



CITADEL PROJECT EXPLORATION RESULTS

RIO TINTO - ANTIPA CITADEL JOINT VENTURE PROJECT - PATERSON PROVINCE

Highlights

- Drilling at Calibre extends the gold-copper mineralisation outside the southern limits of the existing 2.1Moz gold 104kt copper Mineral Resource, with intersections including:
 - 10.6m at 2.12 g/t gold and 0.12% copper from 153.0m down hole in CALB0030, including:
 - 1.0m at 20.10 g/t gold and 0.83% copper from 152.0m
 - 31.9m at 1.07 g/t gold and 0.25% copper from 413.4m down hole in CALB0034, including:
 - 4.9m at 0.86 g/t gold and 1.41% copper from 414.1m; and
 - 1.3m at 12.25 g/t gold from 423.0m
 - 126.1m at 0.43 g/t gold and 0.17% copper from 113.6m down hole in CALB0035
 - 92.0m at 0.44 g/t gold and 0.16% copper from 217.3m down hole in CALB0030
 - 39.9m at 0.50 g/t gold and 0.37% copper from 284.6m down hole in CALB0034, including:
 - 3.0m at 1.76 g/t gold and 1.79% copper from 306.0m
- Broad spaced drilling at Rimfire North intersects gold-copper mineralisation, including sulphide breccias, along 1.5km interpreted domal structure, with intersections including:
 - 15.2m at 0.53 g/t gold and 0.21% copper from 148.9m down hole in RFRN0005, including:
 - 6.2m at 1.06 g/t gold and 0.23% copper from 154.0m
 - 26.1m at 0.48 g/t gold and 0.23% copper from 182.2m down hole in RFRN0005, including:
 - 9.6m at 0.97 g/t gold and 0.34% copper from 188.0m
 - 4.0m at 2.72 g/t gold and 0.07% copper from 102.0m down hole in RFRN0002
 - **2.0m at 7.73 g/t gold** and 0.09% copper from 106.0m down hole in RFRN0002
- Rimfire results highlight potential for a material discovery under shallow cover with multiple magnetic anomalies remaining untested:
 - Drill targeting to be enhanced via recently completed detailed aeromagnetic survey and ground geophysical surveys planned for 2022
- Expanded CY 2021 exploration programme involved the completion of Calibre and Magnum gold-copper resource extension and greenfield discovery drill programmes and various geophysical surveys, including:
 - 24,530m of drilling
 - GAIP geophysical survey
 - Detailed aeromagnetic survey over Rimfire area
- \$10M Citadel Joint Venture Project CY 2022 Exploration Programme agreed by Antipa and Rio Tinto includes follow-up at Rimfire and further regional target drill testing

Antipa Minerals Limited (ASX: AZY) (Antipa or the Company) is pleased to announce exploration results for the Citadel Joint Venture Project (Figures 1 and 2) CY 2021 Exploration Programme (2021 Exploration Programme) and advise that the CY 2022 Exploration Programme has been agreed with Rio Tinto Exploration Pty Limited (Rio Tinto).

Commenting on the 2021 results and 2022 programme, Antipa's Managing Director, Roger Mason, said:

"The available 2021 Exploration Programme results have further increased the potential size of the Calibre 2.1Moz gold, 104kt copper and 1.3Moz silver Mineral Resource, and have also identified highly prospective sulphide rich breccia style mineralisation at Rimfire. Completion this year of the detailed Rimfire aeromagnetic survey in conjunction with additional geophysical surveys planned for 2022 will lead to significantly enhanced gold-copper target identification and testing. The JV partners have agreed to a \$10M CY 2022 exploration programme demonstrating the continued belief in the significant untested exploration potential of the Citadel Project".

Citadel 2021 Exploration Programme

The 2021 Exploration Programme, operated by Rio Tinto, comprised the following activities:

- A 24,530-metre reverse circulation (**RC**) (14,871m) and diamond core (**DD**) (9,658m) drill programme focused on:
 - the Magnum Dome area (10,876m), which hosts the Calibre and Magnum gold-copper-silver combined Mineral Resources of 2.4Moz of contained gold, 162kt of contained copper and 1.8Moz of contained silver (for tonnage and grade details see the table further below in this release), and the Corker deposit (Figure 3); and
 - the Rimfire area together with select regional targets (13,654m) (Figure 10).
- Assay results have been received for 17,697m (RC 14,266m and DD 3,431m);
- Preliminary metallurgical test-work and geotechnical evaluations (including 291m of geotechnical drilling) at Calibre (ongoing);
- Preliminary appraisal work in respect of early stage conceptual project development parameters at the Calibre deposit (ongoing);
- Continuation of the GAIP survey programme across prospective structural corridors of the Citadel tenements, prioritising areas that have had limited or no testing of the basement by drilling;
- Rimfire detailed aeromagnetic survey covering 110km² with orthogonal survey lines; and
- Ongoing processing and interpretation of geophysical and drill hole data, together with Calibre deposit and Magnum Dome modelling to identify further priority target areas which may support a potential Mineral Resource update.

Citadel 2021 Exploration Programme Results

The significant results from the 2021 Exploration Programme are summarised below and in Figures 2 to 12 and Tables 1 and 2.

Calibre Deposit

Drilling at Calibre extended the gold-copper mineralisation beyond the southern limits of the existing 2.1Moz gold and 104kt copper Mineral Resource by up to 100m to the west and east and also beneath the southern region of the resource by up to 150m (Figures 4 to 9). Based on a stepout drill section 200m south of the resource, the Calibre mineralisation remains open but apparently less well developed (Figures 4 to 5). Available assay results can be found in Table 1 with results for several holes pending. Appraisal work in respect of Calibre early stage conceptual

project development options is ongoing and includes geotechnical drilling and metallurgical testwork.

Rimfire Area

The Rimfire intrusion has developed a very large-scale precious and base metal mineral system which extends across an area of up to 6 km in diameter located approximately 25km southeast of Rio Tinto's Winu copper-gold-silver deposit. The 2021 Rimfire greenfield drill programme largely targeted areas with anomalous magnetic signatures and gold-copper mineralisation from the 2020 RC drilling. Drilling at Rimfire has identified two zones of significant gold-copper-silver±tungsten mineralisation 4.4km apart, Sundance and Hangfire, for follow up drilling, both of which remain open in all directions. Mineralisation at the Sundance target is related to a possible domal magnetic feature which extends across 1.5km at Rimfire northeast and mineralisation at the Hangfire target is related to a possible folded magnetic feature which extends across 500m at Rimfire southeast, (Figure 10). Rimfire mineralisation is predominantly hosted by metasediment and mafic intrusives.

Assays for 14 of the 15 RC and 2 of the 6 DD drill holes completed at the Rimfire area in 2021 have been received. Encouragingly, a number of these very widely spaced (200 to 1,000m), commonly vertical holes, returned a number of significant intersections with available assay results including maximum grades of 7.73 g/t gold, 5.0% copper, 9.03 g/t silver and 0.54% tungsten, with results for several holes pending (refer to Tables 1 and 2 and Figures 10 to 12).

Interestingly Sundance DD hole RFRN0005 intersected massive sulphide (pyrrhotite >> chalcopyrite > pyrite) breccia style gold-copper mineralisation which is magnetic and highly conductive. This breccia mineralisation had not been detected by AEM surveys over the area and so in order to enhance drill targeting a detailed Rimfire aerial magnetic survey was completed this year and ground EM surveys are being considered for 2022.

Large regions of magnetic anomalies at Rimfire, including many under shallow cover of less than 30m, remain untested with the recent drill results highlighting the exploration potential for a material discovery (Figure 10). Interpretation, 3D modelling and targeting of the Rimfire 2021 aerial magnetic survey is ongoing.

Magnum Shear

Eight broad spaced drill holes (one DD and seven RC holes) were completed at the Magnum Shear target, which is located between the Magnum and Calibre deposits, with drilling intersecting further narrow high-grade gold-copper mineralisation along a 1km strike with maximum grades of 6.78 g/t gold, 1.7% copper, 7.51 g/t silver and 0.13% tungsten (Table 1 and Figure 3). The prospect is currently under review.

Magnum North

Two DD holes were completed at Magnum North testing for strike extensions to the Magnum gold-copper-silver Mineral Resource, assay results are pending (Figure 3).

Citadel Northeast

One RC hole was successfully completed at Citadel Northeast which is a conceptual target for Nifty style high-grade copper mineralisation (i.e. structurally disrupted fold nose within black shales) located approximately 5km northeast of the Calibre deposit and beneath 120m of cover. The reconnaissance vertical RC hole intersected significant low-grade copper mineralisation with 16.0m at 0.09% copper including 2.0m at 0.29% copper which is considered highly encouraging and the prospect is currently under review (Table 1).

Boxer

Four very widely spaced (200 to 700m) vertical RC holes were completed at Boxer which is a +1,500m along strike x 900m wide IP chargeability anomaly located within a fertile structural trend situated 15km southeast from Rimfire (Figure 2). No significant mineralisation was intersected in the metasediments which are below 70m of cover, with black shales hosting low levels of disseminated to fracture pyrite potentially explaining the IP response. However, the only drill hole located on the western side of the IP anomaly BOXR0003 intersected a 22m zone of moderate to strong quartz veining with minor sulphides (pyrite >> pyrrhotite >> chalcopyrite). The prospect is currently being reviewed, with a follow-up deeper penetrating IP survey (e.g. Pole-Dipole IP) under consideration.

Other Greenfield Targets

Drill holes completed at Magnum East, Trigger, Ballstein and Le Tigre each returned narrow intersections with low-grade gold and/or copper ± silver and tungsten mineralisation, whilst drill holes completed at the Noosa, Detachment and Hansel targets did not return any significant intersections (Tables 1 and 2). No follow up exploration is planned for these targets.

Gradient Array Induced Polarisation (GAIP) Geophysical Survey

Preliminary processing, and review of the 2021 GAIP survey results has not identified any new high priority induced polarisation chargeability targets.

Citadel CY 2022 Exploration Programme

The Citadel 2022 Exploration Programme, to be operated by Rio Tinto, is currently planned to comprise the following activities:

- An 8,000 to 11,000 metre RC and DD drill programme focused on the Rimfire area, together
 with select regional targets including Magnum North, with expected commencement in
 April;
- Geophysical programme comprising IP, Rimfire ground EM and downhole geophysical surveys, with expected commencement in April;
- Ongoing processing and interpretation of IP and drilling data (including final 2021 exploration programme data), together with Calibre deposit, Magnum Dome and preliminary Rimfire modelling, to identify further priority target areas;
- Possible update to the existing 2021 Calibre deposit mineralisation model ± Mineral Resource;
- Conclusion of the Calibre preliminary metallurgical test-work;
- Conclusion of a preliminary assessment of a potential Calibre deposit development opportunity; and
- Rimfire water bore.

The total budgeted spend for 2022 is \$10 million inclusive of JV management fees.

Consistent with previous years, the Citadel JV 2022 Exploration Programme and budget will be subject to ongoing review based on results, field conditions, contractor availability and pricing and other relevant matters.

Overview of the Citadel Project and the Calibre and Magnum Deposits

The Calibre and Magnum deposits are part of the Citadel Project's large 1,330km² tenure. Within the Citadel Project, the mineralised material is covered by desert sand and sediments to a depth ranging between just 10 to 100m.

Calibre and Magnum currently constitute global Mineral Resources of 108Mt at 0.72 g/t gold, 0.15% copper and 0.54 g/t silver for 2.44Moz gold, 162kt copper and 1.8Moz silver with Calibre having a Mineral Resource of 92Mt at 0.72 g/t gold, 0.11% copper and 0.46 g/t silver for 2.1Moz gold, 104kt copper and 1.3Moz silver and Magnum having a Mineral Resource of 16.1Mt at 0.70 g/t gold, 0.37% copper and 1.00 g/t silver for 334,000oz gold, 58,000t copper and 0.5Moz silver. The locations of the two deposits are shown in Figures 1, 2 and 3.

Both deposits are located approximately 45km east of Rio Tinto's Winu copper-gold-silver deposit, which Rio Tinto is continuing to explore and advance development studies on with first ore from Winu expected in 2025, subject to regulatory approvals, traditional owner, and other consents. On 28 July 2020, a maiden JORC 2012 Inferred Mineral Resource of 503Mt at 0.35% copper, 0.27 g/t gold and 2.15 g/t silver (containing 4.4Moz of gold, 1.8Mt of copper and 35Moz of silver) was announced for Winu¹.

Release authorised by Stephen Power Chairman

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

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¹ Refer Rio Tinto (<u>www.riotinto.com</u>) and Australian Securities Exchange (ASX: RIO) (<u>www.asx.com.au</u>) and London Stock Exchange (LSE: RIO) (<u>www.londonstockexchange.com</u>) news releases and report entitled "Rio Tinto reveals maiden Resource at Winu and new discovery" created on 28 July 2020

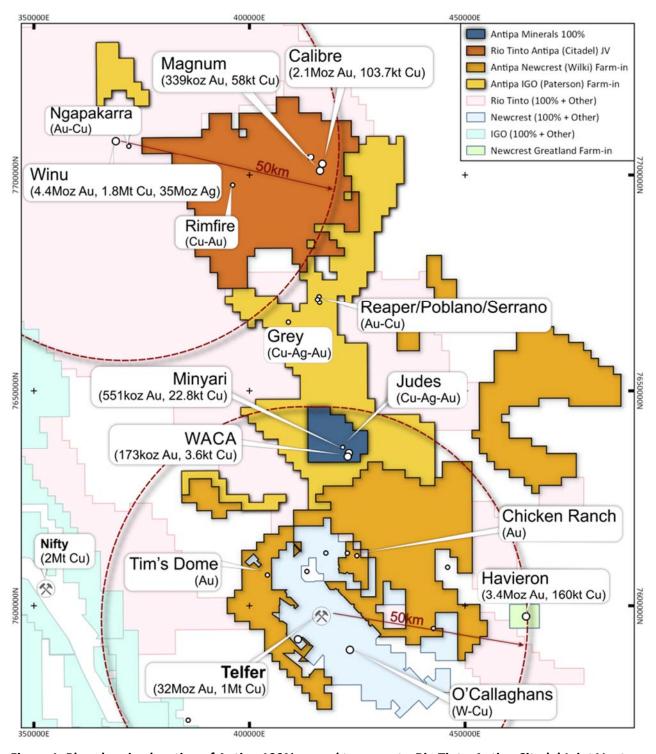


Figure 1: Plan showing location of Antipa 100% owned tenements, Rio Tinto-Antipa Citadel Joint Venture Project, including the Calibre and Magnum deposits and Rimfire prospect in WA's Paterson Province. Also shows Antipa-Newcrest Wilki Farm-in, Antipa-IGO Paterson Farm-in, Newcrest Mining Ltd's Telfer Mine and O'Callaghans deposit, Rio Tinto's Winu deposit, Greatland Gold plc's/Newcrest's Havieron deposit and Cyprium Metals Nifty Mine. NB: Rio and IGO tenement areas include related third-party Farm-in's/Joint Ventures. NB: Regional GDA2020 / MGA Zone 51 co-ordinates, 50km grid.

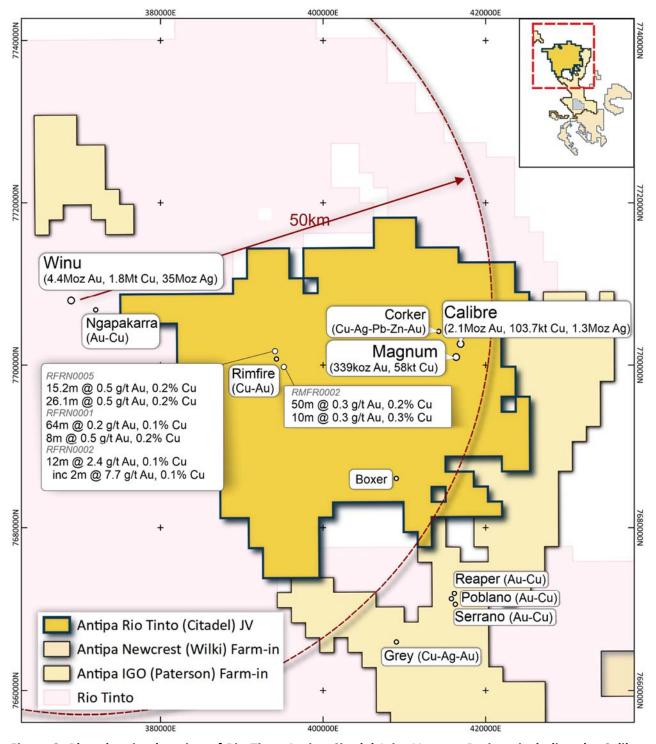


Figure 2: Plan showing location of Rio Tinto-Antipa Citadel Joint Venture Project, including the Calibre and Magnum deposits, Rimfire prospect area and Boxer GAIP target in WA's Paterson Province. Also shows Rio Tinto's Winu deposit and a portion of the Antipa-IGO Paterson Farm-in including the Reaper, Poblano, Serrano and Grey gold-copper prospects. NB: Regional GDA2020 / MGA Zone 51 co-ordinates, 20km grid.

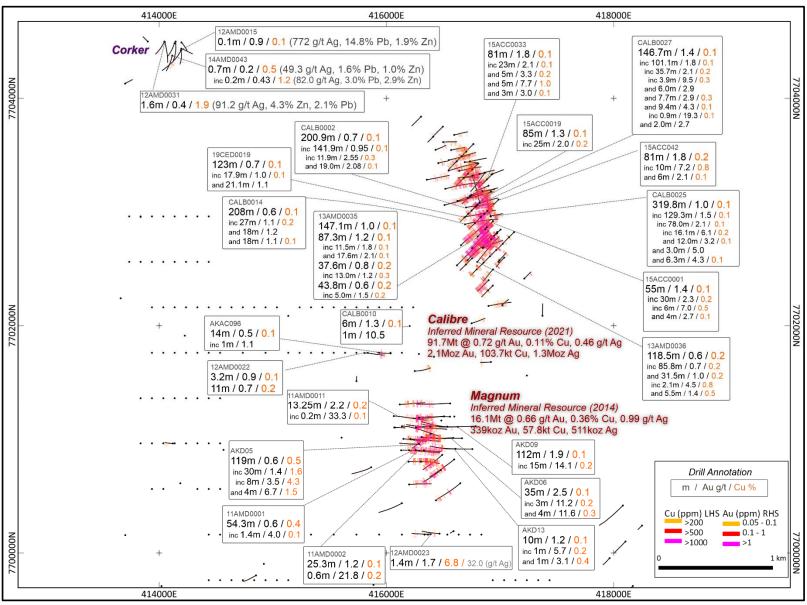


Figure 3: Magnum Dome plan showing Calibre, Magnum and Corker deposits, with drill holes depicting gold and copper grade distribution including intersection labels for a selection of holes. NB: 2 km MGA Zone 51 / GDA 2020 grid.

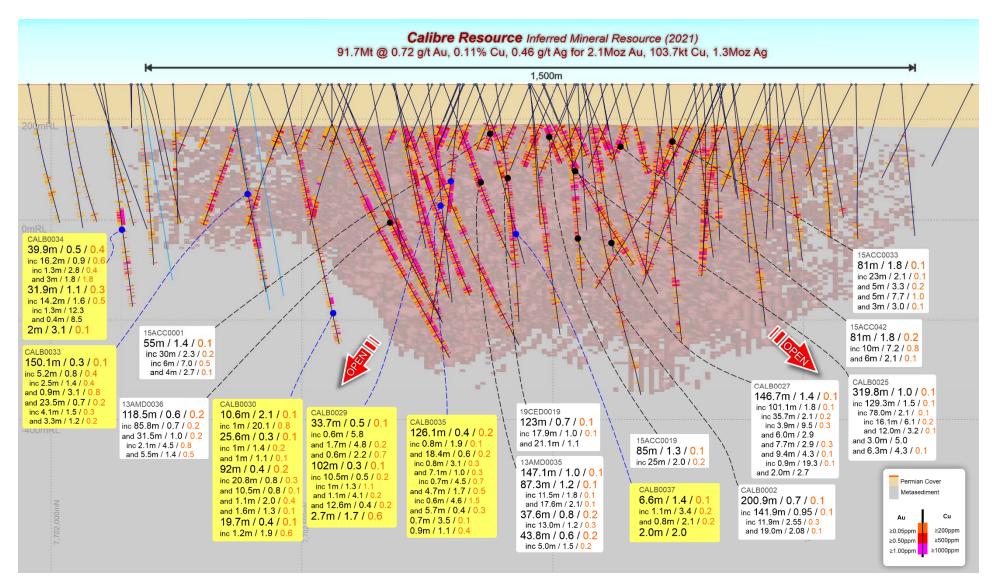


Figure 4: Calibre Deposit west looking vertical projection showing all Calibre drill holes (including 2021 drilling) depicting gold and copper grade distribution, including intersection labels for a selection of holes, and MRE blocks ≥ 0.5 g/t Aueq. NB: 500m horizontal x 200m vertical MGA Zone 51 / GDA 2020 grid.

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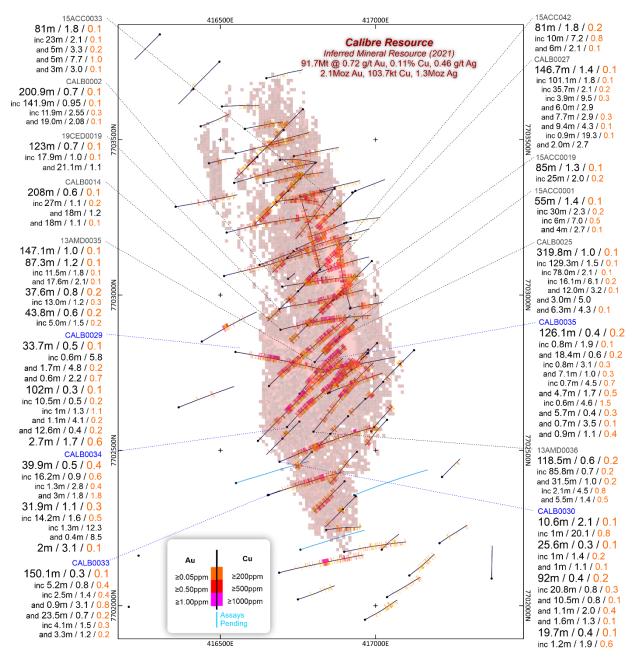


Figure 5: Calibre Deposit plan showing all Calibre drill holes (including 2021 drilling) depicting gold and copper grade distribution, including intersection labels for a selection of holes, and MRE blocks ≥ 0.5 g/t Aueq. NB: 500m MGA Zone 51 / GDA 2020 grid.

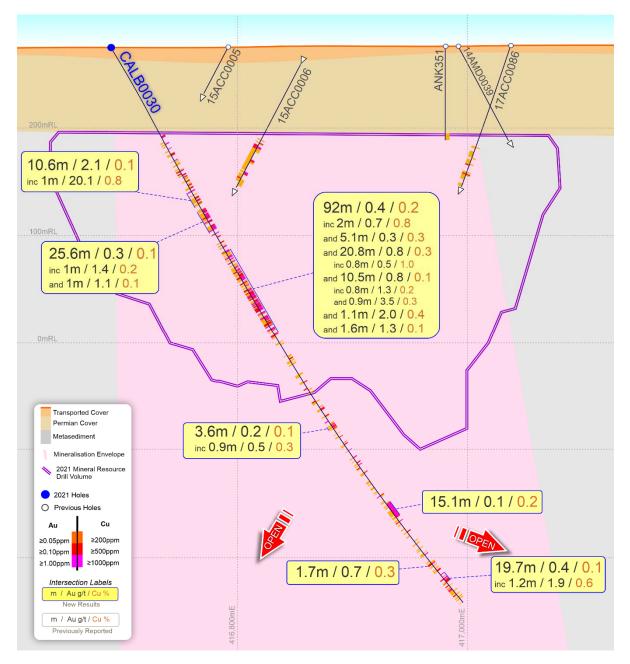


Figure 6: Calibre Deposit interpreted east-west cross-section showing drill hole Au-Cu intersections including CALB0030. NB: 200m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – Approx. north looking.

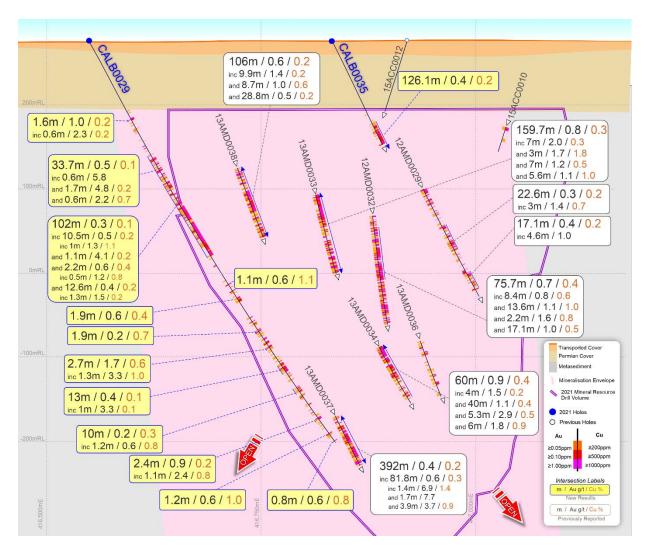


Figure 7: Calibre Deposit interpreted east-west cross-section showing drill hole Au-Cu intersections including CALB0029 and partial of CALB0035. NB: 250m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – Approx. north looking.

