MEDIA RELEASE
23 February 2015

ANTIPAMINERALS
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Citadel Project

Calibre and Magnum Deposit Mineral Resource JORC 2012 Updates

Highlights

- **Combined Mineral Resources of 1.2 million ounces of gold and 139,000 tonnes of copper, open in all directions.**
- **Calibre Deposit Inferred Mineral Resource estimated and reported in accordance with JORC 2012 by Snowden Mining Industry Consultants of 47.8 million tonnes grading 0.56 g/t gold and 0.17% copper for 867,000 ounces of gold and 81,000 tonnes of copper.**
- **Magnum Deposit Inferred Mineral Resource estimated and reported in accordance with JORC 2012 by Cube Consulting of 16.1 million tonnes grading 0.66 g/t gold and 0.36% copper for 339,000 ounces of gold and 58,000 tonnes of copper.**
- **Significant potential to:**
    - **Increase the average grade by drilling higher grade gold and copper zones present in both deposits;**
    - **Increase the size of both Mineral Resources significantly - only 15 to 25% of the Calibre geophysical anomaly is included in the Calibre Mineral Resource and both deposits remain open in all directions.**

Australian precious metals and base metal exploration company Antipa Minerals (ASX:AZY) ("Antipa" or the "Company") is pleased to announce Mineral Resource updates reported in accordance with the JORC Code 2012 for its Calibre and Magnum deposits, forming part of the Citadel Project located in Western Australia's word-class Proterozoic Paterson Province.

Completion of preliminary metallurgical test-work by the Company has facilitated JORC 2012 Mineral Resource reporting compliance on a metal equivalent basis for its Calibre and Magnum deposits located in the Citadel Project.

ASX: **AZY**

Corporate Directory

Stephen Power
Executive Chairman
Roger Mason
Managing Director
Mark Rodda
Non-Executive Director
Peter Buck
Non-Executive Director
Gary Johnson
Non-Executive Director

Company Background

Listed on ASX April 2011 following successful completion of A$10M IPO.

Citadel Project acquired from Centaurus Metals April 2011 for shares/options upon IPO completion.

North Telfer Project acquired from Paladin Energy May 2011 pursuant to an agreement.

Corker high grade precious and base metal deposit discovered April 2012.

Calibre gold-copper-silver-tungsten deposit discovered November 2012.

Paterson Project acquired from Yandal Investments (a Mark Creasy company) September 2013 for shares.

Company Projects

Citadel Project covering 1,111km^2 of prospective granted exploration licences in the World-Class underexplored Proterozoic Paterson Province of Western Australia.

Citadel Project is located approximately 75km north of Newcrest's Telfer gold-copper-silver mine and includes the gold-copper-silver± tungsten Magnum and Calibre deposits and the high grade polymetallic Corker deposit.

North Telfer Project covering an additional 1,310km^2 of prospective granted exploration licences located approximately 20km north of the Telfer mine.

Paterson Project covering an additional 1,630km^2 of prospective exploration licences (225km^2 granted) located as close as 5km from the Telfer mine.

Calibre Deposit - Mineral Resource

The Mineral Resource estimate for the Calibre Deposit is shown in Table 1 ("Mineral Resource"). The Mineral Resource estimate was compiled by Snowden Mining Industry Consultants ("Snowden") and reported in accordance with guidelines and recommendations of the JORC Code (2012) based on a 0.5 g/t gold metal equivalent cut-off. The deposit is amenable to open pit mining.

Table 1: Calibre Mineral Resource Statement (JORC 2012)

February 2015 using a 0.5 g/t gold equivalent cut-off grade

	Resource Category (JORC 2012)	Tonnes (Mt)	Au (g/t)	Cu (%)	Ag (g/t)	W (%)	Au (koz)	Cu (t)	Ag (koz)	W (t)
Eastern Zone	Inferred	31.7	0.61	0.17	0.61	0.03	617	53,600	622	8,670
Western Zone	Inferred	16.1	0.48	0.17	0.57	0.03	251	27,200	296	5,540
Total	**Inferred**	**47.8**	**0.56**	**0.17**	**0.60**	**0.03**	**867**	**80,800**	**918**	**14,200**

Small discrepancies may occur due to the effects of rounding.

Calibre Deposit – Grade and Size Opportunities

Recent interpretation of the Calibre drilling has revealed that the Calibre mineralisation bears a number of similarities to the mineralisation of the world-class Telfer gold-copper-silver deposit. In particular, variations in the hardness of rock units at Calibre, when combined with other structures, give rise to similar high-grade Reef style mineralisation as that seen at Telfer.

Previous drilling was not designed to test these recently interpreted Reef style structures. Future drilling will target these structures and, if successful, could significantly increase the average grade of the Calibre Mineral Resource via delineation of additional higher grade gold and copper zones.

Additionally, only 210m along strike of a combined geophysical anomaly which is up to 1,000m long by 400m wide and in excess of 630m thick has been drilled to date. As such, there is obviously significant potential for material Mineral Resource growth, particularly as drilling suggests the mineralisation is not necessarily confined to the geophysical anomaly.

Magnum Deposit - Mineral Resource

The Mineral Resource estimate for the Magnum Deposit is shown in Table 2 ("Mineral Resource"). The Mineral Resource estimate was compiled by Cube Consulting Pty Ltd ("Cube") and reported in accordance with guidelines and recommendations of the JORC Code (2012) based on a 0.5 g/t gold metal equivalent cut-off.

Table 2: Magnum Mineral Resource Statement (JORC 2012)
February 2015 using a 0.5 g/t gold equivalent cut-off grade

	Resource Category (JORC 2012)	Tonnes (Mt)	Au (g/t)	Cu (%)	Ag (g/t)	Au (koz)	Cu (t)	Ag (koz)
Transition	Inferred	1.7	0.68	0.31	0.65	37.7	5,260	35.7
Primary	Inferred	14.3	0.65	0.37	1.03	302	52,500	476
Total	**Inferred**	**16.1**	**0.66**	**0.36**	**0.99**	**339**	**57,800**	**511**

Small discrepancies may occur due to the effects of rounding.

Magnum Deposit – Grade and Size Opportunities

Recent interpretation of the Magnum drilling has revealed similar high-grade Reef style mineralisation as found at Calibre and Telfer, and has also identified cross-cutting controls on high-grade gabbro hosted gold and copper mineralisation. As noted above, variations in the hardness of rock units, when combined with other structures, can give rise to similar high-grade Reef style mineralisation as that seen at Telfer.

