ASX Announcement 24<sup>th</sup> July 2019

# High Grade Gold Intersection at the Ekoato Project, Papua New Guinea

Canterbury Resources Limited (ASX: CBY) is pleased to provide further assay results from its four-hole scout drilling program at the Ekoato copper-gold project in Papua New Guinea. Significantly, this includes a high-grade result in **EK004 of 18.0m at 6.23g/t Au, 13.0g/t Ag and 0.18% Cu** from 164m down hole. Assays are pending from 199.0m to the end of hole (EOH) at 329.6m.

EK004 is testing beneath the Tobias artisanal gold workings and a major shear zone has been intersected from approximately 165m to 180m comprising metasediments, clay (fault gouge) and coarse sulphides. The shear zone occurs approximately 120m vertically beneath the shear hosting the Tobias artisanal gold workings and is interpreted as the downward extension of that shear or a related splay. It also marks the boundary between intact metasediments up-hole and hydrothermally brecciated metasediments which continue to the end of the hole.

The collar of EK004 was moved from its original planned site due to geotechnical issues. As a result, the drill hole is not orthogonal to the regional structural grain of NW-SE and the significant assay interval reported does not represent a true width. Mapping of structures at surface indicate mineralised shears at Ekoato commonly strike between NW and N, and the orientation of the shear intersected in EK004 is unknown.

Core recoveries in EK004 were poor (<90%) in several sections (164.9m to 168.2m and 171.5m to 174.2m).

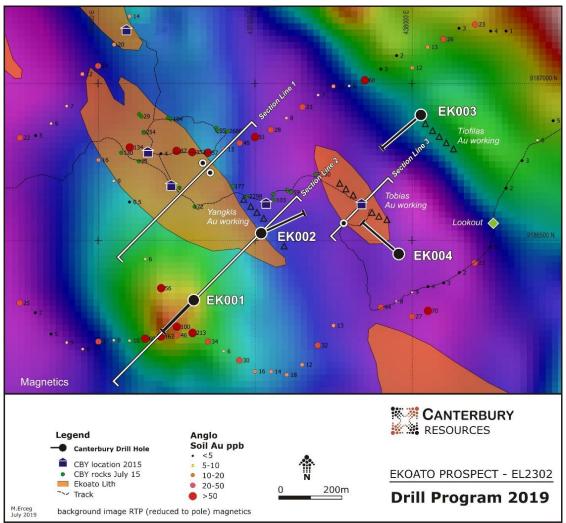


Figure 1 Plan of Ekoato Drill Hole Locations – July 2019



Overall, the observed down-hole geology, the widespread mineralisation and these high-grade assays provide growing evidence of a fertile copper-gold porphyry system at depth at Ekoato.

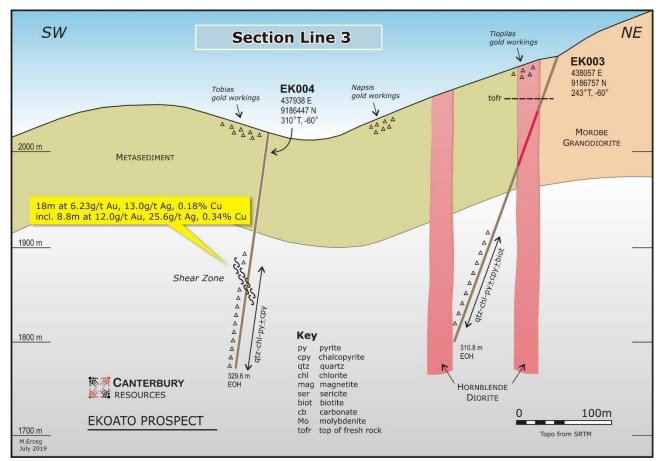


Figure 2 Schematic Section Line 3 Illustrating Location of EK003 & EK004, Geology and High-Grade Assays

Significant results received to date from the Ekoato drill program are outlined in Table 1, including EK001 & EK002 assays previously announced in ASX release "Exploration Progress Report" on 29 May 2019.

Table 1 Ekoato Project - Significant Drill Hole Assays

| Hole No.  | Depth From | Depth To | Length | Au    | Ag    | Cu   | Мо    | Cut-off  |
|-----------|------------|----------|--------|-------|-------|------|-------|----------|
|           | (m)        | (m)      | (m)    | (ppm) | (ppm) | (%)  | (ppm) | (ppm Au) |
| EK001     | 209.0      | 221.0    | 12.0   | 0.18  | <0.5  | 0.01 | 2.6   | 0.1      |
| EK002     | 2.7        | 7.7      | 5.0    | 0.11  | 1.0   | 0.01 | 0.6   | 0.1      |
| and       | 90.0       | 93.0     | 3.0    | 0.20  | 0.2   | 0.02 | 1.0   | 0.1      |
| and       | 220.0      | 227.0    | 7.0    | 0.70  | 0.6   | 0.01 | 0.3   | 0.1      |
| and       | 235.8      | 239.5    | 3.7    | 0.37  | 0.7   | 0.01 | 0.3   | 0.1      |
| EK003     | 20.0       | 26.0     | 6.0    | 0.51  | 0.3   | 0.01 | 1.8   | 0.1      |
| and       | 219.0      | 224.0    | 5.0    | 0.15  | 0.3   | 0.01 | 1.3   | 0.1      |
| EK004     | 80.0       | 83.0     | 3.0    | 0.38  | 0.8   | 0.02 | 0.9   | 0.1      |
| and       | 164.0      | 182.0    | 18.0   | 6.23  | 13.0  | 0.18 | 0.8   | 0.1      |
| including | 171.2      | 180.0    | 8.8    | 12.00 | 25.6  | 0.34 | 0.8   | 0.5      |

### Notes:

- 1. Weighted average grades
- 2. Significant results reported at 0.1ppm Au and 0.5ppm Au cut-off grades
- 3. Significant intervals >2m at a cut-off of 0.1ppm Au
- 4. Maximum internal dilution 1m
- 5. Assays pending from 199.0m to 329.6m in EK004



Table 2 Ekoato Project - Drill Hole Collar Details

| Hole ID | East WGS84 | North WGS84 | Elevation | Azimuth | Dip | Status     |
|---------|------------|-------------|-----------|---------|-----|------------|
|         | (m)        | (m)         | (m ASL)   | (°T)    | (°) |            |
| EK001   | 437296     | 9186298     | 1955      | 225     | 60  | 300.1m EOH |
| EK002   | 437522     | 9186529     | 1831      | 084     | 60  | 256.0m EOH |
| EK003   | 438060     | 9186757     | 2104      | 235     | 60  | 310.8m EOH |
| EK004   | 437938     | 9186447     | 2020      | 310     | 60  | 329.6m EOH |

## **Geological Interpretation**

The structure hosting the high-grade gold and copper intercepted in EK004 is interpreted by Canterbury to represent a feature that has tapped a well-mineralised intrusion (porphyry) at depth. Broad drill hole intercepts of hydrothermal breccia hosting visible sulphides, including chalcopyrite, also indicate the system has significant size-potential. The interpretation is that economic grades may be developed in the upper parts of the intrusion (porphyry) and in the overlying metasediments within a brecciated carapace.

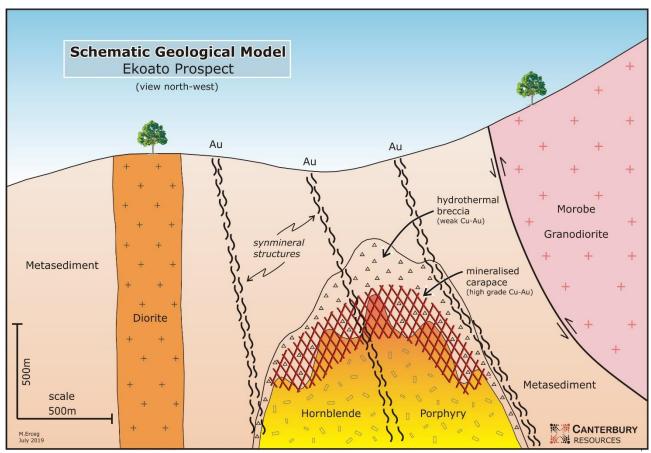


Figure 3 Schematic Geological Model - Ekoato Project





Figure 4 EK004 Drill Site June 2019

## Canterbury's Managing Director, Grant Craighead, said:

"We are very pleased with the high-grade assay results recorded in EK004 and our geological observations from the drill program confirm the Company's pre-drilling interpretation that Ekoato represents the exposed top of a potentially large-scale copper-gold porphyry system. Significantly, these assay results demonstrate the fertility of the system.

We look forward to receiving further assay results from the lower part of EK004 shortly, ahead of planning of the next phase of exploration."

On behalf of the Board

Grant Craighead, Managing Director

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#### **COMPETENT PERSON'S STATEMENT**

The technical information in this report which relates to Exploration Results is based on information compiled by Mr Michael Erceg, MAIG RPGeo. Mr Erceg is an Executive Director of Canterbury Resources Limited and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Erceg consents to the inclusion in this report of the matters based on that information in the form and context in which it appears.

#### **ABOUT CANTERBURY RESOURCES LIMITED**

Canterbury Resources Limited (ASX: CBY) ("Canterbury" or the "Company") is an ASX-listed resource company focused on creating shareholder wealth by generating, exploring and monetising potential Tier-1 copper-gold projects in the southwest Pacific. It has established a strong portfolio of projects in Australia, Papua New Guinea and Vanuatu that are prospective for porphyry copper-gold and epithermal gold-silver deposits. The Company is managed by an experienced team of resource professionals, with a strong track record of exploration success and mine development in the region.

Canterbury's near-term plans include drilling programs at three of its more advanced assets – the Ekoato and Bismarck porphyry copper-gold projects in Papua New Guinea and the Briggs porphyry copper project in Queensland. Each program provides the potential for the discovery and/or delineation of a large-scale copper (±gold) resource. The 100% owned Briggs and Ekoato projects are being managed and funded by Canterbury, while the Bismarck JV Project (Canterbury 40%) is being managed and sole-funded by Rio Tinto Exploration (PNG) Limited as part of a Farm-In and Joint Venture Agreement.

## **DISCLAIMER**

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)", "potential(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.



# **JORC Code, 2012 Edition – Table 1 Ekoato Project, PNG**

# **Section 1 Sampling Techniques and Data**

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

| Criteria                 | JORC Code explanation   | Commentary   |
|--------------------------|---|--|
| Sampling<br>techniques   | <ul> <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> <li>Core drilling is conducted using a heli-portable Longyear LF70. Site geologists check core recovery and summary log the hole before the core is flown by helicopter to Canterbury's exploration base at Bulolo for formal logging and sampling.</li> </ul>  |
| Drilling<br>techniques   | <ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air<br/>blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple<br/>or standard tube, depth of diamond tails, face-sampling bit or other<br/>type, whether core is oriented and if so, by what method, etc).</li> </ul>   | <ul> <li>Core PQ (85mm), HQ3 (61.1mm), and NQ3 (45mm) sizes. Core is<br/>orientated (electronic ori tool).</li> </ul>  |
| Drill sample<br>recovery | <ul> <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</li> </ul>   | <ul> <li>Drill runs are measured and actuals compared with lengths drilled on site and recoveries calculated. Data is entered into Drill Database.</li> <li>Poor recoveries (&lt;90%) were achieved drilling through the shear zone in EK004 (164.9 to 168.2m and 171.5m to 174.2m). No adjustment has been made to assays in reporting significant</li> </ul> |



| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | loss/gain of fine/coarse material.   | intersections.   |
| Logging   | <ul> <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> <li>Formal logging is undertaken at the Bulolo core facility where all the<br/>core is photographed and geologically and geotechnically logged to a<br/>level of detail to support appropriate Mineral Resource estimation (if<br/>warranted).</li> </ul>   |
| Sub-sampling<br>techniques<br>and sample<br>preparation | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <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> | <ul> <li>Core is sawn in half length-wise using a Clipper-type core saw.         Sampling is of half core in nominally 2m intervals reducing in areas of mineralization, structures and/or geological complexity.     </li> <li>Samples are sent to Intertek Laboratories in Lae for drying, crushing and pulverizing using Boyd Crushers and LM2s. The entire sample is crushed and split using a rotary splitter then a sub-sample (&lt;2kg) pulverized in LM2.</li> <li>Field duplicates using stored half core will be considered at the end of the program subject to results.</li> </ul> |
| Quality of<br>assay data<br>and<br>laboratory<br>tests  | <ul> <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> <li>Analysis schemes (Intertek Laboratories):         FA50: Fire Assay Dtn 5ppb         Au1 Au2 Au3 Au4 PbWt         4A/OE: OES Dtn &amp; Digest         Al Cr La Na Sc Zn Ba Cu Li Ni Sr Ca Fe Mg P Tl Co K Mn S V         4A/MS: ICP/MS             Ag Cd Mo Sb Te W Bi Ce Pb Sn Tl         4AH/OE: OES Dtn and Digest             S         Weight: Weighing of sample</li> </ul>  |



| Criteria                                    | JORC Code explanation  | Commentary  |
|---|--|---|
|   |  | WT_W WT_DRY Sieve2: Crush sieving test 1:20 Sieve W1 WT Sieve: Sieve Test 1:20 Sieve W1 WT PT01: Total preparation up to 2kg Weight   |
|   |  | Standards and blanks are inserted every 10 samples. Geologists determine whether standards and blanks are within tolerance. If not the laboratory is advised and requested to rerun batch.  |
| Verification<br>of sampling<br>and assaying | <ul> <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> <li>Assay data are entered into the company database.</li> <li>No twinned holes have been drilled.</li> <li>A Sampling and Assaying Procedure has been documented.</li> <li>No assay data is adjusted.</li> </ul>  |
| Location of<br>data points                  | <ul> <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> <li>Grid used is WGS84 UTM Zone 55</li> <li>Topographic surface is SRTM</li> <li>Survey control is using Garmin GPS</li> <li>Down hole surveys undertaken using electronic instrument. At a minimum single shot every 30m while drilling and multi-shot of entire hole at end of hole.</li> </ul>                                  |
| Data spacing<br>and<br>distribution         | <ul> <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> <li>Planned drill holes are scout only and further drilling will be required to establish a resource if warranted.</li> <li>Drill hole spacing is insufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation.</li> <li>No sample compositing has been applied.</li> </ul> |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Orientation of<br>data in<br>relation to<br>geological<br>structure | <ul> <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> <li>The regional structural grain is NW-SE. Drill holes were designed to drill across this trend although this was not practical at all times due to challenging terrain for drill sites.</li> <li>The mineralized zones appear to dip steeply to the northeast therefore down-hole intervals may be greater than true-widths.</li> <li>Insufficient drilling has been undertaken to be confident of the orientation of mineralized structures within drill holes. As such a material bias may have been introduced although this difficult to assess at this early stage of exploration.</li> </ul> |
| Sample<br>security  | The measures taken to ensure sample security.  | A Chain of Custody procedure is in place  |
| Audits or reviews   | The results of any audits or reviews of sampling techniques and data.  | <ul> <li>Not independent audits have been undertaken. However the<br/>sampling and assaying protocols have been set up by an<br/>independent consulting geochemist.</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<br>tenement and<br>land tenure<br>status | <ul> <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> | Exploration License EL2302, 100% Canterbury Resources  |
| Exploration<br>done by other<br>parties          | Acknowledgment and appraisal of exploration by other parties.  | <ul> <li>Triple Plate Junction and Newmont explored the area 2007-2012.</li> <li>The Ekoato prospect area was covered by surface mapping, geochemical sampling and airborne magnetics, but neither company drilled.</li> </ul> |



| Criteria                       | JORC Code explanation   | Commentary   |
|--------------------------------|---|--|
|                                |   | <ul> <li>Canterbury had both Anglo and Freeport conduct due diligence<br/>mapping and sampling and both companies concluded the area was<br/>attractive for gold-rich porphyry mineralization.</li> </ul>  |
| Geology                        | Deposit type, geological setting and style of mineralisation.   | <ul> <li>Structurally controlled mesothermal quartz-carbonate-anhydrite-sulphide veins containing gold-basemetals e.g. Otibanda and Waikanda lodes.</li> <li>Hydrothermal breccias and high-level intrusions indicating upper levels of a porphyry Cu-Au system e.g. Ekoato and Kopekayo prospects</li> <li>Ekoato is along strike from the Hidden Valley mine which is a carbonate base-metal Au-Ag deposit.</li> </ul> |
| Drill hole<br>Information      | <ul> <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> <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> | • Attached   |
| Data<br>aggregation<br>methods | <ul> <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> </ul>  | <ul> <li>Significant intervals calculated by weighted average grade.</li> <li>No grades are truncated.</li> <li>Significant intervals are reported at a cut-off of 0.1ppm Au and 0.5ppm Au.</li> <li>Internal dilution does not exceed 1m</li> <li>No metal equivalents are used.</li> </ul>   |



| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
|  | <ul> <li>The assumptions used for any reporting of metal equivalent values<br/>should be clearly stated.</li> </ul>  |   |
| Relationship<br>between<br>mineralisatio<br>n widths and<br>intercept<br>lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>                                    | <ul> <li>True widths are not precisely known. Down-hole intervals are<br/>reported in significant interval tables.</li> </ul>   |
| Diagrams   | <ul> <li>Appropriate maps and sections (with scales) and tabulations of<br/>intercepts should be included for any significant discovery being<br/>reported These should include, but not be limited to a plan view of<br/>drill hole collar locations and appropriate sectional views.</li> </ul>  | Drill plan and drill section attached   |
| Balanced<br>reporting  | <ul> <li>Where comprehensive reporting of all Exploration Results is not<br/>practicable, representative reporting of both low and high grades<br/>and/or widths should be practiced to avoid misleading reporting of<br/>Exploration Results.</li> </ul>  | <ul> <li>All Canterbury drill holes on the Ekoato prospect are reported and<br/>there are no historic drill holes.</li> </ul>   |
| Other<br>substantive<br>exploration<br>data                                      | <ul> <li>Other exploration data, if meaningful and material, should be<br/>reported including (but not limited to): geological observations;<br/>geophysical survey results; geochemical survey results; bulk samples         <ul> <li>size and method of treatment; metallurgical test results; bulk<br/>density, groundwater, geotechnical and rock characteristics;<br/>potential deleterious or contaminating substances.</li> </ul> </li> </ul> | <ul> <li>Triple Plate Junction mapped and sampled the Ekoato area</li> <li>Newmont flew helimag/radiometric survey over area</li> <li>Anglo American conducted due diligence sampling in 2017 which included soil sampling at Ekoato</li> </ul> |
| Further work   | <ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>  | <ul> <li>Subject to results further drilling is planned at Ekoato</li> <li>Detailed surface mapping and sampling is underway over the greater Ekoato area.</li> </ul>   |