

# STEP OUT DRILLING SUCCESS - HUB CONTINUES AT DEPTH

## SUMMARY

- Step out RC drilling at Hub intersected depth extensions with outstanding grades including:
  - 9m @ 7.0 g/t Au** from 129m, *incl. 4m @ 13.4 g/t Au*;
  - 6m @ 8.2 g/t Au** from 188m; and
  - 10m @ 5.2 g/t Au** from 209m, *incl. 3m @ 12.0 g/t Au*.
- Mineralisation intersected at over 300m depth, which is below the Redcliffe Gold Project JORC Exploration Target for Hub (*ASX announcement 4 June 2019*) and remains open.
- Diamond drilling within Redcliffe Project also returns high grades including:
  - 3m @ 7.3 g/t Au** from 151m – Hub; and
  - 8m @ 3.0 g/t Au** from 308m, *incl. 2m @ 4.9 g/t Au* - Bindy.
- Gold mineralisation remains open at depth at multiple prospects.

NTM Gold Ltd (ASX: NTM) (“NTM” or “the Company”) is pleased to provide an exploration update for the 100%-owned Redcliffe Gold Project located near Leonora, Western Australia regarding recent RC and diamond drilling.

RC drilling at the Hub, testing depth extensions to the recent high grade aircore drilling, has expanded mineralisation to over 300m depth which remains open. Better results include:

<b>9m @ 7.0 g/t Au</b> from 129m <i>incl. 4m @ 13.4 g/t Au</i>	<b>6m @ 8.2 g/t Au</b> from 188m
<b>10m @ 5.2 g/t Au</b> from 209m, <i>incl. 3m @ 12.0 g/t Au</i>	<b>3m @ 7.48 g/t Au</b> from 135m

A separate diamond drilling campaign tested four areas targeting mineralisation depth extensions. The drilling helped refine the mineralisation distribution and returned some high-quality results at a number of these areas including:

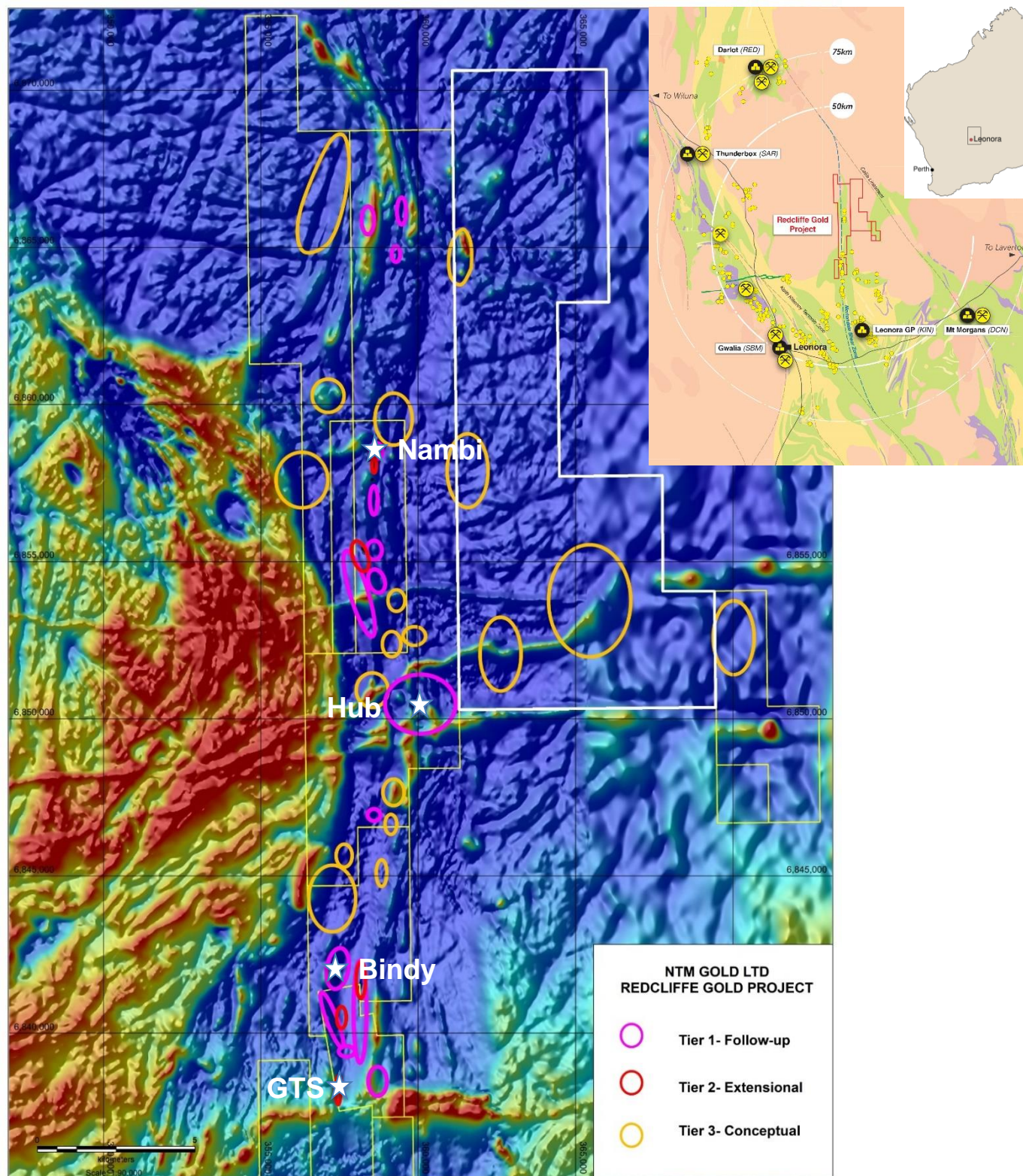
**Hub**      **4.1m @ 4.6 g/t Au** from 184m, *incl. 1.5m @ 8.1 g/t Au*  
              **3m @ 7.3 g/t Au** from 151m

