predictive discovery

ASX Announcement

3 November 2021

HIGH-GRADE GOLD ZONE EXTENDED BELOW RESOURCE PIT SHELL

Underground potential of the NE Bankan deposit grows with every high-grade deeper intersection

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

HIGHLIGHTS

- Significant assays from two Diamond Drillholes (DD) at the NE Bankan deposit have extended the high-grade gold zone 50m below the US$1800/oz optimised Mineral Resource pit shell (Figure 1). Best results include:
  - BNERD0097: **24.2m @ 8.8g/t Au** from 463.8m, incl.
    12.4m @ 15.3g/t Au from 465.6m
  - BNERD0098: **50m @ 2.4g/t Au** from 448.0m, incl.
    15m @ 4.9g/t Au from 449.0m, and
    10m @ 1.9g/t from 544.6m
- Diamond drilling is ongoing at NE Bankan with two multi-purpose drill rigs currently drilling holes at depths between 80m and 130m below the US$1,800/oz optimised pit shell.
- Extensional drilling of the high-grade zone continues to demonstrate potential to add significantly to the Company's maiden Resource of **3.65 million ounces at 1.56g/t Au**[1].
- Regional exploration is ongoing with AC drilling across the Company's 356km^2 Bankan Project area with more than 90% of the Bankan Project untested by any drilling.

Managing Director, Paul Roberts said:

"These new results have confirmed the Company's belief that, as the shear zone is intercepted below the optimised Resource pit shell, the high-grade mineralised zone continues to depth. With every new high-grade intersection below the existing open pit shell, the underground potential becomes clearer. NE Bankan shares the best qualities of tier-1 deposits, namely outstanding grades and widths combined with excellent mineralisation continuity.

"As our drilling progresses, incoming CEO, Andrew Pardey, and myself are currently in Guinea engaged in high-level consultations with senior government officials."

[1] ASX Announcement - 3.65 MILLION OUNCE BANKAN MAIDEN MINERAL RESOURCE ESTIMATE (30 September 2021)

For personal use only

T +61 8 9216 1020 F +61 8 9481 0411
Level 2, 33 Ord Street, West Perth WA 6005

ASX: PDI
predictivediscovery.com

personal use only

ASX Announcement

3 November 2021

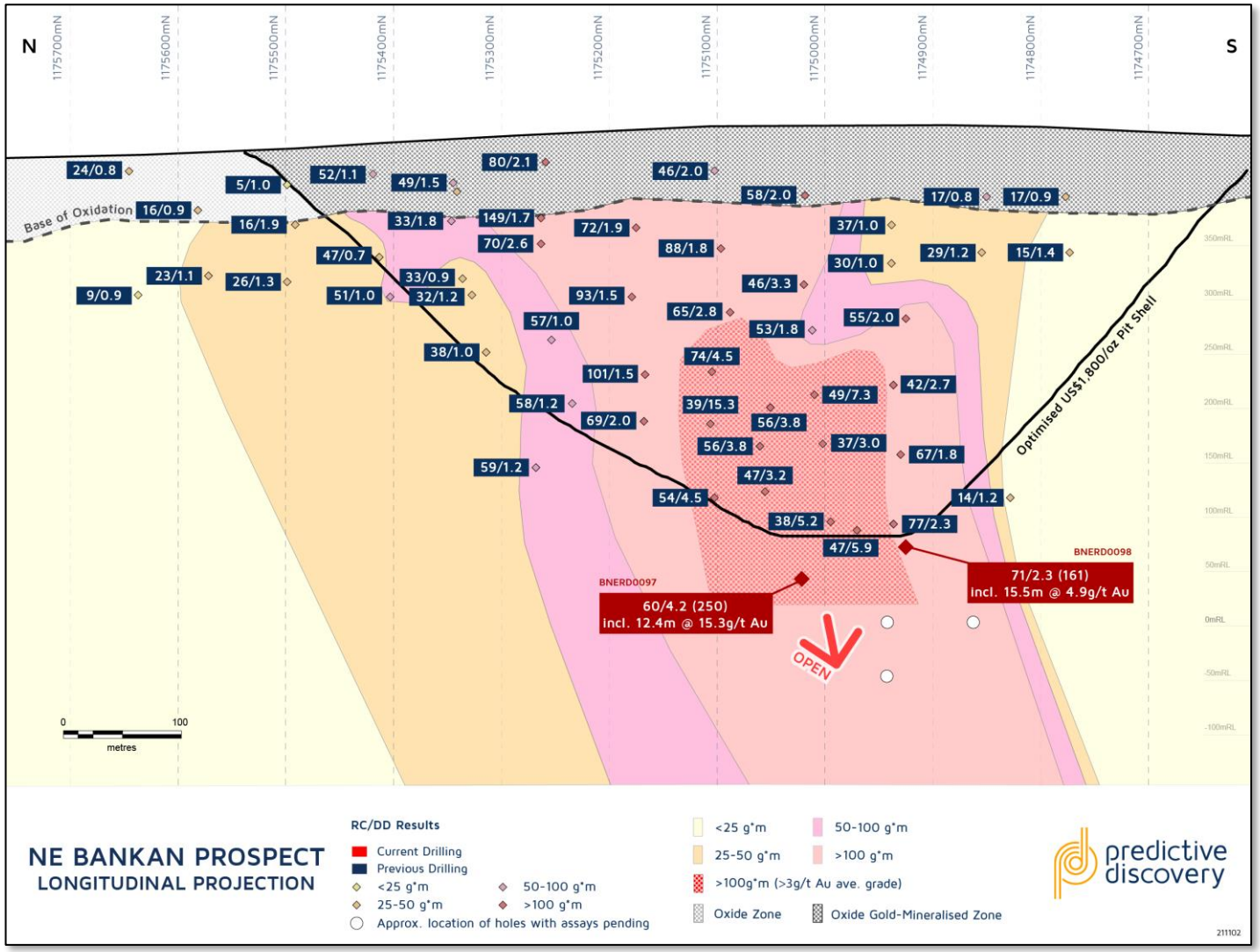


*Figure 1 - NE Bankan NS Longitudinal Projection showing new drill results (red). Contours are interpreted based on aggregate true width gold gram metres (g*m) calculated using >0.5g/t Au cutoff. Results shown in the form 74/4.5 reflect 74m (aggregate true width) at 4.5 g/t Au (length weighted average Au), with gram metres in brackets (aggregate true width x length weighted average Au). The red central hashed area approximates the plus-3g/t Au high-grade gold mineralised zone as modelled for the MRE.*

For personal use only

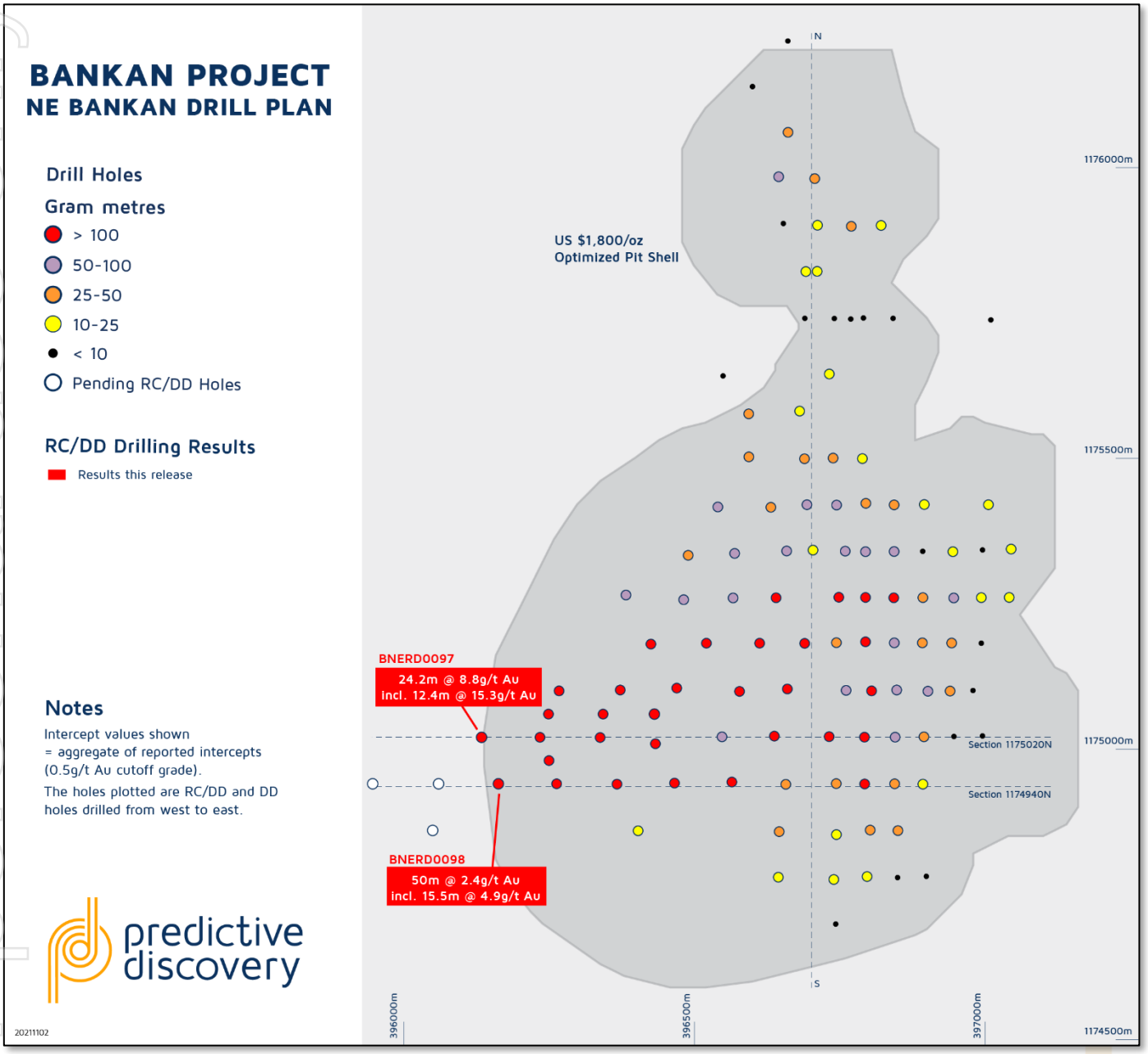


Figure 2 - NE Bankan Plan showing new DD results along with previous RC/DD collars and the US $1,800/oz optimized pit shell outline.

About the Bankan Gold Project

The Bankan gold camp 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^2 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 17 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**[2]**,** 91% of which came from NE Bankan, all for a very low resource discovery cost of $4/oz.

NE Bankan Prospect Drilling (Detailed)

The current drilling program at NE Bankan is designed to test for high-grade gold mineralisation beneath the hangingwall shear zone where it separates mafic volcanics (above) from felsic intrusives (below). Both infill and depth extension drilling are being conducted.

New diamond holes BNERD0097 and BNERD0098 were step-out holes completed on sections 1175020N and 1174940N respectively (Figures 2-4).

BNERD0097 intersected the high-grade gold zone at the deepest point to date from approximately 400m below surface, and 50m below the Resource optimized pit (Figure 1) with **24.2m @ 8.8g/t Au** from 463m, incl. **12.4m @ 15.3g/t Au** from 465m. The gold intercepts in this hole contain **250 cumulative gram metres of gold**, adding to the inventory of exceptionally strong mineralisation in the core of the high-grade gold zone.Hole BNERD0098 lifted from its planned trajectory during drilling and intersected the high-grade gold zone higher than originally planned but still below and outside the existing optimised pit shell. Best results included **50m @ 2.4g/t Au** from 448m, incl. **5m @ 4.9g/t Au** from 448m, and **10m @ 1.9g/t** from 448m.

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 at greater depths, between 450m-500m below surface, to explore for deeper extensions to the high-grade gold zone. One of the new deeper holes is testing for a possible southerly plunge of the high-grade gold zone as it extends to depth.

Results are pending from more DD holes testing beneath the US$1,800/oz optimised pit shell with potential to extend the high-grade gold zone further.

[2]ASX Announcement - 3.65 MILLION OUNCE BANKAN MAIDEN MINERAL RESOURCE ESTIMATE (30 September 2021)

For personal use only

personal use only

ASX Announcement

3 November 2021

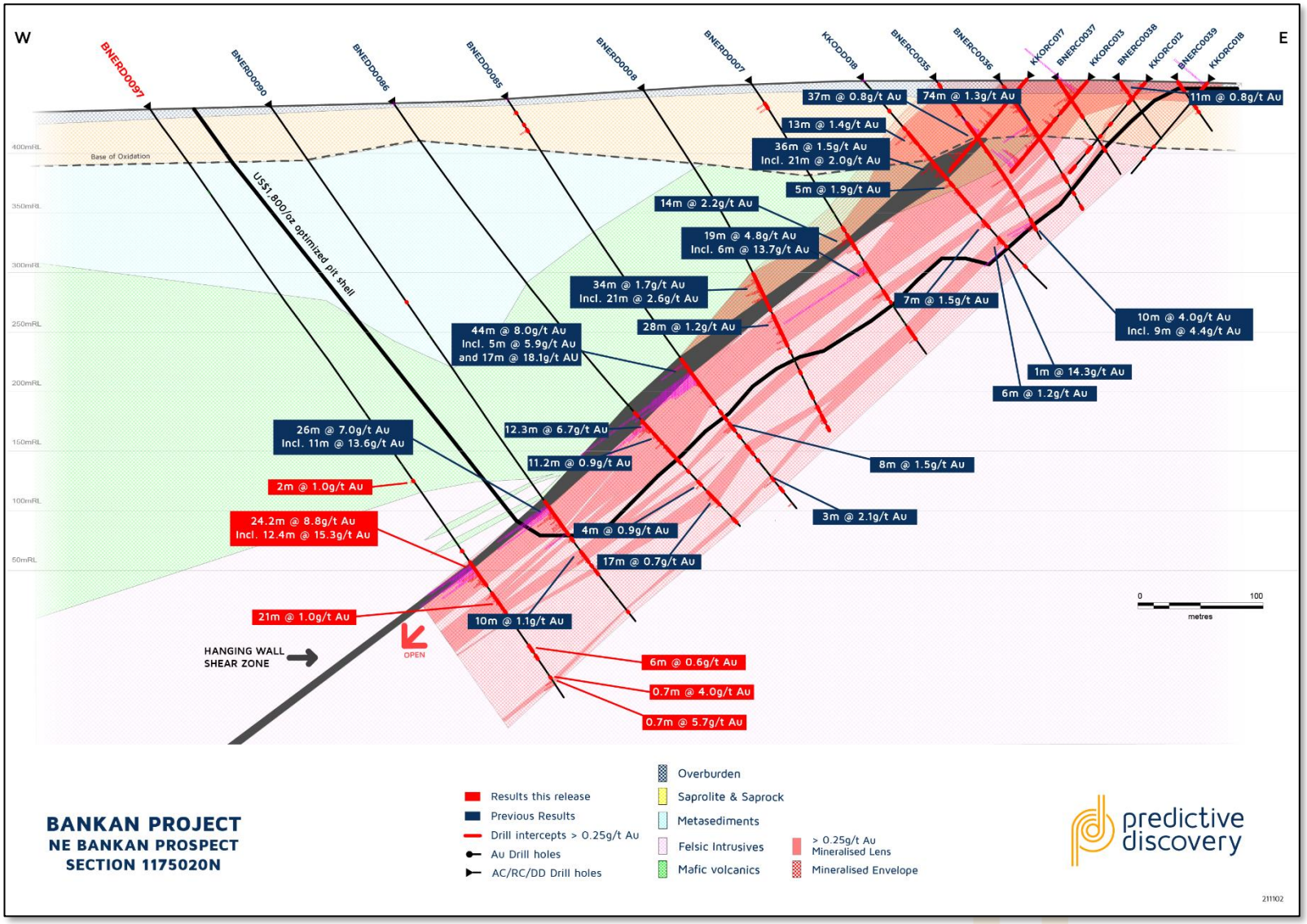


Figure 3 - Section 1175020N with new step-out DD-hole BNERD0097.

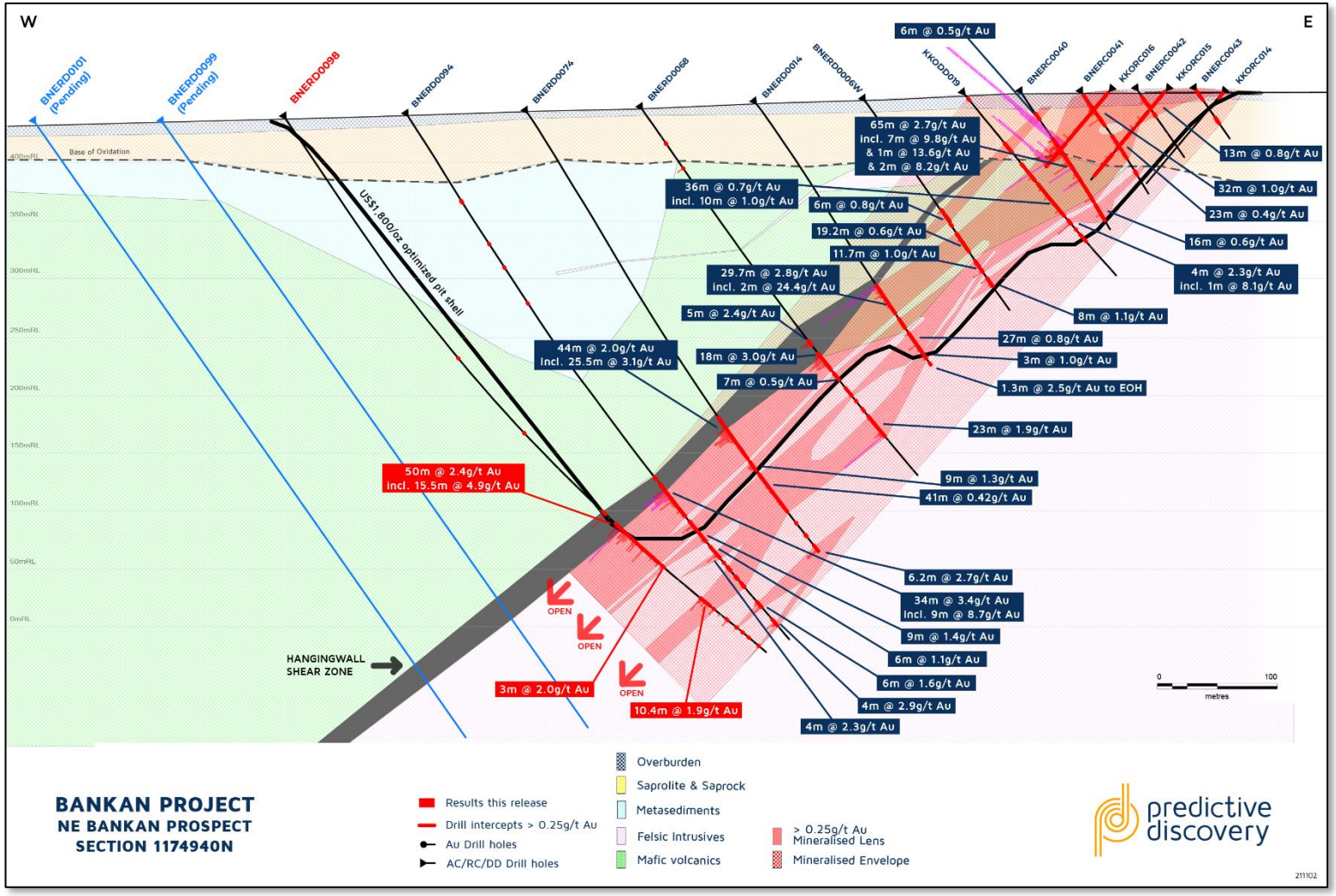


Figure 4 - Section 1174940N with new DD-hole BNERD0098 and pending BNERD0099.

personal use only

ASX Announcement

3 November 2021

- 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 www.predictivediscovery.com 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.

For personal use only

For personal use only

Project Background

The Bankan gold camp 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 (Fig. 5).

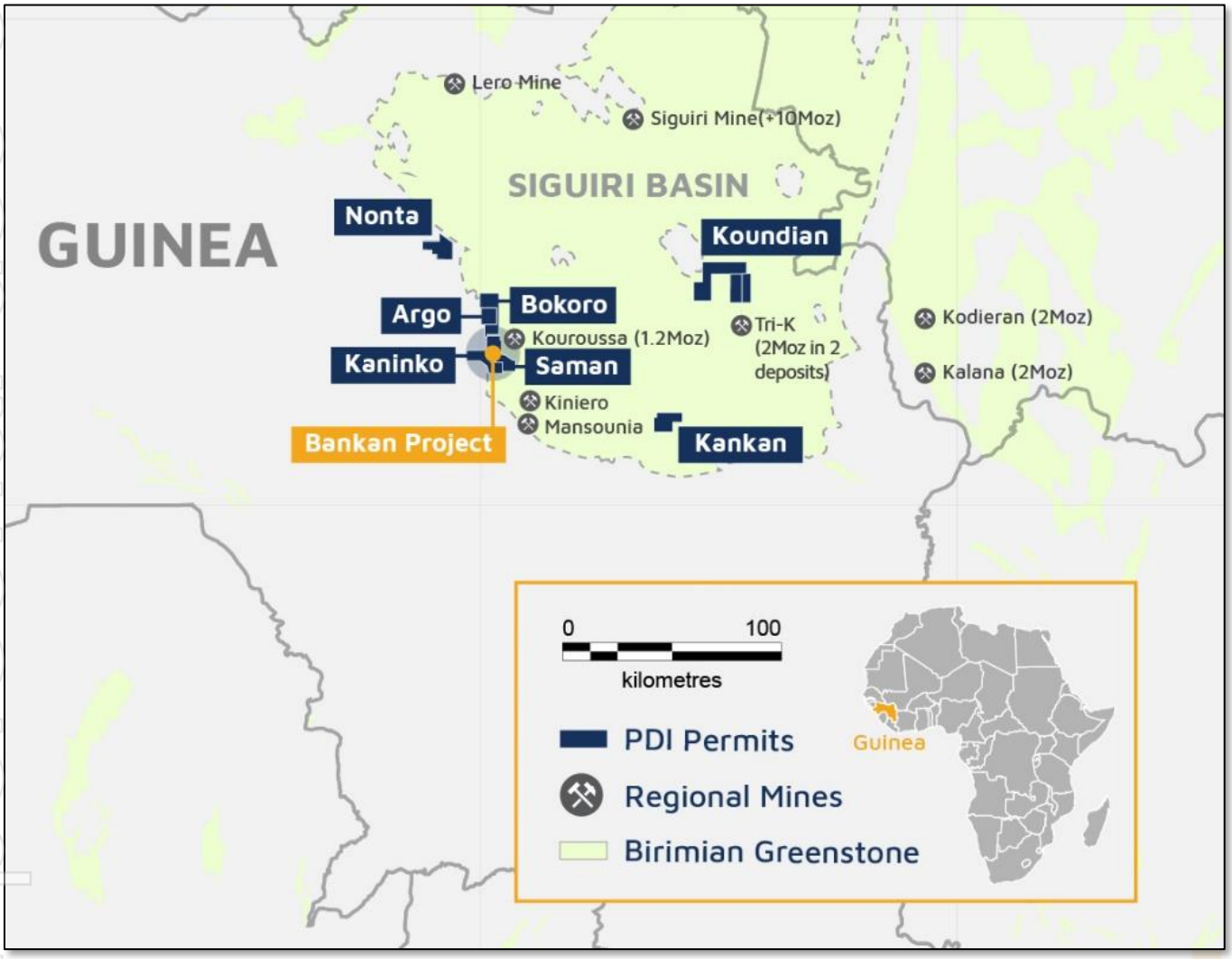


Figure 5 - Predictive Discovery's 100%-owned Guinea Portfolio of gold projects.

In September 2021 the Company reported its maiden Mineral Resource Estimate for the Bankan Project, resulting in an Inferred Resource of **72.8Mt** averaging **1.56g/t Au** for **3.65 million ounces of gold**[3], 91% of which came from NE Bankan, all for a very low resource discovery cost of $4/oz.

The Bankan project area covers 356km^2 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

[3]ASX Announcement - 3.65 MILLION OUNCE BANKAN MAIDEN MINERAL RESOURCE ESTIMATE (30 September 2021)

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.

Gold mineralisation in the central portion of the NE Bankan deposit is strongly controlled by a major, north-trending 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.

For personal use only

For personal use only

TABLE 1 – BANKAN PROJECT DIAMOND DRILL RESULTS

Hole No.	Prospect	UTM 29N East	UTM 29N North	RL (GPS)	Hole azimuth	Hole dip	Hole depth	0.5g/t gold cut-off			Comments
								From	Interval (est true widths)	Au g/t	
BNERD0097	Bankan NE	396134	1175020	434.9	90	-55	602.80	379.0	2.0	1.02	
								452.0	1.7	1.01	
								463.8	**24.2**	**8.79**	**Incl. 12.4m @ 15.3g/t Au from 465.6m**
								496.0	**21.0**	**0.96**	
								550.0	6.0	0.61	
								560.0	3.6	0.70	
								585.6	0.7	4.00	
								588.7	0.7	5.74	
BNERD0098	Bankan NE	396163	1174940	436.4	90	-55	618.00	432.6	3.7	1.95	
								448.0	**50.0**	**2.39**	**Incl. 15.5m @ 4.91g/t Au from 449.0m**
								501.0	3.0	1.97	
								544.6	**10.4**	**1.94**	
								559.0	1.0	3.53	
								573.2	1.8	2.22	
								609.0	1.0	1.21	

TABLE 2 - JORC CODE – DIAMOND DRILLING

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	Samples assayed were cut drill core. 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.

For personal use only

	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.	
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).	Drill types were 2 multipurpose drill rigs both of which are capable of collecting PQ, HQ and NQ core. Both multipurpose rigs are drilling 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.	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. 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 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.

For personal use only

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.	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 the near surface.
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	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. Hole locations will be re-surveyed using a digital GPS system at completion of program.
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 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 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. 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.	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 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.

For personal use only

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 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 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	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.	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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	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.
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	True widths have been estimated for intercepts where mineralisation orientation is reasonably clear.

	(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 1-5).
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.

For personal use only