mining
Sarsfield	31,530	0.7	720	100%	720	28,450	0.8	750	100%	750	New Optimisation
Nolans East	0	0.0	0	100%	0	350	0.7	10	100%	10	Depletion due to mining
Stockpiles (O/C)	360	0.6	10	100%	10	660	0.6	10	100%	10	Movement in operating stockpiles
Buck Reef West	970	1.3	40	100%	40	13,650	0.9	400	100%	400	New Reserve
Mali											
Syama Stockpiles (sulphide)	100	2.5	10	80%	10	30	1.8	0	80%	0	Movement in operating stockpiles
Satellite Deposits	0	0.0	0	80%	0	0	0.0	0	80%	0	No change
Stockpiles (satellite deposits)	970	1.4	40	80%	30	960	1.9	60	80%	50	Movement in operating stockpiles
Tabakoroni	1,450	3.2	150	90%	140	1,830	3.1	190	85%	160	Depletion due to mining
Tabakoroni Stockpiles	320	2.1	20	90%	20	0	0.0	0	90%	0	Movement in operating stockpiles
Total Proved	35,860	0.9	1,000		970	46,100	1.0	1,430		1,390	
	Probable					Probable					Comment on Changes
Australia											
Mt Wright	0	0.0	0	100%	0	0	0.0	0	100%	0	
Mt Wright Stockpiles	0	0.0	0	100%	0	0	0.0	0	100%	0	No change
Sarsfield	18,250	0.7	360	100%	360	18,640	0.7	420	100%	420	New Optimisation
Nolans East	0	0.0	0	100%	0	0	0.0	0	100%	0	No change
Stockpiles (O/C)	10	1.6	0	100%	0	10	2.3	0	100%	0	Movement in operating stockpiles
Buck Reef West	18,590	1.0	600	100%	600	4,670	0.8	120	100%	120	New Reserve
Mali											
Syama Underground	35,040	2.7	2,980	80%	2,390	35,200	2.7	3,000	80%	2,400	Depletion due to mining
Syama Stockpiles (sulphide)	2,270	1.3	100	80%	80	2,560	1.3	110	80%	90	Movement in operating stockpiles
Satellite Deposits	0	0.0	0	80%	0	0	0.0	0	80%	0	No change
Stockpiles (satellite deposits)	1,630	1.1	60	80%	50	2,440	1.3	100	80%	80	Movement in operating stockpiles
Tabakoroni	640	2.4	50	90%	40	860	2.4	70	85%	60	Depletion due to mining
Ghana											
Bibiani	6,400	3.3	660	90%	590	5,480	3.7	640	90%	580	New Reserve
Total Probable	82,830	1.8	4,800		4,100	69,850	2.0	4,470		3,750	
Total Reserves	118,690	1.5	5,800		5,070	115,950	1.6	5,900		5,140	

Appendix Table 1: Ore Reserves Comparison – 31 December 2018 to 30 June 2018

Notes:

1. *Mineral Resources include Ore Reserves. Differences may occur due to rounding.*
2. *Reserves are reported above 0.4 g/t cut-off for Sarsfield and Buck Reef West.*
3. *Mt Wright Reserves are reported above 2.3 g/t cut off.*
4. *Syama Underground Reserves are reported above 1.9 g/t.*
5. *Tabakoroni Reserves are reported above 1.10 g/t.*
6. *Bibiani Reserves are reported above 2.75 g/t.*
7. *Syama Reserves are based on August 2017 Resource model.*

MINERAL RESOURCES COMPARISON TO 30 JUNE 2018

MINERAL RESOURCES	Dec-18					Jun-18					
	Tonnes (000s)	Gold grade (g/t)	Ounces (000s)	Group Share %	Group Share Ounces	Tonnes (000s)	Gold grade (g/t)	Ounces (000s)	Group Share %	Group Share Ounces	
	Measured					**Measured**					**Comment on Changes**
Australia											
Mt Wright	290	3.6	30	100%	30	310	3.5	40	100%	40	Depletion due to mining
Sarsfield	43,250	0.8	1,120	100%	1,120	43,590	0.8	1,130	100%	1,130	Depletion due to mining Nolans East
Buck Reef West	830	1.5	40	100%	40	18,400	0.9	530	100%	530	New Resource
Mali											
Syama Underground	8,740	3.3	930	80%	740	0	0.0	0	80%	0	New Resource
Syama stockpiles (sulphide)	100	2.5	10	80%	10	30	1.8	0	80%	0	Movement in operating stockpiles
Satellite Deposits	0	0.0	0	80%	0	0	0.0	0	80%	0	No change
Stockpiles (satellite deposits)	970	1.4	40	80%	30	960	1.9	60	80%	50	Movement in operating stockpiles
Tabakoroni	2,800	2.9	260	90%	230	3,190	2.9	290	90%	260	Depletion due to mining
Tabakoroni Stockpiles	320	2.1	20	90%	20	0	0.0	0	90%	0	Movement in operating stockpiles
Total Measured	57,300	1.3	2,450		2,220	66,480	1.0	2,050		2,000	
	Indicated					**Indicated**					**Comment on Changes**
Australia											
Mt Wright	0	0.0	0	100%	0	0	0.0	0	100%	0	
Stockpiles (UG)	10	1.6	0	100%	0	10	2.3	0	100%	0	Movement in operating stockpiles
Sarsfield	38,500	0.7	880	100%	880	38,500	0.7	880	100%	880	No change
Buck Reef West	36,550	1.0	1,220	100%	1,220	20,400	0.8	530	100%	530	New Resource
Mali											
Syama Underground	44,390	3.2	4,580	80%	3,670	45,700	3.2	4,800	80%	3,840	New Resource
Syama stockpiles (sulphide)	2,270	1.3	100	80%	80	2,560	1.3	110	80%	90	Movement in operating stockpiles
Satellite Deposits	3,880	2.4	300	80%	240	3,880	2.4	300	80%	240	No change
Stockpiles (satellite deposits)	1,630	1.1	60	80%	50	2,440	1.3	100	80%	80	Movement in operating stockpiles
Tellem	1,770	1.9	110	80%	90	1,770	1.9	110	80%	90	No change
Paysans	1,200	1.5	60	80%	40	1,200	1.5	60	80%	40	No change
Tabakoroni	3,770	2.2	280	90%	250	3,990	2.2	280	90%	250	Depletion due to mining
Ghana											
Bibiani	13,260	3.5	1,490	90%	1,340	13,260	3.5	1,490	90%	1,340	No Change
Sudan											
Galat Sufar South	11,940	1.3	490	16%	490	11,600	1.3	470	17%	470	New Resource
Wadi Doum	680	2.1	40	16%	40	530	2.1	40	17%	40	New Resource
DRC											
Makapela	590	8.7	170	27%	170	590	8.7	170	27%	170	No change
Total Indicated	160,430	1.9	9,770		8,550	146,410	2.0	9,330		8,060	

MINERAL RESOURCES COMPARISON TO 30 JUNE 2018											
MINERAL RESOURCES	Dec-18					Jun-18					
	Tonnes	Gold grade	Ounces	Group Share	Group Share	Tonnes	Gold grade	Ounces	Group Share	Group Share	
	(000s)	(g/t)	(000s)	%	Ounces	(000s)	(g/t)	(000s)	%	Ounces	
	Inferred					Inferred					Comment on Changes
Australia											
Mt Wright	470	3.6	60	100%	60	740	3.0	70	100%	70	Depletion due to mining
Sarsfield	22,080	0.7	520	100%	520	22,080	0.7	520	100%	520	No change
Buck Reef West	8,660	1.0	280	100%	280	17,000	0.7	380	100%	380	New Resource
Welcome Breccia	2,040	3.2	210	100%	210	2,040	3.2	210	100%	210	No change
Waste Dump	33,700	0.4	400	100%	400	33,700	0.4	400	100%	400	No change
Mali											
Syama Underground	5,650	2.8	500	80%	400	11,500	3.1	1,100	80%	880	New Resource
Satellite Deposits	510	2.5	40	80%	30	510	2.5	40	80%	30	No change
Stockpiles (satellite deposits)	50	1.1	0	80%	0	60	1.4	0	80%	0	Movement in operating stockpiles
Tellem	400	2.5	40	80%	30	400	2.5	40	80%	30	No change
Paysans	550	1.5	30	80%	20	550	1.5	30	80%	20	No change
Tabakoroni	3,180	2.0	200	90%	180	3,250	2.0	210	90%	180	Depletion due to mining
Tailings Storage Facility	17,000	0.7	370	80%	290	17,000	0.7	370	80%	290	No change
Ghana											
Bibiani	8,440	3.7	1,010	90%	910	8,440	3.7	1,010	90%	910	No Change
Sudan											
Galat Sufar South	2,670	1.2	100	16%	100	2,970	1.2	110	17%	110	New Resource
Wadi Doum	250	1.3	10	16%	10	340	1.3	10	17%	10	New Resource
DRC											
Makapela	860	5.3	150	27%	150	860	5.3	150	27%	150	No change
Adumbi	5,620	2.5	450	27%	450	5,620	2.5	450	27%	450	No change
Total Inferred	112,110	1.2	4,360		4,040	127,040	1.2	5,090		4,660	
Total Resources	329,830	1.6	16,570		14,820	339,930	1.5	16,470		14,720	

Appendix Table 2: Mineral Resources Comparison – 31 December 2018 to 30 June 2018

Notes:

1. *Mineral Resources include Ore Reserves. Differences may occur due to rounding.*
2. *Resources are reported above 0.4 g/t cut-off for Sarsfield and Buck Reef West and Nolans East.*
3. *Mt Wright Resources are reported above 1.8 g/t cut off.*
4. *Syama Underground Resources quoted above 1.5g/t cut off.*
5. *Resources for Satellite deposits are reported above a cut off of 1.5g/t.*
6. *Resources for the Tabakoroni Open Pit are reported above a cut off of 1.0g/t.*
7. *Bibiani Resources are reported above 2.0 g/t cut off.*
8. *Galat Sufar South resources reported above a 0.6g/t cut-off.*
9. *Wadi Doum resources reported above a 0.6g/t cut-off.*
10. *Makapela resources reported above a 2.75g/t cut-off.*
11. *Adumbi resources reported above a 0.9g/t cut-off.*
12. *Mineral Resources held by Orca Gold, Loncor and Kilo Gold are reported as NI43-101 compliant estimates.*

JORC Code, 2012 Edition – Table 1 Report

Syama Gold Mine

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (e.g. '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. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	The mineral resource estimate was based on data collected from reverse circulation (RC) and diamond core (DD) drill holes completed by Resolute Mining Limited (2003-2017), Randgold Resources Ltd (1996-2000) and BHP (1987-1996). Diamond core was sampled at 1m intervals and cut in half, to provide a 2-4kg sample, which was sent to the laboratory for crushing, splitting and pulverising, to provide a 30g charge for analysis. RC samples were collected on 1m intervals via a cyclone by riffle split (dry), or by scoop (wet), to obtain a 2-4kg sample which was sent to the laboratory for crushing, splitting and pulverising to provide a 30g charge for analysis. Resolute sampling and sample preparation protocols are industry standard and are deemed appropriate by the Competent Person. The Randgold and BHP diamond core and RC samples were taken on 1m intervals. Due to the historical nature of the data sampling protocols are not known.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	Drill types used include diamond core of HQ and NQ sizes. Core is oriented at 3m down hole intervals using a Reflex Act II RD Orientation Tool and more recently using a Reflex north seeking gyro instrument.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	Drill core interval recoveries are measured from core block to core block using a tape measure. Appropriate measures are taken to maximise sample recovery and ensure representative nature of the samples. No apparent relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	Drill holes were geologically logged by geologists for colour, grainsize, lithology, minerals, alteration and weathering on geologically domained intervals. Geotechnical and structure orientation data was measured and logged for all diamond core intervals. Diamond core was photographed (wet and dry). Holes were logged in their entirety (100%) and this logging was considered reliable and appropriate.
Sub-sampling techniques	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether*	Diamond core were sampled at 1m intervals and cut in half to obtain a 2-4kg sample.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
and sample preparation	*sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Reverse circulation samples were collected on 1m intervals by riffle split (dry) or by scoop (wet) to obtain a 2-4kg sample. Sample preparation for diamond core and RC samples includes oven drying, crushing to 10mm and splitting, pulverising to 85% passing -75um. These preparation techniques are deemed to be appropriate to the material and element being sampled. Drill core coarse duplicates were split by the laboratory after crushing at a rate of 1:20 samples. Reverse circulation field duplicates were collected by the company at a rate of 1:20 samples. Resolute sampling, sample preparation and quality control protocols are of industry standard and all attempts were made to ensure an unbiased representative sample was collected. The methods applied in this process were deemed appropriate by the Competent Person. Sub-sampling techniques and sample preparation completed by previous owners is not known.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	All Resolute samples were analysed for gold by 30g fire assay fusion with AAS instrument finish. The analysis was performed by ALS Bamako or SGS Morila. The analytical method was appropriate for the style of mineralisation. No geophysical tools were used to determine elemental concentrations. Quality control (QC) procedures included the use of certified standards and blanks (1:20), non- certified sand blanks (1:20), diamond core coarse duplicates (1:20) and reverse circulation field duplicates (1:20). Laboratory quality control data, including laboratory standards, blanks, duplicates, repeats and grind size results were also captured into the digital database. Analysis of the QC sample assay results indicates that an acceptable level of accuracy and precision has been achieved. The assay techniques used by Randgold and BHP include fire assay fusion with AAS instrument finish and aqua regia with AAS. The majority of the samples were analysed at the onsite Syama laboratory. Due to the historical nature of the Randgold and BHP data the assay procedures are not known for all samples.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Verification of significant intersections have been completed by company personnel and the competent person. No drill holes within the resource area were twinned. Drill holes were logged onto paper templates or Excel templates with lookup codes, validated and then compiled into a relational SQL 2012 database using DataShed data management software. The database has a variety of verification protocols which are used to validate the data entry. The drill hole database is backed up on a daily basis to the head office server. Assay result files were reported by the laboratory in PDF and CSV format and imported directly into the SQL database without adjustment or modification. Resolute has conducted extensive reviews, data validation and data verification on the historic data collected by the previous owners, Randgold and BHP.
Location of	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral*	Collar coordinates were picked up in UTM (WGS84) by staff surveyors using an RTK DGPS with an expected accuracy of ±0.05m; elevations were height above EGM96 geoid.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
data points	*Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Down hole surveys were collected using single shot and multi shot magnetic survey tools including Reflex EZTrac and EZShot instruments. A time-dependent declination was applied to the magnetic readings to determine UTM azimuth. Diamond drilling completed in 2017 and 2018 has utilised a Reflex EZ Gyro downhole survey instrument to provide more frequent data points and reduced magnetic interference. Coordinates and azimuth are reported in UTM WGS84 Zone 29 North in this release. Coordinates were translated to local mine grid where appropriate. Local topographic control is via satellite photography and drone UAV Aerial Survey.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	The drill hole spacing was sufficient to demonstrate geological and grade continuity appropriate for Mineral Resource estimation and classification in accordance with the 2012 JORC Code. The appropriateness of the drill spacing was reviewed by the geological technical team, both on site and within the Resolute group. This was also reviewed by the Competent Person. RC and diamond core samples were collected on 1m intervals; no sample compositing is applied during sampling.
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.* • *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.*	Holes were drilled predominantly perpendicular to mineralised domains where possible. No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	Samples were collected from the drill site and stored on site. All samples were individually bagged and labelled with unique sample identifiers then securely dispatched to the laboratories. All aspects of sampling process were supervised and tracked by SOMISY personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	External audits of procedures indicate protocols are within industry standards.

Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *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.*	Drilling was conducted within the Malian Exploitation Concession Permit PE 93/003 which has an area of 200.6 km^2. Resolute Mining Limited has an 80% interest in the Syama project and the Exploitation Permit PE—93/003, on which it is based, through its Malian subsidiary, Sociêtê des Mines de Syama SA (SOMISY). The Malian Government holds a free carried 20% interest in SOMISY. The Permit is held in good standing. Malian mining law provides that all mineral resources are administered by DNGM (Direction Nationale de la Géologie et des Mines) or National Directorate of Geology and Mines under the Ministry of Mines, Energy and Hydrology.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The Syama deposit was originally discovered by a regional geochemical survey undertaken by the Direction National de Géologie et des Mines (DNGM) with assistance from the United Nations Development Program (UNDP) in 1985. There had also been a long history of artisanal activities on the hill where an outcropping chert horizon originally marked the present day position of the open pit. BHP during 1987-1996 sampled pits, trenches, auger, RC and diamond drill holes across Syama prospects. Randgold Resources Ltd during 1996-2000 sampled pits, trenches, auger, RAB, RC and diamond drill holes across Syama prospects.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Syama Project is found on the northern margin of the Achaean-Proterozoic Leo Shield which forms the southern half of the West African Craton. The project area straddles the boundary between the Kadiana–Madinani terrane and the Kadiolo terrane. The Kadiana-Madinani terrane is dominated by greywackes and a narrow belt of interbedded basalt and argillite. The Kadiolo terrane comprises polymictic conglomerate and sandstone that were sourced from the Kadiana-Madinani terrane and deposited in a late- to syntectonic basin. Prospects are centred on the NNE striking, west dipping, Syama-Bananso Fault Zone and Birimian volcano-sedimentary units of the Syama Formation. The major commodity being sought is gold.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *Whole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the*
		No new exploration results have been reported in this release.
		
		The listing of the entire drill hole database used to estimate the resource was not considered relevant for this release.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No new exploration results have been reported in this release. Metal equivalent values are not used in reporting.
Relationship between mineralisation widths and intercept lengths	• *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.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	The mineralisation is steeply dipping at approximately 60^0 from the horizontal. The majority of the drill holes are planned at local grid 090^0 at a general inclination of -60^0 east to achieve as close to perpendicular to the ore zone as possible. At the angle of the drill holes and the dip of the ore zones, the reported intercepts will be slightly more than true width.
Diagrams	• *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 hole collar locations and appropriate sectional views.*	Relevant maps, diagrams and tabulations are included in the body of text.
Balanced reporting	• *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.*	Mineral Resources are being reported in this announcement. No new exploration results have been reported in this release.
Other substantive exploration data	• *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.*	No geophysical and geochemical data and any additional exploration information has been reported in this release, as they are not deemed relevant to the release.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Depth extension drilling is planned to test the down-dip potential of the Syama ore body at depth, and beneath the current limit of drilling. Relevant maps and diagrams are included in the body of text.

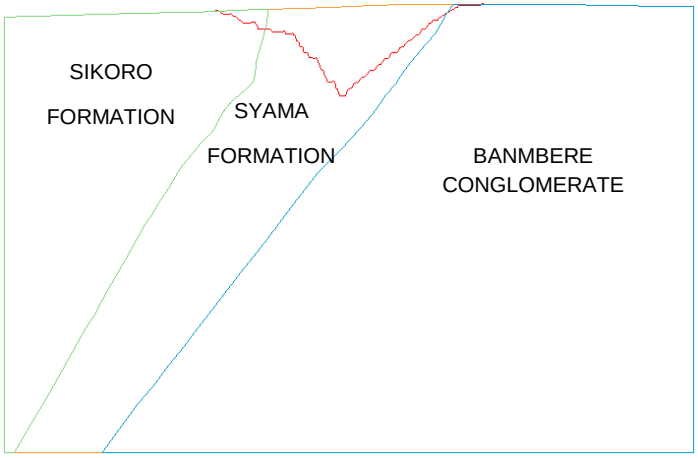
Section 3 Estimation and Reporting of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Data have been compiled into a relational SQL database; the setup of this database precludes the loading of data which do not meet the required validation protocols. The data is managed using DataShed© drill hole management software using SQL database techniques. Validation checks are conducted using SQL and DataShed© relational database standards. Data has also been checked against original hard copies for 100% of the data, and where possible, loaded from original data sources. Resolute completed the following basic validation checks on the data supplied prior to resource estimation: ▪ Drill holes with overlapping sample intervals. ▪ Sample intervals with no assay data. Duplicate records. ▪ Assay grade ranges. ▪ Collar coordinate ranges. ▪ Valid hole orientation data There are no significant issues identified with the data.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Mr Andrew Goode, a Member of the Australasian Institute of Mining and Metallurgy is the Competent Person who has visited this site on numerous occasions. No Optiro Pty Ltd personnel have been to the Syama mine site. All aspects of drilling, sampling and mining are considered by the Competent Persons to be of a high industry standard.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	The digital database used for the interpretation included logged intervals for the key stratigraphic zones of Syama. Detailed geological logs were available in hardcopy and digital and reviewed where necessary. Drill density (50m by 50m) for the majority of the Syama area allows for confident interpretation of the geology and mineralised domains. More recent infill/verification drilling of selected more structurally complicated areas confirms the positions of mineralised zones. Geological and structural controls support modelled mineralised zones, which are constrained within geological units. Continuity of mineralisation is affected by proximity to structural conduits (allowing flow of mineralised fluids), stratigraphic position, lithology of key stratigraphic units and porosity of host lithologies.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Syama area extends for approximately 1,500 metres in strike and the west dipping gold mineralised zone is between 100-200 metres in horizontal width, narrowing at its southern and northern limits. The Mineral Resource is limited in depth by drilling, which extends from surface to a maximum depth of approximately 800 metres vertically.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by- products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Estimation was completed in Datamine Studio RM using a Categorical Indicator (CI) approach to define the mineralised blocks followed by an Ordinary Kriged (OK) model to estimate the gold grade. Grades were estimated into parent block of 5mE by 12.5mN by 5mRL for Syama underground and 10mE by 25 mN by 10mRl for Nafolo. Sub- celling down to 5mE by 12.5mN by 5mRL was employed for resolution of the mineralisation boundary at Nafolo. The categorical model used a cut-off of 1 g/t gold. A 5mE by 12.5mN by 5mRL block size was employed during the categorical process used to delineate mineralised regions. After this process, the model was reblocked up to 10mE by 25mN by 10mRL for Nafolo while retaining the smaller size blocks as subcells at mineralisation boundaries. The resource model included estimates for sulphide sulphur and organic carbon which assist with metallurgical characterisation. It should be noted that there is less sample data for these elements which has resulted in greater smoothing of the block grades. Kriging neighbourhood analysis was performed to optimise the block size, sample numbers and discretisation levels with the goal of minimising conditional bias in the gold grade estimates. A larger blocks size for Nafolo was chosen based on this analysis than was employed in the previous resource estimate. A total of three search passes was used, with the first search pass set to the range of the variogram for each element. A minimum of 10 and a maximum of 30 samples were used. The search stayed the same for the second pass but was increased by a factor of 3 for the third and final pass. The minimum number of samples was reduced to 8 for the second pass and 6 for the third pass. Un-estimated blocks (less than 1% for gold) were assigned the domain average grades. No deleterious elements were found in the ore. No selective mining units have been assumed. No assumptions have been made regarding the correlation of variables although it is noted that a broad positive correlation exists between gold and sulphur. Estimation searches have been orientated to respect the orientation of the Syama Formation which hosts the mineralisation. Top cuts were applied to reduce the variability of the data and to remove the outliers. The estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the drillhole data and by northing and elevation slices. Global comparison between the input data and the block grades for each variable is considered acceptable (±10%). Comparison with the 2017 Mineral Resource was carried out.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All tonnages are estimated on a dry basis.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Mineral Resources are reported at a 1.5 g/t Au grade cut-off for this model. The resource has been demonstrated to be amenable to underground mining.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economicextraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The anticipated mining method for underground exploitation is Sub-Level Caving (SLC). The resource model extends from 1,250 mRL to 600 mRL. Open pit mining methods were used by Resolute to 1,120 mRL. Material testing conducted on samples of underground ore confirmed that properties such as metallurgical factors, structural trends and geological continuity remain the same as observed in the fresh rock portion of the open pit.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Resolute has conducted metallurgical testwork on variability samples taken from within the proposed underground ore zone. A testwork program was supervised by consultants MineLogix Pty Ltd based on analytical testwork completed at ALS Metallurgy Laboratory. The program included comminution, flotation, roasting and leaching assessments. The planned processing flowsheet involves crushing, milling, flotation and roasting, followed by CIL recovery of the calcine product. The Syama sulphide processing facility has been in operation in its current form since 2007. The various testwork programs did not identify any contrasting metallurgical behaviour from samples within the underground ore zone and the performance of the underground ore typically matches that observed for open pit ore.

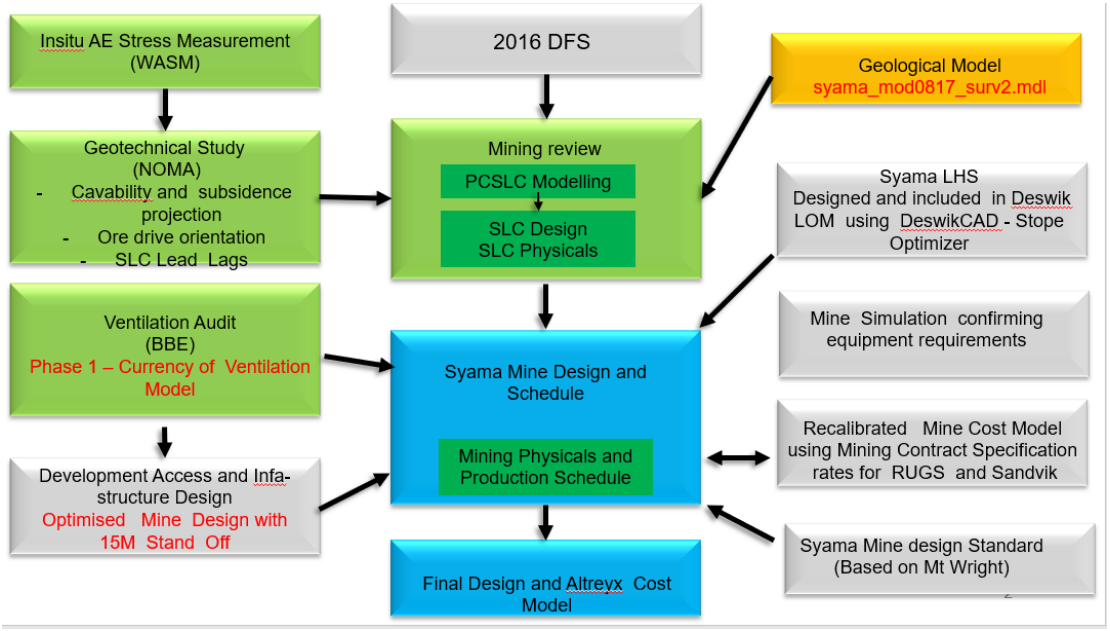
CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	It is a requirement of Decree No.03-594/P-RM of 31 December 2003 of Malian law that an Environmental and Social Impact Study (Étude d'Impact Environmental et Social – EIES) must be undertaken to update the potential environmental and social impacts of the mine's redevelopment. The EIES for the Syama Gold Mine was approved in November 2007 and an Environment Permit (07- 0054/MEA – SG) was issued by the Ministry of Environment and Sanitation on the 22 November 2007. The Ministry of Environment conduct timely reviews of the Syama Gold Mine to ensure that company maintains compliance with the EIES guidelines. At Syama there are three key practices for disposal of wastes and residues namely, stacking of waste rock from open pit mining; storage of tailings from mineral processes; and "tall-stack dispersion" of sulphur dioxide from the roasting of gold bearing concentrate. All waste disposal practices are in accordance with the guidelines in the EIES. The Environmental & Social Impact Study – "Société des Mines de Syama, Syama Gold Mine, Mali, dated 2007 indicated there was minimal potential for acid mine drainage from waste rock due to the elevated carbonate content which buffers an potential acid generation. Resolute maintains a plan for progressive rehabilitation of waste rock landforms as part of ongoing mine development and waste rock dumping. The landform of tailings impoundments does not have a net acid generating potential. The largest volume is flotation tailings where the sulphide minerals have already been removed from the host rock. Its mineralogy includes carbonates which further buffer any acid-formation potential from sulphides that may also be present. Cyanide levels in the leached-calcine tailings are typically less than 50 ppm in the weak acid dissociable form. Groundwater away from the tailings landform is intercepted by trenches and sump pumps. Sulphur dioxide is generated from the roasting of gold concentrate so that gold can be extracted and refined. Tall-Stack "dispersion" of the sulphur dioxide emission is monitored continuously. Prevailing weather and dissipation of the sulphur dioxide is modelled daily to predict the need to pause the roasting process to meet the air quality criteria set out in the Environmental & Social Impact Study.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Site personnel have completed numerous bulk density comparative estimates on HQ drill core to assess variability using the Archimedes method of dry weight versus weight in water. This method was used for 96% of the bulk density measurements. Other tests were completed by SGS using the pycnometer method. On the basis of the data collected the following SG estimates were applied to the model: a) Syama Formation 2.82 b) Sikoro Formation 2.75 c) Banmbere Conglomerate 2.75 
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects theCompetent Person's view of the deposit.*	The Measured Mineral Resource classification is based on good confidence in the geology and gold grade continuity with less than 25 m x 25 m spaced drillhole density in the central part of the deposit directly below the current pit. The Indicated Mineral Resource classification is based on good confidence in the geology and gold grade continuity with less than 75 m x 75 m spaced drillhole density in the central part of the deposit. The Inferred Mineral Resource classification is applied to extensions of mineralised zones on the margins of the deposit where drill spacing is more than 100 m x 100 m and the extents of mineralisation at depth. The Nafolo orebody to the south of Syama which is tested by wider drill spacing has also been classified as Inferred. The validation of the block model has confirmed satisfactory correlation of the input data to the estimated grades and reproduction of data trends. The Mineral Resource estimate appropriately reflects the view of the Competent Persons.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	The Mineral Resource has been audited internally and in conjunction with resource consultants at Optiro Pty Ltd as part of the routine validation process. There has been no external review of the Mineral Resource estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of Indicated and Inferred resource categories as defined by 2012 JORC Code guidelines. The geostatistical techniques applied to the estimate of underground resources at Syama are deemed appropriate to the estimation of Sub Level Caving (SLC) mining method and hence applicable for reserve estimation. There has been no stoping production from the underground mine at Syama at the timing of the model.

