



QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 30 SEPTEMBER 2020

Predictive Discovery Limited ("Predictive" or "Company") is pleased to provide an update on its activities for the September 2020 Quarter. The Company continued its drill program on its highly prospective Bankan Gold Project, Guinea.

BANKAN PROJECT HIGHLIGHTS

NE Bankan Diamond Drilling

Over the period, results received from 19-hole Diamond Drilling (DD) program at NE Bankan successfully intersected wide zones of good to high-grade gold in fresh rock to a vertical depth of over 150m, giving the company a better understanding of true widths of the gold mineralisation in fresh rock. Important holes which were drilled from west to east and therefore intersected gold mineralisation at close to right angles included ¹⁻⁷:

- KKODD009: 30m at 2.65g/t gold from 101m, including 6m at 9.4g/t gold, and
 - 17m at 0.97g/t gold from 81m and,
 - 19m at 1.36g/t gold from 149m
- KKODD011: 55m at 2.94g/t gold from 97m, including 1m at 46.5g/t gold
- KKODD013: 44m at 1.4g/t gold from 33m, including 2m at 8.5g/t gold from 70m
- KKODD014: 19m at 1.6g/t gold from 88m, including 5m at 3.7g/t gold from 96m
- KKODD015: 29m at 1.4g/t gold from 8m, including 2m at 8.5g/t gold from 10m

Other significant intersections, drilled from east to west and therefore at an oblique angle to the mineralisation's dip included²:

- KKODD003: 78m at 2.58g/t gold from 3m, including 4m at 13.64g/t Au from 75m, 14m at 1.60g/t gold from 88m and, 17m at 1.63g/t gold from 141m
- KKODD004: 153m at 1.51g/t gold from 47m (to EOH), including 6m at 10.40g/t gold from 189m

¹ ASX Announcement - 55m at 2.94g/t gold–broad true widths confirmed at Bankan, Guinea https://www.investi.com.au/api/announcements/pdi/94452194-ceb.pdf ²ASX Announcement - Diamond drilling confirms gold at depth at NE Bankan, Guinea https://www.investi.com.au/api/announcements/pdi/7ce8162f-8d3.pdf ³ASX Announcement - NE BANKAN GOLD DEPOSIT GROWS WITH MORE STRONG DRILL RESULTS https://www.investi.com.au/api/announcements/pdi/18c75f55-a5a.pdf



NE Bankan Reverse Circulation Drilling

During the period, the Company announced Reverse Circulation (RC) assays from a 74-hole infill drilling program. Results demonstrated the wide extent of gold mineralisation at NE Bankan in the near surface and confirmed that gold mineralisation continues at depth into the underlying fresh rock. Significant intersections (in east to west directed holes and therefore obliquely orientated with respect to the dip of mineralisation) included⁴⁻⁸:

- KKORC002: 33m at 1.72g/t gold (to EOH) from 67m, including 1m at 22.1g/t gold
- KKORC006: 99m (to EOH) at 1.17g/t gold from 1m
- KKORC007: 15m at 3.42g/t gold from surface, including 4m at 9.33g/t gold
- KKORC013: 35m at 2.4g/t gold from 1m, including 4m at 13.6g/t gold, and 36m at 2.2g/t gold from 64m
- KKORC016: 26m at 21.9g/t gold from 58m (to end of hole), including 6m at 68.0g/t gold from 58m and, 2m at 8.6g/t gold from 72m and, 6m at 17.3g/t gold from 78m (to end of hole)
- KKORC017: 67m at 1.7g/t gold from 32m, including 2m at 11.0g/t gold from 59m
- KKORC021: 73m at 3.2g/t gold from 9m, including, 5m at 8.5g/t gold from 80m
- KKORC028: 55m at 3.3g/t gold from 4m, including 5m at 5.2g/t gold from 19m, 2m at 7.9g/t gold from 37m, 2m at 6.3g/t gold from 44m, 1m at 14.4g/t gold from 51m, plus 9m at 2.8g/t gold from 81m (EOH)

Bankan Creek Discovery and Drilling Programs

Located only 3km west of the main NE Bankan discovery (Figure 1), the Company has completed several early-stage air-core, reverse circulation and diamond drilling programs. Encouraging results from drilling programs at Bankan Creek received during the Quarter included:

- KKODD006: 21m at 1.0g/t gold from 41m, and,
 - 23m at 2.0g/t gold from 86m and,
 - 23m at 2.4g/t gold from 116m
- KKORC052: 42m at 2.8g/t gold from 12m (to end-of-hole)^{8 & 9}

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⁴ ASX Announcement – Impressive first RC drill results grow NE Bankan gold discovery

https://www.investi.com.au/api/announcements/pdi/9d99bae3-5dd.pdf ⁵ ASX Announcement – OUTSTANDING HIGH-GRADE GOLD RESULTS FROM NE BANKAN, GUINEA

https://www.investi.com.au/api/announcements/pdi/b09b9b49-38a.pdf

⁶ STRONG AND WIDE GOLD ZONES RETURNED FROM DRILLING AT BANKAN CREEK AND NE BANKAN, GUINEA

https://www.investi.com.au/api/announcements/pdi/62f93ee7-b77.pdf

⁷ NE BANKAN GOLD DEPOSIT GROWS WITH MORE STRONG DRILL RESULTS https://www.investi.com.au/api/announcements/pdi/18c75f55-a5a.pdf

⁸ STRONG AND WIDE GOLD ZONES RETURNED FROM DRILLING AT BANKAN CREEK AND NE BANKAN, GUINEA

https://www.investi.com.au/api/announcements/pdi/62f93ee7-b77.pdf

⁹ BANKAN CREEK GOLD ZONE FURTHER EXPANDED

https://www.investi.com.au/api/announcements/pdi/7c684b14-d51.pdf







Figure 1 - Bankan Project, highlighting the NE Bankan (east) and Bankan Creek (west) gold mineralised zones

• In mid-September, the Company announced the strengthening of its Bankan Project land position with the acquisition of the Argo (58km²) and Bokoro (100km²) permits, both strategically located directly along strike from the Kaninko and Saman permits, which contain the NE Bankan and Bankan

- The Company signed an earn-in and Joint Venture agreement with Glomin Services Limited, to explore Predictive's Bocanda Permit and Issia and Tieningboue applications, all located within Cote d'Ivoire. Glomin was subsequently acquired by ASX listed Tanga Resources (TRL) during the quarter. Predictive will be free carried by Tanga at 20% until a Mining Lease is granted¹¹.
- During the period, Predictive confirmed its participation in a joint venture with Petratherm Limited (ASX: PTR) and Cape Clear Minerals Pty Ltd (CCM) on the Glenfine Gold Project in Victoria, Australia.

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¹⁰ NEW PERMITS GRANTED ALONG STRIKE FROM FLAGSHIP BANKAN PROJECT https://www.investi.com.au/api/announcements/pdi/613075d1-3f2.pdf
¹¹ ASX Announcement - New Joint venture in Cote D'Ivoire https://www.investi.com.au/api/announcements/pdi/ab2cc1b7-194.pdf





Predictive currently holds a 25% equity stake over two of the three exploration licences in the Glenfine Gold Project. The new agreement will provide PTR the right to earn an 80% equity position in the entire Glenfine Gold Project by expenditure of A\$3 million, which, if achieved, will leave PDI and CCM jointly holding a 20% equity in the Project¹².

- As per ASX Listing Rule 5.3.1, there were no substantive mining production and development activities undertaken during the September quarter.
- As per ASX Listing Rule 5.3.2, a summary of the Company's exploration activities for the quarter is contained herein, with exploration expenditure incurred during the period of circa A\$2.1 million
- Section 6.1 of the Appendix 5B provides for an amount paid to related parties of A\$106,000 being directors' fees and salaries for the quarter.
- Predictive remains well-funded with cash of circa A\$6.2 million at 30 September 2020, and post reporting period, the Company announced it had completed a share placement to raise an additional A\$10.6 million¹³.

DECEMBER QUARTER ACTIVITY 2020

- Final RC and DD drill results from the Bankan-1 drilling program for both NE Bankan and Bankan Creek were received in October. Better intercepts included:
 - KKODD018 (NE Bankan): 60m at 1.4g/t from 57m¹⁴.
 - KKODD020 (Bankan Creek): 91.6m at 1.9g/t gold from 56m¹⁴.
- The Bankan-2 drill program has now commenced with power auger drilling underway on western extension of the NE Bankan auger grid which will aim to test for a possible new north-south zone of gold mineralisation.
- Further analysis of the Bankan-1 results will seek to identify areas for deeper drilling for the Bankan-2 program utilising powerful multipurpose RC/DD rig, enabling deeper RC drilling than used to date.
- An aeromagnetic survey over most of the Company's ground position (Kaninko-Saman-Bokoro-Argo) is planned for December 2020 or early 2021.
- In late October the company completed a A\$10.6 million share placement to drive exploration on the Bankan Gold Project. The placement was well supported by international institutional investors, major existing shareholders, Board and senior management

This announcement is authorised for release by Predictive Managing Director, Paul Roberts.

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¹²ASX Announcement - Predictive retains minority holding in Victorian Gold Project

https://www.investi.com.au/api/announcements/pdi/88f3a61e-b45.pdf ¹³ ASX Announcement - A\$10.6M INSTITUTIONAL PLACEMENT TO DRIVE EXPLORATION AT BANKAN GOLD PROJECT DISCOVERY

https://www.investi.com.au/api/announcements/pdi/91fa6587-c0a.pdf

 ¹⁴ 92M AT 1.9g/t GOLD - DIAMOND DRILLING EXPANDS BANKAN PROJECT

https://www.investi.com.au/api/announcements/pdi/d858335b-e93.pdf





1. GUINEA – KANINKO, SAMAN, ARGO, BOKORO, KOUNDIAN, KANKAN AND NONTA PROJECTS

Over the past 2 years, Predictive has built a commanding land position in Guinea's Siguiri Basin, acquiring 861km² across ten permits (Figure 2) with all ground identified utilising the Company's Predictore[™] methodology.

In July 2019, Predictive was granted the Kaninko Project near the town of Kouroussa in the Siguiri Basin. This tenement, located approximately 10km from Cassidy's Kouroussa gold deposit, laid the platform for the Company's growth over the reporting period with exploration activity and drilling delivering encouraging high gold grades and broad gold mineralised widths at the NE Bankan gold discovery.



Figure 2 - Location of the Kaninko, Saman, Argo and Bokoro Permits – which constitute the Bankan Project

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BANKAN PROJECT AND THE BANKAN-1 DRILLING PROGRAM

In mid-May, Diamond Drilling (DD) and Reverse Circulation (RC) programs commenced at the Kaninko Permit with power auger drilling designed to quadruple power auger coverage of the NE Bankan prospect, already in progress.

The Diamond Drilling program was designed to identify various rock types hosting gold mineralisation in fresh rock and to determine the nature and orientation of mineralised structures at NE Bankan.

RC drilling was focused on testing oxide mineralisation within the one kilometre long (plus 0.25g/t) gold mineralised footprint identified at NE Bankan through earlier reconnaissance power auger drilling. The reverse circulation drilling comprised 50m spaced drill holes on 80m spaced traverses along the main NE Bankan anomaly with holes drilled to a downhole depth of 100m (76m vertical).

In mid-July, the Company announced first RC results, with encouraging intersections returned, including:

- KORC002: 33m at 1.72g/t gold (to EOH) from 67m, including 1m at 22.1g/t gold
- KORC005: 26m at 1.15g/t gold from 4m
- KORC006: 99m (to EOH) at 1.17g/t gold from 1m
- KORC007: 15m at 3.42g/t gold from surface, including 4m at 9.33g/t gold
- KORC010: 40m at 1.44g/t gold from surface, and 21m at 1.24g/t gold (to EOH) from 79m¹⁵

The RC results widened and confirmed the NE Bankan gold mineralised with drilling testing the mineralised one to greater vertical depths than previous AC drilling and significantly, many of the RC holes ended in the transition from weathered to fresh rock, with results suggesting that gold grades continue at depth and into the underlying fresh rock.

By the end of July, the Company had announced further drilling results¹⁶, with DD holes KKODD004, KKODD003 and KKODD002 intersecting wide zones of good to high-grade gold in fresh rock, extending the zone of gold mineralisation to a depth of at least 150m (remaining open). Significant intersections included:

- KKODD004: 153m at 1.51g/t gold from 47m (to EOH), including 6m at 10.40g/t gold from 189m
- KKODD003: 78m at 2.58g/t gold from 3m, including 4m at 13.64g/t gold from 75m, plus 14m at 1.60g/t gold from 88m and 17m at 1.63g/t gold from 141m
- KKODD002: 22.2m at 1.51g/t gold from 1.8m, including 2m at 7.65g/t gold

The results kept coming in August (Figure 3), with assays received from 8 RC-holes yielding several outstanding, high-grade and wide gold intercepts¹⁷:

¹⁵ ASX Announcement -Impressive first RC drill results grow NE Bankan Gold Discovery

https://www.investi.com.au/api/announcements/pdi/b09b9b49-38a.pdf

¹⁶ ASX Announcement - Diamond Drilling confirms gold at depth at NE Bankan, guinea https://www.investi.com.au/api/announcements/pdi/7ce8162f-8d3.pdf

¹⁷ ASX Announcement - ASX Announcement - Diamond Drilling confirms gold at depth at NE Bankan, guinea

https://www.investi.com.au/api/announcements/pdi/b09b9b49-38a.pdf



- KKORC013: 35m at 2.4g/t gold from 1m, including 4m at 13.6g/t gold, and 36m at 2.2g/t gold from 64m
- KKORC016: 26m at 17.5g/t gold from 58m (to end of hole), including 6m at 49.9g/t gold from 59m and, 2m at 8.6g/t gold from 72m and 6m at 17.3g/t gold from 78m (to end of hole)
- KKORC017: 67m at 1.7g/t gold from 32m, including 2m at 11.0g/t gold from 59m



Figure 3 - NE Bankan drill locality plan showing location of the diamond drill, reverse circulation, and AC drill holes, with the most recently reported RC results highlighted in red.

The next batch of assays included drilling at the Bankan Creek Prospect, with diamond hole KKODD006 returning 21m at 2.0g/t gold and 23m at 2.1g/t gold and 23m at 2.4g/t gold (Figure 4). The results also included further RC results:

- KKORC016: 26m at 17.5g/t gold from 58m (to end of hole), including 6m at 49.9g/t gold from 59m and, 2m at 8.6g/t gold from 72m and 6m at 17.3g/t gold from 78m (to end of hole)
- KKORC021: 73m at 3.2g/t gold from 9m, including 5m at 8.5g/t gold from 80m
- KKORC022: 4m at 3.4/t gold from 60m

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- KKORC023: 28m at 1.3g/t gold from 2m
- KKORC024: 16 at 1.9g/t gold from 80m including 3m at 7.2g/t gold from 37m
- KKORC026: 89m at 1.0g/t gold from 7m including 1m at 18.6g/t gold
- KKORC031: 5m at 4.9g/t gold from 56m including 1m at 10.9g/t gold
- KKORC033: 8m at 2.9g/t gold from 59m including 1m at 20.0g/t gold



Figure 4 - Bankan Project, cross section for completed diamond hole KK0DD006 along with previous AC/RC drilling results

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The next batch of assays received in late August included RC results from both NE Bankan and Bankan Creek¹⁸. Shallow RC drilling at Bankan Creek (Figure 5) was completed along strike and 100m to the north of DD-hole KKODD006 (23m at 2.4g/t, 23m at 2.0g/t, 21m at 1.0g/t gold, with the best intercept returning:

KKORC052: 42m at 2.8g/t gold from 12m (to end-of-hole)

Assays received from a further 7 RC drill holes on 2 lines returned further additional good gold intercepts, with better results including:

- KORC048: 9m at 2.3g/t gold from 26m
- KKORC055: 18m at 1.0g/t gold from 7m
- KKORC056: 31m at 0.9g/t gold from 7m



Figure 5 – Bankan Project, drill hole locality plan and drill results, highlighting KKODD020 result reported post-reporting period.

¹⁸ ASX Announcement - Bankan Creek gold zone further expanded https://www.investi.com.au/api/announcements/pdi/7c684b14-d51.pdf

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In early September, the Company reported results from 24-lines of power auger drilling both to the north and south of the NE Bankan gold discovery (Figure 6). Better composite intercepts included:

- KKOAU714: 16m at 3.9g/t gold including 4m at 9.7g/t gold (south-west of NE Bankan)
- KKOAU624: 16m at 1.5g/t gold (south-west of NE Bankan)
- KKOAU695: 16m at 0.8g/t gold including 8m at 1.5g/t gold (south of NE Bankan)
- SAMAU069: 16m at 4.2g/t gold including 2m at 31.8g/t gold (SE Saman prospect)



Figure 6 - Bankan Project, regional power auger coverage, highlighting the new SE Saman power auger anomaly.

September was a pivotal month of results with all-important assays from the first of the west to east DD holes KKODD009, KKODD010, KKODD011 confirming NE Bankan as a large mineralised system at depth (Figure 7), with highly encouraging grades returned over large widths in fresh rock. Significant intersections included:

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KKODD009: 30m at 2.65g/t gold from 101m, including 6m at 9.4g/t gold, 17m at 0.97g/t gold from 81m, plus 19m at 1.36g/t gold from 149m

- KKODD010: 3m at 5.33g/t gold from 88m, including 1m at 15.2g/t gold
- KKODD011: 55m at 2.94g/t gold from 97m, including 1m at 46.5g/t gold¹⁹

Diamond drilling intersected the gold mineralisation in fresh rock almost at right angles to the mineralisation's dip. True widths are interpreted to be 95% of downhole intercept lengths in the above 3 holes.



Figure 7 - Bankan Project, Cross Section S1175260 - diamond drillhole KKODD011 drilled west to east, together with previous RC and AC results

¹⁹ ASX Announcement - 55m at 2.94g/t gold–broad true widths confirmed at Bankan, Guinea https://www.investi.com.au/api/announcements/pdi/94452194-ceb.pdf





As part of the announcement, assays from a further 6-RC holes at NE Bankan and Bankan Creek were also reported, including:

- KKORC046 (NE Bankan): 59m at 0.7g/t gold from 3m, including 1m at 11.4g/t gold and,
- KKORC051 (Bankan Creek): 15m at 0.9g/t gold from 7m.

Drill results to date have also highlighted the generally strong continuity of gold mineralisation at NE Bankan, both down-dip and across-dip with long runs of good gold grades in both directions, suggesting excellent gold mineralisation continuity, which bodes well for the future planned Maiden Resource Estimate (Figure 8).

The final assays for the period were received in late September with the announcement of results from 15 RC-holes and 4 DD-holes confirming clear north-south strike continuity of the central gold-mineralised lodes²⁰



Figure 8 - NE Bankan showing the interpreted surface position of north-south lodes defined by the recent west to east diamond drilling(holes KKODD009, 10, 11, 13, 14, 15)and systematic RC drilling, also showing location of a possible ENE fault passing through the KKODD003 intercept (78m at2.6g/t gold)

²⁰ ASX Announcement - NE Bankan gold deposit grows with more strong drill results https://www.investi.com.au/api/announcements/pdi/18c75f55-a5a.pdf

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Assay results received from a further 15 RC-holes at NE Bankan provided further confidence in continuity in the ore deposit's central lodes. Better RC intersections included:

- KKORC028: 55m at 3.3g/t gold from 4m, including 5m at 5.2g/t gold from 19m, 2m at 7.9g/t gold from 37m, 2m at 6.3g/t gold from 44m and 1m at 14.4g/t gold from 51m, and
 - 9m at 2.8g/t gold from 81m (EOH)
- KKORC029: 6m at 2.2g/t gold from 23m
- KKORC057: 29m at 1.3g/t gold from 17m
- KKORC066: 11m at 1.1g/t gold from 79m, and 7m at 1.5g/t gold from 92m (west to east RC drilling)
- KKORC067: 20m at 1.4g/t gold from 18m (west to east RC drilling)

These most recent RC and DD drilling results have provided new insights into the geology of the NE Bankan discovery. The new west to east diamond drill results demonstrated that the central lodes continue for over 600m on a clear, linear north-south trend, with substantial cumulative mineralised true widths on most drilled sections.

The relative simplicity of the interpretation to date, suggests that line to line continuity is good, complementing earlier recognition of good hole-to-hole continuity on the cross sections and a generally even distribution of gold grades across strike, all of which bodes well for the future planned Maiden Resource Estimate.

NEXT STEPS

- The second phase, Bankan-2, drill program is now underway with auger drilling on the western extension of the NE Bankan auger grid designed to test for additional north-south orientated zones of gold mineralisation between NE Bankan and Bankan Creek.
- The RC/DD drill program is slightly delayed because of logistics issues in Mali. The multipurpose drill rig is now expected on site within the next week.
- Analysis of the RC and DD drill results from the Bankan-1 program will be utilised to define targets for drilling during the Bankan-2 program. This program will be conducted with a powerful multipurpose RC/DD rig enabling deeper drilling and greater capacity for deeper RC drilling than the RC rigs used to date.
- Results received from ground magnetics depict potential structural targets to the west of the known NE Bankan mineralised zone but provide incomplete coverage. Further geophysics is in progress to understand and identify targets for drilling.
- An aeromagnetic survey over most of the Company's ground position (Kaninko-Saman-Bokoro-Argo) is planned for December 2020 or early 2021.



2. COTE D'IVOIRE – BOUNDIALI, FERKESSEDOUGOU NORTH, KOUNAHIRI, FERKESSEDOUGOU, BOBOSSO AND KOKOUMBO PROJECTS

Predictive has a ground position in Cote D'Ivoire of over 4000km² with the country covering about one third of the world-class Birimian gold belt, more than any other country in West Africa (Figure 9). Cote D'Ivoire remains largely underexplored for gold due mainly to political instability which resulted in the exploration investment boom bypassing the country in the decade to 2012.

Predictive has joint venture agreements with Resolute Mining (ASX: RSG) and Tanga Resources (ASX: TRL) to explore its interests.



Figure 9 - Cote D'Ivoire Projects, Applications and Interests.

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RESOLUTE JOINT VENTURE

The Company received assay results from Resolute Mining for the Boundiali Project, including 186 air core holes totalling 8,829m and 397 power auger holes totalling 3,124m.

Resolute has advised that air core and auger drilling from the Boundiali Project had obtained several new gold intercepts north of the Nyangboue gold discovery (Figure 10). Better air core results included:

- BAC066 4m at 12.8g/t gold from 20m
- BAC068 4m at 1.3g/t gold from 28m

The power auger drilling did not encounter any reportable new gold intercepts (>0.25g/t gold).

Additional details about the drilling are listed in Table 1.



Figure 10 – Boundiali Project, power auger holes, overlain historical RC drilling and soil sampling

Further activities for the Resolute Joint Venture include:

• One of the two Odienne permit applications (Figure 9) was granted in September 2020 and a broadscale soil sampling program was in progress by the end of the September Quarter. Further work will be considered once results are received.

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Ferkessedougou North – RC drilling is planned to follow up previously defined IP anomalies near the Ouarigue South gold discovery, commencing in January 2021. Regional power auger drilling on the project area is also planned. Additional IP surveys may also be carried out on the project area depending on the results of the RC drilling.

JOINT VENTURE WITH GLOMIN SERVICES LIMITED (NOW WITH TANGA RESOURCES - ASX: TRL)

In early August, the Company announced it has signed an earn-in and Joint Venture agreement with Glomin Services Limited²¹, to explore Predictive's Bocanda Permit and Issia and Tieningboue applications, all located within Cote D'Ivoire (Figure 9).

In early September, Tanga Resources Limited (ASX: TRL) (Tanga) announced that it has signed a share sale and purchase agreement to acquire Glomin Services Ltd.

The new JV will advance exploration on the Bocanda and Issia Projects, covering an area of 750 km².

The Bocanda project straddles a major geological contact separating greenstone from granite and representing the western edge of the largest greenstone belt in Côte d'Ivoire, which is also the southern extension of Burkina Faso's Hounde belt.

The Bocanda Project also lies in the same structural setting as Predictive's Bobosso project in Côte d'Ivoire, where there have been a number of high-grade intersections recorded. The Bocanda and Issia Project permit areas were selected by Predictive using its in-house targeting system known as Predictore[™].

Glomin (Tanga) will obtain an 80% equity interest in Predictive's Cote d'Ivoire Subsidiary (Ivoirian Resources SARL) by managing and funding exploration activities in two stages:

- **Stage 1:** Earn an 80% interest by spending at least EUR\$200,000 on the Bocanda Permit within the 12 months from agreement signature.
- Stage 2: Exploration activities including, in the event that a successful discovery is made, Ore Resource estimation and completion of a Pre-Feasibility study together with grant of a Mining Lease (known as an Exploitation Permit in Cote d'Ivoire), while maintaining the properties in good stead through completion of statutory expenditure and reporting on the three properties.

If a discovery is made and Stage 2 is therefore successfully completed, Predictive has the option of either contributing to 20% of all subsequent costs or diluting (Stage 3). If the Company opts to dilute and Predictive's shareholding drops below 10%, its equity will be converted to a 2% Net Smelter Return (NSR) Royalty on future gold production from mining operations on any of the properties.

Glomin (Tanga) may, at any time, purchase from Predictive half of the NSR, reducing it to a 1% NSR on such future gold production for a purchase price of US\$10,000,000.

²¹ ASX Announcement - New joint venture in Cote D'Ivoire https://www.investi.com.au/api/announcements/pdi/ab2cc1b7-194.pdf

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3. BURKINA FASO – BONGOU, BIRA AND TAMBIRI PROJECTS

Predictive entered into a joint venture with Progress Minerals International commencing on 30th September 2017 covering an Area of Influence (AOI) including nine exploration permits (Figure 11). The AOI includes the Bongou gold deposit discovered by Predictive in 2012 with a mineral resource estimate of 2.2Mt at 2.6g/t Au for a total of 184,000oz²². In mid-2020, Progress was merged into a new entity, Montage, and Montage took over Progress's JV obligations.



Figure 11 – Burkina Faso Projects and Interests.

No work was carried out on properties in Burkina Faso during the September 2020 quarter.

²² ASX Announcement - High-Grade Maiden Mineral Resource Estimate at Bongou, Burkina Faso https://www.investi.com.au/api/announcements/pdi/2bab5647-9ed.pdf

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2020 SEPTEMBER QUARTER - ASX ANNOUNCEMENTS

This Quarterly Activities Report contains information extracted from ASX market 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 where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

24-Sep-20	NE Bankan gold deposit grows with more strong drill results
17-Sep-20	Additional permits along strike from flagship Bankan Project
10-Sep-20	55m at 2.94g/t gold-broad true widths confirmed at Bankan
03-Sep-20	NE Bankan now 1.6km long with possible parallel gold zone
28-Aug-20	Corporate Update
27-Aug-20	Bankan Creek gold zone further expanded
19-Aug-20	Strong wide gold intercepts from Bankan Creek and NE Bankan
07-Aug-20	Outstanding high-grade gold results from NE Bankan, Guinea
06-Aug-20	New joint-venture in Cote D'Ivoire
31-Jul-20	Diamond drilling confirms gold at depth at NE Bankan, Guinea
17-Jul-20	Impressive 1st RC drill results grow NE Bankan Discovery
08-Jul-20	PDI retains minority holding in Victorian Gold Project

These announcements are available for viewing on the Company's website under the Investors tab. Predictive confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.

TENEMENT STATUS – SEPTEMBER QUARTER 2020

Name	Number	Location	Area (sq. km)	PDI equity	Changes in holding during September Quarter, 2020
Kalinga	Arrêté 2017- 199/MCE/SG/DGMGC	Burkina Faso	186	49%	None
Tantiabongou	Arrêté 2017-054 /MCE/SG/DGMGC	Burkina Faso	50	49%	Permit likely to be replaced by new permit (currently under application)
Tambifwanou	Arrêté 2017- 119/MCE/SG/DGMGC	Burkina Faso	136	49%	None
Bongou	Arrêté 2017- 121/MCE/SG/DGMGC	Burkina Faso	171	49%	None
Tamfoagou	Arrêté 2017- 132/MCE/SG/DGMGC	Burkina Faso	83	49%	None
Tambiri	Arrêté 2017- 120/MCE/SG/DGMGC	Burkina Faso	127	0%	Surrendered

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Bira (in process of	Permit application	Burkina Faso	12	49%	
replacement by					None
now under					None
application)					
Basieri	Arrêté 2017- 133/MCE/SG/DGMGC	Burkina Faso	73	40	Surrendered
Kokoumbo	Mining exploration permit No. 307	Cote D'Ivoire	300	Predictive CI earning 90%. PDI holds 23.5% of Predictive CI	None
Boundiali	Mining exploration permit No. 414	Cote D'Ivoire	299	PDI holds 23.5% of Predictive CI, which owns the Boundiali permit	None
Boundiali North	Mining exploration permit	Cote D'Ivoire	350	Predictive CI earning 90%. PDI holds 23.5% of Predictive CI	None
Kounahiri	Mining exploration permit No. 317	Cote D'Ivoire	260	0%	Surrendered
Bassawa	Mining exploration permit No. 570	Cote D'Ivoire	400	0%	Surrendered
Wendene	Mining exploration permit No. 572	Cote D'Ivoire	400	0% (rights to bonus payments on production)	
Dabakala	Mining exploration permit application	Cote D'Ivoire	400	0% (rights to bonus payments on production)	None
Beriaboukro (Toumodi)	Mining exploration permit No. 464	Cote D'Ivoire	400	Predictive CI can earn 85% in the permit. PDI holds 23.5% of Predictive CI	None
Ferkessedougou North	Mining exploration permit No. 367	Cote D'Ivoire	400	Predictive CI can earn 85% in the permit. PDI holds 23.5% of Predictive CI	None
Bocanda North	Mining exploration permit No. 844	Cote D'Ivoire	368	Predictive 20%	JV with Glomin Services Limited whereby Predictive is free carried at 20% to grant of Mining Lease
Nonta	Exploration Permit	Guinea	100	Predictive 100%	None

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Kankan	Exploration Permit	Guinea	100	Predictive 100%	None
Kaninko	Exploration Permit	Guinea	100	Predictive 100%	None
Saman	Exploration Permit	Guinea	100	Predictive 100%	None
Bokoro	Exploration Permit	Guinea	100	Predictive 100%	New permit grant
Argo	Exploration Permit	Guinea	58	Predictive right to earn 100% at decision to mine.	New acquisition (subject to legal due diligence)
Koundian 1	Exploration Permit	Guinea	85	Predictive –	Need
Koundian 2	Exploration Permit	Guinea	100	right to earn 90% during	
Koundian 3	Exploration Permit	Guinea	63	the	None
Koundian 4	Exploration Permit	Guinea	55	phase	
Cape Clear	EL 5434	Victoria, Australia	63	JV signed under which PDI's beneficial interest may fall to 5% on completion of \$3m exploration expenditure by incoming	None

RESOLUTE JOINT VENTURE – DRILL RESULTS TABLE

Hole No.	UTM 29N Easting	UTM 29N Northing	RL (m)	Hole dip	Hole azimuth	Hole depth	0.25	g/t gold c	ut-off
BAC011	784393	1036400	415	-60	90	35	28	4	0.45
BAC013	784498	1036400	403	-60	90	39	0	8	0.37
BAC022	784949	1036401	409	-60	90	70	12	4	0.46
BAC033	784156	1037193	393	-60	90	39	0	4	2.11
BAC033	784156	1037193	393	-60	90	39	24	4	0.56
BAC066	784399	1037599	399	-60	90	60	20	4	12.80
BAC068	784503	1037601	396	-60	90	43	28	4	1.26
BAC086	784550	1037999	383	-60	90	40	20	4	0.33
BAC093	784900	1038003	383	-60	90	57	48	4	0.39
BAC112	785351	1038401	406	-60	90	66	8	4	0.42
BAC114	785452	1038404	406	-60	90	75	4	16	0.35
BAC128	785050	1038801	403	-60	90	51	20	8	0.40
BAC178	784399	1036801	393	-60	90	47	32	4	0.66
186 air core holes, totalling 8,829m and 397 power auger holes, totalling 3,124m, were completed in the drilling program. Apart from the holes listed here, no drill holes recorded gold grades exceeding 0,25g/t Au									



	Section 1: Sampling Techniques and Data			
Critoria	JORC Code	Commontany		
Citteria	Explanation	commentary		
Sampling Technique	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Samples assayed were air core drill samples and power auger samples, both of which were collected with a scoop. The air core samples were taken in 4m composites for the full length of each hole; one scoop was collected from each 1m sample interval and the four scoop samples combined. Two 1m power auger samples were assayed for each hole, one at the base of the laterite and the other at the end of each hole. Sampling was supervised by qualified geologists. The samples are considerably sufficiently representative of the drilled material for the purposes of a geochemical drilling program.		
Drilling	Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	Drill types were air core and power auger. The air core hole diameter was 3.5 inches.		
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Drill sample recoveries are reported to be adequate. Significant sample bias is not generally expected with scoop sampling of weathered materials.		



Logging	Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography. The total length and percentage of the relevant intersections logged.	All drill samples were logged systematically for lithology and weathering.
Sub-Sampling	If core whether cut or sawn and	The samples were collected using a scoop
Technique and Sample Preparation	whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are	The sampling method is considered adequate for geochemical drilling programs.
	appropriate to the grain size of the	
	material being sampled.	
Quality of Assay Data and Laboratory Tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	All samples were assayed for gold by Bureau Veritas in Abidjan by fire assay with an AAS finish and a detection limit of 5ppb Au. Field duplicates and standards samples are submitted at regular intervals. Duplicate and standards analyses were returned within acceptable limits of expected values.
Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data	At this stage, the intersections have not been verified independently. No twin holes have been drilled to date.
Location of Data points	Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole collar locations were recorded by hand-held GPS. Positional data was recorded in projection WGS84 Zone 29N. The accuracy provided by hand-held GPS is adequate for the reconnaissance nature of the drill program

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	Specification of the grid system used Quality and adequacy of topographic control	
Data Spacing and Distribution	Data spacing for reporting of Exploration Results Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied	The air core and power auger drill holes were drilled on 400m spaced lines with holes 50m apart. Drill hole spacing is not adequate, at this stage, for Mineral Resource estimation.
Orientation of Data in Relation to Geological Structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	There is limited rock outcrop in the area with laterite and soil cover predominating through the area. The overall trend of the Nyangboue gold mineralisation, however, is approximately north-south, hence the east-west orientation of the drill lines.
Sample Security	The measures taken to ensure sample security	Drill samples are retained on site until results are received and are then resampled if significant results are obtained or discarded. Assay sample rejects are stored securely at the laboratory.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data	No reviews or audits of sampling techniques were conducted.
	Section 2 Repo	rting of Exploration Results
Mineral Tenement and Land Tenure Status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the security	The Boundiali exploration permit was granted to PDI Cote D'Ivoire SARL in January 2014. Resolute Mining Limited has earned a 76.5% interest in PDI Cote D'Ivoire SARL to date.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties	PDI is not aware of any effective gold exploration over the Boundiali permit prior to PDI's initial work, however historic records are incomplete at the Cote D'Ivoire government geological agency.
Geology	Deposit type, geological setting and style of mineralisation.	The geology of the Boundiali permit consists of granite, metasediments, mafic volcanics and intrusives, and conglomerates.
Drill Hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length If the exclusion of this information is justified on the basis that the	See Table 1 and the accompanying notes in these tables.

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	and this exclusion does not	
	detract from the	
	understanding of the	
	report, the Competent	
	Person should clearly	
	explain why this is the case.	
Data Aggregation	In reporting Exploration Results.	Drill sampling was either in 1m (auger) or 4m (air core) intervals. No top cuts have been
Methods	weighting averaging techniques	applied to the assay results
	maximum and/or minimum	applied to the assay results
	grade truncations (eg cutting of	
	high grades) and cut-off grades	Up to 4m (down-hole) of internal waste is included for reported results.
	are usually Material and should	
	he stated	Mineralised intervals are reported on a weighted average basis.
	Where aggregate intercents	
	incornorate short lengths of high	
	grade results and longer lengths of	
	low grade results the procedure	
	used for such aggregation should	
	he stated and some typical	
	examples of such aggregations	
	should be shown in detail	
	The assumptions used for any	
	reporting of metal equivalent	
	reporting of metal equivalent	
Deletter 11 C	values should be clearly stated.	
Relationship Between	These relationships are	True widths have not been estimated as the overall orientation of mineralised
Mineralisation Widths	particularly important in the	zones is not well understood.
and Intercept Lengths	reporting of Exploration Results	
	If the geometry of the	
	mineralisation with respect to	
	the drill hole angle is known, its	
	nature should be reported. If it	
	is not known and only the down	
	hole lengths are reported, there	
	should be a clear statement to	
	this effect (eg 'down hole	
	length, true width not known').	
Diagrams	Appropriate maps and sections	An appropriate map is included in this release (Figure 10).
	(with scales) and tabulations of	
	intercepts should be included for	
	any significant discovery being	
	reported These should include,	
	but not be limited to a plan view	
	of drill hole collar locations and	
	appropriate sectional views.	
Balanced Reporting	Where comprehensive reporting	Comprehensive reporting of significant drill results is provided in Table 1.
	of all Exploration Results is not	
	practicable, representative	
	reporting of both low and high	
	grades and/or widths should be	
	practiced to avoid misleading	
	reporting of Exploration Results.	
Other	Other exploration data, if	All other exploration data on this area has been reported previously by PDI.
Substantive	meaningful and material, should	
Exploration Data	be reported including (but not	
	limited to): geological	
	observations; geophysical survey	
	results; geochemical survey	
	results; bulk samples – size and	
	method of treatment;	
	metallurgical test results;	
	bulk density, groundwater,	
	geotechnical and rock	
	cnaracteristics; potential	
	deleterious or contaminating	
- .1	substances.	
Further Work	The nature and scale of planned	No further work is planned on the Boundiali permit in the short term.
	turther work (eg tests for lateral	
	extensions or large scale step out	
	drilling.	
	Diagrams clearly highlighting the	
	areas of possible extensions,	
	including the main geological	
	interpretations and future drilling	
	areas, provided this information is	
	not commercially sensitive.	

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Predictive advises that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.

Competent Persons Statement

The exploration results reported herein are based on information compiled by Mr Paul Roberts (Fellow of the Australian Institute of Geoscientists). Mr Roberts is a full-time employee of the company and has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Roberts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This announcement is authorised for release by Predictive Managing Director, Paul Roberts.

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About Predictive Discovery

Predictive Discovery is a West African focused gold explorer with a large portfolio of 100%-owned and joint venture gold projects located across West Africa's famed Birmian Greenstone Belt, one of the world's most goldendowed Greenstone Belts, presenting great potential for significant gold deposits.

The Company's projects provide a gold resource (Bongu) as well as multiple drill-ready targets being systematically tested with drilling programs currently underway.

The Company's objective is to find large gold deposits and is actively exploring its 100%-owned projects, located in Guinea's highly prospective yet underexplored Siguiri Basin, which contains AngloGolds's world-class Siguiri Mine (+10Moz) with all projects close to widespread artisanal workings



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