

# **ASX Announcement**

4 April 2023

# INFILL DRILLING RESULTS CONTINUE TO CONFIRM NEB'S CONSISTENCY

**Predictive Discovery Limited (ASX:PDI) ("PDI" or the "Company")** is pleased to report assay results from 9 holes for 4,151m of resource definition drilling at the Bankan Gold Project in Guinea.

#### **HIGHLIGHTS**

- Excellent infill drilling results from the middle to lower parts of the NE Bankan ("NEB") resource pit shell, where the Mineral Resource is classified as Inferred.
- Best results include:
  - 50m @ 3.79g/t from 530m;
  - 51m @ 3.28g/t from 509m;
  - o 29m @ 5.20g/t from 412m; and
  - o **29m @ 4.18g/t** from 346m.
- Infill drilling is aiming to upgrade the majority of NEB's 3.5Moz Open Pit Mineral Resource to Indicated (currently 50% Indicated). This is a crucial part of the Scoping Study and is therefore a key step in PDI's strategy to secure a mining permit for the Bankan Project.
- Re-logging of all historical Bankan Creek ("BC") holes completed to refine the geological model and assist with future drilling targeting to upgrade and extend the Mineral Resource.
- Majority of BC holes from the seven-hole drilling program in late 2022 have now been sent for assaying, with samples for remaining holes being prepared.

Commenting on the results, Managing Director Andrew Pardey, said:

"We continue to take great confidence from the quality of infill drilling results at NEB, which is testament to the orebody's consistency.

"PDI is working diligently towards completion of a Scoping Study by the end of 2023 to facilitate permitting in the first half of 2024. Infill drilling to support further Mineral Resource upgrades in Q3 2023 is a crucial part of our strategy and will enable PDI to deliver a robust Scoping Study based on a significant proportion of Indicated Mineral Resources.

"Separately, we are excited to be ramping up exploration activity at the regional Argo targets, as well as at targets close to the NEB and BC deposits. We look forward to providing updates shortly."

<sup>&</sup>lt;sup>1</sup> Refer to Compliance Statement at the end of this announcement.



# **NEB DRILLING RESULTS**

There are currently three active diamond ("DD") rigs focused on resource definition drilling at NEB in line with the Company's strategy to further increase the size and improve the classification of the 4.2Moz Mineral Resource.<sup>2</sup>

Infill drilling within the resource pit shell continues to be a key focus to enable the majority of the NEB Open Pit Mineral Resource to be upgraded to Indicated during 2023. This is crucial to support the Scoping Study and therefore the permitting process for the Project. The Inferred Mineral Resource currently sits in the middle to lower parts of the resource pit shell. The drill spacing in this area is being progressively infilled to 80m by 40m in line with CSA Global's recommendation to achieve an Indicated Mineral Resource.

Resource definition drilling of the Underground Mineral Resource is also ongoing, targeting extensions both along strike and up-dip towards the base of the optimised resource pit shell.

Drilling results in this announcement are from infill drilling at NEB, and include a total of 9 holes for 4,151m. Best results include:

BNEDD0191: 50m @ 3.79g/t from 530m, incl 5m @ 11.01g/t from 534m

incl 11m @ 7.12g/t from 543m

BNEDD0196: 51m @ 3.28g/t from 509m, incl 6m @ 6.84g/t from 515m

incl 10m @ 5.59g/t from 529m

• BNEDD0195: 29m @ 5.20g/t from 412m, incl 6m @ 15.20g/t from 420m

BNEDD0197: 29m @ 4.18g/t from 346m, incl 9m @ 8.72g/t from 354m

BNEDD0199A: 13m @ 2.68g/t from 306m, incl 3m @ 6.50g/t from 313m

22m @ 2.24g/t from 335m, incl 2.1m @ 11.17g/t from 350m

4m @ 8.54g/t from 376m

BNEDD0200A: 24m @ 1.85g/t from 225m

The outstanding results reported in this announcement, particularly in holes BNEDD0191, BNEDD0195, BNEDD0196 and BNEDD0197, intersected high-grade mineralisation in the middle to lower parts of the resource pit shell, where the Open Pit Mineral Resource is currently classified as Inferred. These results continue to confirm the improving grade profile of the deposit at depth and are expected to support further upgrades to Indicated in the next Mineral Resource update.

The long section and drill plan for NEB are shown in Figure 1 and Figure 2 respectively, with cross sections and additional commentary included in subsequent pages.

<sup>&</sup>lt;sup>2</sup> Refer to Compliance Statement at the end of this announcement



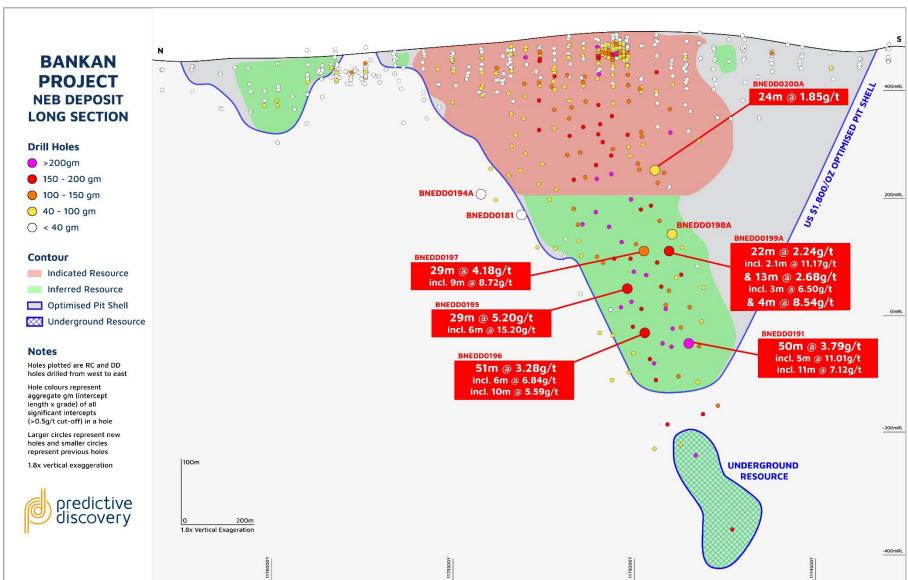


Figure 1: NEB long section view, showing newly reported DD holes



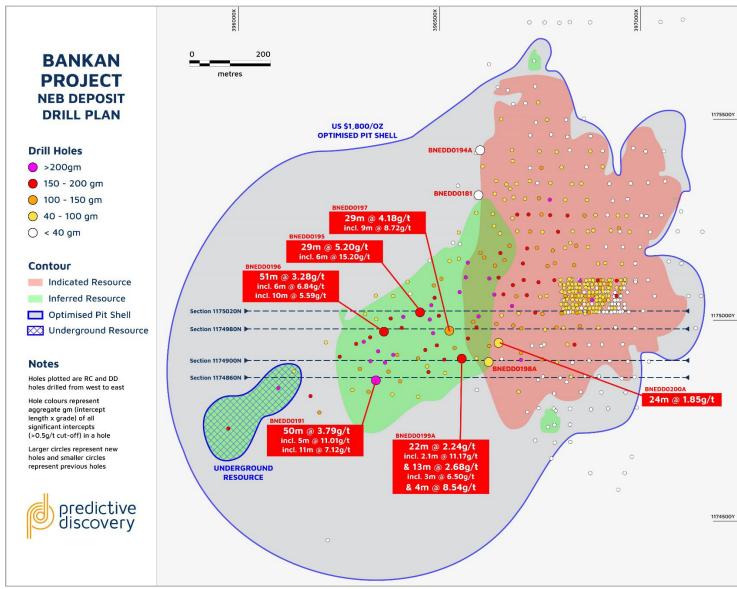


Figure 2: NEB drill plan, showing new DD results



Section 1174980N hosts spectacular intercepts in BNEDD0196 and BNEDD0197 in the lower and middle parts of the resource pit shell where the Mineral Resource is Inferred.

BNEDD0196 reported 51m @ 3.28g/t from 509m including 6m @ 6.84g/t from 515m and 10m @ 5.59g/t from 529m in an area of the Inferred Mineral Resource. Mineralisation in this intercept has developed along the junction between the main shear zone ("STMZ") and the STSZ-02 secondary shear zone, entirely within the tonalite formation.

Mineralisation continues up-dip along the STMZ and is intersected by BNEDD0197 at the mafic-tonalite contact ("MTC"), recording 29m @ 4.18g/t from 346m including 9m @ 8.72g/t from 354m and 2m @ 7.04g/t from 369m. This hole consolidates an area of high-grade mineralisation, infilling a gap between 37m @ 4.41g/t from 275m in BNEDD0154<sup>3</sup> and 35.7m @ 6.08g/t from 397.3m in BNERD0093.<sup>4</sup>

Assays from additional holes on this section are pending, which will further infill the drilling pattern towards the bottom of and below the resource pit shell.

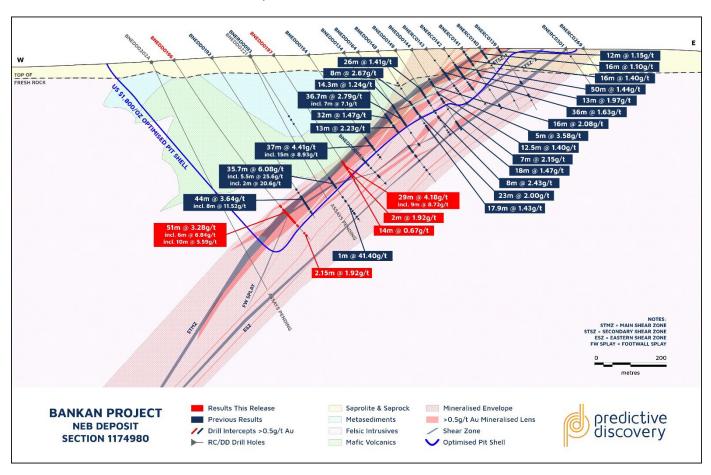


Figure 3: Section 1174980N (+20mN/- 20mS)

<sup>&</sup>lt;sup>3</sup> ASX Announcement – Outstanding Infill Drilling Results Continue (30 January 2023).

<sup>&</sup>lt;sup>4</sup> ASX Announcement – NE Bankan High-Grade Gold Zone Reinforced and Extended (19 October 2021).



This section hosts an outstanding intercept in BNEDD195 of 29m @ 5.20g/t from 412m including 6m @ 15.20g/t from 420m. This intercept occurs where the STMZ and STSZ-02 are in close proximity, resulting in a high intensity of deformation of the surrounding rocks and high-grade mineralisation. The intercept is in an area of Inferred Mineral Resource, infilling a gap between 27.6m @ 5.24g/t from 389.4m in BNERD0115<sup>5</sup> and 24.2m @ 8.79g/t from 463.8m in BNERD0097.<sup>6</sup>

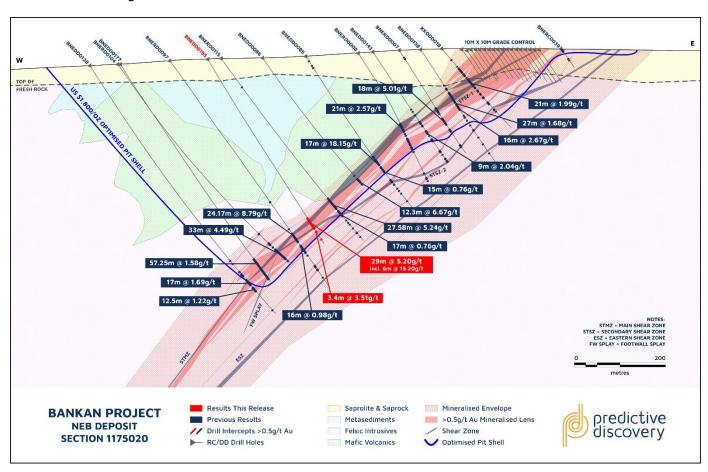


Figure 4: Section 1175020N (+20mN/- 20mS)

<sup>&</sup>lt;sup>5</sup> ASX Announcement – Deepest Hole to Date Intercepts Gold 630m Down Dip (15 June 2022).

<sup>&</sup>lt;sup>6</sup> ASX Announcement – High-Grade Gold Zone Extended Below Resource Pit Shell (3 November 2021).



The southern-most section presented shows BNEDD0191, which hosts 50m @ 3.79g/t from 530m including 5m @ 11.01g/t from 534m and 11m @ 7.12g/t from 543m. This intercept develops at the junction of the STMZ and the footwall splay ("FW Splay"), which likely contributes to the strength of mineralisation and grade. This hole is in an area of Inferred Mineral Resource and infills the gap between BNERD0101 and BNERD0100.

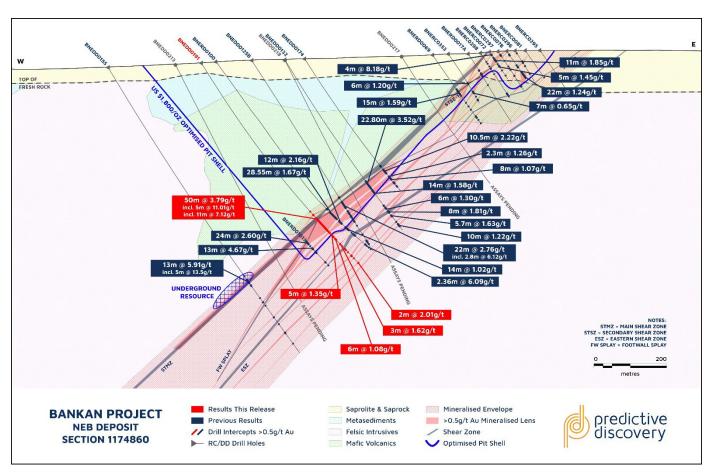


Figure 5: Section 1174860N (+20mN/- 20mS)



This section hosts two holes in the middle part of the resource pit shell, where the Mineral Resource is classified as Inferred. BNEDD199A hosts a number of significant intercepts, with 13m @ 2.68g/t from 306m including 3m @ 6.50g/t from 313m, and 22m @ 2.24g/t from 335m including 2.1m @ 11.17g/t from 350m adjacent and hosted on the STMZ. Further down the hole, 4m @ 8.54g/t from 376m was recorded that sits outside of the current resource pit shell.

Up-dip, BNEDD198A hosts 8.2m @ 1.22g/t from 249m where the STMZ crosses into the more competent basalt, where mineralisation is typically of lower grade. Significant intercepts are also recorded further down the hole, including 8.5m @ 1.46g/t from 276.5m, 5.5m @ 2.57g/t from 326.5m and 7m @ 1.17g/t from 354m.

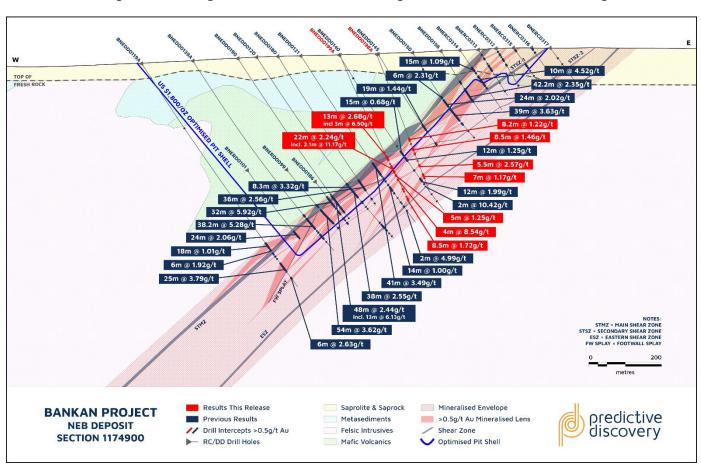


Figure 6: Section 1174900N (+20mN/- 20mS)



#### **BC UPDATE**

A seven-hole drilling program was completed at BC in late 2022. Following a priority on assaying NEB holes for the February 2023 Mineral Resource update, the majority of BC holes from this program have now been sent for assaying, with samples for remaining holes currently being prepared for assaying.

Re-logging of all historical BC holes has been completed to refine the geological model for the deposit. Geological understanding has improved significantly, which will assist with future drilling targeting to upgrade the Mineral Resource from Inferred to Indicated and target extensions to the mineralisation. The next phase of drilling at BC will be planned following finalisation of the updated geological model and receipt all outstanding assay results.

- END -

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

For further information visit our website at www.predictivediscovery.com or contact:

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#### **ABOUT PREDICTIVE DISCOVERY**

PDI's strategy is to identify and develop gold deposits within the Siguiri Basin, Guinea. The Company's key asset is the Tier-1 Bankan Gold Project. A Mineral Resource of 4.2Moz has been defined to date at the NEB (3.85Moz) and BC (331Koz) deposits,<sup>7</sup> making Bankan the largest gold discovery in West Africa in a decade.

PDI's focused on sustainably developing Bankan into a Tier-1 gold mine. The Company is aiming to further increase the size and improve the classification of the current Mineral Resource, and complete a Scoping Study and ESG workstreams by late 2023 as crucial steps towards securing a mining permit for the Project.

The Bankan Project is highly prospective for additional discoveries. PDI is also exploring targets near the NEB and BC deposits, and regionally to the north along the 35km gold super structure which runs through the permits.

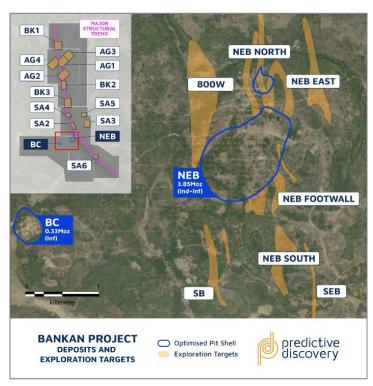


Figure 7: Bankan Project deposits and targets

# **COMPETENT PERSONS STATEMENT**

The exploration results reported herein are based on information compiled by Mr Franck Bizouerne, who is a member of the European Federation of Geologists. Mr Bizouerne 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 Bizouerne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## **COMPLIANCE STATEMENT**

The information in this announcement that relates to the previous mineral resource estimate is from the announcement titled "45% Of NEB'S 3.85Moz Mineral Resource Upgraded to Indicated" dated 6 February 2023. The estimate is summarised in the table below.

 $<sup>^{\</sup>rm 7}$  Refer to Compliance Statement at the end of this announcement.



Deposit	Classification	Cut-off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Contained (Koz Au)
	Indicated	0.5	42.7	1.27	1,747
NEB Open Pit	Inferred	0.5	24.7	2.23	1,768
	Total		67.4	1.62	3,515
NEB Underground	Inferred	2.0	2.2	4.75	335
NEB Total			69.6	1.72	3,850
BC Open Pit	Inferred	0.5	7.2	1.43	331
Total Bankan Project			76.8	1.69	4,181

The information in this announcement that relates to the previous exploration results have been cross referenced to the original announcement or are from announcements listed in the table below.

Date	Announcement	Date	Announcement
21 February 2023	High-Grade Intercepts Extends Underground Mineralisation	06 May 2021	NE Bankan Central Gold Zone Extending to South at Depth
06 February 2023	45% Of NEB'S 3.85Moz Mineral Resource Upgraded to Indicated	28 April 2021	Bankan Aeromag Many New Drill Targets Along 35km Structure
30 January 2023	Outstanding Infill Drilling Results Continue	15 April 2021	NE Bankan Gold Mineralisation Substantially Extends at Depth
30 November 2022	Promising Near-Resource Drilling and Geophysics Results	31 March 2021	NE Bankan Grows To 300m Wide. High Grade Gold from Surface
10 November 2022	Positive Infill Drill Results & Grade Control Program Complete	15 March 2021	Exceptionally High Grades, Thick Intercepts from NE Bankan
29 September 2022	High Grade Gold 200m Below NE Bankans 3.9Moz Resource	05 March 2021	Substantial Oxide Gold Zone Emerging at NE Bankan Project
25 August 2022	Impressive Gold Hits Continue At 4.2Moz Bankan Gold Resource	25 February 2021	More Depth Extensions from Drilling Bankan Gold Discoveries
01 August 2022	4.2Moz Bankan Gold Resource	11 February 2021	High Grade Drill Results Extend Bankan Ck Discovery to North
15 June 2022	Deepest Hole to Date Intercepts Gold 630m Down Dip	28 January 2021	Outstanding, Wide Gold Intercept Grows Bankan at Depth
19 May 2022	60,000m Drill Program Underway at Bankan & Key Appointments	22 January 2021	Bankan Gold Project Drilling Accelerated
27 April 2022	41.5m @ 5.2g/t Au Intersected at NE Bankan	27 November 2020	Exploration Update - Bankan Gold Project, Guinea
02 February 2022	Multi-Deposit Potential Grows with Strong Results	20 October 2020	Exploration Update - Bankan-2 Gold Drilling Underway
13 January 2022	33m @ 4.5 g/t Au at NE Bankan, Guinea	13 October 2020	92m at 1.9g/t Gold - Diamond Drilling Expands Bankan Project
16 December 2021	Bankan Project Grows with New Gold Discoveries	25 September 2020	NE Bankan Gold Deposit Grows with More Strong Drill Results
09 December 2021	Predictive Intersects 34m @ 5.5 g/t Au at NE Bankan	10 September 2020	55m at 2.94g/t Gold-Broad True Widths Confirmed At Bankan
22 November 2021	Further Depth Extension to Bankan High-Grade Gold	03 September 2020	NE Bankan Now 1.6km Long with Possible Parallel Gold Zone
03 November 2021	High-Grade Gold Zone Extended Below Resource Pit Shell	27 August 2020	Bankan Creek Gold Zone Further Expanded
28 October 2021	AC Drilling Identifies New Gold Prospects at Bankan	19 August 2020	Strong Wide Gold Intercepts from Bankan Creek and NE Bankan
19 October 2021	NE Bankan High-Grade Gold Zone Reinforced and Extended	07 August 2020	Outstanding High-Grade Gold Results from NE Bankan, Guinea
30 September 2021	3.65 Million-Ounce Bankan Maiden Mineral Resource Estimate	31 July 2020	Diamond Drilling Confirms Gold at Depth at NE Bankan, Guinea
23 September 2021	28m @ 12.1g/t Gold 1.5 Km from NE Bankan	17 July 2020	Impressive 1st RC Drill Results Grow NE Bankan Discovery
16 September 2021	High-Grade Gold Zone Confirmed Up To 400m Vertical Depth	30 June 2020	NE Bankan Discovery Guinea Extended 30% To 1.3km In Length
24 August 2021	Strong Widths and Grades from Bankan Creek Resource Drilling	27 May 2020	Kaninko Auger Results Double Gold-Mineralised Strike Length
02 August 2021	More Broad Widths and High-Grades from Bankan Drilling	07 May 2020	Drilling Update - Kaninko Project, Guinea
19 July 2021	Bonanza Gold Grades as High-Grade Zone Is Revealed at Bankan	30 April 2020	Final Drill Results, Bankan Creek, Kaninko Project, Guinea
01 July 2021	44m @ 8g/t Gold, Highest Impact Gold Intercept at Bankan	27 April 2020	44m at 2.06g/t Gold from Bankan Creek, Kaninko, Guinea
17 June 2021	Broad Gold Intercepts from Bankan Creek and NE Bankan	15 April 2020	Outstanding Drill Results from New Gold Discovery in Guinea
03 June 2021	NE Bankan Extends to Depth with Strong Gold Grades	07 April 2020	Guinea Ground Acquired Near Plus-2 Million Oz Gold Deposits
31 May 2021	6m at 32g/t Gold from First Drilling at Koundian, Guinea	19 March 2020	High-Grades-Broad Widths from Guinea Auger-Trenching Program
13 May 2021	Widespread & High-Grade Gold from Bankan Regional Auger	26 February 2020	Up To 8g/t Gold from Power Auger Drilling in Guinea

PDI advises that it is not aware of any new information or data that materially affects the previous exploration results or mineral resource estimate contained in this announcement and all material assumptions and technical parameters underpinning the mineral resource estimate continue to apply and have not materially changed.



# **APPENDIX 1: DIAMOND DRILLING RESULTS**

			LITRA 20N	DI.			U.d.	0.5g/t gold cut-off			
Hole No.	Prospect	UTM 29N East	UTM 29N North	RL (GPS)	Hole azimuth	Hole dip	Hole depth	From	Interval (est true widths)	Au g/t	GM
BNEDD0181 NEB	396,430	30 1,175,301	411	87.0	-57.4	7.4 388	81.1	1	0.57	1	
								206	1	0.84	1
								262	4	0.76	3
								297	1	1.09	1
								301	4	0.65	3
								309	3	1.24	4
								315	2	1.26	3
								356	1	1.03	1
								360	3.45	0.94	3
								371	1	1.03	1
BNEDD0191	NEB	396,011	1,174,860	397	88.5	-58.2	702	506	1	0.68	1
								518	3	0.68	2
								530	50	3.79	190
								583	4	0.79	3
								591	5	1.35	7
								599	4	0.82	3
								607	6	1.08	7
								627	3	1.62	5
								635	1	0.61	1
								645	3	0.72	2
								651	1	0.58	1
								659	1	0.62	1
								671	4	0.98	4
								682	1	0.56	1
								699	2	2.01	4
BNEDD0194A	NEB	396,519	96,519 1,175,421 410	410	86.9	-71.8	330	213.3	2.7	0.67	2
	LDD0194A NEB	220,213			00.5			219	1	0.61	1
							238	1	1.60	2	
								241.6	1.4	0.60	1
								249	4	0.52	2
								271	3	0.77	2
								276.7	5.3	0.91	5
								287	2	1.08	2
								292	1	0.64	1
								297	4	0.87	4
BNEDD0195	NEB	396,219	1,175,015	408	87.8	-58.7	479	412	29	5.20	151
BINEDDO 195	NED	390,219	1,175,015	400	07.0	-30.7	4/3	447	3.4	3.51	12
								468	1	0.87	1
BNEDD0196	NED	306 044	1 174 070	399	97.0	-55.9	621		2.7		5
DIVEDDO 130	NEB	396,044	1,174,979	399	87.9	-55.9	021	495.3		1.70	
								501	1	1.60	2
								509	51	3.28	167
								567	1	0.54	1
								570.8	1.2	0.88	11
								596	2.15	1.92	4
DNIEDD0407	NES	206 222	4 474 070	444	07.0	FC -	420	604	3.7	0.70	3
BNEDD0197	NEB	396,320	1,174,978	411	87.9	-56.5	430	346	29	4.18	121
								379	2	1.92	4
								386	14	0.67	9
DAIFDD04004	NES	300 500	4 474 000	44-	04.3	<b>CC</b> 2	402	406	1	3.88	4
BNEDD0198A	NEB	396,508	1,174,899	415	91.3	-68.3	403	249	8.2	1.22	10
								265	1	0.99	1
								276.5	8.5	1.46	12
								292	4.7	0.73	3
								315	1	0.99	1
								326.5	5.5	2.57	14
								354	7	1.17	8
								365	3	0.67	2
							381	1	0.65	1	



			UTM 29N RL North (GPS)						0.5g/t gold c	ut-off	
Hole No.	Prospect			Hole azimuth	Hole dip	Hole depth	From	Interval (est true widths)	Au g/t	GM	
BNEDD0199A	NEB	396,408	1,174,900	412	88.1	-67.1	470	294	1	1.30	1
								306	13	2.68	35
								329	1	0.97	1
								335	22	2.24	49
								362	5	1.25	6
								376	4	8.54	34
								405	3	0.71	2
								412	2.6	0.53	1
								428.5	1	0.55	1
								433.5	8.5	1.72	15
								463	1	2.80	3
BNEDD0200A	NEB	396,519	1,174,941	418	88.9	-57.1	330	225	24	1.85	44
								252	1	4.78	5
								260	5	0.60	3
								280	1	0.53	11
								287	1	0.61	1
								302.3	15.7	0.85	13

# **APPENDIX 2: JORC CODE - DIAMOND DRILLING**

Section 1: Sampling Techniques and Data					
Criteria	JORC Code Explanation	Commentary			
Sampling Technique	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling  Include reference to measures taken to ensure sample representivity and the appropriate 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.	Samples assayed were cut diamond drill ("DD").  Core was cut in half with a core saw where competent and with a knife in soft saprolite in the upper sections of the DD holes.  Sampling was supervised by qualified geologists. The majority of samples are 1m downhole, with diamond core sampling intervals breaking at lithological contacts where appropriate.  Samples were dried, crushed and pulverised at the SGS laboratory in Bamako to produce a 50g fire assay charge.			
Drilling	Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	Drill holes included in this announcement were from DD rigs (EDM 2000 MP, Comacchio CXT15 MP and UDR 200DLS rigs).  Diamond drilling was a combination of PQ, HQ and NQ core.  Core was oriented using WELLFORCE orientation tools.			



Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative patters of the samples.	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.
	representative nature of the samples.  Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between sample recovery and grade has been analysed.
Logging	Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography.  The total length and percentage of the relevant intersections logged.	All drill samples were logged systematically for lithology, weathering, alteration, veining, structure and minor minerals. Minor minerals were estimated quantitively. 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.  Photographs have been taken of each core tray.  A WELLFORCE core orientation device was employed on all drilled core enabling orientated structural measurements to be taken.  The Competent Person considers that the level of detail is sufficient for the reporting of Mineral Resources.
Sub-Sampling Technique and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled.	The DD samples were collected by longitudinally splitting core using a core saw or a knife where core was very soft and clayey. Routine samples were half-core, with predetermined diamond core duplicates being quarter-core. The sampling method is considered adequate for a DD program of this type.  Field duplicate results demonstrated no bias in the sample results.  There is 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.  Sample sizes are considered to be appropriate to the grain size of the material being sampled.
Quality of Assay Data and Laboratory Tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	All samples were assayed by SGS technique FAA505 for gold with a detection limit of 5ppb Au. All samples with gold values exceeding 10g/t Au were re-assayed using SGS method FAA515 with a detection limit of 0.01g/t Au.  Field duplicates, standards and blank samples were each submitted for every 15 samples on a rotating basis.  Diamond core duplicates were obtained by cutting the half core sample into two quarter core samples. As samples are not homogenised, some variation is expected.  Duplicate and standards analysed were all within acceptable limits of expected values.  Analysis of this QAQC data demonstrated that the data is of acceptable quality to be used for Mineral Resource estimation.



Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.  The verification of significant intersections by either independent or alternative company personnel.  Discuss any adjustment to assay data.	At this stage, the intersections have not been verified independently.  A number of DD holes have been completed sufficiently close to previously drilled holes to provide confirmation of the location of mineralisation.  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.  No adjustments or corrections have been made to any assay interval data. All intercepts are reported as drilled
Location of Data points	Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic control.	All surface drill hole survey information is collected in-house using a Leica 18T RTK DGPS system. The project survey grid is tied to the West African GEOID Datum and WGS84 Zone 29N projection.  All DD and RC holes have been surveyed by using north-seeking WELLFORCE CHAMP gyro.
Data Spacing and Distribution	Data spacing for reporting of Exploration Results.  Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.	The deposit has largely been drilled on an 80m x 80m drill spacing which supports an Inferred Mineral Resource estimate, and is being progressively infilled to an 80m x 40m which supports an Indicated Mineral Resource estimate.  A detailed 10m x 10m angled RC grade control program has been completed through a 100m section of the surface core mineralised shoot.
Orientation of Data in Relation to Geological Structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Most of the drilling at NEB is orientated at as close as possible orthogonal to the dip and strike of the mineralisation i.e55o.  Early drilling programs were oriented to the west. When it was recognised that the mineralisation dips west, the drilling orientation was switched to east and most areas were re-drilled. An analysis of the data from east and west dipping holes showed:  • The mean and median of the west dipping holes are higher than east dipping in the saprolite;  • In the saprolite, the composites in the west dipping holes are more variable;  • The west dipping holes in the saprolite have a larger population > 2g/t;  • The mean and median of the west dipping holes are lower than east dipping in the fresh;  • In the saprolite, the composites in the west dipping holes are less variable.  The west dipping data was filtered from the composite dataset before further processing, except for the laterite domain.
Sample Security	The measures taken to ensure sample security.	Core trays and RC chips are stored in a guarded location close to the nearby Bankan Village. Coarse rejects and pulps will be eventually recovered from SGS in Bamako and stored at PDI's field office in Kouroussa.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	CSA have reviewed the sampling techniques and chain of custody procedures at the project.



# **Section 2 Reporting of Exploration Results**

#### Mineral Tenement and Land Tenure Status

Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.

The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.

The Bankan Gold Project consists of four *Permis de Recherce Industrielle* (*Or*) as follows:

Permit Name	Area (km²)	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

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.

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 Argo permit expiry date has passed, however PDI has submitted renewal documents that have been registered by the Ministry and are in process.

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.

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 the permitting process for the Project.

# Exploration Done by Other Parties

Acknowledgment and appraisal of exploration by other parties.

PDI is not aware of any significant previous gold exploration over the permit. Artisanal miners have extracted an unknown quantity of gold from shallow hand dug pits and shafts, with panning and loaming used to identify mineralized areas.

### Geology

Deposit type, geological setting and style of mineralisation.

The Bankan deposits are hosted in Paleoproterozoic rocks of the Birimian Supergroup in the Siguiri Basin, which is host to several significant large active gold mining operations.

The predominant rock types consist of felsic intrusives including granite and tonalite, with mafic to intermediate volcanics and intrusives. Metasediments including marble, chert and schists have also been observed.

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.

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 hanging-wall of a tonalitic felsic intrusive, which has intruded a mafic and sedimentary greenstone sequence.

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 shoot has been identified by three drillholes and is the target of current extensional drilling.
Drill Hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  • easting and northing of the drill hole collar  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	See Appendix 1.
Data Aggregation Methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	DD sampling was generally in 1m intervals.  Up to 2m (down-hole) of internal waste is included for results reported at the 0.5g/t Au cut-off grade.
	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.	Mineralised intervals are reported on a weighted average basis.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship Between Mineralisation Widths and Intercept Lengths	These relationships are particularly important in the reporting of Exploration Results  If the geometry of the mineralisation with respect to the drill	The drilling targets the west dipping mineralised NEB shoot orthogonally, typically at a dip of -550 and drill pattern of 40m sections and 80m spaced holes.
	hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Intercepts are as close to true width as physically possible.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate maps and sections are included in this release.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Comprehensive reporting of the drill results is provided in Appendix 1.
Other Substantive Exploration Data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All other exploration data on this area has been reported previously by PDI.
Further Work	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling.  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	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.