

## 2019 EXPLORATION PROGRAMME UPDATE 100% OWNED PATERSON PROVINCE GROUND

### Highlights

- Assays received for 19 AEM targets – 13 of which require follow-up drilling in Phase 2 which has commenced and will include:
  - Follow up RC drill testing of high priority Phase 1 AEM targets, including deeper drilling into key identified targets
  - RC drill testing of Havieron high-grade gold-copper deposit lookalike targets; and
  - Large 600km<sup>2</sup> AEM survey
- Assays remain outstanding for a further four AEM targets
- Exploration programme aiming to deliver large-scale discoveries based on Telfer, Winu, Havieron and Nifty analogues

**Antipa Minerals Limited** (ASX: **AZY**) (“Antipa”, “the Company”) is pleased to provide an update in relation to its ongoing exploration programme on 100% owned ground in the Paterson Province.

### Greenfield Phase 1 Exploration Programme

The first phase of the 2019 exploration programme, including 13,000m of Air Core (AC), slim-line RC and RC drilling, has been completed (Table 2). The programme systematically tested 23 greenfield aerial electromagnetic (AEM) geophysical targets and one brownfield prospect, Turkey Farm.

Assay results have been received for the first 19 targets with 13 of those targets providing encouraging results (summarised in Table 1 and Figures 1 to 6) that require follow up RC drilling, including deeper drilling into identified targets. This Phase 2 programme is underway and will be completed in 2019.

At AEM target # 28 (“Grey”), eight shallow (average hole depth 42m) Phase 1 drill holes intersected strong Cu-Zn-Co-Au-Ag anomalism under shallow cover (10 to 40m) across 350m above the EM target (Figure 2). A single drill line was completed at Grey and the anomalism remains open in all directions. The untested EM conductor was modelled as being shallow ENE dipping across a strike length of approximately 900m and will be followed up in the near term.

Due to depth penetration limitations, particularly in fresh rock, the air core slim-line RC drill rig was unable to reach the AEM target depth for up to eight targets. These targets will be drill tested during the Phase 2 RC drill programme. The initial drill testing of up to a further four AEM targets was also deferred to Phase 2.

### Greenfield Phase 2 Exploration Programme

The Phase 2 greenfield exploration programme commenced on the 22<sup>nd</sup> of August and includes RC drilling and an additional AEM survey covering approximately 600km<sup>2</sup> to define further priority AEM targets planned to commence in late August (Figure 8). In addition, Antipa geoscience consultants, Model Earth Pty Ltd’s Paterson Province structural, mineral system and targeting project commenced in late July and is ongoing.

The Phase 2 RC drill programme consists of between 7,000 to 9,000m allocated to systematically follow up AEM targets (Figures 3 to 6) and test Havieron high-grade gold-copper deposit lookalike aeromagnetic anomalies (Figures 7a-c).

The four high-priority Havieron lookalike aeromagnetic targets planned for Phase 2 drill testing include:

- **AZY-Mag01** = Co-incident magnetic and gravity high anomaly within interpreted folded/faulted meta-sediment basement beneath 80 to 150m of cover. Located 30km northeast of the Minyari-WACA resources in an area of no historic drilling (Figure 7b);
- **AZY-Mag02** = Partially co-incident magnetic and gravity high anomaly within interpreted faulted meta-sediment basement beneath 300 to 450m of cover. Located 40km northeast of the Minyari-WACA resources in an area of no historic drilling (Figure 7b);
- **AZY-Mag03** = Magnetic high anomaly within interpreted folded and faulted meta-sediment basement beneath less than 30m of cover. Located 10km northeast of the Minyari-WACA resources in an area of no historic drilling (Figure 7c); and
- **AZY-Mag04** = Partially co-incident magnetic and gravity high anomaly within interpreted folded and faulted meta-sediment basement beneath 300 to 450m of cover. Located 35km east-northeast of the Minyari-WACA resources in an area of no historic drilling (Figure 7a).

These aeromagnetic targets share the following characteristics with the Havieron deposit, evidenced by the aeromagnetic work undertaken and available historic data:

- Bull's-eye to sub-circular magnetic high anomaly;
- Meta-sedimentary host rocks (including folding and/or faulting); and
- Related gravity high anomaly (excluding AZY-Mag03).

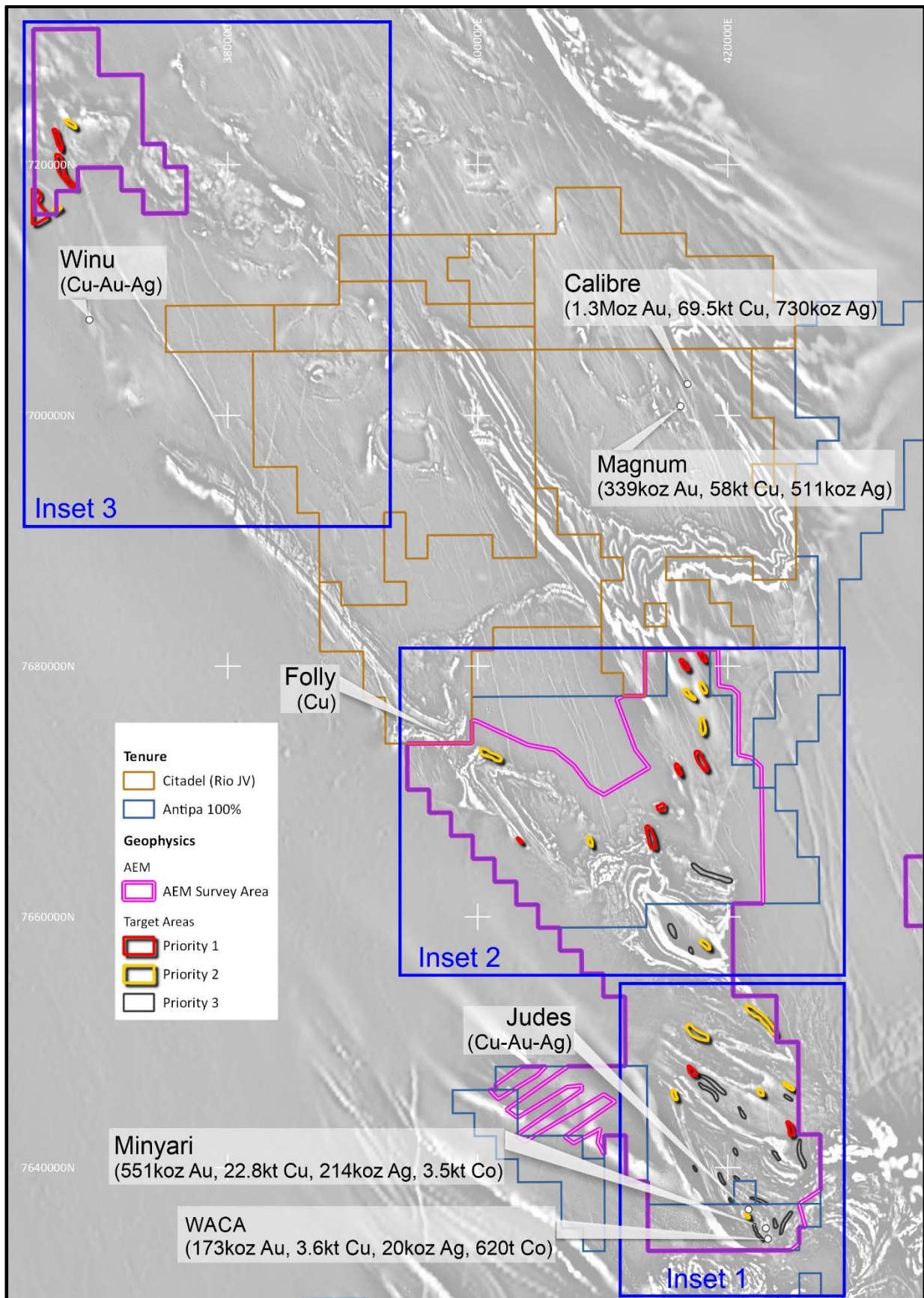
The Phase 2 exploration programme is subject to continuous monitoring and will be adjusted according to results and field conditions. Drill samples will continue to be batched and sent for assay on a periodic basis and announcements will be made periodically as assays are received.

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

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**Figure 1: Plan view showing Antipa's Paterson Province project area covered by the 2018 AEM survey, deposit and prospect locations, EM targets and Figures 4 to 6 inset areas. NB: Over Airborne magnetic image (50m flight-line spacing at an altitude of 30m; Grey-scale First Vertical Derivative) and Regional GDA94 / MGA Zone 51 co-ordinates, 20km grid.**



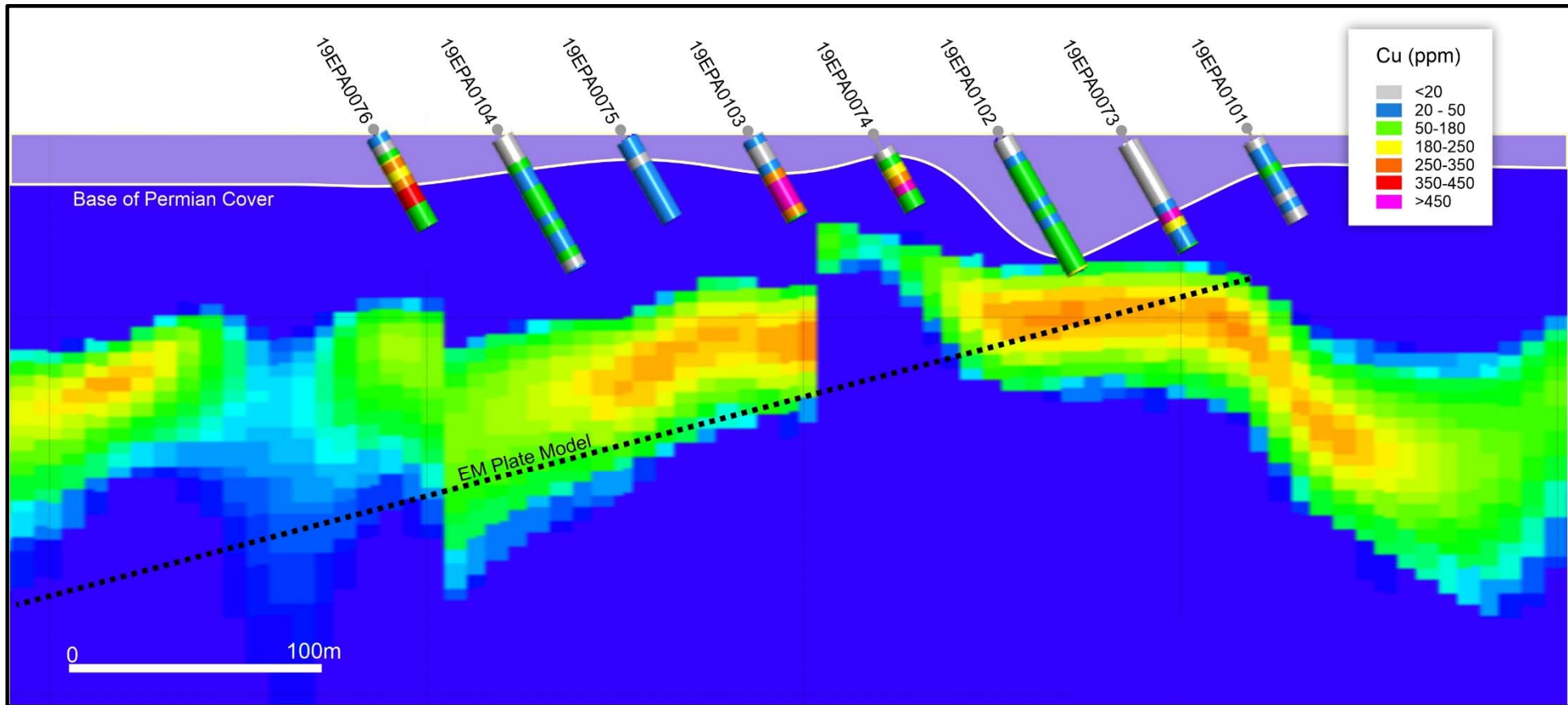


Figure 2: AEM Target # 28 cross section showing 2019 air core drill hole defined 350m wide copper - cobalt - zinc  $\pm$  gold  $\pm$  silver anomaly (drill holes annotated by copper assay results) and AEM conductivity depth image and EM Plate Model. Air Core anomaly is located near surface beneath shallow cover ranging from approximately 10 to 40m, is open in all directions (just a single drill line and average drill hole depth of only 42m) and sits above the AEM conductivity target zone that was unable to be adequately tested due to depth penetration constraints of the previous drill equipment – i.e. EM target remains untested. Cross section looking to 154° and scale bar for reference.

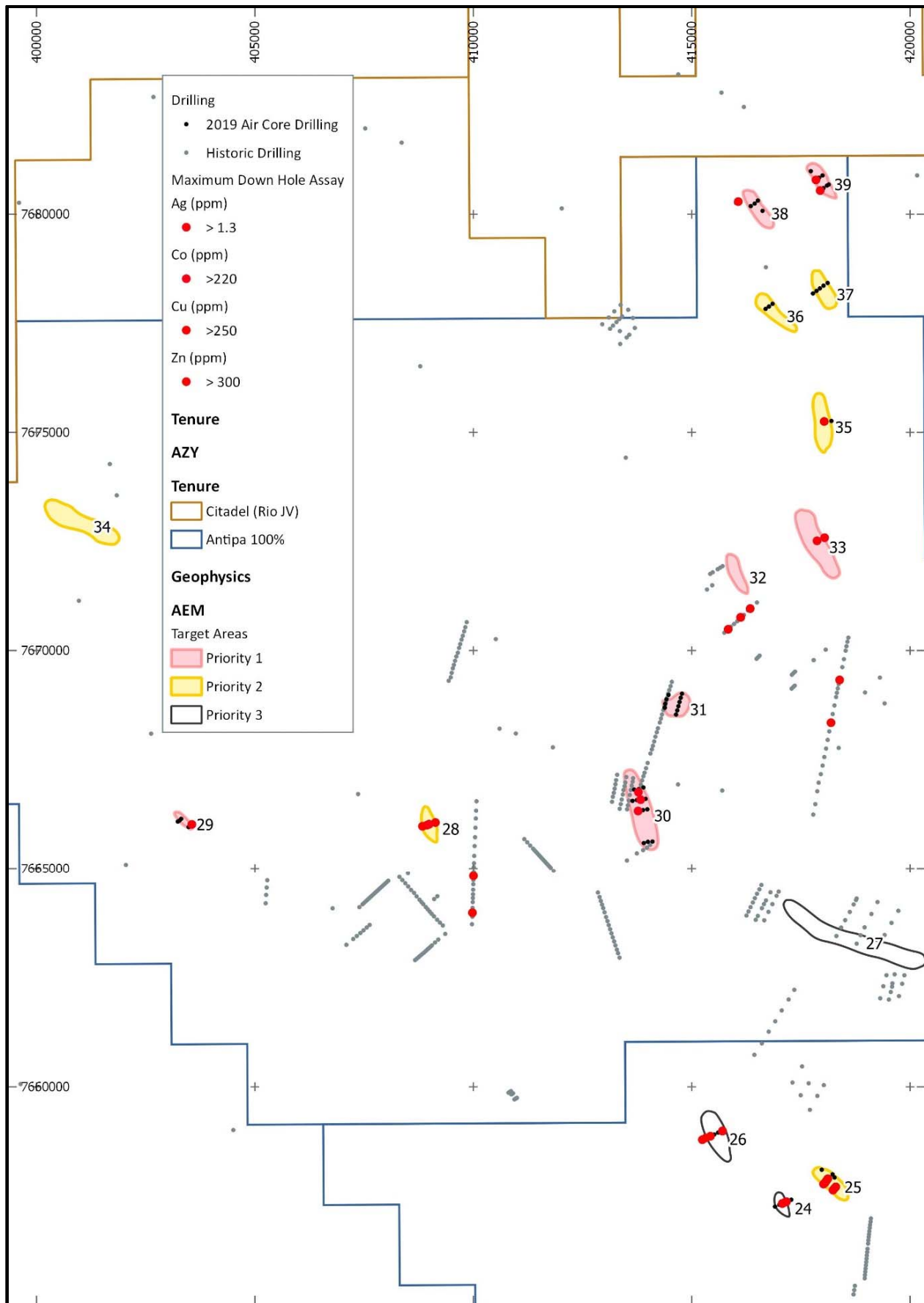
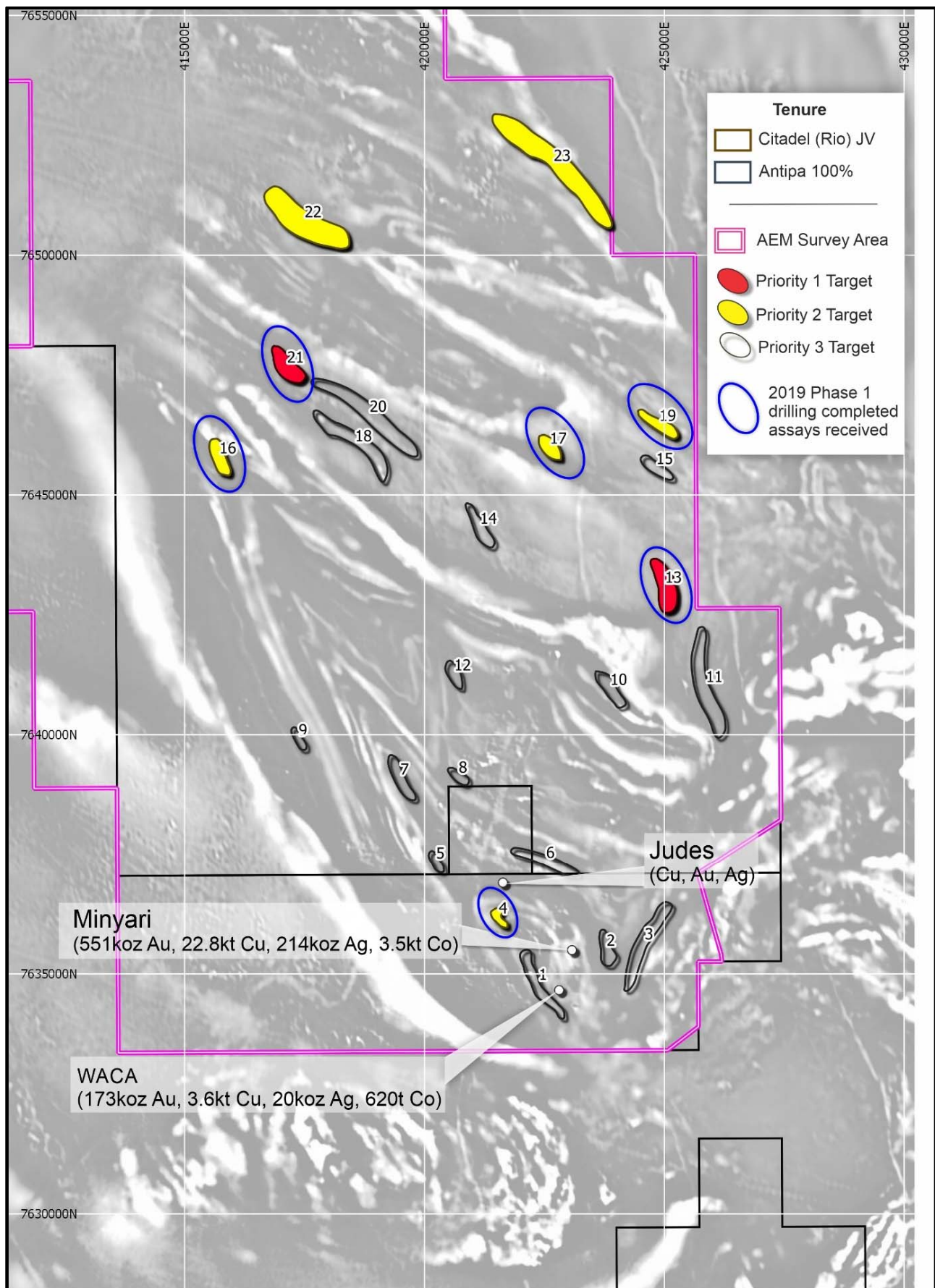
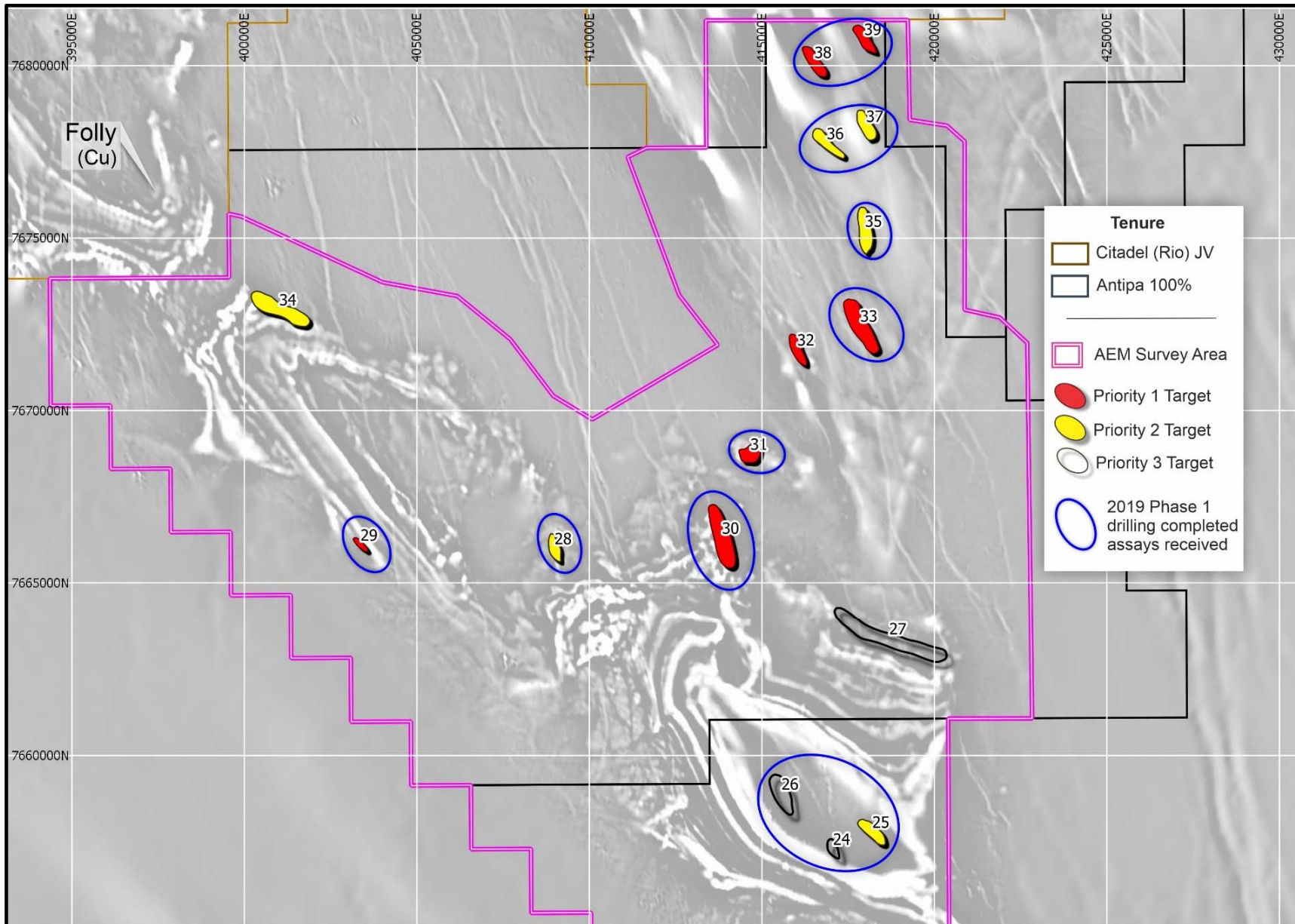


Figure 3: Plan highlighting anomalous maximum downhole assay results for AEM Targets from a portion of the central region of the 2019 Phase 1 air core drill programme area. For a detailed breakdown of these AEM Target anomalies refer to assay results in Table 1. Regional GDA94 / MGA Zone 51 co-ordinates, 5km grid.

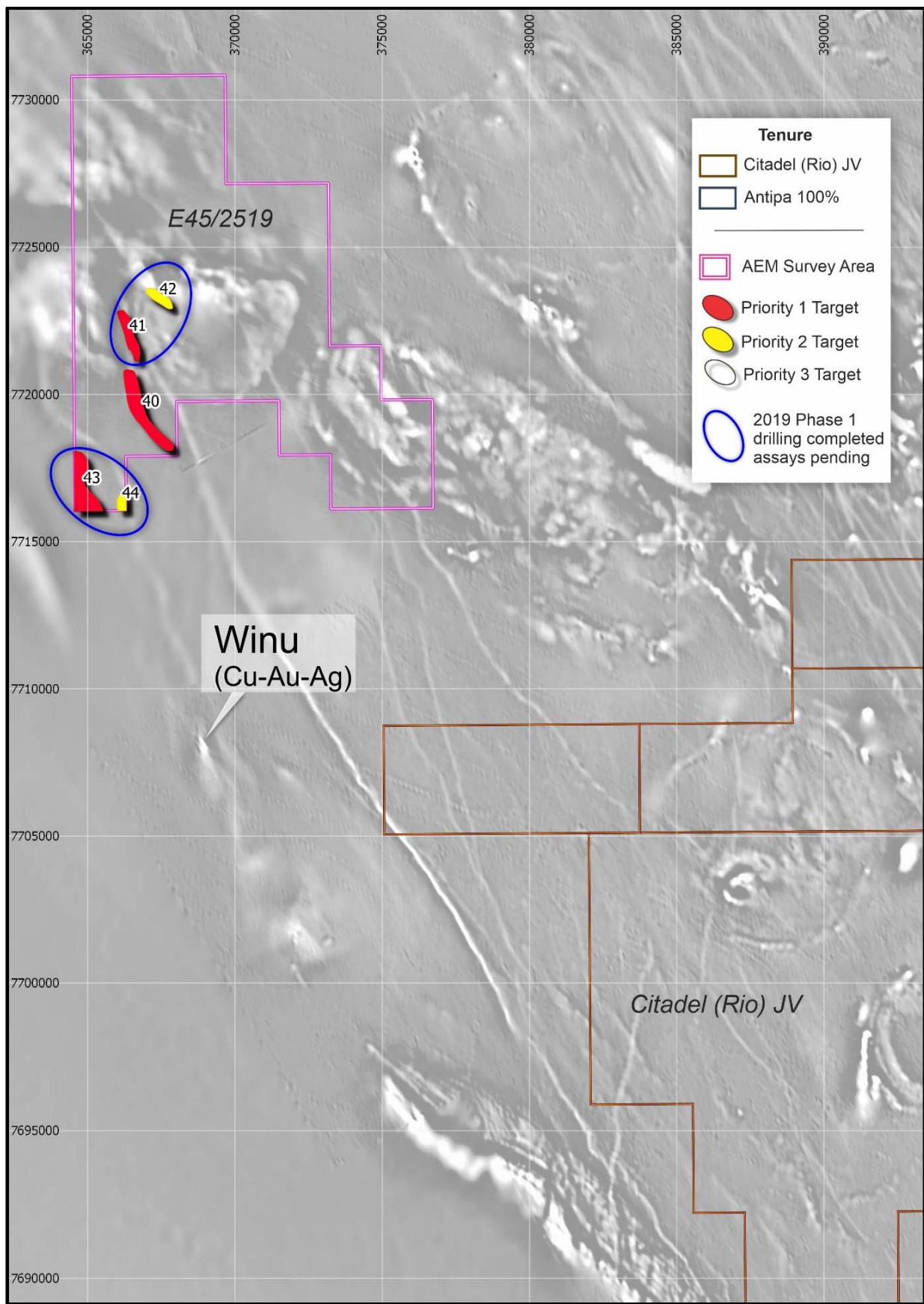


**Figure 4 (Inset 1): Plan view showing southern portion of 2018 AEM survey area with deposit and prospect locations and EM targets including target ID number. NB: Over Airborne magnetic image (50m flight-line spacing at an altitude of 30m; Grey-scale First Vertical Derivative) and Regional GDA94 / MGA Zone 51 co-ordinates, 5km grid.**





**Figure 5 (Inset 2): Plan view showing northern portion of 2018 AEM survey area with deposit and prospect locations and EM targets including target ID number.**  
 NB: Over Airborne magnetic image (50m flight-line spacing at an altitude of 30m; Grey-scale First Vertical Derivative) and Regional GDA94 / MGA Zone 51 co-ordinates, 5km grid.



**Figure 6 (Inset 3): Plan view showing northern portion of 2018 AEM survey area with deposit and prospect locations and ranked EM targets including target ID number. NB: Over Airborne magnetic image (50m flight-line spacing at an altitude of 30m; Grey-scale First Vertical Derivative) and Regional GDA94 / MGA Zone 51 co-ordinates, 5km grid.**



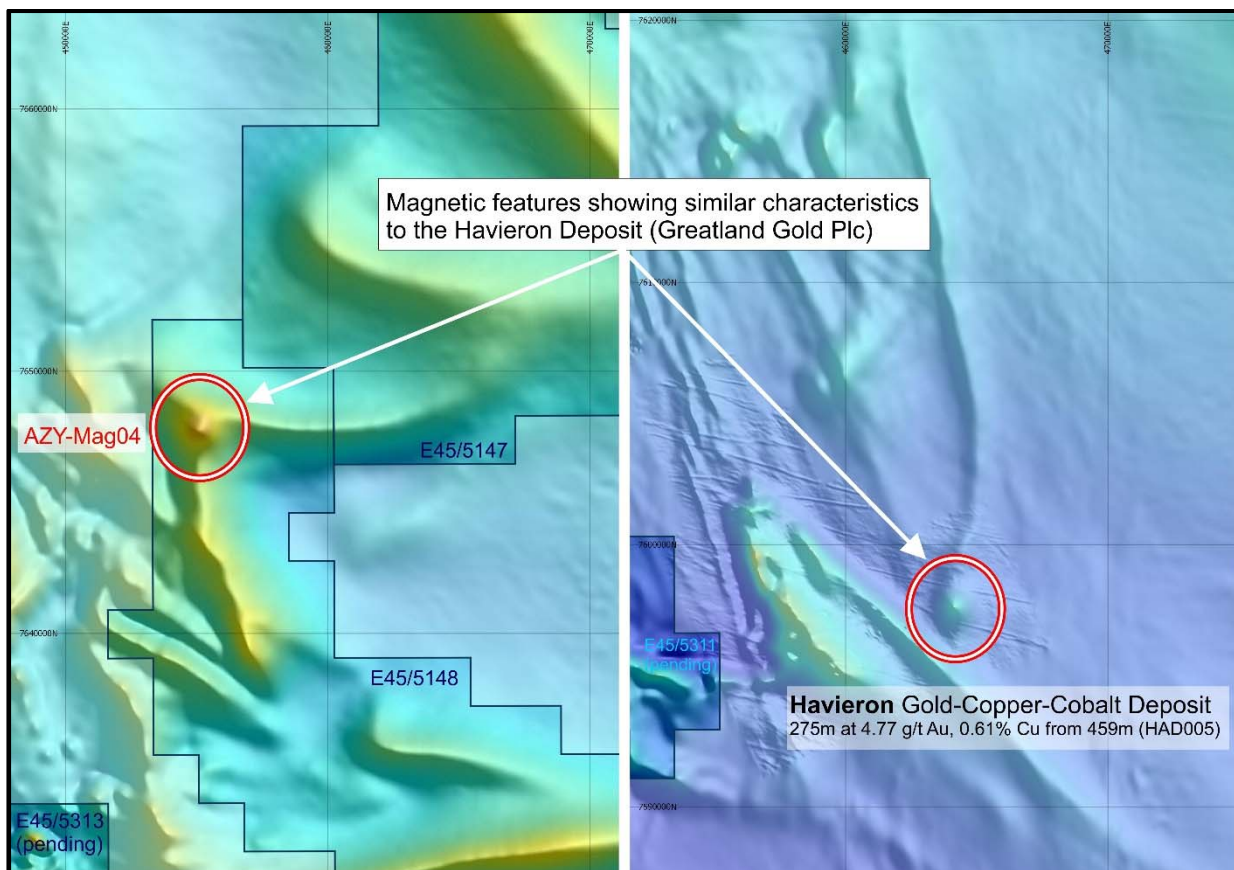


Figure 7a:

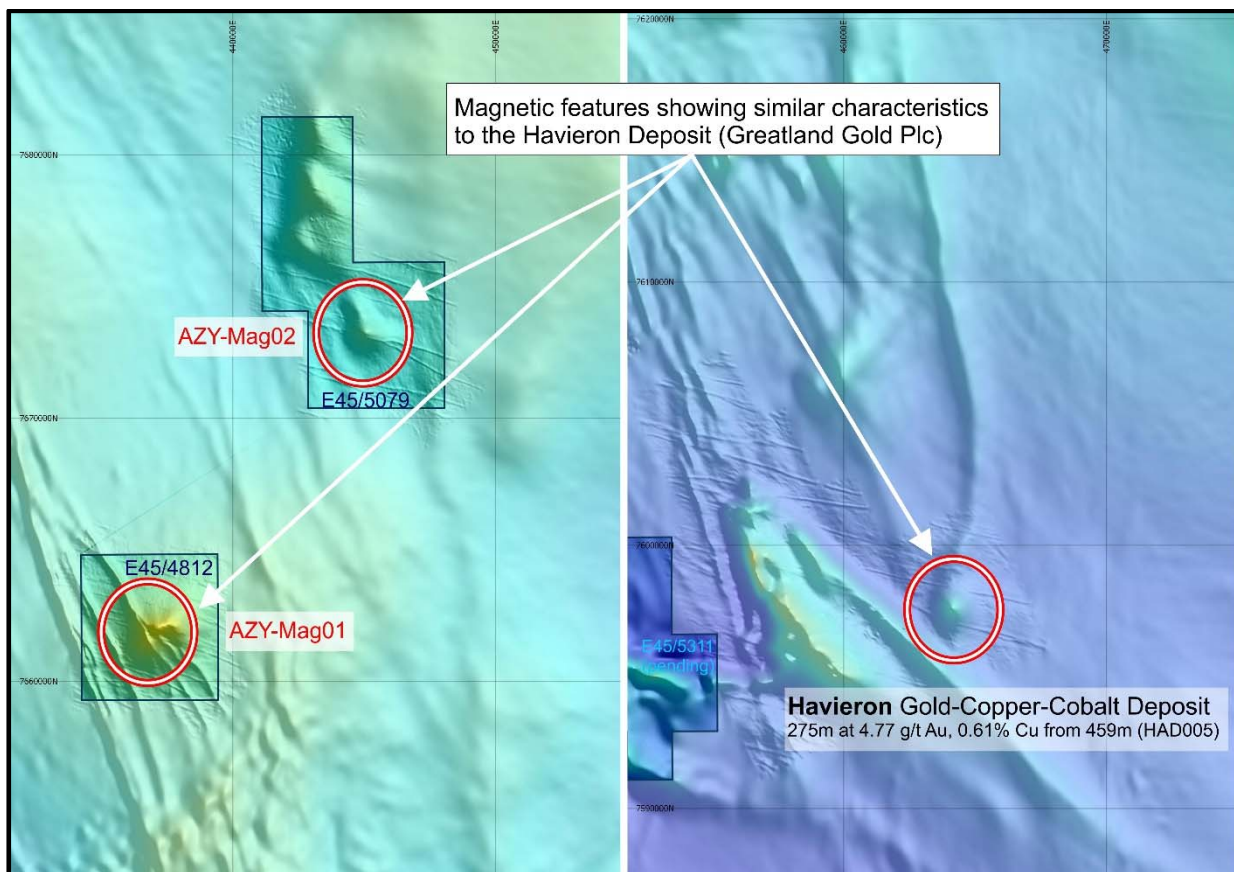
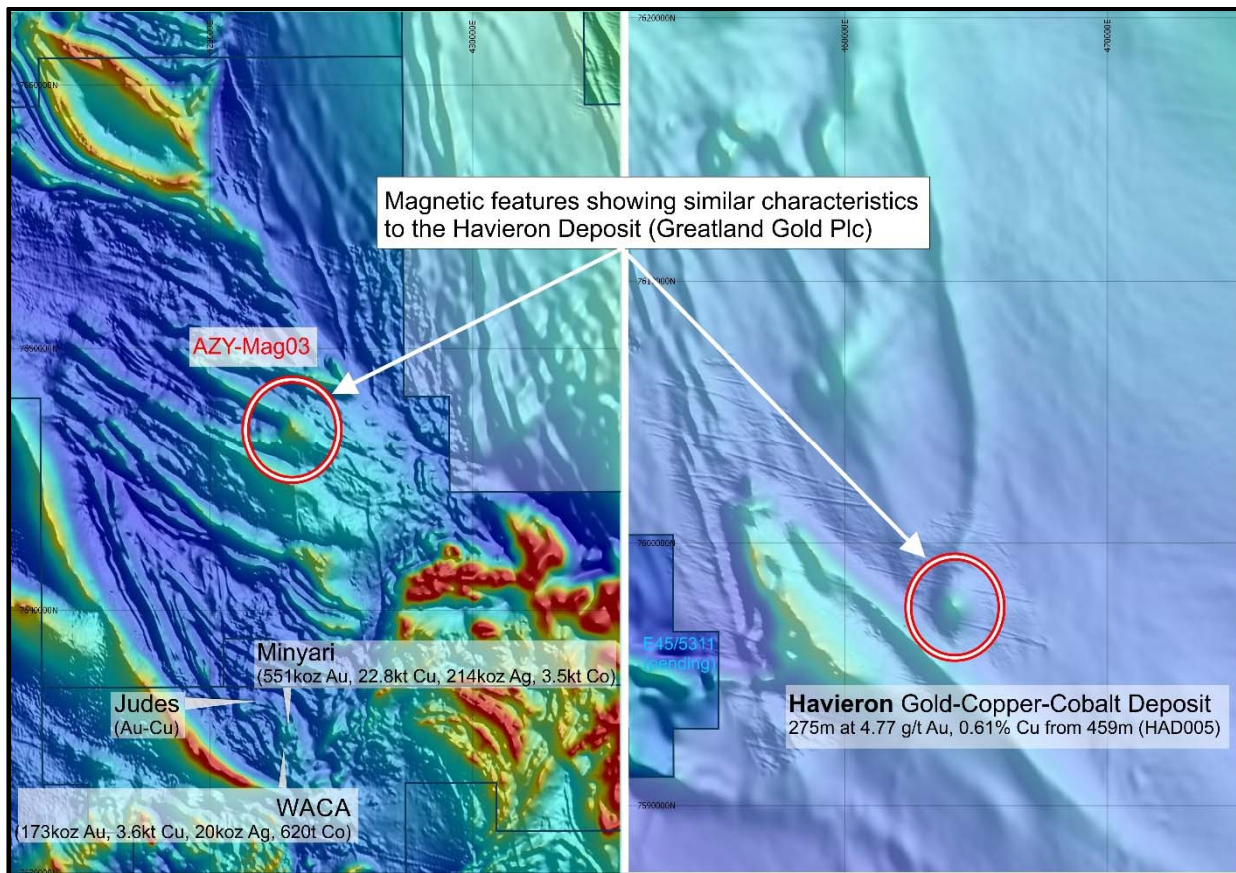


Figure 7b:



**Figure 7c:**

**Figures 7a (AZY-Mag04), 7b (AZY-Mag01 and AZY-Mag02) and 7c (AZY-Mag03): Plans comparing several Antipa aeromagnetic targets (AZY-Mag01 to AZY-Mag04) to Greatland Gold plc – Newcrest Mining Ltd Joint Venture’s (JV) Havieron deposit at the same scale. NB: Over Airborne magnetic image (50m flight-line spacing at an altitude of 30m; pseudo-colour Total Magnetic Intensity Reduced to Pole northeast sun illumination). Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.**



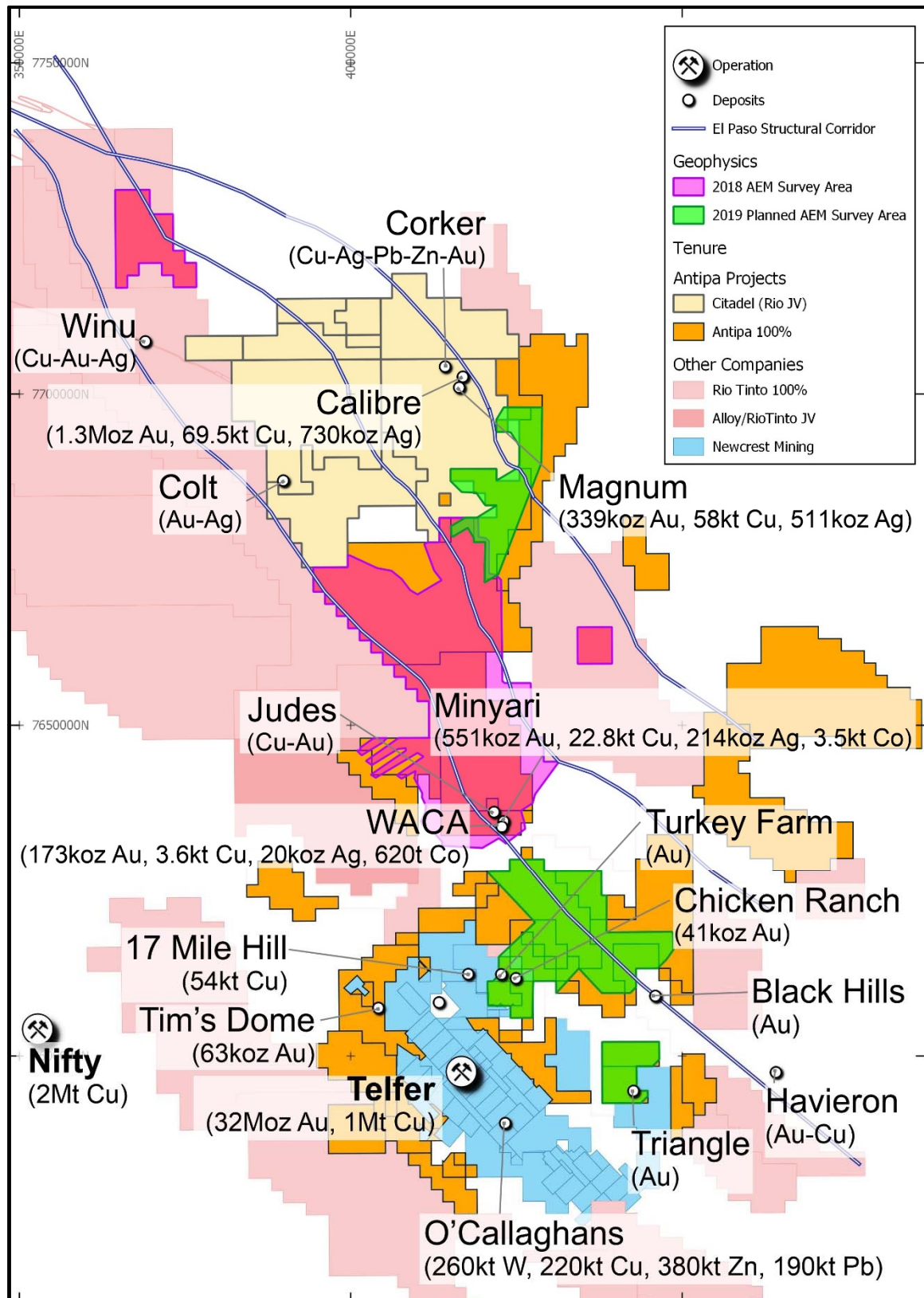
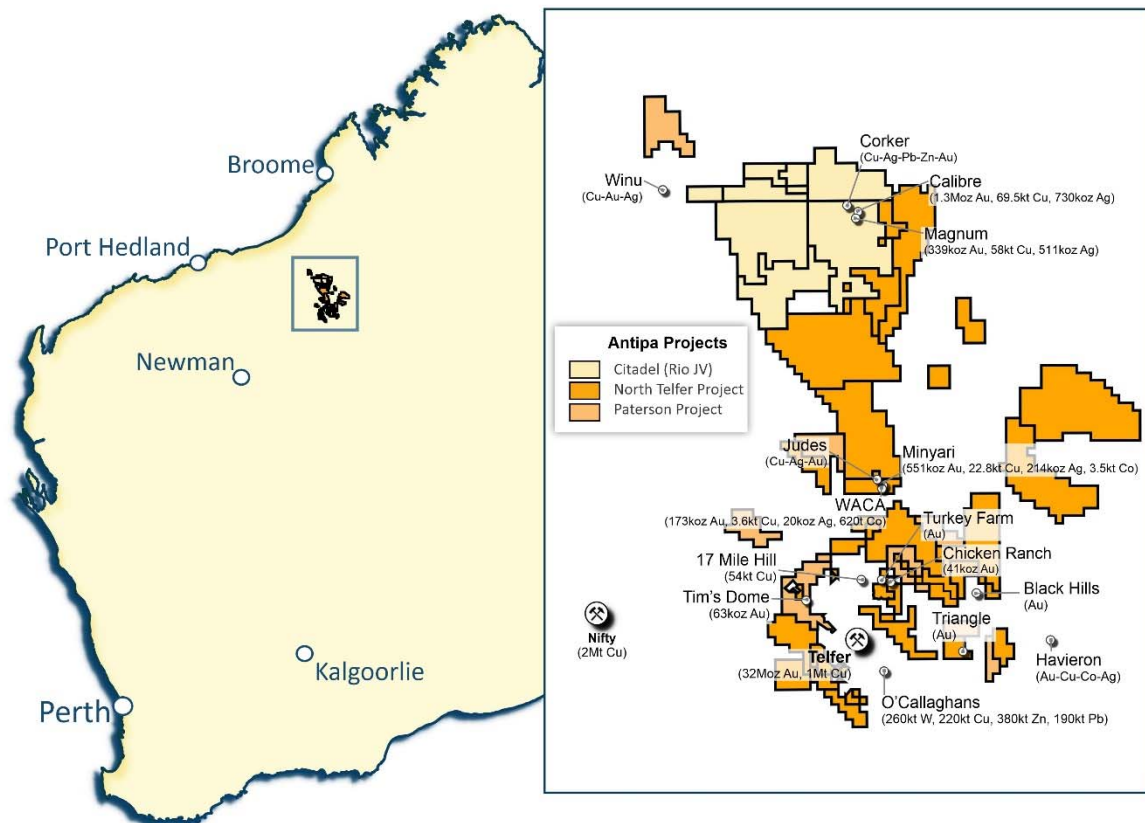


Figure 8: Plan showing 2018 AEM and planned 2019 AEM survey areas, location of the Minyari-WACA deposits and Mineral Resources, Tim's Dome, Chicken Ranch and Triangle areas, Antipa 100% owned tenements, Antipa-Rio Tinto Citadel Project JV, Newcrest Mining Ltd's Telfer Mine and O'Callaghans deposit, Greatland Gold plc – Newcrest Mining Ltd JV's Havieron deposit, Metals X's Nifty Mine and Rio Tinto's Winu deposit. NB: Regional GDA94 / MGA Zone 51 co-ordinates, 50km grid.



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

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



**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.

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

- Report entitled "*Calibre and Magnum Deposit Mineral Resource JORC 2102 Updates*" created on 23 February 2015;
- Report entitled "*Minyari/WACA Deposits Maiden Mineral Resource*" created on 16 November 2017;
- Report entitled "*Calibre Deposit Mineral Resource Update*" created on 17 November 2017;
- Report entitled "*Antipa to Commence Major Exploration Programme*" created on 1 June 2018;
- Report entitled "*Major Exploration Programme Commences*" created on 25 June 2018;
- Report entitled "*2018 Exploration Programme Update*" created on 16 July 2018;
- Report entitled "*2018-19 Exploration Programme Overview and Update - August*" created on 15 August 2018;
- Report entitled "*Multiple High Grade Gold-Copper Targets Identified*" created on 15 October 2018;
- Report entitled "*Expanded Greenfield Programme in Paterson Province Commences*" created on 10 December 2018;
- Report entitled "*Resource Growth Potential and Additional Brownfields Targets*" created on 11 December 2018;
- Report entitled "*Greenfield Programme Identifies Havieron Lookalike Anomalies*" created on 14 February 2019;
- Report entitled "*Antipa to Commence Major Greenfields Exploration Programme*" created on 18 February 2019;
- Report entitled "*Major Greenfields Drilling Programme Commences*" created on 7 May 2019;
- Report entitled "*Chicken Ranch and Tims Dome Maiden Mineral Resources*" created on 13 May 2019;
- Report entitled "*Antipa Provides Update on 2019 Exploration Programme*" created on 18 June 2019; and
- Report entitled "*Antipa provides Further Update on 2019 Exploration Programme*" created on 16 July 2019.

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

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

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

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

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

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

**Table 1: 2019 Phase 1 AEM Target Air Core - Slim-line RC Drill Hole Key Assay Results:  
Copper-Cobalt-Zinc-Silver-Gold**

(i.e.  $\geq 1.0\text{m}$  with  $\text{Cu} \geq 180\text{ppm}$  and/or  $\text{Zn} \geq 200\text{ppm}$  and/or  $\text{Co} \geq 100\text{ppm}$  and/or  $\text{Ag} \geq 0.50\text{ ppm}$  and/or  $\text{Au} \geq 15\text{ppb}$ )

Hole ID	AEM Target #	From (m)	To (m)	Interval (m)	Copper (ppm)	Zinc (ppb)	Cobalt (ppm)	Silver (ppm)	Gold (ppb)
19MYA0002	AEM4	8	12	4	211	15	12	0.07	2
19MYA0002	AEM4	12	16	4	264	31	59	0.01	12
19MYA0002	AEM4	16	20	4	280	21	43	0.00	0
19MYA0002	AEM4	20	21	1	234	18	1,100	0.85	2
19MYA0003	AEM4	16	20	4	267	7	18	0.12	0
19MYA0003	AEM4	20	24	4	584	57	96	0.23	6
19MYA0003	AEM4	24	28	4	332	35	365	1.68	23
19MYA0003	AEM4	28	29	1	83	28	24	0.25	19
19MYA0003	AEM4	29	30	1	112	33	77	0.97	66
19EPA0001	AEM13	0	4	4	17	8	8	0.65	0
19EPA0001	AEM13	20	24	4	301	43	49	0.13	0
19EPA0001	AEM13	30	31	1	42	47	65	0.81	2
19EPA0002	AEM13	4	8	4	195	54	52	0.12	0
19EPA0002	AEM13	8	12	4	188	57	37	0.10	1
19EPA0002	AEM13	12	16	4	205	58	42	0.02	2
19EPA0002	AEM13	16	18	2	336	63	33	0.04	0
19EPA0002	AEM13	18	20	2	229	62	34	0.02	1
19EPA0002	AEM13	20	24	4	220	63	33	0.03	2
19EPA0002	AEM13	30	31	1	157	50	36	0.52	0
19EPA0003	AEM13	0	4	4	13	5	7	0.76	0
19EPA0003	AEM13	16	20	4	233	31	11	0.00	0
19EPA0003	AEM13	20	21	1	359	66	143	0.01	9
19EPA0003	AEM13	21	22	1	241	117	261	0.00	2
19EPA0003	AEM13	22	23	1	193	89	36	0.00	1
19EPA0003	AEM13	28	32	4	208	77	56	0.04	1
19EPA0003	AEM13	32	36	4	345	57	34	0.03	4
19EPA0003	AEM13	36	40	4	446	81	34	0.04	4
19EPA0003	AEM13	40	44	4	356	93	53	0.03	9
19EPA0003	AEM13	44	48	4	222	91	59	0.03	3
19EPA0003	AEM13	48	52	4	185	38	18	0.03	4
19EPA0004	AEM13	12	16	4	4	4	3	0.81	0
19EPA0005	AEM13	23	24	1	157	41	142	0.00	0
19EPA0006	AEM13	12	15	3	253	37	19	0.06	0
19EPA0006	AEM13	15	16	1	361	41	19	0.04	0
19EPA0008	AEM13	12	16	4	272	79	127	0.03	32
19EPA0008	AEM13	16	20	4	236	54	32	0.04	4
19EPA0008	AEM13	20	24	4	201	60	26	0.04	3
19EPA0008	AEM13	24	28	4	211	52	27	0.12	1
19EPA0017	AEM16	8	9	1	11	31	139	0.11	0
19EPA0022	AEM16	36	37	1	9	29	7	1.15	0
19EPA0022	AEM16	37	38	1	11	28	8	0.57	0
19EPA0022	AEM16	38	39	1	11	30	10	0.62	0
19EPA0022	AEM16	39	40	1	8	27	8	1.03	0
19EPA0023	AEM16	4	8	4	13	31	10	0.67	0
19EPA0036	AEM16	0	4	4	9	20	6	0.62	0
19EPA0037	AEM16	12	16	4	183	38	14	0.13	35
19EPA0037	AEM16	16	18	2	131	12	11	0.07	29
19EPA0037	AEM16	18	19	1	94	15	11	0.05	31
19EPA0034	AEM17	0	4	4	12	4	10	0.86	0
19EPA0034	AEM17	4	8	4	3	3	2	0.55	0
19EPA0034	AEM17	12	16	4	2	3	1	0.83	0
19EPA0034	AEM17	28	32	4	55	31	10	0.81	0
19EPA0034	AEM17	93	94	1	28	57	111	0.21	0
19EPA0024	AEM19	16	20	4	2	6	4	1.08	0
19EPA0024	AEM19	20	24	4	2	7	17	1.53	0
19EPA0024	AEM19	76	80	4	108	204	18	0.13	0
19EPA0024	AEM19	80	84	4	115	335	37	0.06	0
19EPA0024	AEM19	88	92	4	28	231	55	0.12	0
19EPA0024	AEM19	92	96	4	30	321	42	0.12	1
19EPA0025	AEM19	8	12	4	120	222	21	0.03	1
19EPA0026	AEM19	12	16	4	153	85	123	0.02	2
19EPA0028	AEM19	16	20	4	435	215	44	0.06	0
19EPA0028	AEM19	20	24	4	484	232	294	0.02	0
19EPA0028	AEM19	24	28	4	190	142	54	0.03	0
19EPA0028	AEM19	28	32	4	184	100	44	0.05	3
19EPA0028	AEM19	32	36	4	201	112	70	0.04	4



Hole ID	AEM Target #	From (m)	To (m)	Interval (m)	Copper (ppm)	Zinc (ppb)	Cobalt (ppm)	Silver (ppm)	Gold (ppb)
19EPA0028	AEM19	60	62	2	214	46	33	0.03	2
19EPA0029	AEM19	8	12	4	201	44	32	0.01	1
19EPA0029	AEM19	12	16	4	224	85	236	0.02	3
19EPA0029	AEM19	16	20	4	190	80	27	0.03	5
19EPA0029	AEM19	20	24	4	186	82	38	0.03	4
19EPA0009	AEM21	12	16	4	183	69	31	0.06	1
19EPA0009	AEM21	28	31	3	326	67	25	0.12	4
19EPA0009	AEM21	31	32	1	289	92	37	0.07	3
19EPA0010	AEM21	16	20	4	215	48	38	0.05	1
19EPA0011	AEM21	4	8	4	178	72	143	0.06	1
19EPA0012	AEM21	52	53	1	18	235	5	0.08	0
19EPA0013	AEM21	0	4	4	20	22	11	1.09	0
19EPA0013	AEM21	12	16	4	13	36	9	0.66	0
19EPA0013	AEM21	24	28	4	7	15	12	0.62	0
19EPA0013	AEM21	28	32	4	5	20	8	0.63	0
19EPA0014	AEM21	4	8	4	249	81	266	0.08	2
19EPA0014	AEM21	8	12	4	258	128	62	0.02	2
19EPA0014	AEM21	12	16	4	253	107	45	0.26	2
19EPA0014	AEM21	16	20	4	205	85	33	0.06	4
19EPA0014	AEM21	28	32	4	192	65	22	0.04	2
19EPA0015	AEM21	8	12	4	274	144	163	0.07	4
19EPA0015	AEM21	16	20	4	188	83	30	0.05	4
19EPA0015	AEM21	20	24	4	183	83	36	0.04	2
19EPA0041	AEM21	28	32	4	233	55	47	0.03	7
19EPA0041	AEM21	32	36	4	205	46	37	0.02	5
19EPA0042	AEM24	49	50	1	92	39	15	0.66	2
19EPA0044	AEM24	0	4	4	19	5	8	0.58	2
19EPA0044	AEM24	12	16	4	8	9	5	0.70	1
19EPA0044	AEM24	36	40	4	216	242	35	0.18	0
19EPA0044	AEM24	40	44	4	456	397	51	0.23	0
19EPA0044	AEM24	44	48	4	261	357	49	0.10	2
19EPA0044	AEM24	48	52	4	54	343	45	0.08	3
19EPA0044	AEM24	112	113	1	31	43	21	1.03	0
19EPA0045	AEM24	36	40	4	230	302	43	0.10	2
19EPA0045	AEM24	40	44	4	280	432	48	0.08	13
19EPA0045	AEM24	44	48	4	183	425	33	0.13	5
19EPA0045	AEM24	48	52	4	89	259	25	0.07	5
19EPA0045	AEM24	52	56	4	42	222	35	0.06	2
19EPA0045	AEM24	104	108	4	34	80	24	6.58	2
19EPA0045	AEM24	108	112	4	41	73	21	0.53	1
19EPA0045	AEM24	116	118	2	25	52	18	2.26	2
19EPA0048	AEM25	64	68	4	168	283	30	0.05	2
19EPA0048	AEM25	68	72	4	28	244	34	0.04	2
19EPA0048	AEM25	72	76	4	39	245	38	0.05	1
19EPA0048	AEM25	76	80	4	28	224	25	0.06	0
19EPA0048	AEM25	84	88	4	82	224	38	0.15	3
19EPA0048	AEM25	88	89	1	66	281	28	0.11	4
19EPA0049	AEM25	64	68	4	99	218	24	0.03	2
19EPA0049	AEM25	68	72	4	13	274	23	0.03	0
19EPA0049	AEM25	72	76	4	41	240	23	0.05	2
19EPA0049	AEM25	76	77	1	20	287	24	0.04	2
19EPA0049	AEM25	77	78	1	11	422	36	0.06	0
19EPA0049	AEM25	78	79	1	10	452	36	0.38	2
19EPA0049	AEM25	79	80	1	15	365	51	0.49	14
19EPA0049	AEM25	80	81	1	25	544	36	0.24	3
19EPA0049	AEM25	81	82	1	20	292	29	0.15	2
19EPA0049	AEM25	88	89	1	17	94	103	0.68	2
19EPA0050	AEM25	52	53	1	257	229	22	0.02	32
19EPA0050	AEM25	53	54	1	156	139	16	0.02	19
19EPA0050	AEM25	54	55	1	207	260	33	0.01	11
19EPA0050	AEM25	55	56	1	50	282	44	0.02	6
19EPA0050	AEM25	56	60	4	33	231	33	0.02	1
19EPA0050	AEM25	60	64	4	43	203	28	0.03	2
19EPA0050	AEM25	72	76	4	35	201	28	0.03	1
19EPA0050	AEM25	76	80	4	91	233	34	0.14	4
19EPA0050	AEM25	80	81	1	29	246	18	0.05	2
19EPA0050	AEM25	81	82	1	30	243	23	0.09	2
19EPA0053	AEM25	54	55	1	243	108	5	0.09	64
19EPA0053	AEM25	55	56	1	273	175	8	0.05	5
19EPA0053	AEM25	57	58	1	463	506	49	0.05	5
19EPA0053	AEM25	58	59	1	247	334	36	0.07	2

Hole ID	AEM Target #	From (m)	To (m)	Interval (m)	Copper (ppm)	Zinc (ppb)	Cobalt (ppm)	Silver (ppm)	Gold (ppb)
19EPA0053	AEM25	108	109	1	17	245	60	0.04	1
19EPA0053	AEM25	109	110	1	120	125	66	0.16	6
19EPA0054	AEM25	0	4	4	10	8	5	1.47	0
19EPA0054	AEM25	4	8	4	3	5	1	0.53	2
19EPA0056	AEM25	20	24	4	9	7	1	1.43	0
19EPA0056	AEM25	44	48	4	72	214	34	0.49	9
19EPA0056	AEM25	48	52	4	49	213	35	0.15	3
19EPA0057	AEM25	28	32	4	47	210	8	0.16	1
19EPA0057	AEM25	40	44	4	99	295	48	0.08	45
19EPA0057	AEM25	48	49	1	9	127	26	1.39	3
19EPA0058	AEM25	64	68	4	63	258	26	0.08	1
19EPA0058	AEM25	72	76	4	51	205	39	0.10	2
19EPA0058	AEM25	76	80	4	28	215	22	0.11	1
19EPA0058	AEM25	80	84	4	45	303	34	0.16	0
19EPA0059	AEM25	60	64	4	34	296	35	0.03	2
19EPA0060	AEM26	61	62	1	40	343	104	0.06	2
19EPA0060	AEM26	62	63	1	122	228	64	0.04	1
19EPA0060	AEM26	64	65	1	227	135	34	0.02	1
19EPA0060	AEM26	65	66	1	100	223	76	0.15	1
19EPA0061	AEM26	52	56	4	102	223	22	0.08	0
19EPA0061	AEM26	56	60	4	91	333	53	0.11	0
19EPA0062	AEM26	12	16	4	38	241	9	0.07	0
19EPA0062	AEM26	28	32	4	27	265	12	0.08	0
19EPA0062	AEM26	64	68	4	46	616	66	0.10	0
19EPA0062	AEM26	72	73	1	74	412	27	0.12	3
19EPA0062	AEM26	73	74	1	42	508	19	0.15	0
19EPA0062	AEM26	74	75	1	42	265	31	0.24	1
19EPA0063	AEM26	0	4	4	7	6	4	0.85	0
19EPA0065	AEM26	0	4	4	3	6	2	1.42	3
19EPA0065	AEM26	68	69	1	152	310	27	0.03	0
19EPA0065	AEM26	69	70	1	257	571	62	0.03	0
19EPA0065	AEM26	70	71	1	73	396	43	0.05	0
19EPA0073	AEM28	0	4	4	14	4	6	0.63	0
19EPA0073	AEM28	32	36	4	480	356	38	0.25	0
19EPA0073	AEM28	36	40	4	221	239	38	0.10	7
19EPA0074	AEM28	12	16	4	221	93	32	0.05	0
19EPA0074	AEM28	16	20	4	339	209	168	0.07	0
19EPA0074	AEM28	20	24	4	700	248	179	0.05	6
19EPA0076	AEM28	11	12	1	181	41	10	0.03	0
19EPA0076	AEM28	12	16	4	252	61	21	0.53	0
19EPA0076	AEM28	16	20	4	233	108	30	0.13	0
19EPA0076	AEM28	20	24	4	289	94	33	0.15	0
19EPA0076	AEM28	24	28	4	447	117	40	0.15	0
19EPA0076	AEM28	28	32	4	370	149	57	0.08	10
19EPA0076	AEM28	32	36	4	149	137	105	0.49	7
19EPA0101	AEM28	20	24	4	48	105	182	0.03	0
19EPA0102	AEM28	4	8	4	4	9	2	0.55	0
19EPA0102	AEM28	20	24	4	64	35	12	0.79	0
19EPA0102	AEM28	60	61	1	200	60	23	0.09	3
19EPA0103	AEM28	16	20	4	262	104	29	0.25	1
19EPA0103	AEM28	20	21	1	633	332	247	0.18	0
19EPA0103	AEM28	21	22	1	586	168	103	0.18	22
19EPA0103	AEM28	22	23	1	771	168	109	0.33	80
19EPA0103	AEM28	23	24	1	550	164	105	0.35	15
19EPA0103	AEM28	24	28	4	568	129	51	0.07	5
19EPA0103	AEM28	28	32	4	507	60	29	0.10	11
19EPA0103	AEM28	32	36	4	277	59	24	0.08	3
19EPA0068	AEM29	12	16	4	3	5	1	0.89	0
19EPA0071	AEM29	22	23	1	54	46	61	3.04	1
19EPA0072	AEM29	60	63	3	82	218	25	0.07	1
19EPA0080	AEM30	20	24	4	65	113	201	0.03	0
19EPA0080	AEM30	24	28	4	45	135	232	0.04	0
19EPA0081	AEM30	20	24	4	37	85	123	0.00	0
19EPA0083	AEM30	28	32	4	69	270	120	0.00	0
19EPA0083	AEM30	32	36	4	77	249	158	0.00	0
19EPA0084	AEM30	40	44	4	65	96	186	0.02	5
19EPA0084	AEM30	44	48	4	51	115	149	0.03	0
19EPA0087	AEM30	20	24	4	46	117	161	0.02	0
19EPA0088	AEM30	24	28	4	51	148	236	0.03	0
19EPA0089	AEM30	28	32	4	113	183	162	0.02	0
19EPA0129	AEM33	4	8	4	4	2	1	2.28	0

Hole ID	AEM Target #	From (m)	To (m)	Interval (m)	Copper (ppm)	Zinc (ppb)	Cobalt (ppm)	Silver (ppm)	Gold (ppb)
19EPA0129	AEM33	8	12	4	3	3	1	0.7	0
19EPA0130	AEM33	4	8	4	6	5	3	1.35	2
19EPA0130	AEM33	8	12	4	11	9	1	1.07	0
19EPA0128	AEM35	69	70	1	328	71	36	0.18	1
19EPA0125	AEM36	16	20	4	4	4	1	0.57	0
19EPA0122	AEM37	40	44	4	92	260	33	0.03	0
19EPA0113	AEM38	12	16	4	4	3	1	0.61	0
19EPA0115	AEM38	36	40	4	47	215	40	0.04	0
19EPA0115	AEM38	44	48	4	50	200	53	0.06	0
19EPA0116	AEM38	113	114	1	64	473	23	0.54	3
19EPA0116	AEM38	115	116	1	52	679	20	0.28	2
19EPA0116	AEM38	116	117	1	51	259	34	0.15	2
19EPA0118	AEM38	20	24	4	7	9	2	1.09	0
19EPA0109	AEM39	40	44	4	116	233	83	0.08	0
19EPA0111	AEM39	0	4	4	3	4	2	1.89	0
19EPA0111	AEM39	4	8	4	5	4	2	1.74	0
19EPA0111	AEM39	20	24	4	2	3	1	0.64	0
19EPA0111	AEM39	24	28	4	2	3	2	1.14	0
19EPA0111	AEM39	28	32	4	5	8	3	8.59	0
19EPA0112	AEM39	60	64	4	99	169	106	0.07	2

**Notes (Intersection Tables above):** Table 1 Intersections are individual assays reported using the following criteria:

Intersection Interval = Nominal cut-off grade scenarios:

- $\geq 180\text{ppm}$  copper which also satisfy a minimum down-hole interval of 1.0m; and/or
- $\geq 200\text{ppm}$  zinc which also satisfy a minimum down-hole interval of 1.0m; and/or
- $\geq 100\text{ppm}$  cobalt which also satisfy a minimum down-hole interval of 1.0m; and/or
- $\geq 0.5\text{ppm g/t}$  silver which also satisfy a minimum down-hole interval of 1.0m; and/or
- $\geq 15\text{ppb}$  gold which also satisfy a minimum down-hole interval of 1.0m.
- No top-cutting has been applied to assay results for copper, zinc, cobalt, silver or gold.
- Intersections are down hole lengths, true widths not known with certainty.



Table 2: 2019 Phase 1 Air Core Drill – Slim-line RC Hole Collar Locations (MGA Zone 51/GDA 94)

Hole ID	Deposit / Target Area	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay Status
19CRA0001	Turkey Farm	7,612,269	422,395	250	102	213.2	-60	Received
19CRA0002	Turkey Farm	7,612,370	422,469	250	138	213.2	-60	Received
19CRA0003	Turkey Farm	7,612,237	422,434	250	120	213.2	-60	Received
19CRA0004	Turkey Farm	7,612,277	422,463	250	105	213.2	-60	Received
19CRA0005	Turkey Farm	7,612,145	422,429	250	102	213.2	-60	Received
19CRA0006	Turkey Farm	7,612,092	422,513	250	102	213.2	-60	Received
19CRA0007	Turkey Farm	7,612,122	422,597	250	102	213.2	-60	Received
19CRA0008	Turkey Farm	7,612,162	422,626	250	120	213.2	-60	Received
19CRA0009	Turkey Farm	7,612,203	422,656	250	102	213.2	-60	Received
19CRA0010	Turkey Farm	7,611,982	422,744	250	105	213.2	-60	Received
19CRA0011	Turkey Farm	7,612,022	422,773	250	102	213.2	-60	Received
19CRA0012	Turkey Farm	7,612,063	422,802	250	105	213.2	-60	Received
19EPA0001	AEM13	7,642,829	424,905	250	31	0	-90	Received
19MYA0001	AEM4	7,636,350	421,572	250	21	0	-90	Received
19MYA0002	AEM4	7,636,067	421,503	250	21	0	-90	Received
19MYA0003	AEM4	7,636,195	421,467	250	30	0	-90	Received
19EPA0002	AEM13	7,642,842	425,005	250	31	0	-90	Received
19EPA0003	AEM13	7,642,854	425,105	250	57	0	-90	Received
19EPA0004	AEM13	7,642,867	425,205	250	45	0	-90	Received
19EPA0005	AEM13	7,643,329	424,735	250	36	0	-90	Received
19EPA0006	AEM13	7,643,342	424,834	250	17	0	-90	Received
19EPA0007	AEM13	7,643,354	424,934	250	60	0	-90	Received
19EPA0056	AEM25	7,657,638	418,239	250	64	0	-90	Received
19EPA0057	AEM25	7,657,677	418,272	250	49	0	-90	Received
19EPA0058	AEM25	7,657,715	418,304	250	105	0	-90	Received
19EPA0059	AEM25	7,658,104	417,980	250	79	0	-90	Received
19EPA0060	Taco	7,658,790	415,246	250	67	0	-90	Received
19EPA0061	Taco	7,658,829	415,338	250	71	0	-90	Received
19EPA0062	Taco	7,658,869	415,430	250	94	0	-90	Received
19EPA0063	Taco	7,658,909	415,523	250	64	0	-90	Received
19EPA0064	Taco	7,658,949	415,615	250	58	0	-90	Received
19EPA0065	Taco	7,658,989	415,707	250	76	0	-90	Received
19EPA0066	AEM29	7,666,066	403,244	250	58	0	-90	Received
19EPA0067	AEM29	7,666,103	403,277	250	52	0	-90	Received
19EPA0068	AEM29	7,666,141	403,311	250	48	0	-90	Received
19EPA0069	AEM29	7,665,950	403,478	250	64	0	-90	Received
19EPA0070	AEM29	7,665,987	403,512	250	40	0	-90	Received
19EPA0071	AEM29	7,666,025	403,545	250	37	0	-90	Received
19EPA0072	AEM29	7,666,049	403,568	250	64	0	-90	Received
19EPA0073	AEM28	7,665,972	408,858	250	49	253.0	-60	Received
19EPA0074	AEM28	7,666,002	408,955	250	31	253.0	-60	Received
19EPA0075	AEM28	7,666,032	409,051	250	37	253.0	-60	Received
19EPA0076	AEM28	7,666,062	409,147	250	42	253.0	-60	Received
19EPA0077	AEM30	7,665,587	413,906	250	43	259.0	-60	Received
19EPA0078	AEM30	7,665,604	414,006	250	47	259.0	-60	Received
19EPA0008	AEM13	7,643,367	425,034	250	54	0	-90	Received
19EPA0009	AEM21	7,647,450	417,161	250	32	0	-90	Received
19EPA0010	AEM21	7,647,506	417,244	250	49	0	-90	Received
19EPA0011	AEM21	7,647,563	417,327	250	48	0	-90	Received
19EPA0012	AEM21	7,647,620	417,410	250	54	0	-90	Received
19EPA0013	AEM21	7,647,767	416,916	250	57	0	-90	Received
19EPA0014	AEM21	7,647,823	416,999	250	42	0	-90	Received
19EPA0015	AEM21	7,647,880	417,082	250	59	0	-90	Received
19EPA0016	AEM21	7,647,936	417,165	250	69	0	-90	Received
19EPA0017	AEM16	7,645,607	415,896	250	9	0	-90	Received
19EPA0018	AEM16	7,645,564	415,805	250	10	0	-90	Received
19EPA0019	AEM16	7,645,521	415,714	250	12	0	-90	Received
19EPA0020	AEM16	7,646,104	415,788	250	24	0	-90	Received
19EPA0021	AEM16	7,646,061	415,697	250	75	0	-90	Received
19EPA0022	AEM16	7,646,019	415,606	250	45	0	-90	Received
19EPA0023	AEM16	7,645,976	415,515	250	28	0	-90	Received
19EPA0024	AEM19	7,646,305	424,898	250	108	0	-90	Received
19EPA0025	AEM19	7,646,388	424,955	250	48	0	-90	Received
19EPA0026	AEM19	7,646,470	425,012	250	44	0	-90	Received
19EPA0027	AEM19	7,646,553	425,068	250	34	0	-90	Received
19EPA0028	AEM19	7,646,612	424,498	250	63	0	-90	Received
19EPA0029	AEM19	7,646,691	424,559	250	55	0	-90	Received
19EPA0030	AEM19	7,646,770	424,621	250	22	0	-90	Received

Hole ID	Deposit / Target Area	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay Status
19EPA0031	AEM17	7,646,174	422,739	250	38	0	-90	Received
19EPA0032	AEM17	7,646,082	422,702	250	40	0	-90	Received
19EPA0033	AEM17	7,645,984	422,673	250	105	0	-90	Received
19EPA0034	AEM17	7,645,889	422,639	250	94	0	-90	Received
19EPA0035	AEM17	7,645,784	422,604	250	144	0	-90	Received
19EPA0036	AEM16	7,645,766	415,647	250	40	0	-90	Received
19EPA0037	AEM16	7,645,724	415,556	250	19	0	-90	Received
19EPA0038	AEM16	7,645,874	415,875	250	33	0	-90	Received
19EPA0039	AEM16	7,645,831	415,784	250	15	0	-90	Received
19EPA0040	AEM21	7,647,625	417,063	250	47	0	-90	Received
19EPA0041	AEM21	7,647,682	417,146	250	38	0	-90	Received
19EPA0042	AEM24	7,657,262	416,911	250	55	66.4	-60	Received
19EPA0043	AEM24	7,657,302	417,003	250	99	66.4	-60	Received
19EPA0044	AEM24	7,657,342	417,096	250	113	246.5	-60	Received
19EPA0045	AEM24	7,657,382	417,188	250	119	246.5	-60	Received
19EPA0046	AEM24	7,657,422	417,280	250	54	246.5	-60	Received
19EPA0047	AEM25	7,658,002	418,222	250	79	0	-90	Received
19EPA0048	AEM25	7,657,926	418,156	250	90	0	-90	Received
19EPA0049	AEM25	7,657,889	418,123	250	91	0	-90	Received
19EPA0050	AEM25	7,657,851	418,090	250	84	0	-90	Received
19EPA0053	AEM25	7,657,813	418,057	250	112	0	-90	Received
19EPA0054	AEM25	7,657,775	418,024	250	105	0	-90	Received
19EPA0055	AEM25	7,657,964	418,189	250	109	0	-90	Received
19EPA0079	AEM30	7,665,622	414,105	250	49	259.0	-60	Received
19EPA0080	AEM30	7,666,325	413,787	250	46	259.0	-60	Received
19EPA0081	AEM30	7,666,343	413,887	250	50	259.0	-60	Received
19EPA0082	AEM30	7,666,360	413,986	250	56	259.0	-60	Received
19EPA0083	AEM30	7,666,814	413,683	250	83	259.0	-60	Received
19EPA0084	AEM30	7,666,832	413,782	250	67	259.0	-60	Received
19EPA0085	AEM30	7,666,850	413,881	250	45	259.0	-60	Received
19EPA0086	AEM30	7,666,555	413,646	250	55	259.0	-60	Received
19EPA0087	AEM30	7,666,572	413,746	250	56	259.0	-60	Received
19EPA0088	AEM30	7,666,590	413,845	250	55	259.0	-60	Received
19EPA0089	AEM30	7,666,608	413,944	250	48	259.0	-60	Received
19EPA0090	AEM 31	7,668,785	414,395	250	145	197.0	-60	Received
19EPA0091	AEM 31	7,668,689	414,366	250	130	197.0	-60	Received
19EPA0092	AEM 31	7,668,593	414,337	250	100	197.0	-60	Received
19EPA0093	AEM 31	7,668,881	414,424	250	100	197.0	-60	Received
19EPA0094	AEM 31	7,668,977	414,452	250	61	197.0	-60	Received
19EPA0095	AEM 31	7,668,629	414,667	250	85	197.0	-60	Received
19EPA0096	AEM 31	7,668,533	414,639	250	76	197.0	-60	Received
19EPA0097	AEM 31	7,668,725	414,695	250	76	197.0	-60	Received
19EPA0098	AEM 31	7,668,821	414,723	250	49	197.0	-60	Received
19EPA0099	AEM 31	7,668,918	414,751	250	64	197.0	-60	Received
19EPA0100	AEM 31	7,669,014	414,779	250	59	197.0	-60	Received
19EPA0101	AEM28	7,665,957	408,810	250	37	253.0	-60	Received
19EPA0102	AEM28	7,665,987	408,906	250	61	253.0	-60	Received
19EPA0103	AEM28	7,666,017	409,003	250	37	253.0	-60	Received
19EPA0104	AEM28	7,666,047	409,099	250	61	253.0	-60	Received
19EPA0105	AEM39	7,680,539	417,937	250	66	55.0	-70	Received
19EPA0106	AEM39	7,680,598	418,018	250	69	55.0	-70	Received
19EPA0107	AEM39	7,680,658	418,099	250	76	55.0	-70	Received
19EPA0108	AEM39	7,680,687	418,140	250	79	55.0	-70	Received
19EPA0109	AEM39	7,680,895	417,999	250	145	55.0	-70	Received
19EPA0110	AEM39	7,680,835	417,918	250	103	55.0	-70	Received
19EPA0111	AEM39	7,680,776	417,837	250	67	55.0	-70	Received
19EPA0112	AEM39	7,680,998	417,721	250	83	55.0	-70	Received
19EPA0113	AEM38	7,680,189	416,355	250	127	233.0	-60	Received
19EPA0114	AEM38	7,680,249	416,435	250	127	233.0	-60	Received
19EPA0115	AEM38	7,680,309	416,516	250	130	233.0	-60	Received
19EPA0116	AEM38	7,680,299	416,076	250	118	0	-90	Received
19EPA0117	AEM38	7,680,263	416,021	250	130	0	-90	Received
19EPA0118	AEM38	7,680,080	416,624	250	112	233.0	-60	Received
19EPA0119	AEM37	7,678,186	417,779	250	94	234.0	-60	Received
19EPA0120	AEM37	7,678,245	417,860	250	94	234.0	-60	Received
19EPA0121	AEM37	7,678,305	417,941	250	90	234.0	-60	Received
19EPA0122	AEM37	7,678,364	418,023	250	85	234.0	-60	Received
19EPA0123	AEM37	7,678,424	418,104	250	103	234.0	-60	Received
19EPA0124	AEM36	7,677,828	416,691	250	93	233.0	-60	Received
19EPA0125	AEM36	7,677,889	416,772	250	81	233.0	-60	Received

Hole ID	Deposit / Target Area	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay Status
19EPA0126	AEM36	7,677,949	416,852	250	79	233.0	-60	Received
19EPA0127	AEM35	7,675,257	418,201	250	68	87.5	-60	Received
19EPA0128	AEM35	7,675,248	418,000	250	72	87.5	-60	Received
19EPA0129	AEM33	7,672,597	418,053	250	114	66.0	-60	Received
19EPA0130	AEM33	7,672,515	417,869	250	109	66.0	-60	Received
19PNC0001	AEM44	7,716,430	366,198	250	120	54.0	-60	Pending
19PNC0002A	AEM43	7,716,767	364,851	250	58	0.0	-90	Pending
19PNC0002	AEM43	7,716,767	364,851	250	91	0.0	-90	Pending
19PNC0003	AEM43	7,716,376	365,005	250	262	0.0	-90	Pending
19PNC0004	AEM43	7,716,316	364,926	250	250	0.0	-90	Pending
19PNC0005	AEM44	7,716,370	366,119	250	250	0.0	-90	Pending
19PNC0007	AEM41	7,722,106	366,444	250	244	0.0	-90	Pending
19PNC0008	AEM41	7,722,070	366,351	250	256	0.0	-90	Pending
19PNC0009	AEM41	7,722,017	366,212	250	208	0.0	-90	Pending
19PNC0010	AEM42	7,723,265	367,380	250	206	0.0	-90	Pending
19PNC0011	AEM42	7,723,180	367,619	250	202	0.0	-90	Pending



## PATERSON PROVINCE – 2019 Air Core, Slim-Line Reverse Circulation and Reverse Circulation 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	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p><b>2019 Air Core (AC), Slim-Line Reverse Circulation (SLRC) and Reverse Circulation (RC) Drilling</b></p> <ul style="list-style-type: none"> <li>Prospects/targets have been sampled by 154 AC, SLRC and RC drill holes, totaling 12,367 m, with an average drill hole depth of 80.3 m.</li> <li>Assays have been received for 142 of the 2019 AC and SLRC drill holes. Assay results are pending for all 12 RC drill holes.</li> <li>AC, SLRC and RC drill holes were generally drilled on a range of hole spacings along line and across line, testing geophysical (AEM ± aeromagnetic) ± geochemical targets.</li> <li>Drill hole locations and orientations for all 2019 holes are tabulated in the body of this report.</li> </ul> <p><b>AC, SLRC and RC Sampling</b></p> <ul style="list-style-type: none"> <li>AC, SLRC and RC Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.</li> <li>One metre samples were collected from a cyclone into a plastic bucket and then laid out on the ground in rows of 10.</li> <li>Compositing AC, SLRC and RC samples in lengths between 2 to 4 m was undertaken via combining 'Spear' samples of the 1.0 m intervals to generate a 2 kg (average) sample. Areas of anomalous portable XRF Device (Niton or Olympus) ('pXRF') results or zones of encouraging geological observations were sampled as single metres. All samples are pulverised at the laboratory to produce material for assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<p><b>Air Core (AC) and Slim-line Reverse Circulation (SLRC) and Reverse Circulation (RC) Drilling</b></p> <ul style="list-style-type: none"> <li>AC and SLRC drilling were undertaken with a Bostech Drillboss 200 4WD truck mounted rig; drill depth capacity of approximately 150 m with an on-board compressor producing 600 cfm at 250 psi and separate axillary booster to 1400 cfm at 700 psi.</li> <li>RC drilling was undertaken with an Austex X50 6x6 truck mounted rig; drill depth capacity of approximately 350 m with an on-board compressor producing 900 cfm at 350 psi and separate 8x8 truck mounted axillary booster to 2400 cfm at 1000 psi.</li> <li>Depending on the local target area geometries inclined drill holes were directed towards various azimuths ranging from 55° to 260° (GDA94 MGA Zone 51 co-ordinates), with inclination angles ranging from vertical to -60°.</li> </ul> <p><b>Air Core Drilling</b></p> <ul style="list-style-type: none"> <li>All drill holes were completed using an 85 mm AC blade.</li> </ul> <p><b>Slim-Line Reverse Circulation Drilling</b></p> <ul style="list-style-type: none"> <li>When hard drilling conditions were encountered an 85 mm "Slim-Line" RC hammer with a crossover sub (not face sampling) was utilised; this drilling technique was variously required/utilised.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<b>Reverse Circulation Drilling</b> <ul style="list-style-type: none"> <li>A 137.5 mm face sampling RC hammer.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<b>AC, SLRC and RC Drill Samples</b> <ul style="list-style-type: none"> <li>AC, SLRC and RC sample recovery and sample quality were recorded via visual estimation of sample volume and condition of the drill spoils.</li> <li>AC, SLRC and RC sample recovery typically ranges from 90 to 100%, with only very occasional samples with less than 70% recovery.</li> <li>AC, SLRC and RC sample recovery was maximized by endeavoring to maintain a dry drilling conditions as much as practicable; the AC samples were almost exclusively dry.</li> <li>Relationships between recovery and grade are not evident and are not expected given the generally excellent and consistently high sample recovery.</li> <li>AC, SLRC and RC results are generated for the purpose of exploration and potentially for Mineral Resource estimations.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<b>AC, SLRC and RC Drill Logging</b> <ul style="list-style-type: none"> <li>Geological logging of 100% of all AC, SLRC and RC sample intervals was carried out recording colour, weathering, lithology, mineralogy, alteration, veining and sulphides.</li> <li>Logging includes both qualitative and quantitative components.</li> <li>All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master Access SQL database.</li> <li>AC, SLRC and RC samples were measured for magnetic susceptibility using a handheld Magnetic Susceptibility meter at 1 m intervals.</li> <li>AC, SLRC and RC samples are generally analyzed in the field using a pXRF for the purposes of geochemical and lithological interpretation and the selection of sampling intervals.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the</li> </ul>	<b>AC, SLRC and RC Samples</b> <ul style="list-style-type: none"> <li>One metre samples were collected from a cyclone into a plastic bucket and then laid out on the ground in rows of 10 or 20.</li> <li>Compositing AC, SLRC and RC samples of between 2 to 4 m was undertaken via combining 'Spear' samples of the intervals to generate a 2 kg (average) sample. Areas of anomalous pXRF results or anomalous geological observations were sampled as single metres.</li> <li>All samples are pulverised at the laboratory to produce material for assay.</li> </ul> <b>AC, SLRC and RC Sample Preparation</b> <ul style="list-style-type: none"> <li>Sample preparation of AC, SLRC and RC samples was completed at MinAnalytical Laboratories in Perth following industry best practice in sample preparation involving oven drying, coarse crushing</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>material being sampled.</i>	<p>of the AC and SLRC sample down to approximately 10 mm, followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 µm and split into a sub-sample/s for analysis.</p> <ul style="list-style-type: none"> <li>The sample sizes are considered to be appropriate to correctly represent the sulphide style of mineralisation encountered in the region, the thickness and consistency of the intersections and the sampling methodology.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sample preparation technique for AC, SLRC and RC samples are documented by Antipa Mineral Ltd's standard procedures documents and is in line with industry standards in sample preparation.</li> <li>The sample sizes are considered appropriate to represent mineralisation.</li> <li>Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures.</li> </ul> <p><b>AC, SLRC and RC Analytical Techniques</b></p> <ul style="list-style-type: none"> <li>All samples were dried, crushed, pulverised and split to produce a sub-sample for a 10-gram sample which are digested and refluxed with nitric and hydrochloric ('aqua regia digest') acid suitable for weathered AC, SLRC and RC samples. Aqua regia can digest many different mineral types including most oxides, sulphides and carbonates but will not totally digest refractory or silicate minerals. Analytical methods used were both ICP-OES and ICP-MS (Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr).</li> <li>For samples which returned Au greater than 4,000 ppb Au (upper detection limit) with the aqua regia digest, a lead collection fire assay on a 50-gram sample with Atomic Absorption Spectroscopy was undertaken to determine gold content with a detection limit of 0.005ppm.</li> <li>Ore grade ICP-OES analysis was completed on samples returning results above upper detection limit.</li> <li>No geophysical tools were used to determine any element concentrations in this report.</li> <li>Handheld portable XRF analyser (Niton XL3t 950 GOLDD+ or Olympus Professional) devices are used in the field to investigate and record geochemical data for internal analysis. However, due to 'spatial' accuracy/repeatability issues this data is generally not publicly reported for drill holes, other than for specific purposes/reasons.</li> <li>Field QC procedures involve the use of commercial certified reference material (CRM's) for assay standards and blanks. Standards are inserted every 50 samples. The grade of the inserted standard is not revealed to the laboratory.</li> <li>Repeat QC samples was utilised during the AC, SLRC and RC drilling programme with nominally two to three duplicate AC, SLRC and RC field samples per drill hole.</li> <li>Inter laboratory cross-checks analysis programmes have not been conducted at this stage.</li> <li>In addition to Antipa supplied CRM's, MinAnalytical includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Selected anomalous samples are re-digested and analysed to confirm results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections have been visually verified by one or more alternative company personnel and/or contract employees.</li> <li>All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master SQL database.</li> <li>No adjustments or calibrations have been made to any assay data collected.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>km = kilometre; m = metre; mm = millimetre.</li> <li>Drill hole collar locations are surveyed using a handheld Garmin 64S GPS which has an accuracy of <math>\pm 3</math> m.</li> <li>The drilling co-ordinates are all in GDA94 MGA Zone 51 co-ordinates.</li> <li>Vertical AC, SLRC and RC drill holes do not require for drill rig set-up azimuth checking.</li> <li>Inclined AC, SLRC and RC drill holes are checked for drill rig set-up azimuth using Suunto Sighting Compass from two directions.</li> <li>Drill hole inclination is set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing.</li> <li>AC, SLRC and RC drill hole down hole surveys <ul style="list-style-type: none"> <li>No downhole surveys are undertaken for AC, SLRC and RC drill holes.</li> </ul> </li> <li>The Company has adopted and referenced one specific local grid across the Chicken Ranch – Turkey Farm area ('Chicken Ranch Grid') which is defined below.</li> </ul> <p>Chicken Ranch Local Grid 2-Point Transformation Data:</p> <p>Point # 1 =</p> <ul style="list-style-type: none"> <li>Chicken Ranch Local Grid 10,000m east is 424,724.5m east in GDA94 / MGA Zone 51;</li> <li>Chicken Ranch Local Grid 5,800m north is 7,611,897.1m north in GDA94 / MGA Zone 51.</li> </ul> <p>Point # 2 =</p> <ul style="list-style-type: none"> <li>Chicken Ranch Local Grid 10,000m east is 422,694.5m east in GDA94 / MGA Zone 51;</li> <li>Chicken Ranch Local Grid 8,600m north is 7,613,433.2m north in GDA94 / MGA Zone 51;</li> <li>Chicken Ranch Local Grid North (360°) is equal to 303° in GDA94 / MGA Zone 51.</li> </ul> <ul style="list-style-type: none"> <li>Chicken Ranch Local Grid elevation is equal to GDA94 / MGA Zone 51.</li> <li>If defaulted, the topographic surface is set to 250m RL.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve</li> </ul>	<ul style="list-style-type: none"> <li>AC, SLRC and RC drill sample compositing is sometimes applied for the reporting of the exploration results.</li> <li>Turkey Farm Area:</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill lines are east-west “Chicken Ranch” local grid oriented. “Chicken Ranch” local grid drill lines are each spaced approximately 100 m apart with an average drill hole spacing on each section between 25 to 50 m.</li> <li>The typical section spacing/drill hole distribution is not considered adequate for the purpose of Mineral Resource estimation.</li> <li>Regional Geophysical Targets (AEM ± aeromagnetic): <ul style="list-style-type: none"> <li>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 approximately 250 to 750 m apart with an average drill hole spacing on each section between 50 to 100 m</li> <li>The typical section spacing/drill hole distribution is not considered adequate for the purpose of Mineral Resource estimation.</li> </ul> </li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>The location and orientation of the Chicken Ranch drilling is appropriate given the strike, dip and morphology of the mineralisation.</li> <li>No consistent and/or documented material sampling bias resulting from a structural orientation has been identified at Turkey Farm or for the “regional” geophysical targets at this point in time.</li> <li>However, both folding, multiple vein directions and faulting have been variously recorded in the region via diamond drilling and surface mapping.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of sample custody is managed by Antipa to ensure appropriate levels of sample security.</li> <li>Samples are stored on site and delivered by Antipa or their representatives to Port Hedland and subsequently by Toll Ipec Transport from Port Hedland to the assay laboratory in Perth.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling techniques and procedures are regularly reviewed internally, as is the data.</li> <li>Consultants Snowden, during completion of the 2013 Calibre Mineral Resource estimate, undertook a desktop review of the Company’s sampling techniques and data management and found them to be consistent with industry standards.</li> </ul>

## PATERSON PROVINCE – 2019 Air Core and Slim-Line Reverse Circulation Drill Hole Sampling

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chicken Ranch and Turkey Farm tenement E45/4867 was applied for by Antipa Resources Pty Ltd on the 19<sup>th</sup> of January 2017 and was subsequently granted on the 3<sup>rd</sup> of January 2019.</li> <li>North Telfer Project tenement E45/3917 was applied for by Antipa Resources Pty Ltd on the 18<sup>th</sup> of May 2011 and was subsequently granted on the 18<sup>th</sup> February 2014.</li> <li>North Telfer Project tenements E45/3918 and E45/3919 were applied for by Antipa Resources Pty Ltd on the 18<sup>th</sup> of May 2011 and was subsequently granted on the 24<sup>th</sup> April 2013.</li> <li>Paterson Project tenement E45/2519 was applied for by Kitchener Resources Pty Ltd (a wholly owned Antipa subsidiary) on the 4<sup>th</sup> of July 2003 and was subsequently granted on the 18<sup>th</sup> December 2014.</li> <li>Antipa Minerals Ltd has a 100% interest in all the above listed tenements.</li> <li>No royalties, other than Western Australian state government royalties, are payable in relation to tenement E45/4867.</li> <li>A 1% net smelter royalty payable to Paladin Energy on the sale of product on all metals applies to tenements E45/3917, E45/3918 and E45/3919 as a condition of a Split Commodity Agreement with Paladin Energy in relation to the Company's North Telfer Project.</li> <li>A 1% net smelter royalty payable to Yandal Investments Pty Ltd (Yandal) on the sale of product on all metals applies to tenements E45/2519 as a condition of an Agreement with Yandal in relation to the Company's Paterson Project.</li> <li>Tenements E45/2519, E45/3917, E45/3918, E45/3919 and E45/4867, including the Minyari, WACA, Chicken Ranch and Turkey Farm deposits, are not subject to the Citadel Project Farm-in Agreement with Rio Tinto Exploration Pty Ltd.</li> <li>All tenements excluding E45/2519 are contained completely within land where the Martu People have been determined to hold native title rights. Tenement E45/2519 is contained completely within land where the Nyangumarta People have been determined to hold native title rights. To the Company's knowledge only one historical site has been identified in the area of work and no environmentally sensitive sites have been identified in the area of work.</li> <li>Land Access and Exploration Agreements are in place with the Martu People and Nyangumarta People.</li> <li>Antipa maintains a positive relationship with the Martu People and Nyangumarta People, who are Native Title parties in the area.</li> <li>The tenements are in 'good standing' and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The exploration of the Chicken Ranch and Turkey Farm and North Telfer Project areas was variously conducted by the following major resources companies: <ul style="list-style-type: none"> <li>Newmont Pty Ltd (early 1970s to 1986);</li> <li>Carr Boyd Minerals Limited (1973 to 1975);</li> <li>Geopeko Limited (JV with Carr Boyd) (1975 to 1978);</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Marathon Petroleum Australia Limited (1979);</li> <li>Western Mining Corporation Limited (WMC) (1980);</li> <li>Duval Mining (Australia) Limited (Carr Boyd JV with Picon Exploration Pty Ltd) (1984 to 1986);</li> <li>Mount Burgess Gold Mining Company N.L. (1989 to 2001);</li> <li>Carpentaria (MIM JV with Mount Burgess) (1990 to 1996);</li> <li>Normandy (JV with Mount Burgess) (1998 to 2000);</li> <li>Newcrest Mining Limited (2009 to 2015);</li> <li>Quantum Resources Limited (2012 to 2016); and</li> <li>Antipa Minerals Limited (2016 onwards).</li> </ul> <ul style="list-style-type: none"> <li>The exploration of North Telfer Project area was variously conducted by the following major resources companies: <ul style="list-style-type: none"> <li>Western Mining Corporation Ltd (1980 to 1983);</li> <li>Newmont Holdings Pty Ltd (1984 to 1990);</li> <li>MIM Exploration Pty Ltd (1990 to 1991);</li> <li>Newcrest Mining Limited (1991 to 2015); and</li> <li>Antipa Minerals Ltd (2013 onwards).</li> </ul> </li> <li>The exploration of Paterson Project area was variously conducted by the following major resources companies: <ul style="list-style-type: none"> <li>Prior to 1980 limited to no mineral exploration activities;</li> <li>BHP Australia (1991 to 1997);</li> <li>Antipa Minerals Ltd (2011 onwards).</li> </ul> </li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>North Telfer Project and Paterson Project Tenement Areas:</p> <ul style="list-style-type: none"> <li>The geological setting is Paterson Province Proterozoic aged meta-sediment hosted hydrothermal shear, fault and strata/contact controlled precious and/or base metal mineralisation which is typically sulphide bearing. The mineralisation in the region is interpreted to be granite related. The Paterson is a low-grade metamorphic terrane but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.</li> </ul> <p>Chicken Ranch and Turkey Farm Tenement Area:</p> <ul style="list-style-type: none"> <li>The geology of the Turkey Farm area is dominated by a northwest trending sequence of moderate to steeply east dipping meta-sediments, including siltstone, carbonate siltstone, dolomite, and subordinate fine-grained sandstone of the Puntapunta Formation.</li> <li>This sequence occurs on the northeast flank of the Camp Dome complex, a regional scale doubly plunging anticline. Regional mapping undertaken by previous explorers indicates that the Chicken Ranch prospect may be related to a parasitic fold on the flank of the Camp Dome, or a separate fold structure altogether.</li> <li>High-grade gold with minor copper mineralisation as gossanous zones within and related to northwest trending, steeply dipping quartz veins hosted by deeply oxidized meta-sediments, including goethite pseudomorphs after massive pyrite alteration (some cubic ex-pyrite oxide</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>pseudomorphs up to 2cm in size, similar in size to those collected in the early 1970's associated with the then outcropping Telfer gold mineralisation).</p> <ul style="list-style-type: none"> <li>The entire zone is deeply oxidized.</li> <li>Main zone consists of two or more northwest trending zones of mineralisation within a corridor up to 70m in width.</li> <li>The southwest lens of mineralisation is more persistent and has a strike length of approximately 1,300m.</li> <li>Several additional northwestern trending mineralisation zones to the east and west of the main zone.</li> <li>The Turkey Farm prospect occurs 800m west-northwest of the Chicken Ranch deposit, and gold with minor copper mineralisation within northwest trending, steeply dipping quartz ironstone veins and possible shallow (25° to 30°) east dipping zones hosted by deeply oxidized meta-sediments.</li> <li>The area is prospective for high-grade Telfer 'Reef Style' gold mineralisation and vein and/or stockwork style mineralisation.</li> <li>North-south striking fault zones (possible Telfer "Graben Fault" generation), appear to offset stratigraphy and mineralisation dominantly with an apparent sinistral sense which may represent simple normal displacement with east-block up / west-block down of northeasterly dipping stratigraphy.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A summary of all available information material to the understanding of the exploration region exploration results can be found in previous Western Australia (WA) DMIRS publicly available reports.</li> <li>All the various technical and exploration reports are publicly accessible via the WA DMIRS' online WAMEX system.</li> <li>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.</li> <li>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 <a href="http://www.antipaminerals.com.au">www.antipaminerals.com.au</a> and <a href="http://www.asx.com.au">www.asx.com.au</a>.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Any reported aggregated intervals have been length weighted.</li> <li>No density or bulk density is available and so no density weighting has been applied when calculating aggregated intervals.</li> <li>No top-cuts to gold or copper have been applied (unless specified otherwise).</li> <li>A nominal 0.40 g/t gold or 1,000 ppm (0.10%) copper lower cut-off grade is applied.</li> <li>Higher grade intervals of mineralisation internal to broader zones of mineralisation are reported as included intervals.</li> <li>Metal equivalence is not used in this report.</li> </ul>



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<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Turkey Farm Area: <ul style="list-style-type: none"> <li>Given the variety of drill hole types and distribution, the intersection angles for the various historic drilling generations are likely to be quite variable. The reported downhole intersections are estimated to commonly be in the range of 30% to 70% <math>\pm</math> 10% of the true width.</li> </ul> </li> <li>Regional Geophysical Targets (AEM <math>\pm</math> aeromagnetic): <ul style="list-style-type: none"> <li>The drill section spacing and sampling, at this stage, is insufficient to establish the geometrical relationships between the drill holes and any mineralised structures.</li> <li>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.</li> </ul> </li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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 <a href="http://www.antipaminerals.com.au">www.antipaminerals.com.au</a> and <a href="http://www.asx.com.au">www.asx.com.au</a>.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All significant results are reported or can sometimes be found in previous WA DMIRS WAMEX publicly available reports.</li> <li>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 <a href="http://www.antipaminerals.com.au">www.antipaminerals.com.au</a> and <a href="http://www.asx.com.au">www.asx.com.au</a>.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Zones of mineralisation and associated waste material have not been measured for their bulk density.</li> <li>Multi element assaying was conducted variously for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium.</li> <li>To date no downhole 'logging' surveys have been completed for the 2019 drill holes.</li> <li>Geotechnical logging (e.g. Recovery, RQD and Fracture Frequency) is not possible for AC, SLRC and RC drill material and none was obtained from the WA DMIRS WAMEX reports.</li> <li>Limited downhole information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material were obtained from the Company's pre-existing SQL database and WA DMIRS WAMEX reports.</li> <li>Metallurgical test-work results available on these particular tenements is restricted to the Minyari-WACA gold-copper-silver-cobalt deposits. Preliminary metallurgical test-work results are available for both the Minyari and WACA deposits. Details of this 2017 metallurgical test-work programme can</li> </ul>

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		<p>be found on the ASX or Antipa websites – Public release dated 13 June 2017 and titled “Minyari Dome Positive Metallurgical Test-work Results”. In summary both oxide and primary gold mineralisation (with accessory copper and cobalt) responded very satisfactorily to conventional gravity and cyanidation processes, with flotation to recovery copper and cobalt by-products the subject of ongoing evaluation. These reports are all available to view on <a href="http://www.antipaminerals.com.au">www.antipaminerals.com.au</a> and <a href="http://www.asx.com.au">www.asx.com.au</a>.</p> <ul style="list-style-type: none"> <li>In addition, the following information in relation to the Minyari deposit metallurgy was obtained from WA DMIRS WAMEX reports: <ul style="list-style-type: none"> <li>Newmont Holdings Pty Ltd collected two bulk (8 tonnes each) metallurgical samples of oxide mineralisation in 1987 (i.e. WAMEX 1987 report A24464) from a 220m long costean across the Minyari deposit. The bulk samples were 8 tonnes grading 1.5 g/t gold and 8 tonnes grading 3.57 g/t gold from below shallow cover in the costean. However, it would appear the Newmont metallurgical test-work for these two bulk samples was never undertaken/competed as no results were subsequently reported to the WA DMIRS;</li> <li>Newmont Holdings Pty Ltd also collected drill hole metallurgical samples for Minyari deposit oxide and primary mineralisation (i.e. WAMEX 1986 report A19770); however, subsequent reporting of any results to the WA DMIRS could not be located suggesting that the metallurgical test-work was never undertaken/competed.</li> </ul> </li> <li>Newcrest Mining Ltd describe the Minyari deposit gold-copper mineralisation as being typical of the Telfer gold-copper mineralisation. In 2004 and 2005 (WAMEX reports A71875 and A74417) Newcrest commenced metallurgical studies for the Telfer Mine and due to the similarities with the Minyari mineralisation a portion of this Telfer metallurgical test-work expenditure was apportioned to the then Newcrest Minyari tenements. Whilst Telfer metallurgical results are not publicly available, the Telfer Mining operation (including ore processing facility) was materially expanded in the mid-2000’s and continues to operate with viable metallurgical recoveries (for both oxide and primary mineralisation).</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Planned further work: <ul style="list-style-type: none"> <li>Ongoing review and interpretations of the 2019 and historical exploration data;</li> <li>Planning and execution of follow-up exploration activities to identify potential high-grade mineralisation;</li> <li>Geophysical data modelling (including AEM and Aeromagnetcs); and</li> <li>Full geological interpretation including 3D modelling.</li> </ul> </li> <li>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.</li> </ul>