

# 50% OF NEB'S 3.5MOZ OPEN PIT RESOURCE UPGRADED TO INDICATED

*High-grade Underground Resource increased to 335Koz (Inferred)*

**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.

## HIGHLIGHTS

- Updated NE Bankan ("NEB") Mineral Resource estimate of 69.6Mt @ 1.72g/t for 3.85Moz of gold.
- Global Mineral Resource for the Bankan Project – NEB and Bankan Creek ("BC") – is now 76.8Mt at 1.69g/t for 4.2Moz of gold (see Table 1).

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	42.7	1.27	1,747
	Inferred	0.5	24.7	2.23	1,768
	<b>Total</b>		<b>67.4</b>	<b>1.62</b>	<b>3,515</b>
NEB Underground	Inferred	2.0	2.2	4.75	335
<b>NEB Total</b>			<b>69.6</b>	<b>1.72</b>	<b>3,850</b>
BC Open Pit	Inferred	0.5	7.2	1.42	331
<b>Total Bankan Project</b>			<b>76.8</b>	<b>1.69</b>	<b>4,181</b>

Refer to notes to Table 2

- 63% of NEB's Open Pit Mineral Resource tonnage and 50% of the contained gold has been upgraded to the Indicated category. This is a result of a substantial increase in geological understanding of the mineralisation combined with the additional drilling undertaken.
- Indicated Mineral Resource sits in the top 250m of the optimised resource pit shell, where drilling has been infilled to a spacing of 80m by 40m.
- Upgrading the Mineral Resource to Indicated is a crucial part of progressing the Scoping Study and is therefore a key step in PDI's strategy to secure a mining permit for the Bankan Project.
- High-grade Underground Mineral Resource increased to 2.2Mt @ 4.75g/t for 335Koz of gold (previously 44Koz). The increase is supported by improvements in the geological understanding of the deposit and is still based on limited drilling, with significant further upside potential up-dip, laterally and at depth.

- Currently, six Diamond Drill (“DD”) rigs are continuing resource definition drilling across the NEB and BC deposits.
  - Ongoing infill drilling and further conversion of the NEB Open Pit Mineral Resource from Inferred to Indicated to support PDI’s Scoping Study.
  - Ongoing deeper drilling to target expansion of the NEB Underground Mineral Resource below the current open pit resource shell.
  - Resource extension drilling also planned in several areas where detailed resource modelling has identified upside potential. This includes around the smaller northern resource pit shell where two shears appear to be a continuation of the main NEB mineralisation, and within the main pit shell targeting potential high-grade shoots south of the main high-grade shoot.
  - Drilling recommenced at BC in late 2022 and increased activity is planned during 2023. BC is open at depth and in all directions.
- Regional exploration efforts are ramping up in 2023, targeting discovery of new major deposits across PDI’s highly prospective landholding. RC drilling of regional targets on the Argo (“AG”) permit is planned to commence immediately following receipt of geophysics results.
- PDI is well funded with \$32.4m in cash as at 31 December 2022.

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

*“It is pleasing to achieve such a significant initial upgrade of the NEB Mineral Resource, with 63% of tonnes and 50% of ounces in the open pit shells now classified as Indicated. This has been achieved through our ongoing extensive infill drilling program, which has greatly enhanced our understanding of the deposit’s geology and controls on mineralisation.*”

*“PDI’s strategy to target early Mineral Resource upgrades will facilitate completion of a Scoping Study and Environmental & Social Impact Assessment in late 2023, allowing commencement of detailed permitting discussions with the Government of Guinea as soon as possible. Further infill drilling and Mineral Resource upgrades will therefore remain a priority to support the Scoping Study mine plan.*”

*“Significant upside potential remains, and we will continue to target Mineral Resource increases at the NEB and BC deposits, and their surrounds. Importantly, both deposits remain open, and our improving geological understanding is generating additional target areas. We are also excited by the potential of Bankan’s northern permits and will increase our exploration focus here during 2023, with RC drilling planned to commence following receipt of geophysics results.”*

## BANKAN GOLD PROJECT

The Bankan Gold Project comprises 356km<sup>2</sup> of highly prospective exploration permits in the Siguiri Basin, Guinea.

A Mineral Resource of 4.2Moz has been defined to date at the NEB (3.85Moz) and BC (331Koz) deposits. PDI's strategy is to sustainably develop Bankan into a Tier-1 gold mine. The Company is focused on further increasing the size and improving the classification of the current Mineral Resource, and completing a Scoping Study and ESG workstreams as crucial steps towards securing a mining permit for the Project.

PDI is also exploring a number of targets near the NEB and BC deposits and regionally to the north along the 35km gold-rich super structure which runs through the Bankan permits.

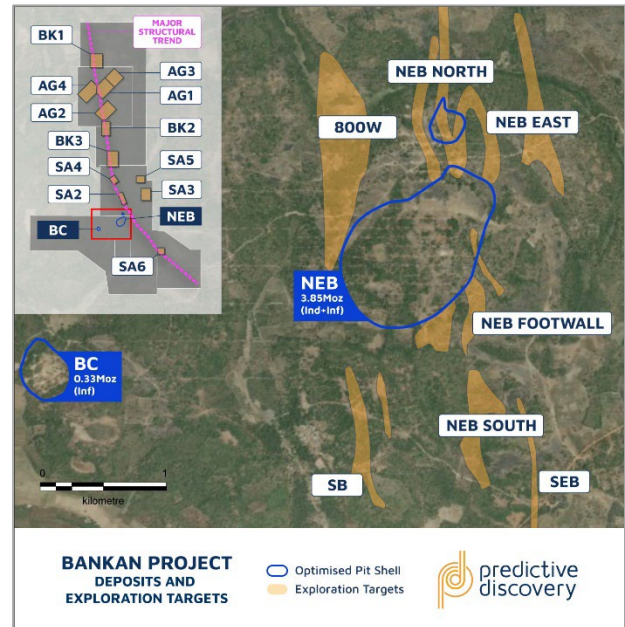


Figure 1: Bankan Project deposits and exploration targets

## UPDATED MINERAL RESOURCE ESTIMATE

An updated Mineral Resource estimate for the NEB deposit has been prepared by PDI's independent resource modelling consultant, CSA Global Mining Industry Consultants ("CSA Global"). The estimate includes assays received up to 16 January 2023 and is based on 102 Diamond Drill ("DD"), 62 Reverse Circulation/Diamond Drill ("RC/DD") and 197 Reverse Circulation ("RC") holes for a total of 84,697.77m of drilling. Of this, 143 holes for 32,380.97m of drilling has been added since the last Mineral Resource update released in August 2022.

The updated NEB estimate includes an Open Pit Mineral Resource reported at a 0.5g/t cut-off grade within a US\$1,800/oz optimised resource pit shell, which totals 67.4Mt @ 1.62g/t for 3.5Moz of gold. The pit shell is the same pit shell as from the August 2022 estimate. An Underground Mineral Resource of 2.2Mt @ 4.5g/t for 335Koz of gold is reported at a 2.0g/t cut-off grade, for a total NEB Mineral Resource of 69.6Mt @ 1.72g/t for 3.85Moz of gold.

The NEB Mineral Resource is shown in Figure 2 below, illustrating the Open Pit Mineral Resource within the two optimised resource pit shells and the Underground Mineral Resource situated below the larger pit shell which hosts the main NEB orebody.

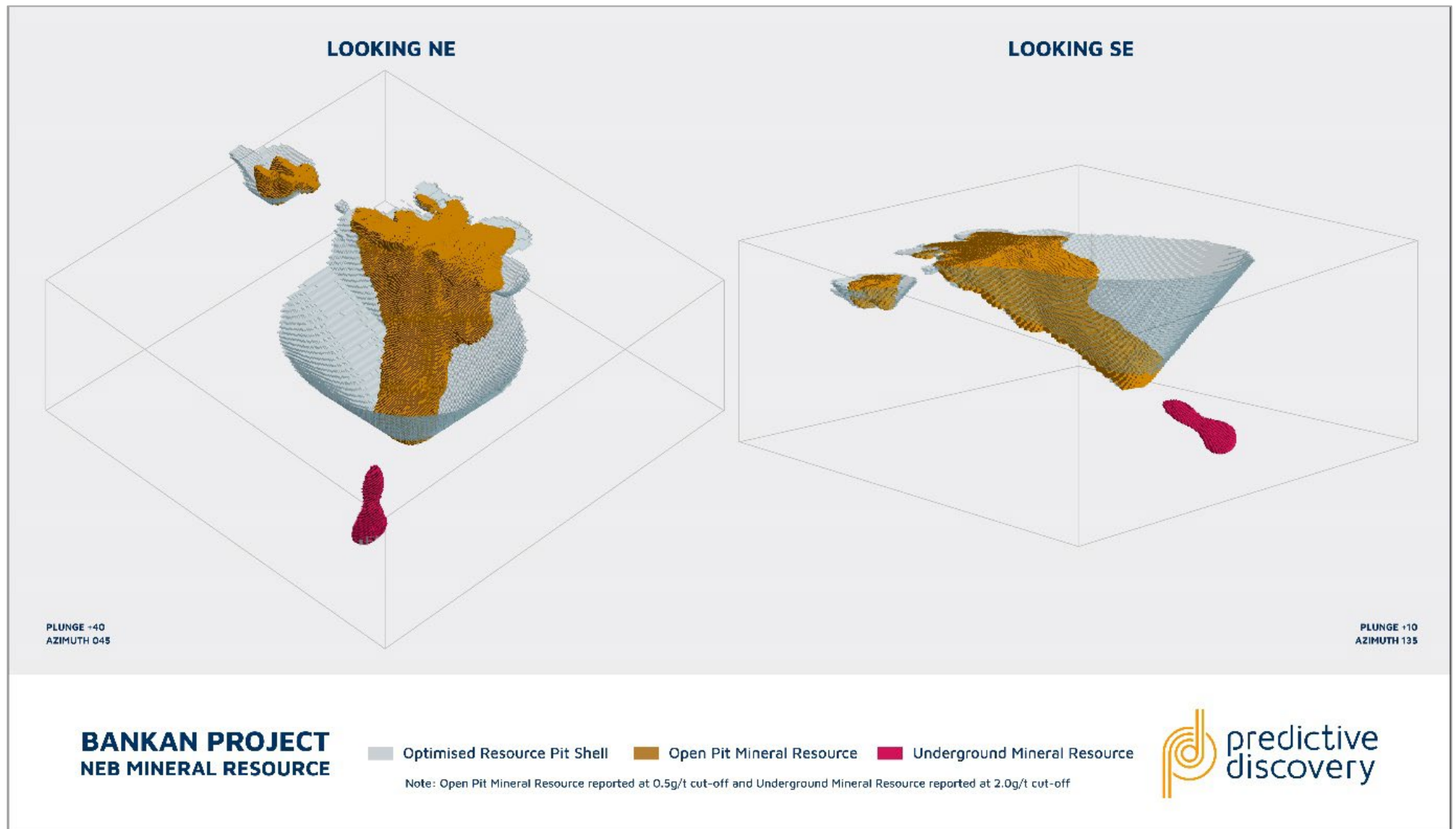


Figure 2: NEB block model showing Open Pit Mineral Resource within two pit shells and Underground Mineral Resource below the larger pit shell. Left image looking north-east and right image looking south-east.

The global Mineral Resource estimate for the Bankan Gold Project is now 76.8Mt @ 1.69g/t for 4.2Moz of gold as shown in Table 2, which includes the updated NEB estimate (3.85Moz) and the unchanged BC estimate (331Koz).

Table 2: 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	42.7	1.27	1,747
	Inferred	0.5	24.7	2.23	1,768
	<b>Total</b>		<b>67.4</b>	<b>1.62</b>	<b>3,515</b>
NEB Underground	Inferred	2.0	2.2	4.75	335
<b>NEB Total</b>			<b>69.6</b>	<b>1.72</b>	<b>3,850</b>
BC Open Pit	Inferred	0.5	7.2	1.43	331
<b>Total Bankan Project</b>			<b>76.8</b>	<b>1.69</b>	<b>4,181</b>

Notes to Resource Table:

1. The NEB Mineral Resource is estimated with all drilling data available as at 16 January 2023. The BC Mineral Resource has not been updated since it was previously reported on 2 August 2022 and 30 September 2021.
2. The Mineral Resource is reported in accordance with the JORC Code 2012 Edition at a 0.5g/t Au cut-off for the Open Pit resource and a 2.0g/t cut-off for the Underground resource.
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.

Significant infill drilling has been completed at NEB since the last Mineral Resource estimate in August 2022. Mineralisation within the optimised resource pit shell is being progressively infilled to 80m by 40m in line with CSA Global's recommendation of the drill spacing required to achieve Indicated status.

63% of NEB's Open Pit Mineral Resource tonnage has been upgraded to the Indicated category, representing 50% of the contained gold. This is the result of a substantial increase in geological understanding of the deposit and the controls on mineralisation from the additional drilling completed. As shown in Figure 3, the Indicated Mineral Resource is situated in the top 250m of the optimised resource pit shell, where drilling has been infilled to the recommended 80m by 40m spacing. The remainder of the Open Pit Mineral Resource below this level is classified as Inferred and the Underground Mineral Resource is also Inferred.

Upgrading the Mineral Resource to Indicated is a crucial part of PDI's strategy, and is necessary to complete the Scoping Study which is on track to be delivered in late 2023. The Scoping Study and the Environmental & Social Impact Assessment (which is ongoing) are the key documents that will support PDI's permitting discussions with the Government of Guinea.



Figure 3: NEB block model showing the Indicated (red) and Inferred (green) Mineral Resource categories and drill traces. Left image looking north-east and right image looking south-east.

Compared to the August 2022 estimate, the updated Open Pit Mineral Resource estimate has slightly lower tonnes and similar grade, resulting in reduction of approximately 300Koz of contained gold. These differences are the result of the greater level of drilling data available resulting in a more detailed interpretation being able to be completed. 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 dataset.

The increased geological understanding of the deposit is also presenting upside opportunities in a number of areas. An ENE striking fault has been identified that appears to offset the mineralisation in the northern area. Two shears north of the fault have been identified which appear to be a continuation of the main zones of the NEB mineralisation. There is a small Inferred Mineral Resource in this area within the smaller resource pit shell, which is open along strike to the north and at depth. This target area aligns with NEB North target which has been identified through geophysics surveys and shallow drilling. Additional resource extension drilling is planned in this area in the near future with the aim of further increasing the Mineral Resource.

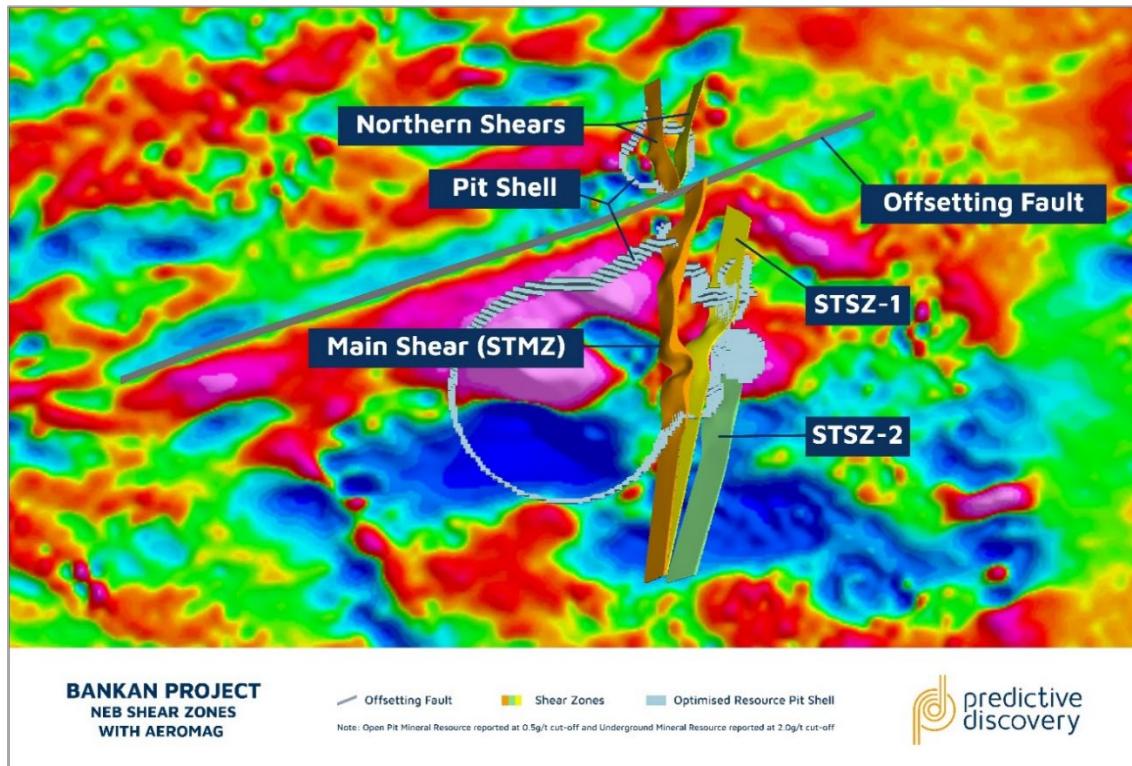


Figure 4: Interpreted NEB shear zones and offsetting fault overlaid on aeromagnetic VD1 image.

In addition, resource modelling work has identified the potential for additional high-grade shoots within the main optimised pit shell to the south of the main high-grade shoot. This target area is largely untested by drilling, although a limited number of nearby holes have returned high-grade intercepts.

NEB’s high-grade Underground Mineral Resource is reported at a higher cut-off grade of 2.0g/t and totals 335Koz @ 4.75g/t (previously 44Koz @ 4.85g/t). Presently, the Underground Mineral Resource commences 110m down-dip of the resource pit shell and is based on the three deepest drill holes to date. Another three holes up-dip towards the resource pit shell are currently excluded due to lower grade intercepts in two, while the third excluded hole, BNEDD0119A, returned a high-grade intercept of 11m @ 6.62g/t within 30m @ 3.43g/t<sup>1</sup> on a high-grade footway splay (as opposed to on the main shear zone). Due to limited drilling, the lateral extent of the Underground Mineral Resource is narrower than the High Grade domain within the open pit shell (refer to Figure 6 further below).

Mineralisation in the Underground Mineral Resource is interpreted as a repetition of the high-grade shoot from within the pit shell. There is therefore potential to increase the Underground Mineral Resource up-dip towards the resource pit shell, and from laterally extending the boundaries of mineralisation to a similar width as the high-grade shoot. One DD rig is focused on resource extension drilling in these areas and a number of holes are in progress or have assays pending. The Underground Mineral Resource also remains open at depth below hole BNERD0113, which returned 24m @ 5.5g/t Au from 850m, including 11m @ 10.3g/t Au from 852m.<sup>2</sup>

<sup>1</sup> ASX Announcement – Impressive Gold Hit Continue at 4.2Moz Bankan Gold Project (25 August 2022).

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

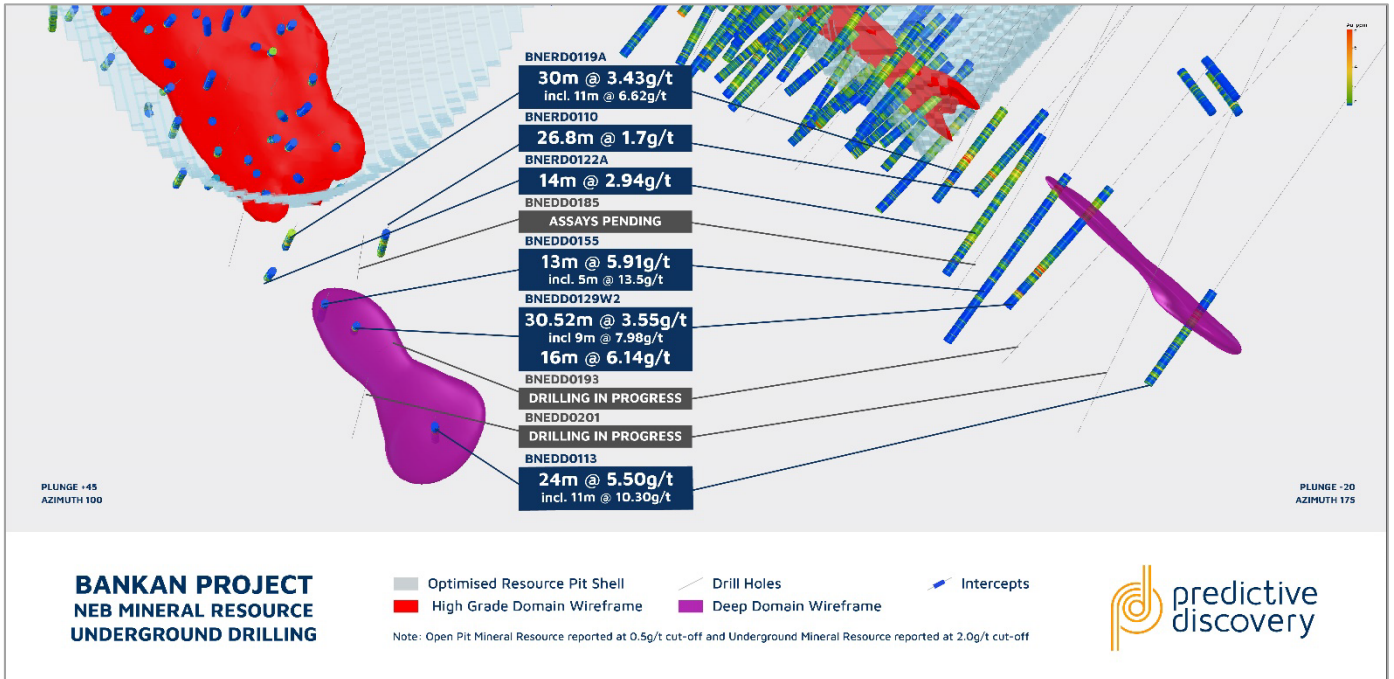


Figure 5: NEB wireframes showing High Grade and Deep domains, and drill holes below the optimised resource pit shell, including holes in progress or with assays pending.

Domining of the NEB Mineral Resource estimate is shown in Table 3 below and is illustrated in Figure 6. The Open Pit Mineral Resource comprises all domains except for the Deep domain, which represents the Underground Mineral Resource. The majority of mineralisation is within the Medium Grade and High Grade domains, with the high-grade mineralisation driving the pit optimisations (which were based on the August 2022 Mineral Resource model and remain valid). The Northern domain represents the smaller optimised resource pit shell to the north of the main NEB orebody.

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)
Laterite	0.5	1.9	1.00	62	-	-	-
Low Grade	0.5	-	-	-	0.7	0.58	13
Medium Grade	0.5	37.9	1.02	1,244	13.2	0.83	353
High Grade	0.5	2.9	4.85	448	8.4	5.01	1,348
Northern	0.5	-	-	-	2.4	0.70	54
Deep	2.0	-	-	-	2.2	4.75	335

Note: Mineral Resource for the Medium Grade domain is only reported within the optimised resource pit shell.



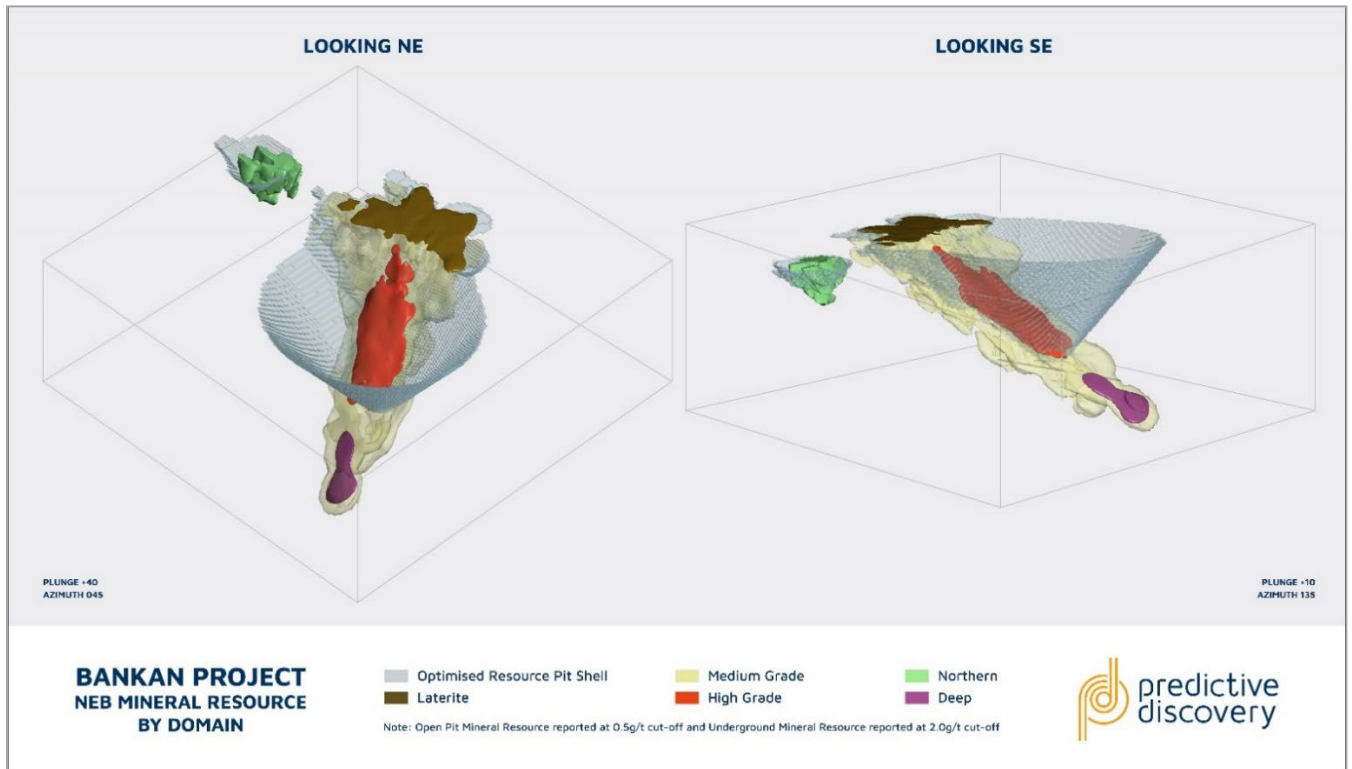


Figure 6: NEB Mineral Resource domain wireframes. Laterite shown in brown, Medium Grade in yellow, High Grade in orange, Deep in magenta and Northern in green. Left image looking north-east and right image looking south-east.

The grade-tonnage relationship for the Open Pit Mineral Resource is shown in Table 4 at varying cut-off grades. Overall, the Mineral Resource is robust to changes in cut-off grade, with approximately 2.6Moz at a 1.0g/t cut-off (compared to 3.5Moz at a 0.5g/t cut-off). The Inferred Mineral Resource is particularly robust to increases in cut-off grades due to the presence of high-grade mineralisation in the lower parts of the pit shell which are classified as Inferred.

Table 4: NEB Open Pit Grade Tonnage Table

Cut-off (g/t Au)	Indicated			Inferred			Total		
	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
0	42.8	1.27	1,750	41.7	1.43	1,921	84.5	1.35	3,671
0.1	42.8	1.27	1,750	41.4	1.44	1,920	84.2	1.35	3,670
0.2	42.8	1.27	1,750	37.9	1.56	1,902	80.7	1.41	3,652
0.3	42.8	1.27	1,750	31.6	1.83	1,854	74.4	1.51	3,604
0.4	42.8	1.27	1,749	27.7	2.04	1,812	70.5	1.57	3,561
<b>0.5</b>	<b>42.7</b>	<b>1.27</b>	<b>1,747</b>	<b>24.7</b>	<b>2.23</b>	<b>1,768</b>	<b>67.4</b>	<b>1.62</b>	<b>3,515</b>
0.6	40.5	1.31	1,706	22.6	2.39	1,730	63.0	1.70	3,437
0.7	35.5	1.40	1,603	20.0	2.62	1,675	55.4	1.84	3,278
0.8	30.0	1.53	1,471	16.0	3.08	1,580	46.0	2.07	3,052
0.9	24.6	1.68	1,326	12.7	3.66	1,491	37.2	2.35	2,817
1.0	19.6	1.86	1,174	10.6	4.20	1,428	30.2	2.68	2,602

## NEXT STEPS

There are currently six active DD rigs focused on resource definition drilling at the NEB and BC deposits, in line with the Company's strategy to further increase the size and quality of the 4.2Moz Mineral Resource.

Infill drilling within the pit shell will continue to be a key focus to enable the majority of the NEB Open Pit Mineral Resource to be upgraded to Indicated during 2023, which is crucial to support the Scoping Study mine plan and future permitting discussions with the Government of Guinea.

One DD rig is focused on deeper resource extension drilling of the current Underground Mineral Resource estimate of 335Koz @ 4.75g/t. There is upside potential to extend the boundaries of mineralisation defined by drilling to date, and up-dip towards the base of the optimised resource pit shell. The Underground Mineral Resource also remains open at depth below hole BNERD0113 (24m @ 5.5g/t Au from 850m, including 11m @ 10.3g/t Au from 852m).<sup>2</sup>

Resource extension drilling is also planned around the northern resource pit shell which is open along strike and at depth, and is underway at the BC deposit which is open at depth and in all directions.

PDI strengthened its exploration team in late 2022, including the appointment of a dedicated regional head geologist, to support an increasing focus on near-resource and regional exploration, where there is potential to discover other major gold deposits.

Geophysics surveys, including gradient array induced polarisation surveys, are planned to commence imminently at the northern Argo ("AG") permit along the highly prospective 35km structural trend. RC drilling of select targets is planned to commence immediately following receipt of the geophysics results.

Additional near-resource exploration will continue at identified targets near the NEB and BC deposits.

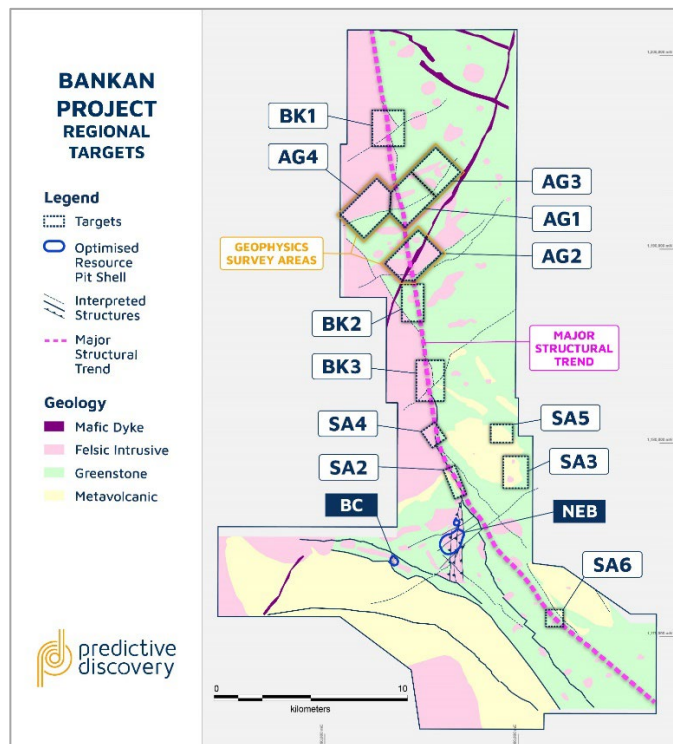


Figure 7: Bankan Project permits showing regional targets and planned geophysics survey areas on the AG permit.

## SUMMARY OF MATERIAL INFORMATION

### Overview

An updated Mineral Resource estimate has been prepared for the NEB deposit, incorporating additional resource definition and infill drilling since the last Mineral Resource update in August 2022. The estimate has been prepared by CSA Global and classified according to the JORC 2012 Code. The Mineral Resource estimate for the BC deposit is unchanged. Resource definition and extension drilling is ongoing at the NEB and BC deposits.

### 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 and the NEB Inferred Mineral Resource was increased to 3.9Moz in August 2022 (for a total of 4.2Moz). 1.7Moz of the 4.2Moz Mineral Resource has now been classified as Indicated, and the Bankan Project is advancing towards the development phase. PDI's current focus is to further increase the size and quality of the resource and complete a Scoping Study and Environmental & Social Impact Assessment by late 2023.

### 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 central portion of the NEB gold deposit is strongly controlled by a major west-dipping dextral shear zone (the Main Shear Zone or STMZ), with most gold and higher-grade zones occurring in the footwall of that shear zone within the felsic intrusives. 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 STMZ.

As well as the STMZ, two major shallower west dipping Footwall Shears (STSZ-1 and STSZ-2) have been identified, that form part of an anastomosing dextral shear network. In the footwall to the STMZ, these control the distribution of higher grades.

### **Drilling Techniques**

All data available as at 16 January 2023 was used to estimate the Mineral Resource for NEB. This comprises 197 RC holes for 23,122 linear metres and 164 DD or RC/DD holes for 61,575.77 linear metres.

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 diamond drilling samples, core was cut with a diamond saw. Routine samples were half-core, with predetermined diamond core duplicates being quarter-core. For reverse circulation 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 and Deep), 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 Northern 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 Deep domain, 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 Northern and Low Grade domains were uncut. Search ellipses and maximum composites were chosen following Kriging Neighbourhood Analysis. For the Deep domain a blanket mean grade was used.

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 drillhole spacing for the deposit is 80m by 40m. The recent infill program has achieved that above approximately 180m RL, which is 250m below the natural surface. Other measures of estimation quality also show a step change at this level.

The main NEB orebody is classified Indicated above this level, for blocks >0.5g/t. The remainder of the resource is classified Inferred, including the entire Low Grade domain, Northern domain and Deep domain.

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 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 Underground Mineral Resource is reported at a higher 2.0g/t Au 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 optimisation was performed on the August 2022 model, and captured a large proportion of the mineralisation apart from the Deep domain. The optimisation outcome was largely driven by the extent of the modelled High Grade domain. As this is still in the Inferred category at depth, and infill drilling has not significantly changed the model in this area, this optimisation is still valid.

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. With a growing resource base of over 4.2Moz Au (Indicated and Inferred) to date, Bankan is the largest gold discovery in West Africa in a decade. PDI's strategy is to bring Bankan into production whilst identifying and developing other deposits within this highly prospective and underexplored region.

In parallel with ongoing and extensive drilling programs, PDI has launched a range of studies and programs, designed to sustainably progress the Bankan Project through to production. Baseline social, environmental and biodiversity studies are underway as part of an extensive ESG program and a Scoping Study is planned to be completed in the second half of 2023.

## **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 exploration results reported herein are based on information compiled by Mr Norm Bailie, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Bailie 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 Bailie 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 – NEB MINERAL RESOURCE ESTIMATE**

<b>Section 1: Sampling Techniques and Data</b>		
<b>Criteria</b>	<b>JORC Code Explanation</b>	<b>Commentary</b>
<b>Sampling Technique</b>	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.	
<b>Drilling</b>	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).	All data available as at 16 January 2023 was used to estimate the resource for NEB; this comprises 197 RC holes for 23,122 linear metres and 164 DD or RC/DDH holes for 61,575.77 linear metres.  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.
<b>Drill Sample Recovery</b>	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	Holes have been logged for lithology, weathering, alteration, mineralisation, and geological structures. Photographs have been taken of each core tray.

	appropriate Mineral Resource 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/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 84,697.77m.
<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.	<p>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:</p> <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> <p>The west dipping data was filtered from the composite dataset before further processing, except for the laterite domain.</p>
<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" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Permit Name</th> <th style="text-align: left;">Area (km<sup>2</sup>)</th> <th style="text-align: left;">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 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</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
	Permit Name	Area (km <sup>2</sup> )	Holder														
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Bokoro	99.9785	Kindia Resources SARLU															
Argo	57.5422	Argo Mining SARLU															

		<p>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.
<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 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.</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>	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul 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.

### Section 3 Estimation and Reporting of Mineral Resources

<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> </ul>

		<ul style="list-style-type: none"> <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 system has been used as a primary control in the interpretation of the mineralised domains, and as an anisotropy for the Leapfrog grade shells. The 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.	The NEB resource covers a strike length of approximately 1,500m, and has been estimated to -145mRL, approximately 600m 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.
<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), 0.4g/t Au (Medium Grade) 0.3 g/t (Northern) 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> <p>These domains were used as hard boundaries. High Grade composites were cut to 40g/t, Medium Grade and Laterite to 30g/t. The Northern 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 NEB was dated 2 August 2022 and totalled Inferred 72.3Mt @ 1.65g/t for 3.9Moz.</p> <p>The tonnes, grade and contained metal in the resource estimate within the reporting pit were compared in RL swath plots by domain to the August 2022 estimate. These show:</p> <ul style="list-style-type: none"> <li>• For the High Grade, the current model has more tonnes, lower grade and a similar metal content, with the largest grade changes above the 150mRL.</li> </ul>

		<ul style="list-style-type: none"> <li>For the Medium Grade, tonnes, grade and metal are slightly lower above the 200mRL, with greater discrepancies at lower levels.</li> <li>For the Low Grade, tonnes are much lower above 310mRL, whereas grade is similar throughout.</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 280m with a minimum of 8 and a maximum of 14 to 32 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 grade trends 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.	The resource is reported at a 0.5g/t Au 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 0.4-0.5g/t Au, depending on the Au price assumed.
<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>

		The optimisations captured a large proportion of the mineralisation and was largely driven by the extent of the modelled High Grade domains.
<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 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.	No assumptions regarding possible waste and process residue disposal options have been made.
<b>Bulk Density</b>	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>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 6,109 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>
	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.	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.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Densities were applied according to the interpreted lithology and weathering state.
<b>Classification</b>	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource was classified as Indicated and Inferred based on the level of geological understanding of the mineralisation, quality of samples, and wide drillhole spacing.



		<p>The resource model estimation quality has been reviewed in the light of the infill drilling. For the High grade and Medium Grade domains, the mean slope of regression and average distance to the composites used have a clear trend of less data and poorer estimate from the surface downwards. Other measures of estimate quality such as distance to drillhole, average distance to drilling and slope of regression in the Medium Grade domain shows a qualitative difference between the 150mRL and 200mRL.</p> <p>Above 180mRL (approximately 250m from the surface), the Medium and High Grade resource have been classified Indicated, given the significant grade and tonnage changes induced by the infill drilling. The entire Laterite domain is also classified Indicated. The remaining resource is classified Inferred, comprising:</p> <ul style="list-style-type: none"> <li>• Any of the Low Grade domain above the 0.5g/t cut-off;</li> <li>• The Medium and High Grade domain in the reporting pit below 180mRL;</li> <li>• The Northern Domain; and</li> <li>• The Deep Domain.</li> </ul>
	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.
<b>Audits or Reviews</b>	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.
<b>Discussion of Relative Accuracy / Confidence</b>	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 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.