# **REDCLIFFE EXPANDS, GOLD POTENTIAL HIGHLIGHTED**

# SUMMARY

- New tenement granted, expanding the Redcliffe Gold Project to over 300km<sup>2</sup>
- Independent Consultant outlines Redcliffe Gold Project JORC Exploration Target
- Recent previously announced aircore results of 10m @ 23.3 g/t gold from 55m and 10m @
   9.0 g/t gold from 65m at Hub demonstrate potential to expand the Mineral Resource
- A review of past drilling highlights that 38% of all holes intersect +1g/t Au, ~70% of funds is used directly for exploration, and the last Mineral Resource upgrade was achieved at less than \$15/oz

NTM Gold Ltd (ASX: NTM) ("NTM" or "the Company") is pleased to provide an update on NTM's exploration at the Redcliffe Gold Project located near Leonora, Western Australia.

NTM's Redcliffe Gold Project has been expanded to over 300km<sup>2</sup> following the granting of exploration licence E37/1356. The tenement covers 116km<sup>2</sup> and abuts the existing tenements to the east. E37/1356 contains a number of early stage structural targets which will be tested once all preliminary work has been completed.

As part of NTM's ongoing exploration strategy, independent consultant Dr James Lally of Mining Associates was commissioned to evaluate the Redcliffe Gold Project. As part of the evaluation, Dr Lally derived a JORC Compliant Exploration Target for Redcliffe of:

#### 14.38Mt - 21.55Mt @ 1.8g/t - 2.5g/t for 0.84 Moz - 1.70 Moz.

This Exploration Target does not include the current Mineral Resource of 12.52Mt @ 1.34g/t for 0.54 Moz<sup>1</sup>.

Exploration Target Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of a mineral resource.

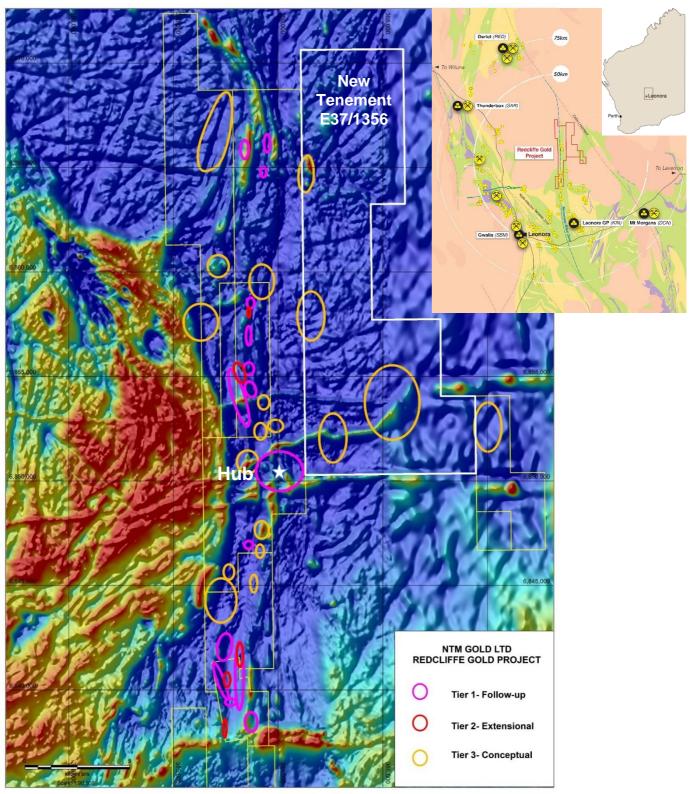
The Redcliffe project covers over 30km of the highly prospective Mertondale Shear. To date, NTM has been very successful in exploring the shear, with 38% of all holes drilled by the Company since 2005 returning a downhole intercept of greater than 1g/t gold. We see this as an outstanding return in identifying large mineralised systems, particularly when considering over 70% of cash is being used directly for exploration. In addition, the last Mineral Resource update added ounces at less than \$15/oz.

#### NTM Gold Managing Director Andrew Muir commented:

"NTM is an effective and efficient explorer, as demonstrated by our historical and recent success rate. The Company has over 30km of strike of the Mertondale Shear Zone, with mineralisation identified at the very northern and southern extremes, with only modest testing in between. We see our current Mineral Resource as a good platform from which to grow substantially, as evidence by the independently derived Exploration Target."

<sup>1:</sup> See Appendix I for full JORC Complaint Resource statement

### **Redcliffe Project Targets and Selected Prospects over Aerial Magnetics**



#### E37/1356

Tenement E37/1256 was granted in May 2019 and comprises 116 km<sup>2</sup>. The area mainly covers what is interpreted to be granitoid and is adjacent the eastern side of the greenstone belt and the Mertondale Shear Zone. Interpretation of regional aeromagnetic images in the northern part of the tenement suggests an embayment in the Greenstone belt. Historical wide spaced soil sampling in this area returned values of up to 13 ppb Au which is significantly above background, and have yet to be fully explored.

Several north-easterly, regional trending structures transect the area. In the southern part of the tenement, late Proterozoic dykes have intruded along these structures. Within the Greenstone belt, gold mineralisation has been found in spatial association with north-easterly trending dykes at prospects including the Hub. No exploration has been completed testing this conceptual target within the granites.

#### **EXPLORATION TARGET**

An Exploration Target has been estimated for gold mineralisation for the Redcliffe Gold Project by Dr James Lally of Mining Associates. The Exploration Target (JORC, 2012), which excludes the current Mineral Resource (see below), is:

#### 14.38 Mt - 21.55 Mt grading 1.8 g/t Au - 2.5 g/t Au for 0.84 Moz - 1.70 Moz of gold.

The potential quantity and grade of this Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The upper and lower grades of the Exploration Target estimate do not necessarily correspond to the upper and lower tonnages.

This Exploration Target is exclusive of the current Redcliffe Project Mineral Resource of 12.53 Mt grading 1.34 g/t Au for 0.54 Moz gold (ASX announcement dated 13th June 2018).

The Target will be tested by NTM over the next few years through reconnaissance aircore, RC drilling over poorly tested areas, resource/infill drilling at known prospects without resources and diamond and RC drilling aimed at intersecting depth extensions to existing Mineral Resources.

The Exploration Target for the Redcliffe Project area was derived by combining three categories of targets:

- Extensions of defined Mineral Resources to a depth considered reasonable for open-pit and/or underground mining. For all defined prospects resources have been extended in a direction constrained by known structural geometries. Exploration Target tonnages and grades are based upon previously reported Mineral Resources and Exploration Results
- 2. Resource potential of prospects with some drilling, but insufficient to define a Mineral Resource. Exploration Target tonnages and grades in this category are based on previously reported Exploration Results.
- 3. Under-explored areas of tenements considered to have potential to host a gold deposit of similar size and grade to those already defined within NTM's tenements.

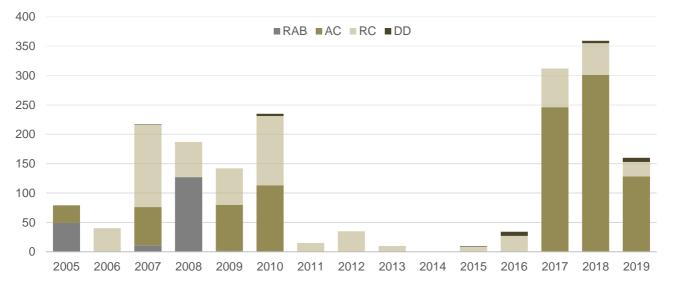
See Appendix II for a detailed breakdown of the components for each of the three categories.

#### HISTORIC EXPLORATION REVIEW

To give a sense of perspective on exploration by NTM since 2005, including precursor companies Redcliffe Resources and Pacrim, a review of drilling shows the Company has been a very successful and cost-effective explorer. Key highlights include:

- Since 2005, the Redcliffe Project has seen 1,835 holes drilled via RAB, Aircore, RC and Diamond.
- Since 2017, more holes have been drilled at Redcliffe than at any other time.
- 39% of all holes have intersected at least 1g/t gold.
- Since 2013, the estimated cost of adding resources is less than \$15/oz.
- Since 2013 the estimated percentage of exploration costs as a proportion of total costs is just under 70%

#### Redcliffe Gold Project Drilling to Date from 2005



The key takeaway from the review is that NTM is an efficient and effective explorer, using money wisely, and delivering a high drill success rate. This is due to a number of key factors including:

- The prospectivity of the project,
- A good understanding of the geology,
- Correctly targeted drill holes, and
- Appropriate funding to allow the drilling to be done.

# LOOKING FORWARD

The Company expects the priority areas to reflect the areas identified in the Exploration Target that have the greatest potential, namely Hub, Redcliffe East and Bindy. There are also has a number of drill targets at existing deposits to test further strike and depth potential, as well as new targets that are required to be tested via aircore. These include the potential for southern and northern extensions of Hub which remain largely untested.

The addition of the new tenement significantly expands the size of the Redcliffe Gold project, though the targets on E37/1356 are at a very early stage and need refining before drilling commences. However, the Company expects the tenement will contribute a number of priority targets over time which will require drill testing.

In the short-term, the focus remains on the Hub and the pending results following the recent RC drilling. The April aircore drilling extended the strike of the Hub mineralisation to over 1,000m, with high grades and depth continuity. NTM is optimistic the Hub has the potential to host a significant mineralised body. Once assays are returned NTM will assess the immediate drill plans.

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# About NTM

NTM Gold Ltd (ASX: NTM) is an emerging Perth-based explorer focused on the Leonora region, in the heart of Western Australia's Eastern Goldfields. The Leonora Laverton Terrane has produced more than 50 million ounces of gold historically and is considered to be one of Australia's most prospective provinces. NTM owns 100% of the Redcliffe Gold Project, a major developing project with established resources close to existing infrastructure and mines (Sons of Gwalia: St Barbara Ltd, Thunderbox: Saracen Mineral Holdings Ltd, and Darlot: Red 5 Limited).

The Redcliffe Gold Project is a 170km<sup>2</sup> tenement holding covering the Mertondale Shear Zone over some 40km length. The Mertondale Shear Zone is an interpreted major crustal structure important for gold mineralisation.

NTM has an experienced team who are committed to developing the Redcliffe Gold Project. An aggressive exploration program is under way, which has delivered drilling success across much of the Redcliffe project area. NTM's ambition is to upgrade the Redcliffe resource base to fast-track commercialisation options.

# **Competent Persons Statements**

The information in this report that relates to Exploration Results is based on information compiled and/or reviewed by Lyle Thorne, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Thorne a full-time employee of NTM and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Thorne consents to the inclusion in the report of the matters based on this information in the form and context in which they appear.

The information in this report that relates to Exploration Targets is based on information compiled by Dr James Lally who is a Member of The Australian Institute of Geoscientists and is employed by Mining Associates Pty Ltd. Dr Lally 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 of Exploration Results, Mineral Resources and Ore Reserves'. Dr Lally consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Appendix I

#### **REDCLIFFE RESOURCE**

NTM released the Estimate of Minerals Resources to the ASX on 13 June 2018, containing the statements and consent referred to in ASX Listing Rule 5.22.

NTM confirms that it is not aware of any new information or data that materially effects the information included in the announcement of 13 June 2018 and that all material assumptions and technical parameters underpinning that estimate continue to apply and have not materially changed.

Deposit		Indicated			Inferred		Total		
	kT	g/t Au	kOz	kT	g/t Au	kOz	kT	g/t Au	kOz
Oxide	403.3	2.13	27.6	2,348.5	0.93	70.4	2,751.8	1.11	98.0
Transition	378.9	2.03	24.7	3,422.6	1.01	110.7	3,801.5	1.11	135.4
Fresh	971.1	2.35	73.4	5,001.1	1.44	231.0	5,972.2	1.59	304.4
Grand Total	1,753.3	2.23	125.7	10,772.1	1.19	412.2	12,525.4	1.34	537.9

Table 1: Redcliffe Project Resource Estimate Summary - 0.5g/t Lower Cut-Off

#### Table 2: Redcliffe Project Resource Estimate Summary - 1.0g/t Lower Cut-Off

Denesit		Indicated			Inferred		Total		
Deposit	kT	g/t Au	kOz	kT	g/t Au	kOz	kT	g/t Au	kOz
Oxide	314.6	2.52	25.5	553.3	1.72	30.6	867.9	2.01	56.1
Transition	307.6	2.32	23.0	1,151.4	1.59	59.0	1,459.0	1.75	82.0
Fresh	835.4	2.61	70.1	2,660.6	2.06	176.3	3,496.0	2.19	246.4
Grand Total	1,457.7	2.53	118.6	4,365.2	1.89	265.9	5,822.9	2.05	384.5

Notes to Table 1 and 2:

1. Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.

2. The Statement of estimates of Mineral Resources has been compiled by Mr Andrew Bewsher who is a full-time employee of BMGS and a Member of the AIG. Mr Bewsher has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code (2012).

3. All Mineral Resources figures reported in the table above represent estimates at 1st June 2018. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

4. Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

# Appendix II

# Detailed Breakdown of Exploration Target Methodology and Estimates.

Target	Range	Tonnes	Width (m)	Est. Grade (g/t Au)	Est. Ounces	Target Description
1. Extension of Kn	own Mineral	Resources (Re	sources re	ported in ASX	announcemer	nt 13th June 2018)
Nambi Underground	Low	439,000	2.5	5.0	71,000	Extending distinct high-grade shoots in Main Lode down plunge from base of current resource model (250m depth) to 520m
	High	607,000	3.0	6.5	127,000	depth. 2 shoots both approx 120m strike, 320m down plunge, 2.5- 3m wide
Nambi South	Low	135,000	14.0	2.5	11,000	Below base of pit, wide high-grade drill intercepts over 50m
	High	170,000	16.0	3.5	19,000	strike, about 15m wide. Extended 75m below pit floor at plunge approx 75 to south
Redcliffe OP	Low	810,000	10.0	1.2	31,000	Extension of mineralisation from base of current resource (150m) to 250m depth. Strike 230m x 160m down plunge x 15m true
	High	1,215,000	15.0	1.5	59,000	width (base of resource model). One drill intercept near edge of ET zone of 4.5m@1.6g/t Au
West Lode	Low	324,000	4.0	1.5	16,000	Potential three higher grade (>1 g/t) shoots extending down plunge to south to 200m depth from base of model at 50-100m
	High	445,000	5.0	2.0	29,000	depth. Shoots approximately 65m across x150m down plunge, 4- 5m wide. One drillhole into a shoot target 14m true width @ 0.85 g/t.
Mesa only downplunge	Low	59,000	4.0	2.0	4,000	Northern and southern high-grade shoots interpreted, 4-6m wide and 2-3g/t Au grade, extending approx 100m down plunge from
	High	97,000	6.0	3.0	9,000	base of resource model wireframes to 150m depth. Note possible incorrect location of older drillholes with main grade intersects.
Bindy OP depth extension	Low	222,000	7.5	3.0	21,000	Extension of mineralisation from base of current resource to
	High	297,000	10.0	4.0	38,000	250m depth, filling in area in higher grade central part.
Bindy UG	Low	675,000	5.0	4.5	98,000	Extension of high-grade Bindy shoot 5-6m wide, 200-300m strike
	High	1,215,000	6.0	5.5	215,000	extent 4.5-5.5g/t Au grade steeply south plunging from 250m depth to 510m depth.
GTS OP depth extension	Low	562,000	8.0	1.5	27,000	Extension of mineralisation from base of current resource to 250m depth. Strike extent approx 400m, down-dip extent approx
	High	702,000	10.0	2.5	56,000	55m
Bindy North						Resource model already at 200m depth, ET depth extent unlikely to meet reasonable prospects for resource

2. Prospect Potentia	al, Some Dr	illing				
Hub	Low	1,750,000	5.0	3.0	169,000	700-800m strike length total in 2 zones broken across mafic dyke,
	High	2,400,000	6.0	4.0	309,000	200m down dip extent, 5-6m wide, 3-4g/t Au. Similar extents to Mesa-West Lode trend. Exploration Results reported ASX announcement 25th January 2019 and May 2019
Kelly North	Low	2,100,000		0.8	54,000	Potential for 2 zones, partly tested in KT1 and KT2 of oxide-
	High	3,150,000		0.9	91,000	transitional material 20-30m thick, 100m across strike and 250m along strike
Bindy-GTS trend	Low	300,000		1.3	12,000	Barry, GTN and GTC prospects within widely spaced AC/RAB lines.
	High	400,000		1.8	23,000	Potential for 3-4 100,000t oxide deposits 1.25-1.75 g/t. Includes older resource of 64,000t @ 1.52 g/t Au for Golden Terrace North (Pacrim Energy quarterly update 31 March 2011)
Gully	Low	800,000	4.0	2.0	51,000	Limited information from surface sampling and wide spaced
	High	800,000	4.0	4.0	103,000	(>200m drilling. ET 2 zones each 200m strike, 200m downdip, 4- 5m wide zone with grades 2-4 g/t based on historical rock chips sampling by Pacrim Energy (Pacrim investor presentation 8/12/2010)
Gully South	Low	300,000	3.0	2.0	19,000	Rock chip samples over 200 m strike, old workings, limited
	High	300,000	3.0	4.0	39,000	drilling. Assume mineralisation aggregate 3m-4m wide, 2-4 g/t Au extending 200m down plunge.

3. Prospect Potent	tial, No Drilli	ng				
Nambi North	Low	450,000	3.0	2.5	36,000	No drilling along strike of Main Lode up to 1km north of Nambi deposit. Potential for another 2 plunging Main Lode style shoots,
	High	800,000	4.0	4.0	103,000	150-200m strike, 200m depth, 3-4m wide, 2.5-4 g/t. Sporadic soil anomalies up to 140ppb Au
Kelly-GTS East (Mertondale Fault)	Low	750,000		1.2	29,000	Poorly tested eastern margin of MSZ that hosts main Mertondale deposits further south. Old workings in area of Golden Terrace East indicate some mineralisation. Potential 0.75-1.25Mt @ 1-1.5
	High	1,250,000		1.5	60,000	g/t Au
	Low	1,500,000		1.2	58,000	Poorly tested region east of Redcliffe but still within main MSZ interpreted from magnetics. Potential at least Redcliffe size (low)
	High	2,000,000		2.5	161,000	to Nambi (high)
Mesa to Hub	Low	350,000		1.8	20,000	Very little drilling along 2.3 km strike area interpreted from magnetics as similar to Mesa-Redcliffe within MSZ. Potential for
	High	1,100,000		1.2	42,000	Mesa-size (low) or Redcliffe-size (high). AC results at Infinity up to 1m @ 5.7g/t Au
Triple 2	Low	300,000		1.1	11,000	2 km strike length of MSZ covered mainly by wide spaced 500m AC lines. Au intersects on several lines around 5m @ 1.2-2.3 g/t
	High	500,000		1.5	24,000	Au. Similar structural position to Bindy-Bindy North, target size less than 500m strike length, size similar to Bindy north (low), Mesa (high)
Aliso-Canjada area	Low	2,200,000		1.1	78,000	Little drilling, incomplete soil coverage over 7km strike of greenstone with interpreted ductile shear zones cutting mafic-
	High	3,000,000		1.5	145,000	felsic stratigraphy. Bends in SZ from N to NNE trending in central part, similar to structural position at Nambi. 700m soil anomaly at Aliso, 1100m anomaly at Canjada. Initial AC results at Aliso, best 5m @ 3.5 g/t. ET based on similarity to Mesa-Redcliffe area, with potential two deposits of same size interpreted.
TOTAL	Low	14,380,000		1.8	837,000	Totals are rounded to reflect the accuracy of the estimated tonnes, grade and metal comprising the Exploration Target.
	High	21,550,000		2.5	1,695,000	The upper and lower grades of the Exploration Target estimate do not necessarily correspond to the upper and lower tonnages.

#### 1. Extension of Known Mineral Resources

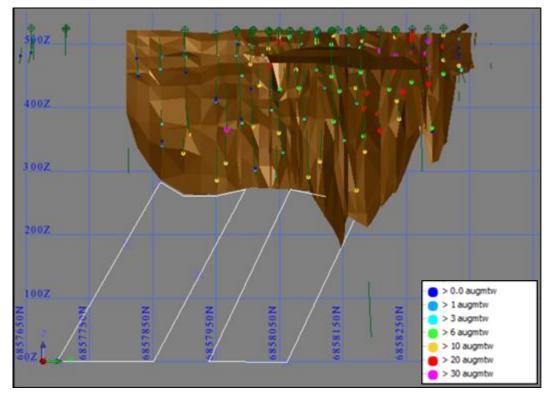
Exploration Targets at Nambi, Nambi South, Redcliffe, West Lode, Mesa, Bindy, Bindy North and GTS were derived by extending the latest Mineral Resource models (from June 2018) down plunge to a depth consistent with either open pit or underground mining potential. The area of the extended polygons plotted in long section were multiplied by the range of mineralisation widths at the base of the resource model to estimate a range of volumes. Volumes ranges were converted to tonnage ranges using densities of different materials as follows: oxide 1.8 t/m<sup>3</sup>, transitional 2.3 t/m<sup>3</sup> and fresh 2.7 t/m<sup>3</sup>. Most of the extended resources were in fresh rock. Grade ranges were derived from the base of the resource block models, with maximum and minimum values reflecting the variability of grade. The Figures below show long section views of the Exploration Target areas for these prospects.

Nambi and Bindy have consistent plunging higher grade shoots greater than 10 gram-metres in their deeper portions that are considered to have potential for underground resources. These shoots were extended to 0 m RL (approximately 500 m below surface) to reflect a depth that is able to be tested cost-effectively from surface drilling.

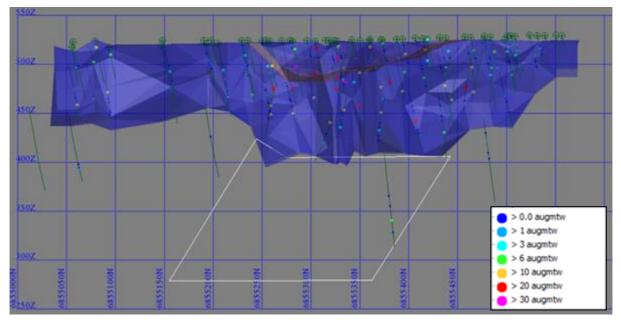
#### Nambi Main Lode high grade extension Exploration Target.

(This graphic and subsequent graphics are from Dr James Lally's Exploration Target report.)

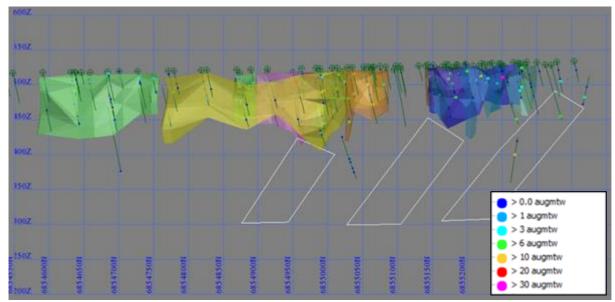
Points in this and other long sections coloured by gram-meter values of drillhole intersects (0.5 g/t cut-off, true width). Exploration Target extensions at depth are indicated by white outlines on long sections through deposits with resources.



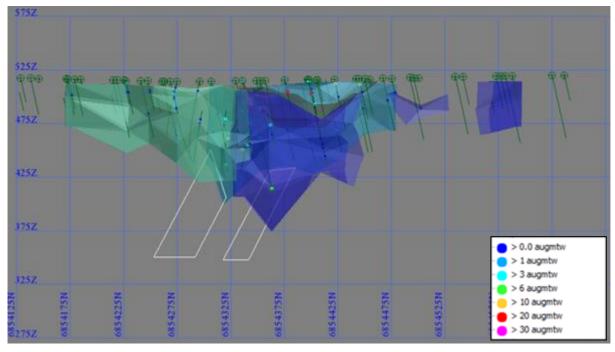
Redcliffe depth extent Exploration Target.



# West Lode depth extent Exploration Target.



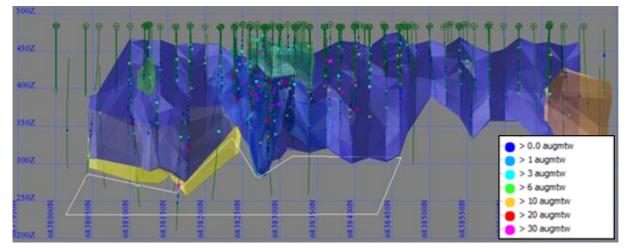
#### Mesa depth extent Exploration Target.



# 5502 5002 4502 4002 • > 0.0 augmtw • > 1 augmtw • > 3 augmtw • > 6 augmtw • > 10 augmtw • > 20 augmtw • > 30 augmtw

#### Bindy depth extent, open pit and underground Exploration Targets.

#### Golden Terrace South depth extents Exploration Target.



#### 2. Prospect potential with some drilling

Prospects at Hub, Kelly North (including KT1 and KT2), Gully, Gully South and the Bindy-GTS trend have limited drilling and surface sampling that is insufficient to define a Mineral Resource, but which provides some indication of potential size and grade. The extent of sampling at each area was used to define an expected range of strike extent and thickness which was projected down-dip by 200 m (likely maximum open pit depth) to provide a range of volumes. The volume range was converted to a tonnage range using a density factor of 2.5 (oxide + transitional to 100 m, fresh rock to 200 m). If mineralisation was interpreted to occur only within oxide-transitional material a density factor of 2.1 was used.

Drilling results from Hub were recently reported by NTM on 25 January 2019 and in May 2019. Kelly North area (KT1) results were reported on 12 January 2018. Gully and Gully South Exploration Targets are based on rock chip sampling and mapping by Pacrim Energy Ltd (Pacrim investor presentation 8/12/2010) and historic (pre-2000) first-pass reconnaissance RC and RAB drilling on lines spaced 80 m apart at Gully and 110 m at Gully South. Bindy-GTS trend Exploration Target is based on RAB and RC drilling by Pacrim Energy Ltd and NTM Gold over an extended period from 2011 to 2017. Reconnaissance AC and RAB lines at 200 m spacing were infilled to 50 m spacing over specific target areas.

#### 3. Prospect potential with no or sparse drilling

Remaining prospect areas have either no or very little drilling but are interpreted to have potential for gold mineralisation based on lithological and structural similarities with other gold deposits in the project area. Exploration Target sizes were based on the strike extent of untested structures and assuming width and depth extents similar to known deposits in the project area.