

## **Citadel Project IP Survey Identifies Multiple Chargeability Anomalies along 20 km Calibre Trend**

### **Highlights**

- **Citadel Project Induced Polarisation (IP) Survey identifies multiple high priority IP chargeability anomalies along a 20 km NNW-SSE trending corridor, including several anomalies similar or stronger than the Calibre and Magnum IP responses;**
  - **500 to 1,000m long (and open) IP anomaly, stronger than Magnum and Calibre IP anomalies, located at Blue Steel target, approximately 3km south-southwest of Calibre;**
  - **500 to 1,000m long (and potentially open) IP anomaly, similar in intensity to Calibre, located at Meekus target, approximately 8km north-northwest of Calibre;**
  - **Magnum North IP identifies possible extensions to gold-copper mineralisation 600 to 1,200m north of the Magnum Mineral Resource; and**
  - **Several other lower priority IP anomalies also identified in other regions of the Citadel Project.**
- **IP orientation survey lines detect the Magnum, Calibre and Corker mineralisation validating the IP technique (i.e. 'Proof of exploration concept').**
- **An RC drilling programme to test high priority IP anomalies is scheduled to commence during the fourth quarter of 2016 with the objectives of delivering additional discoveries and extending the limits of known mineralisation.**

### **CITADEL PROJECT 2016 EXPLORATION PROGRAMME PHASE 1 – IP SURVEY**

#### **Overview**

Antipa Minerals Ltd ("Antipa" or the "Company") is pleased to announce the results of the Citadel Project 2016 IP programme which was completed by Zonge Engineering and Research Organisation (Australia) Pty Ltd and was fully funded by Rio Tinto Exploration Pty Limited (Rio Tinto) as part of its initial \$3 million expenditure commitment pursuant to the 2015 Farm-in Agreement made between Rio Tinto and Antipa.

The objective of the IP survey was to screen and prioritise 17 high-priority targets within an extensive 450km<sup>2</sup> region of the Citadel Project; including Calibre, Magnum, Corker, Trigger, Meekus and the broader Rimfire area (Figures 1, 2, 8 and 9).



**ANTIPAMINERALS**

[www.antipaminerals.com.au](http://www.antipaminerals.com.au)

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.

Citadel Project acquired from Centaurus Metals April 2011.

North Telfer Project acquired from Paladin Energy May 2011.

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.

JORC 2012 Mineral Resources for the Calibre and Magnum deposits announced February 2015.

Citadel Project Farmin entered into with Rio Tinto Exploration October 2015.

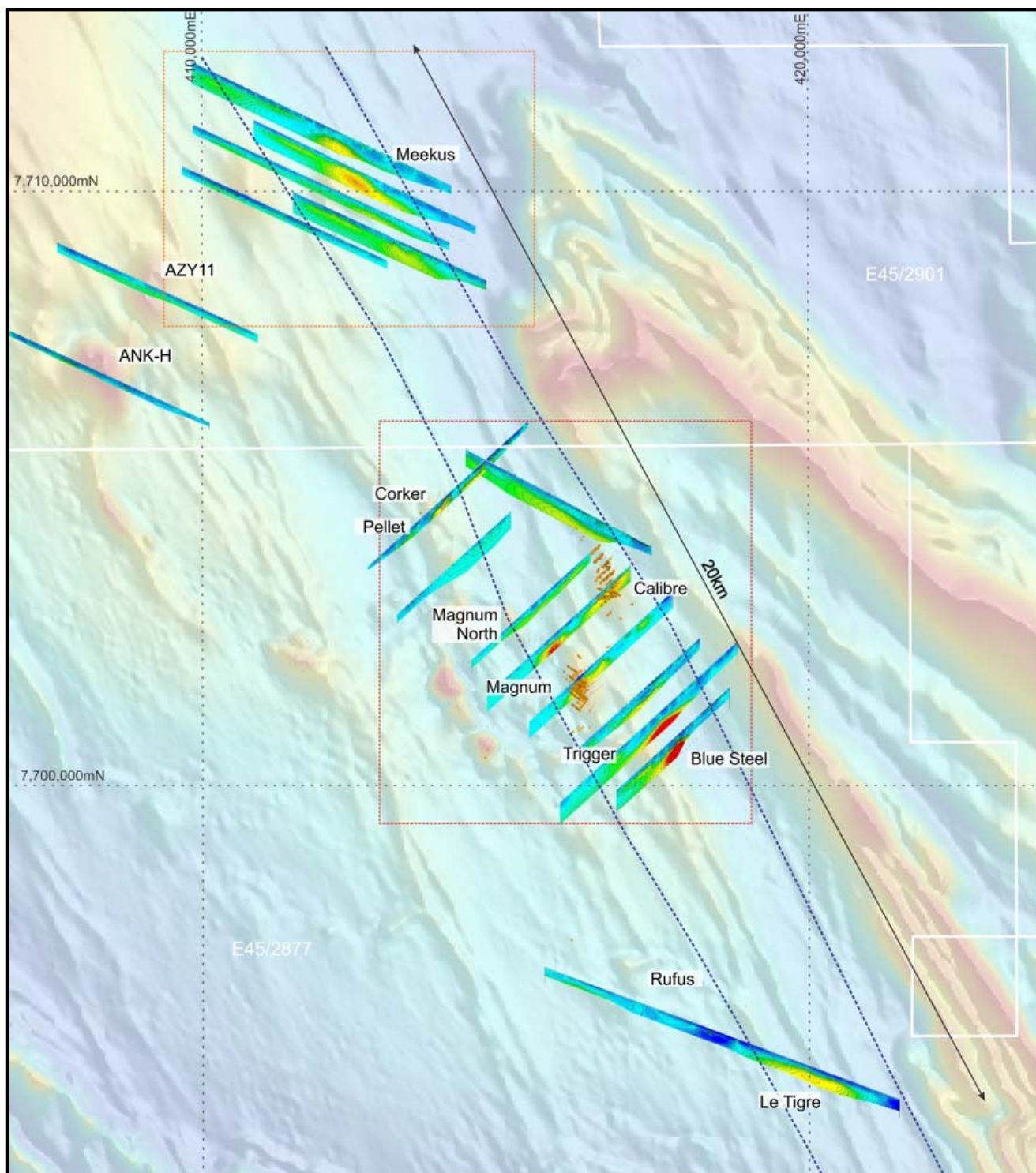
Minyari Dome tenement holding acquired December 2015.

#### **Company Projects**

Citadel Project covering 1,335km<sup>2</sup> of prospective granted exploration licences in the World-Class underexplored Proterozoic Paterson Province of Western Australia. Rio Tinto may earn up to a 75% Interest in the Citadel Project by funding exploration expenditure of \$60m.

