

## Very High Chargeability and Low Resistivity of Sulphide Sample at St John

Drone MobileMT (MMT) deemed suitable for Saint John, New Brunswick, Canada

Sulphide Sample of 10.15% Cu, 65.8 g/t Ag, had very high induced polarisation/chargeability values in the range 210 to 220 mSec

### Highlights

- Testing shows the copper mineralisation at Saint John in Canada from Prince of Wales Prospect sulphide sample:
  - **10.15% Cu, 65.8g/t Ag (RK008302)<sup>1</sup>**
  - Very high IP/chargeability values in the range 210 to 220 mSec
  - Low resistivity values also confirmed ~1-4 S/m (inductive conductivity)
- Drone MobileMT (MMT) therefore deemed appropriate for the project and could quickly assist with defining new targets and prioritising existing targets
- Ground IP/Resistivity surveys to be utilised to follow-up local target scale MMT anomalies of interest
- Full approval for the drilling of 2,000 metres was received in January
- Little Lepreau Prospect geochemical sampling underway
- Multiple high-grade rock-chip results for antimony, gold, copper and silver
- New Brunswick is a Tier-1 Canadian mining jurisdiction and noted for antimony production
- The Project covers 101km<sup>2</sup> west of Saint John in the Bay of Fundy, 50km from the USA border
- Excellent infrastructure and access to the Project area

Riversgold Limited (ASX: RGL, Riversgold or the Company) is pleased to announce that petrophysics on a sulphide sample RK008302 that assayed **10.15% Cu and 65.8g/t Ag<sup>1</sup>**, has shown very high IP / chargeability from the Prince of Wales Prospect at the Saint John antimony, gold, copper and silver project (**the Project**), located in New Brunswick, Canada.

**Southern Geoscience Consultants (SGC), who undertook the petrophysics, commented that:** *“We don’t see too many valid readings above this ~ 200 to 300mSec range. IP/Resistivity surveying should work very well for the Prince of Wales Prospect and greater Saint John Project for the style of mineralisation sampled to date, and likely Drone MMT and conventional Airborne Electromagnetics (AEM) also if thicker sulphide bodies/pods are present.”*

**David Lenigas, Chairman of Riversgold, said:** *“This result is a real gamechanger for how we target copper sulphide mineralisation at Saint John. Surface assays to date have impressed with stellar grades of copper, gold, silver and antimony at this discovery in New Brunswick, Canada, where multiple multi-metal targets are being defined over the ~25 km strike of the project area. The results from the petrophysics tests on this sulphide sample give us a tremendously strong geophysical signature of the mineralisation we are looking for, and it is great that airborne techniques can be utilised to further test the Saint John Project. I look forward to further updates from current site activities and I am very pleased with the great start to 2025.”*

<sup>1</sup> RGL ASX announcement 12 December 2024 “Significant New Canadian Copper Discovery”

The sulphide sample RK008302 (**Figure 1**) from the Prince of Wales Prospect has demonstrated very high chargeability levels that are expected to define a very high IP response, and correlating low galvanic resistivity compared to local host rocks, and a low but detectable electromagnetic (EM) response if the sulphide unit has a reasonable thickness/areal dimensions.

The Project is located immediately to the west of the city of Saint John (refer to **Figure 2**) and only 50km east of the US border. New Brunswick has an excellent mining jurisdiction, and the Company has received full approval for the drilling of 2,000 metres. Geochemical sampling program is underway at Little Lepreau to refine targets.

The results of the petrophysics indicate that Drone MMT could quickly assist with defining new targets and prioritising existing targets by broader coverage, deep resistivity mapping, with the option of more focussed ground Induced Polarisation/Resistivity surveying over defined priority MMT targets defined.



**Figure 1: Prince Of Wales prospect sample RK008302 10.15% Cu and 65.8g/t Ag<sup>2</sup>, being tested for Induced Polarisation, chargeability, galvanic resistivity and inductive conductivity**

**Petrophysics Results:**

The IP chargeability values are around 210 to 220 mSec  
 The galvanic resistivity is about 170 to 180 Ohm.m  
 The inductive (EM) conductivity is ~1-4 S/m

**Chargeability values and responses guide of background to very strong:**

- 0 to 15 – background
- 20 to 40 – low response
- 40 to 60 – moderate response
- 60 to 100 – good response
- 100 to 200 – strong response
- 200 to 300 – very strong response

<sup>2</sup> RGL ASX announcement 12 December 2024 “Significant New Canadian Copper Discovery”

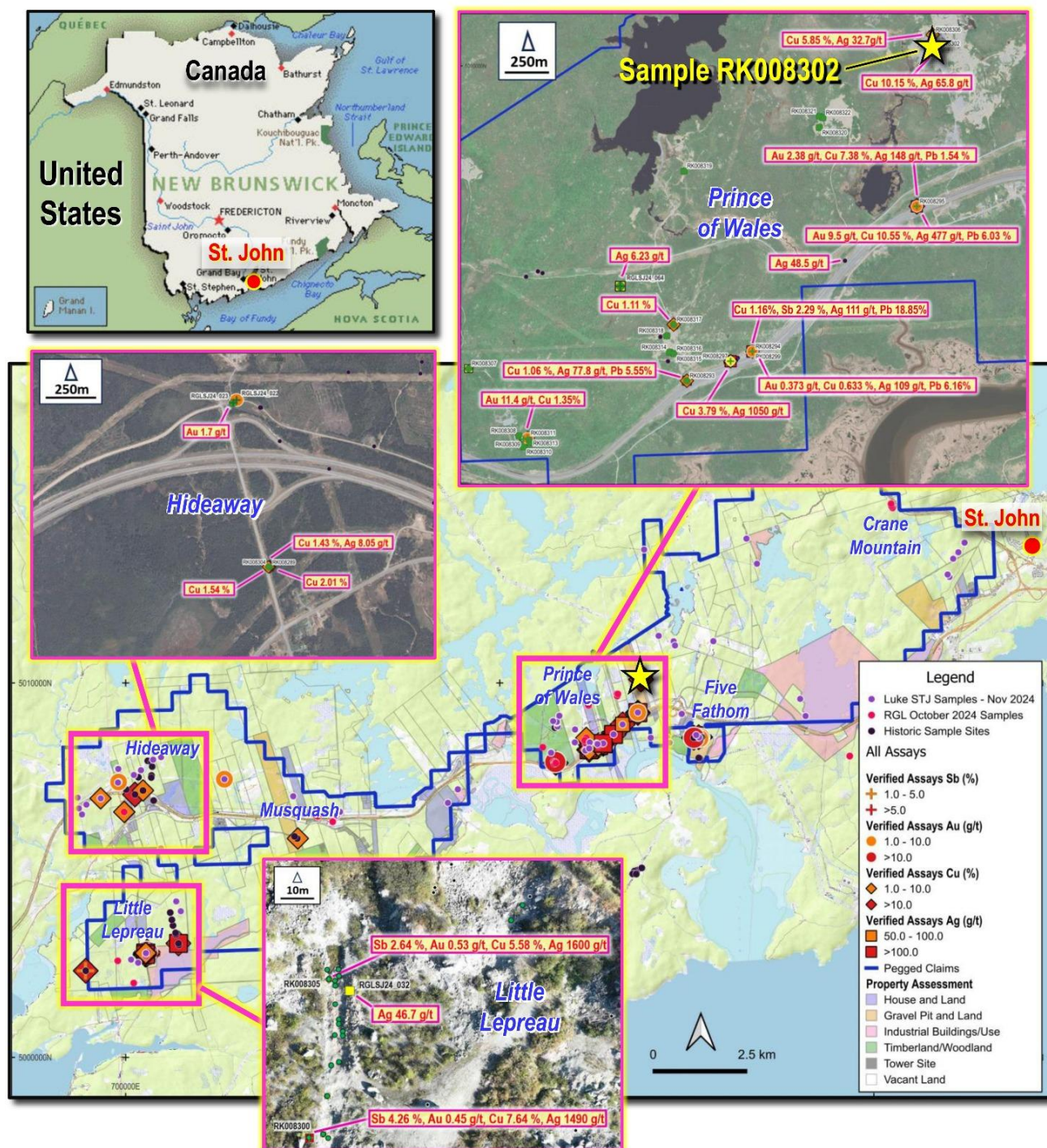


Figure 2: Saint John Project location, illustrating the prospect locations, figure extents and RGL rock chip sample locations and a selection of assay results.<sup>345</sup>

### About Mobile MagnetoTellurics (MMT)

Mobile MagnetoTellurics (MMT) is the latest innovation in airborne electromagnetics and the most advanced generation of airborne AFMAG technologies. The patent pending MobileMTd (Drone) technology utilizes naturally occurring electromagnetic fields in the frequency range of 10 – 20,000 Hz.

<sup>3</sup> RGL ASX announcement 12 December 2024 “Significant New Canadian Copper Discovery”

<sup>4</sup> RGL ASX announcement 7 January 2025 “Canadian Copper Gold Discovery High Grade Samples Continue”

<sup>5</sup> RGL ASX announcement 16 January 2025 “RGL Canadian Copper Gold Update - Magnetic Data Received”

The MobileMTd technology is the product of extensive experience in developing equipment and signal/data processing algorithms for natural electromagnetic fields measurement. MobileMTd combines the latest advances in electronics, airborne system design, and sophisticated signal processing techniques. The advanced noise processing technique of both electronic and signal processing levels ensures high data quality even for low natural EM fields.

The MobileMTd system records two mutually orthogonal electrical components of MT field on the stationary base station and three mutually orthogonal dB/dt components in the towed bird sensors.

The MobileMT processing program merges the records into one file. The signal processing is basically the same as in the classical ground MT methods. The program applies FFT to the records and calculates the matrices of the relations between the magnetic and electrical field signals on the different time bases and in different frequency bands. The module of the determinant of each matrix is a rotation invariant parameter which is used as a geophysical parameter for the mapping. Physically it represents a relation between the field powers in the points of flight and base station. This method is free of the bird motion distortions and does not require the problematic bird attitude corrections.

Each electrical component on the base station is registered independently from two grounded lines - signal and reference - which is utilized to eliminate the data bias distortions. This feature was not available in the previous generations of the AFMAG system.

-ENDS-

This announcement has been authorised for release by the Board of Riversgold Ltd.

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***Competent Person's Statement:***

The information in this report that relates to exploration results and exploration targets is based on information compiled by Mr Edward Mead, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Mead is a director of Riversgold Ltd and a consultant to the company through Doraleda Pty Ltd. Mr Mead has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Mead consents to the inclusion of this information in the form and context in which it appears in this report.

**APPENDIX 1: JORC INFORMATION**

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at Saint Johns, New Brunswick, Canada.

**Section 1: Sampling Techniques and Data**

(Criteria in this section applies to all succeeding sections)

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>Rock chip sampling of outcrop or exposures from trenches, road quarry pits and excavations.</p> <p>Rock chip sampling across the lithologies, in a channel fashion, to obtain representative material was completed, with sample size of 1-4 kg.</p> <p>Sample Core IP Tester (SCIP) manufactured by Instrumentation GDD measures the electrical properties of drill cores, samples and outcrops.</p> <p>Terraplus KT-20 Magnetic Susceptibility Meter</p>
<b>Drilling techniques</b>	<p><i>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).</i></p>	Drilling not being reported.
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	Drilling not being reported.
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	Rock chip samples were logged, with mineralisation and alteration described. Photos of samples and sample locations were taken.
<b>Sub-sampling techniques and sample preparation</b>	<p><i>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.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	No Sub sampling undertaken.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<p>Rock chip samples were submitted to ALS Global Laboratories in Moncton, New Brunswick, Canada, for analysis:</p> <p>Digest of Aqua Regia            Finish of ICP-MS41            Au 50gm FA/AA finish            Elements assayed for: Au, Ag, Al %, As, B, Ba, Be, Bi, Ca %, Cd, Ce, Co, Cr %, Cs, Cu, Fe %, Ga, Ge, Hf, Hg, In, K %, La, Li, Mg % Mn, Mo, Na, Nb, Ni, P %, Pb, Rb, Re, S %, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti %, Tl, U, V, W, Y, Zn, Zr,</p> <p>Sulphide sample was submitted to Southern Geoscience Consultants for petrophysics analysis: SCIP is a portable, battery-operated instrument for evaluating the resistive properties and IP response of your cores/rocks. With this instrument, you obtain information that a geophysicist needs to design an appropriate geophysical survey, to see if an IP survey would be appropriate. The SCIP will also help to better define IP inversion.</p> <p>Terraplus KT-20 Magnetic Susceptibility Meter. The KT-20 is a handheld console with different modules for measuring a sample's magnetic susceptibility, conductivity, changeability and resistivity, and density.</p> <p>IP chargeability mSec            Galvanic resistivity Ohm.m            Inductive (EM) conductivity S/m</p>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Intercepts were reviewed by 2 company personnel.</p> <p>No drilling being reported.</p> <p>Primary data recorded manually in field notebook, transferred to digital at night and stored in the RGL cloud server.</p> <p>Recent sampling has been completed using fulcrumapp. The <b>Fulcrum</b> field data collection and process management platform is digital and online.</p> <p>More than one geophysicist reviewed the results.</p>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Data points were located with handheld GPS in Lat Long and converted to Zone19 NAD83.</p> <p>Accuracy of data points +/-5metres</p> <p>Topographic control is considered adequate for the stage of the project.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Random spacing of samples based on exposure of fresh rock for sampling.</p> <p>Data not designed for, and is not suitable for an MRE.</p> <p>No sample compositing has been used.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>Not known at this stage of exploration.</p>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<p>Samples were taken by RGL geologists, photographed and the location recorded.</p> <p>Samples were kept inside the vehicle and delivered to ALS in Moncton, New Brunswick.</p>

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No data reviews or audits

## Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<p>The Saint John Project is made up of 5 claims in the Saint John area of New Brunswick, Canada. Claims can be renewed every year by meeting expenditure commitments. Claim expenditure is calculated by units. Renew each mineral claim unit costs:</p> <ul style="list-style-type: none"> <li>■ First to Fifth Renewals (per year) \$10.00</li> <li>■ Sixth to Tenth Renewals (per year) \$20.00</li> <li>■ Eleventh to Fifteenth Renewals (per year) \$30.00</li> <li>■ Sixteenth and Successive Renewals (per year) \$50.00</li> </ul> <p>The claims:</p> <ul style="list-style-type: none"> <li>■ 11488 Hideaway Lake held by Geoseacher inc. 101 units. Issue date 2024-09-25 \$10,100 expenditure to renew.</li> <li>■ 11489 Spruce Lake held by Geoseacher inc. 181 units. Issue date 2024-09-25 \$18,100 expenditure to renew.</li> <li>■ 10729 Little Lepreau held by Geoseacher inc. 57 units. Issue date 2025-03-19 \$17,100 expenditure to renew.</li> <li>■ 9106 Little Lepreau held by Robert Murray. 84 units. Issue date 2019-03-19 \$25,200 expenditure to renew</li> <li>■ 10655 Little Lepreau held by Robert Murray. 32 units. Issue date 2019-03-19 \$9,600 expenditure to renew.</li> </ul> <p>All claims are in good standing. Annual Expenditure \$80,100. Mining licences are granted for 20 years, and can be renewed.</p> <p>The Company has signed an option agreement with Geoseacher Inc. and Mr Robert Murray to acquire 100% of the Saint John Project with the following key terms:</p> <ol style="list-style-type: none"> <li>1. Payment of C\$60,000 on execution of the Agreement, which has been paid.</li> <li>2. Four annual payments commencing on the first anniversary of the execution of the Agreement comprising C\$25,000 in cash plus C\$35,000 payable in cash or RGL shares (based on the 10 day VWAP prior to the anniversary date) at the Company's election.</li> <li>3. Following payment of the C\$300,000, the option is considered exercised and a 2% GSR becomes payable. 50% of the GSR (being 1% GSR) can be repurchased by the Company for C\$1,000,000 and, provided</li> </ol>

Criteria	JORC Code explanation	Commentary
		<p>that the Company purchases the initial 50% of the GSR, the Company will then have the first right of refusal to purchase the remaining 50% of the GSR.</p> <p>4. The Company has the ability to accelerate the payments in order to exercise the option earlier.</p>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>The majority of previous exploration in the area is rock chip results, which has been verified. There are 12 diamond drill holes at Musquash, Scott Dam completed in the 60's which are not verifiable. Some geochemical sampling has been done. The most recent work of Lidar, Magnetics and limited geochemical sampling is all of a good quality.</p> <p>Coppercliff Consolidated Mining Corp 1953, geochemical sampling.</p> <p>Mount Costigan Mines, 1962, Scotts Dam Prospect, Musquash. Report 470024. Geological mapping and geochemical samples.</p> <p>Merrill Island Mining Corp, 1968, Scotts Dam Prospect, Musquash. Report 470022. 12 Diamond drill holes to a maximum depth of 404ft (123.14m). Mineralisation intercepted but assays not able to be verified</p> <p>Crystal Plastics Ltd, 1974 Vinegar Hill Prospect, Musquash, VLF-EM, magnetics and geochemical sampling.</p> <p>Brunswick Mining and Smelting Corporation Limited, 1984. Report 473116. Liberty Hill. Geochemical sampling.</p> <p>Falconcrest Resources Inc, 1986. Scott Falls, Musquash. Report 473366. Geochemical sampling.</p> <p>Geosearcher Inc, 2020. Little Lepreau. Rock chip samples.</p> <p>Brunswick Exploration Inc, 2022. Saint John. Lidar reprocessing, Geophysical reprocessing DIGEM resistivity 900Hz, Geophysical reprocessing of Regional Airborne Magnetics Residual RTP, Rock chip.</p> <p>The below datasets are available and are being used by Riversgold over the Saint John Project</p> <ul style="list-style-type: none"> <li>■ Geological Survey of Canada VLF and aeromagnetic (1987)</li> <li>■ Geological Survey of Canada radiometric (1985/1986)</li> <li>■ Government of New Brunswick high sensitivity Aeromagnetic (2001)</li> <li>■ Noranda Exploration magnetic, VLF and EM (DIGEM) (1989)</li> <li>■ Government of New Brunswick Bouguer Gravity (Hassan compilation - 2000)</li> <li>■ Government of New Brunswick Lidar (2015-2018) Exploration Plans</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The deposit is thought to be an IOCG and/or Porphyry. Further exploration is required to validate and advance the geological model to explain the mineralisation observed over such a large area.</p>



<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Drill hole information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> <p>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.</p>	Drilling not being reported.
<b>Data aggregation methods</b>	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No data aggregation being used.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	No relationship between samples and mineralisation width.
<b>Diagrams</b>	<p>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.</p>	See body of the announcement for relevant diagrams and photos.
<b>Balanced reporting</b>	<p>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.</p>	The reporting of exploration results is considered balanced by the competent person.
<b>Other substantive exploration data</b>	<p>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.</p>	See body of the announcement.
<b>Further work</b>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Continued sampling over the project.</li> <li>• Trenching.</li> <li>• Geochemical sampling.</li> <li>• Maiden drill program approved by DNRED (Mines Department)</li> </ul>