Section 4 Estimation and Reporting of Ore Reserves

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserve.*	The Ore Reserves are based on a Mineral Resource estimate that was completed in Datamine Studio RM using a Categorical Indicator approach to define the mineralised blocks, followed by an Ordinary Kriged model to estimate the gold grade. Grades were estimated into parent blocks with dimensions 10mE by 25mN by 10mRL. Sub- celling to 5mE by 12.5mN by 5mRL was employed for resolution of the mineralisation boundary. Only Mineral Resources below the base of the final open pit and below 1250 mRL have been considered in the mining studies. Mineral Resources at Syama are reported above a 1.5 Au g/t cut-off. This is determined from the marginal and geological cut off. Material below this cut-off is not considered in the resource but may form part of the dilution envelope reporting into the underground cave. Ore Reserves are the material which can be extracted from the mine and processed with an economically acceptable outcome. The Ore Reserves have been calculated by means of an economic assessment, which results in a Life Of Mine Plan. Reported Ore Reserves are inclusive to the Mineral Resources.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Mr.Ian Bignell is a Chartered Engineer member of the Institute of Mining, Metallurgy & Materials and is a Competent Person who has conducted regular site visits to the project location.

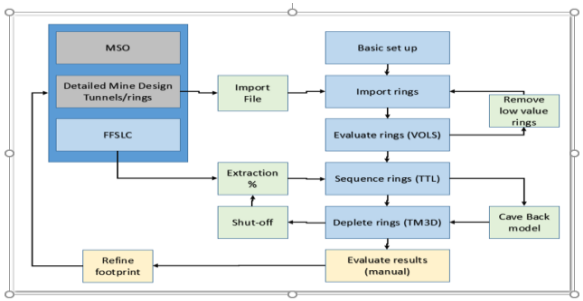
CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	Open pit mining operations recently completed in the Syama open pit were conducted successfully and were well established. This study considered the underground operation below the open pit following the completion of the Definitive Feasibility Study. Approval for the development of the underground project was given by the Resolute Board of Directors in June 2016. During FY 18 mode detailed design work was completed to convert the Definitive Feasibility Study to an executable operating plan as follows : The Syama 2017-18 Mine Design Programme:  In addition to these studies considerations were given to ensure compliance to the Resolute Integrated Management System Standards.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	To select the optimum stope design, a breakeven Cut Off Grade (COG) estimate was performed. The cost per tonne for processing and administration were derived from actual mine average costs, while the mining cost per tonne and metallurgical recovery were taken from the 2015 PFS. The table below shows the breakeven COG estimate with a cost per tonne mined of $59.18/t or COG of 1.93 g/t. Thus to cover these average costs an NSR (Net Smelter Royalty) of $60/t was selected for the stope design.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		FY19 LOM

Item	Units	Value	Comments
Stope mine recovery	%	100.0%	Incorporated in design
Dilution – unplanned	%	0.0%	Incorporated in design
Mining cost	$/t ore	$ 32.43	LOM 2018 AMC Cost Model
Processing cost	$/t ore	$ 23.07	LOM 2018
Metallurgical recovery	%	89.0%	LOM 2018
General and Administration	$/t ore	$ 13.07	
Other (Selling, refining, royalties, etc)	% sold	6.0%	2016 FS
Contracter mark-up	% on mining opex	0.0%	
Gold prices	$/ozUSD	$ 1,300	LOM FY 19
Gold grade mined	g/t	1.00	
Metal mined after mining dilution and loss	oz Au / (g/t)	1.00	
Metal recovered after plant	oz Au / (g/t)	0.89	
Metal value after plant (Metal produced)	$ / (g/t Au)	$ 37.20	
Royalties, sales, refining, etc costs		$ 2.23	
Metal value sold less royalties, sales, refining, etc costs	$ / (g/t Au)	$ 34.97	
Metal value sold less cost and contracter mark-up	$ / (g/t Au)	$ 34.97	
Opex Cost	**$/t ore**	$ 68.57	
COG	**g/t Au**	1.84	

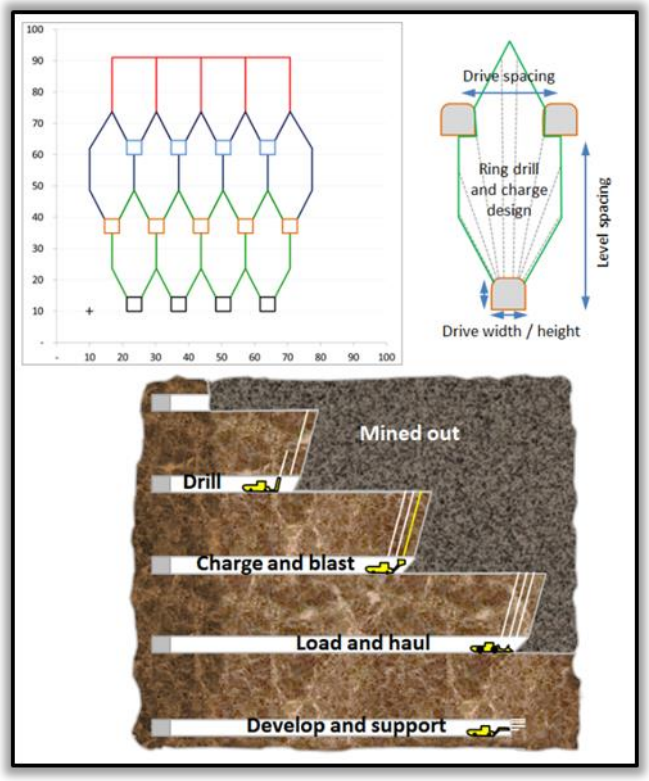
A 1.9g/t COG was used to run a Mine Stope Optimisor and provide initial stope outline and derive the perimeter for production rings on each level.

Dilution and overdraw was modelled using PCSLC© 2018 software by Mining Plus in January 2018 , using the PCSLC sub models following the process flow outlined below .



The results of the modelling provided a basis for estimating tonnes and grade in each of the ring shapes to be later scheduled in the Deswik LOM Schedule.

Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).*	Consultants from Noma Geotechnical Modelling confirmed Snowden's geotechnical study and confirmed that the deposit is amenable to caving, making SLC the preferred mining method. SLC is a highly mechanized, bulk mining method used in operations world-wide. The ore is blasted and during extraction the surrounding rock is allowed to cave naturally; backfilling is not required. SLC offers the advantage of a high mining productivity with reduced mining cost compared with more selective mining methods such as long hole open

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimization (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	stoping. The Noma study provided guidance on dilution movement used to optimize the cave draw parameters in the PCSLC model.  The Syama orebody is steeply dipping with a competent footwall conglomerate and an orebody amenable to caving (Laubscher RMR of 45 to 60). The chosen mining method was selected after excluding other potential mining methods based on their technical and/or economical risk. Caving was identified as the only potential mining method allowing for maximum extraction of the Mineral Resource. The competent footwall has an UCS of 133 MPa, while the orebody is typically 75 to 100 MPa. The hanging wall has a UCS of approximately 100 MPa. The competency contrast is favorable to the mining method. The orebody mining outline was designed using a cut-off grade of 1.9g/t Au based on current overhead and treatment costs and processing recovery from the open pit operations, combined with DFS estimates for the underground component of the mine and confirmed with completion of the AMC Cost Study in January 2018. Assumptions for mining and dilution factors: • Development ore – 100% tonnes at block model grade. No over break is included for development ore as

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		this would require a corresponding reduction in production ore to avoid double-accounting. This does not have a material impact on the overall result. • Production rings attributed by level and drawpoint – determined by outcome of PCSLC cave modelling. Rings were mined to an economic cut-off grade of 1.9 g/t Au, not exceeding the maximum draw percentages listed below: ○ first level below pit – 60% tonnes ○ second level below pit – 70% tonnes ○ third level below pit – 90% tonnes ○ fourth and consecutive levels – 100% tonnes ○ bottom two overdraw levels – 120% tonnes Overdraw was modeled in PCSLC and was derived from material higher in the draw column and from external dilution. External dilution properties were extracted from the relevant adjacent model blocks to provide a more reliable estimate than applying universal modifying factors. The mine design was based on the following design criteria: • Draw point spacing of 14m and level spacing of 25m. • A transverse layout was designed for the majority of the Syama deposit. The northern section is wider and will be used to initiate caving. The southern section is narrower and the cave was terminated where the continuous economic width reduced below 30 m. Draw point drives have been aligned orthogonal to the orebody strike in line with geotechnical recommendations. • A full set of ring designs were completed in the PCSLC software using the orthogonal draw point drive orientation and clipped to a 1.9g/t cut off using stepped height rings on the hangingwall. • Hydraulic radius of 12 (ore) to 17 (hanging wall) was calculated to initiate caving. • The mine will be accessed via two independent haulage declines with one dedicated to autonomous haulage. Both declines are located to the east of the orebody and within competent footwall conglomerate, approximately central to the strike extent of the ore zone. Each level has been designed with infrastructure for ventilation, second means of egress and drainage. • Multiple models were tested to determine optimum extraction rates with the draw shut off grade selected at 1.4 g/t. A small component (<5%) of Inferred Resources in the lower levels of the mine is included in the later years of the life of mine plan. These resources are included in the Ore Reserves as part of the cave dilution inventory. This does not materially impact the outcome of the LOM Plan.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralization.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Experience from the current open pit shows that ore from the Syama deposit can be highly refractory due to locking of gold within the sulphides and variable amounts of reactive natural carbon which robs cyanide leach solutions of dissolved gold. Processing of the ore will be via the following stages: • Crushing and grinding. • Flotation to produce a sulphide rich concentrate. • Concentrate thickening. • Roasting, followed by calcine quench and wash. • CIL. • Tailings disposal. The crushing, grinding and flotation circuit has a designed capacity of 2.4 Mtpa and the roaster will process 196,000t of concentrate per annum. The CIL circuit has a designed capacity sufficient to process all of the roasted concentrate.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterization and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	The Syama Gold Mine operates in accordance with its' Environmental & Social Impact Study – "Société des Mines de Syama, Syama Gold Mine, Mali, dated 2007. Waste rock characterisation has been included in prior studies for this Environmental & Social Impact Study. Work is ongoing to optimise the mining operation and environmental management through the following : • Drilling to investigate rock characteristics • mineralogical assay analysis of drill core • routine testing of rock material types for acid generating properties • developing a sequence, rate and design optimization for open-pit mine walls, ramps and the waste rock dump landform to meet the requirements of rock characteristics. The outcomes of this work are part of a continuing improvement program which contributes to the waste rock dump management plans, annual reporting and consultation-committee meetings with government and community representatives. Tailings storage for the life of mine is forecast to be impounded over the existing footprint area approved in the Environmental & Social Impact Study. Progressive raising of the tailings impoundments will occur to contain life-of-mine storage capacity. Routine progress on the monitoring is reported to government and at stakeholder meetings in concert with routine inspections by government representatives. The Syama Project is in a mature phase of its operating life with environmental management permitted by an Environmental Authority and supported by an Environmental Management Plan. No impediments are anticipated to the development of the underground mine.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the*	The Syama Mine and the underground mine site are located near the two major towns of Kadiola and Sikasso. Kadiola, 55km southeast, is the regional capital while Sikasso, approximately 85 km to the

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	infrastructure can be provided, or accessed.	northeast, is the second largest city in Mali and located close to the border with Burkina Faso. Access is via formed gravel road off the sealed Sikasso to Côte d'Ivoire highway through Kadiola, and then from Fourou to site. Most consumables and supplies use this route as it can be approached either from Côte d'Ivoire through the border post at Zegoua or alternatively from Burkina Faso and Togo through Sikasso. The road north through Bananso to Farakala, on the main highway from Bamako to Sikasso, provides an alternate and shorter route to Bamako. This road is generally impassable during the wet season when the low level "bridge" at Bananso is covered with water. Supporting infrastructure for the current operations has included upgrading of the 70km section of road from Kadiola to the site, refurbishment of administration buildings, plant site buildings and accommodation for housing expatriate and senior national staff. This infrastructure will also be used by the underground operations, with additional allowance made in the study for underground specific infrastructure on surface, such as primary ventilation fan installations, additional work shops and offices and change rooms for underground workers. The site is serviced by two Internet and mobile telecommunications providers (Sotelma & Orange), in addition to a point to point satellite connection to Perth. The current operation has a peak continuous power demand of approximately 22MW with an installed power capacity of 27MW. Power is currently supplied from a diesel fired power station. Supply of power from the national grid is being considered in the near future and was incorporated into the underground study.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Resolute's mobile equipment and mining plant will be purchased by the mining contractor and amortized over the operational lifespan of the items. The underground mine development contract has been awarded to Byrnecut Offshore and cost assumptions have been derived from that contract. Mine operating costs are calculated from first-principles using fixed and variable components and assume contractor mining. Allowances were made for regional efficiencies, supervision and training. Current processing and administration costs were applied. The average mining cost (including decline development, raises and contractor margin) is $25/t. Owner's infrastructure capital costs are estimated to be $117M. Assumed gold prices have been derived by reference to recent USD spot gold prices. All revenue and cost estimates have been made in USD, thus no exchange rates were required. Treatment and refining charges have been derived from current operating costs. Royalties equal to 7% (6% government and 1% smelter) of sales proceeds are included in the cost model and is based on current royalties paid. No other royalties or Joint Venture agreements are expected.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	It has been assumed that gold will be sold at the prevailing spot gold price. All revenue and cost estimates have been made in USD and exchange rate assumptions were not necessary. The study used an assumed gold price of US$1,200 per ounce which was derived by reference to recent USD spot gold prices.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent quoted market for the sale of gold. The mine life of the project and processing forecasts are based on Life Of Mine Plans. Industrial minerals have not been considered in this Study.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	A variety of gold price points and discount rates were used to assess the robustness of the project, likely payback periods, the breakeven point and the projected internal rate of return. The project generates pre-tax revenue of US$467M and has a positive pre-tax IRR of 22%. In the estimate, a gold price of US$1,200 per ounce was assumed.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	Resolute assumed management of Société des Mines de Syama in May 2004. The recently completed open pit operated under the 1993 Permit Syama (No.PE-93/003) and the proposed underground will do the same. It is anticipated that transferrable skills from the current operation will be utilized for the underground operation and that existing employees will be up skilled where possible. Initially selected posts requiring specific skills or experience will most likely be filled by expatriates. In addition to performing their job function, expatriate personnel will be expected to transfer knowledge and expertise in order to develop the capabilities of their Malian staff. In the longer term it is anticipated that Malian nationals will fill most operating and management positions within the company. It is the intention to encourage economic development within the local community. Local contracts therefore, are let wherever possible and the company works actively with existing and emerging companies to achieve this aim. The Syama Mine Community Consultative Committee was established in February 2001 with representatives from local villages, the Malian Government and SOMISY. Since April 2004 the Committee has met regularly as a communication forum and to address community issues and assist with community project proposals.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	High seasonal rain fall events present a risk for the underground operations. Further drilling and logging of drill holes is underway to extend the underground reserves. All current government agreements and approvals are in good standing and no anticipated changes are expected.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	All Measured and Indicated Resources were converted to Probable Reserves. An estimated 51% of the Ore Reserve metal is derived from Measured Resources and classified as a Probable Ore Reserve because some modifying factors are only at a PFS (±25%) level of confidence. A small component (1%) of Inferred Resources is included in the Ore Reserves, but this does not materially affect the outcome.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	Snowden Mining Industry Consultants completed the Syama Underground Pre-Feasibility study in 2015 and later contributed to detailed designs incorporated in the Definitive Feasibility Study. Subsequent mining studies have been conducted in conjunction with various industry experts from external companies relevant to the areas of study. No other external audits of Ore Reserves were undertaken.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognized that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Treatment costs and recoveries are based on actual performance in the open pit operations and provide a high level of confidence. Resolute has extensive experience with a similar underground operation at the company's Mt Wright mine in Australia. This experience was combined with industry average assumptions, where required, to provide a level of accuracy and confidence that falls within the required standard for a Definitive Feasibility Study and the subsequent Mining studies. All the parameters assumed and adopted including the financial modelling and analysis have been subject to internal peer review.

JORC Code, 2012 Edition – Table 1 report

Ravenswood Gold Mine Queensland –Buck Reef West and Sarsfield Deposits.

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (e.g. '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. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	The mineral resource estimate was based on a combination of recent data (Carpentaria Gold 2003-2015) collected from reverse circulation (RC) and diamond core (DD) drill holes, and historic data (MIM Exploration 1980-1999) RC, DD, open hole percussion (OHP) and air core (AC) drill holes. Historic DD holes that had AC, OHP or RC precollars were classified as air core diamond (ACD), open percussion diamond (OPD) or reverse circulation diamond (RCD) respectively. For recent data each 1m RC interval was riffle split to obtain a 2-3.5 kg sample, which was sent to the laboratory for pulverisation to produce a 200g sub-sample for analysis. Historical RC holes were sampled at either 1m or 2m intervals to obtain a sample whose weight was not recorded. Recent diamond core were sampled at 1m intervals and cut in half to provide a 2-4kg sample which was sent to the laboratory for crushing to 10mm, splitting and pulverising to 85% passing 75 microns, to provide a 30g charge for analysis. Historic diamond core was sampled at 1 or 2m intervals and halved and sent to the laboratory. Historic OHP and AC cuttings were sampled at 1m or 2m riffle split intervals providing samples whose weight was not recorded. Sampling and sample preparation protocols for recent drilling are industry standard and are deemed appropriate for the mineralisation being analysed. Historical sampling preparation protocols were deemed appropriate at the time.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	Drill types used include RC and diamond core of PQ, HQ and NQ sizes for recent data, historic drill types include BQ, HQ, NQ and some unspecified sizes. Drill core for recent data is oriented at 30m down hole intervals using spear method. It is unknown what method was used for historic data.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure*	Diamond core interval recoveries are measured by reconciling against driller's depth blocks in each core tray with data recorded in the database. For some historical drilling programs recovery data has rarely been logged and recorded with the historical

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	representative nature of the samples. • *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.*	data. Recovery data is typically not recorded for RC, OHP and AC drilling. Drilling and sampling crews are informed of the importance of core recovery. Measures taken to maximise recovery include the selection of drilling methods and core sizes suited to the geology and mineralisation. Appropriate measures are taken to maximise sample recovery and ensure the representative nature of the samples. At the Buck Reef West deposit core recovery was reduced within areas of historic stoping. Areas of stoping have been identified in the drilling and sampling database and excluded from the resource volume estimate through the use of interpretative wireframes. No apparent relationship was observed between recovery loss and gold grade for any of the recent drilling methods.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Geological logging is conducted in all recent and historic RC, AC, OHP and DD drill holes with observations recorded for colour, grainsize, lithology, minerals and alteration. RC drill holes are logged on 1m intervals and DD drill holes are logged on geologically domained intervals. Historic RC, AC and OHP holes were logged to match the sampling interval of 1 or 2m. Geotechnical rock mass logging, structure orientation, recovery and magnetic susceptibility data are measured and recorded for diamond core intervals. Diamond core is photographed (wet and dry) for recent data but few photographs exist for historic core; RC chips are occasionally photographed for recent data, RC, AC and OHP chips are not photographed for historic data. Recent diamond core and RC chips are logged onto a laptop computer either at the drill site (RC) or the core shed (DD) using Excel templates. Data is validated prior to import to the drillhole database. Historic logging was completed on paper templates at the core shed or drill rig and occasionally entered into the computer database via an excel template. Holes are logged in their entirety (100%).
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in*	Each 1m RC interval is riffle split (dry) to obtain a 2-3.5 kg sample, which is sent to the laboratory for pulverisation. A similar protocol was followed for historical RC, OHP and AC samples for either 1m or 2m intervals; however the sampling details are not recorded. Diamond core has been sampled at 1m intervals and cut into half to provide a 2-4kg sample which is sent to the laboratory for oven drying, crushing to 10mm, splitting and pulverising to 85% passing 75 microns. An approximate 200g subsample is used for assay determination.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	situ material collected, including for instance results for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	A similar protocol was followed for historical DD samples and core was cut and halved for sampling at either 1m or 2m intervals; however details of the sampling were not clearly recorded for induvial samples. Field duplicates (RC) for recent data are collected every 1:30 samples at the same time using the same method (riffle split) as the parent sample. QC data is not available for the historical RC, AC or OHP type drilling. Diamond core coarse duplicates were sampled and collected after crushing, by the laboratory, at a rate of 1:15 samples for recent drilling. QC data is not available in the historical DD drilling records. Sampling, sample preparation and quality control protocols are considered appropriate for the material sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	RC and DD samples are assayed for gold by ALS Global Townsville using method code Au-AA25 which uses a 30gram fire assay fusion with AAS instrument finish. The analytical method is appropriate for this style of mineralisation. Methods for historic RC, AC, OHP and DD drilling included Au-AA25, FA50_Pb_AA, UN_UN and unknown methods for gold by ALS_TNV and a number of unspecified laboratories in the Townsville region. No geophysical tools were used to determine elemental concentrations used in resource estimations. Quality control (QC) procedures for recent data include the use of certified standards (at a rate of 1:20 samples), certified blanks (1:20), non-certified coarse blanks (1:15), field duplicates (RC) (1:30) and coarse crush duplicates (DD) (1:15). QC samples are included in all dispatches to the laboratory and the results are routinely analysed for accuracy and precision. Quality control (QC) procedures for historic RC, AC, OHP, and DD drilling are assumed to have been carried out to industry standard regarding QAQC procedures however the documentation is incomplete. Umpire pulp analysis of selected pulps is performed by a second external laboratory in Townsville for recent data There is no evidence of historic umpire sampling for any drill type. Laboratory quality control data, including laboratory standards, blanks, duplicates, repeats and grind size results are also captured into the database and analysed for accuracy and precision for recent data. Analysis of the available QC sample assay results indicates that an acceptable level of accuracy and precision has been achieved.

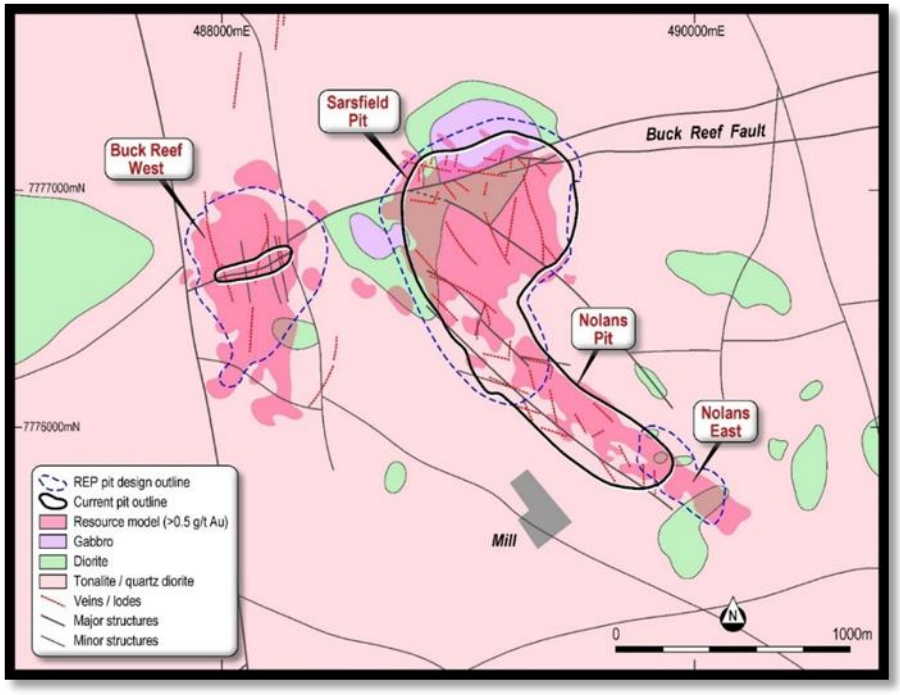
CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		The level of accuracy and precision for historic data is unknown, but there was no reason not to assume industry standards were applied by MIM and Xstrata, the previous owners of the Ravenswood Project.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	The verification of significant intersections has been completed by company personnel and the competent persons. No drill holes within the resource were twinned. Recent drill holes are logged digitally into Excel templates with lookup codes, validated and then compiled into relational SQL2008 database using DataShed data management software. The database is backed up on a daily basis to the head office server. Historic drill holes were logged onto paper templates and partially transcribed onto an excel spreadsheet and logged into the database as described above. Some historic drill logs are only partially loaded onto the database with existing geotechnical and geological logs available as paper copies only. Recent Assay files are reported by the laboratory in CSV format and are imported into the SQL database without adjustment or modification. Historic assay files were reported by the laboratory in CSV, SIF, text, paper and unknown formats and either transcribed into appropriate electronic formats, or directly imported into the SQL database. It appears that no adjustment was made to the assay data. There were no adjustments to assay data.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Collar coordinates for recent drill holes are picked up in UTM by contract and staff surveyors using Leica 1203 DGPS surveying instrument. The survey pickup method has not been recorded in the database records for a large number of historic holes. Down hole surveys are collected at 30m intervals using instruments including Gyro, Devi flex, single shot and multi shot. Coordinates and azimuth are reported in UTM AMG84 Zone 55. Coordinates are translated to local mine grid where required.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	The drill hole spacing is sufficient to demonstrate geological and grade continuity appropriate for the Mineral Resource and the classifications applied under the 2012 JORC Code. The drill spacing applied to each deposit is considered suitable for the style of mineralisation and mineral resource estimation requirements. No sample compositing is applied during the sampling process.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
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.* • *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.*	Drill holes were drilled predominantly perpendicular to mineralised domains where possible. No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	The sample chain of custody is managed by Carpentaria Gold personnel. Both RC and diamond core samples are securely stored on site for logging and sampling procedures prior to being dispatched to the ALS Townsville laboratory for assay analysis Dispatch sheets are used to document sample numbers through the delivery process. ALS laboratories maintains a Webtrieve application to confirm and monitor samples and jobs within the laboratory process. It is assumed that appropriate security protocols were taken for historical drill hole samples to be despatched to the Laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	External audits of procedures indicate protocols are within industry standards for recent drilling. No evidence of external reviews has been recorded for historical drilling data.

Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *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.*	Exploration activity is conducted within Queensland Government authorised tenure including exploration permits and mining leases which are held by Carpentaria Gold Pty Ltd. Formal individual agreements are negotiated with the traditional landowners and property owners for each of the exploration prospects before carrying out exploration activities. Exploration activities conducted within these leases are highly regulated and reports are routinely submitted to the Queensland government containing details of work conducted in the area and expenditure.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The Ravenswood area has a well documented and extensive history of mining and exploration. Gold was discovered in 1868 and alluvial and shallow oxidised quartz-sulphide veins were worked in the initial gold rush. Carpentaria Gold Pty Ltd has been exploring in the area since 1978.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Mineralisation occurs in variably orientated tabular sulphide – quartz veins and mineralised shear zones and in numerous vein stock works. Areas of weak veining separate the more strongly stock-worked areas into discrete zones. Individual veins can vary in width from hairline fractures up to one metre locally. Mineralisation extends from the topographic surface and has been confirmed to extend at depth in deep drilling. The mineralisation remains open at depth. The Jessop Creek Tonalite, an Early to Middle Devonian age unit of the Ravenswood Batholith, hosts the mineralisation. In the project area the Jessop Creel Tonalite can be divided into diorite, quartz diorite and minor gabbro. Boundaries between these units vary from sharp to indistinct and often show complex relationships including stoping xenoliths and irregular dykes. No association between the host lithology and the gold mineralisation has been established other than it is a suitable competent host that allowed the cross cutting sulphide veins to develop. The major commodity being investigated is gold.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth*	No exploration results have been reported in this release. Detailed drilling information that relates to the estimation of mineral resources and ore reserves has not been included in this release. Drilling information that is used for the estimation of mineral resources includes the following : 1. Location data including Easting, Northing and RL of drill hole collars recorded in UTM AMG84 (Zone 55) co-ordinates. 2. Drillhole dip is the inclination of the drill hole from horizontal. A drill hole at a dip of -60^0 is 60^0 below the horizontal.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	○ *hole length.* • *If the exclusion of this 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.*	3. Down hole length is the distance down the inclination of the hole and is measured as the distance from the collar to the end of hole. 4. Intercept depth is the distance from the start of the hole down the inclination of the hole to the depth of the zone of interest. The listing of the entire drill hole database used to estimate the mineral resource was not considered relevant for this release.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Reported intercepts quoted in the report are length weighted. No top cuts are applied. Lower cut-off grade applied was 0.4g/t. Maximum consecutive 4m of internal dilution within a reported interval was used. Minimum intercept length of 3m down hole. Accuracy of the survey measurements is considered to meet acceptable industry standards. Metal equivalent values are not used in reporting.
Relationship between mineralization widths and intercept lengths	• *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.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	Reporting of mineralisation width and intercepts are deemed acceptable by the Competent Persons. Zones of mineralisation are based on interpreted geology recorded in drilling logs. Drill holes were orientated to intersect mineralisation at a perpendicular angle. Here they are provided, results are reported as down hole length.
Diagrams	• *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 hole collar locations and appropriate sectional views.*	No exploration results have been reported in the release.
Balanced reporting	• *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.*	Significant intercepts of new drill holes have not been reported in this release.
Other substantive exploration data	• *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.*	Geophysical and geochemical data and any additional exploration information are reported regularly in annual exploration tenement government reports, and monthly, quarterly and annual Resolute reporting.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further work is planned to evaluate exploration opportunities that extend the known mineralisation at the Buck Reef West and Sarsfield deposits to improve confidence of the model. 

