ASX Announcement

24 Feb 2026

Gravity Breakthrough Reveals Large Copper–Gold System at Highway Reward

Key Highlights

- **High-density gravity imaging delineates a vertically extensive Copper–Gold VHMS system aligned with the Highway Reward mineralised trend and extending well below historic mining.**
- **The primary Highway Reward gravity anomaly extends well beyond the deepest historic mining (~390m vertical), indicating the core of the Copper–Gold system remains largely untested at depth.**
- **Gravity cross-sections define a coherent, vertically continuous anomaly consistent with a feeder-style sulphide system that remains open down-plunge and at depth.**
- **A shallow, undrilled extension of the Copper–Gold gravity anomaly has been identified proximal to the historic mine, exhibiting a comparable gravity response and interpreted to be linked to the same VHMS feeder architecture.**
- **Multiple additional Copper–Gold gravity anomalies have been identified along strike at Police Creek, Handcuff South and the newly recognised Blitz trend — all undrilled at depth and interpreted to represent repeat mineralised centres.**
- **Results support a camp-scale Copper–Gold VHMS exploration model, materially upgrading the scale potential of the Highway Reward Project beyond a single isolated deposit.**
- **With $5.6 million in funding, Loyal Metals is well positioned to accelerate integrated interpretation and drill-test these high-priority Copper–Gold targets [1].**

Loyal Metals Ltd (ASX:LLM) (**Loyal**, **LLM**, or the **Company**) is pleased to report high-density gravity results that materially upgrade the scale and depth potential of the Highway Reward Copper–Gold system.

The gravity data shows a strong spatial correlation with known Copper–Gold mineralisation at Highway Reward and delineates a coherent, vertically extensive high-density anomaly aligned with the established mineralised trend. Importantly, the anomaly extends well below the deepest historic mining (~390 m vertical), highlighting substantial untested potential beneath historic mine workings.

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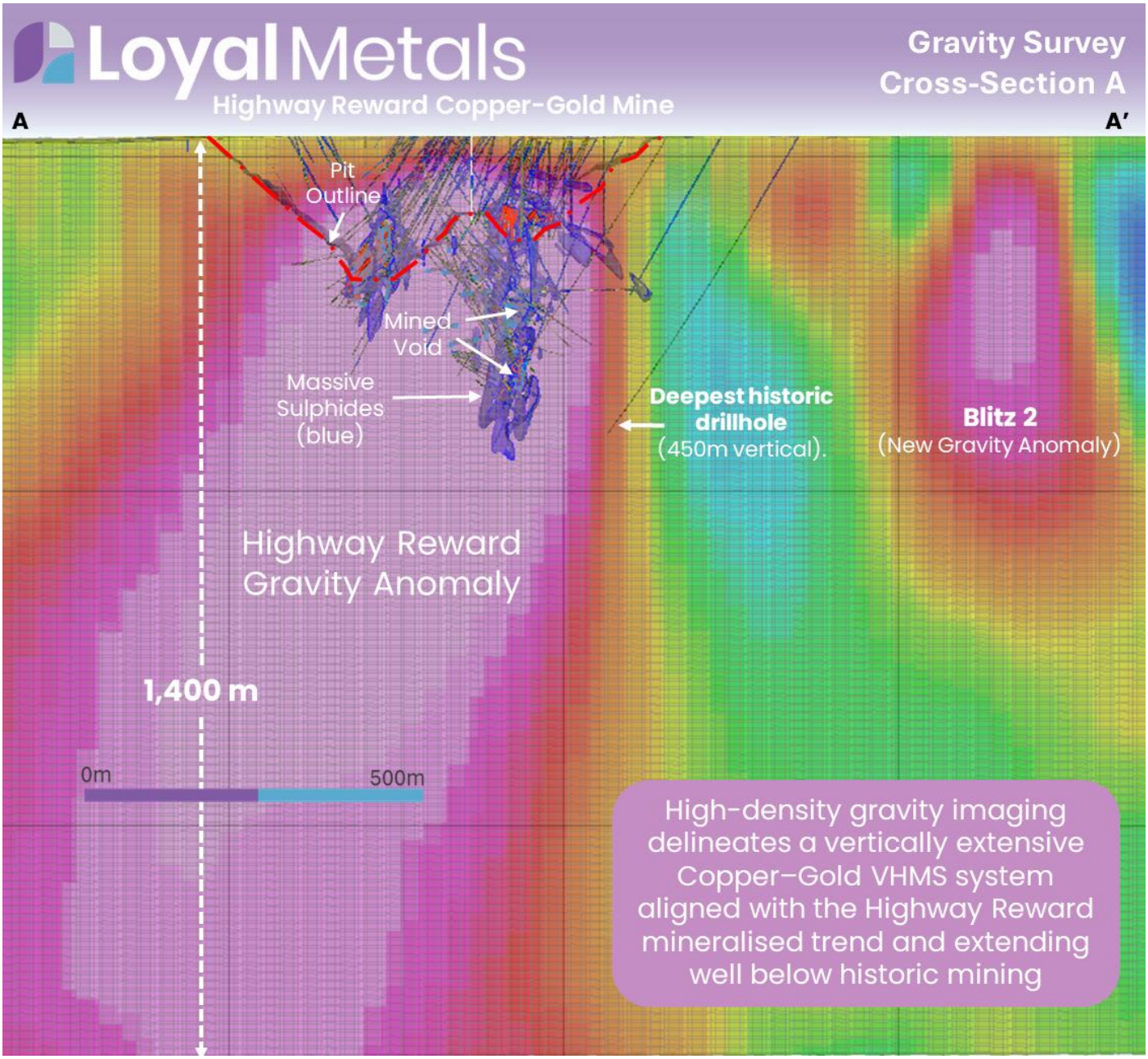

Image 1: Highway Reward gravity cross-section (Section A) showing the relationship between the gravity anomaly and known Copper–Gold mineralisation, including depth extent beneath historic mining.

Gravity cross-sections define a vertically continuous anomaly with geometry consistent with a feeder-style VHMS sulphide system that remains open at depth and down-plunge. In addition to the main system, a shallow, undrilled Copper–Gold gravity anomaly has been identified proximal to the historic mine, exhibiting a comparable gravity response and interpreted to be linked to the same feeder architecture.

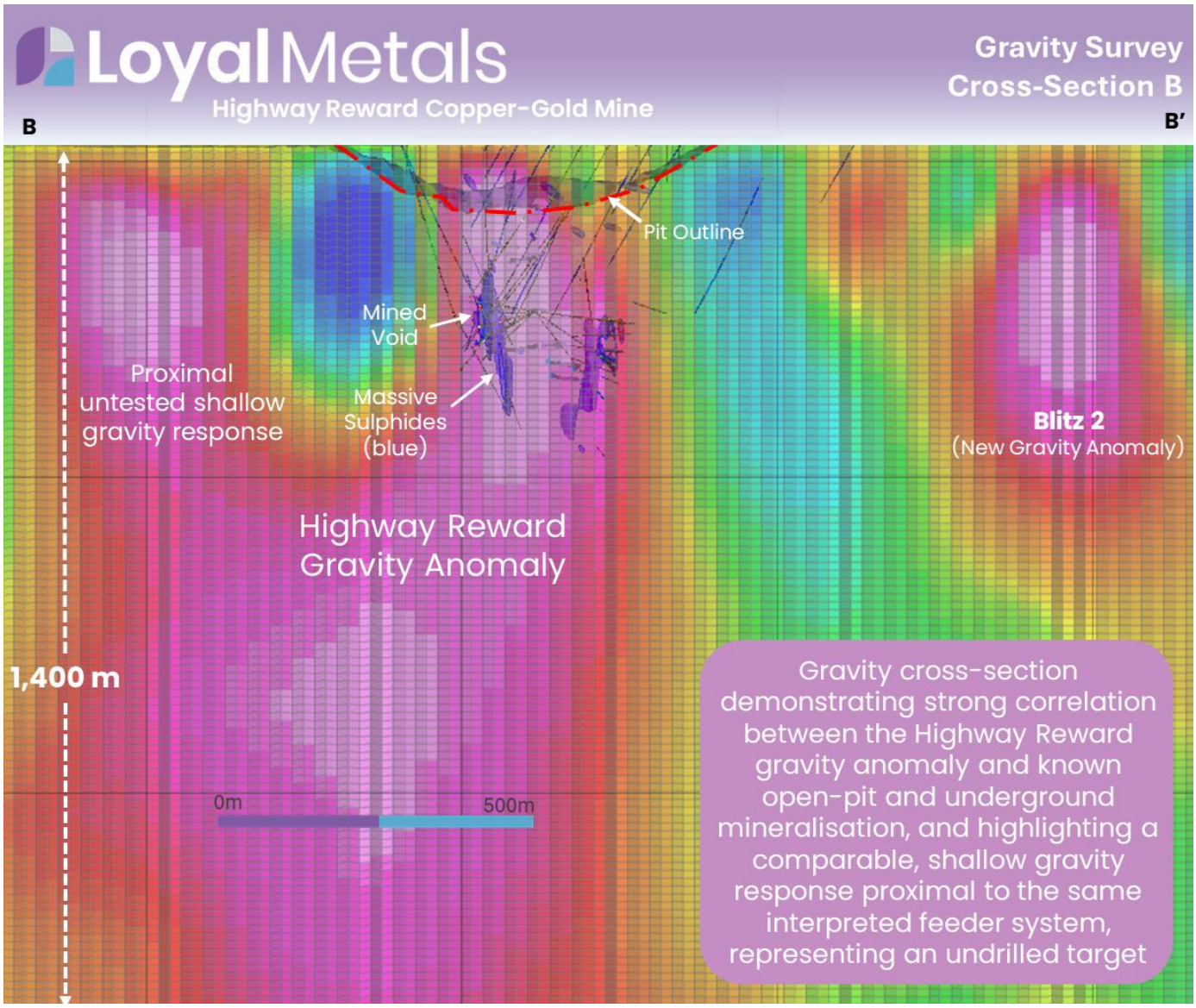

Image 2: Cross-section (Section B) demonstrating strong correlation between the Highway Reward gravity anomaly and known and a comparable, shallow gravity response proximal to the same interpreted feeder system, representing an undrilled target.

Highway Reward Gravity Anomaly – System Continuity at Depth

The gravity response at Highway Reward shows a strong spatial correlation with known open-pit and underground mineralisation, consistent with the density contrast expected from massive sulphide mineralisation relative to the surrounding volcanic host rocks. Gravity cross-sections demonstrate that the primary Highway Reward gravity anomaly extends well below the deepest historic mining (390 m vertical), highlighting significant untested potential at depth within the system. Importantly, the gravity anomaly persists beneath areas the historic mine workings, indicating that the core of the mineralised system remains largely unexplored at depth. This continuity supports the interpretation of a vertically extensive sulphide system that was not fully delineated or mined historically and reinforces the effectiveness of gravity data as a key vector for identifying additional mineralisation beneath and adjacent to the existing mine footprint.

Having established the continuity and depth extent of the Highway Reward Copper–Gold system, the gravity survey also highlights multiple additional, analogous anomalies along the broader mineralised corridor.

