

# **ASX Announcement**

21 October 2024

# QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 30 SEPTEMBER 2024

**Predictive Discovery Limited (ASX:PDI) ("PDI" or the "Company")** is pleased to provide a summary of activities undertaken during the September quarter at the Tier-1 Bankan Gold Project in Guinea, West Africa. Results for nearly 35,000m of drilling were announced, including resource definition drilling at BC, Gbengbeden, 800W and Sounsoun, as well as exploration drilling at Argo and Bokoro South targets. Progress was also made with the permitting process for the Project and the Definitive Feasibility Study.

# **HIGHLIGHTS**

# Resource Definition Drilling - NEB/BC Area

- Resource definition drilling programs completed at BC and Gbengbeden, with the aim of upgrading Inferred Mineral Resource to the Indicated category.
- BC program delivered further excellent results during the quarter, including 43m @ 5.58g/t from 128m, 22m @ 2.01g/t from 176m, 18m @ 2.07g/t from 91m, 8.1m @ 2.52g/t from 108m, 16m @ 1.16g/t from 9m, 15m @ 1.23g/t from 69m, and 13m @ 1.03g/t from 36m.<sup>1,2</sup>
- Gbengbeden drilling also recorded multiple positive intercepts, including 25m @ 1.51g/t from 21m, 13m @ 2.63g/t from 5m, 19m @ 1.64g/t from 34m, 15m @ 1.61g/t from 135m, 4.3m @ 4.88g/t from 103m, 10m @ 1.87g/t from 92m and 4m @ 3.99g/t.<sup>2</sup>
- 800W target progressed to resource development with the aim of defining a maiden Mineral Resource.
   Drilling recorded best results of 15m @ 22.22g/t from 13m, 18m @ 2.03g/t from 40m, 8m @ 4.57g/t from 23m, 6m @ 4.05g/t from 30m and 3m @ 7.35g/t from 31m.<sup>1,2</sup>

# Near-Resource Exploration - SB

• Strong intercepts in the northern part of the SB target, including 19m @ 2.04g/t from 83m and 15m @ 8.05g/t from 105m, with the hole ending in mineralisation.<sup>2</sup>

# Resource Definition Drilling - Argo

- Drilling programs completed at Sounsoun and commenced at Fouwagbe the first Argo targets to be advanced to the resource definition phase.
- Sounsoun resource definition drilling was focused along an E-W trending shear zone that is mineralised over at least 700m so far. Best intercepts included 4.05m @ 11.44g/t from 103m, 11m @ 1.42g/t from 74m, 9m @ 1.46g/t from 50m, 10m @ 1.07g/t from 179m and 9m @ 0.78g/t from 42m.<sup>3</sup>

<sup>3</sup> ASX Announcement – Argo and Bokoro Drilling Results (30 September 2024).

**ASX: PDI** 

<sup>&</sup>lt;sup>1</sup> ASX Announcement – Strong Drilling Results and Permitting Update (16 July 2024).

<sup>&</sup>lt;sup>2</sup> ASX Announcement – NEB and BC Area Drilling Programs Continue to Deliver (12 August 2024).



# Regional Exploration – Argo and Bokoro

- Exploration drilling at other Argo targets has outlined further positive results, including:
  - Somo: multiple mineralised zones in saprolite across one line of AC holes, including a best intercept of 12m @ 4.82g/t from 10m.<sup>4</sup>
  - Sedadiou: new mineralised zone encountered as a potential south-western extension of the Sinkoumba trend, with intercepts of 6m @ 2.16g/t from 60m and 4m @ 2.13g/t from 72m.<sup>4</sup>
  - Sinkoumba: 5m @ 5.55g/t from 48m<sup>4</sup> intersected up-dip of previous result of 5m @ 3.70g/t<sup>5</sup> to confirm steeply dipping mineralised zone.
- Regional exploration has also extended south onto the Bokoro permit, with encouraging first pass AC drilling results of 10m @ 3.33g/t from 24m, 2m @ 7.41g/t from 34m, 8m @ 1.05g/t from 18m and 2m @ 2.99g/t from 50m.<sup>4</sup>

# Sustainability and Permitting

- Certification process for the Environmental and Social Impact Assessment ("ESIA") progressed with the Ministry of the Environmental and Sustainable Development ("MEDD") and associated agencies.
  - Independent public consultation process completed in Kouroussa in July by the MEDD's Agency for Environmental Assessment ("AGEE") as part of the official ESIA evaluation process.
     The Project recorded 97% overall project satisfaction from local communities.
  - Workshop held with the Technical Committee for Environmental Assessment ("CTAE"), which
    operates under the MEDD, to review and evaluate the ESIA. PDI is currently preparing and
    responding to requests for clarification and supplementary information.
- PDI representatives attended a workshop in Faranah presented by the Guinean Office of Parks and Wildlife Reserves ("OGPNRF") for the validation of the Upper Niger National Park management plan, which provides the implementation road map for the Park including the development and operation of projects like the Bankan Gold Project within the Peripheral Zone.
- PDI representatives attended a workshop presented by the AGEE in Kouroussa as part of rolling out the recently adopted General Methodological Guide for Environmental and Social Auditing.
- Sustainability team strengthened with the appointment of an experienced Social Manager.
- Environmental monitoring continued and will remain ongoing.
- Subsequent to the quarter-end, the annual renewal of the environmental authorisation for exploration activities was received from the MEDD.

<sup>&</sup>lt;sup>4</sup> ASX Announcement – Argo and Bokoro Drilling Results (30 September 2024).

<sup>&</sup>lt;sup>5</sup> ASX announcement – Fouwagbe & Sounsoun Progress to Resource Development (12 June 2024).



# Definitive Feasibility Study ("DFS")

- DFS workstreams progressed according to plan following the appointment of several key consultants.
- Strategic review of the Pre-Feasibility Study ("PFS") by mining consultant, Orelogy Consulting, supported various mining-related enhancement opportunities identified in the PFS and identified additional opportunities. All opportunities will be assessed formally during the DFS.
- The DFS is scheduled for completion during the second half of 2025.

# **Corporate**

- PDI had \$41.8m in cash and no debt as at 30 September 2024.
- African focused gold miner, Perseus Mining Limited ("Perseus"), announced it had acquired a 19.86% shareholding in PDI.

# **December 2024 Quarter Planned Activities**

- Conduct additional resource definition drilling at the 800W target to follow up results from the previous program.
- Continue resource definition drilling at Argo targets, Fouwagbe and Sounsoun.
- Continue to develop the pipeline of regional exploration targets on the Argo and Bokoro permits.
- Advance the permitting for the Bankan Gold Project. Complete the ESIA certification process and formally initiate the Exploitation Permit process (subject to reopening of the Ministry of Mines & Geology's Cadastre system).
- Continue to advance DFS workstreams.



# **RESOURCE DEFINITION DRILLING - NEB/BC AREA**

# $BC^{6,7}$

A resource definition drilling program was completed at BC in the June quarter, targeting upgrade of Inferred Mineral Resources below the PFS pit design to the Indicated category. During the September 2024 quarter, results were announced from the final 7 DD holes and 2 RC holes of the drilling program, with further positive intercepts recorded as shown in Figure 1 below.