Section 3 Estimation and Reporting of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Buck Reef West and Sarsfield Data have been compiled into a relational SQL database. The setup of this database precludes the loading of data which do not meet the required validation protocols. The data is managed using Maxell Geoservices' DataShed™ drill hole management software using SQL database techniques. Validation checks are conducted using SQL and DataShed relational database standards. Data has also been checked against original hard copies for 75% of the data, and where possible, loaded from original data sources. Carpentaria Gold Pty Ltd carried out the following basic validation checks on the data supplied prior to resource estimation: • Drill holes with overlapping sample intervals. • Sample intervals with no assay data. Duplicate records. • Assay grade ranges. • Collar coordinates ranges. • Valid hole orientation data. There are no significant issues with the data.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Buck Reef West and Sarsfield Mr Bruce Mowat, a Member of the Australian Institute of Geoscientists is the Competent Person who has visited Sarsfield and Buck Reef West on numerous occasions. All aspects of drilling, sampling and mining are considered by the Competent Persons to be of a high industry standard.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	Buck Reef West and Sarsfield Buck Reef West / Sarsfield Deposit lies within the northern part of the Thomson fold belt which forms part of the Charters Towers province, in a tight cluster of calc-alkaline intrusives of Ordovician to Devonian age known as the Ravenswood Batholiths. Individual intrusive compositions vary from adamellite to diorite: - granite and granodiorite are the most common. The Buck Reef West / Sarsfield gold deposit is located within and around the junction of three prominent fault systems. The deposits outcrop over a 900 by 900 metre area with mineral resources defined to a depth of 600 metres. A weathered zone persists to an average of 15 metres below surface. Supergene effects are restricted to a discontinuous horizon within a partially oxidised zone less than 5 metres thick. At least 95% of gold is located within a network of flatly dipping sulphide-quartz veins. Movement on the faults has controlled dilation within the veins, and at least 17 different structural movements and alteration events have reactivated the vein. Veins (20mm to 250mm thick) are typically associated with a phyllic alteration selvedge up to 500mm wide. Vein mineralogy is sulphide dominant with

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		quartz and calcite constituting the major gangue phases. Total sulphide content of the ore is less than 5% with the most common phases being pyrite, pyrrhotite, sphalerite and chalcopyrite. Gold occurs as mostly sub 50 micron free milling grains on fractures and sulphide mineral boundaries. Historic production figures from 1870 to 1918 and then 1987 to 2005 indicate approximately 400 koz of gold was recovered from underground mining methods. Geologically, Sarsfield resource modelling was divided into several domains based on geological structures/ lithologies and gold distribution; named as the Keel, Bell, Buckreef and Nolans zones. Buck Reef West as divided into zones named Buck Reef West, Duke, Flat, Grant A2 and Sunset
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	<u>Buck Reef West and Sarsfield</u> The Buck Reef West / Sarsfield study area covers a region of approximately 900 metres x 900 metres. The Mineral Resource is limited in depth to 600 metres from the surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective*	<u>Sarsfield</u> The method of Multiple Indicator Kriging (MIK) was used to estimate gold into model blocks. MIK modelling methods of gold grades, use indicator variography based on the resource composite sample grades within distinct mineralised populations, defined by wire-frames. Within each domain gold grade continuity was characterised by indicator variograms at 14 indicator thresholds spanning the global range of grades based on 2m down hole composites of the Sarsfield exploration drilling. Data viewing, compositing and wire-framing were performed using Micromine™ software. Exploratory data analysis, variogram calculation and modelling, and resource estimation have been performed using FSSI Consultant (Australia) Pty Ltd GS3M™ software. GS3M™ is designed specifically for estimation of recoverable resources using MIK methodology. MIK was used as the preferred method for estimation of gold at Sarsfield as the approach has been demonstrated to work well in a large number of deposits of diverse geological styles. The gold mineralisation seen at Sarsfield is typical of that seen in most structurally controlled gold deposits and where the MIK method has been found to be of most benefit. Open pit and underground mining has occurred at Sarsfield by previous owners of the project. Where appropriate the resource estimate takes into account historic production using wireframes that represent the open cut pit and the underground stoping voids. No by-products or deleterious elements are modelled. The selected resource model blocks had dimensions of 20mE by 20mN by 10mRL and were used as this approximates the average drill spacing in the modelled resource areas. A three pass octant search strategy was used to define the local neighbourhood data used in the kriging to produce the three modelled resource confidence categories. The highest confidence blocks are estimated using search radii of 30mE by 30mN by 15mRL and a minimum of 8 data coming from a minimum of 4 octants. The second and third pass

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	mining units. • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	estimates used an expanded search of 50% with 16 and 8 minimum data and 4 and 2 minimum octants, respectively. All estimation passes use a maximum of 48 data. The selective mining unit at Sarsfield is expected to be at the scale of the model blocks so no further subdivision is required. Gold is the only economic metal estimated in the current model. Mineralised domain wire-frames developed at nominal 0.1 g/t Au cut-off and used to flag resource composites and code domain proportions to the block model. A further division of the model domains into oxide and fresh rock is applied by triangulated surfaces interpreted from the logging of the drill samples. Statistical analysis showed the gold population in each domain to be highly skewed and generally having moderate to high coefficient of variation. Selection of the median as the average grade of the highest indicator threshold was used to reduce the influence of extreme composite grades on the model gold estimates. Visual validation of grade trends and gold distributions was carried out. <u>Buck Reef West</u> Estimation was completed in Datamine Studio RM using both Ordinary Kriging (OK) and Simple Kriging (SK) to estimate grades into the domains. Grades were estimated into the model using both two-dimensional and three-dimensional estimation. Mineralisation domains were modelled in three different ways as either constrained (3D wireframes), semi-constrained (2D surfaces) and unconstrained. Fourteen 3D wireframes were created using sectional interpretation techniques to define lode style mineralisation. Eight pairs of surface wireframes were used to define 'semi-constrained' mineralisaton identified adjacent to, or between the constrained lodes. Six unconstrained domains were created to infill the background material. Geological logging was used to classify the background mineralisation into 'high' and 'low' grade populations, with the final grade being a weighted average of the two values. These domains were used to flag resource composites and code domains in the block model. Within each domain gold grade continuity was characterised by variograms for each sub-domain based on 2m down hole composites of the Buck Reef West exploration drilling. Prior to modelling each domain was unfolded onto a two-dimensional plane, except the Buck Reef West domains which were calculated after unfolding onto a north/south vertical plane. Top cuts were applied to reduce the variability of the data and to remove the outliers. Where the impact of the top cut was considered to be severe the model cells within 10 m of each cut composite were selected and an uncut grade estimate used for these model cells. The selected resource model blocks had dimensions of 20mE by 20mN by 20mRL and were used as this approximates the average drill spacing in the modelled resource areas. Panel estimation was used for all domains using a panel size of 20 m along strike, 20 m down dip and 5 m across strike. The panels were orientated to match the average dip and dip direction of each domain.

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		The true thickness of the wireframes was calculated within the 20 m x 20 m panels, they were combined into areas where the average true thickness was less than five metres and areas there the average true thickness was greater than five metres. A two-dimensional estimation was used for the areas where the true thickness was less than five metres and three-dimensional estimation for the other areas. OK was the preferred method and was selected in areas where a slope of regression greater than 60% was achieved. A total of three search passes was used, with the first search pass set to the range of the variogram for each domain. A minimum of 6 and a maximum of between 16 and 32 samples were used. The second pass was enlarged by a factor of 1.5 and the minimum number of samples reduced to 4. For the final pass the search ellipse was increased by a factor of 2 and the minimum number of samples reduced to 1. Open pit and underground mining has occurred at Buck Reef West by previous owners of the project. Where appropriate the resource estimate takes into account historic production using wireframes that represent the open cut pit and the underground stoping voids. Gold is the only economic metal estimated in the current model. No by-products or deleterious elements are modelled. The selective mining unit at Buck Reef West is expected to be at the scale of the model blocks so no further subdivision is required. The estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the drillhole data and by northing and elevation slices. Global comparison between the input data and the block grades for each variable is considered acceptable (±10%).
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Buck Reef West and Sarsfield All tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Buck Reef West and Sarsfield The Mineral Resource has been reported at a 0.4 g/t Au grade cut-off for Buck Reef West and Sarsfield. This cut off was chosen as the insitu marginal cut- grade estimation, using current Ravenswood economic parameters applicable for open cut mining methods.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Buck Reef West and Sarsfield Mining methods for the extraction of gold at Buck Reef West and Nolans East has primarily been by open pit and underground methods. It is anticipated that large scale open pit mining methods will be applied for the remaining resources. Grade control of mining blocks will be based on sampling from high quality reverse circulation drilling spaced at approximately 5mE by 12.5mN with samples taken at 1.5 metre intervals down-hole. The Buck Reef West and Sarsfield pits were mined historically using routine open pit mining methods with a backhoe type excavator to excavate benches. Beneath the open cut, open stope underground mining methods were used historically dating back to 1870. Historically, (1870-1918) + recent (1987-2005) production, totaled around 400koz of high grade gold.

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Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	<u>Buck Reef West and Sarsfield</u> The crushing circuit at the Nolans Plant treating Buck Reef West and Sarsfield ore will use either two or three stage crushing depending on the gold grade of the material being delivered. Gold is recovered using crushing, milling (SAG + ball), gravity circuit (Knelson Concentrator), and a CIL circuit. Gold is recovered from loaded carbon in a four tonne capacity AARL elution plant. Gold is then deposited on to stainless steel cathodes in an electrolytic circuit. Gold will be poured into dore bars, containing approximately 80% gold and 20% silver. The dore bars are sent to the Perth Mint for refining.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	<u>Buck Reef West and Sarsfield</u> The Buck Reef West and Sarsfield deposits at Ravenswood are adjacent to the Nolans plant site. Ore from the Mt Wright underground mine is also trucked to the plant for extraction and refining of gold. The tailings from this mineral processing are discharged into the Sarsfield Open Pit. These tailings are potentially acid forming and subaqueous settlement beneath a pit lake (water cover) prevents the oxidation of the stored tailings. Future processing operations may utilise a dry stacked tailings storage facility which combines a waste landform with filtered tailings in a lined facility and subsequently covered by mine waste material. Carpentaria Gold Pty Ltd (CG) originally initiated the Environmental Approval process required to reopen the Sarsfield pit in July 2011. A draft Environmental Impact Statement (EIS) was submitted in July 2012 and then progressed through the submission process until being suspended pending further design changes. A revised EIS was submitted in March 2014 and then progressed through the EIS completion phase with the Department of the Environment and Heritage Protection (DEHP) issuing an EIS Assessment Report in June 2014. The Sarsfield Expansion Project EIS Assessment Report concluded that the project would be suitable, provided CG thoroughly addressed certain outstanding matters which principally related to: - impacts to human health and safety and social well-being in the Ravenswood community - impacts to groundwater and surface water - the ability of the proposal to comply with appropriate environmental outcomes. Following review of the feedback from the DEHP, a number of key changes were made to the Sarsfield Expansion Project to address some of the key issues raised in the EIS Assessment Report. These key changes include: • A modification of the proposed tailings management system which now includes a Dry Stack Tailings Storage Facility (DSTSF) within and adjacent to the existing Nolans Pit; • A change to the project footprint area due to a reduction in the Waste Rock Dump (WRD) footprint and location of the DSTSF (reduced in volume due to dry stacking), in an area of existing land disturbance; and

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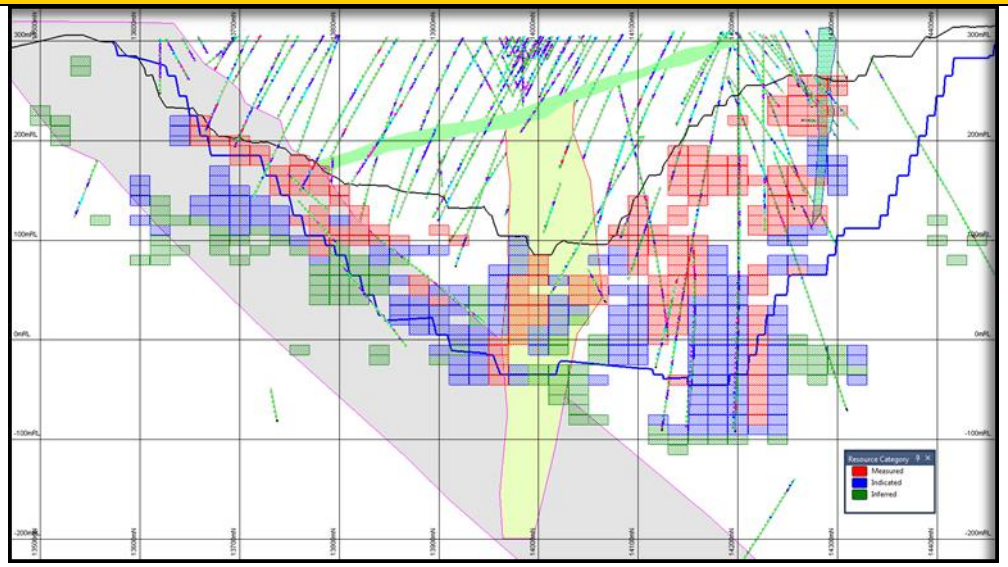
		• A plan to manage accumulated legacy water in the Sarsfield Pit using a Reverse Osmosis (RO) Plant, instead of evaporative fans as originally proposed. Some waste rock from future mining of a cut-back at Buck Reef West / Sarsfield may be potentially-acid forming while the majority of waste rock will be non-acid forming. Waste rock dumping has been scheduled, along with encapsulation designs and optimization determined to minimize the risk of acid forming conditions from the waste rock dumping landform. The rehabilitation plan of that landform is also a key control. Tailings generated from the overall life of mining from a Buck Reef West / Sarsfield cutback would not have a net acid forming potential and will be placed in the regulated dry storage facility over the Nolans pit.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	<u>Buck Reef West and Sarsfield</u> A substantial population of rock density (SG) measurements for the Buck Reef West / Sarsfield deposits were collected by BPB Slimline Services in 2 campaigns during 1995-1996. Gamma-gamma density logging was collected from a total of 14 drill holes with samples taken at 10cm intervals over a combined total length of 2,900 metres. A total of 2,551 readings were made of fresh rock from which an average value of 2.781 was calculated. • Minimum Value 2.365 • Maximum Value 3.002 • Average Value 2.781 • Median Value 2.78 • Std. Deviation 0.05019 A typical dry bulk density of 2.78 has been used.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the*	<u>Sarsfield</u> The gold estimates within each block have been classified according to the distribution of sampling in the kriging neighbourhood. This classification scheme takes into account the uncertainty in the estimates related to the proximity and distribution of the informing composites. A progressively less stringent three pass search strategy produces the three categories of confidence. The highest confident estimate uses a search ellipse of approximately the same dimension of the block dimension and a significant number of resource composites selected from within an octant constraint. The search radii are expanded and sample criteria relaxed for the second and third categories. The highest level of confidence category is measured, the second highest is indicated and the third is inferred.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	Competent Person's view of the deposit.	 Sarsfield Cross Section 13712.5 m E looking West <u>Buck Reef West</u> For the lode domains the slope of regression from kriging was the main parameter used to classify the model. For each domain a perimeter was created enclosing areas where the slope of regression was generally greater than 60%. Model cells falling within this perimeter were classified as indicated. Where the slope of regression was generally greater than 95% the model cells were classified as Measured. Before the unconstrained domains between Duke and Grant and between Sunset and Grant were classified, the sub-cells were combined into parent cells and the slope of regression value averaged. Where the average slope of regression of the parent cell was greater than 30% the cell was classified as Inferred, where the average slope of regression was greater than 60% the cell was classified as Indicated. The remaining unconstrained model domains were classified according to the slope of regression of the individual model cells. Model cells with a slope of regression greater than 30% were classified as Inferred, model cells with a slope of regression greater than 60% were classified as Indicated. Unconstrained model cells with a slope of regression less than 30% were not classified.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	Buck Reef West and Sarsfield No external audits or independent reviews have been undertaken on the current Mineral Resource estimates. As this deposit was mined previously by Resolute Mining Limited from 2004 to 2009 significant internal experience can be drawn on.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Buck Reef West and Sarsfield The relative accuracy of the Mineral Resource estimate is reflected in the reporting of Measured, Indicated and Inferred. The resource's relative accuracy is based on data quality, data quantity, geological confidence and the estimation accuracy. The precision of the estimation is globally acceptable with the assumption that at a mining level more detailed grade control drilling and sampling will be undertaken. In the Competent person's view the geostatistical techniques applied to estimate the Buck Reef West and Sarsfield deposits are deemed appropriate for the anticipated large scale, open cut mining method proposed.