At Magnum, these Reef structures control the location of high-grade gold mineralisation above and particularly below the gabbro sill, whilst within the gabbro cross-cutting structures control the Eastern Lode high-grade gold mineralisation and also the Western Lode high-grade copper mineralisation. Significant regions of these high grade gold and copper lodes remain untested both up and down plunge. Future drill testing, if successful, could result in a significant increase to the average grade of the Magnum Mineral Resource via delineation of these higher grade gold and copper lodes.

Of course, as the mineralisation intersected by drilling remains open in all directions, there is significant potential for material Magnum Mineral Resource growth if future exploration continues to be successful.

Summary of Material Mineral Resource Information

Calibre Deposit

The Calibre Mineral Resource occurs as a single deposit covered by exploration licence E45/2877, which is held 100% by Antipa and is free of non-government royalties.

The Calibre Mineral Resource was extrapolated approximately 25m north-south and 50m east-west based on half the nominal drillhole spacing. At depth the mineralisation was projected down to about 460m below the base of the cover which corresponds to the deepest drillhole intercept. The

extrapolated portions of the mineralisation, around the edges of the mineralised horizon (outside the drilled area), represent about 45% of the total Mineral Resource tonnage.

The geological setting of the Calibre deposit is Paterson Province 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. Mineralisation styles include vein, stockwork, breccia and skarns.

The Calibre Mineral Resource estimate was compiled using relevant drillhole information derived from the eight diamond drillholes completed by the Company, the majority during 2013, distributed on a minimum drilling density of approximately 50m along strike (north-south) and 100m across strike (east-west). Holes are angled towards grid northeast to be perpendicular to the strike of both the dominant mineralisation trend and bedding, and at a suitable angle to the dip of the dominant mineralisation.

Diamond core was drilled with HQ and NQ2 size and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries. Samples are collected from half-core (if <1.5m) and quarter-core (if >1.5m) using a diamond saw and prepared following industry best practice prior to analysis for gold using a lead collection fire assay on a 50g sample with Atomic Absorption Spectroscopy. All other elements (34 in total) were assayed using a four acid digest, inductively coupled plasma – optical emission spectroscopy technique (ICP-OES).

Bulk density was measured for the zones of mineralisation and associated waste material and range from 2.45 g/cm^3 to 4.23 g/cm^3 determined using the water immersion method.

The sample sizes are considered to be appropriate to correctly represent the sulphide style of mineralisation at Calibre, the thickness and consistency of the intersections and the sampling methodology.

The drilling has confirmed mineralisation extends 210m along strike, 410m across strike and down to a vertical depth below the base of cover of about 460m. Mineralisation remains open in all directions.

Datamine software was used to estimate grades for gold, copper, silver, tungsten and bismuth using ordinary block kriging with top cuts into 24 mN by 12.5 mE by 12 mRL parent cells. Mineralised zone boundaries were treated as hard boundaries for estimation.

The Company's basis for the metal equivalent reporting is summarised in the JORC Code, 2012 Edition, Table 1 Section 2 at the back of this announcement and below based on preliminary metallurgical testwork, detailed mineralogy and observations (see Company public disclosure "*Positive Metallurgical Results for Calibre*" dated 28/05/2014) based on which it is the Company's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

The metal equivalence assumptions are as follows:

- Gold equivalent grade (AuEq or Gold Equiv g/t) is based on the following (13/02/2015) USD metal prices;
  - $1,227.00/oz Au, $16.97/oz Ag, $2.62/lb Cu and $28,000/t for WO_3 concentrate.
  - Currency Exchange Rate AUD to USD = 0.778211
- Grades have been adjusted for the metallurgical recoveries as follows;

  - Au = 84.5%, Cu = 90.0%, Ag = 85.4% and W = 50%
  - Note that a factor of 105% has been applied to the recoveries for Au, Cu and Ag to accommodate further optimisation of the metallurgical performance.
  - Note that the tungsten recovery of 50% is considered indicative at this preliminary stage based on the initial metallurgical findings.
  - Tungsten is the only by-product credit used in determining the gold Metal Equivalent grade (NB: Conversion of W% to WO_3% grade requires division of W% by 0.804).
- Gold equivalent grade is calculated using the following formulae;
  - Gold equivalent grade = (Au (g/t) x 0.845) + ((%Cu x (74.32/50.69) x 0.90)) + ((Ag (g/t) x (0.70/50.69) x 0.854)) + ((%W/0.804 x (359.80/50.69) x 0.50))

The Mineral Resource was classified as Inferred based on geological and grade continuity and drillhole spacing. Snowden's assessment of the criteria that were considered when classifying and reporting the Calibre Mineral Resource are summarised in the JORC Code, 2012 Edition, Table 1 Section 3 at the back of this announcement.

Magnum Deposit

The Magnum Mineral Resource occurs as a single deposit covered by exploration licence E45/2877, which is held 100% by Antipa and is free of non-government royalties.

The Magnum Mineral Resource was extrapolated up to 50m past the last drill section along strike, approximately 50m past the last drillhole on each section and up to a vertical depth of 150m past drillhole data.

The geological setting of the Magnum deposit is Paterson Province Proterozoic aged meta-gabbro and 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. Mineralisation styles include vein, stockwork, breccia and skarns.

The Magnum Mineral Resource estimate was compiled using relevant drillhole information derived from the thirty one diamond drillholes and five reverse circulation percussion drillholes, distributed on a collar spacing of between 50 to 100m on seven east-west sections over a strike distance of 750m (refer to JORC Code, 2012 Edition, Table 1 Section 1 for details). The drilling has confirmed mineralisation extends between 750 to 1,200m along strike, 400m across strike and down to a vertical depth below the base of cover of about 550m. Holes are angled towards grid west, east and southeast to be perpendicular to the strike of both the dominant mineralisation trend and bedding, and at a suitable angle to the dip of the dominant mineralisation. Mineralisation remains open in all directions.

Diamond core was drilled with HQ and NQ\NQ2 sizes and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries. Samples are collected from half-core (if <1.5m) and quarter-core (if >1.5m) using a diamond saw and prepared following industry best practice prior to analysis. Pre-2010 a lead collection fire assay on a 40g sample with inductively coupled plasma – optical emission spectroscopy technique (ICP-OES) was undertaken to determine gold (and Pt, Pd) content. All other elements (10 in total) were assayed using a four acid digest, ICP-MS (for Ag, Bi, Mo, Pb, Sn, W) and ICP-OES (for As, Cu, Ni, Zn). Post 2010 analysis for gold was using a lead collection fire assay on a 50g sample with Atomic Absorption Spectroscopy. All other elements (34 in total) were

assayed using a four acid digest, inductively coupled plasma – optical emission spectroscopy technique (ICP-OES).

