

ASX Announcement

29 January 2024

QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 31 DECEMBER 2023

Predictive Discovery Limited (ASX:PDI) ("PDI" or the "Company") is pleased to provide a summary of activities undertaken during the quarter ending 31 December 2023, with continued progress at the Tier-1 Bankan Gold Project in Guinea, West Africa. The principal workstreams included regional and near-resource exploration campaigns (19,376m drilled from 207 holes), further resource definition drilling at NEB and BC (2,466m drilled from 6 holes), and progressing the Pre-Feasibility Study ("PFS") and the Environmental & Social Impact Assessment ("ESIA"), both due to be completed in the quarter ending 31 March 2024.

HIGHLIGHTS

Regional Exploration (Argo)

- Positive results at multiple target areas from the 86 holes for 7,810m of reverse circulation ("RC") and aircore ("AC") drilling announced during the quarter. Best results included:
 - Fouwagbe: follow-up RC and AC drilling extended mineralisation at depth and along strike of the initial discovery hole of 12m @ 6.75g/t from 41m.¹ Best results included 4m @ 4.81g/t from 90m (down-dip), 4m @ 12.14g/t from 6m (along strike north-east), 4m @ 3.96g/t from 30m, 6m @ 1.56g/t from 12m and 3m @ 2.62g/t from 6m (along strike south-west).^{2,3}
 - Sinkoumba: promising initial AC drilling results of 4m @ 6.87g/t from 18m and 2m @ 10.90g/t from 54m, located south-west of Fouwagbe in the same anomalous corridor.³
 - Naladioulou-Gbata: Naladioulou RC hole intercepts 3m @ 1.45g/t from 6m, 9m @ 4.42g/t from 60m and 6m @ 0.90g/t from 96m. 1m @ 30.40g/t from 56m recorded at Gbata, 700m south-west on the same trend.²

Near-Resource Exploration

- Results announced for 121 holes for 11,566m of RC and diamond ("DD") drilling at seven targets.
- Majority of drilling at the SB and SEB targets, which are showing potential to become satellite deposits which can support an operation centred around the NEB and BC deposits.
 - SB: Best intercepts of 3m @ 13.40g/t from 30m, 9m @ 3.30g/t from 72m, 10m @ 1.84g/t from 35m and 6.75m @ 1.96g/t from 78.3m.^{2,3}
 - SEB: Best holes recorded 3m @ 27.66g/t from 11m, 2m @ 3.96g/t from 34m and 1m @ 12.80g/t from 48m, 2m @ 3.84g/t from 5m and 4m @ 2.47g/t from 49m, and 3m @ 4.68g/t from 59m.^{2,3}

¹ ASX Announcement – Encouraging Initial Argo RC Results (29 August 2023).

 ² ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).
 ³ ASX Announcement – Drilling at Bankan Delivers More Positive Results (11 December 2023).



Other targets produced best results of 16m @ 1.58g/t from 5m (BC East), 3m @ 5.84g/t from 19m (NEB South), 7m @ 1.40g/t from 51m and 2m @ 4.41g/t from 65m (NEB North) and 5m @ 2.35g/t from 5m (800W). 4,5

NEB & BC Resource Definition Drilling

- Final results from the current phase of resource definition drilling at the NEB and BC deposits received during the quarter, comprising 6 DD holes for 2,466m.
- BC drilling recorded multiple significant intercepts within or on the margins of the current Mineral Resource envelope. Best results from four holes included 15.6m @ 1.25g/t from 9m, 18.9m @ 1.43g/t from 53.1m, 9m @ 1.81g/t from 68m, 10m @ 1.55g/t from 81m and 13m @ 1.21g/t from 13m.4
- Two holes drilled at NEB near the margins of the current Underground Mineral Resource returned best intercepts of 14.4m @ 1.68g/t from 741.9m and 1.4m @ 11.97g/t from 912.8m.⁴

- PFS for the NEB and BC deposits was significantly progressed during the December 2023 quarter and remains on track to be completed during the March 2024 quarter.
- Completion of the PFS and the ESIA (refer below) are key milestones for the Company and will support the permitting process for the Project.

Sustainability

- Critical habitat assessment and complementary chimpanzee survey completed. All environmental and social studies required for the ESIA nearing completion.
- Results from baseline monitoring to date received and incorporated into the ESIA.
- ESIA nearing completion final report drafting, internal review and translation into French underway.
- Continued collaboration with Upper Niger National Park officials on biodiversity studies. Participated in a workshop during the guarter to update the National Chimpanzee Conservation Plan of Guinea.
- Ongoing Government and community engagement regarding the Project and sustainability studies and initiatives.
- Launched the Bankan School Canteen project and supported the appointment of an additional teacher at the Bankan School. Completed formal handover of three water wells to the community.

Corporate

PDI had \$25.5m in cash and no debt as at 31 December 2023.

ASX Announcement - Promising Results from Across the Bankan Gold Project (24 October 2023). ⁵ ASX Announcement - Drilling at Bankan Delivers More Positive Results (11 December 2023).



