

## CHICKEN RANCH AND TIM'S DOME MAIDEN MINERAL RESOURCES BOOST ANTIPA'S 100% RESOURCE TO 827,000 OUNCES AT 1.9 g/t GOLD

### HIGHLIGHTS

- Antipa's Global Mineral Resource on its 100% owned Paterson Province ground expands to 13.6Mt at 1.9 g/t gold for 827,000 ounces of gold, 26,400 tonnes of copper, 233,000 ounces of silver and 4,000 tonnes of cobalt:
  - The Global Mineral Resource comprises three deposit areas all of which are located within 40km of Newcrest's operating Telfer Gold Mine
- Chicken Ranch area and Tim's Dome deliver a combined maiden Mineral Resource of 2.6Mt at 1.3 g/t gold for 104,000 ounces of gold
- Further Mineral Resource expansion potential from within close proximity to both Minyari-WACA and the Telfer Gold Mine from:
  - Turkey Farm: Resource drilling recently completed and awaiting assays
  - Tim's Dome: Targeting along strike and depth extensions
  - Minyari-WACA area: Including Minyari South and Judes targets
  - Additional brownfield prospects: Including Pajero area and Triangle area
- Antipa's strategy remains in place to significantly grow the Mineral Resource base to support the Company's development aspirations
- Antipa is fully funded to undertake an aggressive exploration programme targeting further resource growth and greenfield discoveries in 2019

Antipa Minerals Ltd ("Antipa" or "the Company") (ASX: AZY) is pleased to announce its Paterson Project's Chicken Ranch area and Tim's Dome maiden Mineral Resource estimates, which are located 25km and 34km respectively from the Company's Minyari-WACA resource and less than 15km from Newcrest's Telfer gold-copper-silver mine in the Paterson Province of Western Australia (see Figure 1 and Figure 2).

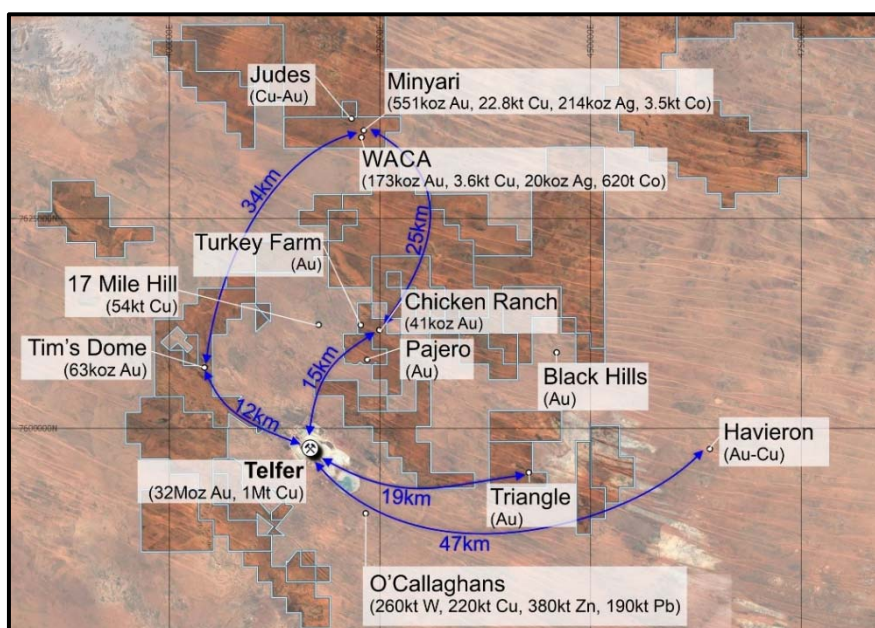


Figure 1: Plan showing southern region of Antipa's Paterson Province Project areas (unfrosted) showing key deposits including Minyari, WACA, Chicken Ranch, Tim's Dome, Telfer, O'Callaghans and Havieron.

NB: Regional GDA94 / MGA Zone 51 co-ordinates, 25km grid.

## CHICKEN RANCH AREA and TIM'S DOME MINERAL RESOURCE

The maiden Mineral Resource estimates for both the Chicken Ranch area and Tim's Dome deposits are summarised in Table 1, in conjunction with the Company's Minyari and WACA resources, and Table 2. Antipa engaged consultant Ashmore Advisory Pty Ltd ("Ashmore") to complete an independent Mineral Resource estimate and subsequent reporting, in accordance with the JORC 2012 code, for the Chicken Ranch area and Tim's Dome deposits.

**Table 1: Antipa North Telfer Project and Paterson Project Mineral Resource Statement**

Deposit and Au Cut-off Grade*	Resource Category	Tonnes (kt)	Au (g/t)	Cu (%)	Ag (g/t)	Co (ppm)	Au (oz)	Cu (t)	Ag (oz)	Co (t)
Chicken Ranch Area 0.5 Au	Inferred	791	1.6	-	-	-	40,300	-	-	-
Tim's Dome 0.5 Au	Inferred	1,780	1.1	-	-	-	63,200	-	-	-
<b>Chicken Ranch Area + Tim's Dome</b>	<b>Total</b>	<b>2,570</b>	<b>1.3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>103,500</b>	<b>-</b>	<b>-</b>	<b>-</b>

Minyari 0.5 Au	Indicated	3,170	1.9	0.30	0.7	590	192,610	9,600	75,660	1,860
Minyari 0.5 Au	Inferred	660	1.7	0.24	0.6	340	36,260	1,560	13,510	220
<b>Minyari 0.5 Au</b>	<b>Sub-Total</b>	<b>3,830</b>	<b>1.9</b>	<b>0.29</b>	<b>0.7</b>	<b>550</b>	<b>228,870</b>	<b>11,160</b>	<b>89,170</b>	<b>2,080</b>
Minyari 1.7 Au	Indicated	230	2.6	0.29	0.9	430	18,740	650	6,800	100
Minyari 1.7 Au	Inferred	3,650	2.6	0.30	1.0	370	303,000	10,950	117,550	1,360
<b>Minyari 1.7 Au</b>	<b>Sub-Total</b>	<b>3,880</b>	<b>2.6</b>	<b>0.30</b>	<b>1.0</b>	<b>380</b>	<b>321,740</b>	<b>11,600</b>	<b>124,350</b>	<b>1,460</b>
<b>Minyari</b>	<b>Total</b>	<b>7,710</b>	<b>2.2</b>	<b>0.30</b>	<b>0.9</b>	<b>460</b>	<b>550,610</b>	<b>22,760</b>	<b>213,520</b>	<b>3,540</b>

WACA 0.5 Au	Inferred	2,780	1.4	0.11	0.2	180	121,950	3,120	15,920	500
WACA 1.7 Au	Inferred	540	2.9	0.09	0.2	230	50,780	510	3,850	120
<b>WACA</b>	<b>Total</b>	<b>3,320</b>	<b>1.6</b>	<b>0.11</b>	<b>0.2</b>	<b>190</b>	<b>172,730</b>	<b>3,630</b>	<b>19,770</b>	<b>620</b>

<b>Minyari + WACA Deposits</b>	<b>Grand Total</b>	<b>11,030</b>	<b>2.0</b>	<b>0.24</b>	<b>0.7</b>	<b>380</b>	<b>723,340</b>	<b>26,390</b>	<b>233,290</b>	<b>4,060</b>
<b>North Telfer + Paterson Projects – Gold Only</b>	<b>Grand Total</b>	<b>13,590</b>	<b>1.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>826,840</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Notes:** Small discrepancies may occur due to the effects of rounding

Refer to Table 2 for additional resource information

\*Minyari-WACA 0.5 Au = Using a 0.5 g/t gold cut-off grade above the 50mRL (NB: potential "Open Cut" cut-off grade)

\*Minyari-WACA 1.7 Au = Using a 1.7 g/t gold cut-off grade below the 50mRL (NB: potential "Underground" cut-off grade)

**Table 2: Chicken Ranch Area and Tim's Dome Deposit Mineral Resources by Oxide Type**

Deposit	Type	Inferred Mineral Resource (0.5 g/t Au cut-off grade)		
		Tonnage kt	Gold g/t	Gold Ounces
Chicken Ranch	Oxide	510	1.6	26,000
Turkey Farm	Oxide	221	1.6	11,100
Big Banana	Oxide	60	1.6	3,200
<b>Chicken Ranch Area</b>	<b>Sub-Total</b>	<b>791</b>	<b>1.6</b>	<b>40,300</b>
Tim's Dome	Oxide	410	1.0	13,400
	Transitional	1,370	1.1	49,700
<b>Tim's Dome</b>	<b>Sub-Total</b>	<b>1,780</b>	<b>1.1</b>	<b>63,200</b>
<b>Chicken Ranch Area + Tim's Dome</b>	<b>Total</b>	<b>2,571</b>	<b>1.3</b>	<b>103,500</b>

**Notes:** Small discrepancies may occur due to the effects of rounding.

These latest maiden Mineral Resources have boosted the Company's 100% resource to 827,000 ounces of gold and combined with a strategy to convert several additional satellite brownfield targets to resource status in the coming year provide further support to the Company's development aspirations.

Antipa's ability to continue to deliver resource growth in addition to greenfield discoveries is well supported by the current cash position that allows a continuation of the aggressive Paterson Province dual strategy to simultaneously target both resource extensions and new discoveries.

## ONGOING EXPLORATION ACTIVITIES

Ongoing exploration activities by Antipa within its 100% owned Paterson Province projects for 2019 include:

- Recently commenced 20,000m greenfield Air Core programme – Slim Line RC drilling programme systemically testing aerial electromagnetic conductivity targets
- Preparation for drill testing of Havieron lookalike aeromagnetic anomalies
- Follow-up drill testing of several highly prospective areas at Minyari Dome and Chicken Ranch, including Judes and Minyari South
- Evaluation of potential gold resource opportunities in the Turkey Farm, Pajero and Triangle
- Geophysical survey and follow-up drilling at Tim's Dome
- Possible further Mineral Resource estimation/s

## **CHICKEN RANCH AREA DEPOSITS AND TIM'S DOME DEPOSIT - SUMMARY OF MATERIAL MINERAL RESOURCE ESTIMATION INFORMATION**

Antipa's 2019 Mineral Resource estimates have been completed by Ashmore. The estimates used validated geological drill hole data supplied by Antipa. This section has been produced by Ashmore to fulfil ASX reporting requirements. Additional detailed information can also be found in the JORC Table 1 – Sections 1 to 3 at the back of this announcement.

### ***Geology and Mineralisation - Chicken Ranch and Tim's Dome***

#### ***Regional Geology***

The Chicken Ranch and Tim's Dome areas are hosted within the Paterson Province in the Pilbara Craton of WA. The geology is Proterozoic aged, meta-sediment hosted hydrothermal shear, fault and strata/contact controlled precious and/or base metal mineralisation which is typically sulphide bearing. The mineralisation in the region is interpreted to be granite related. The Paterson Province is a low-grade metamorphic terrane but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.

#### ***Local Geology and Mineralisation – Chicken Ranch Area***

The geology of the Chicken Ranch area is dominated by a northwest trending sequence of moderate to steeply east dipping meta-sediments, including siltstone, carbonate siltstone, dolomite, and subordinate fine-grained sandstone of the Puntapunta Formation. This sequence occurs on the northeast flank of the Camp Dome complex, a regional scale doubly plunging anticline (Figure 3). Regional mapping undertaken by previous explorers indicates that the Chicken Ranch deposit may be related to a parasitic fold on the flank of the Camp Dome, or a separate fold structure altogether.

The Mineral Resource estimate for the Chicken Ranch area includes the Chicken Ranch, Turkey Farm and Big Banana deposits (Figures 1 and 2). High-grade gold with minor copper mineralisation occurs as gossanous zones within and related to northwest trending, steeply dipping quartz veins hosted by deeply oxidised meta-sediments, including goethite pseudomorphs after massive pyrite alteration (some cubic ex-pyrite oxide pseudomorphs up to 2cm in size, similar in size to those collected in the early 1970's associated with the then outcropping Telfer gold mineralisation). The majority of the deposit is deeply oxidised.

The Turkey Farm deposit is located 1km west-northwest of the Chicken Ranch deposit, and gold with minor copper mineralisation occurs within northwest trending, steeply dipping quartz ironstone veins and possible shallow (25° to 30°) east dipping zones hosted by deeply oxidised meta-sediments. The Big Banana deposit occurs 1km south-southwest of the Chicken Ranch deposit, and gold with minor copper mineralisation occurs within northwest trending, steeply dipping quartz ironstone veins hosted by deeply oxidised meta-sediments.

The area is prospective for lithologically controlled high-grade gold mineralisation and vein and/or stockwork style mineralisation. North-south (regional grid) striking fault zones (possible Telfer "Graben Fault" generation), appear to offset stratigraphy and mineralisation dominantly with an apparent sinistral sense which may represent simple normal displacement with east-block up / west-block down of north-easterly dipping stratigraphy.

Figure 4 shows a drill hole collar plan with maximum down hole gold values and Figures 5a-b shows schematic cross sections through the main portion of the Chicken Ranch deposit.

#### *Local Geology and Mineralisation – Tim’s Dome*

Tim’s Dome is located approximately 12km along strike from the Telfer deposit (Figures 1 and 2) and is interpreted to represent the re-emergence, due to a fold plunge reversal, of the Telfer Domal structure. The Tim’s Dome anticlinal axis plunges shallowly to the southeast with fold limbs that dip between 30° and 70° and is truncated to the northwest by Crofton Granite.

Stratigraphy within Tim’s Dome includes rock units which host the world-class Telfer gold-copper-silver deposit, including the quartz rich Malu Formation and carbonate bearing Telfer Member, with the overlying carbonate bearing Puntapunta Formation also identified by drilling (Figure 6). The area is prospective for high-grade Telfer “Reef Style” gold mineralisation and vein and/or stockwork style mineralisation.

Gold mineralisation in the southern portion of the deposit area is best developed on the western side of a northwest striking, mineralised quartz vein to stockwork corridor greater than 4km long. This zone hosts several sub-parallel and cross-cutting gold trends across a zone up to approximately 200m in width which is dominated by northwest striking, moderate to steeply southwest dipping mineralised veins; however, less abundant orthogonal northeast striking mineralised veins are also present.

Figure 7 shows a drill hole collar plan with recent mineralisation intercepts and Figure 8 shows schematic cross sections through the southern portion of the Tim’s Dome deposit.

#### ***Drilling Techniques – Chicken Ranch***

The Chicken Ranch area deposit Mineral Resource estimates were compiled using relevant reverse circulation (“RC”) and air core (“AC”) drill hole information. All rotary air blast (“RAB”) drill holes were excluded from the Mineral Resource estimate. The Company has invested significant resources to determine the provenance, validity, quality, accuracy and relevance of pre-2018 (non-Antipa) drill hole data, much of which was generated by major resource companies MIM, Newmont and Newcrest. Antipa has contributed 50% of the drill metres used for the Chicken Ranch resource estimate.

For detailed descriptions of the JORC Criteria for the various Chicken Ranch exploration programmes completed between 1970 and 2016, refer to the Antipa’s public disclosure (i.e. ASX Website [www.asx.com.au](http://www.asx.com.au) and Antipa Minerals Ltd Website [www.antipaminerals.com.au](http://www.antipaminerals.com.au)) report entitled “Antipa Secures High Grade Chicken Ranch Deposit” created on 2 August 2017.

#### ***Drilling Techniques – Tim’s Dome***

The Tim’s Dome deposit Mineral Resource estimate was compiled using relevant reverse circulation (“RC”), air core (“AC”) and diamond drill (“DD”) hole information. All rotary air blast (“RAB”) drill holes were excluded from the Mineral Resource estimate. Antipa has invested significant resources to determine the provenance, validity, quality, accuracy and relevance of pre-2015 (non-Antipa) drill hole data, much of which was generated by major resource companies MIM, Newmont, Barrick, Mount Burgess Mining and Newcrest. Antipa has contributed 41% of the drill metres used for the Chicken Ranch resource estimate.



For detailed descriptions of the JORC Criteria for the various Tim's Dome exploration programmes completed between 1970 and 2014, refer to the Antipa's public disclosure (i.e. ASX Website [www.asx.com.au](http://www.asx.com.au) and Antipa Minerals Ltd Website [www.antipaminerals.com.au](http://www.antipaminerals.com.au)) report entitled "Exciting New Gold Opportunity Tims Dome" created on 22 September 2016.

### ***Sampling and Sub-sampling Techniques – Chicken Ranch and Tim' Dome***

Both AC and RC Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.

The various sample sizes detailed below are considered to be appropriate to correctly represent the style of mineralisation for these deposits, the thickness and consistency of the intersections and the sampling methodology.

#### ***Air Core Sampling Methodology***

One metre samples were collected from a cyclone into a plastic bucket and then laid out on the ground in rows of 10 or 20.

Compositing air core samples in lengths between 2 to 4m was undertaken via combining "Spear" samples of the 1m intervals to generate a 2kg (average) sample. Areas of anomalous pXRF results or zones of encouraging geological observations were sampled as single metre intervals. All samples were pulverised at the laboratory to produce material for assay.

#### ***Reverse Circulation Sampling Methodology***

RC samples were drilled using a 140mm diameter face sampling hammer and sampled on intervals of 1m using a rig mounted cone splitter from which a 3kg (average) sample which was pulverised at the laboratory to produce material for assay.

Compositing of unmineralised regions (guided by pXRF field analysis) of between 2 to 4m was undertaken via combining "Spear" samples of the unmineralised sample intervals to generate a 2kg (average) sample which was pulverised at the laboratory to produce material for assay.

### ***Sample Analysis Method – Chicken Ranch and Tim's Dome***

#### ***Sample Preparation***

Sample preparation of AC and RC samples was completed at MinAnalytical Laboratories in Perth following industry best practice. Preparation involved oven drying, coarse crushing of the air core sample down to approximately 10mm, followed by pulverisation of the entire sample using Essa LM5 grinding mills to a grind size of 85% passing 75µm and split into a sub-samples for analysis.

#### ***Air Core Analytical Techniques***

All air core samples were dried, crushed, pulverised and split to produce a sub-sample for a 10-gram sample which are digested and refluxed with nitric and hydrochloric ("aqua regia digest") acid suitable for weathered air core samples. Aqua regia can digest many different mineral types including most oxides, sulphides and carbonates but will not totally digest refractory or silicate minerals. Analytical methods used were both ICP-OES and ICP-MS (for Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr).

For samples which returned gold greater than 4,000 ppb gold (upper detection limit) with the aqua regia digest, a lead collection fire assay on a 50-gram sample with Atomic Absorption Spectroscopy was undertaken to determine gold content with a detection limit of 0.005 ppm.

Ore grade ICP–OES analysis was completed on samples returning results above upper detection limit.

#### *RC Analytical Techniques*

For RC samples, a lead collection fire assay on a 50-gram sample was analysed with Atomic Absorption Spectroscopy to determine gold content with a detection limit of 0.005 ppm.

All samples were dried, crushed, pulverised and split to produce a subsample for a 25-gram subsample which were digested and refluxed with hydrofluoric, nitric, hydrochloric and perchloric acids (“four acid digest”) suitable for silica-based samples. This digest is considered to approach a total dissolution for most minerals. Analytical methods used were ICP–OES (for Al, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, P, S, Ti, V and Zn) with selective ICP–MS (for Ag, As, Ba, Be, Bi, Cd, Ce, Co, Cs, Ga, Ge, Hf, In, La, Li, Mo, Nb, Ni, Pb, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Tl, U, W, Y and Zr).

#### ***Density Information – Chicken Ranch and Tim’s Dome***

No bulk density measurements have been obtained from the Chicken Ranch area deposits or the Tim’s Dome deposit. Bulk density has been assigned in the two block models based on values derived from similar deposits in the region. A value of 1.8 t/m<sup>3</sup> was assigned to alluvial cover, 1.9 t/m<sup>3</sup> and 2.0 t/m<sup>3</sup> were assigned respectively to the Chicken Ranch area and Tim’s Dome oxide material, and 2.4 t/m<sup>3</sup> was assigned to transitional material.

#### ***Mineral Resource Estimation Methodology – Chicken Ranch and Tim’s Dome***

Separate Surpac block models were created to encompass the full extent of the Chicken Ranch area and Tim’s Dome area mineralisation. The block dimensions used for both resource models were 10m NS by 5m EW by 5m vertical with sub-cells of 1.25m by 1.25m by 1.25m. The Chicken Ranch area and Tim’s Dome block models were rotated along a bearing of 305° and 320° respectively to match the approximate strike of the mineralisation in their respective areas.

The parent block sizes in the strike directions for each model were selected based on kriging neighbourhood analysis, while dimensions in other directions were selected to provide sufficient resolution to the block model in the across-strike and down-dip directions.

The Ordinary Kriging (“OK”) algorithm was used for the grade interpolation and 3D-wireframes were used as a hard boundary for the grade estimation of each domain (Figures 9a-b). Any waste blocks were set to zero gold grade. In addition to the above, a nearest neighbour (“NN”) estimate was run for the two block models to validate the OK results for gold. Five metre composites were used in the NN estimates, which aligned with the 5m Z block size. This ensured the OK estimate was appropriately compared to the NN estimate. For domains intersected by a single drill hole, average grades were assigned.

An orientated search ellipse with an “ellipsoid” search was used to select data for grade interpolation. Each ellipse was oriented based on kriging parameters for the respective deposit areas and were consistent with the interpreted geology.

***Model Validation – Chicken Ranch and Tim’s Dome***

A three-step process was used to validate the two Mineral Resource estimate block models. Firstly, a qualitative assessment was completed by slicing sections through the block models in positions coincident with drilling. Overall the assessment indicated that the trend of the modelled grade was consistent with the drill hole grades. Secondly, a quantitative assessment of the estimate was completed by comparing the average grades of the sample file input against both block model outputs for all the lodes. In addition, a NN estimate was run to validate the OK results. Thirdly, to check that the interpolation of both block models correctly honoured the drilling data, validation was carried out by comparing the interpolated blocks to the sample composite data.

***Cut-off Grades – Chicken Ranch and Tim’s Dome***

For the Chicken Ranch and Tim’s Dome deposits, the mineralisation commences from near surface (i.e. 0 to 10m). The mineralisation grades and quantities support the potential for eventual economic extraction by open pit mining and therefore material was reported at a gold grade cut-off of 0.5 g/t gold. However, no open pit or underground mining assessment has been completed for these deposits.

The shallow gold mineralisation defined at these deposits could provide an additional source of oxide mill feed to any future processing plants built at nearby gold deposits within the Company’s extensive project areas.

***Metallurgical Information – Chicken Ranch and Tim’s Dome***

No metallurgical testing has been conducted on the Chicken Ranch area deposits or Tim’s Dome deposit. Antipa expects that similar overall recoveries could be achieved as the average 95% recovery demonstrated for the oxide mineralisation at the nearby Minyari and WACA deposits.

***Mineral Resource Classification – Chicken Ranch and Tim’s Dome***

The resource classification for the Chicken Ranch area deposits and Tim’s Dome deposit is all Inferred Mineral Resources, with the primary criteria used for classification being the drill hole spacing in relation to the mineralisation geometry and overall confidence in the grade and geological continuity. Ashmore’s assessment of the criteria that were considered when classifying and reporting these Mineral Resources are summarised below and in the JORC Code Table 1 Section 3 at the back of this announcement.

In the Chicken Ranch area drilling by Antipa has largely verified the historical drilling and assay data and the predominant drill hole spacing is 50m by 50m or less. The Chicken Ranch deposit shows some continuity of the main mineralised lodes within the north western portion of the deposit which allowed the drill hole intersections to be modelled into coherent, geologically robust wireframes.

At Tim’s Dome drilling by Antipa has largely verified the historical drilling and assay data and the predominant drill hole spacing is 50m by 20m. The Tim’s Dome deposit shows some continuity of the main mineralised lodes within the south-eastern portion of the deposit which allowed the drill hole intersections to be modelled into coherent, geologically robust wireframes.



For further information, please visit [www.antipaminerals.com.au](http://www.antipaminerals.com.au) or contact:

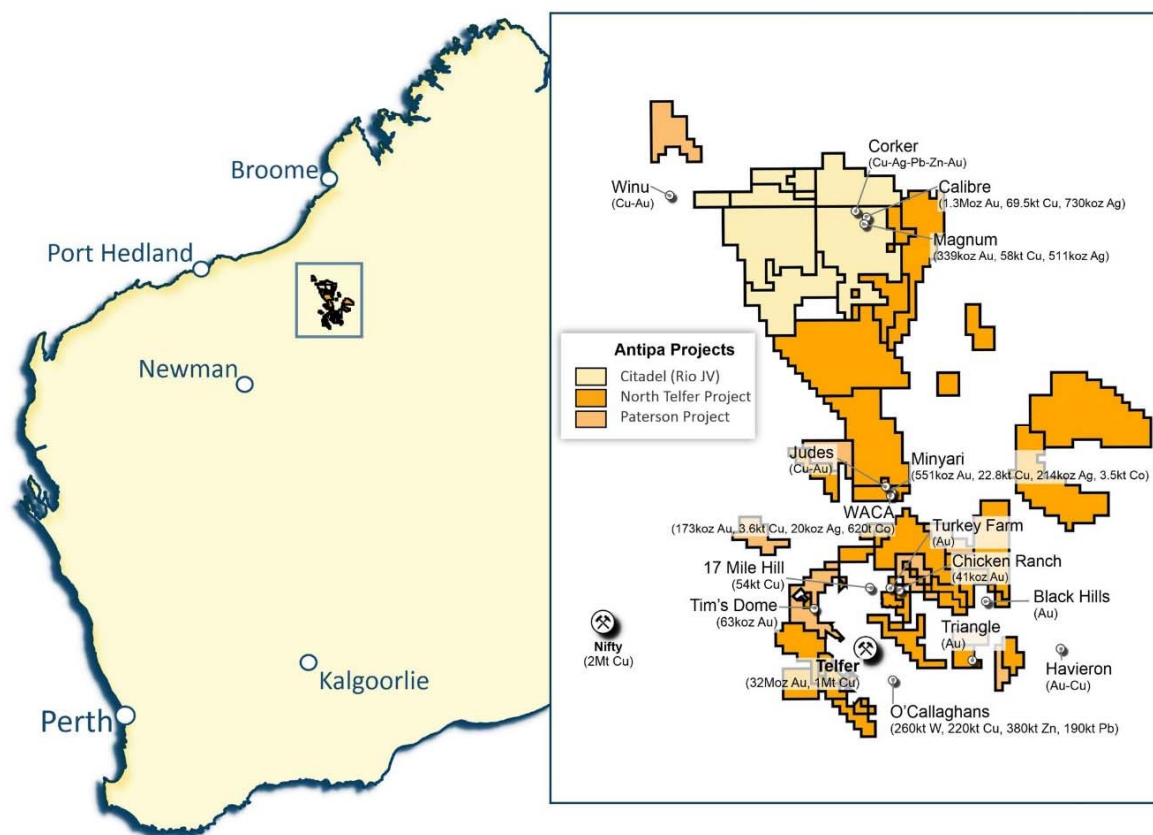
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**About Antipa Minerals:** Antipa is a mineral exploration company focused on the Paterson Province in north-west Western Australia, home to Newcrest Mining's world-class Telfer gold mine, Rio Tinto's recent Winu copper discovery and other significant mineral deposits. Having first entered the Paterson in 2011 when it was a less sought-after exploration address, the Company has used its early mover advantage to build an enviable tenement holding of approximately 5,000km<sup>2</sup>, including the 1,330km<sup>2</sup> Citadel Project that is subject to a Farm-in and Joint Venture Agreement with Rio Tinto. Under the terms of the Farm-in and Joint Venture Agreement, Rio Tinto can fund up to \$60 million of exploration expenditure to earn up to a 75% interest in Antipa's Citadel Project. Unlike certain parts of the Paterson where cover can extend to kilometres, making for difficult exploration, the Company's tenements feature relatively shallow cover: approximately 80% are under less than 80 metres. The Citadel Project lies within 5km of the Winu discovery and contains a Mineral Resource of 1.64 million ounces of gold and 128,000 tonnes of copper spread across two deposits, Calibre and Magnum. The Company has also established a Mineral Resource on its 100%-owned tenements, known as the North Telfer and Paterson Projects, with the Minyari-WACA, Chicken Ranch area and Tim's Dome deposits containing 827,000 ounces of gold and 26,000 tonnes of copper. Extensive drilling is planned for 2019 across Antipa's Paterson tenements as the company pursues a dual strategy of targeting tier-one greenfields discoveries and growing its existing resources through brownfields exploration.

**References to Rio Tinto:** All references to "Rio Tinto" or "Rio" in this document are a reference to Rio Tinto Exploration Pty Limited, a wholly owned subsidiary of Rio Tinto Limited.



**Competent Persons Statement – Exploration Results:** The information in this document that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Roger Mason, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Mason is a full-time employee of the Company. Mr Mason is the Managing Director of Antipa Minerals Limited, is a substantial shareholder of the Company and is an option holder of the Company. Mr Mason has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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’. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

**Competent Persons Statement – JORC Table 1, sections 3 Chicken Ranch and Tim’s Dome Mineral Resource Estimates:** The information in this report that relates to the estimation and reporting of both the Chicken Ranch and Tim’s Dome deposit Mineral Resources is based on, and fairly represents, information and supporting documentation – the compilation of which was reviewed by Mr Shaun Searle who is a Member of Australian Institute of Geoscientists and a full-time employee of Ashmore Advisory Pty Ltd. Mr Searle was engaged by Antipa on a fee for service basis, and is an independent consultant who holds shares in the Company. Mr Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Searle consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Various information in this report which relates to Chicken Ranch area and Tim’s Dome deposit Mineral Resources reported here is extracted from the following:

- Report entitled “*Calibre Deposit - Maiden Mineral Resource Estimate*” created on 28 October 2013;
- Report entitled “*Calibre and Magnum Mineral Resources JORC 2012 Updates*” created on 23 February 2015;
- Report entitled “*New Gold Opportunity - Tim’s Dome South*” created on 22 September 2016;
- Report entitled “*Minyari Dome Positive Metallurgical Test Work Results*” created on 13 June 2017;
- Report entitled “*Antipa Secures High-Grade Chicken Ranch Deposit*” created on 2 August 2017;
- Report entitled “*Minyari/WACA Deposits Maiden Mineral Resource*” created on 16 November 2017;
- Report entitled “*Calibre Deposit Mineral Resource Update*” created on 17 November 2017;
- Report entitled “*Tim’s Dome 2017 Air Core Drilling Results*” created on 31 January 2018;
- Report entitled “*Minyari Dome Excellent Metallurgical Test-work Results*” created on 27 August 2018;
- Report entitled “*Further High-grade Gold Mineralisation at Chicken Ranch*” created on 19 September 2018;
- Report entitled “*Chicken Ranch and Minyari Dome Drilling Update*” created on 15 November 2018; and
- Report entitled “*Resource Growth Potential and Additional Brownfields Targets*” created on 11 December 2018.

All of which are available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au).

The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

**Competent Persons Statement – JORC Table 1, sections 3 Minyari Mineral Resource Estimate:** The information in this report that relates to the estimation and reporting of the Minyari deposit Mineral Resource is based on, and fairly represents, information and supporting documentation – the compilation of which was reviewed by Kahan Cervo who is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Optiro Pty Ltd. Kahan Cervo was engaged by Antipa on a fee for service basis, and is independent of Antipa and holds no shares in the company. Kahan Cervo has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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’. Kahan Cervo consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Competent Persons Statement – JORC Table 1, sections 3 WACA Mineral Resource Estimate:** The information in this report that relates to the estimation and reporting of the WACA deposit Mineral Resource is based on, and fairly represents, information and supporting documentation – the compilation of which was reviewed by Susan Havlin who is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Optiro Pty Ltd. Susan Havlin was engaged by Antipa on a fee for service basis, and is independent of Antipa and holds no shares in the company. Susan Havlin has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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’. Susan Havlin consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

**Competent Persons Statement – Mineral Resource Estimations for the Minyari-WACA Deposits, Calibre Deposit and Magnum Deposit:** The information in this document that relates to the estimation and reporting of the Minyari-WACA deposits Mineral Resources is extracted from the report entitled “*Minyari/WACA Deposits Maiden Mineral Resources*” created on 16 November 2017, the Calibre deposit Mineral Resource information is extracted from the report entitled “*Calibre Deposit Mineral Resource Update*” created on 17 November 2017 and the Magnum deposit Mineral Resource information is extracted from the report entitled “*Calibre and Magnum Deposit Mineral Resource JORC 2012 Updates*” created on 23 February 2015, all of which are available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

**Gold Metal Equivalent Information - Calibre Mineral Resource AuEquiv cut-off grade:** Gold Equivalent (AuEquiv) details of material factors and metal equivalent formula are reported in “*Calibre Deposit Mineral Resource Update*” created on 16 November 2017 which is available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au).

**Gold Metal Equivalent Information - Magnum Mineral Resource AuEquiv cut-off grade:** Gold Equivalent (AuEquiv) details of material factors and metal equivalent formula are reported in “*Citadel Project - Calibre and Magnum Deposit Mineral Resource JORC 2012 Updates*” created on 23 February 2015 which is available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au).

**Forward-Looking Statements:** This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Antipa Mineral Ltd’s planned exploration programme and other statements that are not historical facts. When used in this document, the words such as “could,” “plan,” “estimate,” “expect,” “intend,” “may,” “potential,” “should,” and similar expressions are forward-looking statements. Although Antipa Minerals Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

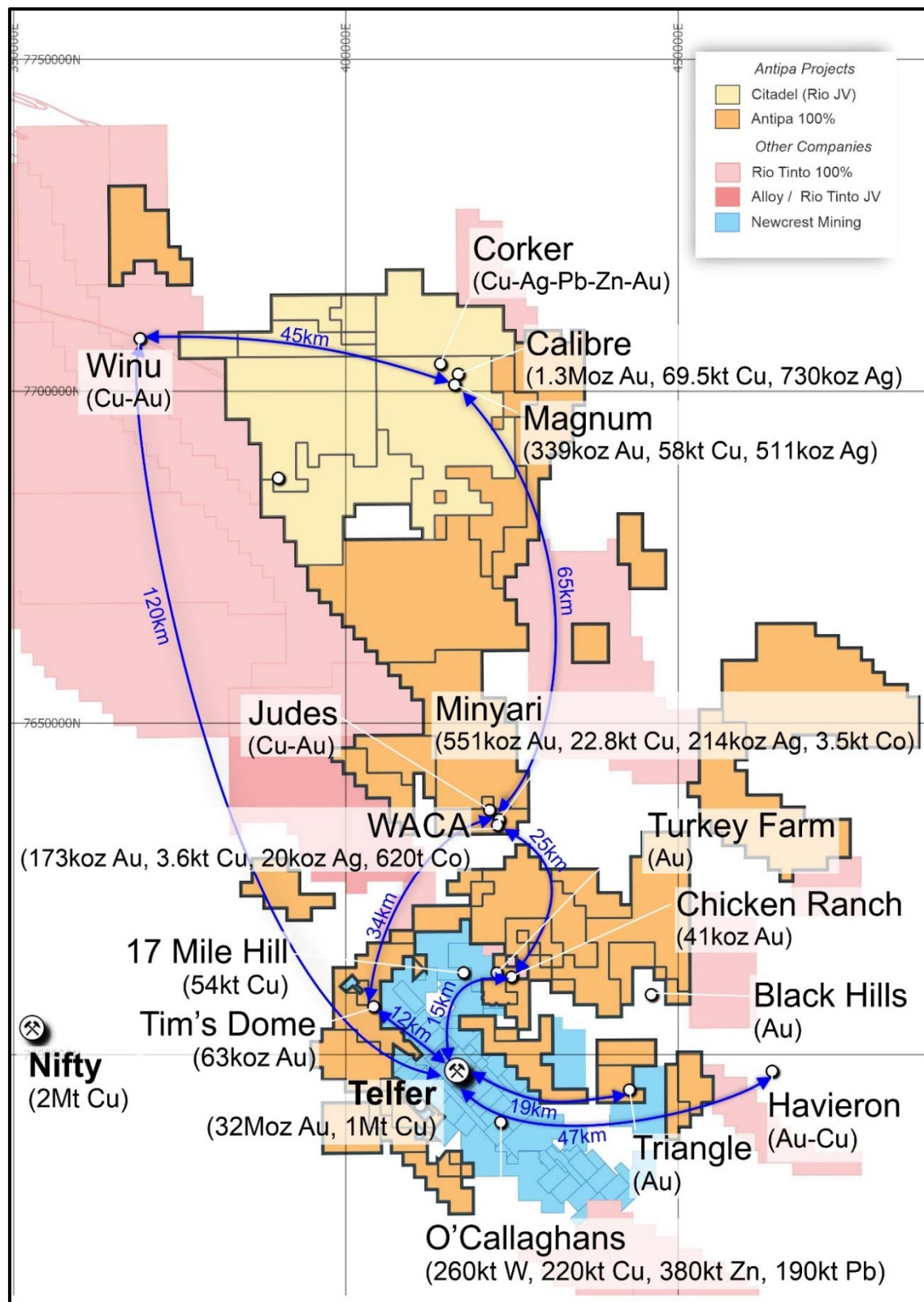
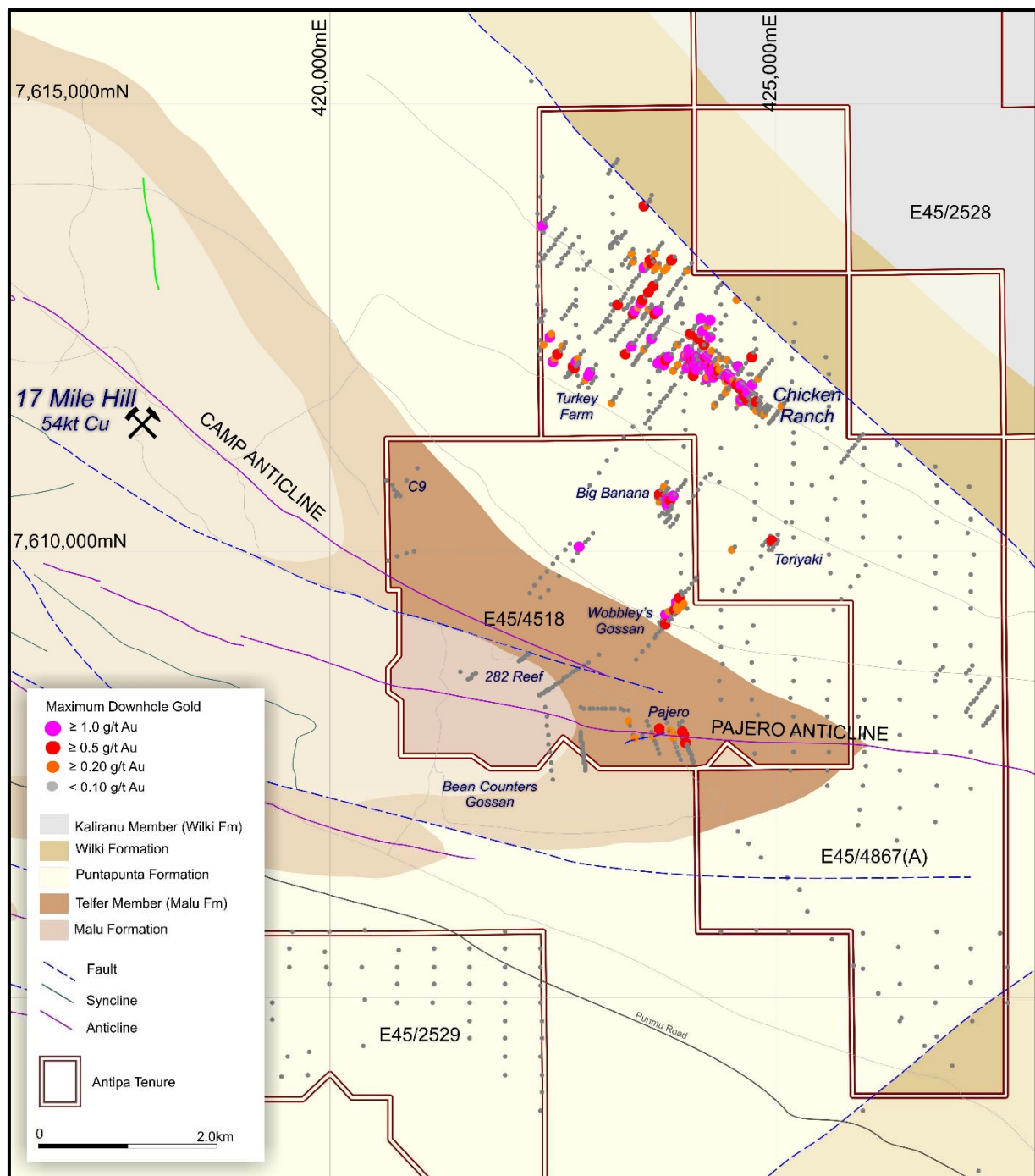