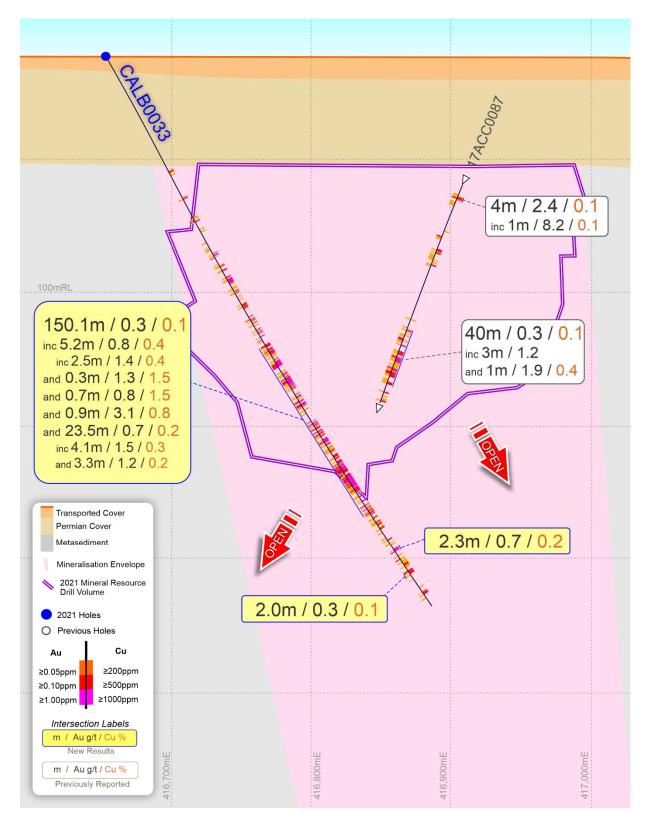


Figure 8: Calibre Deposit interpreted east-west cross-section showing drill hole Au-Cu intersections including CALB0033. NB: 100m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – Approx. north looking.

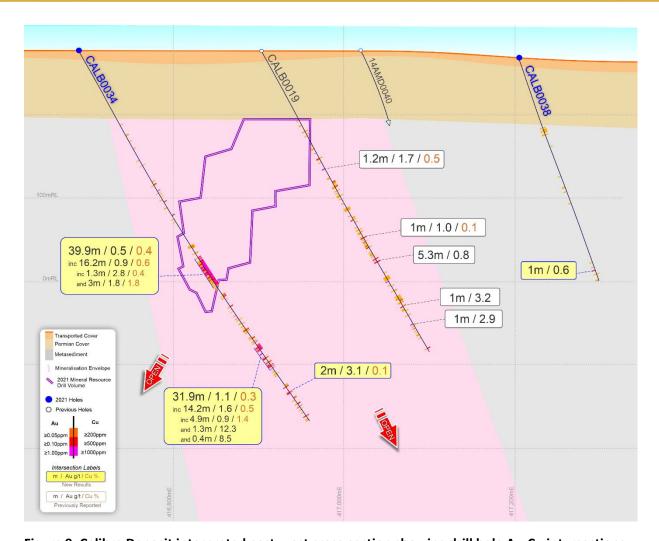


Figure 9: Calibre Deposit interpreted east-west cross-section showing drill hole Au-Cu intersections including CALB0034 and CALB0038. NB: 200m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – Approx. north looking.

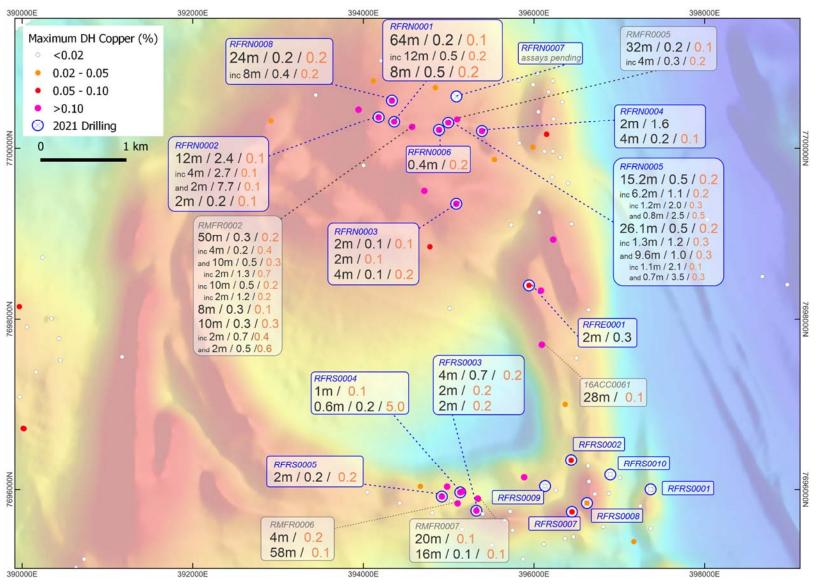


Figure 10: Plan view of the Rimfire area showing drill holes and significant drill results. NB: Over 2021 Airborne magnetic image; TMI-RTP pseudo-colour NESUN and Regional GDA2020 / MGA Zone 51 co-ordinates, 2km grid.

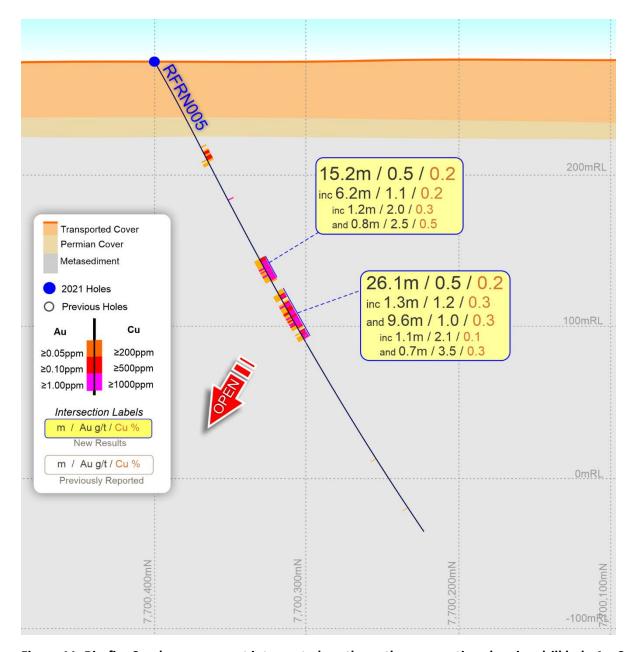


Figure 11: Rimfire Sundance prospect interpreted north-south cross-section showing drill hole Au-Cu intersections for RFRN005. NB: 100m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – East looking.

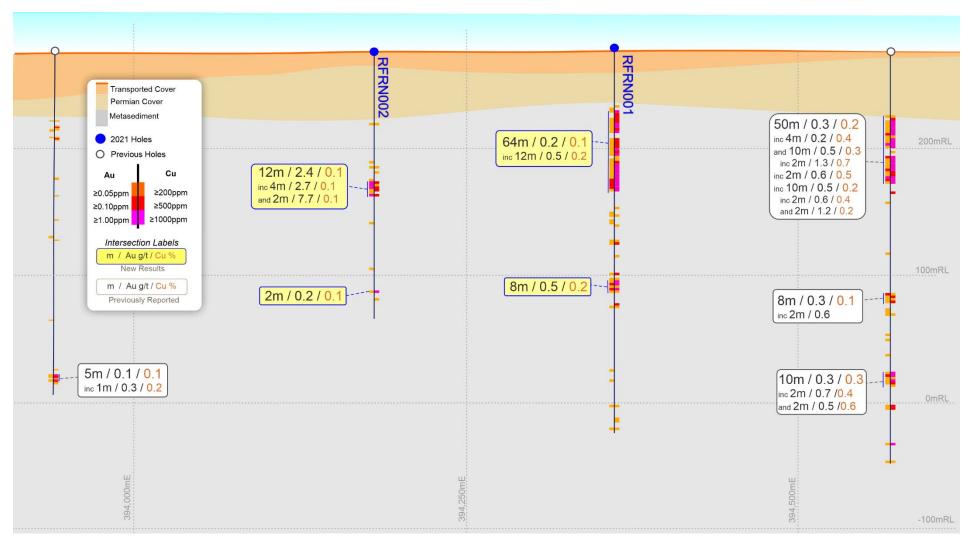
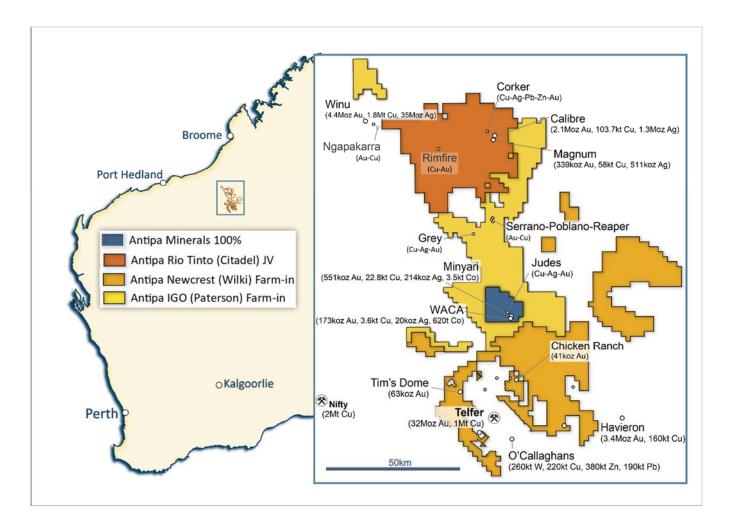


Figure 12: Rimfire Sundance prospect interpreted east-west cross-section showing 2021 drill hole Au-Cu intersections. NB: 250m horizontal x 100m vertical MGA Zone 51 / GDA 2020 grid – North looking.

About Antipa Minerals: Antipa is a mineral exploration company focused on the Paterson Province in north-west Western Australia, home to Newcrest Mining's world-class Telfer gold-copper mine, Rio Tinto's Winu copper-gold deposit, Greatland Gold-Newcrest's recent Havieron gold-copper discovery and other significant mineral deposits. Having first entered the Paterson in 2011 when it was a less sought-after exploration address, the Company has used its early mover advantage to build an enviable tenement holding of ~5,200km², including the ~1,300km² Citadel Project that is subject to a \$60 million Farm-in and Joint Venture Agreement with Rio Tinto (who currently holds a 51% joint venture interest), the ~2,200km² Wilki Project that is subject to a \$60 million Farm-in and Joint Venture Agreement with Newcrest (who is yet to earn a joint venture interest) and the ~1,500km² Paterson Project that is subject to a \$30 million Farm-in and Joint Venture Agreement with IGO (who is yet to earn a joint venture interest). The Citadel Project lies within 5km of the Winu discovery and contains a Mineral Resource of 1.64 million ounces of gold and 128,000 tonnes of copper from two deposits, Calibre and Magnum. Antipa retains 144km² of 100%-owned Minyari Dome Project tenements which contains an established Mineral Resource, with the Minyari and WACA deposits containing 723,000 ounces of gold and 26,000 tonnes of copper plus other deposits and high quality exploration targets. Unlike certain parts of the Paterson where the post mineralisation (younger) cover can be kilometres thick, making for difficult exploration, the Company's combined 5,200km² tenement portfolio features relatively shallow cover; approximately 80% being under less than 80 metres of cover. Extensive drilling and geophysical surveys are planned for 2020 across Antipa's combined Paterson tenement portfolio as the company pursues a dual strategy of targeting tier-one greenfields discoveries and growing its existing resources through brownfields exploration.



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.

Competent Persons Statement – Exploration Results: The information in this document that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Roger Mason, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Mason is a full-time employee of the Company. Mr Mason is the Managing Director of Antipa Minerals Limited, is a substantial shareholder of the Company and is an option holder of the Company. Mr Mason has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements, all of which are available to view on www.asx.com.au. Mr Mason, whose details are set out above, was the Competent Person in respect of the Exploration Results in these original market announcements.

Various information in this report which relates to Exploration Results have been extracted from the following announcements lodged on the ASX, where further details, including JORC Code reporting tables where applicable, can also be found:

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

Citadel Project 2018 Exploration Programme 27 March 2018 Rio Tinto Resumes Drilling at the Citadel Farm-in Project 4 September 2018 Citadel Project Rio JV – Additional AEM Survey 20 November 2018 Rio Tinto Citadel Farm-in Project 2018 Exploration Update 11 December 2018 Multiple Gold-Copper Targets identified on Rio Tinto-Antipa Citadel Farm-in Project 25 March 2019 Indicative \$3.4M 2019 Citadel Exploration Programme 27 March 2019 Citadel Project \$3.4M 2019 Exploration Programme 16 May 2019 Exploration Update on Rio Tinto-Antipa Citadel Farm-in 29 July 2019 Citadel Project - Calibre Drilling Commences 6 September 2019 Calibre Drilling Identifies Significant Deposit Extensions 20 November 2019 22 November 2019 Citadel Project - New Airborne Gravity Survey Significant Extensions to Mineralisation at Calibre 20 December 2019 Rio Tinto Earns 51% JV Interest in Citadel Project 9 January 2020 Rio Tinto Proceeds with Next \$14M Earn-in Stage at Citadel 29 January 2020 Citadel Geophysical Survey Identifies New Targets 18 February 2020 Citadel Project - 2020 Exploration Programme Update 31 March 2020 \$9.2M Citadel Project 2020 Exploration Programme 24 April 2020 Citadel Project-\$9.2M 2020 Exploration Programme Update No 2 28 May 2020 Citadel JV GAIP Survey Highlights New Large Gold-Copper Target 20 August 2020 Calibre Drilling Delivers Significant Au-Cu Intersections 22 October 2020 Calibre Delivers Further Significant Au-Cu Intersections 12 November 2020 18 November 2020 Significant High-grade Gold-Copper Intersections at Calibre More Significant High-Grade Au-Cu Intersections at Calibre 25 November 2020 \$13.8M 2021 Exploration Programme for Citadel JV Project 21 December 2020 Significant Gold-Copper Intersections at Rimfire 4 February 2021 Further Significant High-grade Au Intersections at Calibre 9 February 2021 Expanded \$24.5M Citadel Project Exploration Programme 12 April 2021 Corporate Presentation - 121 APAC Conference - March 2021s 17 March 2021 Corporate Presentation - Update April 2021 12 April 2021 Calibre Gold Resource Increases 62% to 2.1 Million Ounces 17 May 2021 Corporate Presentation - 121 EMEA Conference - May 2021 25 May 2021 AZY: 2021 Exploration Activities Update 17 June 2021 Corporate Presentation - Noosa Mining Conference - July 2021 15 July 2021 Corporate Presentation - Diggers and Dealers - August 2021 2 August 2021 Corporate Presentation - Beaver Creek PMS - September 21 8 September 2021 2 November 2021 Corporate Presentation - 121 APAC Conference

These announcements are available for viewing on the Company's website www.antipaminerals.com.au under the Investors tab and on the ASX website www.asx.com.au.

The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements. Mr Roger Mason, whose details are set out above, was the Competent Person in respect of the Exploration Results in these original reports.

Competent Persons Statement – Mineral Resource Estimations for the Calibre Deposit: Information relating to the estimation and reporting of the Calibre Mineral Resource estimate has been reviewed and compiled by Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy and of the Australian Institute of Geoscientists. Ian Glacken is a full-time employee of Optiro Pty Ltd. Ian Glacken was engaged by Antipa on a fee for service basis, is independent of Antipa and holds no shares in the company. Ian Glacken has sufficient experience that is relevant to the style of mineralisation and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Ian Glacken consents to the inclusion in the report of information based upon his review and endorsement of the Calibre Mineral Resource estimate in the form and context in which it appears.

Competent Persons Statement – Mineral Resource Estimations for the Minyari-WACA Deposits, Tim's Dome and Chicken Ranch Deposits and Magnum Deposit: The information in this document that relates to the estimation and reporting of the Minyari-WACA deposits Mineral Resources is extracted from the report entitled "Minyari/WACA Deposits Maiden Mineral Resources" created on 16 November 2017 with Competent Persons Kahan Cervoj and Susan Havlin, the Tim's Dome and Chicken Ranch deposits Mineral Resources is extracted from the report entitled "Chicken Ranch and Tims Dome Maiden Mineral Resources" created on 13 May 2019 with Competent Person Shaun Searle and the Magnum deposit Mineral Resource information is extracted from the report entitled "Calibre and Magnum Deposit Mineral Resource JORC 2012 Updates" created on 23 February 2015 with Competent Person Patrick Adams, all of which are available to view on www.antipaminerals.com.au and www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant original market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Gold Metal Equivalent Information - Calibre Mineral Resource Gold Equivalent cut-off grade: Gold Equivalent (Aueq) details of material factors and metal equivalent formula are detailed in this report which is available to view on www.antipaminerals.com.au and www.asx.com.au.

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

Mineral Resource Estimates

Minyari Dome Project (100% Antipa)

Deposit and Gold Cut-off Grade*	Resource Category	Tonnes (Mt)	Gold Grade (g/t)	Copper Grade (%)	Silver Grade (g/t)	Cobalt (ppm)	Gold (oz)	Copper (t)	Silver (oz)	Cobalt (t)
Minyari 0.5 Au	Indicated	3.2	1.9	0.3	0.7	590	192,610	9,600	75,660	1,860
Minyari 0.5 Au	Inferred	0.7	1.7	0.24	0.6	340	36,260	1,560	13,510	220
Minyari 0.5 Au	Sub-Total	3.8	1.9	0.29	0.7	550	228,870	11,160	89,170	2,080
Minyari 1.7 Au	Indicated	.2	2.6	0.29	0.9	430	18,740	650	6,800	100
Minyari 1.7 Au	Inferred	3.7	2.6	0.3	1.0	370	303,000	10,950	117,550	1,360
Minyari 1.7 Au	Sub-Total	3.9	2.6	0.3	1.0	380	321,740	11,600	124,350	1,460
Minyari	Total	7.7	2.2	0.3	0.9	460	550,610	22,760	213,520	3,540
WACA 0.5 Au	Inferred	2.8	1.4	0.11	0.2	180	121,950	3,120	15,920	500
WACA 1.7 Au	Inferred	0.5	2.9	0.09	0.2	230	50,780	510	3,850	120
WACA	Total	3.3	1.6	0.11	0.2	190	172,730	3,630	19,770	620
Minyari + WACA Deposits	Grand Total	11.0	2.0	0.24	0.7	380	723,340	26,390	233,290	4,160

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

Wilki Project (Newcrest Farm-in)

Deposit and Gold Cut-off Grade**	Resource Category	Tonnes (Mt)	Gold Grade (g/t)	Copper Grade (%)	Silver Grade (g/t)	Cobalt (ppm)	Gold (oz)	Copper (t)	Silver (oz)	Cobalt (t)
Chicken Ranch Area 0.5 Au	Inferred	0.8	1.6	VT		-	40,300	1573		
Tim's Dome 0.5 Au	Inferred	1.8	1.1	-	2	2:	63,200	121	-	æ
Chicken Ranch Area + Tim's Dome	Total	2.4	1.3	15	8	ē	103,500	(2)	170	æ

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

Citadel Project (Rio Tinto JV)

Deposit and Gold Cut-off Grade***	Resource Category	Tonnes (Mt)	Gold Equiv (g/t)	Gold Grade (g/t)	Copper Grade (%)	Silver Grade (g/t)	Gold Equiv (Moz)	Gold (Moz)	Copper (t)	Silver (Moz)
Calibre 0.5 Au Equiv	Inferred	92	0.92	0.72	0.11	0.46	2.7	2.1	104,000	1.3
Magnum 0.5 Au Equiv	Inferred	16	-	0.70	0.37	1.00	3 4 3	0.34	58,000	0.5
Calibre + Magnum Deposits	Total	108	s	0.72	0.15	0.54	2.7	2.4	162,000	1.8

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

Note: Citadel Project Mineral Resources are tabled on a 100% basis, with Antipa's current joint venture interest being 35%

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

Table 1: Citadel Project 2021 Drill Hole Intersections - Gold-Copper-Silver-Tungsten

								Tungster
Hole ID	Area	From (m)	To (m)	Interval (m)	Gold (g/t)	Copper (%)	Silver (g/t)	(ppm)
3ALL0003 3OXR0001	Ballstein Boxer	294.00 66.00	296.00 68.00	2.00 2.00	0.01 0.00	0.30 0.04	1.26 0.15	2 4
CALB0029	Calibre	86.50	94.30	7.80	0.00	0.01	1.94	55
CALB0029	Calibre	103.00	104.55	1.55	0.95	0.22	1.05	59
	Including	103.92	104.55	0.63	2.32	0.20	1.95	86
CALB0029	Calibre	116.76	119.00	2.24	1.01	0.02	0.26	19
	Including	118.30	119.00	0.70	2.46	0.00	0.06	9
CALB0029	Calibre	139.40	140.23	0.83	1.73	0.00	0.15	8
CALB0029	Calibre	142.35	143.00	0.65	0.94	0.00	0.14	1
CALB0029	Calibre	152.35	186.00	33.65	0.52	0.09	0.44	31
3, 1230023	Including	152.35	152.95	0.60	5.75	0.05	0.58	2
	Including	174.35	176.00	1.65	4.84	0.16	1.60	5
	_							5
	Including	181.30	181.89	0.59	2.20	0.65	2.99	
CALB0029	Calibre	190.00	292.00	102.00	0.26	0.13	0.37	804
	Including	190.50	201.00	10.50	0.45	0.15	0.69	540
	Also Incl.	190.5	191.4	0.90	0.93	0.16	0.68	9
	Also Incl.	193.7	194.65	1.00	1.25	1.06	4.78	3
	Also Incl.	200.0	200.59	0.59	1.72	0.01	0.10	5
	Including	219.80	220.91	1.11	4.07	0.22	1.11	29
	-							6,090
	Including	224.37	226.53	2.16	0.63	0.37	0.92	
	Also Incl.	226.0	226.5	0.53	1.15	0.81	1.48	6,160
	Including	237.30	238.39	1.09	1.21	0.16	0.54	4,860
	Including	251.15	251.80	0.65	0.50	0.15	0.35	390
	Including	254.55	267.15	12.60	0.44	0.20	0.49	2,037
	Also Incl.	265.9	267.2	1.28	1.45	0.23	0.75	5,040
CALBOORD								
CALB0029	Calibre	305.00	306.00	1.00	1.11	0.00	0.06	2
CALBO029	Calibre	331.93	333.00	1.07	0.56	1.07	4.08	65
CALB0029	Calibre	341.00	342.00	1.00	0.54	0.25	1.47	4
CALB0029	Calibre	348.00	350.00	2.00	0.08	0.01	0.05	2,625
CALB0029	Calibre	351.00	352.90	1.90	0.56	0.37	1.41	686
CALB0029	Calibre	356.00	357.00	1.00	0.47	0.06	0.37	52
CALB0029	Calibre	378.31	380.23	1.92	0.24	0.69	3.67	2
3, 1250023	Including	379.32	380.23	0.91	0.22	1.47	7.67	1
CALB0029	Calibre	384.73	385.40		0.56	0.31	1.98	2
				0.67				
CALB0029	Calibre	396.70	399.41	2.71	1.71	0.61	2.98	21
	Including	398.12	399.41	1.29	3.32	1.04	5.26	1
CALB0029	Calibre	409.00	422.00	13.00	0.39	0.09	0.49	75
	Including	421.00	422.00	1.00	3.29	0.05	0.82	13
CALB0029	Calibre	446.00	456.00	10.00	0.20	0.28	1.16	522
	Including	450.00	451.20	1.20	0.57	0.78	3.28	420
CALB0029	Calibre	459.49	460.00	0.51	0.40	0.07	0.39	1
CALB0029	Calibre	463.00	463.60	0.60	0.42	0.57	1.83	7
CALB0029	Calibre	480.10	485.13	5.03	0.25	0.19	0.79	20
CALB0029	Calibre	489.60	490.65	1.05	0.18	0.04	0.36	5,100
								13
CALB0029	Calibre	490.65	493.00	2.35	0.85	0.16	0.79	
	Including	489.60	490.65	1.05	2.35	0.78	3.51	5
CALB0029	Calibre	514.18	515.00	0.82	1.54	0.01	0.98	2
CALB0029	Calibre	523.00	526.00	3.00	0.26	0.18	0.77	13
	Including	522.00	523.00	1.00	0.57	0.24	1.04	2
CALB0029	Calibre	532.90	534.00	1.10	0.46	0.01	0.08	72
CALB0029	Calibre	537.00	538.10	1.10	0.27	0.00	0.02	5
CALB0029	Calibre	545.80	547.00	1.20	0.55	1.04	4.06	137
CALB0029	Calibre	556.84	557.60	0.76	0.60	0.76	2.60	1
CALB0030	Calibre	95.00	96.00	1.00	0.00	0.06	0.04	1,100
CALB0030	Calibre	96.00	97.10	1.10	0.00	0.13	0.05	2,420
CALBO030	Calibre	103.00	104.00	1.00	0.17	0.30	1.10	16
ALB0030	Calibre	108.43	109.00	0.57	0.01	0.14	0.91	2
CALB0030	Calibre	120.57	121.29	0.72	0.10	0.20	0.87	5
CALB0030	Calibre	131.69	135.00	3.31	0.36	0.04	0.14	46
CALBOO30	Calibre	138.00	139.00	1.00	0.03	0.11	0.76	37
CALB0030	Calibre	150.00	151.00	1.00	0.19	0.10	0.48	4
CALB0030	Calibre	153.00	163.61	10.61	2.12	0.10	0.48	58
~LD0030								
241 00000	Including	152.00	153.00	1.00	20.10	0.83	5.68	6
CALB0030	Calibre	172.00	173.00	1.00	0.31	0.01	0.09	1,490
CALB0030	Calibre	173.68	199.25	25.57	0.25	0.11	0.44	13
	Including	180.00	182.00	2.00	0.53	0.13	0.52	2
	Including	185.00	186.00	1.00	1.36	0.21	1.02	1
	Including	194.00	195.00	1.00	1.07	0.13	0.58	2
	Including	198.42	199.25	0.83	0.86	0.34	1.75	1
CALB0030	Calibre	210.80	211.20	0.40	0.63	0.04	0.15	1
								9
CALBO030	Calibre	212.85	213.97	1.12	0.14	0.36	1.38	
CALB0030	Calibre	217.35	309.33	91.98	0.44	0.16	0.63	92
	Including	223.00	225.00	2.00	0.73	0.84	3.22	45
	Including	244.95	250.06	5.11	0.32	0.28	1.04	60
	Including	264.50	285.30	20.80	0.77	0.28	1.12	270
		284.52	285.3	0.78	0.50	1.04	3.92	90
	Also Incl.	204.32						
	Also Incl.					0.13		
	Including Also Incl.	288.27 289	298.75 289.8	10.48 0.82	0.75 1.33	0.13 0.24	0.52 1.12	45 2

Hole ID	Area	From (m)	To (m)	Interval (m)	Gold (g/t)	Copper (%)	Silver (g/t)	Tungster (ppm)
	Including	301.03	302.14	1.11	1.95	0.36	1.64	2
CAL DO020	Including	307.70	309.33	1.63	1.31	0.15	0.78	3
CALBOO30	Calibre	366.00	367.00	1.00	0.51	0.01	0.13	1
CALBOO30	Calibre	380.00	381.00	1.00	0.67	0.00	0.19	1
CALB0030	Calibre	389.00	390.10	1.10	0.42	0.43	1.55	10
CALBO030	Calibre	402.26	403.19	0.93	1.82	0.00	0.96	3
ALB0030	Calibre	406.86	410.46	3.60	0.20	0.13	0.54	673
	Including	409.60	410.46	0.86	0.48	0.29	1.28	2,780
ALB0030	Calibre	428.79	429.89	1.10	0.14	0.12	0.27	3
ALB0030	Calibre	435.92	436.44	0.52	0.07	0.11	0.29	410
CALB0030	Calibre	443.66	444.69	1.03	0.17	0.10	0.35	17
ALB0030	Calibre	452.20	453.03	0.83	0.49	0.28	0.79	151
CALB0030	Calibre	454.78	455.57	0.79	0.86	0.02	0.25	8
CALBO030	Calibre	461.17	461.95	0.78	0.10	0.16	0.62	93
CALB0030	Calibre	487.14	487.89	0.75	1.16	0.09	1.44	12
CALB0030	Calibre	497.04	512.15	15.11	0.09	0.17	0.41	48
ALB0030	Calibre	517.00	517.75	0.75	0.93	0.33	0.48	21
ALB0030	Calibre	556.00	556.80	0.80	0.48	0.38	1.54	340
ALB0030	Calibre	566.00	567.71	1.71	0.68	0.31	0.58	314
ALB0030	Calibre	574.42	574.82	0.40	0.27	0.12	0.68	54
ALB0030	Calibre	579.93	580.69	0.76	0.02	0.15	0.68	21
CALB0030	Calibre	584.31	604.00	19.69	0.40	0.06	0.33	451
	Including	584.31	585.50	1.19	1.94	0.58	2.20	471
	Including	592.00	592.90	0.90	0.94	0.02	0.22	4
	Including	596.20	597.81	1.61	1.94	0.01	0.49	3,990
ALB0030	Calibre	609.00	610.00	1.00	0.01	0.02	1.12	2
ALB0032	Calibre	110.00	112.00	2.00	0.50	0.05	0.21	21
ALB0032	Calibre	120.00	122.00	2.00	0.59	0.00	0.21	4
CALB0032	Calibre	126.00	128.00	2.00	0.61	0.00	0.14	3
CALB0032	Calibre	136.00	138.00	2.00	0.54	0.01	0.11	5
ALB0032	Calibre	178.00	184.00	6.00	0.84	0.01	0.08	3
ALB0032	Calibre	240.00	252.00	12.00	0.47	0.00	0.06	72
	Including	246.00	248.00	2.00	2.15	0.00	0.26	4
ALB0032	Calibre	262.00	264.00	2.00	0.46	0.00	0.04	27
ALB0032	Calibre	288.00	290.00	2.00	0.40	0.03	0.10	28
ALB0033	Calibre	122.00	123.00	1.00	0.27	0.14	0.58	2
ALB0033	Calibre	141.49	142.32	0.83	0.07	0.15	0.69	3
ALB0033	Calibre	163.03	163.49	0.46	0.49	0.01	0.08	4
ALB0033	Calibre	165.80	166.36	0.56	0.38	0.00	0.01	1
ALB0033	Calibre	170.27	171.23	0.96	0.07	0.11	0.73	14
ALB0033	Calibre	172.03	172.52	0.49	0.53	0.03	0.17	5
ALB0033	Calibre	190.91	195.00	4.09	0.08	0.13	0.64	111
ALB0033	Calibre	201.25	202.00	0.75	0.02	0.11	0.51	3
ALB0033	Calibre	214.16	215.00	0.84	0.10	0.22	0.92	2
ALB0033	Calibre	225.48	225.80	0.32	0.86	0.17	1.03	4
ALB0033	Calibre	227.29	227.70	0.41	0.09	0.10	1.09	6
ALB0033	Calibre	234.58	235.15	0.57	0.08	0.15	0.58	7
ALB0033	Calibre	235.89	236.27	0.38	0.44	0.19	0.76	1
ALB0033	Calibre	237.72	238.42	0.70	0.04	0.13	0.50	16
ALB0033	Calibre	240.55	241.22	0.67	0.35	0.18	0.92	3
								1
ALB0033	Calibre	242.89	243.31	0.42	0.65	0.02	0.10	1
ALB0033	Calibre	248.05	398.10	150.05	0.31	0.12	0.48	68
	Including	248.05	249.00	0.95	0.56	0.11	0.33	38
	Including	253.00	253.46	0.46	0.83	0.01	0.09	5
	Including	254.88	255.77	0.89	0.43	0.14	0.48	1
	Including	262.32	267.48	5.16	0.84	0.35	1.63	50
	Also Incl.	265.00	267.48	2.48	1.36	0.43	2.11	95
	Including	277.00	281.00	4.00	0.84	0.17	1.00	15
	-							8
	Including	297.66	298.09	0.43	2.00	0.58	2.93	
	Including	314.83	315.15	0.32	1.31	1.49	5.78	1
	Including	316.50	317.41	0.91	1.69	0.17	1.02	2
	Including	320.69	321.38	0.69	0.76	1.53	5.03	2
	Including	323.44	324.22	0.78	1.17	0.57	2.18	1
	Including	332.26	333.20	0.94	3.14	0.75	3.51	570
	Including	352.33	375.80	23.47	0.71	0.18	0.70	79
	Also Incl.	352.33	352.80	0.47	1.04	0.18	0.75	145
	Also Incl.	355.61	359.70	4.09	1.48	0.27	1.07	15
	Also Incl.	365.00	368.30	3.30	1.15	0.24	1.07	95
	Including	392.00	392.61	0.61	1.39	0.12	0.33	11
	Including	395.85	396.70	0.85	1.12	0.08	0.34	600
ALB0033	Calibre	406.26	406.78	0.52	0.03	0.11	0.36	143
ALB0033	Calibre	428.95	431.22	2.27	0.69	0.19	0.85	127
	Including	430.40	431.22	0.82	1.81	0.17	0.61	81
AL DOGG								
ALB0033	Calibre	437.42	438.23	0.81	0.60	0.03	0.11	2
ALB0033	Calibre	448.10	450.13	2.03	0.31	0.12	0.50	29
ALB0033	Calibre	468.14	469.03	0.89	0.04	0.11	0.42	17
ALB0034	Calibre	191.30	191.87	0.57	0.04	0.10	0.27	350
ALB0034	Calibre	211.31	212.20	0.89	0.01	0.00	1.05	50
ALB0034	Calibre	269.04	269.95	0.91	0.49	0.05	0.25	35
	Calibre	284.58	324.47	39.89	0.50	0.37	1.32	191
ALB0034								
CALBO034	Including	297.00	313.20	16.20	0.92	0.64	2.37	236

Hole ID	Area	From (m)	To (m)	Interval (m)	Gold (g/t)	Copper (%)	Silver (g/t)	Tungste (ppm)
	Also Incl.	306.00	309.00	3.00	1.76	1.79	6.62	501
CALB0034	Calibre	330.00	331.00	1.00	0.01	0.01	1.13	7
CALB0034	Calibre	340.90	341.98	1.08	0.04	0.11	0.40	44
CALB0034	Calibre	354.86	355.18	0.32	0.07	0.11	0.47	1
CALB0034	Calibre	365.55	366.60	1.05	0.03	0.00	0.04	1,060
CALBOO34	Calibre	366.60	367.10	0.50	0.20	0.01	1.26	19
CALBOO34	Calibre	368.15	368.45	0.30	0.55	0.00	0.14	1
CALB0034	Calibre	371.75	372.15	0.40	0.54	0.00	0.11	1
CALB0034	Calibre	389.00	389.90	0.90	0.52	0.08	0.19	3
CALB0034	Calibre	407.35	408.10	0.75	0.09	0.24	0.82	18
CALB0034	Calibre	413.35	445.25	31.90	1.07	0.25	0.51	97
	Including	414.10	428.30	14.20	1.64	0.49	0.90	192
	Also Incl.	414.10	419.00	4.90	0.86	1.41	2.08	547
	Also Incl.	423.00	424.25	1.25	12.25	0.00	1.54	3
	And	427.9	428.3	0.40	8.51	0.04	0.88	2
241 00004								
CALB0034	Calibre	453.00	453.78	0.78	0.09	0.02	0.14	1,350
CALB0034	Calibre	472.00	473.23	1.23	1.08	0.06	0.32	2
CALB0034	Calibre	480.00	482.00	2.00	3.10	0.10	0.49	32
CALB0034	Calibre	482.75	484.00	1.25	0.03	0.01	0.06	2,240
CALB0034	Calibre	496.75	498.00	1.25	0.40	0.06	0.19	10
CALB0034	Calibre	501.00	501.44	0.44	0.68	0.06	0.35	32
CALBOO34	Calibre	504.78	505.15	0.37	0.43	0.03	0.28	3
CALB0034	Calibre	514.60	515.40	0.80	0.63	0.16	0.34	3
CALB0035	Calibre	111.47	112.10	0.63	0.02	0.04	0.16	1,050
CALB0035	Calibre	113.60	239.67	126.07	0.43	0.17	0.68	344
	Including	120.42	121.25	0.83	1.85	0.08	0.53	687
	Including	137.35	155.78	18.43	0.59	0.21	0.93	312
	Also incl.	147.00	147.76	0.76	3.14	0.21	1.61	5
	Including	158.85	165.94	7.09	0.97	0.28	1.12	80
	Also Incl.	159.25	159.98	0.73	4.48	0.66	3.32	9
	Including	189.42	194.12	4.70	1.67	0.48	1.70	104
	Also Incl.	192.80	193.37	0.57	4.56	1.49	3.76	2
	Including	215.62	221.30	5.68	0.44	0.26	0.87	754
CALB0035	Calibre	244.18	245.08	0.90	0.02	0.01	1.55	48
CALB0035			263.00					
ALBUU35	Calibre	253.26		9.74	0.55	0.08	0.46	86
	Including	253.26	254.00	0.74	3.45	0.08	0.94	240
	Including	257.19	258.01	0.82	1.12	0.17	0.96	136
	Including	261.91	263.00	1.09	0.91	0.02	0.19	2
CALB0035	Calibre	268.35	269.00	0.65	0.18	0.17	0.86	5
CALB0035	Calibre	275.15	276.00	0.85	1.11	0.45	2.40	2
CALBOO36	Calibre	87.10	89.00	1.90	0.00	0.00	1.02	18
CALBO036	Calibre	109.12	109.90	0.78	0.00	0.00	1.20	5
CALB0036	Calibre	251.88	253.00	1.12	0.40	0.10	0.69	29
CALB0036	Calibre	256.00	256.49	0.49	1.62	0.00	0.38	4
CALB0036	Calibre	258.50	259.16	0.66	0.10	0.17	0.78	4
CALB0037	Calibre	172.37	179.00	6.63	1.38	0.10	0.40	804
	Including	172.37	173.50	1.13	3.35	0.17	0.69	310
	Including	176.22	177.00	0.78	2.08	0.23	0.83	5,460
CAL DO027	-							
CALB0037	Calibre	180.16	183.40	3.24	0.02	0.02	9.81	29
CALB0037	Calibre	186.00	187.14	1.14	0.04	0.13	0.24	10
CALB0037	Calibre	195.43	196.16	0.73	0.11	0.05	0.15	1,980
CALB0037	Calibre	243.22	245.19	1.97	2.00	0.00	0.31	1
ALB0037	Calibre	296.11	297.26	1.15	0.03	0.01	0.07	1,110
ALB0037	Calibre	320.40	321.45	1.05	0.57	0.13	0.95	9
ALB0038	Calibre	185.00	186.00	1.00	0.01	0.00	0.02	1,720
ALB0038	Calibre	280.00	281.00	1.00	0.55	0.00	0.05	21
ALB0039	Calibre	126.00	127.00	1.00	0.44	0.00	0.04	5
ALB0039	Calibre	147.00	149.00	2.00	0.48	0.01	0.05	48
ALB0042	Calibre	66.00	67.00	1.00	0.10	0.00	2.38	2
ALB0042	Calibre	74.00	75.00	1.00	0.00	0.00	0.04	1,370
ALB0042 CALB0042	Calibre	122.00	123.00	1.00	0.41	0.00	0.01	
								5
CALB0042	Calibre	177.00	178.00	1.00	0.57	0.00	0.02	7
CALBO042	Calibre	242.00	243.00	1.00	1.52	0.03	0.08	27
CALB0042	Calibre	283.00	285.00	2.00	0.51	0.04	0.16	12
CALB0042	Calibre	295.00	296.00	1.00	2.44	0.02	0.21	6
CALB0042	Calibre	232.00	240.00	8.00	0.48	0.03	0.08	101
	Including	234.00	235.00	1.00	0.82	0.05	0.15	149
	Including	239.00	240.00	1.00	1.90	0.03	0.12	26
CITDOCCC	-							
CITD0002	Citadel NE	200.00	216.00	16.00	0.01	0.09	0.12	4
	Including	214.00	216.00	2.00	0.02	0.29	0.37	4
TGR0001	Le Tigre	226.00	228.00	2.00	0.01	0.00	1.04	3
GNM0002	Magnum	288.00	290.00	2.00	0.34	0.33	0.86	97
GNM0003	Magnum	84.00	86.00	2.00	0.01	0.18	0.38	28
GNM0003	_	152.00	154.00	2.00	0.20	0.12	0.46	7
	Magnum							
GNM0003	Magnum	170.00	174.00	4.00	0.06	0.32	1.90	4
GNM0003	Magnum	274.00	276.00	2.00	0.29	0.11	0.58	860
IGNM0003	Magnum	298.00	300.00	2.00	0.04	0.12	0.66	218
IGNM0003	Magnum	288.00	290.00	2.00	0.34	0.33	0.86	97
1GSH0001	Magnum Shear	112.36	114.21	1.85	0.00	0.01	2.06	9
/IGSH0001	Magnum Shear	127.00	128.00	1.00	0.00	0.00	2.94	2
/IGSH0001	Magnum Shear	222.50	223.65	1.15	0.01	0.11	0.30	12
MGSH0001	Magnum Shear	248.70	250.00	1.30	0.19	0.00	0.00	1,320

Hole ID	Area	From (m)	To (m)	Interval (m)	Gold (g/t)	Copper (%)	Silver (g/t)	Tungsten (ppm)
MGSH0001	Magnum Shear	265.50	266.10	0.60	6.78	0.86	0.62	1
MGSH0001	Magnum Shear	314.40	321.02	6.62	0.07	0.11	0.14	11
MGSH0001	Magnum Shear	343.21	344.00	0.79	0.06	0.11	0.22	10
MGSH0001	Magnum Shear	344.00	345.06	1.06	0.01	0.02	1.44	8
MGSH0001	Magnum Shear	347.16	347.73	0.57	0.01	0.17	0.34	2
MGSH0001	Magnum Shear	391.20	391.55	0.35	0.03	0.27	1.52	29
MGSH0001	Magnum Shear	419.06	419.75	0.69	0.02	0.17	0.71	2
MGSH0001	Magnum Shear	453.46	459.10	5.64	0.11	0.33	1.31	14
MGSH0001	Magnum Shear	476.57	477.12	0.55	0.81	1.71	7.51	980
MGSH0001	Magnum Shear	491.56	492.00	0.44	0.00	0.11	0.43	2
MGSH0005	Magnum Shear	130.00	132.00	2.00	0.09	0.10	0.37	8
MGSH0005	Magnum Shear	172.00	174.00	2.00	0.80	0.01	0.08	7
MGSH0005	Magnum Shear	182.00	184.00	2.00	0.49	0.01	0.03	5
MGSH0006	Magnum Shear	200.00	202.00	2.00	0.10	0.28	0.93	19
MGSH0006	Magnum Shear	206.00	208.00	2.00	0.09	0.11	0.30	690
MGSH0006	Magnum Shear	216.00	220.00	4.00	0.58	0.01	0.02	7
MGSH0006	Magnum Shear	236.00	238.00	2.00	0.91	0.00	0.03	11
RFRE0001	Rimfire E.	244.00	246.00	2.00	0.32	0.03	0.06	5,380
RFRN0001	Rimfire N.	46.00	110.00	64.00	0.22	0.11	0.13	198
1111110001	Including	96.00	108.00	12.00	0.54	0.21	0.26	448
RFRN0001	Rimfire N.	180.00	188.00	8.00	0.45	0.21	0.20	219
RFRN0001	Rimfire N.	102.00	118.00	12.00	2.44	0.10	0.81	852
M MINUUUZ	Including	102.00	106.00	4.00	2.44	0.10	0.28	143
	Including	102.00	108.00	2.00	7.73	0.07	1.11	260
	U			2.00				209
RFRN0002	Including Dimfire N	112.00	114.00		1.04	0.08	0.23	209 172
	Rimfire N.	188.00	190.00	2.00	0.17	0.11	0.28	
RFRN0003 RFRN0003	Rimfire N. Rimfire N.	126.00 142.00	128.00 144.00	2.00 2.00	0.07 0.03	0.12 0.10	0.25 0.19	19 5
RFRN0003	Rimfire N.	200.00	204.00	4.00	0.14	0.22	0.73	425
RFRN0004	Rimfire N.	90.00	92.00	2.00	1.56	0.01	0.04	6
RFRN0004	Rimfire N.	150.00	154.00	4.00	0.18	0.11	0.18	113
RFRN0005	Rimfire N.	44.50	46.00	1.50	0.00	0.00	9.00	14
RFRN0005	Rimfire N.	47.00	48.00	1.00	0.00	0.00	6.93	12
RFRN0005	Rimfire N.	48.50	57.00	8.50	0.00	0.00	2.32	8
RFRN0005	Rimfire N.	103.28	104.00	0.72	0.01	0.26	0.84	2
RFRN0005	Rimfire N.	148.85	164.00	15.15	0.53	0.21	0.30	228
	Including	154.00	160.23	6.23	1.06	0.23	0.42	488
	Also Incl.	154.00	155.20	1.20	1.99	0.28	0.41	79
	Also Incl.	156.25	157.00	0.75	2.54	0.49	0.70	3,630
RFRN0005	Rimfire N.	176.00	177.00	1.00	0.18	0.14	0.17	202
RFRN0005	Rimfire N.	182.20	208.30	26.10	0.48	0.23	0.27	138
	Including	182.20	183.45	1.25	1.16	0.28	0.34	2,260
	Including	188.00	197.59	9.59	0.97	0.34	0.41	13
	Also Incl.	190.90	192.04	1.14	2.08	0.08	0.17	2
	Also Incl.	196.00	196.67	0.67	3.54	0.31	0.59	10
RFRN0005	Rimfire N.	267.00	268.00	1.00	0.00	0.00	2.24	3
RFRN0006	Rimfire N.	53.00	56.10	3.10	0.01	0.00	5.15	22
RFRN0006	Rimfire N.	76.00	77.00	1.00	0.01	0.00	1.00	7
RFRN0006	Rimfire N.	189.00	190.00	1.00	0.01	0.01	1.71	2
RFRN0006	Rimfire N.	193.59	194.00	0.41	0.02	0.16	0.18	1
RFRN0008	Rimfire N.	260.00	284.00	24.00	0.21	0.15	0.18	241
	Including	260.00	268.00	8.00	0.43	0.15	0.19	541
RFRS0003	Rimfire S.	42.00	46.00	4.00	0.70	0.20	0.25	528
RFRS0003	Rimfire S.	62.00	64.00	2.00	0.03	0.15	0.21	4
RFRS0003	Rimfire S.	84.00	86.00	2.00	0.00	0.10	0.12	3
RFRS0003	Rimfire S.	106.00	108.00	2.00	0.01	0.14	0.23	8
RFRS0003	Rimfire S.	128.00	130.00	2.00	0.00	0.10	0.17	8
RFRS0003	Rimfire S.	138.00	140.00	2.00	0.01	0.18	0.49	9
RFRS0003	Rimfire S.	148.00	150.00	2.00	0.01	0.13	0.49	108
RFRS0003	Rimfire S.	156.00	158.00	2.00	0.01	0.11	0.13	13
RFRS0003	Rimfire S.	168.00	170.00	2.00	0.03	0.13	0.36	5
RFRS0003	Rimfire S.	60.00	61.00	1.00	0.00	0.14	0.36	3
RFRS0004	Rimfire S.	62.23	63.00	0.77	0.00	0.11	0.08	1
RFRS0004		150.38	150.93			4.99	9.03	2
	Rimfire S.			0.55	0.17			
RFRS0004	Rimfire S.	200.08	201.00	0.92	0.01	0.13	0.37	1
RFRS0004	Rimfire S.	264.54	265.79	1.25	0.09	0.04	0.06	3,750
RFRS0005	Rimfire S.	42.00	44.00	2.00	0.17	0.24	0.36	240
RFRS0005	Rimfire S.	50.00	52.00	2.00	0.02	0.10	0.03	5
RFRS0006	Rimfire S.	102.00	104.00	2.00	0.00	0.01	1.62	5
RFRS0008	Rimfire S.	36.00	38.00	2.00	0.00	0.00	1.79	2
TRGR0001	Trigger	116.00	118.00	2.00	0.94	0.02	0.15	110
			250.00	2.00	0.03	0.19	0.35	191
TRGR0001	Trigger	256.00	258.00					
	Trigger Trigger	256.00 280.00	282.00	2.00	0.02	0.15 0.01	1.28	6

Notes: Table 1 intersections are length-weighted assay intervals reported using the following criteria:

Intersection Interval = Nominal cut-off grade scenarios:

- ≥ 0.40 ppm (g/t) gold; and/or
- ≥ 1000 ppm (0.1%) copper; and/or

- ≥ 1.00 ppm (g/t) silver; and/or
- ≥ 1000 ppm (0.1%) Tungsten
- No top-cutting has been applied to these individual assay intervals
- Intersections are down hole lengths, true widths not known with certainty, refer to JORC Table 1 Section 2

Table 2: Citadel Joint Venture Project 2021 Drill Hole Collar Summary (MGA Zone 51/GDA 94)

