



GEOPHYSICAL SURVEY IDENTIFIES NEW GREENFIELD TARGETS RIO TINTO – ANTIPA CITADEL JOINT VENTURE PROJECT

HIGHLIGHTS

- 2019 Gradient Array Induced Polarisation survey at the Citadel Project Joint Venture with Rio Tinto Exploration Pty Limited ("Rio Tinto") identifies six new greenfield goldcopper targets proposed to be drill tested in 2020.
- New targets located within 30 to 40km of Rio Tinto's Winu copper-gold-silver deposit within a similar geological setting.
- Citadel hosts a global Mineral Resource of 63.8Mt at 0.8 g/t gold and 0.2% copper for 1.6Moz gold and 127kt copper, in close proximity to Rio Tinto's Winu copper-gold project.
- Results from the Airborne gravity survey over the Citadel Project expected in March.
- Rio Tinto moving ahead with the next stage of the Citadel Project earn-in whereby it can increase its interest to 65% by sole funding \$14 million in exploration expenditure.

OVERVIEW

Antipa Minerals Ltd (ASX: AZY) ("Antipa" or "the Company") is pleased to provide an exploration update for the Citadel Project in Western Australia's prospective Paterson Province, 80km north of Newcrest's Telfer gold-copper-silver mine in northern Western Australia and within 5km of Rio Tinto's recent Winu copper-gold deposit (Figures 1 to 3). Exploration is being fully funded by Rio Tinto Exploration Pty Limited ("Rio Tinto") pursuant to a Farm-in and Joint Venture Agreement ("Citadel Farm-in").

Antipa's Paterson Province dual exploration strategy strives to deliver both greenfield discoveries and increase brownfield gold and/or copper resources. Exploration activities within the Citadel Project are complementary to this strategy.

EXPLORATION PROGRAMME – GAIP GEOPHYSICS

The major ground based electrical geophysical survey, using the gradient array induced polarisation ("GAIP") technique, completed late 2019 across approximately 70 line-km has identified six targets within the Citadel Project summarised in Figure 3 and Table 1. The GAIP technique has the ability to identify disseminated sulphide mineralisation, such as that associated with Telfer, Winu and Calibre style gold-copper-silver type mineral systems. These six new greenfield GAIP targets demonstrated elevated chargeability responses approximately 1.5 to 2 times above background and are proposed to be drill tested during 2020.

2020 EXPLORATION PROGRAMME

As reported on the 29th January, the proposed 2020 Citadel exploration programme is outlined below, subject to any changes which may be made consequent upon results, field conditions and ongoing review:

- Induced Polarisation ("IP") surveys along favourable structural corridors;
- Interpretation of the recently completed airborne gravity survey which covered the entire project;
- Further evaluation of the Calibre gold-copper-silver deposit, including possible drilling;
- Remodelling of the broader Magnum Dome and selection of additional drill targets targeting high-grade gold-copper mineralisation;
- Drilling of targets generated from the 2019 exploration programmes; and
- Identification and drill testing of additional greenfield targets based on the airborne gravity and IP surveys

The Citadel Project is concealed beneath shallow cover, ranging from just 10 to 100m, and hosts a global Mineral Resource of 63.8Mt at 0.8 g/t gold and 0.2% copper for 1.6Moz gold and 127kt copper (Figure 1). The resource is split over two deposits, Calibre (47.7Mt at 0.9 g/t gold and 0.15% copper for 1.3Moz gold and 69,500t copper) and Magnum (16.1Mt at 0.7 g/t gold and 0.37% copper for 339,000oz gold and 57,800t copper), both within 45km of Rio Tinto's Winu copper-gold-silver deposit which Rio Tinto has formally moved from an "advanced project" to the studies stage.

Under the terms of the Farm-in Agreement, Rio Tinto may spend an additional \$14 million within 5 years to increase its interest in the Citadel joint venture from 51% to 65%. Subject to Rio Tinto earning the 65% interest in the Citadel Joint Venture and Antipa then electing not to contribute to expenditure to maintain its 35% interest, Rio Tinto has the ability to increase its interest to 75% by sole funding a further \$35 million within a further three years with the total of Rio Tinto's sole funding potentially being \$60 million.

For further information, please visit www.antipaminerals.com.au or contact:

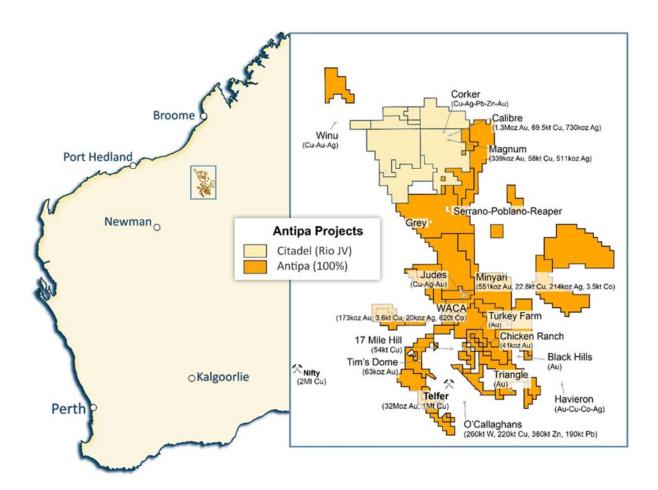
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Table 1: Summary of Citadel Project 2019 GAIP Targets – Sorted by Target Rank

Target ID	Target Rank	Length Metres	GAIP Anomaly Description	Anomalism – Historic Drilling
Magnum West	1	1,000	Elevated IP chargeability (max. 12.01 msec) co-incident with interpreted mafic intrusions / alteration and meta-sediments located 3.5km west of the Magnum gold-copper deposit on the NW corner of the Magnum Dome structure. Gravity low. Cover c75m.	No Drilling over IP target - Anomalous Cu+Ni+Zn from adjacent air core drill holes testing magnetic anomalies coincident with NW "tail" of IP anomaly.
AZY_10	2	2,700	Elevated IP chargeability (max. 11.55 msec) co-incident with interpreted mafic intrusions / alteration and meta-sediments located 7.3km west of the Calibre gold-copper deposit on western margin of granite pluton. Gravity low. Cover c70m.	No Drilling. NB: 2,700m length includes 1,200m gap between GAIP lines.
Ludmilla	3	520	Isolated elevated IP chargeability anomaly (max. 11.04 msec) located within major NNW structure on western limb of folded metasediments 2.6km west of fertile Rimfire granite pluton . Gravity high. Cover c50m.	No Drilling.
Hangfire	3	820	Isolated elevated IP chargeability (max. 10.96 msec) with co-incident magnetic high anomaly within interpreted mafic intrusions / alteration and meta-sediments on the SW corner of the Rimfire domal structure. Gravity gradient. Cover c30m.	One 33m air core drill hole over IP target weak Ag only - Anomalous Ag+Cu+Ni±Co±W±Zn±Au from nearby air core drill holes testing magnetic anomalies.
Elena	3	650	Isolated elevated IP chargeability (max. 9.88 msec) proximal to mafic intrusion / alteration 900m SSW of AZY_10 IP target. Gravity gradient. Cover c70m.	No Drilling.
Vladimir	3	800	Isolated elevated IP chargeability (max. 11.78 msec) 1.1km SW of Magnum West IP target. Gravity gradient. Cover c75m.	No Drilling.

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 5,660km², including the 1,330km² 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, Tim's Dome and Chicken Ranch 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. All dollar figures are in AUD unless stated otherwise.



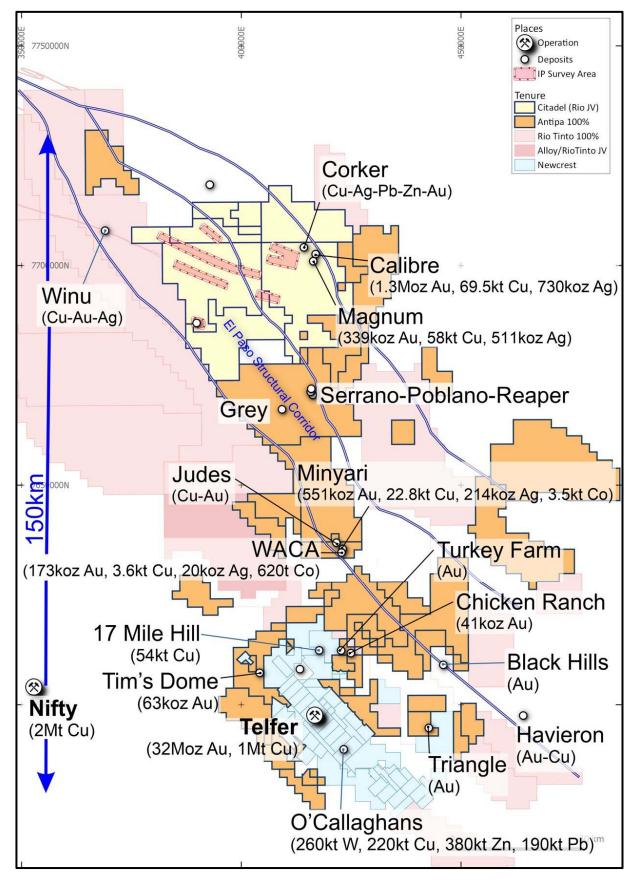


Figure 1: Plan showing location of Antipa 100% owned tenements, Antipa-Rio Tinto Citadel Farm-in (including major GAIP survey perimeter), Rio Tinto's Winu discovery, Greatland Gold plc's Havieron deposit, Newcrest Mining Ltd's Telfer Mine and O'Callaghans deposit, and Metals X Nifty Mine.