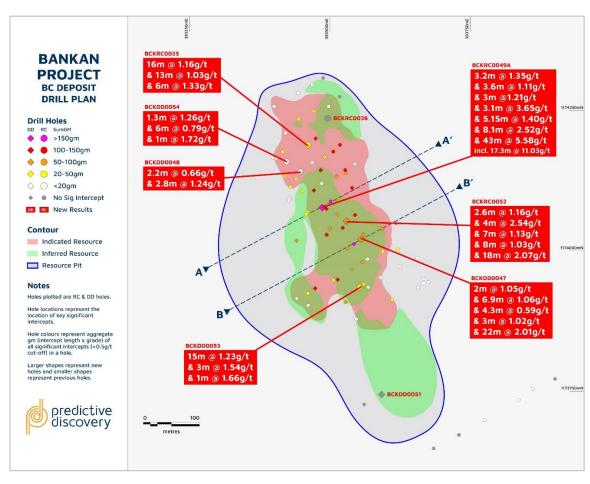


Figure 1: BC drill plan

On cross section A-A', BCKDD0049A, returned multiple significant intercepts below the PFS pit design. A spectacular intercept of 43m @ 5.58g/t from 128m was recorded near the end of the hole in a metasediment-tonalite-skarn complex close to the footwall shear. The intercept included a high-grade component of 17.3m @ 11.03g/t from 152.7m which is entirely outside the current Mineral Resource envelope.

Further up the hole, other significant intercepts within the Inferred Mineral Resource envelope included 3m @ 1.21g/t from 80m, 3.1m @ 3.65g/t from 87m, 5.15m @ 1.40g/t from 98m, 8.1m @ 2.52g/t from 108m and 4.2m @ 0.95g/t from 119.8m.

<sup>&</sup>lt;sup>6</sup> ASX Announcement – Strong Drilling Results and Permitting Update (16 July 2024).

<sup>&</sup>lt;sup>7</sup> ASX Announcement – NEB and BC Area Drilling Programs Continue to Deliver (12 August 2024).



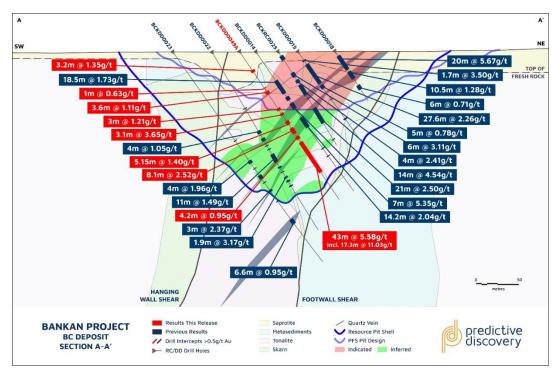


Figure 2: BC cross section A-A'

On cross section B-B' located just to the south, BCKDD0047 also returned multiple significant intercepts below the PFS pit design within the Inferred Mineral Resource envelope. Best results included 6.9m @ 1.06g/t from 99m, 4.3m @ 0.59g/t from 155.7m, 3m @ 1.02g/t from 164m and an excellent intercept of 22m @ 2.01g/t from 176m near the footwall shear.

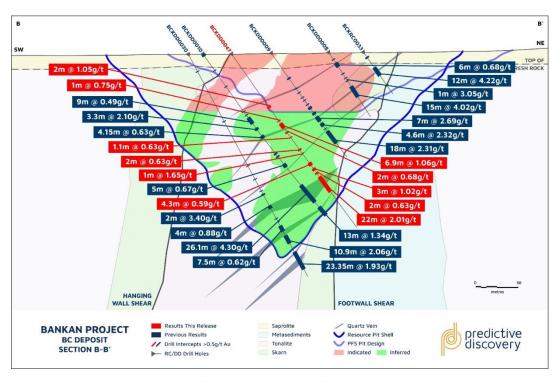


Figure 3: BC cross section B-B'



In the central part of the deposit, BCKRC0052 recorded several significant intercepts within the Indicated Mineral Resource envelope, including 2.6m @ 1.16g/t from 13.1m, 4m @ 2.54g/t from 28m, 7m @ 1.13g/t from 36m and 8m @ 1.03g/t from 49m. Further down the hole, below the PFS pit design and within the Inferred Mineral Resource envelope, BCKRC0052 intercepted 18m @ 2.07g/t from 91m.

In the northern part of the deposit, BCKRC0035 recorded 16m @ 1.16g/t from 9m and 13m @ 1.03g/t from 36m within the PFS pit, further infilling the Indicated Mineral Resource. 6m @ 1.33g/t from 80m was also intercepted at the boundary between Indicated and Inferred Mineral Resources at the bottom of the PFS pit.

Towards the southern end of the deposit, BCKDD0053 encountered mineralisation just below the PFS pit design, with best intercepts of 15m @ 1.23g/t from 69m and 3m @ 1.54g/t from 103m.

# Gbengbeden<sup>8</sup>

Similar to BC, additional infill drilling was completed at Gbengbeden with aim of upgrading Inferred Mineral Resources below the PFS pit design to the Indicated category. Gbengbeden is located approximately 250m north of the main NEB deposit and hosts an open pit Mineral Resource of 2.4Mt @ 0.87g/t for 69Koz and an Ore Reserve of 0.5Mt @ 0.81g/t for 12Koz (included within the broader NEB estimates). The infill drilling program comprised 3 DD and 14 RC holes for 2,139m drilled, with results shown below in Figure 4.

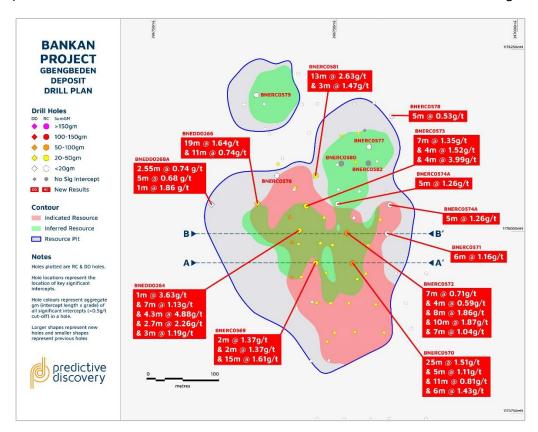


Figure 4: Gbengbeden drill plan

<sup>&</sup>lt;sup>8</sup> ASX Announcement – NEB and BC Area Drilling Programs Continue to Deliver (12 August 2024).

<sup>&</sup>lt;sup>9</sup> Refer to Compliance Statement at the end of this announcement. Gbengbeden estimates are shown in ASX announcements "PFS Delivers Attractive Financials & 3.05Moz Ore Reserve" (15 April 2024) and "Bankan Mineral Resource Increases to 5.38Moz" (7 August 2023).



Two infill RC holes drilled in the southern part of the deposit on cross section A-A' encountered mineralisation at the base of and below the PFS pit.

BNERC0570 recorded a positive intercept of 25m @ 1.51g/t from 21m at the base of the PFS pit within saprolite. Further down the hole, several significant intercepts were recorded in tonalite, including 5m @ 1.11g/t from 53m, 11m @ 0.81g/t from 64m and 6m @ 1.43g/t from 85m.

BNERC0569 intercepted 15m @ 1.61g/t from 135m associated with a shear zone at the base of the resource pit shell. Several other significant intercepts were recorded higher up the hole.

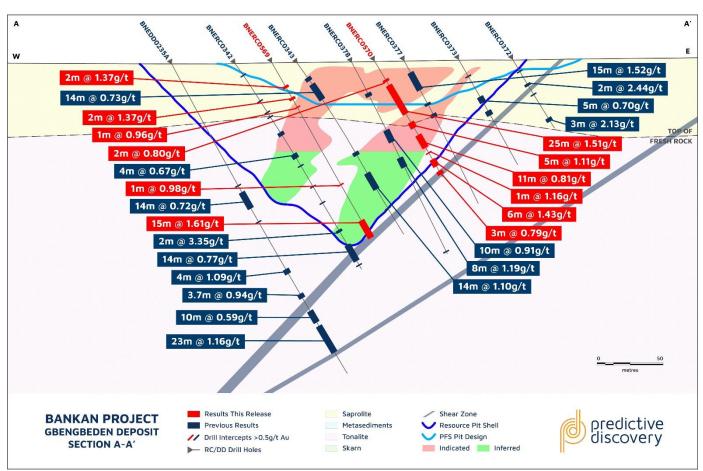


Figure 5: Gbengbeden cross section A-A'

Three holes were drilled on cross section B-B', located in the middle of the deposit. BNEDD0264 recorded several significant intercepts within the Inferred Mineral Resource envelope below the PFS pit design, including best results of 7m @ 1.13g/t from 80m and 4.3m @ 4.88g/t from 103m.

BNERC0572 recorded 8m @ 1.86g/t from 78m, 10m @ 1.87g/t from 92m and 4m @ 0.70g/t from 111m below the PFS pit, as well as 7m @ 1.04g/t from 121m below the resource pit shell. Higher up the hole, 7m @ 0.71g/t from 9m was recorded within the PFS pit. BNERC0571 intercepted 6m @ 1.16g/t from 11m on the eastern edge of the PFS pit.



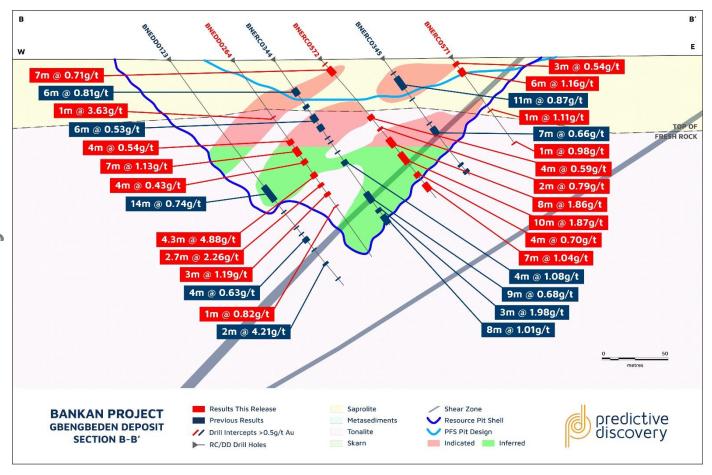


Figure 6: Gbengbeden cross section B-B'

Best results from other holes, located in the northern part of the deposit and typically below the PFS pit design, included:

BNEDD0266: 19m @ 1.64g/t from 34m 11m @ 0.74g/t from 84m
 BNERC0581 13m @ 2.63g/t from 5m
 BNERC0573 7m @ 1.35g/t from 32m 4m @ 3.99g/t from 84m

BNERC0575: 11m @ 0.83g/t from 20m



# 800W10,11

The 800W target is located approximately 400m north-west of the NEB resource pit shell. Following successful initial drilling programs, the 800W target was advanced to the resource definition phase and a drilling program was completed comprising 2 DD and 24 RC holes for 2,046m drilled. Results from the program are shown in Figure 7.

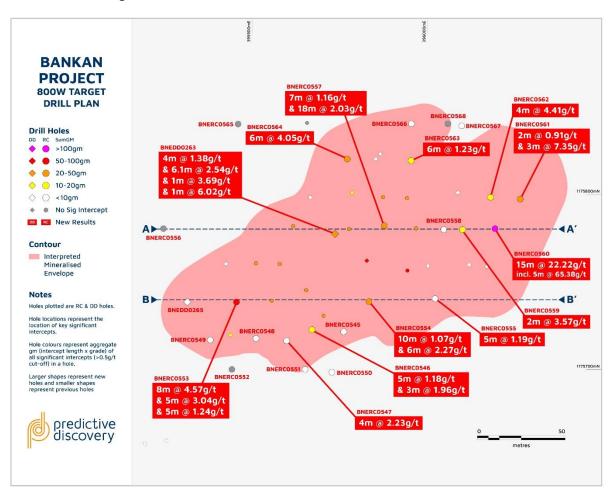


Figure 7: 800W drill plan

Five RC holes and one DD hole were drilled on cross section A-A' in the central part of the deposit to further define mineralisation in this area. The eastern-most hole, BNERC0560, encountered very high-grade mineralisation, recording 5m @ 65.38g/t from 13m (including 1m @ 241g/t) from within a broader intercept of 15m @ 22.22g/t from 13m.

Multiple significant intercepts were recorded in other holes on this section, including 7m @ 1.16g/t from 3m and 18m @ 2.03g/t from 40m (BNERC0557), 4m @ 1.38g/t from 29m, 6.1m @ 2.54g/t from 53m and 1m @ 6.02g/t from 100m (BNEDD0263), 2m @ 3.57g/t from 16m and 5m @ 0.81g/t from 26m (BNERC0559), 7m @ 0.55g/t from 37m (BNERC0558).

<sup>&</sup>lt;sup>10</sup> ASX Announcement – Strong Drilling Results and Permitting Update (16 July 2024).

<sup>&</sup>lt;sup>11</sup> ASX Announcement – NEB and BC Area Drilling Programs Continue to Deliver (12 August 2024).



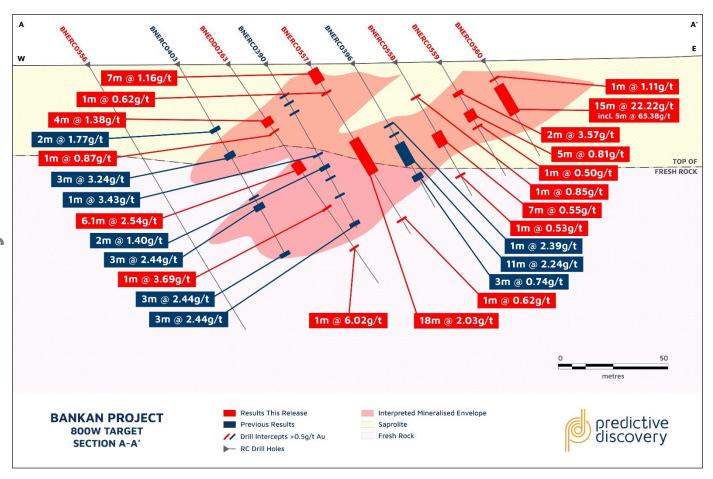


Figure 8: 800W cross section A-A'

Located in the southern part of the mineralised envelope at cross section B-B', three RC holes reported excellent intercepts at shallow depths.

Results from BNERC0554 and BNERC0555, located at the eastern end of the section, better define and extend the edge of the mineralised envelope to the east. BNERC0554 intercepted 10m @ 1.07g/t from 10m and 6m @ 2.27g/t from 23m and BNERC0555 recorded a best intercept of 5m @ 1.19g/t from 7m. At the western end of the section, BNERC0553 recorded strong intercepts of 8m @ 4.57g/t from 23m, 5m @ 3.04g/t from 47m and 5m @ 1.24g/t from 55m.

One DD hole, BNEDD0265, was drilled to the west of BNERC0553 and recorded minor intercepts.



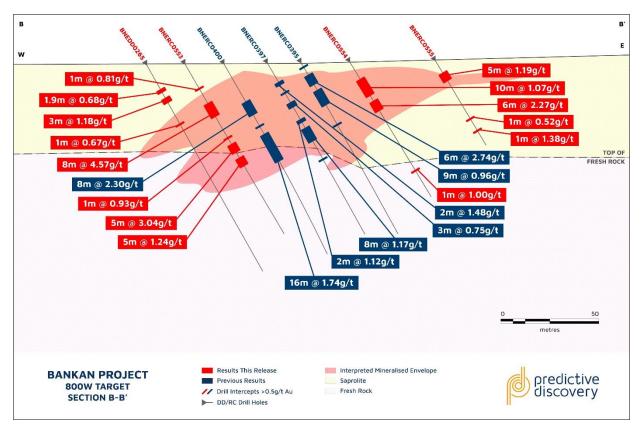


Figure 9: 800W cross section B-B'

Multiple significant intercepts were reported to the north and south of cross section lines A-A' and B-B' which further suggest mineralisation is developing along a NNE-SSW trending axis. Best results included:

BNERC0564: 6m @ 4.05g/t from 30m

BNERC0561: 3m @ 7.35g/t from 31m

• BNERC0562: 4m @ 4.41g/t from 37m

BNERC0546: 5m @ 1.18g/t from 6m

3m @ 1.96g/t from 52m

BNERC0547: 4m @ 2.23g/t from 20m

BNERC0563: 6m @ 1.23g/t from 11m

# **NEAR-RESOURCE EXPLORATION – SB<sup>12</sup>**

During the quarter, additional exploration drilling results were announced from the SB target located south of the main NEB deposit. BNERC0585 recorded excellent intercepts of 19m @ 2.04g/t from 83m and 15m @ 8.05g/t from 105m (including 2m @ 11.69g/t from 109m and 7m @ 11.34g/t from 113m). These intercepts have formed at and below the contact between the metasediments and tonalite, and encouragingly, the hole ended in mineralisation.

<sup>&</sup>lt;sup>12</sup> ASX Announcement – NEB and BC Area Drilling Programs Continue to Deliver (12 August 2024).



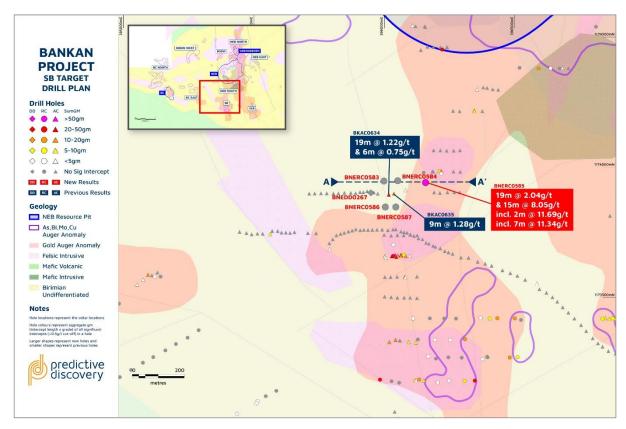


Figure 10: SB drill plan

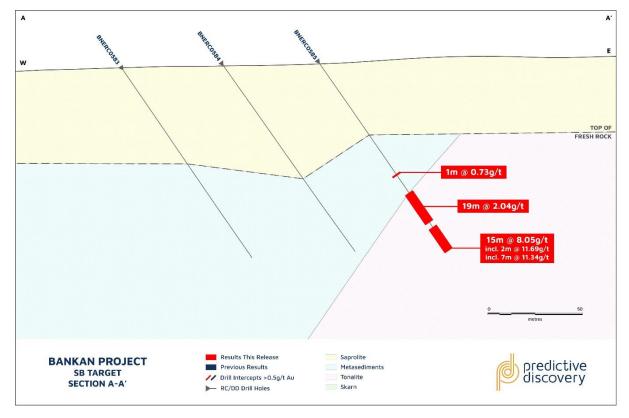


Figure 11: SB cross section A-A'



# **RESOURCE DEFINITION DRILLING – ARGO<sup>13</sup>**

Based on positive drilling results received from initial exploration drilling at Argo, the Sounsoun and Fouwagbe targets have been advanced to the resource development phase. A drilling program has been completed at Sounsoun and drilling is underway at Fouwagbe.

Results from nine DD and 21 RC holes were announced during the quarter from Sounsoun. The remaining five DD holes are pending.

An updated structural interpretation revealed an E-W trending shear corridor that appears to be one of the controls of the mineralisation at Sounsoun. Resource definition drilling has been focused along this E-W corridor, with results indicating that the deformation zone is steeply dipping to the north, up to 10m thick and mineralised over a strike length of 700m so far.

Best intercepts included:

RBNDD0017: 4.05m @ 11.44g/t from 103m

• RBNRC0076: 11m @ 1.42g/t from 74m

RBNRC0074: 9m @ 1.46g/t from 50m

• RBNRC0071: 1m @ 5.62g/t from 54m

5m @ 1.19g/t from 107m

RBNDD0019: 10m @ 1.07g/t from 179m

RBNDD0013: 3m @ 1.17g/t from 79m

3m @ 1.11g/t from 103m 1m @ 5.36g/t from 137m

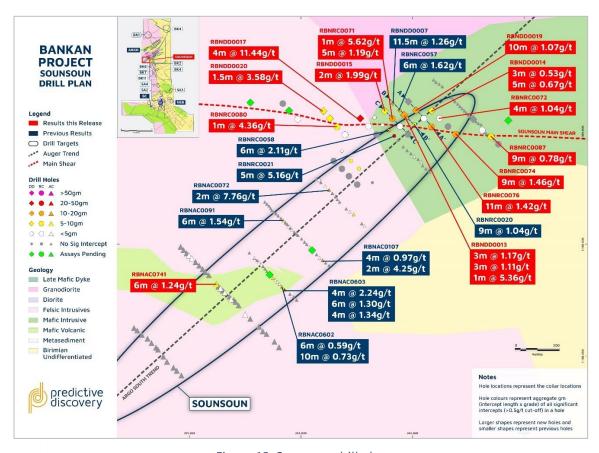


Figure 12: Sounsoun drill plan

<sup>&</sup>lt;sup>13</sup> ASX Announcement – Argo and Bokoro Drilling Results (30 September 2024).



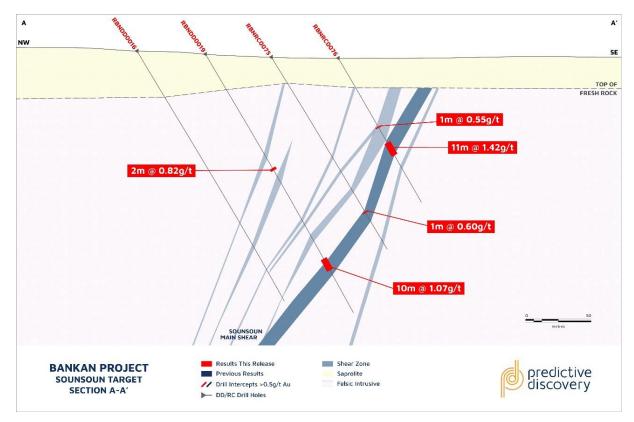


Figure 13: Sounsoun cross section A-A'

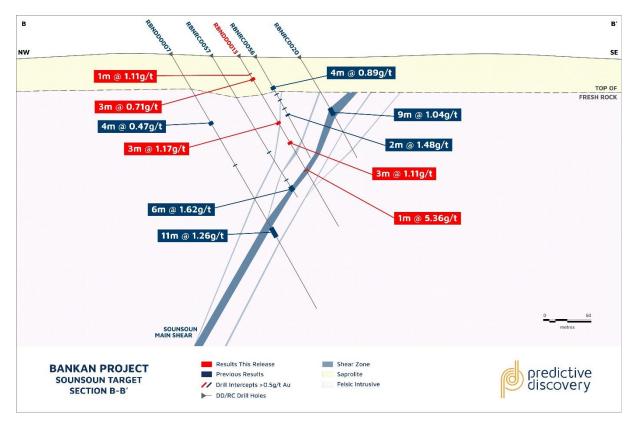


Figure 14: Sounsoun cross section B-B'



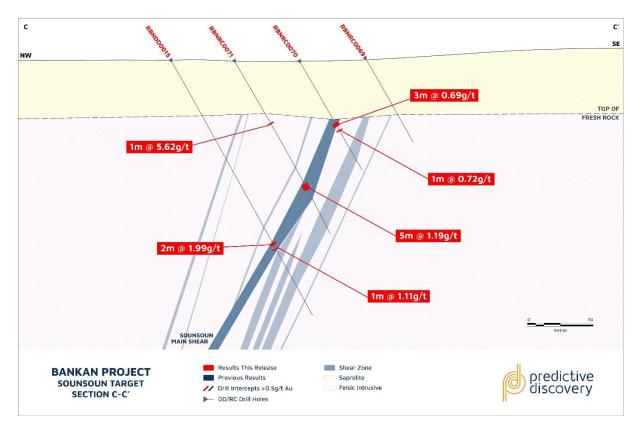


Figure 15: Sounsoun cross section C-C'



# **REGIONAL EXPLORATION – ARGO AND BOKORO**

# Argo<sup>14</sup>

Results were also received from multiple other Argo targets during the quarter as part of ongoing exploration drilling efforts. The drilling mainly comprised AC lines as well as one DD hole from Sanifolon South and several RC holes at Sinkoumba, Sedadiou South and Sanikourou.

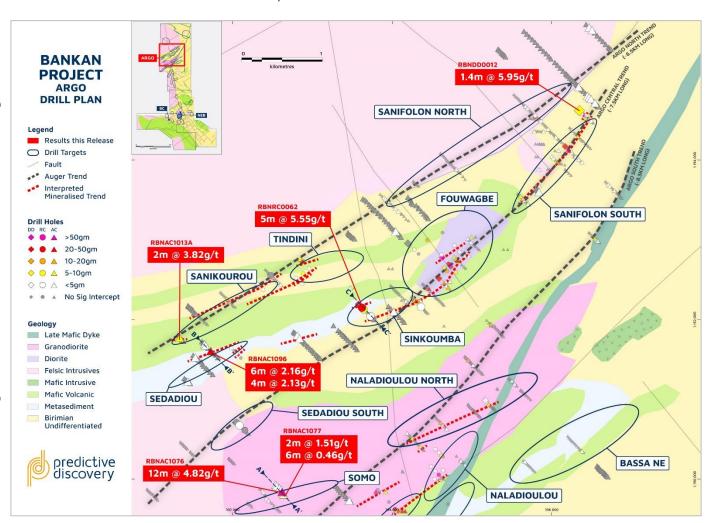


Figure 16: Argo drill plan

# Somo

One new line of AC holes drilled at Somo confirmed the potential of this target. Seven out of eight holes returned significant intercepts, including a best result of 12m @ 4.82g/t from 10m in RBNAC1076. The results appear to define multiple mineralised zones within saprolite, with additional drilling required to confirm the exact orientation and extent of the anomalous trend towards the east.

<sup>&</sup>lt;sup>14</sup> ASX Announcement – Argo and Bokoro Drilling Results (30 September 2024).



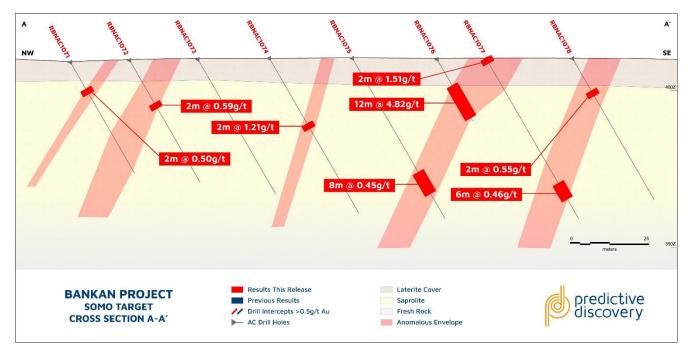


Figure 17: Somo cross section A-A'

# Sedadiou

A new mineralised zone was encountered at Sedadiou with intercepts of 6m @ 2.16g/t from 60m, 4m @ 2.13g/t from 72m and 2m @ 0.64g/t from 80m in RBNAC1096. Mineralisation appears to be linked to the contact between a set of metasediments and a mafic unit, and could represent the south-western extension of the Sinkoumba trend, which in this sector is moving away from the Argo Central Trend. This new prospective corridor between Sinkoumba and Sedadiou warrants further testing by AC drilling.

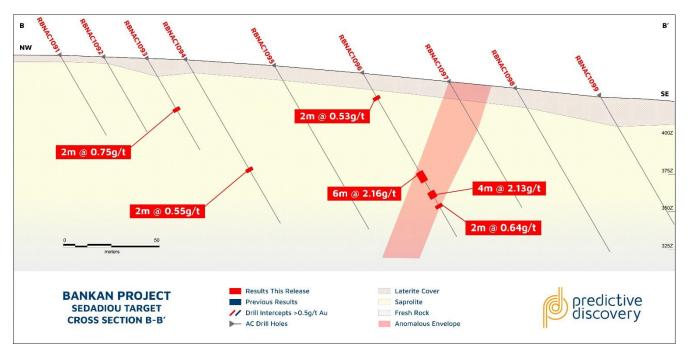


Figure 18: Sedadiou cross section B-B'



# Sinkoumba

One line of four RC holes was drilled at the Sinkoumba target to follow up previous AC drilling. RBNRC0062 intersected 5m @ 5.55g/t from 48m within an interpreted steeply dipping structure and up-dip of previous result of 5m @ 3.70g/t from 75.8m in RBNDD0004.<sup>15</sup>

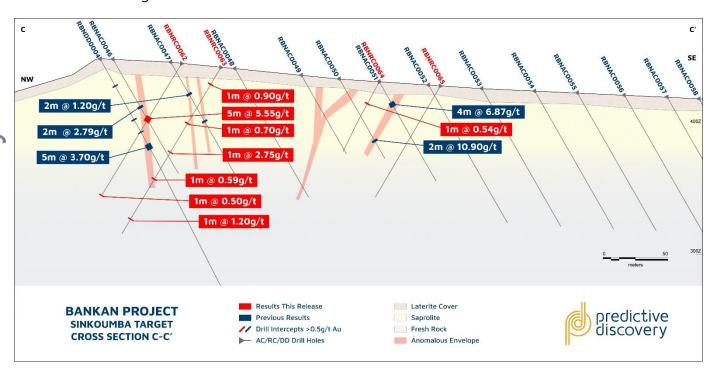


Figure 19: Sinkoumba cross section C-C'

# Sanifolon South

One DD hole drilled at the north-eastern end of Sanifolon South returned a significant intercept of 1.4m @ 5.95g/t from 185.6m. Further up the hole, a modest intercept of 1m @ 0.91g/t from 33m associated with silica alteration was encountered.

Additional AC drilling which aimed to extend the anomalous trend further to the north-east encountered minor significant intercepts, including 2m @ 1.63g/t from 34m, 2m @ 1.43g/t from 24m and 2m @ 0.96g/t from 52m.

# Sanikourou

Limited additional AC drilling returned an intercept of 2m @ 3.82g/t from 38m at the south-western end of the target.

<sup>&</sup>lt;sup>15</sup> ASX announcement – Fouwagbe & Sounsoun Progress to Resource Development (12 June 2024).



# Bokoro<sup>16</sup>

PDI's regional exploration program has also extended south to test structural and geophysical targets on the southern part of the Bokoro permit. Extensive auger drilling has been completed, albeit with some gaps in the grid due to reduced wet season access, together with 161 AC holes for 8,168m drilled.

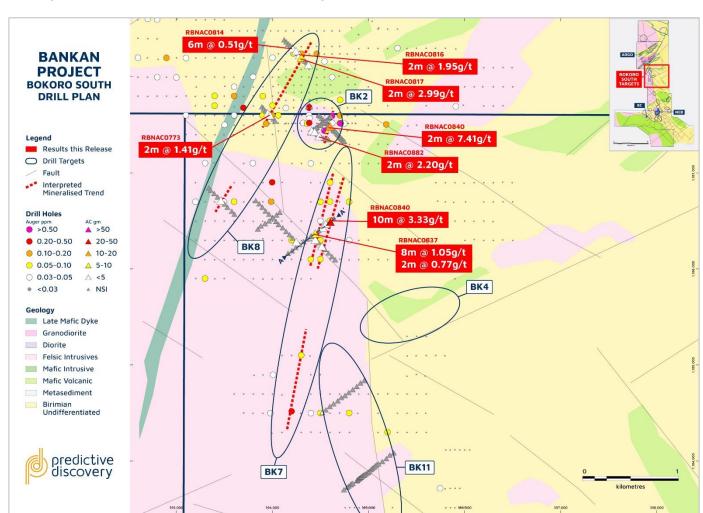


Figure 20: Bokoro South drill plan

BK7 is a conceptual target based on geophysics and interpreted as a faulted intrusive close to the basin margin adjacent to the northern extension of the NEB trend. Auger results indicate an 800m by 150m wide NNE-trending anomaly in the northern half of the BK7 target. First pass AC drilling at BK7 returned significant intercepts including 10m @ 3.33g/t from 24m in RBNAC0840 and 8m @ 1.05g/t from 18m in RBNAC0837, appearing to define two main mineralised zones within the auger anomaly.

Auger results in the southern half of the BK7 target, beyond an E-W valley that has not yet been covered by auger drilling, appear to indicate continuity of the anomaly, which could be up to 2.5km long if confirmed by future auger drilling.

<sup>&</sup>lt;sup>16</sup> ASX Announcement – Argo and Bokoro Drilling Results (30 September 2024).



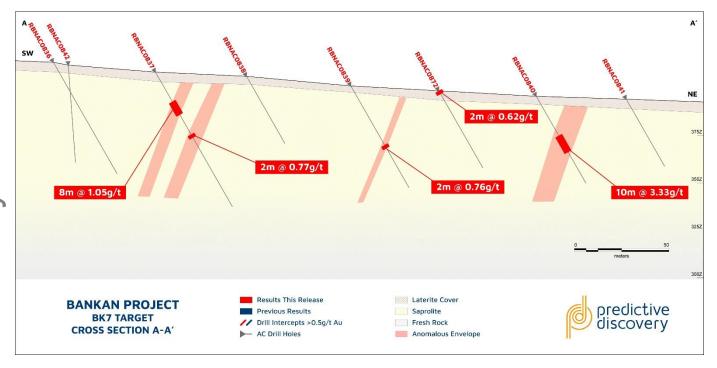


Figure 21: BK7 cross section A-A'

To the north of BK7, a strong auger anomaly has been identified at BK2. Initial AC drilling encountered notable intercepts of 2m @ 7.41g/t from 34m in RBNAC0785 and 2m @ 2.20g/t from 42m in RBNAC0882.

The BK8 target, initially identified by its southern half in the Bokoro permit, extends northwards onto the Argo permit. First pass AC drilling identified a potential 1.7km long trend with intercepts of 2m @ 2.99g/t from 50m, 2m @ 1.95g/t from 50m and 6m @ 0.51g/t from 22m on the northern AC line, 2m @ 1.41g/t from 20m on the central AC line, and 2m @ 0.84g/t from 30m on the southern line. The NNE-SSW orientation of this trend appears to be consistent with BK7 trend.

Two lines of AC holes were drilled on the BK11 target, returning a single significant intercept of 2m @ 0.84g/t from 30m. The mineralised zone potentially lies further west on the BK7 trend, and this area will be tested by AC drilling when the wet season ends.



# **SUSTAINABILITY**

# **Permitting and Engagement**

During the quarter, PDI conducted numerous engagements with key stakeholder groups, including the MEDD and associated agencies, in support of the ongoing ESIA certification process, a key step in the process to secure an Exploitation Permit.

In July, an independent public consultation process was conducted in Kouroussa by the AGEE as part of the ESIA evaluation process, aimed at gathering feedback from local communities regarding the Project's potential impacts and benefits. The consultations involved open dialogue, transparent information sharing and discussions about the environmental, economic and social aspects of the Project. An excellent outcome was achieved from the public consultation process. 97% overall project satisfaction from communities was recorded, with 99% approving project acceptability, 95% for environmental protection and 96% for social protection.

The CTAE, which operates under the MEDD, hosted a workshop to review and assess the ESIA during the quarter. This session provided a platform for in-depth discussions on the potential environmental and social implications of the Project, with representatives from various ministries and independent experts providing their technical feedback and evaluations. PDI is actively addressing various requests for clarification and for supplementary information that were raised by the CTAE. Following this, ESIA certification will be considered by the MEDD.

The OGPNRF hosted a workshop in Faranah for validation of the Upper Niger National Park management plan, which provides the implementation road map for the Park including the development and operation of projects like the Bankan Gold Project within the Peripheral Zone.

In Kouroussa, PDI representatives participated in a workshop organised by AGEE as part of the rolling out of the recently adopted General Methodological Guide for Environmental and Social Auditing. The guide outlines best practices and standardised approaches for conducting environmental and social audits, and is aimed at ensuring projects like the Bankan Gold Project operate in a responsible and transparent manner.

During the quarter, PDI was notified by the Centre for Mining Promotion and Development, which is part of the Ministry of Mines & Geology, that the Cadastre is temporarily closed and the processing of all permit applications and renewals is suspended for the present time for maintenance of the system and review of all mining titles in the Cadastral system.

Subsequent to the end of the quarter, the MEDD renewed PDI's annual environmental authorisation for exploration activities at the Project. The authorisation is valid until October 2025.

# **Environmental**

The Kankan regional inspectorate of Guinea's national petroleum agency, Société Nationale des Pétroles, carried out an unscheduled compliance inspection of the Project's fuel installations and their associated documentation. General compliance was established, with minor fuel storage improvements being completed.

Environmental baseline monitoring (air, water and noise) continued as part of PDI's ongoing environmental work to capture additional data.



# **Sustainability Appointment**

In August 2024, PDI appointed a new and highly experienced Social Manager to be based on site. The addition reflects the Company's commitment to maintaining strong community relations, mitigating any social impact of its activities and ensuring that local populations benefit from the Project. The Social Manager will also play a pivotal role in overseeing stakeholder engagement and ensuring that the Company adheres to its ongoing social responsibilities.

# **Community Projects**

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

PDI continues to support the Bankan Primary School through the canteen project, which supplies lunch to pupils in coordination with local education authorities, and the provision of financial assistance for three teachers.

Utilisation of the recently constructed classrooms at the Samankoura Primary School commenced.

# **DEFINITIVE FEASIBILITY STUDY**

Several key DFS consultants were appointed during the quarter, including:

- Dhamana Consulting study management support for PDI's internal technical team;
- Orelogy Consulting strategic mining review;
- Peter O'Bryan & Associates mine geotechnical;
- Orway Mineral Consultants comminution modelling;
- DRA Pacific process plant design and engineering;
- Australasian Groundwater and Environmental Consultants hydrogeological & hydrological;
- ALS Metallurgy metallurgical and geochemical test work.

A strategic mining review was completed by Orelogy Consulting which identified multiple potential project enhancement opportunities, including further support for various mining-related opportunities identified in the PFS. The key opportunities include improvement in the application of mining dilution and ore recovery, steepening of overall pit slope angles, improvement in NEB pit design and staging, optimisation of underground transition depth and timing, and improvement to the underground design and mining methods. These potential enhancement opportunities are subject to detailed assessment during the DFS and will be confirmed, or otherwise, upon completion of the DFS.

Other DFS workstreams are progressing according to schedule. Additional metallurgical and geochemical samples have been identified, selected on site, and dispatched to ALS for testing. DFS geotechnical drilling commenced to further inform pit slope angles and underground design parameters. Preparations are well advanced for commencement of DFS hydrogeological site investigations during the December 2024 quarter.

The DFS is scheduled for completion during the second half of 2025.



# **CORPORATE**

#### **Financial Position**

As at 30 September 2024, the Company had \$41.8m 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 \$9.4m included at item 2.1(d) of the Appendix 5B. This includes \$3.3m for drilling and \$6.1m in associated geology, assaying and other exploration and evaluation costs (note that figures may not sum due to rounding). 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 \$320,000 including GST. The Company advises that this relates to Directors' fees and salaries.

# **Capital Structure and Shareholding Structure**

PDI currently has 2,350,901,983 fully paid ordinary shares on issue and 130,687,500 unlisted options on issue at various exercise prices and expiry dates.

During the quarter, African focused gold miner, Perseus, announced it had acquired a 19.86% shareholding in PDI.

- END -

This announcement is authorised for release by PDI's 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 5.38Moz has been defined to date at the NEB (4.89Moz) and BC (487Koz) deposits,<sup>17</sup> making Bankan the largest gold discovery in West Africa in a decade.

PDI recently completed a Pre-Feasibility Study ("PFS") and Environmental & Social Impact Assessment, which are crucial steps to secure a mining permit for the Project. The PFS outlined a 269kozpa operation over 12 years, with a maiden Ore Reserve of 3.05Moz and strong financials.<sup>17</sup>

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.

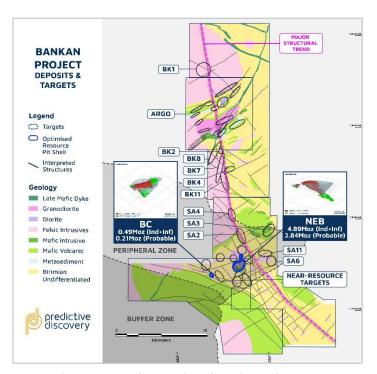


Figure 22: Bankan Project deposits and targets

# **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" ("JORC Code"). Further details (including the JORC Code reporting tables) of exploration results 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      |
|---|-----------|
| Strong Drilling Results and Permitting Update         | 16-Jul-24 |
| NEB and BC Area Drilling Programs Continue to Deliver | 12-Aug-24 |
| Argo and Bokoro Drilling Results                      | 30-Sep-24 |

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.

<sup>&</sup>lt;sup>17</sup> Refer to Compliance Statement at the end of this announcement.



The information in this announcement that relates to the previous mineral resource estimate is from the announcement titled "Bankan Mineral Resource increases to 5.38Moz" dated 7 August 2023. The information in this announcement that relates to the previous ore reserve estimate is from the announcement titled "PFS Delivers Attractive Financials & 3.05Moz Ore Reserve" dated 15 April 2024.

The estimates are summarised in the tables below. The Company it is not aware of any new information or data that materially affects the mineral resource or ore reserve estimates contained in this announcement and all material assumptions and technical parameters underpinning the mineral resource and ore reserve estimates continue to apply and have not materially changed.