March 2024 Quarter Planned Activities

- Complete the Bankan Gold Project's PFS and ESIA.
- Additional near-resource exploration drilling, with a focus on further defining the SB and SEB targets.
- Commence diamond drilling at Argo, initially at high priority targets Fouwagbe, Sounsoun, Sinkoumba and Tindini to refine the geological and structural understanding of the prospects.
- Continue AC drilling at Argo to test the broader potential of high priority targets and test new auger anomalies and prospective areas.
- Drilling at the Bankan Project had been temporarily paused due to fuel shortages in Guinea following a fire at the main fuel storage facility in mid-December. Drilling has recently resumed with all rigs targeted to be fully operational by the end of January.
- Further develop the pipeline of regional exploration targets on the Argo and Bokoro permits, and near-resource targets on the Kaninko and Saman permits.

Commenting on PDI's activities during the quarter, Managing Director Andrew Pardey said:

"Strong progress was achieved during the quarter at the Bankan Gold Project in all our development and exploration workstreams. Importantly, the PFS and ESIA advanced significantly and are on track to be completed during the March 2024 quarter. Completion of these studies will be a landmark milestone and will kick start the formal process for PDI to apply for an Exploitation Permit, which we aim to secure during mid-2024."

"We continue to have success with exploration programs across Bankan's highly prospective permit package. We are delighted with results coming from the Argo area, particularly at Fouwagbe where promising intercepts were received both close to the initial discovery hole and further south-west at the Sinkoumba target. Extensive drilling is ongoing at Argo to continue following up on the best results received so far and test other targets."

"Similarly, results from near-resource exploration were positive. With prior drilling success at 800W and further strong results from SB and SEB during the quarter, we now have three target areas that show potential to become future satellite deposits. We are also encouraged by initial results from several other target areas."

"We are entering a very exciting period for PDI and I look forward to providing further updates as we progress the Bankan Gold Project towards becoming West Africa's next Tier-1 gold mine."

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

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REGIONAL EXPLORATION (ARGO)

PDI's regional exploration is currently focused on the Argo area, located 15-20km north of NEB along the major gold structural corridor, and is highly prospective for additional gold discoveries.

During the quarter, PDI completed its initial RC drilling program, announcing the final 26 holes of the 49hole program. Based on the positive results received, PDI commenced a new RC and AC drilling program to follow up on best results from the initial program and test additional targets.

In total, results from 86 holes for 7,810m were announced during the quarter from the Fouwagbe, Sinkoumba, Naladioulou-Gbata, Sounsoun, Tindini, Sanifolon and Bassa targets.

Table 1: December 2023 regional exploration drilling results

Location	Drill type	Holes	Metres
Argo	RC	28	4,235
Argo	AC	58	3,575
Total		86	7,810

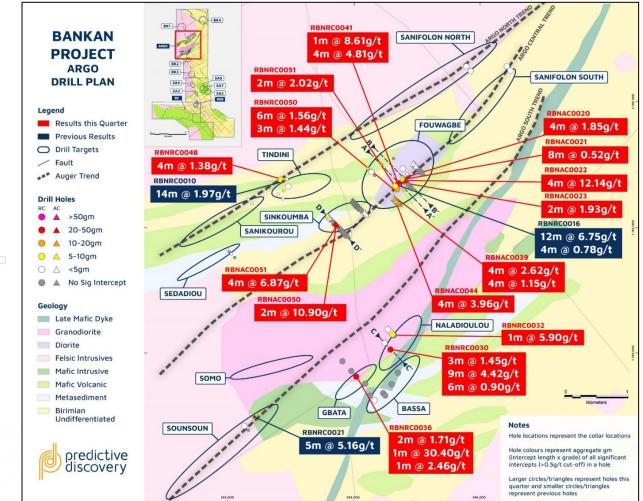


Figure 1: Argo drilling results



Fouwagbe⁶

Previously reported drilling at a 600m long Au-As-Mo-Bi auger anomaly in the southern part of Fouwagbe returned an excellent intercept of 12m @ 6.75g/t from 41m⁷ in an interpreted north-west dipping mineralised structure.

As part of the initial RC program, RBNRC0041 was drilled ~50m to the north-west of RBNRC0016 to test the mineralised structure at depth. Significant intercepts of 1m @ 8.61g/t from 67m and 4m @ 4.81g/t from 90m were recorded, with the latter interpreted as the down-dip extension of the mineralisation intersected in RBNRC0016.

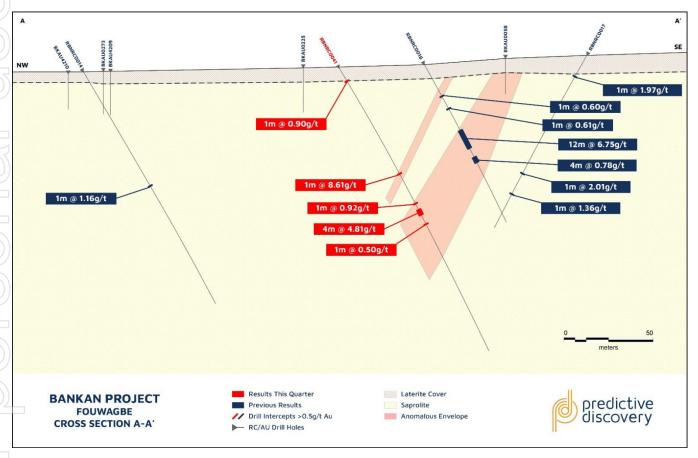


Figure 2: Fouwagbe cross section A-A'

Fouwagbe is one of the highest priority targets from the initial RC program, and follow-up drilling at Fouwagbe during the quarter included two RC holes and three lines of AC holes.