NB: Regional GDA94 / MGA Zone 51 co-ordinates, 50km grid.

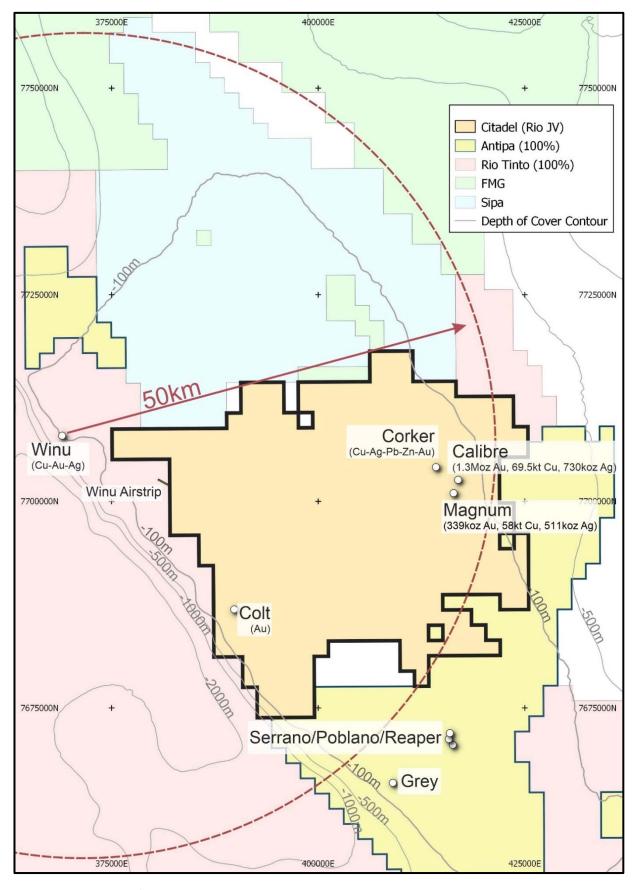


Figure 2: Summary of the Antipa Minerals - Rio Tinto Joint Venture Citadel Project location, Mineral Resources, depth of cover and distance from Rio Tinto's Winu copper-gold-silver deposit.

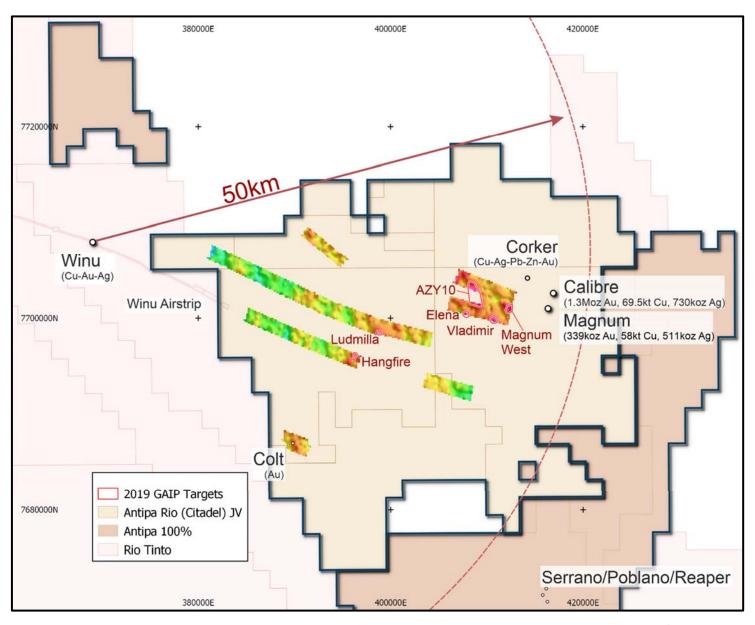


Figure 3: Plan showing the Antipa-Rio Tinto Citadel Project Joint Venture, 2019 GAIP survey colour contoured images, six new greenfield IP targets and deposits including Rio Tinto's Winu Cu-Au-Ag deposit and the Calibre and Magnum Mineral Au-Cu-Ag Resources. NB: Regional GDA94 / MGA Zone 51 co-ordinates, 20km grid.

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 undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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, all of which are available to view on www.asx.com.au. Mr Mason, whose details are set out above, was the Competent Person in respect of the Exploration Results in these original market announcements.