Table 1: Bankan Gold Project Mineral Resource Estimate

| Deposit              | Classification | Cut-off<br>(g/t Au) | Tonnes<br>(Mt) | Grade<br>(g/t Au) | Contained<br>(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                 |
| DC On an Dit         | Indicated      | 0.4                 | 5.3            | 1.42              | 244                   |
| BC Open Pit          | Inferred       | 0.4                 | 6.9            | 1.09              | 243                   |
| BC Total             |                |                     | 12.2           | 1.24              | 487                   |
| Total Bankan Project |                |                     | 100.5          | 1.66              | 5,376                 |

Table 2: Bankan Gold Project Ore Reserve Estimate

| Deposit              | Mining Method | Classification | Cut-off<br>(g/t Au) | Tonnes<br>(Mt) | Grade<br>(g/t Au) | Contained<br>(Koz Au) |
|----------------------|---------------|----------------|---------------------|----------------|-------------------|-----------------------|
|                      | Open Pit      | Probable       | 0.5                 | 46.2           | 1.41              | 2,101                 |
| NEB                  | Underground   | Probable       | 1.7                 | 7.1            | 3.24              | 739                   |
|                      | Total         |                |                     | 53.3           | 1.66              | 2,840                 |
| D.C.                 | Open Pit      | Probable       | 0.4                 | 4.3            | 1.48              | 207                   |
| BC                   | Total         |                |                     | 4.3            | 1.48              | 207                   |
| Total Open Pit       |               |                |                     | 50.6           | 1.42              | 2,308                 |
| Total Underground    |               |                |                     | 7.1            | 3.24              | 739                   |
| Total Bankan Project |               |                |                     | 57.7           | 1.64              | 3,047                 |

The production targets and forecast financial information referred to in this announcement is from the announcement titled "PFS Delivers Attractive Financials & 3.05Moz Ore Reserve" dated 15 April 2024. The Company confirms that all the material assumptions underpinning the production targets and forecast financial information derived from the production targets in the previous announcement continue to apply and have not materially changed.



# **TENEMENT STATUS AS AT 30 SEPTEMBER 2024**

| 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<br>the exploration phase and<br>acquire the remaining 10%<br>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  | Nil              |
| Koundian 3       | Exploration Permit                    | Guinea                 | 63            | acquire the remaining 10% on a decision to mine   | 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              |
| Bocanda North    | Mining exploration permit<br>No. 844  | Cote D'Ivoire          | 368           | 20% (Wia Gold Ltd 80%)  | Nil              |
| Issia            | Mining exploration permit<br>No. 880  | Cote D'Ivoire          | 375           | 20% (Wia Goid Ltd 80%)  | Nil              |
| Wendene          | Mining exploration permit<br>No. 572  | Cote D'Ivoire          | 400           | Rights to bonus payments  | Nil              |
| Dabakala         | Mining exploration permit application | Cote D'Ivoire          | 400           | on production   | Nil              |
| Cape Clear       | EL 5434                               | Victoria,<br>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           | 30 Sept 2024                      |

| Consolidated statement of cash flows |  | Current quarter<br>\$A'000 | Year to date (3<br>months)<br>\$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         | (2,231)                    | (2.231)                               |
| 1.3                                  | Dividends received (see note 3)                |                            |                                       |
| 1.4                                  | Interest received                              | 376                        | 376                                   |
| 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)                             | 380                        | 380                                   |
| 1.9                                  | Net cash from / (used in) operating activities | (1,475)                    | (1,475)                               |

| 2.  | Ca  | sh flows from investing activities |         |         |
|-----|-----|------------------------------------|---------|---------|
| 2.1 | Pay | yments to acquire or for:          |         |         |
|     | (a) | entities                           | -       | -       |
|     | (b) | tenements                          | -       | -       |
|     | (c) | property, plant and equipment      | (133)   | (133)   |
|     | (d) | exploration & evaluation           | (9,407) | (9,407) |
|     | (e) | investments                        | -       | -       |
|     | (f) | other non-current assets           | -       | -       |

| Con | solidated statement of cash flows              | Current quarter<br>\$A'000 | Year to date (3<br>months)<br>\$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)                             | (155)                      | (155)                                 |
| 2.6 | Net cash from / (used in) investing activities | (9,695)                    | (9,695)                               |

| 3.   | Cash flows from financing activities  |     |     |
|------|---|-----|-----|
| 3.1  | Proceeds from issues of equity securities (excluding convertible debt securities)       | -   | -   |
| 3.2  | Proceeds from issue of convertible debt securities                                      | -   | -   |
| 3.3  | Proceeds from exercise of options   | 670 | 670 |
| 3.4  | Transaction costs related to issues of equity securities or convertible debt securities | (9) | (9) |
| 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  | 661 | 661 |

| 4.  | Net increase / (decrease) in cash and cash equivalents for the period |         |         |
|-----|---|---------|---------|
| 4.1 | Cash and cash equivalents at beginning of period                      | 52,434  | 52,434  |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above)       | (1,475) | (1,475) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above)       | (9,695) | (9,695) |

| Con | solidated statement of cash flows                                | Current quarter<br>\$A'000 | Year to date (3<br>months)<br>\$A'000 |
|-----|--|----------------------------|---------------------------------------|
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | 661                        | 661                                   |
| 4.5 | Effect of movement in exchange rates on cash held                | (96)                       | (96)                                  |
| 4.6 | Cash and cash equivalents at end of period                       | 41,829                     | 41,829                                |

| 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<br>\$A'000 | Previous quarter<br>\$A'000 |
|-----|---|----------------------------|-----------------------------|
| 5.1 | Bank balances   | 5,829                      | 6,877                       |
| 5.2 | Call deposits   | 36,000                     | 45,557                      |
| 5.3 | Bank overdrafts   |                            |                             |
| 5.4 | Other (provide details) cash in transit   | -                          | -                           |
| 5.5 | Cash and cash equivalents at end of quarter (should equal item 4.6 above)   | 41,829                     | 52,434                      |

| associates  | Current quarter \$A'000  |
|---|--|
| Aggregate amount of payments to related parties and their associates included in item 1 | 320  |
| Aggregate amount of payments to related parties and their associates included in item 2 |  |
|   | Aggregate amount of payments to related parties and their associates included in item 1  Aggregate amount of payments to related parties and their |

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

\$320K in director fees (including GST (\$4K)

| 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<br>amount at quarter<br>end<br>\$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 quarter 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. |   |                                     |
|     |   |   |                                     |

| 8.  | Estimated cash available for future operating activities                                | \$A'000  |
|-----|---|----------|
| 8.1 | Net cash from / (used in) operating activities (item 1.9)                               | (1,475)  |
| 8.2 | Payments for exploration & evaluation classified as investing activities) (item 2.1(d)) | (9,407)  |
| 8.3 | Total relevant outgoings (item 8.1 + item 8.2)  | (10,882) |
| 8.4 | Cash and cash equivalents at quarter end (item 4.6)                                     | 41,829   |
| 8.5 | Unused finance facilities available at quarter end (item 7.5)                           | -        |
| 8.6 | Total available funding (item 8.4 + item 8.5)   | 41,829   |
| 8.7 | Estimated quarters of funding available (item 8.6 divided by item 8.3)                  | 3.8      |

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?

# Answer:

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?

### Answer:

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?

# Answer:

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:          | 21 October 2024  |
|----------------|--|
|                |  |
|                |  |
|                |  |
| Authorised by: | The Board  |
|                | (Name of body or officer authorising release – see note 4) |

#### Notes

- 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.
- 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.