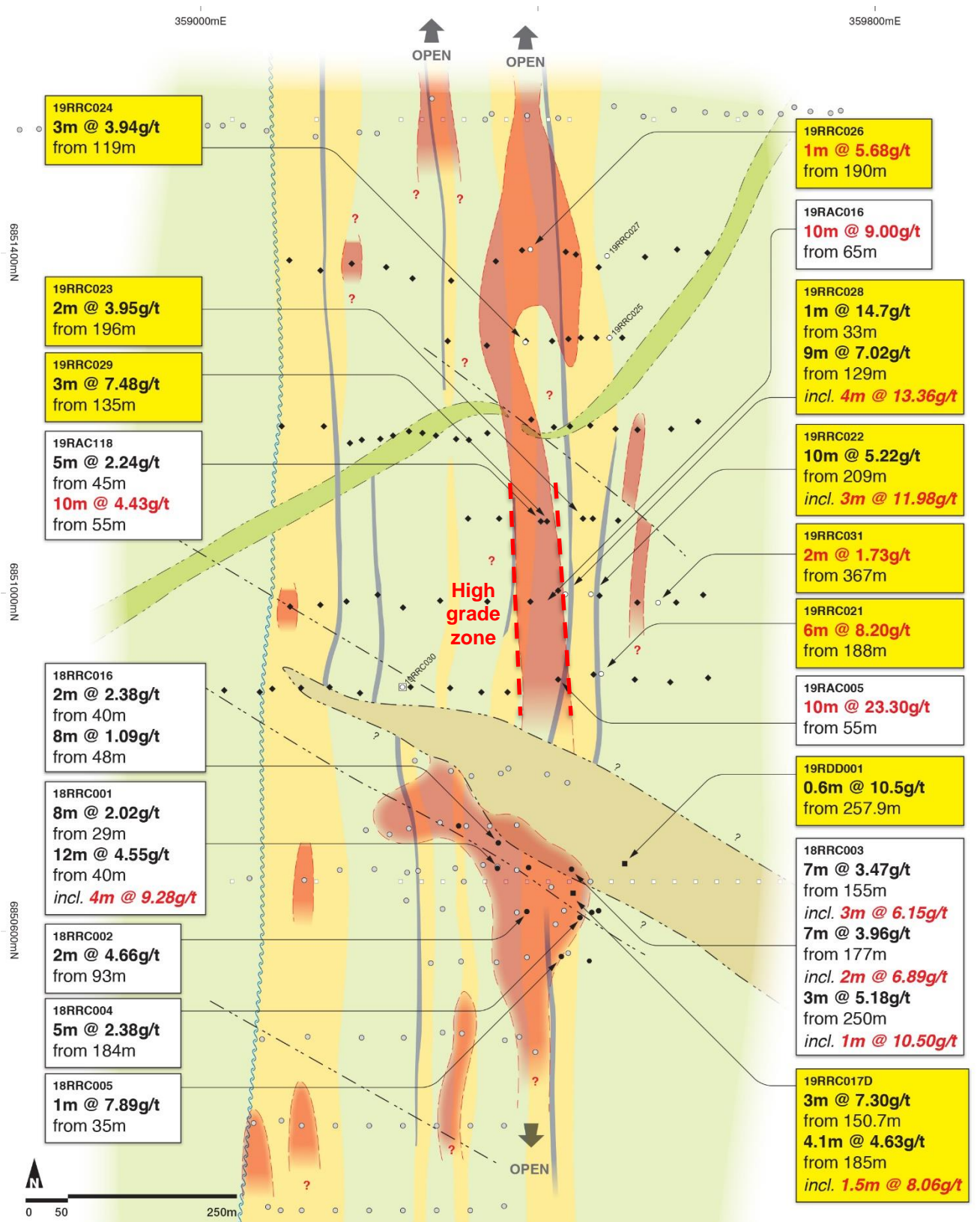
**Bindy**    **8.0m @ 3.0 g/t Au** from 308m, *incl. 2m @ 4.9g/t Au*

## NTM Gold Managing Director Andrew Muir commented:

*“The RC drilling has highlighted the size potential of the Hub prospect, returning excellent results at depth. With outstanding grades, the mineralisation extended to 1,000m in strike and remaining open at depth, Hub has the potential to host a significant body of mineralisation. In addition, the diamond drilling has highlighted the depth potential at a number of other areas, with all requiring follow up drilling.”*

## Redcliffe Project Targets and Selected Prospects over Aerial Magnetics





## Hub Prospect Regional Geology Plan

Drill holes on simplified geology  
June 2019, GDA 94 Zone 51

## HUB RC DRILLING

An RC drilling program at Hub followed up the high grade aircore results which included **10m @ 23g/t Au** and **10m @ 9g/t Au** (see ASX 16 April 2019). The RC drilling delivered some outstanding results demonstrating the depth continuity and highlighting the potential of the prospect. The program involved 11 holes (19RRC021-031) for 2,520m on 100m spaced lines.

The RC drilling returned excellent results with high grades and good widths. Better intercepts include:

**9m @ 7.0 g/t Au** from 129m *incl.* **4m @ 13.4 g/t Au** in 19RRC028

**10m @ 5.2 g/t Au** from 209m *incl.* **3m @ 12.0 g/t Au** in 19RRC022

**6m @ 8.2 g/t Au** from 188m in 19RRC021

**3m @ 7.5 g/t Au** from 135m *incl.* **1m @ 13.2 g/t Au** in 19RRC029

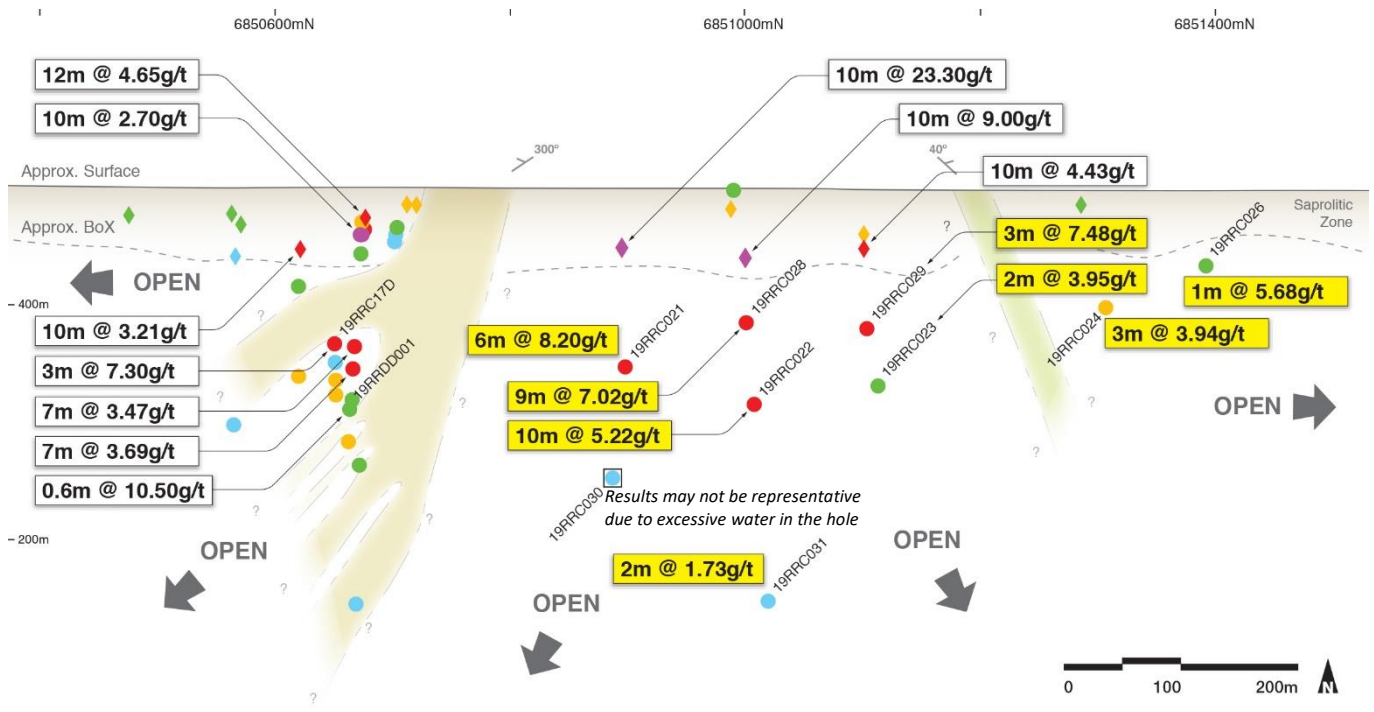
**1m @ 14.7 g/t Au** from 33m in 19RRC028

**3m @ 3.9 g/t Au** from 119m *incl.* **1m @ 7.0 g/t Au** in 19RRC024

The drilling demonstrated that the mineralisation extends to over 300m depth and remains open.

**This is significantly below the 200m depth projection used for the Hub JORC Exploration Target** (See ASX announcement 4 June 2019).

Of note is the series of high grades over +200m strike in the central part of the prospect. Whilst the long section implies a potential southerly plunge, this is based on only a limited number of drill holes and more drilling is required.



### Hub Prospect Long Section Schematic

Section looking West +/-20m.  
June 2019. GDA 94 Zone 51.



#### Drill Result

Single Metre RC - May 2019

Previous Result

6m @ 8.20g/t  
10m @ 23.30g/t

#### Drill hole intercepts (gxm)

● >50 RC	◆ >50 AC
● 20 to 50 RC	◆ 20 to 50 AC
● 10 to 20 RC	◆ 10 to 20 AC
● 5 to 10 RC	◆ 5 to 10 AC
● 2 to 5 RC	◆ 2 to 5 AC

#### Simplified Geology

■ Dyke (Dolerite)  
■ Dyke (Lamprophyre?)  
Only main intervals shown

Drill hole 19RRC030 was drilled as a scissor hole (to the east) on 6850900mN underneath the 6m @ 8.20 g/t intercept in 19RRC021 to allow for the interpreted the westerly dip. The mineralised chlorite schist unit was intersected from approximately 240-270m down hole confirming the dip interpretation. However, from 240m there was excessive water in the hole that meant an effective sample was not able to be taken. Any results below 240m in this hole are likely to be unreliable and may not be reflective of the mineralisation in the above long section.

### **Geology and Mineralisation**

The mineralisation at the northern end of Hub has a strike of at least 800m and remains open along strike and depth. Combined with the +300m strike at the southern end of the prospect, Hub has at least a 1,000m strike, with an interpreted lamprophyre dyke separating the northern and southern sections.

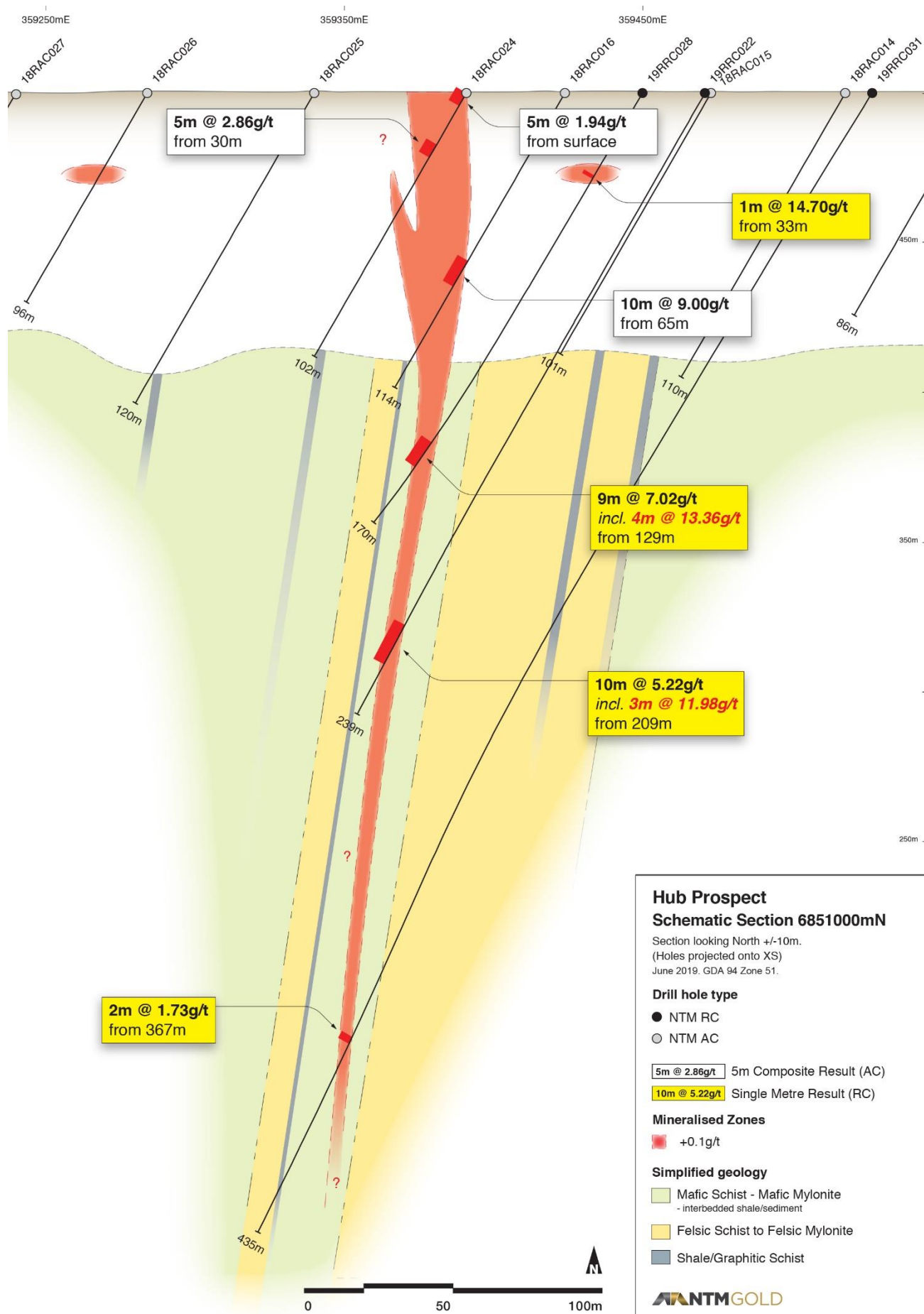
North of the lamprophyre, the dip of the mineralised zone varies from sub-vertical to steep west. This differs from south of the lamprophyre, where a steep east dip is interpreted.

Diamond drilling is planned to provide geological information to improve the interpretation of the current geological model.

The mineralisation is hosted in a fine-grained chlorite (mafic) schist with interbedded thin shale units. Silicification is pervasive and is associated with the mineralisation. The higher-grade zone is defined by quartz veining with 5-10% sulphide (Pyrite +/-Pyrrhotite).

The mineralisation is discrete, with only modest lower level gold as a halo around the high grade, mineralised shear. The broader high-grade mineralised zones intercepted in the early shallow aircore drilling are interpreted to reflect both supergene processes and drill direction.

The mineralisation within the Redcliffe project can pinch and swell, and often has a plunge component. Whilst the grades at depth in 19RRC031 are lower than in 19RRC022 (see overpage), the mineralisation remains open, and there is insufficient drilling along strike or depth. Further drilling is required to indicate the mineralisation's plunge component and grades at depth below 19RRC031.



## REDCLIFFE DIAMOND DRILLING

A 7-hole, 1,337m diamond program was completed at several areas within the Redcliffe Gold Project including Nambi, GTS, Bindy and the Hub. Drilling focused on testing down dip or down plunge extensions.

### HUB

Two diamond holes (19RDD001 & 19RRC017D) were drilled at the southern part of the Hub to provide insight on the grade continuity, the influence of the intrusive dykes and structures at depth. 19RDD001 was drilled from surface whereas 19RRC017D was a diamond tail on an abandoned RC hole. Better results include:

#### 19RRC017D

**3m @ 7.3 g/t Au** from 150.7m

**4.1m @ 4.6 g/t Au** from 184m, *incl. 1.5m @ 8.1 g/t Au*

**1.2m @ 2.7 g/t Au** from 169.4m

#### 19RDD001

**0.6m @ 10.5 g/t Au** from 257.9m

**0.6m @ 2.4 g/t Au** from 352.4m

**0.7m @ 2.4 g/t Au** from 388.3m

The drilling successfully demonstrated that the mineralisation was present at depth in the south, though continuity was impacted by the presence of the lamprophyre dyke. 19RRC017D was a 110m diamond tail that was initially planned as a 240m RC hole; however, the RC hole was abandoned at 130m due to drilling issues. The hole was drilled 25m south of the main zone of mineralisation and has proven very useful in understanding the complexity of the lamprophyre, as well as intersecting the gold mineralised zone, albeit immediately below the dyke. Gold mineralisation is associated with quartz-pyrite veins within a fine-grained mafic schist.

The lamprophyre is generally fine to medium grained with sharp clasts of country rock, indicating the rapidity in which intruded. The presence of the lamprophyre dyke suggests very deep-seated structures exist in this portion of the Mertondale shear zone. These deep-seated structures can be a very important factor in hosting sizeable gold mineralisation as observed elsewhere in the Eastern Goldfields. The lamprophyre appears to have intruded along a structure striking 300° and has an interpreted southerly dip.

19RDD001 was drilled below the mineralisation on 6850660mN with the aim of intersecting the mineralisation below the interpreted southerly dipping lamprophyre dyke. The hole was drilled from surface, initially by rock roller and then diamond to a depth of 432.8m.

Variable thicknesses of the lamprophyre were intersected throughout the entire hole. The lamprophyre appears to have disrupted the mineralised zone, with mineralisation regularly intersected when there was no lamprophyre present.

## BINDY

A single drill hole (19RRC13D) was completed at Bindy to test down dip of the high-grade interval recorded from 2018 hole GTDD012 (16m @ 4.7 g/t Au – see ASX release 9 May 2018).

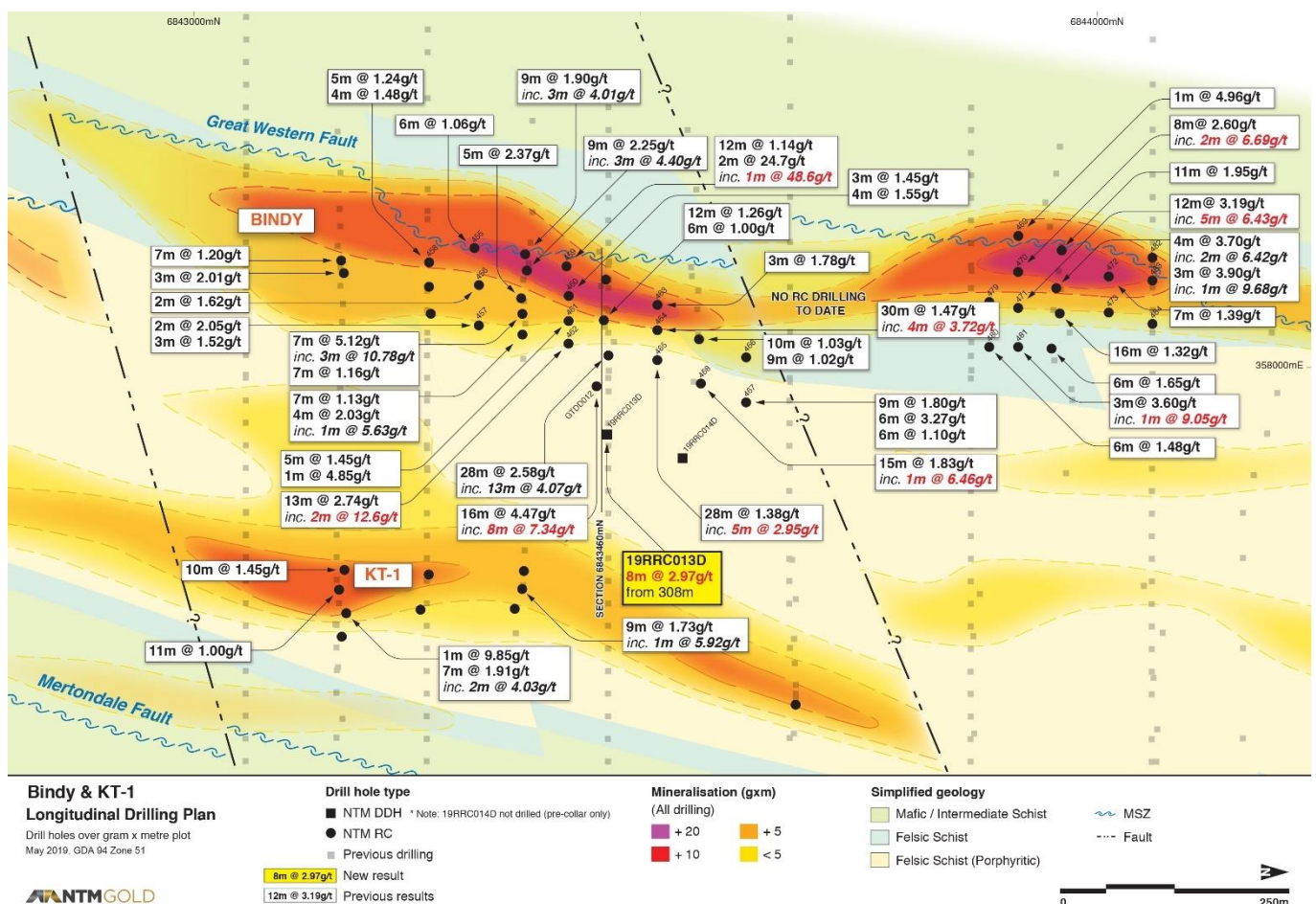
The latest drillhole confirmed that the mineralisation continues at depth, returning:

**8m @ 3.0 g/t Au from 308m, incl. 2m @ 4.9g/t Au**

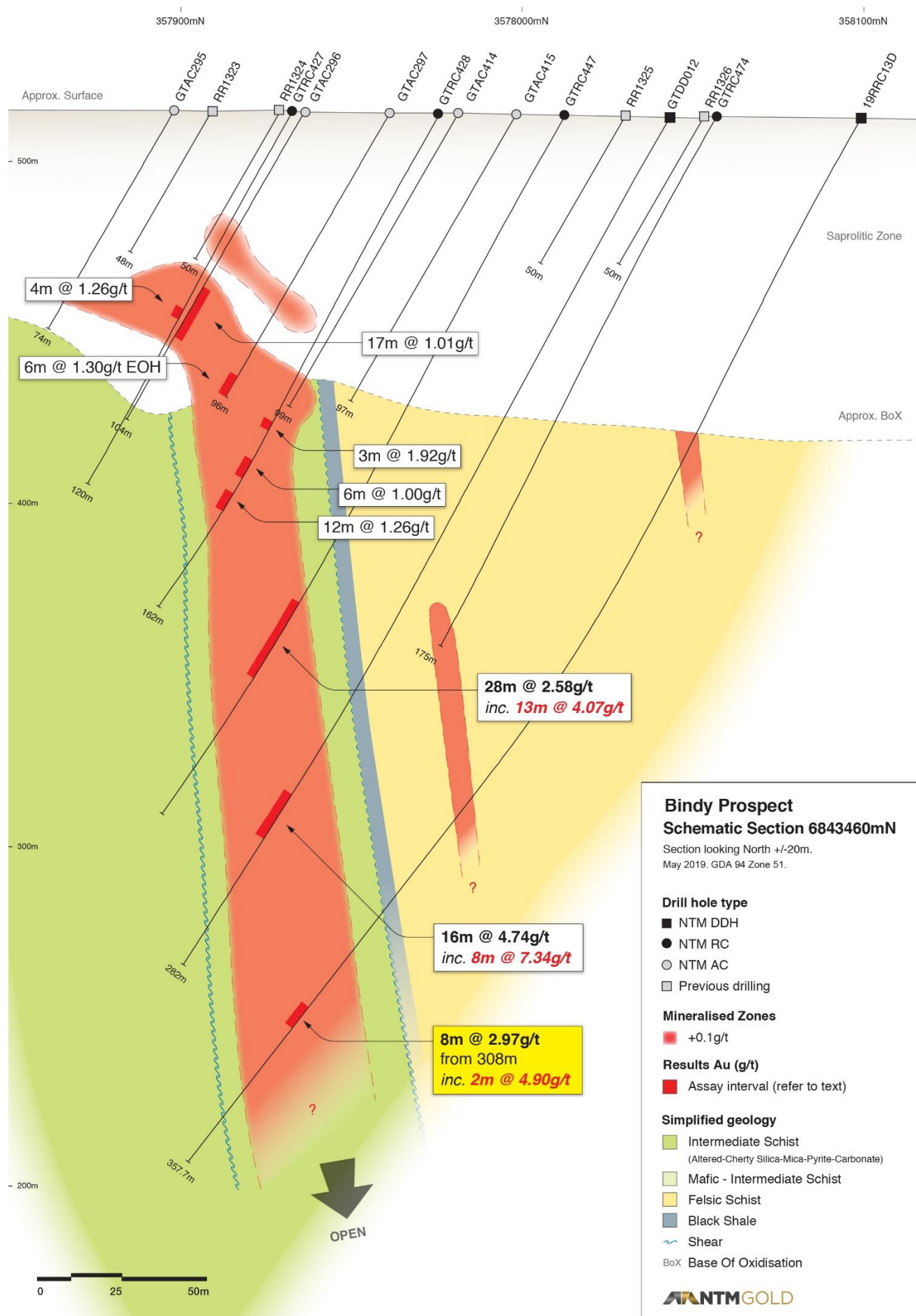
**1m @ 2.1 g/t Au from 333m.**

This drillhole is the deepest into Bindy to date, and has extended the gold mineralisation by approximately 70m down dip. Mineralisation at Bindy is now confirmed at +260m below surface and still open.

Mineralisation in 19RCCD13D was consistent with GTDD012, hosted within highly sheared intermediate rocks with variable pyrrhotite-pyrite, quartz veining and cherty silica-sericite alteration.



The mineralisation within the Redcliffe project as a whole can pinch and swell with a degree of grade variability and typically have a strong plunge component. Whilst the mineralisation at Bindy remains open at depth, more drilling is required at strike and depth to provide insight into any plunge component and as well as the grades below 19RRC013D.



## NAMBI

Three diamond tails were completed at Nambi, targeting down plunge extensions to the three interpreted, southerly plunging high grade shoots (Main Lode, E1 and E2). Unfortunately, due to drill hole deviation and interpreted structural complexity, the holes did not successfully intersect the high-grade plunge component to the three lodes in the expected positions.

19RRC018D – Targeted the northern shoot, however the hole lifted significantly in the RC pre-collar and missed the target intercept position. However, the hole still intersected:

**1.3 m @ 3.6 g/t Au** in E1 from 235.9m, and

**1.75m @ 3.5 g/t Au** in Main Lode from 320m.

19RRC019D – This hole also lifted in the pre-collar although the eventual diamond pierce point was on target. The E2, E1 and Main Lodes were intersected at predicted hole depth but returned disappointing results, despite the geology looking encouraging. Best result was:

**0.5m @ 6.3 g/t Au** from 201m in the E2 lode

19RRC020D – This hole was drilled to test the down plunge extent of the southern E1 and Main lodes. Geology varied from what is considered the usual host lithological sequence with several carbonate filled brecciated fault zones, together with a number of additional shale units proximal to the fault zones in the E1 sequence. This change in geology suggests a more complex structural environment and a possibility that the Main Lode may have been offset from the interpreted position.

## GTS

Drill hole 19RRC012D was drilled 55m south of GTRC475D, completed in 2018, which intersected 11m @ 4.51 g/t (see ASX announcement 24 May 2018).

The new hole targeted the interpreted southerly plunge of the GTS Central Zone shoot as interpreted from structural logging of existing drill core.

A similar lithological sequence was noted to GTRC475D in this hole however only low-grade mineralisation was returned. Consequently, NTM believes that the high-grade shoot has a steeper plunge than originally interpreted.

## LOOKING FORWARD

At Hub, the interpreted strike of the mineralisation is over 1,000m, with high grades and depth continuity. The recent RC and diamond drilling has confirmed that the mineralisation extends at depth, and has upgraded the size potential. Given the results to date, Hub has the potential to be a game changing discovery for NTM.

The diamond drilling program successfully intersected good grades and widths at a number of other prospects and deposits, highlighting a number of follow up targets.

However, given the potential of the Hub, the short- and medium-term focus will be on infill and extending the Hub mineralisation to quantify the prospects size extent and continuity with plans to resume RC and DC drilling soon.

For further enquiries:

Andrew Muir

Managing Director

Telephone: (08) 9481 6666

Email: [amuir@ntmgold.com.au](mailto:amuir@ntmgold.com.au)

## 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 Statement

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.

**Table 1 – Hub RC Drill Results Summary: +1.0g/t Au Intercepts - 19RRC021-031**

HOLE	FROM	TO	RESULT +1.0 g/t Au
19RRC021	188	194	6m @ 8.20
19RRC022	209	219	10m @ 5.22
Inc.	216	219	3m @ 11.98
19RRC023	196	198	2m @ 3.95
19RRC024	119	122	3m @ 3.94
Inc.	119	120	1m @ 7.00
19RRC025			NSR
19RRC026	184	185	1m @ 1.14
	190	191	1m @ 5.68
19RRC027			NSR
19RRC028	33	34	1m @ 14.70
	129	138	9m @ 7.02
Inc.	133	137	4m @ 13.36
19RRC029	135	138	3m @ 7.48
Inc.	136	137	1m @ 13.20
19RRC030			NSR
19RRC031	367	369	2m @ 1.73

Mineralisation calculated at +0.5 g/t, max 2m internal continuous dilution. NSR = No significant result. Downhole widths quoted, further drilling is required to confirm true width.

**Table 2 – Redcliffe Diamond Drill Results Summary: +1.0g/t Au Intercepts**

AREA	HOLE	LODE	FROM	TO	RESULT +1.0 g/t Au
Hub	19RDD001		257.9	258.5	0.6m @ 10.50
			352.4	353	0.6m @ 2.41
			388.3	389	0.7m @ 2.37
Bindy	19RRC013D		308	316	8m @ 2.97
	Incl.		308	310	2m @ 4.87
			333	334	1.0m @ 2.10
Hub	19RRC017D		144.1	144.6	0.5m @ 1.40
			150.7	153.7	3m @ 7.30
			169.4	170.6	1.2m @ 2.66
			171.9	172.4	0.5m @ 2.18
			185	189.1	4.1m @ 4.63
	Incl.		185	186.5	1.5m @ 8.06
	&		188.4	189.1	0.7m @ 8.05
			194.5	198.5	4.0m @ 1.05
			200.5	201.5	0.6m @ 2.10
			203	207.8	4.8m @ 1.82
Nambi	19RRC018D		235	236	1.0m @ 1.31

AREA	HOLE	LODE	FROM	TO	RESULT +1.0 g/t Au
		E1 lode	239.5	240.8	1.3m @ 3.61
		Main lode	320	321.75	1.75m @ 3.47
Nambi	19RRC019D	E2 lode	201	201.5	0.5m @ 6.30
		E1 lode	206	207	1m @ 0.90
		Main lode	310.5	310.95	0.45m @ 1.00
Nambi	19RRC020D	E2 lode	257	258	1.0m @ 1.91
		E1 lode	296	299	3.0m @ 1.91
		Main lode	370	371.2	1.2m @ 1.20
			372.8	373.3	0.5m @ 1.12

Calculated at +1.0 g/t Au, two samples maximum internal dilution. EOH = End of Hole

**Table 3 – Hub RC Drill Data Summary**

HOLE_ID	EAST	NORTH	RL	AZ	DIP	MAX_DEPTH
19RRC021	359470	6850900	500	270	-60	205
19RRC022	359470	6851000	500	270	-60	239
19RRC023	359465	6851100	500	270	-60	239
19RRC024	359375	6851300	500	270	-60	199
19RRC025	359485	6851300	500	270	-60	239
19RRC026	359387	6851405	500	270	-60	220
19RRC027	359481	6851402	500	270	-60	150
19RRC028	359445	6851000	500	270	-60	170
19RRC029	359430	6851100	500	270	-60	142
19RRC030	359210	6850893	500	090	-60	282
19RRC031	359527	6851002	500	270	-58	435

**Table 4 – Redcliffe Diamond Drill Data Summary**

PROSPECT	HOLE ID	EAST	NORTH	RL	AZ	DIP	DEPTH	DDH METRES
GTS	19RRC012D	357678	6838113	488.5	270	-60	412.9	192.9
Bindy	19RRC013D	358099	6843461	513.1	270	-60	357.7	137.7
Hub	19RRC017D	359416	6850652	498.98	270	-60	240	110.7
Hub	19RRD001	359490	6850670	499	270	-60	432.8	432.8
Nambi	19RRC018D	358775	6858051	522.57	270	-60	330.3	130.3
Nambi	19RRC019D	358780	6857908	520.9	270	-60	351.1	151.3
Nambi	19RRC020D	358784	6857850	520.64	270	-60	381.2	181.2

## 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.

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

Deposit	Indicated			Inferred			Total		
	T	g/t Au	Oz	T	g/t Au	Oz	T	g/t Au	Oz
Oxide	403,287	2.13	27,572	2,348,470	0.93	70,442	2,751,757	1.11	98,013
Transition	378,884	2.03	24,726	3,422,570	1.01	110,711	3,801,454	1.11	135,437
Fresh	971,109	2.35	73,409	5,001,083	1.44	231,018	5,972,192	1.59	304,427
<b>Grand Total</b>	<b>1,753,280</b>	<b>2.23</b>	<b>125,706</b>	<b>10,772,123</b>	<b>1.19</b>	<b>412,157</b>	<b>12,525,403</b>	<b>1.34</b>	<b>537,862</b>

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

Deposit	Indicated			Inferred			Total		
	T	g/t Au	Oz	T	g/t Au	Oz	T	g/t Au	Oz
Oxide	314,619	2.52	25,531	553,259	1.72	30,569	867,878	2.01	56,100
Transition	307,649	2.32	22,978	1,151,353	1.59	58,990	1,459,002	1.75	81,968
Fresh	835,429	2.61	70,072	2,660,589	2.06	176,315	3,496,018	2.19	246,387
<b>Grand Total</b>	<b>1,457,697</b>	<b>2.53</b>	<b>118,581</b>	<b>4,365,201</b>	<b>1.89</b>	<b>265,874</b>	<b>5,822,898</b>	<b>2.05</b>	<b>384,455</b>

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

### JORC Code, 2012 Edition – Table 1 report – RC drilling

#### Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	The sampling has been carried out using Reversed Circulation drilling (RC). A total of 11 holes (19RRC021-031) were drilled in the reported program for a total of 2520m at depths ranging from of 142 to 435m. At Hub Nth, most holes were drilled at – 60 degrees at approximately 270°. Hole 19RRC030 was drilled to 090, holes 19RRC031 had dip of -58o. Sample quality was high with only minimal sample loss around the annulus in the top 5m of each hole. Some samples were damp to wet as noted at depth (19RRC030) but overall dry sample was produced to the depths drilled
	<i>Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.</i>	The drill holes were initially located by handheld GPS, and then verified with tape measure from base line pegs/known holes. Sampling was carried out under NTM GOLD Ltd protocols and QAQC procedures as per current industry practice. See further details below.
	<i>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 1m samples from which 3kg was pulverised to produce a 30g 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.</i>	RC holes were drilled with a 5.25inch face-sampling bit, 1m samples collected through a cyclone and riffle splitter, to form a 2 to 3kg sub sample. These samples were sorted and dried by the assay laboratory. pulverised to form a 30gm charge for Fire Assay/AAS.
Drilling techniques	<i>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).</i>	A KWL Reverse Circulation drilling rig, operated by Challenge Drilling Pty Ltd was used to collect the samples.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	The majority of samples were dry, some wet samples were experienced at depth in hole 19RRC030. Ground water was encountered in all holes, the inflow was controlled by increasing the air volume. RC recoveries were visually estimated and any low recoveries recorded in the drill logs. Recovery of the samples was generally good, and noted on logs when otherwise. Sample quality was noted on the drill logs.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	RC face-sample bits, PVC casing in the top 6 metres and dust suppression were used to minimise sample loss. RC samples are collected through a cyclone and riffle splitter, with the bulk of the sample deposited in a plastic bag and a sub sample up to 3kg collected for dispatch to the assay laboratory. Cyclone and riffle splitter are cleaned between rods and at EOH to minimize contamination
	<i>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.</i>	Ground water egress into the holes resulted in some damp to wet samples at depth, as noted above. Sample quality was noted on drill logs, and drilling of the hole was terminated when sample quality was compromised at depth.

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<i>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.</i>	All chips were geologically logged by NTM geologists, using the Companies logging scheme.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of RC chips records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All samples are wet-sieved and stored in chip trays. These trays were stored off site for future reference.
	<i>The total length and percentage of the relevant intersections logged.</i>	All holes were logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	NA
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	One-metre drill samples are channelled through a cone splitter installed directly below a rig mounted cyclone. A 2-3 kg sub-sample is collected in a calico bag and the balance in a plastic bag. The calico bag is positioned on top of the corresponding plastic bag for later collection if required. Most samples were dry with only one hole (19RRC030) returning wet samples (230-282m EOH). A 5m composite preliminary sample was collected by spearing the green drill bag of each 5m interval. Results from the composite samples are used to identify which single meter samples will be submitted to laboratory. Composite samples are not used in resources calculations.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were prepared at Bureau Veritas Laboratories in Kalgoorlie. Samples were dried, and the whole sample pulverised to 90% passing 75um, and a reference sub-sample of approximately. 200g retained. A nominal 40g was used for the analysis (FA/AAS). The procedure is industry standard for this type of sample.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</i>	RC samples are collected at 1 m intervals and composited into 5 m samples using a PVC spear to sample individual metre samples. Certified Reference Materials (CRM's) and/or in-house controls, blanks, splits and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report. Selected samples are also re-analysed to confirm anomalous results.
	<i>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.</i>	One-metre samples are split on the rig using a 3-tier splitter, mounted directly under the cyclone. This is standard Industry practice. The samples weigh 3-5kg prior to pulverisation.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate to give an indication of mineralisation given the particle sizes and the practical requirement to maintain manageable sample weights.
<b>Quality of assay data and</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were analysed for Au to ppm levels via a 30-40gm fire assay / AAS finish which gives total digestion and is appropriate for high-level samples.
	<i>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.</i>	No geophysical tools were used in this program.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	Company QA/QC protocol for RC & DC drilling single meter sampling is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 3 Blanks per 100 single metre samples. Duplicate samples were collected at a rate of 3 in 100 single meter samples in RC drilling. Similarly, for 5m composite sampling, Field Standards (Certified Reference Materials) and Blanks are inserted at a rate of 1 in 20 samples. At the Assay Laboratory additional Repeats, Lab Standards, Checks and Blanks are analysed concurrently with the field samples. Results of the field and Lab QAQC samples were checked on assay receipt. Majority of assays met QAQC protocols, showing no levels of contamination or sample bias. However, some discrepancy was observed in minor intervals and these were re-analysed/re-sampled with expected levels of precision subsequently achieved. Analysis of field duplicate assay data suggests expected levels of sampling precision, with less than 10% pair difference.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant results were checked by the MD and Exploration Manager.
	<i>The use of twinned holes.</i>	Twin holes were not employed during this part of the program.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All field logging was carried out SurfacePro into the Database. Assay files are received electronically from the Laboratory. All data is stored in a Company database system, and maintained by the Database Manager.
	<i>Discuss any adjustment to assay data.</i>	No assay data was adjusted. The lab's primary Au field is the one used for analysis purposes. Averaging is employed where repeat assays for the same sample are available
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	RC locations were determined by hand-held GPS. The drill rig mast is set up using a clinometer and rig is orientated using hand held compass.
	<i>Specification of the grid system used.</i>	Grid projection is GDA94, Zone 51.
	<i>Quality and adequacy of topographic control.</i>	Relative Levels are allocated to the drill hole collars using current Digital Terrain Model's for the area. The accuracy of the DTM is estimated to be better than 5m.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drilling was designed to intersect interpreted primary mineralisation at depth beneath oxide mineralisation targets. No grid-based drilling was undertaken.
	<i>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.</i>	The drilling sections are 100m spaced through the known mineralized areas at Hub North, and as such will be incorporated into Resource estimations, although further infill drilling will be required prior
	<i>Whether sample compositing has been applied.</i>	No compositing has been employed in the reported results.
<b>Orientation of data in relation</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The orientation of the drill hole (azimuth) is approximately perpendicular to the strike of the targeted mineralisation. Down hole widths are quoted. The mineralisation changes from steep east to steep west dip, and drilling directions will be adjusted to allow for perpendicular intersection direction in future programmes

Criteria	JORC Code explanation	Commentary
<b>to geological structure</b>	<i>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.</i>	The drill orientation is estimated to be approximately perpendicular to the main mineralised trend. The mineralisation changes from steep east to steep west dip, and drilling directions will be adjusted to allow for perpendicular intersection direction. It is unclear at present whether cross structures are mineralised.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Composite samples were submitted in pre -numbered plastic bags (five calico bags per single plastic bag), sealed and transported to the Bureau Veritas Laboratory in Kalgoorlie for assaying.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling and assaying techniques are industry-standard. Batch assay data is routinely reviewed to ascertain laboratory performance. The laboratory is advised of any discrepancies and samples are re-assayed. The Company also submits further re-splits to primary and secondary laboratories as part of the audit process.

## JORC Code, 2012 Edition – Table 1 report – Diamond drilling

## Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>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.</i>	The sampling has been carried out using a Diamond core drilling (DC). A total of seven holes were drilled in the reported program for a total of 1337m of DC, at depths ranging from 240 to 432.8m. The holes were drilled at ~60 dip at azimuth of approximately 270o. All holes were completed as DDH tails off RC pre-collars with the exception of 19RDD001 which was cored from surface. DC recovery was good.
	<i>Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.</i>	The drill holes were initially located by handheld GPS, and then verified with tape measure from base line pegs/known holes. Sampling was carried out under NTM GOLD Ltd protocols and QAQC procedures as per current industry practice. See further details below.
	<i>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 1m samples from which 3kg was pulverised to produce a 30g 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.</i>	DC samples were collected from NQ2 diamond core. Core was measured, orientated (where possible), photographed and then cut in half. Core samples generally on a 0.5m to ~1m basis were then collected, dependent upon geology as ½ core, keeping the side collected constant. These samples were sorted and dried by the assay laboratory. pulverised to form a 40gm charge for Fire Assay/AAS. Multi-element analysis was also undertaken using ICP-OES to ppm levels.
<b>Drilling techniques</b>	<i>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).</i>	A Diamond Coring drilling rig, operated by Westralian Diamond Drillers Pty Ltd was used to collect the samples. Core was oriented using downhole tool technique.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Core recoveries were checked against core blocks when marking up core on 1m intervals and also in geotechnical work. Core recovery was good.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Core was sampled on a 0.5m to ~1m basis generally to geological contacts and collected as ½ core, keeping the side collected constant.
	<i>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.</i>	Core recovery was generally good. No significant core loss was noted in the drilling.
<b>Logging</b>	<i>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.</i>	All core was geologically logged by Company geologists, using the Companies logging scheme. DC was both geologically and geotechnically logged.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of DC records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. All RC samples are wet-sieved and stored in chip trays. These trays were photographed and then stored off site for future reference.
	<i>The total length and percentage of the relevant intersections logged.</i>	All holes were logged in full.
<b>Sub-sampling techniques and sample</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core was sawn using a diamond blades and ½ core collected for assay on a 0.5m to ~1m basis, generally to geological contacts.

Criteria	JORC Code explanation	Commentary
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	N/A
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were prepared at the Bureau Veritas Laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverised to 90% passing 75um, and a reference sub-sample of approximately 200g retained. A nominal 40g was used for the analysis (FA/AAS). The procedure is industry standard for this type of sample.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</i>	Certified Reference Materials (CRM's) and/or in-house controls, blanks and duplicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report. Selected samples are also re-analysed to confirm anomalous results.
	<i>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.</i>	Core collected as 1/2 core or 50% of material collected from interval if material unconsolidated. The samples generally weigh 2-4kg prior to pulverisation
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate to give an indication of mineralisation given the particle sizes and the practical requirement to maintain manageable sample weights.
<b>Quality of assay data and</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were analysed for Au to ppm levels via a 30-40gm fire assay / AAS finish which gives total digestion and is appropriate for high-level samples.
	<i>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.</i>	No geophysical tools were used in this program.
	<i>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.</i>	Company QA/QC protocol for DC drilling is for Field Standards (Certified Reference Materials) and Blanks inserted at a rate of 4 Standards and 3 Blanks per 100 single metre samples.  At the Assay Laboratory additional Repeats, Lab Standards, Checks and Blanks are analysed concurrently with the field samples. Results of the field and Lab QAQC samples were checked on assay receipt. All assays met QAQC protocols, showing no levels of contamination or sample bias.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant results were checked by the MD and Exploration Manager.
	<i>The use of twinned holes.</i>	Twin holes were not employed during this part of the program.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All field logging was carried out on hardcopy geological log sheet. Data is entered electronically at the Leonora Field office. Assay files are received electronically from the Laboratory. All data is stored in a Company database system, and maintained by the Database Manager.
	<i>Discuss any adjustment to assay data.</i>	Due to varying assay interval widths, the results quoted have been weight averaged.
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	RC locations were determined by hand-held GPS.  The drill rig mast is set up using a clinometer and rig is orientated using hand held compass.
	<i>Specification of the grid system used.</i>	Grid projection is GDA94, Zone 51.
	<i>Quality and adequacy of topographic control.</i>	Relative Levels are allocated to the drill hole collars using current Digital Terrain Model's for the area. The accuracy of the DTM is estimated to be better than 5m.

Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drilling was designed to intersect interpreted primary mineralisation at depth beneath oxide mineralisation targets. No grid-based drilling was undertaken.
	<i>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.</i>	The drilling will be incorporated into Resource estimations.
	<i>Whether sample compositing has been applied.</i>	No compositing has been employed in the reported results.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The orientation of the drill hole (azimuth) is approximately perpendicular to the strike of the targeted mineralisation.
	<i>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.</i>	The drill orientation is estimated to be approximately perpendicular to the main mineralised trend. It is unclear at present whether cross structures are mineralised, however it is considered unlikely that any sampling bias has been introduced.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Composite samples were submitted in pre -numbered plastic bags (five calico bags per single plastic bag), sealed and transported to the Bureau Veritas Laboratory in Kalgoorlie for assaying.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken at this stage in the program.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	The drilling occurred within tenement M37/1286, M37/1295, M37/1276 and E37/1205 which is held 100% by NTM GOLD Pty Ltd. The Project is located 65km NE of Leonora in the Eastern Goldfields of Western Australia
	<i>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.</i>	The tenement subject to this report is in good standing with the Western Australian Department of Mines & Petroleum.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Previous exploration at the Project has been completed by Ashtons, Dominion, SOG's and CRAE in the 1990's, who completed mining of the Nambi and Nambi Sth pits. Pacrim Energy Ltd/Redcliffe Resources Ltd completed exploration in the area from in 2007-2016. Where relevant, assay data from this earlier exploration has been incorporated into NTM databases.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Redcliffe project mineralisation is hosted largely within Archaean-aged felsic, sediment (inc chert, black shale, graphitic in part) and intermediate-mafic rocks. A schistose to mylonitic fabric is observable in the lithologies. Gold mineralisation occurs in northerly striking, sub-vertical to steep west dipping zones associated with silica-sulphide-mica alteration and veining. Depth of oxidation is generally 80-100m down hole.
<b>Drill hole Information</b>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p><i>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.</i></p>	Refer to table in the body of text.
<b>Data aggregation methods</b>	<i>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.</i>	Grades are reported as down-hole length-weighted averages of grades. No top cuts have been applied to the reporting of the assay results.
	<i>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.</i>	All higher-grade intervals are included in the reported grade intervals.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are used.

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	The geometry of the mineralisation at depth is interpreted to vary from steeply west dipping to sub-vertical. (80 to 90 degrees). All assay results are based on down-hole lengths, and true width of mineralisation is not known.
<b>Diagrams</b>	<p><i>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.</i></p>	Refer to Figure in the body of text.
<b>Balanced reporting</b>	<p><i>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.</i></p>	Refer to results reported in body of text and summary statistics for the elements reported.
<b>Other substantive exploration data</b>	<p><i>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.</i></p>	Refer to body of text and this appendix.
<b>Further work</b>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	Further drill testing of the anomalous results is planned based on additional geological analysis. The location of the collars of these holes is still to be determined.