Various information in this report which relates to Exploration Results have been extracted from the following announcements:

- Report entitled "Citadel Project Phase 2 Drilling Programme Twin Success" created on 13 December 2012;
- Report entitled "Citadel Project Calibre Deposit Major Gold-Copper Discovery" created on 4 February 2013;
- Report entitled "Citadel Project 2013 Exploration Programme Calibre Deposit Focus of Phase 1" created on 11
 February 2013;
- Report entitled "Calibre Exploration Update" created on 25 February 2013;
- Report entitled "Calibre Deposit Third Drillhole Preliminary Results" created on 7 March 2013;
- Report entitled "Calibre Deposit Third Drillhole Assay Results" created on 27 March 2013;
- Report entitled "Calibre Deposit Assay Results and New DHEM Anomaly" created on 15 April 2013;
- Report entitled "Calibre Deposit Fifth Drillhole Assay Results" created on 19 April 2013;
- Report entitled "Calibre Deposit Sixth Drillhole Assay Results" created on 29 April 2013;
- Report entitled "Calibre Deposit FLEM and Magnetics Survey Results" created on 15 May 2013;
- Report entitled "Calibre Deposit Seventh Drillhole Assay Results" created on 1 August 2013;
- Report entitled "Calibre Deposit Exploration Update" created on 2 September 2013;
- Report entitled "Calibre Deposit Maiden Mineral Resource Estimate" created on 28 October 2013;
- Report entitled "Calibre Deposit Positive Concept Study completed by Snowden" created on 30 October 2013;
- Report entitled "Surveys extend and upgrade Calibre and Corker target areas" created on 26 March 2014;
- Report entitled "Phase 2 Geochemical Surveys Define Calibre and Matilda Drill Targets" created on 28 April 2014;
- Report entitled "2014 Exploration Programme Drilling Commences at Calibre" created on 16 May 2014;
- Report entitled "Positive Metallurgical Results for Calibre" created on 28 May 2014;
- Report entitled "2014 Drilling Programme Update" created on 29 May 2014;
- Report entitled "2014 Drilling Programme Update" created on 25 July 2014;
- Report entitled "Citadel Project Calibre High Grade Opportunity" created on 9 September 2014;
- Report entitled "Calibre & Magnum Mineral Resources JORC 2012 Updates" created on 23 February 2015;
- Report entitled "Calibre Drilling Programme Commenced" created on 15 May 2015;
- Report entitled "Calibre Deposit Drilling Update No. 1" created on 18 June 2015;
- Report entitled "Calibre Deposit Drilling Update No. 2" created on 2 July 2015;
- Report entitled "Calibre Deposit Drilling Update No. 3" created on 10 July 2015;
- Report entitled "Calibre Deposit Drilling Update No. 4" created on 28 July 2015;
- Report entitled "Rio Tinto Antipa Citadel Project Joint Venture" created on 9 October 2015;
- Report entitled "Calibre Drilling October 2015 No. 1" created on 16 October 2015;
- Report entitled "Calibre Drilling October 2015 No. 2" created on 22 October 2015;
- Report entitled "Calibre 2015 Phase 2 Drilling Update No. 3" created on 17 November 2015;
- Report entitled "Calibre 2015 Phase 2 Drilling Update" created on 30 November 2015;
- Report entitled "Calibre 2015 Drilling Phase 2 Results" created on 16 December 2015;
- Report entitled "Citadel Project IP Survey Identifies Multiple Chargeability Anomalies along 20km Calibre Trend" created on 24 June 2016;
- Report entitled "Rio Tinto Elects to Proceed to Stage 2 of Citadel Farm-In" created on 12 April 2017;
- Report entitled "Citadel Project Rio Tinto Funded 2017 Exploration Programme" created on 12 April 2017;
- Report entitled "Rio Tinto Elects to Proceed to Stage 2 of Citadel Farm-In" created on 12 April 2017;
- Report entitled "Citadel Project Exploration Update" created on 2 October 2017;
- Report entitled "Citadel Project Exploration Update" created on 8 November 2017;
- Report entitled "Calibre Deposit Mineral Resource Update" created on 17 November 2017;
- Report entitled "Citadel Project 2018 Exploration Programme" created on 27 March 2018;

- Report entitled "Rio Tinto Resumes Drilling at the Citadel Farm-in Project" created on 4 September 2018;
- Report entitled "Citadel Project Rio JV Additional AEM Survey" created on 20 November 2018;
- Report entitled "Rio Tinto Citadel Farm-in Project 2018 Exploration Update" created on 11 December 2018;
- Report entitled "Multiple Gold-Copper Targets identified on Rio Tinto-Antipa Citadel Farm-in Project" created on 25 March 2019;
- Report entitled "Indicative \$3.4M 2019 Citadel Exploration Programme" created on 27 March 2019;
- Report entitled "Citadel Project \$3.4M 2019 Exploration Programme" created on 16 May 2019;
- Report entitled "Exploration Update on Rio Tinto-Antipa Citadel Farm-in" created on 29 July 2019;
- Report entitled "Citadel Project Calibre Drilling Commences" created on 6 September 2019;
- Report entitled "Calibre Drilling Identifies Significant Deposit Extensions" created on 20 November 2019;
- Report entitled "Citadel Project New Airborne Gravity Survey" created on 22 November 2019;
- Report entitled "Significant Extensions to Mineralisation at Calibre" created on 20 December 2019;
- Report entitled "Rio Tinto Earns 51% JV Interest in Citadel Project" created on 9 January 2020; and
- Report entitled "Rio Tinto Proceeds with Next \$14M Earn-in Stage at Citadel" created on 29 January 2020.

All of which are available to view on www.antipaminerals.com.au and 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. Mr Roger Mason, whose details are set out above, was the Competent Person in respect of the Exploration Results in these original reports.

Competent Persons Statement – Mineral Resource Estimations for the Minyari-WACA Deposits, Tim's Dome and Chicken Ranch Deposits, Calibre Deposit and Magnum Deposit: The information in this document that relates to 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 with Competent Persons Kahan Cervoj and Susan Havlin, the Tim's Dome and Chicken Ranch deposits Mineral Resources is extracted from the report entitled "Chicken Ranch and Tims Dome Maiden Mineral Resources" created on 13 May 2019 with Competent Person Shaun Searle, the Calibre deposit Mineral Resource information is extracted from the report entitled "Calibre Deposit Mineral Resource Update" created on 17 November 2017 with Competent Person John Graindorge 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 with Competent Person Patrick Adams, all of which are available to view on www.antipaminerals.com.au and 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 and that all material assumptions and technical parameters underpinning the estimates in the relevant original market announcements continue to apply and have not materially changed. 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 17 November 2017 which is available to view on www.antipaminerals.com.au and 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 and 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.

Mineral Resource Estimates

North Telfer Project and Paterson Project

Deposit and Gold Cut-off Grade*	Resource Category	Tonnes (Mt)	Gold Grade (g/t)	Copper Grade (%)	Silver Grade (g/t)	Cobalt (ppm)	Gold (oz)	Copper (t)	Silver (oz)	Cobalt (t)
Chicken Ranch Area 0.5 Au	Inferred	0.8	1.6	-		-	40,300	-		
Tim's Dome 0.5 Au	Inferred	1.8	1.1	4	140	-	63,200		-	-
Chicken Ranch Area + Tim's Dome	Total	2.4	1.3	÷	**		103,500		*	-
Minyari 0.5 Au	Indicated	3.2	1.9	0.3	0.7	590	192,610	9,600	75,660	1,860
Minyari 0.5 Au	Inferred	0.7	1.7	0.24	0.6	340	36,260	1,560	13,510	220
Minyari 0.5 Au	Sub-Total	3.8	1.9	0.29	0.7	550	228,870	11,160	89,170	2,080
Minyari 1.7 Au	Indicated	0.2	2.6	0.29	0.9	430	18,740	650	6,800	100
Minyari 1.7 Au	Inferred	3.7	2.6	0.3	1.0	370	303,000	10,950	117,550	1,360
Minyari 1.7 Au	Sub-Total	3.9	2.6	0.3	1.0	380	321,740	11,600	124,350	1,460
Minyari	Total	7.7	2.2	0.3	0.9	460	550,610	22,760	213,520	3,540
WACA 0.5 Au	Inferred	2.8	1.4	0.11	0.2	180	121,950	3,120	15,920	500
WACA 1.7 Au	Inferred	0.5	2.9	0.09	0.2	230	50,780	510	3,850	120
WACA	Total	3.3	1.6	0.11	0.2	190	172,730	3,630	19,770	620
Minyari + WACA Deposits	Grand Total	11.0	2.0	0.24	0.7	380	723,340	26,390	233,290	4,060
North Telfer + Paterson Projects – Gold Only	Grand Total	13.5	1.9	§ .		Æ	826,840	- 19	8-	

^{*0.5} Au = Using a 0.5 g/t gold cut-off grade above the 50mRL (NB: potential *Open Cut* cut-off grade)
*1.7 Au = Using a 1.7 g/t gold cut-off grade below the 50mRL (NB: potential *Underground* cut-off grade)

Citadel Project (Rio Tinto JV)

Deposit and Gold Cut-off Grade**	Resource Category	Tonnes (Mt)	Gold Grade (g/t)	Copper Grade (%)	Silver Grade (g/t)	Tungsten (ppm)	Gold (oz)	Copper (t)	Silver (oz)	Tungsten (t)
Calibre 0.5 Au Equiv	Inferred	47.7	0.9	0.15	0.5	217	1,300,000	69,500	730,000	10,300
Magnum 0.5 Au Equiv	Inferred	16.1	0.7	0.37	1.0	8	339,000	57,800	511,000	-
Calibre + Magnum Deposits	Total	63.8	0.8	0.2	0.6	161	1,639,000	127,300	1,241,000	10,300

^{**0.5} AuEquiv = Refer to details provided by the Notes section

Note: Citadel Project Mineral Resources are tabled on a 100% basis, with Antipa's current joint venture interest being 49%

CITADEL PROJECT PATERSON PROVINCE – 2019 Gradient Array Induced Polarisation (GAIP) Survey:

JORC Code 2012 Edition: Table 1 - Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 2019 Citadel Project Rio Tinto – Antipa Minerals Joint Venture Induced Polarisation Survey: The ground based 2019 Induced Polarisation survey was undertaken by Moombarriga Geoscience Pty Ltd, an independent geophysical contractor/service provider. The IP survey employed the following equipment and sampling techniques:
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	Not applicable to geophysical survey.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Not applicable to geophysical survey.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Not applicable to geophysical survey.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Not applicable to geophysical survey.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 The ground Induced Polarisation (IP) survey was undertaken by Moombarriga Geoscience Pty Ltd, an independent geophysical contractor/service provider. The survey was carried out using a gradient array configuration with 100m spaced receiver electrodes. A total of eleven gradient arrays were surveyed for a total of approximately 190 line-km. The Induced Polarisation equipment consisted of Transmitter(s) and Receiver apparatus. A 50kw motor generator drove the Search Ex 50kva transmitter supplying up to 50.0 kva continuous power. Transmitter electrodes (aluminum plates) were used to inject a stable current. The secondary voltage, denoted Vs, was nominally measured every 100 metres, using a SMARTem24 16 Channel receiver or Search Ex 32 Channel receiver. The receiver was used to take all of the data for the survey. From the Vs Apparent Resistivity and Apparent Chargeability were derived. The decay curve was separated into pre-programmed windows. Stack size was typically 20 cycles. Porous Pot receiver electrodes (Pb/PbCl₂ solution) were used. This release has no reference to previously unreported drilling, sampling, assays or mineralisation.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	Not applicable to geophysical survey.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 km = kilometre; m = metre; mm = millimetre. IP Stations were determined by a standard hand-held Garmin GPS. The IP survey coordinates are in GDA94 MGA Zone 51 coordinates. Local IP survey coordinates are for the purposes of line and station reference points. This release has no reference to previously unreported drilling.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The IP survey line spacing was 300 – 800m IP receiver electrodes were spaced at 100mNot applicable to geophysical survey.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	Not applicable to geophysical survey.
Sample security	The measures taken to ensure sample security.	Not applicable to geophysical survey.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 All digital IP data was subjected to rigorous auditing and vetting by the independent geophysical contractor/service provider and data manager Moombarriga Geoscience Pty Ltd. In addition, all digital IP data was also subjected to an audit by independent geophysical consultants Resource Potentials Pty Ltd.

CITADEL PROJECT PATERSON PROVINCE – 2019 Gradient Array Induced Polarisation (GAIP) Survey:

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The GAIP survey was located within Exploration Licenses: E45/2874; E45/2876; E45/2877; E45/4212; and E45/4561. Currently Antipa Mineral Ltd has a 49% interest and Rio Tinto has a 51% in all Citadel Project tenements and there are no royalties on these tenements. On 9 October 2015 Farm-in and JV Agreements were executed between Antipa and Rio Tinto Exploration Pty Limited (Rio Tinto). Refer to the main body of the report for further information pertaining to these agreements. E45/2876, E45/2877 and E45/4561 are contained completely within land where the Martu People have been determined to hold Native Title rights. No historical or environmentally sensitive sites have been identified in the area of work. E45/2874, E45/2901, E45/4212, E45/4213 and E45/4214 are contained completely within land where the Nyangumarta People have been determined to hold Native Title rights. No historical or environmentally sensitive sites have been identified in the area of work. The tenements are all in 'good standing' with the Western Australian DMIRS. There are no known impediments exist, including to obtain a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Prior to 1991 limited to no mineral exploration activities. 1991 to 1996 BHP Australia completed various regional airborne geophysical surveys (e.g. aeromagnetics, radiometrics, GeoTEM, ground magnetics, surface EM), geochemical Air core and selected diamond core drilling programmes across a significant area which covered the Citadel Project. Whilst this era of exploration highlighted a number of areas as being variously anomalous, BHP did not locate any basement (Proterozoic) precious or base metal mineralisation. In 1995 BHP Minerals completed an MMI-A/MMI-B soil programme over an area which was ultimately found to be the region within which the Magnum deposit was located. 1997 to 2002 JV partners Croesus-Gindalbie completed minor surface geophysical surveys (e.g. electromagnetics) and various drilling programmes across parts of the Citadel Project (i.e. 17 x Diamond core, 10 x RC and 134 x Air core drill holes) leading to the discovery of the Magnum Au-Cu-Ag deposit, and its partial delineation, in 1998. 2002 to 2003 JV partners Teck Cominco and Croesus-Gindalbie completed detailed aeromagnetic and radiometric surveys over the entire Citadel Project, Pole-Pole IP over 8 targets and limited drilling (i.e. 4 x Diamond core holes) within the Citadel Project.