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

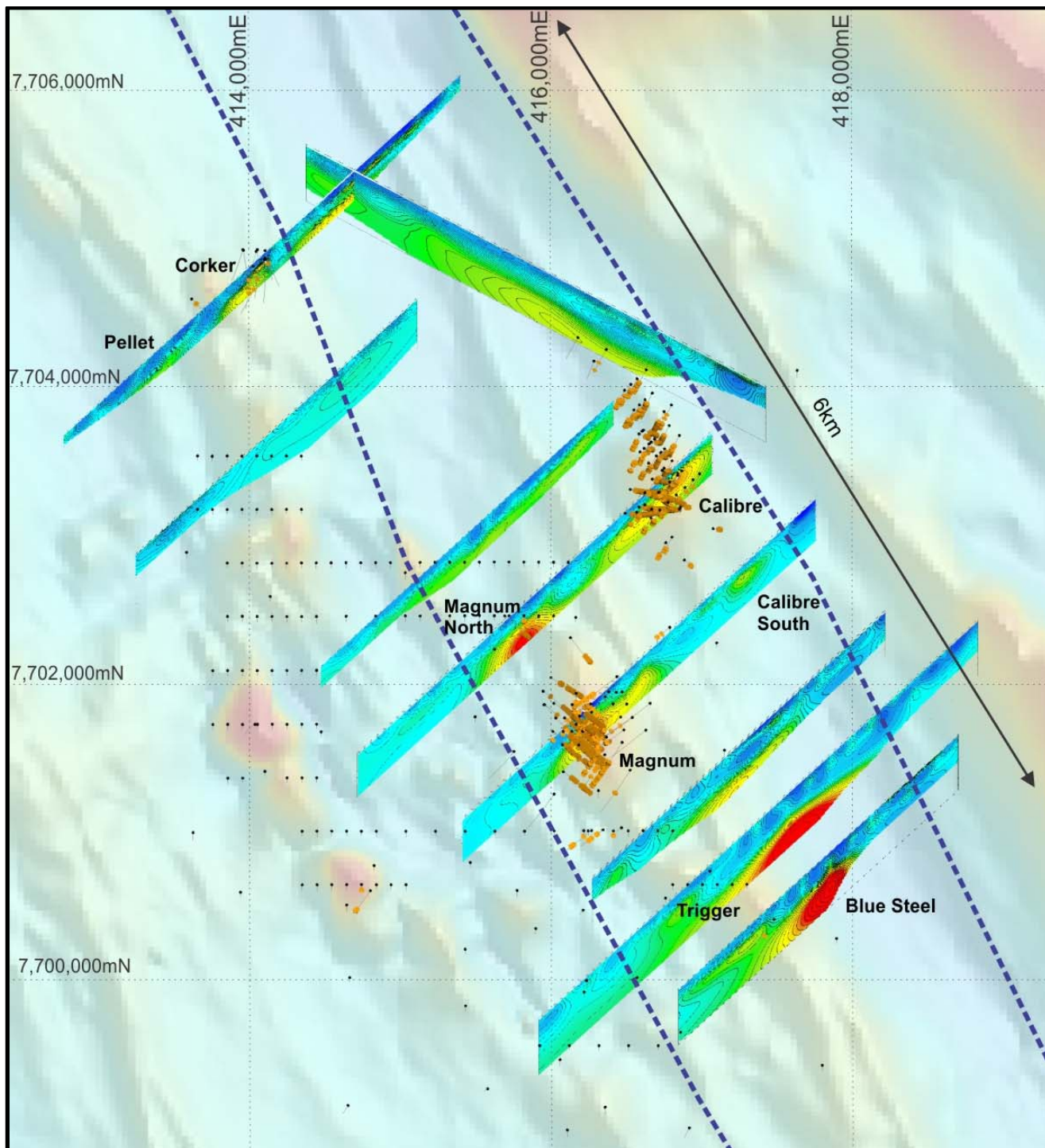
Paterson and Telfer Dome Projects covering an additional combined 1,631km<sup>2</sup> of prospective granted exploration licences and 80km<sup>2</sup> of exploration licence applications located as close as 5km from the Telfer mine.



**Figure 1: Eastern region of Citadel Project showing deposits, targets, IP survey Chargeability Inversion sections and  $\geq 0.1$  g/t Au drill intersections, highlighting multiple high priority IP chargeability anomalies along a 20 km NNW-SSE trending corridor and correlation between IP anomalies and known (drill intersected) precious and base metal mineralisation.**

**NB: Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour First Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.**





**Figure 2: Magnum Dome area within the a 20 km NNW-SSE trending corridor showing deposits, targets, IP survey Chargeability Inversion sections and  $\geq 0.1$  g/t Au drill intersections, highlighting multiple high priority IP chargeability anomalies along a 6 km NNW-SSE trending corridor and correlation between IP anomalies and known (drill intersected) precious and base metal mineralisation at Calibre, Magnum and Corker.**

**NB:** Over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour First Vertical Derivative, Reduced to Pole, northeast sun illumination) and Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.

As a 'proof of exploration concept' IP 'orientation' survey lines were completed across the known Magnum, Calibre and Corker mineralisation. These IP lines detected all three deposits, validating the IP technique as an appropriate electrical geophysical method for identifying gold-copper and other base metal mineralisation beneath the Citadel Project transported cover. Both 200m (typically) Dipole-Dipole and Pole-Dipole IP techniques were utilised during the survey (refer to Table 1). IP chargeability anomalies of interest were generally in the range of approximately 2.0 to 3.0 times background IP responses, with the 'orientation' IP line anomalies positively and strongly correlating with drilled Au-Cu-Ag mineralisation at Magnum and Calibre and Ag-Pb-Zn-Cu-Au mineralisation at Corker (Figures 1, 2, 3, 4, 6 and 8).

Induced Polarisation (IP) is a geophysical exploration technique whereby an electrical transmitter is used to introduce current into the ground which can cause some parts of the rock mass to become electrically polarised (i.e. 'charged'). When the current is stopped the polarised rock mass discharges producing currents, voltages and magnetic fields which can be measured by surface receivers the processed output of which can be used to identify possible sulphide related mineralisation.

*IP ('measured') Chargeability anomaly strength relative to background IP response:*

<i>Weak IP Chargeability Anomaly</i>	$\geq 1.5 \times \text{background};$
<i>Moderate IP Chargeability Anomaly</i>	$\geq 2.0 \times \text{background};$ and
<i>Strong IP Chargeability Anomaly</i>	$\geq 3.0 \times \text{background}.$

Within the limits of the 2016 IP survey area there are no known or interpreted Proterozoic carbonaceous/graphitic  $\pm$  sulphidic black shales, which can be IP 'responders', with the one exception being the Winchester target.

Figures 1 to 8, Table 1 and Appendix 1 summarise the IP survey results and parameters.

## **IP Results - Eastern Region of Citadel Project**

Across the eastern region of the Citadel Project (Figure 9) the IP survey identified multiple high priority chargeability anomalies along a 20 km north-northwest – south-southeast trending corridor, including several anomalies similar or stronger than the Calibre and Magnum IP chargeability responses (refer to Figures 1 to 8, Table 1 and Appendix 1).

This 20 km NNW-SSE trending corridor includes the following deposits and/or IP anomalies in location order from north to south (refer to Figures 1 to 8):

- |   |  |
|---|--|
| • <b>Meekus</b>                                   | = Moderate IP chargeability anomaly;               |
| • <b>Corker Ag-Pb-Zn-Cu-Au deposit</b>            | = Weak IP chargeability anomaly;                   |
| • <b>Calibre Au-Cu-Ag-W deposit</b>               | = Moderate IP chargeability anomaly;               |
| • <b>Magnum North</b>                             | = Moderate IP chargeability anomaly;               |
| • <b>Magnum Au-Cu-Ag<math>\pm</math>W deposit</b> | = Moderate to strong IP chargeability anomaly;     |
| • <b>Blue Steel</b>                               | = Moderate to strong IP chargeability anomaly; and |
| • <b>Le Tigre</b>                                 | = Moderate IP chargeability anomaly.               |

### *Blue Steel (IP Lines # 6, 48 and 49)*

The Blue Steel moderate to strong IP chargeability anomaly is 500 to 1,000m north-south (and open) by 400 to 600m east-west and is stronger than both the Magnum and Calibre Au-Cu-Ag-W deposit IP anomalies (Figures 1, 2, 5 and 8). Blue Steel is located approximately 3km south-southwest and 1.5km southeast of Calibre and Magnum respectively and east of Trigger and is situated at the intersection of the Calibre trend and Magnum plus Trigger west-northwest cross-fault trends. Previous limited drilling

at Trigger, located to the west of Blue Steel, encountered anomalous copper, gold and tungsten. Blue Steel is the highest ranked 2016 IP target.

Meekus (IP Lines # 18, 19, 20, 21 and 46)

The Meekus IP chargeability anomaly is 500 to 1,000m north-south (and potentially open) by 400 to 600m east-west and is similar in intensity to the Calibre Au-Cu-Ag-W deposit IP anomaly (Figures 1, 2, 7 and 8). There is no existing drilling in the vicinity of Meekus, which is located approximately 8km north-northwest of Calibre, with the IP anomaly located immediately to the east of the northwest trending Meekus magnetic anomaly. The Meekus IP anomaly is the second highest ranked 2016 IP target.

Magnum North (IP Lines # 3 and 4)

The Magnum North IP chargeability anomaly, which remains untested by drilling, is +640m north-south (and potentially open) by 400 to 500m east-west and is similar in intensity to the Magnum Au-Cu-Ag±W deposit IP anomaly (Figures 1, 2, 4 and 8). Limited existing drilling, mainly shallow aircore drilling and an isolated diamond drillhole (i.e. 12AMD0022), in the Magnum North area encountered anomalous to significant gold, copper, silver and tungsten and in conjunction with the IP results suggests the potential for further mineralisation 600 to 1,200m north of the Magnum Mineral Resource.

Magnum Deposit (IP Line # 1)

'Orientation' IP line # 1 across the Magnum deposit delivered a definitive moderate to strong IP chargeability anomaly which correlates with the known Au-Cu-Ag±W mineralisation (Figures 1, 2, 3 and 8).

Calibre Deposit (IP Lines # 1, 3, 4 and 43)

The Calibre deposit IP chargeability anomaly was not closed off along strike and was 250 to 400m east-west. The Calibre IP results were affected by poor data quality/depth penetration issues as a result of electrical current basement 'coupling' issues likely due to sand dune deposit 'interference'. Notwithstanding these issues the IP survey, including the 'orientation' IP line # 3, was able to detect the Calibre Au-Cu-Ag-W mineralisation and also identified possible mineralisation extensions to the south ± north of the known mineralisation (Figures 1, 2, 4 and 8). Further evaluation of Calibre is required.

Corker Deposit (IP Line # 8)

At the Corker deposit a weak, but discernible, approximately 400m wide east-west IP chargeability anomaly was identified by a single IP 'orientation' line. The anomaly correlated with the known Ag-Pb-Zn-Cu-Au±W mineralisation and further evaluation of Corker is required (Figures 1, 2, 6 and 8).

Le Tigre and Rufus (IP Line # 47)

Oblique (NW-SE) IP Line # 47 identified a moderate 1,000m long IP chargeability anomaly at the southeastern end of the line over the Le Tigre target 10 km south-southeast of Calibre (Figures 1 and 8) and further evaluation of this target is required. At the northwestern end of Line # 47 an equivocal IP chargeability anomaly in the Rufus target area 5 km south of Magnum also requires further evaluation.

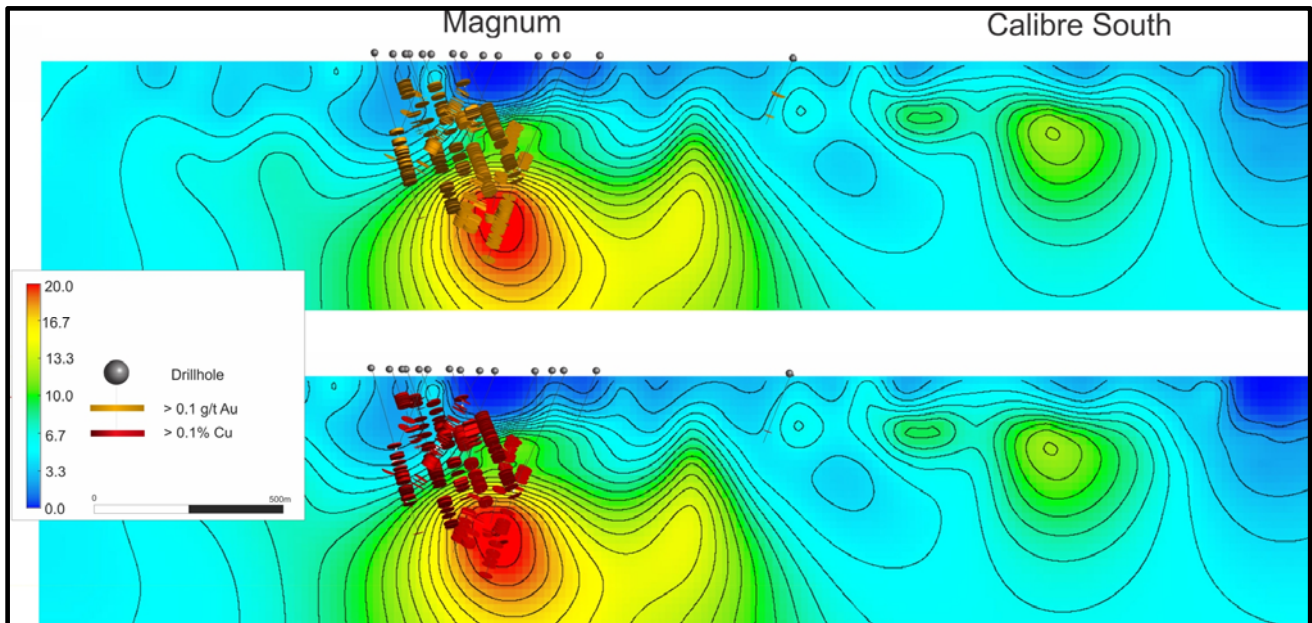
ANK-H, AZY-11 and AZY-15 (IP Lines # 12, 15 and 18)

There were no IP chargeability anomalies identified by limited IP coverage (i.e. two lines) in these areas (Figures 1 and 8).

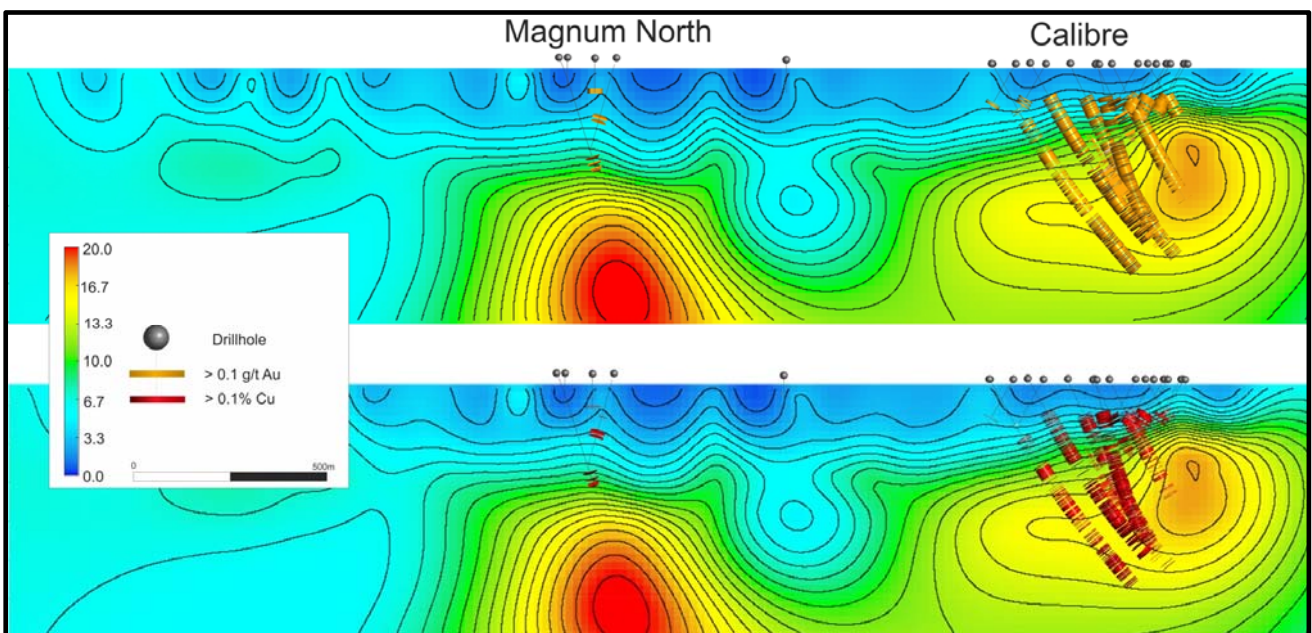


**Babushka (IP Line # 22)**

At Babushka an equivocal weak IP chargeability anomaly was identified at the southeastern end of a single IP line. Further evaluation of this target is required (Figure 8).

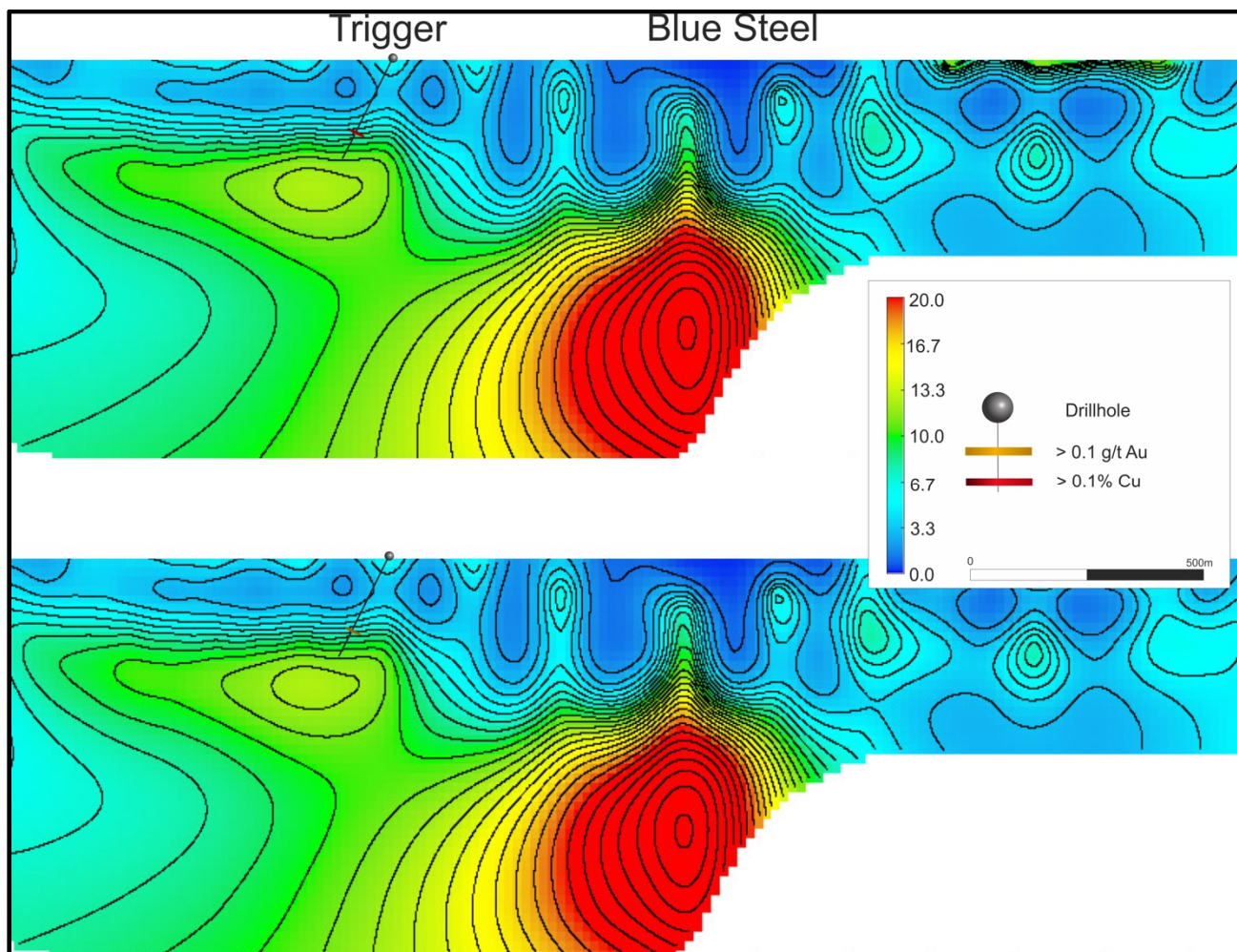


**Figure 3: Magnum deposit 'Orientation' IP Line # 1 showing IP Chargeability Inversion section (looking north) with  $\geq 0.1$  g/t Au (upper section) and  $\geq 0.1\%$  Cu (lower section) drill intersections, highlighting the correlation of the high priority IP chargeability anomaly with the drill intersected Magnum deposit mineralisation and untested Calibre South IP anomaly.**

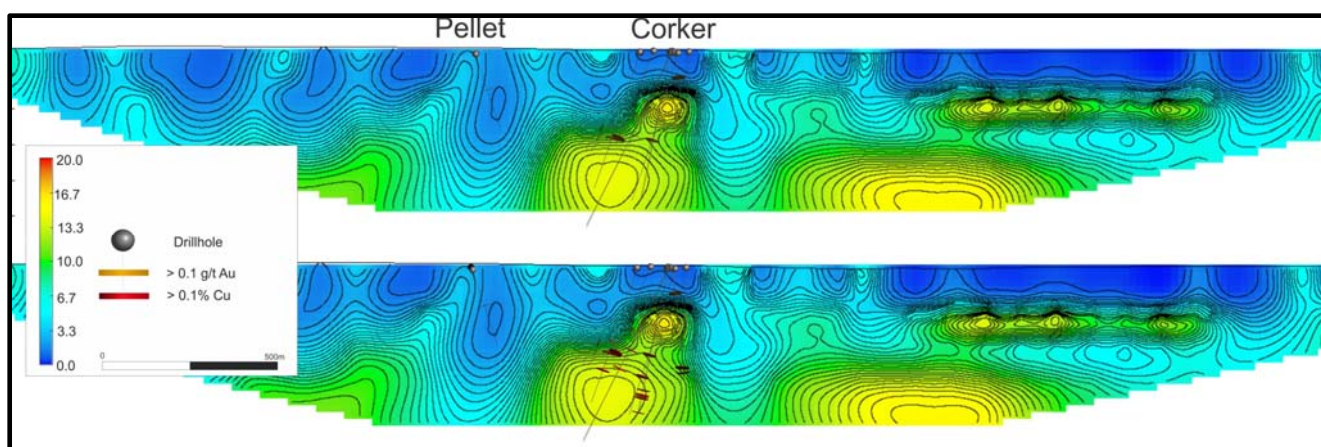


**Figure 4: Calibre deposit 'Orientation' IP Line # 3 showing IP Chargeability Inversion section (looking north) with  $\geq 0.1$  g/t Au (upper section) and  $\geq 0.1\%$  Cu (lower section) drill intersections, highlighting the correlation of the high priority IP chargeability anomaly with the drill intersected Calibre deposit mineralisation and untested Magnum North IP anomaly.**

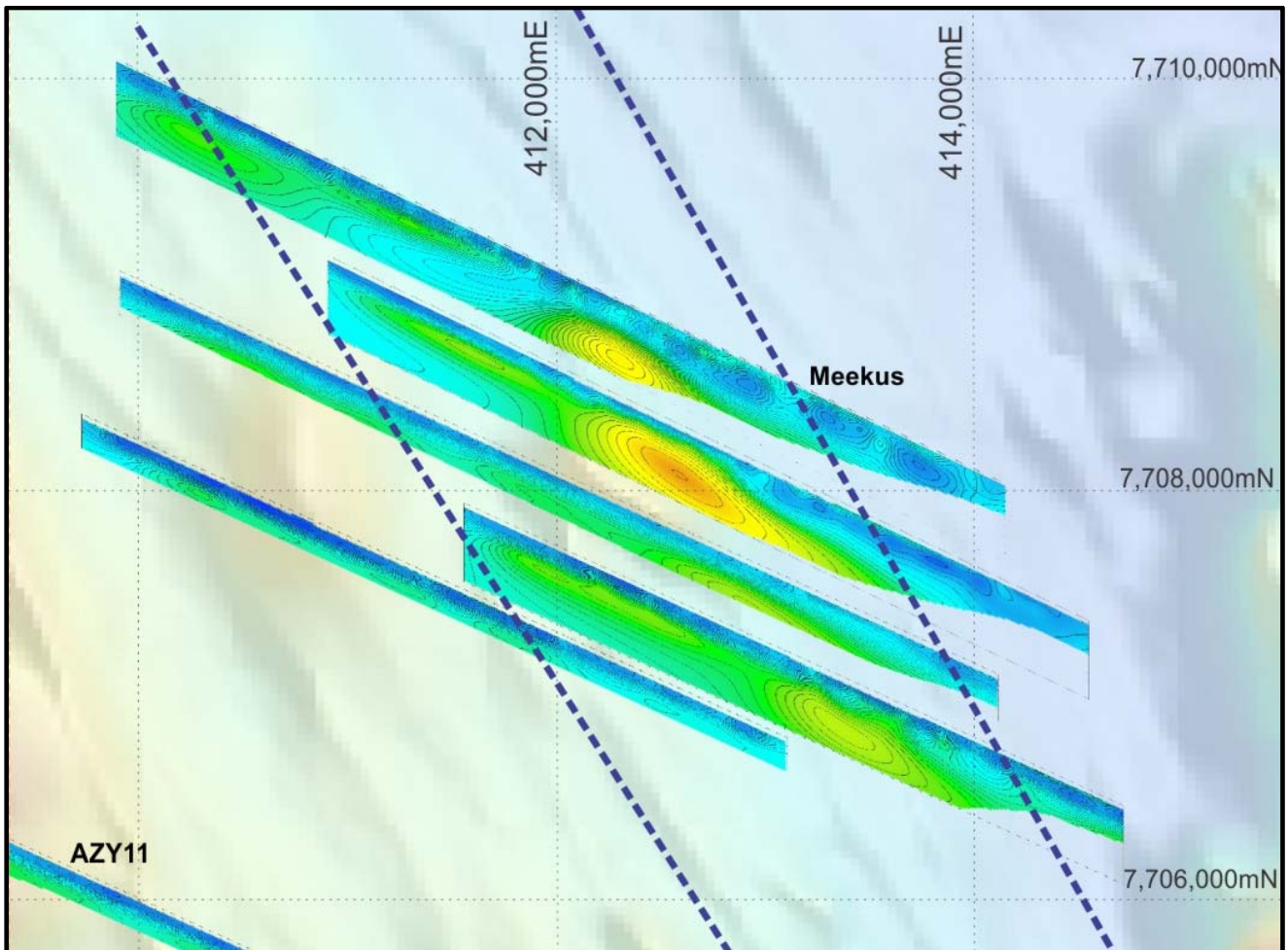




**Figure 5: Blue Steel target IP Line # 49 showing IP Chargeability Inversion section (looking north) with  $\geq 0.1$  g/t Au (upper section) and  $\geq 0.1\%$  Cu (lower section) drill intersections from a single Trigger drillhole west of Blue Steel, highlighting untested very high priority Blue Steel anomaly.**



**Figure 6: Corker deposit 'Orientation' IP Line # 8 showing IP Chargeability Inversion section (looking north) with  $\geq 0.1$  g/t Au (upper section) and  $\geq 0.1\%$  Cu (lower section) drill intersections, highlighting the correlation of the high priority IP chargeability anomaly with the drill intersected Corker deposit mineralisation and untested regions of the IP chargeability anomaly.**



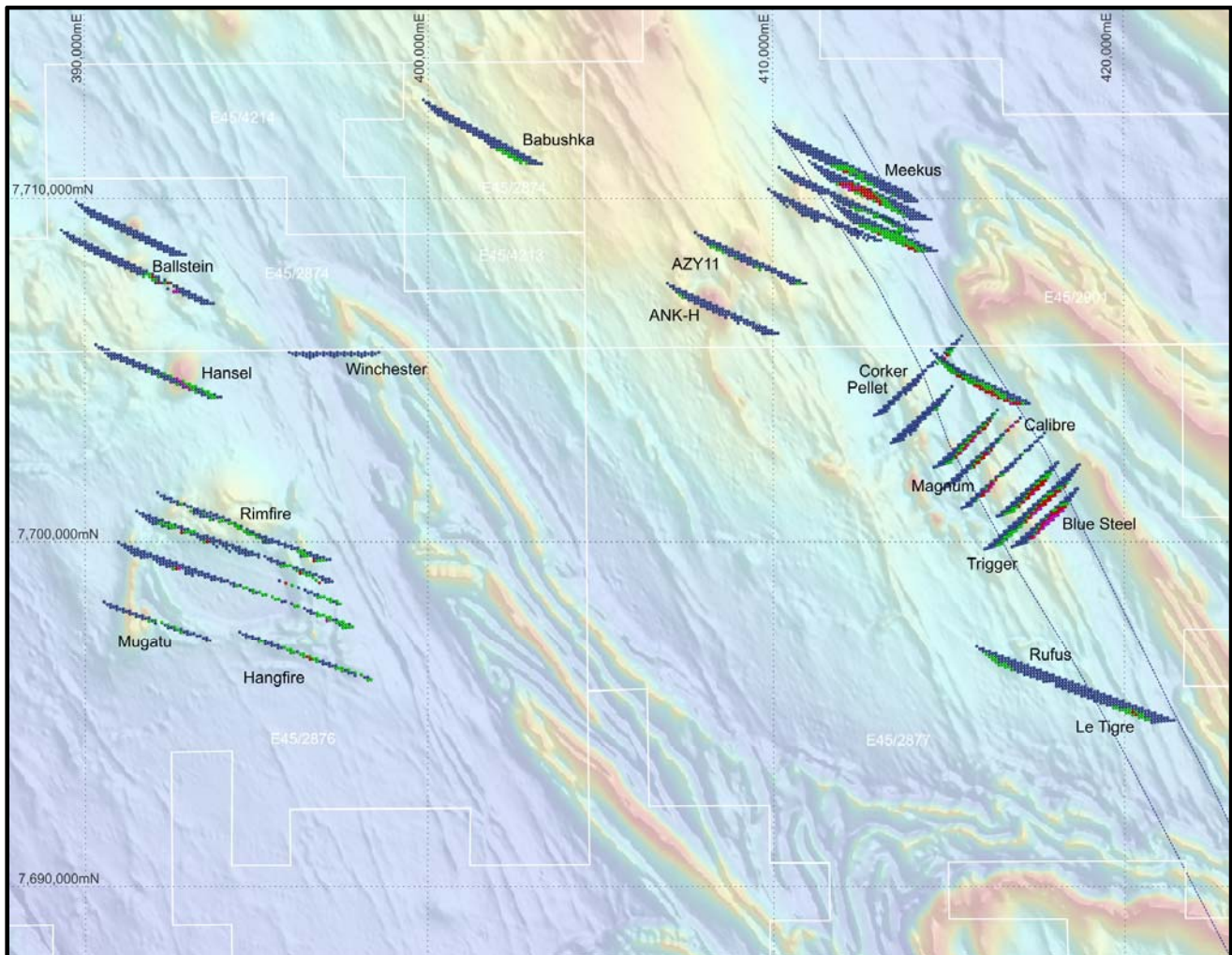
**Figure 7: Meekus target at the northern end of the 20 km NNW-SSE trending Calibre corridor showing IP Lines # 19, 20, 21 and 46 and corresponding IP Chargeability Inversion sections (looking north). There is no drilling in the Meekus area highlighting the untested high priority Meekus IP anomaly, which is similar in magnitude to the Calibre IP response.**

**NB:** Over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour First Vertical Derivative, Reduced to Pole, northeast sun illumination) and Regional GDA94 / MGA Zone 51 co-ordinates, 2km grid.

## IP Results - Western Region of Citadel Project

In the western region of the Citadel Project (Figure 9), which includes the Rimfire area, Ballstein, Hansel and Winchester, the IP survey identified several low priority weak commonly 'noisy' chargeability anomalies however many of the surveyed areas suffered from poor data and depth penetration issues due to apparently resistive cover (refer to Figures 8 and 9, Table 1 and Appendix 1). Whilst the transported cover is shallower in the western region (i.e. 40 to 60m), the shallow fresh-water (i.e. resistive) table and lateritic ferricrete impeded the electrical current penetration, particularly in the Rimfire area. A second IP generator had to be incorporated to boost the effective electrical current into the ground.





**Figure 8: Citadel Project showing deposits, targets, IP survey Chargeability Pseudo-sections, highlighting multiple high priority IP chargeability anomalies along a 20 km NNW-SSE trending corridor in the eastern region of the project**

**NB:** Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour First Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.

#### Rimfire Area (IP Lines # 36, 37, 38, 40, 41 and 44)

At the Rimfire area the IP survey identified a series of weak, commonly 'noisy'/equivocal chargeability anomalies on multiple lines particularly adjacent to the eastern margin/aureole of the sub-circular Rimfire intrusion co-incident with various magnetic highs and VTEM mid-channel conductivity anomalies (Figure 8). Further evaluation is required.

#### Ballstein Area (IP Lines # 28 and 30)

At Ballstein IP line # 30 identified a zone of interesting, possibly 'noisy', IP chargeability anomalism co-incident with several northwest aligned magnetic highs which requires further evaluation (Figure 8). The northern Ballstein IP line # 28 did not identify any IP anomalies.

#### Hansel (IP Line # 32)

At Hansel the IP line # 32 identified a low priority weak equivocal IP chargeability anomaly co-incident with the Hansel magnetic high (Figure 8). Further evaluation is required.

#### Winchester (IP Line # 25)

No IP chargeability anomalies were identified at Winchester across the single IP line # 25 (Figure 8). The Winchester stratigraphy is interpreted to include Proterozoic carbonaceous/graphitic  $\pm$  sulphidic black shales.

### **CITADEL PROJECT 2016 EXPLORATION PROGRAMME PHASE 2 – RC DRILL TESTING**

#### **Overview**

The Company is currently preparing Phase 2 of the Citadel Project 2016 exploration programme which will be largely driven by the results of the Phase 1 IP survey and will involve RC drill testing of a range of targets to be fully funded by Rio Tinto pursuant to the 2015 Farm-in Agreement made between Rio Tinto and Antipa.

RC drill testing of gold and/or copper targets is planned to commence during the fourth quarter, 2016, and will involve drill testing of IP chargeability anomalies generated during Phase 1 and other selected targets including some VTEM™ electromagnetic conductivity anomalies and/or magnetic high anomalies.

The objectives of the Phase 2 RC drilling programme is to deliver additional discoveries and extend the limits of known gold-copper-silver mineralisation.

#### **Western Australian Government Funding Received for Rimfire Area Drilling Programme**

The Company has received funding approval for up to \$148,000 from the Western Australian Government's Exploration Incentive Scheme (EIS) for exploration at its Rimfire area. The government funding relates to 2016 exploration activities at the Rimfire area and contemplates the completion of a RC drilling programme involving up to 40 drillholes for up to approximately 4,500 metres, to be 50% EIS co-funded, with the RC drillholes ranging in depth from 130 to 250 metres.

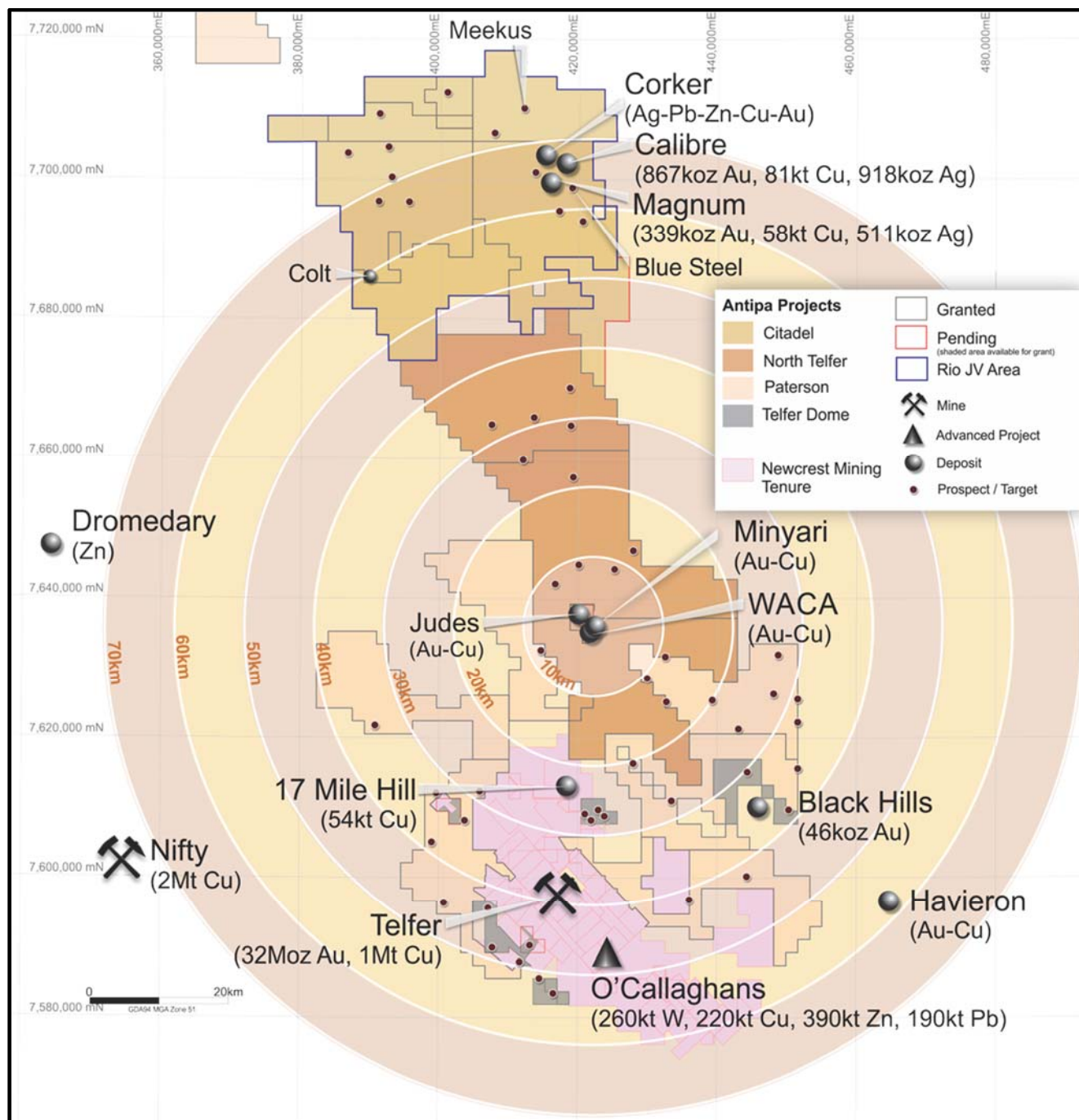
Antipa would like to acknowledge the ongoing support provided by the WA Government through its EIS programme for the Company's exploration programmes. Since listing the Company has successfully applied for six WA Government EIS co-funded drilling grants. The EIS co-funded drilling programme preferentially funds high quality, technical and economically based projects that promote new exploration concepts and are assessed by a panel on the basis of geoscientific and exploration targeting merit.

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

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**Figure 9: Antipa's Paterson Province Projects identifying major deposits and mines (20km grid).**

**Table 1: Citadel Project 2016 Induced Polarisation (IP) Survey Detailed Parameters**

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#### Notes Table 1:

- Also refer to Appendix 1 for all IP Chargeability Inversion Sections.
- DDIP = Dipole-Dipole IP.
- PDIP = Pole-Dipole IP.
- Rx = IP Receiver.
- Tx = IP Transmitter.
- Single Transmitter used for line # 1 = Zonge GGT-30.
- Single Transmitter used for all other DDIP lines (i.e. excluding Line # 1) = GDD transmitter.
- Twin (in series) Transmitters used for all PDIP lines = GDD transmitters x 2.
- Receivers used = GDD GRx8-IP.
- The IP line length is calculated based on maximum extent of the electrode array (i.e. both Tx and Rx).
- The number of stations represents the actual number of data points available for modelling.

#### 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 1,335km<sup>2</sup> 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. Under the terms of a Farm-in and Joint Venture Agreement with Rio Tinto, Rio Tinto can fund up to \$60 million of exploration expenditure to earn up to a 75% interest in Antipa's Citadel Project.

The Company has an additional 1,310km<sup>2</sup> of granted exploration licences, known as the North Telfer Project which hosts the high-grade gold-copper Minyari and WACA deposits and extends its ground holding in the Paterson Province to within 20km of the Telfer Gold-Copper-Silver Mine and 30km of the O'Callaghans tungsten and base metal deposit. The Company has also acquired, from the Mark Creasy controlled company Kitchener Resources Pty Ltd, additional exploration licences in the Paterson Province which are now all granted and cover 1,573km<sup>2</sup>, and a further 138km<sup>2</sup> of exploration licences (including both granted tenements and applications) known as the Telfer Dome Project, which come to within 5km of the Telfer mine and 7km of the O'Callaghans deposit.



### **Competent Person Statement:**

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Roger Mason 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 relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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.

Additional information in this report that relates to previous Exploration Results was extracted from the following:

- Report entitled "*Citadel Project – VTEM Electromagnetic Survey Extends Existing Magnum Target Area and Defines New Generation of High Priority Targets*" created on 2 September 2011;
- Report entitled "*Citadel Project - Magnum Drilling Update*" created on 10 September 2012;
- Report entitled "*Citadel Project - Phase 2 Drilling Programme - Corker Assays*" created on 20 December 2012;
- Report entitled "*Citadel Project - Calibre Deposit - Major Gold-Copper Discovery*" created on 4 February 2013;
- Report entitled "*Rio Tinto – Antipa Citadel Project Joint Venture*" created on 9 October 2015;
- Report entitled "*Citadel Project Exploration Update*" created on 15 March 2016; and
- Report entitled "*Citadel Project Commencement of IP Survey*" created on 24 March 2016.

