



## EXPLORATION UPDATE

### Key points

- **Robust gold anomalous trends identified in first part of regional ionic leach geochemical survey in Central Lapland Greenstone Belt (CLGB), Finland**
- **Large VTEM survey due to start over nickel-copper prospective ground in CLGB**
- **Mineral rights extended at Ecu (Nevada) via agreement between S2's partner, Renaissance Gold and Newmont**
- **Gravity survey starting on expanded Ecu acreage, with AMT next and first drilling in October**

S2 Resources Ltd ("S2" or the "Company") advises that its summer exploration campaign in northern Finland is progressing well with good progress and robust gold anomalies identified in its regional ionic leach geochemical program and the imminent startup of a large VTEM survey over its nickel-copper prospective ground. Meanwhile in Nevada, the Company, via its earn-in rights with JV partner Renaissance Gold, has secured mineral rights to additional ground adjacent to its Ecu project through a sub-lease deal with Newmont. S2 will soon commence gravity, audiomagnetotellurics (AMT) and drone surveys on this ground ahead of first drilling scheduled for October.

### Central Lapland Greenstone Belt, Finland

The focus of S2's summer exploration program in northern Finland is the execution of one of the most extensive ionic leach geochemical surveys ever undertaken (see Figure 1). The aim of this program is to identify broad gold and base metal anomalous areas in order to prioritise and rationalise tenure, enabling the fast tracking of high priority areas for follow up together with the relinquishment of low priority areas to minimize ground holding costs, thereby focusing activities to optimize their technical, time and cost effectiveness.

Sampling is approximately 50% complete on a 14,000 sample survey, which is being undertaken by a large team of students under the supervision of S2 personnel to ensure its completion in the relatively brief (3 month) sampling window prior to the ground re-freezing in October.

Results received for the first of these areas (Paana), considered to be prospective for lode gold style mineralization and located to the north west of Agnico Eagle's 8 million ounce Kittila gold mine, have identified robust, strike extensive gold anomalous corridors (see Figures 2 and 3). Specifically, there are two distinct gold anomalous corridors, each trending NNW over a strike extent of 4-5 kilometres, within a broader belt of arsenic anomalism. The western gold trend contains three distinct hotspots,

each measuring about 1 kilometre across and up to 1.5 kilometres along strike. Additionally, there are two smaller gold anomalies to the southwest and northeast of the main trends.

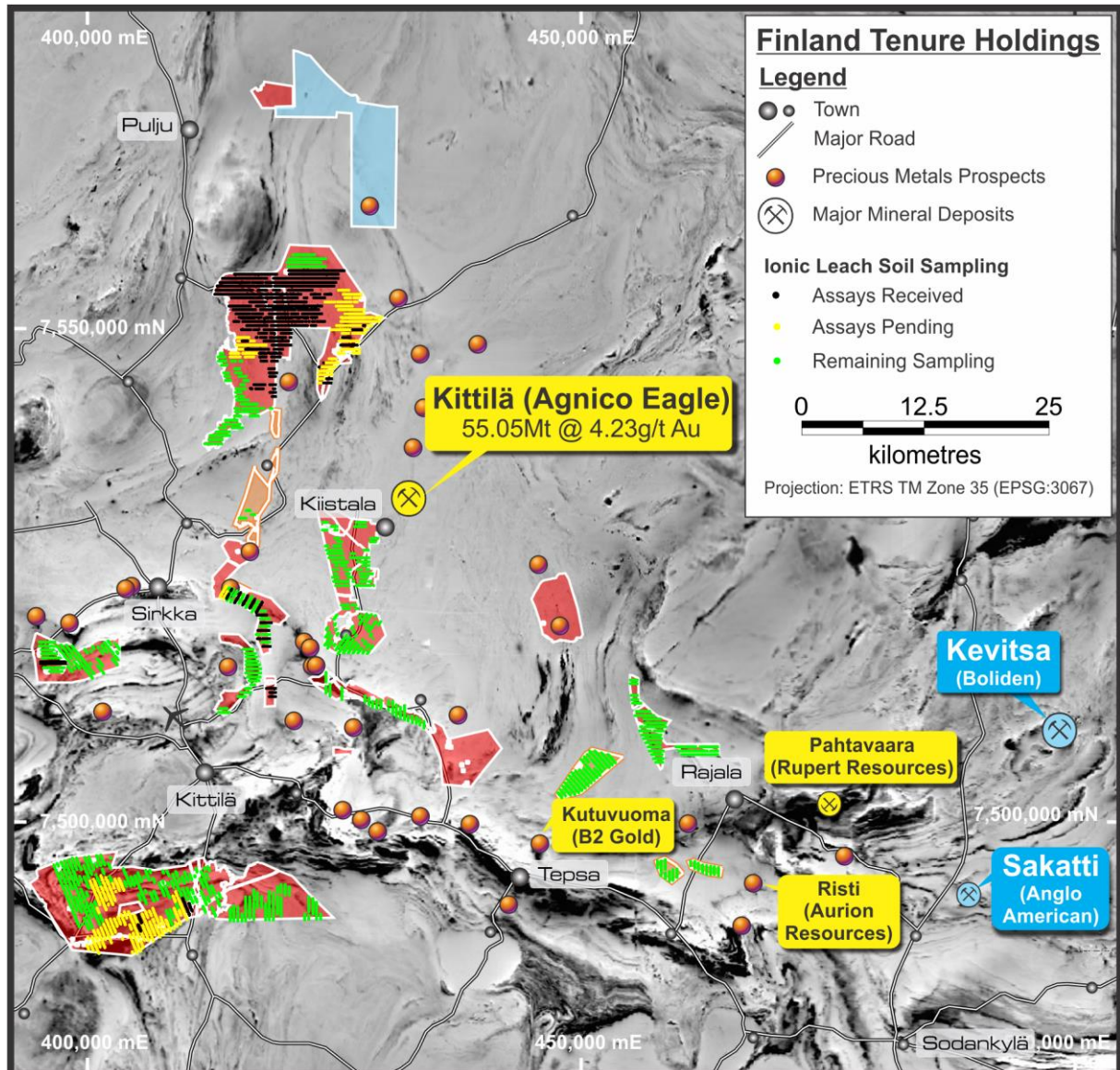


Figure 1. Plan showing extent of planned and completed ionic leach geochemical sampling.

The ionic leach technique is designed to detect very low levels of anomalism in situations such as this, where conventional geochemical techniques may be ineffective due to bedrock being concealed by transported cover. Whilst the levels of anomalism are typically low, the contrast between anomalous and background values is high, and the spatial coherency of the anomalies suggests they reflect a real bedrock signal rather than random noise from the overburden. These results are important because they not only show that the ionic leach technique works as a valid reconnaissance tool, but they indicate the presence of gold enriched structures with the potential for hosting significant gold mineralization.

Sampling is ongoing over other areas including the Home licence (one of Finland's most prominent gold in till anomalies) and the Ruopas licence (considered to be prospective for magmatic nickel-copper mineralization like that at Anglo American's Sakatti deposit).

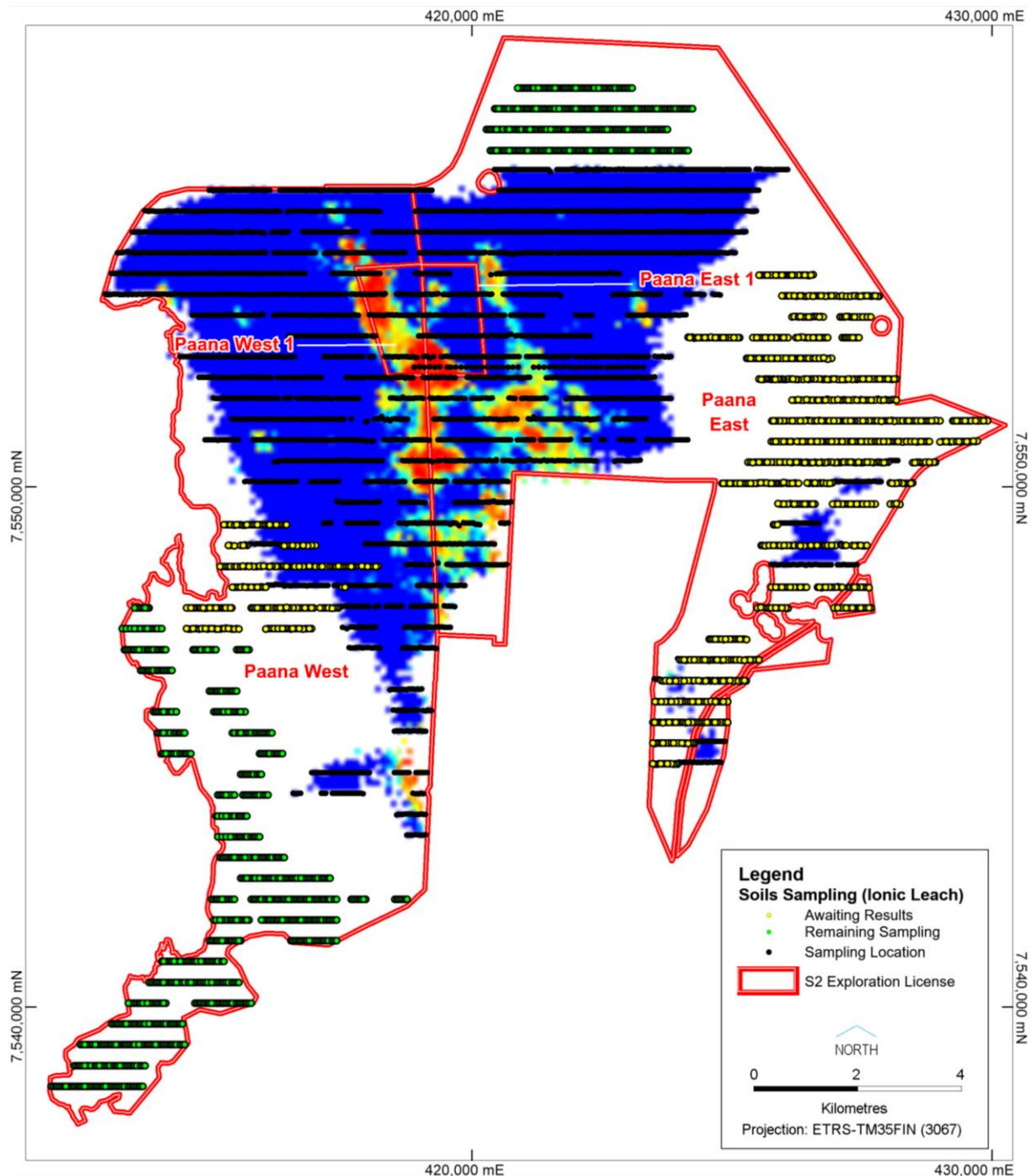


Figure 2. Plan showing gold anomalous trends and hotspots identified in the ionic leach geochemical survey of the Paana licence.

In addition to the geochemical program, a large VTEM airborne electromagnetic survey will soon commence over the Ruopas and Nuttio licences. Both areas are considered prospective for magmatic nickel-copper sulphide mineralization, and the Ruopas licence contains copper and palladium anomalies identified in previous government till sampling.

The Ruopas and Nuttio VTEM airborne surveys will comprise approximately 900 line kilometres flown by helicopter on 200m line spacing. Acquisition, quality control and processing is likely to take three to four weeks and interpreted results are expected by October 2018.



The combination of the ionic leach geochemical survey and the VTEM will drive the winter program which will have a dual focus of: base of till (BoT), or equivalent, drilling of the gold anomalous trends to define more focused anomalies for future targeted drilling; and follow up ground EM of nickel-copper targets (any VTEM conductors), especially if supported by the geochemistry.

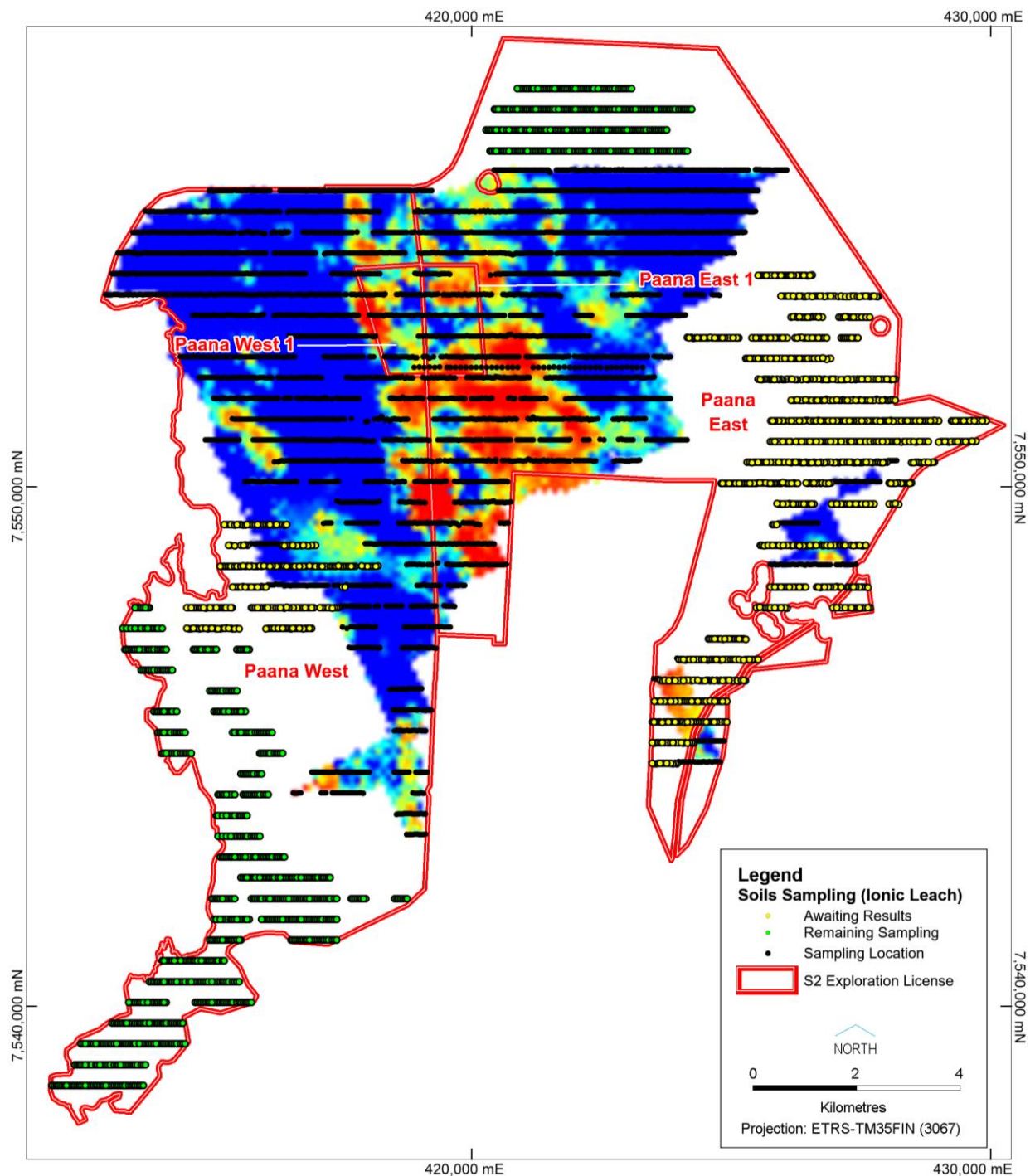


Figure 3. Plan showing arsenic anomalous belt identified in the ionic leach geochemical survey of the Paana licence.

## **Ecru, Nevada**

S2's joint venture partner at the Ecru project, Renaissance Gold ("RenGold"), has signed an agreement via its wholly-owned subsidiary, Kinetic Gold (US) Inc ("Kinetic"), to sublease the mineral rights on approximately 1120 acres (~4.5 square kilometres) of ground adjacent to the Ecru project from Newmont USA Ltd (the "Newmont Lease"). The terms of the deal give RenGold the mineral rights on this ground for a period of ten years, with an option to extend the lease for an additional five years, and then indefinitely so long as mining, development or processing operations are being conducted on the property on a continuous basis. RenGold is required to make annual payments to Newmont which will be deemed advance royalty payments to be offset against any future royalty obligations in the event of a mine being developed.

The Newmont Lease is in the area of interest of the S2-Rengold Ecru JV and will be included in it under the existing earn-in terms of the S2-RenGold Investment Agreement ("IA") as disclosed in S2's ASX release of 1<sup>st</sup> August 2017, namely:

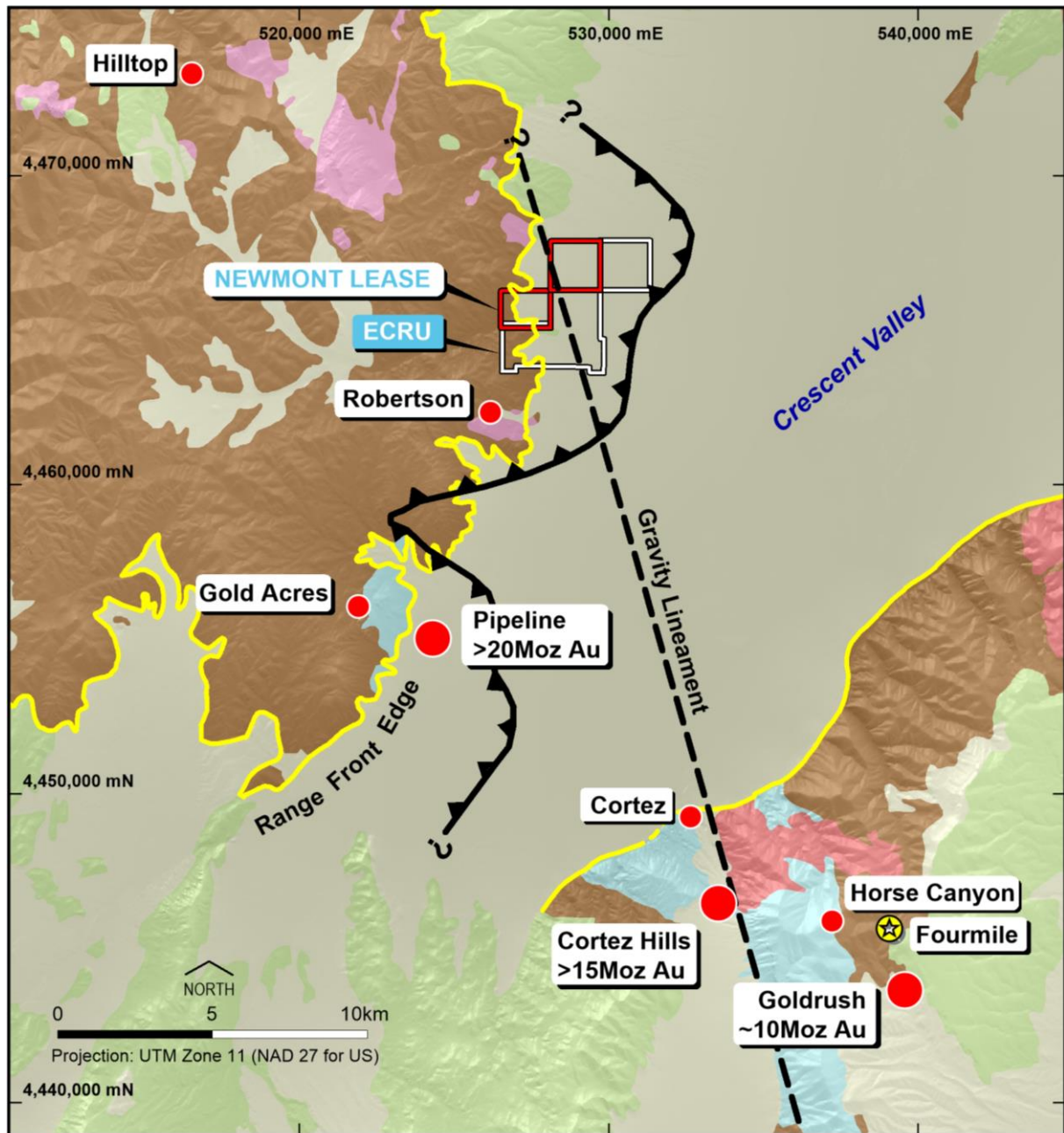
- Minimum expenditure by S2 of US\$200,000 within 2 years of signing (ie, by 30<sup>th</sup> July 2019 – note that S2 is already part way towards meeting this from expenditure already incurred on the Ecru project)
- US\$3 million total expenditure within 5 years (ie, by 30<sup>th</sup> July 2022) for S2 to earn a 70% interest
- If/when S2 earns in, RenGold can participate or dilute its interest, and if its interest dilutes below 10% it reverts to a net smelter return royalty

As managers of the Ecru project, S2 will explore the Newmont Lease in conjunction with the existing Ecru ground and will also be responsible for making the advance royalty payments to Newmont under the terms of the RenGold-Newmont deal. These payments will be deemed earn in expenditure for S2 under the terms of the S2-RenGold IA.

Gravity, audiomagnetotelluric (AMT) and drone reconnaissance will be undertaken to extend existing coverage over the Newmont ground to provide maximum data for the siting of the planned initial deep stratigraphic/reconnaissance drilling.

The gravity and drone surveys start next week, followed by AMT later in August. It is anticipated that the results of these surveys will be available by September, enabling initial drilling to take place from mid-October until mid-December.

The Ecru project is located on the prolific Battle Mountain-Eureka trend of central Nevada, adjacent to Barrick's Cortez landholdings, which contain the world class Pipeline, Cortez Hills and Goldrush Carlin-style gold deposits (see Figures 4 and 5).



#### Legend

- ECRU claims boundary
- Newmont lease

- Gold deposit >10Moz
- Gold deposit <10Moz
- ★ New discovery

#### Geology

- Alluvium
- Tertiary volcanic
- Tertiary intrusive
- Abyss thrust fault (Interp.)
- Jurassic intrusive
- Lower plate carbonates
- Upper plate sediments
- Edge of transported cover

Figure 4. Plan showing existing ECRU project area and new ground sub-leased from Newmont, in context of nearby mines.



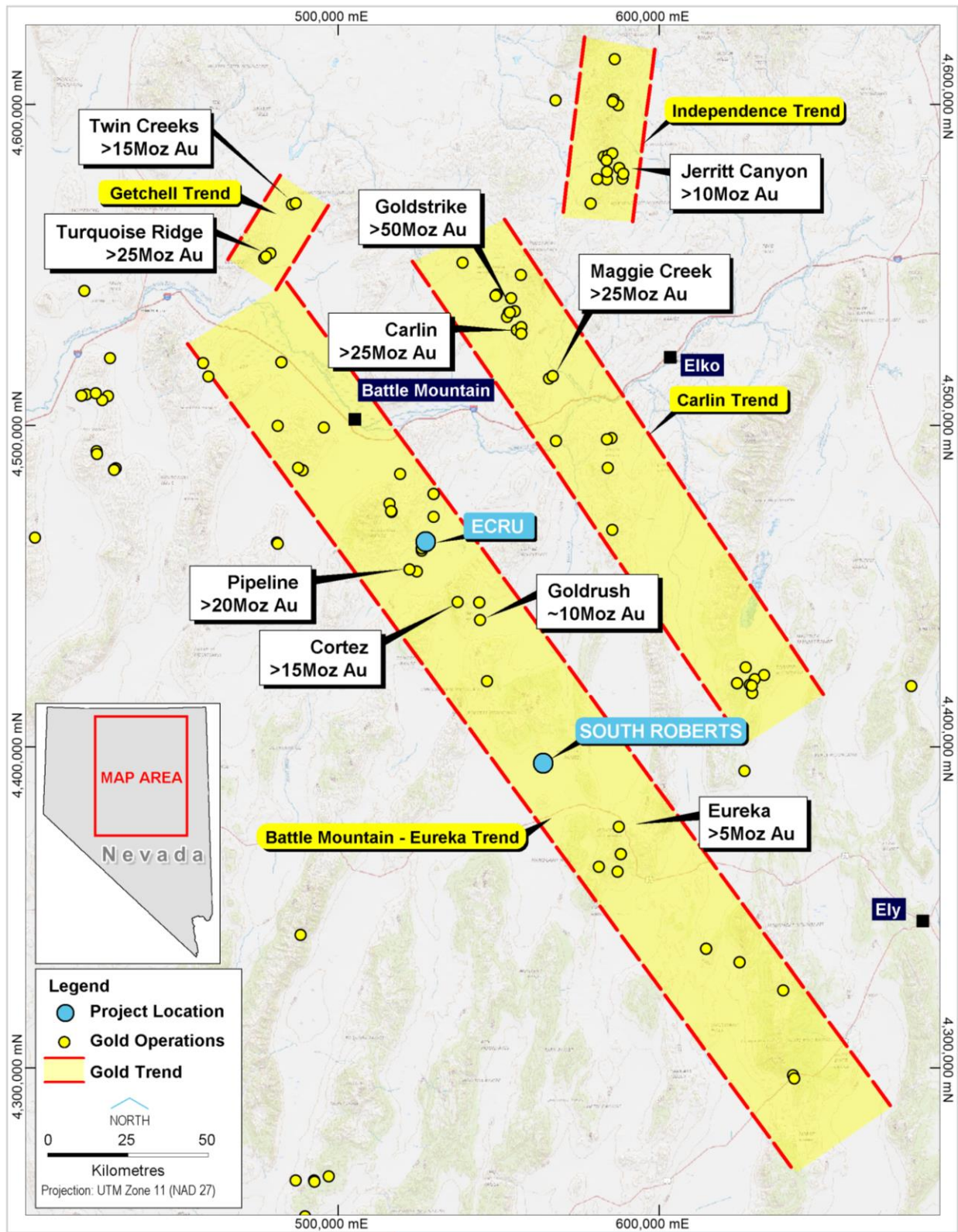


Figure 5. Plan showing location of Ecru on the prolific Battle Mountain-Eureka trend.

**For further information, please contact:**

Mark Bennett  
Managing Director & CEO  
+61 8 6166 0240

Anna Neuling  
Executive Director & Company Secretary  
+61 8 6166 0240



S2's Finnish summer campaign team, LTR: Johan Vandaele, Markus Aho, Marlo Blatchford, Matthew Goode, Ellie Capuano, Stephanie Blaberg, Thomas Dols, Jon Carrier, Liisa Repo, Andy Thompson.

**Competent Persons statements**

The information in this report that relates to Exploration Results from Nevada is based on information compiled by John Bartlett, who is an employee and shareholder of the Company. Mr Bartlett is a member of the Australian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience of relevance to the style of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bartlett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to Exploration Results from Sweden and Finland is based on information compiled by Andy Thompson, who is an employee and shareholder of the Company. Mr Thompson is a member of the Australian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience of relevance to the style of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thompson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.



## Annexure 1

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

### SECTION 1: SAMPLING TECHNIQUES AND DATA

| Criteria                     | JORC Code explanation   | Commentary  |
|------------------------------|---|---|
| <b>Sampling techniques</b>   | <i>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.</i>   | Soil sampling is undertaken by S2 employees and contractors using handheld mattocks. Samples are collected from 20-25cm beneath the base of organic ground cover. Samples are double bagged in zip lock bags. All rock grab and rock float samples are collected from outcrop by S2 personnel and marked into sample books and a representative portion of the sample retained. All are forwarded for analyses by ALS Laboratories. |
|                              | <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>   | Sampling and QAQC procedures are carried out using S2 protocols as per industry best practice.  |
|                              | <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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</i> | Geochemical samples only were collected for inclusion in this report.   |
| <b>Drilling techniques</b>   | <i>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).</i>  | Soil sampling was the only technique used for data inclusion in this report and technique is described elsewhere in this table.   |
| <b>Drill sample recovery</b> | <i>Method of recording and assessing core and chip sample recoveries and results assessed</i>   | Soil sampling was the only technique used for data inclusion in this report and technique is described elsewhere in this table.   |
|                              | <i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>   | Soil sampling was the only technique used for data inclusion in this report and technique is described elsewhere in this table.   |
|                              | <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>   | Soil sampling was the only technique used for data inclusion in this report and technique is described elsewhere in this table.   |
| <b>Logging</b>               | <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>  | The logging of soil samples uses a standard legend developed by S2 which is suitable for domaining different soil type domains. This is suitable to provide data to assess quality control and statistical analysis of geochemical anomalism  |
|                              | <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>   | Logging is qualitative, based on a logging system developed during orientation surveys in 2017.   |
|                              | <i>The total length and percentage of the relevant intersections logged</i>   | All samples are logged.   |

| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| <b>Sub-sampling techniques and sample preparation</b> | <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>  | Geochemical sampling only.  |
|   | <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>  | No sieving of samples. Obvious coarse organics are removed  |
|   | <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>   | Samples were delivered by S2 personnel to ALS Minerals laboratory in Sodankyla, Finland. Samples are only weighed in Finland and then sent to ALS, Loughrea Ireland for Ionic Leach.  |
|   | <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>  | No sub-sampling takes place.  |
|   | <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>   | No sub-sampling takes place.  |
|   | <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>  | Samples are of appropriate size at 150-250g.  |
| <b>Quality of assay data and laboratory tests</b>     | <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>   | All samples were analysed by ALS Minerals Loughrea, Ireland. Using Ionic leach (code ME-MS22)<br>Ionic Leach is a static sodium cyanide leach using chelating agents ammonium chloride, citric acid and EDTA with the leachant buffered at pH 8.5. Analytes are measured using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS). Elements analysed are:<br>Ag,As,Au,Ba,Be,Bi,Br,Ca,Cd,Ce,Co,Cr,Cs,Cu,Dy,Er,Eu,Fe,Ga Gd,Ge,Hf,Hg,Ho,I,In,La,Li,Lu,Mg,Mn,Mo,Nb,Nd,Ni,Pb,Pd,Pr, Rb,Re,Sb,Sc,Se,Sm,Sn,Sr,Ta,Tb,Te,Th,Ti,Tl,Tm,U,W,Y,Yb,Zn,and Zr |
|   | <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> | No geophysical tools were used to determine any element concentrations.   |
|   | <i>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.</i>                 | Field duplicates are taken to assess laboratory repeat quality.   |
| <b>Verification of sampling and assaying</b>          | <i>The verification of significant intersections by either independent or alternative company personnel.</i>  | Andy Thompson has worked with all the soil sampling team members to verify field sampling procedures are adhered to.  |
|   | <i>The use of twinned holes.</i>  | Soil sampling only.   |
|   | <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>   | Primary sampling data is collected in a set of standard Excel templates. The information is managed by S2's database manager for validation and compilation into S2's central database.   |
|   | <i>Discuss any adjustment to assay data.</i>  | No adjustments made   |
| <b>Location of data points</b>                        | <i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>   | Sample are located with a handheld GPS with an accuracy of within 3 metres.   |
|   | <i>Specification of the grid system used.</i>   | The grid system used is the ETRS-TM35FIN National Grid.   |
|   | <i>Quality and adequacy of topographic control.</i>   | Excellent quality topographic maps (2m or 8m gridded Lidar) produced by the Finnish Authorities.  |

| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
| <b>Data spacing and distribution</b>                           | <i>Data spacing for reporting of Exploration Results.</i>   | Data is geochemical sampling at this stage and drilled to define geochemical and geophysical targets. A nominal 400m x 40m spacing is used.  |
|  | <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> | Data type is not appropriate at this stage to allow the estimation of mineral resources.   |
|  | <i>Whether sample compositing has been applied.</i>   | No sample compositing has been applied   |
| <b>Orientation of data in relation to geological structure</b> | <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>   | Soil samples only.   |
|  | <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>                   | Soil samples only.   |
| <b>Sample security</b>   | <i>The measures taken to ensure sample security.</i>  | Chain of custody is managed by S2 personnel. Soil samples are sorted and checked every day for bag sequence and integrity and then bagged samples are transferred to ALS Laboratories in Sodankyla, Finland by S2 personnel. |
| <b>Audits or reviews</b>                                       | <i>The results of any audits or reviews of sampling techniques and data.</i>  | No audits or reviews have been conducted at this stage.  |

## **SECTION 2 REPORTING OF EXPLORATION RESULTS**

| Criteria                                       | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Mineral tenement and land tenure status</b> | 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.   | S2R has title of its Finland tenements and applications through its wholly owned subsidiary Sakumpu Oy.  |
|  | 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.   | All of the Exploration Licences and applications are in good standing and no known impediments exist on the tenements being actively explored.   |
| <b>Exploration done by other parties</b>       | Acknowledgment and appraisal of exploration by other parties.  | The areas have been explored by government regional programs over the last 40 years with wide spaced till sampling. Assay suites were often limited to base metal and detection limits are variable. |
| <b>Geology</b>                                 | Deposit type, geological setting and style of mineralisation.  | Orogenic lode gold and magmatic intrusion related nickel-copper.   |
| <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> | No drilling conducted. Geochemical sampling only.  |



| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
| <b>Data aggregation methods</b>   | 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 drilling conducted. Geochemical sampling only   |
|   | 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 drilling conducted. Geochemical sampling only   |
|   | The assumptions used for any reporting of metal equivalent values should be clearly stated.   | No drilling conducted. Geochemical sampling only   |
| <b>Relationship between mineralisation widths and intercept lengths</b> | These relationships are particularly important in the reporting of Exploration Results.<br>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>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').   | No drilling conducted. Geochemical sampling only   |
| <b>Diagram</b>  | 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.   | Refer to Figures in body of text.  |
| <b>Balanced reporting</b>   | 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.   | All results considered significant are reported.   |
| <b>Other substantive exploration data</b>                               | 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. | Geochemical sampling only  |
| <b>Further work</b>   | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).<br>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive  | VTEM survey is planned for August. Field mapping and ground trothing of anomalous gold trend will take place in late summer. BOT drilling or equivalent over anomalous trend. Ground EM follow-up of VTEM anomalies. |