

## ALASKAN DRILLING CAMPAIGN UNDERWAY

- **Alaskan drilling campaign underway testing targets at Luna, Quicksilver and Kisa**
- **Induced Polarisation (IP) survey highlights drill targets at Luna and Luna East**

**Riversgold Limited (ASX: RGL, “Riversgold”)** is pleased to announce the commencement of the Company’s maiden drilling campaign at its gold exploration projects in southwest Alaska, USA, testing various targets within the Luna, Quicksilver and Kisa Prospects.

The Company has three 100%-owned projects within the world-class Tintina Gold Province in southwest Alaska, USA, and is currently exploring for a large intrusion-related gold (IRG) deposit, such as the giant 45 million-ounce Donlin Creek gold deposit, approximately 150km to the north.

Riversgold’s projects contain outcropping high-grade gold, and/or polymetallic mineralisation, at several locations that has been only sporadically explored and, apart from the Kisa Project, never drilled.

The Company has recently completed geochemical and geophysical surveys over the Luna, Quicksilver and Gemuk prospects, including an Induced Polarisation survey at Luna which has been used to refine the location of drill holes at the Luna and Luna East targets.

Riversgold’s Managing Director, Mr Allan Kelly, said the drill programme had been delayed slightly due to a number of mechanical issues, but would still test a variety of geological, geochemical and geophysical targets at Luna, Quicksilver and Kisa.

“We are focussing on the highest priority targets at this stage, starting by drilling underneath the main Luna outcrop where we have multiple high-grade rock chip results, up to 64.7g/t Au, from a zone of stockwork veins and felsic porphyry dykes within altered sediments,” Mr Kelly said.

The current drill programme will comprise up to 1,000m of diamond drilling and is forecast to take 2 weeks to complete.



**Figure 1.** Diamond drill rig at the Luna stockwork outcrop.

## Luna IP Survey

The Company has recently completed an Induced Polarisation (IP) survey over the Luna Prospect, including the Luna and Luna East targets.

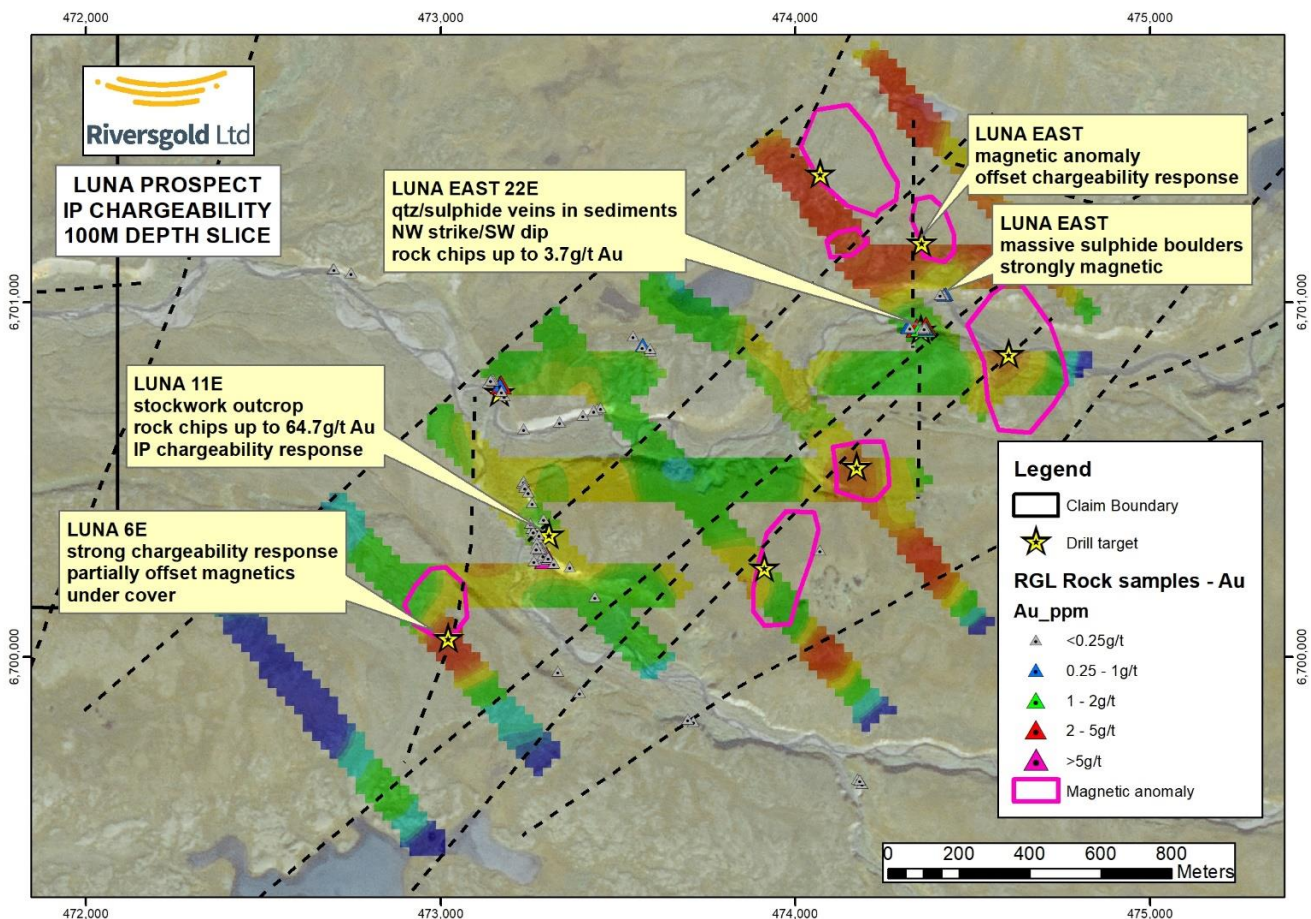
IP has shown to be an effective technique in exploration for IRG mineralisation, in Alaska and elsewhere, given the characteristic presence of disseminated sulphides such as pyrite and arsenopyrite. IRG mineralisation is expected to show up as a high chargeability +/- resistivity response.

Given the extensive thin glacial/alluvial cover at Luna, the Company considered IP to be a potentially useful tool in helping the refine the location of proposed drill holes.

The pole-dipole survey was conducted by Aurora Geosciences ("Aurora"), who have provided preliminary data including resistivity and chargeability pseudo-sections and inversion models for use in refining the current drilling programme.

The survey was designed as a grid of 400m-spaced NW-SE oriented lines, orthogonal to the main structures, with stations spaced at 50m along the lines. Following identification of at least two N-S structures, several E-W follow-up lines were also completed (Figure 2).

The survey has highlighted several interesting geophysical targets which appear to be related to bedrock features and could represent buried IRG mineralisation and/or massive sulphide mineralisation.



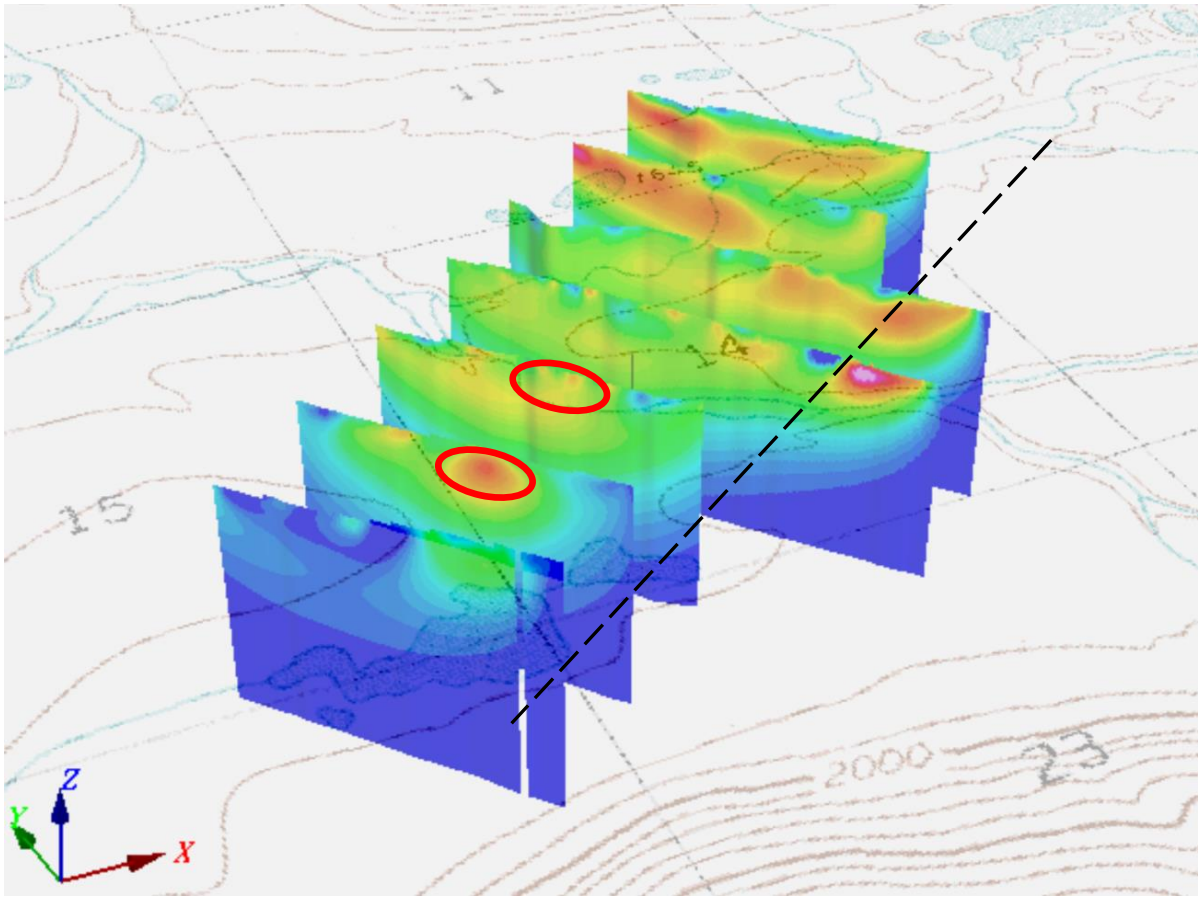
**Figure 2.** Luna Prospect showing IP chargeability response (100m depth slice) in relation to known mineralisation, interpreted structures and magnetic anomalies.

At **Luna**, a combined IP chargeability and resistivity response is seen over at least 400m of strike, between lines 6E and 10E, as well as on follow-up line 2N (Figure 3).

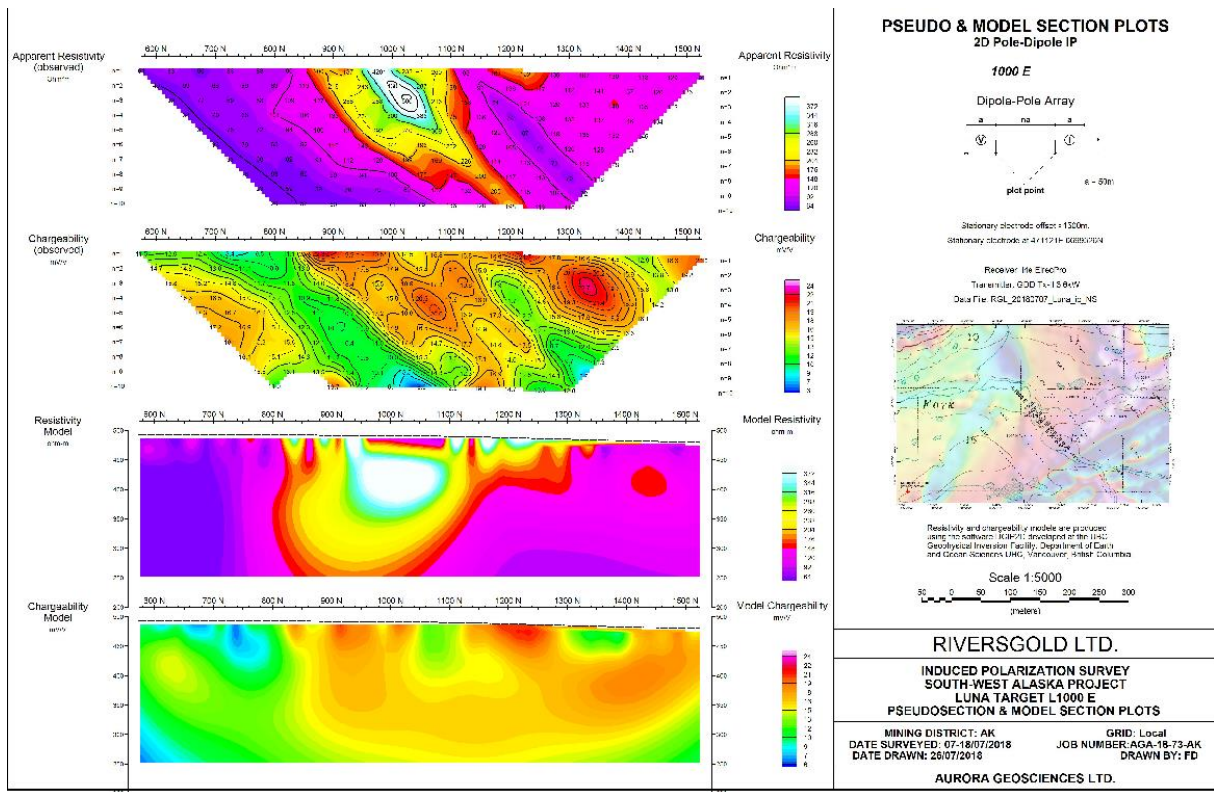
The response is shallowest on line 10E, where mineralisation is seen at the main Luna outcrop (Figure 4), and appears to increase in depth towards the southwest, where a stronger chargeability response is observed on Line 6E (Figure 5).

Diamond drill holes are planned to test the strongest part of the IP response on Line 6E, as well as under the main Luna outcrop, as part of the current drilling campaign.





**Figure 3.** Stacked section view of modelled IP chargeability, looking northeast. IP targets on Line 6E and 10E shown as red ellipses with North Fork Fault shown as dashed line. (E-W lines omitted).



**Figure 4.** Line 10E, over main Luna outcrop at 1000N.

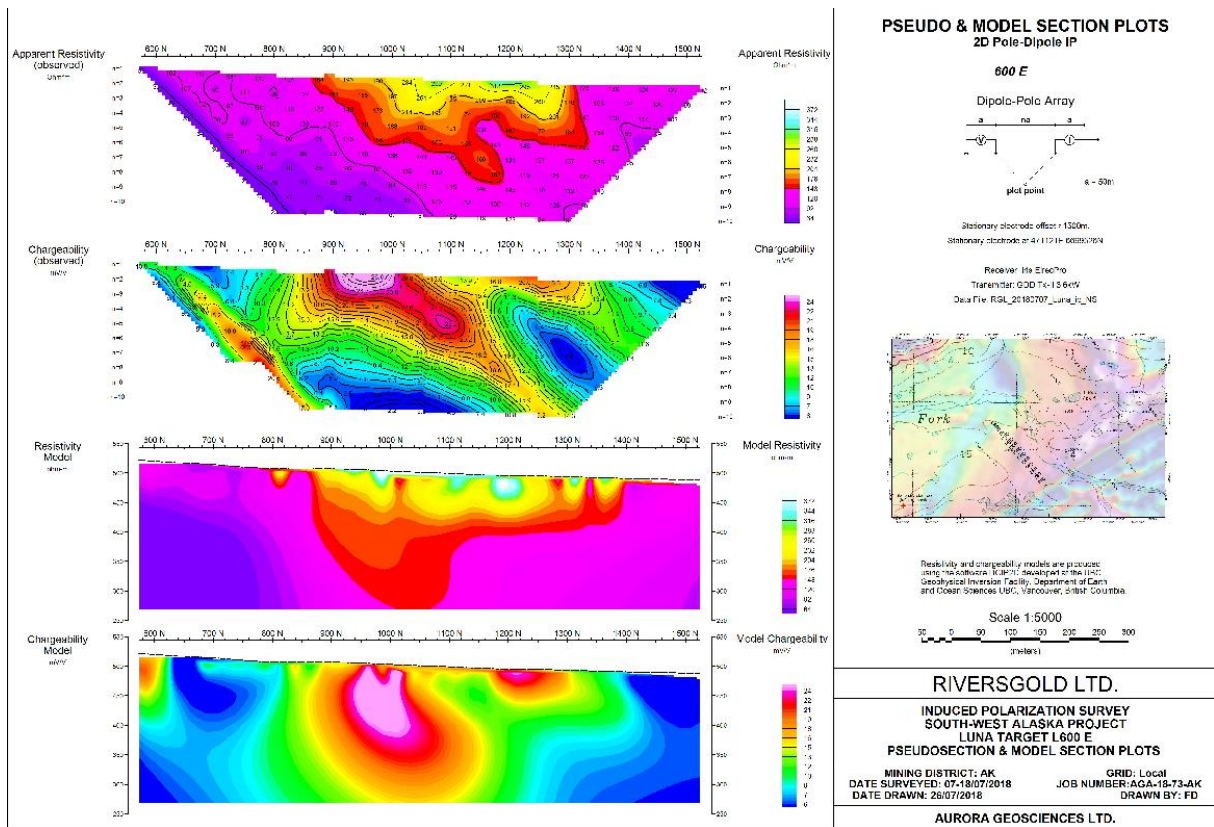


Figure 5. Line 6E, 400m SW of the main mineralised Luna outcrop.

Between Luna and Luna East, two lines 400m apart (14E and 18E), show a discrete IP chargeability and resistivity response, along with partially coincident magnetic anomalism, just north of the North Fork Fault (Figures 6).

A drill hole is planned for this target, pending the results of the hole testing the IP anomaly on Line 6E.

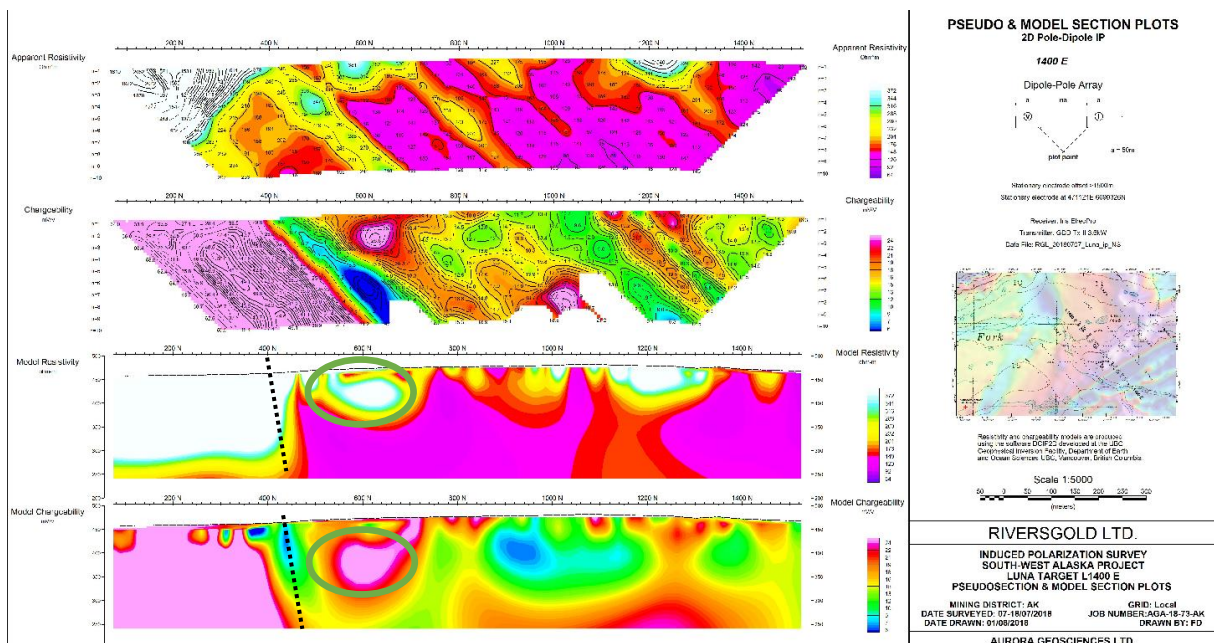


Figure 6. Line 14E, showing combined IP chargeability and resistivity anomaly at 600N (green ellipse), north of the North Fork Fault (dotted line).



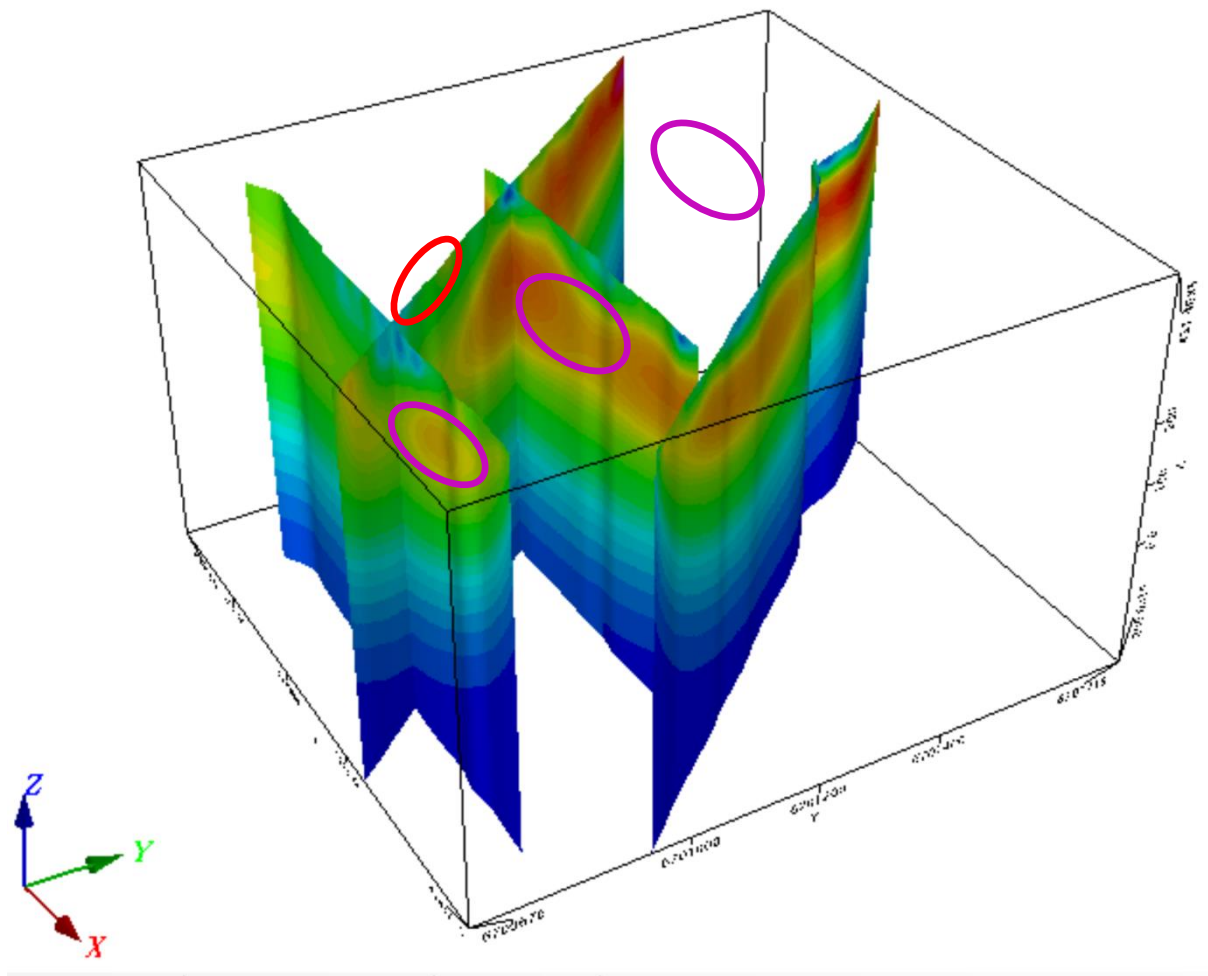
At **Luna East**, two styles of mineralisation are observed:

- Outcropping quartz/sulphide veins within northwest striking/southwest dipping hornfelsed sediments and with rock chip results up to 3.7g/t Au with associated Ag, As, Cu and Sb;
- Large, angular massive sulphide boulders with a significant amount of magnetic pyrrhotite and with assays up to 1.2% Cu and 90g/t Au, but generally lower tenor gold results.

The IP survey data does not show an obvious response over the quartz/sulphide veins but has highlighted a chargeability response on two E-W follow-up lines, 300m apart (8N and 11N), which appears to be associated with a NW trending magnetic anomaly broken up by faulting (Figure 7).

The magnetic unit may be the source of the massive sulphide boulders.

As well as testing beneath the outcropping quartz/sulphide veins, a drill hole is planned to test the magnetic anomaly adjacent to the IP chargeability response.



**Figure 7.** Luna East IP chargeability model, looking NW. Luna East qtz/sulphide vein outcrop shown as red ellipse. Approximate location of NW-trending magnetic body shown as magenta ellipses.

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### **About Riversgold Limited**

Riversgold listed on the ASX in October 2017 and has a portfolio of gold exploration projects within the Eastern Goldfields of Western Australia, the Tintina Gold Belt in southwest Alaska, USA, and the Gawler Craton of South Australia, along with applications for mineral exploration tenements in Cambodia, adjacent to the 1 million-ounce Okvau gold deposit.

Riversgold's Board has a track record of successful exploration, discovery, development and production.

### **Competent Person Statement**

The information in this document that relates to Exploration Results is based on information compiled by Mr Allan Kelly, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG). Mr Kelly is the Managing Director and CEO of Riversgold Ltd. He is a full-time employee of Riversgold Ltd and holds shares and options in the Company.

Mr Kelly has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Kelly consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Information relating to historical results for the Luna/Quicksilver project, including JORC Table 1 information is included the Independent Geologists Report included in the Replacement Prospectus dated 11 August 2017.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.

**Section 1 Sampling Techniques and Data – Luna IP Survey**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Pole-dipole IP survey with 50m station spacing along 300-400m spaced lines</li> <li>Transmitter: GDD Tx-II 3.6kw</li> <li>Receiver: Iris ElrecPro</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>
Sub-sampling techniques and	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled,</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>

Criteria	JORC Code explanation	Commentary
sample preparation	<p><i>rotary split, etc and whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>IP data considered appropriate for exploration for Intrusion-related gold deposits due to the presence of disseminated sulphides.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Data not verified</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Lines located using handheld GPS.</li> <li>Datum is NAD83 Zone 4N</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Line spacing of 300-400m and station spacing of 50m considered appropriate for size of target sought.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Lines oriented at 90 degrees to major structures</li> <li>Follow-up lines oriented E-W to cross subordinate N-S structures</li> </ul>



Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no samples taken</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audit undertaken</li> </ul>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>State of Alaska mining claims owned 100% by Riversgold's Alaskan subsidiary, "Afranex (Alaska) Limited"</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous work completed at Luna by Gold Crest Mines and Southern Crown Resources Ltd.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Riversgold is exploring Intrusion-related Gold (IRG) mineralisation.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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"> <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> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>
Relationship between	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration</li> </ul>	<ul style="list-style-type: none"> <li>No drilling undertaken</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>mineralisation widths and intercept lengths</i>	<p><i>Results.</i></p> <ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Plan and sections shown for IP survey</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Plans and sections shown</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Summary of rock chip results shown</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling of targets refined from combination of geological mapping, geochemical sampling and IP survey.</li> </ul>