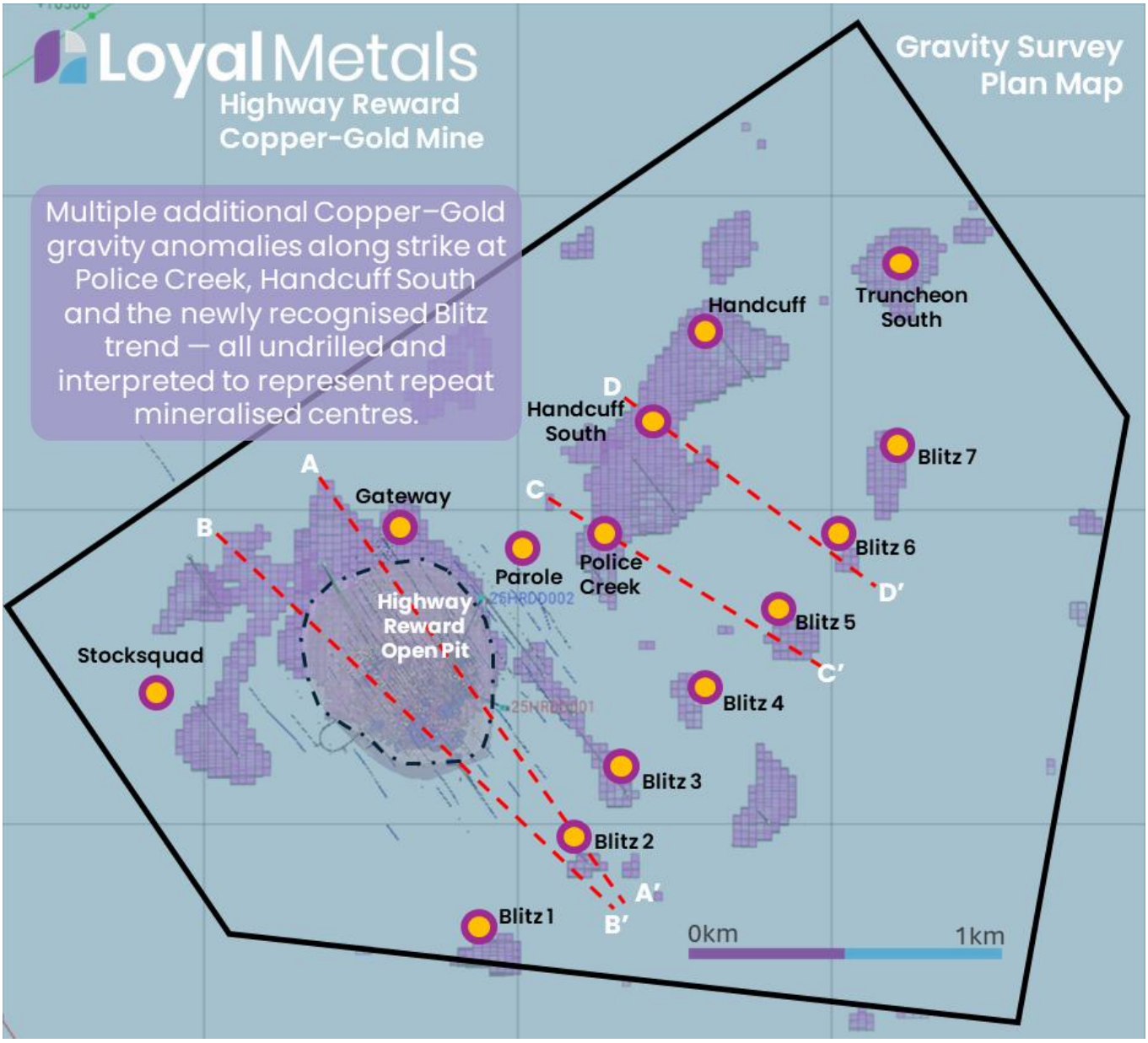

Image 3: Plan view of high-density gravity anomalies at Highway Reward; cross-section locations relative to the historic mine.

Other Prospects Along the Highway Reward Mineralised Trend

Beyond the historic Highway Reward mine footprint, the gravity survey has identified multiple discrete Copper–Gold anomalies at Police Creek, Handcuff South and the newly recognised Blitz trend. Each anomaly displays gravity characteristics analogous to Highway Reward and remains untested by drilling. Collectively, these results support a camp-scale VHMS exploration model, materially upgrading confidence in the potential for multiple Copper–Gold mineralised centres across the broader project area.

These prospects were identified historically but were only subject to limited surface work and shallow drilling, and were never effectively tested at depth using modern, high-resolution geophysical techniques.

Loyal Metals Managing Director, Mr. Adam Ritchie, commented:

"The new gravity imaging has fundamentally upgraded our understanding of Highway Reward. The data indicates a large, vertically extensive Copper–Gold system that extends well below historic mining, with the core of the system remaining untested. Multiple additional gravity anomalies along strike reinforce our view that Highway Reward represents a broader camp-scale VHMS system, with the potential for significant new Copper–Gold discoveries at depth and across the project area."

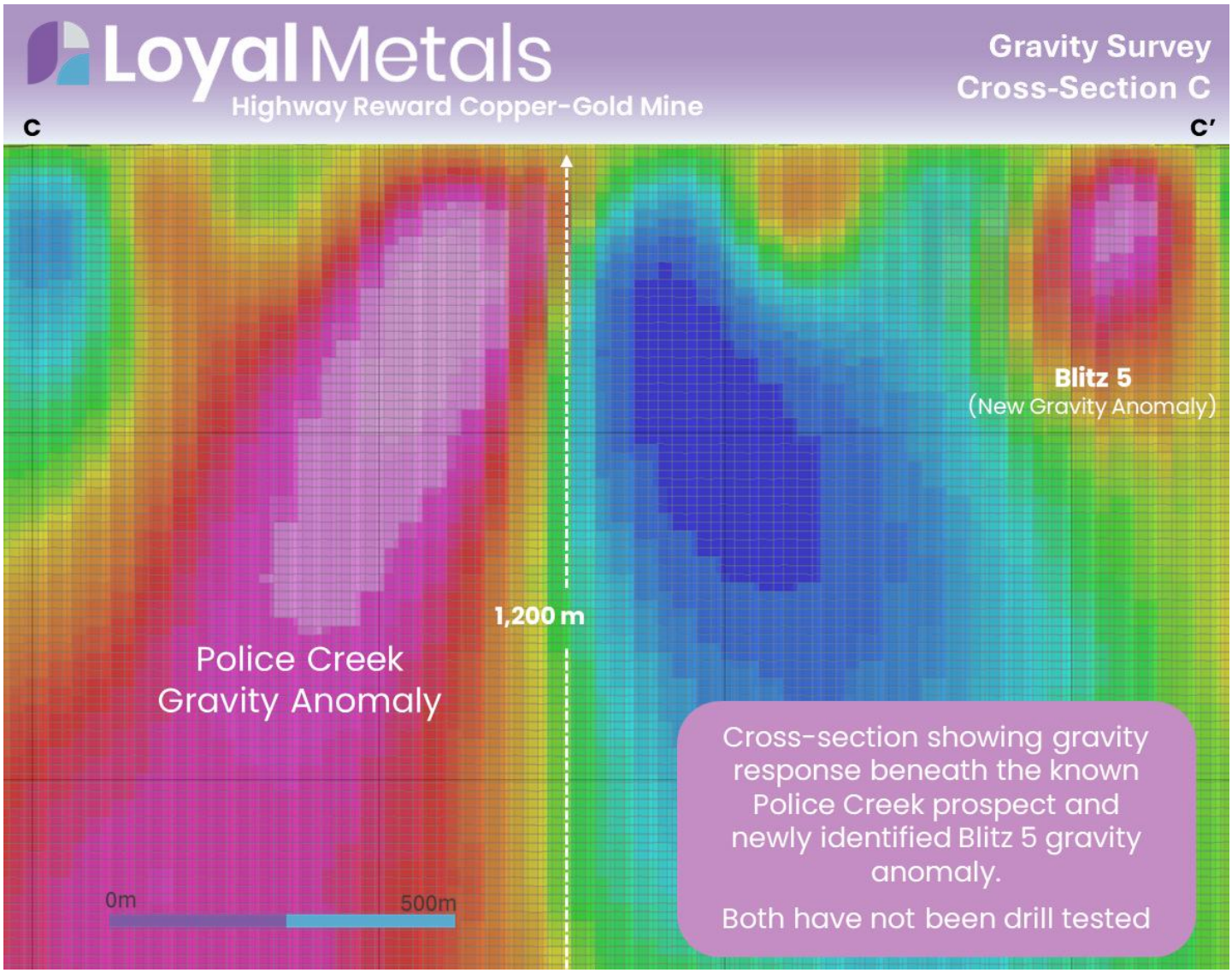

Image 4: Gravity cross-section showing the Police Creek and Blitz anomalies along the Highway Reward mineralised trend.

The recently completed high-density gravity survey has fundamentally changed this understanding by identifying multiple discrete, coherent gravity anomalies near these prospects with density responses analogous to the Highway Reward system. Importantly, gravity modelling demonstrates that historical drilling at these locations did not test the anomalies, confirming that significant portions of the mineralised corridor remain unexplored. These results reinforce the interpretation that the Highway Reward trend represents a broader, camp-scale VHMS system with multiple underexplored centres of mineralisation distributed along strike and at depth.

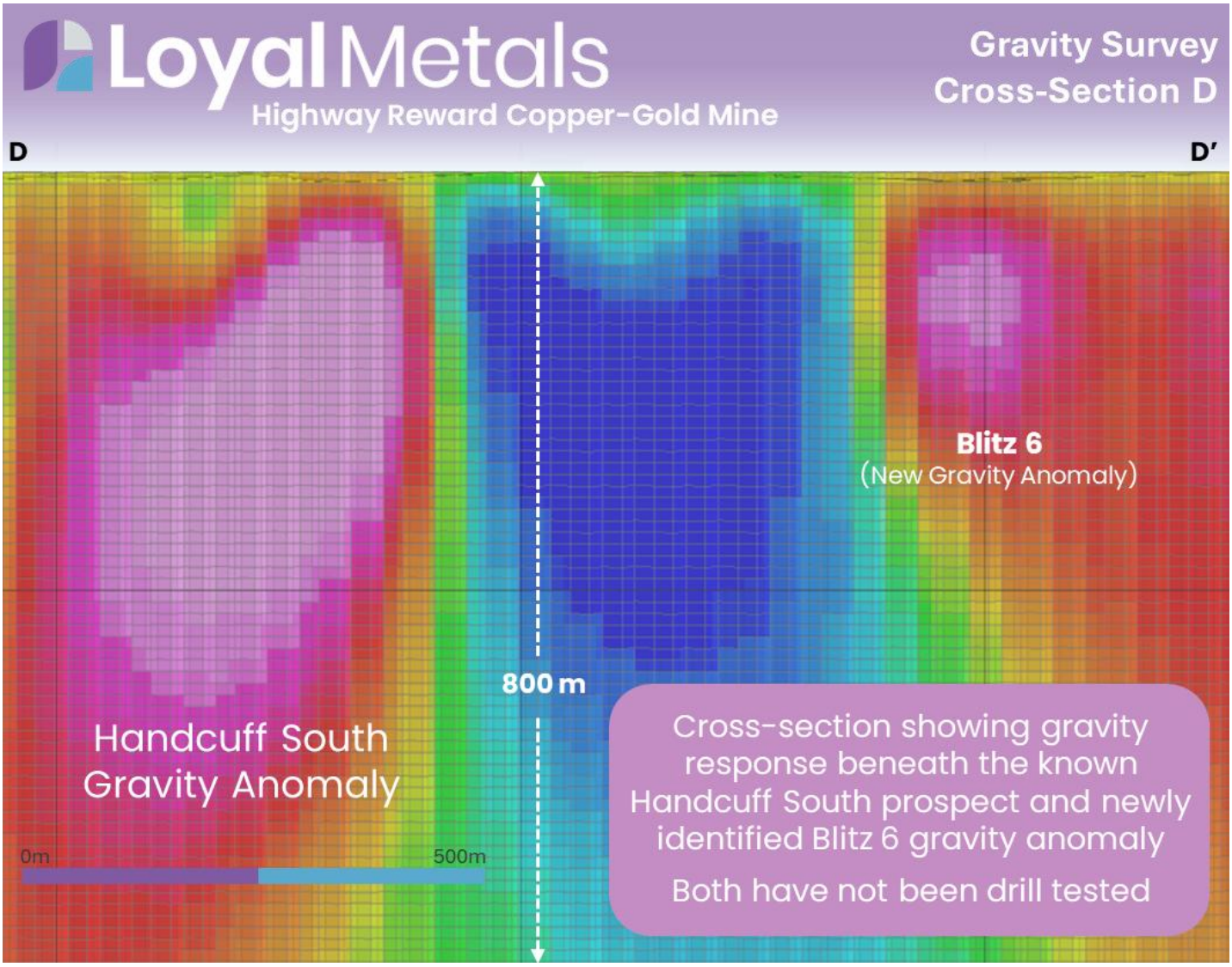

Image 5: Gravity cross-section showing the Handcuff South and Blitz anomalies along the Highway Reward mineralised trend.

Next Steps and Timeline

Loyal is integrating the gravity results with existing geological, geochemical and drilling datasets, together with recently acquired 3D induced polarisation (3DIP) and magnetotelluric (MT) data. Integrated interpretation is underway, with target refinement and prioritisation focused on high-confidence Copper–Gold drill targets beneath the historic mine and along the broader mineralised corridor, guiding follow-up drilling programs.

This announcement has been authorised for release by Loyal Metal's Board of Directors.

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About Loyal Metals

Loyal Metals Limited (ASX: LLM) is a well-structured listed resource exploration company with projects in Tier 1 North American and Australian mining jurisdictions. Through the systematic and technology enhanced exploration of its projects, the Company aims to delineate JORC compliant resources, creating value for its shareholders.

AI Enhanced Exploration

Loyal Metals is integrating artificial intelligence (AI) across its exploration workflow—from prospectivity modelling to corporate communication and investor engagement. The Company leverages VRIFY's DORA platform for intelligent drill targeting geological modelling, and high-volume data integration while the Relait Investor Centre to delivers immersive, interactive updates to shareholders. Additionally, ChatGPT-powered tools are being trialled internally to support corporate communications, technical documentation, and operational planning. This multi-platform AI strategy positions Loyal Metals at the forefront of modern mineral discovery, enabling faster decision-making, improved resource definition, and more transparent communication with shareholders.

Competent Person's Statement

The information in this report that relates to Geophysical Exploration Results is based on information compiled by Mr Barry Bourne, who is employed as a Consultant to the Company through geophysical consultancy Terra Resources Pty Ltd. Mr Bourne is a fellow of the Australian Institute of Geoscientists and a member of the Australian Society of Exploration Geophysicists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bourne consents to the inclusion in the report of matters based on information in the form and context in which it appears.

Competent Person's Statement

The information in this report that relates to Exploration Results is based and fairly reflects, information reviewed by Mr Allingham, who is a Fellow of the Australian Institute of Geoscientists. Mr Allingham has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results (JORC Code). Mr Allingham consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

Future Performance

This announcement may contain certain forward-looking statements and opinions. Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties, assumptions, contingencies and other important factors, many of which are outside the control of the Company and which are subject to change without notice and could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Loyal Metals Limited.

List of References:

1 ASX LLM Announcement – 29 January 2026 - Quarterly Activities Report for the Quarter Ending 31 December 2025.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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.*	Terra Resources Pty Ltd (Terra) – Perth – Geophysicists - designed, sourced and recommended contractors, and implemented, supervised and managed contractors, and interpreted a gravity geophysical survey across the entire ≈6.7km2 area of the Highway Reward Mining leases of the Highway Reward Copper Gold Project. Terra completed 3D modelling and interpretation of historical gravity data and the integration with other geological data.

Criteria	JORC Code explanation	Commentary
	• *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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	In 2025, an infill gravity survey was completed on a 100 × 100 m grid - manually planned between historical gravity stations (manually planned due to open pit, public highway and other infrastructure). Atlas Geophysics completed the gravity survey using a Scintrex CG5 or CG6 gravity meter, with 100m spaced gravity stations in November/December 2025. The 2025 survey conducted by Atlas Geophysics was tied to the AFGN via control station 2023990007 located at the Charters Towers Airstrip terminal. The objective of the infill gravity survey was to better define the gravity features found historically, with historical summary information alluding to the fact that a distinct gravity high signature was found across the VHMS massive sulphide pipes pre-mining. However, processing and merging the 2025 gravity data with the historical datasets proved challenging (see historical data below). The 2025 gravity data were merged with the 1987 and 1997 datasets. Note that the 1987 and 1997 gravity data were reprocessed prior to merging with the 2025 data. 3D modelling was undertaken using both the historical datasets alone and, in a second inversion, using the merged 2025 and historical gravity data. A 3D unconstrained inversion was conducted using the 1987 and 1997 gravity datasets. The CBA267 grid was used for the modelling. The inversion was performed at a cell resolution of 25 × 25 × 12.5m. A digital elevation model (DEM) derived from the historical airborne magnetic surveys was used in the modelling. A 3D unconstrained inversion was conducted using the merged 2025 gravity data and the 1987–1997 gravity datasets. The CSCBA267 grid was used for the modelling. The inversion was completed using the same cell resolution as the previous modelling (25 × 25 × 12.5m). The modelling results are very similar to the three-dimensional models derived from the historical gravity data, as expected. However, the inversion shows reduced sensitivity at greater depths. High-density isosurfaces (0.13 to 0.20 g/cc) were displayed together with the geology map. The density values were provided in g/cc. Generally, Terra Search used a background density of 2.67 g/cc when processing the gravity data. The inversion results represent a

Criteria	JORC Code explanation	Commentary
		density contrast that are added to this background density. For example, if the density inversion result (isosurface value) is 0.1569 g/cc, this is added to the background density of 2.67 g/cc to give an actual rock (or massive sulphide) density of approximately 2.826 g/cc. The modelling suggests that the main gravity anomaly (density body) extends well beyond the limits of the current drilling and/or Mining. In addition, several other discrete gravity anomalies have been modelled to the north-east of the Highway Reward Mine. Four 3D modelling Isosurfaces were provided to Loyal as follows: HWR_8797_Grav_CBA267_Inv_Dens_High_Isosurfaces.dxf HWR_Grav_2025_Merge_Inv_Dens_High_Isosurfaces.dxf 3D Modelling Geosoft VOXELS HWR_8797_Grav_CBA267_Inv_Dens.geosoft_voxel HWR_Grav_2025_Merge_Dens.geosoft_vox Models were in the format of Geosoft voxels, OMF files and 3D DXF files for the isosurfaces.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	N/A
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.*	N/A
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate*	N/A

Criteria	JORC Code explanation	Commentary
	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.*	
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.* • *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.*	N/A
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	Atlas Geophysics completed the gravity survey using a Scintrex CG5 or CG6 gravity meter, with 100m spaced gravity stations. The data was processed and interpreted by Terra Resources (geophysical consultants) using standard industry procedures.
Verification of sampling	• *The verification of significant intersections by either independent*	N/A

Criteria	JORC Code explanation	Commentary
and assaying	*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.*	
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.*	Located relative to the Highway Reward local ,ine grid, and AMG66 zone 55. Mine Local Grid — AMG66 Zone 55 Pt1 11456.44N ™ 7748523.11N 20682.07E 417666.46E 1100RL 100RL Pt 2 10153.35N ™ 7747528.57N 21000.05E 416766.42E Magnetic North ™ AMG66 North + 8° Mine Grid North ™ Magnetic North + 48° Mine Grid North ™ AM66G North + 56° Local/Mine grid North is oriented 55.857 east of AMG66 North.
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.*	.100m x 100m gravity stations.
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.*	100x100m regular grid.
Sample security	• *The measures taken to ensure sample security.*	Data was transferred daily to the consultant's head office and also copied onto management consultant Terra Resources.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Historical gravity survey data aligned well with the 2025 gravity survey where similar gravity data was found, with the 2025 data greatly enhancing the resolution, especially at depth.

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 project is composed of four mining leases (ML) 1571, 1734, 1739 and 10028 and one Mining Lease at Big Magpie ML 1758 (Thalanga Copper Mines Pty Ltd). **Acquisition Terms** On 1 July 2025, Loyal entered into a share sale agreement (Share Sale Agreement) with Highway Copper Gold Pty Ltd (HCG) to acquire 100% of the fully paid ordinary shares of HCG (Acquisition). The Acquisition ensures that Loyal has exclusivity to undertake exploration on the tenements comprising the Highway Reward Project and Big Magpie Project in Queensland, Australia (Tenements). *Option Agreement* On 27 June 2025, HCG entered into a binding option agreement (Option Agreement) with Thalanga Copper Mines Pty Ltd and BML Holdings Pty Ltd (together, the Vendors) pursuant to which the Vendors granted HCG an option to undertake exploration on the Tenements (Option). The term of the Option is 12 months and may be extended by 6 months upon agreement by the parties. The key terms of the Option Agreement were announced on the ASX: LLM - 02 July 2025 Loyal to Acquire The High-Grade Highway Reward Copper Gold Mine
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The Highway Reward gravity surveys are located approximately 32km south of Charters Towers Qld along the Gregory Developmental Road.

Permit number	Area (ha)	Permit name	Expiry date	Authorised holder name
ML 1734	457.1	REWARD	31-Aug-27	THALANGA COPPER MINES PTY LTD
ML 1739	204.9	REWARD EXTENDED	31-Oct-26	THALANGA COPPER MINES PTY LTD
ML 1571	26.92	HIGHWAY EXTENDED	31-Oct-26	THALANGA COPPER MINES PTY LTD
ML 10028	2	THE HIGHWAY	31-Oct-26	THALANGA COPPER MINES PTY LTD
ML 1758	66	THE BIG MAGPIE	31-Oct-27	THALANGA COPPER MINES PTY LTD

Criteria	JORC Code explanation	Commentary
		Geophysical surveys were conducted between 1987 and the most recent described in this announcement for 2025. The 1987 survey was acquired by Terra Search for City Resources, stations (50m x 50m stations). In 1997 RGC Exploration commissioned an extension to the 1987 survey (100m x 100m stations). This survey was acquired by Haines Surveys. It is important to note that the 1987 and 1997 surveys were not tied to the Australian Fundamental Gravity Network (AFGN). Rather an arbitrary base was used which was a join in concrete slabs at the RGC Exploration office in Charters Towers. Two versions of the 1987 and 1997 gravity surveys were received. One version had been reprocessed by Atlas but the 1987 surveys sits noticeably lower than the 1997 survey. There is no documentation describing the processing undertaken by Atlas. RGC Exploration processed 1987 and 1997 surveys fit together well and these data are used to merge with the 2025 gravity survey. Note the 1987 and the 1997 survey fit together well. The 1987 and 1997 surveys had had terrain corrections applied whereas the 2025 survey was not corrected for terrain effects. The 1987 survey was acquired prior to major mining activity. The 1997 and 2025 survey were acquired post major mining activity. In order to apply terrain corrections to the 2025 survey the SRTM DEM for a large area surrounding the mine was downloaded from the Qld Department of Natural Resources and Mines. Since the SRTM data was acquired in 2000 it was not known if further mining activity between 2000 and 2025 had altered the DEM. Fortunately an airborne EM survey was conducted in 2025 with 2 lines of the survey (100m spacing) were flown directly over the pit and several lines over the waste dump. This confirmed that the SRTM data was suitable to use for terrain correcting the 2025 data. The DEM from the 2025 survey was stitched into the SRTM DEM and Oasis Montaj gravity processing software was used to generate the corrections to be applied to the 2025 Bouguer anomaly data to calculate a complete Bouguer anomaly dataset. Since the 1987 and 1997 surveys had not been tied to the AFGN, Bouguer values at eight coincident stations between the 1987/1997 and 2025 surveys

Criteria	JORC Code explanation	Commentary
		were queried. The mean difference between them was 185.410mGals. This figure was subtracted from the 1987/1997 data to create a “pseudo tie” to the AFGN. This “pseudo tie” facilitated the merging of the 1987/1997 and the 2025 surveys. These merged data were gridded at a 50m cell size. Note the minor differences ~ 0.3MGal between the 1987/1997 surveys and the 2025 survey along the slopes of the waste dump. This is most likely due to the DEM (25m cell size) being under sampled on the slopes of the waste dump.
Geology	• *Deposit type, geological setting and style of mineralisation.*	**Regional Geology** The Highway-Reward deposit is hosted within the Trooper Creek Formation, one of four formations within the Seventy Mile Range Group. The Trooper Creek Formation comprises a complex suite of rhyolitic, dacitic and andesitic lavas, syn-sedimentary intrusions, volcaniclastic rocks and volcanic and non-volcanic siltstone. Combined, features such as andesite pillow lavas, sandstone turbidites, hyaloclastite, peperite and fossils suggest a submarine below-storm-wave-base depositional setting for the bulk of the Trooper Creek Formation. However, parts of the succession were deposited above storm wave base and may have been partly emergent. The Seventy Mile Range Group has been metamorphosed to lower greenschist faces and affected by three deformations of equivocal age. In the east, the syn-deformational early regional metamorphic assemblage has been overprinted by hornblende hornfels assemblages, which form contact metamorphic aureoles around post-kinematic granitoids of the Lolworth-Ravenswood Batholith. The Trooper Creek Formation hosts three significant massive sulfide deposits (Thalanga, Highway-Reward and Liontown) and several prospects including Waterloo, Handcuff, Big Magpie and Warrawee. The zinc rich Thalanga Deposit is the largest known VHMS deposit in the Seventy Mile Range Group and occurs within the Trooper Creek Formation at the contact with the underlying Mount Windsor Formation. The remaining VHMS deposits, including Highway-Reward, occur within the Trooper Creek Formation. Structural deformation in the area is dominated by a seven-kilometre-wide shear zone, trending north-east and termed the Policeman Creek Shear. Locally, this zone is typified by a pervasive upright cleavage and higher strain zones with an

Criteria	JORC Code explanation	Commentary

anastomosing hourglass fabric.

The Highway-Reward copper-gold system and the Handcuff-Truncheon base metal sulphide system are located within a broad northeasterly trending regional structural zone known as the Mount Leyshon Corridor. This 7km wide corridor (Policeman Creek Shear Zone) has been interpreted as a reactivated transform fault zone, invoked by extensional rifting during the formation of the back arc basin. The regional structure trends through the Highway-Reward, and Handcuff-Truncheon areas and extends to the now depleted Mt Leyshon gold mine hosted within a younger porphyry breccia system to the northeast.

Host Stratigraphy

The host succession to the Highway-Reward deposit was originally interpreted to comprise rhyolitic lavas separated by three horizons of volcaniclastic and sedimentary facies (VS1, VS2, VS3), however, detailed drill core logging mapping has subsequently demonstrated that the deposit is hosted in the proximal facies association of a syn-sedimentary intrusion-dominated volcanic centre.

Massive coherent rhyolite, rhyodacite and dacite and associated in-situ or resedimented hyaloclastite and peperite are the principal faces in the environment of mineralisation. The distribution and arrangement of these facies is the basis for determining the mode of emplacement. Upper contact relationships are critical in evaluating intrusive versus extrusive emplacement, as basal contacts can be similar. The peperitic upper margins of many porphyries demonstrates that they intruded wet poorly consolidated sediment. Syn-sedimentary sills, cryptodomes and a single partly extrusive cryptodome have been recognised. Contact relationships and phenocryst mineralogy, size and percentages indicate the presence of thirteen distinct porphyritic units in a volume of 1 x 1 x 0.5 km.

Porphyries intruded or were overlain by a volcaniclastic and sedimentary faces association comprising suspension-settled siltstone, graded turbidic sandstone and thick, non-welded pumice- and crystal-rich sandstone and breccia units. Pumiceous and crystal-rich deposits record episodes of explosive silicic volcanism in an extra-basinal or marginal basin environment and were emplaced by cold water supported high-concentration turbidity currents. Andesite dykes cut across the massive sulfide and altered host rocks. The sedimentary facies that indicate a submarine,

Criteria	JORC Code explanation	Commentary
		below-storm-wave-base environment of deposition for the volcanism and massive sulfide deposition. At Highway-Reward, beds generally dip (10-30°) and face southeast. The deposit is hosted by volcano-sedimentary rocks of the Cambro-Ordovician Seventy Mile Range Group. The dominant structural trend is northeast (axial planar cleavage to a synclinal(?) fold) with a strong slaty cleavage striking 050°, dipping steeply SE. Significantly the strike of the massive copper and gold sulphide pipes found to date are all oriented parallel to this cleavage and are discordant with stratigraphy. Zinc and lead sulphides (+/- gold) have been found mainly concordant with stratigraphy. The deposit comprises two main discordant pyrite-chalcopyrite pipes: Highway and Reward with an additional pipe called Conviction which is interpreted to form part of the Highway pipe, although recent modelling suggests that it is a separate sulphide pipe. Reward is a “blind” orebody, discovered in 1987 after a long history of exploration by various companies in the area. The Highway pipe was discovered in 1990 and is located approximately 200 m NNW of the Reward orebody beneath an initially small, abandoned Highway oxide gold open pit. The main Reward pyrite-chalcopyrite pipe occurs under 10-100 m combined thickness of Tertiary fluviatile sediments (Campaspe Formation) and deeply weathered gossanous volcanic rocks. The base of complete oxidation at Highway is at approximately 50m below surface. Over the Reward deposit this deepens rapidly to 120-150m coincident with the thickening of the younger (Tertiary) Campaspe Formation. The deposition of this formation presumably promoted deeper weathering over Reward, and its location may be controlled by the relative nature of the host rocks in the upper parts of the Highway and Reward pipes. The host rocks to the sulphide bodies are rhyolitic to dacitic lavas and volcaniclastic sediments. These rocks vary in competency due to a combination of primary rock type (lava or sediment) and the overprinting alteration. The Highway massive sulphide body lies beneath 100 m of weathered and Au-barite-bearing gossanous rhyodacite, the bulk of which has now been mined out. The mineralisation can be divided into five main types. These are: (1) primary pyrite-chalcopyrite pipes; (2) supergene Cu (chalcocite and covellite) and Au above and surrounding the Reward pipe, (but laying more southwest of and therefore may be the supergene expression of a separate pipe to

Criteria	JORC Code explanation	Commentary
		Reward), (3) gossanous Cu-Au-rich mineralisation above the sulphide zone; (4) disseminated, vein-style and stratabound pyrite-sphalerite-galena-barite mineralisation at the margins of the pipes and in the hanging wall; (5) footwall and hanging wall pyrite-quartz veins. The Reward pipe contains significant pyrite with primary chalcopyrite-rich zones. Overlying the primary mineralisation, is a variable supergene chalcocite-covellite rich zone, occurring above where the pyrite pipe contains chalcopyrite lenses. A historical oxide resource of gold overlay the supergene copper-gold zone. The Highway orebody contains pyrite of which over half is mineralised significantly with interstitial and massive chalcopyrite. The majority of the Highway pipe was mined in the Highway open pit (220m vertical depth) with the last portion of the orebody mined in the Highway South underground. The Highway and Reward massive sulphide pipes are each approximately 150 metres long, trending northeast-southwest (north-south on mine grid), although they converge towards the northern end in a region known as North Reward. Although the Highway and Reward Sulphide pipes thin at depth, there was significant copper in the floors of the final underground ore drive levels and there are significant copper-gold drill intercepts below the completed underground workings. Historical IP and gravity geophysics data suggest continuations at depth with new geophysical data (3D-IP, Magnetotellurics, Gravity) being collected.

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.*
		.

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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.*	Geosoft voxels OMF files 3D DXF files for the isosurfaces
	• *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.*	All deliverables have been prepared in both MGA coordinates and Mine coordinates
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').*	
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.*	Cross sections are provided in this announcement.
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.*	.
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.*	No additional exploration results reported.

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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.*	The area covered by the mining leases contains some of the most prospective ground for volcanic hosted polymetallic massive sulphide mineralisation in Queensland. A rebuild and validation of open pit and underground workings from monthly surveying data has been undertaken Loyal. Drilled areas outside of the mine area are being validated by Terra Search. Current surface LiDAR survey planned, with historical LiDAR and orthophotos completed. The requirement for validation drilling of historical mineral resources/ore reserves will continue to be assessed. Resource extension and development drilling will also be assessed. Metallurgical and processing studies will be evaluated. Analysis of exploration targets including around the mine and known copper-gold pipes and zinc-lead-gold mineralisation is ongoing. The following are initial evaluations in order of priority. In the mine. Previous workers have noted that the northern end of Upper Reward Deeps transitions into Reward North, with high grade copper mineralisation occurring on the edge of the pyrite envelope, while generally the copper mineralisation is totally enclosed within massive pyrite that can contain gold. This and the presence of a major shear zone on this southeastern side of the orebody suggest that the north-eastern edge of this mineralisation has been faulted off. It is possible that the extension of this mineralisation is yet to be found. Examination of the drill hole data and the historical resource models illustrates that there appears to be gaps in the drilling between Highway and Reward that could potentially contain copper and gold mineralisation. Exploration targets outside the Highway Reward Mine area across the mining leases will be assessed and prioritised for drill testing including gold-barite and copper-lead-zinc anomalies in historical surface mapping, soils and drill sample assay geochemistry, drilling, geophysics IP and downhole EM anomalies. Prospects are at various stages of historical testing. Previous consultants have stated that the lesson learned from the last ore body discovered and mined at Highway Reward, named Conviction, is that very high-grade copper pipes with short strike

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		lengths (≈100m) and depth extents (≈100m) and widths (≈25m) may be present even in areas with significant drilling, and especially in areas where the geology was previously considered unfavourable. In Conviction's case the pipe is hosted more in massive coherent dacite which up until the discovery was considered relatively non-prospective host rock. Several occurrences of base metal and gold mineralisation are known to occur within the mining leases. These are all advanced prospects and include Handcuff (and Handcuff South), Truncheon South, Gateway, Stocksquad, Acquittal, and Parole. All require geological and geophysical evaluation and more data collection and surveys to determine priority for drill testing. RGC Limited announced on the ASX in 1997 that drilling around the Reward mine, Queensland, continued to intersect low-grade base metal sulphides and massive pyrite zones at the Gateway, Stocksquad and Reward East prospects. As massive pyrite halos occur around the high-grade Highway Reward copper pipes, these can be an indicator of the presence of distal base metal sulphides and gold. Gold appears to be concentrated above and asymmetrically (coinciding with pyrite) on the hanging walls and above copper pyrite pipes. Follow-up drilling was planned by RGC on many targets but appears not to have been completed due to corporate conditions at the time. Both within and outside of the Highway Reward Copper Gold Mine, geophysics chargeability anomalies for copper, zinc, and gold (associated with pyrite) have been identified at depth, over a 2.3km strike (Loyal's mining leases cover 3km of strike in this direction), extending from the Stocksquad Prospect in the southwest to Truncheon South Prospect in the northeast. The Campaspe Formation is a relict alluvial plain (river floodplain) that has survived largely intact since the early Pliocene and covers the Paleozoic basement that hosts copper-gold mineralisation. There are extensive areas of this late cover across the mining leases and it is still to be determined how much historical drilling has successfully drilled beneath the Campaspe.