Bulk density was measured for the zones of mineralisation and associated waste material and range from 2.49 g/cm^3 to 5.10 g/cm^3 determined using the water immersion method.

The sample sizes are considered to be appropriate to correctly represent the sulphide style of mineralisation at Magnum, the thickness and consistency of the intersections and the sampling methodology.

Current drilling indicates the Magnum deposit extends between 750 to 1,200m along strike, up to 400m across strike and to a vertical depth in excess of 550m. Mineralisation remains open in all directions.

Surpac software was used to estimate grades for gold, copper, silver, tungsten and bismuth using Inverse Distance (power 2) grade weighting into 12.5 mN by 2.5 mE by 2.5 mRL parent cells. Mineralisation zones totaled 34 and were independently 3D wire-framed and the boundaries of which were treated as hard boundaries for estimation.

The Company's basis for the metal equivalent reporting is summarised in the JORC Code, 2012 Edition, Table 1 Section 2 at the back of this announcement and below based on preliminary metallurgical testwork, detailed mineralogy and observations for the Calibre mineralisation (see Company public disclosure "*Positive Metallurgical Results for Calibre*" dated 28/05/2014), which is identical to the Magnum mineralisation, based on which it is the Company's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

The metal equivalence assumptions are as follows:

- Gold equivalent grade (AuEq or Gold Equiv g/t) is based on the following (13/02/2015) USD metal prices;
  - $1,227.00/oz Au, $16.97/oz Ag, $2.62/lb Cu and $28,000/t for WO_3 concentrate.
  - Currency Exchange Rate AUD to USD = 0.778211
- Grades have been adjusted for the metallurgical recoveries as follows ;
  - Au = 84.5%, Cu = 90.0% and Ag = 85.4%
  - Note that a factor of 105% has been applied to the recoveries for Au, Cu and Ag to accommodate further optimisation of the metallurgical performance.
  - No by-product credits are used in determining the Magnum gold Metal Equivalent grade.
- Gold equivalent grade is calculated using the following formulae;
  - Gold equivalent grade = (Au (g/t) x 0.845) + ((%Cu x (74.32/50.69) x 0.90)) + ((Ag (g/t) x (0.70/50.69) x 0.854))

The Mineral Resource was classified as Inferred based on geological and grade continuity and drillhole spacing. Cube's assessment of the criteria that were considered when classifying and reporting the Magnum Mineral Resource are summarised in the JORC Code, 2012 Edition, Table 1 Section 3 at the back of this announcement.

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

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About Antipa Minerals:

Antipa Minerals Ltd is an Australian public company which was formed with the objective of identifying under-explored mineral projects in mineral provinces which have the potential to host world class mineral deposits, thereby offering high leverage exploration potential. The Company owns a 1,111km^2 package of prospective granted tenements in the Proterozoic Paterson Province of Western Australia known as the Citadel Project. The Citadel Project is located approximately 75km north of Newcrest's Telfer gold-copper-silver mine and includes the gold-copper-silver±tungsten Mineral Resources at the Calibre and Magnum deposits and high-grade polymetallic Corker deposit.

The Company has an additional 1,310km^2 of granted exploration licences, known as the North Telfer Project which extend its ground holding in the Paterson Province to within 20km of the Telfer mine and 30km of the O'Callaghans deposit.

The Company has also acquired, from the Mark Creasy controlled company Kitchener Resources Pty Ltd, additional exploration licences in the Paterson Province which now cover 1,631km^2 (including 225km^2 granted) and come to within 5km of the Telfer mine and 7km of the O'Callaghans deposit.

Competent Persons Statement – Exploration Results: The information in this report that relates to Exploration Results and the drillhole database used for the Calibre Mineral Resource is based on and fairly represents information and supporting documentation prepared by Mr Roger Mason, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and a full time employee of the Company. Roger Mason has sufficient experience that is 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'. Roger Mason 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 – Calibre Mineral Resource: The information in this report that relates to the estimation and reporting of the Calibre deposit Mineral Resource is based on, and fairly represents, information and supporting documentation – the compilation of which was reviewed by Lynn Olssen who is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Snowden Mining Industry Consultants Pty Ltd. Lynn Olssen was engaged by Antipa on a fee for service basis, she is independent of Antipa and holds no shares in the company. Lynn Olssen 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'. Lynn Olssen 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 – Magnum Mineral Resource: The information in this report that relates to the Magnum deposit Mineral Resource is based on information compiled by Patrick John Adams, a Competent Person who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy. Patrick Adams is employed by Cube Consulting. Patrick Adams is a director of Cube Consulting Pty Ltd and was engaged by Antipa on a fee for service basis, he is independent of Antipa and holds no shares in the company. Patrick Adams 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'. Patrick Adams consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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 program 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.

CALIBRE DEPOSIT:

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.*	• The Calibre deposit was sampled by diamond drill holes (DDH), with a total of eight DDH drilled for 4,104m and average depth of 513m. • The DDH program was drilled across four approximate northeast-southwest sections spaced approximately 50m apart with an average drill hole spacing on each section of between 100 to 200m. • Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of ± 5m. • Holes are angled towards grid northeast to be perpendicular to the strike of both the dominant mineralisation trend and bedding, and at a suitable angle to the dip of the dominant mineralisation. • Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice. • Diamond core was drilled with HQ and NQ2 size and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries. • If the sample interval is less than 1.5m in length half the core was submitted for assay. If the sample interval is greater than 1.5m in length then quarter of the core is submitted for assay. • Samples were sent to MinAnalytical Laboratory Services Australia Pty Ltd in Perth, where they were dried, crushed, pulverised and split to produce a sub–sample for a lead collection fire assay on a 50g sample with Atomic Absorption Spectroscopy undertaken to determine gold content with a detection limit of 0.005ppm. All other elements (34 in total) were assayed using a four acid digest, inductively coupled plasma – optical emission spectroscopy technique (ICP-OES) with various detection limits.
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).*	• Diamond drilling accounts for 100% of the current Calibre drilling. Drillholes were completed using HQ and NQ2 sized core. Rock-rolled pre-collar depths range from 31 to 100m and hole depths range from 375 to 665m. • A total of 8 diamond drillholes (DDH) have been drilled totaling 4,104m. • Holes are angled towards grid north-east at varying angles to optimally intersect the mineralisation. • The core is oriented using a Reflex ACT electronic orientation tool.
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.*	• Core recovery is routinely recorded as a percentage. Overall core recoveries averaged 99.6% and there are no core loss issues or significant sample recovery problems except for occasional localised regions either side of the unconformity/base of transported cover. • Core recovery is routinely recorded and is generally very good, except for occasional localised regions either side of the unconformity and in the