Hole ID	Target	Hole Type	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay Status
BALL0001	Ballstein	RC	7,710,817	391,988	258	252	0	-90	Received
BALL0002	Ballstein	RC	7,710,979	391,538	263	292	0	-90	Received
BALL0003	Ballstein	RC	7,709,118	391,422	261	306	0	-90	Received
BALL0004	Ballstein	RC	7,708,056	391,663	263	300	160	-70	Received
BALL0005	Ballstein	RC	7,708,847	391,457	269	300	0	-90	Received
BOXR0001	Boxer	RC	7,686,356	409,087	285	246	0	-90	Received
BOXR0002	Boxer	RC	7,686,329	408,876	280	300	0	-90	Received
BOXR0003	Boxer	RC	7,686,304	408,675	280	276	0	-90	Received
BOXR0004	Boxer	RC	7,685,693	409,033	283	276	0	-90	Received
CALB0029	Calibre	DDH	7,702,817	416,549	271	559	100	-60	Received
CALB0030	Calibre	DDH	7,702,464	416,689	270	613	70	-60	Received
CALB0032	Calibre	RC	7,702,245	416,841	268	300	75	-70	Received
CALB0033	Calibre	DDH	7,702,357	416,660	268	480	70	-75	Received
CALB0034	Calibre	DDH	7,702,108	416,690	267	521	75	-60	Received
CALB0035	Calibre	DDH	7,702,751	416,833	264	496	75	-60	Partially Rec.
CALB0036	Calibre	DDH	7,702,639	416,367	271	396	70	-60	Partially Rec.
CALB0037	Calibre	DDH	7,702,850	416,442	268	409	60	-60	Partially Rec.
CALB0038	Calibre	RC	7,702,203	417,207	264	294	60	-70	Received
CALB0039	Calibre	RC	7,702,099	417,109	264	300	60	-70	Received
CALB0040	Calibre	DDH	7,702,395	416,550	269	487	70	-60	Pending
CALB0041	Calibre	DDH	7,702,180	416,758	266	445	70	-60	Pending
CALB0042	Calibre	RC	7,702,026	417,039	265	300	60	-70	Received
CALB0043	Calibre	RC	7,701,957	416,966	265	300	60	-70	Received
CALB0045	Calibre	DDH	7,702,356	416,932	263	513	70	-60	Pending
CITD0001	Citadel NE	RC	7708881	417,781	242	68	0	-90	Received
CITD0002	Citadel NE	RC	7708719	417,917	249	272	0	-90	Received
DETA0001	Detachment	RC	7,699,143	399,788	273	300	0	-90	Received
DETA0002	Detachment	RC	7,698,886	400,332	271	174	0	-90	Received
DETA0003	Detachment	RC	7,698,678	400,948	267	150	0	-90	Received
DETA0004	Detachment	RC	7,698,446	401,508	269	156	0	-90	Received
DETA0005	Detachment	RC	7,698,242	402,063	263	150	0	-90	Received
DETA0006	Detachment	RC	7,698,401	398,970	272	144	0	-90	Received
DETA0007	Detachment	RC	7,698,496	398,677	274	162	0	-90	Received
HASL0001	Hansel	RC	7,704,468	392,798	266	96	0	-90	Received
HASL0002	Hansel	RC	7,704,292	392,788	263	372	0	-70	Pending
LTGR0001	Le Tigre	RC	7,697,064	418,468	275	306	0	-90	Received
LTGR0002	Le Tigre	RC	7,696,834	418,365	275	306	0	-90	Received
LTGR0003	Le Tigre	RC	7,694,412	420,422	280	252	0	-90	Received
LTGR0004	Le Tigre	RC	7,694,079	420,762	279	252	0	-90	Received
MGNM0001	Magnum	RC	7,701,204	416,543	272	150	0	-90	Pending
MGNM0002	Magnum	RC	7,701,491	416,392	274	306	270	-70	Received

Hole ID	Target	Hole Type	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay State
MGNM0003	Magnum	RC	7,701,504	416,191	277	306	270	-80	Received
MGNN0001	Magnum North	DDH	7,701,399	416,053	267	510	94	-60	Pending
MGNN0003	Magnum North	DDH	7,701,946	415,750	290	456	80	-60	Pending
MGSH0001	Magnum Shear	DDH	7,702,159	416,095	282	527	270	-60	Received
MGSH0002	Magnum Shear	RC	7,701,498	416,703	270	264	90	-70	Received
MGSH0003	Magnum Shear	RC	7,701,700	416,605	271	252	90	-70	Received
MGSH0004	Magnum Shear	RC	7,701,496	416,508	273	244	90	-70	Received
MGSH0005	Magnum Shear	RC	7,701,702	416,490	272	300	270	-70	Received
MGSH0006	Magnum Shear	RC	7,701,500	416,592	272	252	90	-70	Received
MGSH0007	Magnum Shear	RC	7,700,907	416,895	278	252	270	-70	Received
MGSH0008	Magnum Shear	RC	7,700,902	416,804	275	252	90	-70	Received
NOOS0002	Noosa	RC	7,703,017	408,331	261	202	0	-90	Received
NOOS0003	Noosa	RC	7,701,960	408,760	261	200	0	-90	Received
NOOS0004	Noosa	RC	7,702,911	408,605	266	200	0	-90	Received
NOOS0005	Noosa	RC	7,702,797	408,892	264	228	0	-90	Received
NOOS0006	Noosa	RC	7,702,125	408,297	264	198	0	-90	Received
RFRE0001	Rimfire East	RC	7,698,402	395,899	270	294	100	-75	Received
RFRE0002	Rimfire East	DDH	7,697,605	396,391	269	373	270	-60	Pending
RFRN0001	Rimfire North	RC	7,695,837	395,109	279	300	0	-90	Received
RFRN0002	Rimfire North	RC	7,700,374	394,174	269	210	0	-90	Received
RFRN0003	Rimfire North	RC	7,699,358	395,097	271	216	0	-90	Received
RFRN0004	Rimfire North	RC	7,700,216	395,389	270	198	0	-90	Received
RFRN0005	Rimfire North	DDH	7,700,389	395,004	270	358	180	-60	Received
RFRN0006	Rimfire North	DDH	7,700,123	394,888	270	334	360	-60	Received
RFRN0007	Rimfire North	DDH	7,700,614	395,091	272	418	180	-70	Pending
RFRN0008	Rimfire North	RC	7,700,646	394,375	268	300	205	-70	Received
RFRS0001	Rimfire South	RC	7,696,000	397,368	261	120	0	-90	Received
RFRS0002	Rimfire South	RC	7,696,350	396,437	269	102	0	-90	Received
RFRS0003	Rimfire South	RC	7,695,752	395,325	278	198	0	-90	Received
RFRS0004	Rimfire South	DDH	7,696,008	395,065	278	331	120	-60	Received
RFRS0005	Rimfire South	RC	7,695,920	394,921	278	198	0	-90	Received
RFRS0006	Rimfire South	RC	7,694,706	398,322	266	288	0	-90	Received
RFRS0007	Rimfire South	RC	7,695,736	396,442	269	200	0	-90	Received
RFRS0008	Rimfire South	RC	7,695,844	396,630	268	162	0	-90	Received
RFRS0009	Rimfire South	RC	7,696,044	396,130	271	120	0	-90	Received
RFRS0010	Rimfire South	RC	7,696,178	396,895	267	156	0	-90	Received
RFRS0011	Rimfire South	DDH	7,695,756	395,325	278	367	150	-60	Pending
TRGR0001	Trigger	RC	7,699,366	417,505	275	300	300	-70	Received
TRGR0002	Trigger	RC	7,699,682	417,001	273	300	0	-90	Received
TRGR0003	Trigger	RC	7,699,495	417,505	272	318	90	-80	Received
TRGR0004	Trigger	DDH	7,699,777	417,786	266	676	45	-70	Pending

PATERSON PROVINCE – 2021 Citadel Joint Venture Project Drill Hole Sampling

JORC Code 2012 Edition: Table 1 - Section 1 Sampling Techniques and Data (Criteria in this section shall 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. 	 2021 Reverse Circulation (RC) Drilling A total of 63 holes for 14,871m of RC drilling occurred across the Citadel project. RC samples were collected from a static cone splitter on 2m intervals. The samples sent for analysis consisted of 8% of the drilled 2m interval. Cyclone/splitter hygiene audits were carried out regularly to ensure the best quality samples were collected. Assay results have been completely received for 60 RC holes. Drill hole locations and orientations for all 2021 holes are tabulated in the body of this report. Reverse Circulation (RC) Sampling RC sampling was carried out under Rio Tinto Exploration Pty Ltd (RTX) protocols and QAQC procedures as per industry best practice. RC drilling was used to obtain 2m samples which generally range from 4 to 8.5kg in the basement. A subset of each RC sample is retained in chip trays (per 2 metres) and the coarse reject (residual material from the primary crush at the lab) is kept in Perth for repeat or tertiary analyses as needed. 2021 Diamond Core Holes A total of 23 holes for 9,658m of Diamond drilling occurred across the Citadel project. Assay results have been completely received for nine diamond core holes, and results have been partially received for three other holes. All hole locations and orientations for all 2021 holes are tabulated in the body of this report. Diamond Core Sampling Diamond core sampling was carried out under RTX protocols and QAQC procedures as per industry best practice. All diamond drill core samples were cut in half with an automatic core saw. All available half core was sampled, nominally as one metre samples but at times adjusted for major geological changes. Samples range between 0.3m and 1.2m.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g.	Half diamond drill core samples are prepared for assay and the remaining half core archived. All drill core was logged and photographed by the geology team prior to cutting. Reverse Circulation (RC) Drilling A face sampling RC hit was used.
tecimiques	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).	 A face sampling RC bit was used. Diamond Core Holes The drilling consisted of rock-roll drilling to several metres above the Permian-Proterozoic unconformity (no core samples returned), followed by PQ diamond core drilling to designated competent ground, followed by HQ diamond core drilling to the end of hole. A triple tube assembly was employed for all diamond drilling that returned core samples.

Criteria	JORC Code explanation	Commentary
		The core was orientated using the ACT III RD tool. At the end of each run, the low side of the core was marked by the drillers and this was used at the site for marking the whole drill core with a reference line.
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. 	 Reverse Circulation (RC) Drill Samples RC sample recovery was maximized by endeavoring to maintain dry drilling conditions as much as practicable. Relationships between recovery and grade are not evident and are not expected given the generally excellent and consistently high sample recovery. RC samples were also weighed on arrival at the laboratory. Sample weights were reviewed to identify potential loss. There is potential for a minor loss of sample in the running sand cover in the Permian due to the unconsolidated nature of this unit. No evidence for loss exists in basement samples. Diamond Core Holes Core recovery was measured and recorded continuously from the start of the casing to the end of the hole for every hole. Each core run length (PQ 1.5m, HQ 3m) was marked by a core block which provided the depth, the core drilled and the core recovery. Generally, core recovery was > 99%.
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. 	 Reverse Circulation (RC) Drill and Diamond Core Logging Geological logging of 100% of all intervals was carried out recording colour, weathering, lithology, mineralogy, alteration, veining and sulphides. Logging includes both qualitative and quantitative components. Magnetic Susceptibility measurements were collected for all intervals using a handheld KT-10 magnetic susceptibility reader. The logging of the RC chips was done after sieving and washing of the material collected from the RC rig's cyclone. For diamond core holes structural and geotechnical measurements were also recorded. All the drill holes were logged before sampling. All logging is entered directly into a ruggedized Toughbook and is only uploaded into an acQuire database once a series of QAQC checks have been completed. The core was photographed both wet and dry inside the core trays. The RC chip trays were photographed wet.
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. 	Reverse Circulation (RC) Samples • All samples are crushed and pulverised at the laboratory to produce material for assay. Diamond Core Samples

Criteria	JORC Code explanation	Commentary
	 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 samples were sawn in two and half was collected in a calico bag and submitted for analysis. The other half was kept in core trays and archived. The core was typically sampled at 1.0m intervals with breaks for major geological changes, with sample interval lengths ranging from 0.3m to 1.2m. All samples are crushed and pulverised at the laboratory to produce material for assay. Reverse Circulation (RC) and Diamond Core Sample Preparation Sample preparation of RC samples was completed at ALS Limited laboratory in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the RC sample down to 6mm to 8mm, coarse crushing down to a nominal 70% passing -2 mm followed by a second pass at 2mm to produce a 750 gram sub-sample, followed by pulverisation of the entire sample (total prep) using a LM2 grinding mill to a grind size of 85% passing 75 μm and split into 30 gram sub-sample/s for analysis. Duplicate samples were collected at each stage of the preparation, with a rate of 1:20 (field duplicates) or 1:55 (crush and pulp duplicates) samples. Duplicate results show acceptable levels of precision for the style of mineralisation. The sample sizes are considered appropriate to correctly represent the vein hosted style of mineralisation encountered in the region, 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. 	 Analytical Techniques All samples were submitted to an ALS Limited laboratory in Perth. 51 elements were analysed for using 4-acid digest followed by ICP-OES/MS measurements including qualitative Au, Pt and Pd. 30 grams of sample were used for Au analysis by fire assay with ICP-AES finish. Any Au samples which trigger the over range analysis method (>10ppm Au) will be analysed with AAS finish. Portable XRF analysis on pulp for Cr, Nb, S, Si, Ta, Ti, Y and Zr was done using a SciAps X200 instrument for DD holes only. Quality control samples consisted of field duplicates (1:20), crush duplicates (1:55), pulp duplicates (1:55), blanks (1:50) and commercial certified reference materials (3:100) with the grade of the inserted standards not revealed to the laboratory. All the QAQC data is verified by a competent geologist in the acQuire database before being used, and the analysed batches are continuously reviewed to ensure they are performing within acceptable accuracy and precision limits for the style of mineralisation. Any failures during this quality control process requires the batch to be re-analysed prior to acceptance in the database. Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures. In addition to RTX supplied CRM's, ALS Limited laboratory includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates.

