

ASX Announcement

31st October 2012

Quarterly Report for the Period Ended 30th September 2012

Highlights:

EXPLORATION

□ Eastern Burkina Faso Project:

○ High grade-focused drill strategy developed

○ Bangaba Project:

- Recently identified historic high grade intercepts 1km south-west of Tambiri Prospect on same structure expand prospectivity of the Bangaba Permit:

- **3m at 4.9g/t Au** from 25m
- **6m at 5.2g/t Au** from 90m including 1m at 22g/t Au
- **1m at 16g/t Au** from 55m
- 400m long and open to south

- Remaining RC drill results from Dave Prospect include:

- **14m @ 1.5g/t Au** from 26m
- **4m @ 3.2g/t Au** from 28m
- **6m @ 2.4g/t Au** from 78m

○ Bonsiega Permit Group

- Acquisition of minority interest in Stratos Joint Venture permits to increase to 100% ownership

□ December Quarter:

○ Drilling program focused on 6 high grade targets in Eastern Burkina Faso Project, commencing at new Bongou discovery (**20m at 4.8g/t Au from 70m**)

CORPORATE

□ Capital raisings:

- Entitlement issue raised \$761,000
- Commitments for \$3.3M placement announced after 30 September 2012

□ Significant reduction in Company overheads to further focus future expenditure on planned drill programs.

□ \$0.6M in cash at 30 September 2012 and no debt. Cash at 31 October of \$1.2M after tranche 1 of recent placement.

Predictive Discovery

Limited is a gold exploration company with advanced exploration projects in Burkina Faso, West Africa and strong technical capabilities.

ASX: PDI

Issued Capital: 136M shares

Share Price: 5.5 cents

Market Capitalisation:
\$7.5M

Cash (at 31 October 12):
\$1.2M

Directors

Phillip Harman
Non-Exec Chairman

Paul Roberts
Managing Director

Bobby Danchin
Non-Executive Director

Tom Whiting
Non-Executive Director

Phil Henty
Non-Executive Director

Managing Director's Assessment of the September Quarter

Mr Paul Roberts, PDI's Managing Director commented: *"A pause in exploration activities in the September Quarter due to the Burkina Faso rainy season has given us time to evaluate the many encouraging drill results from the exploration program completed in May 2012. This has led to a strategic decision to focus on drilling the **higher grade prospects** encountered in the past 18 months including **Bongou, Tambiri, Tambiri South, Solna, Prospect 71 and Tamboana**.*

Our recent capital raisings combined with a focus on reducing overheads to reflect the more constrained market conditions means that PDI is well placed to return to the field with a tightly focused drill program late in the December Quarter. This will be followed by additional, carefully controlled drilling programs in 2013 aimed at building a high grade open pit gold resource inventory."

INTRODUCTION

PDI's major country focus is Burkina Faso, West Africa where it has established a well-qualified Burkina-based exploration team and a large regional tenement package mainly in the north east of the country (Figure 1).

PDI's tenement holding covers approximately 100 km of strike length in the Samira Hill greenstone belt in eastern Burkina Faso (the "Bonsiega permit group", Figure 1). This belt hosts the 2.5 million ounce Samira Hill gold mine across the border in Niger and contains numerous active artisanal gold mine sites along its length. The Bangaba permit covers 10km of strike of the nearby Sebba Belt, including the largest known artisanal workings in the area.

Encouraging drill results from the Bonsiega and Bangaba permits has led PDI to consider its entire Eastern Burkina Faso ground holdings effectively as one project. Based on the encouraging results, the company's goal is to identify sufficient resources to support a major central gold treatment plant, the first in the area, drawing ore from multiple deposits.

Early onset of the rainy season in 2012 brought field work to a halt in the June Quarter. Consequently, the focus of technical work in the September Quarter has been on drill hole logging using a hand held XRF unit and geological analysis.

