



**2 SEPTEMBER 2019** 

# TECHNICAL REVIEW UNEARTHS SIGNIFICANT AND MULTIPLE NEW TARGETS AT WEST MALI GOLD PROJECT

#### **HIGHLIGHTS**

- Recently completed technical review of Government and historic infill soil geochemistry data identifies significant untested targets at Koussikoto, West Mali Gold Project
- +27.5 km strike of significant gold anomalism now identified across four major trends
- Newly identified trend located 5km East of Koussikoto Ouest and along strike of significant multi-million-ounce gold deposits located across the border in Southern Senegal
- Assay results outline 7500m long soil anomaly with peak values including:
  - > 5680ppb
  - > 3840ppb
  - > 1680ppb
- Historic termite mound sampling at the northern end of trend confirms anomaly with peak values including:
  - > 1100ppb
  - > 208ppb
  - 189ppb
- Future work programme planned to include mapping, geochemistry and RC and diamond drilling across the tenement package – commences early October

Indiana Resources Limited (ASX: IDA) ('Indiana' or the 'Company') is pleased to announce that ongoing review of historic government and termite mound sampling (refer Figure 9 for comments regarding this technique) assay data has highlighted a significant untested gold trend on the Koussikoto Licence situated on the eastern side of its West Mali Gold Project (refer Figure 1).

The new trend at Koussikoto is at least **7500m** long and defined by historic 1000m by 250m Mali Government sampling, 400m by 200m infill sampling and historic sampling of termite mounds at approx. 400 by 50m spacing by previous operators. Infill sampling is planned by Indiana at 200m by 50m spacing prior to planning for possible drill testing.

It is important to note that there has been no drill testing of anomalies along this new trend which represents a significant and previously unrecognised target at the West Mali Gold project. Over **27.5** km of strike of significant gold anomalism has been identified in the project area to date, across four major trends.

The technical review work recently undertaken was supported by the completion of Indiana's 2019 exploration activity in Mali. The review compared recently received drill and soil sampling results with historic data available for the project areas. The work conducted will now form part of the planning for the upcoming exploration season commencing in October 2019.

Website: www.indianaresources.com.au

All historic sampling relating to this new trend was completed on east-west lines, and ppb assay ranges for the samples are summarised below:

	Total	> 100	30 - 100	20 - 30	< 20	Spacing
Government Soils	398	5	6	1	386	1000m x 250m
Company Soils	651	0	16	25	610	400m x 200m
Company Termite Mounds	1393	5	31	46	1311	400m x 50m

The persistent anomalies identified-to-date currently appear related to north—south and northwest-southeast trending structures within or adjacent to the Main Transcurrent Zone (MTZ). The MTZ is interpreted to be one of the major structures which controls mineralisation in Western Mali and Eastern Senegal, considered an excellent geological and structural location within the highly prospective Kenieba Inlier of Western Mali, known to host a number of multi-million ounce gold deposits, including the Loulou 12.5Moz deposit (Barrick Gold) and the Sabodala 8Moz deposit (Teranga Gold) (refer Figure 2).

### **Future Work Programmes**

The Company has undertaken a review of work completed in the recent field season and propose the following programme for the coming field season:

- 1. Acquisition of high resolution satellite photography and elevation data to cover the entire West Mali project area
- 2. Detailed geological mapping covering the entire West Mali project area to commence initially over high priority targets at Koussikoto, Kenieko Nord and Saboussire
- 3. Soil geochemistry at 200m by 50 m spacing at Koussikoto, Saboussire and Kenieko Nord (refer Figures 1, 8 and 9)
- 4. RC and Diamond drilling on 40m spaced sections at The Edge to infill the 200m long high grade zone and test the extent of mineralisation down plunge to 500 metres below surface (refer Figure 5)
- 5. RC and Diamond drilling on existing sections at A5 and A7 to confirm orientation of mineralisation (refer Figures 6 and 7) followed by step out RC drilling on 40m spaced sections north and south.

For further information, please contact:

Bronwyn Barnes Jim Moran
Chairman Company Secretary
T: +61 (0)417 093 256 T: +61 8 9429 8829

To find out more, please visit www.indianaresources.com.au.

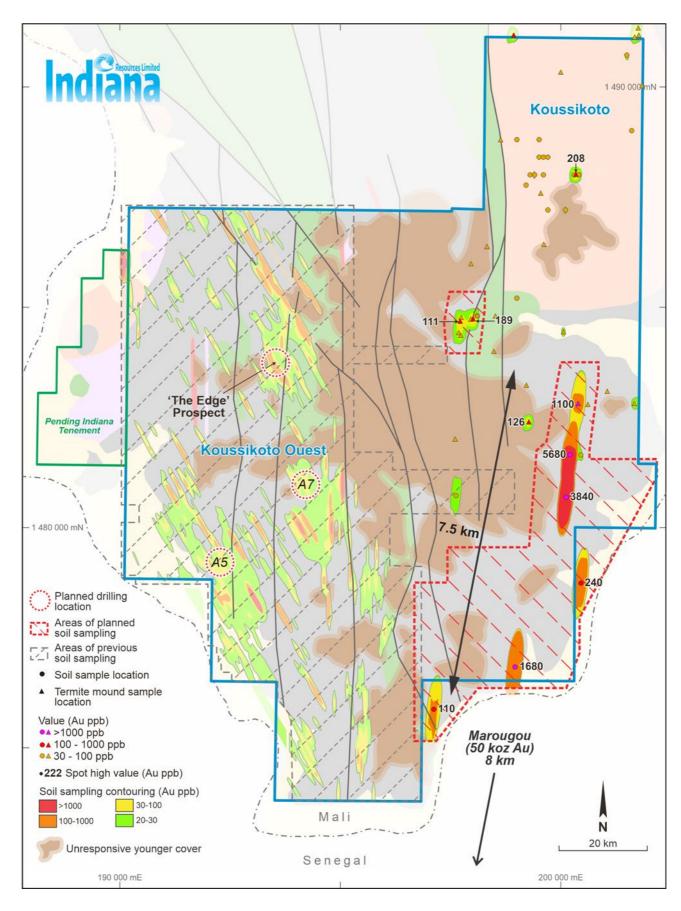


Figure 1 – Koussikoto and Koussikoto Ouest
Soil geochemical anomalies, planned soil sampling and planned drilling locations
set against government regional geological interpretation

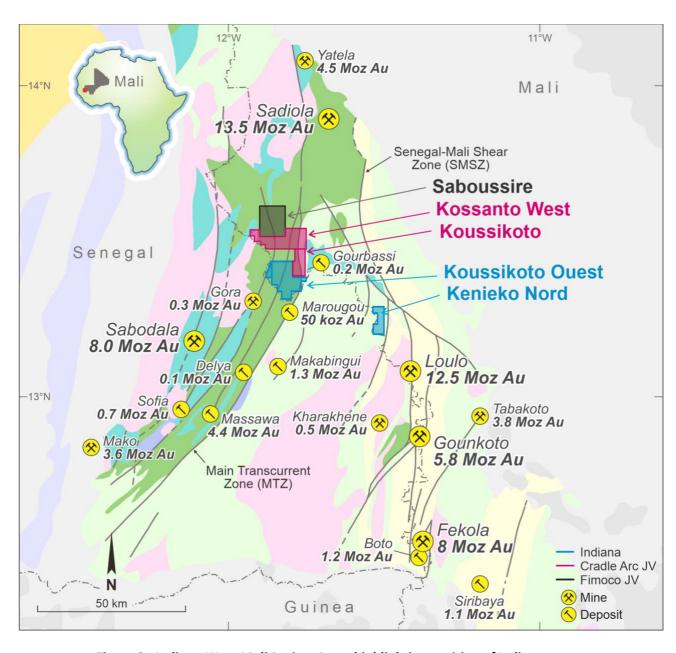


Figure 2 - Indiana West Mali Project Area; highlighting position of Indiana tenure and gold prospective Main Transcurrent Zone (MTZ)

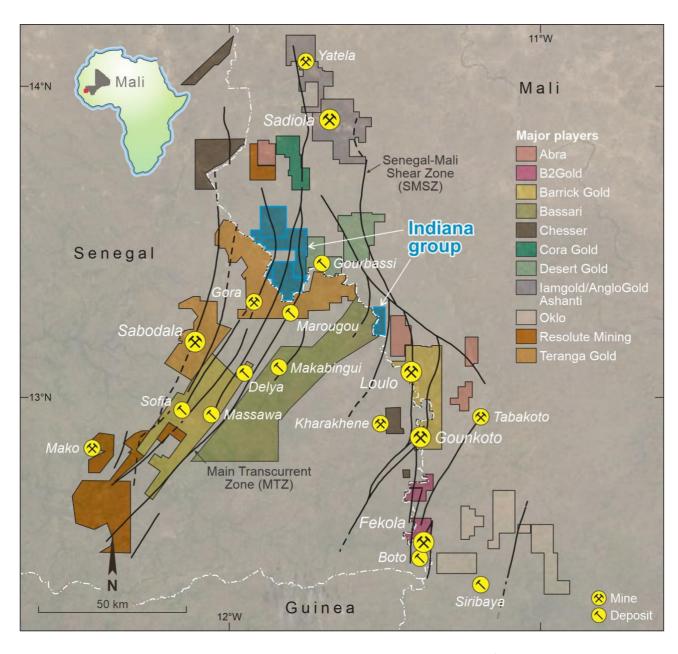


Figure 3 - Indiana West Mali Project Area; highlighting position of Indiana tenure and regional major players

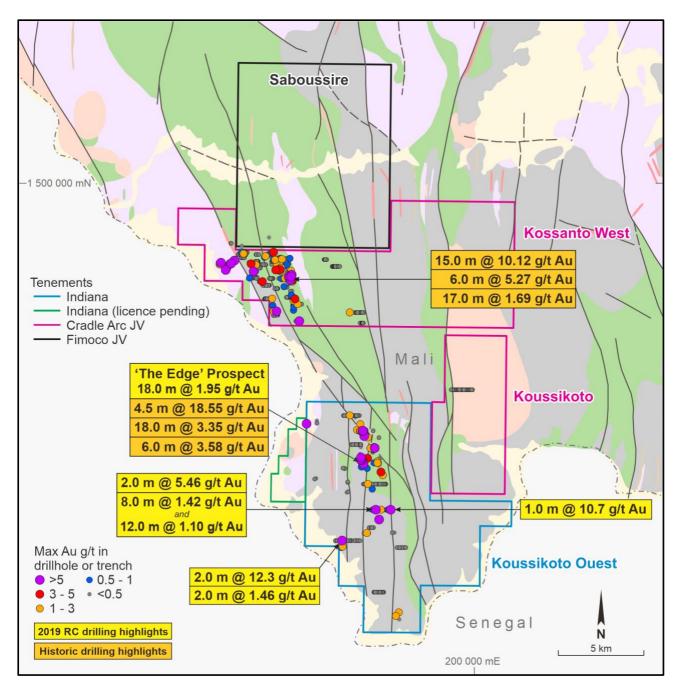


Figure 4 –Indiana West Mali Gold Project showing results of drilling and sampling programmes. (Results relating to Kossanto West – see ASX release – 11 September 2018)

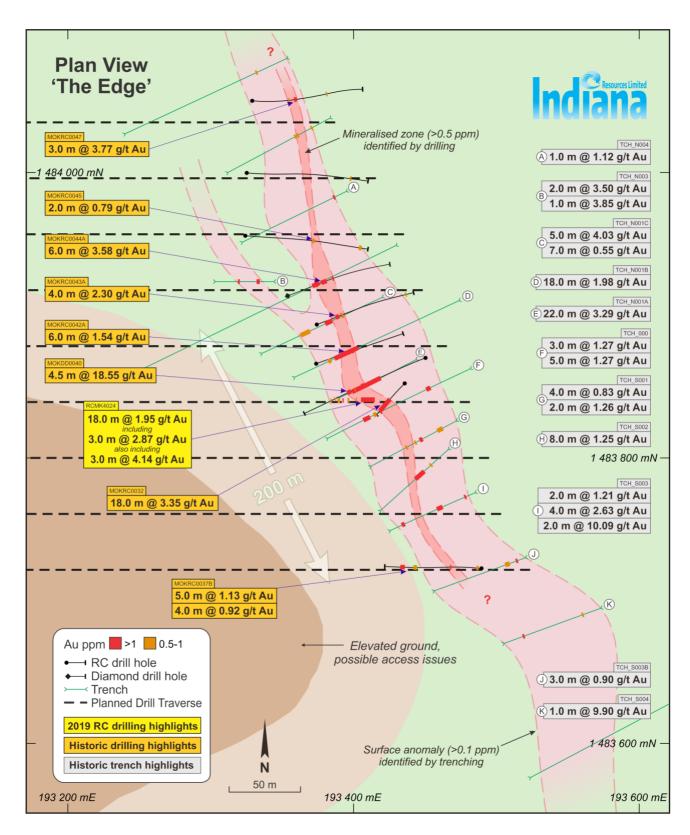


Figure 5 -'The Edge' Planned Drilling Traverses

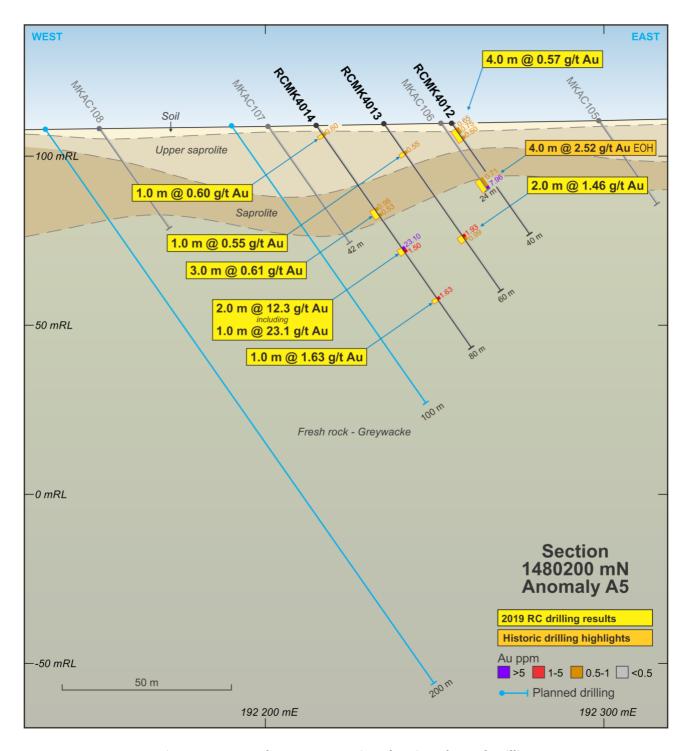


Figure 6 – Anomaly A5 Cross Section Showing Planned Drilling

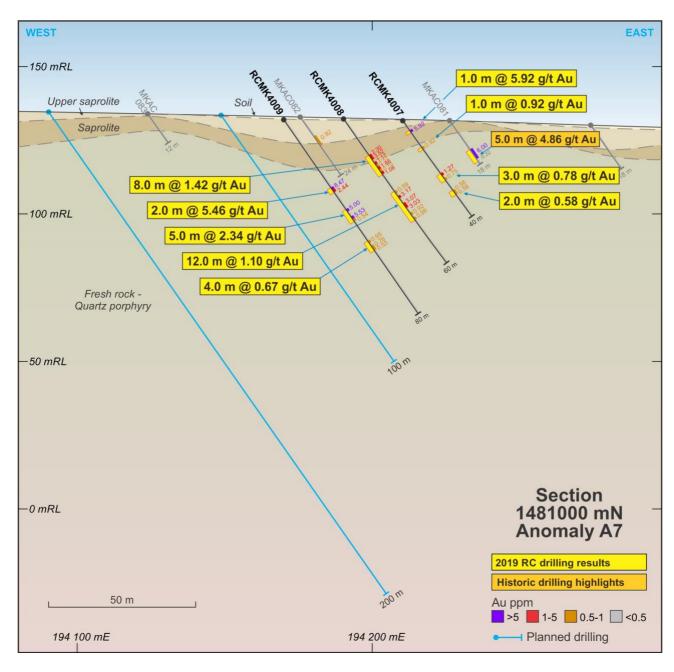


Figure 7 – Anomaly A7 Cross Section Showing Planned Drilling

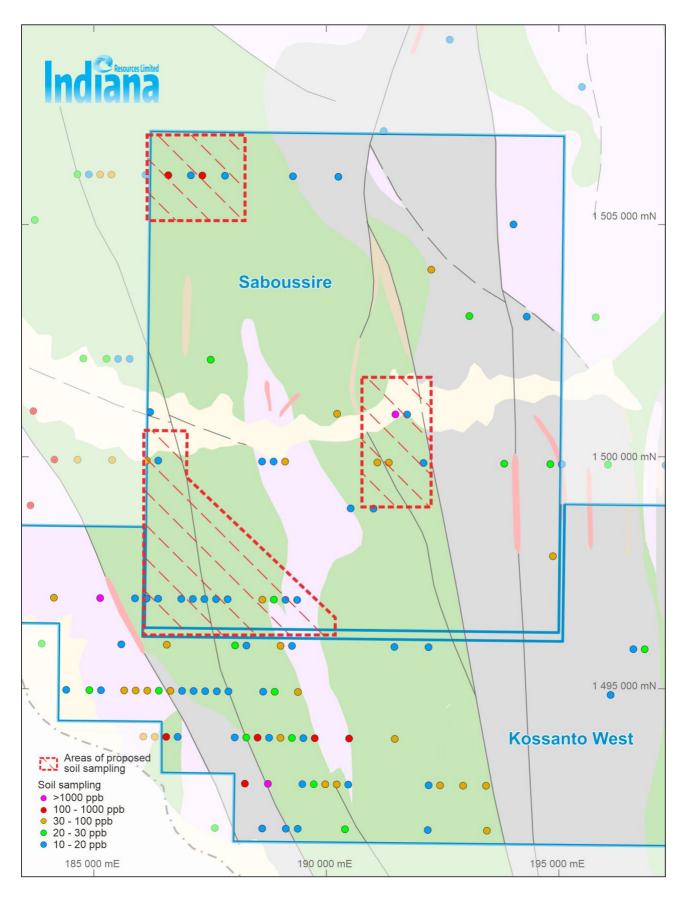


Figure 8 – Saboussire Planned Soil Sampling (for Kossanto West refer to see ASX release – 11 September 2018)

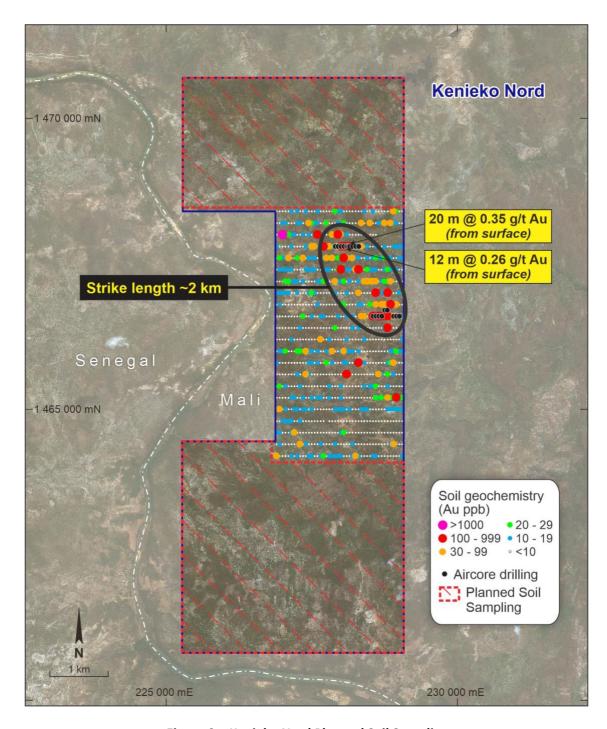


Figure 9 – Kenieko Nord Planned Soil Sampling

### About termite mound sampling

Termite mound sampling is a technique that utilises the work done by termites to mobilise material from depth to the surface. The results of this sampling may indicate anomalies at depth where surface soil sampling is unresponsive.

#### **Competent Person's Statement**

Information relating to historical exploration results is based on information reviewed by Mr Craig Hall, whom is a Member of the Australian Institute of Geoscientists. Mr Hall has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person in terms of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('JORC 2012'). Mr Hall consents to the inclusion of the information relating to historical exploration results in this announcement in the form and context in which it appears.

## Appendix A: JORC 2012 Table 1 Reporting Section 1. Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling 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>All of the reported sampling on Koussikoto Ouest was undertaken by the project vendor, Mukuyu Resources, during the period 2013 to present. Results for Kossanto West are discussed in IDA's release dated 11th September 2018.</li> <li>Reverse Circulation (RC) drill holes were routinely sampled at 1m intervals down the hole.</li> <li>RC Samples were collected at the drill rig by riffle splitting drill spoils to collect a nominal 2 - 3 kg sub sample.</li> <li>Diamond (DD) drill holes were sampled to geological boundaries for the length of the hole.</li> <li>DD holes were sampled by cutting the core in half length-wise down the core axis.</li> <li>RC and DD - Routine standard reference material, sample blanks, and sample duplicates were inserted/collected at every 10th sample in the sample sequence.</li> <li>All RC and DD samples were submitted to SGS Bamako for preparation and analysis by 30g Fire Assay.</li> <li>Aircore (AC) drilling samples were collected at the drill rig and scoop sampled from 1m drill spoils to collect a nominal 2 - 3 kg sub sample.</li> <li>AC holes were routinely sampled as 4m composited intervals down the hole. The bottom of each hole was sampled as a 1m interval down the hole.</li> <li>AC - Routine standard reference material and sample blanks were inserted/collected at every 20th sample in the sample sequence.</li> <li>AC samples were submitted to SGS Bamako for preparation and analysis by 50g Fire Assay (DL 0.01ppm).</li> <li>Trench samples were routinely sampled at 1m intervals along the trench.</li> <li>Soil sample were collected at a nominal grid spacing of 50m East x 200m North, samples were collected from the bottom of pits dug to 40cm depth.</li> <li>Soil sample were collected at a nominal grid spacing of 50m East x 200m North, samples were collected from the bottom of pits dug to 40cm depth.</li> <li>Soil sample nominal weight was 2kg</li> <li>Soil sampling - Routine standard reference material, sample blanks, and sample duplicates were inserted/collected at every 30th sam</li></ul>
Drilling techniques	<ul> <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-</li> </ul>	<ul> <li>RC hole diameter was nominally 5.5 Inch. A face sampling down hole hammer was used at all times.</li> <li>DD hole diameter varied from HQ- size to NQ-size</li> </ul>

Criteria	JORC Code explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>AC holes were initially planned for drilling by the aircore (AC) technique but were subsequently drilled using RC hammer to achieve adequate penetration and better sample quality.</li> <li>AC holes were drilled using a UDR650 drill rig supplied and operated by Amco Drilling.</li> <li>AC hole diameter was nominally 120mm.</li> </ul>
Drill sample 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 loss/gain of fine/coarse material.</li> </ul>	<ul> <li>A qualitative estimate of sample recovery was done for each sample metre collected from the RC drill rig.</li> <li>Normal Drilling protocols were employed to ensure sample recovery was representative. Sample recovery and quality was assessed as adequate for the drilling techniques employed.</li> <li>No such relationship established at this point.</li> </ul>
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>All sample intervals were geologically logged by geologists.</li> <li>Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering using a standardized logging system.</li> <li>Logging effectively quantitative in nature</li> <li>All sample material was logged and sampled.</li> </ul>
Sub-sampling techniques and sample 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 subsampling 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>RC - All 1m samples were riffle split at the drill rig.</li> <li>DD holes were sampled by cutting the core in half length-wise down the core axis.</li> <li>AC - All 4m composite and 1m samples were scoop sampled at the drill rig.</li> <li>Trenches were sampled by continuous rock chipping along the base of the trench</li> <li>Routine sample duplicates were taken to evaluate whether samples were representative.</li> <li>Additional sample preparation was undertaken by SGS Bamako laboratory.</li> <li>At the laboratory, samples were weighed, dried and crushed to -2mm in a jaw crusher. A 1.5kg split of the crushed sample was subsequently pulverised in a ring mill to achieve a nominal particle size of 85% passing 75um.</li> <li>Sample sizes and laboratory preparation techniques are considered to be appropriate for this early stage exploration and the commodity being targeted.</li> </ul>
Quality of assay data and laboratory 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>RC and DD - Analysis for gold was undertaken at SGS Bamako by 30g/50g Fire Assay with AAS finish to a lower detection limit of 0.01ppm. Fire assay is considered a "total" assay technique.</li> <li>AC - Analysis for gold was undertaken at SGS Bamako by 50g Fire Assay with AAS finish to a lower detection limit of 0.01ppm. Fire assay is considered a "total" assay technique.</li> <li>No geophysical tools or other non-assay instrument types were used in the analyses reported.</li> <li>QC data has not been investigated in detail. however, a review of standard reference material and sample blank data suggest there are no significant analytical bias or preparation errors.</li> <li>Results of analyses for field sample duplicates are consistent with the style of mineralisation being evaluated.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling 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>Data was compiled and digitally captured by the project vendor.</li> <li>Twin holes were not utilized to verify results.</li> <li>Reported drill hole intercepts have been compiled by the Company's technical consultant utilising the digital data provided by the project vendor.</li> <li>There were no adjustments to assay data.</li> </ul>
Location of 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> </ul>	<ul> <li>Drill hole collars were set out in UTM grid WGS84_Zone29N</li> <li>Trenches, soil sampling points and rock chip points were located by hand held GPS in UTM grid WGS84_Zone29N.</li> <li>All drill hole collars were positioned using hand held GPS.</li> <li>RC and DD drill holes are routinely surveyed for down hole deviation at approximately 30m spaced intervals down the hole.</li> </ul>
	Quality and adequacy of topographic control.	<ul> <li>A differential GPS (DGPS) survey has been undertaken to locate historic and current collar and trench locations</li> <li>Locational accuracy at collar and down the drill hole is considered appropriate for this early stage of exploration.</li> </ul>
Data spacing and 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>RC and DD holes were drilled on variably spaced east-west orientated drill sections.</li> <li>RC and DD hole spacing on section varies between 10m to 50m.</li> <li>AC holes were drilled on variable spaced (between 800m to 1,500m spacing) east-west orientated drill sections.</li> <li>AC hole spacing on section was nominally 50m. A small portion of the drilling was infilled to 25m spacing on section to achieve adequate coverage in areas were holes were shallow.</li> <li>Soil sample were collected at a nominal grid spacing of 50m East x 200m North, samples were collected from the bottom of pits dug to 40cm depth.</li> <li>The reported drilling has not been used to estimate JORC-compliant mineral resources or reserves.</li> <li>Sample compositing was not applied.</li> </ul>
Orientation of data in relation to geological 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>Exploration is at an early stage and the true orientation of mineralisation has not been confirmed at this stage.</li> <li>No assessment of sampling bias has been considered to this stage</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were stored on site in a locked storage area prior to road transport by Company personnel to the laboratory in Bamako, Mali.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>There have been no external audit or review of the sampling techniques or data.</li> </ul>

# APPENDIX A. JORC 2012 Table 1 Reporting (cont.) Section 2. Reporting of Exploration Results

Criteria JORC Code explanation		Commentary		
Mineral tenement and land tenure 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>	<ul> <li>The reported data covers the Koussikoto Ouest Permit, which is held by Olive Mining SARL, a subsidiary of Mukuyu Resources.</li> <li>Tenure is in good standing.</li> </ul>		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The area which is presently covered by the permit areas was explored intermittently by Randgold Resources and Caracal Gold during the period 1990. To 2013. Exploration consisted of mapping and soil sampling.</li> <li>Mukuyu Resources, the project vendor, undertook exploration during the period 2013 to present, which included surface sampling, geophysical surveying, trenching and drilling.</li> </ul>		
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The deposit style targeted for exploration is lode gold.         This style of mineralisation typically forms as veins or disseminations in altered host rock.     </li> <li>Surficial geology within the project area consists of outcropping basement, indurated gravels forming plateau, and broad depositional plains consisting of colluvium and alluvial to approximately 2m vertical depth.</li> <li>Lateritic weathering is common within the project area. The depth to fresh rock is variable over the project permit.</li> </ul>		
Drill hole 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>	<ul> <li>Grid co-ordinates are UTM WGS84_29N</li> <li>Collar elevation is defined as height above sea level in metres (RL)</li> <li>Dip is the inclination of the hole from the horizontal. Azimuth is reported in WGS 84_29N degrees as the direction toward which the hole is drilled.</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace</li> <li>Intersection depth is the distance down the hole as measured along the drill trace.</li> <li>Intersection width is the down hole distance of an intersection as measured along the drill trace</li> <li>Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.</li> </ul>		
Data aggregation 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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Drill hole and trench intervals are reported from length weighted average sample assay results</li> <li>A minimum cut-off grade of 0.5 g/t Au is applied to the reported intervals.</li> <li>Maximum internal dilution is 2m within a reported interval.</li> <li>No grade top cut off has been applied.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>		
Relationship between mineralisation widths and intercept 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> </ul>	<ul> <li>The reported results are from early stage exploration drilling; as such the orientation of geological structure is uncertain.</li> <li>Results are reported as down hole length, true width is</li> </ul>		

Criteria	JORC Code explanation	Commentary
	<ul> <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>	unknown.
Diagrams	<ul> <li>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.</li> </ul>	Drill hole locations plans are included
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Results have been comprehensively reported in this announcement or previous announcements.</li> <li>Drill holes completed, including holes with no significant gold intersections, are reported or have been previously reported</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable at this stage
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>Follow up, including additional reconnaissance drilling, soil sampling, rock chip sampling and mapping, is currently being planned and prioritized.</li> </ul>