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		 2004 to 2005 JV partners NGM Resources and Croesus-Gindalbie completed limited drilling (i.e. 3 x Diamond core holes) at selected Citadel Project prospects intersecting minor Au-Cu-Ag mineralisation at the Colt prospect. 2006 to 2010 Glengarry Resources/Centaurus Metals undertook re-processing of existing data and re-logging of some drill core. No drilling or geophysical surveys were undertaken, and so no new exploration results were forthcoming. 2011 to 2015 Antipa Minerals Ltd exploration of the Citadel Project including both regional and prospect/area scale geophysical surveys (i.e. VTEM, ground EM, DHEM, ground magnetics and ground gravity) and geochemical surveys (i.e. MMI-M™ and SGH™ soil programmes) and drilling programmes (i.e. diamond core and RC) resulting in two greenfield discoveries in 2012, i.e. Calibre and Corker, and subsequent drilling programmes. October 2015 to March 2017 Antipa Minerals Ltd operators under a Farm-in Agreement executed on the 9 October 2015 between Antipa and Rio Tinto Exploration Pty Limited ("Rio Tinto"), a wholly owned subsidiary of Rio Tinto Limited. RC drilling at Calibre late 2015, and in 2016 an extensive IP survey, a regional target RC drilling programme and single (deep) diamond core hole were completed. April 2017 to March 2019 Rio Tinto operators under the Farm-in Agreement (see above). 2017 and 2018 exploration activities included: Further extensive IP survey (2017) in the southeastern portion of E45/2877; Air Core drilling Programme (2017) testing targets located on E45/2876 (Rimfire area) and 45/2877 (Calibre area); RC drilling programme (2018) testing several targets located on E45/2876 and 45/4561; and Two (i.e. 2017 and 2018) aerial electromagnetic surveys primarily over various portions of all of the Citadel Project tenements have been completed. March t
Geology	Deposit type, geological setting and style of mineralisation.	 The Citadel Project region of the Paterson Province is located on the Anketell Shelf of the Yeneena Basin, a Neoproterozoic aged sequence of meta-sedimentary rocks, mafic intrusives and granitoids that has been intruded by post-mineralisation Cambrian dolerite dykes and is entirely covered by younger Phanerozoic sediments typically ranging in thickness of between 10 to 130 m. The Paterson is a low to moderate grade metamorphic grade (i.e. greenschist to lower-amphibolite) terrane, with local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment.

Criteria	JORC Code explanation	Commentary
		 Precious and/or base metal mineralisation is hydrothermal in nature and is shear, fault and strata/contact controlled and is typically sulphide bearing. Mineralisation styles include vein, stockwork, breccia and skarns. Mineralisation includes chalcopyrite, pyrite, pyrrhotite, bismuthine, sphalerite, galena, scheelite and wolframite.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 A summary of all available information material to the understanding of the exploration region exploration results can be found in the main body of the report (including drill hole collar table providing collar co-ordinates, orientations and length for all reported drill holes). A summary of all available previously reported information material to the understanding of the exploration region exploration results can also be found in previous Western Australia (WA) DMIRS publicly available reports. All the various technical and exploration reports are publicly accessible via the WA DMIRS' online WAMEX system. The specific WA DMIRS WAMEX and other reports related to the exploration information the subject of this public disclosure have been referenced in previous public reports. Antipa Minerals Ltd publicly disclosed reports provide details of all exploration completed by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 This release has no reference to previously unreported drill results, sampling, assays or mineralisation. Antipa Minerals Ltd publicly disclosed reports provide details of all exploration completed by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au. Reported average intersection grades may be length-weighted averages, with a minimum intersection interval length of 1 m and maximum internal dilution allowed is 10 m. Metal equivalence is not used in this report.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 Regional Geophysical Targets (AEM ± aeromagnetic): The drill section spacing and sampling, at this stage, is insufficient to establish the geometrical relationships between the drill holes and any mineralised structures. Therefore, at this stage the reported intersection lengths are down hole in nature and the true width, which will be dependent on the local mineralisation geometry/setting, is not known. Calibre Deposit: The reported intersection lengths are down hole in nature and the true width, which will be dependent on the local mineralisation geometry/setting, is not known with complete certainty.