Criteria	JORC Code explanation	Commentary
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. 	 Selected anomalous samples are re-digested and analysed to confirm results. No geophysical tools were used to determine any element concentrations in this report. Inter laboratory cross-checks analysis programmes have not been conducted at this stage. All the sample intervals were visually verified using high quality core and chip tray photography through Imago. All logging is entered directly into the acQuire interface in a Toughbook laptop which is backed up daily. Further data validation is carried out during upload to the acQuire database prior to data being available for use. No adjustments or calibrations have been made to any assay data collected, which are electronically uploaded from the laboratory to the database. A systematic analysis of duplicate samples was carried out at each stage of sampling including field, crush and pulp duplicates. The results from this analysis were within acceptable range for this type of mineralization.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 km = kilometre; m = metre; mm = millimetre. Drill hole collar locations were surveyed using a handheld Garmin 64S GPS which has an accuracy of ± 3 m. The drilling co-ordinates are all in Geocentric Datum of Australia GDA94 MGA Zone 51 co-ordinates. Inclined RC and DD drill holes are checked for drill rig set-up azimuth using a Suunto Sighting Compass from two directions. Drill hole inclination is set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing. Drill hole down hole surveys were ran for the majority of RC and DD holes with exception of any RC holes drilled vertical. The topography is relatively flat, and if defaulted the topographic surface is set to 250m RL. Table 1 in this Report is in GDA94 / MGA Zone 51. Prior to 2019 the Company has utilised and referenced a local grid at Calibre which is defined below: Calibre Local Grid 0.00m east is 421,535.53m east in GDA94 / MGA Zone 51; Calibre Local Grid 0.00m north is 7,691,393.40m north in GDA94 / MGA Zone 51; Calibre Local Grid North (360°) is equal to 315° in GDA94 / MGA Zone 51; and Calibre Local Grid elevation is equal to GDA94 / MGA Zone 51.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The reporting of both RC and diamond core assay results as broader intersection intervals may occur on the basis tabulated in the body of this report. Regional Geophysical Targets (AEM ± aeromagnetic ± IP/GAIP): Drill spacing was variable depending on target rank, target dimensions (along strike and/or across strike); if more than one drill line per target then drill lines were generally spaced

Criteria	JORC Code explanation	Commentary
		 approximately 200 to 700 m apart with an average drill hole spacing on each section between 100 to 200 m. The typical section spacing/drill hole distribution is not considered adequate for the purpose of Mineral Resource estimation.
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. 	No consistent and/or documented material sampling bias resulting from a structural orientation has been identified for the "regional" geophysical targets at this point in time.
Sample security	The measures taken to ensure sample security.	 Samples were assigned a unique sample number. All RC and DD samples were placed in calico bags clearly marked with the assigned sample number, and placed in bulka bags, wrapped in plastic and transported by company transport to Port Hedland and by private haulage to the ALS sample preparation facility in Wangara, Perth, Western Australia. Each sample was given a barcode at the laboratory and the laboratory reconciled the received sample list with physical samples. Barcode readers were used at the different stages of the analytical process. The laboratory uses a LIMS system that further ensures the integrity of results.
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.

PATERSON PROVINCE – 2021 Citadel Joint Venture Project Drill Hole Reporting

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 Le Tigre, Calibre, Magnum, Magnum North, Magnum Shear, Noosa and Trigger targets are located within Exploration License E45/2877. The Rimfire, Detachment and Hansel targets are located within Exploration License E45/2876. Citadel Northeast target is located wholly on E45/2901. Boxer target is located wholly on E45/4561. Ballstein target is located wholly on E45/2874. On 9 October 2015 Farm-in and JV Agreements were executed between Antipa and Rio Tinto Exploration Pty Limited (Rio Tinto). Currently Antipa Mineral Ltd has a 35% interest and Rio Tinto has a 65% in all Citadel Project tenements and there are no royalties on these tenements. Exploration licences E45/2876, E45/2877 and E45/4561 are contained completely within land where the Martu People have been determined to hold Native Title rights. No historical or environmentally sensitive sites have been identified in the immediate exploration activity areas. Exploration licences 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 immediate exploration activity areas. The tenements are all in 'good standing' with the Western Australian DMIRS. No known impediments exist, including to obtain a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Prior to 1991 limited to no known mineral exploration activities. 1991 to 1996 BHP Australia completed various regional airborne geophysical surveys (e.g. aeromagnetics, radiometrics, GeoTEM, ground magnetics, surface EM), geochemical Air core and selected diamond core drilling programmes across a significant area which covered the Citadel Project. Whilst this era of exploration highlighted a number of areas as being variously anomalous, BHP did not locate any basement (Proterozoic) precious or base metal mineralisation. In 1995 BHP Minerals completed an MMI-A/MMI-B soil programme over an area which was ultimately found to be the region within which the Magnum deposit was located. 1997 to 2002 JV partners Croesus-Gindalbie completed minor surface geophysical surveys (e.g. electromagnetics) and various drilling programmes across parts of the Citadel Project (i.e. 17 x Diamond core, 10 x RC and 134 x Air core drill holes) leading to the discovery of the Magnum Au-Cu-Ag deposit, and its partial delineation, in 1998. 2002 to 2003 JV partners Teck Cominco and Croesus-Gindalbie completed detailed aeromagnetic and radiometric surveys over the entire Citadel Project, Pole-Pole IP over eight targets and limited drilling (i.e. four x Diamond core holes) within the Citadel Project. 2004 to 2005 JV partners NGM Resources and Croesus-Gindalbie completed limited drilling (i.e. 3 x

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Criteria	JONE Code explanation	Diamond core holes) at selected Citadel Project prospects intersecting minor Au-Cu-Ag mineralisation at the Colt prospect. 2006 to 2010 Glengarry Resources/Centaurus Metals undertook re-processing of existing data and re-logging of some drill core. No drilling or geophysical surveys were undertaken, and so no new exploration results were forthcoming. 2011 to 2015 Antipa Minerals Ltd completed 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. MIMI-M™ and SGH™ soil programmes) and drilling programmes (i.e. diamond core and RC) resulting in two greenfield discoveries in 2012, i.e. Calibre and Corker, and subsequent drilling programmes. Cotober 2015 to March 2017 Antipa Minerals Ltd operators under a Farm-in Agreement executed on the 9 October 2015 between Antipa and Rio Tinto Exploration Pty Limited ("Rio Tinto"), a whotly owned subsidiary of Rio Tinto Limited. Rc drilling at Calibre in late 2015, and in 2016 an extensive IP survey, a regional target RC drilling programme and single (deep) diamond core hole were completed. April 2017 to March 2019 Rio Tinto as operators under the Farm-in Agreement (see above). 2017 and 2018 exploration activities included: Further extensive IP survey (2017) in the central region (Rimfire area) of E45/2876; RC drilling programme (2017) testing targets located on E45/2876 (Rimfire area) and 45/2877 (Calibre area); RC drilling programme (2017) testing targets located on E45/2876 and 45/4561; and Two (2017 and 2018) aerial electromagnetic surveys primarily over various portions of all of the Citadel Project tenements have been completed. March to December 2019 inclusive Antipa Minerals Ltd operators under the Farm-in Agreement (see above). 2019 exploration activities included: Further extensive GAIP surveys across various project tenements; Airborne Falcon* AGG gravity survey across the entire project; RC drill programme te

Criteria	JORC Code explanation	Commentary
		 Further extensive GAIP surveys across various project tenements. 2021 exploration activities included: RC and diamond core drill programme testing various greenfield targets across various project tenements; Continuation of the GAIP survey programme across prospective structural corridors; Rimfire detailed aeromagnetic survey covering 110km² with orthogonal survey lines; Preliminary metallurgical test-work and geotechnical evaluations at Calibre; Appraisal work in respect of early stage project development options for Calibre; and Ongoing processing and interpretation of geophysical and drill hole data, together with Calibre deposit and Magnum Dome modelling to identify further priority targets.
Geology	Deposit type, geological setting and style of mineralisation.	 The Citadel Project region of the Paterson Province is located on the Anketell Shelf of the Yeneena Basin, a Neoproterozoic aged sequence of meta-sedimentary rocks, mafic intrusives and granitoids that has been intruded by post-mineralisation Cambrian dolerite dykes and is entirely covered by younger Phanerozoic sediments typically ranging in thickness of between 10 to 130 m. The Paterson is a low to moderate grade metamorphic grade (i.e. greenschist to lower-amphibolite) terrane, with local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environments. Precious and/or base metal mineralisation is hydrothermal in nature and is shear, fault and strata/contact controlled and is typically sulphide bearing. Mineralisation styles include vein, stockwork, breccia and skarns. Mineralisation includes chalcopyrite, pyrite, pyrrhotite, bismuthine, sphalerite, galena, scheelite and wolframite.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 A summary of all available information material to the understanding of the exploration region exploration results can be found in the main body of the report (including drill hole collar table providing collar co-ordinates, orientations and length for all reported drill holes). A summary of all available previously reported information material to the understanding of the exploration region exploration results can also be found in previous Western Australia (WA) DMIRS publicly available reports. All the various technical and exploration reports are publicly accessible via the WA DMIRS' online WAMEX system. The specific WA DMIRS WAMEX and other reports related to the exploration information the subject of this public disclosure have been referenced in previous public reports. Antipa Minerals Ltd publicly disclosed reports provide details of all exploration completed by the Company since 2011; these reports are all available to view on www.asx.com.au and www.asx.com.au
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually	This release has no reference to previously unreported drill results, sampling, assays, or mineralisation.

Criteria	JORC Code explanation	Commentary
	 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. 	 Antipa Minerals Ltd publicly disclosed reports provide details of all exploration completed by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au. The reported average intersection grades may be length-weighted averages, with a minimum downhole intersection interval length of generally 1m and maximum internal dilution allowed is generally 10m. If used Metal equivalence is defined in the body of this report.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 Regional Geophysical Targets (IP/GAIP ± aeromagnetic ± AEM): The drill section spacing and sampling, at this stage, is insufficient to establish the geometrical relationships between the drill holes and any mineralised structures. Therefore, at this stage the reported intersection lengths are down hole in nature and the true width, which will be dependent on the local mineralisation geometry/setting, is not known.
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 sometimes be found in previous WA DMIRS WAMEX publicly available reports. This release has no reference to previously unreported drill results, sampling, assays or mineralisation. Antipa Minerals Ltd publicly disclosed reports provide maps and sections (with scales) and tabulations of intercepts generated by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	 All significant results are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports. This release has no reference to previously unreported drill results, sampling, assays or mineralisation. Antipa Minerals Ltd publicly disclosed reports provide details of all significant exploration results generated by the Company since 2011; these reports are all available to view on www.antipaminerals.com.au and www.asx.com.au.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 This announcement refers to previous exploration results including geophysics, drill results and geology which can be found in previous public reports. All meaningful and material information has been included in the body of the text or can sometimes be found in previous WA DMIRS WAMEX publicly available reports. Zones of mineralisation and associated waste material have been measured for their specific gravity ("density") at target areas that were tested with diamond drilling. The measurement used the hydrostatic/gravimetric method (Archimedes Principle of buoyancy). Multi element assaying has been conducted variously for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium.

Criteria	JORC Code explanation	Commentary
		Geotechnical logging (e.g. Recovery, RQD and Fracture Frequency) is not possible for RC drill material; however, all diamond core holes (i.e. Calibre, Magnum, Corker, Blue Steel, etc) receive geotechnical logging, No geotechnical logging was obtained from the WA DMIRS WAMEX reports. Downhole information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material are not possible for RC drill material; however all diamond core holes (i.e. Calibre, Magnum, Corker, Blue Steel, etc) receive structural logging which can be obtained from the Company's pre-existing SQL database and WA DMIRS WAMEX reports. Metallurgical test-work results available on these particular tenements is restricted to the Calibre gold-copper-silver-tungsten deposit. Preliminary metallurgical test-work results are available for the Calibre deposit, this report is available to view on www.antipaminerals.com.au and <a href="https://www.antipaminerals.com.au and www.antipaminerals.com.au and <a a="" href="https://www.antipaminerals.com.au and <a href=" https:="" www.antipaminerals.com.au<=""> and

Criteria	JORC Code explanation	Commentary
		 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 test-work is required with respect to tungsten concentrate specifications; however, the initial results are considered encouraging, including mineralogy investigation using QEMSCAN® which revealed the tungsten minerals to be comparatively coarse grained and well liberated. As a consequence, a conservative recovery of 50% was assumed for tungsten. Heavy Liquid Separation (HLS) test work was used to assess the amenability of the ore to physical upgrade processes such as gravity. The HLS results highlighted the excellent density beneficiation qualities of the Calibre mineralisation. Geophysical surveys carried out over significant regions of the Citadel Project include aerial and ground electromagnetics, aerial and ground magnetics, aerial radiometrics, ground induced polarisation/resistivity, aerial (AGG) and ground gravity, and magnetic susceptibility from drill sample material. Satellite imagery is also available.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Planned further work: Ongoing review and interpretations of historical data, and 2021 exploration data including modelling/interpretation of various geophysical survey data; Planning and execution of follow-up exploration activities to identify potential high-grade mineralisation; Full geological interpretation including 3D modelling where data supports; Ongoing appraisal work in respect of early stage project development options for Calibre, including further metallurgical test-work and geotechnical evaluations; and Possible Calibre deposit Mineral Resource Estimate update in 2022. All appropriate maps (with scales) and tabulations of GAIP anomalies are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports.