ASX Announcement

Integrated 3D Inversion Modelling Identifies Series of High Priority Exploration Targets at Jervois - Amended

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4 August 2025

KGL Resources Limited (ASX:KGL) provides the following amended announcement to replace the same announced on 30 July 2025. This announcement now contains a completed JORC Table 1.

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KGL Resources (**ASX:KGL**) is pleased to provide an update on the exploration potential of the Jervois and Unca Creek exploration leases based on recent integrated 3D Inversion Modelling undertaken by **Viridien's Multiphysics team** that has incorporated considerable geological knowledge of the area, built-up by KGL over the last 10 years of drilling.

- KGL's exploration to date has shown the Jervois tenements to be a highly prospective high grade polymetallic deposit. Ongoing technological advancements are enabling improved geological understanding of the Jervois deposit that contributes to improved exploration targeting and cost efficiency.
- Over the past decade, substantial geophysical data has been collected across KGL's Jervois and Unca Creek tenements, particularly over the southern extent of the J-fold structure. Historically, these datasets, including gravity, magnetics, and magnetotellurics (MT) were analysed independently, limiting their integration with geological information due to computational constraints.
- With recent advancements in computing power, geoscientific expertise and enriched geological datasets from drilling and core analysis, the application of joint inversion modelling which integrates gravity, magnetotelluric (MT), magnetic and petrophysical drilling data now offers improved resolution and targeting precision. This has proven to be significantly more effective in reflecting the subsurface geology compared to single-parameter inversion models, which inherently view geological structures from a single perspective.
- Effectively combining three key physical rock properties; low resistivity, high magnetic susceptibility and high density, the resulting model further delineates known zones of mineralisation at Jervois and demonstrated strong correlation with existing proven geological data.
- The study has highlighted several new exploration targets and increased confidence in previously recognised anomalies. Among the most prominent targets emerging from this approach are **the central J-fold structure** that is associated with the single domain models' trend of Scarpe / Crowe's Nest, and a southern trend parallel to the J structure that encompasses the **southern extents of the Bellbird (Colling prospects)** and **south of Rockface** prospects and the southern continuation of Reward South (Krak Ridge prospect)..
- The results validate that integrating additional geophysical inputs, such as structural trends derived from IP surveys further enhances model resolution and geological interpretation. Moreover, expanding MT survey coverage, particularly infill over the southern area and extension across the broader Jervois project, would substantially improve the confidence in anomalies identified through single-domain inversions.
- **In addition, apparent resistivity mapping has identified a significant deep-seated low-resistivity feature beneath the central J-Fold and a smaller low-resistivity feature near the Bellbird deposit, penetrating to depths exceeding 5km.** The integrated 3D Inversion Model resistivity data identifies two prominent low-resistivity areas at 3km below the central J-fold structure (Area 1 prospect) and the Bellbird-Rockface trend. These prominent conductive zones are interpreted to represent a major structurally controlled feature—potentially linked to alteration, fluid pathways, or mineralising systems associated with the J-Fold axial plane and the deeper Jervois Fault structure.
- Integrated 3D Inversion modelling lays the foundation to accelerate low cost / accretive growth for the high-grade Jervois Project. This program has led to the delineation of a series of high-priority exploration targets, particularly within the southern extent of the J-fold structure, underscoring its value in guiding future exploration efforts for potential mine life extension, at the wholly owned Jervois and the Unca Creek tenements.
- The findings from this study provide the strongest geophysical evidence to date that **Jervois hosts a significantly larger and deeper mineral system than previously identified**.

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Background

The Jervois mineral field is a highly prospective area due to its proximity to the large crustal-scale Jervois Fault, which acted as a plumbing system for mineralising ore-forming fluids.

Since KGL acquired the project in 2011, substantial advances have been made in understanding the geological controls on mineralisation. Extensive drilling has revealed that copper mineralisation is largely hosted in steeply plunging shoots, many of which remain open at depth.

Structural analysis (**Crowe, 2024**) has shown that.

- Cu-Ag-Au-magnetite mineralisation is associated with late tectonic, post-S2 foliation,
- Ag-Pb-Zn mineralisation is interpreted as pre-tectonic, likely related to a SEDEX-VMS system.
- Bornite is interpreted to form through later, lower-temperature hydrothermal overprinting of chalcopyrite.

KGL recognises the mineralisation at Jervois as a **hybrid system**, incorporating characteristics of **Volcanic-hosted massive sulphide (VHMS)**, **sediment-hosted exhalative (SEDEX)**, **Fe–Cu skarn**, and **Iron oxide–copper–gold (IOCG)**-style deposits.

For simplicity, the mineralisation can be grouped into two assemblage styles:

- Lower tenor, stratabound disseminated sulphides, and
- Higher-grade, structurally controlled copper-magnetite or calc-silicate shoots

Whilst the Jervois tenements remain under explored, recent drilling has focused on infill drilling and extending the resource and knowledge, at depth, for the current lodes. This work has consistently demonstrated high grade copper intersects in these areas.

While each of the main deposits remain open at depth, future drilling of deep targets is deferred until they become more accessible from underground at a significantly lower cost from underground development and exploration drives.

An ongoing work program to identify “high priority” and “high value” targets using more cost effective advanced geophysical techniques and advanced modelling techniques of geophysical data was initiated with Viridien to improve drill targeting and reduce the cost of future exploration programs.

Integrated Inversion Modelling

Over the past decade, substantial geophysical data have been collected across KGL’s Jervois and Unca Creek tenements. Historically, these datasets, including gravity, magnetics, and magnetotellurics (MT) were analysed independently, limiting their integration due to computational constraints and limited geological information.

This project addresses those limitations by developing integrated multidisciplinary inversion models, where different geophysical parameters are cross-validated and weighted against each other (Luis A. Gallardo, Max A. Meju, 2003 and 2011). The final deliverables include both single-domain and joint 3D inversion models that combine multiple physical properties.

Enabled by recent advancements in computing power, geoscientific expertise, and enriched geological datasets from drilling and core analysis, these models offer improved resolution, geological constraints, and targeting precision. The initiative aims to enhance exploration strategies, align drilling with known mineralization, and reveal previously unrecognized prospects.

The final integrated 3D inversion models comprise magnetically guided gravity and MT inversions, constrained by downhole geological information. These models have delineated several new exploration targets, many of which correspond to geochemical anomalies identified in earlier phases of work and are now validated by the integrated modelling.

The integrated models were developed using a cross-gradient approach that promotes structural similarity across the three geophysical datasets: gravity, magnetics, and magnetotellurics (MT). This method effectively

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combines three key physical rock properties, low resistivity, high magnetic susceptibility, and high density. The resulting model accurately delineates known zones of mineralisation at Jervois, demonstrating strong correlation with existing geological data.

The program included joint inversion modelling of the 3D Orion MT, gravity, and magnetic datasets by Viridien, including:

- Unconstrained single-domain inversions (gravity, magnetics, MT)
- Magnetically guided inversions of gravity and MT
- Joint 3D inversions integrating magnetic, gravity, and MT data, constrained by surface geology, downhole density and magnetic susceptibility, alteration domains, and mineralised wireframes

The 1999 airborne magnetic survey and the 2016–2017 ground gravity program remain the most comprehensive datasets covering both the Jervois and Unca Creek tenements. Alongside 114 Orion MT sounding stations, these datasets form the foundation for the current 3D modelling initiative.

Exploration Program

The current work program including desktop studies and data analyses has been conducted with the overarching objective of designing an exploration program aligned with KGL's long-term strategic vision to significantly enhance copper, silver, gold extraction at the Jervois Project.

The ongoing exploration program is to be staged into short-term, medium-term, and long-term phases to achieve the following key objectives:

- Short-Term (project operating years 5–10): To infill underutilised processing capacity by identifying and developing low-risk open pit extensions within the existing Jervois tenement (EL25429).
- Medium to Long-Term (project life extension years 10–20+): To extend the Jervois Project's mine life beyond 10 years to 15 and 20+ years; through expansion of current mining areas at depth, new mining areas within the Jervois tenement and extension into the adjacent Unca Creek tenement (EL28082).

In the short term, the focus is on infilling underutilised processing capacity through low-risk open pit targets within the existing Jervois tenement (EL25429). High-confidence targets identified for the short term; include Area 4, the Reward trend extensions, and the Oleg–Moley trend (**Figure 1**,**Figure 2**).

- The planned magnetotelluric (MT) surveys to fill geophysical data gaps will further enhance these targets. While the Cox's Find prospect has been downgraded by the latest inversion models, recent mineralised intercepts warrant further investigation using DHEM surveys.

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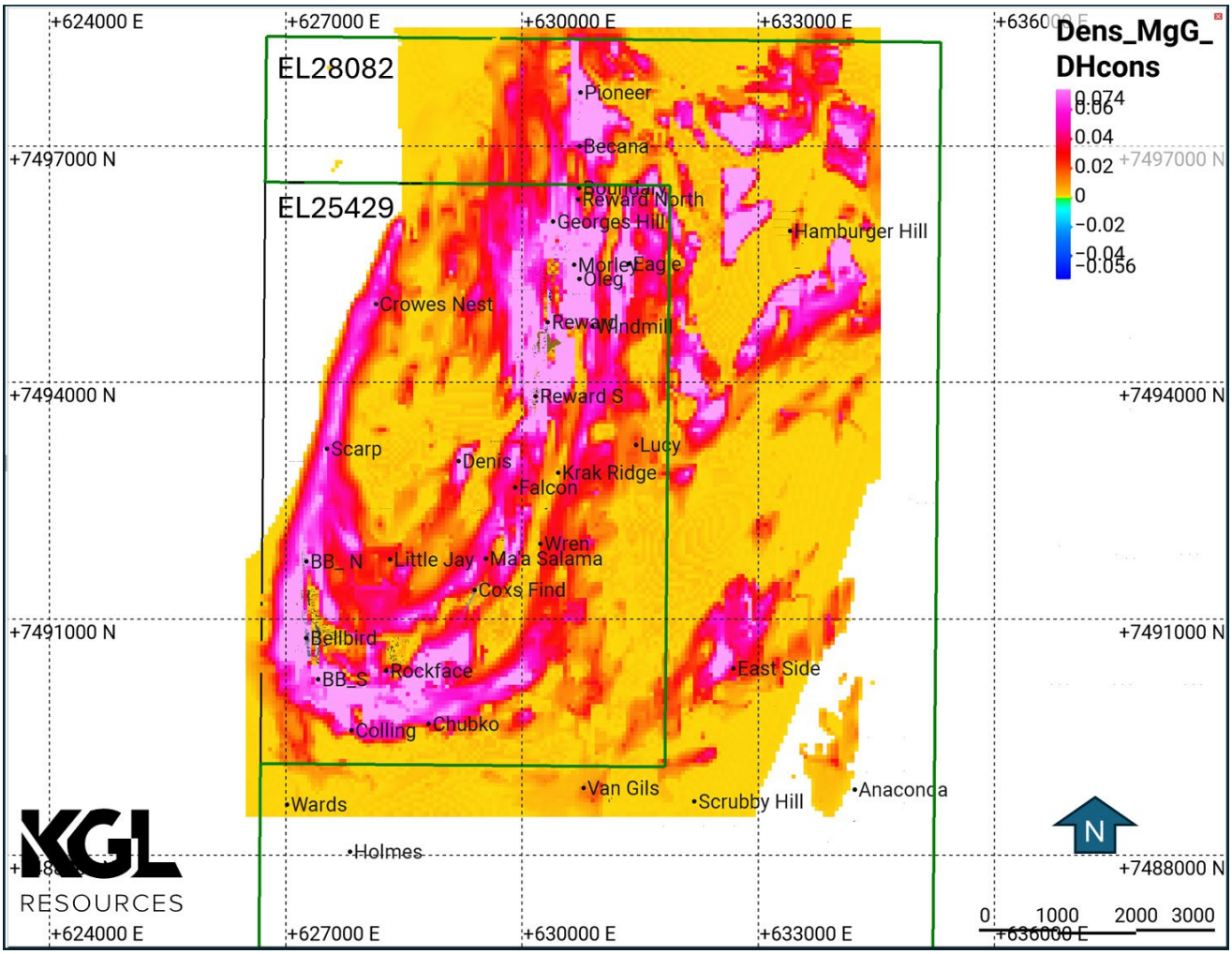

Figure 1. *Plan view of the magnetic image–guided and drill hole density–constrained gravity inversion model. The model provides improved resolution and increased confidence in anomalies identified along strike from Reward to Reward North and Boundary, extending into the Unca Creek tenement between Becana and Pioneer. It also enhances the definition of key trends, including the Oleg–Morley trend east of Reward and the western limb of the J-Fold (Scarp–Crowe's Nest).*

In the medium term, the program aims to extend the mine life by targeting deeper mineralisation within EL25429 and expanding the knowledge into the adjacent Unca Creek tenement (EL28082). Three key targets, Area 2, Area 3 and the west of Rockface (Rockhole) are prioritised for drill testing, with the latter becoming accessible following underground development. (**Figure 2**).

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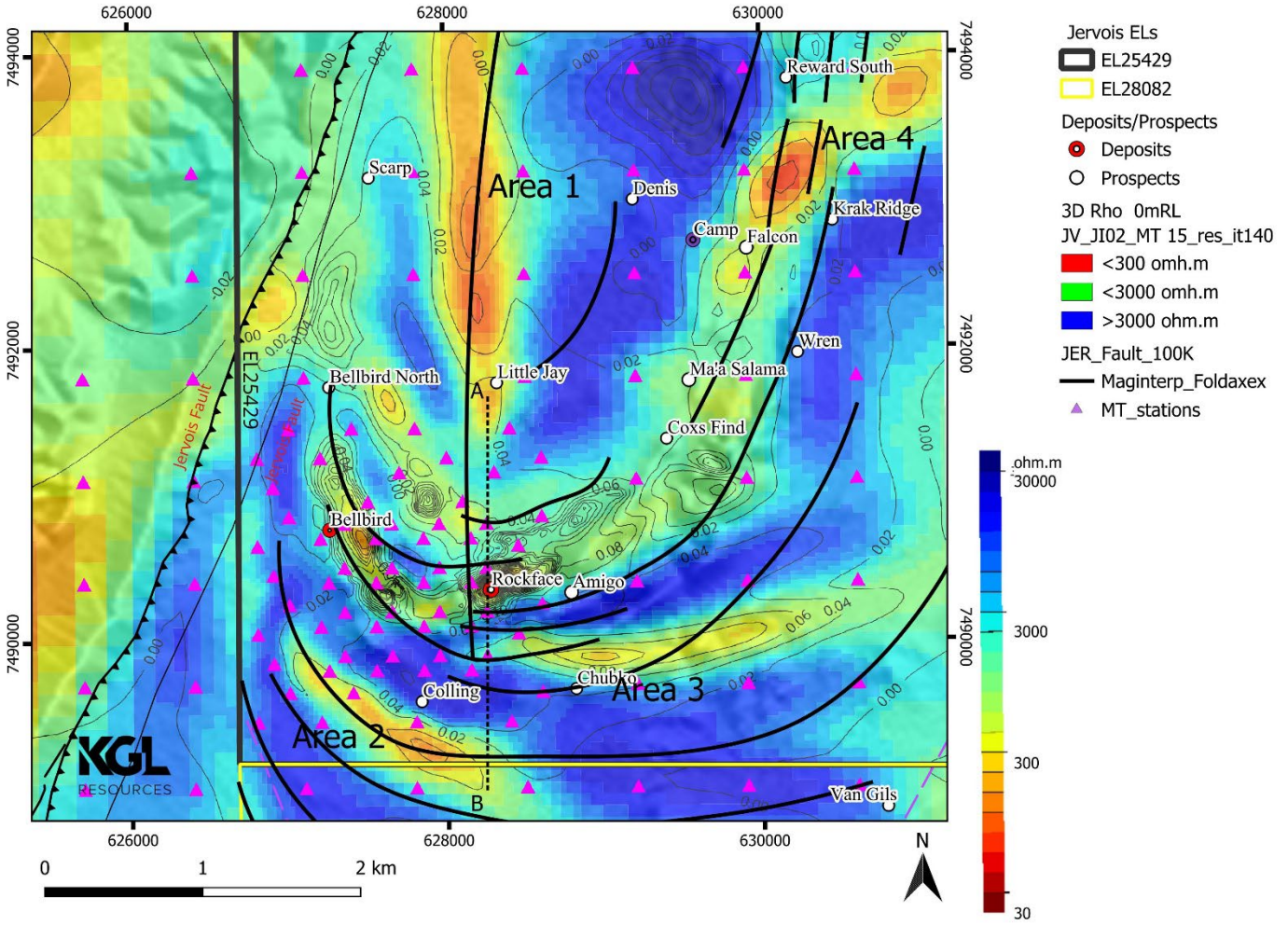

Figure 2. *Horizontal slice of the joint magnetic imagery guided MT and gravity inversion model at 0.0 mRL (approximately 350 m below surface). Resistivity is displayed using the colour scale, while inverted density is represented by contour lines. Purple triangles denote MT sounding stations, and black lines indicate structural interpretations derived from magnetic data. Several anomalies have been identified within Jervois Tenement (EL25429): Area 1 is positioned directly over the F3/J-Fold axis, Area 2 defines a distinct parallel trend to Bellbird, Area 3 forms an offset parallel trend to Rockface, and Area 4 aligns closely with the Reward South trend. The cross section line AB is shown in figure 3.*

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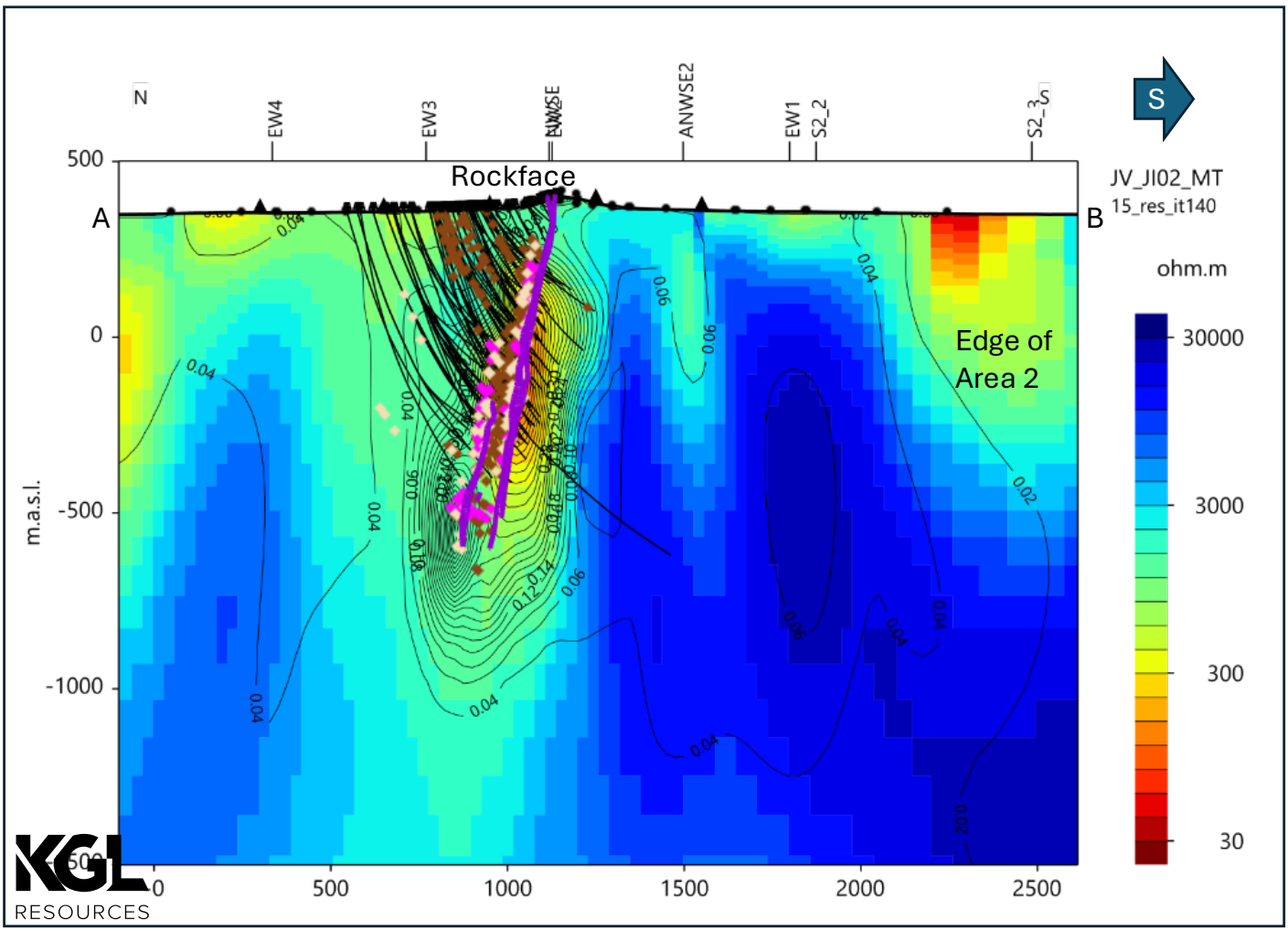

Figure 3. *Cross-section along the N–S line at 628286 mE (viewing east) illustrating the magnetic-guided MT and gravity joint 3D inversion, constrained with down hole information. Resistivity is represented by the colour scale, while density is shown by contour lines. Two mineralised lodes are highlighted in purple, along with drill hole traces indicating mineralised intersections.*

Long-term opportunities focus on the Unca Creek tenement, where joint inversion modelling and geochemical validation have highlighted several prospects. These include the Becana–Pioneer trend, and the area south of Hamburger Hill. The Eastside prospects continue to show strong geophysical signatures, and although many anomalies are linked to mafic intrusions, the untested southern zone, featuring outcropping banded iron formation, remains a high-potential target for IOCG-style mineralisation (**Figure 1**)

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Results & Analysis

Integrated and Constrained Models

The magnetic guided MT model shows an overall good match across the entire survey area, with a global Root Means Square (RMS) of 1.08. Compared to the blind single-domain (SD) MT inversion, the global RMS is slightly higher, and a few stations exhibit increased local misfits. This difference is attributed to the use of the magnetic-image structural cross-gradient constraint, which enhances large-scale structural coherence but can suppress small-scale variations needed to fit the data at some individual sites.

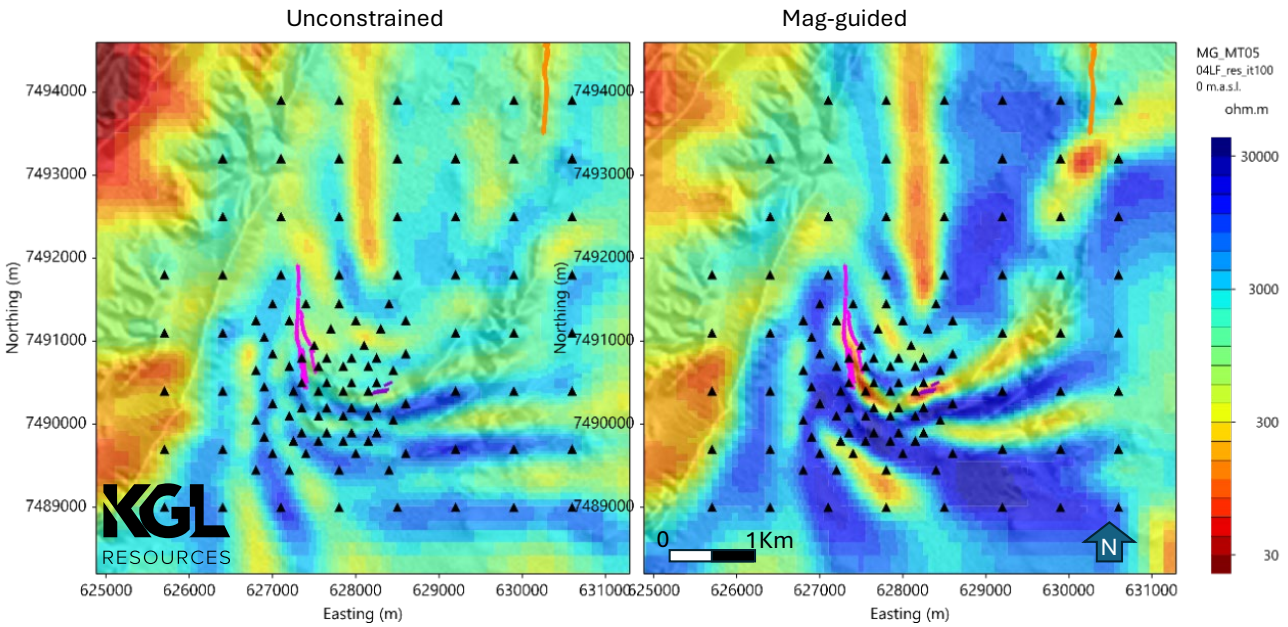

Figure 4. Horizontal slice of the MT resistivity 3D model over the southern portion of the Jervois tenement, comparing the unconstrained model (left) with the magnetic-guided model (right). MT station locations are indicated by black triangles.

The integrated approach combining geophysical methods with geological and geochemical data has improved the resolution and confidence of subsurface modelling at Jervois. While limitations remain, particularly with uneven MT coverage and the depth sensitivity of certain methods, joint inversion models have successfully delineated multiple high-priority exploration targets. A series of promising targets has been identified along the southern extent of the J-fold, warranting follow-up exploration and potential drill testing

Targets type 1

The single-domain gravity inversion, guided by magnetic imagery and constrained by drillhole data, has **significantly improved geological confidence and model resolution**. This method successfully delineated several targets, including areas along strike from Reward to Reward North and the Boundary prospects, as well as the western limb of the J-fold structure (from Scarp to Crowe's Nest) and the eastern side of Reward, along the Moley–Oleg trend. Within the Unca Creek tenement, key target zones include the southern extent of Hamburger Hill, the Becana–Pioneer trend, and the Eastside prospects (**Figure 1and Figure 5**)

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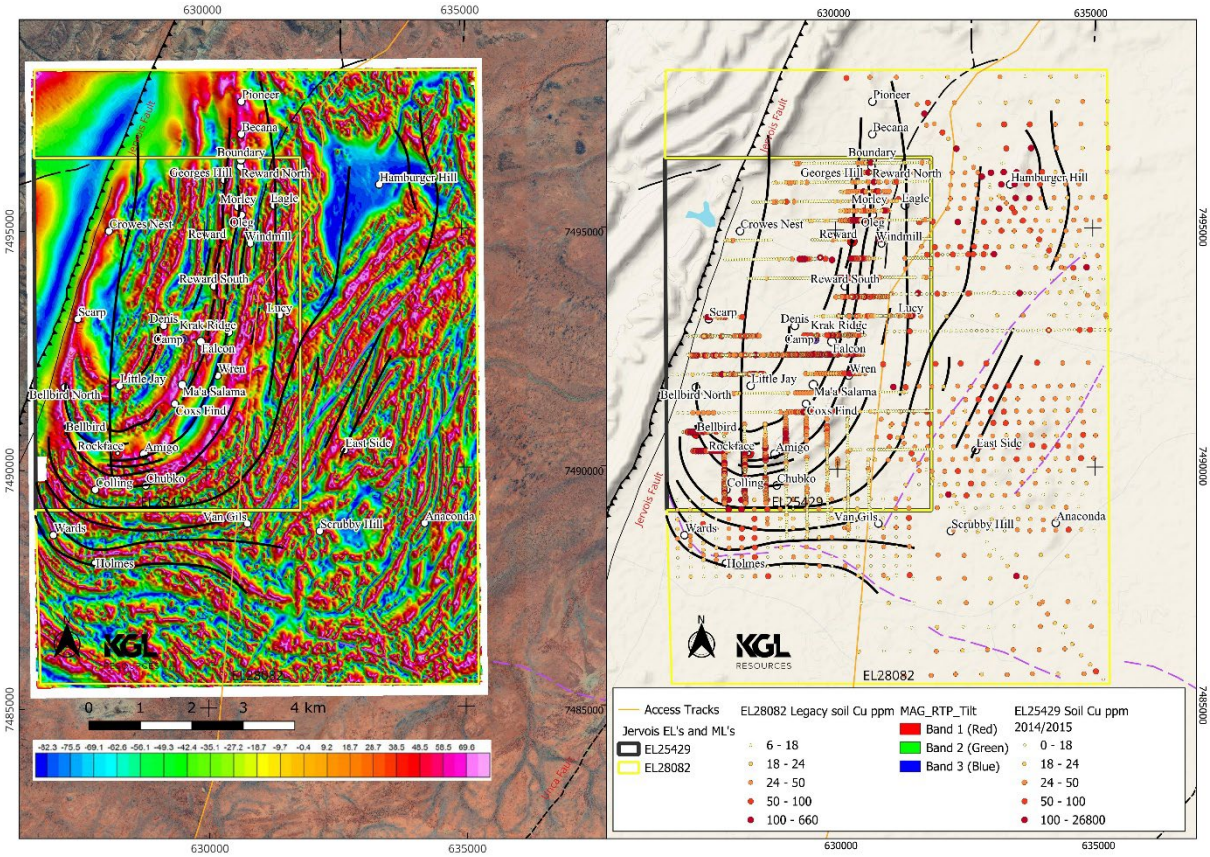

Figure 5. Tilt angle of magnetic data reduced to the pole (left) across both the Jervois and Unca Creek tenements, with structural interpretations derived from magnetic data. The right panel displays copper concentrations (ppm) from soil geochemistry: legacy data over the Unca Creek tenement and samples collected in 2014 and 2015 by KGL Resources over the Jervois tenement.

Target Type 2

The integrated inversion models have identified targets with high geological confidence, supported by alignment with legacy geochemical datasets and known mineralisation at Bellbird and Rockface. The joint inversion approach has delineated **four key target areas**:

Area 1 is located in the central-western portion of the J-fold and is characterised by a coincident low-resistivity, high-density, and magnetic response. This feature is entirely under cover, buried beneath thick sedimentary sequences, further geophysical assessment is warranted. Preliminary interpretation suggests this may represent a deep-seated structural feature aligned with the F3 (J-fold) fold axis (**Figure 2, Figure 6, Figure 7**).

Area 2, situated south of Bellbird, appears as a parallel trend to the main Bellbird mineralisation (**Figure 6**).

Area 3 extends from the Chubko prospect south of Rockface, forming a parallel trend to Rockface trend (**Figure 2, Figure 6**). Preliminary interpretation suggests this may represent a deep-seated structural feature aligned with the F3 (J-fold) fold axis.

Areas 2 and 3 have been recognised as anomalous zones since the initial magnetic and gravity inversion modelling in 2018 requiring further validation. Through integrated inversion and correlation with geochemical datasets, these targets have now been refined and prioritised for future drill testing (**Figure 2, Figure 6**).

- *Additional magnetotelluric (MT) stations are planned for the three areas in the upcoming geophysical program*

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Area 4 is located on the eastern limb of the main J-Fold and along the southern extent of the Reward South trend. Anomalies in this area are supported by both the single-domain inversion and soil geochemistry results.

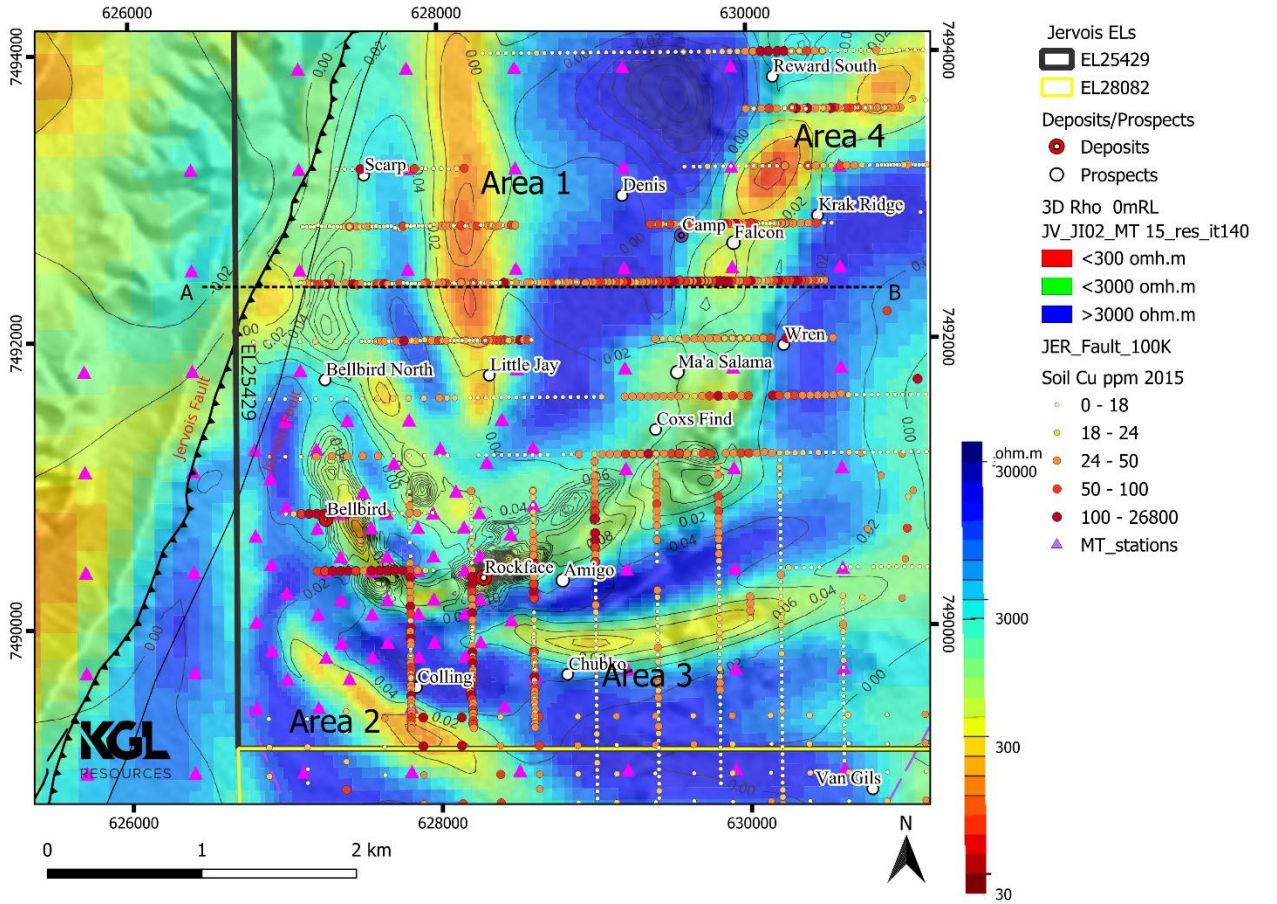

Figure 6. Horizontal slice of the joint magnetic imagery guided MT and gravity inversion model at 0.0 mRL(approximately 350 m below surface). Resistivity is displayed using the colour scale, while inverted density is represented by contour lines. Purple triangles denote MT sounding stations, and copper concentration in ppm is from soil geochemistry data. The cross-section line AB is shown in figure 7.

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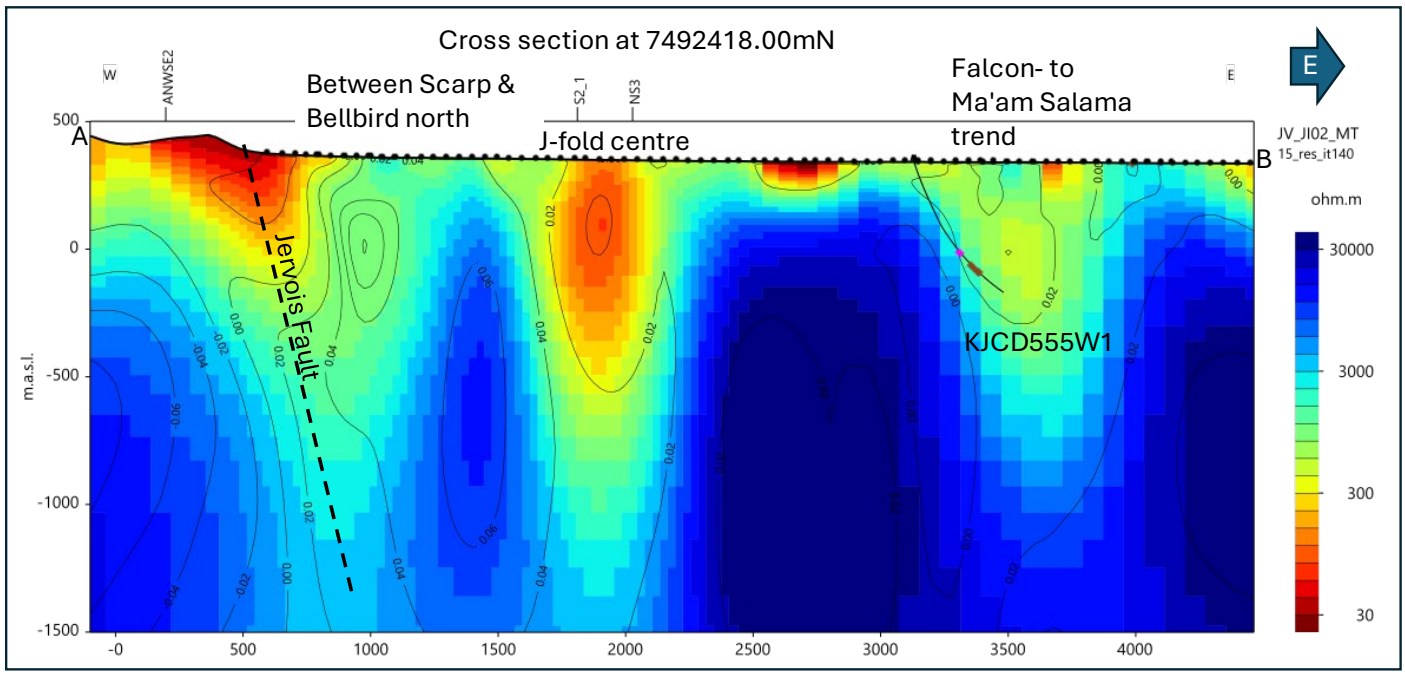

Figure 7. Cross section at 7492418.00mN looking north highlighting resistivity of Area 1 (J-fold centre).

Exploration Targets

Short-Term Targets and Work Plan (EL25429):

Several high-confidence targets have been identified within the approved Jervois tenement. These include Area 4 /Krak Ridge, south of Reward South, Reward North and the Boundary prospects, Oleg–Moley trend on the east of Reward (**Figure 1**and **Figure 2**).

Additionally, the Scarp–Crowe's Nest trend on the western extent of the J, remains a high-priority structural corridor. A previously drilled hole at Crowe's Nest intersected magnetite with trace sulphides. Follow-up work to improve the integrate joint inversion model interpretation. includes:

- *Downhole EM (DHEM) to map potential conductors within ~200 m of the existing drill hole and Fixed-Loop Surface EM (FLEM) to map potential deeper-seated conductors beyond the reach of DHEM. (***Figure 8***).*
- *A magnetotelluric (MT) survey is planned to infill gaps in the Orion 3D array and to achieve complete geophysical coverage across the project area, enabling an upgrade to the integrated joint inversion model.*

The Cox's Find prospect has been downgraded by the integrated inversion model and is no longer considered an open-pit target. However, strong copper mineralisation intersected in several legacy drillholes, as well as in hole KJD646 drilled in 2024, warrants further investigation.

- *A follow-up Downhole Electromagnetic (DHEM) survey is planned for KJD646 to determine whether the prospect should be downgraded or reconsidered as a potential target based on the results.*

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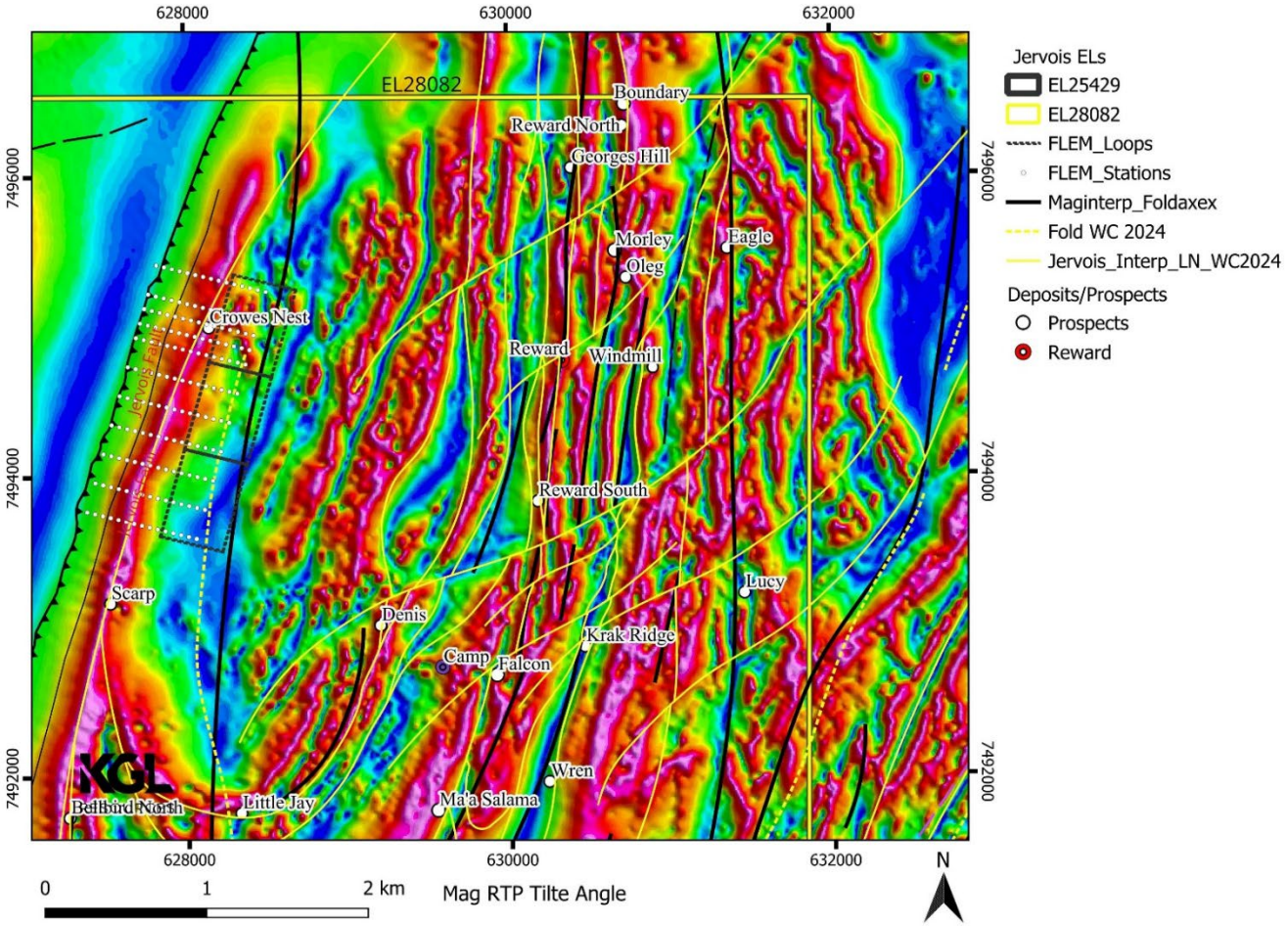

Figure 8. Reduced-to-pole (RTP) magnetic tilt angle over the northern section of the Jervois tenement, showing structural interpretations derived from magnetic data. The figure also illustrates the proposed FLEM loop and station locations over the western limb of the J-Fold.

Medium-Term Targets and Strategy

Two primary medium-term targets are prioritised for drill testing following the outcomes of the integrated inversion modelling:

- Area 2, located within EL25429 in the Jervois tenement, has been well constrained through geophysical and geochemical datasets. This target is now considered drill-ready.

  The area west of the Rockface North Lode and Rockhole prospect also presents a compelling opportunity. Although currently inaccessible due to rugged terrain, once the decline to Rockface is established, this zone will become more accessible and cost-effective for drilling from undergrounddrives.

- Area 3, located south of Rockface (Chubko trend) is a parallel trend to the known Rockface mineralisation. It has been validated by MT and gravity models, supported by IP chargeability anomalies, although it lies near the edge of current IP coverage.

Long-Term Opportunities within the Unca Creek Tenement (EL28082)

Several exploration targets have been defined and prioritised through integrated geophysical modelling and geochemical validation:

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The Becana–Pioneer trend adjacent to the north of the Jervois tenement remains a significant target, supported by results from joint magnetics-guided gravity inversions, single-domain gravity models, IP chargeability anomalies and historical drillhole copper intersections (**Figure 1, Figure 5**).

At Hamburger Hill, to the east of the Jervois tenement, legacy drilling intersected copper mineralisation. However, improved structural resolution from mag-guided gravity inversion now suggests the mineralised zone lies approximately 200 m south of previous drillholes, on the adjacent flat terrain (**Figure 1,Figure 5**)

Further MT surveying is planned to refine this interpretation and feed into the integrated model.

The Eastside prospects, located in the eastern portion of the Unca Creek tenement, consistently exhibit strong magnetic and gravity anomalies. Several of these responses have been attributed to mafic intrusions and remanent magnetisation, leading to a downgrade in their exploration priority, the southern portion of Eastside has been deprioritised. The outcome of the geophysical review and the presence of banded iron formation (BIF) outcrops in this area enhances the potential for a chemical trap and the development of ironstone/skarn-type mineralisation (IOCG).

Deep Resistivity Anomalies Indicate Untested Large-Scale System at J-Fold

Using the 3D Orion MT dataset, apparent resistivity mapping was undertaken for three different scenarios, including assumptions on effective crustal resistivities and skin depths: for a period of 0.01 seconds (shallower penetration depths), for a period of 100 seconds (deeper crustal penetration of 5-10 km) and for a period of 1000 seconds (over 10km crustal penetration).

For a period of 0.01 seconds, a conductive zone is aligned with the western survey area, corresponding to conductive cover. The xy component shows lower resistivities around near the Bellbird deposit. The yx component (right) reveals a conductive feature spatially aligned with Bellbird, suggesting a distinct structural or conductive lithology in that area. Overall lower resistivities are indicated in the yx component in the northern part of the survey area (central J-fold).

For a period of 100 seconds (5-10kms crustal penetration), the results are consistent with the apparent resistivity maps at short periods - the area west of the Jervois fault shows significantly lower resistivities and the yx component (right) reveals a strong conductive feature located along the central axis of the F3 fold.

For a period of 1000 seconds (over 10Km crustal penetration) the central J-fold lower resistivity response on the yx component remains strong (Figure 7). Overall lower resistivities are observed in the central survey area, and below the known mineralized zones, which is indicative for a **deep-rooted source of the deposits**.

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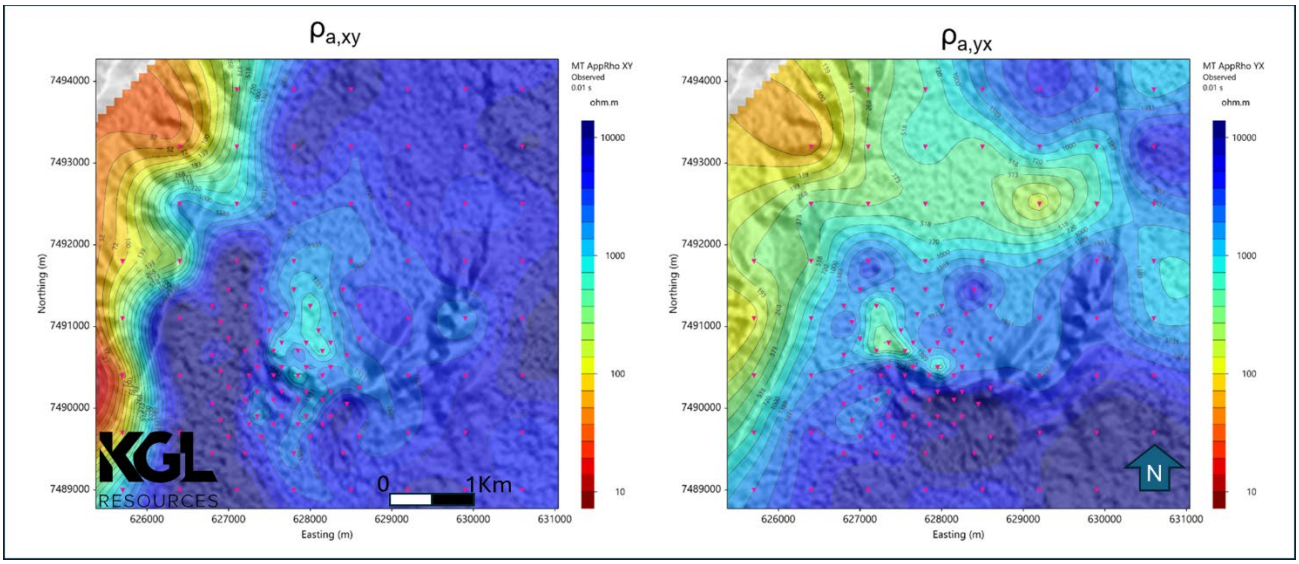

***Figure 9**. Apparent resistivity map for sounding period T=0.01s. Left: XY component of the impedance tensor. Right: YX component of the impedance tensor, displayed with contour lines representing resistivity values. Pink triangles denote MT station locations*

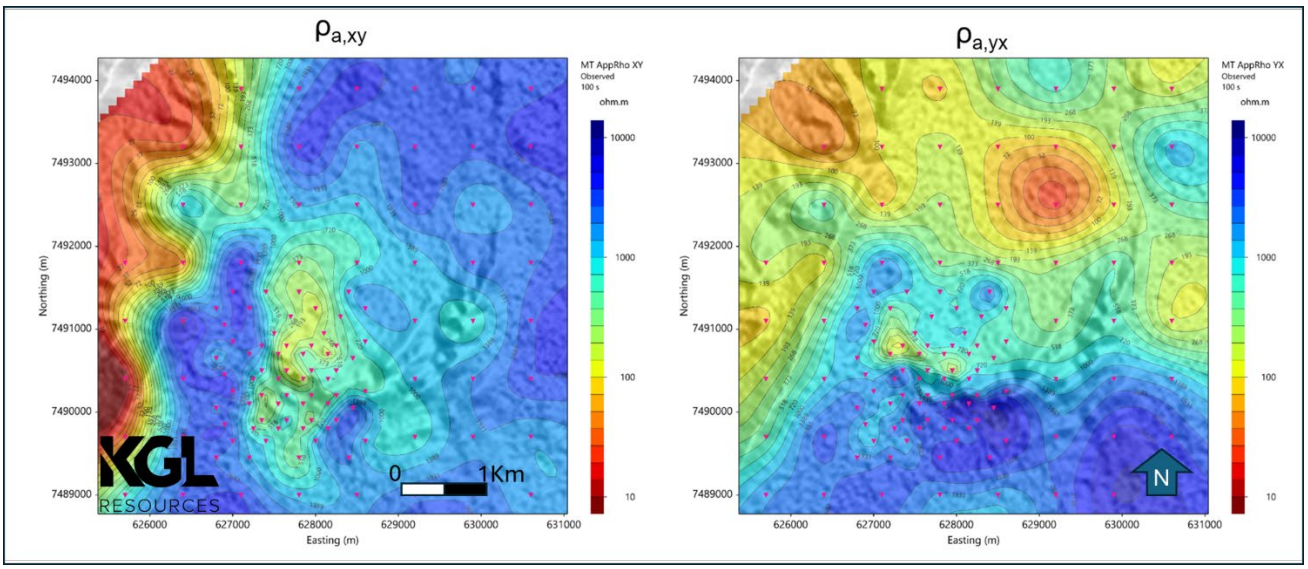

***Figure 10**. Apparent resistivity map for sounding period T=100s. Left: XY component of the impedance tensor. Right: YX component of the impedance tensor, displayed with contour lines representing resistivity values. Pink triangles denote MT station locations*

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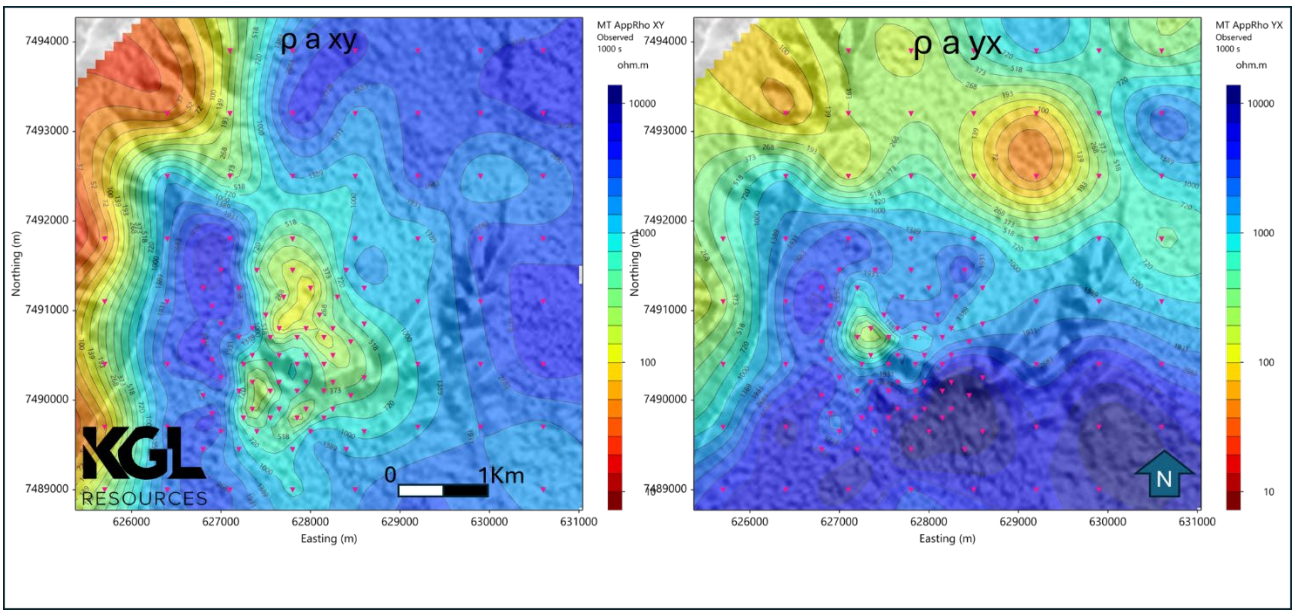

Figure 11. Apparent resistivity map for sounding period T=1000s. Left: XY component of the impedance tensor. Right: YX component of the impedance tensor, displayed with contour lines representing resistivity values. Pink triangles denote MT station locations.

Apparent resistivity mapping has identified a significant deep-seated low-resistivity feature beneath the central J-Fold, penetrating to depths exceeding 5km. This prominent conductive zone is interpreted to represent a major structurally controlled feature—potentially linked to alteration, fluid pathways, or mineralising systems associated with the J-Fold axial plane and the deeper Jervois Fault structure (Heinson, G., Didana, Y., Soeffky, P. et al., 2018). A smaller, less conductive anomaly beneath Bellbird may represent a subsidiary or less-developed system.

The integrated 3D Inversion Model resistivity data identifies two prominent low-resistivity areas at 3km below the central J-fold structure (Area 1 prospect) and the Bellbird-Rockface trend.

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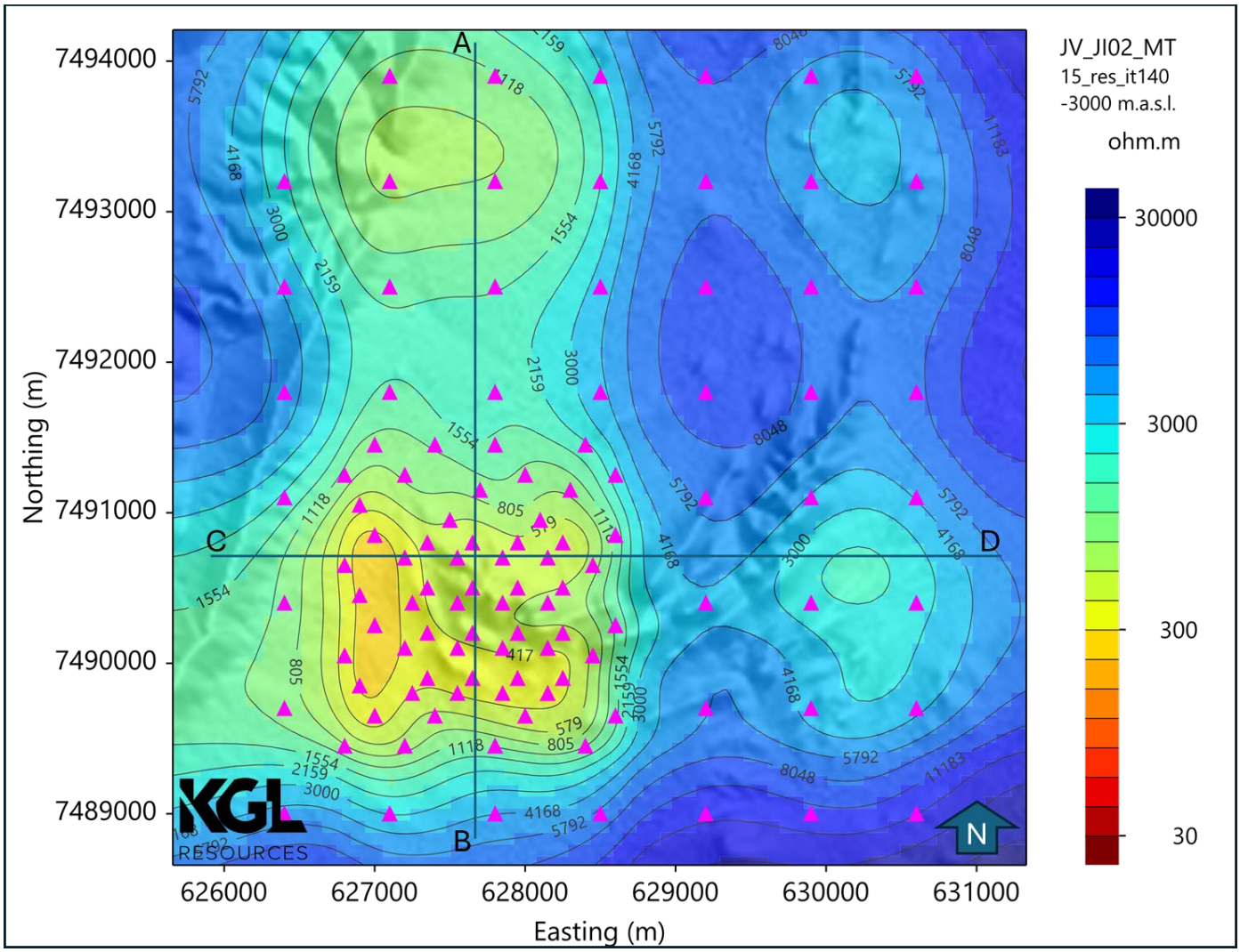

Figure 12. horizontal slice at -3Km of joint 3D MT model constrained with down hole information. indicating the 2 prominent resistivity lows under Bellbird and rockface trend and along the centre of J-fold (western limb) further north. Cross section lines AB and CD are shown in figures 13 and 14. MT stations location shown with purple tringles.

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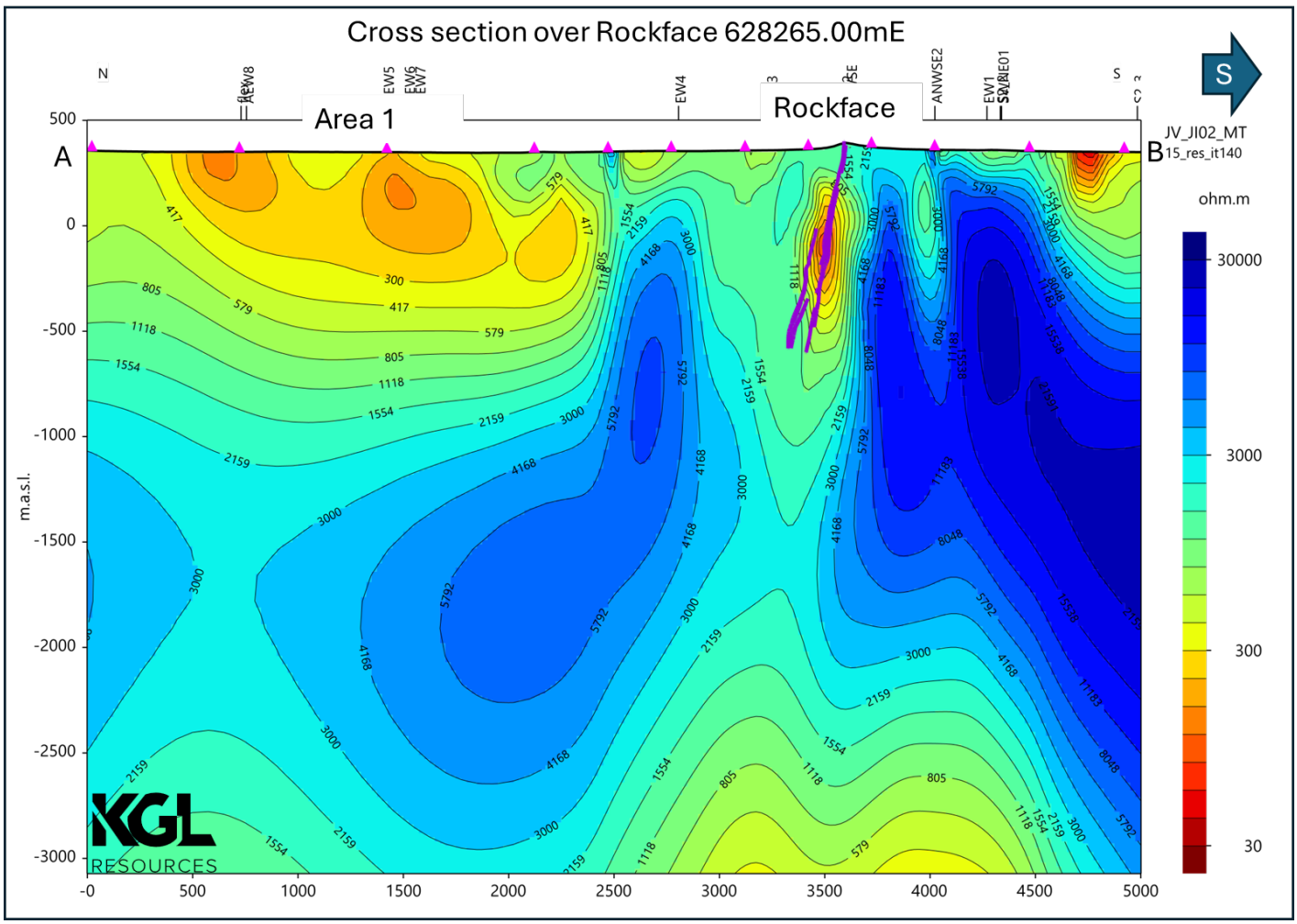

Figure 13. Cross section line AB over Rockface deposit (628265.00mE) of the joint MT 3D inversion model constrained with down hole information.

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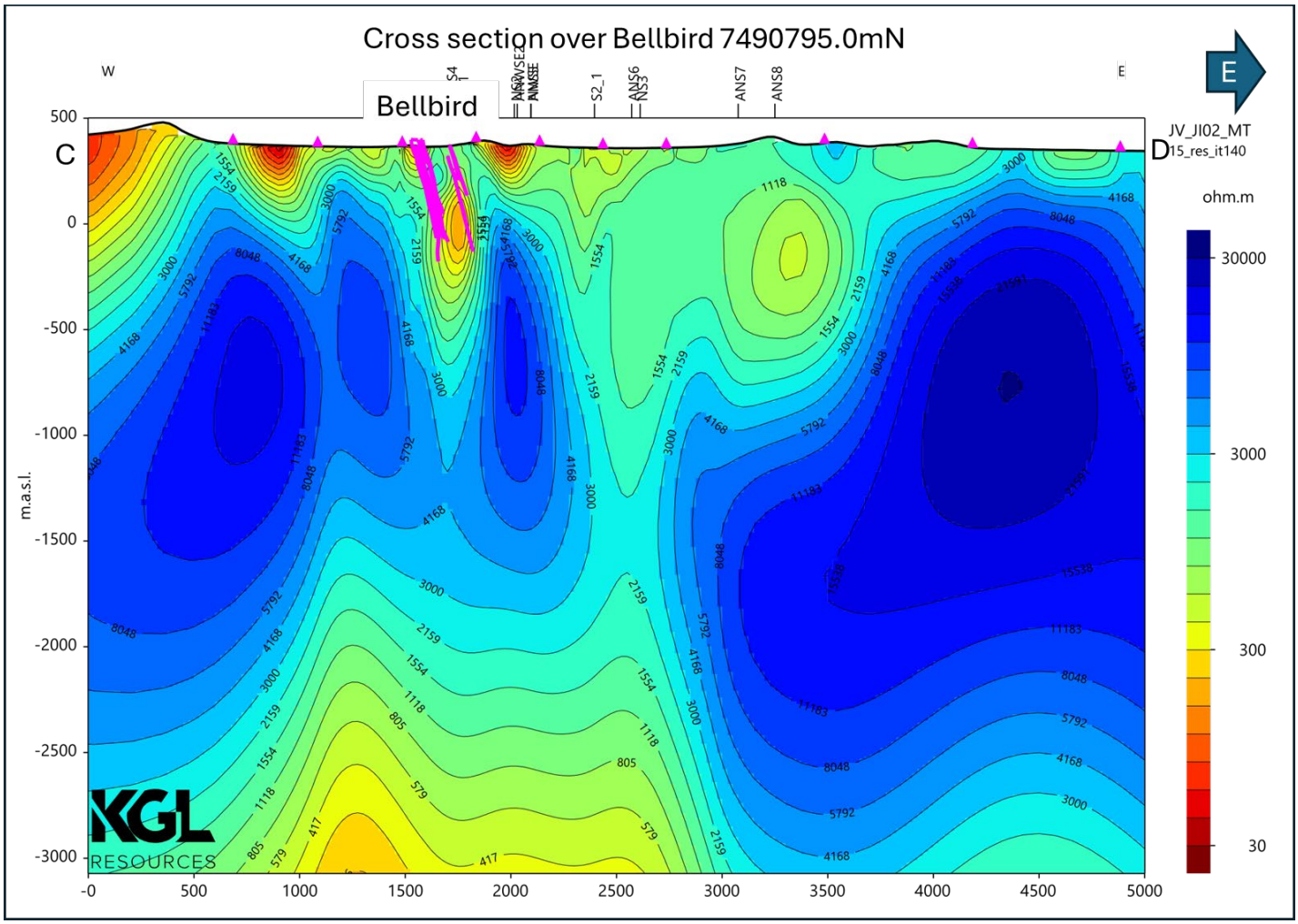

Figure 14. Cross section line CD over Bellbird deposit of the joint 3D inversion MT model, constrained with down hole information.

These findings provide the strongest geophysical evidence to date that **Jervois hosts a significantly larger and deeper mineral system than previously understood**.

Importantly, the results demonstrate that integrating additional geophysical inputs—such as resistivity data derived from Induced Polarisation (IP) surveys—could further improve model resolution and geological insight. Additionally, expanding MT survey coverage, particularly through infill over the southern corridor and extension across the broader Jervois Project, would substantially increase confidence in anomalies identified through single-domain inversions.

This announcement has been approved by the Board of KGL Resources Limited

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References:

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Competent Person Statement

The information in this report has been compiled by Atiq Amiri, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG). Atiq Amiri is a fulltime employee of KGL Resources. He has over 5 years of experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Amiri consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table

1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No new drilling was undertaken. Remodelling is performed based on existing data
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• No new drilling was undertaken. Remodelling is performed based on existing data

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• No new assays were undertaken. Remodelling is performed based on existing data
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No new assays were undertaken. Remodelling is performed based on existing data
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No new drilling was undertaken. Remodelling is performed based on existing data
Sample security	• *The measures taken to ensure sample security.*	• No new sampling was undertaken. Remodelling is performed based on existing data
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No new samples were taken. Remodelling is performed based on existing data

1.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Jervois Project is within EL25429 and EL28082 100% owned by Jinka Minerals and operated by Jervois operation (NT), both wholly owned subsidiaries of KGL Resources. • The Jervois Project is covered by Mineral Claims and an Exploration licence owned by KGL Resources subsidiary Jinka Minerals.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration has primarily been conducted by Reward Minerals, MIM and Plenty River.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• EL25429 and EL28082 lie on the Huckitta 1: 250 000 map sheet (SF 53-11). The tenement is located mainly within the Palaeo-Proterozoic Bonya Schist on the northeastern boundary of the Arunta Orogenic Domain. The Arunta Orogenic Domain in the northwestern part of the tenement is overlain unconformably by Neo-Proterozoic sediments of the Georgina Basin. • The stratabound mineralisation for the project consists of a series of complex, narrow, structurally controlled, sub-vertical sulphide/magnetite-rich deposits hosted by Proterozoic-aged, amphibolite grade metamorphosed sediments of the Arunta Inlier. • Mineralisation is characterised by veinlets and disseminations of chalcopyrite in association with magnetite. In the oxide zone which is vertically limited malachite, azurite, chalcocite are the main Cu-minerals. • Massive to semi-massive galena in association with sphalerite occur locally in high grade lenses of limited extent with oxide equivalents including cerussite and anglesite in the oxide zone. Generally, these lenses are associated with more carbonate-rich host rocks occurring at Green Parrot, Reward and Bellbird North.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No new drilling was undertaken. Remodelling is performed based on existing data

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Single domain (SD) gravity 3D inversion mesh contains ~5 million cells; 50×50 m core, padded to 30 km. • Lateral cell size grows 20% outside the core of survey area. • Vertical size: starts at 8 m at surface and increased by 8% to 340 m RL, 6% below –1000 m RL,and 20% below –4000 m RL. • Initial model: uniform density 0 g/cm³, reference 2.4 g/cm³. • Input:7,940 gravity points,

Criteria	JORC Code explanation	Commentary
		Complete Bouguer anomaly at 2.4 g/cm³ with error of 0.1 mGal. • Density bounds: –0.5 to +1.5 g/cm³ • Parameters: tauv/tauh: 0.01 / 0.1, betav/betah: 1 / 1, Z0v: 10. RMS misfit: 0.95 • Single domain Magnetic 3D inversion used the same mesh geometry as the gravity SD. • The start model was a uniform half-space, neutral susceptibility (µcgs). • Input data was 29,974 TMI points, 20 nT error. • Susceptibility range: –1000 to 10,000 µcgs. • RMS misfit: 1.37 with 20 nT error floor. • Single domain (SD) Magnetization vector inversion (MVI) was performed using: • Initial model: uniform half-space with neutral susceptibility (µcgs). • Input: 29,974 TMI measurements, • Error: 5 nT. • Regularization: matched to RLM3D inversion structure. • RMS misfit: 0.98, • Single domain (SD) magnetotellurics (MT) 3D inversion mesh consists of 1,959,900 cells. • the lateral cell dimensions are 30x30 meters (centre, over Bellbird deposit), in the wider space station increased to 80x80 meters. Vertically, the initial cell size at the surface is set to 8 metres. Below the surface, the vertical cell size increases gradually with depth by 8% per layer up to 340mRL, by 3% per layer for depths below -1000mRL and by 20% per layer for depths exceeding -4000mRL. • The starting model was a model with 100omh.m. • 114 MT soundings, full tensor complex impedances. • 32 frequencies from 0.01 to 1500 Hz. • Error floor: 5%. • Resistivity bounds: 0.5 to 50,000 Ω·m. • Distortion inversion: not applied. • Parameters: • tauv/tauh: 0.01 / 0.3 • betav/betah: 1 / 1 • Z0v: 10 • RMS misfit: 0.89 • Magnetic image-guided (pseudo geology-guided) inversions of the Magnetotelluric (MT) and gravity data were performed using structural constraints derived from the horizontal gradients of the magnetic tilt angle map, served as cross-gradient files to enhance structural coherence across geophysical models. • Additionally, drillhole-derived density data were used to further constrain the gravity inversion model. • The joint 3D inversions are based on the squared magnitude of the cross gradient. a cross product of gradient fields from two rocks' properties of resistivity and density. • Horizontal gradient maps were

Criteria	JORC Code explanation	Commentary
		derived in both the north–south (NS) and east–west (EW) directions. • To be used effectively as structural cross-gradient constraints in 3D inversion, these horizontal gradients were normalized by their maximum amplitude. This normalization ensures the values fall within the range of –1 to 1. • $grad_{x,y}$ / max($grad_{x,y}$) ∈ [–1, 1] • This method is introduced by the reference in the main boy of this report. A smaller cross product indicates similar structure. • Mathematical equation $\Phi_{\mathrm{res,den}}^{xg}(\vec{m}) = \int_V \|\nabla \vec{m}_{\mathrm{res}} \times \nabla \vec{m}_{\mathrm{den}}\|^2$ • Mag-guided MT: • Initial model: uniform resistivity of 100 Ω·m. • Input data:114 full-tensor MT soundings, of 32 frequencies from 0.01 to 1500 Hz, with 5% error floor on impedance. • Resistivity bounds: 0.5 to 50,000 Ω·m. • Distortion inversion: not applied. • Inversion parameters: tauv/tauh: 0.01 / 0.3, betav/betah: 1 / 1, Z0v: 10. • Magnetic-guided cross-gradient weight: 1.0. • Final RMS misfit: 1.08. • Mag-guided gravity: • Initial model: uniform density of 0 g/cm³, reference density 2.4 g/cm³. • Input data: 7,940 gravity measurements, • Complete Bouguer anomaly calculated at 2.4 g/cm³, with error of 0.1 mGal. • Density bounds: –0.5 to +1.5 g/cm³ • Inversion parameters: tauv/tauh: 0.01 / 0.1, betav/betah: 1 / 1, Z0v: 10. • Magnetic-guided cross-gradient weight: 5.0. • Final RMS misfit: 0.89 • Mag-guided gravity inversion model was further constrained with density measurement collected from drill core with a weak locking for down hole cells. • The joint inversion of the magnetic-guided gravity and MT data was based on initial models derived from prior inversions. Specifically, the resistivity model was initialized using the output from the magnetic-guided MT inversion, while the density model used the drillhole-constrained magnetic-guided gravity inversion as the starting point. Cross-gradient constraints, derived from the horizontal gradients of the magnetic tilt angle, were applied to both resistivity and density models. • MT data:109 full-tensor soundings • 32 frequencies (0.01–1500 Hz) • 5% impedance error floor • Bounds: 0.5 to 50,000 Ω·m

Criteria	JORC Code explanation	Commentary
		• No distortion inversion • Parameters: tauv/tauh: 0.01 / 0.3 betav/betah: 1 / 1 Z0v: 10 • Gravity data:3,558 measurements Complete Bouguer anomaly at 2.4 g/cm³ with error floor: 0.1 mGal • Bounds: –1 to +1.5 g/cm³ • Parameters: tauv/tauh: 0.01 / 0.1 betav/betah: 1 / 1 Z0v: 10 • Final RMS misfit: MT=1.22 Gra=1.0 •
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No new intercept reported. Remodelling is performed based on existing data.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer Figures in the report body
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All targets identified or further strengthened are based on the data aggregation above. • Inversion models are mathematical estimation of observed (measured) geophysical data. • Inversion models do not produce a unique solution. • Multiple models can fit the same dataset equally well, depending in multiple parameters such as initial model and constraints. • Survey extent, spares and uneven data points can generate low confidence anomalies. • MT survey extent is limited to southern J-fold only. Targets to the norther Jervois and all Unca creek tenement is based on single domain models and other geological information stated under next section below "other substantive exploration data" • Multiple single domain 3D inversion of these datasets performed previously. • MT stations spacing are not regular over the survey area, starts with 140m spacing at the centre of survey area (Bellbird), and widens toward the edge of survey extent up to 700m. • The result from all models were analysed with observed dataset and residual (observe – modelled) datasets produced. • Some of the targets identified may shift in location and strength with additional infill MT station planned. • All targets identified are based on the rocks' physical property of high magnetic, high density and low resistivity, not necessarily means mineralisation. •
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Outcrop mapping of exploration targets using Real time DGPS. • IP, Magnetics, Gravity, Downhole EM, down hole petrophysical information are all used for targeting and assessing the targets identified from the inversion models.

Criteria	JORC Code explanation	Commentary
		• Soil geochemistry results are used for targeting and evaluating the targets identified from the inversion models. • Information from drill core were used as constrained in the inversion models. • The down hole information included magnetic susceptibility, specific gravity, alteration domains and mineralisation wireframe were used as guide or constraints in the inversion models. • In the reported joint 3D inversion only MT, Gravity and Magnetic data utilised.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional geophysical survey of MT is proposed to cover the entire tenements and to infill the wider spaced stations. • Some identified targets are drill ready. But others need additional geophysical data and re-modelling. • Additional prospecting, fixed loop EM (FLEM) and downhole EM (DHEM) work is underway to pinpoint further targets for next phase of exploration.