Figure 2: Plan showing Antipa's extensive 5,000km<sup>2</sup> land holding in the underexplored world-class Paterson Province of Western Australia. Antipa's portfolio includes the North Telfer Project which hosts the Minyari and WACA Mineral Resources, the Paterson Project which hosts the Tim's Dome and Chicken Ranch Mineral Resources, and comes to within 3km of Newcrest's world-class Telfer gold-copper-silver mine and mineral processing facility, and the Citadel Project, subject of a farm-in agreement between Rio Tinto and Antipa, which hosts the Calibre and Magnum Mineral Resources and comes to within 5km of Rio's Winu copper-gold-silver deposit. NB: Regional GDA94 / MGA Zone 51 coordinates, 50km grid.





**Figure 3: Chicken Ranch exploration licence (E45/4867) and Pajero exploration licence (E45/4518) areas showing drill hole distribution and maximum downhole gold over interpreted geology map. NB: Regional GDA94 / MGA Zone 51 co-ordinates, 5km grid.**



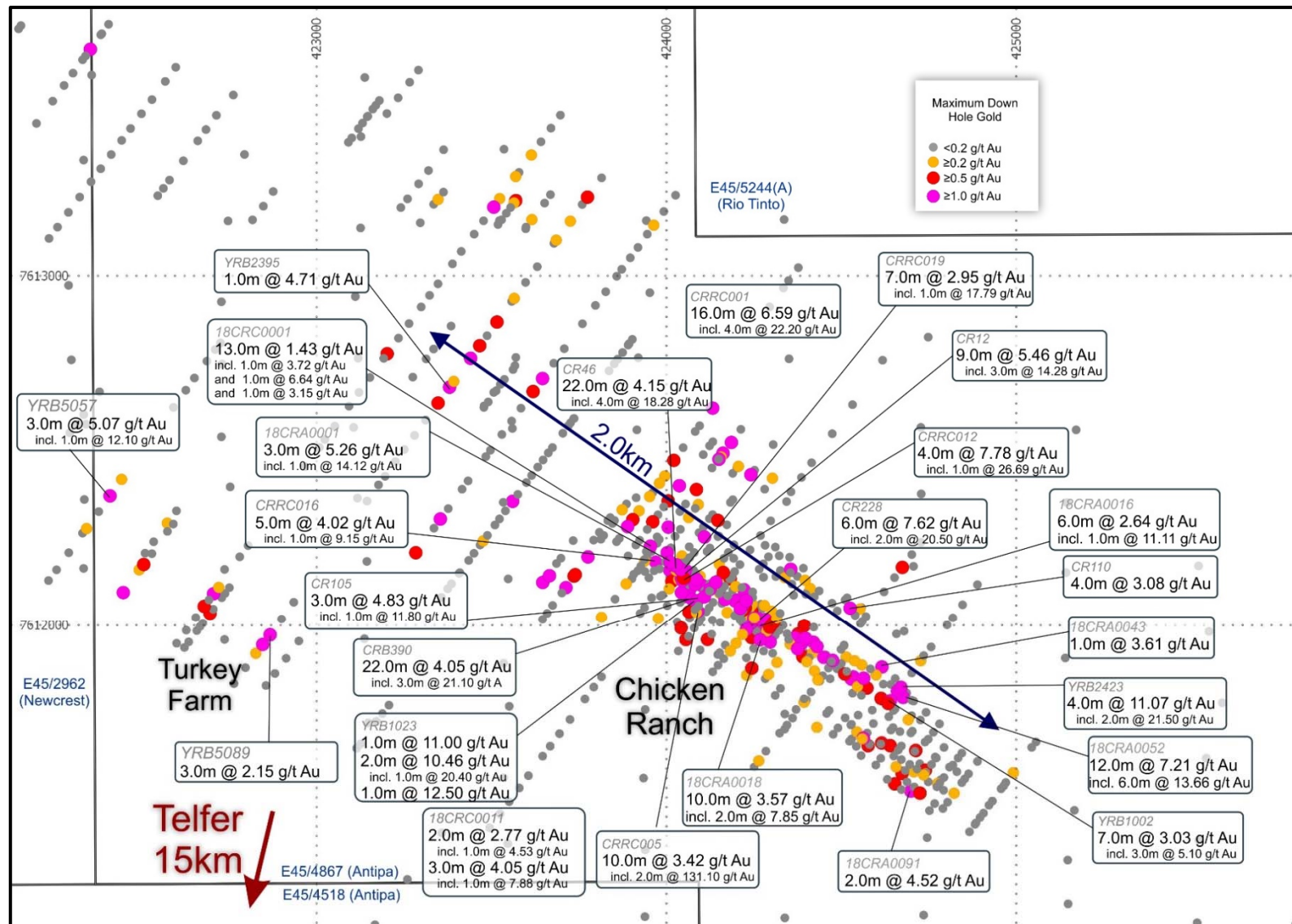


Figure 4: Plan view of the Chicken Ranch and Turkey Farm area showing maximum down hole gold values and significant drill intersections approximately 1km west of the Chicken Ranch deposit. NB: Regional GDA94 / MGA Zone 51 co-ordinates, 1km grid.

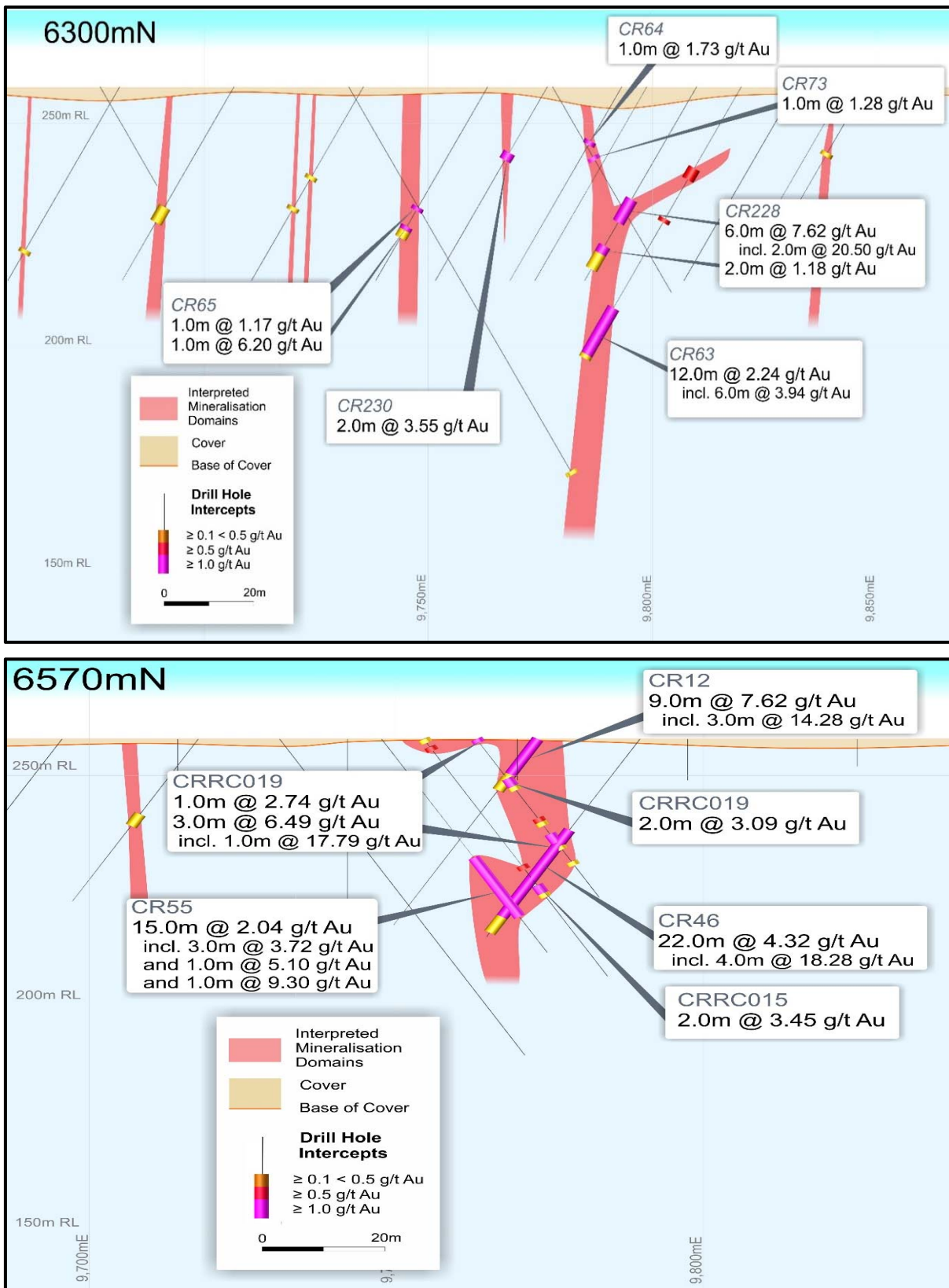


Figure 5a-b: Chicken Ranch Deposit 6,300 North (top) and 6,570 North (bottom) interpreted (schematic) cross-sections showing drill holes with gold grade bars and interpreted gold ± copper mineralisation domains. NB: 50m Local Grid – looking north.

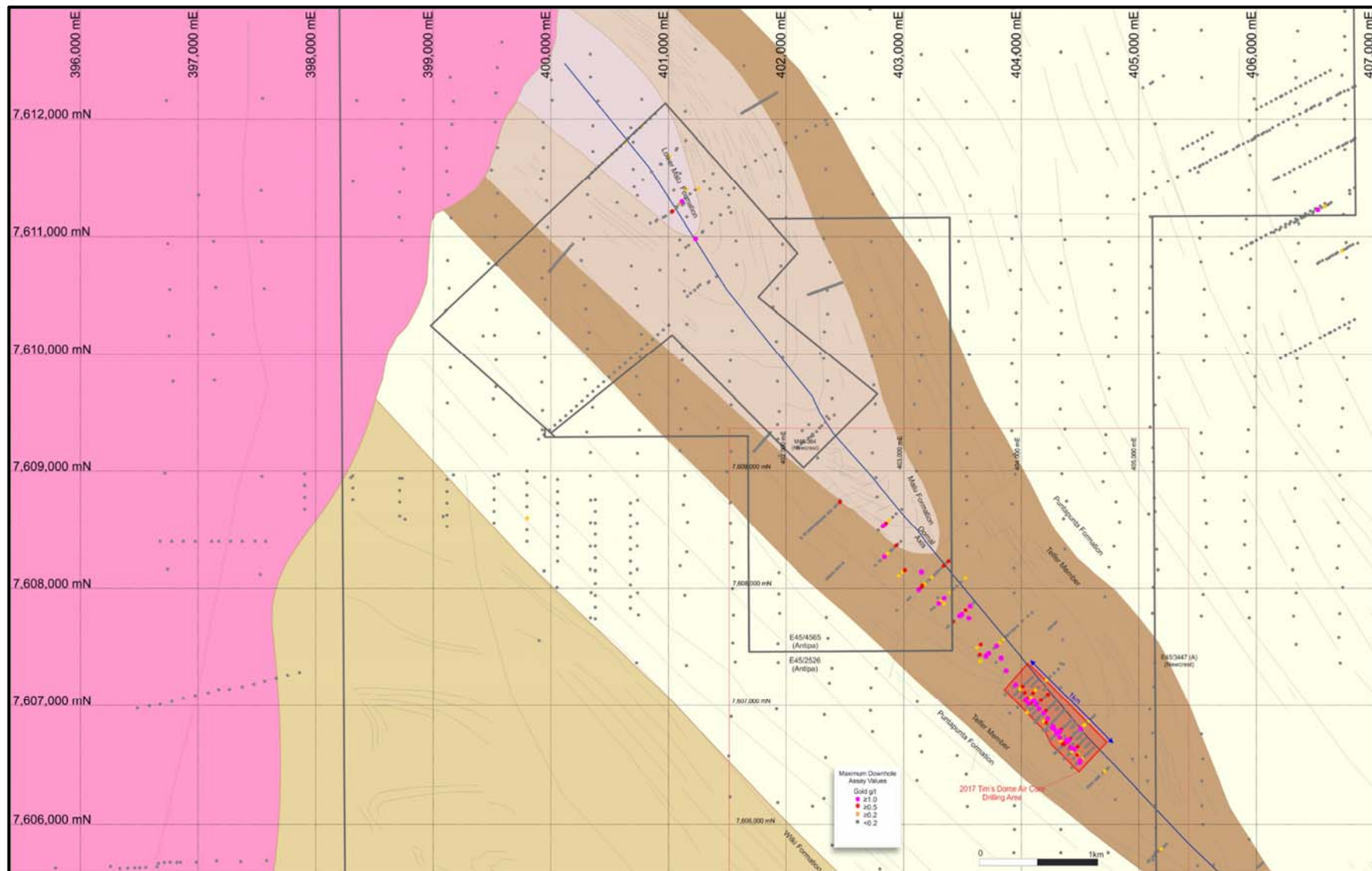


Figure 6: Tim's Dome interpreted geology plan showing drill hole locations, maximum down hole gold drill results highlighting the 4km long Tim's Dome South deposit gold trend and Antipa tenements. NB: Regional GDA94 / MGA Zone 51 co-ordinates, 1km grid.



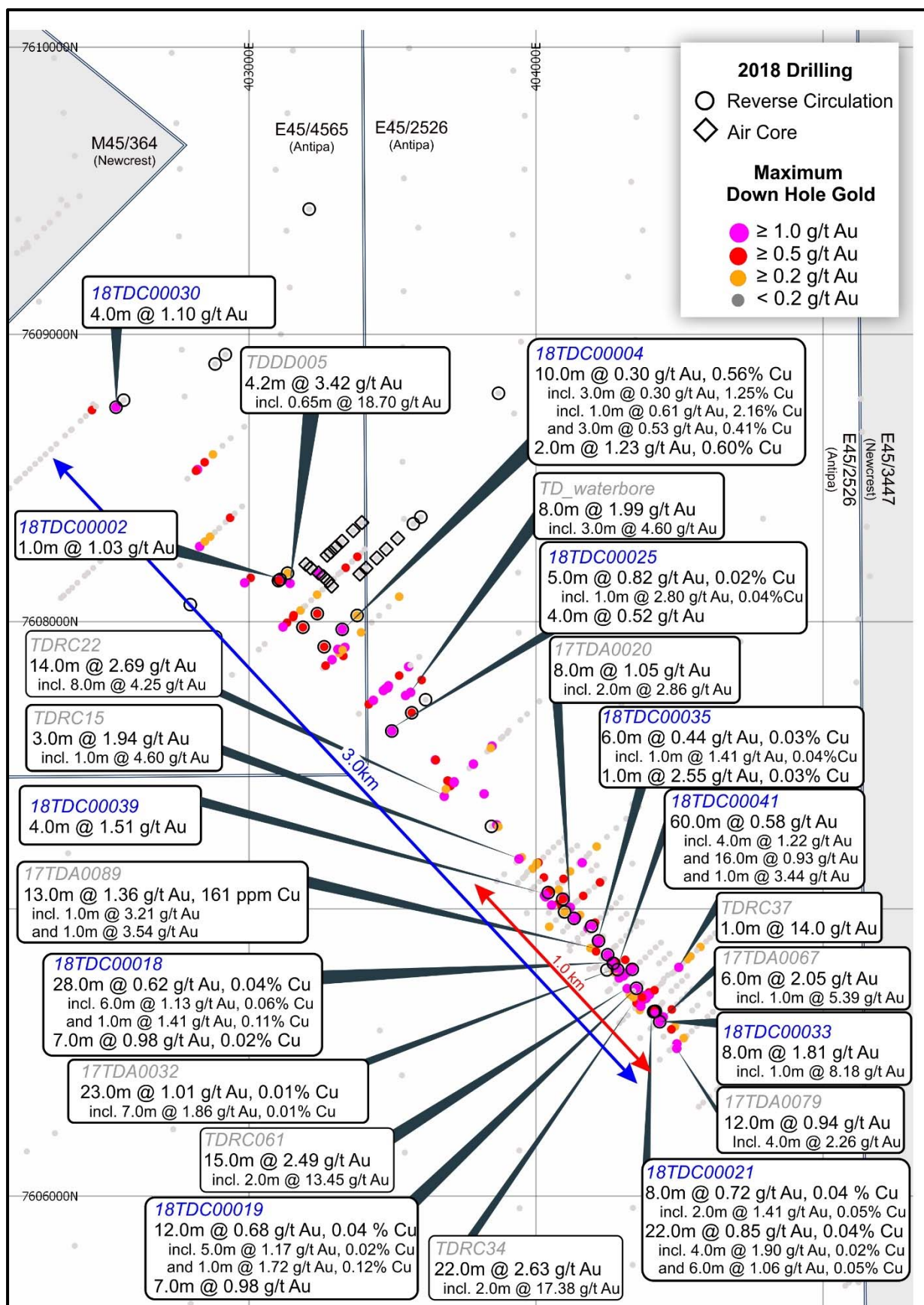


Figure 7: Tim's Dome plan showing maximum down hole gold values, significant drill intersections and tenement boundaries. Regional GDA94 / MGA Zone 51 co-ordinates, 1km grid.

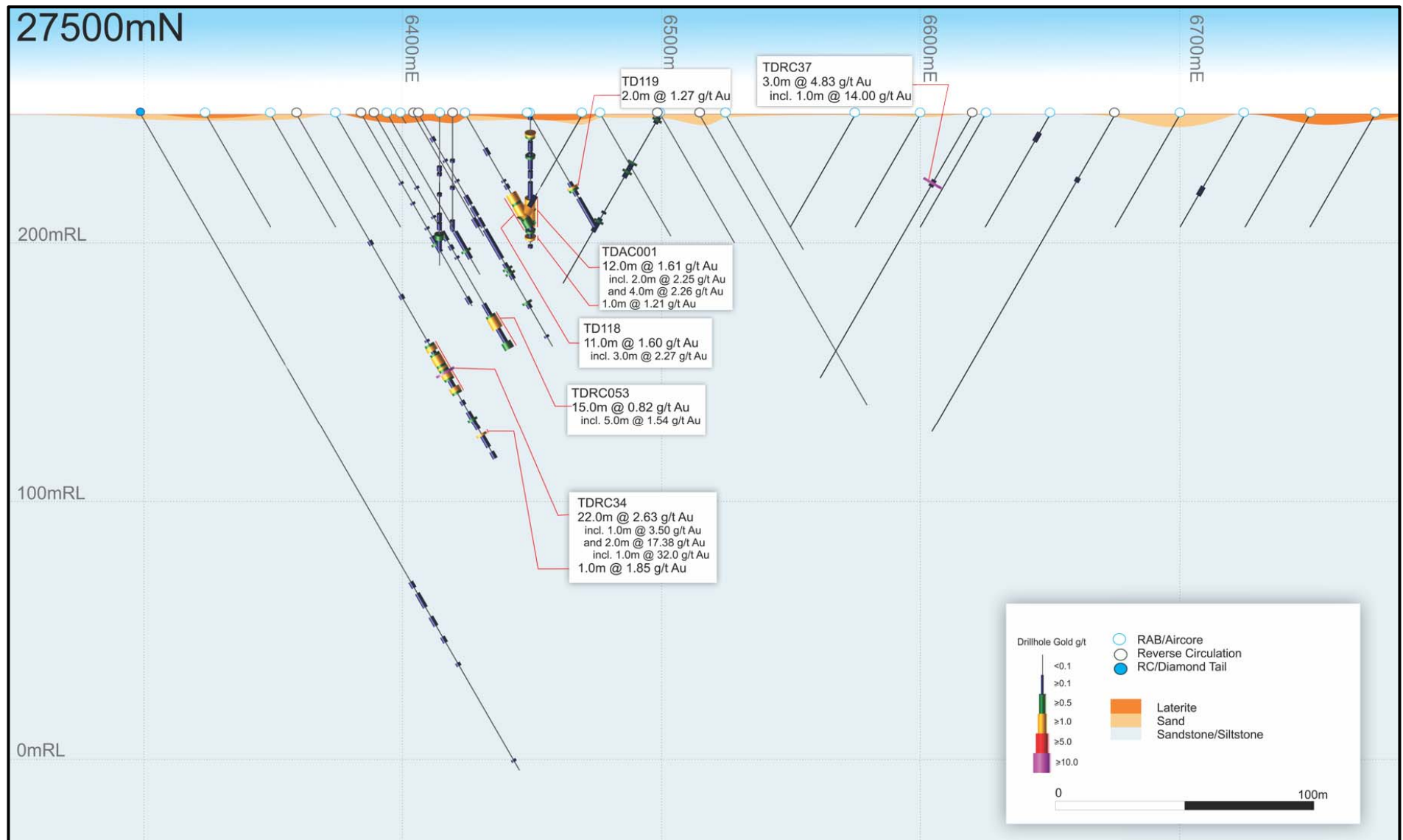


Figure 8: Tim's Dome South Deposit 27,500 North interpreted (schematic) cross-section showing drill holes and assay results (see legend for gold grade ranges).  
NB: 100m grid Local Grid and looking north.



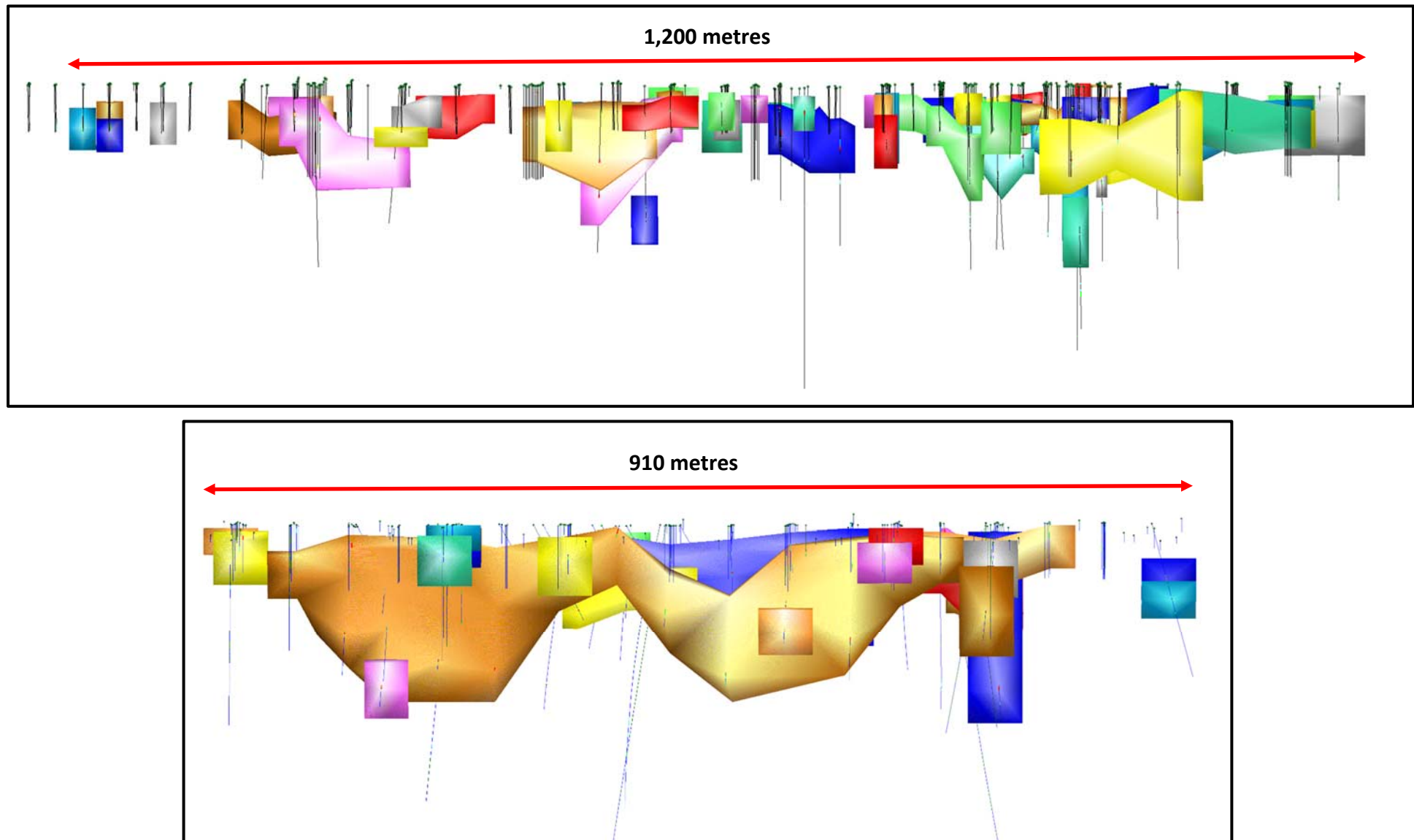


Figure 9a-b: Long Section (Looking 215°) of Chicken Ranch (top) and Long Section (Looking 225°) of Tim's Dome South (bottom) showing Mineral Resource mineralisation 3D-wireframe distribution. NB: Scale bars for reference.

## PATERSON PROJECT – CHICKEN RANCH AREA DEPOSITS and TIM'S DOME DEPOSIT:

### Section 1 – Sampling Techniques and Data (Criteria in this section shall apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p><b>AC Drilling</b></p> <ul style="list-style-type: none"> <li>Prospects/targets have been sampled by 195 AC drill holes, totaling 10,105 m, with an average drill hole depth of 51.8 m.</li> <li>AC drill holes were generally drilled on a nominal 25 m (along line) and 50 m across line infill and trend-extensional basis only, testing geological and geochemical targets.</li> </ul> <p><b>RC Drilling</b></p> <ul style="list-style-type: none"> <li>Prospects/targets have been sampled by 20 Reverse Circulation ("RC") drill holes, totaling 2,533 m, with an average drill hole depth of 126.7 m.</li> <li>RC drill holes were drilled within, below and along strike of known mineralisation, testing geological and geochemical targets.</li> </ul> <p><b>AC Sampling</b></p> <ul style="list-style-type: none"> <li>AC Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.</li> <li>One metre samples were collected from a cyclone into a plastic bucket and then laid out on the ground in rows of 10 or 20.</li> <li>Compositing AC samples in lengths between 2 to 4 m was undertaken via combining 'Spear' samples of the 1.0 m intervals to generate a 2 kg (average) sample. Areas of anomalous portable XRF Device (Niton) ('pXRF') results or zones of encouraging geological observations were sampled as single metre intervals. All samples were pulverised at the laboratory to produce material for assay.</li> </ul> <p><b>RC Sampling</b></p> <ul style="list-style-type: none"> <li>RC Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.</li> <li>RC samples were drilled using a 140 mm diameter face sampling hammer and sampled on intervals of 1.0 m using a rig mounted cone splitter from which a 2 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> <li>Compositing of unmineralised regions (guided by pXRF field analysis) of between 2 to 4 m was undertaken via combining 'Spear' samples of the unmineralised sample intervals to generate a 2 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p><b>AC Drilling</b></p> <ul style="list-style-type: none"> <li>AC Drilling was undertaken with a Bostech Drillboss 200 4WD truck mounted rig. The rig has a depth capacity of approximately 150 m with an on-board compressor producing 600 cfm at 250 psi.</li> <li>All drill holes were completed using an 85 mm AC blade. If hard drilling conditions are encountered a 97 – 102 mm RAB hammer with a crossover sub (not face sampling) is utilised; however, this drilling technique was not required at Chicken Ranch or Tim's Dome.</li> <li>Drill holes were directed towards local grid east (135 holes), west (57 holes) and southwest (one hole), with an inclination angle of -60°.</li> </ul> <p><b>RC Drilling</b></p> <ul style="list-style-type: none"> <li>RC samples were drilled using a 140 mm diameter face sampling hammer and sampled on intervals of 1.0m using a rig mounted cone splitter from which a 2 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure</li> </ul>	<p><b>AC Drill Samples</b></p> <ul style="list-style-type: none"> <li>AC sample recovery and sample quality was recorded via visual estimation of sample volume and condition of the drill spoils.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>AC sample recovery typically ranges from 90 to 100%, with only very occasional samples with less than 70% recovery.</li> <li>AC sample recovery was maximised by endeavoring to maintain dry drilling conditions as much as practicable; the AC samples were almost exclusively dry.</li> <li>Relationships between recovery and grade are not evident and are not expected given the generally excellent and consistently high sample recovery.</li> </ul> <p><b>RC Drill Samples</b></p> <ul style="list-style-type: none"> <li>RC sample recovery was recorded via visual estimation of sample volume.</li> <li>RC sample recovery typically ranges from 90 to 100%, with only very occasional samples with less than 70% recovery.</li> <li>RC sample recovery was maximized by endeavoring to maintain a dry drilling conditions as much as practicable; the RC samples were almost exclusively dry.</li> <li>All samples were split on a 1 m interval using a rig-mounted cone splitter. Adjustments were made to ensure representative 2 to 3 kg sample volumes were collected.</li> <li>Relationships between recovery and grade are not evident and are not expected given the generally excellent and consistently high sample recovery.</li> </ul>
Logging	<ul style="list-style-type: none"> <li><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></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p><b>AC Drill Logging</b></p> <ul style="list-style-type: none"> <li>Geological logging of 100% of all AC sample intervals was carried out recording colour, weathering, lithology, mineralogy, alteration, veining and sulphides.</li> <li>Logging includes both qualitative and quantitative components.</li> <li>All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master Access SQL database.</li> <li>Selected AC sample intervals were measured for magnetic susceptibility using a handheld Magnetic Susceptibility meter.</li> <li>AC samples are generally analysed in the field using a pXRF for the purposes of geochemical and lithological interpretation and the selection of sampling intervals.</li> </ul> <p><b>RC Drill Logging</b></p> <ul style="list-style-type: none"> <li>All RC material is logged.</li> <li>Logging includes both qualitative and quantitative components.</li> <li>All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master Access SQL database.</li> <li>Geological logging of 100% of all RC sample intervals was carried out recording colour, weathering, lithology, mineralogy, alteration, veining and sulphides.</li> <li>RC sample intervals were routinely measured for magnetic susceptibility using a handheld Magnetic Susceptibility meter.</li> <li>RC samples are generally analysed in the field using a pXRF for the purposes of geochemical and lithological interpretation and the selection of sampling intervals.</li> </ul>
Sub-sampling techniques and	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and</i></li> </ul>	<p><b>AC Samples</b></p> <ul style="list-style-type: none"> <li>One metre samples were collected from a cyclone into a plastic bucket and then laid out on the ground in rows of 10 or 20.</li> </ul>

Criteria	JORC Code explanation	Commentary
sample preparation	<p><i>whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><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></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>Compositing AC samples of between 2 to 4 m was undertaken via combining 'Spear' samples of the intervals to generate a 2 kg (average) sample. Areas of anomalous pXRF results or anomalous geological observations were sampled as single metres. All samples are pulverised at the laboratory to produce material for assay.</li> </ul> <p><b>RC Samples</b></p> <ul style="list-style-type: none"> <li>RC samples for all drill holes were drilled using a 140 mm diameter face sampling hammer and split on intervals of 1.0 m using a rig mounted cone splitter from which a 3 kg (average) sample which was pulverised at the laboratory pulverised to produce material for assay.</li> <li>Compositing of unmineralised regions (guided by pXRF field analysis) of between 2 to 4 m was undertaken via combining 'Spear' samples of the unmineralised sample intervals to generate a 3 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> <li>Field duplicate samples were collected for all RC drill holes.</li> </ul> <p><b>AC Sample Preparation</b></p> <ul style="list-style-type: none"> <li>Sample preparation of AC samples was completed at MinAnalytical Laboratories in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the AC sample down to approximately 10 mm, followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 µm and split into a sub-sample/s for analysis.</li> <li>The sample sizes are considered to be appropriate to correctly represent the style of mineralisation at both Chicken Ranch and Tim's Dome, the thickness and consistency of the intersections and the sampling methodology.</li> </ul> <p><b>RC Sample Preparation</b></p> <ul style="list-style-type: none"> <li>Sample preparation of RC samples was completed at MinAnalytical Laboratories in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the sample down to approximately 10 mm, followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 µm and split into a sub-sample/s for analysis.</li> <li>The sample sizes are considered to be appropriate to correctly represent the style of mineralisation at both Chicken Ranch and Tim's Dome, the thickness and consistency of the intersections and the sampling methodology.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>The sample preparation technique for both AC and/or RC samples are documented by Antipa's standard procedures documents and is in line with industry standards in sample preparation.</li> <li>The sample sizes are considered appropriate to represent mineralisation.</li> <li>Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures.</li> </ul> <p><b>AC Analytical Techniques</b></p> <ul style="list-style-type: none"> <li>All samples were dried, crushed, pulverised and split to produce a subsample for a 10 g sample which are digested and refluxed with nitric and hydrochloric ('aqua regia digest') acid suitable for weathered AC samples. Aqua regia can digest many different mineral types including most oxides, sulphides and carbonates but will not totally digest refractory or silicate minerals. Analytical methods used were both ICP-OES and ICP-MS (Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr).</li> <li>For samples which returned Au greater than 4,000 ppb Au (upper detection limit) with the aqua regia digest, a lead collection fire assay on a 50-gram sample with Atomic Absorption Spectroscopy was undertaken to determine gold content with a detection limit of 0.005 ppm.</li> <li>Ore grade ICP-OES analysis was completed on samples returning results above upper detection limit.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>No geophysical tools were used to determine any element concentrations in this report.</li> <li>A handheld pXRF device is used in the field to investigate and record geochemical data for internal analysis. However, due to 'spatial' accuracy/repeatability issues this data is generally not publicly reported for drill holes, other than for specific purposes/reasons.</li> <li>Field QC procedures involve the use of commercial certified reference material (CRM's) for assay standards and blanks. Standards are inserted every 50 samples. The grade of the inserted standard is not revealed to the laboratory.</li> <li>Repeat QC samples was utilised during the AC drilling programme with nominally two to three duplicate AC field samples per drill hole.</li> <li>Inter laboratory cross-checks analysis programmes have not been conducted at this stage.</li> <li>In addition to Antipa supplied CRM's, MinAnalytical includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates.</li> <li>Selected anomalous samples are re-digested and analysed to confirm results.</li> </ul> <p><b>RC Analytical Techniques</b></p> <ul style="list-style-type: none"> <li>A lead collection fire assay on a 50 g sample with Atomic Absorption Spectroscopy undertaken to determine gold content with a detection limit of 0.005 ppm.</li> <li>All samples were dried, crushed, pulverised and split to produce a subsample for a 25 g sample which are digested and refluxed with hydrofluoric, nitric, hydrochloric and perchloric acids ('four acid digest') suitable for silica-based samples. This digest is considered to approach a total dissolution for most minerals. Analytical methods used were ICP-OES (Al, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, P, S, Ti, V and Zn) with selective ICP-MS (Ag, As, Ba, Be, Bi, Cd, Ce, Co, Cs, Ga, Ge, Hf, In, La, Li, Mo, Nb, Ni, Pb, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Tl, U, W, Y and Zr).</li> <li>Ore grade ICP-OES analysis was completed on samples returning results above upper detection limit.</li> <li>No geophysical tools were used to determine any element concentrations in this report.</li> <li>A pXRF device is used in the field to investigate and record geochemical data for internal analysis. However, due to 'spatial' accuracy/repeatability issues this data is generally not publicly reported for drill holes, other than for specific purposes/reasons.</li> <li>Field QC procedures involve the use of commercial certified reference material (CRM's) for assay standards and blanks. Standards are inserted every 25 samples. The grade of the inserted standard is not revealed to the laboratory.</li> <li>Field duplicates/repeat QC samples was utilised during the RC drilling programme with nominally two to three duplicate RC field samples per drill hole.</li> <li>Inter laboratory cross-checks analysis programmes have not been conducted at this stage.</li> <li>In addition to Antipa supplied CRM's, MinAnalytical includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates.</li> <li>Selected anomalous samples are re-digested and analysed to confirm results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections were visually verified by one or more alternative company personnel and/or contract employees.</li> <li>All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master SQL database.</li> <li>Assay values that were below detection limit were adjusted to equal half of the detection limit value.</li> </ul>



Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>km = kilometre; m = metre; mm = millimetre.</li> <li>Drill hole collar locations were surveyed using a handheld Garmin 64S GPS which has an accuracy of <math>\pm 3</math> m.</li> <li>The drilling co-ordinates are surveyed in GDA94 MGA Zone 51 co-ordinates.</li> <li>Vertical AC drill holes do not require for drill rig set-up azimuth checking.</li> <li>Inclined AC drill holes are checked for drill rig set-up azimuth using Suunto Sighting Compass from two directions.</li> <li>Drill hole inclination is set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing.</li> <li>No down hole surveys were undertaken for AC drill holes.</li> <li>RC down hole surveys were undertaken in-hole during drilling using a 'Reflex EZ Trac Camera' device at 30 metre intervals with a final survey at the end of the drill hole.</li> <li>Down hole surveys were checked by the supervising geologist for consistency. If required, readings were re-surveyed or smoothed in the database if unreliable azimuth readings were apparent.</li> <li>Survey details included drill hole dip (<math>\pm 0.25^\circ</math> accuracy) and drill hole azimuth (<math>\pm 0.35^\circ</math> accuracy) Total Magnetic field and temperature.</li> </ul> <p><b>Chicken Ranch Area:</b></p> <ul style="list-style-type: none"> <li>The Company has adopted and referenced one specific local grid across the Chicken Ranch area ('Chicken Ranch Grid') which is defined below.</li> <li>Chicken Ranch Local Grid 2-Point Transformation Data:</li> <li>Point # 1 = Chicken Ranch Local Grid 10,000 m east is 424,724.5 m east in GDA94 / MGA Zone 51; Chicken Ranch Local Grid 5,800 m north is 7,611,897.1 m north in GDA94 / MGA Zone 51.</li> <li>Point # 2 = Chicken Ranch Local Grid 10,000 m east is 422,694.5 m east in GDA94 / MGA Zone 51; Chicken Ranch Local Grid 8,600m north is 7,613,433.2m north in GDA94 / MGA Zone 51;</li> <li>Chicken Ranch Local Grid North (<math>360^\circ</math>) is equal to <math>303^\circ</math> in GDA94 / MGA Zone 51.</li> <li>Drill collars surveyed by GPS were draped onto the topography by Ashmore.</li> </ul> <p><b>Tim's Dome:</b></p> <ul style="list-style-type: none"> <li>The Company has adopted and referenced one specific local grid across the Tim's Dome area ('Tim's Dome Grid') which is defined below.</li> <li>Tim's Dome Local Grid 2-Point Transformation Data: Tim's Dome Local Grid 6,800m east is 403,537m east in GDA94 / MGA Zone 51; Tim's Dome Local Grid 29,100m north is 7,608,101m north in GDA94 / MGA Zone 51; Tim's Dome Local Grid 6,475m east is 404,437m east in GDA94 / MGA Zone 51; Tim's Dome Local Grid 27,450m north is 7,606,671m north in GDA94 / MGA Zone 51; Tim's Dome Local Grid North (<math>360^\circ</math>) is equal to <math>314^\circ</math> in GDA94 / MGA Zone 51.</li> <li>Tim's Dome Local Grid elevation is equal to GDA94 / MGA Zone 51.</li> <li>Drill collars surveyed by GPS were draped onto the topography by Ashmore.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p><b>Chicken Ranch Area:</b></p> <ul style="list-style-type: none"> <li>Drill lines are east-west "Chicken Ranch" local grid oriented. "Chicken Ranch" local grid drill lines are each spaced approximately 50 m apart with an average drill hole spacing on each section between 20 to 25 m. Locally (two areas) the Chicken Ranch mineralisation has been delineated in a grade-control style drill pattern consisting of 10 m by 10 m drill hole spacing format over 20 to 50 m strike lengths.</li> </ul> <p><b>Tim's Dome:</b></p> <ul style="list-style-type: none"> <li>The location and orientation of the Tim's Dome drilling is appropriate given the strike, dip and morphology of the mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<b>Chicken Ranch Area Deposits and Tim's Dome Deposit:</b> <ul style="list-style-type: none"> <li>The typical section spacing/drill hole distribution is considered adequate for the purpose of Mineral Resource estimation.</li> <li>Samples have been composited to 1 m lengths using fixed length techniques prior to Mineral Resource estimation.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<b>Chicken Ranch Area:</b> <ul style="list-style-type: none"> <li>The location and orientation of the Chicken Ranch drilling is appropriate given the strike, dip and morphology of the mineralisation.</li> <li>No consistent and/or documented material sampling bias resulting from a structural orientation has been identified at Chicken Ranch at this point; however, both folding, multiple vein directions and faulting have been recorded via diamond drilling and surface mapping.</li> </ul> <b>Tim's Dome:</b> <ul style="list-style-type: none"> <li>The location and orientation of the Tim's Dome drilling is appropriate given the strike, dip and morphology of the mineralisation.</li> <li>No consistent and/or documented material sampling bias resulting from a structural orientation has been identified at Tim's Dome at this point; however, both folding, multiple vein directions and faulting have been recorded via diamond drilling and surface mapping.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of sample custody is managed by Antipa to ensure appropriate levels of sample security.</li> <li>Samples are stored on site and delivered by Antipa or their representatives to Port Hedland and subsequently by Toll Ipec Transport from Newman to the assay laboratory in Perth.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling techniques and procedures are regularly reviewed internally, as is the data.</li> <li>Snowden Mining Consultants, during completion of the 2013 Calibre Mineral Resource estimate, undertook a desktop review of the Company's sampling techniques and data management and found them to be consistent with industry standards.</li> </ul>

## PATERSON PROJECT – CHICKEN RANCH AREA DEPOSITS:

### Section 2 – Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Chicken Ranch deposits are contained within tenement E45/4867, which was granted to Antipa on the 3<sup>rd</sup> of January 2018.</li> <li>Antipa Minerals Limited has a 100% interest in E45/4867 and no existing royalties or prior agreements apply.</li> <li>All tenements are contained completely within land where the Martu People have been determined to hold native title rights. To the Company's knowledge no historical or environmentally sensitive sites have been identified in the area of work.</li> <li>Land Access and Exploration Agreements are in place with the Martu People.</li> <li>Antipa maintains a positive relationship with the Martu People, who are Native Title parties in the area.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration of the Chicken Ranch area has been conducted by the following major resources companies: Newmont Pty Ltd (early 1970s to 1986); Carr Boyd Minerals Limited (1973 to 1975); Geopeko Limited (JV with Carr Boyd) (1975 to 1978); Marathon Petroleum Australia Limited (1979); Western Mining Corporation Limited (WMC) (1980); Duval Mining (Australia) Limited (Carr Boyd JV with Picon Exploration Pty Ltd) (1984 to 1986); Mount Burgess Gold Mining Company N.L. (1989 to 2001); Carpentaria (MIM JV with Mount Burgess) (1990 to 1996); Normandy (JV with Mount Burgess) (1998 to 2000); Newcrest Mining Limited (2009 to 2015); Quantum Resources Limited (2012 to 2016); and Antipa (2016 to present).</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The geology of the Chicken Ranch area is dominated by a northwest trending sequence of moderate to steeply east dipping meta-sediments, including siltstone, carbonate siltstone, dolomite, and subordinate fine-grained sandstone of the Puntapunta Formation.</li> <li>This sequence occurs on the northeast flank of the Camp Dome complex, a regional scale, doubly plunging anticline. Regional mapping undertaken by previous explorers indicates that the Chicken Ranch prospect may be related to a parasitic fold on the flank of the Camp Dome, or a separate fold structure altogether.</li> <li>High-grade gold with minor copper mineralisation occurs as gossanous zones within and related to northwest trending, steeply dipping quartz veins hosted by deeply oxidized meta-sediments, including goethite pseudomorphs after massive pyrite alteration (some cubic ex-pyrite oxide pseudomorphs up to 2 cm in size, similar in size to those collected in the early 1970's associated with the then outcropping Telfer gold mineralisation).</li> <li>The entire zone is deeply oxidised.</li> <li>Main zone consists of two or more northwest trending zones of mineralisation within a corridor up to 70 m in width.</li> <li>The southwest lens of mineralisation is more persistent and has a strike length of approximately 1,300 m.</li> <li>Several additional northwestern trending mineralisation zones to the east and west of the main zone.</li> <li>The Turkey Farm prospect occurs 800 m west-northwest of the Chicken Ranch deposit, and gold with minor copper mineralisation occurs within northwest trending, steeply dipping quartz ironstone veins and possible shallow (25° to 30°) east dipping zones hosted by deeply oxidised meta-sediments.</li> <li>The area is prospective for high-grade Telfer 'Reef Style' gold mineralisation and vein and/or stockwork style mineralisation.</li> <li>North-south striking fault zones (possible Telfer "Graben Fault" generation), appear to offset stratigraphy and mineralisation dominantly with an apparent sinistral sense which may represent simple normal displacement with east-block up / west-block down of northeasterly dipping stratigraphy.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>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: <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> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported. A table of all drill hole collars with all the listed information is shown in the Appendices.</li> <li>All information has been included in the appendices. No drill hole information has been excluded.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported.</li> <li>Not applicable as a Mineral Resource is being reported.</li> <li>Metal equivalent values have not been used.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Given the variety of drill hole types and distribution, the intersection angles for the various historic drilling generations are likely to be quite variable. The reported down hole intersections are estimated to commonly be in the range of 30% to 70% ± 10% of the true width.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Relevant diagrams have been included within the Mineral Resource report main body of text.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All hole collars were surveyed in MGA94 Zone 51 grid using handheld GPS. No down hole surveys were undertaken for AC drill holes. RC down hole surveys were undertaken in-hole during drilling using a 'Reflex EZ Trac Camera' device at 30 metre intervals with a final survey at the end of the drill hole. Down hole surveys were checked by the supervising geologist for consistency. If required, readings were re-surveyed or smoothed in the database if unreliable azimuth readings were apparent.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported.</li> <li>The Chicken Ranch interpretation for mineralisation is consistent with observations made in sub-crop in the field, geophysical surveys and supported by infill drilling.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Infill and extensional drilling are planned at selected areas of the Chicken Ranch Mineral Resource.</li> <li>Refer to diagrams in the body of text within the Mineral Resource report.</li> </ul>

## PATERSON PROJECT – CHICKEN RANCH AREA DEPOSITS:

### JORC Table 1 - Section 3 – Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The database has been systematically audited by an Antipa geologist and database manager. Original drilling records were compared to the equivalent records in the database (where original records were available). Any discrepancies were noted and rectified by the database manager.</li> <li>All Antipa drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the data base a report of the collar, down-hole survey, geology, and assay data are produced. This is then checked by an Antipa geologist and any corrections are completed by the data base manager.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>A site visit has not been conducted by Ashmore.</li> <li>A site visit was not considered necessary due to the Chicken Ranch Mineral Resource classification (Inferred). In the case of classifying Indicated Mineral Resource in future, a site visit will be conducted.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation is considered to be good and is based on visual confirmation in outcrop and within drill hole intersections.</li> <li>Geochemistry and geological logging have been used to assist identification of lithology and mineralisation.</li> <li>Gold mineralisation with minor copper occurs as gossanous zones within and related to northwest trending, steeply dipping quartz veins hosted by deeply oxidised meta-sediments, including goethite pseudomorphs after massive pyrite alteration. Infill drilling has supported and refined the model and the current interpretation is considered robust.</li> <li>Outcrops of mineralisation and host rocks confirm the geometry of the mineralisation.</li> <li>Infill drilling has confirmed geological and grade continuity.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Chicken Ranch Mineral Resource area extends over a northwest-southeast strike length of 1,200 m, has a maximum width (combined lodes) of 80 m and includes the 170 m vertical interval from 270 mRL to 100 mRL.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the</i></li> </ul>	<ul style="list-style-type: none"> <li>Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in up to three passes using Surpac software. Linear grade estimation was deemed suitable for the Chicken Ranch Mineral Resource due to the geological and structural control on mineralisation. Maximum extrapolation of wireframes from drilling was 25 m along strike and 20 m down-dip. Extrapolation for lodes terminating between drill cross sections was half drill hole spacing.</li> <li>No historical mining has occurred at the deposit.</li> <li>No recovery of by-products is anticipated. Ashmore noted that there were 31 assays in the database that displayed elevated copper of more than 1,000 ppm, with a maximum value of 2,280 ppm copper. Ashmore did not deem the copper assays material and therefore did not estimate or report copper in the Chicken Ranch estimate.</li> <li>Only Au was interpolated into the block model.</li> <li>The parent block dimensions used were 10 m NS by 5 m EW by 5 m vertical with sub-cells of 1.25 m by 1.25 m by 1.25 m. The block model was rotated on a bearing of 305° to match the approximate strike of the mineralisation. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the Chicken Ranch dataset.</li> <li>An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography derived from a combination of mineralised domains. Up to three passes were used for each domain. First pass had a range of 40 m, with a minimum of 4 samples. For the second pass, the range was extended to 80 m, with a minimum of 4 samples. For the third pass, the range was extended to 160 m, with a minimum of 2 samples. A maximum of 20 samples was used for each pass with a maximum of 4 samples per hole.</li> <li>No assumptions were made on selective mining units.</li> <li>Only Au assay data was analysed, therefore correlation analysis was not conducted.</li> <li>The deposit mineralisation was constrained by wireframes constructed using a 0.4 g/t gold cut-off grade and geological logging. The wireframes were applied as hard boundaries in the estimate.</li> <li>Statistical analysis was carried out on data from 77 lodes. The high coefficient of variation and the scattering of high-grade values observed on the histogram for some of the lodes suggested that high grade cuts were required if linear grade interpolation was to be carried out. It was determined that high grade cuts between 5 g/t and 15g/t gold was warranted for some domains, resulting in 14 composites being cut.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>comparison of model data to drill hole data, and use of reconciliation data if available.</i>	<ul style="list-style-type: none"> <li>Validation of the model included detailed comparison of composite grades and block grades by strike and elevation. Validation plots showed good correlation between the composite grades and the block model grades.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 0.5 g/t gold. The cut-off grade was based on open pit reporting cut-off grades utilised at Antipa's nearby Minyari and WACA gold-copper deposits, situated approximately 25 km to the north of Chicken Ranch.</li> <li>The shallow gold mineralisation defined at Chicken Ranch could provide an additional source of oxide mill feed to any future processing plants built at nearby gold deposits within the Project. Further geological, geotechnical, engineering and metallurgical studies are required to further define gold mineralisation and determine the viability of mining at Chicken Ranch.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ashmore has assumed that the deposit could be mined using open pit mining techniques.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical testing has been conducted on the Chicken Ranch deposit. Antipa expects that similar overall recoveries could be achieved to the nearby Minyari and WACA deposits of 90 to 93%.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding environmental factors. Antipa will work to mitigate environmental impacts as a result of any future mining or mineral processing.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling has been conducted at the deposit; however no designated density data has been obtained.</li> <li>Bulk density has been assigned in the block model based on values derived from similar deposits in the region. A value of 1.8 t/m<sup>3</sup> was assigned to alluvial cover, 1.9 t/m<sup>3</sup> was assigned to oxide material and 2.4 t/m<sup>3</sup> was assigned to transitional material.</li> <li>It is assumed there are minimal void spaces in the rocks at Chicken Ranch.</li> <li>Antipa will obtain bulk density measurements from future diamond drilling at the deposit.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resource was classified based on data quality, sample spacing, and lode continuity. Drilling by Antipa has largely verified the historical drilling and assay data and the predominant drill hole spacing is 50 m by 50 m or less. At this stage of assessment of the deposit, continuity is assumed rather than verified. Therefore, the deposit meets the criteria for an Inferred Mineral Resource.</li> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The lode geometry and continuity has been adequately interpreted to reflect the applied level of Inferred Mineral Resource. The data quality is reasonable, and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• No historical mining has been conducted at the deposit.</li> </ul>



## PATERSON PROJECT – TIM'S DOME DEPOSIT:

### Section 2 – Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Tim's Dome deposit is located within Antipa Resources Ltd Exploration License E45/4565 (granted) and Kitchener Resources Pty Ltd (a wholly owned Antipa subsidiary) Exploration License E45/2526 (granted).</li> <li>Antipa Minerals Ltd has a 100% interest in both E45/4565 and E45/2526.</li> <li>A 1% net smelter royalty payable to Yandal Investments Pty Ltd (Yandal) on the sale of product on all metals applies to tenement E45/2526 as a condition of an Agreement with Yandal in relation to the Company's Paterson Project.</li> <li>All tenements are contained completely within land where the Martu People have been determined to hold native title rights. To the Company's knowledge no historical or environmentally sensitive sites have been identified in the area of work.</li> <li>Land Access and Exploration Agreements are in place with the Martu People.</li> <li>Antipa maintains a positive relationship with the Martu People, who are Native Title parties in the area.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Tim's Dome South deposit was a greenfield discovery by Duval Mining Corporation during the early 1980's.</li> <li>Exploration of the Tim's Dome region has involved the following companies: Duval Mining Corp. (1984 to 1985); Battle Mountain Inc. (1986); Newmont Holdings Pty Ltd (1987 to 1990); Newcrest Mining Limited (1991); MIM Exploration Pty Ltd (1991 to 1995); Mount Burgess Mining Company NL (1997); Normandy Exploration Limited (1999 to 2000); Mount Burgess Mining Company NL (2001 to 2002); Newcrest Mining Limited (2003); Barrick Gold Limited (2005 to 2006); and Antipa Minerals Ltd (2015 onwards).</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Tim's Dome area is hosted within the Paterson Province in the Pilbara Craton of WA. The geology is Proterozoic aged, meta-sediment hosted hydrothermal shear, fault and strata/contact controlled precious and/or base metal mineralisation which is typically sulphide bearing. The mineralisation in the region is interpreted to be granite related. The Paterson Province is a low-grade metamorphic terrane but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>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: <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> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported. A table of all drill hole collars with all the listed information is shown in the Appendices.</li> <li>All information has been included in the appendices. No drill hole information has been excluded.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported.</li> <li>Not applicable as a Mineral Resource is being reported.</li> <li>Metal equivalent values have not been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Given the variety of drill hole types and distribution, the intersection angles for the various historic drilling generations are likely to be quite variable. The reported down hole intersections are estimated to commonly be in the range of 30% to 70% <math>\pm</math> 10% of the true width.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Relevant diagrams have been included within the Mineral Resource report main body of text.</li> <li></li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All hole collars were surveyed in MGA94 Zone 51 grid using handheld GPS. No down hole surveys were undertaken for AC drill holes. RC down hole surveys were undertaken in-hole during drilling using a 'Reflex EZ Trac Camera' device at 30 to 50 metre intervals with a final survey at the end of the drill hole. Down hole surveys were checked by the supervising geologist for consistency. If required, readings were re-surveyed or smoothed in the database if unreliable azimuth readings were apparent.</li> <li>Exploration results are not being reported.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Tim's Dome interpretation for mineralisation is consistent with observations made in sub-crop in the field, geophysical surveys and supported by infill drilling.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future</li> </ul>	<ul style="list-style-type: none"> <li>Infill and extensional drilling are planned at selected areas of the Tim's Dome Mineral Resource.</li> <li>Refer to diagrams in the body of text within the Mineral Resource report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>drilling areas, provided this information is not commercially sensitive.</i>	

## PATERSON PROJECT – TIM'S DOME DEPOSIT:

### JORC Table 1 - Section 3 – Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The database has been systematically audited by an Antipa geologist and database manager. Original drilling records were compared to the equivalent records in the database (where original records were available). Any discrepancies were noted and rectified by the database manager.</li> <li>All Antipa drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the data base a report of the collar, down-hole survey, geology, and assay data are produced. This is then checked by an Antipa geologist and any corrections are completed by the data base manager.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>A site visit has not been conducted by Ashmore.</li> <li>A site visit was not considered necessary due to the Tim's Dome Mineral Resource classification (Inferred). In the case of classifying Indicated Mineral Resource in future, a site visit will be conducted.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation is considered to be good and is based on visual confirmation in outcrop and within drill hole intersections.</li> <li>Geochemistry and geological logging have been used to assist identification of lithology and mineralisation.</li> <li>Gold mineralisation in the southern portion of the deposit area is best developed on the western side of a northwest striking, mineralised quartz vein to stockwork corridor greater than 4 km long. This zone hosts several subparallel and cross-cutting gold trends across a zone up to approximately 200 m in width which is dominated by northwest striking, moderate to steeply southwest dipping mineralised veins. Infill drilling has supported and refined the model and the current interpretation is considered robust.</li> <li>Outcrops of mineralisation and host rocks confirm the geometry of the mineralisation.</li> <li>Infill drilling has confirmed geological and grade continuity.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Tim's Dome Mineral Resource area extends over a northwest-southeast strike length of 2,100 m, has a maximum width (combined lodes) of 90 m and includes the 210 m vertical interval from 310 mRL to 100 mRL.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in up to three passes using Surpac software. Linear grade estimation was deemed suitable for the Tim's Dome Mineral Resource due to the geological and structural control on mineralisation. Maximum extrapolation of wireframes from drilling was 25 m along strike and 20 m down-dip. Extrapolation for lodes terminating between drill cross sections was half drill hole spacing.</li> <li>No historical mining has occurred at the deposit.</li> <li>No recovery of by-products is anticipated. Ashmore noted that there were 68 assays in the database that displayed elevated copper of more than 2,000 ppm. Ashmore did not deem the copper assays broadly material and therefore did not estimate or report copper in the Tim's Dome estimate.</li> <li>Only Au was interpolated into the block model.</li> <li>The parent block dimensions used were 10 m NS by 5 m EW by 5 m vertical with sub-cells of 1.25 m by 1.25 m by 1.25 m. The block model was rotated on a bearing of 320° to match the approximate strike of the mineralisation. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the Tim's Dome dataset.</li> <li>An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography derived from a combination of mineralised domains. Up to three passes were used for each domain. First pass had a range of 40 m, with a minimum of 6 samples. For the second pass, the range was extended to 80 m, with a minimum of 4 samples. For the third pass, the range was extended to 160 m, with a minimum of 2 samples. A maximum of 20 samples was used for each pass with a maximum of 4 samples per hole.</li> <li>No assumptions were made on selective mining units.</li> <li>Only Au assay data was analysed, therefore correlation analysis was not conducted.</li> <li>The deposit mineralisation was constrained by wireframes constructed using a 0.4 g/t gold cut-off grade and geological logging. The wireframes were applied as hard boundaries in the estimate.</li> <li>Statistical analysis was carried out on data from 58 lodes. The high coefficient of variation and the scattering of high-grade values observed on the histogram for some of the lodes suggested that high grade cuts were required if linear grade interpolation was to be carried out. It was determined that high grade cuts between 5 g/t and 15 g/t gold was warranted for some domains, resulting in four composites being cut.</li> <li>Validation of the model included detailed comparison of composite grades and block grades by strike and elevation. Validation plots showed good correlation between the composite grades and the block model grades.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 0.5 g/t gold. The cut-off grade was based on open pit reporting cut-off grades utilised at Antipa's nearby Minyari and WACA gold-copper deposits, situated approximately 35 km to the northeast</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>of Tim's Dome.</p> <ul style="list-style-type: none"> <li>The shallow gold mineralisation defined at Tim's Dome could provide an additional source of oxide mill feed to any future processing plants built at nearby gold deposits within the Project. Further geological, geotechnical, engineering and metallurgical studies are required to further define gold mineralisation and determine the viability of mining at Tim's Dome.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ashmore has assumed that the deposit could be mined using open pit mining techniques.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical testing has been conducted on the Tim's Dome deposit. Antipa expects that similar overall recoveries could be achieved to the nearby Minyari and WACA deposits of 90 to 95%.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding environmental factors. Antipa will work to mitigate environmental impacts as a result of any future mining or mineral processing.</li> </ul>

Criteria	JORC Code explanation	Commentary
Bulk density	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling has been conducted at the deposit; however no designated density data has been obtained.</li> <li>Bulk density has been assigned in the block model based on values derived from similar deposits in the region. A value of 1.8 t/m<sup>3</sup> was assigned to alluvial cover, 2.0 t/m<sup>3</sup> was assigned to oxide material and 2.4 t/m<sup>3</sup> was assigned to transitional material.</li> <li>It is assumed there are minimal void spaces in the rocks at Tim's Dome.</li> <li>Antipa will obtain bulk density measurements from future diamond drilling at the deposit.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resource was classified based on data quality, sample spacing, and lode continuity. Drilling by Antipa has largely verified the historical drilling and assay data and the predominant drill hole spacing is 50 m by 20 m. At this stage of assessment of the deposit, continuity is assumed rather than verified. Therefore, the deposit meets the criteria for an Inferred Mineral Resource.</li> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The lode geometry and continuity has been adequately interpreted to reflect the applied level of Inferred Mineral Resource. The data quality is reasonable, and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses.</li> <li>The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>No historical mining has been conducted at the deposit.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"><li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	