Resolute | ASX Announcement

21 September 2016

Ravenswood Expansion Project extends mine-life to 2029

Further 13 years of operations at average annual gold production of 120,000 ounces at Life-of-Mine All-in-Sustaining Costs of A$1,166/oz

Highlights

- Feasibility Study completed for the Ravenswood Expansion Project which confirms long life, low risk, low cost development plan with robust economics
- Average annual production to increase to approximately **120,000 ounces** of gold
- Mine life extended by **13 years** with operations continuing until at least 2029
- Life of Mine All-in-Sustaining Costs of **A$1,166 per ounce** (US$880 per ounce)
- Total Ravenswood Ore Reserves increased to **1.8 million ounces**
- Staged development plan requires no immediate additional capital expenditure during FY17
- Start-up capital of only **A$134 million** for pre-stripping and staged processing plant expansion to 5.0 million tonnes per annum
- Life of Mine major project capital of **A$258 million** (including A$134 million start-up) staged over six years to 2022
- Significant potential for economic upside and further extensions

Resolute Mining Limited (Resolute or the Company) (ASX:RSG) is pleased to advise that it has completed the Ravenswood Expansion Project Feasibility Study (REP Study) at its 100% owned Ravenswood Gold Mine (Ravenswood or the Project) in Queensland, Australia. The REP Study defines Resolute's plans to complete the Mt Wright underground mine and extend mining operations at Ravenswood by recommencing open-pit mining in the Nolans East, Sarsfield, and Buck Reef West Pits.

Managing Director and CEO, Mr John Welborn, stated the REP Study was a tremendous achievement for Resolute: "A year ago we were facing the prospect of closing our operations at Ravenswood when the Mt Wright underground reserves were exhausted. We now look forward with confidence to a highly profitable 13-year mine life at Ravenswood as we return to open pit mining at Sarsfield and Buck Reef West. Combined with the 12-year mine life at Syama, Resolute's gold business now possesses a combination of longevity and scale unrivalled amongst our peer group."

"Innovative solutions and a staged approach to development has resulted in increased annual production and low operating costs which drive exceptionally positive economic outcomes. Importantly, the Project has low up-front capital requirements with total project capital staged over six years. The FY17 capital requirements are already included in the current year guidance and are fully funded from existing cash reserves and operating cash flows."

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"The REP represents a transformation of our Ravenswood operations and has been made possible by the imaginative work of Resolute's project delivery team and the Ravenswood operating team. A number of important improvements have been incorporated into the REP Study which have boosted the economic results of the Project and enhanced the future environmental outcomes. I am especially proud that the expansion project will secure the future employment of 280 permanent employees and contractors and lead to a significant number of new jobs in the Ravenswood region."

"Ravenswood is a major gold field, having produced over 3 million ounces of gold. Resolute now has ore reserves of 1.8 million ounces and total resources of 4.3 million ounces. Establishing a development plan to ensure a long life, low cost open pit operation to follow Mt Wright has been a key priority for our business. With the successful completion of the REP Study, Resolute is well placed to take advantage of the strong Australian gold price and continue our positive operating performance at Ravenswood and maintain our diversified production base between Australia and Africa."

"The REP Study has also identified further significant potential upside at Ravenswood. Projects such as Welcome Breccia and other regional prospects offer the potential to augment the open pit ore with high grade underground feed. In addition, opportunities for further cost reduction, such as owner operator mining, have yet to be assessed".

Production	Units	LOM Output
Underground Mining		
Ore Mined	kt	931
Ore Grade	g/t	2.72
Metal Contained (ROM)	koz	81
Open Pit Mining		
Ore Mined:		
Run of Mine	kt	35,419
Low Grade	kt	35,269
Waste Mine	kt	96,705
Total Movement	kt	167,392
Life of Mine Strip Ratio	Waste:Ore	1.3
Ore Grade:		
Run of Mine	g/t	0.97
Low Grade	g/t	0.50
Metal Contained (ROM)	koz	1,663
Processing		
Total ore processed*	kt	58,557
Metal grade (ROM)	g/t	0.91
Metal contained (ROM)	koz	1,712
Processing recovery	%	90%
Metal (recovered)	koz	1,536
Mine life (incl. pre-production)	years	13.0
Cost Analysis		
Costs	**A$m**	**A$/t**
Mining	566	9.7
Processing	861	14.7
G&A	207	3.5
Royalty	126	2.2
Sustaining capital	30	0.5
Unit Costs	**A$m**	**A$/oz**
All in Sustaining Cost	**1,790**	**1,166**

**= Beneficiated low grade + Open pit ROM + UG ore*

Table 1: Key REP Study Outcomes

The REP was established with the aim of maintaining continuity of production at Ravenswood as the Mt Wright underground mine prepares for closure in 2017. Resolute has recently commenced a transition back to open pit mining, with open pit operations at the Nolans East deposit having commenced in August 2016. The REP will see the eventual development of three open pits at Nolans East, Sarsfield and Buck Reef West.

The REP Study contemplates the following development sequence:

- Mt Wright underground operations continuing until eventual closure in mid-2017;
- Mining underway, with first ore processed in September 2016 from Nolans East;
- Increase in processing capacity to 2.8 million tonnes per annum (Mtpa) from October 2016;
- Approval for mining of Sarsfield open pit in January 2017;
- Approval for mining of Buck Reef West open pit in mid-2018; and
- Expansion of mill capacity to 5.0Mtpa to commence in FY18.

The REP Study envisages an expansion to 5.0Mpta in the year following approval of the Sarsfield open pit. The Company has already commenced increasing plant throughput to 2.8Mtpa which is expected to be achieved from October 2016.

The REP will utilise a number of innovative approaches to mine scheduling, tailings management, waste water treatment and open pit blasting practices in order to minimise initial capital costs and ensure best practice environmental and community outcomes are achieved. Mining and processing of Sarsfield ore will include a beneficiation stage for low grade ore, nominally 0.3-0.7 grams per tonne (g/t), which will reject approximately 30-40% of crushed ore, for the loss of around 4% of contained gold.

Resolute is working collaboratively with the Queensland Government to achieve an amended Environmental Authority (EA) for Sarsfield by late 2016. The amended EA for the Sarsfield Expansion Project is the final approval required to allow mining activities to recommence in the Sarsfield Pit. Resolute will also commence the formal approval process for the Buck Reef West Project in late 2016. It is anticipated that this will allow final approvals to be obtained by mid-2018. The Company has worked closely with the Ravenswood community in developing its plans for the REP. Projects are being developed to preserve and rehabilitate a number of heritage buildings and artefacts in the vicinity of the proposed open pits. Resolute welcomes the opportunity provided by the REP to further enhance its legacy at Ravenswood and continue its role as a major employer in the greater Charters Towers region.

Key outcomes from the REP Study are summarised in the body of this announcement, and are based on financial and production models commencing from 1 July 2016 and so include the remaining Mt Wright production and costs. The estimates reflect all of the costs associated with the ongoing development and operation of Ravenswood, as well as sustaining capital and processing plant maintenance capital. Mine operating costs include all waste stripping other than major pre-strip capital.

The REP is designed to give the Company maximum operational and balance sheet flexibility. It allows Resolute to respond to changes in external circumstances such as gold price movements and internal competition for capital. This flexibility also allows Resolute to consider additional ore sources that may have potential to augment planned production. The Company recently re-commenced drilling at the Welcome Breccia Project located 40km north of Ravenswood. Welcome Breccia hosts an underground Mineral Resource of 210,000 ounces (oz), and has the potential to be developed in parallel with the open pits.

For further information, contact:

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ASX:RSG Capital Summary
Fully Paid Ordinary Shares: 658,921,396
Current Share Price: A$2.14 as at 20 Sep, 2016
Market Capitalisation: A$1.41 Billion
FY17 Guidance: 300,000oz @AISC A$1,280/oz

Board of Directors
Mr Peter Huston *Non-Executive Chairman*
Mr John Welborn *Managing Director & CEO*
Mr Peter Sullivan *Non-Executive Director*
Mr Martin Botha *Non-Executive Director*
Mr Bill Price *Non-Executive Director*

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Background and REP Study details

Introduction

The REP Study was established with the aim of maintaining continuity of production at Ravenswood by transitioning operations back to open pit mining. The REP will manage the process of completing the Mt Wright underground operations and the eventual development of three open pits at Nolans East, Sarsfield and Buck Reef West.

The REP Study includes an expansion of processing capacity to the previous rate of 5.0Mpta through a staged development process. In the current financial year Resolute has already commenced open pit mining at Nolans East and is increasing plant throughput to 2.8Mtpa which is expected to be achieved from October 2016 (See ASX announcement dated 21 June 2016).

Location

The REP area is located at the Ravenswood Gold Mine in northern Queensland, Australia approximately 120km southwest of the major regional centre and port of Townsville and approximately 90km by road east of Charters Towers.

History

The Ravenswood gold mine has been in continuous operation since 1987 and currently employs 280 full-time workers and pays State Government royalties to the Queensland government of approximately $8.5 million (m) annually.

Gold has been mined at Ravenswood since the discovery of the goldfield in 1868. The first of two distinct periods of historic mining activity occurred from 1868 to 1880 and consisted of alluvial and shallow reef mining. The second consisted of major underground operations on the reefs from 1897 to 1914.

In 1978 Carpentaria Gold Pty Ltd (Carpentaria Gold), then a subsidiary of MIM Holdings Limited (MIM), began exploration at Ravenswood and in 1987 commenced mining activity, initially from open pits and subsequently from underground mining. Carpentaria Gold's operations at Ravenswood have undergone continual expansion since 1987 having commenced as a 250,000 tonnes per annum heap leach operation. The operation expanded to a 2.0Mtpa Carbon-in-Pulp (CIP) operation in 1993 in joint venture with Haoma Mining NL (Haoma). In 2000 the operation was further expanded to 5.0Mtpa with processing equipment purchased from mines at Kidston and Mt Leyshon. During this period ore was sourced from the Sarsfield and Nolans open pits. In 2003 Carpentaria Gold acquired the remaining interest in Nolans East from Haoma. During the same year Xstrata plc (Xstrata) purchased MIM taking control of Carpentaria Gold and the Ravenswood operation.