Criteria	JORC Code explanation	Commentary
		chloritic fault zone within the footwall of the cross-cutting (pre-mineralisation) dolerite dyke. • Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. • Drillers used appropriate measures to maximise diamond sample recovery. • To date, no detailed analysis to determine the relationship between sample recovery and/or and grade has been warranted as the mineralisation is defined by diamond core drilling which has high recoveries.
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.*	• Logging includes both qualitative and quantitative components. • All logging is entered directly into a ruggedized 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. • Geological logging of 100% of all drill core was carried out recording colour, weathering, lithology, mineralogy, alteration, veining, sulphides and structure. • Geotechnical logging of all core was carried out for Recovery, RQD and Fracture Frequency. • Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is stored in the Company's technical database. • All drill holes were logged in full with the exception of the rock-rolled pre-collar component of the diamond drillholes. The pre-collar in entirely within the transported (younger/post mineralisation) cover material. • Snowden considers that the Company's logging is carried out in sufficient detail to meet the requirements of the reporting of exploration results and resource estimation and mining studies. • Core was photographed both wet and dry.
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.*	• Diamond core was drilled with HQ and NQ2 size and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries. • Diamond core is sampled on a nominal 2.0m sample interval within unmineralised zones and on 0.1 to 1.0m intervals within the mineralised zones. • Sample intervals are adjusted so that samples do not cross lithological boundaries and samples are collected from the same side of the core. • Samples are collected from half-core (if <1.5m) and quarter-core (if >1.5m) using a diamond saw located at the Company's field facility. • Samples are selected to weigh less than 3kg to ensure total preparation at

Criteria	JORC Code explanation	Commentary
		the pulverisation stage. • No RC samples have been collected at Calibre to date as no RC drilling has occurred. • Sample preparation of half or quarter diamond core was completed at MinAnalytical Laboratories in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the core sample down to approximately 10mm, 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. • The sample sizes are considered to be appropriate to correctly represent the sulphide style of mineralisation at Calibre, the thickness and consistency of the intersections and the sampling methodology.
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 sample preparation technique of core is documented in Antipa 2013d and is in line with industry standards in sample preparation. • The sample sizes are considered appropriate to represent mineralisation. • A lead collection fire assay on a 50g sample with Atomic Absorption Spectroscopy undertaken to determine gold content with a detection limit of 0.005ppm. • The samples 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 (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W and Zn). • No geophysical tools were used to determine any element concentrations in this report. • Snowden’s analysis of the QC data for the Calibre deposit found the standard sample results to be acceptable. • Field QC procedures involve the use of commercial certified reference material (CRM’s) for assay standards and blanks. Standards are inserted every 30 samples, increasing to every 20 samples in mineralised zones and decreasing to every 50 samples in unmineralised zones. The grade of the inserted standard is not revealed to the laboratory. • No field duplicates/second core sampling QC were utilised during this diamond drilling program. • Inter laboratory cross-checks analysis programmes have not been conducted at this stage. • In addition to Antipa supplied CRM’s, MinAnalytical includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates. • Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures.

Criteria	JORC Code explanation	Commentary
		• Selected anomalous samples are re-digested and analysed to confirm results.
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.*	• There is currently no field duplicate or blanks component to Antipa's QAQC program. MinAnalytical routinely insert tested certified reference materials, blanks and up to 10% replicates as part of their internal QAQC procedures. Snowden has reviewed the results. No significant issues were identified. • Significant intersections of the diamond drilling have been visually verified by the Managing Director. • No twinned holes have been drilled at Calibre. • All logging is entered directly into a ruggedized 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. • No adjustments or calibrations have been made to any assay data collected.
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.*	• Drillhole collar locations are surveyed using a hand held Garmin 60CSx GPS which has an accuracy of ±3m. • The drilling coordinates are all in GDA94 MGA Zone 51 coordinates. • Rig orientation was checked using Suunto Sighting Compass from two directions. • Drillhole inclination was set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing. • The topographic surface has been compiled using the drillhole collar coordinates. • Downhole surveys were undertaken in-hole during drilling using a 'Reflex EZ Trac Camera' device at 30 to 50 metre intervals (maximum 50 metres) with a final survey at the end of the drillhole. • Downhole 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. • Survey details included drillhole dip (±0.25° accuracy) and drillhole azimuth (±0.35 accuracy°) Total Magnetic field and temperature.
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.*	• At this point the nominal drill hole spacing two approximate east-west sections spaced approximately 50m apart with an average drill hole spacing on each section of 100 to 200m. • The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the resource classification of Inferred. • No sample compositing has been applied for the reporting of exploration results. • For the Mineral Resource estimation all samples were composited using a

Criteria	JORC Code explanation	Commentary
		nominal 1m interval prior to compiling the estimate. Where necessary the composite interval has been adjusted to ensure that there are no residual sample lengths.
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.*	• The location and orientation of the Calibre drilling is appropriate given the strike, dip and morphology of the mineralisation. • No sampling bias resulting from a structural orientation has been identified at Calibre at this point.
Sample security	• *The measures taken to ensure sample security.*	• Chain of sample custody is managed by Antipa to ensure appropriate levels of sample security. Samples are stored on site and delivered by Antipa personnel to Sadleirs Nexus Logistics Transport in Port Hedland and then to the assay laboratory in Perth.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques and procedures are regularly reviewed internally, as is the data. • Consultants Snowden, 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.

CALIBRE DEPOSIT:

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 drilling is located wholly within Exploration License E45/2877. Antipa Minerals Ltd has a 100% interest in the tenement and there are no royalties on the tenement. • E45/2877 is 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. • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Calibre deposit was a greenfield discovery by the Company in 2012. There has been no other exploration of the target area or deposit region by other parties.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geological setting is Paterson Province 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

Criteria	JORC Code explanation	Commentary
		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.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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 information material to the understanding of the Calibre exploration results can be found in previous public reports.
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.*	• Reported aggregated intervals have been length and bulk density weighted. • No top-cuts have been applied. • A nominal 0.2% copper equivalent lower cut-off grade is applied. • Higher grade intervals of mineralisation internal to broader zones of mineralisation are reported as included intervals. • The metal equivalence assumptions are as follows: • Gold equivalent grade (AuEq or Gold Equiv g/t) is based on the following (13/02/2015) USD metal prices; o $1,227.00/oz Au, $16.97/oz Ag, $2.62/lb Cu and $28,000/t for WO_3 concentrate. • Currency Exchange Rate AUD to USD = 0.778211 • Grades have been adjusted for the metallurgical recoveries as follows; o Au = 84.5%, Cu = 90.0%, Ag = 85.4% and W = 50% o Note that a factor of 105% has been applied to the recoveries for Au, Cu and Ag to accommodate further optimisation of the metallurgical performance. o Note that the tungsten recovery of 50% is considered indicative at this preliminary stage based on the initial metallurgical findings. • Tungsten is the only by-product credit used in determining the gold Metal Equivalent grade (NB: Conversion of W% to WO_3% grade requires division of W% by 0.804) • Gold equivalent grade is calculated using the following formulae; • Gold equivalent grade = (Au (g/t) x 0.845) + ((%Cu x (74.32/50.69) x 0.90)) + ((Ag (g/t) x (0.70/50.69) x 0.854)) + ((%W/0.804 x (359.80/50.69) x 0.50))
Relationship	• *These relationships are particularly important in the reporting of Exploration*	• The quartz vein and breccia mineralisation is dominantly moderate to steeply

Criteria	JORC Code explanation	Commentary
between mineralisation widths and intercept lengths	*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').*	dipping (average 65°) to the southwest and drill holes are typically holes inclined between -60° and -75° toward the northeast. • In general the intersection angles for the drilling appear to be close to perpendicular to the overall mineralised zones. Therefore the reported downhole intersections approximate 70% to 80% true width.
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 and sections (with scales) and tabulations of intercepts are reported or can be found in previous public reports.
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 be found in previous public reports.
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.*	• All meaningful and material information has been included in the body of the text or previous public reports. • The outlines of heliborne, surface and downhole electromagnetic conductivity anomalies can be found in previous public reports. • Zones of mineralisation and associated waste material are measured for their bulk density which range from 2.45 g/cm^3 to 4.23 g/cm^3. • Multi element assaying is conducted routinely on all samples for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium. • Geotechnical logging was carried out on all diamond drillholes for Recovery, RQD and Fracture Frequency. • Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is stored in the Company's technical SQL database. • For preliminary metallurgical test results refer to previous public reports.
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.*	• At this stage mineralisation identified by diamond drilling is understood across a relatively limited strike extent (i.e. 220m) and requires further work/drilling to test for lateral and vertical extensions and continuity beyond the limits of the Inferred Mineral Resource. • Diagrams can be found in previous public reports.

CALIBRE DEPOSIT:

Section 3 Reporting of Mineral Resources (Criteria listed in section 1, and where relevant section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database	• *Measures taken to ensure that data has not been corrupted by, for example,*	• All drilling information is entered directly into a computer database. The

Criteria	JORC Code explanation	Commentary
integrity	*transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	validated data was provided to Snowden in a Microsoft Access database. • Snowden undertook a basic check of the database for potential errors as a preliminary step to compiling the resource estimate. No significant flaws were identified.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Given the early and initial stage of the deposit evaluation, no site visit was undertaken by the Mineral Resource consultants. • Representative drill core samples were inspected. • Diamond drill core photographs were inspected.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The interpretations for lithology and mineralisation have been supplied by Antipa and are based on a combination of geological logging and assay results. • Given the limited drillhole information currently available alternative interpretations of the mineralisation are likely to significantly impact the reported resource.
Dimensions	• *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.*	• Current drilling indicates the Calibre deposit extends 210m along strike, 410m across strike and to a vertical depth in excess of 540m. • The deposit is open in all directions.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterization).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Drillhole data was coded using the wireframe interpretations. Samples were composited to 1m downhole, with composite lengths adjusted to avoid crossing lithological boundaries. • Statistical analysis of the domains (LENSES) indicates that top-cutting was necessary for some domains. Top cuts of between 1 and 5 g/t Au were applied for gold estimation and between 0.4 and 1% Cu for copper estimation. Top cuts impacted on between <1% and 5% of the data. • Omni-directional variograms were modelled to determine grade continuity. • Datamine software was used to estimate grades for gold, copper, silver, tungsten and bismuth using ordinary block kriging into 24 mN by 12.5 mE by 12 mRL parent cells with sub-celling to 6m by 3.125m by 3m. A block discretisation of 8 by 4 by 4 was used in the easting, northing and elevation directions respectively. • Mineralised zone boundaries (LENSE) were treated as hard boundaries for estimation. • There was not enough data to obtain meaningful directional variogram models and therefore the search ellipse was based on the geology and extents of the mineralisation as determined by the drillhole data. Blocks were estimated using a minimum of 5 and a maximum of 40 samples. If the initial search failed to find the minimum number of samples required, then a second search was conducted reducing the minimum number of samples to 2, a third search using quadruple the initial search radii with the minimum

Criteria	JORC Code explanation	Commentary

		number of samples reduced to 2 was used to populate all remaining un-informed blocks.
		• The estimates were validated using:
		  • A visual comparison of the block grade estimates to the input drillhole composite data which shows a good correlation.
		  • Generation of moving window average plots of the block grade estimates, declustered (nearest neighbour method) composites and naïve composite grades, along with the number of composite samples available. These grade trend plots show reasonable correlation between the local patterns in the block grade estimates compared with the drillhole composite grades in the well informed parts of the deposit.
		  • A global comparison of the estimated block grades to the average composite (naïve) grades for all elements within the mineralised domains. Both sets of results are within 5% for the main mineralised lenses.
		• This is an update of the maiden resource estimate for the Calibre deposit.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages are estimated on a dry basis. • There are no clay-rich mineralisation lithologies (e.g. oxide material) and the mineralisation host rock is non-porous.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource is reported at a 0.5 g/t AuEq grade cut-off based on metallurgical testwork.
Mining factors and assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Calibre deposit is overlain by a layer of weakly lithified sediments material which has an average thickness of 84m. Open pit methods are being considered at this stage.
Metallurgical factors and assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• 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 drill core representative of the Calibre gold-copper-silver-tungsten

Criteria	JORC Code explanation	Commentary

		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;
		  • Cyanide leaching of sulphide flotation tailings for recovery of remaining gold and silver.
		• The Calibre mineralisation is planned to be crushed and ground with the following products being produced:
		  • A sulphide concentrate containing copper, gold and silver;
		  • Gold doré (containing gold and silver); and
		  • 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 testwork 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.
		• 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.
		• It is envisaged that the Calibre mineralisation would be processed on site.

Environmental factors and assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be*	• The Calibre project is in the early stages of exploration and therefore, given the small amount of data available considerations regarding environmental factors have not yet been made.

Criteria	JORC Code explanation	Commentary
	reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density measurements were supplied by Antipa and have been determined using the water immersion method. • Density values used are listed in Table 5.3.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *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).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The resources have been classified based on geological and grade continuity, drillhole spacing as well as the information summarised in this table.
		• Model blocks were flagged as Inferred or unclassified. Inferred Mineral Resources were flagged in the model based on the following guidelines:
		  • Minimum drilling density of approximately 50m along strike (north-south) and 100m across strike (east-west).
		  • Mineralisation is constrained within the estimation domain LENSE and has been extended 25m past the last drill section along strike, approximately 50m past the last drillhole on each section and to a vertical depth of equal to the deepest drillhole (approximately 460m).
		• Approximately 45% of the Inferred Mineral Resource is based on extrapolated data beyond the extent of the drillholes.
		• The Mineral Resource estimate appropriately reflects the views of the Competent Person with respect to the deposit.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No third party reviews of the work have been undertaken. This is appropriate given the limited amount of work completed to date.
Discussion of relative accuracy/confidence	• *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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy and confidence in the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as set out in the JORC Code (2012 Edition). • Given the limited drilling information that is available the overall confidence in the local estimates is low.

MAGNUM DEPOSIT:

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.*
		• The Magnum deposit was sampled primarily by diamond drill holes (DDH) with limited reverse-circulation percussion (RCP) drill holes as follows:
		  • Previous explorers completed 22 diamond drill holes for 10,109m (including pre-collars), with the majority being completed by Croesus-Gindalbie between 1998 and 1999 following Magnum's discovery;
		  • Antipa completed 9 diamond drill holes for 4,152m (including pre-collars) in 2011.
		  • Antipa completed 5 RCP drill holes for 1,105m (including pre-collars) in 2011.
		• Drill holes are distributed on a collar spacing of between 50 to 100m on seven east-west sections over a strike distance of 750m.
		• Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of ± 5m.
		• Holes are angled towards grid west, east and southeast to be perpendicular to the strike of both the dominant mineralisation trend and bedding, and at a suitable angle to the dip of the dominant mineralisation.
		• Pre-2010:
		  • Sampling of drill material was conducted by Croesus-Gindalbie and reviews by Antipa indicate that these procedures were of a suitable industry standard.
		  • Diamond core was drilled with HQ and NQ size and sampling was generally conducted on a routine one metre basis.
		  • Samples were sent to Ultra Trace Pty Ltd in Perth, where they were dried, crushed, pulverised and split to produce a sub–sample for a lead collection fire assay on a 40g sample with inductively coupled plasma – optical emission spectroscopy technique (ICP-OES) undertaken to determine gold (and Pt, Pd) content with a detection limit of 0.001ppm. All other elements (10 in total) were assayed using a four acid digest, ICP-MS (for Ag, Bi, Mo, Pb, Sn, W) and ICP-OES (for As, Cu, Ni, Zn) with various detection limits.
		• Post 2010:
		  • Sampling of drill material was carried out under Antipa protocols and QAQC procedures as per industry best practice.
		  • Diamond core was drilled with HQ and NQ2 size and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries.
		  • If the sample interval is less than 1.5m in length half the core was submitted for assay. If the sample interval is greater than 1.5m in length

Criteria	JORC Code explanation	Commentary
		then quarter of the core is submitted for assay. • Samples were sent to MinAnalytical Laboratory Services Australia Pty Ltd in Perth, where they were dried, crushed, pulverised and split to produce a sub–sample for a lead collection fire assay on a 50g sample with Atomic Absorption Spectroscopy (AAS) undertaken to determine gold content with a detection limit of 0.005ppm. All other elements (34 in total) were assayed using a four acid digest, inductively coupled plasma – optical emission spectroscopy technique (ICP-OES) with various detection limits.
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).*	• Diamond drilling accounts for 93% of the current Magnum drilling. Drillholes were completed using HQ and NQ2 sized core. Rock-rolled pre-collar depths range from 31 to 100m and hole depths range from 259 to 648m. • Holes are angled towards grid west, east and southeast at varying angles to optimally intersect the mineralisation. • Post 2010 the core is oriented using a Reflex ACT electronic orientation tool. • Pre 2010 the core is orientated using a Reflex Single-Shot downhole Camera.
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.*	• Core recovery is routinely recorded as a percentage. Overall core recoveries averaged > 99% and there are no core loss issues or significant sample recovery problems except for occasional localised regions either side of the unconformity/base of transported cover. • Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. • Drillers used appropriate measures to maximise diamond sample recovery. • RCP drill sample recovery was recorded on a one metre basis and was generally high. • To date, no detailed analysis to determine the relationship between sample recovery and/or and grade has been warranted as the mineralisation is defined by diamond core drilling which has high recoveries.
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.*	• Logging includes both qualitative and quantitative components and the same components have been recorded pre and post 2010. • Post 2010 all logging is entered directly into a ruggedized 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. • Pre 2010 all logging was onto paper log-sheets which was subsequently data entered into an MS Access Drill-hole database, where validation was undertaken.

Criteria	JORC Code explanation	Commentary
		• Geological logging of 100% of all drill core was carried out recording colour, weathering, lithology, mineralogy, alteration, veining, sulphides and structure. • Geotechnical logging of all core was carried out for Recovery, RQD and Fracture Frequency. • Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is stored in the Company's technical database. • All drill holes were logged in full with the exception of the rock-rolled pre-collar component of the diamond drillholes. The pre-collar in entirely within the transported (younger/post mineralisation) cover material. • Cube considers that the Company's logging is carried out in sufficient detail to meet the requirements of the reporting of exploration results and resource estimation and mining studies. • All drill core was photographed both wet and dry. • RCP drill holes were logged (as above) on a metre basis, however due to the nature of RCP sample material no detailed structural or orientation data can be collected.
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.*	• Diamond core was drilled with HQ and NQ2 size and sampled on intervals from 0.1 to 2.0m selected on the basis of geological boundaries. • Sample intervals are adjusted so that samples do not cross lithological boundaries and samples are collected from the same side of the core. • Samples are collected from half-core (if <1.5m) and quarter-core (if >1.5m) using a diamond saw located at the Company's field facility. • Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage. • RCP samples collected at Magnum were on a 1m to 4m basis, depending on visual indications of mineralisation. • Sample preparation of diamond core was completed at MinAnalytical Laboratories (post 2010) or Ultratrace (pre 2010) in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the core sample down to approximately 10mm, followed by pulverisation of the entire sample (total prep) using Essa LM5 (MinAnalytical) or Ring Pulverizer (Ultratrace) grinding mills to a grind size of > 85% passing 75 µm and split into a sub–sample/s for analysis. • The sample sizes are considered to be appropriate to correctly represent the sulphide style of mineralisation at Magnum, the thickness and consistency of the intersections and the sampling methodology.
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The sample preparation technique of core is documented in Antipa 2013d

Criteria	JORC Code explanation	Commentary
laboratory tests	• *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.*	and is in line with industry standards in sample preparation. • The sample sizes are considered appropriate to represent mineralisation. • The samples 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. • Post 2010 Analytical methods used were ICP–OES (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W and Zn) and 50g fire assay with AAS finish for gold. • Pre 2010 Analytical methods used were ICP–OES (As, Cu, Ni and Zn), ICP-MS (Ag, Bi, Mo, Pb, Sn and W) and 40g fire assay with ICP-OES finish for gold (and Pt, Pd). • No geophysical tools were used to determine any element concentrations in this report. • Company analysis of the QAQC data for the Magnum deposit found the standard sample results to be acceptable. • Analysis of the QC data for the Magnum deposit found the standard sample results to be acceptable. • Post 2010 field QC procedures involve the use of commercial certified reference material (CRM's) for assay standards and blanks. Standards are inserted every 30 samples, increasing to every 20 samples in mineralised zones and decreasing to every 50 samples in unmineralised zones. The grade of the inserted standard is not revealed to the laboratory. • No field duplicates/second core sampling QC were utilised during this diamond drilling program. • Inter laboratory cross-checks analysis programmes have not been conducted at this stage. • In addition to Antipa supplied CRM's, both MinAnalytical and Ultratrace includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates. • Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures. • Selected anomalous samples are re-digested and analysed to confirm results.
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.*	• There is currently no field duplicate or blanks component to Antipa's QAQC program. MinAnalytical and Ultratrace routinely insert tested certified reference materials, blanks and up to 10% replicates as part of their internal QAQC procedures. No significant issues were identified. • Significant intersections of the diamond drilling have been visually verified by the Managing Director. • No twinned holes have been drilled at Magnum. • Post 2010 all logging is entered directly into a ruggedized notebook

Criteria	JORC Code explanation	Commentary
		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. • Pre 2010 all logging was onto paper log-sheets which was subsequently data entered into an MS Access Drill-hole database, where validation was undertaken. • No adjustments or calibrations have been made to any assay data collected.
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.*	• Drillhole collar locations are surveyed using a hand held Garmin 60CSx GPS which has an accuracy of ±3m. • The drilling coordinates are all in GDA94 MGA Zone 51 coordinates. • Rig orientation was checked using Suunto Sighting Compass from two directions. • Drillhole inclination was set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing. • The topographic surface has been compiled using the drillhole collar coordinates. • Post 2010 downhole surveys were undertaken in-hole during drilling using a 'Reflex EZ Trac Camera' device at 30 to 50 metre intervals (maximum 50 metres) with a final survey at the end of the drillhole. • Pre 2010 downhole surveys were undertaken in-hole during drilling using a Reflex Single-Shot downhole Camera at 30 to 50 metre intervals with a final survey at the end of the drillhole. • Downhole 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. • Survey details included drillhole dip (±0.25° accuracy) and drillhole azimuth (±0.35 accuracy°) and (post 2010) Total Magnetic field and temperature.
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.*	• Drill holes are distributed on a collar spacing of between 50 to 100m on seven east-west sections over a strike distance of 750m. • The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the resource classification of Inferred. • No sample compositing has been applied for the reporting of exploration results. • For the Mineral Resource estimation all samples were composited using a nominal 2.5m interval prior to compiling the estimate. Where necessary the composite interval has been adjusted to ensure that there are no residual sample lengths.
Orientation of data in relation to geological	• *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*	• The location and orientation of the Magnum drilling is appropriate given the strike, dip and morphology of the mineralisation. • No sampling bias resulting from a structural orientation has been identified at

Criteria	JORC Code explanation	Commentary
structure	*mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Magnum at this point.
Sample security	• *The measures taken to ensure sample security.*	• Post 2010 Chain of sample custody is managed by Antipa to ensure appropriate levels of sample security. Samples are stored on site and delivered by Antipa personnel to Sadleirs Nexus Logistics Transport in Port Hedland and then to the assay laboratory in Perth. • Chain of sample custody pre 2010 is not known.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques and procedures are regularly reviewed internally, as is the data. • Cube Consulting, during completion of the 2012 Magnum 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.

MAGNUM DEPOSIT:

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 drilling is located wholly within Exploration License E45/2877. Antipa Minerals Ltd has a 100% interest in the tenement and there are no royalties on the tenement. • E45/2877 is 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. • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Magnum deposit was a greenfield discovery by Croesus-Gindalbie in 1998. • Prior to 1997 BHP completed aircore and various geochemical and geophysical surveys in the general vicinity of the Magnum deposit, which highlighted the are as being variously anomalous, however BHP but did not locate any basement (Proterozoic) mineralisation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geological setting is Paterson Province 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 is a low grade metamorphic terrane but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a

Criteria	JORC Code explanation	Commentary
		high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.
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 information material to the understanding of the Magnum exploration results can be found in previous public reports.
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.*	• Reported aggregated intervals have been length and bulk density weighted. • No top-cuts have been applied. • A nominal 0.2% copper equivalent lower cut-off grade is applied. • Higher grade intervals of mineralisation internal to broader zones of mineralisation are reported as included intervals. • The metal equivalence assumptions are as follows: • Gold equivalent grade (AuEq or Gold Equiv g/t) is based on the following (13/02/2015) USD metal prices; ➢ $1,227.00/oz Au, $16.97/oz Ag and $2.62/lb Cu. • Currency Exchange Rate AUD to USD = 0.778211 • Grades have been adjusted for the metallurgical recoveries as follows; ➢ Au = 84.5%, Cu = 90.0% and Ag = 85.4% ➢ Note that a factor of 105% has been applied to the recoveries for Au, Cu and Ag to accommodate further optimisation of the metallurgical performance. • Gold equivalent grade is calculated using the following formulae; ➢ Gold equivalent grade = (Au (g/t) x 0.845) + ((%Cu x (74.32/50.69) x 0.90)) + ((Ag (g/t) x (0.70/50.69) x 0.854))
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The quartz vein and breccia mineralisation is dominantly moderate to steeply dipping (average 75°) to the west and drill holes are typically holes inclined between -60° toward the east, west and southwest. • In general the intersection angles for the drilling appear to be at a high angle to the overall mineralised zones. Therefore the reported (post 2010) downhole intersections approximate 70% to 80% true width.
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 and sections (with scales) and tabulations of intercepts are reported or can be found in previous public reports.

