



## AUSTRALASIAN METALS

ASX Announcement | ASX: A8G | 29 May 2025

# High-chargeability responses returned from geophysical survey at the May Queen Gold Project

### Highlights

- **Geophysical survey completed at May Queen gold project**
- **The highest chargeability response with a 400-500m strike extent**
- **This response infers that this feature has the potential for significant depth extent**
- **This clearly defined target could represent sulphide mineralisation and/or associated alteration**
- **The northern DDIP line 7128950N also defined several chargeability anomalies**

Australasian Metals Limited (**ASX: A8G, Australasian** or the **Company**) is pleased to advise that as a follow up from our drilling campaign in 2021, the Company has completed an IP geophysical survey consisting of a gradient array (GAIP) and dipole-dipole (DDIP) configuration to define further drilling targets. Positive results, including a highest chargeability response with a 400-500m strike extent were returned for the geophysical survey which was completed in May 2025.

### **A8G Managing Director Dr Qingtao Zeng commented:**

*"We are very pleased with the data from the geophysical surveys which have identified new drill targets at the May Queen Gold Project. The program was executed under budget efficiently. Now we will proceed to validate the drill targets with targeted ground mapping and sampling programs. We are encouraged by these results which support the data from our maiden diamond drilling program and the potential of a gold-copper porphyry system within the project area."*



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### Project Summary

The May Queen Gold Project comprises granted Exploration Permits EPM 19419 and adjacent EPM 27746, located within the Brovinia goldfield in Queensland, approximately 375km by road from Brisbane.

The company's maiden diamond drilling program indicated the potential of a gold-copper porphyry system within the project area. That drilling at May Queen has delivered highly encouraging initial results including:

- 6m @ 1.99g/t Au from 35m and 1m @ 9.39g/t Au from 68m (Hole MQD0001).
- 1m @ 0.55g/t Au from 120m (Hole MQD0002).
- 1m @ 1.92g/t Au from 48m (Hole MQD0003).
- 4m @ 0.29g/t Au from 154m, 1m @ 1.39g/t Au from 174m and 2m @ 0.28g/t Au from 180m (Hole MQD0005).

While notable results from previous explorers included:

- 26m @ 8.37g/t Au from surface, including 3m @ 18.9g/t Au from 9m and 4m @ 38.8g/t Au from 21.8m (Hole BPH015).
- 2m @ 73.4g/t Au (including 1m @ 145g/t Au) from 32m (Hole BPH01).
- 3m @ 9.27g/t Au from 46m (Hole MQN05).

The IP survey was completed by Australian Geophysical Services (AGS) during May 2025, and the survey consisted of both Gradient Array (GAIP) and Dipole-Dipole (DDIP) configurations. The key target areas are presented in Figure 1. The program used two 1000m x 1100m Gradient Array IP/Resistivity (GAIP) Blocks. The GAIP and DDIP survey layout is illustrated in Figure 1 including a listing of line coordinates.

The Company commissioned Consulting Geophysicists, Mitre Geophysics Pty Ltd, to model the geophysical survey data and provide the full deliverables including raw and processed data, survey coverage files, plots of the results, geo-located images and contours of the GAIP results and the model sections for the DDIP lines. The report details the survey specifications and presents the results so that it is all documented, plus some brief discussion points on the results. Mr Angus also



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recommended at least two drillholes proposed to test the best chargeability anomalies.

### Survey Results and Discussion

Positive results from the IP geophysics survey have identified significant chargeability anomalies. The May Queen GAIP survey results are presented in Figure 2. Images and contours of chargeability and resistivity are supplied. The results from the DDIP lines are presented as section plots in Figure 3 and Figure 4.

The GAIP Resistivity results show a dominant NNW-NS grain with numerous linear zones of higher resistivity following that trend. The resistivity in general is high with the lowest values measured being in the order of around 300  $\Omega$ m. The GAIP chargeability also has a dominant NNW-NS grain with the more elevated chargeability across the western two-thirds of the survey area. In the central south of the survey area is the highest chargeability response with a 400-500m strike extent linear high centred on 303525E - 7128150N. Two additional lines of GAIP were surveyed to close off this anomaly in the south and then it was also covered with DDIP Line 7128150N to provide additional details.

Other GAIP chargeability high responses occur across the northern part of the grid with several NS trending linear chargeability highs. Several of these responses were covered with DDIP Line 7128950N to provide additional information on these anomalies.

DDIP Line 7128150N shows a distinct and discrete sub-vertical highly chargeable (80mV/V+) and low resistivity target (<40 Ohm.m) at 303550E. The inversion modelling suggests this feature has significant depth extent. The target also appears to be on a structure or boundary between higher resistivity to the west and more moderate resistivity to the east. This clearly defined target could potentially be representing sulphide mineralisation and/or associated alteration.

The northern DDIP Line 7128950N defines the various chargeability features observed in the GAIP. The eastern chargeability feature at 303550E is a very small near-surface feature, while the western response between 303100E and 303300E



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is deeper (~50-100m) and appears to be flat lying. Note the chargeability values of these highs are a lot less (<20 mV/V) than the anomaly on the southern line.

### **Next steps**

Field inspection of the DDIP chargeability anomalies, especially the southern highly chargeable target, will be carried out to identify surface features to explain the anomalism. Two holes have been proposed. PH01 will test the discrete southern high chargeability target on Line 7128150N (Figure 5), and PH02 to test the flat lying target on Line 7128950N (Figure 6). Drill testing of targets as recommended by the geophysicist will be subject to a review in the field with mapping and geochemical sampling being conducted prior to a commencement of a drill program.



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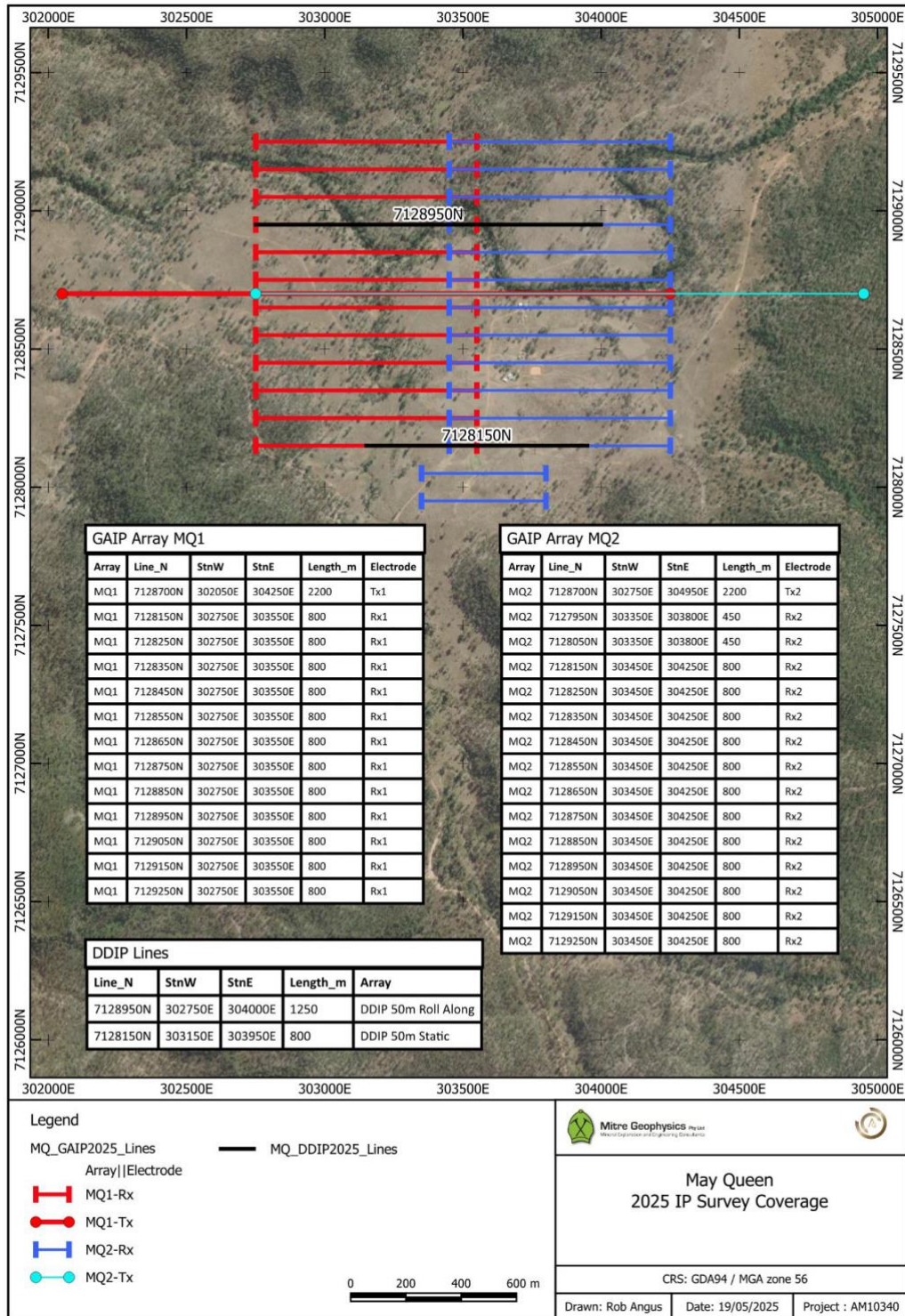


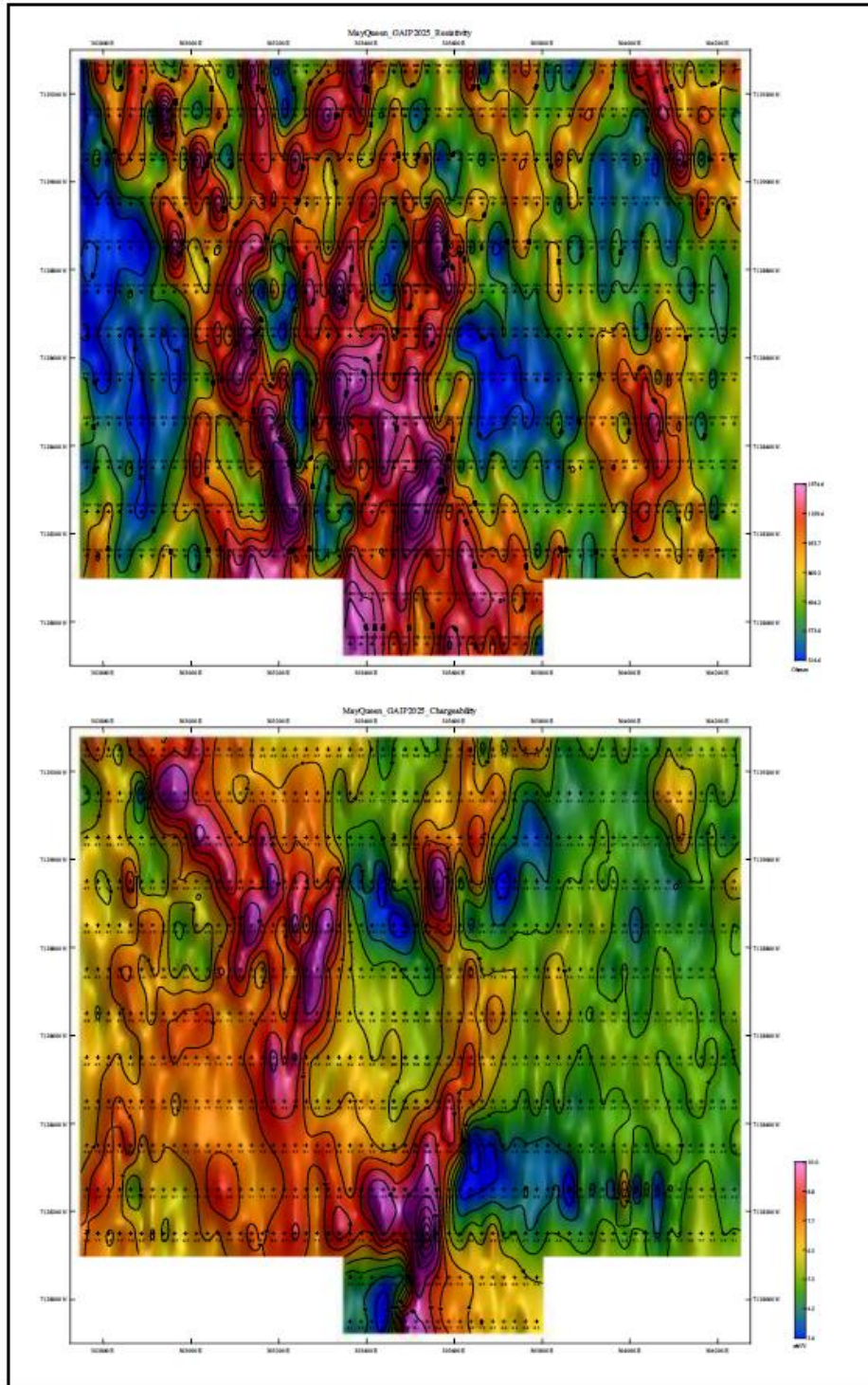
Figure 1. May Queen GAIP and DDIP 2025 Survey Line Locations, including line specifications.





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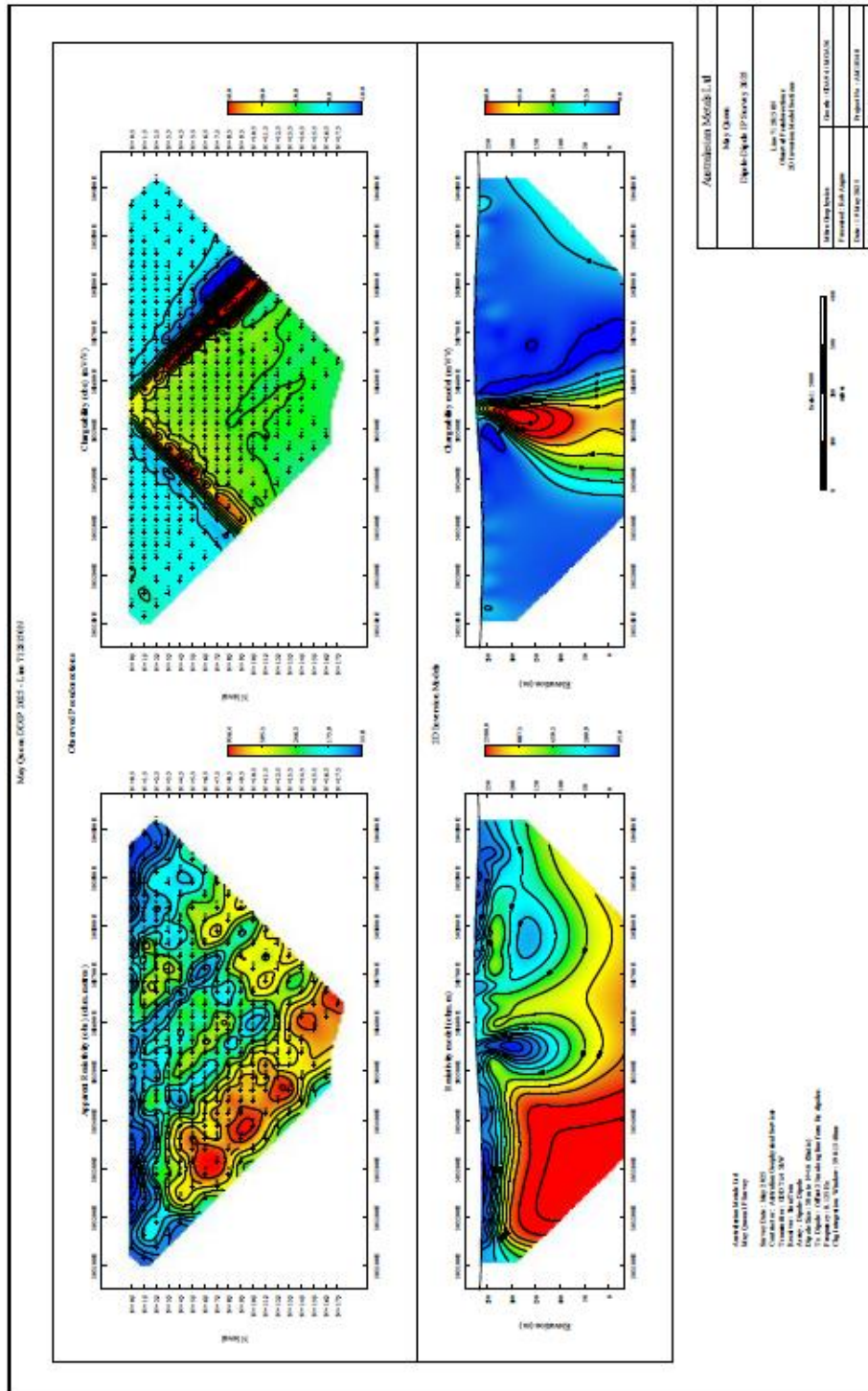


**Figure 2.** May Queen GAIP Results. Resistivity and Chargeability sun-illuminated images.



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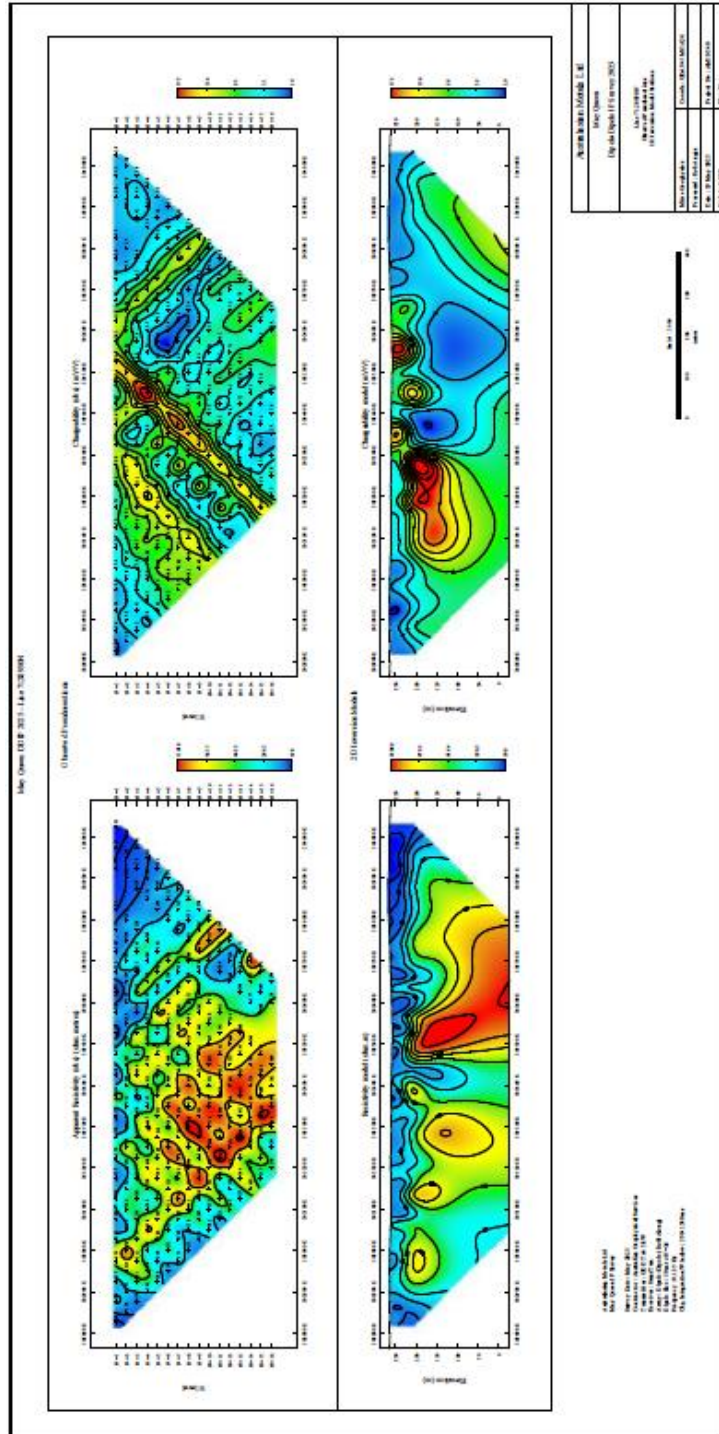


**Figure 3. May Queen DDIP Line 7128150N Results. Observed data pseudo-sections and 2D Inversion Model Sections.**



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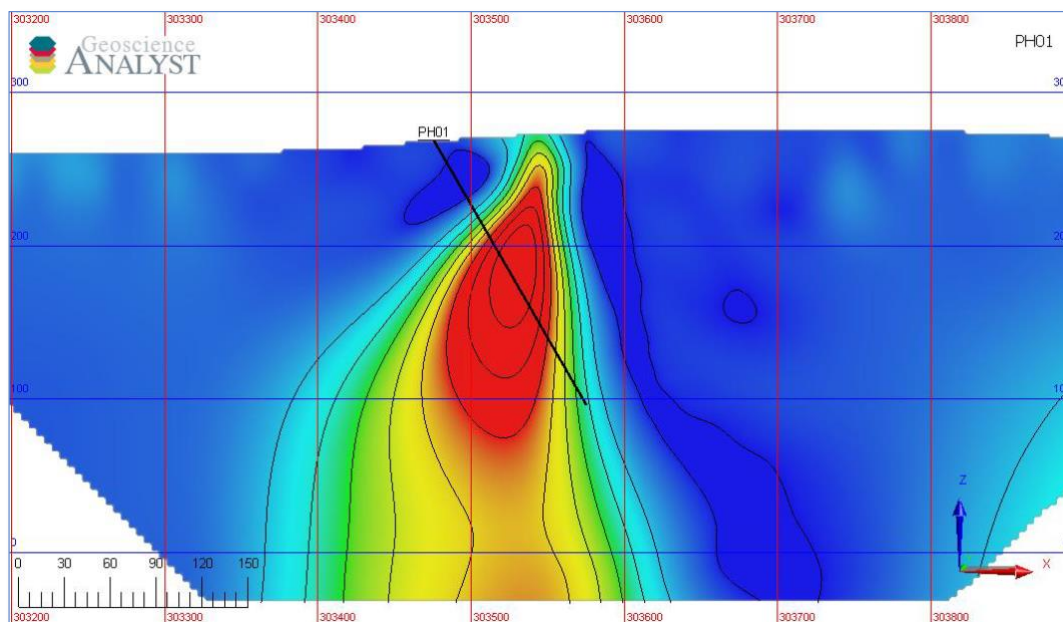
**Figure 4. May Queen DDIP Line 7128950N Results. Observed data pseudo-sections and 2D Inversion Model Sections.**



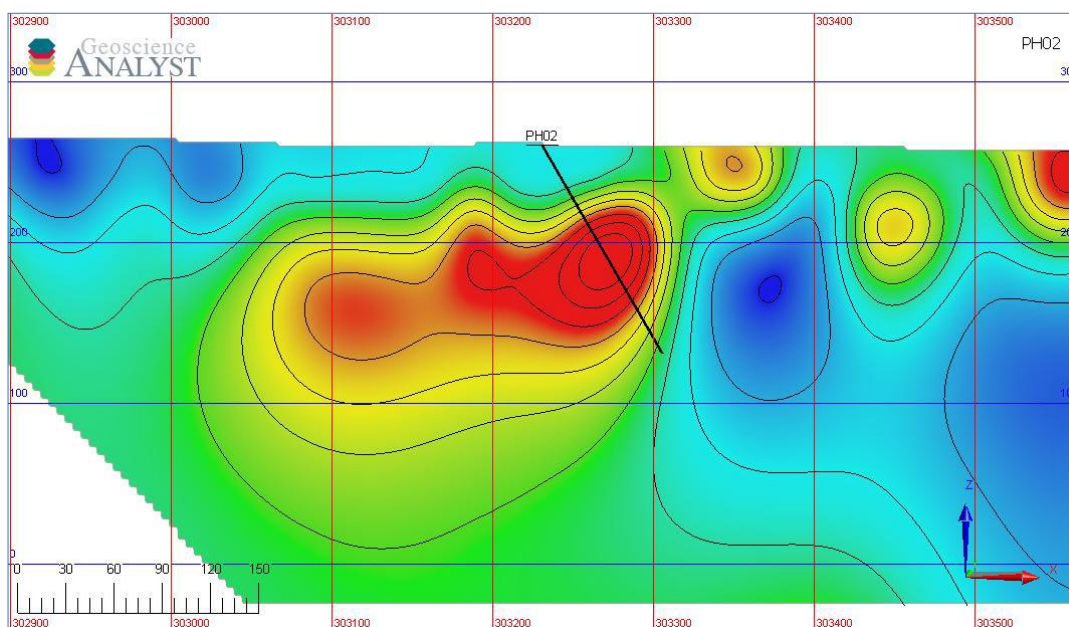


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**Figure 5.** PH01 designed to test the discrete chargeability target on Line 7128150N.



**Figure 6.** PH02 designed to test the flat lying chargeability target on Line 7128950N.



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This announcement is approved for release by the Board of Directors.

### ENDS

For Further Information

Dr Qingtao Zeng  
Managing Director  
M +61 8 6507 3082

Mr Dan Smith  
Joint-Company Secretary  
T +61 8 9486 4036

### Competent Person Statement

*The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Ian Cooper, a consultant geologist of Australasian Metals Limited. Mr Cooper is a Fellow of the Australasian Institute of Mining and Metallurgy, and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been 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". Mr Cooper consents to the inclusion in this release of the matters based on the information in the form and context in which they appear.*



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Report compliant with the JORC Code (2012).

### Section 1: Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	No sampling discussed in this report, as previously reported the company completed a diamond drill programme in 2021, details of that work are: Both HQ and NQ were used in this program Core sample intervals were geological logged, measured for average length, photographed, and placed into numbered core trays. Sample has been sent to ALS Brisbane under standard preparation procedures.
<i>Drilling techniques</i>	No drilling has been carried out, proposed drill targets were discussed, drill methodology is to be determined. Summaries of historical drill results are provided as background and have been previously reported. As previously reported the company completed a diamond drill programme in 2021, details of that work are: Diamond drilling accounts for 100% of the drilling.
<i>Drill sample recovery</i>	No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are: The recovery of the Diamond drilling samples was reported by the operators and supervised by our consulting geologist No sample bias has been established.
<i>Logging</i>	No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are: All logging is quantitative, based on visual field estimates.
<i>Sub-sampling techniques and sample preparation</i>	No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are: Company procedures were followed to ensure sub-sampling adequacy and consistency. Laboratory QC procedures for rock sample assays involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates. The QC procedure for historical RC samples is unknown but considered immaterial.
<i>Quality of assay data and laboratory tests</i>	No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are: Industry standard assay techniques were used for gold and for base metals and silver.
<i>Verification of sampling and assaying</i>	No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are: The verification work identified that no significant adjustments to the assay data have been required.
<i>Location of data points</i>	The geophysical survey was oriented EW using the GDA94 / MGA56 coordinate system. The drill holes completed in 2021 have been reported as being located by hand-held GPS. Historical drill holes and mine shafts have been verified by GPS. Government topographic maps have been used for topographic validation. The GPS is considered sufficiently accurate for elevation data. For the diamond drill holes, down hole dip surveys were taken at approximately 30m intervals and at the bottom of the hole.
<i>Data spacing and distribution</i>	GAIP survey consisted of two adjoining blocks. Each block consisted initially of twelve EW survey lines spaced 100m apart. The two adjacent blocks included three overlapping stations to enable merging of



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Criteria	Commentary
	<p>the data between blocks. Line lengths were 800m and the receiver dipoles were 25m in length. Transmitter dipoles were 2200m long.</p> <p>DDIP survey completed with the 50m transmitter dipole offset 25m along the line to avoid having Tx and Rx electrodes at the same location.</p> <p>No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are:</p> <p>Drill spacing of drill holes ranges between 12.5 and 25 m which is considered adequate for reporting Exploration Results.</p>
<i>Orientation of data in relation to geological structure</i>	<p>The survey was oriented EW using the GDA94 / MGA56 coordinate system considered to reflect interpreted north south structural interpretation</p> <p>No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are:</p> <p>Drilling is designed to test anomalies and potential mineralization. They were oriented sub-perpendicular to the potential mineralised trend and stratigraphic contacts as determined by field data and cross section interpretation. Intersection widths will therefore be longer than true widths.</p> <p>No significant sample bias has been identified from drilling due to the optimum drill orientation described above. Where present, sample bias will be reported.</p>
<i>Sample security</i>	<p>No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are:</p> <p>Samples to be analysed were delivered to the laboratory and under direct control of the consulting geologist who supervised the drill programme</p>
<i>Audits or reviews</i>	<p>No drilling has been carried out. As previously reported the company completed a diamond drill programme in 2021, details of that work are:</p> <p>There has been no review of the sampling techniques and data.</p>

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

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>Granted exploration permit EPM 19419 comprises one exploration licence covering 74.1 km<sup>2</sup>. The tenement is held 100% by Pure Mining Ltd a 100% subsidiary of Australian Metals Limited.</p> <p>No aboriginal sites or places have been declared or recorded in areas where Australasian intend exploring. There are no national parks over the license area.</p> <p>The tenements are in good standing with no known impediments.</p>
<i>Exploration done by other parties</i>	<p>The May Queen mine was part of the Brovinia gold field and was described by Jack (1896). The first modern exploration was undertaken by Burmine (ATP 4106) who carried out reconnaissance mapping and rock chip sampling.</p> <p>Black Swan (ATP 4576) explored the area during 1987-1988. Completed gridded auger soil sampling, rock chip sampling, costeaning, ground magnetic and EM surveying and geological mapping. Black Swan also drilled 15 RC holes, eight of which tested the May Queen mineralisation. Additional holes were drilled at Bat Cave, Valley and a skarn altered outcrop to the north of May Queen.</p> <p>During 1997 Compass Resources (EPM 11197) carried out soil, rock chip and BCL drainage sampling around the May Queen prospect.</p> <p>Copper Strike (EPM 15036) in joint venture with Paradigm Gold drilled seven RC holes at May Queen.</p> <p>EPM 19419 "May Queen" was granted on the 26 August 2014 to IronRidge Resources Ltd (IRR) for a period of 3 years and subsequently renewed for a further 5-year term in total to 25 August 2022. The permit was acquired by Pure Mining Pty Ltd, a wholly owned subsidiary of Australasian Metals Limited (A8G) on 21 January 2021 and was renewed on 22 August 2022 for a further three years. Historical works indicate that there are shallow high grade gold mineralisation occurrences</p>
<i>Geology</i>	<p>The Surat Basin overlies the older Bowen Basin and contains sedimentary rocks up to 2,500m thick. The Evergreen Formation consists of Jurassic aged basinal mudstones, claystones, siltstones and sandstone.</p>





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	<p>They are continental sediments, often abundant with fossil freshwater plants fragments. Colluvium deposits of Quaternary to Tertiary age outcrop within the Evergreen formation. Mostly clays, silts, sand, and gravels, but also residual iron-rich laterites are commonly found capping various sediments. The Evergreen laterites usually are brick red on top, thin, with a yellow to white, bleached clay, zone beneath the capping. The laterites are Cretaceous to early Tertiary in age.</p> <p>The Monogriliby deposit is mapped by the government geological survey as being hosted by lateritised Tertiary volcanics resting unconformably on Jurassic sediments of the Evergreen Formation. In the field, the dominant volcanic material is bleached pink/purple tuff, with very few basalt lavas around vents in the far west of the volcanic field. The eruption was presumed to have been catastrophic because the very hot basaltic lava interacted with the abundant formation waters of the Surat Basin. At least 2 maars have been recognised in the field on other EPM's.</p> <p>Extensive thick airborne volcanic tuff was deposited across the landscape. Red iron-silica-titanium laterites formed on the surface of these tuff deposits, but most of this laterite has now been eroded leaving some flat plateau and mesa type high areas. Beneath the capping is the best bauxite.</p> <p>Beneath the Jurassic and Tertiary sediments are Carboniferous volcanics and intrusives including gabbro. The Brovinia Gold Field outcrops sporadically across the project area as an erosional window.</p>
<i>Drill hole Information</i>	No new drill information is reported. Details of the historical drill holes are reported in an announcement by the company dated 14 July 2021.
<i>Data aggregation methods</i>	<p>Not applicable for the geophysical survey reported in this report.</p> <p>As previously reported the company completed a diamond drill programme in 2021. No new drill information is reported here. Details of the historical drill holes are reported in an announcement by the company dated 14 July 2021.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<p>Not applicable for the geophysical survey reported in this report.</p> <p>As previously reported the company completed a diamond drill programme in 2021, details of that work</p> <p>As previously reported the company completed a diamond drill programme in 2021. No new drill information is reported here. Details of the historical drill holes are reported in an announcement by the company dated 14 July 2021.</p>
<i>Diagrams</i>	A survey location map was provided and geophysical interpretations were also provided as plans and 'pseudo sections'
<i>Balanced reporting</i>	The report represents a fair representation of reporting on the geophysical survey from consultant geophysicists' Mitre Geophysics Pty Ltd.
<i>Other substantive exploration data</i>	Historical data and exploration have been published previously no other substantive exploration data is available.
<i>Further work</i>	Subsequent drill testing of drill targets as recommended by the geophysicist will be subject to a review in the field with mapping and geochemical sampling being conducted prior to a commencement of a drill program.