

09 December 2021

## PREDICTIVE INTERSECTS 34M @ 5.5 G/T AU AT NE BANKAN

Predictive Discovery Limited ("Predictive" or "Company") is pleased to announce new results from exploration drilling at its Bankan Gold Project, located in Guinea.

#### HIGHLIGHTS

- High-grade results from depth at NE Bankan include:
  - BNERD0102: 34m @ 5.5g/t Au from 441m, incl.

2m @ 15.5g/t Au from 453m, and

13m @ 9.6g/t Au from 460m

BNERD00101: 21m @ 2.9g/t Au from 574m, incl.

1m @ 11g/t Au from 588m, and

13m @ 4.6g/t Au from 601m, incl.

7.3m @ 7.0g/t Au from 606m

- Two deep Diamond Drillholes (DD) intersected zones of high-grade gold mineralisation below the US\$1,800/oz resource pit shell (Figures 1-4).
- Two drill rigs are currently on-site double shift drilling at NE Bankan, targeting extensions to the high-grade gold zone at depth.
- Regional power auger and aircore target definition programs are ongoing across the Bankan Project, with three rigs testing structural targets identified by the aeromagnetic survey completed earlier this year.
- Predictive is well funded to complete all work programs with \$20m<sup>1</sup> in cash.

#### Commenting on the results, Managing Director, Paul Roberts, said:

"Deep drilling at NE Bankan continues to extend the high-grade zone to depths of more th<mark>an 500m</mark> be<mark>lo</mark>w surface and remains wide open at depth. BNERD0102 intersected the target high-grade gold mineralised zone containing an impressive 34m @ 5.5g/t Au including 13m @ 9.6g/t Au providing further confirmation that the high-grade zone is at least 150m long below the limits of the US\$1,800/oz resource pit shell.

BNERD0101, the deepest hole drilled so far, intercepted the southern limit of the high-grade zone, having deviated south from its target position and included **13m @ 4.6g/t Au** from 601m.

Assays are pending for a further three deep drill holes, two of which are currently in progress."

<sup>1</sup> As at 8 December 2021



09 December 2021

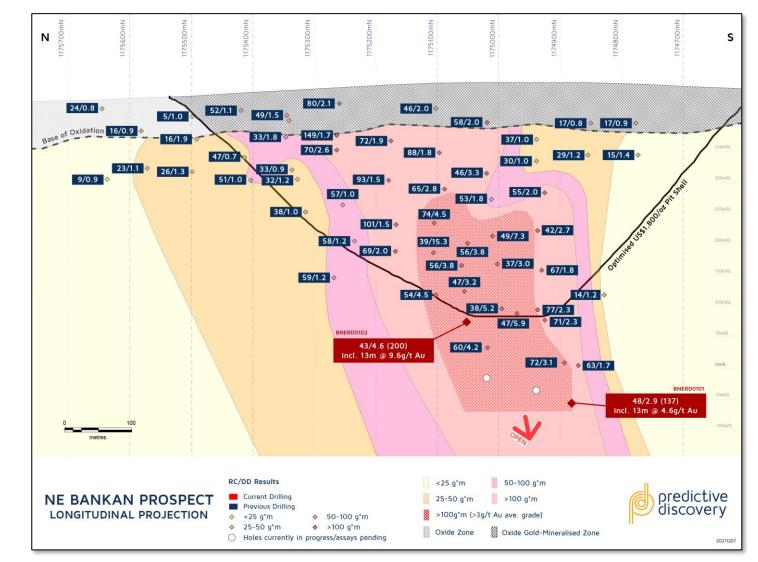


Figure 1 - NE Bankan N-S Longitudinal Projection showing new drill results (red). Contours are interpreted based on aggregate true width gold gram metres (g\*m) calculated using >0.5g/t Au cutoff. Results shown in the form 74/4.5 reflect 74m (aggregate true width) at 4.5 g/t Au (length weighted average Au), with gram metres in brackets (aggregate true width) at 4.5 g/t Au (length weighted average Au), with gram metres in brackets (aggregate true width) at 4.5 g/t Au high-grade gold mineralised zone as modelled for the MRE.



09 December 2021

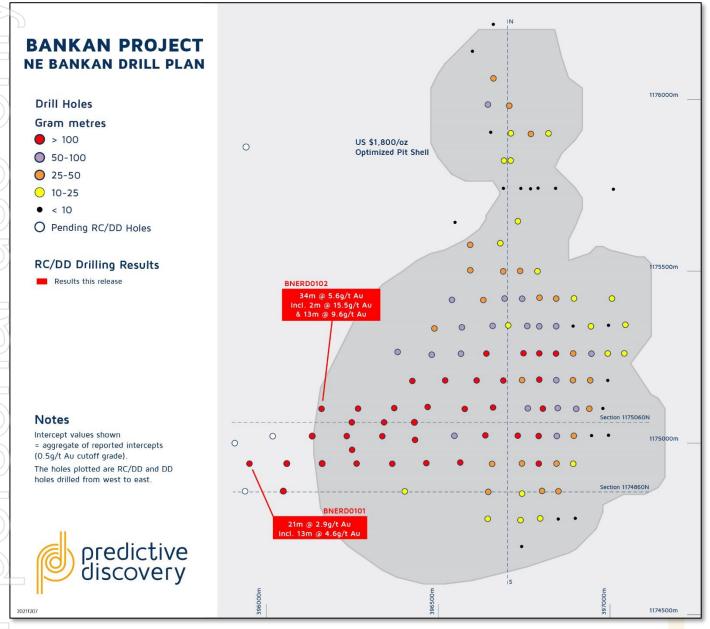


Figure 2 - NE Bankan drill plan showing new, previous and pending diamond drill holes.

#### NE Bankan Prospect Drilling (Detailed)

Deep drilling at NE Bankan is ongoing and is aimed at extending the high-grade gold zone at depth below the US\$1,800/oz optimised pit shell containing the maiden Resource Estimate (ASX announcement, 30 September 2021). Currently 2 multipurpose rigs are on site drilling deep diamond drill holes.

Recent drilling has demonstrated that the high-grade zone, located beneath the hangingwall shear zone, where it separates mafic volcanics (above) from felsic intrusives (below), is still open at depth. The deepest drill hole so far, BNERD0101, returned **13m @ 4.6g/t Au** from 601m including **7m @ 7.0g/t Au** from 606m. While this was somewhat thinner than observed in the central part of the high-grade zone, significant hole



deviation to the south placed the intercept close to the southern limit of the high-grade zone on the next section to the south, where this hole is a significant improvement on BNERD0100, approximately 100m updip from it (Figure 4).

BNERD0102, a shallower step out hole designed to better define the high-grade zone below the US\$1,800/oz optimised pit shell, obtained an impressive **34m @ 5.5g/t Au** from 441m including **13m @ 9.6g/t Au** from 460m. This intercept is located well away from the mafic-felsic contact (Figure 3) and has very good widths and grades on both sides of the hangingwall shear zone, suggesting a variation to the geological model as the high-grade zone extends to depth. Drilling more holes in areas of similar geology near the northern margin of the high-grade zone is planned.

Variable hole deviation in recent deeper drill holes has meant that several holes have intersected the hangingwall shear south of or up-dip from the planned target positions. The Company is currently working with drill contractor, Capital Drilling, to implement several methods to limit deviation in the increasingly long diamond drill holes. Some specialised equipment remains on order and is expected on site in coming weeks.

Detailed results and a complete explanation of the methods followed in drilling and assaying the reported holes can be found in Tables 1 and 2.

## NEXT STEPS

Diamond drilling is continuing with two multipurpose drill rigs currently in operation. At present, both rigs are drilling holes to depths of 500-650m below surface, to explore for deeper extensions of the high-grade gold zone.

After a longer than expected normal rainy season, the Company restarted the power auger program in November, testing structural target areas interpreted from the aeromagnetic survey both in the southeastern part of the permit area and in the area directly east of NE Bankan.

Diamond and aircore drilling will be suspended for an end of year break on 18 December with crews returning to site in early January, enabling most staff to take some well-deserved time off with their families after a year of intense activity. One auger rig will continue drilling through the Christmas period, manned by Kouroussa-based staff.

Page 4 of 13 predictivediscovery.com



09 December 2021

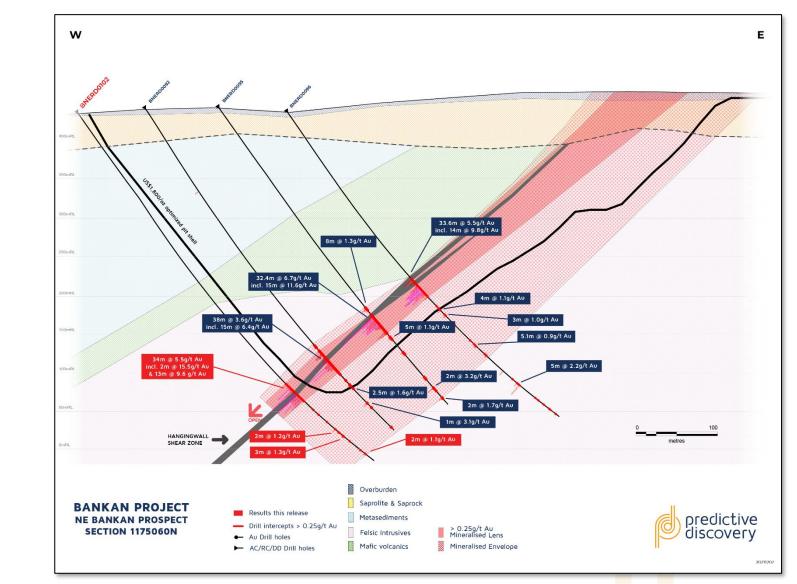


Figure 3 - Section 1175060N (+ 20mN / -50mS) showing projected BNERD0102 trace collared from 1175100N as the hole deviated 90m to the south.



**ASX Announcement** 

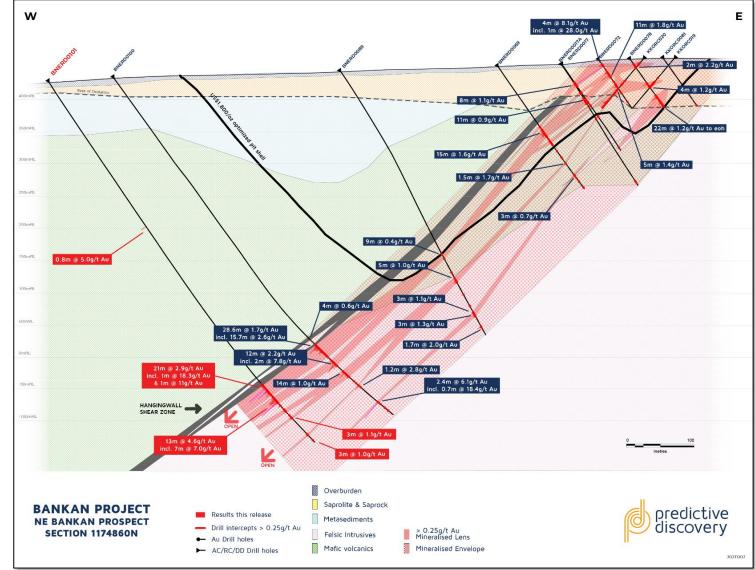


Figure 4 - Section 1174860N (+75mN /- 50mS) showing projected BNERD00101 trace from 1174940N collar position as this hole deviated almost 80m south





#### - END -

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

This announcement is authorised for release by Predictive Managing Director, Paul Roberts.

For further information visit our website at <u>www.predictivediscovery.com</u> or contact:

#### PAUL ROBERTS

Managing Director Email: paul.roberts@predictivediscovery.com

#### **COMPETENT PERSONS STATEMENT**

The exploration results reported herein 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.

#### About the Bankan Gold Project

The Bankan gold camp (Figure 5) is situated in north-east Guinea in West Africa. The project is 550km by road from Guinea's capital Conakry within the region of Upper Guinea and is 10km west of the regional administrative centre of Kouroussa.

The Bankan project area covers 356km<sup>2</sup> in four exploration permits, Kaninko, Saman, Bokoro and Argo. Three permits are held by wholly owned subsidiaries of Predictive. The fourth, Argo, is held in a joint venture with the owners of local company Argo Mining SARLU, through which the Company has the right to acquire a 100% equity interest at decision to mine.

In only 18 months, the Company has completed over 53,000 meters of RC and diamond drilling on the Bankan Project. This has returned an Inferred Resource of **72.8Mt** averaging **1.56g/t Au** for **3.65 million ounces of gold**<sup>2</sup>, 91% of which came from NE Bankan, all for a very low resource discovery cost of \$4/oz.

<sup>2</sup>ASX Announcement - 3.65 MILLION OUNCE BANKAN MAIDEN MINERAL RESOURCE ESTIMATE (30 September 2021)

ASX: PDI predictivediscovery.com



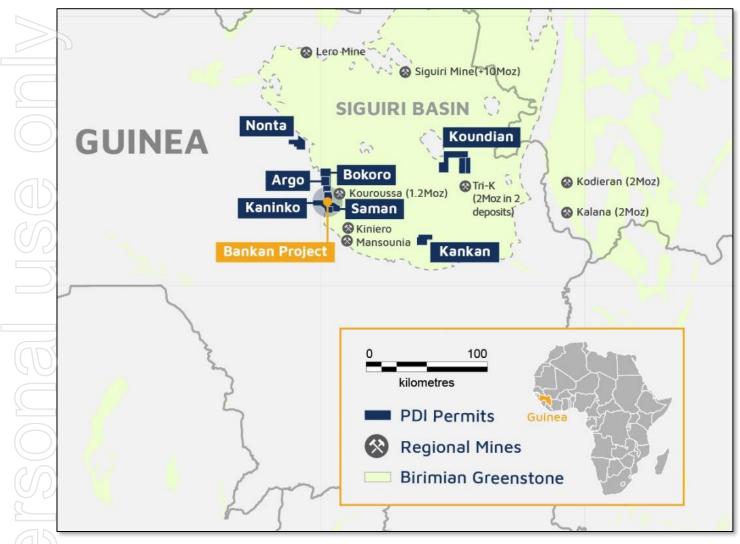


Figure 5 - Predictive Discovery's 100%-owned Guinea Portfolio of gold projects.

Gold mineralisation in the central portion of the NE Bankan deposit is strongly controlled by a major, northtrending west-dipping shear zone (the "hangingwall shear zone"), with most gold mineralisation including the high-grade zone located immediately below that shear zone within the felsic intrusive. Resource modelling indicates that the deep, high-grade gold intercepts form a coherent body of high-grade mineralisation at a 3g/t Au cut-off grade. Depth extensions to the high-grade gold zone will increase potential for underground mining and are expected to add significantly to the Company's resource inventory.

> Page 8 of 13 predictivediscovery.com





### **TABLE 1 – BANKAN PROJECT DRILL RESULTS**

Hole No.	Prospect	UTM 29N East	UTM 29N North		Hole azimuth	Hole dip	Hole depth	0.5g/t gold cut-off		Comments	
)								From	Interval (also true widths)	Au g/t	
BNERD0101	Bankan NE	395952	1174940	423	90	-55	699.00	268.9	0.8	5.07	
)								574.0	21.0	2.91	Incl. 1m @ 18.3 g/t Au from 583m and 1m @ 11g/t Au from 588m
								601.0	13.0	4.61	Incl. 7.32m @7.0g/t Au from 605.7m
1								619.0	1.0	2.38	
1								627.0	6.0	0.55	
								644.0	3.0	1.06	
1								681.0	3.0	0.98	
BNERD0102	Bankan NE	396162	1175100	434	90	-55	599.50	441.0	34.0	5.51	Incl. 2m @ 15.54g/t Au fron 453m and 13m @ 9.55g/t Au from 460m
								531.0	1.0	2.82	
1								537.0	2.0	1.19	
								544.0	3.0	1.27	
								575.0	1.0	1.28	
								583.0	2.0	1.12	

## TABLE 2 - JORC CODE – DIAMOND DRILLING

Section 1: Sampling Techniques and Data					
Criteria	JORC Code	Commentary			
	Explanation				
Sampling Technique	Nature and quality of sampling (eg cut channels, random chips, or specific	Samples assayed were rotary mud sediment and cut drill core.			
	specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or	Rotary mud precollar sediment samples are collected by adding flocculent to the mud slurry and pouring the flocculated slurry into			

Page 9 of 13 predictivediscovery.com





Drilling	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. Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details	calico bags in order to retain the sample fines. Once the sample is partially dried, it is mixed and subsampled using a scoop. Core was cut in half with a core saw where competent and with a knife in soft saprolite in the upper sections of the diamond drill holes. Sampling was supervised by qualified geologists. Samples were dried, crushed and pulverised at the SGS laboratory in Bamako to produce a 50g fire assay charge. Drill types were 2 multipurpose drill rigs both of which are capable of collecting PQ, HQ and NQ core. Both multipurpose rigs are drilling
	(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).	short (approx. 80m) precollars with reverse circulation or mud rotary and the remainder of the holes with NQ diameter core. All core is orientated using Reflex digital system.
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.	The rotary mud samples are collected from saprolite in the hangingwall, 100's of metres above the gold mineralised zone. Samples are collected and assayed as a precautionary measure in case there is any gold present in the saprolite. Given the nature of the drilling method, it is not possible to recover all the mud slurry and therefore sample recoveries are not recorded Drill core: Sample recoveries were measured in the normal way for diamond drill core. Core recoveries were generally excellent except for the saprolite where some core loss was experienced owing to clayey core being washed out in the diamond drilling process. Given that most of these saprolite core loss zones were obtained in mineralised intervals, grade is probably underestimated in those sections as zones of core loss are assumed to contain no gold. Significant sample bias is not expected with cut core.
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.	All drill samples were logged systematically for lithology, weathering, alteration, veining, structure and minor minerals. Minor minerals were estimated quantitively. A core orientation device was employed enabling orientated structural measurements to be taken.
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.	The diamond drill samples were collected by longitudinally splitting core using a core saw or a knife where core was very soft and clayey. Half of the core was sent off to the laboratory for assay. The sampling method is considered adequate for a diamond drilling program of this type.

Page 10 of 13
predictivediscovery.com



Quality of Assay Data and Laboratory Tests	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 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.	All samples were assayed by SGS technique FAA505 for gold with a detection limit of 5ppb Au. All samples with gold values exceeding 10g/t Au were re-assayed using SGS method FAA515 with a detection limit of 0.01g/t Au. Field duplicates, standards and blank samples were each submitted for every 15 samples on a rotating basis. Diamond core field duplicates were obtained by cutting the half core sample into two quarter core samples. As samples are not homogenised some variation is expected. Duplicate and standards analyses were all returned were within acceptable limits of expected values.
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	At this stage, the intersections have not been verified independently. Some partial twin holes have been reported previously, specifically where initial RC precollars (named BNERC****) were not able to be re-entered by the diamond rig resulting in a second hole being drilled within 5m and named BNERD****A. Both BNERC**** and the completed BNERD****A holes therefore have the same hole number (eg. BNERC0005 and BNERD0005A). These holes are sufficiently close to a previously drilled holes to provide confirmation of the location of mineralisation. In addition, KKODD002 was drilled close to aircore hole KKOAC001 and demonstrated that similar, consistent gold mineralisation was present in
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	the near surface. Drill hole collar locations were recorded at the completion of each hole by hand-held GPS. Positional data was recorded in projection WGS84 Zone 29N.
Data Spacing and Distribution	Quality and adequacy of topographic control Data spacing for reporting of Exploration Results	Hole locations will be re-surveyed using a digital GPS system at completion of program. The drill holes were designed to explore the gold mineralised system in fresh rock. A series of DD holes are in the process of being drilled on
	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	most 40m to 80m spaced sections in the 1.3km long zone tested previously with RC drilling. The drill hole spacings being employed at NE Bankan and Bankan Creek have been deemed sufficient for Mineral Resource estimation by an independent Competent Person.
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.	There is very limited outcrop in the immediate area but based on the small number of geological observations and the overall strike of the anomaly, an east west line orientation with holes inclined to the west was considered most likely to test the target mineralised zone. Results from

# Page 11 of 13 predictivediscovery.com



	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.	earlier drilling has now determined that the overall dip of the gold mineralised envelope is to the west at NE Bankan and to the west-south- west at Bankan Creek. All drill holes reported in this release were drilled from west to east (at NE Bankan) or from west-south-west to east-north- east (at Bankan Creek) to obtain near-true widths through the intersected gold mineralisation.
Sample Security	The measures taken to ensure sample security	Core trays are stored in a guarded location close to the nearby Bankan Village. Coarse rejects and pulps will be eventually recovered from SGS in Bamako and stored at Predictive's field office in Kouroussa.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data	No reviews or audits of sampling techniques were conducted.
Section 2 Rep	orting of Exploration Res	ults
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 Bankan Gold Project comprises 4 exploration permits, Kaninko (PDI 100%), Saman (PDI 100%), Bokoro (PDI 100%) and Argo JV (right to earn 100% in JV with local partner). Permits are held by Predictive subsidiaries in Guinea or in a joint venture structure. Parts of the Kaninko and Saman permits overlap the outermost buffer zone (or "peripheral area") of the Upper Niger National Park.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	Predictive is not aware of any significant previous gold exploration over the permit.
Geology	Deposit type, geological setting and style of mineralisation.	The geology of the Kaninko permit consists of felsic intrusives including granite and tonalite, with mafic to intermediate volcanics and intrusives. Metasediments including marble, chert and schists have also been observed.
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> <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> </li> </ul>	See Table 1 and the accompanying notes in this table.
Data Aggregation Methods	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. 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.	Diamond drill sampling was generally in one metre intervals. Up to 2m (down-hole) of internal waste is included for results reported at the 0.5g/t Au cut-off grade. Mineralised intervals are reported on a weighted average basis.

Page 12 of 13
predictivediscovery.com



	The assumptions used for any	
	reporting of metal equivalent values	
	should be clearly stated.	
Relationship Between Mineralisation	These relationships are particularly important in the reporting of Exploration Results	True widths have been estimated for intercepts where mineralisation orientation is reasonably clear.
Widths and Intercept Lengths	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').	
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 maps, cross sections and a longitudinal projection are included in this release (Figures 1-4).
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.	Comprehensive reporting of the drill results is provided in Table 1.
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 other exploration data on this area has been reported previously by PDI.
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.	These results form part of a large ongoing program of RC and diamond drilling. Geological studies will continue to be conducted to characterise the gold mineralisation going forward.

## Page 13 of 13 predictivediscovery.com