Resolute acquired Carpentaria Gold from Xstrata in 2004 and assumed operating control of the Sarsfield open pit mine and the Nolan's processing plant (Nolans Plant) which was operating at a 5.0Mtpa rate. Resolute developed the nearby Mt Wright Underground Mine, initially as a high grade ore source to supplement the Sarsfield ore and

subsequently as the primary ore source for operations. In 2009 Resolute commissioned the Mt Wright Underground Mine and open cut mining operations ceased at the Sarsfield open pit. The Nolans Plant treated both Sarsfield low grade stockpiles and Mt Wright underground ore at a 5.0Mtpa rate until 2012. Since 2012 the Nolans Plant has been run at a reduced capacity with the Mt Wright underground operation providing 1.5Mtpa of ore producing approximately 125,000oz of gold per annum. The current Ravenswood operation comprises the Mt Wright underground mine located 12km north-west of the Nolans mill and the Nolans East open pit, located adjacent to the plant. The underground operation has delivered approximately 1.5Mtpa of mill feed to the process plant for the past six years, but is scheduled to close in mid-2017.

Geology

The focus of the REP will be the Sarsfield, Nolans and Buck Reef West gold deposits, all of which have been mined previously. The deposits are hosted by diorite intrusives in the Silurian to Devonian aged Jessop's Creek Tonalite Complex in the Ravenswood Batholith. In the Project area the Tonalite Complex includes units of diorite, quartz diorite and minor gabbro. Deposit types include sulphide quartz shear lodes (Buck Reef West and Sarsfield), narrow high grade veins (Buck Reef West and Sarsfield) and large quartz-sulphide vein stock-works (Sarsfield, Nolans and Nolans East).

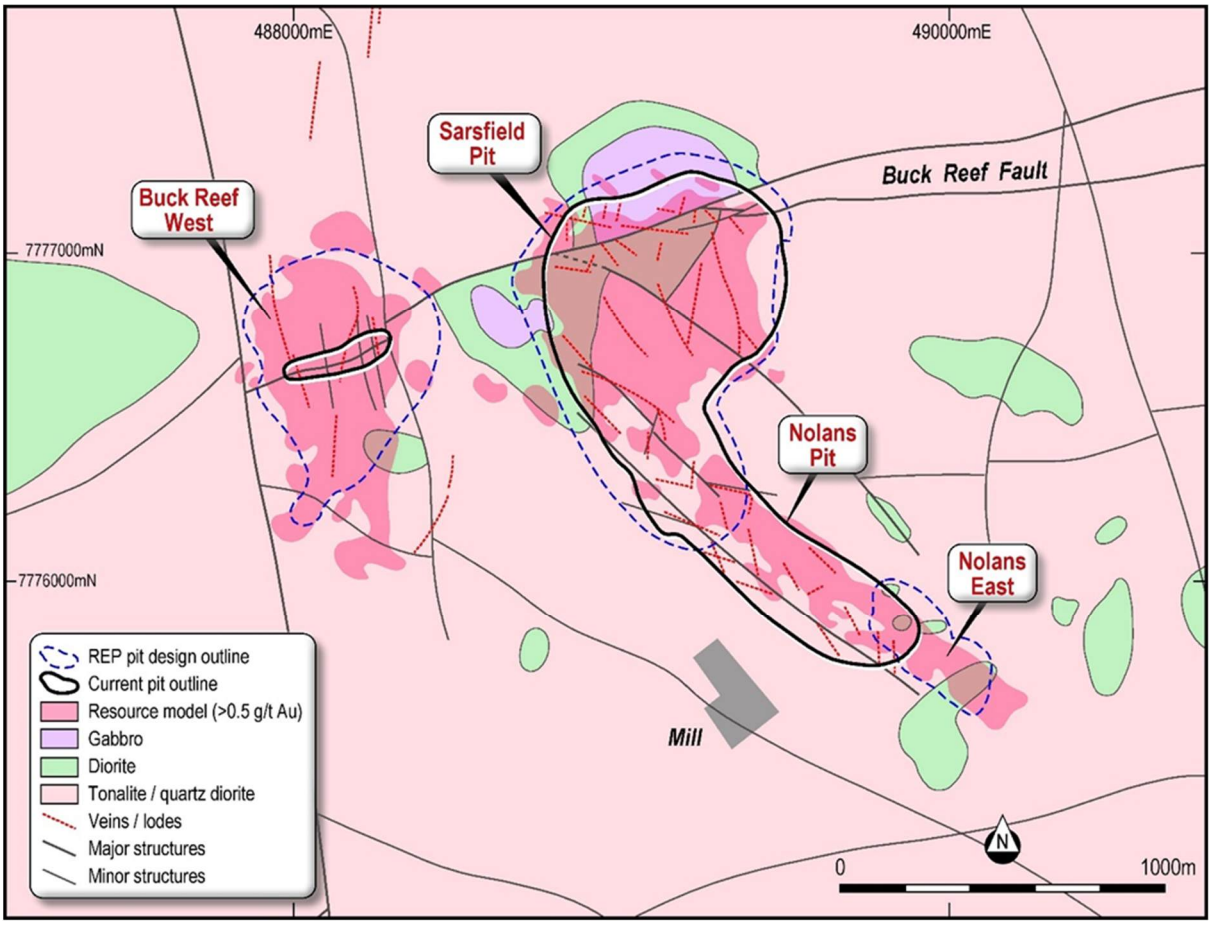


Figure 1: Ravenswood geology and open pits

The Ravenswood deposits, excluding Mt Wright, have produced over 3.4 million ounces of gold, from several phases of operation. Despite this, very little deep drilling has been undertaken, and a number of attractive exploration targets remain in the immediate vicinity of the current resources.

Resources

The Mineral Resource statement for Ravenswood is provided below.

Ravenswood [1]	MEASURED			INDICATED			INFERRED			TOTAL		
	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz	Kt	g/t	Koz
Sarsfield (insitu) [2]	46,453	0.8	1,186	57,664	0.7	892	22,192	0.7	521	126,309	0.6	2,599
Buck Reef West	17,857	1.0	598	11,582	0.9	323	12,360	0.9	356	41,799	1.0	1,277
Sub Total O/C	64,310	0.9	1,784	69,246	0.5	1,215	34,552	0.8	877	168,108	0.7	3,876
Mt Wright (insitu) [3]	826	2.9	78	354	3.3	38	1,079	3.1	107	2,259	3.1	223
Welcome Breccia	0	0.0	0	0	0.0	0	2,036	3.2	208	2,036	3.2	208
Stockpiles	0	0.0	0	8	3.9	1	0	0.0	0	8	3.9	1
Sub Total UG	826	2.9	78	362	3.4	39	3,115	3.1	315	4,303	3.1	432
Ravenswood Total	**65,136**	**0.9**	**1,862**	**69,608**	**0.6**	**1,254**	**37,667**	**1.0**	**1,192**	**172,411**	**0.8**	**4,308**

1) Mineral Resources are inclusive of Ore Reserves - differences may occur due to rounding. 2) Resources are reported as follows - Nolans East above 0.5g/t cut off, and Sarsfield plus Buck Reef West above 0.4g/t cut off. 3) Mt Wright Resources above 1.8g/t cut off.

Table 2: Ravenswood Mineral Resources

Mining

The REP comprises mining operations in three separate open pits which include:

- Nolans East: A small pit is being developed at the eastern end of the present Nolans pit which involves a cutback of the eastern and northern walls
- Sarsfield: A cutback of the main Sarsfield open pit
- Buck Reef West: Excavation of new open pit. The area has previously been the subject of small scale underground and open pit mining.

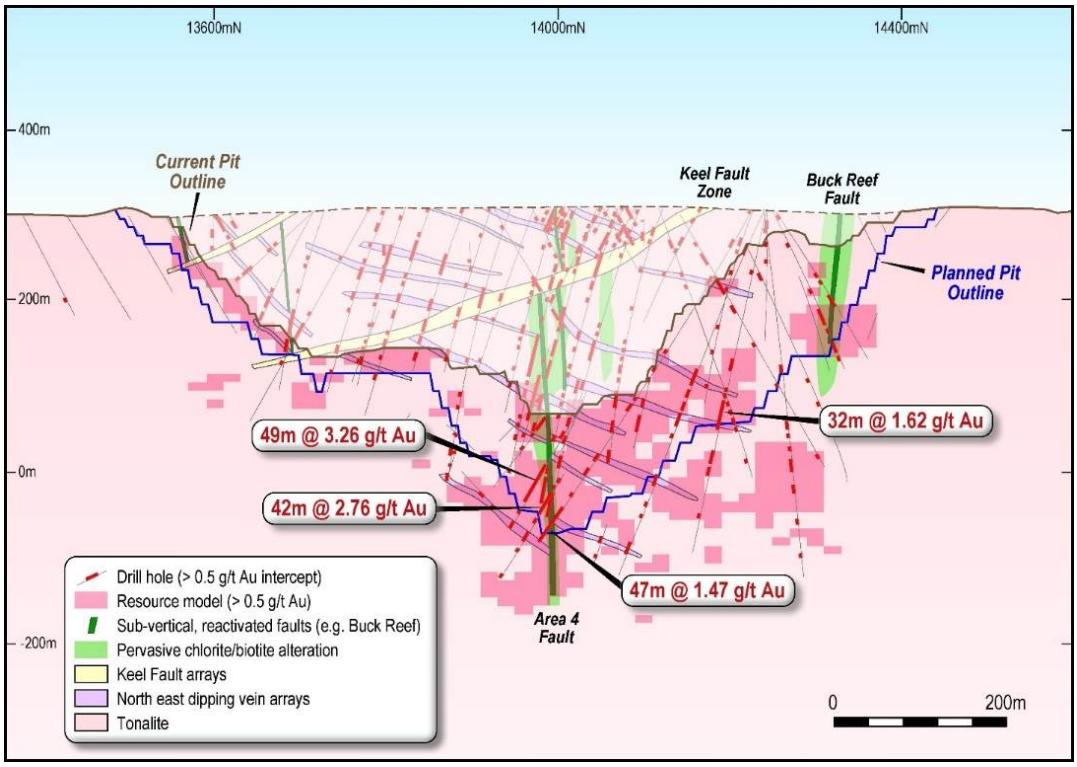


Figure 2: Sarsfield Open Pit Cross Section

The mining operations required for the development of the open pits comprise two separate components:

- Dredging of tailings from the Sarsfield pit; and
- Conventional drill and blast, load and haul operations at Nolans East, Sarsfield and Buck Reef West.

The REP Study assumes that mining will be performed using reputable large scale open pit contractors. Optimisations and designs were based on an assumed gold price of A$1,575/oz.

The mining schedules depicted in Figure 4 show total movement increasing over the course of FY17 and FY18 to peak at around 19.0Mtpa in FY19 to FY21. Thereafter movement rates fall back to average around 14.0Mtpa to FY26. The location of mining activities and the volumes excavated are designed to ensure full utilisation of the mill, as it is progressively upgraded to 5.0Mtpa.

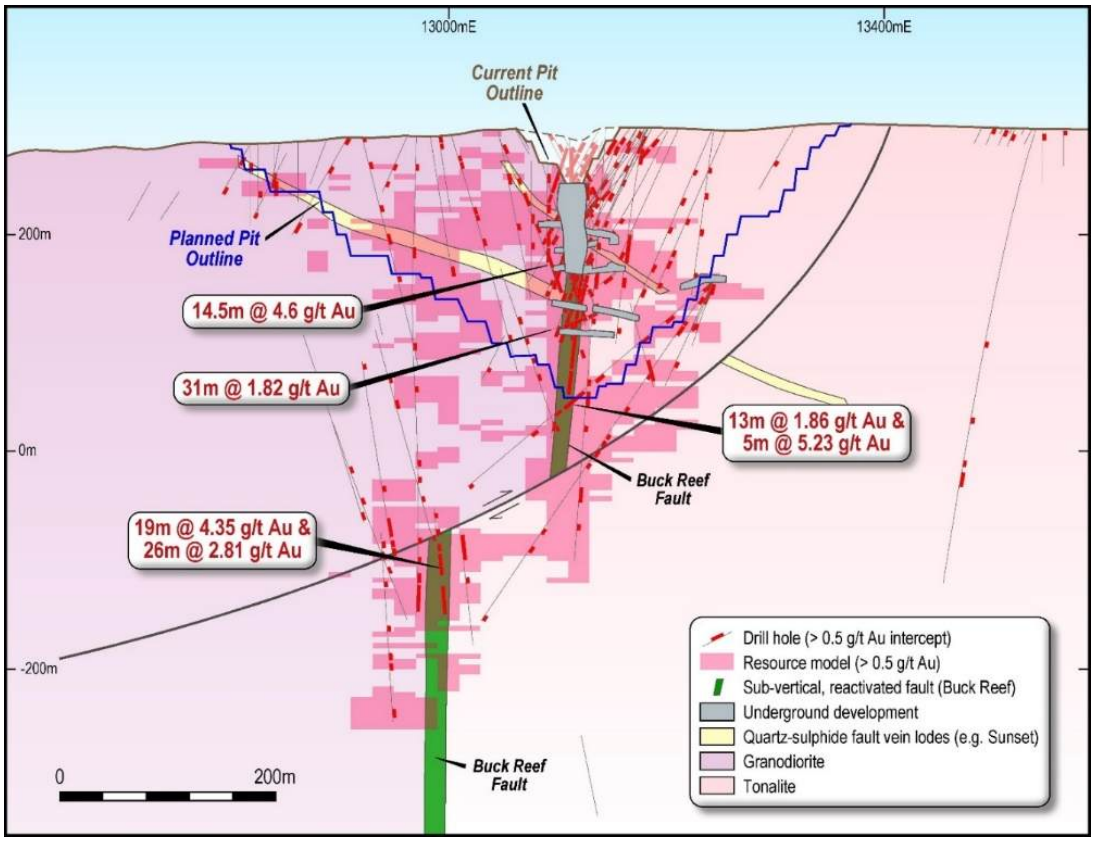


Figure 3: Buck Reef West Open Pit Cross Section showing previous underground and open pit development (refer to ASX Announcement 19 June 2014)

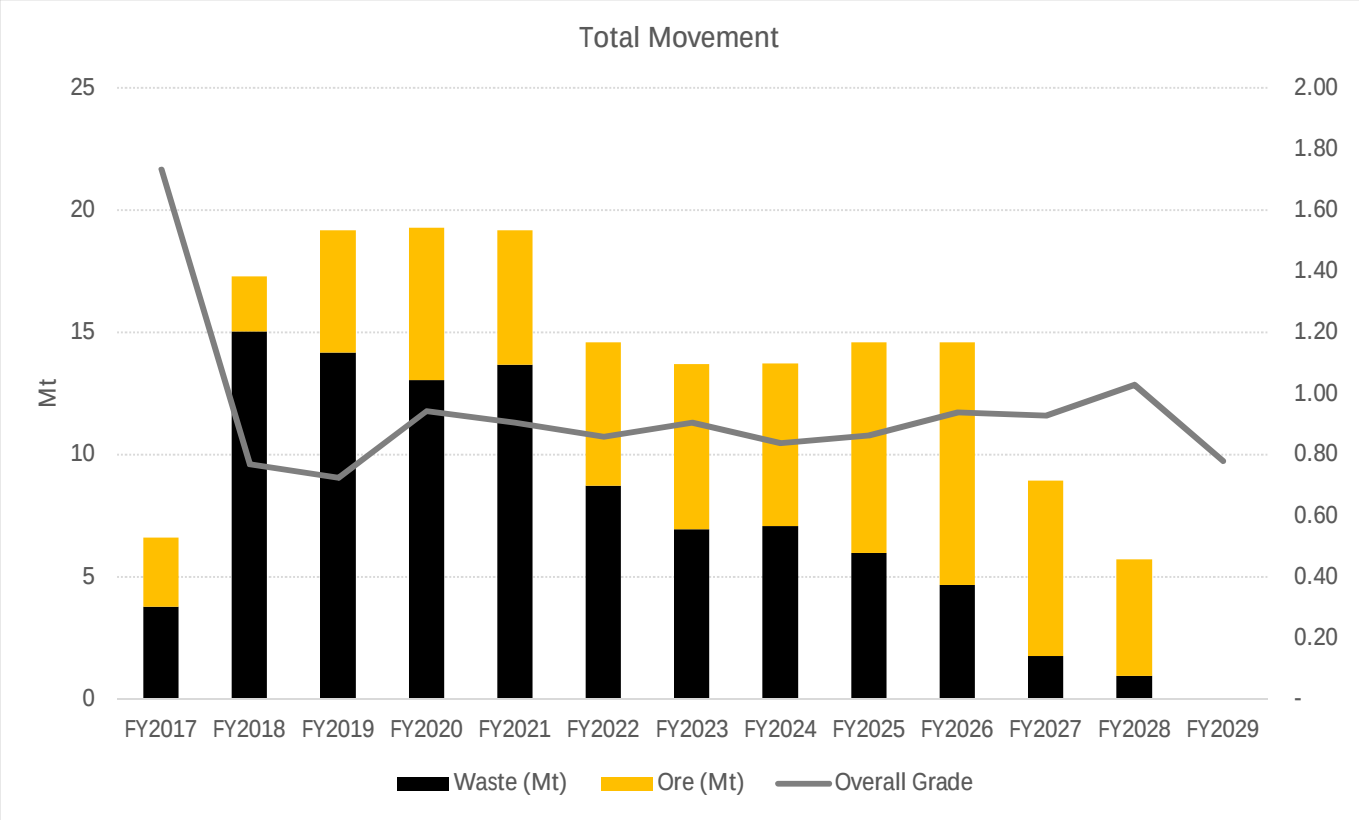


Figure 4: Open Pit Ore Mining Schedule

Reserves

Following the completion of pit optimisation and mine design, Ore Reserves were estimated and mine scheduling completed to deliver the required material to the crusher and mill. Detailed information for the Ravenswood Ore Reserves is provided below.

Ravenswood [1]	PROVED			PROBABLE			TOTAL		
	Kt	g/t	Koz	kT	g/t	kOz	kT	g/t	kOz
Sarsfield (insitu) [2]	28,450	0.8	747	18,640	0.7	423	47,090	0.8	1,170
Nolans East	1,818	0.8	46	846	0.9	25	2,664	0.8	71
Buck Reef West [2]	12,448	0.9	362	6,515	0.8	163	18,963	0.9	525
Sub Total Open Cut	42,716	0.8	1,155	26,001	0.7	611	68,717	0.8	1,766
Mt Wright (insitu) [3]	682	2.7	60	248	2.7	21	930	2.7	81
Stockpiles	0	0.0	0	8	3.0	1	8	3.0	1
Sub Total Underground	682	2.7	60	256	2.7	22	938	2.7	82
Ravenswood Total	**43,398**	**0.9**	**1,215**	**26,257**	**0.7**	**633**	**69,655**	**0.8**	**1,848**

1) Mineral Resources are inclusive of Ore Reserves - differences may occur due to rounding. 2) Reserves are reported as follows: Nolans East above 0.5g/t cut off, and Sarsfield plus Buck Reef West above 0.4g/t cut off. 3) Mt Wright Reserves are reported above 2.3g/t cut off

Table 3: Ravenswood Ore Reserves

Development Strategy

Staged Development Approach

The REP Study is based on the following development sequence:

- Mt Wright underground operations continuing until eventual closure in mid-2017;
- Mining underway, with first ore processed in September 2016 from Nolans East;
- Increase in processing capacity to 2.8Mtpa from October 2016;
- Approval for mining of Sarsfield open pit in late 2016;
- Approval for mining of Buck Reef West open pit in mid-2018; and
- Expansion of mill capacity to 5.0Mtpa to commence in FY18.

The sequence above requires four main activities:

- Dewatering and treating the clear water (supernatant) above the tailings stored in the Sarsfield pit;
- Increasing the processing rate of the Nolans Plant to treat 5.0Mtpa of milled feed;
- Dredging the tailings from the Sarsfield pit; and
- Managing both the production and dredged tailings through dry stacking of all tailings.

Processing

History

Prior to the development of the Mt Wright underground mine, the Nolans Plant at the Ravenswood Mine treated approximately 5.0Mtpa of Sarsfield ore. In 2011 the Nolans Plant was reconfigured to treat Mt Wright underground ore at the lower tonnage of 1.5Mtpa and one of the three mills was placed on care and maintenance. Since 2009 the Sarsfield pit has been used for tailings containment and to date approximately 15 million tonnes of tailings has been deposited in the pit.

The Sarsfield, Nolans East and Buck Reef West ore all exhibit similar metallurgical characteristics, namely high recovery through milling to a P80 180µm followed by conventional processing through a gravity, oxygen enhanced CIP plant with a gravity circuit.

Beneficiation

Test work and historical performance has demonstrated that the ore is amenable to beneficiation through the rejection of a “nominal” 50mm oversize after secondary crushing. Previous owners ran two extensive successful pilot programmes and Resolute has recently replicated this characteristic through the beneficiation of low grade stockpiles on site. At the current gold price and operating costs, it is viable to beneficiate material between 0.3 – 0.7g/t ore from Sarsfield and potentially Nolans East and Buck Reef West.

Dewatering and treatment of the supernatant

The 4.65GL of clear water (supernatant) above the tailings stored in the Sarsfield pit will be pumped from the pit and treated through a leased Reverse Osmosis (RO) Plant with the permeate reducing the operation’s raw water requirement as well as providing a source of “beneficial use” water for the mine site and environs.

Nolans Plant expansion

The crushing circuit will be increased to handle 7.1Mtpa of ROM (pre-beneficiation). This will be achieved by installing a parallel three stage crushing circuit. The circuit will also incorporate a beneficiation screen to discard a nominal +50mm product after secondary crushing of low grade material.

The leach circuit will be expanded by the installation of two new leach tanks to optimise recovery.

Sarsfield Tailings

The tailings in the Sarsfield pit will be dredged at a rate (nominally 2.5Mtpa) to maintain a 20m differential between the vertical advance of the Sarsfield cutback and the level of the tailings in the pit. The dredged material will be treated in a new thickener and then filtered to extract water. The filter product will also be conveyed to the dry tailings stacker. The filtrate will be returned to the process water circuit.

Tailings Storage

The Dry Stacked Tailings Storage Facility (DSTSF) comprises a combined waste landform with the filtered tailings contained by mine waste to the North. The sides of the facility are covered with mine waste. In preparation for the placement of tailings to the north of the Nolans Pit the existing ground will be profiled with mine waste from the mining of the Nolans East Pit, as appropriate, during FY17 to FY19.

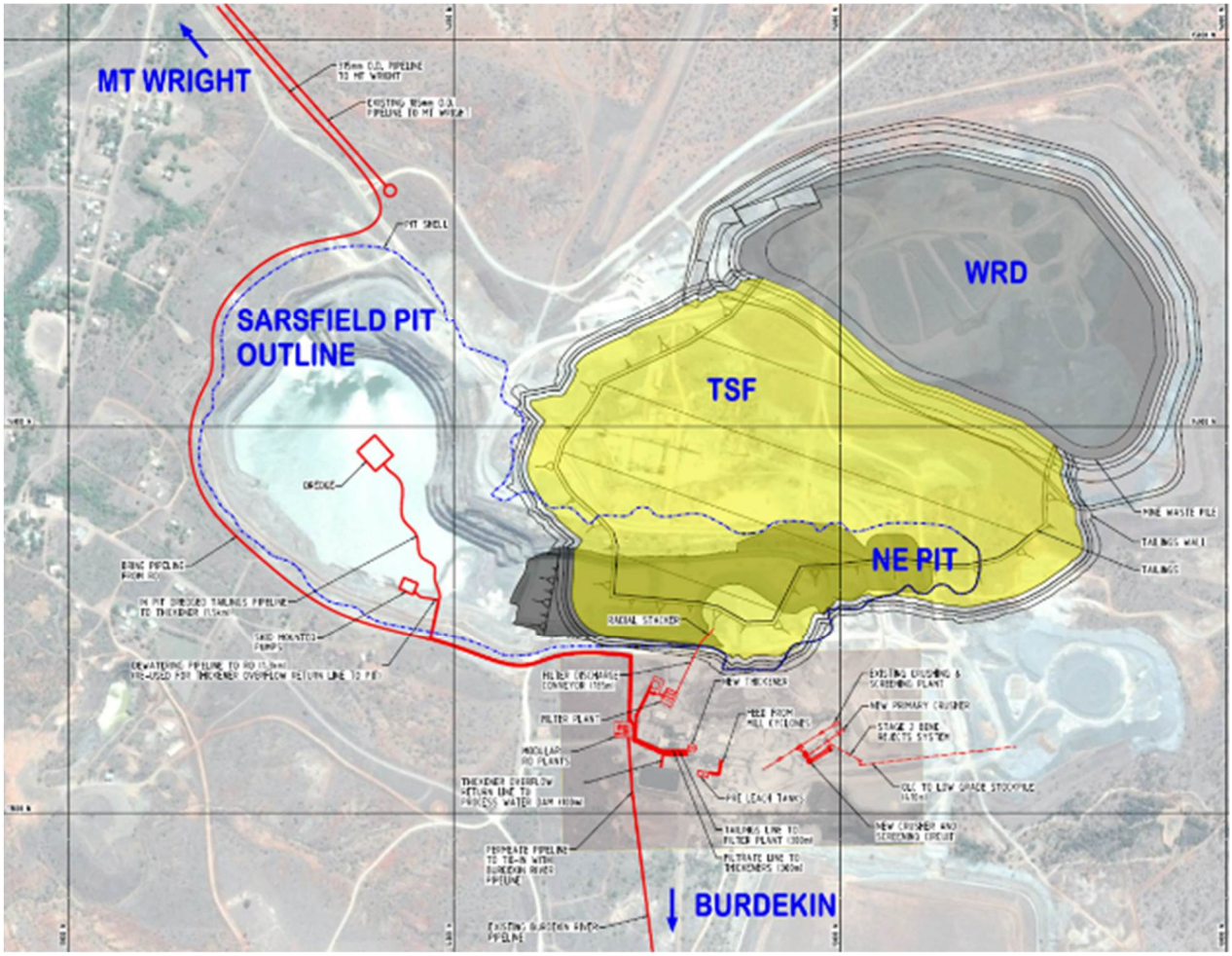


Figure 5: Plant layout plan showing location of dry-stacked TSF

A liner will be placed to the north of the Nolans Pit from FY18 to FY20 to accommodate the placement of filtered tailings which is expected to commence in FY19/FY20. This liner will be extended up and over the surface of the existing waste dump. The liner will contain seepage, if any, from the DSTSF and direct rainfall runoff toward the Nolans Pit.

Processing Schedule

The processing schedule for the REP incorporates a ramp up from the recent throughput of 1.5Mtpa to 2.8Mtpa in FY17 to 5.0Mtpa by FY19.

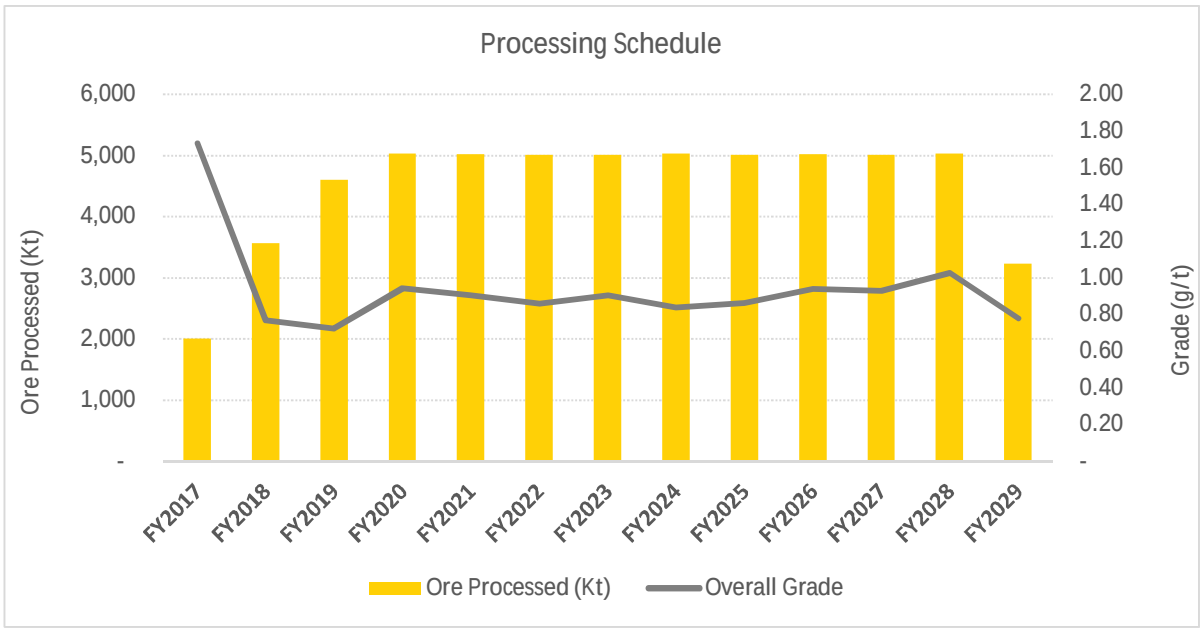


Figure 6: Processing Schedule

Adoption of the REP into the Ravenswood Life-of-Mine (LOM) does not affect production guidance for the current financial year. Production from Ravenswood in FY17 is expected to be maintained at approximately 100,000oz of gold. Transition to exclusively open-pit mining will see production of approximately 80,000oz in FY18. Gold production builds from FY18 to 130,000oz in FY20, and averages around 135,000oz in the period to FY28.

Average annual gold production over the 13-year mine life of the REP is approximately 120,000oz.

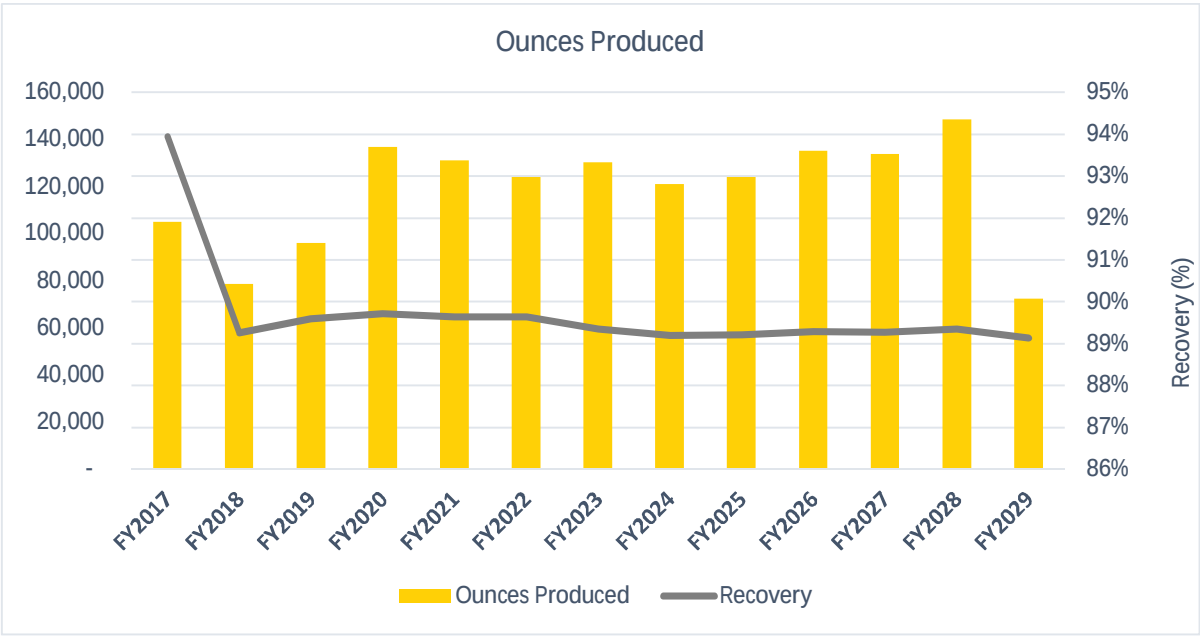


Figure 7: Gold Production Schedule

Capital and Operating Costs

A capital and operating cost estimate has been developed in conjunction with international mining and engineering consultants and suppliers. The pricing has been based on an equipment list, process flow diagrams and arrangement sketches. The operating cost assumes current contract mining rates, current processing costs modified to reflect reagent consumptions and recoveries obtained through test work programmes on the ore, and contracted power and site administration costs.

Description	Total Expenditure (A$m)	Capital (A$/t)
Start-up project capital		
Beneficiation and new crushing circuit	43	0.7
Dewatering	8	0.1
RO plant, piping & plumbing	10	0.2
Initial Pre-strip / Dredging	49	0.8
Nolans 2.8Mtpa - Plant Upgrade	2	0.0
Nolans 5.0Mtpa - Plant Upgrade	14	0.2
Miscellaneous	7	0.1
Subtotal	**134**	**2.3**
Other project capital		
Dewatering	2	0.0
Filters	31	0.5
CIL tanks	5	0.1
Later Pre-strip	77	1.3
Beneficiation and materials handling Nolan's circuit	5	0.1
Miscellaneous	4	0.1
Subtotal	**124**	**2.1**
LOM project capital	**258**	**4.4**

Table 4: Capital Summary

The timing of capital expenditure for mining, de-watering, Sarsfield tailings dredging and processing is matched to the availability of ore and the processing schedule, as illustrated below.

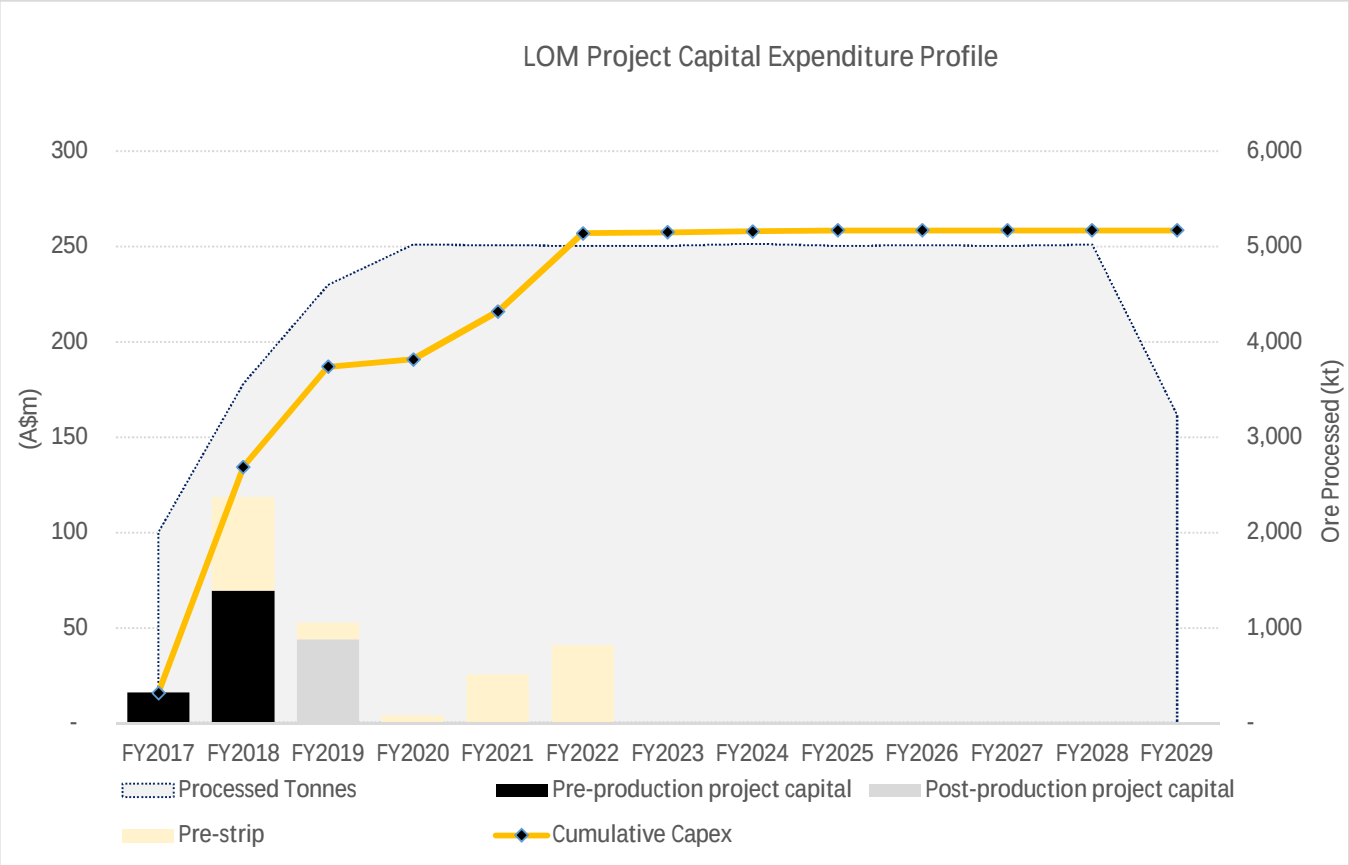


Figure 8: Ravenswood Capital Schedule

Due to the Nolans Pit being used to retain dry stacked tailings in the initial years of operation, the costs of construction and lining of the dry stacked tailings facility (A$13m) are captured in the sustaining costs in Table 4. Capital costs include an allowance for Owners costs and EPCM contracting philosophy (15%) and contingency (20%).

Start-up capital of A$134m is deployed over FY17 and FY18 and total LOM project capital of A$258m is staged over six years to FY22. The current year FY17 guidance includes all expenditure required for the REP which is fully funded from existing cash reserves and operating cash flows.

Infrastructure

Ravenswood is a mature operation which has previously operated as a 5.0Mtpa open cut mine. The existing infrastructure, including grid power, sub-potable process water and excellent transport links support the planned return to open cut operations.

Innovation and Future Technology Application

With the Project operating in close proximity to the town of Ravenswood, Resolute has drawn upon a number of innovations and technologies that are not traditionally incorporated into an open-cut gold project. These range from:

- Transferring integrated blasting services used within the quarrying industry to deliver low noise, vibration and material throw while maintaining high fragmentation for production efficiency;
- Filtration technology to produce a DSTSF facility located within and subsequently adjacent to an existing pit to minimise seepage and manage run off; and
- Beneficiation of the low grade ROM through classification.

The application of these technologies has greatly enhanced the economics of the Project and reduced both the environmental and community effects of the operation.

Environment and Social Impacts

Carpentaria Gold originally initiated the EA process required to reopen the Sarsfield pit in July 2011. A draft 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 Environment and Heritage Protection issuing an EIS Assessment Report in June 2014.

As detailed above a number of key changes were made to the 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 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 footprint and location of the DSTSF (reduced in volume due to dry stacking), in an area of existing land disturbance; and
- A plan to manage accumulated water in the Sarsfield Pit using a RO Plant, instead of evaporative fans as originally proposed.

Resolute currently employs 280 staff and contractors at Ravenswood. Currently 94% of our staff drive in and out of the operation at the end of their rosters, with the majority of these living within approximately 150km of Ravenswood, in towns such as Townsville, Charters Towers, Ayr and Home Hill. The extension of mining in Ravenswood will ensure the continuation of these 280 jobs in regional Queensland and create 100 new construction jobs during the first three years of the Project.

Regulatory Approvals Timeline

Various local, regional, and state regulatory approvals are required for the REP to proceed as envisaged in the REP Study. Resolute has been working closely with all relevant authorities since 2011 on the various aspects of the REP and is not aware of any special impediments to the eventual grant of the required approvals.

Due to schedule constraints the Sarsfield and Buck Reef West open pit projects will require their own separate approval pathways. Under the REP plan final approvals for Sarsfield are anticipated by January 2017. Buck Reef West final approvals are anticipated during the first half of 2018.

Economic & Social Benefits

In addition to maintaining continuity of gold production for Resolute, the REP ensures the following local and regional economic benefits are realised:

- Continuation of 280 jobs in regional Queensland;
- Potential for additional 100 new jobs in regional Queensland;
- Continuation of annual gold royalty payment to Queensland Government (currently circa $8.5m);
- Support for local Ravenswood business;
- Continuation of company operated water supply and treatment operations;
- Continuation of community support. This includes support of the Ravenswood Restoration and Preservation Association, RFDS, Rural Fire Brigade, medical support, swimming pool life guards, Seniors Community group, sporting team sponsorship, Ravenswood State School support, community garden projects); and
- Continuation of annual rates payment to Charters Towers Regional Council (currently circa A$300,000).

The increase in annual production over the 13 years of additional mine life will generate State Government Royalties in excess of A$100m. Resolute is proud of the Company's exceptional environmental, social, and heritage protection record and the proactive approach we have adopted to ensure the Ravenswood gold mine delivers positive outcomes for all stakeholders.

Potential Upside

There is significant potential for enhancement to the current base case, from a combination of exploration and evaluation of existing resources and the pursuit of additional cost savings.

Welcome Breccia

Welcome Breccia is located 40km north of the Nolans Plant. Gold mineralisation at Welcome Breccia is focused in and around a vertical granodiorite breccia pipe. Exploration in 2010-11 (refer to ASX Announcement 9 September 2011) identified high grade gold mineralisation, focused towards the margins of the steeply north plunging breccia zone and within steeply dipping quartz vein arrays marginal to the breccia. Based on drilling conducted in 2010, Resolute established an Inferred Resource of 210Koz at 3.2g/t. The bulk of the resource is contained between 300m and 500m below surface.

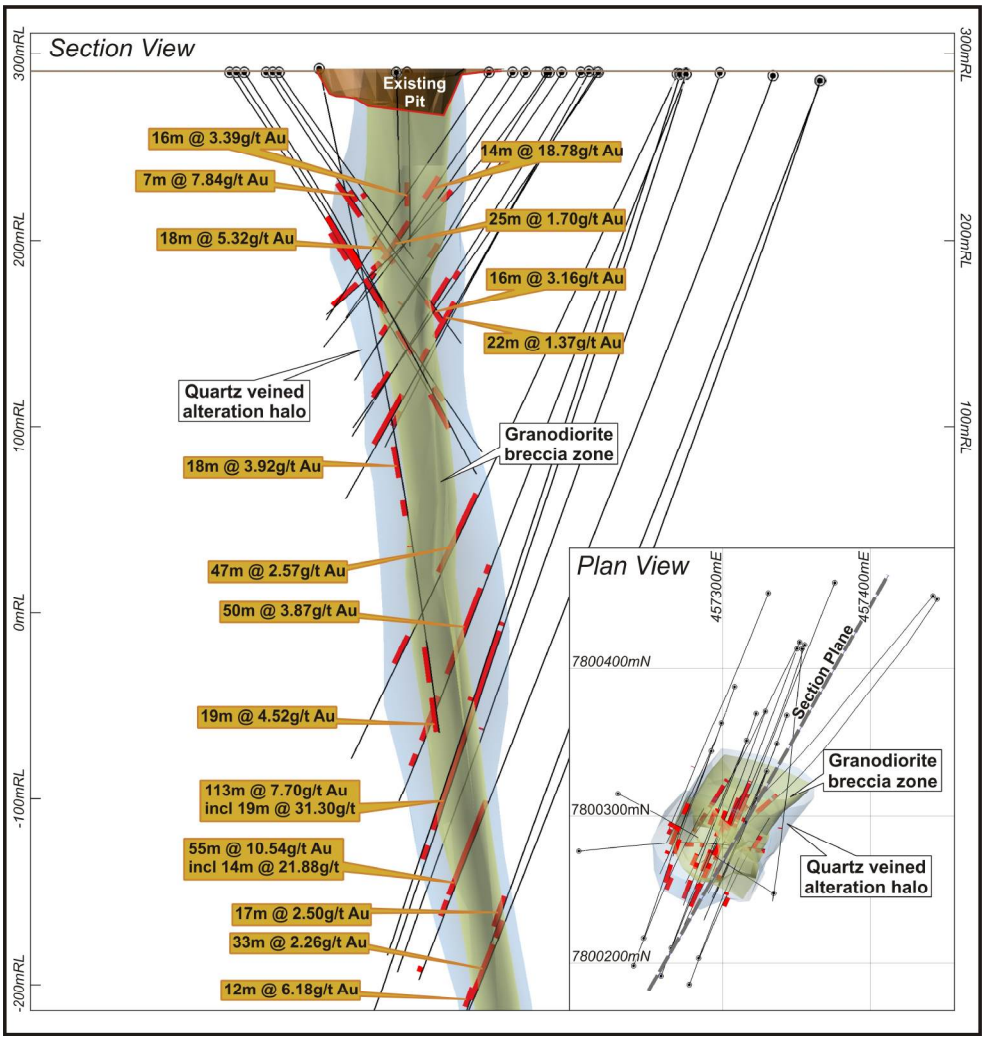


Figure 9: Drilling Results from the Welcome Breccia Deposit (from ASX Announcement 9 September 2011)

Resolute has commenced a program of infill drilling with the aim of upgrading the resource classification from Inferred to Indicated over the next six months, with mining studies to follow if results are sufficiently encouraging. The Company sees Welcome Breccia as a potentially very valuable source of incremental feed to the expanded Nolans Plant. If drilling and evaluation work is positive, a priority will be placed on bringing Welcome Breccia into the mine schedule as quickly as possible.

Potential for Cost Savings

The REP Study cost estimates are derived from current processing and administration operating costs at Ravenswood, and contract mining rates at Nolans East. The Company see opportunity for improvements in mining pre-strip and operating costs at the Sarsfield and Buck Reef West pits, where larger equipment is likely to be employed than at Nolans East. The Company will consider a move to owner operated mining where the long mine life and steady volumes lend themselves to such an approach. Resolute is confident that significant savings can be achieved and will initiate a formal study into owner mining in due course.

About Resolute

Resolute is a successful gold miner with more than 25 years of continuous production. The Company is an experienced explorer, developer, and operator having operated nine gold mines across Australia and Africa which have produced in excess of 7 million ounces of gold. The Company currently operates two mines, the Syama Gold Mine in Africa and the Ravenswood Gold Mine in Australia, and is one of the largest gold producers listed on the Australian Securities Exchange with FY17 guidance of 300,000 ounces of gold production at All-in-Sustaining Costs of A$1,280/oz (US$934/oz).

The Ravenswood Gold Mine in Queensland, Australia demonstrates Resolute's significant underground expertise in the success in mining the Mt Wright ore body. The completion of the Ravenswood Extension Project Study has now confirmed a 13-year mine life based on a return to open pit mining.

Resolute's flagship Syama Gold Mine in Mali is a robust long life asset benefitting from fully operational parallel sulphide and oxide processing plants. The move to underground mining will continue the asset's history of strong cash generation and extend the mine life to out beyond 2028.

In Ghana, the Company has completed a feasibility study on the Bibiani Gold Project focused on the development of an underground operation requiring modest capital and using existing plant infrastructure. Resolute also controls an extensive exploration footprint along the highly prospective Syama Shear and greenstone belts in Mali and Cote d'Ivoire and is active in reviewing new opportunities to build shareholder value.

Competent Persons Statement

The information in this report that relates to the Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Richard Bray who is a Registered Professional Geologist with the Australian Institute of Geoscientists and Mr Andrew Goode who is a member of The Australasian Institute of Mining and Metallurgy. Mr Richard Bray and Mr Andrew Goode each have more than 5 years' experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Richard Bray and Mr Andrew Goode are full time employees of Resolute Mining Limited Group and each hold equity securities in the Company. They have consented to the inclusion of the matters in this report based on their information in the form and context in which it appears. This information was prepared and disclosed under the JORC code 2012 except where otherwise noted. Particular Reserves and Resources remain 2004 JORC compliant and not updated to JORC code 2012 on the basis that information has not materially changed since it was last reported.

The information in this report/announcement that relates to processing, infrastructure, beneficiation and operating and capital cost estimation are based on and fairly represents information compiled or reviewed by Mr Paul Henharen who is a Competent Person as a member of the Australasian Institute of Mining and Metallurgy. Mr Paul Henharen has over 5 years' experience relevant to the activities undertaken for preparation of the relevant sections of this report, is a full time employee of Resolute Mining Limited Group and holds equity securities in the Company. Mr Paul Henharen has consented to the inclusion of the matters in this report based on their information in the form and context in which it appears.

Cautionary Statement about Forward Looking Statements

This announcement includes certain statements, estimates and projections with respect to the future performances of the Ravenswood Gold Mine. The Company believes it has a reasonable basis for the forward-looking statements contained in this announcement based on advice of the Competent Persons involved in the Ravenswood Extension Project feasibility study, the Company's long previous history of production and operation of the existing mines and processing facilities at Ravenswood, and the Company's strong historical knowledge of open cut mining. Notwithstanding the above, forward-looking statements, estimates and projections reflect various assumptions concerning anticipated results, which assumptions may prove not to be correct. The projections are

merely estimates by Resolute, of the anticipated future performance of Resolute's business based on interpretations of existing circumstances, and factual information and certain assumptions of economic results, which may prove to be incorrect. Such projections and estimates are not necessarily indicative of future performance, which may be significantly less favourable than as reflected herein. Accordingly, no representations are made as to the fairness, accuracy, correctness or completeness of the information contained in this announcement including estimates or projections and such statements, estimates and projections should not be relied upon as indicative of future value, or as a guarantee of value of future results. This announcement does not constitute an offer, invitation or recommendation to subscribe for or purchase securities in Resolute Mining Limited (ASX:RSG).

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

JORC Code, 2012 Edition – Table 1 report

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*	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 by the Competent Person. Historical sampling preparation protocols were deemed appropriate at the time.

Criteria	JORC Code explanation	Commentary
	gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
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 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.*	Diamond core interval recoveries are measured and logged for recent data; they are rarely logged for historical data. RC, OHP and AC recoveries are not collected. Appropriate measures are taken to maximise sample recovery and ensure the representative nature of the samples.
Logging	· *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support*	Recent and historic RC, AC, OHP and DD drill holes are geologically logged 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.

Criteria	JORC Code explanation	Commentary
	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.*	Historic RC, AC and OHP holes were logged to match the sampling interval of 1 or 2m. Geotechnical, structure orientation, recovery and magnetic susceptibility data are measured and logged for diamond core intervals. Diamond core is photographed (wet and dry) for recent data but there are few photographs available 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 on a laptop computer either at the drill site (RC) or the core shed (DD) into Excel, validated and imported into the drillhole database. Historic logging was completed on paper templates at the core shed or drill rig and occasionally entered into the computer database from 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 situ material collected, including for instance*	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 are sampled at 1m intervals and cut into half core to provide a 2-4kg sample which is sent to the laboratory for crushing to 10mm, splitting and pulverising to 85% passing 75 microns. 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.

Criteria	JORC Code explanation	Commentary
	results for field duplicate/second-half sampling. · *Whether sample sizes are appropriate to the grain size of the material being sampled.*	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 for the historical DD drilling. Sampling, sample preparation and quality control protocols are industry standard and are deemed appropriate by the Competent Person.
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 Au-AA25 method which is 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.

Criteria	JORC Code explanation	Commentary
		Analysis of the available QC sample assay results indicates that an acceptable level of accuracy and precision has been achieved. 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.*	Collar coordinates for recent drill holes are picked up in UTM by contract and staff surveyors using Leica 1203 DGPS (up to 10cm accuracy). The survey pickup method is unknown 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.

Criteria	JORC Code explanation	Commentary
	· *Quality and adequacy of topographic control.*	Coordinates and azimuth are reported in UTM AMG84 Zone 55. Coordinates are translated to local mine grid where appropriate.
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 appropriateness of the drill spacing is reviewed by the geological team and Competent Person. No sample compositing is applied during the sampling process.
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.*	RC and diamond core samples are initially stored on site and then securely despatched to ALS Townsville laboratory.

Criteria	JORC Code explanation	Commentary
		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 supplied for historical drilling data.

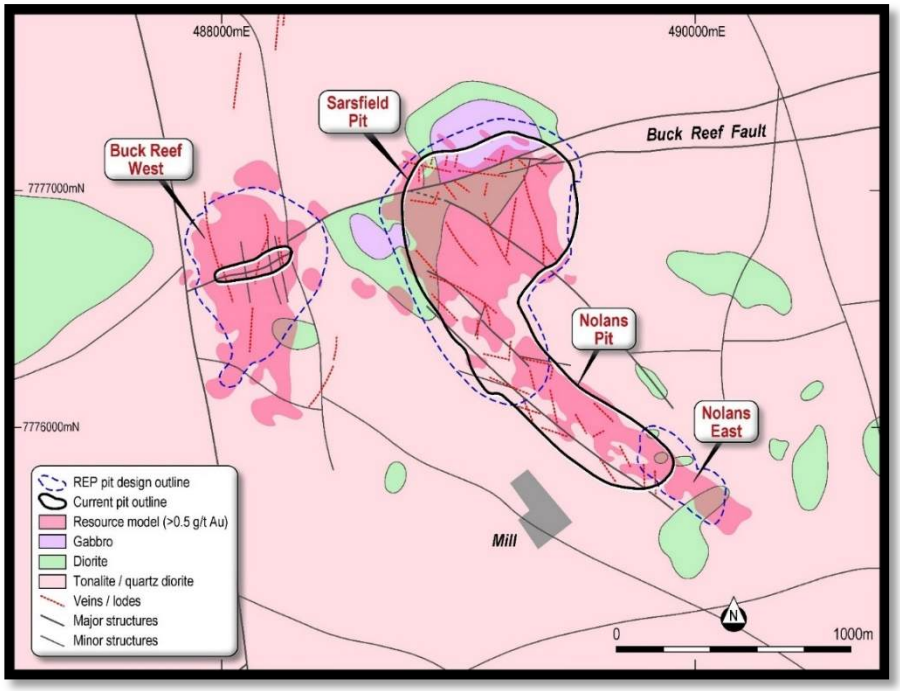
Section 2 Reporting of Exploration Results

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 QLD 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 QLD 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 long 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 a number of vein stock works. Areas of weak veining separate the more strongly stock-worked areas into discrete zones. Individual veins vary in width from hairline fractures up to im locally. Mineralisation extends from the surface level and is essentially tested by drilling depth. 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.

Criteria	JORC Code explanation	Commentary
		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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	All information including easting, northing, elevation, dip, azimuth, coordinate system, drill hole length, intercept length and depth are documented in the tabulated intercepts in the body of the report. Detailed information in relation to the results from drilling used to calculate the Resource and Reserve is not included in this release. For completeness the following information is provided about the drill holes used in the resource calculation: 1. Easting, Northing and RL of the drill hole collars are measured and recorded in UTM AMG84 (Zone 55). 2. Dip is the inclination of the drill hole from horizontal. For example a drill hole drilled at -60^0 is 60^0 from the horizontal. 3. Down hole length is the distance down the inclination of the hole and is measured as the distance from the collar to 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 interest or assayed interval of interest. The Competent Persons do not believe the listing of the entire drill hole data base used to calculate the resources is 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*	Reported intercepts quoted in the report are length weighted. No top cuts are applied.

Criteria	JORC Code explanation	Commentary
	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.*	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. Drill holes were orientated to intersect mineralisation at a perpendicular angle. Results are reported as down hole length.
Diagrams	· *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant*	Relevant maps, diagrams and tabulations of intercepts are included in the body of the report.

Criteria	JORC Code explanation	Commentary
	discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.
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*	Further work is planned to evaluate exploration opportunities that extend the known mineralisation at the Buck Reef West / Sarsfield deposit and improve the confidence of the model.

Criteria	JORC Code explanation	Commentary
	future drilling areas, provided this information is not commercially sensitive.	

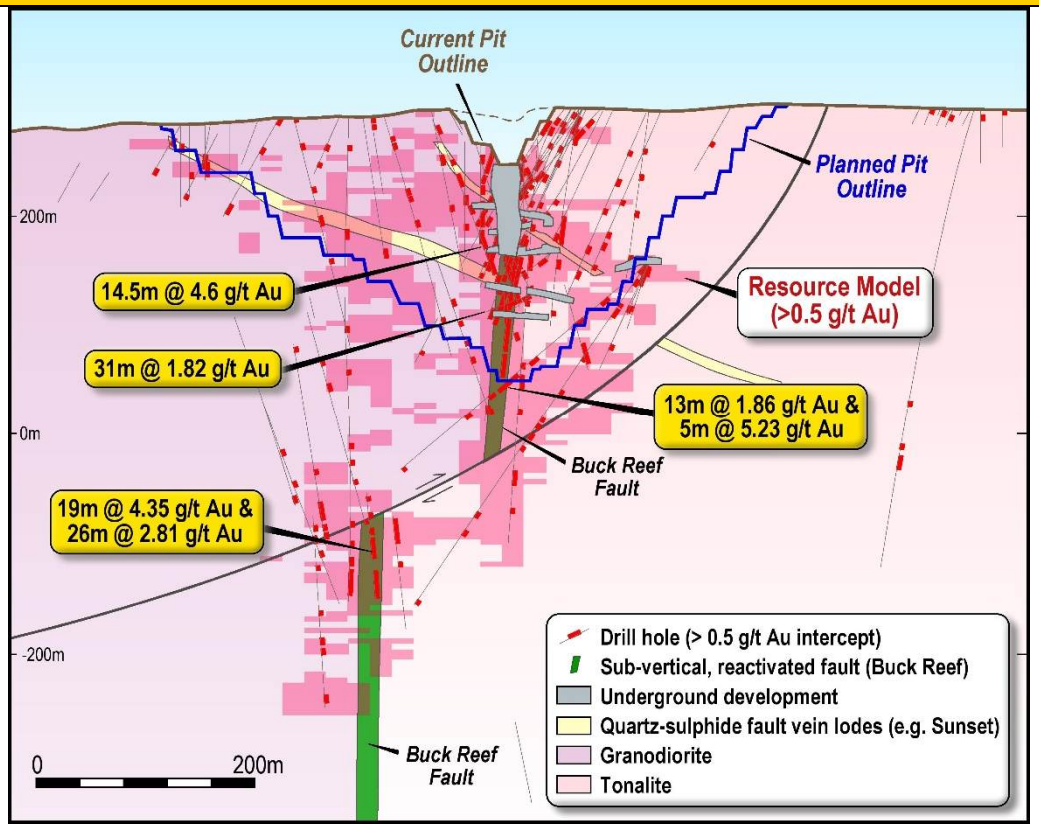
Section 3 Estimation and Reporting of Mineral Resources

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 (Maxwell Geoservices) 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.*	The Competent Persons have conducted numerous site visits to the Ravenswood Project Qld. 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.*	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.

Criteria	JORC Code explanation	Commentary
	· *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 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 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, Buck Reef West / Sarsfield resource modelling was divided into several domains based on geological structures/ lithologies and gold distribution; named as Area 2, Area 4, the Keel, Bell, OCA, Buckreef and Nolans zones.
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 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*	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.

Criteria	JORC Code explanation	Commentary
	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.*	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 Buck Reef West / 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 Buck Reef West / 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 Buck Reef West / 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 Buck Reef West / Sarsfield by previous owners of the project. The current resource estimate takes into account historic production using wireframes that represent the open cut pit and the stopes mined underground. No by-products or deleterious elements are modelled. Block dimensions used were 20mE by 20mN by 10mRL and chosen 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 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 Buck Reef West / 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.

Criteria	JORC Code explanation	Commentary
	· *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.*	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.

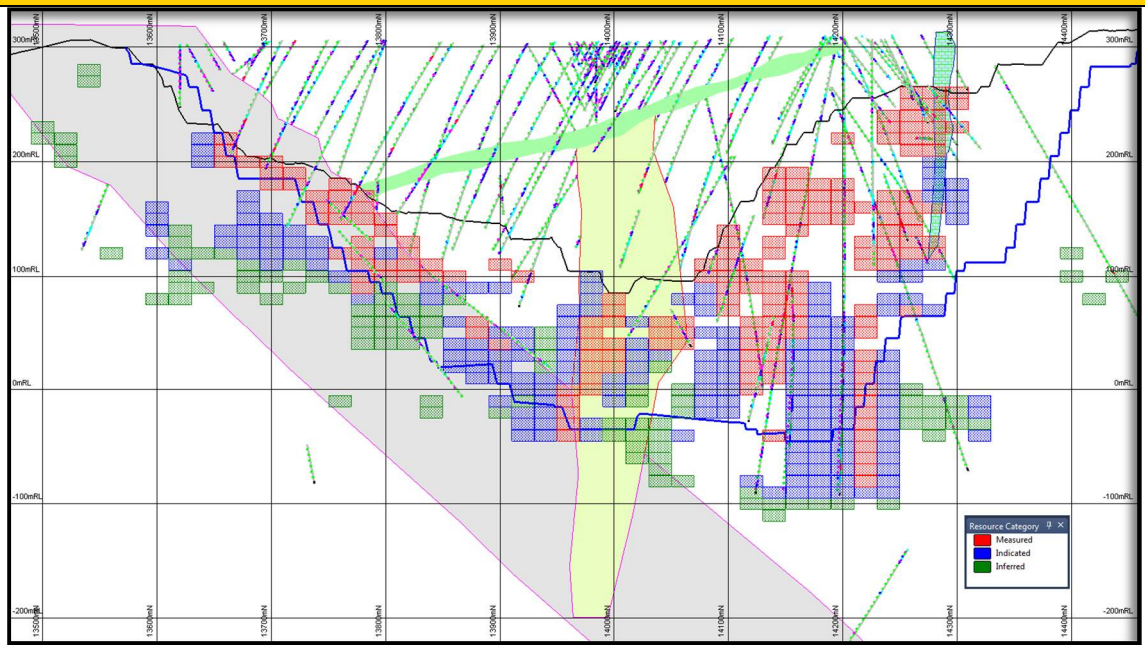
Criteria	JORC Code explanation	Commentary
		 Typical section through Buck Reef West Deposit.
Moisture	· *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All tonnages are estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	· *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The Mineral Resources were reported at a 0.4 g/t Au grade cut-off for Buck Reef West / Sarsfield. This cut off was chosen as the insitu marginal cut- grade estimation, using current Ravenswood economic parameters, indicates that this is 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.*	Mining methods for the extraction of gold at Buck Reef West / Sarsfield 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 ore blocking 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. Buck Reef West / Sarsfield pit was mined historically using standard open pit mining methods with a backhoe type excavator to excavate benches. Below the open cut, underground 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.
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*	Crushing at Buck Reef West / Sarsfield will be either single stage or in three stages depending on the gold grade of the material to be crushed. Some minor adjustments to the current circuit used for Mt Wright ore will be required. 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.

Criteria	JORC Code explanation	Commentary
	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.	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.*	The Buck Reef West / Sarsfield operation at Ravenswood is centred on the Nolans Plant site. Ore from the Mt Wright underground mine is currently 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. 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;

Criteria	JORC Code explanation	Commentary
		· 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 · 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.*	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 Bulk Density of 2.78 has been used for this study.

Criteria	JORC Code explanation	Commentary
	· *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	
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.*	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
		 Sarsfield Section 13712.5 m E looking West
Audits or reviews	· *The results of any audits or reviews of Mineral Resource estimates.*	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*	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.

Criteria	JORC Code explanation	Commentary
	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 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 / 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 / Sarsfield are reported above a 0.4 g/t cut-off. This was calculated as a marginal cut off utilising open pit mining methods. Material below this cut-off is not considered in the 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. Reported Ore Reserves are exclusive to the 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 Richard Bray who is a Registered Professional Geologist with the Australian Institute of Geoscientists and Mr Paul Henharen and Mr Andrew Goode, who are members of The Australasian Institute of Mining and Metallurgy are the Competent Persons. Both have conducted regular site visits to the Ravenswood Project location.
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.*	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. A practical pit design was completed and scheduled as part of the Feasibility process.
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 current budget cost models, including contractor estimates and actual cost data. Processing recovery and other factors were determined from actual current performance, or historic/estimated 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*	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 four flitches.

Criteria	JORC Code explanation	Commentary
	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.*	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. A minimum mining width of 40m has been applied. Ramp widths are set at 26m (double lane – 777 haulage truck) for the upper sections and then narrowed to 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 spaced at approximately 5mE by 12.5mN with samples taken at 1.5 metre intervals down-hole. All Grade Control sampling assays are determined on a PAL system on the mine site. Standard QAQC protocols will be applied which comprise of 1 in every 10 samples. Existing geotechnical parameters, used in previous mining and validated through external consultant studies, as part of the Feasibility, have been applied; 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. Minimal infrastructure is required for the selected mining method with the exception of new ramp access into the existing void. Other required infrastructure is already in place. The waste dump will require expansion but sufficient space exists within the lease to do this.
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*	Gold is recovered using crushing, milling (SAG + ball), gravity circuit (Knelson Concentrator), and a CIL circuit. The metallurgical process is well-tested technology. The processing plant has been operating in its current configuration for several years and no significant changes to the circuit are anticipated. No deleterious elements have been experienced to date and are not expected.

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	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?*	A screening beneficiation circuit will be introduced as part of the crushing process. Beneficiation is defined as that process whereby ore is crushed and screened and a significant portion, usually confined to a particular size fraction, is discarded with the loss of only a small amount of fed metal. The remaining product contains the majority of the fed metal at a greatly enhanced grade in a significantly reduced volume. 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 enabled more confidence to be held in the results than if the study was on a laboratory or pilot plant scale using a relatively small amount of drill core as beneficiation plant feed. Adding to the confidence level was 27kt of Nolans ore treated in 1998 in a previous trial that showed clearly that the ore could be beneficiated. 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. Reopening the Sarsfield pit is essential to extending the life of the Ravenswood operation. Studies are currently underway to refine the costs for treating and disposing of the water and dredging and filtering the tailings contained within the Sarsfield Pit. The Sarsfield pit presently contains an estimated 15 Mt of tailings and approximately 12 Mm3 of water.

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		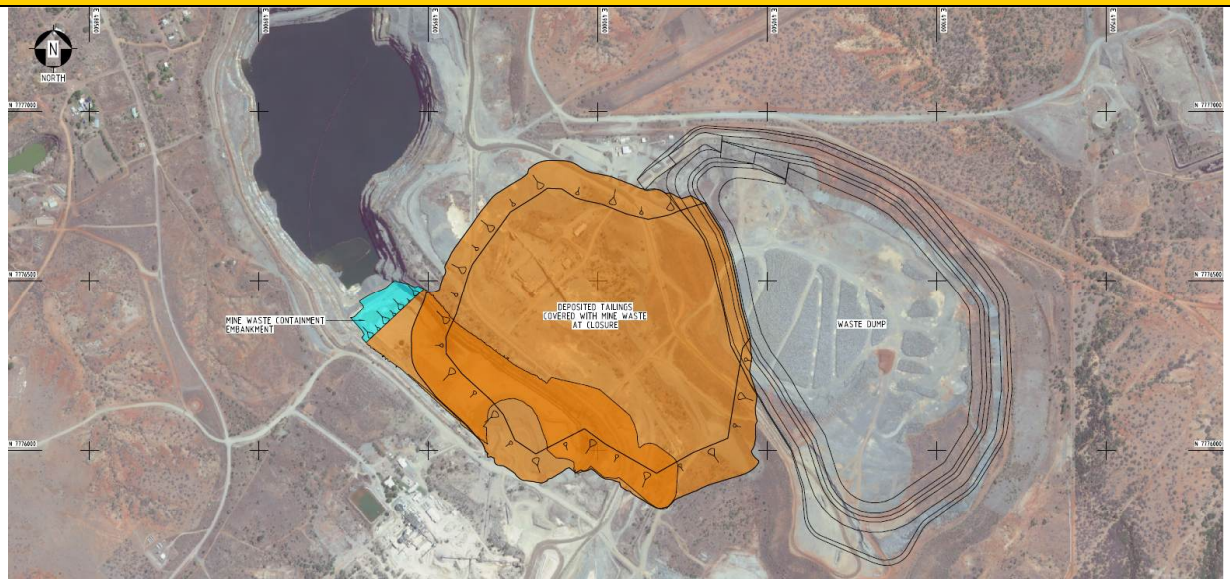 Producing dry stacked tailings is an essential feature of the Sarsfield Expansion Project. The Dry Stacked Tailings Storage Facility (DSTSF) comprises an integrated waste land form with the filtered tailings contained by mine waste to the north, with 10 m perimeter high rock bunds to the south and west. The sides of the facility are covered with mine waste and a preliminary surface cover concept of not less than 0.5 m thick. Details for the actual surface cover and the design for the surface cover of the existing Nolans Tailings Storage are to be finalised. The tailings are to be processed, thickened and filtered to provide a residue or filter cake which can be stacked. According to the test work which has been completed to date, the filter cake has a moisture content of approximately 17% to 20% after leaving the filtration plant. The tailings will be handled by conveying and with conventional earth moving equipment, i.e., trucks and shovels, to shape the materials to the final grade and apply surface compaction with smooth drum rollers or similar. 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 plant tailings will be stored in an approved dry storage facility.

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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. Being close to major centres, one of which with an International Airport ensures easy and quick supply of parts and materials. Carpentaria Gold has sufficient area on its leases to cater for its planned land requirements.
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 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 performance against budget costs has validated the cost assumptions. 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.

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	· *The allowances made for royalties payable, both Government and private.*	
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 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. In the estimate, a discount rate of 10% was used and a gold price of A$1,575 per oz.
Social	· *The status of agreements with key stakeholders and matters leading to social*	The Resolute group has 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

Criteria	JORC Code explanation	Commentary
	license to operate.	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. 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 by late-2016. 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. Carpentaria will also commence the formal approval process for the Buck Reef West Project in late-2016. It is anticipated that this will allow final approvals for the Buck Reef West to be obtained by mid-2018. 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. It is likely that Carpentaria Gold will need to buy a large number of residential blocks to the west, north and east of the Buck Reef West pit and rezone them such that they are no longer sensitive receptors in order to comply with modern environmental conditions.
Classification	· *The basis for the classification of the Ore Reserves into varying confidence categories.*	Only Measured Resources are converted to Proved Reserves Only Indicated Resources are converted to Probable Reserves

Criteria	JORC Code explanation	Commentary
	· *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).*	Inferred Resources are not included in the Ore Reserves The Resource to Reserve conversions were deemed appropriate for the Buck Reef West / Sarsfield Ore Reserve estimates by the Competent Persons.
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*	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
	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.*	