Criteria	JORC Code explanation	Commentary
		 For the diamond core holes down hole intersections represent between 30 to 75% of the mineralisation domain/envelope true width depending on the drill hole orientation, both azimuth and dip.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 All appropriate maps (with scales) and tabulations of GAIP anomalies are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports. This release has no reference to previously unreported drill results, sampling, assays or mineralisation. Antipa Minerals Ltd publicly disclosed reports provide maps and sections (with scales) and tabulations of intercepts generated by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	 All significant results are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports. This release has no reference to previously unreported drill results, sampling, assays or mineralisation. Antipa Minerals Ltd publicly disclosed reports provide details of all significant exploration results generated by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 This announcement refers to previous exploration results including geophysics, drill results and geology which can be found in previous public reports. All meaningful and material information has been included in the body of the text or can sometimes be found in previous WA DMIRS WAMEX publicly available reports. Zones of mineralisation and associated waste material have been measured for their specific gravity ("density") at both the Calibre and Magnum deposits located on exploration licence E45/2877. The measurement used the hydrostatic/gravimetric method (Archimedes Principle of buoyancy). Multi element assaying has been conducted variously for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium. Hyperspectral and high-resolution core imagery may be collected in 2020 for the 2019 diamond core using a CoreScan Hyperspectral Core Imager, or similar technology. To date no downhole 'logging' surveys have been completed for the 2019 drill holes. Geotechnical logging (e.g. Recovery, RQD and Fracture Frequency) is not possible for RC drill material; however, all diamond core holes (i.e. Calibre, Magnum, Corker, Blue Steel, etc) receive geotechnical logging. No geotechnical logging was obtained from the WA DMIRS WAMEX reports. Downhole information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is not possible for RC drill material; however all diamond core holes (i.e. Calibre, Magnum, Corker, Blue Steel, etc) receive structural logging which can be obtained from the Company's pre-existing SQL database and WA DMIRS WAMEX reports.

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	 Metallurgical test-work results available on these particular tenements is restricted to the Calibre gold-copper-silver-tungsten deposit. Preliminary metallurgical test-work results are available for the Calibre deposit, this report is available to view on www.asx.com.au The Calibre deposit's simple and coarse grained copper mineralogy, is almost exclusively chalcopyrite. No copper oxide or other copper sulphide minerals were observed. The gangue mineralogy is dominated by quartz and feldspar. The straightforward mineralogy has produced very favourable metallurgical outcomes from the low copper ore grades of Calibre. Preliminary metallurgical test work was completed at the Bureau Veritas Minerals Pty Ltd laboratories in Perth, Western Australia under the management of Bureau Veritas metallurgists and Antipa's Managing Director. A master 39 kilogram metallurgical composite sample was composed of material from 90 individual samples. All samples were collected from diamond core representative of the Calibre gold-copper-silver-tungsten mineralisation. As no oxide mineralisation is known to occur at Calibre the samples were all of primary and transitional mineralisation. The master metallurgical composite sample was constructed to have precious and base metal grades comparable to the Calibre Inferred Mineral Resource. The head grade for the composite used in the definitive metallurgical test was 0.63 g/t gold, 0.23% copper, 0.80 g/t silver, 0.02% tungsten tri-oxide and 0.97% sulfur. The preliminary metallurgical test work which focused on the precious and base metals has comprised: Mineralogical, and metallurgical data investigation via the QEMSCAN® micro-analysis system; HLS density beneficiation test work; Sulphide Flotation; Tungsten Flotation; and Cyanide leaching of sulphide flotation tailings f
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		 A tungsten concentrate. Preliminary metallurgical test work has shown that saleable products for copper, gold and silver can
		 be produced from the Calibre mineralisation at good metallurgical recoveries. Further test-work is required with respect to tungsten concentrate specifications; however, the initial results are considered encouraging, including mineralogy investigation using QEMSCAN® which
		revealed the tungsten minerals to be comparatively coarse grained and well liberated. As a consequence, a conservative recovery of 50% was assumed for tungsten.

Criteria	JORC Code explanation	Commentary
		 Heavy Liquid Separation (HLS) test work was used to assess the amenability of the ore to physical upgrade processes such as gravity. The HLS results highlighted the excellent density beneficiation qualities of the Calibre mineralisation. Geophysical surveys carried out over significant regions of the Citadel Project include airborne electromagnetics, aeromagnetics, airborne radiometrics, some induced polarisation/resistivity and ground gravity surveys, and magnetic susceptibility from drill sample material. Satellite imagery is also available.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Planned further work: Ongoing review and interpretations of the 2019 and historical exploration data; Planning and execution of follow-up exploration activities to identify potential high-grade mineralisation; Future modelling/interpretation of airborne gravity survey data; and Full geological interpretation including 3D modelling where data supports. All appropriate maps (with scales) and tabulations of GAIP anomalies are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports.