

Compelling Cobalt Copper and REE targets identified at Broken Hill

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Highlights

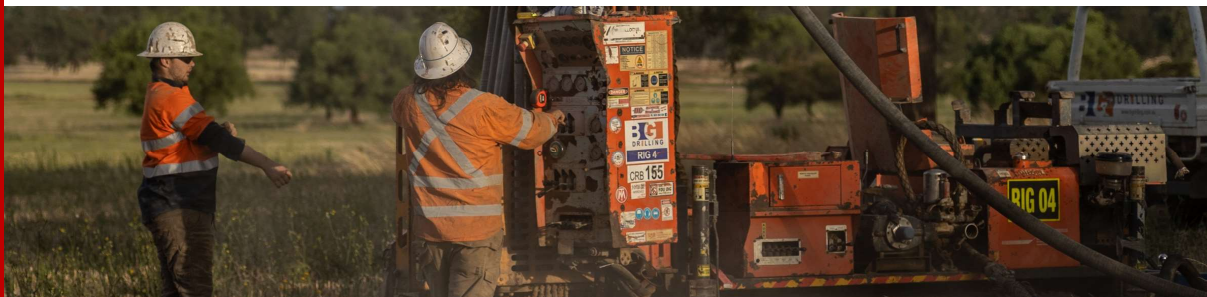
- Detailed ground magnetics identifies a potential extension to high grade cobalt mineralisation drilled by Rimfire at Bald Hill last year, including;
 - 125m @ 0.13% Co from 198 metres in FI2470 including 97m @ 0.15% Co
- Bald Hill Extension magnetic anomaly which has not been drilled present over 450 x 400m to a vertical depth of ~300m
- Additional magnetic anomalies identified 2km northeast of Bald Hill with initial rock chip samples up to 0.72% cobalt and 0.46% copper
- Rimfire will shortly commence reconnaissance mapping & sampling to refine new targets and plan for drilling in 2H CY24

Commenting on the announcement, Rimfire’s Managing Director Mr David Hutton said: “Rimfire is exploring throughout New South Wales for critical minerals that are associated with global decarbonisation strategies, such as scandium, PGEs, copper, and cobalt.

While we remain firmly focussed on the scandium exploration program currently underway at Fifield and Avondale, we are also keen to advance our recently expanded Broken Hill Project.

Broken Hill is shaping up as a compelling exploration opportunity for Rimfire with ground magnetics highlighting a potential extension to high grade cobalt sulphides drilled last year at Bald Hill, as well as the cobalt, copper and REE targets outlined in this announcement.

With executed Access Agreements in place, we will shortly commence a ground inspection of the targets with a view to drill testing during the second half of 2024 and look forward to further market updates as new information comes to hand.”



Rimfire Pacific Mining (ASX: RIM, "Rimfire" or "the Company") is pleased to advise that multiple cobalt, copper, and Rare Earth Element [REE] targets have been identified at its recently expanded 100% - owned Broken Hill Project which is located 17-30 kilometres west of Broken Hill, NSW (*Figures 1 and 2*).

Rimfire has recently executed Access Agreements with relevant Landowners to facilitate ground reconnaissance, geological mapping, and sampling of these targets

Bald Hill Extension Target (Cobalt Copper)

Diamond drilling by Rimfire at the Bald Hill Prospect last year successfully intersected high-grade cobalt (Co) associated with strongly disseminated to semi massive sulphide (pyrite, pyrrhotite and trace chalcopyrite + sphalerite) mineralisation (*See Rimfire ASX Announcement dated 18 September 2023*), i.e.;

- **125m @ 0.13% Co from 198 metres in FI2470 including 97m @ 0.15% Co,**
- **58m @ 0.13% Co from 62 metres in FI2471 including 2m @ 0.24% Co and 17m @ 0.15% Co,**
- **33m @ 0.11% Co from 58 metres including 4m @ 0.23% Co and 2m @ 0.21% Co, and**
- **100m @ 0.08% Co from 71 metres in FI2470 including 68m @ 0.10% Co.**

Higher grade cobalt at Bald Hill is typically associated with a greater abundance of sulphides with zones of coarse-grained semi-massive pyrite / pyrrhotite hosting individual 1 – metre grades of up to 0.79% Co (FI2471 – 67 to 68 metres) (*see Rimfire ASX Announcement 18 September 2023*).

FI2471 also intersected a weathered gossanous zone immediately up hole of the cobalt mineralisation, assaying of which returned strongly anomalous copper (Cu) - 6m @ 0.51% Cu from 56 metres.

Detailed ground magnetic surveying [on 50-metre spaced east west lines] undertaken post drilling has identified a very strong magnetic anomaly [peak value – 57,744nT] coincident with and extending from cobalt and copper mineralisation intersected in Rimfire's 2023 drilling at Bald Hill (*Figures 3 - 4 and Table 1*).

The Bald Hill magnetic anomaly trends NNE, dips to the southeast, and has a near surface extent of 450 x 400 metres and extends to a vertical depth of approximately 300 metres below surface. 3D modelling suggests that the anomaly plunges to the southeast with Rimfire's diamond holes just "clipping" the top of the anomaly.

This is highly significant as the Bald Hill mineralisation is intimately associated with magnetic minerals, i.e. pyrrhotite and magnetite, **and as such the magnetic anomaly is interpreted to be "mapping" a potential extension to existing cobalt and copper mineralisation.**

Diamond drilling to further test the Bald Hill anomaly is planned for the second half of 2024.

Bald Hill Northeast (Cobalt Copper)

Ground magnetic surveying has also identified a cluster of strong anomalies [56,482nT to 57,744nT] over a surface area of 700 x 300 metres approximately 2 kilometres northeast of Bald Hill, which remains open to the northeast.

Initial ground reconnaissance of the area has identified ferruginous gossanous material associated with many of the magnetic anomalies, rock chip sampling of which returned up to 0.72% cobalt and 0.46% copper (See Figures 5 – 7 and Table 2). **The area appears not to have been drilled by previous explorers.**

Further geological mapping and sampling is required to better understand the significance of these initial rock chip results.

Castillo tenements (Cobalt Copper REE's)

Rimfire has recently expanded the size of the Broken Hill Project with the acquisition of two adjoining tenements from Castillo Copper (EL's 8572 and 8599 "Castillo tenements - see Rimfire ASX Announcement dated 11 January 2024).

The Castillo tenements cover the same sequence of Proterozoic age deformed and quartz – albite – magnetite gneiss, psammite, and amphibolite units that host the Bald Hill cobalt sulphide mineralisation.

An examination of the NSW Government Minview online GIS portal reveals several historic mineral occurrences within the tenement boundaries that require follow up to better determine their geological significance and exploration potential. (Figure 2).

Of initial interest are a cluster of gossanous, quartz veined and copper-stained occurrences within the northwestern portion of EL8572 (NSW Mineral Occurrences 181678, 181681, 181683 – 181684, 181686, and 181688).

Additionally there are several shear – hosted pegmatite occurrences within the southern portion of EL8572 and EL8599 (NSW Mineral Occurrences 181344 – 181348) which were reportedly mined in the mid-1940's for a mineral called "Davidite" which is a rare earth oxide mineral with chemical end members of either Lanthanum or Cerium.

As such the Castillo tenements are also considered prospective for **Rare Earth Element (REEs) mineralisation** associated with shear – hosted pegmatite occurrences with geological mapping and sampling are required to better understand the significance of these targets.

Next Steps

Rimfire has recently executed Access Agreements with relevant Landowners to allow Company geologists to undertake ground reconnaissance, geological mapping, and sampling of the Castillo Tenements targets and further sampling of the Bald Hill Northeast target.

Field work is expected to commence within the next fortnight and Rimfire looks forward to providing updates as new information comes to hand.

Broken Hill Project background

Rimfire's 100% - owned Broken Hill Project covers an area of 190km² and is considered prospective for the discovery of cobalt sulphide, copper, and Rare Earth Element [REE] deposits.

Given the project's proximity to Broken Hill and the similarities between the project's underlying geology and the Broken Hill lead zinc silver deposits (owned separately by CBH Resources Ltd and Perilya Limited), Rimfire's project area has had a long history of mineral exploration but primarily for lead, zinc, and silver,

Modern exploration has been largely restricted to the area of Cobalt Blue's (COB.ASX) adjacent Broken Hill Cobalt Project which hosts the Pyrite Hill, Big Hill, and Railway Deposits (with a global Mineral Resource estimate comprising 118 Mt at 859 ppm (0.08%) cobalt equivalent (CoEq) [i.e., 687 ppm (0.07%) cobalt, 7.6% sulphur & 133 ppm nickel] for 81.1Kt contained cobalt using a 275 ppm CoEq cut-off (*Cobalt Blue website*).

A 2022 project review highlighted that cobalt exploration was last undertaken on Rimfire's Broken Hill Project in the early 1980's when North Broken Hill Pty Ltd conducted a program of geological mapping, IP geophysics and drilling at the **Bald Hill prospect**. Prior to this Broken Hill South Limited undertook IP geophysical surveying and diamond drilling of the **Staurolite Ridge prospect** in the early 1960's. In both cases, the exploration work was undertaken as part of programs targeting lead zinc silver mineralisation within the broader Broken Hill district.

Additionally, the **Railway Extension target** directly lies north northeast and along strike from Cobalt Blue's Railway Cobalt Deposit which has a JORC Indicated and Inferred Resource of 68Mt @ 755 CoEq ppm for 40.9Kt of contained cobalt.

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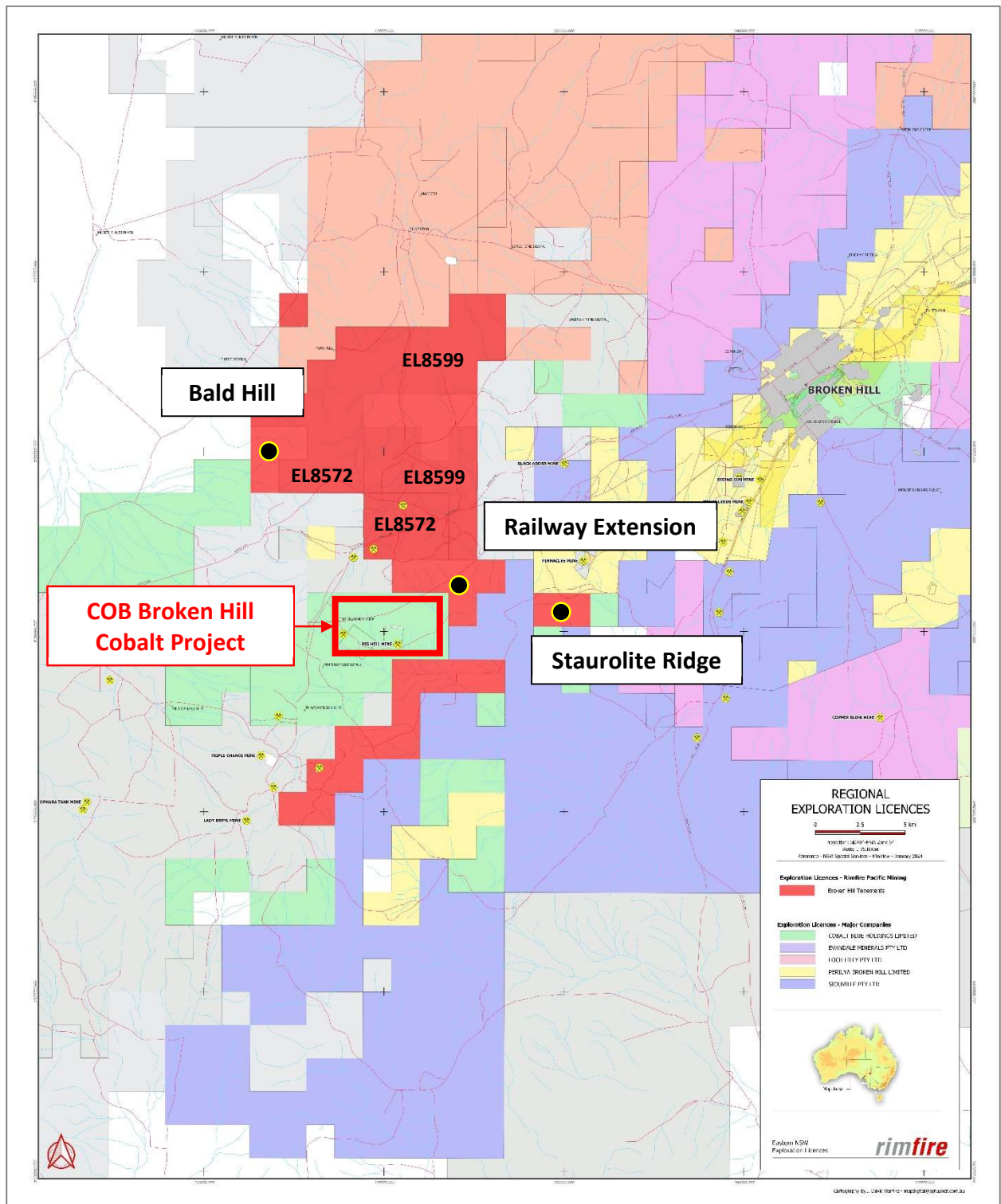


Figure 1: Rimfire Broken Hill Project (red blocks - with Castillo Tenements shown as light red with EL numbers), regional tenement holders and target locations

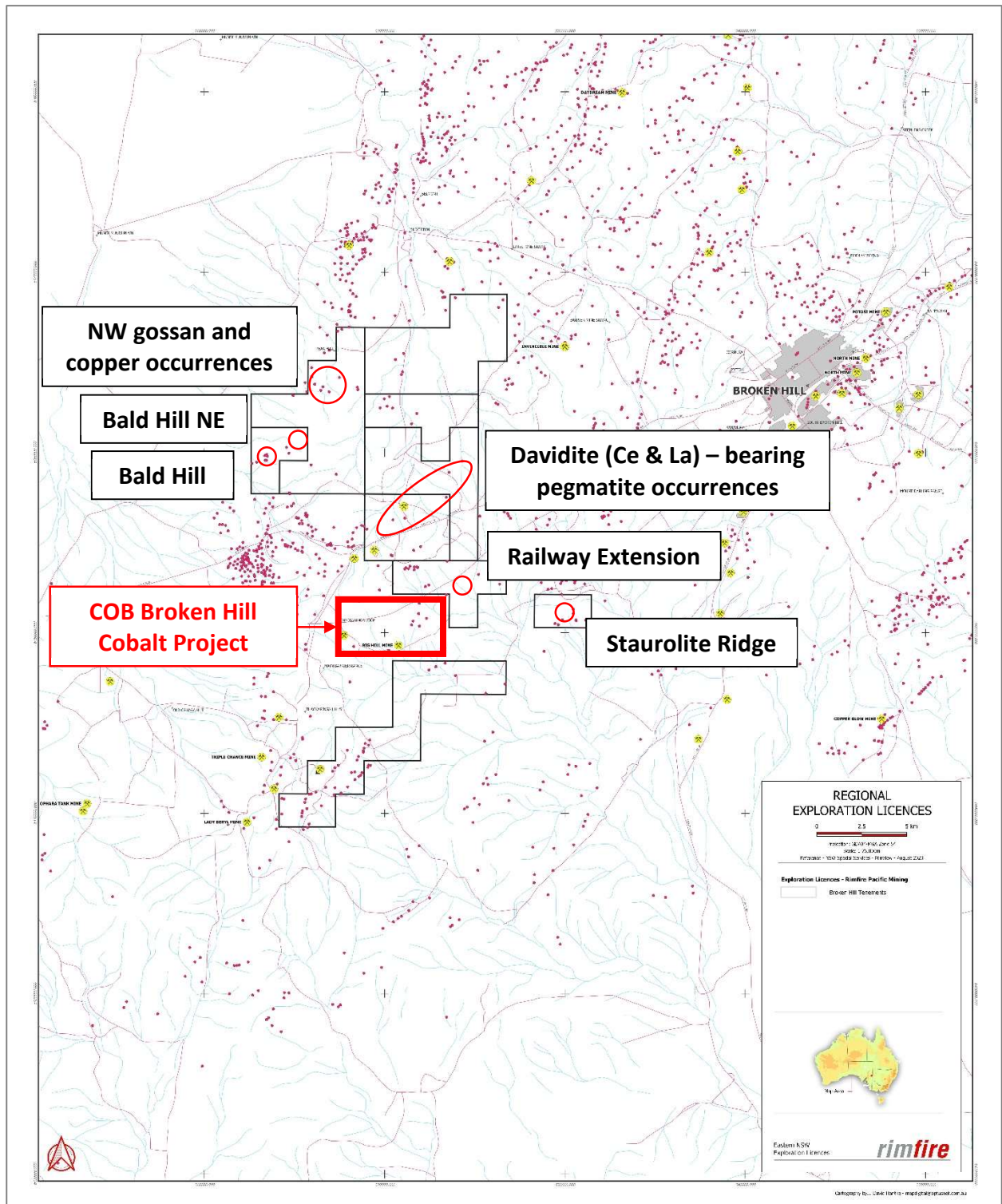


Figure 2: Rimfire Broken Hill Project – priority Rimfire targets and Minview mineral occurrences on the Castillo Tenements referred to in this Announcement

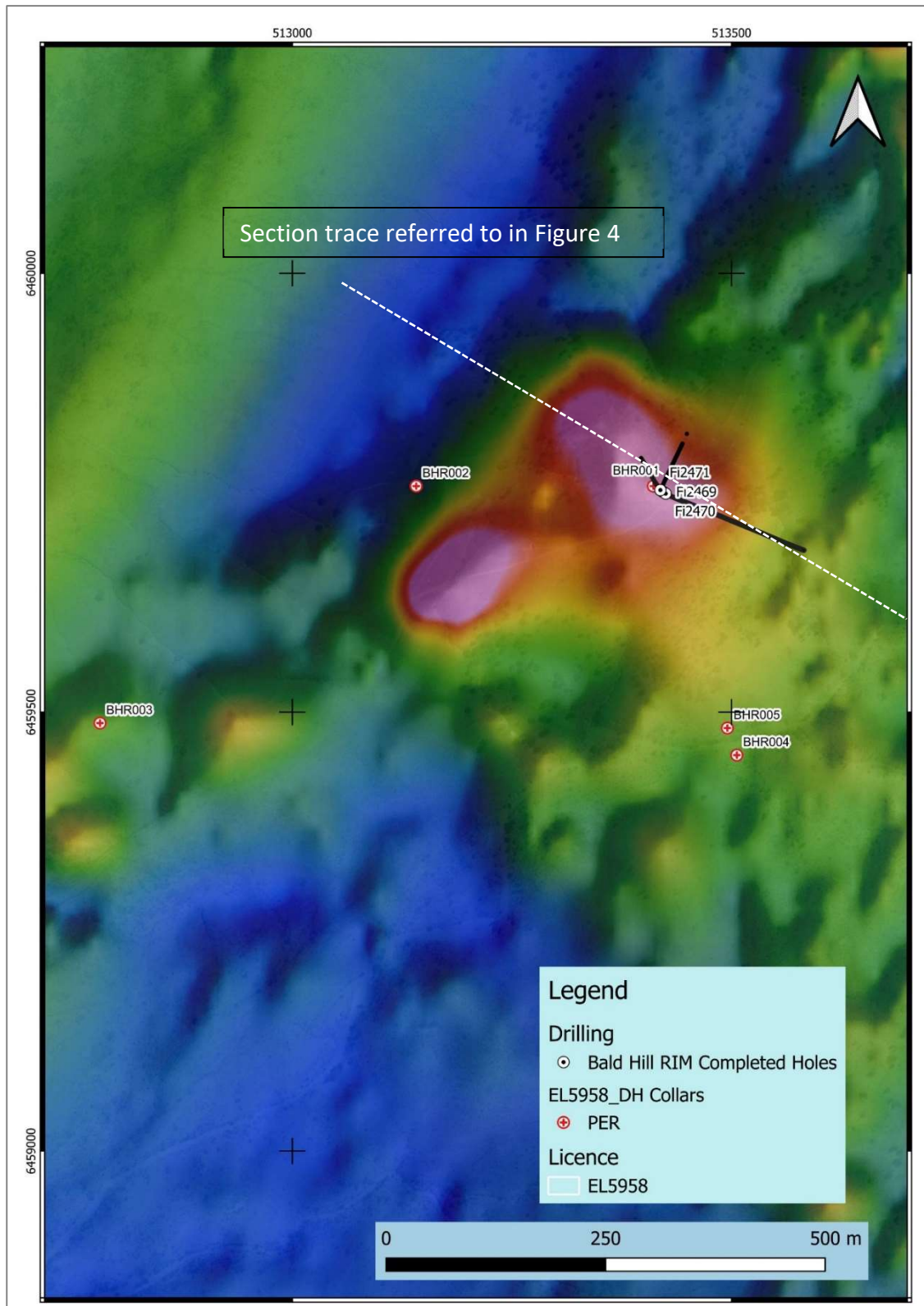


Figure 3: Bald Hill Cobalt Prospect – ground magnetics image showing existing drill holes and newly identified magnetic body. Section trace referred to in Figure 4 shown in white.

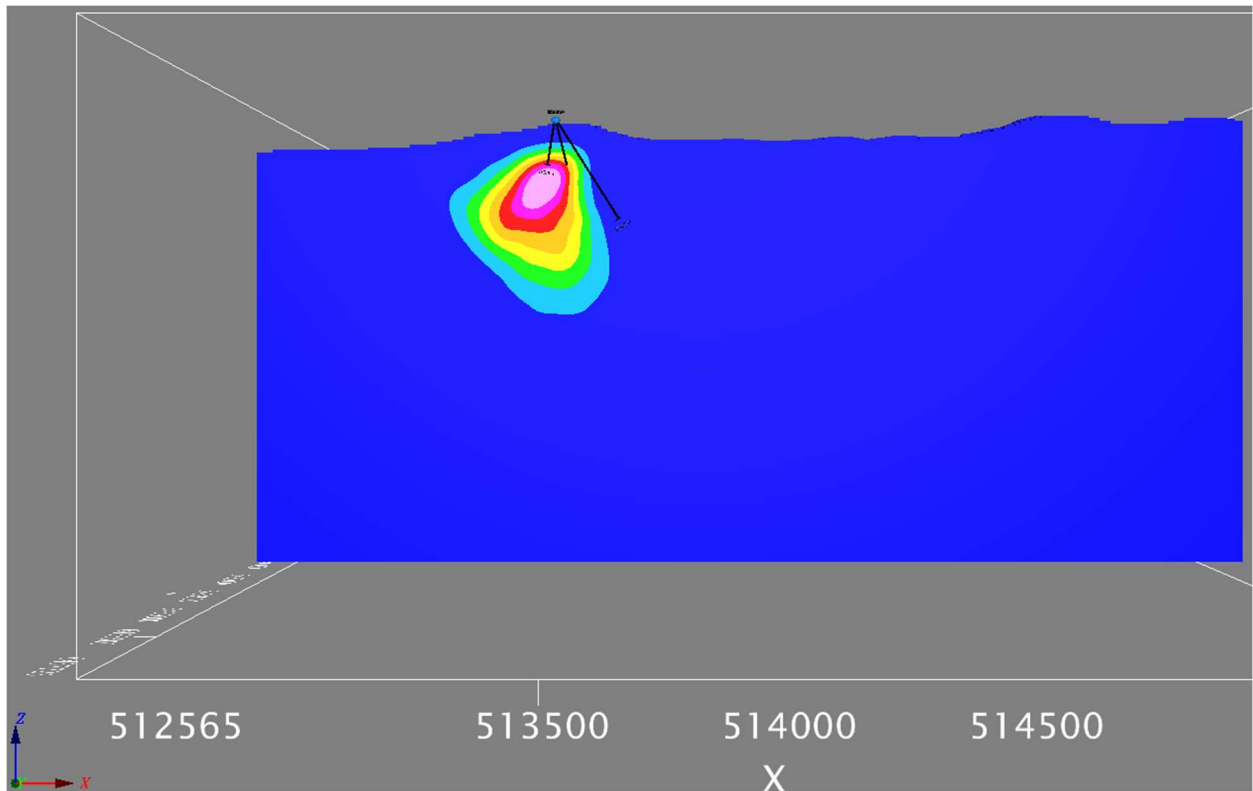


Figure 4: Bald Hill Cobalt Prospect – cross section showing Rimfire 2023 drill hole traces and modelled magnetic body from ground magnetic data. Section trace shown on Figure 3.

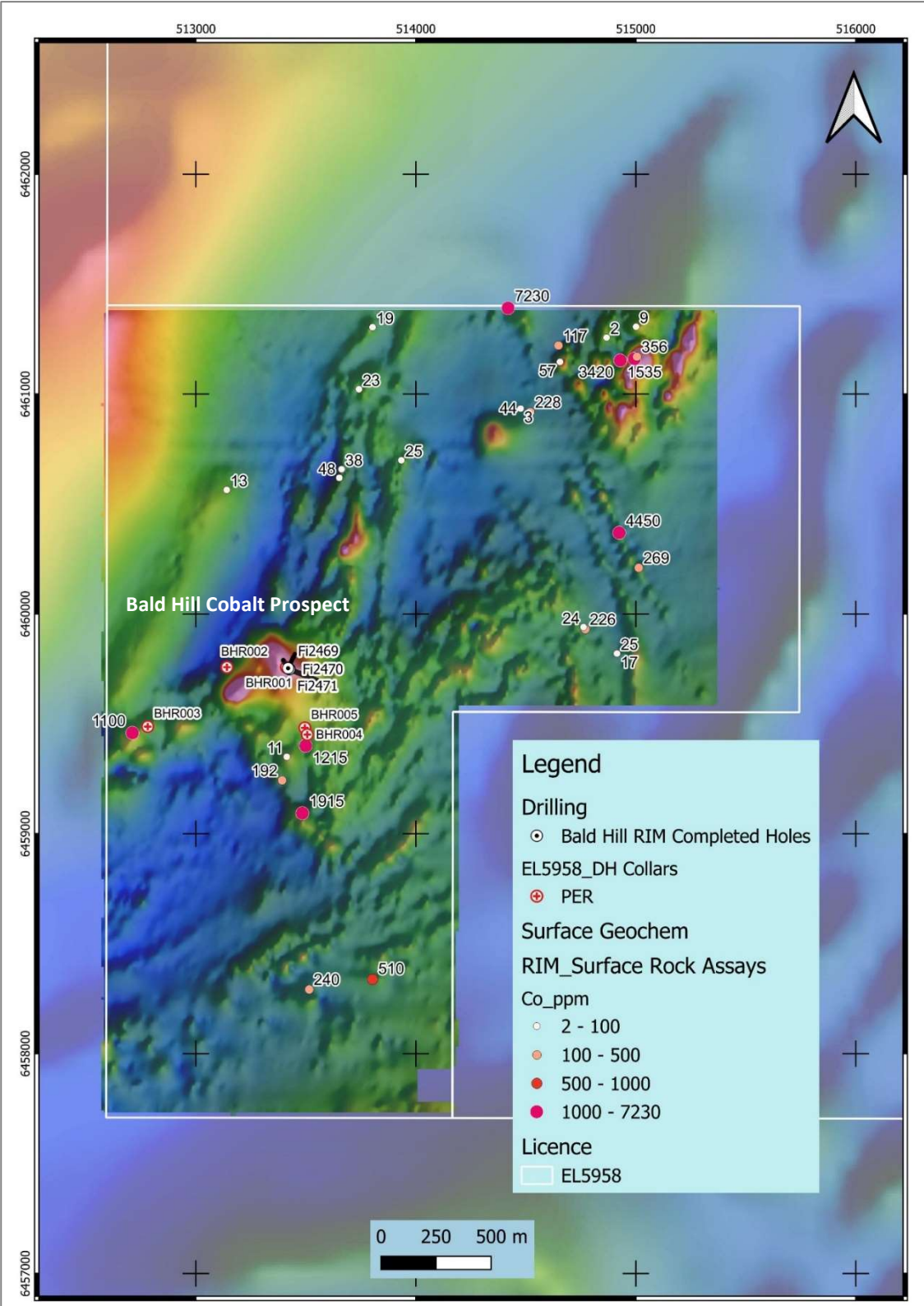


Figure 5: Bald Hill Northeast target – ground magnetic image showing cobalt (ppm) assay values and drill holes.

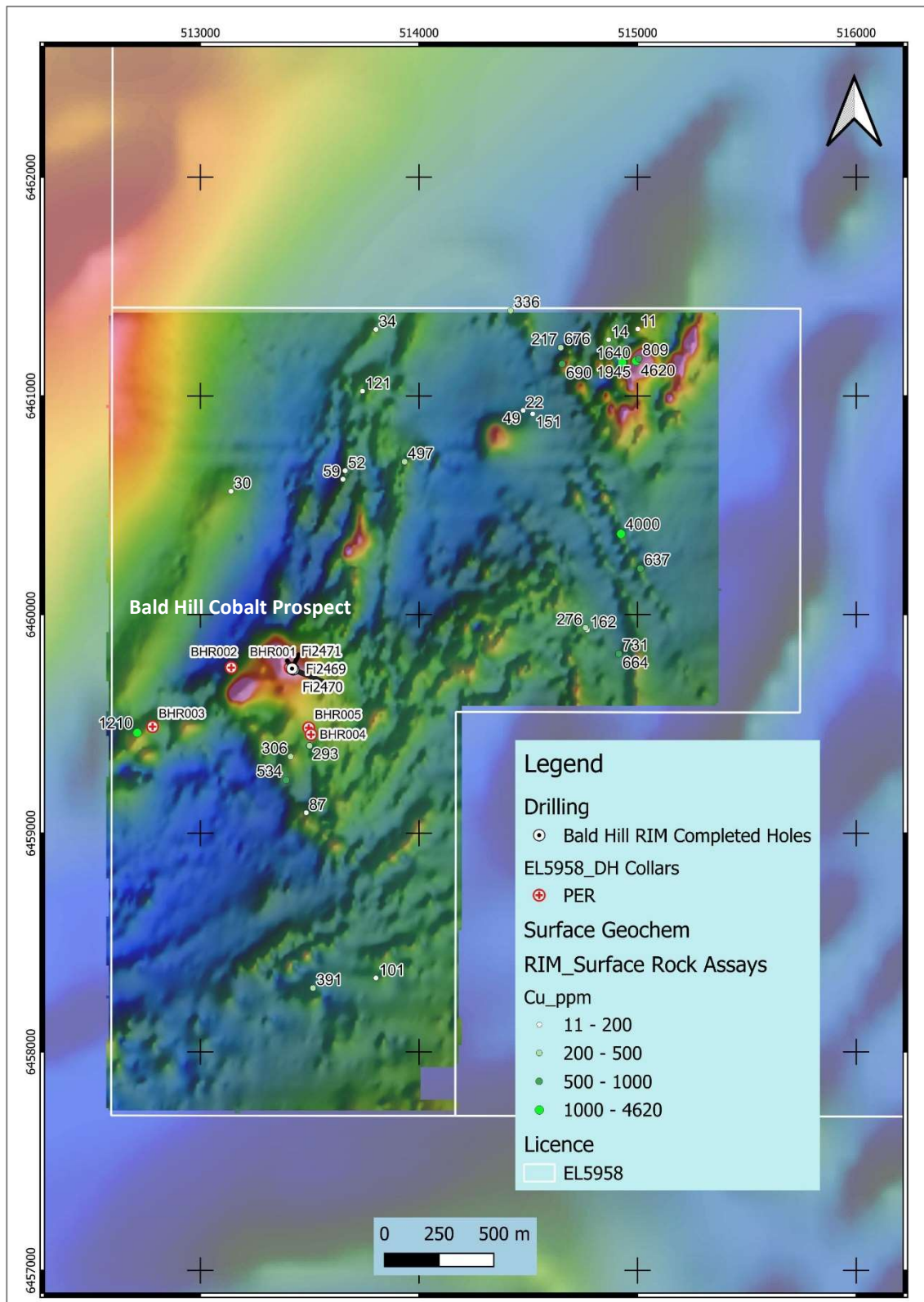


Figure 6: Bald Hill Northeast target – ground magnetic image showing copper (ppm) assay values and drill holes.



Figure 7: Bald Hill Northeast target – photo of rock chip sample B00605 (gossanous quartz albite gneiss) which assayed 0.18% cobalt and 0.46% copper.

This announcement is authorised for release to the market by the Board of Directors of Rimfire Pacific Mining Limited.

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Table 1: Ground Magnetism Survey - Specifications

| Item | Details |
|-----------------------|--|
| Contractor | Fender Geophysics |
| Equipment | Roving Magnetometer: Gem Systems Overhauser GSM19W |
| | Base Station Magnetometer: Gem Systems Overhauser GSM19 |
| | GPS: Garmin GPS62 or equivalent to locate lines |
| | Gem Systems GSM19W – walking magnetometer specifications |
| Sensitivity | 0.022 nT @ 1 Hz, (0.015 nT option) |
| Resolution | 0.01 nT |
| Absolute Accuracy | (+/-) 0.1 nT |
| Dynamic Range | 20,000 to 120,000 nT |
| Gradient Tolerance | Over 10,000 nT/m |
| Sampling Intervals: | 60+, 5, 3, 2, 1, 0.5, 0.2 sec |
| Operating Temperature | (-) 40°C to (+) 50°C |
| GPS | 0.6m SBAS resolution, 1Hz, Enhanced with Glonass |
| | |
| Method: | Ground Magnetism |
| Survey Area: | 8.7 km ² |
| Line Spacing: | 50m |
| Line kilometres | ~ 161 km |
| Sample Time | Roving magnetometer - 0.2 seconds |
| | Base Station magnetometer - 30 seconds |

Table 2: Bald Hill Rock Chip Sampling Details and Assay Values

| Sample_ID | East | North | Co_ppm | Cu_ppm | Ni_ppm | Zn_ppm | Description |
|-----------|---------|-----------|--------------|--------------|--------------|--------------|------------------------------|
| B00590 | 513,803 | 6,461,304 | 19 | 34 | 19 | 25 | Gossan |
| B00591 | 514,419 | 6,461,391 | 7,230 | 336 | 1,155 | 2,480 | Gossan |
| B00592 | 514,770 | 6,459,930 | 226 | 162 | 35 | 80 | Gossan |
| B00593 | 514,762 | 6,459,940 | 24 | 276 | 8 | 15 | Gossan |
| B00594 | 513,652 | 6,460,619 | 48 | 59 | 20 | 16 | Biotite rich rock -gossanous |
| B00595 | 513,140 | 6,460,564 | 13 | 30 | 20 | 70 | Soil |
| B00596 | 514,867 | 6,461,257 | 2 | 14 | <1 | 3 | haematite - stained qtz vein |
| B00597 | 513,662 | 6,460,658 | 38 | 52 | 26 | 85 | Sediment |
| B00598 | 513,934 | 6,460,699 | 25 | 497 | 231 | 120 | Gossanous - heavy |
| B00599 | 514,655 | 6,461,146 | 57 | 690 | 20 | 50 | Ironstone |
| B00600 | 513,741 | 6,461,022 | 23 | 121 | 11 | 12 | Ironstone |
| B00601 | 514,381 | 6,460,871 | 44 | 49 | 17 | 751 | haematite - stained qtz vein |
| B00602 | 515,001 | 6,461,306 | 9 | 11 | 11 | 29 | micaceous rock |
| B00603 | 514,476 | 6,460,934 | 3 | 22 | 7 | 17 | quartz - iron staining |
| B00604 | 514,924 | 6,460,369 | 4,450 | 4,000 | 825 | 68 | bleached amphibolite |
| B00605 | 514,993 | 6,461,160 | 1,805 | 4,620 | 437 | 108 | Gossan / qtz albite gneiss |
| B00606 | 514,929 | 6,461,153 | 3,420 | 1,945 | 1,080 | 71 | Gossan |
| B00607 | 514,648 | 6,461,221 | 390 | 676 | 1,335 | 133 | Sediment? Garnetiferous |
| B00608 | 514,648 | 6,461,221 | 745 | 488 | 651 | 199 | gossan / qtz vein |
| B00609 | 514,520 | 6,460,918 | 228 | 151 | 199 | 41 | massive magnetite |
| B00610 | 514,648 | 6,461,221 | 117 | 217 | 53 | 86 | Sediment? Garnetiferous |
| B00611 | 515,013 | 6,460,210 | 269 | 637 | 195 | 29 | Gossan |
| B00612 | 514,914 | 6,459,820 | 25 | 664 | 83 | 233 | Gossan |
| B00613 | 515,005 | 6,461,170 | 356 | 809 | 138 | 99 | Gossan. Box works |
| B00614 | 514,914 | 6,459,820 | 17 | 731 | 52 | 140 | Ironstone. Leached |
| B00615 | 514,929 | 6,461,153 | 1,535 | 1,640 | 349 | 72 | bleached amphibolite |
| B00616 | 513,413 | 6,459,350 | 11 | 306 | 4 | 4 | Gossan / ironstone |
| B00617 | 513,392 | 6,459,243 | 192 | 534 | 35 | 87 | Sediment / siliceous |
| B00618 | 513,484 | 6,459,094 | 1,915 | 87 | 555 | 443 | Siliceous / chert? |
| B00619 | 513,515 | 6,458,292 | 240 | 391 | 176 | 1,800 | Siliceous / chert? |
| B00620 | 513,803 | 6,458,338 | 510 | 101 | 131 | 305 | Ironstone |
| B00621 | 512,711 | 6,459,459 | 1,100 | 1,210 | 309 | 83 | Chert / Ironstone |
| B00622 | 513,499 | 6,459,400 | 249 | 642 | 71 | 86 | Sediment / siliceous |
| B00623 | 513,499 | 6,459,400 | 1,215 | 293 | 276 | 492 | ironstone / gossan? |

JORC Statement

Mineral Occurrences referred to in this ASX Announcement have been sourced from the NSW Government Minview online GIS portal which is publicly available at the following website - [MINVIEW](https://minview.nsw.gov.au/) online portal.

JORC Reporting

Table 2: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data – Rock Chip Sampling

| 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. | <p>This ASX Announcement details the results of rock chip sampling and ground magnetics geophysical surveying undertaken by Rimfire Pacific Mining Limited at the company's 100% - owned Bald Hill cobalt prospect at Broken Hill, NSW.</p> <p>Rock chip samples were submitted to ALS Pty Ltd in Adelaide, SA for base metal analysis using ALS method ME-ICP61.</p> <p>Sample coordinates, geological descriptions and assay results are given in Table 2 of this ASX Announcement.</p> |
| | Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. | Each rock chip sample comprised approximately 2 kilograms of outcropping material deemed prospective in the field. Samples were geologically described and placed in calcio bags at time of collection. |
| | 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 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. | <p>Rock chip samples were collected of outcropping ironstone, gossanous material (ex-sulphide) or other rock types deemed prospective in the field.</p> <p>Industry standard preparation and assay is conducted at ALS Pty Ltd in Adelaide, SA, including sample crushing and pulverising prior to subsampling for an assay sample.</p> |
| 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). | N/A as no drilling techniques were employed. |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. | N/A as no drilling techniques were employed. |
| | Measures taken to maximise sample recovery and ensure representative nature of the samples. | N/A as no drilling techniques were employed. |
| | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain | N/A as no drilling techniques were employed. |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| | of fine/coarse material. | |
| 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. | Rock chip samples were geologically logged but not to a level of detail sufficient to support appropriate Mineral Resource estimation |
| | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. | Geological logging rock chip samples is largely qualitative by nature. |
| | The total length and percentage of the relevant intersections logged. | Relevant intersections have been geologically logged in full. |
| Sub-sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. | N/A as no drilling techniques were employed. |
| | If non-core, whether riffled, tube sampled, rotary split & whether sampled wet or dry. | N/A as no drilling techniques were employed. |
| | For all sample types, the nature, quality, and appropriateness of the sample preparation technique. | The Sample Preparation technique employed by the laboratory is considered industry standard |
| | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. | Rock chip sampling is a largely prospecting type of activity and no addition quality control procedures other than placing samples in a sealed calico bag were adopted. |
| | 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. | Rock chip sampling is a largely prospecting type of activity and no addition quality control procedures other than placing samples in a sealed calico bag were adopted. |
| | Whether sample sizes are appropriate to the grain size of the material being sampled. | The sample sizes (typically ~ 2kg) of half core are considered appropriate to the grainsize of 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. | The methods used by ALS to analyse the rock samples for base metals and REE's are industry standard. The 4 acid ME-ICP61 method is a near completion dissolution technique |
| | For geophysical tools, spectrometers, handheld XRF instruments (pXRF), etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | No geophysical tools were used for the collection of rock chip samples. Details of the ground magnetics geophysical survey are given in Table 1 of this ASX Announcement. |
| | 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. | Due to the nature of the samples being reconnaissance surface rock samples no standards were added by Rimfire however ALS internal QA/QC samples were well within accepted tolerances |
| | | |
| Verification of sampling and assaying | The verification of significant intersections by either independent or alternative company personnel. | The significant results included in this ASX Announcement have been reviewed and verified by both Rimfire's Exploration Manager and Managing Director |
| | The use of twinned holes. | N/A as no drilling techniques were employed. |
| | Documentation of primary data, data entry procedures, data verification, data storage | Geological descriptions and sample locations were written into field notebooks at the time of |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| Location of data points | (physical and electronic) protocols. | collection and later entered into a digital database. |
| | Discuss any adjustment to assay data. | Rock chip sample locations were collected using a handheld GPS with +/- 5 metre accuracy. |
| | 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. | Sample locations are recorded using handheld Garmin GPS with a nominal accuracy +/- 5m. |
| | Specification of the grid system used. | GDA94 Zone 54. |
| Data spacing and distribution | Quality and adequacy of topographic control. | Rock chip sample locations were collected using a handheld GPS with +/- 5 metre accuracy. |
| | Data spacing for reporting of Exploration Results. | The location and spacing of diamond drillholes discussed in this Report are given in Table 1 and various figures of this Report |
| | 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. | The data spacing and distribution of rock chip sampling referred to in this Report is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s). |
| Orientation of data in relation to geological structure | Whether sample compositing has been applied. | Sample compositing has not been applied. |
| | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. | Rock chip sampling is a largely prospecting type of activity and as such no consideration as to whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type has been given. |
| | 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. | N/A as no drilling techniques were employed. |
| Sample security | The measures taken to ensure sample security. | Samples were placed inside calico sample bags and delivered to ALS Pty Ltd in Adelaide for analysis. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | The sampling techniques and data received to date has been reviewed by senior company personnel including the Exploration Manager and Managing Director with no issues identified. |

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. | This ASX Announcement details the results of rock chip sampling undertaken on EL5958 (the Broken Hill Project) which is 100% - owned by Rimfire Pacific Mining Limited All work was undertaken on Private Freehold Land. No Native Title exists. The land is used primarily for grazing. |
| | The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. | The tenement is in good standing, and all fieldwork is conducted under specific approvals from NSW Department of Planning and Energy, Resources and Geoscience. Rimfire has also executed an access agreement with relevant landowners to undertake this work. |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | The Broken Hill Project has a long history of base metal exploration given its proximity to the Broken Hill mining centre and the geological similarities between Rimfire's project area and the mines. Further details are provided in the body of this report. |
| Geology | Deposit type, geological setting, and style of mineralisation. | As discussed in the body of this report, Rimfire is targeting sulphide (pyrite) – hosted cobalt mineralisation within metamorphosed and structurally deformed metasediments of the Willyama Supergroup. |
| 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: <ul style="list-style-type: none"> • 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. | All rock chip locations are included within Tables and figures included in this ASX Announcement |
| | 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. | Not applicable as no information has been excluded. |
| Data aggregation methods | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. | No weighting techniques or cut off grades have been applied. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | 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. | No length weighting has been applied given all historic sample intervals were of equal length. |
| | The assumptions used for any reporting of metal equivalent values should be clearly stated. | No metal equivalents have been reported. |
| Relationship between mineralisation widths and intercept lengths | These relationships are particularly important in the Reporting of Exploration Results. | N/A as no drilling techniques were employed. |
| | 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 (e.g., '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. | Included within the ASX 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 avoiding misleading reporting of Exploration Results. | All results are included within this ASX Announcement. |
| 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. | There is currently no other substantive exploration data that is meaningful and material to report. |
| Further work | The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). | Planned further work is discussed in the report in relation to the exploration results. |
| | Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Not applicable at this stage |

About Rimfire

Rimfire Pacific Mining (**ASX: RIM**, “Rimfire” or the “Company”) is an ASX-listed Critical Minerals exploration company which is advancing a portfolio of projects within the highly prospective Lachlan Orogen and Broken Hill districts of New South Wales.

Rimfire has the 100% - owned Broken Hill Cobalt Project which is located immediately west and northwest of Broken Hill and covers several targets including;

- Bald Hill, where recent diamond drilling by Rimfire successfully intersected high-grade cobalt (Co) associated with strongly disseminated to semi massive sulphide (pyrite, pyrrhotite and trace chalcopyrite + sphalerite) mineralisation - see *Rimfire ASX Announcement dated 18 September 2023 [Broad zones of high-grade cobalt at Bald Hill](#)*, and
- Railway Extension, which is the interpreted along strike extension to Cobalt Blue Holdings’ Railway Cobalt Deposit (COB: ASX).

The Company has two 100% - owned copper – gold prospective projects that are located west of Parkes and Orange in central New South Wales:

- The Valley Project - located 35km west of the Northparkes Copper Gold Mine where Evolution Mining (EVN: ASX) has just acquired an 80% interest in the mining operation for up to US\$475M – see *Evolution Mining ASX Announcement dated 5 December 2023 [Acquisition of an 80% interest in Northparkes Copper Gold Mine](#)*, and
- The Cowal Project - located to the east of Evolution’s Lake Cowal Copper / Gold mine (EVN: ASX), which includes the newly acquired Porters Mount Project - see *Rimfire ASX Announcement dated 11 September 2023 [Acquisition of Porters Mount Project](#)*

Rimfire has two additional projects in the Lachlan Orogen which are being funded by Rimfire’s exploration partner - Golden Plains Resources (GPR):

- Avondale Project (GPR earning up to 75%) & Fifield Project (GPR earning up to 50.1%)
 - ✓ Both projects are prospective for high-value critical minerals – scandium, cobalt, nickel, gold, and PGEs - which are essential for renewable energy, electrification, and green technologies.
 - ✓ Adjacent to both projects are the;
 - development ready Sunrise Energy Metals Nickel Cobalt Scandium Project (ASX:SRL), and
 - Platina Scandium Project (Owendale Scandium Deposit), which was acquired by Rio Tinto (ASX:RIO) – see *RIO News Release dated 28 April 2023 [Rio Tinto acquires high-grade scandium project in Australia](#)*
 - ✓ The Fifield Project hosts the historic Platina Lead mine, the largest historic producer of Platinum in Australia.

For more information on the Avondale and Fifield Earn In and Joint Venture Agreements see:

[ASX Announcement: 4 May 2020 - Rimfire enters \\$4.5m Earn-in Agreement](#)

[ASX Announcement: 25 June 2021 - RIM Secures \\$7.5m Avondale Farm Out](#)

Competent Persons Declaration

The information in the report that relates to Exploration and Resource Results is based on information reviewed and/or compiled by David Hutton who is deemed to be a Competent Person and is a Fellow of The Australasian Institute of Mining and Metallurgy.

Mr Hutton has over 30 years' experience in the minerals industry and is the Managing Director and CEO of Rimfire Pacific Mining. Mr Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposits 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 Hutton consents to the inclusion of the matters based on the information in the form and context in which it appears.

Forward looking statements Disclaimer

This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals.

Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives, believe to have a reasonable basis for implying such an expectation or belief.

However, forward looking statements are subject to risks, uncertainties, and other factors, which could cause actual results to differ materially from future results expressed, projected, or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets, and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement".