

## UP TO 52g/t GOLD RETURNED FROM KANINKO ARTISANAL MINE SAMPLES

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### HIGHLIGHTS

- 97 samples were collected from artisanal mine dumps on the Company's 100%-owned Kaninko Permit, located in Guinea.
- The sampling has enlarged the area of recorded gold grades at the Bankan North-East Prospect and encountered high grade gold in a quartz vein at the Bankan Creek Prospect.

### BANKAN CREEK PROSPECT

- Sampling of spoil from a 2m wide quartz vein from one pit in the previously recorded 230m long mineralised saprolite zone<sup>1</sup> recorded a value of **52.1g/t gold**.

### BANKAN NORTH-EAST PROSPECT

- New sampling of lateritic material in artisanal mine dumps extended the prospect area, with the area of interest now enlarged to 350m long and up to 80m wide.
- Nine values exceeding 1.0g/t gold were recorded with a maximum value of **1.83 g/t gold**.
- Gold mineralisation at both the Bankan Creek and Bankan North-East Prospects is **open in most directions**.
- A soil sampling program has been completed over a 17km<sup>2</sup> area covering the three known prospects in the Kaninko Permit on a 400 x 50m spaced grid. Gold assay results are expected in the next 3 weeks.
- Further work in the December Quarter will include infill soil sampling, trenching and a possible geophysical survey.

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Predictive Discovery Limited (**Predictive** or **Company**) is pleased to announce additional, encouraging sampling results from its 100%-owned Kaninko Project, located in Guinea. Predictive currently holds 500km<sup>2</sup> of landholdings in Guinea, most which contain widespread artisanal gold workings. All projects are located within the Siguiri Basin, which hosts AngloGold's large Siguiri Mine (+10Moz).

*"These new results have further expanded the prospective area at Kaninko and provided additional confirmation that the gold mineralised laterite and saprolite zones tested so far by artisanal miners extend over encouragingly broad areas. The cluster of higher-grade gold values from new sampling of the Bankan North-East gold mineralised zone is also open in all directions except the north-east."*

*We are now awaiting the results of the new Kaninko soil geochemical grid to determine the best areas for follow-up sampling and help identify targets for reconnaissance drill programs in the March Quarter of 2020."*

**- Commented Predictive Discovery Managing Director, Paul Roberts**

<sup>1</sup> ASX Announcement 8/10/19-GUINEA RESULTS IDENTIFY MORE GOLD AND NEW DRILL TARGETS AT KANINKO  
<https://www.investi.com.au/api/announcements/pdi/53a6e48c-3c1.pdf>

## NEW RESULTS FROM ARTISANAL MINE SITE SAMPLING

The Company has obtained additional widespread gold-anomalous values from sampling mine spoil (waste material removed during mining) from artisanal pits (Figure 1) on the Kaninko Exploration Permit.

97 new samples were collected and assayed for gold by SGS in Bamako, Mali. Sample details are provided in Table 1 with sample locations and results shown in (Figure 2).

## BANKAN CREEK PROSPECT

Previous work has identified saprolite hosted gold over a 230m strike length with a peak value of **4.6g/t gold**<sup>2,3</sup>. Recent sampling of spoil from a 2m wide quartz vein from a water-filled pit within this zone returned a peak value of **52.1g/t gold**.



*Figure 1 –Bankan Creek artisanal mine site located within the Kaninko Exploration Permit.*

<sup>2</sup> ASX Announcement 17/9/19 - CHANNEL SAMPLING IDENTIFIES NEW GOLD AT KANINKO PROJECT IN GUINEA  
<https://www.investi.com.au/api/announcements/pdi/29ca37b4-e76.pdf>

<sup>3</sup> ASX Announcement 8/10/19 - GUINEA RESULTS IDENTIFY MORE GOLD AND NEW DRILL TARGETS AT KANINKO  
<https://www.investi.com.au/api/announcements/pdi/53a6e48c-3c1.pdf>



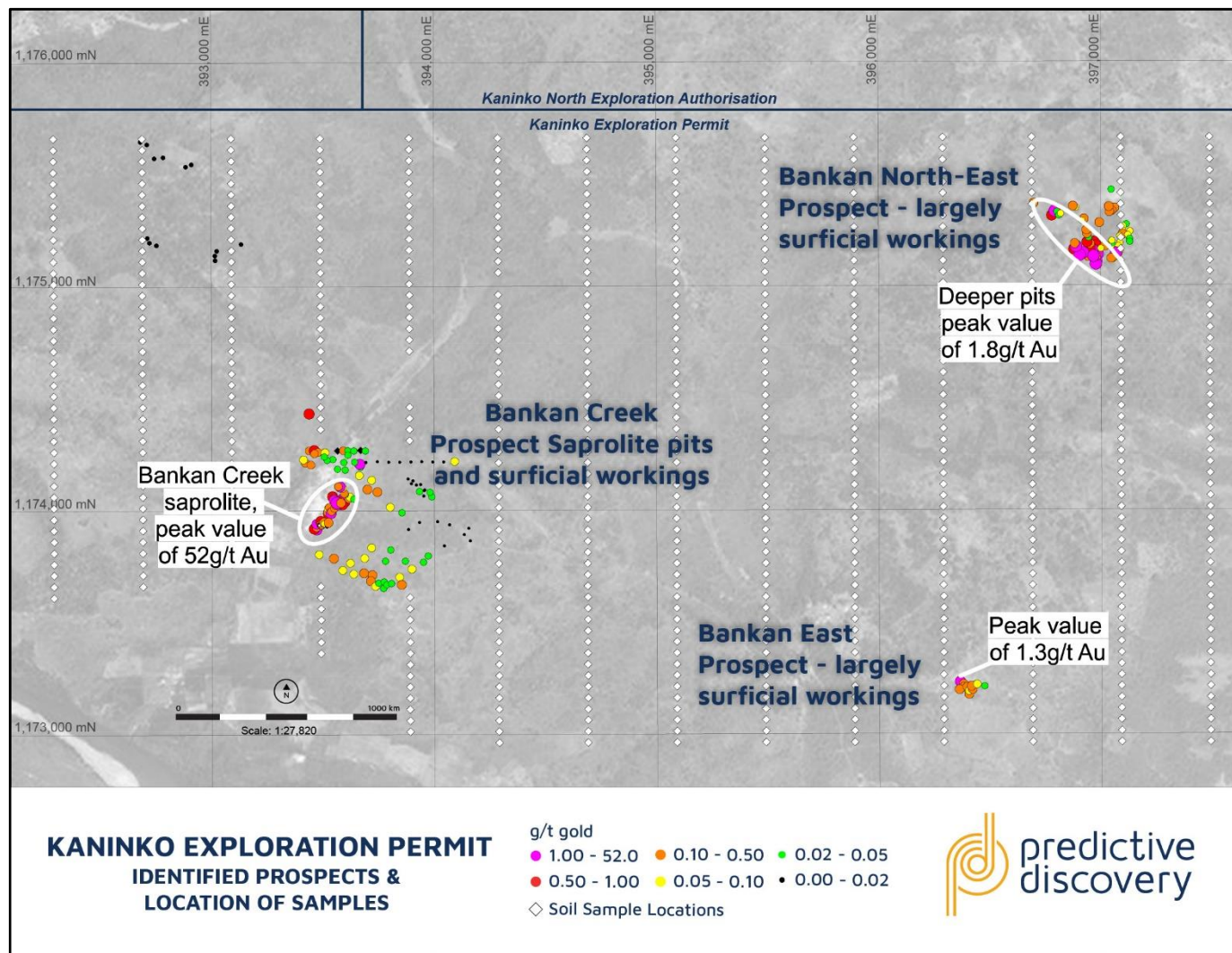


Figure 2 –Kaninko Exploration Permit including location prospects and samples

## BANKAN NORTH-EAST PROSPECT

45 additional samples were collected from Bankan North-East Prospect, completing the sampling program over the large zone of surficial workings located there. Most samples were gold anomalous with 9 samples contained more than 1g/t gold. Peak values of **1.83g/t gold** and **1.71g/t gold** were recorded (Figure 3). Importantly, the cluster of plus 1 g/t gold results shown on Figure 3 also define the southern and western limit of surficial workings in the area. This means that the mineralised laterite zone is open in most directions and could be considerably larger.

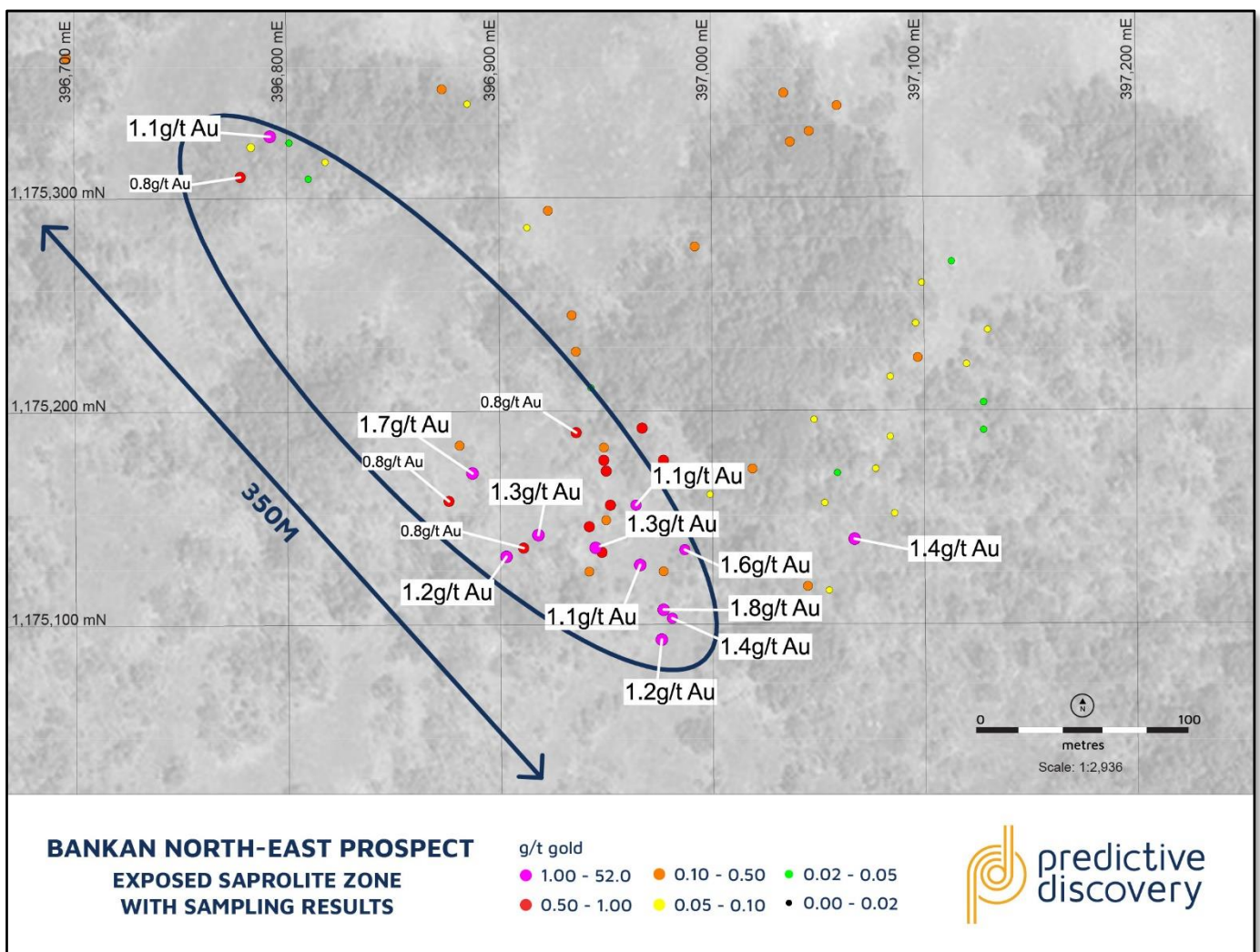


Figure 3 – Bankan North-East Prospect with artisanal mine dump sample locations and results on satellite imagery

## NEXT STEPS

### Kaninko Project

Results of the first phase of soil sampling covering a 17 km<sup>2</sup> area on a 400 x 50m spaced sampling grid are now awaited. Follow-up infill soil sampling is expected over all gold-anomalous zones identified on the grid.

Other work will include a BLEG stream sediment sampling survey over both the Kaninko permit and the adjacent Kaninko North Reconnaissance Authorisation, trenching and possibly a ground geophysical survey, results of all of which will be used to help guide reconnaissance air core and/or RC drilling in the March Quarter.

### Kankan Project

Follow-up infill soil geochemical sampling is now in progress. The planned ground magnetics survey has been delayed but is scheduled to be carried out in December.

### Nonta Project

A power auger drill program has been scheduled, testing gold-in-soil anomalous zones recorded previously.

## ABOUT GUINEA

Predictive holds approximately 500km<sup>2</sup> of prospective landholdings across five projects all containing artisanal gold workings. Four of the projects are within the Siguiri Basin which hosts AngloGold's large Siguiri Mine (+10Moz).

The Guinea Project area (Figure 4) was identified by Predictive during its terrain-scale assessment of the Siguiri Basin in late 2018 using the Company's Predictore™ gold targeting system. The Company is currently undertaking early stage exploration work across the Kankan, Nonta, Kaninko and Boroto Projects.



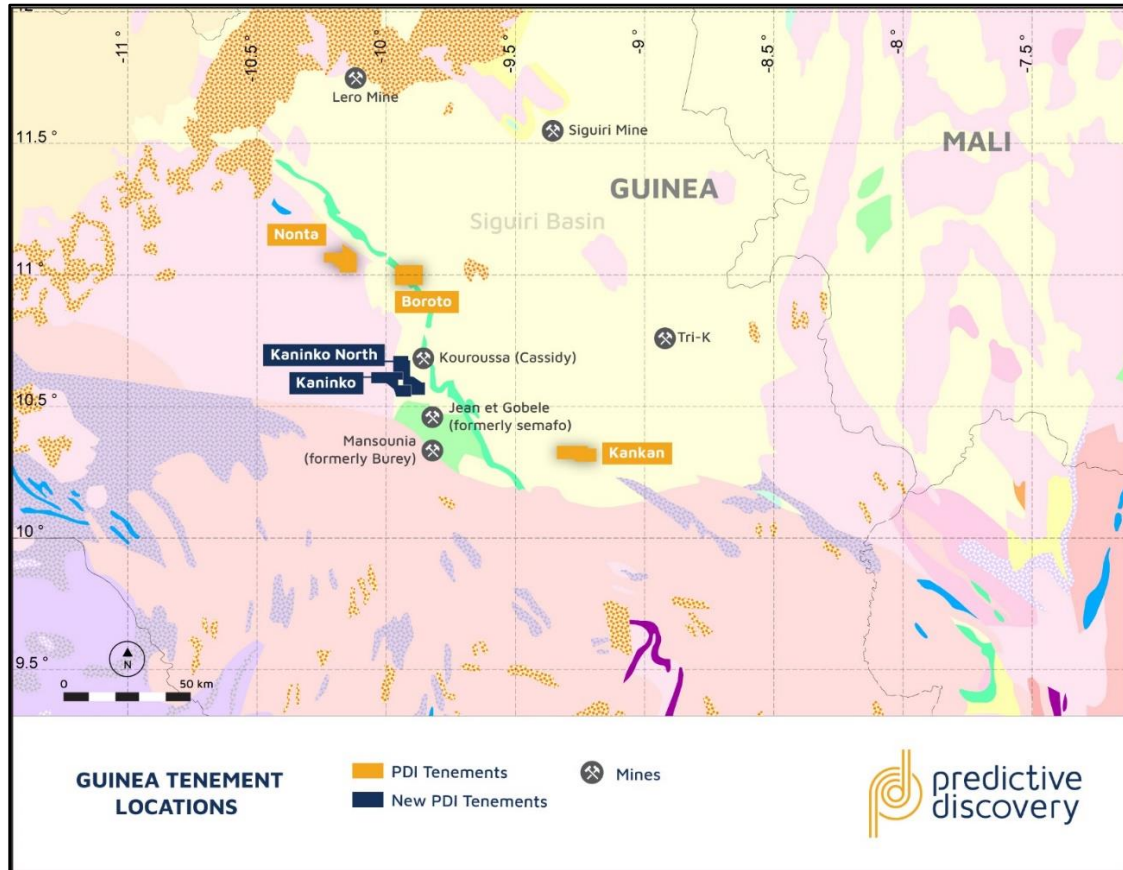


Figure 4 – Guinea tenement locations and gold deposits in the Siguiri Basin on geological map background

**TABLE 1 – DUMP SAMPLE DETAILS – KANINKO EXPLORATION PERMIT**

Sample numbers	Northing (WGS84-29N)	Easting (WGS84 – 29N)	RL	Hole dips	Azimuth	Hole Depth	From	Interval	Au (ppb)
Kaninko samples: PDG1790-1886	Refer to Figures 2 and 3 for sample location data.	Refer to Figures 2 and 3 for sample location data.	See notes	Not relevant to dump samples	Not relevant to dump samples	Not relevant to dump samples	Not relevant to dump samples	Not relevant to dump samples	Refer to Figures 2 and 3
Notes: The samples were collected by a process of random selection of laterite or saprolitic material including quartz on mine dumps mined from the adjacent pits. Each sample weighed approximately 2kg. The samples were sent to the SGS laboratory in Bamako, Mali for crushing, grinding and aqua regia (low detection limit) gold analysis. Plus 200ppb values were re-analysed by fire assay. RL ranges at surface for the sampled workings are 371-435m. Individual RLs are not reported in this announcement because they are not relevant to interpreting geochemical data of this type. All samples were collected from gold artisanal mine sites.									

Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
Sampling Technique	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	The sampling described in this report refers to mine dump samples obtained from artisanal workings in the Kaninko Exploration Permit in Guinea-Conakry.

	<p>downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>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.</p>	
<b>Drilling</b>	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).	This is not relevant to a mine dump sampling program.
<b>Drill Sample Recovery</b>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	This is not relevant to a mine dump sampling program.
<b>Logging</b>	<p>Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	Mine dump samples are described in terms of interpreted lithology or regolith type and degree of weathering. Descriptions are qualitative.
<b>Sub-Sampling Technique and Sample Preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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. Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	The sample preparation methods are appropriate and standard for mine dump samples.

<b>Quality of Assay Data and Laboratory Tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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.	The use of aqua regia gold assays followed up by fire assays for higher values with samples of this type is appropriate and standard.
<b>Verification of Sampling and Assaying</b>	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data	This is not relevant to a mine dump sampling program
<b>Location of Data points</b>	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. Specification of the grid system used Quality and adequacy of topographic control	Coordinates shown on the locality maps (Figures 2 and 3) are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 29 - Northern Hemisphere.
<b>Data Spacing and Distribution</b>	Data spacing for reporting of Exploration Results 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. Whether sample compositing has been applied	Data spacing for artisanal mine samples is not relevant. No Mineral Resource can be estimated from these data.
<b>Orientation of Data in Relation to Geological Structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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.	The mine dump samples were collected by random selection from the surface of mine dumps adjacent to pits in saprolite or laterite from which the material had been extracted
<b>Sample Security</b>	The measures taken to ensure sample security	Samples are stored securely at the SGS laboratory in Bamako and will be returned to Predictive's field office in Kouroussa in due course.
<b>Section 2 Reporting of Exploration Results</b>		
<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. 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.	The Kaninko Reconnaissance Authorisation was granted to a Predictive subsidiary in Guinea in June 2019. It was converted to an Exploration Permit in early October 2019. It is 100% owned by Predictive.
<b>Exploration Done by Other Parties</b>	Acknowledgment and appraisal of exploration by other parties.	Predictive is not aware of any significant gold exploration over the permit.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The geology of the Kaninko permit consists of metasediments, mafic volcanics and intrusives, and granitic rocks.
<b>Drill Hole Information</b>	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> </ul>	This is not relevant to a mine dump sampling program



	<ul style="list-style-type: none"> <li>• down hole length and interception depth</li> <li>• hole length</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>	
<b>Data Aggregation Methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	This is not relevant to a mine dump sampling program
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	This is not relevant to a mine dump sampling program
<b>Diagrams</b>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	An appropriate plan showing the locations of the dump samples is shown in this release.
<b>Balanced Reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</p>	Results from all assayed samples within the Kaninko Permit have been reported.
<b>Other Substantive Exploration Data</b>	<p>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</p>	All relevant, new exploration data is reported in this release.
<b>Further Work</b>	<p>The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling. Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	The next phase of work will include soil sampling, some additional mine dump sampling, BLEG stream sediment geochemistry and trenching,

*Predictive advises that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.*

## Competent Persons Statement

*The exploration results reported herein, insofar as they relate to mineralisation are based on information compiled by Mr Paul Roberts (Fellow of the Australian Institute of Geoscientists). Mr Roberts is a full-time employee of the company and has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Roberts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

**-END-**

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## About Predictive Discovery

Predictive Discovery is a West African focused gold explorer with a portfolio of 21 exploration projects and applications strategically located in the prolific Birimian greenstone belts of Guinea, Cote d'Ivoire and Burkina Faso.

The Company has begun work on its five 100%-owned exploration properties in Guinea with a 500km<sup>2</sup> landholding in the highly prospective but underexplored Siguiri Basin, which contains AngloGold's world-class Siguiri Mine (+10Moz). All permits are located close to widespread artisanal workings with drilling expected to begin in early 2020.