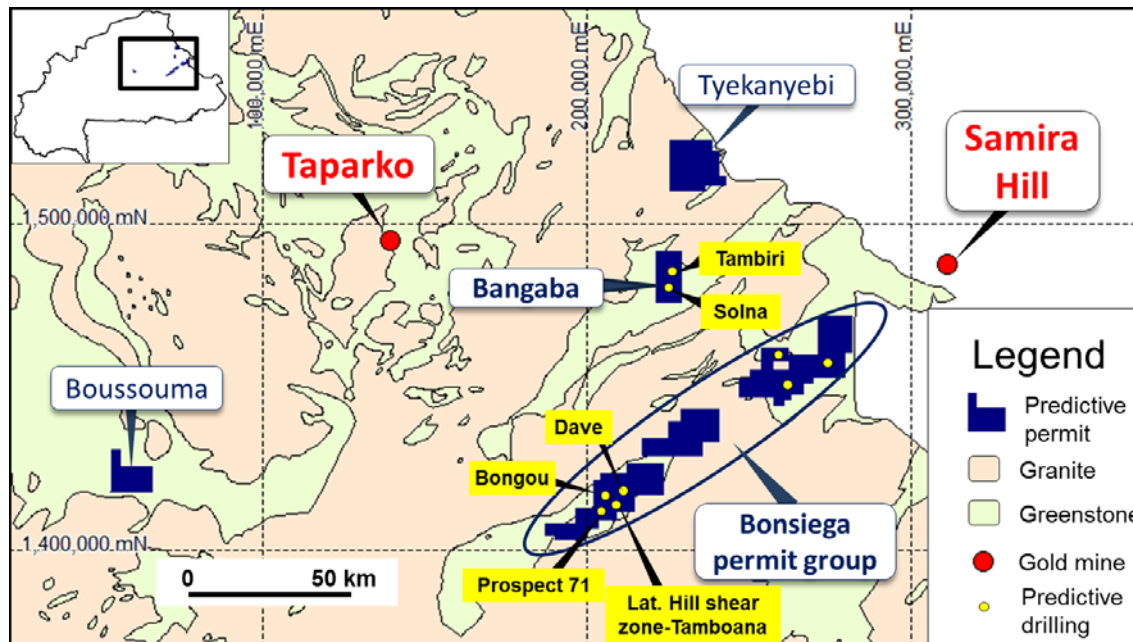


Figure 1: Locality Plan – PDI Exploration Permits in Eastern Burkina Faso on Government geological map. Prospect locations are labelled in yellow.

PROJECTS

Burkina Faso

Bangaba Permit

Tambiri South

Recent analysis of historic data from the Bangaba Permit indicates that there is a cluster of four reconnaissance diamond drill holes located approximately 1km south-south-west of the main Tambiri Prospect containing significant gold intercepts including:

- **3m at 4.9g/t Au** from 25m
- **6m at 5.2g/t Au** from 90m including 1m at 22g/t Au
- **1m at 16g/t Au** from 55m

These holes were drilled by High River Gold 1996 over a strike length of 400m. Each hole intersected gold mineralisation, the deepest intercept being approximately 63m below surface. The zone is open to the south-west and at depth. Potential exists for another Tambiri sized gold deposit possibly including a thicker high grade shoot as at Tambiri itself (Figure 3).

The drill results coincide with the 3.5 km long, Tambiri bedrock gold geochemical anomaly (Figure 2). The historic High River Gold reconnaissance drilling program intersected at least minor gold mineralisation in most holes over a strike length of approximately 2km, indicating significant additional potential elsewhere along the same structure.

