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1 February 2022

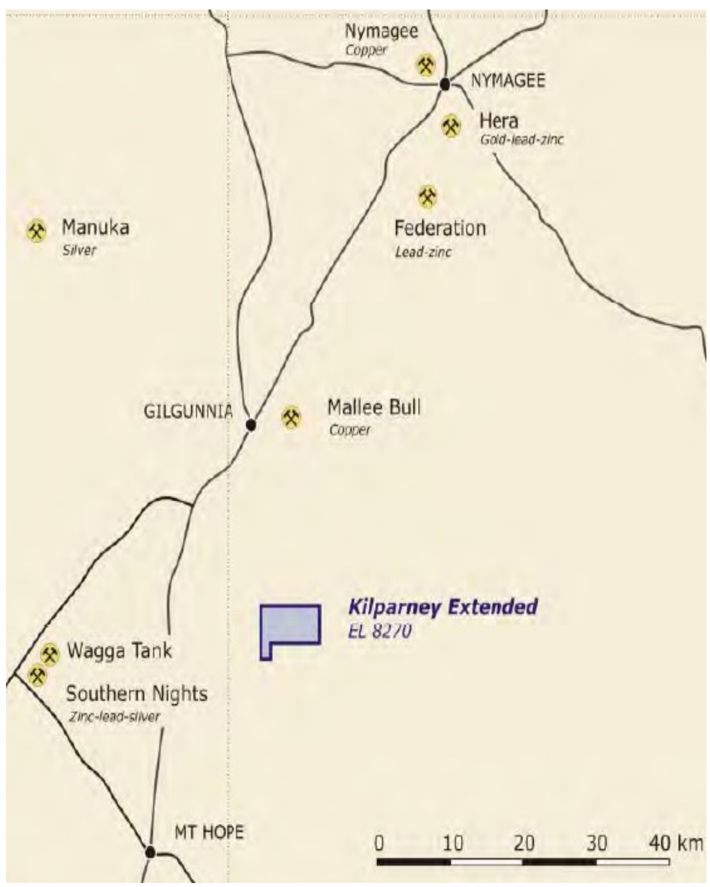
Kilparney Extended Geophysics Review

Golden Cross Resources ("the Company") recently completed a gravity geophysical survey over EL8270 located 40 kilometres south of Nymagee in Central NSW. (*refer to ASX announcement 24 December 2021- "Kilparney Extended Update")*

Deep (and possibly conductive) overburden to a depth of approximately 90m in many places in the region mitigates against some geophysical techniques. As basement structure is a key factor in localising the Cobar style deposits, the gravity survey was completed to test the technique.

The area of EL8270 is characterised by overburden of unknown depth obscuring bedrock geology. The main feature of geological interest has been adjacent to the western end of EL8270 licence, where the Kilparney magnetic feature has been prospected previously.

Government open file regional gravity data is wide spaced approximately 4km x 2km, with insufficient stations over the main features to achieve resolution suitable for targeting and structural interpretation. To assess the usefulness of the gravity technique, readings were initially taken on 800m x 800m grid pattern. (**Figure 1)**



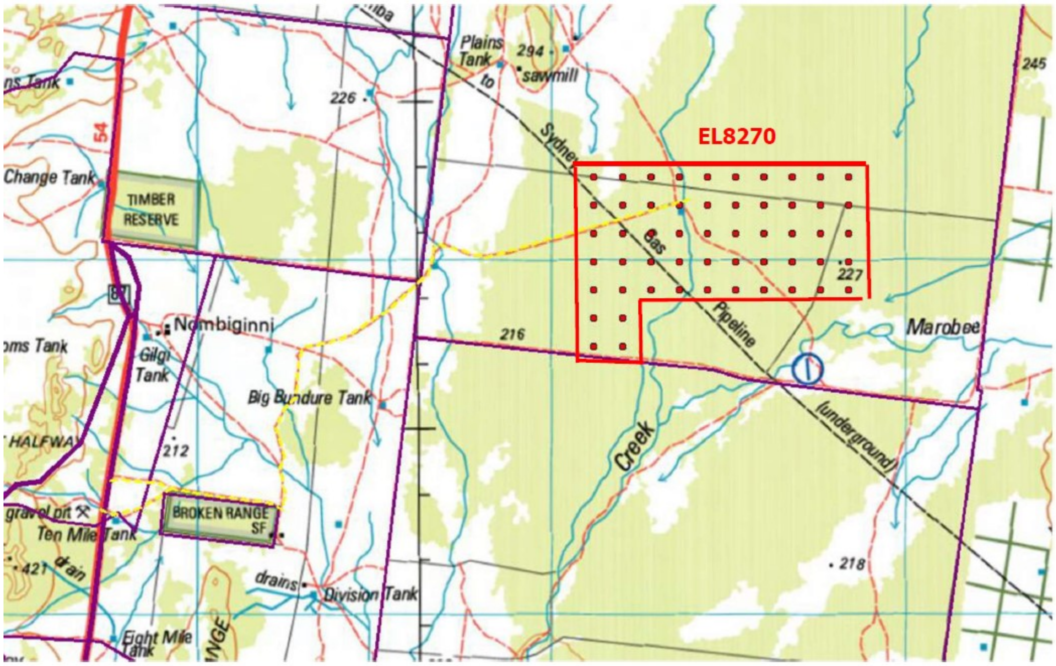


Figure 1 Gravity Survey location

A review of the data has been undertaken by geophysicist Steve Collins (**Appendix 1**). Two main gravity features are identified, and, considering there is limited supporting data from other types of exploration, a review of possible further exploration is presented, including a range of geophysical techniques.

The Company plans to consider the review and decide on the appropriate work for the next field program.

This announcement has been reviewed and authorised for release by the GCR Board.

References to previous announcements

24 December 2021: "Kilparney Extended Geophysics Update"

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original ASX announcements.

Compliance Statements

Competent Persons

The information in this report that relates to Geophysical Results is based on information from a survey in 2021. The report in Appendix 1 was compiled by Mr Steve Collins, who is a Member of the Australasian Institute of Geoscientists. (AIG). Mr Collins sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Collins consents to the inclusion in this report of the matters based on that information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information from previous reports, compiled by Mr Bret Ferris, who is a Member of the Australasian Institute of Geoscientsts. (AIG). Mr Ferris is a consultant to Golden Cross Resources Limited, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Ferris consents to the inclusion in this report of the matters based on that information in the form and context in which it appears.

Appendix 1
Review of Gravity Data – Kilparney Extended Project. S Collins. January 2022

Appendix 2

JORC Compliance Statement: Kilparney Gravity Survey
Sections 1 and 2 of Table 1, JORC Code, 2012 Edition

Review of Gravity Data
Kilparney Extended Project - Golden Cross Operations

Steve Collins January 2022

Fifty three gravity readings were collected on the Kilparney Extended Project (EL8720) of Golden Cross Operations in late 2021. The gravity data show a possible broad gravity high approximately 3km east of the previously explored Kilparney Prospect which may be related to that prospect. In the east of the gravity survey is a ridge of elevated gravity readings that are parallel to and semi-coincident with a near surface linear magnetic high. There is a possibility that higher gravity readings in the east of the surveyed area reflect thinner alluvial cover than in the west.

Fifty three gravity stations were recorded at 800 metre spacings on a square grid to cover EL8720 with broad spaced gravity readings. The terrain in this area is very flat with less than 20 metre elevation change from one side of the survey to the other in a gradual gradient. The data were Bouguer corrected using a correction density of 2.67 T/m3. The low terrain relief makes the correction density barely relevant and no terrain corrections were applied.

An image of the Bouguer corrected data is shown in Figure 1. At the west of the survey area the gravity values are consistently lower than over the rest of the survey area. This may be indicative of deeper alluvial cover. The previously explored Kilparney Prospect lies about a kilometre west of the western edge of this survey. Drilling on this prospect indicates that the depth of cover is about 90 metres. Gravity data suggests that the cover depth may be significantly less than this over most of EL8720. Alternately, the elevated gravity may be indicating denser subsurface lithologies, possibly silicification. Either way, the higher gravity values in the east is beneficial for exploration.

In the Cobar district, alteration associated with mineralisation generally appears as a topographic high. In areas of deep alluvial and wind blown cover these topographic features may be represented as paleo-highs in the bedrock. The gravity method can help map this paleo-topography since the cover material is significantly less dense than the bedrock. Silicification associated with mineralising events will often also locally increase the density of the host rock. Thus most major mineral deposits in the Cobar district are coincident with or adjacent to local gravity highs. The high itself, however, may not be a direct indicator of mineralisation.

The sampling interval for this gravity survey at 800 metres is too large to properly define density variations at the expected depth of cover (100m). Infilling of the survey to 400m square should significantly increase the resolution of density variations below the cover. A decrease to 200m is likely to be sufficient to gain the maximum information for the depths of interest. This is particularly the case in the central and eastern parts of the survey area where it is possible that the cover is thinner.

The data was high-pass filtered to enhance as much detail from shallower density variations as possible. However, at 800m centres it is not possible to get a detailed picture. Figure 2 shows the data after filtering with a 1000m Gaussian high-pass filter. This is the limit of what is possible in terms of detail enhancement, given the broad station spacing.

The filtered data set shows a prominent local high at approximately 412,800E / 6,390,800N (MGA55 GDA94). However, this is part of a gravity ridge and the local high is defined by just a single reading so cannot be relied on as a definite indicator of subsurface density contrast. It is possible that the gravity ridge is associated in some way with alteration surrounding the previously explored Kilparney prospect but these are three kilometres apart so this seems unlikely.

The Kilparney prospect, further west, is a very well defined magnetic high. In order to look for similar but lower tenor magnetic features the government airborne magnetic data for the licence area was filtered and imaged. Figure 3 shows these data after a 2km halfwidth highpass filter has been applied. On the western edge of the area are isolated magnetic highs that are the edge of the magnetic complex associated with the Kilparney prospect further west. The width of these responses indicates a depth of burial of about 100 metres, consistent with the known depth to bedrock at Kilparney. Interestingly, these may also be subtle gravity highs. On the east side of these is a south-north magnetic ridge that is coincident with an abrupt gradient in the gravity data. This may indicate a geological contact or fault of some sort.

In the eastern half of the area surveyed by gravity is an area of elevated magnetic character that roughly corresponds to elevated values in the gravity data. The width of magnetic features in this zone suggests that the source(s) of this magnetic/gravity high is significantly closer to the surface than the 100m depth indicated on the western side of the area. It would be advisable to check any existing water bores or exploration drilling in this area or in similar surrounding areas for information on the depth to bedrock.

Within the area of elevated magnetic and gravity values is a north-northwest trending linear magnetic high centred at approximately 417,500E / 6,389,800N. This ridge is parallel to and semi-coincident with a ridge of elevated gravity values. There is insufficient gravity data to determine if these features are truly coincident but it is likely that they are related to the same geological structures or lithologies. The width of the magnetic ridge suggests a depth of the source between zero and a few tens of metres. It is possible that the magnetic high is a maghemite filled paleo-stream but there is no indication of this in the topographic data.

Recommendations for further work are as follows.

Firstly check for existing drilling or water bores to attempt to determine the depth to bedrock in the eastern half of the survey area.

Secondly, infill the gravity data. Ideally this infill should be at 200 metre centres but this may not be practical given the thick vegetation that covers the licence area. An infill of the gravity to 400 metre centres would help the resolution of the data. This could then be evaluated to determine if further infill is justified.

A line or two of ground magnetic data over the eastern magnetic ridge would better determine the depth of burial of the source and may write this feature off as a maghemite filled paleo-stream.

Suitable area such as the magnetic ridge or geochemical anomalies may be amenable to surveying using Induced Polarisation (IP). The Southern Nights deposit northwest of this project has a clear IP response. This is particularly applicable in any area that has a lead/zinc geochemical signature.

Ground electromagnetic (EM) surveys may be applicable for a copper rich sulphide accumulation but I doubt that airborne EMwould work if there were a deposit of the typical Cobar basin morphology beneath the sort of cover material known to exist at the Kilparney prospect. If the bedrock depth in the eastern half of the Exploration Licence is found to be shallower than expected then airborne or ground EM may be suitable exploration methods for copper bearing sulphide deposits on the Licence.

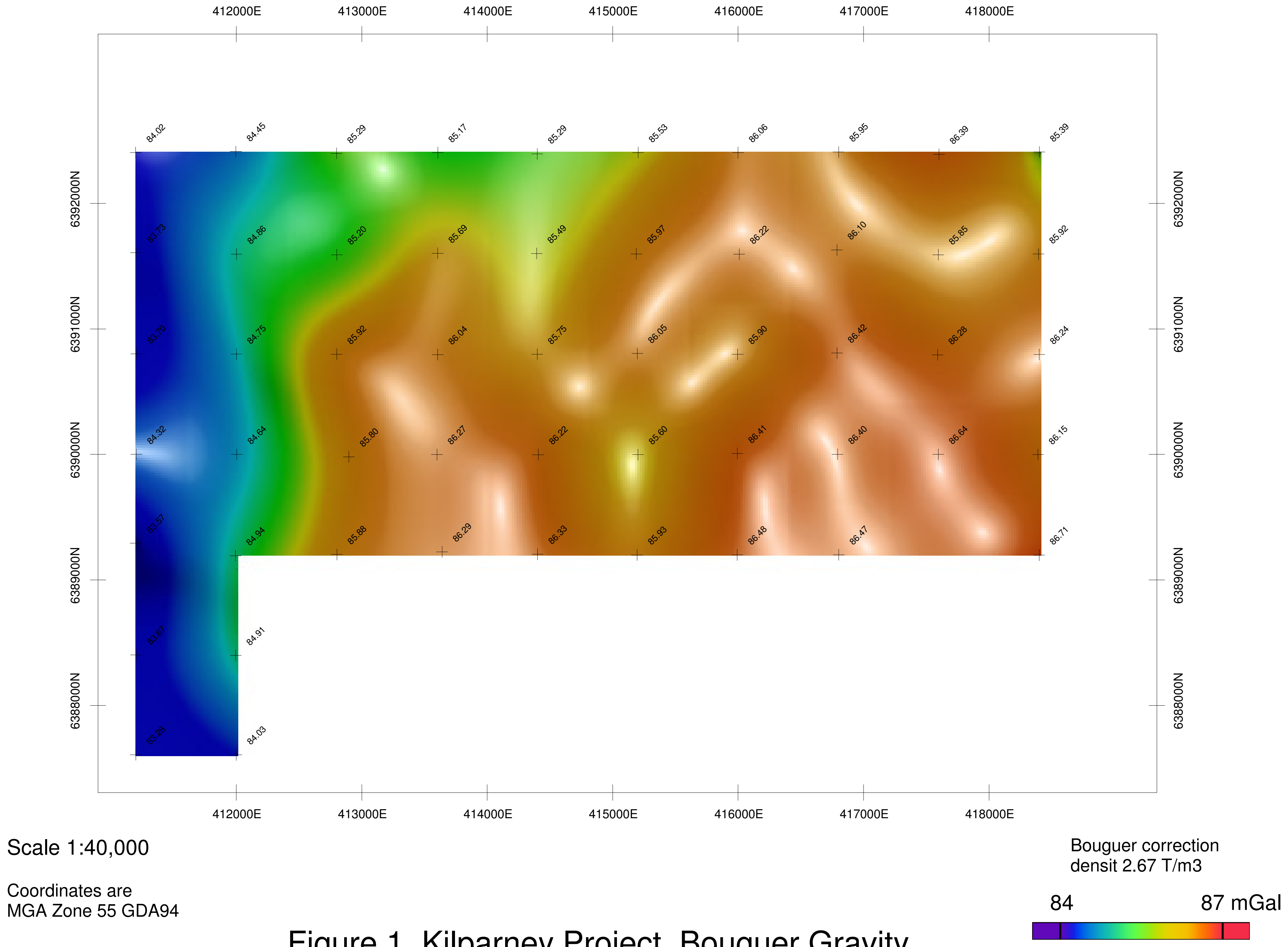
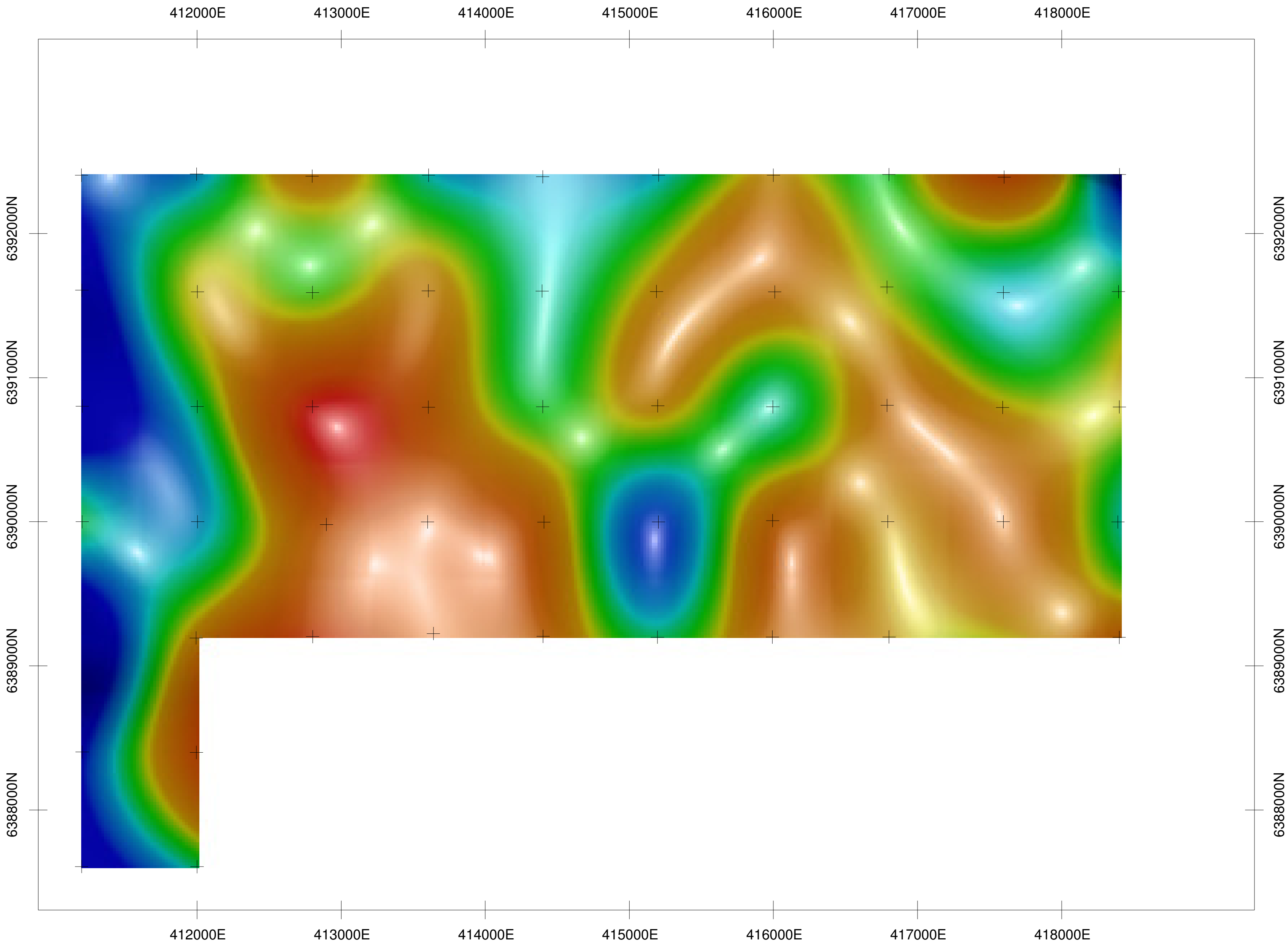


Figure 1 Kilparney Project Bouguer Gravity



Scale 1:40,000

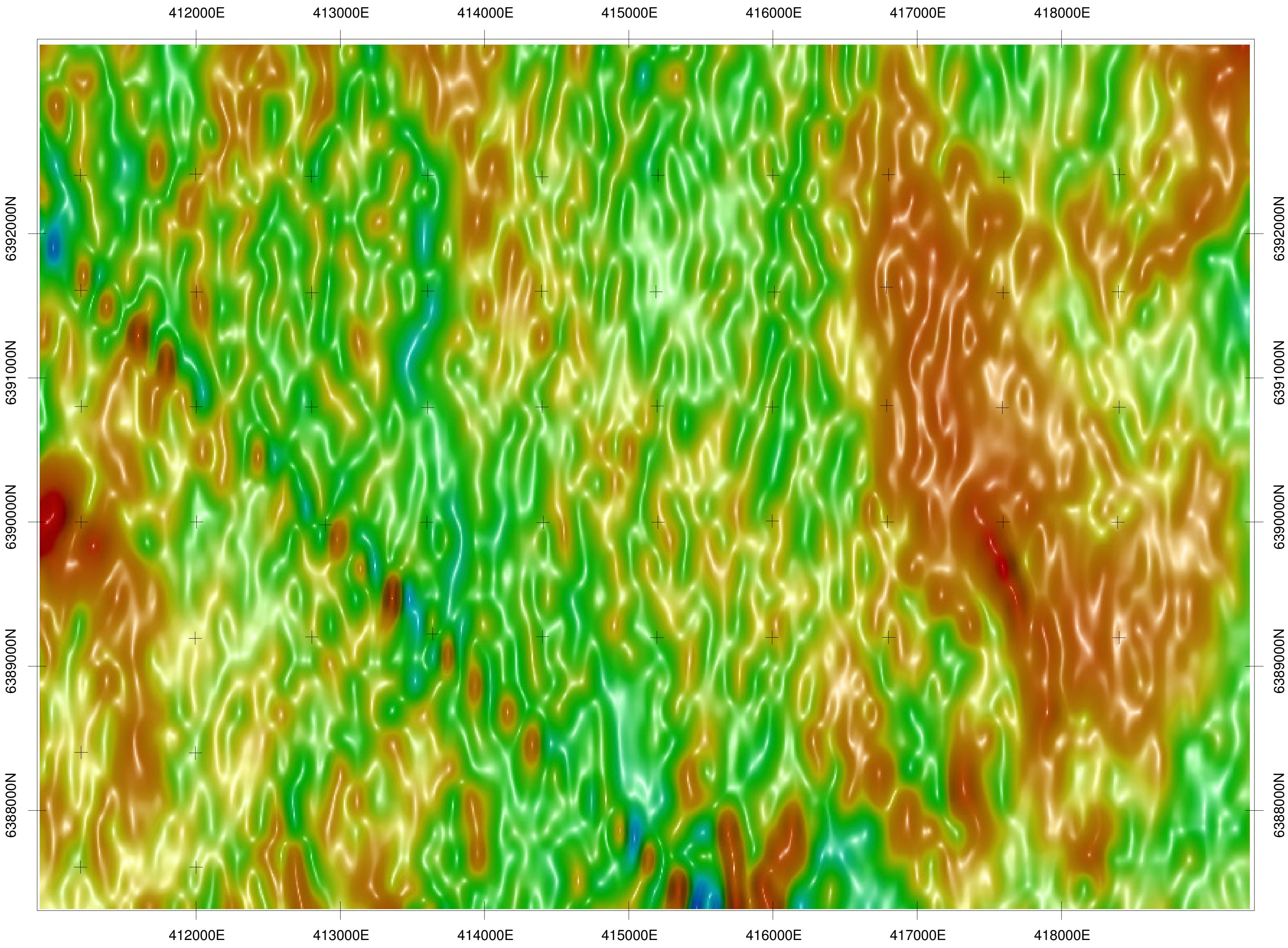
Coordinates are
MGA Zone 55 GDA94

Figure 2 Kilparney Project Bouguer Gravity 1km halfwidth Gaussian Highpass filtered

Bouguer correction
densit 2.67 T/m3

-0.5 0.5 mGal

(Around local mean value)



Scale 1:40,000

Coordinates are
MGA Zone 55 GDA94

Figure 3 Kilparney Project Government Air magnetics 2km halfwidth Gaussian Highpass filtered

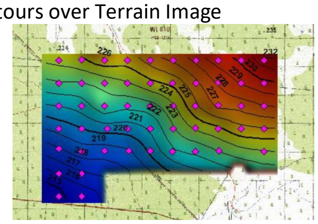
-10 10 nT

(Around local mean value)

Appendix 2

JORC Compliance Statement: Kilparney Gravity Survey
Sections 1 and 2 of Table 1, JORC Code, 2012 Edition

Section 1: Sampling Techniques and Data

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• The Kilparney Gravity Survey was completed by Precision Exploration Services, Cobar NSW. • After mobilization, initial access recce & establishment of a local GPS Base site; a Gravity Control Base point (2100675), was brought in from the nearest AFGN Base 1993912105 , situated on the Kidman Way South of Gilgunnia. • The GPS was initially run from autonomous coordinates & files of 30 second static data were collected for both onsite check processing & later submission to Trimble RTX Post processing • The carried in gravity base point (2100675), was located on the main access; the transecting cleared & graded Gas Pipeline. From this base, traverse reading loops were undertaken, carrying gravity ties out across the grid area. • Grid gravity traversing was effected with station navigation per a Garmin Montana 680 Handheld GPS. • Stations were centred on a nominal 800m square grid. Some station sites were moved to read stable ground with acceptable sky/satellite view. • Gravity Readings were taken with a Model G Lacoste & Romberg Meter • Survey of reading station coordinates & levels were measured with 6 minute x 30 second static post processed baselines with a pair Trimble SPS880/R8 units • With the returned RTX GPS Base GDA 94 LL coordinates, the final GPS survey project was re-processed per Trimble TBC to generate corrected positions for all measured stations. **Gravity Processing** • Instrument gravity readings were processed with STRIDER Gravity Software. • Reductions for TIDE, LATTITUDE undertaken with GRAVRED with a residual Drift file produced. • Further Bouguer corrections were undertaken through BOUGUER. This process applied corrections for FREE AIR & Infinite Slab Bouguer • The entire survey area is gently tilted from the NE Corner to the SW Corner. • RL Contours over Terrain Image  The slightly smooth gradient did not require any terrain correction
Drilling	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and*	• N/A]

Criteria	JORC Code explanation	Commentary
techniques	*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).*	
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 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.*	• N/A
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.*	• N/A • N/A • N/A
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.*	• N/A
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.*	• Survey of reading station coordinates & levels were measured with 6 minute x 30 second static post processed baselines with a pair Trimble SPS880/R8 units • MGA GDA94 z55

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	
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.*	• Stations were centred on a nominal 800m square grid. Some station sites were moved to read stable ground with acceptable sky/satellite view.
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.*	• Subsurface structure is unknown. Data points are on a 800m square grid to avoid any data bias in a particular direction
Sample security	• *The measures taken to ensure sample security.*	•
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Planned geophysicist review will address any sampling and data issues.

Section 2: Reporting of Exploration Results

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.*	• Kilparney Extended (EL8270) held 100% by Golden Cross Operations PL, a wholly owned subsidiary of Golden Cross Resources Ltd under EL8270 • EL8270 is located over the pastoral property Kilparney • EL8270 is current to 6 May 2023 over an area of 11 graticular units or ~14 sq. kilometres.
Exploration by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The region has been explored by Golden Cross Operations under a group of tenements [The Rast Group] from 2007 to 2014. • Most of the area of EL8270 was vacant for many years due to a dearth of obvious targets outside the Kilparney Magnetic Feature, and low understanding of the regolith, and bedrock structure. The key to the area is structure and AirborneEM and Gravity combined with Magnetics offer a good combination of techniques to identify basement structural targets for more detailed ground work. •
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Cobar style lode deposit under up to 90m of overburden.
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*	• N/A

Criteria	JORC Code explanation	Commentary
	◦ *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.*	
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.*	• N/A
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').*	• N/A
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.*	• N/A
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.*	• N/A
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.*	• N/A
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 initial data set will be passed to a geophysisict for review and interpretation. Where warranted infill reading will be taken to improve resolution of selected areas. • Evaluation of other geophysical techniques to validate features, ahead of assessment for shallow drilling to bedrock. .