

# **BANKAN MINERAL RESOURCE INCREASES TO 5.38MOZ**

**Indicated Mineral Resource now 4.14Moz (77% of the total)**

**Predictive Discovery Limited (ASX:PDI) ("PDI" or the "Company")** is pleased to announce an updated Mineral Resource estimate for the Company's flagship Bankan Gold Project in Guinea, West Africa.

## **HIGHLIGHTS**

- Total Mineral Resource for the Bankan Project increases to 100.5Mt @ 1.66g/t for 5.38Moz, representing a 29% increase in contained gold compared to the previous 4.18Moz Mineral Resource.
- 4.14Moz representing 77% of the total Mineral Resource is now classified as Indicated, providing a strong platform for the Scoping Study.

*Table 1: Bankan Project updated Mineral Resource estimate*

Deposit	Classification	Cut-off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
NEB Open Pit	Indicated	0.5	78.4	1.55	3,900
	Inferred	0.5	3.1	0.91	92
	<b>Total</b>		<b>81.4</b>	<b>1.53</b>	<b>3,993</b>
NEB Underground	Inferred	2.0	6.8	4.07	896
<b>NEB Total</b>			<b>88.3</b>	<b>1.72</b>	<b>4,888</b>
BC Open Pit	Indicated	0.4	5.3	1.42	244
	Inferred	0.4	6.9	1.09	243
<b>BC Total</b>			<b>12.2</b>	<b>1.24</b>	<b>487</b>
<b>Total Bankan Project</b>			<b>100.5</b>	<b>1.66</b>	<b>5,376</b>

*Refer to notes to Table 2. Pit optimisations remain based on a US\$1,800/oz gold price.*

- The updated Mineral Resource comprises the NEB (including Gbenbeden) and BC deposits only, and there is significant future upside across the Bankan permits both near-resource and regionally.
- NEB Mineral Resource increased to 88.3Mt @ 1.72g/t for 4.89Moz of gold, with substantial increases in both the Open Pit Mineral Resource and the Underground Mineral Resource.
- Increase in the NEB Open Pit Mineral Resource from 3.52Moz to 3.99Moz, primarily due to additional data at depth and in the Gbenbeden area, an updated mineralisation interpretation and the updated optimisation capturing additional Inferred mineralisation in the footwall.
- Extensive infill drilling completed in the last six months has resulted in a significant further upgrade of the NEB Open Pit Mineral Resource, with 3.90Moz or nearly 98% now classified as Indicated.
- NEB Underground Mineral Resource increased by approximately 170% or 560Koz to 896Koz (Inferred). Deeper drilling was successful in expanding the main underground mineralisation and defining two additional mineralised zones immediately below the pit shell and in the footwall.

- BC Mineral Resource increased by 47% to 487Koz, including 50% in the Indicated category, following a successful infill and extension drilling campaign based on the re-interpreted mineralisation model.
- Upside exists in a number of areas, where there is potential to grow the Mineral Resource over time:
  - Recent drilling identified additional high-grade mineralisation in the NEB resource pit shell to the south of the main high-grade shoot, where targeted drilling has the potential to add ounces.
  - The NEB Underground Mineral Resource is open down plunge to the south-west of the deepest hole, BNEDD0113, which recorded 24m @ 5.50g/t from 850m.<sup>1</sup> Also potential to incrementally expand the current underground resource along strike to the south, and for additional underground mineralisation in footwall structures.
  - Gbenbeden (small pit shell immediately north of NEB) is open at depth and to the north.
  - BC is open down plunge to the south-west, and along strike to the south.
  - Numerous near-resource targets at NEB have potential to contribute to the Mineral Resource. RC drilling programs are underway at 800W and NEB North.
- Next steps:
  - This updated Bankan Mineral Resource estimate provides a basis for the Scoping Study. Work on the Scoping Study is now ramping up for its completion in late 2023.
  - Selective resource definition drilling at NEB and BC will continue, with an increasing focus on drilling the numerous near-resource targets.
  - Extensive RC drilling at Argo and ongoing identification of additional regional drill targets.
- PDI is well funded to continue to grow and advance the Tier-1 Bankan Gold Project, with \$44.9m in cash as at 30 June 2023.

Commenting on the updated Mineral Resource estimate, Managing Director Andrew Pardey, said:

*"The increase in Bankan's Mineral Resource by 1.2Moz to 5.38Moz is an outstanding result and confirms its status as a Tier-1 gold project. It is pleasing to see increases across the NEB open pit and underground resources, as well as the BC deposit, and excellent potential remains to further grow this resource base over time."*

*"Importantly, we have continued to upgrade the Mineral Resource, with a total of 4.14Moz now classified as Indicated. This is crucial to delivering a robust Scoping Study, which we aim to complete in late 2023 as a key step in the process to secure a mining permit for the Project in H1 2024."*

*"On the exploration front, our focus is shifting further towards our ongoing RC drilling campaigns which are testing multiple near-resource targets as well as 11 drill targets at the highly prospective Argo area to the north. Any new discoveries will provide additional catalysts to PDI's exciting growth trajectory in what remains a highly prolific and underexplored gold district in West Africa."*

<sup>1</sup> ASX Announcement – Deepest Hole to Date Intercepts Gold 630m Down Dip (15 June 2022).

## BANKAN GOLD PROJECT

Bankan is a Tier-1 gold project comprising of 356km<sup>2</sup> of highly prospective exploration permits in the Siguiri Basin in Guinea, West Africa.

A Mineral Resource of 5.38Moz has been defined to date at the NEB (4.89Moz) and BC (487Koz) deposits, with a total of 4.14Moz in the Indicated category. PDI is focused on sustainably developing Bankan into a Tier-1 gold mine. The Company is aiming to complete a Scoping Study and ESG workstreams by late 2023 as crucial steps towards securing a mining permit for the Project in H1 2024.

The Bankan Project is highly prospective for additional discoveries. PDI is exploring a number of targets near the existing deposits and regionally to the north along the 35km gold-rich super structure which runs through the Bankan permits, with a current focus on the Argo area.

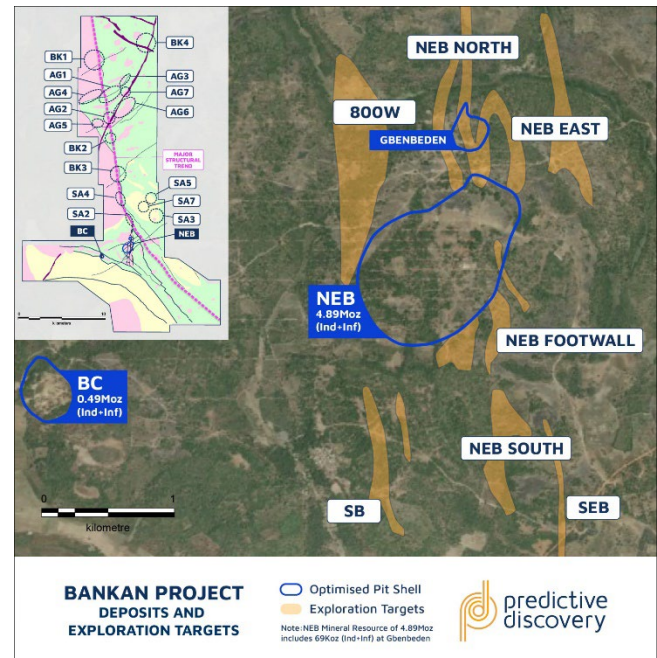


Figure 1: Bankan Project deposits and exploration targets

## UPDATED MINERAL RESOURCE ESTIMATE

### Summary

The updated Mineral Resource estimate for the Bankan Gold Project has been prepared by PDI's independent resource modelling consultant, CSA Global Mining Industry Consultants ("CSA Global"), an ERM Group company. The estimate includes assay results received up to 29 July 2023 and is based on 205 Diamond Drill ("DD"), 62 Reverse Circulation/Diamond Drill ("RC/DD") and 162 Reverse Circulation ("RC") holes for a total of 148,275m of drilling, including the results of the close-spaced grade control RC drilling completed in early 2022.

The Mineral Resource for the Bankan Project has increased to 100.5Mt @ 1.66g/t for 5.38Moz as shown in Table 2, which includes 4.89Moz at NEB and 487Koz at BC. Compared to the February 2023 estimate of 4.18Moz, this represents a 1.20Moz or 29% increase in contained gold. Increases have been achieved across all of the NEB Open Pit, NEB Underground and BC Mineral Resource estimates as shown in Figure 2.

4.14Moz representing 77% of the total Mineral Resource is now classified as Indicated, which is a significant upgrade compared to the February 2023 estimate which included 1.75Moz in the Indicated category representing 42% of the total.

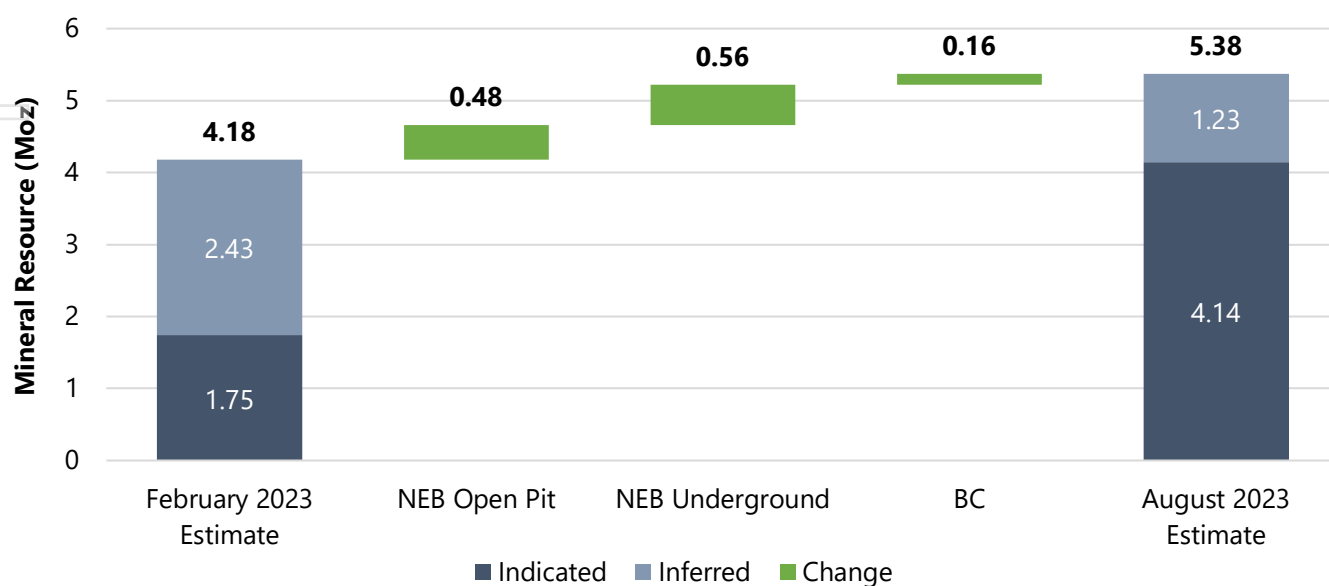
Table 2: Bankan Project updated Mineral Resource estimate

Deposit	Classification	Cut-off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
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<b>Total Bankan Project</b>			<b>100.5</b>	<b>1.66</b>	<b>5,376</b>

Notes to Resource Table:

1. The Mineral Resource is estimated with all drilling data available as at 29 July 2023.
2. The Mineral Resource is reported in accordance with the JORC Code 2012 Edition. The NEB Open Pit Resource is reported at a 0.5g/t Au cut-off and the NEB Underground Mineral Resource is reported at a 2.0g/t cut-off. The BC Open Pit Resource is reported at a 0.4g/t Au cut-off.
3. The Competent Person is Phil Jankowski FAusIMM of CSA Global.
4. The Open Pit Mineral Resource is constrained by optimised pit shells using a metal price of USD1,800/oz Au and process recovery of 94%.
5. Rounding may lead to minor apparent discrepancies.

Figure 2: Change in Bankan Project Mineral Resource estimate from February 2023 to August 2023



## NEB Mineral Resource Update

The NEB Mineral Resource estimate has increased to 88.3Mt @ 1.72g/t for 4.89Moz of gold, comprising of 81.4Mt @ 1.53g/t for 3.99Moz in the Open Pit Mineral Resource and 6.8Mt @ 4.07g/t for 896Koz in the Underground Mineral Resource (refer to Figure 3).

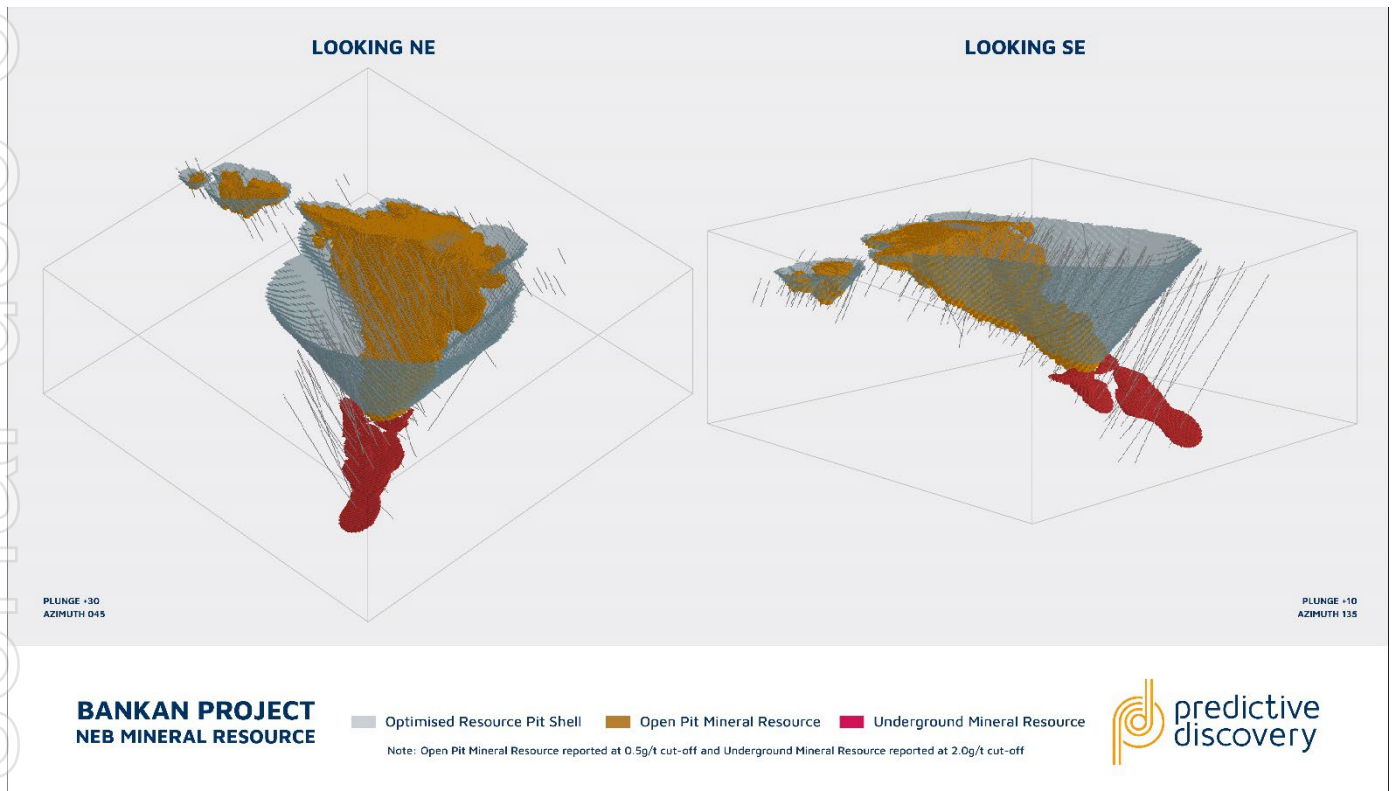


Figure 3: NEB block model showing the Open Pit Mineral Resource within the NEB and Gbenbeden resource pit shells and the Underground Mineral Resource below the NEB pit shell

The Open Pit Mineral Resource is reported at a 0.5g/t cut-off grade within a resource pit shell, which has been re-optimised based on latest drilling data. Overall, the changes to the pit shell are largely on the footwall, and the maximum depth and surface footprint are very similar to the previously reported pit shell.

The updated resource pit shell captures additional mineralisation situated in the footwall of the main shear zone ("STMZ"), which partially accounts for the increase in ounces and also the reduction in grade from 1.62g/t in the February 2023 estimate to 1.53g/t currently.

The NEB Open Pit Mineral Resource includes 2.4Mt @ 0.87g/t for 69Koz in the Gbenbeden resource pit shell located just north of the main NEB pit shell, which has increased from 54Koz @ 0.70g/t in the February 2023 estimate (refer to the NEB Mineral Resource estimate by domain in Table 3).



Extensive infill drilling has been completed at NEB in the last six months, targeting the middle and lower parts of the resource pit shell where the Mineral Resource was previously classified as Inferred. The drill spacing across the majority of resource pit shell has been closed to 80m by 40m, resulting in 3.90Moz or 98% of the Open Pit Mineral Resource now being classified as Indicated (refer to Figure 4). 92Koz remains classified as Inferred, mainly in Gbenbeden and in the footwall of the main NEB mineralisation.

Achieving this substantial upgrade of the Mineral Resource to Indicated is crucial to delivering a robust Scoping Study, which together with the Environmental & Social Impact Assessment ("ESIA") are the key documents that will support PDI's permitting discussions with the Government of Guinea. The Scoping Study and ESIA are scheduled to be complete in late 2023 and PDI is aiming to secure a mining permit for the Project in H1 2024.

Resource modelling work identified the potential for additional high-grade shoots within the main optimised pit shell to the south of the main high-grade shoot. A recent drillhole (BNEDD0226) has confirmed the presence of a small high-grade structure that has not been comprehensively tested by resource drilling and therefore presents upside potential. Gbenbeden is also open at depth and to the north.

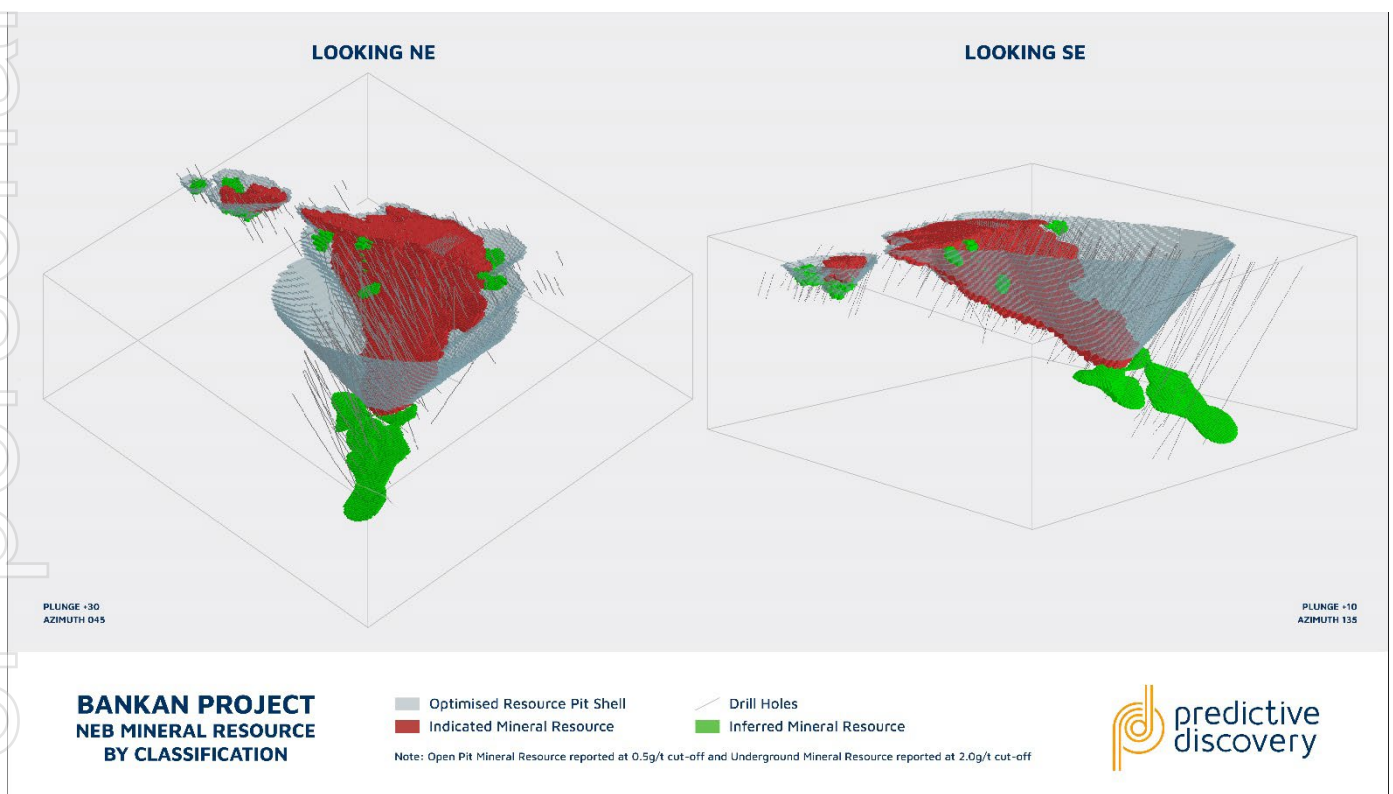


Figure 4: NEB block model by Mineral Resource classification

The high-grade NEB Underground Mineral Resource is reported at a 2.0g/t cut-off grade, and totals 6.8Mt @ 4.07g/t for 896Koz of gold. It remains classified as Inferred. PDI has actively targeted extensions to the underground mineralisation over the last six months and the updated estimate represents approximately a 170% or 560Koz increase compared to the February 2023 estimate of 335Koz @ 4.75g/t.

Mineralisation in the Main underground zone is interpreted as a down-dip repetition of the high-grade shoot from within the pit shell. The Mineral Resource within the Main zone has increased to 662Koz @ 4.60g/t based on additional drilling completed.

The additional resource drilling, in conjunction with revision of the geological and structural model, has also defined two new high-grade underground areas (named the Intersection and Footwall zones). Intersection is located immediately beneath the resource pit shell at the intersection of a footwall shear and the STMZ. The Footwall zone is located along a separate, deeper footwall shear. These zones contribute an additional 234Koz @ 3.07g/t to the Underground Mineral Resource.

There is potential for targeted drilling to expand the Main zone to the south to align with the strike length of the main high-grade shoot within the resource pit shell and define additional mineralisation in footwall structures. The Underground Mineral Resource also remains open at depth beneath the deepest hole, BNEDD0113, which recorded 24m @ 5.50g/t from 850m including 11m @ 10.30g/t from 852m.<sup>2</sup>

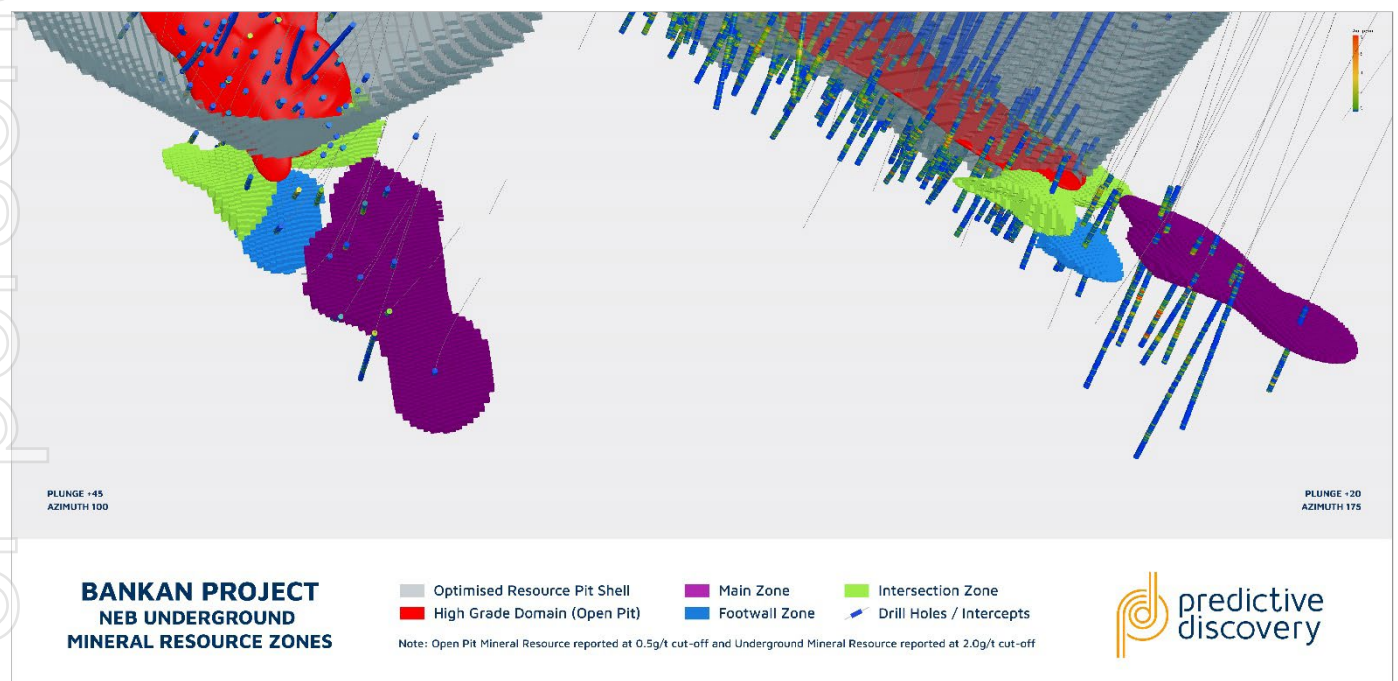


Figure 5: NEB Underground Mineral Resource zones (left image looking east and right image looking south)

<sup>2</sup> ASX Announcement – Deepest Hole to Date Intercepts Gold 630m Down Dip (15 June 2022).

## BC Mineral Resource Update

PDI has completed substantial additional work at BC during 2023, including re-logging all historical drill core, updating the geological interpretation and completing additional drilling to target infill and extension of the known mineralisation.

The BC Mineral Resource has been updated to 12.2Mt @ 1.24g/t for 487Koz of gold, an increase of 156Koz or 47% compared to the maiden Mineral Resource estimate of 331Koz @ 1.42g/t completed in September 2021.

The BC Mineral Resource is reported at a 0.4g/t cut-off (compared to 0.5g/t previously) within a resource pit shell that has been re-optimised based on latest drilling data. The 0.4g/t cut-off was chosen after a remodelling of the geology to better represent the continuity of the mineralisation.

The drill spacing varies from 40m by 40m to wider than 80m at the bottom of the model. The core area has been classified Indicated in the upper 70m of the deposit (above 300mRL) where the results and interpretation are consistent from hole to hole. At deeper levels, additional drilling is required to confirm the continuity of the several lodes and the Mineral Resource is classified Inferred.

The BC deposit remains open down plunge to the south-west, and along strike to the south.

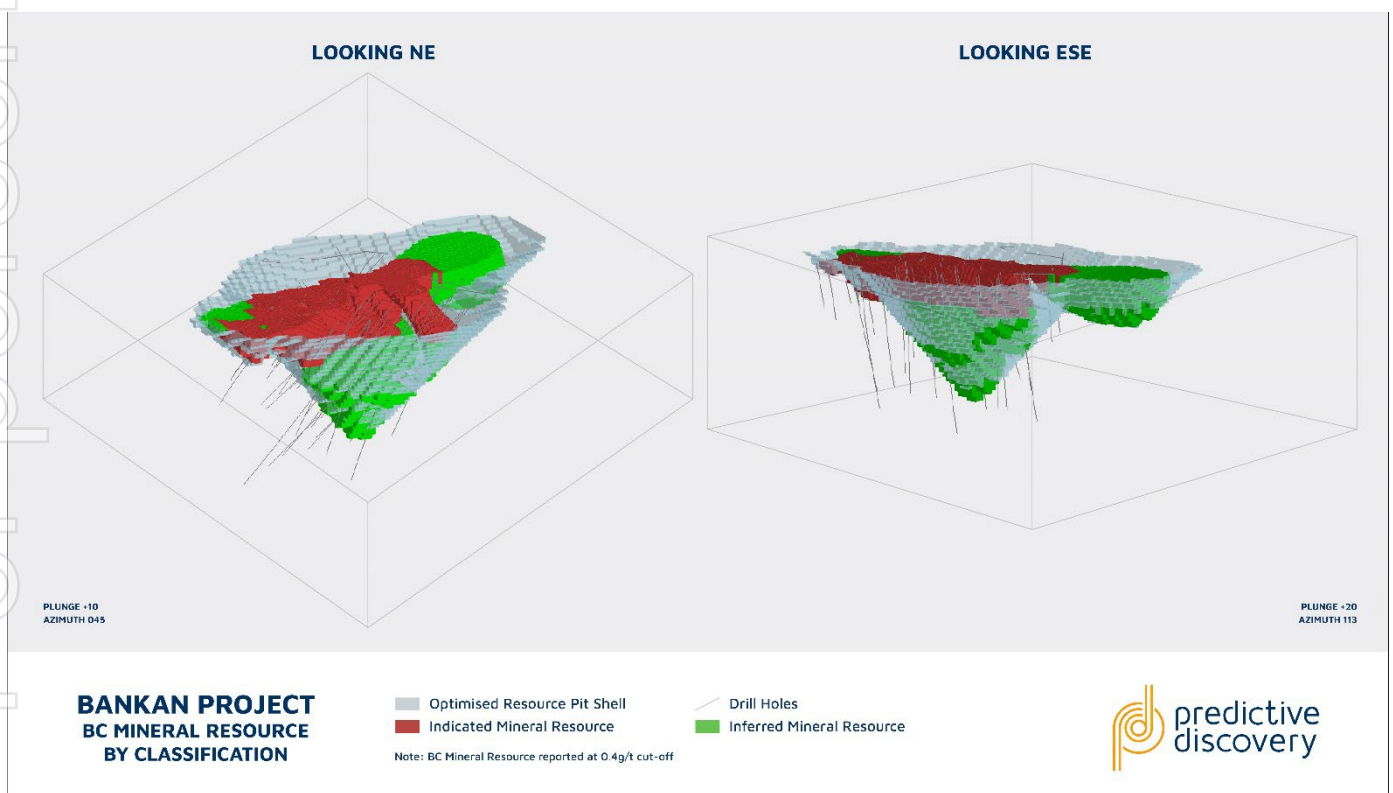


Figure 6: BC block model by Mineral Resource classification



## Mineral Resource Domains

Domining of the NEB Mineral Resource estimate is shown in Table 3 below and is illustrated in Figure 7. The majority of the Open Pit Mineral Resource is within the Medium Grade (1,959Koz) and High Grade (1,904Koz) domains, with the high-grade mineralisation driving the pit optimisations.

Table 3: NEB Mineral Resource estimate by domain

Domain	Cut-off (g/t Au)	Indicated			Inferred		
		Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
Open Pit							
Laterite	0.5	1.7	1.00	57	-	-	-
Low Grade	0.5	-	-	-	0.1	0.58	5
Medium Grade	0.5	63.9	0.93	1,902	1.9	0.93	57
High Grade	0.5	11.4	5.21	1,904	-	-	-
Gbenbeden	0.5	1.4	0.84	38	1.0	0.92	31
Underground							
Main	2.0				4.5	4.60	662
Intersection	2.0	-	-		1.4	3.12	144
Footwall	2.0				0.9	3.00	90

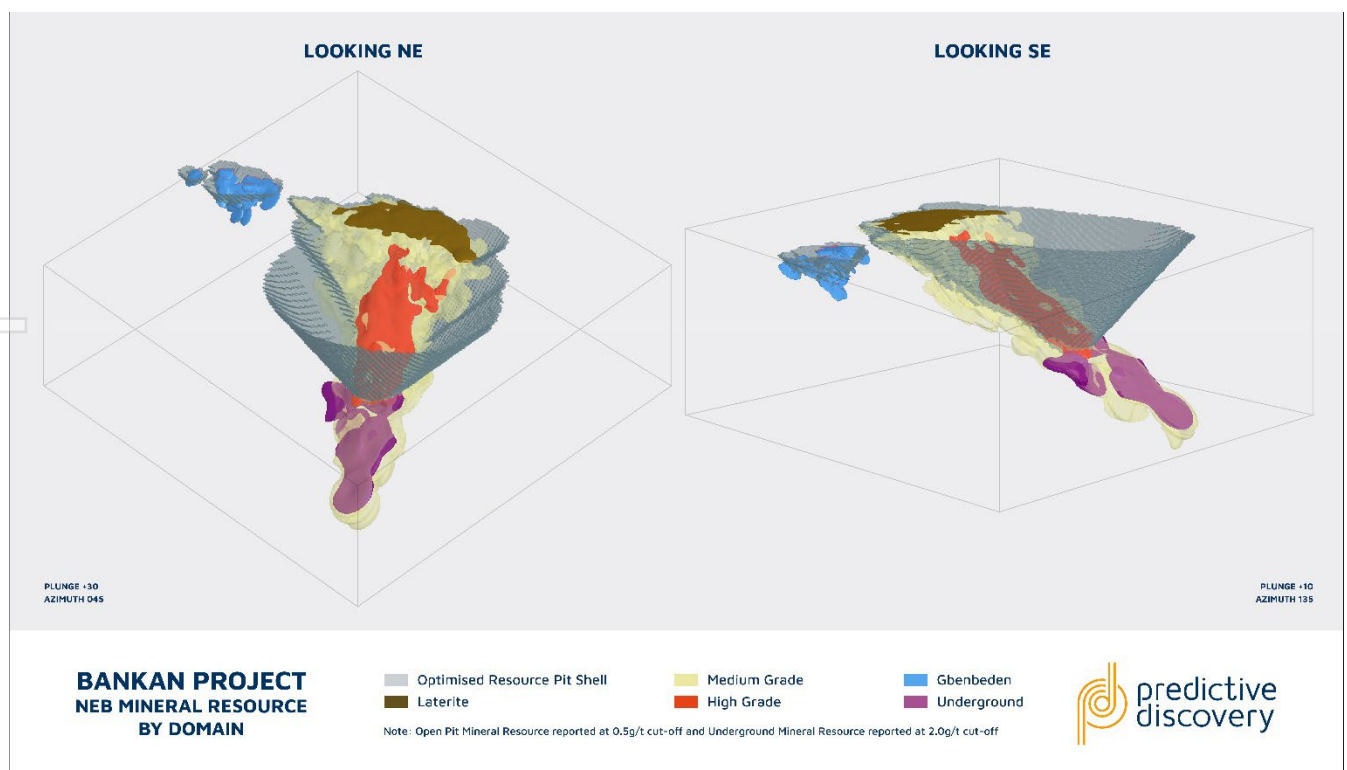


Figure 7: NEB Mineral Resource domain wireframes  
(note: Mineral Resources reported within the open pit domains are constrained by the resource pit shell)

For BC, nested High Grade, Medium Grade and Low Grade domains were used. The majority of the contained gold is in the High Grade domain, which is the key control on the pit optimisation, and is open down plunge to the south-west.

Table 4: BC Mineral Resource estimate by domain

Domain	Cut-off (g/t Au)	Indicated			Inferred		
		Tonnes (kt)	Grade (g/t Au)	Contained (Koz Au)	Tonnes (kt)	Grade (g/t Au)	Contained (Koz Au)
Laterite	0.4	0.2	0.95	0	-	-	-
Low Grade	0.4	1,180	0.58	22	2,875	0.65	60
Medium Grade	0.4	1,709	0.69	38	1,880	0.63	38
High Grade	0.4	2,434	2.35	184	2,161	2.09	145

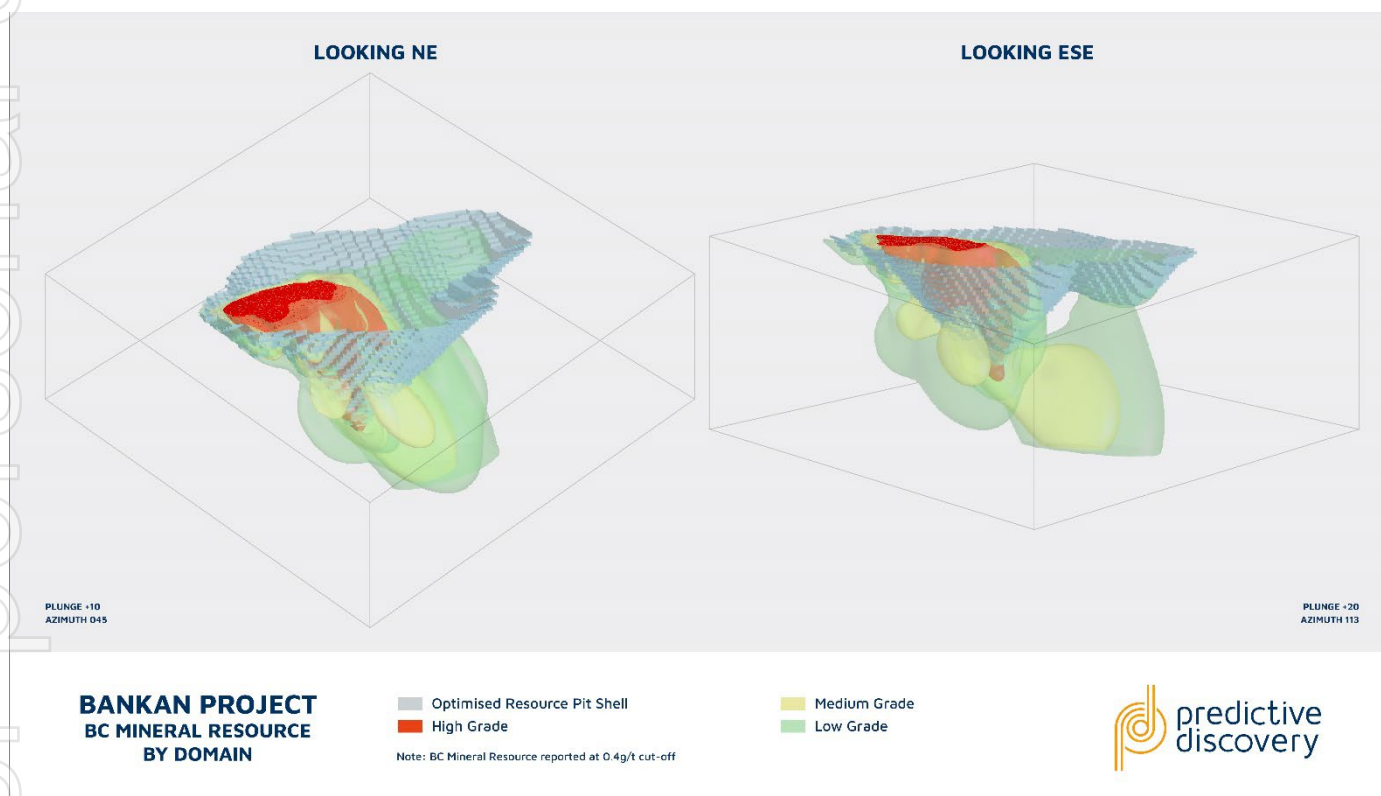


Figure 8: BC Mineral Resource domain wireframes  
(note: Mineral Resources reported within the domains are constrained by the resource pit shell)

## Mineral Resource Grade-Tonnage Tables

The grade-tonnage relationship for the NEB Open Pit Mineral Resource is shown in Table 5 at varying cut-off grades. Overall, the Mineral Resource is robust to changes in cut-off grade, with approximately 2.77Moz at a 1.0g/t cut-off (compared to 3.99Moz at a 0.5g/t cut-off). For BC, there is a similar robust relationship between the reported Mineral Resource and the grade-tonnage relationship of the estimation model as shown in Table 6.

Table 5: NEB open pit grade-tonnage table

Cut-off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
0	110.5	1.17	4,163
0.1	106.4	1.21	4,155
0.2	94.0	1.35	4,095
0.3	83.6	1.50	4,018
0.4	81.4	1.52	4,002
<b>0.5</b>	<b>81.4</b>	<b>1.53</b>	<b>3,993</b>
0.6	77.7	1.57	3,926
0.7	67.4	1.71	3,712
0.8	55.4	1.92	3,420
0.9	43.5	2.22	3,099
1.0	30.2	2.64	2,772

Table 6: BC open pit grade-tonnage table

Cut-off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
0	16.0	1.01	520
0.1	16.0	1.01	520
0.2	15.6	1.04	517
0.3	13.9	1.13	503
<b>0.4</b>	<b>12.2</b>	<b>1.24</b>	<b>487</b>
0.5	10.8	1.34	464
0.6	9.5	1.45	442
0.7	7.3	1.69	397
0.8	5.3	2.06	350
0.9	4.8	2.20	336
1.0	4.5	2.27	328

## NEXT STEPS

The updated Bankan Project Mineral Resource estimate will form the basis of the Scoping Study, which is ongoing and scheduled to be completed in late 2023. The Scoping Study and ESIA are the key documents that will support PDI's permitting discussions with the Government of Guinea and PDI is aiming to secure a mining permit for the Project in H1 2024.

Resource definition drilling at NEB and BC will continue to selectively target areas which present upside potential. PDI is increasing focus on drilling the numerous high-quality targets located close to NEB and BC. An initial RC drilling campaign is ongoing at 800W and NEB North, with encouraging initial results reported at 800W.

The regional exploration team is continuing with the initial RC drilling campaign to test the 11 drill targets at Argo. This program is planned to comprise approximately 50 holes for 7,000m. PDI will continue early-stage exploration across the Project to identify and prioritise additional exploration targets, focusing on the 35km major gold structure that runs through the permits.

PDI is well funded to drive growth and advance Bankan, with \$44.9m in cash as at 30 June 2023.

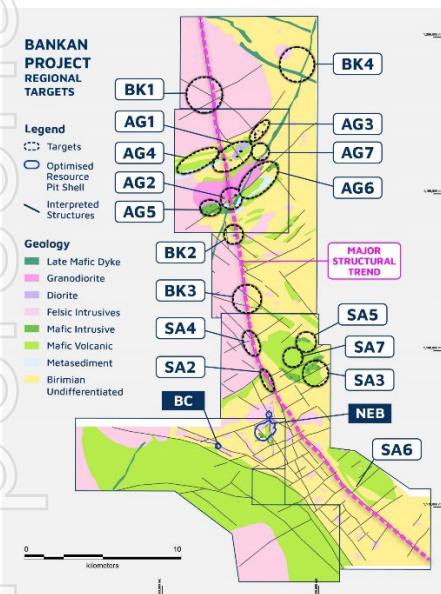


Figure 9: Bankan regional targets

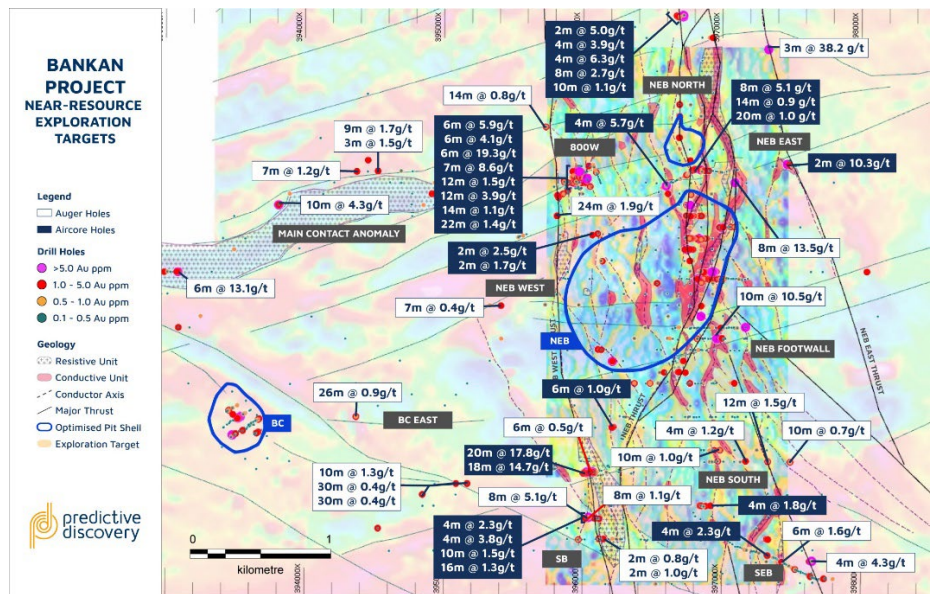


Figure 10: Bankan near-resource exploration targets and auger/aircore results

## SUMMARY OF MATERIAL INFORMATION

### Overview

An updated Mineral Resource estimate has been prepared for the NEB and BC deposits, incorporating additional resource definition drilling completed since the last Mineral Resource update in February 2023. The estimate has been prepared by CSA Global and classified according to the JORC 2012 Code.

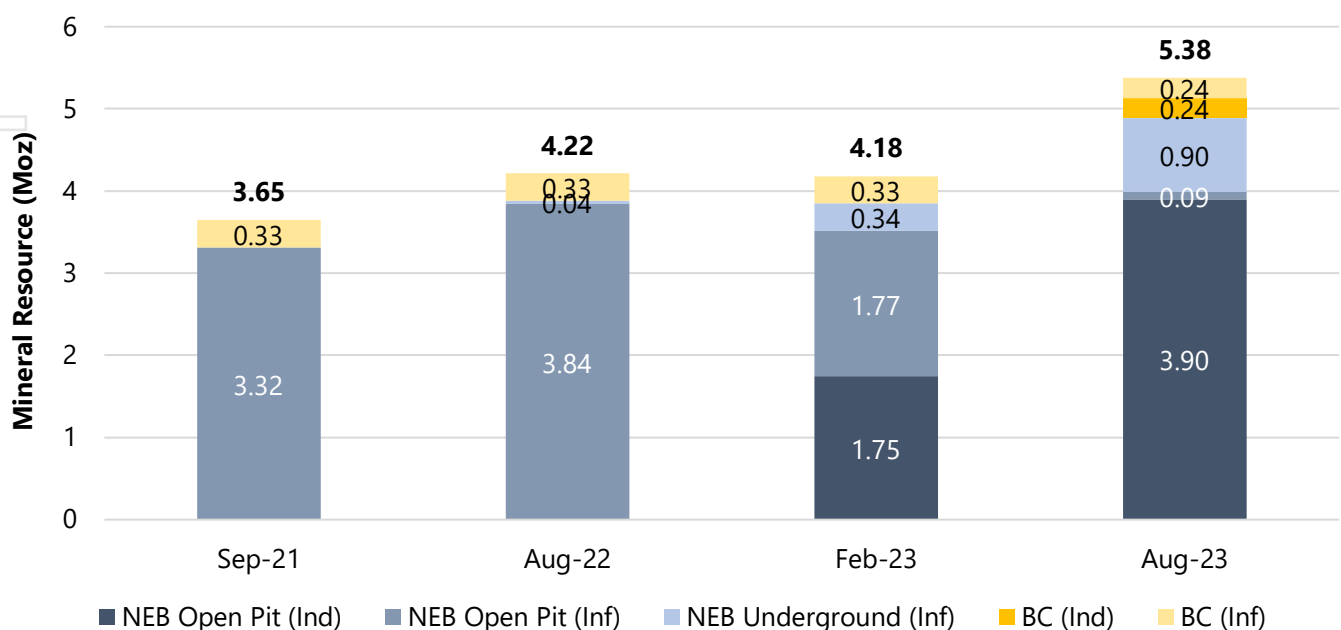
### Project Location and History

The Bankan Gold Project is a potential Tier-1 gold mine located in north-east Guinea, West Africa. The Project is 550km by road from Guinea's capital Conakry, near the regional administrative centre of Kouroussa. The Project covers 356km<sup>2</sup> in four exploration permits: Kaninko, Saman, Bokoro and Argo. Three permits are held by wholly owned subsidiaries of PDI and the Argo permit is held in joint venture, with PDI having the right to earn 90% during the exploration phase and acquire the remaining 10% at a decision-to-mine.

In early 2020, PDI discovered the NEB and BC deposits on the Kaninko and Saman permits, with NEB recognised as the largest gold discovery in West Africa in more than a decade. A maiden Inferred Mineral Resource estimate of 3.65Moz for the two deposits was announced in September 2021. Resource definition drilling has been ongoing at Bankan and Mineral Resource updates were completed in August 2022 and February 2023. The current update has increased the Mineral Resource estimate to 5.38Moz, comprising 4.89Moz at NEB and 487Koz at BC. 4.14Moz has been classified as Indicated.

PDI's current focus is to complete a Scoping Study and ESIA by late 2023 whilst continuing to explore the Bankan permits for additional gold deposits, where the current focus is on targets near NEB and BC, and regionally at Argo 15-20km north of NEB.

Figure 11: Change in Bankan Project Mineral Resource over time





## Geology and Geological Interpretation

Geologically, the Bankan gold camp lies in the south-western portion of the Siguiri Basin, a component of the early Proterozoic Birimian orogenic belt 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.

The dominant host rocks to mineralisation at NEB 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 NEB mineralisation is found largely in a corridor between two moderately west dipping shears (the Main and Eastern Shears) with shallower dipping linking structures. The mineralisation is preferentially developed at the Main Shear, especially around the contact between the footwall tonalite and the overlying mafic/metasediment package. Higher grades are found in a steeply SW plunging shoot; a second high grade shoot down plunge of the main high-grade shoot has been identified by three drillholes and is the target of current extensional drilling. North of a NE/SW striking wrench fault, the Gbenbeden mineralisation is similar to NEB, and is controlled by three anastomosing shears.

At BC, mineralisation is controlled by moderately west-dipping shears in a tonalite/skarn package with mafic hangingwall. Preliminary analysis suggests that the higher grade mineralisation plunges steeply to the SW, similar to NEB.

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.

## Drilling Techniques

The estimate includes assays received up to 29 July 2023 and is based on 205 Diamond Drill ("DD") holes for 73,043m, 62 Reverse Circulation/Diamond Drill ("RC/DD") for 25,711m and 162 Reverse Circulation ("RC") holes for 49,521m, for a total 429 holes for 148,275m of drilling. This includes the results of the close spaced grade control RC drilling completed in early 2022. Core is orientated by a downhole orientation tool. Core diameters used are mostly NQ with minor HQ and HQ triple tube; 140 mm RC face sampling bits were used; and 90 mm aircore.

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. Overall, RC recovery is very good at 96%, however samples in the first metre have lower than average recovery from the collaring process.

### **Sample Analysis Method**

Samples were assayed using industry standard fire assaying with a 50g charge; this method is a total method 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 50g aliquot is taken for assay.

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.

Analysis of this QAQC data demonstrated that the data is of acceptable quality to be used for resource estimation.

### **Sampling and Sub-sampling Techniques**

For DD samples, core was cut with a diamond saw. Routine samples were half-core, with predetermined diamond core duplicates being quarter-core. For RC and aircore drillholes, the samples were split using a cone sampler. The majority of chip samples are dry or only slightly damp. RC sample weights are recorded as are the weights of the rejects.

Field duplicate results for reverse circulation and diamond core demonstrated no bias in the sample results. There is a moderate scatter in the reverse circulation duplicate pairs and considerable scatter in the diamond duplicate pairs suggesting that the mineralisation is likely to be highly variable at a short scale.

### **Estimation Methodology**

Gold grades have been estimated using Ordinary Kriging using Surpac software. For NEB, three nested grade domains were defined in the saprolite and fresh mineralisation using Leapfrog software, at nominal 2g/t (High Grade, Main, Intersection and Footwall domains), 0.4g/t (Medium Grade) and 0.2g/t (Low Grade) cut-offs from 3m downhole composites. For the laterite mineralisation, a 0.5g/t cut-off domain was defined from 1m downhole composites. A separate interpretation was made at 0.3g/t cut-off for the Gbenbeden domain. In all of these, the current interpretation of the anastomosing shear network built up from geological logging and grade trends was used to control the anisotropy of the domain Leapfrog shells.

The Open Pit Mineral Resource comprises all domains except for the Main, Intersection and Footwall domains, which represents the Underground Mineral Resource.

These domains were used as hard boundaries. High Grade composites were cut to 40g/t, Medium Grade and Laterite to 30g/t. The Gbenbeden and Low Grade domains were uncut. Search ellipses and maximum composites were chosen following Kriging Neighbourhood Analysis.

For BC, three nested domains were defined at 1.0g/t (High Grade), 0.5g/t (Medium Grade) and 0.3g/t (Low Grade). These domains were used as hard boundaries, and grades estimated by Ordinary Kriging. The

Laterite Domain was interpreted at 0.5g/t but is much less extensive than that at NEB due to the creek erosion and previous artisanal mining.

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 320 m with a minimum of 8 and a maximum of 24 composites adopted.

Densities were applied according to the interpreted lithology and weathering state. 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.

### **Classification Criteria**

A review of the detailed grade control drilling program completed in 2022 demonstrated that the optimum drill hole spacing for the deposit to achieve an Indicated classification is 80m by 40m. The recent infill program has achieved for the entirety of the main mineralisation in the NEB pit shell. Inferred mineralisation comprises any blocks above the cut-off in the Low Grade domain, poorly defined mineralisation in the footwall structures, and the underground resource. At Gbenbeden and BC, the central part of the mineralisation is well defined by 40m by 40m drilling and has been classified Indicated. The remainder of the resource is classified Inferred, and is less continuous and contains significant amounts that are projected past the end of the dataset.

The classification reflects the overall level of confidence in mineralised domain continuity based on the mineralisation drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithotypes over numerous drill sections. The Mineral Resource classifications applied appropriately reflect the view of the Competent Person.

### **Cut-off Grades**

The NEB Open Pit Mineral Resource is reported at a 0.5g/t Au cut-off. Preliminary open pit economic assessments have suggested that the economic cut-off for a bulk mining option is likely to be in the range of 0.4-0.5g/t Au, depending on the gold price assumed. The NEB Underground Mineral Resource is reported at a higher 2.0g/t Au cut-off. At BC, a cut-off of 0.4g/t was used as the mineralisation model shows better continuity at this cut-off.

### **Mining and Metallurgical Methods and Parameters and Other Material Factors**

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:

- Mill throughput of 4Mtpa;
- Metallurgical recovery of 94%;
- Ore loss of 4% and dilution of 5%;

- Base mining cost of US\$1.92/t, incremented with depth;
- Processing costs of US\$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 and was largely driven by the extent of the modelled High Grade domains.

For the Underground area, a bulk mining method has been assumed, and the current models are reported at a 2.0g/t cut-off that greater selectivity is not achievable from the current very widely spaced data.

A scoping level metallurgical testwork program was carried out on eleven samples with a total weight of 305kg from both NEB and BC, 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.

A Scoping Study and Environmental & Social Impact Assessment are in progress and due to be completed in late 2023. The mining, metallurgical and other assumptions will be refined as these studies progress.

**- END -**

This announcement is authorised for release by PDI's Managing Director, Andrew Pardey.

For further information visit our website at [www.predictivediscovery.com](http://www.predictivediscovery.com) or contact:

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**ABOUT PREDICTIVE DISCOVERY**

PDI is focused on identifying and developing gold deposits within the Siguiri Basin, Guinea. The Company's key asset is the Tier-1 Bankan Gold Project.

Bankan comprises of 356km<sup>2</sup> of highly prospective exploration permits in the Siguiri Basin in Guinea, West Africa. A Mineral Resource of 5.38Moz has been defined at the NEB (4.89Moz) and BC (487Koz) deposits, with a total of 4.14Moz in the Indicated category. PDI is focused on sustainably developing Bankan into a Tier-1 gold mine. The Company is aiming to complete a Scoping Study and ESG workstreams by late 2023 as crucial steps towards securing a mining permit for the Project in H1 2024.

The Bankan Project is highly prospective for additional discoveries. PDI is exploring a number of targets near the existing deposits and regionally to the north along the 35km gold-rich super structure which runs through the Bankan permits, with a current focus on the Argo area.

**COMPETENT PERSONS STATEMENT**

The mineral resource estimates reported herein are based on information compiled by Mr Phil Jankowski, who is a Fellow 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 information in this announcement that relates to prior exploration results have been referenced to the original announcement date. The Company confirms that it is not aware of any new information or data that materially affects previous exploration results referred to in this announcement. The Company also confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the relevant original market announcements.



**TABLE 1: JORC CODE – MINERAL RESOURCE ESTIMATE**

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.	Samples were acquired by a mixture of aircore, reverse circulation and diamond drilling. The majority of samples are 1 m downhole, with diamond core sampling intervals breaking at lithological contacts where appropriate.  Only reverse circulation and diamond drilling was used to estimate the resource.
	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.	
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).	The estimate includes assays received up to 29 July 2023 and is based on 205 Diamond Drill ("DD") holes for 73,043m, 62 Reverse Circulation/Diamond Drill ("RC/DD") for 25,711m and 162 Reverse Circulation ("RC") holes for 49,521m, for a total 429 holes for 148,275m of drilling This includes the results of the close spaced grade control RC drilling completed in early 2022.  Core is orientated by a downhole orientation tool. Core diameters used are mostly NQ with minor HQ and HQ triple tube; 140 mm RC face sampling bits were used; and 90 mm 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 40 m of the drillholes.  Overall RC recovery is very good at 96%, however samples in the first metre have lower than average recovery from the collaring process.  A regularity of the recovery pattern downhole suggests considerable lag between the sample being generated at the hammer and reporting to the cyclone.  Drillers do not always adhere to the metre marks on the mast, leading to randomly occurring overlength and underlength samples.  It is unlikely that overall the grade of the RC drill samples has been biased however the combination of regularly and randomly occurring sample weight variations will lead to a degradation of the local grade estimate and a higher than necessary nugget, as well as increased inaccuracy in the spatial delimitation of ore waste boundaries.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The splitters are regularly checked to ensure sample build up is minimised.
	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.

<b>Logging</b>	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.	Holes have been logged for lithology, weathering, alteration, mineralisation, and geological structures. Photographs have been taken of each core tray.  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/Trench, 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 148,274.79m.
<b>Sub-Sampling Technique and Sample Preparation</b>	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 cone sampler. 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 sub-sampling stages to maximise representivity of samples.	For reverse circulation and aircore samples, sample weights are recorded as are the weights 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 reverse circulation and diamond core demonstrated no bias in the sample results. There is a moderate scatter in the reverse circulation duplicate pairs and considerable scatter in the diamond 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.
<b>Quality of Assay Data and Laboratory Tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were assayed using industry standard fire assaying with a 50g charge; this method is a total method 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie 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.  Analysis of this QAQC data demonstrated that the data is of acceptable quality to be used for resource estimation.
<b>Verification of Sampling and Assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	
	The use of twinned holes.	No twinned holes have been completed.
	The verification of significant intersections by either independent or alternative company personnel.	Drillhole logging is completed on paper sheets and manually entered into a database on site. The data is managed by a company employee, who checks for data validation. Assay results are returned electronically from the assay laboratory and are merged into the assay table of the database.
	Discuss any adjustment to assay data.	No adjustments or calibrations have been made to any assay data.

<b>Location of Data points</b>	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Collar surveying is by contracted surveyors using DGPS enabled survey devices. Centimetric accuracy is achieved in the 3D positioning of drill collars and topographic features.  Holes are downhole surveyed with gyroscopic tools; the Champ Gyro or the Reflex EZ Shot depending on the contractor.
	Specification of the grid system used.	All surveying is completed on the WGS84 grid.
	Quality and adequacy of topographic control.	The Competent Person considers that the surface is suitable for this Mineral Resource estimate.
<b>Data Spacing and Distribution</b>	Data spacing for reporting of Exploration Results.	
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	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 3 m downhole for saprolite and fresh mineralisation, and 1 m downhole for the laterite domain.
<b>Orientation of Data in Relation to Geological Structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Most of the drilling at NEB 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 NEB programs were initially oriented to the west; when it was recognised that the mineralisation 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: <ul style="list-style-type: none"> <li>The mean and median of the west dipping holes are higher than east dipping in the saprolite;</li> <li>In the saprolite, the composites in the west dipping holes are more variable;</li> <li>The west dipping holes in the saprolite have a larger population &gt; 2g/t Au;</li> <li>The mean and median of the west dipping holes are lower than east dipping in the fresh;</li> <li>In the saprolite, the composites in the west dipping holes are less variable.</li> </ul> The west dipping data was filtered from the composite dataset before further processing, except for the laterite domain.
<b>Sample Security</b>	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; the current laboratory used is SGS in Bamako, Mali which requires crossing an international border.
<b>Audits or Reviews</b>	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

<b>Mineral Tenement and Land Tenure Status</b>	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<p>The Bankan Gold Project consists of four <i>Permis de Recherche Industrielle (Or)</i> as follows:</p> <table border="1"> <thead> <tr> <th>Permit Name</th><th>Area (km<sup>2</sup>)</th><th>Holder</th></tr> </thead> <tbody> <tr> <td>Kaninko</td><td>98.2158</td><td>Mamou Resources SARLU</td></tr> <tr> <td>Saman</td><td>99.74845</td><td>Mamou Resources SARLU</td></tr> <tr> <td>Bokoro</td><td>99.9785</td><td>Kindia Resources SARLU</td></tr> <tr> <td>Argo</td><td>57.5422</td><td>Argo Mining SARLU</td></tr> </tbody> </table> <p>The permits are located between 9 51'00"W and 10 03 24W and between 10 32'26"N and 10'52"00N, situated to the northwest, west and southwest of the town of Kouroussa in Guinea.</p> <p>The Kaninko, Saman and Bokoro permits are held by 100% owned subsidiaries of PDI. The Argo permit is subject to a joint venture within the Australian registered holding company of Argo Mining SARLU, whereby PDI can progressively earn 90% of the holding company by</p>	Permit Name	Area (km <sup>2</sup> )	Holder	Kaninko	98.2158	Mamou Resources SARLU	Saman	99.74845	Mamou Resources SARLU	Bokoro	99.9785	Kindia Resources SARLU	Argo	57.5422	Argo Mining SARLU
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Argo	57.5422	Argo Mining SARLU															

		<p>payment of US\$100,000 and will acquire the remaining 10% at a decision to mine in exchange for a 2% net smelter royalty on production. The Argo permit expiry date has passed, however PDI has submitted renewal documents that have been registered by the Ministry and are in process.</p> <p>Parts of the Kaninko and Saman permits, including the NEB and BC deposits, are situated in Buffer Zone 2 of the Upper Niger National Park.</p>
	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.	Agriculture and other multiple use activities are permitted in Buffer Zone 2, but absence any change of decree, the mining of mineral deposits is not permitted. However, there are precedents in Guinea for Mining Permits to be granted in environmentally sensitive areas (e.g. within and adjacent to the Mt Nimba World Heritage Site). PDI is currently undertaking detailed sustainability studies (including an Environmental and Social Impact Assessment) and a Scoping Study to facilitate future permitting discussions with the Government of Guinea. It is expected that this Scoping Study will be complete by the end of calendar 2023.
<b>Exploration Done by Other Parties</b>	Acknowledgment and appraisal of exploration by other parties.	No previous significant 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 mineralisation areas.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<p>The Bankan deposits are hosted in Paleoproterozoic rocks of the Birimian Supergroup in the Siguiri Basin, which is host to several significant large active gold mining operations.</p> <p>Mineralisation 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 hangingwall of a tonalitic felsic intrusive, which has intruded a mafic and sedimentary greenstone sequence.</p> <p>The NEB mineralisation is found largely in a corridor between two moderately west dipping shears (the Main and Eastern Shears) with shallower dipping linking structures. The mineralisation is preferentially developed at the Main Shear, especially around the contact between the footwall tonalite and the overlying mafic/metasediment package. Higher grades are found in a steeply SW plunging shoot; a second high grade shoot down plunge of the main High Grade has been identified by three drillholes and is the target of current extensional drilling. North of a NE/SW striking wrench fault, the Gbenbeden mineralisation is similar to NEB, and is controlled by three anastomosing shears.</p> <p>At BC, mineralisation is controlled by moderately west-dipping shears in a tonalite/skarn package with mafic hangingwall. Preliminary analysis suggests that the higher grade mineralisation plunges steeply to the SW, similar to NEB.</p> <p>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.</p>
<b>Drill Hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	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.

<b>Data Aggregation Methods</b>	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.	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.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	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 drill hole angle is known, its nature should be reported.	Exploration Results are not being 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').	Exploration Results are not being reported.
<b>Diagrams</b>	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.	Relevant maps and diagrams are included in the body of this report.
<b>Balanced Reporting</b>	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.
<b>Other Substantive Exploration Data</b>	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.
<b>Further Work</b>	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling).	NEB is open at depth for the majority of its strike length, and along strike to the north. Additional infill drilling will be completed within the open pit shell to further improve the resource classification from Inferred. Step out drilling will be planned to the north along strike and at depth, around the underground resource and selected structural targets along the main shear to 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.
<b>Section 3 Estimation and Reporting of Mineral Resources</b>		
<b>Database Integrity</b>	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. Original forms are archived on site for reference.
	Data validation procedures used.	<p>PDI employ a database administrator who performs standard database validation checks including incorrect XYZ locations, missing surveys, missing logging, missing assays and data out of range.</p> <p>The Competent Person checked the drillhole files for errors prior to Mineral Resource estimation. The Competent Person found no material errors and deemed the database was fit for the purpose of Mineral Resource estimation.</p>



<b>Site Visits</b>	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<p>The Competent Person visited the site from 10th to 15th June 2022, from the 10<sup>th</sup> to the 21<sup>st</sup> November 2022 and from the 11<sup>th</sup> to the 27<sup>th</sup> January 2023. During these visits the following were inspected:</p> <ul style="list-style-type: none"> <li>• The general site layout, including the NEB and BC deposits, Bankan village and surrounding areas;</li> <li>• Diamond core drilling;</li> <li>• Drillhole setup;</li> <li>• Core orientation and markup;</li> <li>• Core logging;</li> <li>• Core sampling;</li> <li>• Density measurement procedure;</li> <li>• PLT measurement procedure;</li> <li>• XRF measurement procedure;</li> <li>• RC drilling;</li> <li>• RC sampling;</li> <li>• Aircore drilling and sampling;</li> <li>• Auger drilling and sampling;</li> <li>• Sample dispatch;</li> <li>• Core and RC retention bag storage;</li> <li>• Pulp storage;</li> <li>• Review of selected core intervals.</li> </ul> <p>Detailed technical discussions with PDI staff were also conducted.</p>
	If no site visits have been undertaken, indicate why this is the case.	Not applicable.
<b>Geological Interpretation</b>	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	<p>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.</p> <p>An inspection of historic logging, core photos and core resulted in the identification of numerous intersections of the footwall shears, as well as hangingwall lamprophyre dykes; these were added to the appropriate database fields and used for geological modelling.</p>
	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 Mineral Resource estimate.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	The NEB interpreted anastomosing shear systems for each deposit have been used as a primary control in the interpretation of the mineralised domains, and as an anisotropy for the Leapfrog grade shells. The NEB High Grade domain is located at and in the immediate footwall of the Main Shear.
<b>Dimensions</b>	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.	<p>The NEB resource covers a strike length of approximately 1,500m, and has been estimated to approximately 1,100m 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.</p> <p>BC covers approximately 650m long in strike and to approximately 350m below the natural surface, with a width of the Low Grade domain of up to 240m.</p>
<b>Estimation and Modelling Techniques</b>	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.	<p>Gold grades have been estimated using Ordinary Kriging using Surpac software.</p> <p>For NEB, three nested grade domains were defined in the saprolite and fresh mineralisation using Leapfrog software, at nominal 2g/t Au (High Grade, Main, Intersection and Footwall domains), 0.4g/t Au (Medium Grade) 0.3g/t Au (Gbenbeden) and 0.2g/t Au (Low Grade) cut-offs from 3m downhole composites. For the laterite mineralisation, a 0.5g/t Au cut-off domain was defined from 1m downhole composites.</p>

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	<p>For BC, three nested grade domains were defined in the saprolite and fresh mineralisation using Leapfrog software, at nominal 1g/t Au (High Grade), 0.5g/t Au (Medium Grade) and 0.3g/t Au (Low Grade) cut-offs from 3m downhole composites. For the laterite mineralisation, a 0.5g/t Au cut-off domain was defined from 1m downhole composites.</p> <p>These domains were used as hard boundaries. High Grade composites were cut to 40g/t, Medium Grade and Laterite to 30g/t. The Gbenbeden and Low Grade domains were uncut.</p> <p>Search ellipses and kriging parameters were chosen following Kriging Neighbourhood Analysis.</p>
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	<p>The previous resource estimate for the Bankan Project was released on 6 February 2023 and totalled Indicated+Inferred 76.8 Mt @ 1.69g/t for 4.18Moz; the current model total Indicated+Inferred is 100.5Mt @ 1.66g/t for 5.38Moz. The changes are:</p> <ul style="list-style-type: none"> <li>• In the NEB open pit, the completion of the infill drilling programme has upgraded the majority of the Inferred resource to Indicated;</li> <li>• The revised NEB structural and mineralisation model has produced additional Inferred resources in the footwall to STMZ that has been captured by the resource open pit optimisation;</li> <li>• Further extensional drilling at depth has increased the underground resource; the revised structural interpretation has also identified two new resource zones that added incremental resources;</li> <li>• At Gbenbeden, additional resources have been produced by extensional and infill drilling;</li> <li>• At BC, a relogging programme in early 2023 led to a new geological model. In conjunction with the additional infill and extensional drilling, this has increased the resource.</li> </ul> <p>These differences are result of the greater level of data and the more detailed interpretation that has been possible with it. In particular, the infill drilling has demonstrated a greater number of internal higher and lower grade structures, as well as restricting the distance that grade shells are extended past the edge of the database.</p> <p>Previous artisanal mining production is minor in scale and not formally recorded.</p>
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 140m to 300m with a minimum of 8 and a maximum of 14 to 24 composites adopted.
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.	The interpretation of the Main Shear, Footwall Shears and other shears were used as an anisotropy for the Leapfrog shells. The logged base of laterite was used as a limit of the data used for the Mottled Zone, Saprolite Zone, Saprock and Fresh mineralisation.
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 unduly 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.
<b>Moisture</b>	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.
<b>Cut-off Parameters</b>	The basis of the adopted cut-off grade(s) or quality parameters applied.	<p>The NEB open pit resource is reported at a 0.5g/t Au cut-off. Preliminary open pit economic assessments have suggested that for a bulk mining option the economic cut-off is likely to be in the range of 0.4-0.5g/t Au, depending on the Au price assumed.</p> <p>The NEB underground resource is reported at a 2g/t Au cut-off.</p> <p>The BC open pit resource is reported at 0.4g/t Au cut-off, which represents the mineralisation continuity better than 0.5g/t.</p>
<b>Mining Factors or Assumptions</b>	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 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.	<p>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:</p> <ul style="list-style-type: none"> <li>• Mill throughput of 4Mtpa;</li> <li>• Metallurgical recovery of 94%;</li> <li>• Ore loss of 4% and dilution of 5%;</li> <li>• Base mining cost of US\$1.92/t, incremented with depth;</li> <li>• Processing costs of US\$19.90-\$24.73/t, depending on material type;</li> <li>• Gold price of US\$1800/oz;</li> <li>• Discount rate of 5%.</li> </ul> <p>The optimisations captured a large proportion of the mineralisation and was largely driven by the extent of the modelled High Grade domains.</p> <p>For the Underground area, a bulk mining method has been assumed, and the current models are reported at a 2.0g/t cut-off that greater selectivity is not achievable from the current very widely spaced data.</p>
<b>Metallurgical Factors or Assumptions</b>	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.	<p>A scoping level metallurgical testwork program was carried out on eleven samples with a total weight of 305kg from both NEB and BC, representing softer saprolite and fresh rock mineralisation. All samples were quarter NQ diamond drill core apart from one saprolite sample of reverse circulation chips.</p> <p>The scope of the test work program included: comminution testwork, optimisation of grind size and leaching characteristics, gravity concentration, and cyanide leaching tests.</p> <p>The testwork program was completed by Metallurgy Pty Ltd in Perth, Western Australia. The main results were:</p> <ul style="list-style-type: none"> <li>• The fresh ore is relatively hard, with a Bond Ball Mill Index of 18-25kWh/t.</li> <li>• Optimum grind size is approximately 75 microns.</li> <li>• The ore has a moderate proportion of gravity-recoverable gold, ranging from 13% to 37% for the samples.</li> <li>• Using optimum leaching conditions, over 94% of the leach feed gold could be recovered in 24 hours, with a cyanide consumption of 0.7-0.9kg/t and lime consumption of around 0.1kg/t.</li> </ul> <p>These results suggest that relatively high recoveries may be achievable using standard CIL technology.</p>
<b>Environmental Factors or Assumptions</b>	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	No assumptions regarding possible waste and process residue disposal options have been made.

	<p>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 explanation of the environmental assumptions made.</p>	
<b>Bulk Density</b>	<p>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.</p>	<p>The density of selected core samples are measured using an immersion method. Samples of 10-30cm of competent core are selected, every 30-50m in waste lithologies and every 5m in shear zones. The samples are oven dried, then weighed in air and then immersed in water and density calculated using Archimedes' Principle.</p> <p>A total of 9,704 measurements have been recorded.</p> <p>An analysis of the current density database was made, by classifying by the logged weathering and lithology. From a review of these, the mean values were similar to those used in the August 2022 resource model, however 114 were identified as problematic, in that their density readings did not match the expected range. These were removed from the dataset before statistical analysis.</p> <p>The densities applied are fresh tonalite: 2.8; fresh mafic: 2.9; fresh metasediment: 2.6; saprock: 2.3; saprolite and mottled zone: 1.6; laterite: 2.2. These are typical values for the logged rock types.</p>
	<p>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.</p>	<p>Friable, oxidised or porous samples are first wax coated, with the mass of the wax recorded and taken into account for the density calculation. Lithology and weathering type are recorded for each sample.</p>
	<p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	<p>Densities were applied according to the interpreted lithology and weathering state.</p>
<b>Classification</b>	<p>The basis for the classification of the Mineral Resources into varying confidence categories.</p>	<p>The Mineral Resource was classified as Indicated and Inferred based on the level of geological understanding of the mineralisation, quality of samples, and drillhole spacing.</p> <p>At NEB the drill spacing across the majority of resource pit shell has been closed to 80m by 40m, resulting in 3.90Moz or 98% of the Open Pit Mineral Resource now being classified as Indicated. Inferred comprises some separate zones in the footwall, any open pit blocks in the Low Grade domain above the cut-off, the entire underground resource, and the majority of Gbenbeden, where the central core of the mineralisation within 70m of the natural surface is Indicated, with deeper and along strike extensions classified Inferred pending further infill drilling.</p> <p>At BC, the drill spacing varies from 40m by 40m to wider than 80m at the bottom of the model. The core area has been classified Indicated in the upper 70m of the deposit (above 300mRL) where the results and interpretation are consistent from hole to hole. At deeper levels, additional drilling is required to confirm the continuity between the several lodes and the Mineral Resource is classified Inferred.</p>
	<p>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).</p>	<p>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.</p>
	<p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p>	<p>The Mineral Resource classifications applied appropriately reflect the view of the Competent Person.</p>
<b>Audits or Reviews</b>	<p>The results of any audits or reviews of Mineral Resource estimates.</p>	<p>Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate.</p>
<b>Discussion of Relative Accuracy / Confidence</b>	<p>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</p>	<p>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</p>

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	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.	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 Mineral Resource Statement relates to a global estimate of in-situ tonnes and grade. It is suitable for reporting as a 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.