Criteria	JORC Code explanation	Commentary
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 be found in previous public reports.
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.*	• All meaningful and material information has been included in the body of the text or previous public reports. • The outlines of heliborne, surface and downhole electromagnetic conductivity anomalies can be found in previous public reports. • Zones of mineralisation and associated waste material are measured for their bulk density which range from 2.49 g/cm^3 to 5.10 g/cm^3. • Multi element assaying is conducted routinely on all samples for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium. • Geotechnical logging was carried out on all diamond drillholes for Recovery, RQD and Fracture Frequency. • Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is stored in the Company's technical SQL database. • For preliminary metallurgical test results refer to previous public reports.
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.*	• At this stage mineralisation identified by diamond drilling is understood across a significant strike extent (i.e. 750m); however, further work/drilling is required to test for lateral and vertical extensions and continuity beyond the limits of the Inferred Mineral Resource. • Diagrams can be found in previous public reports.

MAGNUM DEPOSIT:

Section 3 Reporting of Mineral Resources (Criteria listed in section 1, and where relevant section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All drilling information is entered into a computer database where it is further validated. The validated data was provided to Cube in a Microsoft Access database. • Cube undertook a basic check of the database for potential errors as a preliminary step to compiling the resource estimate. No significant flaws were identified.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Given the early and initial stage of the deposit evaluation, no site visit was undertaken by the Mineral Resource consultants. • Representative drill core samples were inspected.

Criteria	JORC Code explanation	Commentary
		• Diamond drill core photographs were inspected.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The interpretations for lithology and mineralisation have been supplied by Antipa and are based on a combination of geological logging and assay results. • Given the limited drillhole information currently available alternative interpretations of the mineralisation are likely to significantly impact the reported resource.
Dimensions	• *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.*	• Current drilling indicates the Magnum deposit extends between 750 to 1,200m along strike, up to 400m across strike and to a vertical depth in excess of 550m. • The deposit is open in all directions.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterization).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• Drillhole data was coded using the wireframe interpretations. Samples were composited to 2.5m downhole, with composite lengths adjusted to avoid crossing lithological boundaries.
		• Statistical analysis for high grade outlier cuts were investigated for each domain and a single silver outlier of 2.06 g/t was set to 1.0 g/t in domain 25. No other high grade cuts were required.
		  • Surpac software was used to estimate grades for gold, copper, silver, tungsten and bismuth using Inverse Distance (power 2) grade weighting into 12.5 mN by 2.5 mE by 2.5 mRL parent cells (no sub-celling) and a block discretisation of 4 by 2 by 4 was used in the northing, easting and elevation directions respectively.
		• Mineralised zone boundaries were treated as hard boundaries for estimation; 23 separate mineralised domains were defined by 3D wireframes. The wireframes have been interpreted from geological logging of geology, veining, sulphide and alteration type and also taking note of elevated gold or silver or copper or bismuth grades.
		• There was not enough data to obtain meaningful directional variogram models for each of the 23 separate geological domains and therefore the search ellipse was based on the geology and extents of the mineralisation as determined by the drillhole data. The inverse distance method used a minimum of 3 and maximum of 15 composites over a search radius of generally 250 metres (with 400 metres used in three domains) oriented to the dip of the domain during estimation of each block.
		• The estimates were validated using:
		  • A visual comparison of the block grade estimates to the input drillhole composite data which shows a good correlation.
		  • A global comparison of the estimated block grades to the average composite (naïve) grades for all elements within the mineralised domains. Both sets of results are within an acceptable tolerance for the

Criteria	JORC Code explanation	Commentary
		adequately sampled main mineralised domains. • This is an update of the maiden Mineral Resource estimate for the Magnum deposit.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages are estimated on a dry basis. • There are no clay-rich mineralisation lithologies (e.g. oxide material) and the mineralisation host rock is non-porous.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource is reported at a 0.5 g/t AuEq grade cut-off.
Mining factors and assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Magnum deposit is overlain by a layer of weakly lithified sediments material which ranges in thickness between 60 to 80m. • Both underground and open pit mining methods are being considered at this stage.
Metallurgical factors and assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• The Magnum 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 Magnum. • Preliminary metallurgical test work for the Calibre deposit, located approximately 1.5km to the northeast of Magnum, which has almost identical mineralisation to that encountered at Magnum 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 drill core representative of the Magnum gold-copper-silver-tungsten mineralisation. As no oxide mineralisation is known to occur at Magnum 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 Magnum 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;

Criteria	JORC Code explanation	Commentary
		• HLS density beneficiation test work; • Sulphide Flotation; • Tungsten Flotation; • Cyanide leaching of sulphide flotation tailings for recovery of remaining gold and silver. • The Magnum mineralisation is planned to be crushed and ground with the following products being produced: • A sulphide concentrate containing copper, gold and silver; • Gold doré (containing gold and silver); and • A tungsten concentrate. • Preliminary metallurgical test work has shown that saleable products for copper, gold and silver can be produced from the Magnum mineralisation at good metallurgical recoveries. • Further testwork 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. • 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 Magnum mineralisation. • It is envisaged that metallurgically the Magnum mineralisation would behave in the same manner to the Calibre mineralisation and would be processed on site.
Environmental factors and assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Magnum project is in the early stages of exploration and therefore, given the small amount of data available considerations regarding environmental factors have not yet been made.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density measurements were supplied by Antipa and have been determined using the water immersion method. • The assignment of an appropriate tonnage factor for blocks was by inverse distance weighting of 778 density measurements on core and 3,352 density values calculated from a regression on sample iron content. Within the Magnum deposit iron and SG show a good linear correlation with an R^2 value of 0.61. Cube Consulting used this correlation to calculate an SG value for every sample with an iron determination using the formula: SG_calc

Criteria	JORC Code explanation	Commentary
		= Fe_ppm x $3.0x10^{-6}$ + 2.64. This unconstrained estimation of bulk density used the measured SG in preference to a calculated value.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *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).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The resources have been classified based on geological and grade continuity, drillhole spacing as well as the information summarised in this table.
		• Model blocks were flagged as Inferred or unclassified. Inferred Mineral Resources were flagged in the model based on the following guidelines:
		  • Minimum drilling density of approximately 50 to 100m across strike (east-west) and 100m along strike (north-south).
		  • Mineralisation is constrained within the estimation domains and has been extrapolated up to 50m past the last drill section along strike, approximately 50m past the last drillhole on each section and up to a vertical depth of 150m past drillhole data.
		• The Mineral Resource estimate appropriately reflects the views of the Competent Person with respect to the deposit.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No third party reviews of the work have been undertaken. This is appropriate given the limited amount of work completed to date.
Discussion of relative accuracy/confidence	• *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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy and confidence in the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as set out in the JORC Code (2012 Edition). • Given the limited drilling information that is available the overall confidence in the local estimates is low.