predictive discovery

ASX Announcement

30 September 2021

3.65 MILLION OUNCE BANKAN MAIDEN MINERAL RESOURCE ESTIMATE

HIGHLIGHTS

- Maiden Mineral Resource Estimate (MRE) of **3.65 million ounces** for the Bankan Gold Project, located in Guinea's Siguiri Basin.
- Total Mineral Resource of **72.8 million tonnes at 1.56g/t Au for 3.65 million ounces of gold.**

TABLE 1: BANKAN PROJECT *IN SITU* MINERAL RESOURCE ESTIMATE

Deposit	Classification	Million Tonnes	Grade Au g/t	'000 Contained Au ounces
NE Bankan	Inferred	65.6	1.57	3,315
Bankan Creek	Inferred	7.2	1.42	331
Total	**Inferred**	**72.8**	**1.56**	**3,646**

(Assays to 11 September 2021, reported within a US$1800/oz optimised pit shell, see other accompanying notes to Resource Table on p. 3)

- High retention of contained gold ounces as the cut-off grade is lifted, demonstrating a robust ore body. At a cut-off grade of 1.0g/t Au, total ounces within the same resource models are **2.82Moz at an average grade of 2.29g/t Au.**
- The maiden MRE has been defined in only 17 months since the discovery drillholes were reported[1], highlighting the rapid growth of the Bankan Project.
- Resource discovery cost of $4/oz (US$2.90/oz)[2], very low-cost by industry standards.
- Exceptional potential to grow mineral resources: substantial drilling programs have continued at Bankan since the MRE cut-off date, including:
  - **High-grade zone:** presents significant potential for further growth at NE Bankan, now tested to 350-400m vertical depth. Extensional drilling to depth and along strike is ongoing.
  - **Regional:** Aircore drilling 1.5km from NE Bankan intersected 28m @ 12.1g/t Au (BKAC0016) – more than 9 targets along the 35km-long Bankan structural trend to be tested.
  - **Bankan Creek:** Drill coverage at depth is limited, with the deposit remaining open in all directions.
- Scoping study level metallurgical testwork has been extremely promising, with free milling gold, and 94-98% gold recoveries demonstrated across a broad representative sample.

[1] ASX Announcement - Outstanding drill results confirm new gold discovery in Guinea (15 April 2020)
[2] Calculated as total resource ounces divided by total exploration expenditure to date on the Bankan Project

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- With $24 million in cash, the Company is targeting a substantial increase in its resource base in the Bankan Project from both step-out and deeper drilling of the NE Bankan and Bankan Creek deposits and from regional targets.

- The MRE has been prepared by independent consultants, CSA Global Mining Industry Consultants ('CSA') and is reported in accordance with the JORC Code (2012).

Commenting on the MRE, Managing Director Paul Roberts:

"We are delighted by the scale of this initial Mineral Resource Estimate which reflects excellent continuity of mineralisation and has been generated from 32,700 drilling metres. After only 17 months from announcement of the initial NE Bankan drill results[1], this is just the beginning of the Bankan gold discovery story.

Our gold discovery success in such a small time period invites comparisons with the best gold deposit discovered in West Africa in the last decade - Fekola in Mali. Also announced 17 months after first discovery, the Fekola MRE contained 3.9 Moz averaging 1.7g/t Au at a 0.5g/t Au cut-off grade and 3.1 Moz averaging 2.4g/t Au at a 1.0g/t Au cut-off grade[3]. Today, Fekola's 2021 production is projected to be 530,000 to 560,000oz at an AISC of US$745-785/oz, with current quoted resources (excluding mine depletion since 2017) at Fekola itself and nearby deposits totalling 7.6Moz[4].

We are very well-funded to accelerate a drilling program to grow resources in both NE Bankan and Bankan Creek, increase drill density to increase confidence, and to quickly advance earlier stage regional prospects through to discovery and resource definition."

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[3] ASX Announcement – Maiden Resource of 3.14 million ounces gold at Fekola (Papillon Resources Ltd, 4 July 2012) - Resource statement was issued under the earlier 2004 JORC Code.
[4] Source B2Gold website - https://www.b2gold.com/projects/producing/fekola

Predictive Discovery Limited ("Predictive" or "Company") is pleased to announce a JORC 2012-compliant Mineral Resource Estimate ('MRE') for the Company's flagship Bankan Project ('Bankan' or 'the Project'), located in Guinea (Figure 1).

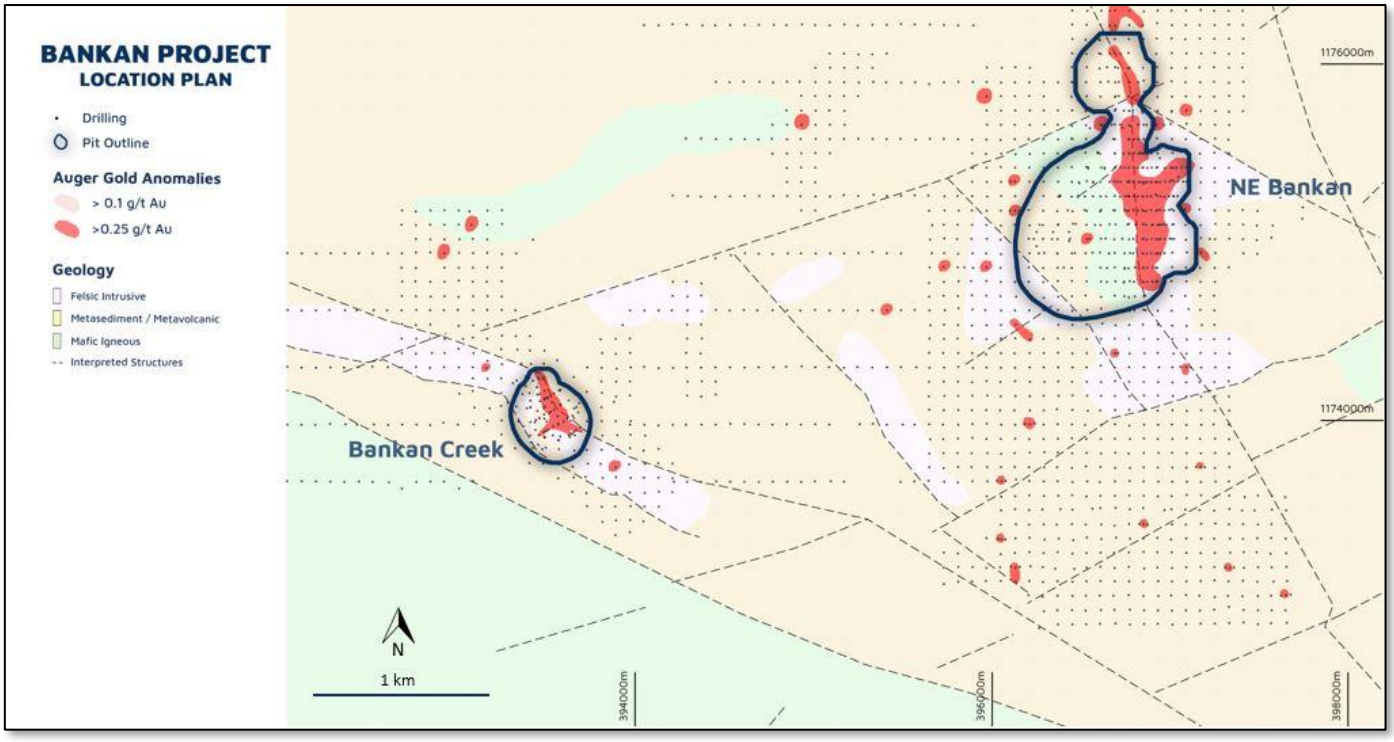

Figure 1 – Location of NE Bankan and Bankan Creek deposits, showing US$1800 optimised pit shell outlines used in estimation of the maiden Mineral Resource Estimate.

TABLE 1: BANKAN PROJECT *IN SITU* MINERAL RESOURCE ESTIMATE

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Total	**Inferred**	**72.8**	**1.56**	**3,646**

Notes to Resource Table:

1. The Mineral Resource is estimated with all drilling data available at 11th September 2021[5]. Drillholes BNERD0090 and BNERD0091 (reported to ASX on 16 September 2021) were included in the resource database.
2. The Mineral Resource is reported in accordance with the JORC Code 2012 Edition at a 0.5g/t cut-off.
3. The Competent Person is Phil Jankowski MAusIMM (CP) of CSA Global
4. The Mineral Resources are constrained by optimised pit shells using a metal price of USD1,800 per ounce Au and process recovery of 94%.
5. Rounding may lead to minor apparent discrepancies.

[5] *Including drill holes BNERD0090 and BNERD0091 but excluding BNERD0092 assays for which were received after 11 September 2021.*

Drilling Data

All data available as at 11th September 2021 was used to estimate the resource for NE Bankan and Bankan Creek; this comprises 147 reverse circulation drillholes for 14,973m, 28 diamond drillholes for 6,005m, 32 RC/DDH drillholes for 9,486m and 47 aircore drillholes for 2,231m.

Resource Model, Constraints and Estimate

Leapfrog software was used to generate grade shells. In NE Bankan, High Grade (>3g/t), Medium Grade (>1.0g/t), Low Grade(>0.5g/t) and Laterite (>0.3g/t) domains were generated. In Bankan Creek High Grade (>1.2g/t), Low Grade (>0.5g/t) and Laterite (>0.3g/t) domains were generated.

At NE Bankan, the High Grade is controlled by a west-dipping shear contact between underlying tonalite an overlying greenstone; it takes the form of a thickened disc, and has a strike length of up to 280m, a typical true width of 30m and a length of 380m downdip, with an average grade above 7g/t. The Medium Grade and Low Grade domains are largely hosted by the tonalite.

At Bankan Creek the mineralisation is controlled around the carapace of a different tonalite intrusion.

NE Bankan is weathered to depths of 50m to 80m and overlain by a flat layer of gold mineralised laterite. Weathering thickness is generally less at Bankan Creek.

Gold grades were estimated within these domains using Ordinary Kriging; high grades were cut to between 40g/t and 7g/t depending on the domain. Search parameters were chosen to optimise the quality of the estimate.

For NE Bankan, the resource model was restricted to above the 75mRL, approximately 40m downdip of the deepest resource hole (BNERD0091).

Open pit optimisations using a US$1,800 per ounce gold price and assuming a 4Mtpa production rate produced open pits at both deposits; both are partly constrained by the extent of the resource model, and extensions to the resource may produce larger pit optimisations.

The resources are classified Inferred, based on the drillhole spacing (averaging 80m by 80m). Both NE Bankan and Bankan Creek remain open at depth.

The resource and grade-tonnage tables are as follows:

TABLE 2: NE BANKAN GRADE-TONNAGE TABLE

Cutoff Au g/t	Tonnes	Grade Au g/t	Contained Au ounces
0.3	81,552,613	1.34	3,513,445
0.4	72,373,263	1.47	3,413,103
0.5	**65,562,063**	**1.57**	**3,314,560**
0.6	59,801,863	1.67	3,212,702
0.7	52,796,432	1.81	3,066,303
0.8	46,792,763	1.94	2,923,466
0.9	40,682,038	2.11	2,756,472
1.0	34,282,544	2.32	2,561,011
1.1	28,568,657	2.58	2,369,957
1.2	24,358,938	2.83	2,215,663
1.3	20,447,057	3.13	2,058,450
1.4	16,928,938	3.50	1,905,752
1.5	14,110,569	3.91	1,775,269
1.6	12,202,457	4.28	1,680,795
1.7	10,716,457	4.65	1,602,442
1.8	9,477,313	5.03	1,533,121
1.9	8,499,369	5.40	1,475,269
2.0	7,576,600	5.82	1,417,713

(Assays to 11 September 2021, reported within a US$1800/oz optimised pit shell, see other accompanying notes to Resource Table on p. 3)

TABLE 3: BANKAN CREEK GRADE TONNAGE TABLE

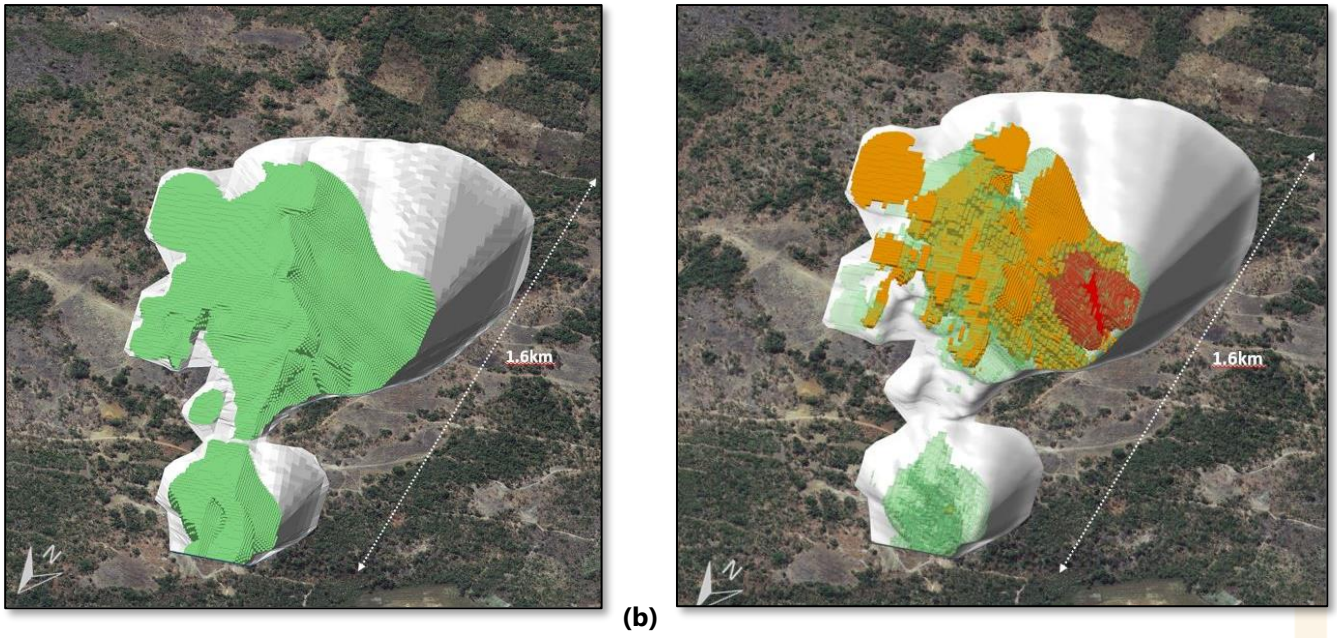
Cutoff Au g/t	Tonnes	Grade Au g/t	Contained Au ounces
0.3	8,709,644	1.25	350,613
0.4	8,235,435	1.30	345,429
0.5	**7,235,710**	**1.42**	**330,965**
0.6	6,446,001	1.53	317,255
0.7	5,451,798	1.69	296,798
0.8	4,768,314	1.83	280,537
0.9	4,318,467	1.93	268,388
1.0	3,952,608	2.02	257,213
1.1	3,291,695	2.22	235,114
1.2	2,935,998	2.35	222,077
1.3	2,720,223	2.44	213,475
1.4	2,488,485	2.54	203,491
1.5	2,286,691	2.64	194,149
1.6	2,148,266	2.71	187,295
1.7	2,082,172	2.75	183,789
1.8	2,000,569	2.79	179,198
1.9	1,878,872	2.85	171,998
2.0	1,775,769	2.90	165,568

(Assays to 11 September 2021, reported within a US$1800/oz optimised pit shell, see other accompanying notes to Resource Table on p. 3)

TABLE 4: BANKAN PROJECT MINERAL RESOURCE ESTIMATE BY WEATHERING

Deposit	Weathering	Million Tonnes	Grade Au g/t	'000 Contained Au ounces
NE Bankan	Laterite	2.15	0.97	67
	Saprolite	11.54	1.08	401
	Primary	51.87	1.71	2,852
Sub-total:		*65.6*	*1.57*	*3,320*
Bankan Creek	Laterite	0.15	1.04	5
	Saprolite	1.01	1.83	59
	Primary	6.08	1.37	268
Sub-total:		*7.2*	*1.42*	*332*
Total	**Inferred**	**72.80**	**1.56**	**3,646**

(Assays to 11 September 2021, reported within a US$1800/oz optimised pit shell, 5, rounding may lead to minor apparent discrepancies. See other accompanying notes to Resource Table on p. 3)



(a) **(b)**

Figure 2 – Perspective views of NE Bankan, viewed from the north showing (a) the plus 0.5g/t Au resource block model (green) and (b) the 1.0-3.0g/t Au (dark yellow) and plus 3.0g/t Au (red) resource blocks inside the same resource model - within a US$1800/oz gold price-optimised pit shell. The second image highlights the strong coherence of the plus 1.0g/t Au ore blocks in the Central Gold Mineralised Zone and the transition to high grade in the bottom of the deposit, reinforcing the potential to transition into underground mining at depth.

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, a city of approximately 50,000 inhabitants.

The Bankan project area covers 356km^2 in four exploration permits, Kaninko, Saman, Bokoro and Argo (Figure 3). 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 at decision to mine.

Geology

Geologically, the Bankan gold camp lies in the south-western portion of Siguiri Basin, a component of the early Proterozoic Birimian orogenic belt (2.0-2.1by) in north-eastern Guinea. The Siguiri Basin is largely composed of turbiditic sediments with lesser mafic volcanics and minor felsic intrusives. The geology in the immediate Bankan area consists of shelf sedimentary rocks (conglomerates, sandstones, shales and limestones), mafic volcanics and intrusives and felsic intrusives, the latter generally ranging from tonalite to quartz diorite in composition.

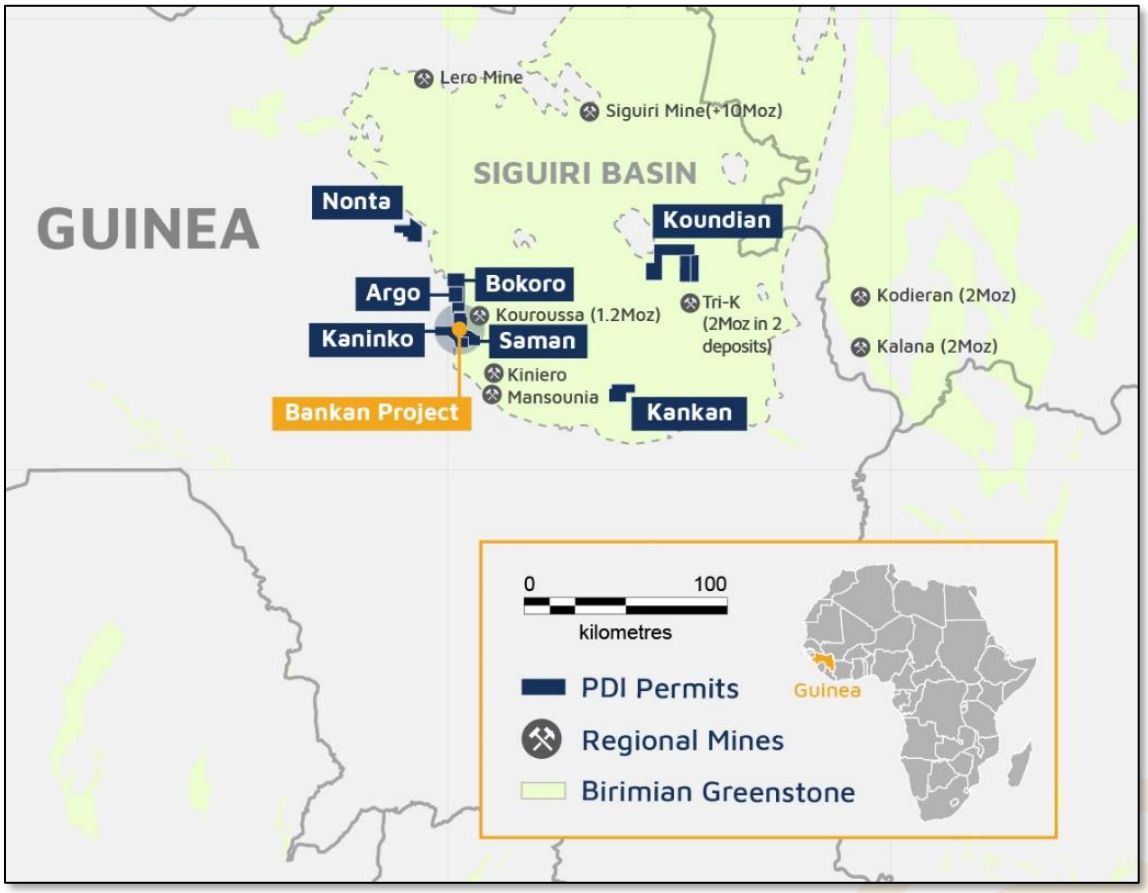


Figure 3 - Predictive Discovery's 100%-owned Guinea Portfolio of gold projects, showing Bankan Project location.

The dominant host rocks to mineralisation at NE Bankan are felsic to intermediate intrusives, typically of tonalite to quartz diorite composition (collectively called the "felsic intrusives" or the "tonalite"). These intrude mafic volcanics which are overlain by shallowly west-dipping metasediments to the west. The primary gold mineralisation, which dips to the west at approximately 45 degrees, is overlain by oxide gold mineralisation, in laterite and saprolite, from surface to a depth averaging approximately 60m.

The central portion of the NE Bankan gold deposit is strongly controlled by a major west-dipping shear zone (Figure 4), with most gold and higher-grade zones occurring in the footwall of that shear zone within the felsic intrusives. This shear zone appears to split into several weaker shear planes north of the high-grade core where gold grades are generally lower. Gold grades are generally highest where the shear zone forms the contact between the felsic intrusives in the footwall from the mafic volcanics in the hangingwall. The gold mineralised bodies generally strike north-south and dip to the west, parallel to the major shear zone.

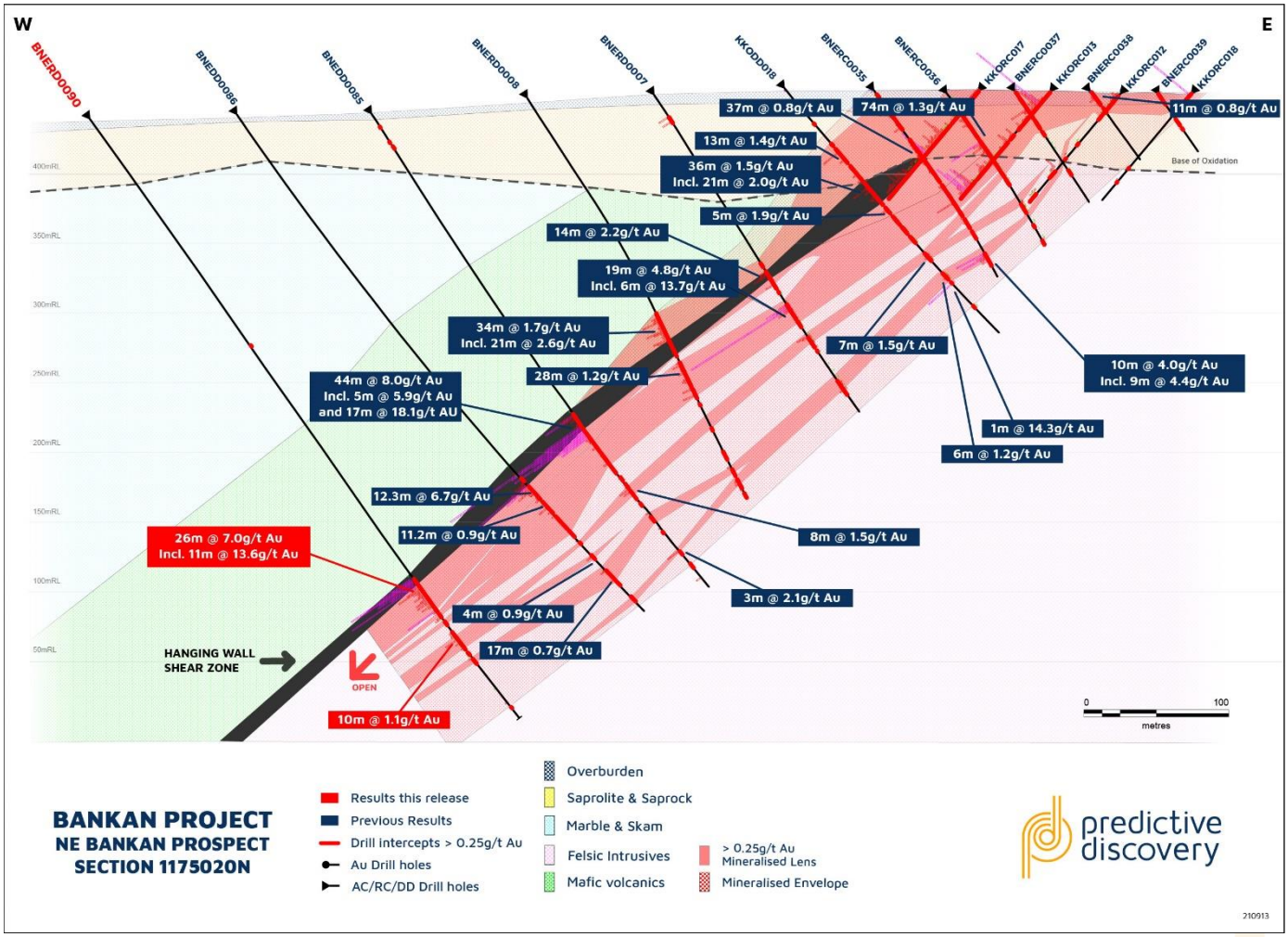


Figure 4 - Cross-section1,175,020N, highlighting high gold grades where the hangingwall shear zone coincides with the contact between the mafic volcanics (above) and felsic intrusives (below).

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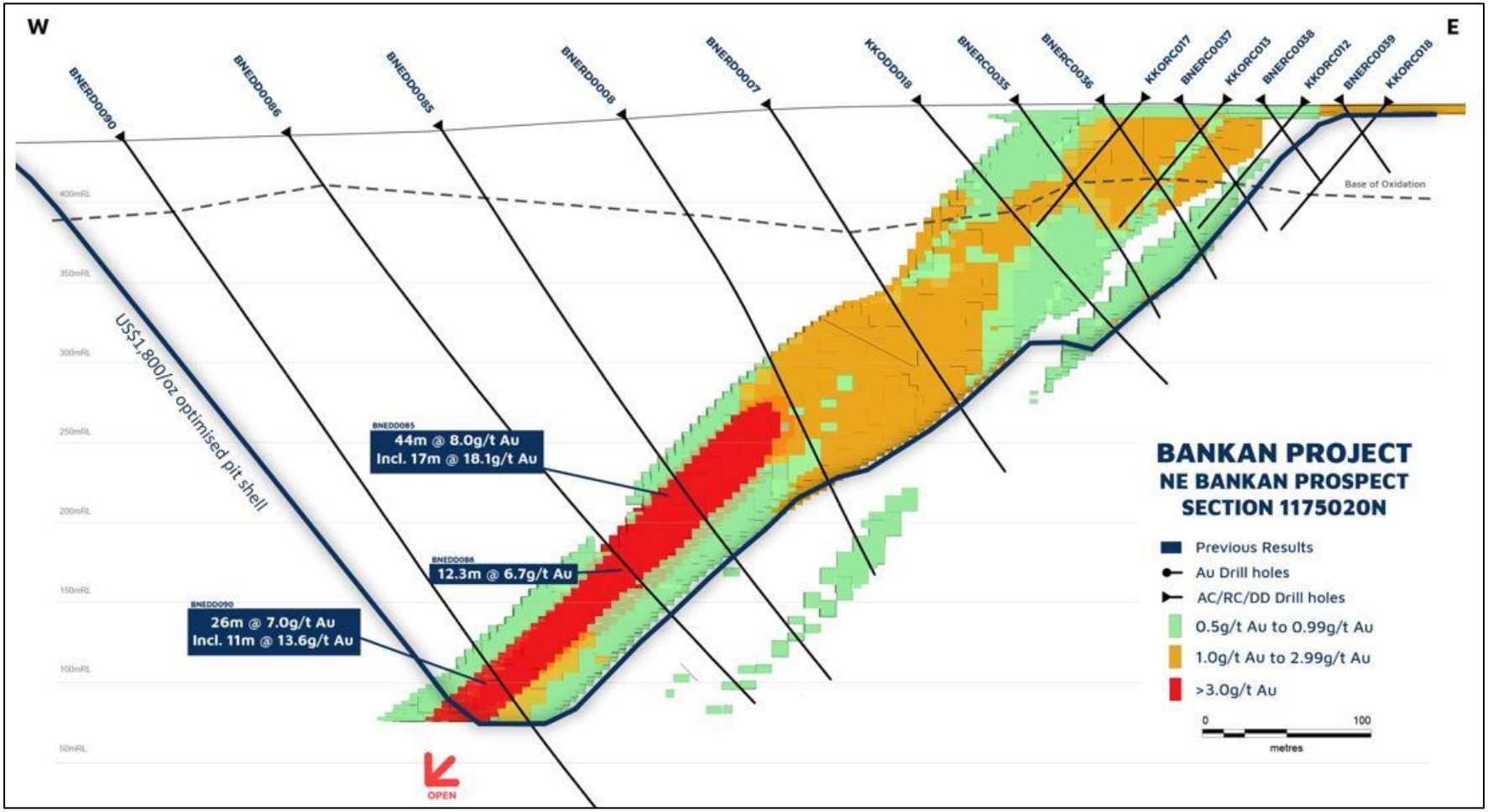

Figure 5 - Cross section1,175,020N illustrating the locations of >3g/t Au blocks (red), plus 1-3g/t Au blocks (dark yellow) and 0.5-1.0g/t Au blocks (green) in the resource model largely within the US$1800/oz gold price-optimised pit shell.

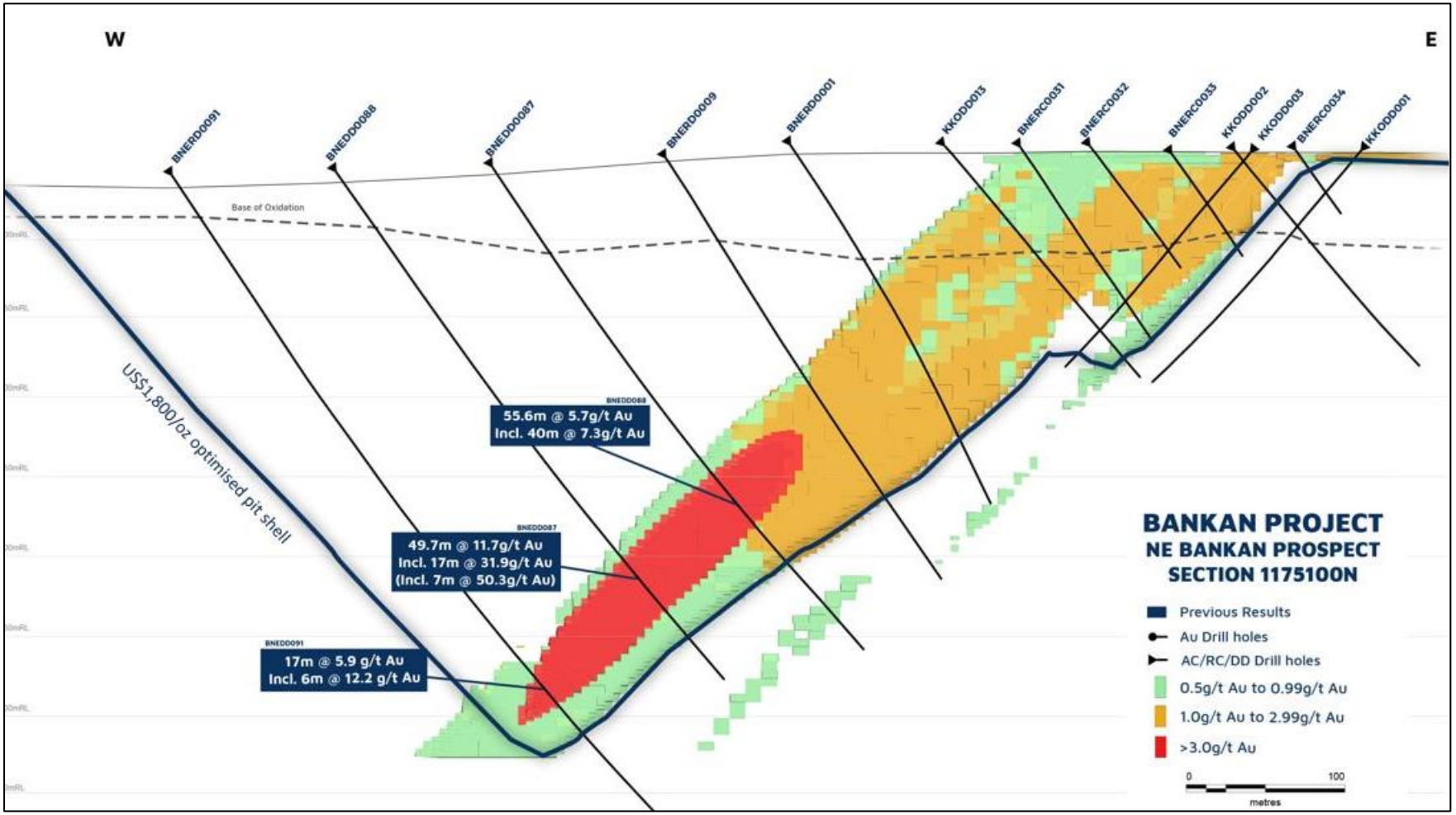

Figure 6 - Cross section1,175,100N illustrating the locations of >3g/t Au blocks (red), plus 1-3g/t Au blocks (dark yellow) and 0.5-1.0g/t Au blocks (green) in the resource model largely within the US$1800/oz gold-price optimised pit shell.

At Bankan Creek, gold mineralisation is hosted in a different setting – consisting of the same felsic igneous intrusives as at NE Bankan but where they have been intruded into metasediments, mainly marbles, which have been altered/metamorphosed near the intrusive contacts to form skarns. White quartz veining and gold mineralisation appear to be better developed in the more brittle rocks, namely the tonalitic intrusives and the skarns.

Metallurgical Testwork

A summary of the metallurgical testwork program reported to the ASX on 14 September 2021 is as follows:

- Bankan gold mineralisation confirmed as free-milling with high gold recoveries, and amenable to a simple, industry-standard comminution and carbon-in-leach process circuit.
- Cyanide leach recoveries from all gold mineralisation types ranged from 94.2% to 98.5% under optimised conditions (75-micron grind, 24 hours).
- Very good leaching kinetics with at least 94% of extractable gold dissolution within 24 hours.
- Gravity gold recoveries ranging from 13.1% to 37% with values from the tonalite and tonalite-skarn ore ranging from 19.6% to 37%.
- The ore is relatively hard with breakage characteristics pointing to (a) a three-stage crushing and ball mill circuit or (b) two-stage crushing and High Pressure Grinding Roll (HPGR) before milling or (c) a Semi Autogenous Ball Mill Crushing Circuit (SABC).
- Under optimised conditions, cyanide consumption is anticipated to be 0.7 to 0.9 kg/t and lime consumption of 0.1kg/t or less.

ROOM TO GROW – EXPLORATION UPSIDE AT BANKAN

There is great potential to expand the mineral resources in the Bankan Project, as the Company aggressively drills out the known systems at NE Bankan and Bankan Creek and progresses higher priority prospects within the broader Bankan permit which have already provided highly encouraging results. More than 90% of the Bankan Project area is yet to be drilled by any method (including power auger).

Areas of potential resource growth include:

NE Bankan – Depth and Strike Extensions

Recent drilling results at depth in NE Bankan have revealed a high-grade core zone at the centre of the deposit[6,9]. Resource modelling indicates that the deep highest-grade intercepts form a coherent body of mineralisation at a 3g/t Au cut-off grade (Figures 4-7). Estimated contained ounces in the lowermost 100m (vertical extent) of the plus-3g/t Au component of the resource block model were 500,000oz gold or 5,000 oz/vertical metre. While it is not yet clear how deep an economic open pit mine may reach, depth and possible strike extensions to this zone have obvious potential for underground mining (Figure 7) and could add very significantly to resource ounces in the next MRE update. Drilling is now in progress with two drill rigs to test this zone at depth (Figure 8).

[6]ASX Announcement - 44m @ 8g/t gold – Highest impact gold intercept at Bankan project (1 July 2021)

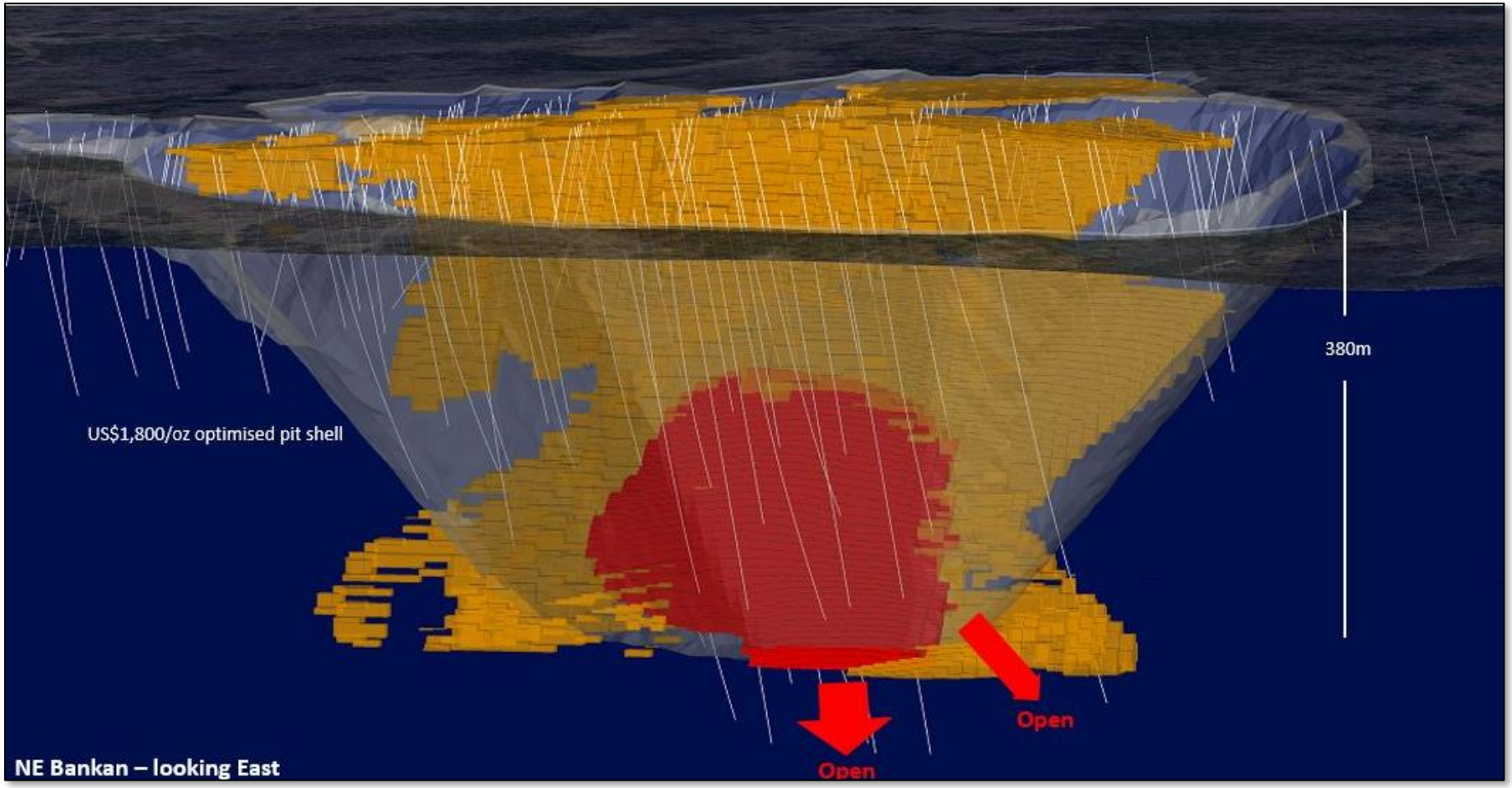

Figure 7 - "See-through" view (looking east) of the US$1800/oz gold-price optimised pit shell in the central portion of the NE Bankan gold deposit, showing location of the 1.0-3.0g/t ore blocks (dark yellow) and the plus-3.0g/t high-grade gold zone and its potential projection to depth.

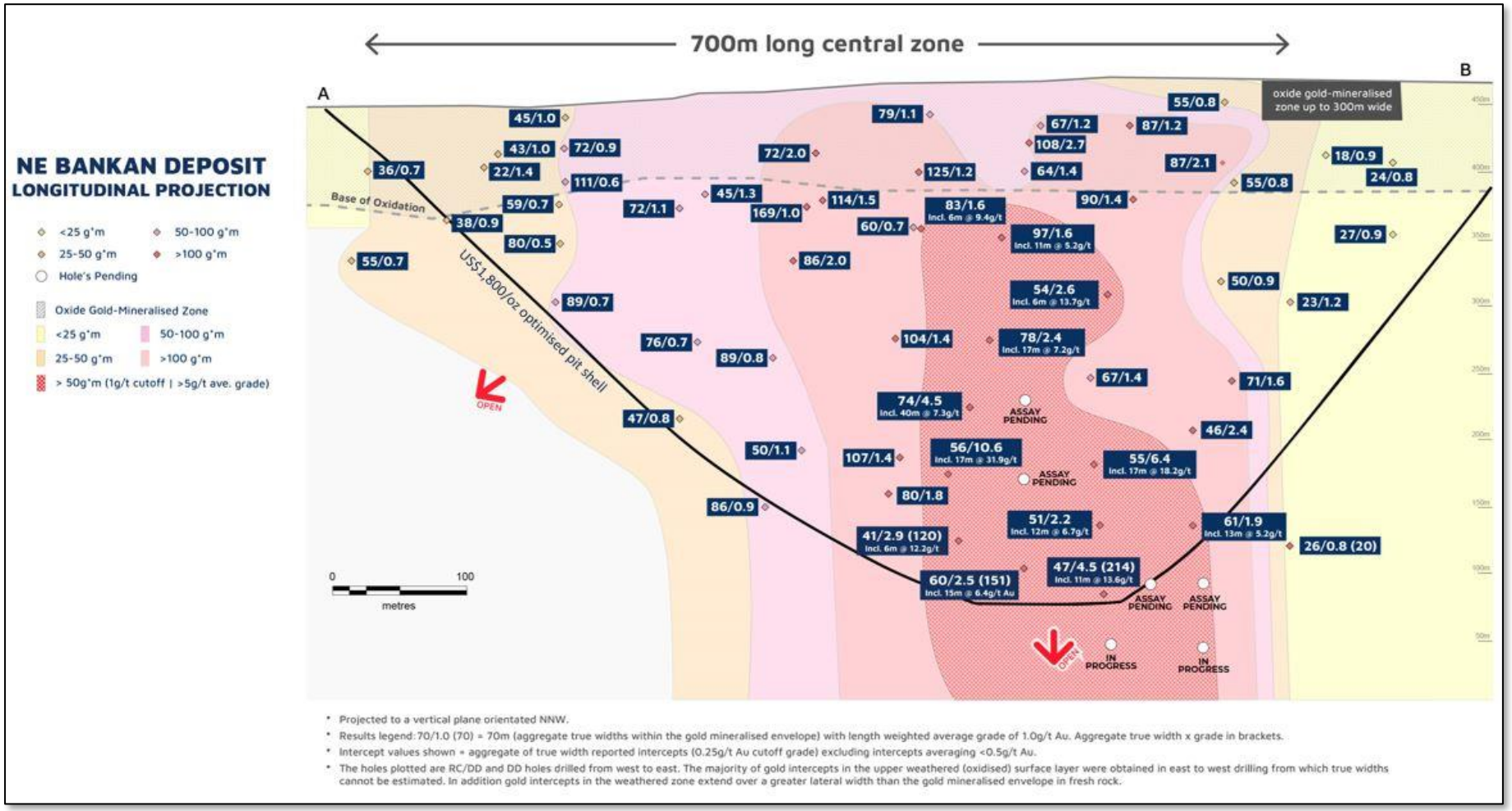

Figure 8 – NE Bankan Longitudinal Projection, showing pit outline and pending drill holes.

Bankan Creek – Depth and Strike Extensions

Drilling at Bankan Creek has not yet explored the full extent of the gold mineralised system, both at depth and along strike. Extensional drilling is planned for later in the year.

Regional Prospects

An airborne magnetic and radiometric survey in February 2021 enabled the Company to interpret the geology of the entire Bankan Project area for the first time and identify nine targets with structural and geological similarities to the NE Bankan deposit within an interpreted 35km-long structural corridor[7] (Figure 9). Exploration of these targets commenced in April 2021 mainly by power auger drilling. Further geological interpretation and structural studies are likely to generate more targets in the project area over time.

Guided principally by the new geological interpretation, Predictive has obtained high gold grades from power auger, rock sampling and, most recently, Aircore (AC) drilling across the Bankan Project. Better results from various prospects (Figure 9), include:

- Argo permit (AG1) - **12m @ 9.8g/t Au** from 12m[8] (power auger - stopped in gold mineralisation)
- 1.5km SE of NE Bankan – **28m @ 12.1g/t Au** from 22m[9] (AC)
- SE Saman – **2m @ 31.8 g/t Au** from 12m (power auger)[10]
- Argo permit (AG3) – 1km long zone of consistently gold-bearing quartz-tourmaline rock samples with **values ranging up to 14.1g/t Au[11]**.

The ongoing exploration has already demonstrated that gold mineralisation is widespread across the Bankan Project area, suggestive of focused gold-bearing fluid flow at the time of mineralisation via deep structures into multiple, structurally complex geological positions.

The presence of two strong gold mineralised systems at NE Bankan and Bankan Creek, just 3km apart, provides further confirmation of the strength of gold mineralised systems in this area. The potential to find more significant gold deposits beyond the two known deposits is very substantial and is driving the Company to explore aggressively for more gold mineralisation with a view to identifying more resources throughout the project area.

[7]ASX Announcement - Bankan aeromagnetics identifies numerous drill targets along 35km-long structural corridor (28 April 2021)
[8]ASX Announcement - Widespread and high-grade gold from regional auger drilling at Bankan (13 May 2021)
[9]ASX Announcement - 28m @ 12.1 g/t gold 1.5 km from NE Bankan (23 September 2021)
[10]ASX Announcement - NE Bankan now 1.6km long with possible parallel gold zone (3 September 2020)
[11]ASX Announcement - Bonanza gold grades as high-grade zone revealed at Bankan (19 July 2021)

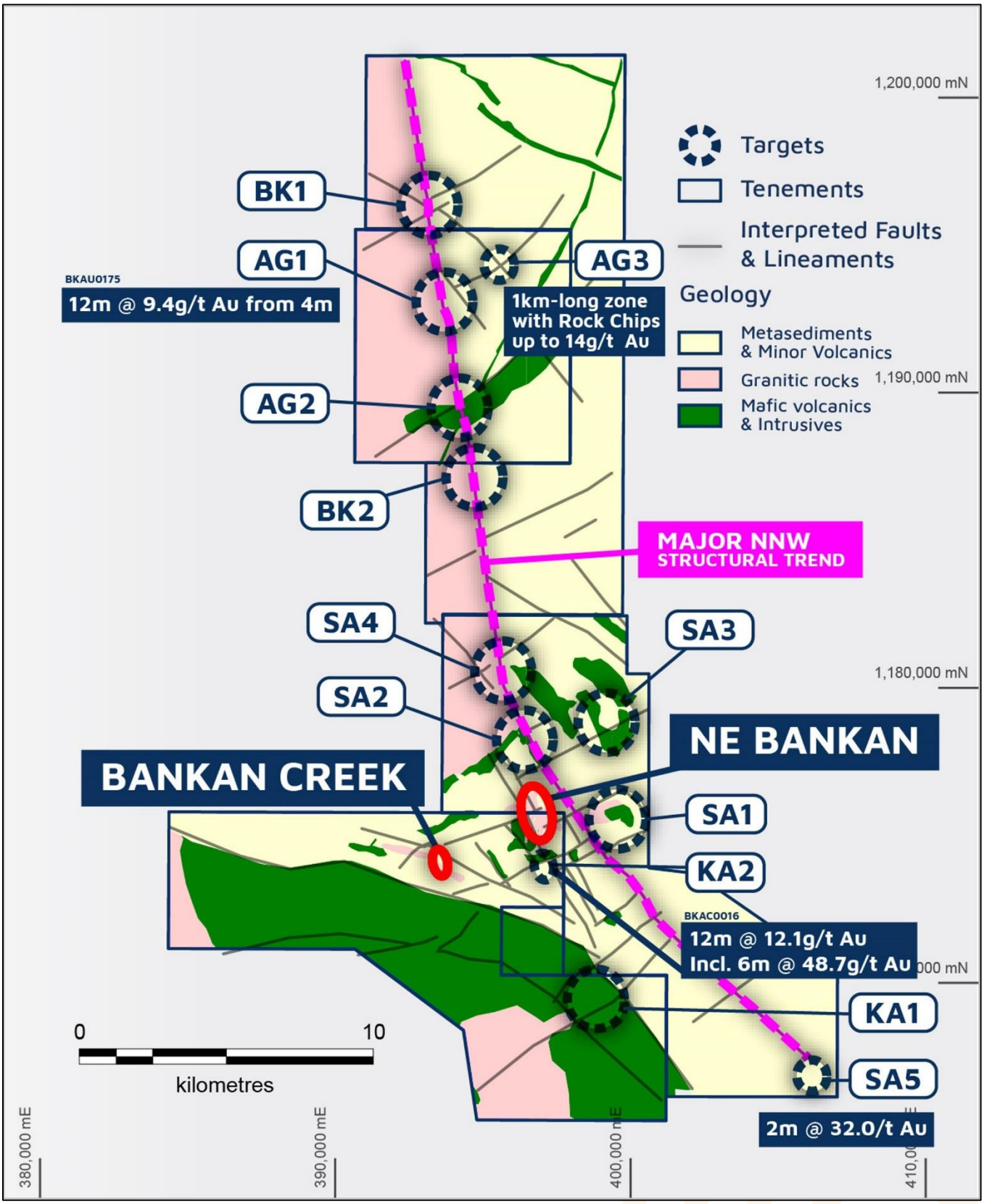

Figure 9 - Bankan Project regional target location map.

- END -

Predictive advises that it is not aware of any new information or data that materially affects the exploration results and Mineral Resource 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:

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COMPETENT PERSONS STATEMENT

The Mineral Resource estimates reported herein are based on information compiled by Mr Phil Jankowski, who is a member of The Australasian Institute of Mining and Metallurgy. Mr Jankowski is a full-time employee of CSA Global Pty Ltd 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 Jankowski consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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.

JORC TABLE 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. 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.*	Samples were acquired by a mixture of aircore, reverse circulation and diamond drilling. The majority of samples are 1m downhole, with diamond core sampling intervals breaking at lithological contacts where appropriate.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Not applicable.
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information	Mineralisation has been determined by standard assaying techniques of core and percussion chip samples.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	All data available at 11th September 2021 was used to estimate the resource for NE Bankan and Bankan Creek; this comprises 147 reverse circulation drillholes for 14,973m, 28 diamond drillholes for 6,005m, 32 RC/DDH drillholes for 9,486m and 47 aircore drillholes for 2,231m. Core is orientated by a downhole orientation tool. Core diameters used are mostly NQ with minor HQ and HQ triple tube; 140mmRC face sampling bits; and 90mm aircore.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Core recoveries were recorded by dividing the total length of core returned from each run by the length of the run. Overall core recoveries averaged 92%, with the poorest recoveries (averaging 82%) in the first 40m of the drillholes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	For aircore and RC, individual one metre samples were collected from the cyclone and weighed. Each sample was then riffle split producing a 1kg split sample.
	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.	No relationship between sample recovery and grade has been analysed.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	Holes have been logged for lithology, weathering, alteration, mineralization, and geological structures. Photographs have been taken of each core tray.

Criteria	JORC Code explanation	Commentary
	estimation, mining studies and metallurgical studies.	The Competent Person considers that the level of detail is sufficient for the reporting of Mineral Resources.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	The Competent Person considers that the availability of qualitative and quantitative logging has appropriately informed the geological modelling, including weathering and oxidation, water table level and rock type.
	The total length and percentage of the relevant intersections logged.	All drillhole intervals have been logged. The total meterage is 32,695m.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Core was cut with a diamond saw. Routine samples were half-core, with predetermined diamond core duplicates being quarter-core.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Reverse circulation and aircore drillholes were split using a riffle splitter . The majority of chip samples are dry or only slightly damp.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The Competent Person considers these methods appropriate for this style of mineralisation.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	For reverse circulation and aircore samples, sample weights are recorded as are the wights of the rejects.
	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.	Field duplicate results for RC and diamond core demonstrated no bias in the sample results. There is a moderate scatter in the RC duplicate pairs and considerable scatter in the DDH duplicate pairs suggesting that the mineralisation is likely to be highly variable at a short scale, and this variability needs to be taken into account when planning future sampling programs.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate to the grain size of the material being sampled.
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.*	Samples were assayed using industry standard fire assaying with a 50g charge; this method is a total methods that should recover all gold in a sample. Several commercial laboratories have been used, including SGS in Bamako, SGS in Ouagadougou, MSA in Yamoussoukro and BVI in Conakry. All use slightly different procedures, but typically the sample is dried, crushed to -2mm, split to 200g and pulverised to -75 microns, before a 50 g aliquot is taken for assay.
	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.	Not applicable
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	PDI insert routine blanks, certified reference materials and field duplicates into the sample stream submitted to the laboratories. The field duplicates are either second splits of chips (RC and aircore) or quarter core duplicates. The laboratories also insert their own CRMs and perform duplicate assays.

Criteria	JORC Code explanation	Commentary
		Analysis of this QAQC data demonstrated that the data is of acceptable quality to be used for resource estimation.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No independent verifications have been completed
	The use of twinned holes.	No twinned holes have been completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary geological and sample data is physically captured on standard logging templates in the field. This data is then digitally captured in standard company Excel templates with data validation applied. All data is reviewed and validated by Senior geological staff before being uploaded into a DataShed relational database.
	Discuss any adjustment to assay data.	No adjustments or calibrations have been made to any assay data.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Surveying is by contracted surveyors using DGPS enabled survey devices. Centimetric accuracy is achieved in the 3D positioning of drill collars and topographic features.
	Specification of the grid system used.	All surveying is done on the WGS84 grid
	Quality and adequacy of topographic control.	The Competent Person considers that the surface is suitable for this MRE.
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.	The Competent Person believes the mineralised zones have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	Whether sample compositing has been applied.	Drillholes were composited to 3m downhole for saprolite and fresh mineralisation at NE Bankan, and 1m downhole for Bankan Creek and the Laterite domain at NE Bankan.
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.*	Most of the drilling at NE Bankan is orientated at a high angle to the dip and strike of the mineralisation.
	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.	At NE Bankan, early drilling programs were oriented to the west; when it was recognised that the mineraliation dips west, the drilling was switched to east drilling and most areas were re-drilled. An analysis of the data from east and west dipping holes showed: • The mean and median of the west dipping holes are higher than east dipping in the saprolite • In the saprolite, the composites in the west dipping holes are more variable

Criteria	JORC Code explanation	Commentary
		• The west dipping holes in the saprolite have a larger population > 2g/t • The mean and median of the west dipping holes are lower than east dipping in the fresh • In the saprolite, the composites in the west dipping holes are less variable The west dipping data was filtered from the composite dataset before further processing, except for the Laterite domain.
Sample security	*The measures taken to ensure sample security.*	Samples are stored onsite with a 24 hour security presence. Samples are bagged in polyweave sacks, sealed and then driven directly to the assay laboratory.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No external audit of sampling techniques and data has been undertaken.

Section 2: Reporting of Exploration Results

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>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.</td><td>The Bankan Property consists of four Permis de Recherche Industrielle (Or).
<table>
<tr><th>Tenement Name</th><th>Area (km²)</th><th>Holder</th><th>Grant Date</th><th>Expiry Date</th></tr>
<tr><td>Kaninko</td><td>98.2158</td><td>Mamou</td><td>3.10.19</td><td>2.10.22</td></tr>
<tr><td>Saman</td><td>99.74845</td><td>Mamou</td><td>11.6. 20</td><td>10.6.23</td></tr>
<tr><td>Bokoro</td><td>99.9785</td><td>Kindia</td><td>9.11.20</td><td>8.11.23</td></tr>
<tr><td>Argo</td><td>57.5422</td><td>Argo</td><td>24.10.18</td><td>23.10.21</td></tr>
</table>
The tenements are located between 9 51’00”W and 10 03 24W; and between 10 32’26”N and 10’52”00N, to the northwest, west and southwest of the town of Kouroussa Centre in the prefecture of Kouroussa, Republic of Guinea. They are registered to:
• Mamou Resources SARLU, a company registered in Guinea on 22nd October 2018 (registration RCCM/GN.KAL.2018.B.087 473), and a 100% owned subsidiary of Predictive
• Kindia Resources SARLU, a company registered in Guinea on 24th October 2018 (registration RCCM/GN.KAL.2018.B.087 510), and a 100% owned subsidiary of Predictive; or
• Argo Mining SARLU a company registered in Guinea on 6th June 2018 (registration RCCM/GN.KAL.2018.B.085 214).
Predictive entered into a JV agreement with Argo in September 2021. Under the terms of the agreement, Predictive is entitled to acquire 100% of the permit in stages under the following terms:
• Ownership of the permit transferred to an Australian subsidiary of Argo owner
• Predictive to manage all exploration activities
• Payment of USD100,000 by Predictive for 90% ownership of the subsidiary
• At decision to mine on the property, Predictive will acquire the remaining 10% equity in exchange for a 2% net smelter royalty on production.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• Predictive may withdraw from the Agreement at the end of Year 1 after completion of geological, geochemical and geophysical (ground magnetics) surveys and payment of USD33,500.
	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.	No impediments are currently known.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	No previous modern exploration has been performed in the project area. Artisanal miners have extracted an unknown quantity of gold from shallow hand dug pits and shafts, with panning and loaming used to identify mineralized areas.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Bankan deposits are hosted in Palaeoproterozoic rocks of the Birimian Supergroup in the Siguiri Basin, which is host to several significant large active gold mining operations. Mineralization consists of wide zones of structurally controlled chlorite, silica and sericite alteration with associated pyrite and quartz veining, emplaced during deformation of anastomosing north-south shears on the hanging wall of a tonalitic felsic intrusive, which has intruded a mafic and sedimentary greenstone sequence. Weathering has formed a deep saprolite profile, with a pisolitic and nodular lateritic cover which hosts remobilised gold, generally above the primary deposits or dispersed a few tens of metres laterally.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *Easting and northing of the drillhole collar* • *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *Dip and azimuth of the hole* • *Downhole length and interception depth* • *Hole length.*	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Exploration Results are not being reported.
	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	Exploration Results are not being reported.
	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	Exploration Results are not being reported.
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 drillhole collar locations and appropriate sectional views.*	Relevant maps and diagrams are included in the body of this announcement.
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.*	Exploration Results are not being 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.*	Not applicable.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Both NE Bankan and Bankan Creek are open at depth for the majority of their strike length. Further extension and infill drilling will be planned to improve the resource classification and add to the total resource.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Relevant maps and diagrams are included in the body of this report.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Data is manually entered onsite into Excel spreadsheet files, using a standardised format. The data is loaded into databases by a third-party consultant, who perform automatic validation checks before releasing data to end users.
	Data validation procedures used.	The Competent Person checked the drillhole files for errors prior to Mineral Resource estimation

Criteria	JORC Code explanation	Commentary
		The Competent Person found no material errors and deemed the database was fit for the purpose of Mineral Resource estimation.:
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person has not visited the site.
	If no site visits have been undertaken, indicate why this is the case.	The Competent Person has not visited the site due to current international travel restrictions relating to the COVID-19 pandemic. An independent consultant from SEMS Exploration of Accra, Ghana was contracted to perform a site inspection, observing drilling and sampling operations.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	All drillholes have been geologically logged for weathering and lithology. A standardisation and relogging program in April 2021 ensured consistency of logging and allowed lithologies to be simplified into a few main types.
	Nature of the data used and of any assumptions made.	No material assumptions have been made which affect the Mineral Resource reported herein.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The Competent Person is confident any alternative interpretations would result in globally immaterial differences in the MRE.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	The NE Bankan interpreted anastomosing shear system has been used as a primary control in the interpretation of the mineralised domains. The High Grade domain is located at and in the immediate footwall of the Main Shear. At Bankan Creek, the mineralisation is found in the upper part of the tonalite intrusion as well as a carapace of the country rocks.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The NE Bankan resource covers a strike length of approximately 1500m, and has been estimated to the 75mRL, approximately 380m below the natural surface. The plan width varies from 50m to more than 220m wide. The Laterite mineralisation is near the natural surface, with saprolite mineralisation directly below the base of the laterite. The Bankan Creek resource covers a strike length of approximately 400m, and has a vertical extent of 250m below the natural surface. The plan width varies from 50m to almost 100m.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used*	Gold grades have been estimated using Ordinary Kriging using Surpac software. For NE Bankan, three nested grade domains were defined in the saprolite and fresh mineralisation using Leapfrog software, at nominal 3g/t (High Grade), 0.5 g/t (Medium Grade)and 0.3g/t (Low Grade) cutoffs from 3m downhole composites. For the laterite mineralisation, a 0.3g/t cutoff domain was defined from 1m downhole composites. These domains were used as hard boundaries. High Grade and Medium Grade composites were cut to 40 g/t, low Grade to 7g/t and Laterite to 15g/t. Search ellipses and maximum composites were chosen using a Kriging Neighbourhood Analysis.

Criteria	JORC Code explanation	Commentary
		For Bankan Creek, two nested grade domains were defined at 1.2g/t (High Grade) and 0.5g/t (Low Grade); in addition a Laterite domain was defined at 0.3g/t At NE Bankan, the base of the estimate was set at 75 mRL, which is approximately 40 m downdip from the deepest drillhole intersection.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	This is the maiden mineral resource estimate for both Bankan Northeast and Bankan Creek. Previous artisanal mining production is minor in scale and not formally recorded.
	The assumptions made regarding recovery of by-products.	No by-products have been modelled or are expected.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No elements other than gold have been estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The estimation block size is 20m Y by 10m X by 5m Z, approximately half the sample spacing in the best drilled parts of the deposits. The search ellipses range from 160 to 320m with a minimum of 8 and a maximum of 24 composites.
	Any assumptions behind modelling of selective mining units.	SMU units were not modelled.
	Any assumptions about correlation between variables	No assumptions have been made regarding the correlation of variables.
	Description of how the geological interpretation was used to control the resource estimates.	
	Discussion of basis for using or not using grade cutting or capping.	For the estimate of grades, high-grade cuts were applied to composites to reduce the influence of extreme outliers. These values, determined by statistical analysis including review of coefficient of variation values, histograms, log-probability plots, and mean-variance plots. The aim of choosing topcuts was to reduce the coefficient of variability without affecting the overall mean grade of the various mineralised domains.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Standard model validation was completed using numerical methods (histogram and swath plots) and validated visually in section and 3D against the input raw drillhole data, composites, and blocks.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages have been estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The resource is reported at a 0.5g/t cutoff. Preliminary open pit economic assessments have suggested that for a bulk mining option the economic cutoff is likely to be in the range of 0.4-0.5 g/t, depending on the Au price assumed.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual*	Open pit mining is considered as the appropriate method for future studies, and the Competent Person believes that there are reasonable prospects for eventual economic extraction based on the outputs of the Whittle optimisations completed. The key assumptions of the optimisations were:

Criteria	JORC Code explanation	Commentary
	economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Mill throughput of 4Mtpa • Metallurgical recovery of 94% • Ore loss of 4% and dilution of 5% • Base mining cost of $1.92/t, incremented with depth • Processing costs of $19.90-$24.73/t, depending on material type • Gold price of US$1800/oz • Discount rate of 5% The optimisations captured a large proportion of the mineralisation at both NE Bankan and Bankan Creek; at NE Bankan the optimisation was largely driven by the extent of the modelled High Grade domain.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	A scoping level metallurgical testwork program was carried out on eleven samples with a total weight of 305kg from both NE Bankan and Bankan Creek, representing softer saprolite and fresh rock mineralisation. All samples were quarter NQ diamond drill core apart from one saprolite sample of reverse circulation chips. The scope of the test work program included: comminution testwork, optimisation of grind size and leaching characteristics, gravity concentration, and cyanide leaching tests. The testwork program was completed by Metallurgy Pty Ltd in Perth, Western Australia. The main results were: • The fresh ore is relatively hard, with a Bond Ball Mill Index of 18 to 25 kWh/t • Optimum grind size is approximately 75 microns. • The ore has a moderate proportion of gravity-recoverable gold, ranging from 13% to 37% for the samples. • Using optimum leaching conditions, over 94% of the leach feed gold could be recovered in 24 hours, with a cyanide consumption of 0.7 - 0.9 kg/t and lime consumption of around 0.1 kg/t These results suggest that relatively high recoveries may be achievable using standard CIL technology.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered, this should be reported with an*	No assumptions regarding possible waste and process residue disposal options have been made.

Criteria	JORC Code explanation	Commentary
	explanation of the environmental assumptions made.	
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been assumed; limited density testwork to data has provided inconsistent results and is being reviewed. The densities applied are fresh Tonalite: 2.6; fresh mafic: 2.8; fresh metasediment:2.6; saprolite:2.2; Laterite:1.8. These are typical values for the logged rock types.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	Not applicable.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Not applicable.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource was classified as Inferred based on the level of geological understanding of the mineralisation, quality of samples, lack of directly measured density data, and wide drillhole spacing.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification reflects the overall level of confidence in mineralised domain continuity based the mineralisation drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithotypes over numerous drill sections.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource classifications applied appropriately reflect the view of the Competent Person.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	*Where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The accuracy of the Mineral Resource is communicated through the classification assigned. The Mineral Resource been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The accuracy of the Mineral Resource is communicated through the Inferred classification assigned to the deposit. The Mineral Resource has been classified in accordance with the JORC Code. All factors that have been considered have been adequately communicated in Section 1, Section 2 and Section 3 of this table. The Mineral Resource Statement relates to a global estimate of in-situ tonnes and grade. It is suitable for reporting as a

Criteria	JORC Code explanation	Commentary
		resource, however the relatively wide sampling grid has produced a model with only moderately well estimated individual blocks. No reliance should be placed on individual block grade estimates.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	There has been no previous commercial production from the property. Previous artisanal mining production is minor in scale and not formally recorded.