The central line of AC holes was located 100m north-east of the RBNRC0016 discovery hole. Drilling encountered two mineralised structures in saprolite, recording intercepts of 4m @ 1.85g/t from 20m and 8m @ 0.52g/t from 34m. A strong intercept of 4m @ 12.14g/t from 6m was recorded close to surface in laterite, up-dip of one of the structures, suggesting the mineralisation is at least partly in-situ.

⁶ ASX Announcement – Drilling at Bankan Delivers More Positive Results (11 December 2023).

⁷ ASX Announcement – Encouraging Initial Argo RC Results (29 August 2023).



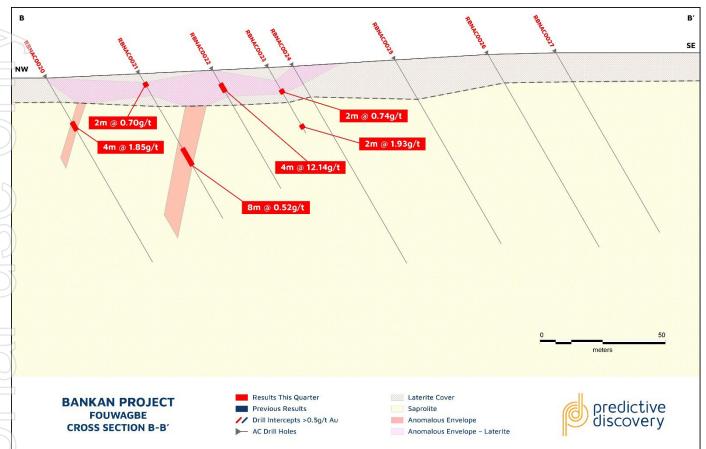


Figure 3: Fouwagbe cross section B-B'

Two RC holes were drilled 80m south-west of RBNRC0016. Shallow intercepts of 6m @ 1.56 g/t from 12m and 3m @ 1.44 g/t from 28m were recorded in RBNRC050. At depth, RBNRC051 returned a best intercept of 2m @ 2.02 g/t from 126m.

The southern line of AC holes is located a further 120m south-west and intersected what is currently interpreted as six sub-parallel structures. Best results included 4m @ 3.96g/t from 30m, 4m @ 2.62g/t from 6m and 4m @ 1.15g/t from 30m.

The northern line of AC holes is located 400m north-east of RBNRC0016. These holes couldn't directly target the multi-element auger anomaly due to the extensive artisanal workings in the area. Two significant intercepts were returned: 2m @ 0.62g/t from 20m and 2m @ 0.58g/t from 86m.

The laterite plateau of Fouwagbe is locally the target for artisanal miners and exhibits typical mechanical and chemical remobilisation of the gold in the laterite zone. Drilling to-date suggest the source of this mineralisation is in the saprolite zone below and along strike.



Sinkoumba⁸

The Sinkoumba target is located to the south-west of Fouwagbe in the same anomalous corridor. Two lines of AC holes were drilled during the quarter and a third line is planned to be drilled during the dry season.

The south-western line intersected multiple mineralised zones. The best intercepts of 4m @ 6.87g/t from 18m and 2m @ 10.90g/t from 54m appear to be part of the same north-west dipping anomalous zone.

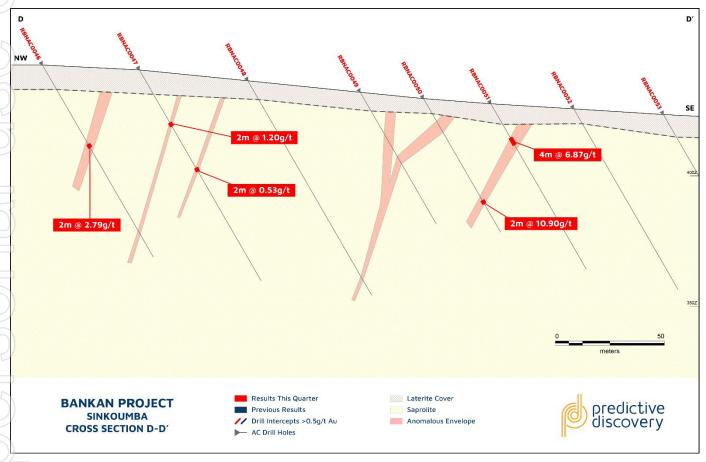


Figure 4: Sinkoumba cross section D-D'

The north-eastern line returned two significant intercepts at the south-eastern end of the line near the edge of the plateau: 4m @ 1.22g/t from 8m in RBNAC0017 and 2m @ 0.65g/t from 52m in RBNAC0019.



Naladioulou-Gbata⁹

Results from 10 RC holes drilled at the Naladioulou and Gbata targets were released during the quarter.

At Naladioulou, the best results were encountered in RBNRC030, which tested an auger anomaly. Significant intercepts included 3m @ 1.45g/t from 6m, 9m @ 4.42g/t from 60m and 6m @ 0.90g/t from 96m.

