

HIGH-POTENTIAL GOLD DRILL TARGETS IDENTIFIED IN GUINEA

HIGHLIGHTS

- An extensive soil sampling program (1,271 samples) has identified four highly promising drill targets at Predictive's 100%-owned Kaninko and Kankan Projects, located in Guinea.
- Expected 10,000m program comprising Air Core (AC) and Reverse Cycle (RC) drilling to begin in the March 2020 Quarter.
- Power auger drilling, trenching and geophysical surveys are currently underway across Nonta and Kankan respectively with trenching about to commence at Kaninko. Programs are designed to tighten drill collar locations and will continue across all three permit areas during January.
- Kankan, Kaninko and Nonta are located in northeast Guinea's Siguiri Basin, an emerging yet under-explored region which hosts AngloGold's large Siguiri Mine (+10Moz).
- The Company currently has multiple live projects across West Africa with diamond drilling (DD) at Ferkessedougou North (Cote D'Ivoire) expected to begin in January 2020.

Predictive Discovery Limited (**Predictive** or **Company**) is pleased to announce that extensive soil sampling programs completed across its 100%-owned Kankan and Kaninko Projects (located in Guinea) have identified four high-potential gold drill targets, to be drill tested in the March 2020 Quarter.

"Since Predictive first entered West Africa, the Company has systematically uncovered new gold prospects through a disciplined process of early stage exploration and target definition across what is arguably, the best region globally for greenfields gold discovery. Our systematic approach to gold discovery in just 12 months in Guinea's prolific yet under-explored Siguiri Basin has resulted in significant exploration progress at the Nonta, Kankan and Kaninko Projects. Recent soil sampling programs have vectored down onto four new very promising targets at Kaninko and Kankan which will be drill tested in the March Quarter. The greenfields potential of both Kankan and Kaninko are also highlighted by very prospective geology in previously unexplored areas. When combined with the auger drilling underway at Nonta and diamond drilling about to commence at Ferkessedougou North, the Company expects the next few months will generate more positive results and substantial newsflow." – **Commented Managing Director Paul Roberts.**

Predictive holds approximately 500km² of prospective landholdings across five projects in Guinea, all containing artisanal gold workings (Figure 1). All five projects are within the Siguiri Basin which hosts AngloGold's large Siguiri Mine (+10Moz). These project areas were identified by Predictive during its terrain-scale assessment of the Siguiri Basin in late 2018 using the Company's Predictore™ gold targeting system.

Predictive's regional assessment has confirmed that the Siguiri Basin is both highly prospective for gold mineralisation and underexplored. The Basin forms part of the richly mineralised West African Birimian gold belt and consists largely of metasediments with minor granitic rocks, metavolcanics and mafic to ultramafic intrusives.

In only 12 months, the Company has completed numerous early stage exploration programs including soil geochemical sampling, BLEG stream sediment sampling, ground magnetics, rock-chip sampling and

mapping across the Kankan, Nonta, Kaninko, Boroto and Saman Projects with target generation work ongoing at Kankan, Nonta and Kaninko. This initial exploration work has identified wide zones of anomalous to high-grade gold.

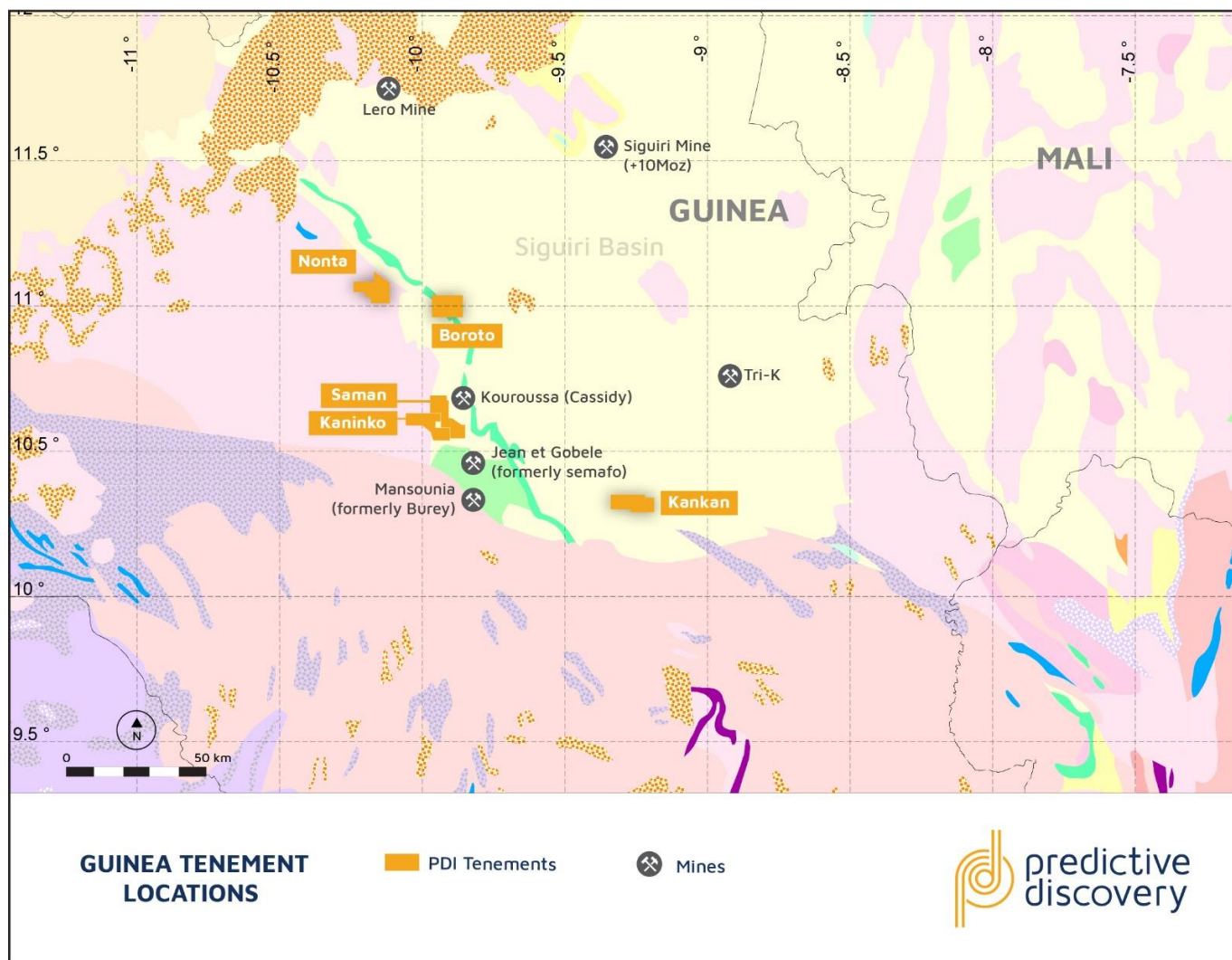


Figure 1 – Location of Predictive Discovery gold projects in Guinea's prolific Siguiri Basin

KANINKO PROJECT

A soil sampling program was completed on the Kaninko Project aimed at exploring around the known artisanal mine areas of Bankan Creek and North-East Bankan. The results of this sampling showed that the likely orientation of the Bankan Creek and North-East Bankan mineralisation is west-north-west (Figure 2). Results have grown the Bankan North-East gold geochemical anomaly to approximately 1km-long and the Bankan Creek anomaly to 900m-long (Figure 2). In both cases, the strike length may be extended further by power auger drilling below transported regolith materials.

A total of 931 soil samples were collected on a 400 x 50m grid covering an area of 17km² area, with a peak value of 1.4g/t gold recorded. The soil program builds on previous saprolite and laterite sampling programs which included a peak value of 52.1g/t gold at Bankan Creek and 1.8 g/t gold at Bankan North-East¹.

If further work confirms the inferred west-north-west trends, the zones of gold mineralisation underlying these gold anomalies may be much wider than initially thought, possibly 100m or wider in places.

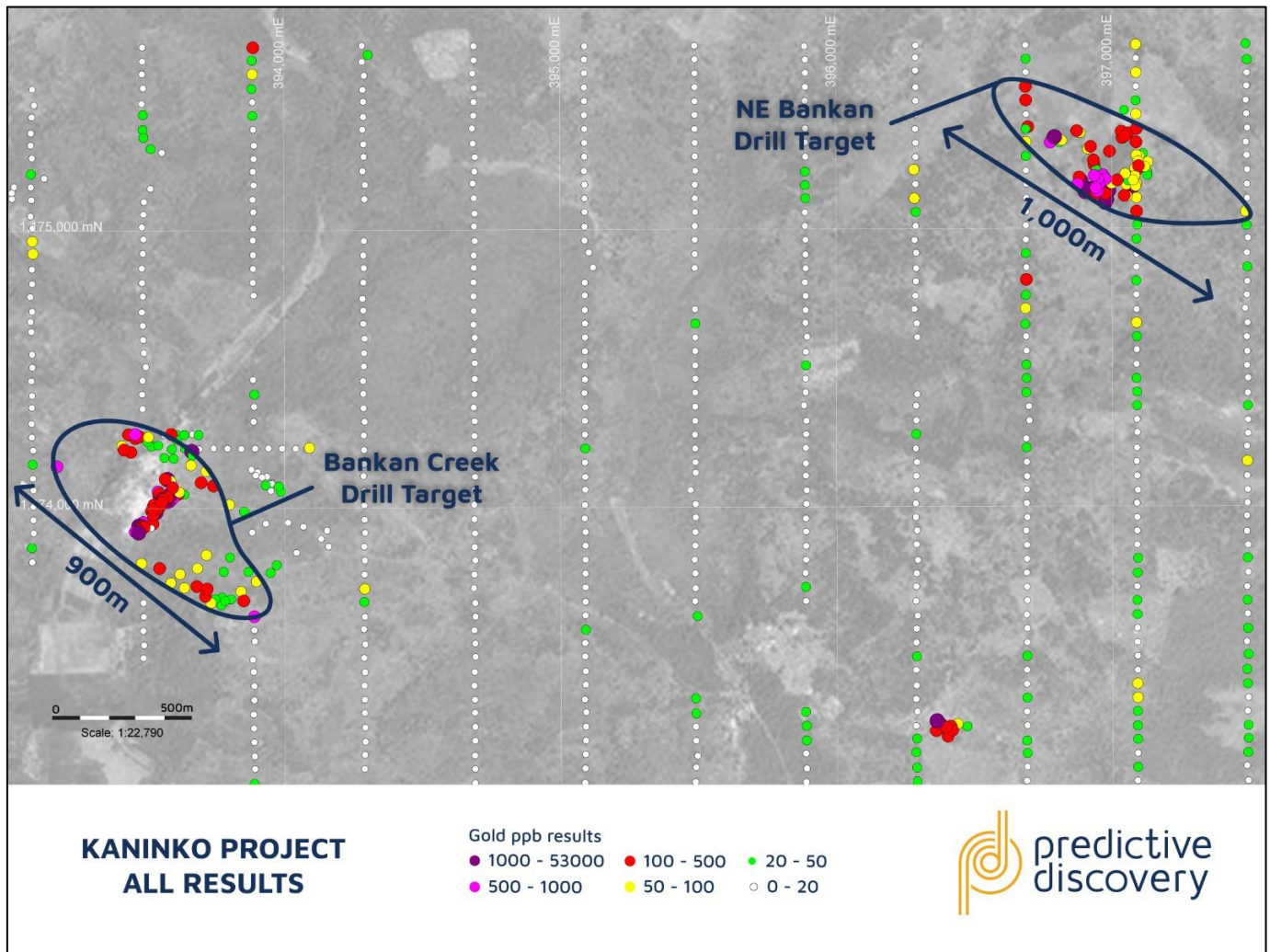


Figure 2 - High value drill targets with a combined strike length of almost 2km across the Kaninko Project. Combined results shown from the soil samples reported in this release (north-south lines) plus the previously reported laterite, saprolite and quartz vein samples¹.

The Company now has two high-potential drill targets on Kaninko with a combined length of almost 2km. Trenching is about to start with power auger drilling to begin in January 2020 and follow-up RC drilling expected to start within the March Quarter 2020.

¹ASX Announcement - UP TO 52g/t GOLD RETURNED FROM KANINKO ARTISANAL MINE SAMPLES
<https://www.investi.com.au/api/announcements/pdi/49756a56-ed9.pdf>

KANKAN PROJECT

Building on previous soil sampling which outlined a 7km-long gold-in-soil anomaly with a peak value of 570ppb gold², an infill soil sampling program was completed with 340 samples collected on a 200 x 25m grid with peak values of 2.5g/t and 1.0g/t gold recorded, much higher than from the previous, broader spaced soil sampling programs.

The sampling identified higher grade coherent anomalies within the 7km-long gold anomalous trend at the east and west of the Kankan soil grid, namely Drill Targets A and B (Figure 3).

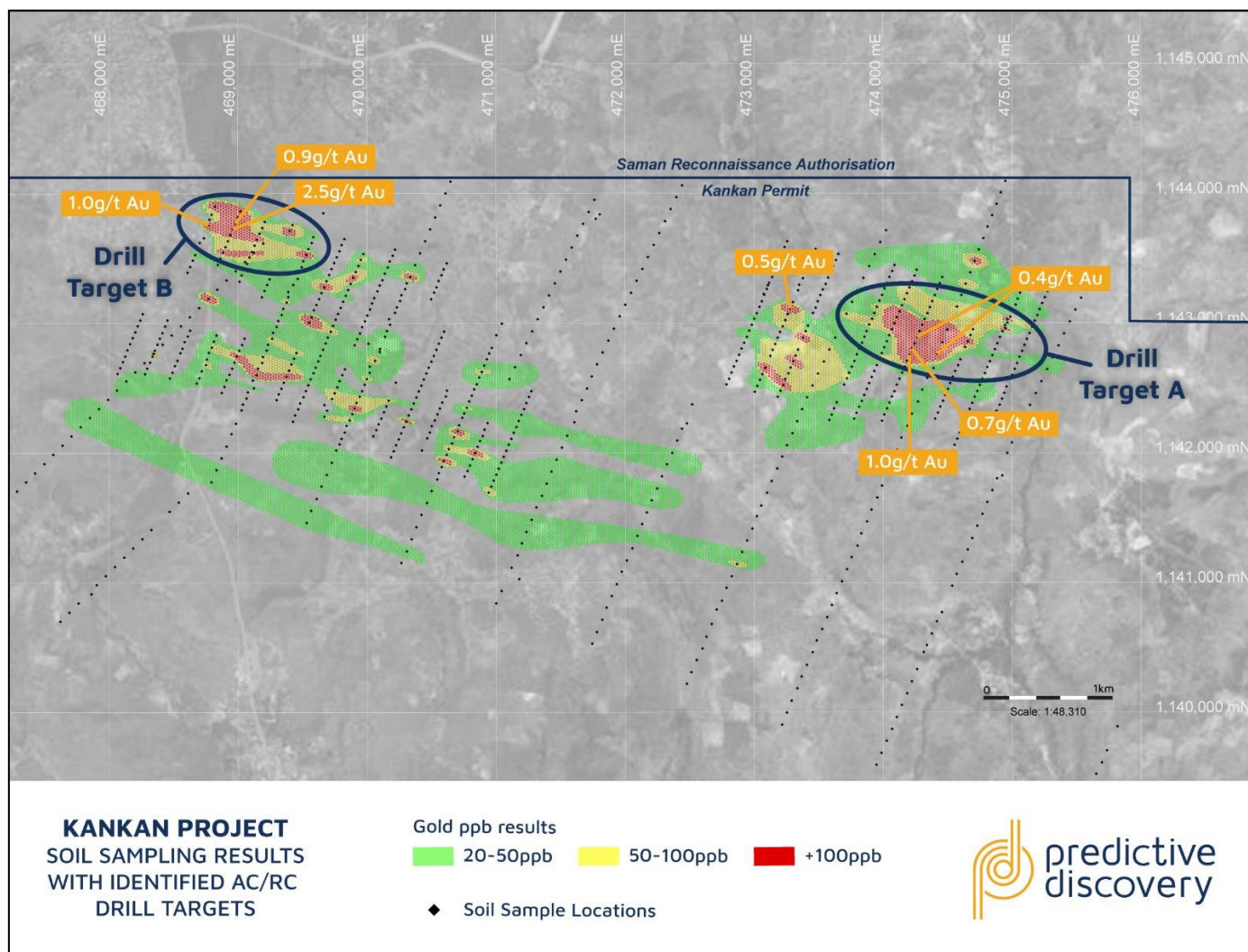


Figure 3 – Drill Targets A & B highlighted by zones of +100ppb soil sample results

Drill Target A is a 1.4km-long plus-50ppb gold anomaly with peak values of 1.0g/t and 0.7g/t gold respectively, while Drill Target B is a 0.8km-long plus-50ppb gold anomaly with peak values of 2.5g/t Au and 1.0g/t gold.

²ASX Announcement - KANKAN RESULTS EXTEND ZONE OF GOLD ANOMALIES TO OVER 7KM
<https://www.investi.com.au/api/announcements/pdi/57ee0674-e4d.pdf>

A follow-up program of ground magnetics is currently in progress (Figure 4) to assist in identifying the most prospective areas for the upcoming drill campaign with a gradient array IP survey to be carried out in January 2020. Combination of results from both methods is expected to help define geological structure under the laterites and further focus drill targeting to maximise the chances of drill success. Air Core or RC drilling is expected to follow later in the March Quarter 2020.



Figure 4 - Predictive Discovery Principal Geologist Aimé Nganare (left) supervising ground magnetics survey on the Kankan Project.

NONTA PROJECT

Following encouraging early soil sampling results which identified a 5km-long zone of anomalous gold and included peak values of 1250ppb and 325ppb gold, the company has undertaken a program of power auger drilling (Figure 5) to better understand the complex regolith. The work is ongoing with results to be released early in the New Year.



Figure 5 – The first power auger drillhole being completed on the Nonta Project

COTE D'IVOIRE

Diamond drilling (DD) at the Ferkessedougou North Project is scheduled to begin in January 2020. Unseasonably late heavy rains in the area made access to the Company's Ouarigue South deposit difficult and delayed the planned diamond drilling by a number of weeks.

The Ouarigue South deposit is an exciting discovery made in June³ 2019 with results including:

³ ASX Announcement - CONFIRMATION OF SIGNIFICANT NEW GOLD DISCOVERY AT FERKESSEDOUGOU NORTH, COTE D'IVOIRE
<https://www.investi.com.au/api/announcements/pdi/02e800f8-176.pdf>

- 45.3m at 3.16g/t gold from 45.9m including 9m at 10.31g/t gold,
- 39.7m at 3.54g/t gold from 51.4m including 4.5m at 11.00g/t gold
- 10.9m at 1.94g/t gold from 95.7m
- 4.7m at 6.14g/t gold from 134m

Joint venture partner Resolute Mining Limited is co-ordinating the planned drilling program, with further work expected along the Ferkessedougou North 17km-long gold-in-soil trend in the coming months.

-END-

TABLE 1 – KANKAN AND KANINKO PROJECTS SOIL SAMPLE RESULTS

Sample numbers	Northing (WGS84-29N)	Easting (WGS84 – 29N)	RL	Hole dips	Azimuth	Hole Depth	From	Interval	Au (ppb)
Kankan soils: PDG002729-PDG003068 Kaninko soils: PDG001501-PDG002728	Refer to Figures 2 and 3 for sample map locations	Refer to Figures 2 and 3 for sample map locations	See notes	Not relevant to the samples described in this report	Not relevant to the samples described in this report	The Kankan and Kaninko soil samples were collected from 10-60cm depth	Not relevant to the samples described in this report	Not relevant to the samples described in this report	See notes and Figures 2 and 3.
Notes: Soil sampling is a reconnaissance exploration technique. Soil samples were collected from shallow holes and coarse material was sieved out using a 2mm mesh. The prepared soil samples were sent to the SGS laboratory in Bamako, Mali for grinding and aqua regia (low detection limit) gold analysis. The RL range for the soil grid on the Kankan permit is 385-443m. The RL range for the soil grid on the Kaninko permit is 371-435m. Individual RLs are not reported in this announcement because they are not relevant to interpreting geochemical data of this type.									

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 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. 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.	The sampling described in this report refers to samples obtained from the Kankan and Kaninko exploration permits in Guinea-Conakry. The soil samples were collected from shallow holes with depths between 10 and 60cm.

Drilling	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 soil sampling program.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	This is not relevant to a soil sampling program.
Logging	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. Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography. The total length and percentage of the relevant intersections logged.	Soil samples are described in terms of soil type, regolith and landscape classification and colour. Descriptions are largely qualitative.
Sub-Sampling Technique and Sample Preparation	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. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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.	The sample preparation methods are appropriate and standard for soil samples.
Quality of Assay Data and Laboratory Tests	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 soil sample aqua regia digest analytical method used has a low (2ppb Au) detection limit which is appropriate for samples of this type.

Verification of Sampling and Assaying	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 soil sampling program.
Location of Data points	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 map (Figure 2) are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 29 - Northern Hemisphere.
Data Spacing and Distribution	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	The soil sampling grids of 400x50m and 200x25m at Kaninko and Kankan respectively are considered appropriate for reconnaissance exploration grid of this type. No Mineral Resource can be estimated from these data.
Orientation of Data in Relation to Geological Structure	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 Kankan and Kaninko soil samples were collected along lines which were designed to cross cut the interpreted strike of the geology in both permits.
Sample Security	The measures taken to ensure sample security	Samples are currently stored securely at the SGS laboratory in Bamako. Pulps will be returned to Predictive's field office in Kouroussa.

Section 2 Reporting of Exploration Results

Mineral Tenement and Land Tenure Status	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 Kankan permit was granted to a Predictive subsidiary in Guinea in April 2019. It is 100% owned by Predictive. The Kaninko permit was granted to a Predictive subsidiary in Guinea in October 2019. It is 100% owned by Predictive.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	Predictive is not aware of any significant gold exploration over Kankan or Kaninko. There is a record of two gold occurrences recorded on the Kankan permit in a nation-wide database (see Mamedov, V I et al (2010): Banque de Données sur les Gisements et Indices des Minéraux Utiles, Volume II)
Geology	Deposit type, geological setting and style of mineralisation.	The geology of the Kankan permit consists of metasediments, mafic volcanics and intrusives, granitic rocks, felsic volcanics and high-grade metamorphic rocks (gneisses). The geology of the Kaninko permit consists of metasediments, mafic volcanics and intrusives, and granitic rocks.
Drill Hole Information	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: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length • 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.	This is not relevant to a soil sampling program.
Data Aggregation Methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and	This is not relevant to a soil sampling program.

	cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship Between Mineralisation Widths and Intercept Lengths	These relationships are particularly important in the reporting of Exploration Results 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').	This is not relevant to a soil sampling program.
Diagrams	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.	Appropriate plans showing locations of the soil samples, contoured by values, are shown in this release.
Balanced Reporting	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.	Results from all assayed soil samples within the Kankan and Kaninko Permit have been reported.
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.	All relevant, new exploration data is reported in this release.
Further Work	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.	At Kankan, a ground magnetics survey is in progress and an IP survey will start in January. At Kaninko, trenching will start shortly and a power auger drill program is planned to commence in January.

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.

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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 500km² 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.