Section 4 Estimation and Reporting of Ore Reserves

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	Resources and Reserves at Buck Reef West are reported above a 0.4 g/t cut-off. Mineral Reserves at Sarsfield are reported above a 0.3 g/t cut-off. This was calculated as a marginal cut off utilising open pit mining methods. Material below this cut-off is not included in the mineral resource. Ore Reserves are the material reported as a sub-set of the resource, that which can be extracted from the mine and processed with an economically acceptable outcome. Mineral Resources are reported inclusive of Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The Competent Person for the Ore Reserves at Buck Reef West, Mr. John Millbank, is an independent consultant engaged by Resolute. Mr Millbank has contributed to the mine planning processes at Ravenswood Operations since commencement of operations at Nolans East in 2016, and has been closely involved with site operations since this time. Numerous site visits have been conducted during this time. Mr. David Mackay is a Member of the Australasian Institute of Mining and Metallurgy and is a Competent Person who is a full-time employee of Carpentaria Gold working at Ravenswood.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The study should be considered as Feasibility Level due to the accuracies of the cost information and other inputs used. Pit optimisations were completed using the Lerchs-Grossman (LG) algorithm utilising the Whittle™ software to calculate the optimal pit at specified input parameters that were determined prior to the study. A wireframe pit shell for each gold price considered was the resultant output. One of these was selected as the base for the new pit design. An operational pit design was completed and mine scheduling conducted as part of the Feasibility process. These pit designs and mine schedules have recently been incorporated into the Company's Life of Mine planning process for the Buck Reef West and Sarsfield projects.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	Cut-off grades for the mine design were calculated using recent budget cost models, including contractor mining cost estimates and actual cost data. Processing recovery and other factors were determined from actual process plant performance combined with relevant historic data. The mine design was completed using the output from the LG algorithm.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).* • *The choice, nature and appropriateness of the*	The open pit mine design is based on normal sequential bench mining methods. The orebody comprises quartz veins and some disseminated mineralisation hosted within a granodiorite batholith. Mining incorporates a single access ramp into the pit, 10m bench height mined as a series of up to four flitches. Orebody cut offs are applied during the pit optimisation process. Only Measured and Indicated ore has been used to compile the pit shell and associated designs and schedules.

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	selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimization (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	For Buck Reef West a minimum mining width of 40m has been applied. Ramp widths are set at 26m (double lane – 150 t rear dump truck) for the upper sections and then narrowed to 16m (single lane). For Sarsfield a 30m wide ramp is used in the upper sections and narrows to 18m (single lane). Mining dilution and recovery are addressed in the model method (MIK) and the utilisation of flitch mining. There are currently no Inferred Resources included in the life of mine plan or Ore Reserves. Grade control will be based on sampling from high quality reverse circulation drilling at spacing appropriate to the mineralisation structures under investigation. This will typically be a nominal 5 metre hole spacing on lines12.5 metres apart using a sample interval of 1.5 metres. Grade control drill orientation will be adjusted at both Buck Reef West and Sarsfield to accommodate the changing orientation of mineralisation structures where required. Existing geotechnical parameters, used in previous mining and validated through external consultant studies as part of the Feasibility have been applied which include: Oxide – Single 10m bench height with a batter face angle of 60° and berm width of 8m. Fresh - Double stacked 10m high benches (20m overall height) with a batter face angle of 80° and 7m berm width. Inferred resources are not considered within the pit design process. Allowances for previously mined underground voids have been made. For Buck Reef West additional infrastructure will be required as part of the mining process. The Ravenswood School, powerlines, and a section of the public access road plan to be relocated to an area outside of the pit limits. Capital expenditure has been allowed for this in the financial modelling. Additional noise bunding and waste rock dump construction has been allowed for, and locations planned on the existing tenements. All other infrastructure is in place.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralization.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale*	Gold is recovered using crushing, milling (SAG + ball), gravity circuit and a conventional CIL circuit. The metallurgical process is well established technology and the processing plant has been operating in its current configuration for several years with no significant changes to the circuit anticipated. No deleterious elements have been experienced to date and are not expected. A crushing and screening beneficiation circuit will be introduced as part of the processing circuit to reduce the mass of ore reaching the comminution circuit and to elevate the feed grade. Test work and pilot scale trials conducted in the Nolan's plant have indicated that beneficiation can be achieved at appropriate size fractions with minimal loss of gold. The crushing and screening process to be used for Sarsfield low grade ores has been proven at Ravenswood in 2004 -2009 and on other mine sites. The beneficiation study conducted on Sarsfield material was a large scale operation where some 16kt of ROM feed was subjected to testing. This degree of test work provided further confidence to earlier laboratory scale testwork. Adding to the confidence level was a

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	test work and the degree to which such samples are considered representative of the ore body as a whole. • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	parcel of 27,000 tonnes of Nolans ore treated in 1998 that supported the economic improvements through the use of beneficiation. No bulk samples were deemed necessary due to the current successful metallurgical performance of the extraction methods applied.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterization and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	The Ravenswood Project is in the mature phase of its operating life. Its environmental management is permitted by an Environmental Authority and supported by an Environmental Management Plan An Environmental Authority Amendment for the Buck Reef West Project has been issued by the Queensland State Government. The waste rock formations have a very low permeability and the mine is a net user of water for operational purposes. An acid base accounting study was conducted on the Buck Reef West / Sarsfield open pit mine's ore and waste, determining the waste to be non-acid forming and the ore to be potentially acid forming. Process residue storage for Buck Reef West is to be completed using existing storage facilities on site.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	The site is currently serviced by mains power, a water supply line from the Burdekin River and accessed by sealed roads. Water is pumped from the Burdekin River approximately 18km southwest of Ravenswood to a local storage (Suhrs Creek Dam). From here, raw water is pumped to the processing plant, Mt Wright, the golf course, and the water treatment plant. Carpentaria Gold operates the water treatment plant on behalf of the Charters Towers Regional Council (CTRC) and supplies potable water to the Ravenswood township as well as the Buck Reef West and Sarsfield sites. There are two mains power feeds available in the event that one becomes unserviceable. The site is located approximately 120km from Townsville and 90km from Charters Towers. A bus service operates twice a day to and from Charters Towers and serviced camp style accommodation is available to all employees in Ravenswood. Some employees live in Ravenswood and the surrounding area. Being close to major centres, one of which with an International Airport ensures easy and quick supply of parts and materials. Carpentaria Gold has lodged Mining Lease Applications to support the Buck Reef West open pit and associated infrastructure. This application process is running in parallel with the Environmental Authority Amendment Application.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating*	The operating history of the mine has validated the capital requirements. Projected capital costs are made up of forecast capital spend for the known capital expenditure requirements. The capital estimate is determined by the needs of the site as required to continue to produce in a safe and efficient manner and comply with all environmental requirements. Operating costs have been calculated from first principles using both fixed and variable components. Recent operating history and

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	costs. • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	performance against budget costs has validated the cost assumptions. The mining cost model has been independently reviewed and benchmarked, with recommendations applied as appropriate. Assumed gold prices have been derived by reference to recent AUD spot gold prices. All revenue and cost estimates have been made in AUD. Transportation charges have been derived from existing contractual arrangements. Refining charges have been derived from existing contractual arrangements. Current Queensland Government royalties equal to 5% of sales proceeds are included in the cost model. There are no other royalties or Joint Venture agreements.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	It has been assumed that gold will be sold at the prevailing spot gold price. All revenue and cost estimates have been made in AUD. Transportation charges have been derived from existing contractual arrangements. Refining charges have been derived from existing contractual arrangements. Assumed gold prices have been derived by reference to recent AUD spot gold prices.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent quoted market for the sale of gold.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the*	A variety of gold price points and discount rates were used to assess the robustness of the project, likely payback periods, the

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	source and confidence of these economic inputs including estimated inflation, discount rate, etc. • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	breakeven point and the projected internal rate of return. In the estimate, a discount rate of 10% was used and a gold price of A$1,600 per oz.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	The Carpentaria Gold personnel maintain a good relationship with neighbouring stakeholders, including engagement with the local pastoralists. Part of the tenure held by the Company is located on leasehold pastoral land with compensation agreements in place with the local pastoralist. Granted mining leases cover all of the proposed mining and processing assets and there are no Native title claims pending.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	Events such as cyclones and fires present a risk, although due to risk mitigants, these naturally occurring risks, have not impacted the estimation or classification of the Ore Reserves. The climate in Ravenswood is typical of northern Australia with “wet” and “dry” seasons. The wet season is aligned with the hotter months of December through to March. The dry season typically starts around April and runs through to November, when the humidity starts to build prior to the wet season. Allowances for impacts from the distinct wet season have been made. Queensland is said to be a seismically active area (intraplate activity), but is relatively inactive compared to other parts of Australia or plate margin regions (interplate activity) of the world such as New Zealand, Indonesia, California, Japan, or Chile. The Burdekin region has been identified as a seismic source zone (Matthews et al, 2011). Australian Standard 1170.4-2007 (Structural design actions Part 4: Earthquake actions in Australia) shows the area has an elevated earthquake hazard factor compared to most of Australia, although not as high as the major concentration points in other parts of the world. There have been in excess of 50 events ranging from M_L 0.5 to 5.7 in the Bowen region since 1900 (Matthews et al, 2011). The mining leases are in good standing and are all part of the suite of leases held by Carpentaria Gold and host a combination of both current activities and infrastructure, and historic workings. Carpentaria Gold are working collaboratively with the Queensland Government to achieve an amended Environmental Authority for the Sarsfield Expansion Project. The amended Environmental Authority for the Sarsfield Expansion Project is the final approval required in order to allow mining activities to recommence in the Sarsfield Pit. This completed approval was received by Carpentaria Gold in Q2 2017, and consequently Sarsfield is now permitted to operate. Carpentaria has submitted the application for the amended Environmental Authority and additional Mining Leases to the Queensland Government for the Buck Reef West Project in Quarter 2 2017. The Environmental Authority has been subsequently approved, with additional Mining Lease approval still outstanding. Carpentaria Gold have submitted a Development Application for construction of additional noise bunds adjacent the proposed BRW pit. Approval of this application is outstanding at present, but not considered as a significant risk to the project. Carpentaria Gold also owns a number of freehold land parcels in Ravenswood that includes company housing and blocks purchased adjacent to the Sarsfield open pit.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		It is possible that the Company may acquire some adjacent residential land close to the Buck Reef West pit to ensure the company complies with modern environmental conditions.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	Only Measured Resources are converted to Proved Reserves Only Indicated Resources are converted to Probable Reserves Inferred Resources are not included in the Ore Reserves The Resource to Reserve conversions were deemed appropriate for the Buck Reef West and Nolans East Ore Reserve estimates by the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No external audits of resources / reserves were undertaken. Due to the success and maturity of the processes applied, the company has deemed this unnecessary. However, periodic reviews of the mining methods have been undertaken and reported as very successful.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognized that this may not be possible or appropriate in all circumstances. These*	Recent historic operational performance against the mine plan for tonnage produced and production head grade, indicate the assumptions used to generate the Ore Reserves, are valid. There has been over the life of the Sarsfield Project, strong mine to mill reconciliations. The updated Ore Reserves, are the same mineralisation being mined with similar sized mining equipment being used. The same mining and grade control methods will be applied and the ore will continue to be processed through the existing facility. Assuming all QA/QC standards are applied in the drilling, mining and processing, then it is reasonable to expect similar levels of operating margins, experienced in previous years of mining 2004 to 2009. All the parameters assumed and adopted along with financial modelling and analysis have been subject to internal peer review.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

JORC Code, 2012 Edition – Table 1 report

Bibiani Gold Mine Ghana.

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (e.g. '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. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Samples were collected by Mensin Gold Bibiani Ltd (Mensin) from diamond core (DD) drill holes and reverse circulation (RC) pre-collars. Diamond core was sampled at 1m intervals and cut in half, to provide a 2-4kg sample, which was sent to the laboratory for crushing, splitting and pulverising, to provide a 30g charge for analysis. RC samples were collected on 1m intervals by riffle split to obtain a 2-4kg sample, which was sent to the laboratory for crushing, splitting and pulverising, to provide a 30g charge for analysis. Mensin sampling and sample preparation protocols are industry standard and were deemed appropriate by the Competent Person. Previous owners (1994-2012) collected samples from RC and DD drill holes and underground channels (CHAN). In 2012 Coffey Mining Pty Ltd (Coffey Mining) assessed that the previous sampling was conducted using industry standards techniques.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	Drill types used include RC and diamond PQ, HQ and NQ2 sizes. Since 2014, HQ and NQ2 core has been orientated using the Reflex ACTIII electronic core orientation tool.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the*	Diamond core interval recoveries were measured from core block to core block using a tape measure. Stopes and voids were identified as separate intervals. A relationship between sample recovery and grade was not identified.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	samples. • *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.*	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Drill holes were geologically logged by geologists for lithology, alteration, mineralisation and weathering on geologically domained intervals. Geotechnical and structure orientation data was measured and logged for diamond core intervals. Drill core is photographed (dry and wet). Diamond core and RC chips were captured digitally using LogChief logging software, then validated and imported into the digital drill hole database. Holes were logged in their entirety (100%).
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Diamond core was sampled at one metre intervals and cut in half to obtain a 2-4kg sample. Interval lengths were adjusted around voids, to ensure samples were at least 0.5m in length. RC intervals are riffle split (dry) to obtain a 2-4kg sample. Sample preparation of diamond core and RC samples included oven drying, crushing to 10mm and splitting, pulverising to 85% passing 75 microns. These preparation techniques are deemed to be appropriate to the material being sampled. Drill core coarse duplicates were split by the laboratory after crushing at a rate of 1:20 samples. Reverse circulation field duplicates were collected from pre-collars and were collected at a rate of 1:20 samples. Mensin sampling, sample preparation and quality control protocols are industry standard and all attempts are made to ensure an unbiased representative sample is collected. The methods applied in this process are deemed appropriate by the Competent Person. Sub-sampling techniques and sample preparation completed by previous owners was assessed by Coffey Mining in 2012 and was determined to have been conducted using industry standards techniques.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	All Mensin samples were assayed for gold by 25g fire assay fusion with AAS instrument finish. The analysis was performed at Intertek Tarkwa (method code FA25/AAS). The analytical method was appropriate for the style of mineralisation. The analytical method is considered a total gold analytical method. No geophysical tools were used to determine any elemental concentrations.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Quality control (QC) procedures included the use of certified reference material and coarse blanks included at a rate of 1:20 drill samples, diamond core coarse duplicates (1:20) and reverse circulation field duplicates (1:20). Reanalysis of 1.5% of the pulps for gold by fire assay fusion AAS was carried out at a second laboratory, SGS Ghana, to test repeatability. Additionally, 2.5% of the pulps and 2.5% of the coarse reject samples were reanalysed at the primary laboratory at the completion of the drilling programs. Laboratory quality control data including laboratory standards, blanks, duplicates, repeats and grind size results are also captured into the digital database. Analysis of the Mensin QC sample assay results indicates that an acceptable level of accuracy and precision has been achieved. Assay data quality for previous owners was assessed by Coffey Mining in 2012 and was considered to be of industry standard for Noble data (2011-2012) and not verifiable at the time for data that pre-dated Noble (1994-2008). Assessment of the available QAQC data demonstrated acceptable levels of assay precision and accuracy. When Mensin took ownership of the Bibiani project in 2014 they initiated a data validation and verification process for the historical drill holes.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Verification of significant intersection was completed by Mensin personnel following the receipt of assay results. No drill holes within the resource were twinned. Drill hole data was logged into LogChief digital logging software, validated and then compiled into a relational SQL2012 digital database using DataShed data management software. The SQL database includes verification protocols which were used to validate the data. The drill hole database was backed up on a daily basis to the head office server. Assay result files were reported by the laboratory in PDF and CSV format and imported into the SQL database without adjustment or modification. In 2012 Coffey Mining assessed the sampling and assaying procedures for previous owners and considered them of appropriate industry standards. When Mensin took ownership of the Bibiani project in 2014 they initiated ongoing validation and verification processes for the data collected by previous owners. This has involved resampling historical diamond core to verify intersections as well as cross-checking samples, void intervals and assays against the original data sources including digital files, reports and laboratory assay certificates in both hardcopy and digital format. The outcome of the verification processes is that 40% of the assay data for holes drilled by previous owners included in the resource have been validated by Mensin.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Collar coordinates were surveyed in local Bibiani Mine Grid using a Total Station Theodolite with expected accuracy of less than 1cm. Down hole surveys are collected using a Reflex EZTrac electronic magnetic survey tool. Surveys are obtained every 30m during drilling (single shot mode) and every 6m at the completion of each hole (multi-shot mode). Survey data is checked and verified using the Reflex SProcess software, with survey readings outside of expected magnetic and gravity values flagged and excluded. A time-dependent declination was applied to the magnetic readings to determine UTM azimuth. Coordinates and azimuths are reported in UTM WGS84 Zone 30 North.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Drill hole spacing was sufficient to demonstrate geological and grade continuity appropriate for the Mineral Resource and the classifications applied under the JORC Code (2012).

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *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.* • *Whether sample compositing has been applied.*	The appropriateness of the drill spacing was reviewed by resource geologists at Optiro and by the Competent Persons in 2017. Downhole RC and diamond samples approximated 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.* • *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.*	The mineralisation trend extends over 2km of strike length with a steep to sub-vertical dip. The majority of holes have been drilled perpendicular to the strike and at a high angle to the dip. Where this was not possible (such as from underground), holes have been drilled at oblique angles to the mineralisation (up to 30°). No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	Samples were collected from the drill site and stored on site. All samples were individually bagged and labelled with unique sample identifiers, then securely dispatched to the laboratories. All aspects of sampling and dispatch process were supervised and tracked by Mensin personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	In 2012 Coffey Mining assessed the sampling and assaying procedures for previous owners and found that prior to 2008 the sampling and assay data was not verifiable. The data collected by Noble between 2008 and 2012 were of an appropriate industry standards. External audits of current sampling procedures indicated sampling protocols reflect current industry standards.

Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *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.*	Drilling was conducted within the Ghanaian Mining Concession Permit of Bibiani which covers the current mining leases of the Bibiani Project. Resolute Mining Limited has a 90% interest in the Bibiani Project through its subsidiary company Mensin Gold Bibiani Limited and the Exploitation Permit on which it is based. The Ghana Government holds a free carried 10% interest in Mensin Gold Bibiani Ltd (MGBL). The Bibiani Mine concession is located approximately 6° 27' latitude north and 2° 17' longitude west in the Western Region of Ghana. The Bibiani mineral concessions lie approximately 80 kilometres south west of the Ashanti capital, Kumasi. The principal access to the mine is from the east, along the Kumasi – Bibiani – Sefwi Bekwi Highway. Ghana mining law provides that all mineral resources are administered by the Minerals Commission of Ghana.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Commercial gold production commenced at Bibiani in the early 1900s and was suspended in 1915. In 1927 mining activities recommenced as the mine was developed and operated by foreign investors until it was nationalised in 1958. Post nationalisation, the mine was operated by SGMC (State Gold Mining Corporation) until it was closed in 1973 following the depletion of economic reserves. During the SGMC period, reserves within the existing infrastructure were depleted and the old workings were reworked to recover pillars and remnant lower grade material (probably plus 6g/t) that was below the pay limit applied to the deposit prior to nationalisation. Reports have suggested that during the first 65 years of production a total of 7.8 million tonnes from underground mining and 0.5 million tonnes from surface operations were milled, producing over 2 million ounces of gold at an average recovered grade of approximately 9.5 g/t Au. In the late-1980s, Glamco and International Gold Resources ("IGR") gained rights to the old Bibiani mine and initiated tailings reclamation and surface exploration, which activities led to the delineation of an open pit resource and a positive feasibility study. Ashanti Goldfields purchased Bibiani from IGR in the mid-1990s for US$ 130 million, financed an additional US$ 85 million to capitalize the operation, and redeveloped the mine as an open pit operation with a modern processing plant. Ashanti Goldfields (now AngloGold Ashanti ("AGA") produced approximately 1.8 million ounces of gold from the main and satellite pits (after main pit production was hampered by a slope failure in 2004) and tailings retreatment, bringing total Bibiani production since inception to almost four million ounces. Central African Gold plc (CAG) purchased Bibiani, for a cash consideration of US$ 40 million. Subsequent to acquisition, CAG expended a further US$ 51 million of capital on the mine, nearly all of which was used to accelerate underground access and to purchase a modern underground mining fleet. Despite development and capital constraints Bibiani produced a further 53,066 oz. of gold between 2007 and 2008 from three sources, namely old tailings, underground ore, and near-mine open pit oxide ore not included in the mineral resources. In late 2009, Noble Mineral Resources Ltd signed a 'Sale of Shares' agreement to acquire Central African Gold Ghana Ltd from Investec Bank subject to a number of Conditions. One of these Conditions states that Noble shall formulate a 'Development Plan' for the development of and the return to production of the Bibiani mining and processing operations. Resolute Mining Ltd became the owner of the Bibiani Project in June 2014 following the completion of the Deed of Company Arrangement (DOCA) regarding Noble Mineral Resources Limited (ASX:NMG) and acceptance and approval of a scheme of arrangement in Ghana. Prior to Resolute acquiring the project, approximately 1,100 RC and/or diamond holes for 168,000m had been drilled by previous

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		operators into the Bibiani resource area (excluding satellite deposits and regional exploration). Since 2014, Mensin have drilled 169 diamond holes (17 holes have RC pre-collars) for 50,100m into the resource area.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The project is located within rocks of the Birimian Supergroup in SW Ghana. Locally mineralisation is hosted within predominately carbonaceous metasediments of the Kumasi-Afema Basin, immediately adjacent to the eastern margin of metavolcanic-dominant Bibiani-Sefwi Belt. The basin sediments are dominated by a thick sequence of fine grained graded turbidites (siltstone to shale) with localised interbeds of fine to medium grained turbiditic sandstones. The shales are variably carbonaceous and often develop phyllitic and schistose fabrics, as a result of overprinting deformation. Several felsic to intermediate composition dykes intrude the sedimentary sequences, including dacite, tonalite, granodiorite and rare monzonitic lamprophyres. Rocks of the Bibiani-Sefwi Belt occur to the west, in the footwall of the Bibiani deposit and include coarser grained turbidites with lithic fragments, and thick intervals of basalt, often with doleritic bases and flow-top breccias with carbonaceous interflow sediments. The margin between the Kumasi-Afema Basin and Bibiani-Sefwi Belt is marked by a broad zone of roughly sub-vertical shearing, striking roughly NNE, regionally referred to as the Bibiani or Sefwi Shear. The sedimentary sequence is tightly folded, with west-dipping axial planes and localised development of steep W-NW dipping shear zones, which acted as conduits for initial Au mineralisation. Further deformation resulted in development of S-SE dipping brittle-ductile faults and emplacement of larger quartz reefs. Mineralisation is related to emplacement of quartz veins, which occur as either sheared, stockwork veins with quartz-ferroan dolomite, or as larger, up to 20m wide, locally stylolitic quartz reefs. Both veins types are associated with pyrite +/- arsenopyrite. Fine-grained disseminated Fe-carbonate and sericite alteration with pyrite +/-arsenopyrite occurs adjacent to the veining. The overall mineralised trend extends over 2km along strike. Mineralisation has also been identified on a sub-parallel trend to the east of the main deposit, with numerous pits developed by pervious operators over a strike length of approximately 4km.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this 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*	All information including easting, northing, elevation, dip, azimuth, coordinate system, drill hole length, interval length and depth are measured and recorded in UTM WGS84 Zone 30 North. The Bibiani local mine grid has been tied to the UTM WGS84 Zone 30 North coordinate system. Drill hole information has been tabulated for this release in the intercepts table of the accompanying text. For completeness the following information is provided for each drill hole: • Easting, Northing and RL of the drill hole collars are measured and recorded in UTM WGS84 Zone 30N. • Dip is the inclination of the drill hole from horizontal. For example a drill hole drilled at ○ -600 is 600 from the horizontal • Down hole length is the distance down the inclination of the hole and is measured as the distance from the horizontal to end of hole. • Intercept depth is the distance from the start of the hole down the inclination of the hole to the depth of interest or assayed interval of interest.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Exploration results reported in this announcement are tabulated using the following parameters: • Coordinates are UTM WGS84 Zone 30N • Cut-off grade for reporting of intercepts is >=1g/t Au with a maximum of 3m consecutive internal dilution included within the intercept; only intercepts >=3m are reported. • No top cut of individual assays prior to length weighted compositing of the reported intercept has been applied. Metal equivalent values are not used in reporting.
Relationship between mineralization widths and intercept lengths	• *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.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	Mineralised zones across the deposit vary from steeply east dipping to steeply west dipping, with dips generally exceeding 70°. Drill holes are designed to intersect the mineralisation as close to orthogonal to the strike and dip as practical. Surface drill holes were drilled with azimuths at mine grid 270° in the south and at mine grid 090° in the northern end, depending access and the overall trend of the mineralisation. Underground drill holes were mostly drilled at mine grid 090° and occasionally at slightly oblique angles to the mineralisation depending on access. In general, true widths may be 50-90% of the downhole length.
Diagrams	• *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 hole collar locations and appropriate sectional views.*	No exploration results have been reported in the release.
Balanced reporting	• *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.*	Significant intercepts of new drill holes have not been reported in this release.
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not*	No geophysical or geochemical data is reported in this release as they are not deemed relevant to the release

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
exploration data	*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.*	All diamond core drilled and sampled by Mensin are measured for bulk density which has a mean value of 2.77 g/cm3 and varies between 2.30 and 3.00 g/cm3.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Drilling by Mensin to test lateral and depth extensions of the known mineralisation is ongoing.

Section 3 Estimation and Reporting of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Data captured in a relational SQL database. The setup of this database precludes the loading of data which do not meet the required validation protocols. The data was managed using DataShed© drill hole management software (Maxwell Geoservices) using SQL database techniques. Validation checks are conducted using SQL and DataShed© relational database standards. Approximately 6% by number (17% by length) of assayed samples prior to compositing were greater than 3.0 m in length. These overlength samples were sampled prior to 2014 and had an average grade lower than the < 3.0 m samples. These overlength samples were excluded from variography analysis but were included in the top-cut analysis and subsequent grade estimate. Drillhole database has been supplied as an extract of the master drillhole database. The drillhole collar data was visually inspected for any obvious errors (underground holes plotted up on surface, surface holes projected up above the surface). The assay and density data was inspected for potential outlier values and overlapping intervals, none of which were identified in the assay data. Approximately 1% of the 39,862 density determinations were identified as being potentially erroneous and excluded from further analysis. The database was subsequently validated and checks made to the database prior to use included: • check for overlapping intervals • downhole surveys at 0m depth • consistency of depths between different data tables check gaps in the data.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	No site visit has been undertaken by the Kahan Cervoj who is accepting responsibility for the compilation of the Mineral Resource. As this is a long lived project that recently was being successfully mined by the current operators, that Mensin Gold Bibiani Ltd personnel have accumulated extensive experience at the project and are taking responsibility for data collection, exploration results and interpretations (i.e. sections 1 and 2 of the JORC Table 1), a site visit by the person completing the Mineral Resource was not deemed necessary.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade*	The historical underground mining and recent open pit mining has resulted in a good understanding of the geology and mineralisation. There is high confidence in the geological interpretation. All available data (diamond and RC drilling, underground channel sampling) has been used to update the mineralised interpretations. The 2017 update is focussed on the underground potential. Oxidised material has been depleted as part of the main and satellite pit mining and is assumed to be fully depleted. There is limited scope for alternative interpretations on a global scale. As a series of parallel lodes and splays, there is scope for very localised alternative interpretation. The mineralisation interpretation was guided by a combination of the geology (presence of structure and/or quartz veining) and gold grade. The only exception is Stope 13 domain which is based on a 0.5 g/t gold cut-. Factors that affect grade and geological continuity include the structural orientation (main shear or footwall/hanging wall splay), and the

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	and geology.	spatial relationship with the tonalite intrusive to the west of the mineralised system.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Bibiani mineralisation outcrops on surface and can be traced over 1,950 m strike length and 700 m vertically, consisting of 12 lodes. The individual lodes range in strike length from 100 to 970 m along strike, 150 to 650 m vertically and with true widths that range from less than 1 m to 32 m true width.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.*	Grade estimation was by ordinary kriging using top-cut 1.0 m length composites samples which was appropriate given the grade distributions. Top-cuts were applied to each individual lode to reduce the impact of a limited number of outlier grades. The lodes were interpreted using a combination of geology and grade, and the final solids were wireframed using Leapfrog Geology software. Each lode was treated individually and estimated using hard boundaries. Grade compositing was undertaken in SURPAC v6.6.2 and grade estimation completed in Datamine Studio RM v1.3.11.0. The grade estimation search and variogram orientation used the Studio RM dynamic anisotropy function. Less than 1% of the resource is extrapolated and the maximum distance of extrapolation is 131 m. Compared to the 2014 Mineral Resource estimate, there has been an increase in the interpreted volume and tonnes at approximately the same grade for the deposit. This change is the result of on-going extensional and infill exploration drilling and updated interpretations. No assumptions regarding the recovery of any by-products have been made. No deleterious elements or other non-grade variables of economic significance have been estimated or modelled. A parent block size of 20 mN x 5 mE x 20 mRL was used for estimation. The nominal drillhole spacing is 20 mN x 20 mRL in the plane of the mineralisation. An expanding 3 pass search method was employed, with the search radii based on the overall geometry of the lode. The search radius for the first pass ranged from 75 x 50 x 10 m to 175 x 85 x 20 m, and was expanded by a factor of 1.25 for the second pass and 2.5 for the third pass. A minimum number of two drillholes were required to inform the estimate. Any cells that were not estimated after the third pass (approximately 2% by volume) were assigned the nearest estimated block grade. No assumptions regarding the selective mining unit have been made. No other variables other than gold and dry density have been modelled. The mineralised interpretations were built on observed geology (presence or absence of alteration, veining, structure) and grade. Domain Stope 13 was an exception to this, which was based on a 0.5 g/t gold cut-off due to the limited exposure of this zone/structure. All boundaries were treated as 'hard' boundaries to flag the raw and subsequent composite samples, and for grade estimation. Grade cutting was used for all domains/zones, with each zone being individually reviewed using a combination of population disintegration and grade distribution plots. The only exception was for the non-mineralised (waste) domain which was severely top-cut to manage the limited number of outliers. The block grade estimate was initially validated by visual review of block grades to drillhole data, followed by a global comparison between the naïve and declustered grades and finally by swath plots by easting, northing and elevation.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	The Mineral Resource has been depleted for known underground mining. Production data has currently not been reviewed and no reconciliation between the production and the 2017 estimate has been undertaken.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A reporting cut-off of 2.0 g/t gold has been used to reflect the most probable underground mining scenario presented in the June 2016 Feasibility Study.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	A Feasibility Study has been completed in June 2016, that used the June 2014 Mineral Resource. The preferred mining method identified was large scale long-hole mining methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	It is assumed that the metallurgy does not materially change with depth and that the metallurgical performance of the fresh open pit ore is not materially different for underground ore. It Is also assumed that future treatment options will utilise much of the exiting processing infrastructure. The current circuit configuration includes a Knelson Concentrator which typically recovers up to 35% of the gold. Historically, the processing facility has produced dore with a fineness of 80% gold and 20% silver. The gold grain size distribution is reported as predominantly less than 50 microns however visible gold has been observed within some quartz veins. Arsenopyrite has been observed within the ore body and there is generally a good correlation between the presence of gold. The presence of arsenopyrite has no deleterious effect on processing of the ore. The ore host rock can be graphitic and carbonaceous with the graphite content increasing in the more intensely sheared zones. Historic processing data suggests the graphite may negatively impact gold recovery in the elution circuit, but this is reflected in the historical processing performance.
Environmental factors or	• *Assumptions made regarding possible waste and process residue disposal options. It is*	Future processing operations would employ the existing regulated tailings storage facility that was used for the processing of the open pit material. Some waste rock from future mining underground may be potentially-acid forming, the majority of the waste rock will be non-

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
assumptions	*always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	acid forming. Waste rock dumping has been scheduled, along with encapsulation designs and optimization determined to minimize the risk of acid forming conditions from the waste rock dumping landform. The rehabilitation plan for the landform is also a key control. Tailings generated from the project are not expected to be net acid forming and will be stored in the current regulated storage facility.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Bulk density is based on 37,123 validated dry density determinations. For the in-situ mineralisation a density value of 2.75 t/m3 was assigned. This value remains unchanged from previous estimates. There was no material difference between the different weathering or oxidation conditions. The mineralised oxide and transitional material has been fully depleted. Procedures used to collect the bulk density information are not available. On-going mining at Bibiani has confirmed that the density value is appropriate. It was noted some of these determinations were on whole runs along the drillhole, while others were 'spot' density chosen either at a fixed distance down the drillhole or to capture some observed feature in the core. However, no bias was identified between the two data collection types. There was no observed difference between the grade distributions for the different weathering/oxidation conditions or between the mineralised/non-mineralised material. A single value has been assigned to all in-situ material.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Mineral Resource classification was based on a combination of the drillhole spacing and kriging efficiency. Where grade and geological confidence was demonstrated, and the nominal drilling approached less than 40 to 50 m spacing and the average nominal KE was greater than 30%, the mineralisation was classified as an Indicated Mineral Resource. Material that did not meet this criteria were classified as an Inferred Mineral resource. There were small areas that remain unclassified because of either the extent of extrapolation and/or associated lack of confidence in the interpretation. The Mineral Resource classification incorporates all relevant factors. The classification appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	The Mineral Resource has undergone internal peer review but no other independent third party audits are available at this time.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	No geostatistical studies have been undertaken to determine relative accuracy or confidence limits of the estimate. Relative accuracy and confidence is reflected in the resource block model by the resource category assigned to blocks, that ultimately relates to local drillhole spacing and the geological interpretation. Overall the 2017 Mineral Resource estimate is considered a global estimate. In areas of closer spaced drilling and where reflected by the resource classification, the estimate approximates a local estimate, but requires grade control sampling prior to mining. Reconciliation with historical underground or open pit mining has not been done.

Section 4 Estimation and Reporting of Ore Reserves

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserves are based on the Mineral Resource estimate that was detailed in the ASX release dated 18 October 2017 The Mineral Resource estimate was prepared by mining industry consultants Optiro Pty Ltd and used Ordinary Kriging to estimate the gold grades into geological domains constrained by wireframes The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The Competent Person, David Lee, Principal Mining Engineer of AMC Consultants Pty Ltd and Fellow of the AusIMM visited site in September 2017. The visit included site familiarisation; discussions with site personnel; inspection of the surface facilities and accessible underground workings; inspection of locations for the surface expression of the underground infrastructure such as portal position and ventilation rises; and review of selected drill core. The Bibiani underground mine is located beneath he Bibiani main pit. The pit has an extensive wall failure on the western wall. Previous underground mining at Bibiani has occurred in several phases. These phases can be split into historical mining up to 1973 and modern mining between 2002 and 2008. The area of modern development (4 to 9 Level) is under care and maintenance and kept in a dewatered condition. Below the modern workings (from 10 Level and below) the historical workings are flooded.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The study has been undertaken to pre-feasibility (PFS) level of study. Major contributors to the PFS were: • Optiro Pty Ltd – Mineral Resources • AMC Consultants Pty Ltd – mining geotechnical, mining and Ore Reserves. • Wood Group (formerly Amec Foster Wheeler) – process plant design • Resolute Mining Ltd – all other areas
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The Ore Reserve was based on economic assessment of individual stopes and the overall schedule, rather than a single cut-off grade. The inputs to the assessments were a gold price of US$1,200/oz, applicable royalties and preliminary costs and metallurgical recoveries developed during the PFS. The approximate cut-off grade from these assessments was 2.2g/t Au.
Mining factors or	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an*	The Mineral Resource was converted to an Ore Reserve through PFS level mine planning, including mine design and scheduling. Initial stope shapes were created using Datamine's Mineable Shape Optimiser and considered Indicated and Inferred Resources. The

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
assumptions	*Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimization (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	2.0g/t cut-off shapes were then manually edited to form the PFS stope shapes. Multiple mine designs and schedules were completed. The design and schedule that best met Resolute's criteria was selected as the final mine plan for the PFS. The stope shapes included mining around historical voids. Each stope was assessed for the amount of void interaction and a mining recovery factor applied to each stope, ranging from 80% to 0%. Longhole mining methods were considered the most appropriate mining method based on ore geometry, geotechnical and economic factors. Assessment was made of various longhole mining methods, with selected study methods consisting of longhole open stoping with pillars and longhole stoping with introduced rockfill (sublevel shrink) as applied at Resolute's Mt Wright mine. Longhole stoping with pillars is the primary mining method and is used in area where the stope blocks are less continuous, occur in multiple lodes and are generally narrower. Sublevel shrink is used in the lower southern mining area were the stope blocks are continuous and are generally wider (up to 25m). Geotechnical assessment indicated that conditions are amenable to moderately large scale open stoping. Minimal dilution is expected in most areas, except where graphitic shears are located near the orebody. There is considerable stoping experience from previous mining available, which was used to validate the geotechnical assessment. The recommended maximum hydraulic radius for unsupported stopes was 8.1m. The PFS and Ore Reserves are based on the Mineral Resource estimate that was detailed in the ASX release dated 18 October 2017. Unplanned stope dilution was estimated as 15%, comprising approximately 10% included in the process of converting the 10m stope sections into wireframes stope shapes and an additional 5% included in the mine schedule. Mining recovery was set at 85% for sublevel shrink, based on actual performance at Mt Wright. Mining recovery ranged from 55% to 80% for longhole stoping with pillars. This included an allowance for pillar loss and mining losses around voids. Approximately 50% of the stope tonnes and ounces are obtained from stopes with no void interactions, 40% from stopes with one void interaction and 10% from stopes with multiple void interactions. Stope dimensions are based on a level interval of 30m, minimum width of 5m and a strike length of 30m. The level interval was fixed by the spacing of the historical development. Indicated and Inferred Resources were used in the PFS. The PFS contains 60% Indicated and 40% Inferred Resources The Ore reserves are reported as a subset of the PFS. Two separate economic evaluations were conducted on the Ore Reserves only (Inferred Resources were excluded), both of which demonstrated the project produced positive cash flows on an Ore Reserve only basis. The first assessment was based on a stand alone Ore Reserves mining schedule and a simple economic evaluation.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		The second assessment was by removing the Inferred Resources from the PFS financial model. The surface infrastructure is largely already in place, such as haul roads, workshops and offices. The mine will be accessed by two declines to service the 1.3km of mining strike length. One decline is pre-existing from the Bibiani Main pit to the 9 Level and will be extended to the base of the mine. A second decline was commenced but was halted prior to being connected to the orebody. This decline required a new portal and extending to connect to the remainder of the mine design. Only preliminary assessments have been made of infrastructure such as ventilation, power and dewatering. The primary airflows are estimated as 350m^3/s to 400 m^3/s, with the two declines used as primary intakes and two 4m diameter rises located as the southern end of the mine providing primary exhaust. Dewatering of the historical working is required ahead of mining. The volume of voids is estimated at approximately 1.5Mm^3 from old survey plans that have been digitised to 3D. It is proposed to dewater the voids from dedicated large diameter drillholes equipped with borehole pumps.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralization.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	The ore will be processed through the existing Bibiani processing plant that is currently on care and maintenance. The plant has a nominal capacity of 3Mtpa. This will be reduced to 1.1Mtpa to treat Bibiani underground ore only. The plant was designed around a standard carbon-in-leach (CIL) process to extract the gold from the ore. To enhance the process, rather than rely on CIL with gravity, the overflow material from the SAG mill is floated and then re-ground to increase yield. Testwork has shown that the mineralogy of the deposit favours targeted regrinding of gold-associated sulphide minerals in order to achieve optimal leach extraction. The plant required refurbishment of most components, plus replacement or changes to the primary classification, scavenger flotation, regrind and concentrate areas. The assessment of the plant and proposed modifications were undertaken by an experienced consultant. Numerous phases of metallurgical testwork have been undertaken on underground samples over the previous 15 years. The samples are representative both spatially and in grade of the Ore Reserves. An average metallurgical recovery of 89.9% was used in the PFS, based on Resolute's analysis of the testwork data. No deleterious elements were identified from the testwork and historical processing.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterization and the consideration of potential sites, status of design options considered and, where applicable, the status*	An Environmental Impact Study (EIS) has been completed and submitted to the Ghanaian Environmental Protection Agency (EPA). The EPA has accepted the EIS and has invoiced the permit fee. Waste rock will be stored on existing waste dumps. Process tailings will be deposited in the existing TFS.

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	of approvals for process residue storage and waste dumps should be reported.	Historical test work has shown the waste rock and tailings are non-acid forming.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	Bibiani is an existing mining operation. All necessary infrastructure for operations is in place, including a processing plant, offices and workshops, tailings storage facility (TFS) and accommodation facilities for senior staff. Most of the facilities are in reasonable condition and require refurbishment to commence operations. The TFS footprint has the capacity to contain all tails produced in the mine plan. An approximately 2.5m high lift is required to the TSF wall. The capital for this work has not been included in the PFS financial model. AMC expects it to be in the range of $3M to $5M. Ghana is an established mining jurisdiction, with an experienced labour pool available in country. The labour pool will be supplemented by expatriates in key roles. Labour will be accommodated either in the Bibiani mine camp or local towns. Bibiani is located approximately 80km from the major regional city of Kumasi and is connected by the sealed Kumasi-Bibiani-Sefwi highway. Electrical power is provided from the government grid.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Capital costs are based on a PFS level of accuracy. Mining capital costs are based on contract mining for the first three years. The mine development costs are based on mine physical and contract rates from Resolute's Syama mine in Mali and preliminary infrastructure costs. Processing capital costs were based on a minimal capital cost approach to refurbish and upgrade the existing plant. Mining operating costs are based on: • Contract mining costs for the first three years • Owner mining thereafter. The owner mining costs are based on a first principal cost build-up. Processing cost of US$21.6/t and administration costs of US$9.0/t are based on Resolute undertaking these activities and have been developed from first principals. No deleterious elements were identified and no allowance was made in the project financial model. The exchange rates were based in Resolute forecasts with USD to GHS of 1:4.5 and USD to AUD of 1:1.33 used in the PFS. Royalties total 6% and include the standard Ghanaian government royalty of 5% plus 1% for other external parties.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange*	Production and recovery for revenue factors were based on the PFS level mining schedule, factors and cost estimates. A gold price of US$1,200/oz was used for the PFS and Ore Reserve estimate.

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	rates, transportation and treatment charges, penalties, net smelter returns, etc. • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	There is a transparent quoted market for the sale of gold.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The economic analysis was based on: • Costs as described previously • Gold price of US$1,200/oz • Royalties of 6% • Tax rate of 35% • Discount rate of 5.5% for real, post-tax cash flows NPV sensitivity was undertaken on key parameters such as metal price, gold grade, processing recovery, costs and exchange rates Major parameters were flexed by up to 10% and provided post-tax NPVs ranging from US$37M to US$140M.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	Resolute and its consultants have performed appropriate stakeholder engagement at the local, regional and national level. These are documented in the EIS.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*	Bibiani is located in a tropical environment and subject to heavy rain events. The Bibiani underground is connected to the open pit in many places and rainfall will drain into the underground workings. The project is owned by Mensin Gold Bibiani Ltd (MGBL) a wholly owned subsidiary of Resolute Mining Ltd. While mining and environmental permits were held by the previous operators, they did not include underground mining. Some permits have expired or were cancelled when the operation was placed on care and maintenance.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	Prior to recommencing operations and environmental permit will be required from the EPA and a Mining Permit from the Minerals Commission. There is no reason not to expect these to be granted.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	All Indicated Resources were classified as Probable Ore Reserves There are no Measured Resources
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No reviewed of audits have been undertaken of the Ore Reserves estimate
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits,*	The design, schedule and financial model are prepared to PFS level of accuracy. The PFS requires mining around historic voids, with 50% of the stope tonnes and ounces mined in close proximity to voids. Mining around voids has a degree of uncertainty. The metallurgical recovery is based on a certain sulphide content, if the sulphide content is higher than 0.6% metallurgical recovery will be lower. Further metallurgical recovery testwork is required to validate the metallurgical recovery.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognized that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	