All of which are available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

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

### **Forward-Looking Statements:**

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



## CITADEL PROJECT – 2016 INDUCED POLARISATION (IP) SURVEY:

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The ground based 2016 Induced Polarisation survey was undertaken by Zonge Engineering and Research Organisation (Australia) Pty Ltd, an independent geophysical contractor/service provider.</li> <li>The IP survey is detailed in the attached report including Table 1, with equipment and sampling techniques employed in the survey as follows: <ul style="list-style-type: none"> <li>Survey Type = Induced Polarisation;</li> <li>Array = Dipole-Dipole or Pole-Dipole;</li> <li>Number of Arrays = 28;</li> <li>Dipole Length = 200m (generally);</li> <li>Receiver Lines = As per Table 1 in the attached report;</li> <li>Transmitter Lines = As per Table 1 in the attached report;</li> <li>Line Separation = Variable, as per Table 1 and diagrams in the attached report;</li> <li>Domain = Time Domain;</li> <li>Cycle = 0.125 Hz;</li> <li>Eastern region of Citadel Project IP data results modelled using UBC DCIP2D inversion code;</li> <li>Western region of Citadel Project IP data results modelled using Zonge SW-TS2DIP (2-D SMOOTH MODEL RES/IP INVERSION) inversion code;</li> <li>Resultant Final Output = Pseudo-sections (using n spacings) and Inversions (cross-sections) of Apparent Chargeability (Milliseconds) and Apparent Resistivity (Ohm.m).</li> </ul> </li> <li>This release has no reference to previously unreported drilling.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The ground Induced Polarisation (IP) survey was undertaken by Zonge Engineering and Research Organisation (Australia) Pty Ltd, an independent geophysical contractor/service provider.</li> <li>The survey involved both dipole-dipole and pole-dipole arrays generally with 200m spaced electrodes on variably, generally broad spaced (i.e. 400 to 600m) spaced lines with readings with variable n spacing.</li> <li>A total of 28 IP lines were surveyed for a total of 126.8 line kilometres.</li> <li>Each IP receiver array consisted of up to 9 receiver electrodes at 200m spacings. These electrodes were connected to the receiver to provide up to eight 200m dipoles and additional 400m, 600m (when possible) dipoles simultaneously.</li> <li>PDIP data was collected using 200m dipoles providing up to 8 dipoles (i.e. n=1-8).</li> <li>The Induced Polarisation equipment consisted of Transmitter(s) and Receiver apparatus. A motor generator drove the Zonge GGT-30 and GDD transmitter(s) capable of supplying up to 30.0 kva and 5.0 kva of continuous power respectively. For periods of the survey two GDD Transmitters were</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>operated in series allowing for increased continuous power of up to 10 kva.</p> <ul style="list-style-type: none"> <li>Stainless steel electrodes were used to inject a stable current. The bipolar current waveform had an 8-second period with a 50% duty cycle.</li> <li>The secondary voltage, denoted Vs, was nominally measured every 200 metres, and at 100m occasionally using a GRX8-32 GDD Instruments Time Domain Receiver.</li> <li>A GDD GRX-32 IP Receiver was used to take all of the data for the survey. From the Vs Apparent Resistivity and Apparent Chargeability were derived. The decay curve was separated into 20 pre-programmed windows after an initial delay of 40ms. Stack size was typically 20 cycles.</li> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>km = kilometre; m = metre; mm = millimetre.</li> <li>IP Stations were determined by a standard hand-held Garmin GPS.</li> <li>The IP survey coordinates are in GDA94 MGA Zone 51 coordinates.</li> <li>Local IP survey coordinates are for the purposes of line and station reference points.</li> <li>This release has no reference to previously unreported drilling.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>IP survey line spacing varied due to the nature of the programme and varied from single IP lines to multiple IP lines. The closest spaced lines were 400 m (refer also to Table 1 in the attached report).</li> <li>IP electrodes were generally spaced at 200m (refer to Table 1 in the attached report).</li> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Orientation of data in relation to geological	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
structure	<i>mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>All digital IP data was subjected to rigorous audit and vetting by the independent geophysical contractor/service provider and data manager Zonge Engineering and Research Organisation (Australia) Pty Ltd.</li> </ul>

## CITADEL PROJECT – 2016 INDUCED POLARISATION (IP) SURVEY:

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The IP survey is located within Exploration Licenses E45/2874, E45/2876, E45/2877 and E45/2901.</li> <li>Antipa currently has a 100% interest in all these tenements and there are no royalties on these tenements.</li> <li>On 9 October 2015 Farm-in and JV Agreements were executed between Antipa and Rio Tinto Exploration Pty Limited (Rio Tinto).</li> <li>E45/2876 and E45/2877 are contained completely within land where the Martu People have been determined to hold Native Title rights. No historical or environmentally sensitive sites have been identified in the area of work.</li> <li>E45/2874 and E45/2901 are contained completely within land where the Nyangumarta People have been determined to hold Native Title rights. No historical or environmentally sensitive sites have been identified in the area of work.</li> <li>The tenements are all in 'good standing' with the WA DMP.</li> <li>There are no known impediments exist, including to obtain a licence to operate in the area.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Prior to 1991 limited to no mineral exploration activities.</li> <li>1991 to 1996 BHP Australia completed various regional airborne geophysical surveys (e.g. aeromagnetics, radiometrics, GeoTEM, ground magnetics,</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>surface EM), geochemical Aircore and selected diamond drilling programmes across a significant area which covered the Citadel Project. Whilst this era of exploration highlighted a number of areas as being variously anomalous, BHP did not locate any basement (Proterozoic) precious or base metal mineralisation. In 1995 BHP Minerals completed an MMI-A/MMI-B soil programme over an area which was ultimately found to be the region within which the Magnum deposit was located.</p> <ul style="list-style-type: none"> <li>• 1997 to 2002 JV partners Croesus-Gindalbie completed minor surface geophysical surveys (e.g. electromagnetics) and various drilling programmes across parts of the Citadel Project (i.e. 17 x Diamond, 10 x RC and 134 x Aircore drillholes) leading to the discovery of the Magnum Au-Cu-Ag deposit, and its partial delineation, in 1998.</li> <li>• 2002 to 2003 JV partners Teck Cominco and Croesus-Gindalbie completed detailed aeromagnetic and radiometric surveys over the entire Citadel Project, Pole-Pole IP over 8 targets and limited drilling (i.e. 4 x Diamond drillholes) within the Citadel Project.</li> <li>• 2004 to 2005 JV partners NGM Resources and Croesus-Gindalbie completed limited drilling (i.e. 3 x Diamond drillholes) at selected Citadel Project prospects intersecting minor Au-Cu-Ag mineralisation at the Colt prospect.</li> <li>• 2006 to 2010 Glengarry Resources/Centaurus Metals undertook re-processing of existing data and re-logging of some drillcore. No drilling or geophysical surveys were undertaken and so no new exploration results were forthcoming.</li> <li>• 2011 to 2015 Antipa Minerals Ltd exploration of the Citadel Project including both regional and prospect/area scale geophysical surveys (i.e. VTEM, ground EM, DHEM, ground magnetics and ground gravity) and geochemical surveys (i.e. MMI-M™ and SGH™ soil programmes) and drilling programmes (i.e. diamond and RC) resulting in two greenfield discoveries in 2012, i.e. Calibre and Corker, and subsequent drilling programmes.</li> <li>• 2015 to 2016 (ongoing) Antipa Minerals Ltd operators under a Farm-in Agreement executed on the 9 October 2015 between Antipa and Rio Tinto Exploration Pty Limited (Rio Tinto). RC drilling at Calibre late 2015 and in 2016 and extensive IP survey was completed.</li> </ul>



Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The 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 high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to drilling.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should</li> </ul>	<ul style="list-style-type: none"> <li>All appropriate maps and IP sections (with scales) and tabulations of survey parameters are reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<ul style="list-style-type: none"> <li>This release has no reference to previously unreported drilling, sampling, assays or mineralisation.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Company believes that the ASX announcement is a balanced report with all material results reported.</li> <li>Additional significant results can be found in previous public reports.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>This announcement refers to previous exploration results including geophysics, drill results and geology.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>At this stage it is envisaged that the IP chargeability anomalies identified by the 2016 IP survey will be the subject of further investigation and evaluation via a Reverse-circulation (RC) drilling programme the exact nature and scale of which is currently being determined.</li> <li>Relevant diagrams can be found in the attached report or in previous public reports.</li> </ul>