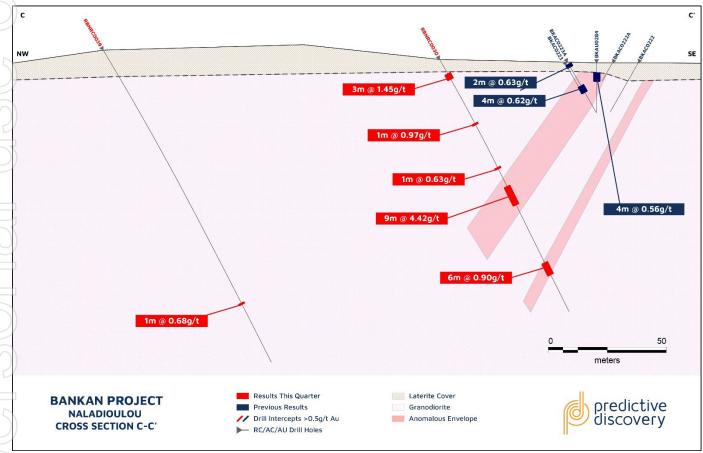


Figure 5: Naladioulou cross section C-C'

Approximately 700m along strike to the south-west, the Gbata target is centred on an active artisanal mining site. Significant intercepts were returned in the shallower part of hole RBNRC036, including 2m @ 1.71g/t from 40m and 1m @ 30.40g/t from 56m.

Sounsoun⁹

Previous drilling delivered best results of 5m @ 5.16g/t from 129m and 9m @ 1.04g/t from 61m at the northeastern end of a 1.2km auger anomaly.¹⁰ One additional RC hole was announced during the quarter, returning intercepts of 1m @ 4.38g/t from 54m and 1m @ 0.99g/t from 58m associated with silica alteration, approximately 300m south-west of the previous results.

⁹ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).
 ¹⁰ ASX Announcement – Encouraging Initial Argo RC Results (29 August 2023).



Tindini¹¹

Two RC holes were drilled to follow-up a previous strong intercept of 14m @ 1.97g/t from 65m.¹² RBNRC0048 was drilled ~40m to the north-west to test the orientation and depth continuity of the mineralised structure. Intercepts of 2m @ 0.78g/t from 103m and 4m @ 1.38g/t from 141m were encountered, confirming a sub-vertical structure. RBNRC0049 was drilled to the south-east and in the opposite direction, recording 4m @ 0.62g/t from 47m on a possible cross-cutting structure.

Other Argo Targets¹¹

Results were also received from the Sanifolon South, Sanifolon North and Bassa target areas during the quarter. Sanifolon South recorded best intercepts of 4m @ 0.49g/t from 41m and 2m @ 1.13g/t from 81m from two RC holes drilled. Sanifolon North intercepted 1m @ 4.07g/t from 53m and 2m @ 0.83g/t from 20m in two RC holes. 6 RC holes were drilled at Bassa and returned several 1m intercepts with grades of less than 1g/t.

NEAR-RESOURCE EXPLORATION

Multiple exploration targets have been identified close to the NEB and BC deposits from previous auger and aircore drilling, geophysical surveys results and structural interpretation. Drilling programs are being completed to follow-up on the most promising of these near-resource targets, with the aim of discovering additional gold deposits which have potential to support a future operation centred around NEB and BC.

During the quarter, results from 121 holes for 11,566m were announced from the SEB, SB, NEB North, NEB South, BC East, 800W, BC North and Dibon West.

2	Location	Drill type	Holes	Metres
	Near-Resource	DD	14	2,709
5	Near-Resource	RC	107	8,857
\cup	Total		121	11,566

Table 2: December 2023 regional exploration drilling results

The majority of results were from the SB and SEB target areas, which are positioned at the intersection of major structures which host known gold deposits – the broad multi-kilometre N-S deformation zone which hosts the NEB deposit and extends north to the Argo permit, and the WNW-ESE structure that carries the BC deposit. A number of other transverse local structures, which are visible on geophysical surveys, add complexity to the area.

Drilling at SB and SEB has confirmed the existence of mineralised structures intercepted during previous exploration work (mainly AC and auger drilling), some of which extend to depth. These targets are considered highly prospective and are showing potential to become satellite deposits that can support a future operation centred around the NEB and BC deposits. This builds on previous successful drilling at 800W, which also has potential to become a satellite deposit.

¹¹ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).

¹² ASX Announcement – Encouraging Initial Argo RC Results (29 August 2023).



SB^{13,14}

Drilling at SB, which is located approximately 1km south of NEB, indicates the presence of two parallel westdipping zones of mineralisation, lying on the eastern and western edges of the strong resistivity anomaly. Best results announced during the quarter include:

- BNERC0445: 3m @ 13.40g/t from 30m
- BNERC0454: 9m @ 3.30g/t from 72m
- BNEDD0248: 6.75m @ 1.96g/t from 78.3m
 12m @ 0.69g/t from 102m
- BNERC0510: 10m @ 1.84g/t from 35m
- BNERC0449: 2m @ 3.50g/t from 30m 9m @ 0.98g/t from 64m
- BNERC0446: 4m @ 2.68g/t from 12m

Section 1173340N shown below hosts BNEDD0248 and BNERC0449, which encountered mineralisation in bedrock identified as a metasediment formation, along altered slightly deformed fracture zones associated with sulphide-rich quartz vein systems (+/- 2% to 3% pyrite). Mineralisation is also present in saprolite, particularly further to the west where AC holes were previously drilled.

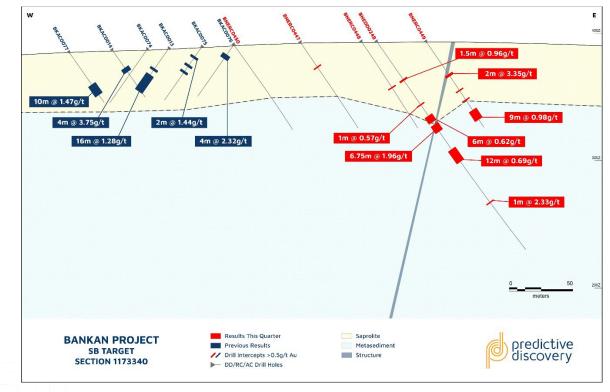


Figure 6: SB cross section

¹³ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).

¹⁴ ASX Announcement – Drilling at Bankan Delivers More Positive Results (11 December 2023).



SEB^{15,16}

The SEB target is located approximately 1km south-east of NEB. Drilling has mainly encountered basalts that display multiple fractures with intense albite, sericite and chlorite alteration with quartz veining and sulphides (+/- 2 to 3% pyrite). Best results announced during the quarter include:

•	BNERC0464:	3m @ 27.66g/t from 11m 3m @ 1.04g/t from 72m
•	BNERC0456:	2m @ 3.96g/t from 34m 1m @ 12.80g/t from 48m
•	BNERC0486:	2m @ 3.84g/t from 5m 4m @ 2.47g/t from 49m
•	BNERC0463:	1m @ 3.42g/t from 15m 3m @ 4.68g/t from 59m
•	BNERC0492:	1m @ 6.36g/t from 20m 4m @ 0.97g/t from 36m 1m @ 8.40g/t from 70m
•	BNERC0472:	5m @ 2.21g/t from 61m
•	BNERC0502:	6m @ 1.52g/t from 24m

NEB North^{15,16}

NEB North is located to the north of the Gbenbeden deposit. Prior drilling has returned positive intercepts at a N-S resistive axis coincident with positive auger and aircore drilling results. BNERC0518 recorded 1m @ 29.80g/t from 99m near this prior drilling, with the hole ending in mineralisation. Other results announced during the quarter were from two lines of RC holes further to the south of the initial drilling, with best intercepts including:

•	BNERC0431A:	7m @ 1.40g/t from 51m
		2m @ 4.41g/t from 65m

• BNERC0435A: 8m @ 0.72g/t from 17m

NEB South¹⁶

Further to the north of the SB and SEB target areas, encouraging results were recorded in a several holes:

- BNEDD0244: 2.86m @ 4.57g/t from 64.64m
- BNERC0484: 3m @ 5.84g/t from 19m

¹⁵ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).

¹⁶ ASX Announcement – Drilling at Bankan Delivers More Positive Results (11 December 2023).



BC East¹⁷

In the southern part of the BC East target area, and along the WNW-ESE-trending structural corridor that hosts the BC deposit, several significant intercepts were recorded in two RC holes:

•	BCERC0003:	16m @ 1.58g/t from 5m
		3m @ 2.07g/t from 68m

• BCERC0004: 7m @ 0.67g/t from 92m

800W^{17,18}

Located 400m north-west of the edge of NEB's resource pit shell, previous drilling at 800W has defined a shallow zone of mineralisation which has potential to become a satellite deposit. Limited drilling during the quarter was to the south of the prospect area, and returned several significant intercepts indicating that the mineralised structures are open to the south:

		4m @ 0.92g/t from 30m
•	BNERC0478:	5m @ 2.35g/t from 5m

• BNERC0480: 3m @ 1.39g/t from 18m

Other Targets¹⁷

Single DD holes drilled during the quarter at BC North and Dibon West returned no significant intercepts.



RESOURCE DEFINITION DRILLING RESULTS

During the quarter, results from a further 6 holes for 2,466m of resource definition drilling at NEB and BC were received. These represented the final results from the current phase of resource definition drilling, with PDI's ongoing programs focused on exploration drilling at Argo and near-resource targets.

Table 3: December 2023 resource definition drilling results

Location	Drill type	Holes	Metres
NEB	DD	2	1,930
BC	DD	4	536
Total		6	2,466

NEB Results¹⁹

NEB results were from two holes drilled near the margins of the current Underground Mineral Resource (refer to Figure 7).

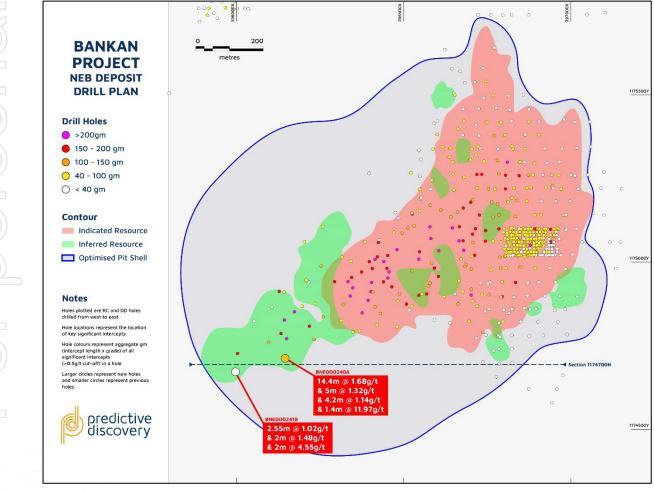


Figure 7: NEB drill plan, showing new DD results

¹⁹ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).



BNEDD0240A intersected 6m @ 0.97g/t from 732m and 14.4m @ 1.68g/t from 741.9m within the Underground Mineral Resource envelope. These intercepts developed at the mafic-tonalite contact ("MTC"), below the main shear zone ("STMZ"). Further down the hole, in footwall tonalite, intercepts of 5m @ 1.32g/t from 784m, 15m @ 0.95g/t from 845m and 1.4m @ 11.97g/t from 912.8m were recorded.

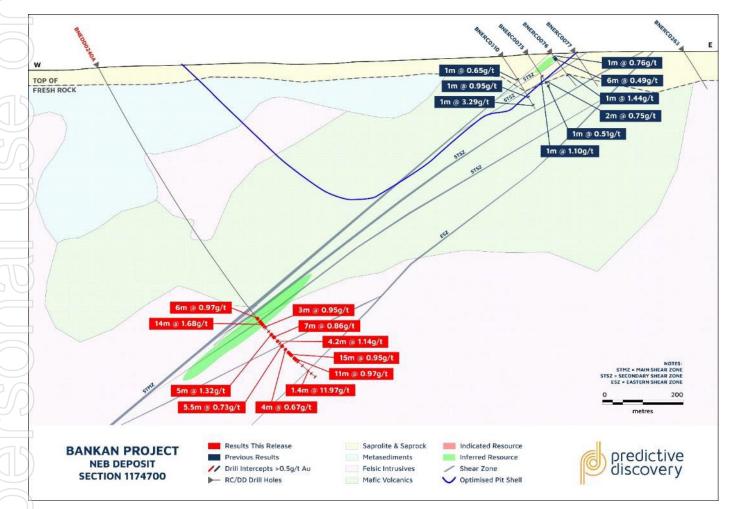


Figure 8: NEB section 1174700N (+20mN/- 20mS)

BNEDD0241B recorded intercepts of 2.55m @ 1.02g/t from 790.45m, 2m @ 1.48g/t from 796, 2m @ 4.55g/t from 845m and 5m @ 0.57g/t from 914m in the footwall tonalite. No significant intercepts were recorded within the current Underground Mineral Resource envelope.



BC Results²⁰

Results from four holes at BC recorded multiple significant intercepts within or on the margins of the current Mineral Resource envelope. Best results included:

- BCKDD0040:
- 15.6m @ 1.25g/t from 9m 18.9m @ 1.43g/t from 53.1m 11m @ 0.79g/t from 76m 9m @ 0.86g/t from 109m
- BCKDD0035: 9m @ 1.81g/t from 68m
 10m @ 1.55g/t from 81m
- BCKDD0039:
- 13m @ 1.21g/t from 13m

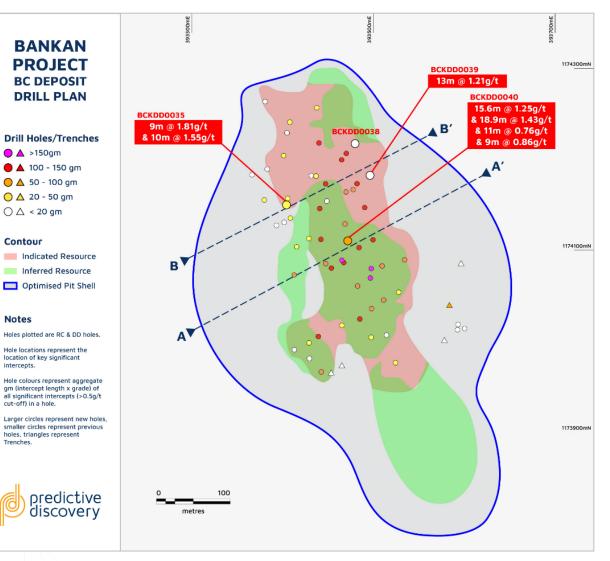
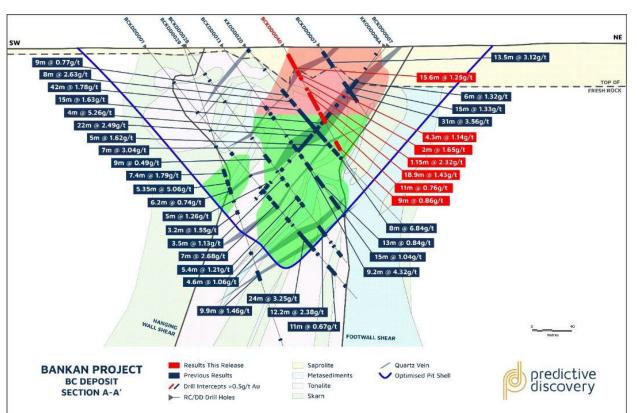


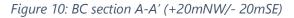
Figure 9: BC drill plan, showing new DD results

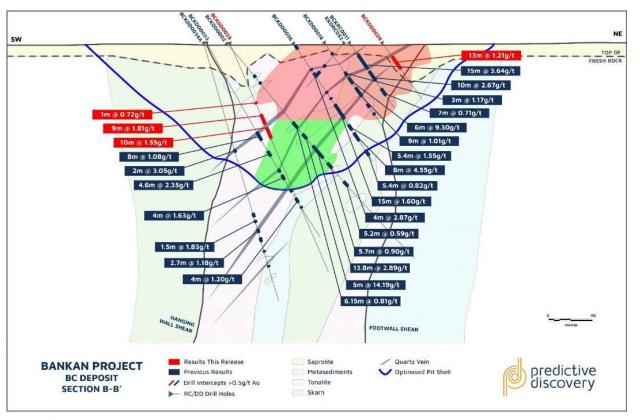
²⁰ ASX Announcement – Promising Results from Across the Bankan Gold Project (24 October 2023).















PFS

The PFS is ongoing for the NEB and BC deposits, which host a combined Mineral Resource of 100.5Mt @ 1.66g/t for 5.38Moz, including 4.14Moz in the Indicated category.²¹

Significant progress was made with the PFS during the December 2023 quarter and it remains on track to be completed during the March 2024 quarter.

The PFS, together with the ESIA, are key documents in the permitting process for the Project, and PDI is aiming to secure an Exploitation Permit in mid-2024.

SUSTAINABILITY

PDI is completing an extensive ESIA and associated sustainability-related studies and workstreams as part of its strategy to sustainably develop the Bankan Gold Project. The ESIA is being coordinated by ERM, a leading global sustainability consultant, with support from in-country specialists Insuco, Biotope and Guinée Ecologie. The ESIA is nearing completion, with final report drafting, internal review and translation into French underway.

ESIA Studies and Monitoring

A number of further ESIA surveys were completed during the quarter. These included the critical habitat assessment and a chimpanzee survey. All environment and social baseline surveys and studies for the ESIA are nearing completion and results are being progressively incorporated into the final ESIA report.

Environmental baseline monitoring was ongoing, covering air quality and dust, surface water and groundwater, noise and vibration monitoring. Results were received during the quarter and incorporated into the ESIA report.

Environmental

PDI continues to collaborate with officials from the Upper Niger National Park on the baseline ecological studies. In November, three park officials participated in the demobilisation of cameras used in the chimpanzee survey.

In December, PDI participated in a two-day workshop to update the National Chimpanzee Conservation Plan of Guinea for the period 2020-2030. The workshop was conducted under the auspices of the Ministry of Environment and Sustainable Development, and included participation from a number of NGOs, other corporates and PDI's environmental consultants Biotope and Guinée Ecologie.

Social & Community

PDI continued regular community engagement during the quarter and has continued to provide temporary compensation for landowners impacted by drilling operations, in line with the prescribed compensation requirements. PDI provided further community education on crop compensation protocols and arrangements.



Community Projects

PDI has specific social programmes dedicated to supporting the community and supporting local education.

During the quarter, PDI launched the Bankan School Canteen Project, which supplies lunch to pupils in coordination with the local education authorities. PDI also supported the appointment of one additional teacher to the Bankan School, and now provides financial support to two local teachers.

The Company also formally handed over three community water wells in December.

Government Engagement

PDI regularly informs the Government of Guinea about the Project's progress and it provided further updates to the Ministry of Environmental and Sustainable Development and the Ministry of Mines and Geology during the quarter. PDI also continued to actively engage with the local government.

CORPORATE

Financial Position

As at 31 December 2023, the Company had \$25.5m in cash with no debt.

Expenditure on Mining Exploration Activities

In accordance with ASX Listing Rule 5.3.1, the Company advises its exploration and evaluation expenditure during the quarter totalled \$9.7m included at item 2.1(d) of the Appendix 5B. This includes \$3.8m for drilling and \$5.9m in associated geology, assaying and other exploration and evaluation costs.

There were no substantive mining production and development activities during the quarter.

Payments to Related Parties and their Associates

In accordance with ASX Listing Rule 5.3.5, payments to related parties of the Company and their associates during the quarter was approximately \$132,000 including GST. The Company advises that this relates to Directors' fees and salaries.

Capital Structure

PDI currently has 2,076,244,088 fully paid ordinary shares on issue and 73,000,000 unlisted options on issue at various exercise prices and expiry dates.

- END -

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



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 5.38Moz has been defined to date at the NEB (4.89Moz) and BC (487Koz) deposits,²² making Bankan the largest gold discovery in West Africa in a decade.

PDI is aiming to sustainably develop Bankan into a Tier-1 gold mine. The Company is currently focused on completing a Pre-Feasibility Study and ESG studies as crucial steps towards securing a mining permit for the Project in mid-2024.

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.

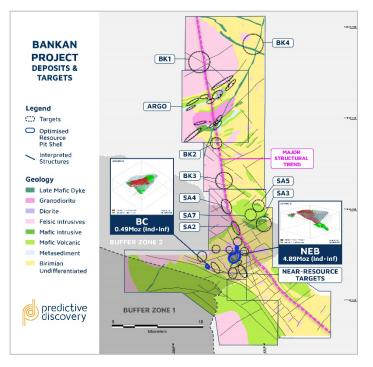


Figure 12: Bankan Project deposits and targets

COMPLIANCE STATEMENT

This Quarterly Activities Report contains information extracted from ASX announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("2012 JORC Code"). Further details (including 2012 JORC Code reporting tables) of exploration results and mineral resource estimates referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX and available to view on the Company's website under the "For investors" tab:

Announcement	Date
Drilling at Bankan Delivers More Positive Results	11-Dec-23
Promising Results from Across the Bankan Gold Project	24-Oct-23
Encouraging Initial Argo RC Results	29-Aug-23
Bankan Mineral Resource Increases to 5.38Moz	7-Aug-23

PDI advises that it is not aware of any new information or data that materially affects the exploration results or mineral resource estimate contained in this Quarterly Activities Report and all material assumptions and technical parameters underpinning the mineral resource estimates in the 7 August 2023 announcement (summarised below) continue to apply and have not materially changed.



Table 4: Bankan Project Mineral Resource estimate

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

TENEMENT STATUS AS AT 31 DECEMBER 2023

Name	Number	Location	Area (sq. km)	PDI equity	Change in equity
Kaninko (Bankan)	Exploration Permit	Guinea	98	100%	Nil
Saman (Bankan)	Exploration Permit	Guinea	100	100%	Nil
Bokoro (Bankan)	Exploration Permit	Guinea	100	100%	Nil
Argo (Bankan)	Exploration Permit	Guinea	58	Right to earn 90% during the exploration phase and acquire the remaining 10% on a decision to mine	Nil
Koundian 1	Exploration Permit	Guinea	85		Nil
Koundian 2	Exploration Permit	Guinea	100	Right to earn 90% during the exploration phase and acquire the remaining 10% on a decision to mine	Nil
Koundian 3	Exploration Permit	Guinea	63		Nil
Koundian 4	Exploration Permit	Guinea	55		Nil
Nonta	Exploration Permit	Guinea	100	100%	Nil
Paramangui 1	Exploration Permit	Guinea	99	Right to earn 80% during	Nil
Paramangui 2	Exploration Permit	Guinea	98	the exploration phase	Nil
Boundiali South	Mining exploration permit No. 414	Cote D'Ivoire	167	11% (Turaco Gold Ltd 89%)	Nil
Boundiali North	Mining exploration permit No. 808	Cote D'Ivoire	260	Turaco-Predictive JV holds 35% and can earn 85%. PDI holds 11% of the JV (Turaco Gold Ltd 89%)	Nil



Name	Number	Location	Area (sq. km)	PDI equity	Change in equity
Ferkessedougou North	Mining exploration permit No. 367	Cote D'Ivoire	300	Turaco-Predictive JV holds 51% and can earn 85%. PDI holds 11% of the JV (Turaco Gold Ltd 89%)	Nil
Odienne South	Mining exploration permit No. 865	Cote D'Ivoire	367		Nil
Odienne North	Mining exploration permit No. 866	Cote D'Ivoire	391		Nil
Bocanda North	Mining exploration permit No. 844	Cote D'Ivoire	368	20% (Wia Gold Ltd 80%)	Nil
Issia	Mining exploration permit No. 880	Cote D'Ivoire	375		Nil
Wendene	Mining exploration permit No. 572	Cote D'Ivoire	400	Rights to bonus payments on production	Nil
Dabakala	Mining exploration permit application	Cote D'Ivoire	400		Nil
Cape Clear	EL 5434	Victoria, Australia	63	12.5%, reducing to 5%	Nil

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
PREDICTIVE DISCOVERY LTD	
ABN	Quarter ended ("current quarter")
11 127 171 877	31 Dec 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(1,124)	(2,184)
1.3	Dividends received (see note 3)		
1.4	Interest received	264	768
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (BAS Refund & FBT refund)	42	232
1.9	Net cash from / (used in) operating activities	(818)	(1,184)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(7)	(29)
	(d) exploration & evaluation	(9,673)	(19,682)
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Fuel stock)	(167)	(351)
2.6	Net cash from / (used in) investing activities	(9,847)	(20,062)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	125
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	896	896
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(53)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other	-	-
3.10	Net cash from / (used in) financing activities	896	968

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	35,403	44,895
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(818)	(1,184)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(9,847)	(20,062)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000	
4.4	Net cash from / (used in) financing activities (item 3.10 above)	896	968	
4.5	Effect of movement in exchange rates on cash held	(100)	917	
4.6	Cash and cash equivalents at end of period	25,534	25,534	

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	18,058	25,060
5.2	Call deposits	4,341	10,343
5.3	Bank overdrafts		
5.4	Other (provide details) cash in transit	3,135	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	25,534	35,403

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	132
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include ation for, such payments.	e a description of, and an
\$132K	in director fees (including GST (\$3K)	

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qua	arter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		itional financing

8.	Estim	ated cash available for future operating activities	\$A'000	
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	(818)	
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	(9,847)	
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(10,665)	
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	25,534	
8.5	Unuse	d finance facilities available at quarter end (item 7.5)	-	
8.6	Total a	available funding (item 8.4 + item 8.5)	25,534	
8.7	7 Estimated quarters of funding available (item 8.6 divided by item 8.3)		2.39	
		Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:			
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?			
	Answe	er:		
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?			
	Answe	er:		
	8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?			
	Answe	er:		

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 January 2024

Authorised by: The Board (Name of body or officer authorising release – see note 4)

Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.