![abm resources logo]

Level 1, 141 Broadway
Nedlands WA 6009, AUSTRALIA

T +61 8 94239777   F +61 8 9423 9733
admin@abmresources.com.au
abmresources.com.au

ASX ANNOUNCEMENT / MEDIA RELEASE   **ASX: ABU**

1 September 2017

Twin Bonanza - Buccaneer Resource Update

ABM Resources NL ("ABM" or "the Company") provides an update of the Buccaneer Resource.

HIGHLIGHTS

- o   Resource updated to reflect the current understanding of the orebody
- o   10.0Mt at 1.82g/t for 585,000 ounces gold above a 1.0g/t cut-off
- o   Includes drilling completed subsequent to the 2013 Resource update
    - ▪   48 aircore holes for 3,305 metres
    - ▪   4 diamond holes for 749.9 metres
- o   Resource now includes only higher confidence drilling methods (RC, diamond and aircore)
- o   Resource Estimate independently estimated by Optiro Pty Ltd (Optiro) in accordance with JORC 2012 guidelines

The 2017 Buccaneer update completes the review of ABM's Resources by the current management. The robust Mineral Resources in the company's portfolio form a solid foundation for the current exploration strategy to build upon.

Table 1 Mineral Resource report for Buccaneer gold deposit at a 1.0 g/t gold cut-off, August 2017

	ABM Resources NL Buccaneer gold deposit – August 2017 Mineral Resource Report								
	Indicated			**Inferred**			**Total**		
Oxide	**Tonnes (Mt)**	**Cut Au (g/t)**	**Metal (koz)**	**Tonnes (Mt)**	**Cut Au (g/t)**	**Metal (koz)**	**Tonnes (Mt)**	**Cut Au (g/t)**	**Metal (koz)**
Oxidised	0.2	1.69	12	0.1	1.82	4	0.3	1.73	16
Transitional	0.7	1.69	40	0.5	1.52	22	1.2	1.63	62
Fresh	0.3	1.59	13	8.3	1.86	494	8.5	1.85	507
Total	**1.2**	**1.67**	**65**	**8.8**	**1.84**	**521**	**10.0**	**1.82**	**585**

The previous estimate was completed by ABM in February 2013 (ASX 5 February 2013). Since that time 48 aircore holes totalling 3,305 metres drilling, aiming to delineate additional oxide resources, and 4 diamond core holes totalling 749.9 metres have been completed. Recent activities by ABM include the re-logging of three Buccaneer diamond holes, substantial validation of the database data, and the review of the geological model by ABM and Optiro. This work showed that mineralisation is challenging to predict from drill hole to drill hole and the mineralisation tonnages reported in 2013 are difficult to support with the current drilling density. Though independently generated, this is a similar conclusion reached by SRK Consulting in the generation of prior Resources on Buccaneer (Table 3).

The 2017 Resource represents a substantial reduction in the estimated deposit size compared to that declared in 2013 by ABM. At a 1 g/t gold reporting cut-off, the 2017 Resource Estimate is down 35% on tonnage, down 18% on grade and consequently down 47% on total metal compared to the 2013 case.

Most of this difference can be attributed to Leapfrog grade shells being used to guide the 2013 interpretation of large volumes of mineralisation in areas of limited support from drilling.

The Twin Bonanza area including Buccaneer, Old Pirate and other targets have the potential to grow with additional drilling. These projects continue to be ranked against other targets within ABM's portfolio model with balanced investment across the most prospective targets at each stage of exploration. ABM's Resources are consolidated in Table 2. For details on the Old Pirate Resource refer to ASX announcement 19 August 2016 and for details on the Suplejack Resource refer to ASX announcement 20 February 2017.

Table 2 ABM Consolidated Resource Summary as at August 2017

Project	Date	Cut-Off Grade (g/t)	Indicated			Inferred			Total		
			Tonnes (Mt)	Grade (g/t Gold)	Metal (Koz)	Tonnes	Grade (g/t Gold)	Metal (Koz)	Tonnes	Grade (g/t Gold)	Metal (Koz)
Old Pirate	Aug-16	1.0	40	4.6	7	720	4.7	109	760	4.7	115
Suplejack	Feb-17	0.8	930	2.3	70	3,580	2.1	240	4,510	2.1	310
Buccaneer	Aug-17	1.0	1,200	1.7	65	8,800	1.8	520	10,005	1.8	585
Total	Aug-17	various	2,170	2.0	142	13,100	2.1	868	15,275	2.1	1,010

Background

The Buccaneer Gold Deposit is located about 22 kilometres south of the Tanami Road and 14 kilometres to the East of the Northern Territory – West Australian border. Buccaneer was first discovered by North Flinders Mines in the late 1990s and received further work from Newmont Asia Pacific. Newmont/North Flinders drilled a total of 830 holes into the prospect – 76 aircore, 669 RAB, 27 vacuum, 48 RC, and 10 RC with diamond extensions – totalling 51,082 metres.

ABM acquired the property in 2010 and first declared a Resource in 2011 (ASX 21 February 2011) based on an estimation generated by SRK Consulting. ABM reported internally generated Resources in 2012 (ASX 16 April 2012), and re-reported in 2013 (ASX 5 February 2013), based on additional drilling (Table 3).

Table 3 History of Buccaneer Resource Estimates quoted above a 1g/t cut-off

	Indicated			Inferred			Total			Author
	Tonnes (Mt)	Grade (g/t Au)	Metal koz Gold	Tonnes (Mt)	Grade (g/t Au)	Metal koz Gold	Tonnes (Mt)	Grade (g/t Au)	Metal (koz) Gold	
2011	0.0	0.00	0	10.2	1.80	590	10.2	1.80	590	SRK
2013	7.1	2.00	459	8.2	2.43	640	15.3	2.23	1,098	ABM
2017	1.2	1.67	65	8.8	1.84	520	10.0	1.82	585	Optiro

The 2017 Buccaneer Resource model update was triggered after the current management reviewed diamond drilling underpinning the interpretation. During this review and subsequent work, the following conclusions were reached:

- Re-logging of the core by management, external consultants, and third party geologists, lead to the conclusion that the high grade domains applied in the 2013 model are not found to be predictable based on geological features or structural trends
- Significant areas of the previous Resources were reliant on RAB drilling. These samples are 3 metre composites of low quality samples which risk overstating mineralisation volumes
- Management recognised that the prediction of volumes of mineralisation in the deposit are highly sensitive to the parameters used. Without a clear geological control, minor changes in parameters were having a dramatic impact in the volumes estimated. The deposit does not have adequate diamond drilling or geological control to support the volumes previously reported
- The previous model used inverse distance cubed with a minimum sample count of 0. This likely resulted in large areas of 'nearest neighbour' block estimates which are industry standard
- Samples composites were reused for each of three estimation runs at risk of biasing the grade estimate
- 2013 resource extrapolations did not reflect volumes predicted by areas of denser drilling

The 2017 Resource Estimate has been produced by Optiro. The estimate has used validated geological drillhole data and geological wireframes supplied by ABM. The Company reviewed the resource model during its development and at completion of the final Mineral Resource.

The following description has been produced by ABM to fulfil ASX reporting requirements and represents a synthesis of internal reporting documentation by ABM and Optiro.

Geology

The Buccaneer Resource is located between the Trans-Tanami and Mongrel Faults within the Granites-Tanami Orogen (GTO) and is hosted within a monzogranite intrusion. The monzogranite intrudes the Tanami Group sedimentary rocks assigned to the circa 1825 million year old Ware Group. A crustal scale north-trending transfer fault/thrust linking the Trans-Tanami and Mongrel faults is inferred to be located immediately to the East of the intrusion (Bagas et al., 2014).
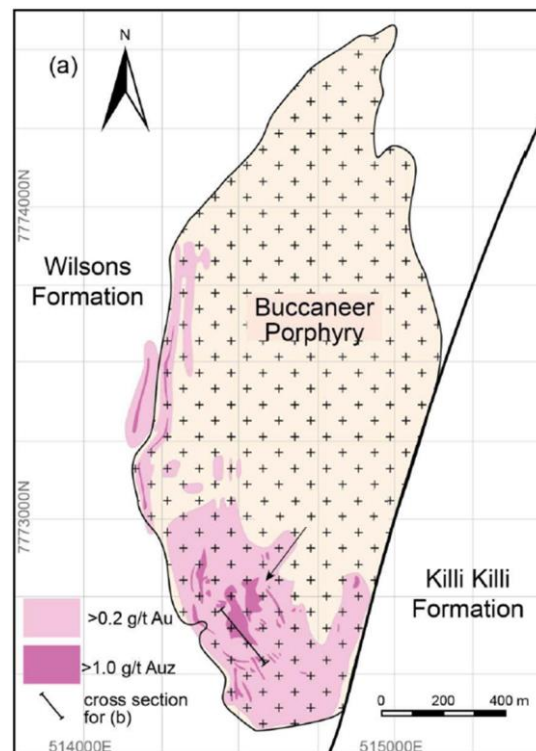

Figure 1 Simplified Geological Map of the Buccaneer Intrusion (Li. 2014)

The GTO is host to several economically important gold mines such as Callie, The Granites, Tanami, Coyote and Old Pirate. The Buccaneer intrusion is approximately 2,300 metres by 800 metres in surface area and is interpreted to be a multi-phase monzogranite intrusion. The intrusion is dominantly

composed of plagioclase and K-feldspar with lesser quartz and biotite hosted within a fine grained but equigranular groundmass. The majority of the deposit has been drilled with RC however it is postulated that two phases of intrusion are recognisable in core.

Mafic microgranular enclaves (MMEs) are widespread in the early and late quartz monzonite. The MMEs are commonly 50-200 millimetre in diameter and have sharp contacts with the quartz monzonite. The MMEs are gabbroic to dioritic in composition, dark coloured and exhibit subhedral to anhedral textures.

Early in 2010, ABM scanned several RC holes for multi-spectral analysis by PIMA and results showed the Buccaneer intrusion to be highly-enriched in bismuth, molybdenum, tungsten and copper. PIMA and subsequent pXRF analysis later supported the classification of three zones of weathering. A highly-weathered oxide zone is present from 0 to 60 metres vertical depth which is stripped of potassium, sodium and calcium. From ~60 to 100 metres vertical depth the rock transitions appear fresh, but calcium and sodium remain depleted. Visually the rock often appears fresh from 100 metre vertical depth but chemically this isn't the case until approximately 150 metres depth.

Material Types

The drillhole data was categorised as either monzogranite, sediment or transported cover based on the supplied wireframe interpretations. Sediment and monzogranite samples were also allocated to oxidised, transitional and fresh categories based on the weathering interpretations. An example section is provided in Figure 2 showing drillholes coloured by gold grade and wireframes defining surface topography (tan), base of cover (green), base of oxide (red), base of transition (purple) and the southwestern limit of the monzogranite (cyan).
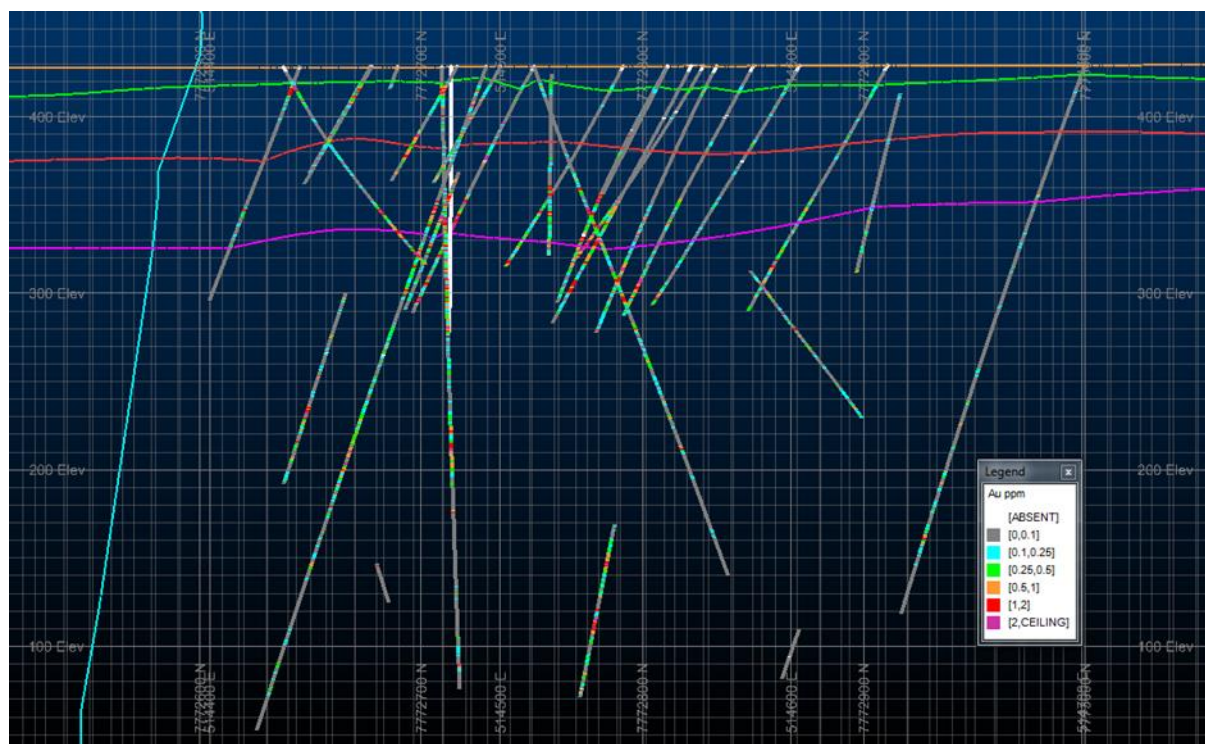

Figure 2 SW-NE oblique section

Bulk Density

ABM have a density sample database comprising 444 samples sourced from eight drillholes of which the vast majority represent fresh monzogranite. ABM calculated average density values from this data which were assigned to the block model under the conditions described in Table 4. No density data was available for the cover sequence and a value of 1.6 t/m^3 was used based on Optiro's experience. No mineralisation has been assigned in the cover sequence.

Table 4 Density values assigned to the block model

Category	Number of Samples	Average density
Cover sequence	Nil	1.6
Oxidised	2	2.5
Transitional	18	2.6
Fresh Monzogranite	387	2.7
Fresh Sediment	37	2.7

Mineralisation

A locally intense texturally destructive sericite alteration is found within the intrusion. This alteration appears to be structurally controlled and is largely associated with shearing. The sericite-chlorite alteration is centred upon networks of shearing and micro-fracturing. Sericite/illite, chlorite and sulphides (mainly pyrite) are concentrated along these micro fractures. The spatial distribution of these logged intervals suggests the source of the shearing to be orientated in a north-west orientation that bisected the intrusive complex.

Mineralisation extends from near-surface to a depth of over 500 metres and has been defined in several zones over an area of 2,300 metres by 800 metres. Gold mineralisation is disseminated throughout the monzogranite with higher grade zones typically associated with zones of shallow dipping quartz veins as well as sulphides (pyrite, arsenopyrite), although free gold is also seen in the quartz stockwork veining. The more coherent zones of mineralisation are related to zones of increased quartz veining and/or micro-fracturing. An overall north-easterly trend to the shallow dipping quartz veins is recognisable within the quartz stock work. From visual inspection of the core, the veining appears to be strongest at the margins between the Phase 1 and Phase 2 contacts and this may act as a local control to the north-east.

Drilling

Historic drilling prior to ABM's ownership was completed by Newmont and North Flinders prior to 2005. ABM subsequently completed:

- 30 RC holes in 2010 using a Schramm 685 and Atlas Copco RC rig
- 54 ABM RC holes completed in 2011
- 6 diamond holes completed in in 2011
- 17 RC holes completed in 2012

All RC holes were 5 5/8" diameter. Diamond drill holes completed in 2011 were drilled NQ2 (hole diameter 75.7mm, core diameter 50.6mm).

The previous estimate was completed by ABM in February 2013. Since that time 48 holes totalling 3,305 metres of aircore drilling, aiming to delineate additional oxide resources, and 4 diamond core holes totalling 749.9 metres have been completed. Recent activities by ABM include the re-logging of three Buccaneer diamond holes, substantial correction of the database data, and the review of the geological model by ABM and Optiro. This work showed that mineralisation is challenging to predict from drill hole to drill hole and the mineralisation tonnages reported in 2013 are difficult to support with the current drilling density. Though independently generated, this is a similar conclusion reached by SRK Consulting in the generation of prior Resources for Buccaneer (Table 3).

Figure 3 Buccaneer drillhole collar locations and outline of the Buccaneer intrusion

Sampling

All sampling was completed prior to the engagement of the ABM Competent Person. The sampling practices described in ABM documents describe methods that are suitable to support a Resource Estimate.

"Sample dispatches including all the samples from a hole, including quality control samples, were delivered primarily to ALS Minerals Laboratory in Alice Springs for Sample preparation (samples prepared for Intertek underwent very similar preparation procedures).

   a)   ALS Laboratories
Samples were pulverised to 75 µm (85% passing) and then subsampled to create pulps of 100g. The pulps were then transported to the ALS Minerals Laboratory in Perth for analysis. In Perth, the 100g pulps were

subsampled further to 30g charges. Figure 4 shows the flowchart detailing the sample preparation process.

ABM Resources visited both Laboratories in Alice Springs and in Perth and have observed staff cleaning sample preparation areas with compressed air, and wiping down surfaces between samples. ALS laboratories use a comprehensive sample tracking system incorporating bar-coded stickers for sample tracking. These are attached during preparation in Alice Springs and then tracked right through to the final assays. ALS Laboratories also conduct internal QC testing on the fire assays.
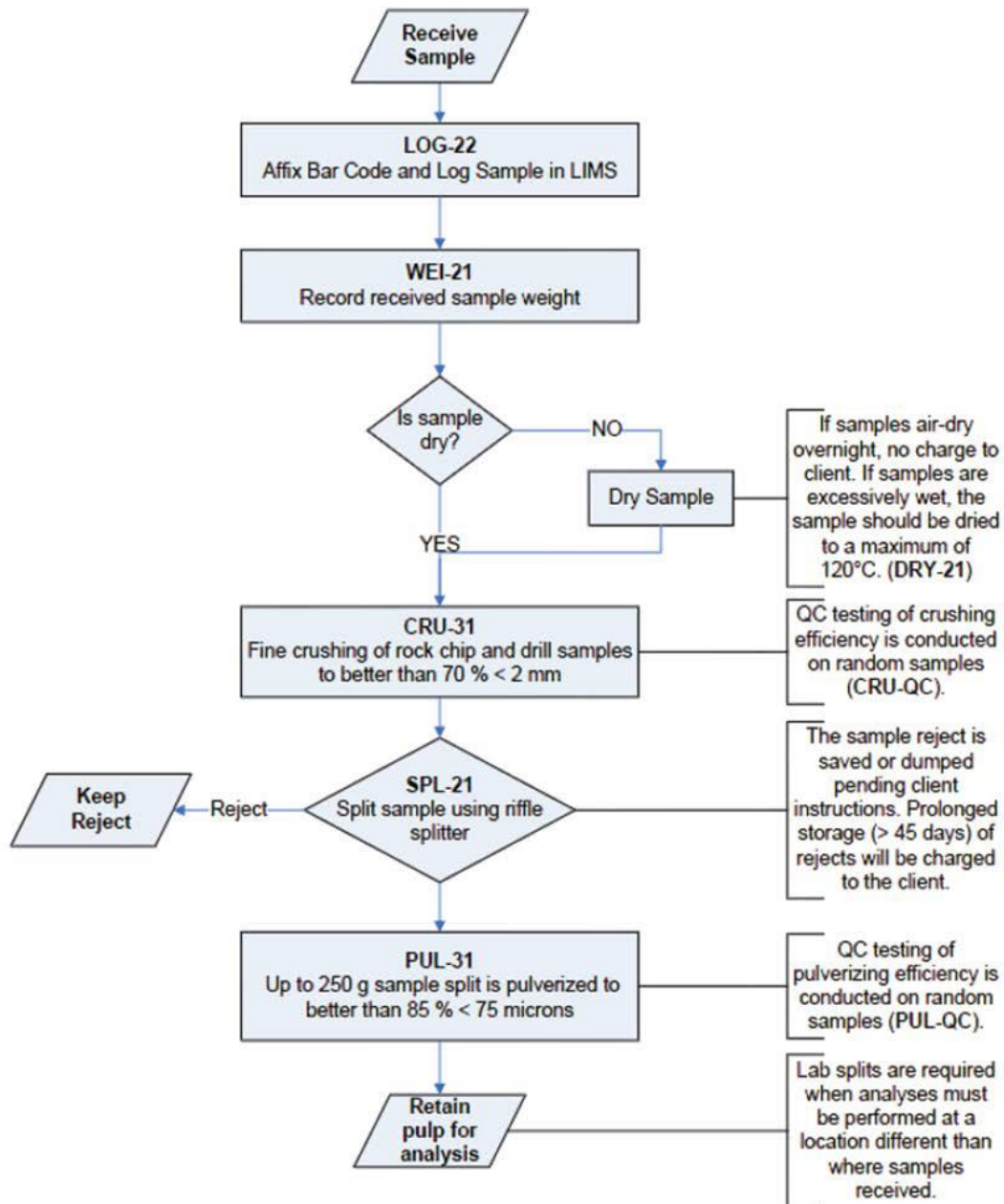

Figure 4 ALS Laboratories Sample Preparation Flow Chart

   b)   Intertek

A subset of sample dispatches including all the samples from a hole, including quality control samples, were delivered to Intertek Laboratories preparation facility in Alice Springs for sample preparation. Samples were pulverised to 75 µm (85% passing) and then subsampled to create pulps of 200g. The pulps were then transported to the Intertek Laboratory in Adelaide for analysis. In Adelaide, the 200g pulps were subsampled further to 50g charges. Figure 5 shows the flowchart detailing the sample preparation process.
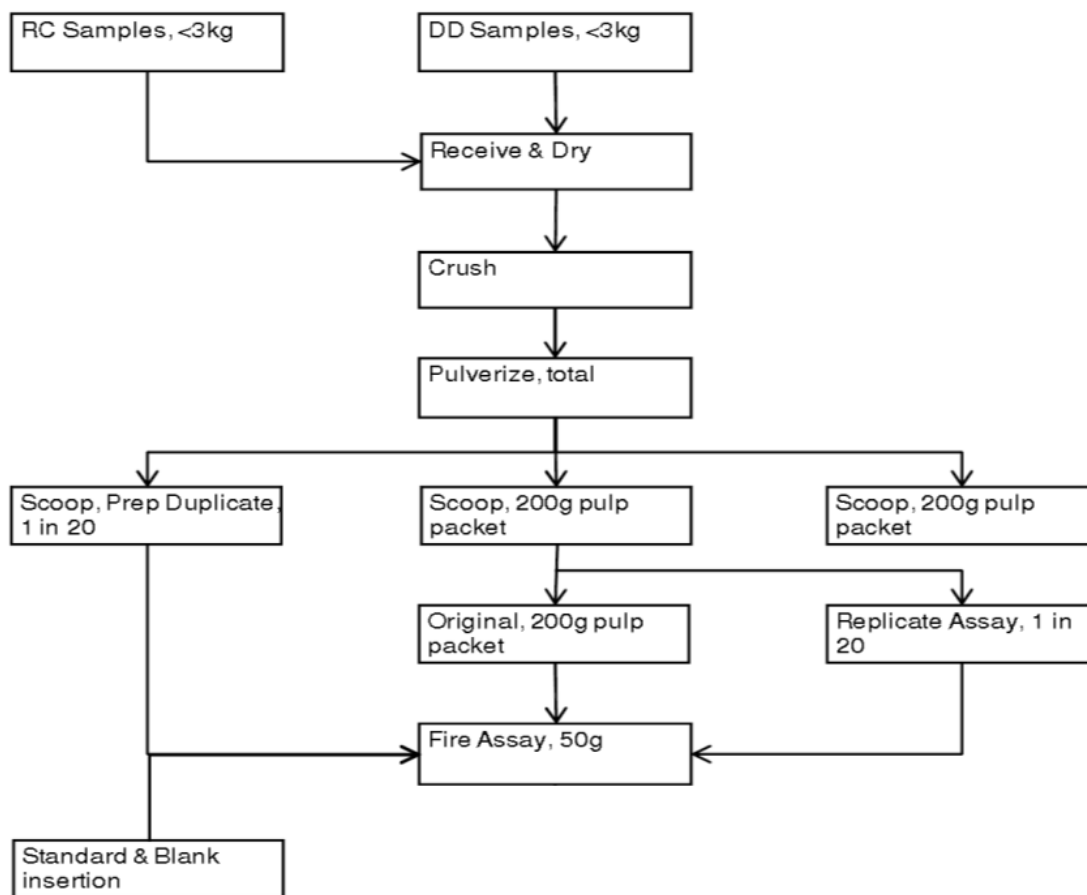
Figure 5 Intertek Laboratories Sample Preparation Flow Chart

Assay Techniques

Historic drill results were either by aqua reqia or fire assay, but the specifics of used techniques are not known. All ABM samples were analysed by ALS Minerals Laboratory or Intertek using 30 gram fire assay with an ICP-AES finish. All samples that returned grades greater than 10g/t were re-assayed with an AAS finish instead."

Mineralisation Domains

A categorical indicator probability model was generated to define the regions of the monzogranite where the presence of the mineralisation was most likely. This probability estimation was conducted using a 10 mE by 10 mN by 5 mRL block size resolution which would later be the size of the selective mining unit (SMU) employed for grade estimation.

A probability model was created and subjected to considerable visual scrutiny to determine a probability threshold that adequately segregated mineralised and unmineralised regions (0.40 or 40% probability of being 0.25g/t or greater) and a kriging variance filter (based on a separate dedicated global estimation run) that removed obvious estimation artefacts and controlled extrapolation beyond the data limits.

Estimation

Panel gold grades were estimated at Buccaneer using ordinary kriging of 1 metres top-cut (Table 5) composited samples within the mineralised and background domains. Mineralisation domains were treated as hard boundaries during grade estimation while the weathering (oxidation) domains were treated as soft grade boundaries.

Table 5 Sample count and top-cut per domain

Statistic	Mineralised - less continuous			Mineralised - more continuous		
	Oxidised	Transitional	Fresh	Oxidised	Transitional	Fresh
Sample Count	1,120	1,480	7,180	526	1,346	3,929
Top Cut (g/t)	6	5	11	5	10	22

All grade estimation was undertaken on a parent cell size scale (50 x 50 x 10 metres), thus all sub-cells (down to 5 x 5 x 2 metres) within a parent cell within a single mineralisation domain received the parent cell estimate. Continuity parameters from the more continuous mineralised domain were applied to the other domains. The oxide and transitional regions were estimated with no dip (i.e. horizontal) while a 10° dip was applied within the fresh region.

Grade estimation used a three-pass search. The primary search radii were set to the maximum ranges demonstrated by the variogram model. The minimum and maximum number of informing samples (10 and 30) remained constant between the primary and secondary searches but the minimum number of samples was reduced to 1 in the tertiary search. The primary search radii were doubled for the secondary and tertiary searches. The maximum number of samples that could be utilised from a single drillhole was limited to five.

Local Uniform Conditioning (LUC), was employed to estimate the variability of grade within SMU's of 10 mE by 10 mN by 5 mRL. The inputs to the LUC process are the declustered, top-cut monzogranite composites, the gold grade continuity model and the panel grade estimates. The output is a model with estimated SMU grades assigned to SMU sized blocks.

Classification

The mineralisation estimated within the Buccaneer Deposit has been classified as Indicated or Inferred Mineral Resources using the guidelines of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, 2012 (the JORC Code).
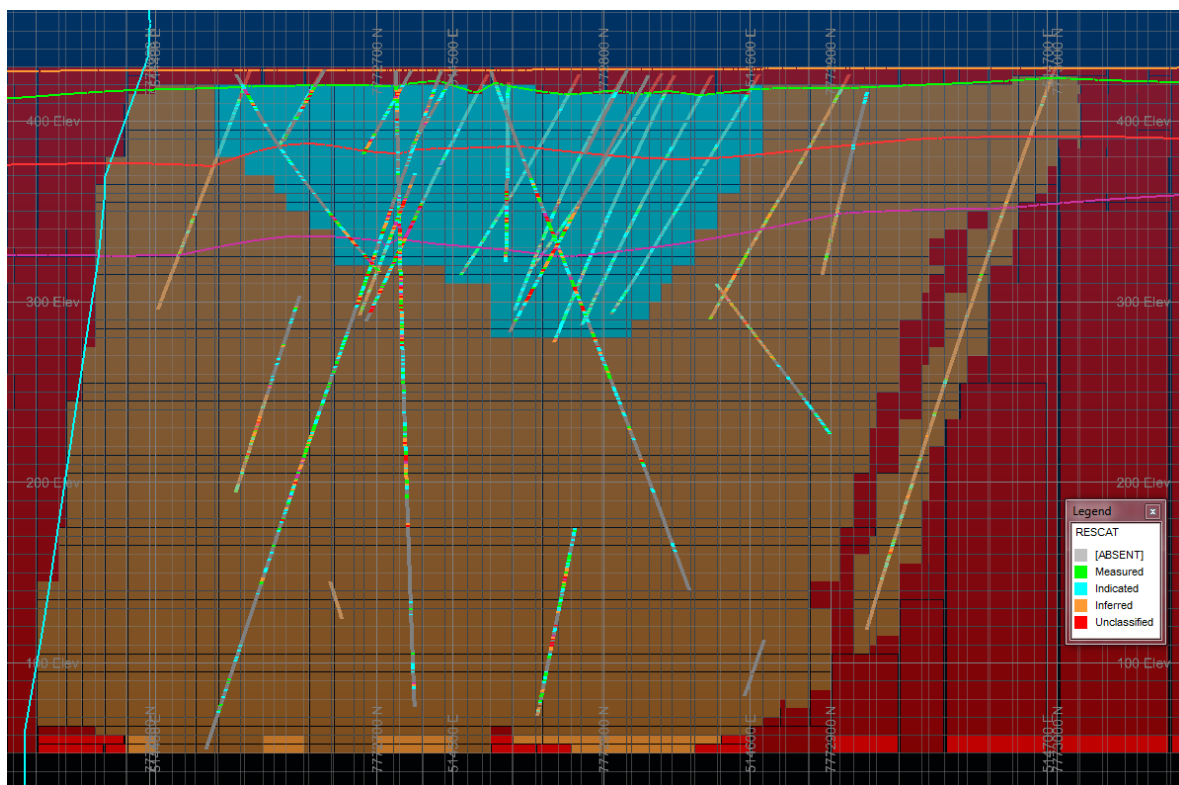

Figure 6 Oblique cross section view of Resource classification at Buccaneer – Indicated (light blue), Inferred (tan) and unclassified (red)
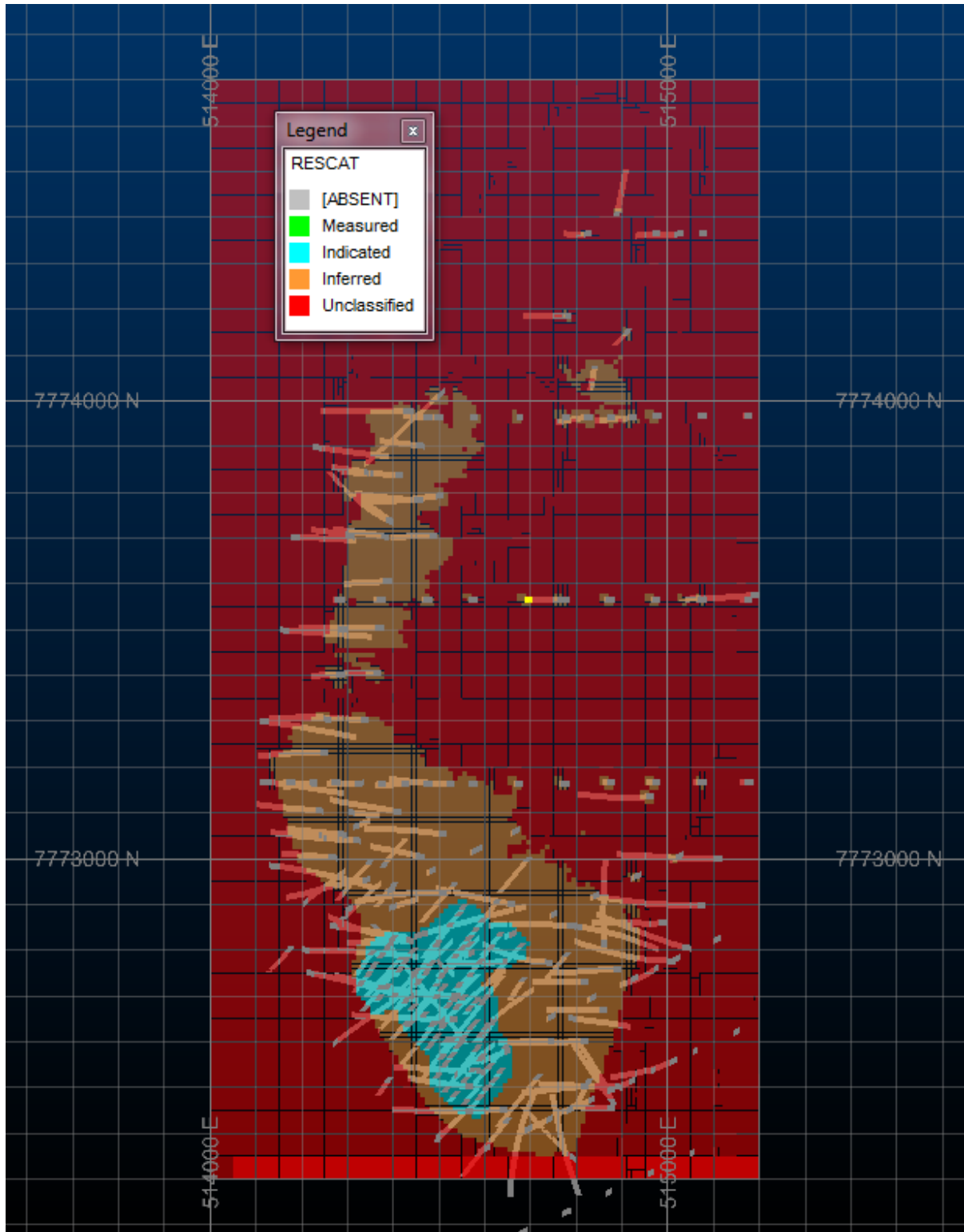
Figure 7 Plan view of Resource classification at Buccaneer – Indicated (light blue), Inferred (tan) and unclassified (red)

The Indicated portion of the deposit is defined by the region covered by the closer spaced drilling which support the grade continuity models developed for the deposit. All other parts of the deposit are Inferred and where no estimation has taken place due to paucity of data, are unclassified and do not contribute to the Resource reporting (Figure 6 and Figure 7).

The drillhole coverage of the Indicated region is variable. Oblique cross section drill lines are at nominal 50 metre centres. Drilling along these sections can be as close as 10 metres but is more commonly in the order of 20 to 40 meters and may be wider. As depth increases, the number of drillholes declines and this has led to the footprint of the Indicated region reducing as depth increases.

Mining Method and Cut-Off Grades

Based on the grade of the deposits, open pit mining is the likely mining method. There is currently no processing plant at the deposit site however the discovery of sufficient Mineral Resources to support a mining operation is a strategic goal of the company.

Three processing plants occur within reasonable haulage distance of the deposit and are either in operation (The Granites), care and maintenance (Coyote) or proposed for refurbishment (Central Tanami). A likely marginal cut-off grade including haulage to these plants is approximately 1.0g/t gold. Treatment at a dedicated heap leach or CIL plant onsite, if justified, would be expected to have a lower marginal cut-off grade.

Mining Studies

Several studies have been completed on Buccaneer, including and excluding the adjacent Old Pirate Resource. Resource models for both deposits have subsequently been revised and are now materially different to those considered by the optimisation studies. The economic outcomes of these studies are no longer seen as current. As part of these studies metallurgical test work was completed which remains current.

In 2015 ABM commissioned ALS Metallurgy to carry out metallurgical test work on core samples from the Buccaneer deposit. Three whole core sample composites were prepared representing oxidised, transitional and predominantly fresh mineralisation.

- Composite #1 – Hole BCDD10007 from 84 to 94 metres, assaying 2.30 g/t to 2.40 g/t gold designated transitional
- Composite #2 – Hole BCDD10007 from 114 to 126 metres, assaying 0.50 g/t to 0.70 g/t gold designated fresh
- Composite #3 – Hole BCDD10008 from 57 to 66 metres, assaying 1.25 g/t to 1.65 g/t gold designated oxide

Heap leaching achieved high gold recovery for the oxidised sample. The transitional and fresh samples produced moderate recoveries, but within an acceptable range for heap leach operations. Cyanide and lime consumption was low in all tests.

Indicated recoveries are summarised in Table 6 and outlined in more detail in Appendix C.

Table 6 Summarised results of 2015 metallurgical recovery testwork.

	Oxide	Transitional	Fresh
Coarse Cyanidation (Heap Leach Analogue)	95.4%	76.5%	71.1%
Gravity/Leach (CIL Analogue)	97.2%	97.2%	92.2%

Resource Reporting

The estimated Buccaneer Mineral Resource as at August 2017 is reported above several gold cut-off grades in Table 7. These tonnage grade statistics represent the estimated distribution of tonnage and grade from 10 mE by 10 mN by 5 mRL SMU's based on top-cut input grade data. Grade and tonnage curves are provided in Figure 8 and Figure 9.

A more detailed report dividing the Mineral Resource into oxidation/weathering, cut-off grade and classification categories is provided in Appendix A. Appendix D provides a complete JORC Table 1 for the Buccaneer project.

Table 7 Mineral Resource report for Buccaneer deposit, August 2017

| Cut-off g/t	Indicated			Inferred			Total		
	Tonnes (Mt)	Grade g/t Gold	Metal (koz)	Tonnes (Mt)	Grade g/t Gold	Metal (koz)	Tonnes (Mt)	Grade g/t Gold	Metal (koz)
0.0	19.4	0.23	143	365.2	0.12	1,400	384.6	0.12	1,543
0.1	5.6	0.70	125	52.7	0.58	978	58.3	0.59	1,103
0.2	4.3	0.86	120	29.9	0.92	888	34.2	0.92	1,008
0.3	3.9	0.92	117	26.8	1.00	864	30.8	0.99	980
0.4	3.4	1.01	111	23.3	1.10	824	26.7	1.09	934
0.5	2.9	1.11	103	19.8	1.22	773	22.7	1.20	876
0.6	2.4	1.22	95	16.8	1.33	720	19.2	1.32	815
0.7	2.0	1.33	86	14.2	1.46	666	16.2	1.44	752
0.8	1.7	1.45	78	12.1	1.58	616	13.8	1.57	694
0.9	1.4	1.56	71	10.3	1.71	565	11.7	1.70	636
1.0	1.2	1.67	65	8.8	1.84	521	10.0	1.82	585
1.1	1.0	1.79	58	7.6	1.97	479	8.6	1.95	537
1.2	0.9	1.90	52	6.6	2.09	442	7.4	2.07	495
1.3	0.7	2.03	47	5.7	2.22	408	6.4	2.20	455
1.4	0.6	2.14	42	5.0	2.35	376	5.6	2.33	419
1.5	0.5	2.26	38	4.4	2.48	347	4.9	2.45	386
1.6	0.5	2.37	35	3.8	2.60	322	4.3	2.58	356
1.7	0.4	2.47	32	3.4	2.71	300	3.8	2.69	332
1.8	0.3	2.59	29	3.1	2.84	279	3.4	2.81	307
1.9	0.3	2.68	26	2.7	2.96	258	3.0	2.93	285
2.0	0.3	2.80	24	2.4	3.08	240	2.7	3.06	263
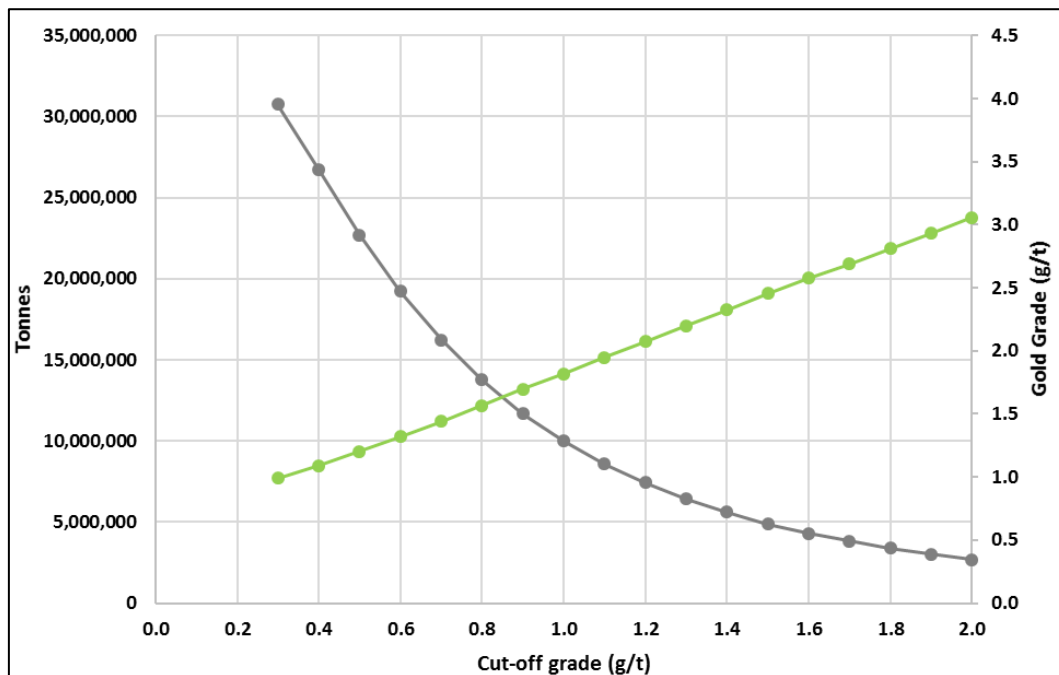
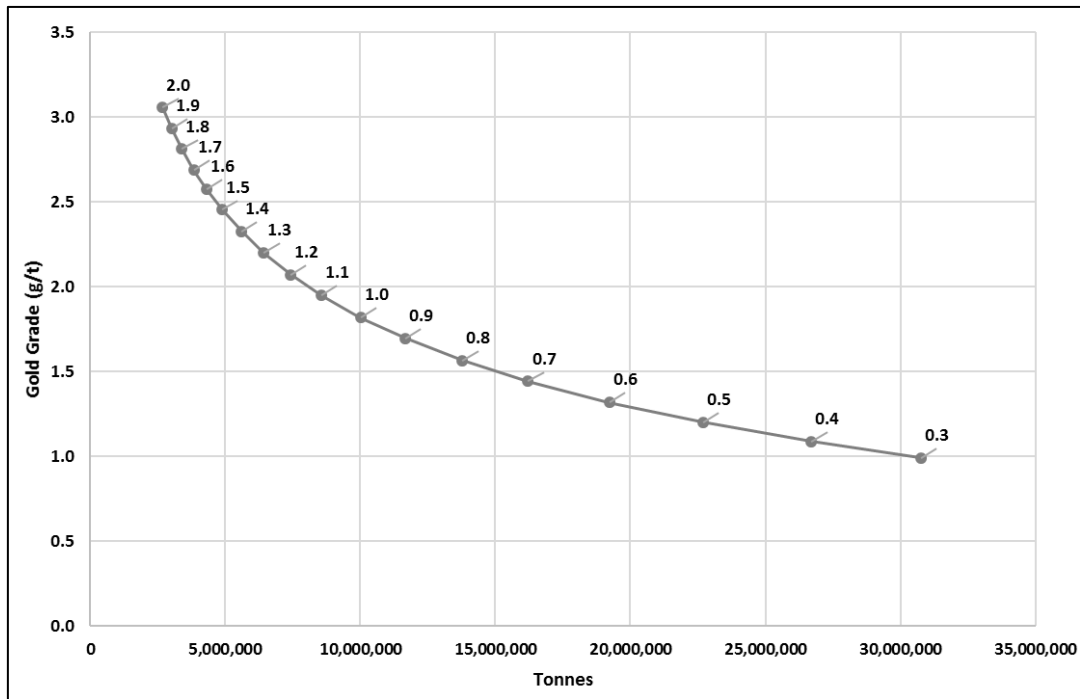Figure 8 Buccaneer August 2017 grade and tonnage curves

Figure 9 Buccaneer August 2017 grade-tonnage curve

Model Validation

The 2017 model was validated through visual comparison, global composite to SMU comparison, and validation plots.

a) Visual validation - The block grade estimates were visually validated on screen by comparing the estimated block grades and the input composites. Overall, reasonable conformance was observed between the composite grades and the panel and SMU grade estimates.

b) Global comparison- The block estimates were statistically validated against the declustered, top-cut informing composites on a whole-of-domain basis. The mean estimated grades for each domain were compared to the input data means (Table 8). The comparison is poor in the background domain; however, this is of no concern due the presence of un-estimated blocks which were assigned a default value of zero. The comparison within the mineralised domains is acceptable, particularly for the more continuous mineralisation.

Table 8 Global comparison of input data versus block grade estimates for the monzogranite

Domain	Average Composite Grade (g/t)	Average Block Grade (g/t)	Difference
Background	0.038	0.005	-86%
Less continuous mineralisation	**0.262**	**0.280**	**7%**
More continuous mineralisation	**0.901**	**0.912**	**1%**

c) Validation plots - Grade trend profile plots were constructed for the mineralised domain to test for any global bias and to compare the average grade of the block estimates with the average of the declustered top-cut composited input samples for slices through the models. The grade profile plots demonstrate a reasonable conformance between the composited sample grades trends and the block grades where the informing data is more closely spaced, however, as the amount of supporting data declines, there is some evidence of the impact of extrapolation beyond limited data.

Comparison with the previous Resource Estimate

The Buccaneer Mineral Resource was publicly reported at 1 g/t and 2 g/t in 2013. These cut-off grades have been employed for comparative reporting between the 2013 and current Mineral Resource models (Table 9 and Table 10). The 2013 reporting presents uncut and top-cut grade estimates. ABM considers the reporting of uncut grade estimates to be outside industry standard reporting practices and only use the 2013 top-cut grades for comparison.

Table 9 Comparative reporting of the 2013 and 2017 Mineral Resource models above a 1 g/t cut-off

Model	Category	Tonnes (Mt)	Au top-cut (g/t)	Ounces (koz)
2013	Indicated	7.1	2.00	459
	Inferred	8.2	2.43	640
	Total	**15.3**	**2.23**	**1,098**
2017	Indicated	1.2	1.67	65
	Inferred	8.8	1.85	521
	Total	**10.0**	**1.82**	**585**
Difference	Indicated	-83%	-17%	-86%
	Inferred	7%	-24%	-19%
	Total	**-35%**	**-18%**	**-47%**

Table 10 Comparative reporting of the 2013 and 2017 Mineral Resource models above a 2 g/t cut-off

Model	Category	Tonnes (Mt)	Au top-cut (g/t)	Ounces (koz)
2013	Indicated	2.3	3.39	246
	Inferred	3.6	3.75	431
	Total	**5.8**	**3.61**	**677**
2017	Indicated	0.3	2.80	24
	Inferred	2.4	3.08	240
	Total	**2.7**	**3.06**	**263**
Difference	Indicated	-87%	-17%	-90%
	Inferred	-33%	-18%	-44%
	Total	**-53%**	**-15%**	**-61%**

An appraisal of the data presented in Table 9 and Table 10 shows that the two models make significantly different predictions regarding the size of, and the confidence applied to, the Buccaneer Resource. The 2017 model reports less tonnage and grade and consequently metal overall, and a much smaller component is assigned to an Indicated category. The overall differences are large with metal reporting down 47% at 1 g/t cut-off and down 61% at 2 g/t cut-off.

There are numerous contributing factors to these reporting differences however the most significant are the assumptions made regarding mineralisation constraints.

In 2013, Leapfrog software was employed to generate a 0.5 g/t grade shell to constrain the mineralised volume. Two structural models were employed. At shallower depths, a structure dipping at 20° towards 73° was employed. At greater depths, a structure dipping at 44° towards 238° was used. In both cases, a range of 70 metres is stated with an anisotropic ratio of 2:2:1. The shell was generated and allowed to cross both the monzogranite/sediment and monzogranite/cover boundaries.

The analysis conducted during the current modelling does not support continuity greater than 36 m at a 0.25 g/t indicator grade, which is lower than the 2013 0.5 g/t cut-off. Normal expectation is that a

lower grade threshold would exhibit greater continuity than a higher-grade threshold. In the current model, mineralisation was not allowed to extend outside the monzogranite – it is, however, acknowledged that there is limited evidence of mineralisation within the surrounding sediment proximal to the monzogranite/sediment boundary.

Only one structural orientation was employed during the current modelling. The selected orientation is similar to the shallower depth case applied in the 2013 modelling. Due to the uncertainties associated with the current data levels testing the deposit, the relative merits of the structural domain assumptions remain open to debate.

A visual comparison of the two models indicates extrapolation within the 2013 mineralisation volume model was not adequately constrained. Many examples were noted where considerable mineralisation volume was extrapolated into volumes not supported by drilling. Other examples show the Leapfrog algorithm as applied maximising volume in untested areas while skirting around the existing drillholes. Mineralised volume is also extrapolated below the depth limits of the current model.

Figure 10 and Figure 11 show two oblique section lines which are 50 metres apart. For each section, the current 2017 and 2013 Resource models are presented with blocks coloured by estimated gold grade. Both sections highlight the volume within the 2013 model that is reliant on extrapolation of grade into untested portions of the deposit. Additional drilling is required to reveal the true distribution and extent of mineralisation in these areas.
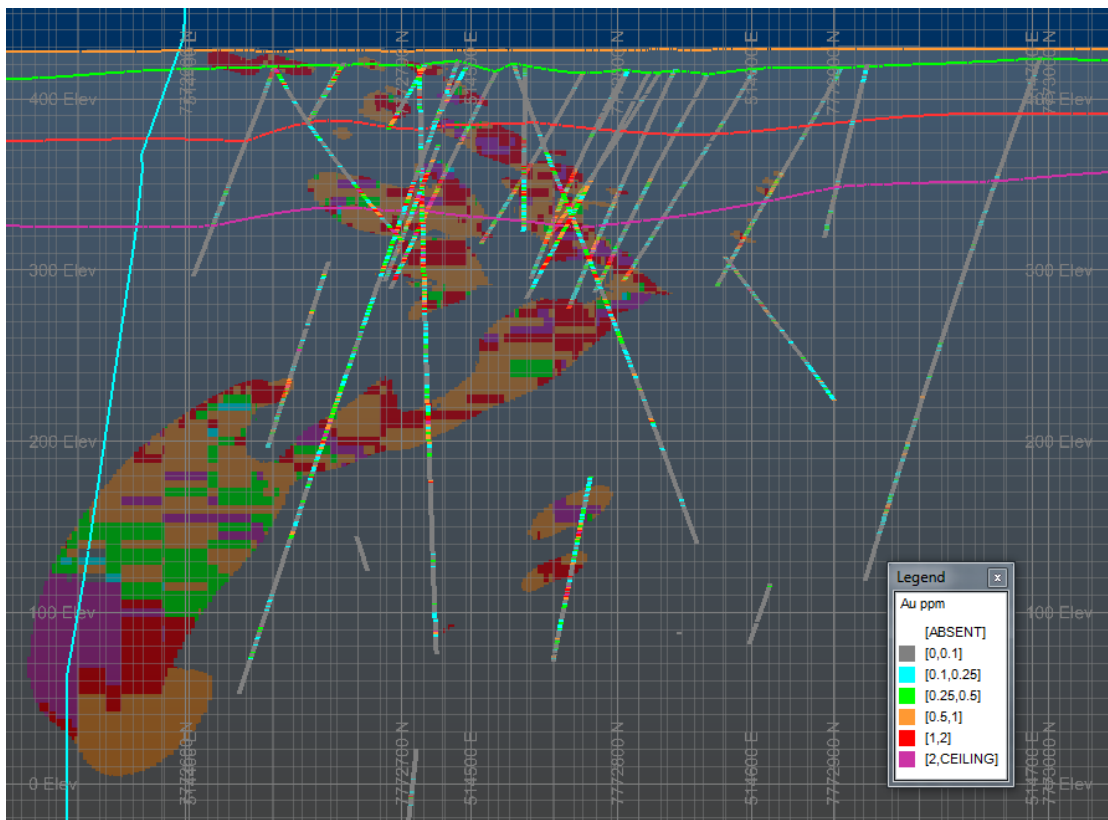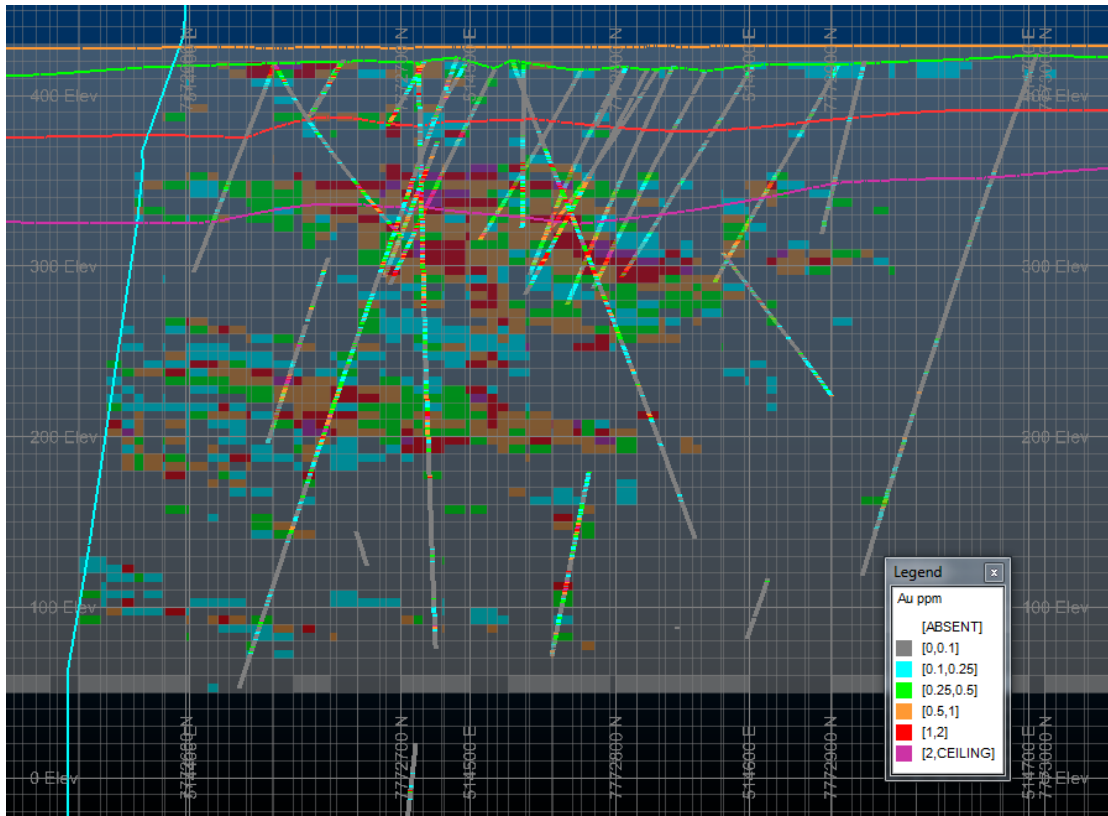
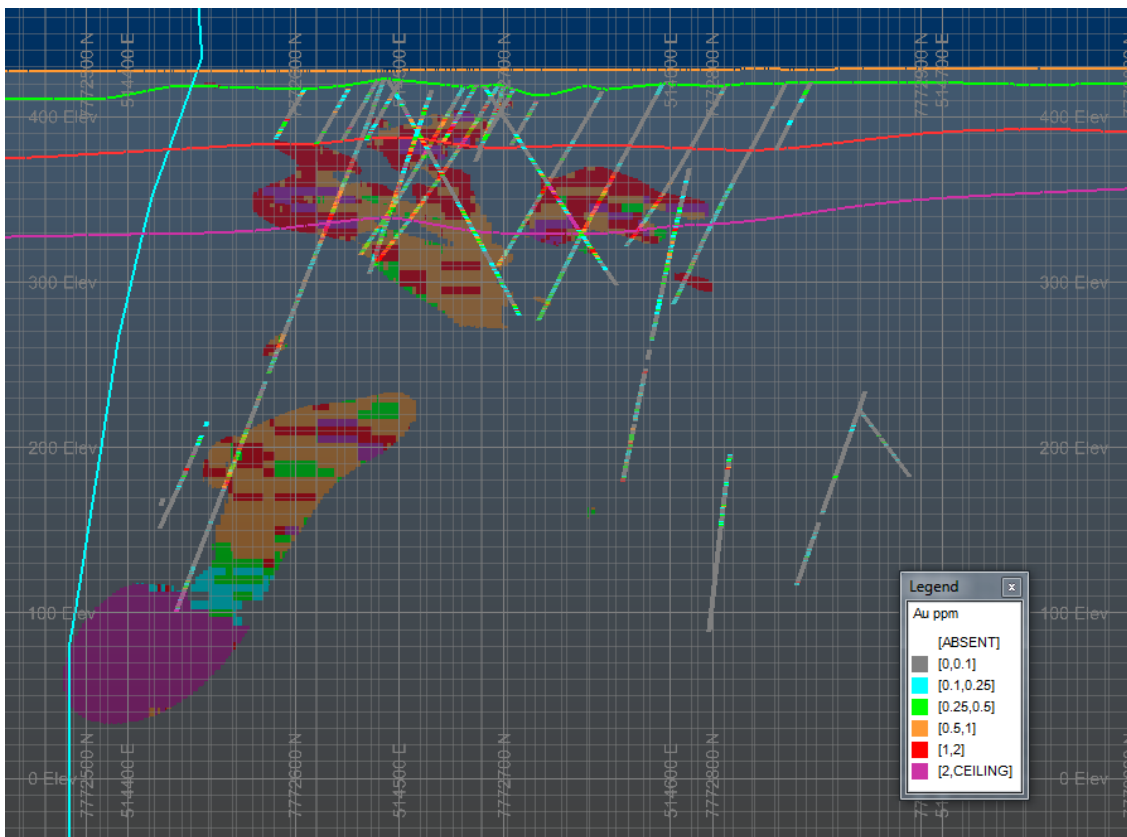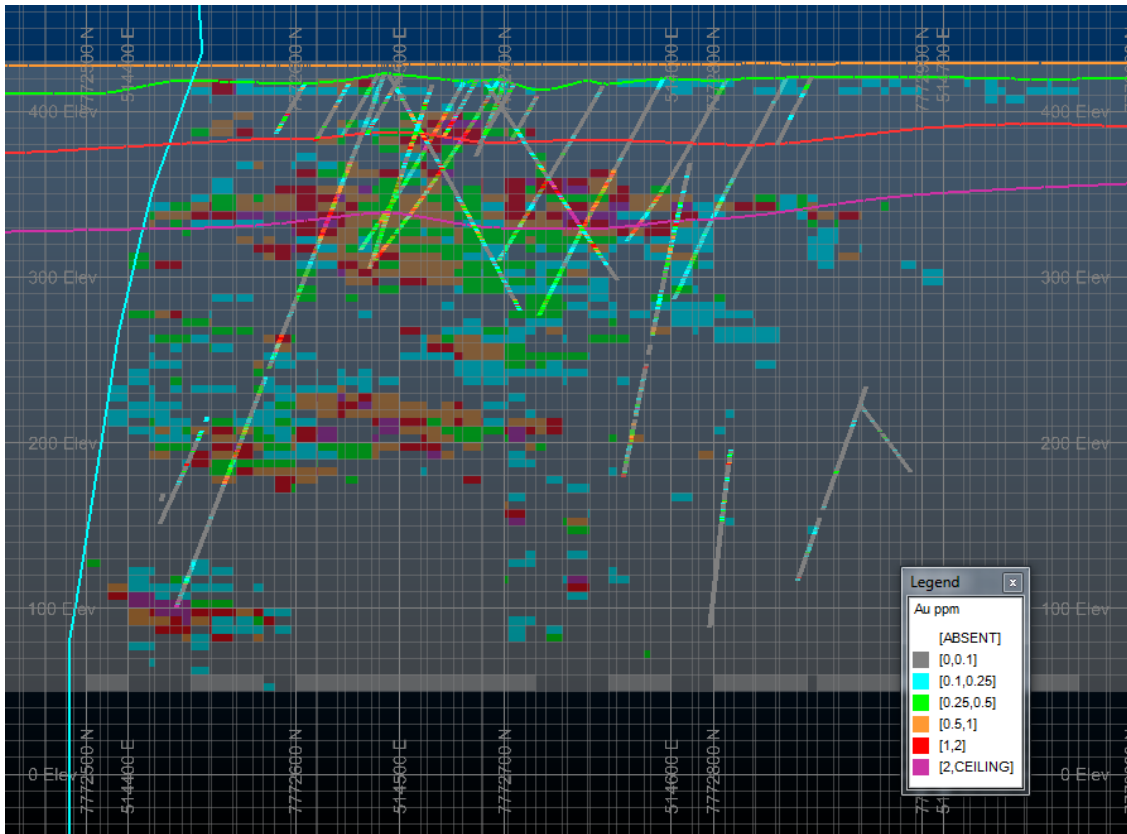**Figure 10 Oblique section of 2017 (top) and 2013 (bottom) Resource models**

Figure 11 Oblique section 50 metres southeast of previous section of 2017 (top) and 2013 (bottom) Resource models

When these issues around mineralised volume extrapolation are considered, it is not surprising that the current model estimates lower tonnages than the 2013 case.

Resource classification within the 2013 model is based on a search algorithm that is stated to use short ranges and criteria that require at least three proximal drillholes. The actual parameters applied are not clear. Examples were noted where isolated mineralisation volumes intersected by a single drillhole had portions of the volume assigned to an Indicated category. After review the current model reports a substantially lower ratio of Indicated to Inferred tonnage.

Future Work

The Buccaneer Deposit is open at depth and along strike. Increasing density of drilling has the potential to provide controls on continuity and volumes of mineralisation predicted. Early stage exploration has identified numerous gold occurrences within the Project tenements such as Syrene, Vampire and Casa (ASX Announcement 19 February 2015). These, and many other targets have not been comprehensively evaluated. Excluding the Old Pirate and Buccaneer prospects, the average drill hole depth at Bonanza is only 15 metres. These targets are routinely ranked within ABM's Portfolio model to ensure the most prospective targets are attracting focus and investment in line with the Company's exploration strategy.

Matt Briggs
Managing Director

About ABM Resources

ABM is an established gold exploration company with a successful track record of discovery in one of Australia's premier gold mining districts. The Company owns gold Resources and extensive prospective land holdings in the Central Desert region of the Northern Territory. The Company leadership is implementing a strategy of aggressive cost management initiatives and is developing a disciplined, tightly focused exploration strategy. Activities are currently focused on the Company's under-explored 36,000 km^2 Tanami Project area and includes:

- Drilling of advanced prospects on the Suplejack Project
- Systematic evaluation of high potential early stage targets
- Assessment of existing Resources and
- Exploring opportunities for joint ventures of early stage targets

Competent Person Statement

The information in this announcement and Appendix that relate to data and geological modelling included in Mineral Resource Estimates is based on information reviewed by Mr Matt Briggs who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Briggs is a full time employee of ABM Resources NL and has sufficient experience which is relevant to the style 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 Exploration Results, Mineral Resources and Ore Reserves". Mr Briggs consents to the inclusion in the documents of the matters based on this information in the form and context in which it appears.

The information in this announcement and Appendix that relates to grade estimation and Mineral Resource Estimates is based on information reviewed by Mr Paul Blackney, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Blackney is a full time employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves". Mr Blackney consents to the inclusion in the documents of the matters based on this information in the form and context in which it appears.

References

Bagas, L., Boucher R., Li B. Miller J., Hill P., Depauw G., Pascoe J.,Eggers B. 2014 Paleoproterozoic stratigraphy and gold mineralisation in the Granites-Tanami Orogen, North Australian Craton. Australian Journal of Earth Sciences v61 p. 89—111.

Li, B., 2014 Tectonic Evolution and Gold Mineralisation of the Granites-Tanami Orogen, North Australia Craton. PhD thesis, University of Western Australia p. 79.

Appendix A   Resource Estimate reporting by cut-off, oxidation and Resource Classification

Oxide	Cut-off	Indicated			Inferred			Total		
		Tonnes	Cut Au	Metal	Tonnes	Cut Au	Metal	Tonnes	Cut Au	Metal
Oxidised	0.0	9,359	0.11	35	36,661	0.03	38	46,020	0.05	72
	0.1	1,376	0.55	25	1,041	0.33	11	2,418	0.46	36
	0.2	873	0.80	23	303	0.86	8	1,175	0.82	31
	0.3	753	0.89	22	263	0.95	8	1,015	0.91	30
	0.4	635	0.99	20	226	1.04	8	861	1.00	28
	0.5	530	1.10	19	185	1.17	7	715	1.12	26
	0.6	433	1.22	17	161	1.27	7	594	1.24	24
	0.7	350	1.36	15	138	1.37	6	488	1.36	21
	0.8	291	1.48	14	118	1.48	6	409	1.48	19
	0.9	249	1.59	13	94	1.64	5	343	1.60	18
	1.0	**214**	**1.69**	**12**	**75**	**1.82**	**4**	**289**	**1.73**	**16**
	1.1	183	1.80	11	65	1.94	4	248	1.84	15
	1.2	156	1.92	10	59	2.02	4	215	1.95	13
	1.3	134	2.03	9	50	2.16	3	184	2.06	12
	1.4	113	2.16	8	45	2.25	3	158	2.18	11
	1.5	98	2.27	7	38	2.41	3	135	2.31	10
	1.6	85	2.37	6	36	2.44	3	121	2.39	9
	1.7	71	2.51	6	30	2.60	3	101	2.54	8
	1.8	63	2.62	5	26	2.72	2	89	2.65	8
	1.9	54	2.75	5	24	2.82	2	78	2.77	7
	2.0	50	2.81	5	21	2.92	2	71	2.84	7
Transitional	0.0	8,106	0.31	80	53,546	0.07	125	61,651	0.10	204
	0.1	2,828	0.80	72	6,055	0.37	73	8,883	0.51	145
	0.2	2,462	0.90	71	2,816	0.66	60	5,278	0.77	131
	0.3	2,252	0.96	69	2,337	0.74	56	4,589	0.85	125
	0.4	1,975	1.04	66	1,853	0.85	50	3,827	0.95	116
	0.5	1,713	1.13	62	1,438	0.96	44	3,151	1.05	107
	0.6	1,446	1.24	58	1,125	1.08	39	2,570	1.17	96
	0.7	1,221	1.35	53	897	1.18	34	2,118	1.28	87
	0.8	1,021	1.47	48	724	1.29	30	1,745	1.39	78
	0.9	854	1.59	44	573	1.40	26	1,427	1.51	69
	1.0	**732**	**1.69**	**40**	**454**	**1.52**	**22**	**1,186**	**1.63**	**62**
	1.1	624	1.80	36	364	1.64	19	988	1.74	55
	1.2	529	1.92	33	299	1.75	17	828	1.86	49
	1.3	449	2.04	29	252	1.84	15	701	1.97	44
	1.4	386	2.16	27	205	1.95	13	592	2.09	40
	1.5	332	2.27	24	166	2.07	11	498	2.21	35
	1.6	289	2.38	22	140	2.17	10	429	2.31	32
	1.7	254	2.48	20	117	2.27	9	371	2.41	29
	1.8	218	2.60	18	90	2.43	7	308	2.55	25
	1.9	196	2.68	17	79	2.51	6	276	2.63	23
	2.0	166	2.82	15	68	2.61	6	234	2.76	21
Fresh	0.0	1,921	0.47	29	274,977	0.14	1,237	276,899	0.14	1,267
	0.1	1,385	0.63	28	45,653	0.61	894	47,038	0.61	922
	0.2	996	0.82	26	26,779	0.95	820	27,775	0.95	847
	0.3	926	0.86	26	24,226	1.03	800	25,152	1.02	825
	0.4	798	0.95	24	21,217	1.12	766	22,014	1.12	790
	0.5	662	1.05	22	18,166	1.24	722	18,827	1.23	744
	0.6	548	1.15	20	15,507	1.35	675	16,056	1.35	695
	0.7	446	1.27	18	13,165	1.48	626	13,611	1.47	644
	0.8	370	1.37	16	11,258	1.60	580	11,628	1.60	596
	0.9	308	1.48	15	9,594	1.73	535	9,902	1.73	549
	1.0	**257**	**1.59**	**13**	**8,274**	**1.86**	**494**	**8,531**	**1.85**	**507**
	1.1	203	1.73	11	7,128	1.99	456	7,331	1.98	467
	1.2	173	1.83	10	6,207	2.11	422	6,380	2.10	432
	1.3	139	1.97	9	5,405	2.24	389	5,544	2.23	398
	1.4	116	2.10	8	4,733	2.37	360	4,849	2.36	368
	1.5	100	2.20	7	4,157	2.49	333	4,257	2.49	340
	1.6	85	2.32	6	3,667	2.62	309	3,752	2.61	315
	1.7	74	2.41	6	3,298	2.73	289	3,372	2.72	295
	1.8	63	2.53	5	2,939	2.85	269	3,002	2.84	274
	1.9	55	2.63	5	2,608	2.98	250	2,664	2.97	254
	2.0	47	2.74	4	2,329	3.10	232	2,376	3.09	236

Appendix B Drillholes included in the 2017 Mineral Resource Estimate

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
BURC0016E	514332.56	7772667.25	428.34	160.0	RC
BURC0017E	514373.57	7772978.18	429.84	157.0	RC
BURC0018	514455.96	7772761.21	428.47	138.0	RC
BURC0019	514431.81	7772632.86	428.00	138.0	RC
BURC0020E	514537.43	7772703.60	428.32	144.0	RC
BURC0021	514576.14	7772755.58	428.48	138.0	RC
BURC0022	514502.82	7772561.98	427.93	132.0	RC
BURC0023	514511.12	7772490.04	427.70	120.0	RC
BURC0024	514556.33	7772812.03	428.64	148.0	RC
BURC0025	514584.58	7772851.85	428.74	160.0	RC
BURC0026	514600.27	7772872.86	428.95	160.0	RC
BURC0027	514630.62	7772912.67	429.20	160.0	RC
BURC0028	514569.92	7772818.66	428.76	166.0	RC
BURC0029	514572.03	7772835.26	428.66	166.0	RC
BURC0030	514499.90	7772820.93	428.65	160.0	RC
BURC0031	514529.20	7772861.85	429.02	160.0	RC
BURC0032	514558.49	7772901.67	428.91	185.0	RC
BURC0033	514596.02	7772783.23	428.64	172.0	RC
BURC0034	514639.96	7772842.95	428.77	160.0	RC
BURC0035	514179.04	7772810.13	429.49	144.0	RC
BURC0036	514406.99	7772950.48	429.62	150.0	RC
BURC0037	514358.79	7772802.24	428.85	168.0	RC
BURC0038	514689.00	7772744.42	428.64	144.0	RC
BURC0039	514784.15	7772797.45	428.76	180.0	RC
BURC0040	514830.95	7772521.87	428.09	162.0	RC
BURC0041	514918.05	7774159.59	437.00	126.0	RC
TBRC0001	514870.26	7772050.41	427.51	180.0	RC
TBRC0002	514747.26	7772434.51	427.81	180.0	RC
TBRC0003	514838.22	7772476.49	427.94	198.0	RC
TBRC0004	514928.14	7772518.46	428.45	180.0	RC
TBRC0005	515018.05	7772561.54	428.63	240.0	RC
TBRC0006	514233.68	7773165.31	431.40	180.0	RC
TBRC0007	514332.97	7773165.23	430.87	180.0	RC
TBRC0008	514433.30	7773165.15	430.72	171.0	RC
TBRC0009E	514533.63	7773165.06	430.10	341.6	RC
TBRC0010	514773.31	7773565.46	431.33	180.0	RC
TBRC0011	515033.55	7773565.24	430.88	240.0	RC
TBRC0012	514508.17	7773965.17	434.25	180.0	RC
TBAC0001	514604.89	7772148.02	426.98	116.0	AC
TBAC0002	514786.81	7772231.97	427.54	77.0	AC
TBAC0003	514967.68	7772317.02	428.01	108.0	AC
TBAC0004	514752.68	7772658.05	428.46	80.0	AC
TBAC0005	514843.64	7772700.02	428.52	86.0	AC
TBAC0006	514934.60	7772741.99	428.77	78.0	AC
TBAC0007	515025.56	7772785.07	429.04	98.0	AC
TBAC0008	515115.48	7772827.05	429.23	86.0	AC
TBAC0009	514283.84	7773165.27	431.07	83.0	AC
TBAC0010	514383.13	7773165.19	430.75	77.0	AC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
TBAC0011	514483.47	7773165.11	430.40	83.0	AC
TBAC0012	514582.75	7773165.02	430.22	71.0	AC
TBAC0013	514683.09	7773164.94	429.74	74.0	AC
TBAC0014	514783.42	7773164.85	429.84	80.0	AC
TBAC0015	514882.71	7773165.87	429.78	80.0	AC
TBAC0016	514983.04	7773165.79	429.64	67.0	AC
TBAC0017	515083.37	7773165.70	429.77	95.0	AC
TBAC0018	515184.75	7773165.61	429.81	92.0	AC
TBAC0019	514611.35	7772371.55	427.53	74.0	AC
TBAC0020	514701.26	7772413.53	427.62	74.0	AC
TBAC0021	514792.22	7772455.50	427.87	71.0	AC
TBAC0022	514882.14	7772497.48	428.18	84.0	AC
TBAC0023	514974.14	7772540.56	428.50	71.0	AC
TBAC0024	515064.06	7772582.53	428.78	75.0	AC
TBAC0025	515155.02	7772624.50	429.11	110.0	AC
TBAC0026	514825.30	7772029.42	427.35	85.0	AC
TBAC0027	514916.26	7772072.50	427.67	78.0	AC
TBAC0028	515006.17	7772114.48	427.76	81.0	AC
TBAC0029	515098.17	7772156.45	428.39	81.0	AC
TBAC0030	514577.22	7772796.52	428.58	84.0	AC
TBAC0031	514668.18	7772839.60	428.78	84.0	AC
TBAC0032	514758.10	7772881.58	429.10	76.0	AC
A03A	514320.39	7772049.89	426.77	200.0	RCD
TBRC0013	514834.27	7773964.90	432.68	180.0	RC
TBRC0014	514933.56	7773964.81	432.36	180.0	RC
TBRC0015	514834.61	7774365.49	438.00	180.0	RC
TBRC0016	515034.24	7774365.32	437.00	222.0	RC
TBRC0017	514978.51	7772762.98	428.85	240.0	RC
CORC100010	516213.00	7771407.00	433.04	150.0	RC
TBAC0033	514850.10	7772923.55	429.28	81.0	AC
TBAC0034	514940.02	7772965.53	429.38	81.0	AC
TBAC0035	515030.98	7773008.61	429.60	81.0	AC
TBAC0036	514311.84	7772894.13	429.58	78.0	AC
TBAC0037	514402.80	7772936.10	429.61	84.0	AC
TBAC0038	514492.72	7772978.08	429.55	75.0	AC
TBAC0039	514584.72	7773020.05	429.60	45.0	AC
TBAC0039A	514593.09	7773024.47	429.52	69.0	AC
TBAC0040	514674.64	7773063.14	429.64	75.0	AC
TBAC0041	514284.17	7773565.87	433.73	30.0	AC
TBAC0041A	514293.58	7773565.86	433.58	63.0	AC
TBAC0042	514383.46	7773565.78	433.00	78.0	AC
TBAC0043	514483.80	7773565.70	432.36	72.0	AC
TBAC0044	514583.09	7773565.62	432.15	69.0	AC
TBAC0045	514703.28	7773565.52	431.62	75.0	AC
TBAC0046	514783.76	7773565.45	431.17	75.0	AC
TBAC0047	514883.05	7773565.36	431.06	75.0	AC
TBAC0048	514983.38	7773565.28	431.04	75.0	AC
TBAC0049	515083.72	7773565.19	430.79	84.0	AC
TBAC0050	515183.01	7773565.11	430.81	75.0	AC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
TBAC0051	514484.13	7773965.19	434.41	75.0	AC
TBAC0052	514583.42	7773965.11	434.19	75.0	AC
TBAC0053	514683.76	7773965.02	433.56	66.0	AC
TBAC0054	514784.10	7773964.94	433.11	75.0	AC
TBAC0055	514883.39	7773964.85	432.49	69.0	AC
BCAC100001	514592.84	7772484.66	427.77	60.0	AC
BCAC100002	514608.22	7772504.68	427.83	75.0	AC
BCAC100003	514625.69	7772523.92	427.96	90.0	AC
BCAC100004	514639.29	7772542.94	427.92	65.0	AC
BCAC100005	514615.06	7772552.81	427.93	60.0	AC
BCAC100006	514538.92	7772490.46	427.76	60.0	AC
BCAC100007	514560.37	7772521.43	427.81	73.0	AC
BCAC100008	514577.84	7772545.10	427.90	60.0	AC
BCAC100009	514596.89	7772571.42	427.97	79.0	AC
BCAC100010	514595.68	7772622.66	428.05	73.0	AC
BCAC100011	514607.08	7772638.03	428.08	89.0	AC
BCAC100012	514501.23	7772532.99	427.76	69.0	AC
BCAC100013	514518.07	7772557.65	427.86	69.0	AC
BCAC100014	514531.88	7772575.68	427.96	69.0	AC
BCAC100015	514545.70	7772596.36	427.92	67.0	AC
BCAC100016	514557.94	7772615.16	428.00	72.0	AC
BCAC100017	514575.31	7772638.94	428.21	76.0	AC
BCAC100018	514584.72	7772649.89	428.10	75.0	AC
BCAC100019	514522.09	7772611.43	427.92	61.0	AC
BCAC100020	514571.27	7772679.67	428.24	70.0	AC
BCAC100021	514586.64	7772696.48	428.22	78.0	AC
CYDD100001	514400.00	7773735.00	433.54	300.1	DDH
CYRC100001	514887.95	7774402.53	435.33	300.0	RC
CYRC100002	514786.81	7774184.64	434.19	300.0	RC
CYRC100003	514838.75	7774073.94	432.98	300.0	RC
CYRC100004	514421.25	7773837.44	434.39	300.0	RC
TBAC0056	514983.73	7773965.87	432.23	66.0	AC
TBAC0057	515084.07	7773965.79	431.83	60.0	AC
TBAC0058	515183.36	7773965.70	431.67	69.0	AC
TBAC0059	514984.07	7774365.36	438.00	36.0	AC
TBAC0060	515084.41	7774365.28	438.00	36.0	AC
TBAC0061	514183.51	7773165.35	431.54	60.0	AC
TBAC0062	514694.80	7772189.99	427.35	51.0	AC
TBAC0063	514876.72	7772273.94	427.85	69.0	AC
TBAC0064	515057.59	7772359.00	428.37	60.0	AC
TBAC0065	514553.48	7771902.39	426.68	69.0	AC
TBAC0066	514643.39	7771945.47	426.86	69.0	AC
TBAC0067	514735.39	7771987.45	427.06	63.0	AC
TBD0001	514620.99	7772647.09	428.11	155.5	DDH
TBD0002	514588.54	7772594.00	428.07	249.0	DDH
BCAC100022	514484.77	7772597.52	427.91	63.0	AC
BCAC100023	514500.46	7772619.08	428.02	68.0	AC
BCAC100024	514515.74	7772643.31	427.97	63.0	AC
BCAC100025	514543.47	7772681.91	428.19	65.0	AC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
BCAC100026	514556.97	7772701.81	428.19	61.0	AC
BCAC100027	514490.24	7772645.21	428.01	73.0	AC
BCAC100028	514548.74	7772731.03	428.33	68.0	AC
BCAC100029	514472.28	7772665.03	428.22	77.0	AC
BCAC100030	514499.39	7772705.29	428.27	75.0	AC
BCAC100031	514513.93	7772725.20	428.22	76.0	AC
BCAC100032	514447.63	7772682.65	428.09	69.0	AC
BCAC100033	514432.28	7772695.72	428.26	72.0	AC
BCAC100034	514460.12	7772737.31	428.24	65.0	AC
BCAC100035	514476.54	7772757.76	428.44	62.0	AC
BCAC100036	514488.37	7772777.34	428.42	66.0	AC
BCAC100037	514407.73	7772708.25	428.23	65.0	AC
BCAC100038	514374.81	7772703.07	428.26	55.0	AC
BCAC100039	514391.03	7772726.63	428.45	72.0	AC
BCAC100040	514419.28	7772764.45	428.53	68.0	AC
BCAC100041	514432.77	7772785.69	428.49	76.0	AC
BCAC100042	514448.78	7772806.37	428.62	88.0	AC
BCAC100043	514333.97	7772733.76	428.57	67.0	AC
BCAC100044	514350.39	7772753.77	428.59	84.0	AC
BCAC100045	514363.16	7772774.57	428.67	63.0	AC
BCAC100046	514378.85	7772794.81	428.72	35.0	AC
BCAC100047	514392.46	7772813.28	428.78	59.0	AC
BCAC100048	514405.33	7772833.63	428.97	60.0	AC
BCDD100007	514485.00	7772712.00	428.32	150.5	DDH
BCDD100008	514570.00	7772503.00	427.84	99.3	DDH
BCRC100006	514231.86	7773164.68	431.41	247.0	RC
BCRC100007	514511.74	7772750.89	428.30	309.0	RC
BCRC100008	514496.69	7772728.00	428.18	398.0	RC
BCRC100009	514499.11	7772638.39	427.73	399.0	RC
BCRC100010	514596.41	7772688.45	428.30	384.0	RC
BCRC100011	514495.60	7772391.92	427.30	393.0	RC
BCRC100012	514533.50	7772526.14	427.73	418.0	RC
BCRC100013	514442.65	7772744.97	428.25	389.0	RC
BUAC0001	514732.04	7772962.38	429.24	21.0	AC
BUAC0002	514624.27	7772817.51	428.83	21.0	AC
BUAC0003	514566.72	7772741.20	428.36	21.0	AC
BUAC0004	514517.54	7772672.63	428.24	21.0	AC
BUAC0005	514464.18	7772600.74	427.98	21.0	AC
BUAC0006	514420.24	7772539.92	427.99	15.0	AC
BUAC0007	514359.56	7772459.18	427.54	18.0	AC
BURC0001	514394.10	7772522.23	427.73	96.0	RC
BURC0002	514656.47	7772582.88	428.00	126.0	RC
BURC0003E	514525.92	7772687.01	428.27	132.0	RC
BURC0004	514619.04	7772814.19	428.70	126.0	RC
BURC0005E	514529.05	7772684.79	428.25	156.0	RC
BURC0006	514495.68	7772775.56	428.49	118.0	RC
BURC0007E	514391.27	7772891.85	429.30	136.0	RC
BURC0008	514311.98	7773067.86	430.41	90.0	RC
BURC0009E	514596.99	7772689.16	428.27	153.0	RC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
BURC0010	514553.95	7772463.45	427.73	132.0	RC
BURC0011E	514492.22	7772379.40	427.46	130.7	RC
BURC0012E	514511.34	7772751.21	428.39	156.0	RC
BURC0013	514539.59	7772793.23	428.52	132.0	RC
BURC0014	514566.79	7772829.73	428.69	132.0	RC
BURC0015	514366.04	7772711.49	428.38	126.0	RC
BCRC100014	514623.02	7772648.96	428.28	22.0	RC
BCRC100015	514546.48	7772883.29	428.90	400.0	RC
BCRC100016	514608.80	7772639.76	428.11	400.0	RC
BCRC100017	514481.61	7772708.00	428.05	353.0	RC
BCRC100018	514431.17	7772644.62	427.95	142.0	RC
BCRC100019	514495.37	7772644.19	427.95	352.0	RC
BCRC100020	514532.89	7772611.06	427.85	352.0	RC
BCRC100021	514681.38	7772813.31	428.77	352.0	RC
BCRC100022	514418.71	7772785.76	428.48	352.0	RC
BCRC100023	514534.91	7772947.23	429.21	352.0	RC
BCRC100024	514696.65	7773003.12	429.12	328.0	RC
BCRC100025	514650.49	7772593.50	428.03	352.0	RC
BCRC100026	514720.30	7772529.09	427.83	328.0	RC
BCRC100027	514652.66	7772433.48	427.57	370.0	RC
BCRC100028	514445.19	7772704.14	428.13	400.0	RC
BCRC100029	514269.10	7772596.03	427.86	472.0	RC
BCRC100030	514446.43	7772830.33	428.73	352.0	RC
BCRC100031	514293.81	7772874.07	429.31	70.0	RC
BCRC100032	514203.84	7772901.84	429.78	352.0	RC
BCRC100033	514293.47	7772870.84	429.27	352.0	RC
BCRC100034	514351.22	7772995.18	429.80	352.0	RC
BCRC100035	514446.08	7772819.99	428.73	352.0	RC
BCRC100036	514399.62	7772817.49	428.71	331.0	RC
BCRC100037	514210.59	7772751.05	428.98	397.0	RC
BCRC100038	514261.01	7772854.00	429.30	354.0	RC
BCRC100039	514300.82	7773101.82	430.66	156.0	RC
BCRC100040	514295.96	7773102.16	430.70	91.0	RC
BCRC100041	514515.68	7772926.18	428.99	398.0	RC
BCRC100042	514500.36	7772820.97	428.57	372.0	RC
BCRC100043	514468.87	7773003.17	429.70	253.0	RC
BCRC100044	514515.57	7773053.95	429.71	354.0	RC
BCRC100045	514298.74	7773052.41	430.39	312.0	RC
BCRC100046	514415.63	7773100.68	430.20	354.0	RC
BCRC100047	514599.33	7772534.82	427.77	348.0	RC
BCRC100048	515049.60	7772804.06	428.96	354.0	RC
BCRC100049	514900.12	7772500.93	427.89	354.0	RC
BCRC100050	514648.28	7772775.38	428.65	378.0	RC
BCRC100051	514573.60	7772449.61	427.54	378.0	RC
BCRC100052	514666.04	7772899.58	428.98	378.0	RC
BCRC100053	514748.59	7772772.69	428.77	378.0	RC
BCRC100054	514254.87	7773043.74	430.32	300.0	RC
BCRC100055	514243.96	7773050.54	430.57	222.0	RC
BCRC100056	514884.35	7772461.25	427.99	348.0	RC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
BCRC100057	514879.00	7772468.59	428.03	348.0	RC
BCRC100058	514572.50	7772501.52	427.72	300.0	RC
BCRC100059	514799.18	7772340.97	427.52	354.0	RC
BCRC100060	514784.31	7772651.86	428.16	282.0	RC
BCRC100061	514110.34	7773168.42	432.02	324.0	RC
BCRC100062	514109.48	7773300.32	432.82	330.0	RC
BCRC100063	514264.25	7773303.60	432.18	252.0	RC
BCRC100064	514300.65	7773500.98	433.20	120.0	RC
BCRC100065	514378.06	7773502.94	432.78	374.0	RC
BCRC100066	514153.75	7773499.44	434.00	348.0	RC
BCRC100067	514345.69	7773301.62	431.64	408.0	RC
BCRC100068	514176.53	7773702.99	435.09	258.0	RC
BCRC100069	514314.93	7773702.87	434.23	192.0	RC
BCRC100070	514391.19	7773701.51	433.71	234.0	RC
BCRC100071	514354.67	7773840.73	434.78	192.0	RC
BCRC100072	514246.49	7773103.55	430.90	306.0	RC
BCRC100073	514275.92	7773001.69	430.17	246.0	RC
BCRC100074	514464.39	7773781.81	433.77	318.0	RC
BCRC100075	514468.40	7773900.61	434.52	204.0	RC
BCRC100076	514222.27	7773899.26	436.20	300.0	RC
BCRC100077	514995.88	7772859.52	428.98	384.0	RC
BCRC100078	514898.01	7772759.69	428.60	324.0	RC
BCRC100079	514824.14	7772731.83	428.39	252.0	RC
BCRC100080	514864.89	7772671.15	428.23	252.0	RC
BCRC100081	514826.31	7772601.56	428.11	374.0	RC
BCRC100082	514752.79	7772601.80	427.91	156.0	RC
BCRC100083	514496.52	7773705.94	433.06	204.0	RC
BCRC100084	514396.33	7773605.16	433.22	210.0	RC
BCRC100085	514257.17	7773232.11	431.66	300.0	RC
BCRC100086	514295.79	7773401.47	432.61	138.0	RC
BCRC100087	514374.44	7773404.90	432.23	313.0	RC
BCRC100088	514647.34	7772450.20	427.57	198.0	RC
BCRC100089	514882.72	7772454.62	427.88	192.0	RC
BCRC100090	514805.00	7772264.00	427.46	396.0	RC
BCRC100091	514655.00	7772262.00	427.22	450.0	RC
BCRC100092	515017.00	7772777.00	428.91	396.0	RC
BCRC100093	515080.00	7772898.00	429.44	396.0	RC
BCRC100094	515119.00	7772999.00	429.54	400.0	RC
BCRC100095	514970.00	7773136.00	429.73	396.0	RC
BCRC100096	514796.00	7772852.00	428.97	396.0	RC
BCRC100097	514861.00	7772808.00	428.79	396.0	RC
BCRC100098	514796.00	7772853.00	428.98	396.0	RC
BCRC100099	514130.00	7772985.00	430.64	396.0	RC
BCRC100100	514350.00	7772955.00	429.72	396.0	RC
BCRC100101	514399.00	7773732.00	433.53	396.0	RC
BCRC100102	514510.00	7773794.00	433.22	396.0	RC
BCRC100103	514442.00	7773979.00	434.83	450.0	RC
BCRC100104	514510.00	7774020.00	434.55	450.0	RC
BCRC100105	515199.00	7773575.00	430.83	348.0	RC

BHID	NAT_East	NAT_North	Best_RL	MaxDepth	HoleType
BCRC100106	514825.00	7772503.00	428.04	312.0	RC
BCRD100001	514545.85	7772699.42	428.26	417.0	RCD
BCRD100002	514436.52	7772822.94	428.69	514.7	RCD
BCRD100003	514200.72	7772801.14	429.24	451.8	RCD
BCRD100004	514356.34	7772856.55	429.25	801.6	RCD
BCRD100005	514538.59	7772650.25	428.04	396.1	RCD
BCRD100005a	514349.36	7772655.66	92.24	78.5	RCD
BCRD100006	514328.94	7773039.07	430.25	403.0	RCD

Appendix C   Tabulation of August 2015 ALS Metallurgical Recovery Test Work

Sample	Head Grade (g/t)	Recovery (240 hrs)	Residue Grade (g/t)	NaCN Usage (kg/t)	Lime Usage (kg/t)
Oxide	1.74	95.4%	0.08	0.20	2.02
Transitional	2.34	76.5%	0.55	0.18	0.72
Fresh	0.59	71.2%	0.17	0.19	0.53

Buccaneer Coarse Crush/Leach Test Work Results

Sample	P80 Grind (μm)	Head Grade (g/t)	Recovery (240 hrs)	Residue Grade (g/t)	NaCN Usage (kg/t)	Lime Usage (kg/t)
Oxide	150	1.52	98.4%	0.03	0.32	0.68
	106	1.67	99.4%	0.01	0.36	0.68
	75	1.56	99.0%	0.02	0.33	0.73
Transitional	150	3.83	96.9%	0.12	1.30	0.4
	106	3.98	97.9%	0.09	1.34	0.42
	75	3.59	99.0%	0.04	1.34	0.44
Fresh	150	0.67	89.5%	0.07	0.32	0.38
	106	0.7	92.2%	0.06	0.46	0.36
	75	0.81	93.2%	0.06	0.36	0.43

Buccaneer Gravity/Grind/Leach Test Work Results

Appendix D   BUCCANEER AUGUST 2017 RESOURCE DECLARATION (JORC 2012)

Sections 1 and 2 of this table were provided by ABM. Section 3 was compiled by Optiro.

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	*The sampling has been carried out using a combination of Aircore (AC), Reverse Circulation (RC) and diamond drilling. Significant historic RAB drilling covers the area and was used in developing the lithological and mineralisation interpretation. However, this data is not used in the estimate and is not detailed here. 124 AC, 163 RC, 8 RC(D) with diamond tails and 5 diamond holes were drilled between 1993 and 2015 and was undertaken by several different companies:* • *1993– 1996 – RAB and DDH drilling by North Flinders Mines* • *1997 – 1999 – RC and RAB drilling by North Flinders Mines* • *2004 – AC, RAB and RC drilling by North Flinders Mines* • *2010 – 2015 - AC, RC, RCD and DD by ABM Resources* *Drill core is geologically logged and marked up for assay at approximately 1 m intervals. Drill core is cut by a diamond saw and half core samples submitted for assay analysis. 2 Diamond holes were drilled and sampled specifically for metallurgical test work.* *RC samples are logged geologically and 1 m split samples submitted for assay. AC samples were either 1 m or 3 m composite spear samples dependent on drill campaign.*
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	*Between 2010 and 2015 sampling was carried out under ABM's protocols and QAQC procedures. 54% of the AC, RC, RCD and DD holes drilled at Buccaneer were completed by ABM.* *Prior to 2010, sampling was carried out under the relevant company's protocols and procedures and is assumed to be industry standard practice for the time. Specific details for this historical drilling are not readily available, however assays and lithology appear consistent with results from ABM's work, and historic data is considered representative and equivalent.*
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	*Details regarding sampling of historic samples are not readily available.* *Sampling under ABM's protocols comprises the following: Diamond drilling was completed using HQ or NQ drilling for all holes. Core is cut in half for sampling, with a half core sample sent for assay at measured/mineralogical intervals. RC drilling samples were taken using a 12.5:1 Sandvik static cone splitter mounted under a polyurethane cyclone. Samples were split into 3 aliquots, with one sent to the laboratory for assay, one stored and retained for QA/QC purposes, and one remaining at the drill site.* *1 m AC drilling samples were collected through a cyclone and sampled by spear. 3m composite samples were created by spear sampling of the total reject of the 1 m sample.*
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).*	*Drilling information beyond type was not recorded in the database ABM acquired for the project so no comments can be made on the drilling types or techniques for North Flinders Mines activities.* *ABM RC drilling was undertaken with a Schramm 685 and Atlas Copco RC rig which have a depth capability of approximately 600m, using a 1000psi, 1,350cfm Sullair compressor and auxiliary booster. Holes were 5 5/8" diameter.* *ABM's 10 diamond drill holes were drilled by Boart Longyear, using a dual-purpose KL-1500 diamond/RC drill rig with 6m rods.*

Criteria	JORC Code explanation	Commentary
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	*RC recoveries were not recorded for the RC Drilling in 2010. A total sample weight was later recorded for six ABM RC holes drilled in 2010 and 2011, and typically showed recoveries of over 90%. Higher sample loss was recorded at the top of the hole in the Quaternary cover.* *All diamond core is collected dry. Drill operators measure core recoveries for every drill run using a 6m barrel. The core recovered is physically measured by tape measure and the length recovered id recorded for every 6 m "run". Core recovery is calculated as a percentage recovery. Almost 100% recoveries were achieved for diamond drilling.*
	Measures taken to maximise sample recovery and ensure representative nature of the samples	*RC face-sampling bits and dust suppression was used to minimise sample loss. Drilling pressure airlifted the water column below the bottom of the sample interval to ensure dry sampling. RC samples are collected through a cyclone and cone splitter. The sample required for assay is collected directly into a calico sample bag at a designed 3 to 4 kg sample mass which is optimal for full sample crushing and pulverisation at the assay laboratory. The polyurethane cyclone was emptied after each complete 6m drill rod, and cleaned out during each survey camera shot (every 5 rods) to minimise any potential for contamination. Diamond drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling. Protocols for drilling undertaken prior to 2010 are not readily available.*
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	*No relationship between sample recovery and grade is apparent and sample bias due to preferential loss/gain of fine/coarse material is unlikely.*
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	*ABM RC samples were geologically logged at the drill rig by a geologist using a laptop with Maxwell Logchief data capture system. Data on lithology, weathering, alteration, ore mineral content and style of mineralisation, quartz content and style of quartz were collected.* *Logging of diamond hole core records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other features of the samples. All core is photographed in the cores trays, with individual photographs taken of each tray both dry and wet.*
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	*Logging of RC chips captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in a chip tray. Logging of drill core captures lithology, mineralogy, mineralisation, weathering, colour and other features of the samples, and structural information from oriented drill core. All samples are stored in core trays. All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet, and photos uploaded to ABM server database.*
	The total length and percentage of the relevant intersections logged	*Geological logging exists for 100% of ABM's 41,110 drill intervals and 97% of historic drill intervals 51,082.1m length. Some regolith sections in shallow previous holes were not logged, but this does not impede geological interpretation.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	*Core samples were cut in half and half core samples were collected for assay, with the remaining half core samples stored in the core trays. Two diamond drill hole were sampled in full for metallurgical test work.*
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	*RC samples were split with a 12.5:1 Sandvik static cone splitter mounted under a polyurethane cyclone and a 2-3 kg sample is collected in a numbered calico bag*

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared and analysed at a variety of laboratories. For data prior to 2010 it is assumed the procedures undertaken are industry standard for the time. Historic assaying was by fire assay, but the specifics of the used techniques are not known. Given the consistency with ABM's results, historic methods are considered to have been appropriate, and are considered equivalent to ABM's. Post 2010 upon receipt by the laboratory samples were logged, weighed, and dried if moist. Samples were then crushed to 2mm (70% pass), then split using a riffle splitter, with 250g crushed to 75 μm (85% pass). 30g charges were then fire assayed. A subset of sample dispatches including all the samples from a hole, including quality control samples, was delivered to an alternative laboratory for quality control. Samples were pulverised to 75 μm (85% passing) and then subsampled to create pulps of 200g, with 50g charges then fire assayed
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field duplicates for RC were taken approximately every 20-25 samples.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates for RC were taken approximately every 20-25 samples. No diamond duplicates were collected. Details of historical duplicates are not readily available.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and preference to keep the sample weight below 3 kg to ensure the requisite grind size in a LM5 sample mill.
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.	Historic drill results were either by Aqua Reqia or fire assay, but the specifics of used techniques are not known. Fire assay with a detection limit of 0.001g/t gold was used for all ABM RC samples. Samples returning over 10.0g/t were re-assayed using ALS Fire Assay/AA25 ore-grade method. Samples over 100g/t were re-assayed using AA25 over limit dilution method. ALS conducted internal laboratory checks using standards, blanks. Standards and blanks returned within acceptable limits, and field duplicates showed good correlation. It is assumed laboratory procedures were appropriate at the time.
	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.	Olympus DELTA handheld XRF was used on a small number of drill holes. Calibration of the hand-held XRF tools is applied at start up. XRF results are only used for indicative analysis of litho-geochemistry and alteration and to aid logging and subsequent interpretation. 4 acid digest data is also used to assist in litho-geochemical determination.
	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.	A blank or standard was inserted approximately every 25-30 samples. For drill samples, blank material was supplied by the assaying laboratory. Eight certified standards, acquired from GeoStats Pty. Ltd., with different gold grade and lithology were also used. Infill drilling completed by ABM has highlighted the highly variable short scale continuity noted in historical data.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections were calculated independently by both the Project Geologist and database administrator.
	The use of twinned holes.	No dedicated twin holes have been drilled however as the deposit has been drilled on multiple azimuths over 20 RC and DD holes are drilled within 10m and are suitable for review as twinned holes. Mineralisation location is consistent across the areas of close spaced drilling however the tenor between the twinned holes is variable highlighting the high variability in short scale continuity of grade.

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	*For drilling data, ABM uses the Maxwell Data Schema (MDS) version 4.5.1. The interface to the MDS used is DataShed version 4.5 and SQL 2008 R2 (the MDS is compatible with SQL 2008-2012 – most recent industry versions used). This interface integrates with LogChief and QAQCReporter 2.2, as the primary choice of data capture and assay quality control software. DataShed is a system that captures data and metadata from various sources, storing the information to preserve the value of the data and increasing the value through integration with GIS systems. Security is set through both SQL and the DataShed configuration software. ABM has one sole Database Administrator and an external contractor with expertise in programming and SQL database administration. Access to the database by the geoscience staff is controlled through security groups where they can export and import data with the interface providing full audit trails. Assay data is provided in MaxGEO format from the laboratories and imported by the Database Administrator. The database assay management system records all metadata within the MDS and this interface provides full audit trails to meet industry best practice*
	Discuss any adjustment to assay data.	*No transformations or alterations are made to assay data stored in the database. The lab's primary Au field is the one used for plotting and Resource purposes. No averaging is employed.*
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	*Most ABM hole collars were surveyed with a handheld GPS pre- and post- drilling. Handheld GPS reading accuracy is improved by the device 'waypoint averaging' mode, which takes continuous readings of up to 5 minutes and improves accuracy. 95 holes were picked up by the mine surveyor with using a DGPS. 49 collar survey methods were not recorded and are assumed to be by GPS. Collar locations for wedge holes have been generated from the desurveyed trace of the parent hole.* *ABM drill holes were surveyed every 30m with a Reflex EZ-Trac Single Shot Surveying camera.* *29 ABM drill holes were also surveyed with a Keeper Rate Gyro continuous surveyor provided by Gyro Australia. Interpretations of the DH Survey data has been completed with an INTERP field loaded to the database for plotting. This INTERP field incorporates and compares all available data to generate an interpreted DH trace whilst preserving the integrity of the original data. INTERP data has been included for holes where the DH Survey tool failed to survey the entire hole.*
	Specification of the grid system used.	*The grid system used is MGA_GDA94, Zone 52.*
	Quality and adequacy of topographic control.	*A topographic surface was generated using DEM data collected in July 2016. For holes surveyed by handheld GPS or NR the Z rl has been updated based off the 5m DEM.*
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	*Drill spacing is variable throughout the Resource area. In the southwest parts of the deposit drillholes are located on nominal 50 m spaced section lines. Drillholes within these sections have variable spacing from 10m to 40m and wider. Outside this area, section spacing is variable from 100m to 200m and 400 m. In section spacing is nominally 100m but is also variable. Drill grid coverage is incomplete and drilling depth is highly variable.*
	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.	*Sample spacing is sufficient to provide geologic and grade continuity.*
	Whether sample compositing has been applied.	*No sample compositing has been applied.*

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	*The orientation of the drill lines was designed to intersect the shallow dipping zone of mineralisation as orthogonally as possible. The dominant drill azimuth was 215 degrees azimuth in the core of the monzogranite and is approximately perpendicular to the targeted mineralisation. ABM diamond holes were drilled on selected azimuths to test specific targets. Drilling in the northern zone is either 90 or 270 degrees azimuth where the geological interpretation suggested a strike change to the main structure.*
	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.	*Gold mineralisation is disseminated within a monzogranite, and typically associated with quartz veins and fractures, free gold is seen in the quartz stockwork veining. Due to the multiple orientations of veining it is not considered that the different drill orientations have introduced sample bias.*
Sample security	*The measures taken to ensure sample security.*	*Samples were transported from the rig to the field camp by ABM personnel, where they were loaded onto a Toll Express truck and taken to a secure preparation facility in Alice Springs, Perth or Orange. The preparation facilities use the laboratory's standard chain of custody procedure. Details regarding sample security of drilling prior to 2010 are not readily available.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	*ABM has conducted several audits of ALS's Perth and Alice Springs laboratory facilities and found no faults. QA/QC review of laboratory results shows that ABM Resources sampling protocols and procedures were generally effective. ABM has also conducted annual reviews at the end of every calendar year, and found no significant statistical outliers.*

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 Buccaneer Gold Deposit is located on Mining License 29822 in the Northern Territory. The tenement is wholly owned by ABM, and subject to the 'Twin Bonanza Mining Agreement' agreement between ABM and the Central Land Council (CLC). The Mineral Lease was granted in April 2014 for a term of 25 years.*
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	*The tenement is in good standing with the NT DPIR*
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	*The Buccaneer Resource was originally discovered by North Flinders Mines in the late 1990s. Newmont Asia Pacific Ltd. (Newmont) acquired the property and continued active exploration through 2006. Newmont/North Flinders drilled a total of 830 holes into the prospect – 103 air core, 669 RAB, 48 RC, and 10 RC with diamond extensions – totalling 51,082m and provided the foundation of understanding of the Buccaneer Deposit.*
Geology	Deposit type, geological setting and style of mineralisation.	*Gold mineralisation is disseminated within a monzogranite porphyry, and typically associated with quartz veins, free gold is seen in the quartz stockwork veining. Mineralisation extends from near-surface to a depth of over 500m and has been defined in several zones over an area of 2,200m by 800m. Mineralisation within the main body of the monzogranite has been recognised to have a moderate north-easterly dip.*

Criteria	JORC Code explanation	Commentary
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case	*Summaries of all material drill holes are available within the Company's ASX releases.*
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	*ABM does not use weighted averaging techniques or grade truncations for reporting of exploration results.* *ABM reports two significant intercept values; 0.5g/t gold and 1.0g/t gold. The 0.5g/t gold is an average of all continuous values greater than 0.5g/t gold, with no more than 2 continuous values below this cut-off. The 1.0g/t gold is an average of all continuous values greater than 1.0g/t gold, with no more than 1 continuous value below this cut-off.*
	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.	*Summaries of all material drill holes and approach to intersection generation are available within the Company's ASX releases.*
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	*No metal equivalent values are used.*
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	*The majority of drilling is RC, and thus the exact geometry of the mineralisation with respect to drill angle cannot be determined. From the limited diamond drilling, identified stockwork veining at various orientations. The overall trend of the fresh mineralisation has a moderate north-easterly dip. Subsequently, drill holes are angled at 60 degrees to drill as close to orthogonal to mineralisation as possible.* *Intercepts reported are down hole length, true width is not known.*
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	*Refer to Figures and Tables in the body of the text.*
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	*The Company reports all assays as they are finalised by the laboratory.*
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.	*Multi-element geochemistry and spectral logging studies have been completed on the deposit. These are used to influence the interpretation of the regolith profile and host rock lithology. Metallurgical test work has previously been published on 17th August 2015. No deleterious elements are noted. Summary results are included in Appendix B.*

Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	*Further work would include improved geological understanding to confirm continuity of mineralisation and could be used as a basis to target extensions of the Resource as it is currently open at depth and in several strike directions.*

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.	All data was transferred digitally to Optiro by ABM from ABM's dedicated drillhole database and geological modelling systems; drillhole files as a series of CSV file exports and geological interpretations and topography models in DXF format
	Data validation procedures used.	All data was used by Optiro on an as supplied basis. Routine validation checks were conducted on the drillhole data during importation and desurveying within Datamine RM
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Optiro's resource geologist (CP) who compiled the current Mineral Resource model has not been to site. Other specialist geologists form Optiro have been to site and have conveyed their observations to the CP.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	There is good confidence in the geological domains within the Resource Estimate with mineralisation constrained to the monzogranite. Limited diamond drilling and reliance on RC drilling has lowered the confidence in regards to the local controls to mineralisation and grade continuity. RC drilling on the closer spaced grids however supports the approximate tenor and thickness of the north-east dipping mineralisation grade trends.
	Nature of the data used and of any assumptions made.	All available data has been used to help build the geological interpretation. This includes geological logging data (lithology and structure), portable XRF multi-element data, gold assay data (RC and DDH), and airborne magnetics. Re-logging of the available diamond holes within the deposit was used to assist in validating historical logging and structural measurements and to generate refined interpretations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The contrast between the current and previous Resource Estimates demonstrates that alternative interpretations can have a substantial impact on the Resource Estimate, particularly in the less well drilled regions. The size of the previous Resource model was reliant on extrapolation of mineralisation beyond or between wider spaced drillhole locations. The current Resource estimation significantly reduces this reliance, and in doing so, has reduced the estimated metal within the deposit.

The previous interpretation of a moderately south-west dipping control to the mineralisation at depth has not been recognised in the re-logging campaign. With additional diamond drilling, it may be possible to further constrain the location of the interpreted north-west striking shear corridors as a control to the mineralisation to increase geological confidence. |

Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation.	Regionally the deposit is hosted in a monzogranite within medium to fine grained turbiditic meta-greywackes of the Tanami Group. The contact between the monzogranite and sediments is easily recognisable in core and RC chips and is well constrained. Geological domains were created for the lithology's and are used to constrain mineralisation domains.

Mineralisation is disseminated throughout the monzogranite with higher grade zones typically associated with stronger zones of shallow dipping quartz veins. The more coherent zones of mineralisation are related to zones of increased quartz veining and/or micro-fracturing. An overall shallow north-easterly dipping trend to the quartz veins is recognisable within the quartz stock work and is used to guide and control the Resource Estimation. Mineralisation within the monzogranite host has been implicitly modelled to the mineralisation trends.

PIMA and pXRF analysis support the classification of three zones of weathering. A highly-weathered oxide zone is present from 0 to 60 metres vertical depth which is stripped of potassium, sodium and calcium and determines the oxide/transitional oxidation surface. From ~60 to 100 metres vertical depth calcium and sodium remain depleted and chemically determine the transitional/fresh oxidation surface. |
	The factors affecting continuity both of grade and geology.	These are described in the above sections, however the most obvious controls on mineralisation relate to near surface weathering effects and the orientation and density of quartz veining.
Dimensions		Mineralisation extensions are present throughout the extent of the monzogranite which covers a footprint of approximately 800 mE by 2,200 mN. Mineralisation has been modelled to depth of approximately 370 m below surface. The actual mineralisation extent is closely controlled by the distribution of drilling, much of which is focused in the southwest corner of the monzogranite in an area that is roughly 400 mE by 600 mN
	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	
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Mineralised volumes were defined using categorical indicator methods driven by the available drillhole data. A grade threshold of 0.25 g/t Au was utilised for the categorical process. Two types of mineralisation were defined; more continuous and less continuous. These, and the background around these domains were estimated separately using one metre top-cut composite data and ordinary kriging into 50 mE by 50 mN by 10 mRL panels. These panel grades were processed using uniform conditioning methods to estimate the distribution of gold grades within 10 mE by 10 mN by 5 mRL selective mining units
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource Estimate takes appropriate account of such data.	No check estimates were completed. The previous Mineral Resource was generated in 2013 prior to ABM's most recent database. The 2013 estimate applies considerably different assumptions regarding the continuity of mineralisation. The current Mineral Resource Estimate reports considerably lower tonnages, grade and metal than the 2013 case due to the changes introduced in the current model regarding mineralisation continuity.
	The assumptions made regarding recovery of by-products.	No assumptions have been made.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	None have been estimated

Criteria	JORC Code explanation	Commentary
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Panel size (as discussed above) is similar to or larger than the drill grid spacing in the better drilled portion of the deposit. Drill spacing is erratic and wider spaced in the rest of the monzogranite. The primary search is derived from the grade continuity model determined by variogram model. This search is 60 m by 80 m by 20 m. Multiple search passes were completed and subsequent searches doubled the primary search ranges
	Any assumptions behind modelling of selective mining units.	Grades were estimated for selective mining units of 10 mE by 10 mN by 5 mRL using uniform conditioning of the 50 mE by 50 mN by 10 mRL panels. This process assumes the panel grades are accurate and that the grade statistics and continuity model are representative of the mineralisation
	Any assumptions about correlation between variables.	None required
	Description of how the geological interpretation was used to control the Resource Estimates.	Mineralisation estimation was constrained to within the extent of the monzogranite. Oxidation surfaces were used to control the assigned density factors
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was applied to the mineralisation domains. Grade cap values were determined using a population disintegration method that is designed to reduce the impact of outlier grades.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	The block grade model was validated using whole-of-domain statistical comparisons, grade profile comparisons and visual review of block grades to drillhole data. The deposit has not been mined thus no reconciliation data is available
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are reported on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied*	The primary cut-off grade for Resource reporting has been set at 1 g/t Au based on the deposits average grade and size.
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.*	The selective mining unit size employed is based on the assumption of extraction by open pit mining methods on a 5 metre bench height. The selective mining unit includes internal dilution but requires additional allowances for ore loss and edge dilution.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	No assumptions are made regarding metallurgical recovery. Oxidation domain modelling built into the resource model will allow this variable to be considered in future work.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields 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*	No factors or assumptions have been made
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.*	Average dry bulk density factors were applied based on oxidation subdivisions. Density values were measured from core using water displacement methods. Most of the density samples were collected from the monzogranite, mainly from fresh rock conditions (387 fresh samples, 18 transitional samples and 2 oxide samples). 37 samples were collected from fresh sediment. Average density factors determined from this data were assigned based on oxidation condition. Due to the similarity between the fresh sediment and fresh monzogranite density and the absence of density data from oxidised and transitional sediment conditions, the monzogranite averages were assigned to the sediment. An assumed density factor of 1.6 t/m^3 was assigned to the cover sequence (which contains no mineralisation) based on experience from other deposits
	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,	See above
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	See above
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories*	The resource categories assigned (Indicated and Inferred) are based on the spatial density of drilling. The Indicated resource is assigned only to the portion of the deposit that is tested by the closest spaced drilling which is on a nominal drilling pattern of 50 m by 25 m. All other parts of the resource model were assigned an Inferred status
	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).	Data quality, data spacing, demonstrated mineralisation and grade continuity were all important factors considered when assigning resource category
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Yes
Audits or reviews	*The results of any audits or reviews of Mineral Resource Estimates.*	The Mineral Resource has undergone internal peer review but no independent third party audits at this time

Criteria	JORC Code explanation	Commentary
	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	No geostatistical studies have been undertaken to determine relative accuracy or confidence limits. Relative accuracy and confidence is reflected in the resource block model by the resource category assigned to blocks, which, as stated below, ultimately relates to local drillhole spacing.
	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	The estimate is considered to be global overall. Some local confidence is applicable in the closer spaced drilling area as reflected by the resource classification
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No mining has occurred at Buccaneer.