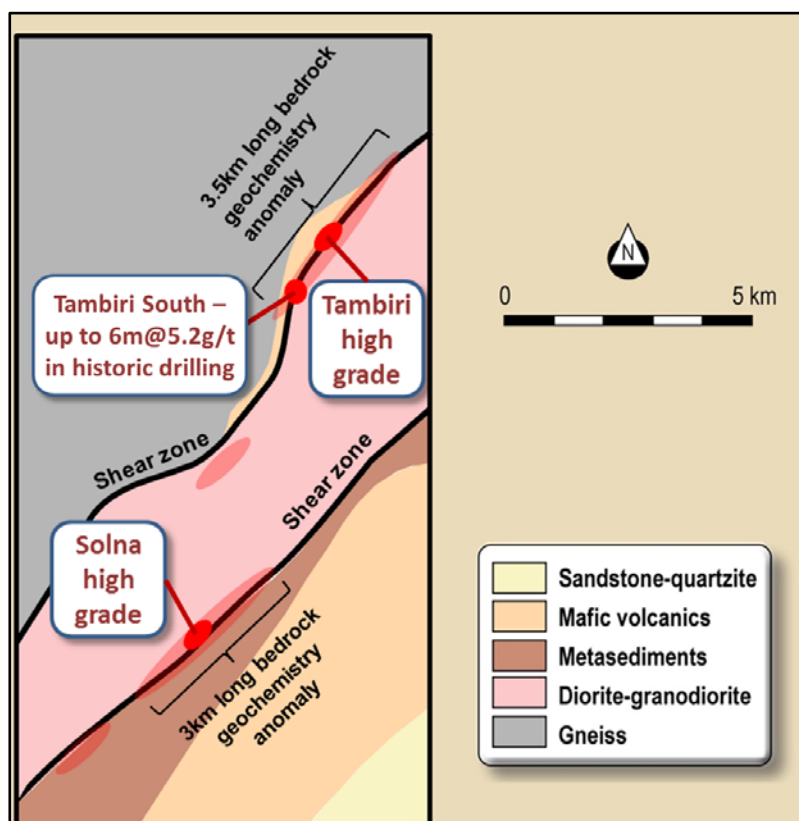


Figure 2: Locality Plan – Bangaba Permit, showing location of Tambiri South gold mineralised zone.

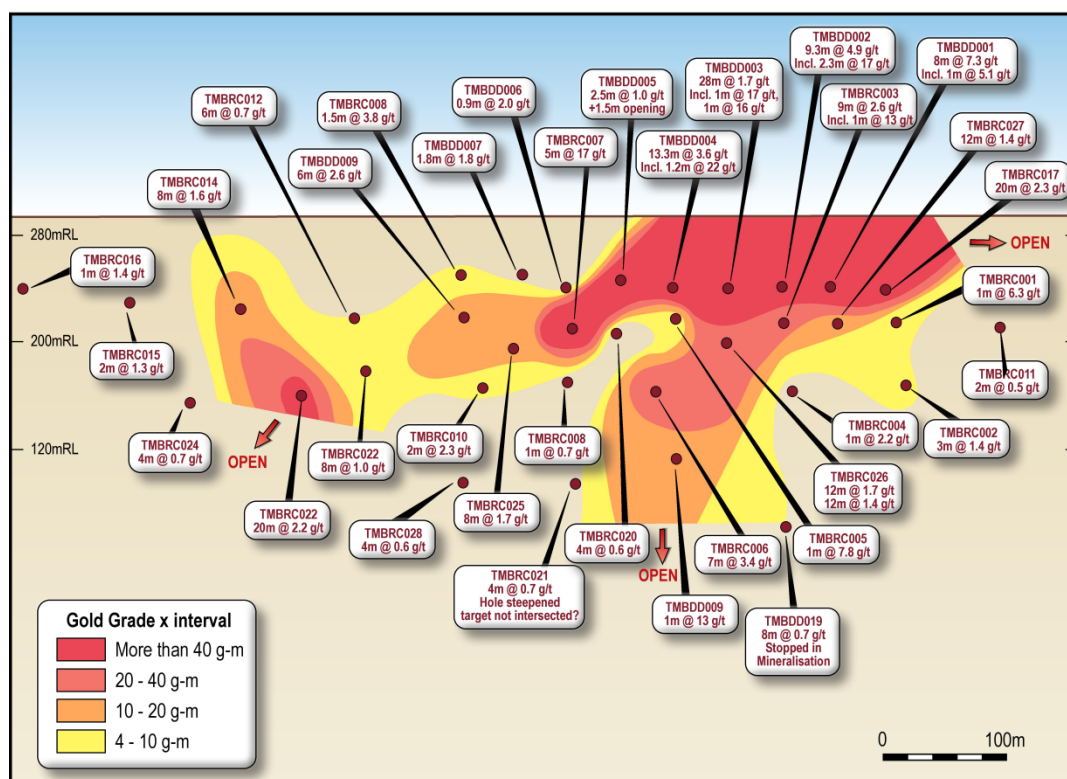


Figure 3: Tambiri longitudinal projection showing shallow plunging high grade shoot. A similar shoot may be present at shallow depths in the Tambiri South zone and possibly at other locations along the Tambiri structure.

Solna Geological Interpretation

Geological re-interpretation of the Solna Prospect indicated that the gold mineralisation may occur in a series of sub-horizontally plunging shoots with high grade cores (2-7m at 10-50g/t Au). These are only detectable at surface where the high grade cores outcrop, as they do at the Solna artisanal workings (Figure 4). Elsewhere, these shoots can be present at shallow depths (e.g. 6m at 20g/t Au at left on Figure 4) but not extend to surface. This new understanding opens up potential to discover significantly more such mineralisation at shallow depths over the 3km of strike length of bedrock gold geochemical anomalies known at Solna (Figure 2). In addition, as Figure 4 shows, these horizontal shoots repeat at depth, opening up the potential to discover a series of underground-mineable high grade ore shoots, possibly to great depths.

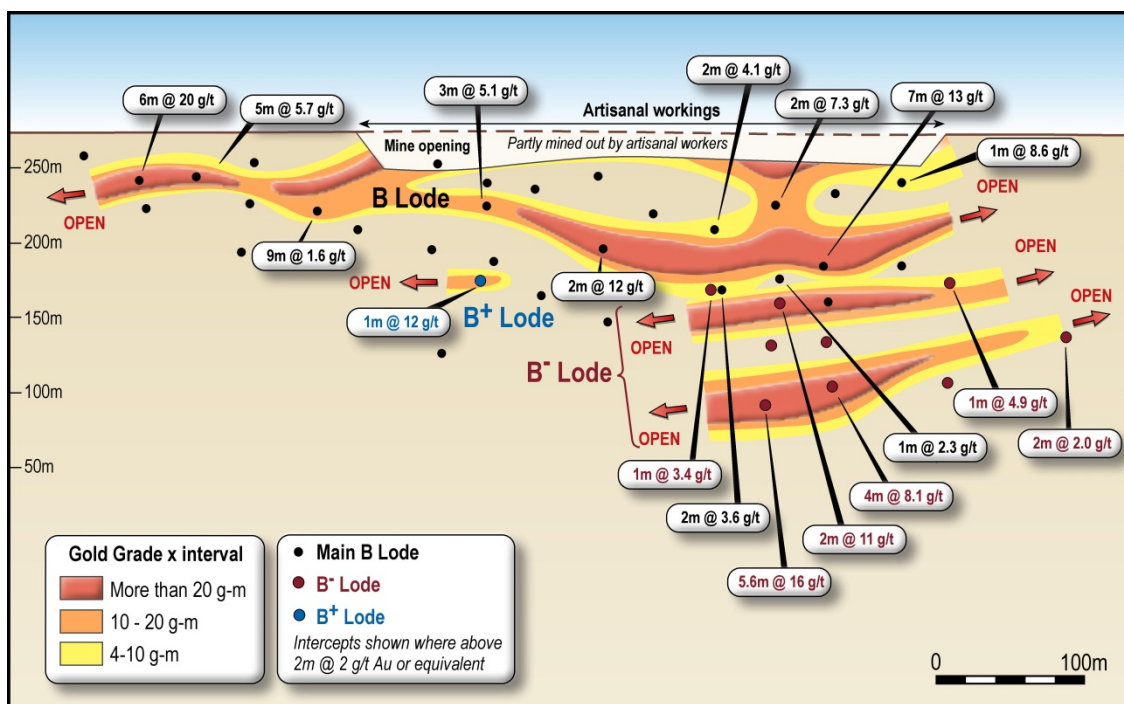


Figure 4: Solna Prospect – longitudinal projection of PDI's RC and diamond drill results in the B Lode (the largest of the three lodes discovered to date). Note the series of interpreted sub-horizontal shoots.

Bonsiega Permit Group

Acquisition of Stratos Joint Venture Minority Interest

The Stratos Joint Venture covered four permits within the Bonsiega Project (Figures 1 and 2). PDI's partner was Stratos Resources Limited (ASX: SAT), formerly Eldore Mining Corporation Limited. PDI announced a transaction with SAT on 6th August 2012 by which PDI acquired the 27.9% of the joint venture that it did not already own by issuing 15 million PDI shares and receiving \$300,000 in partial repayment of the cash calls then owed by SAT. SAT also had the right to pay all or part of that \$300,000 by purchasing shares in PDI's recent entitlement issue for the price of 8 cents per share. Since then, SAT has purchased 3.75 million PDI shares and 1.875 million PDI options through

expenditure of the full \$300,000. SAT will receive the remaining 11.25 million PDI shares immediately after refreshment of PDI's 15% placement capacity at PDI's AGM on 26th November 2012.

With this purchase, the Company has acquired 100% ownership of the 20km long Laterite Hill Gold Field, which includes both the high grade prospects and targets at Bongou, Prospect 71 and Tamboana and the large tonnage, moderate grade prospects of Dave and the Laterite Hill Shear Zone (Figure 1). The former joint venture permits also cover a number of other less advanced prospects containing artisanal gold workings and gold geochemical anomalies.

PDI now owns or has the right to earn 95 to 100% of all of its 11 permits in Burkina Faso.

Dave Prospect Drilling Results

Assay results were received during the Quarter from the last seven holes drilled at the Dave Prospect in the June Quarter. Multiple gold mineralised zones were encountered in most holes. Highlights included:

- 14m at 1.5g/t Au from 26m
- 6m at 2.0g/t Au from 104m
- 4m at 3.2 g/t Au from 28m
- 8m at 1.3g/t Au from 24m
- 6m at 2.4g/t Au from 78m
- 12m at 0.9g/t Au from 98m
- 10m at 1.1g/t Au from 50m

Full results are tabulated at the end of this report.

Logging using a hand-held XRF machine and geological analysis of the drill samples during the September Quarter has improved PDI's geological understanding of the Dave mineralised system. It is now known that many of the better gold assay results are found on the margins of basaltic volcanic or intrusive units, thereby providing a guide for future resource drilling.

In addition, there is now evidence for a north-east dipping gold mineralised zone oriented parallel to a drill line in the central part of the Dave Prospect. This may be a mineralised fault and points to new potential between the drill lines that was not effectively tested by earlier drilling. If more parallel zones are found, this has the potential to increase the size of the gold mineralised system.

Planned December Quarter Exploration – Burkina Faso

PDI's exploration strategy in the 2012-13 field season is to focus on drill testing higher grade prospects and targets with the objective of expanding their resource potential and working towards a substantial high grade resource inventory. A series of drill programs will be carried out aimed at establishing continuity and strike length on the higher grade prospects, including Bongou, Tambiri, Tambiri South, Solna, Prospect 71 and Tamboana (Figure 1).

Given the past difficulties with obtaining rapid assay returns, drilling will be carried out in relatively short campaigns, leaving time between each campaign to obtain the assays and plan the next phase. This approach is designed to maximise discovery efficiency and ensure that most drilling will go into prospects that can produce the maximum number of resource ounces.

The Company will also carry out low key exploration activities in 2012-13 elsewhere in the Eastern Burkina Faso Project aimed at identifying additional significant prospects for future drilling.

PDI will start field work in November 2012, commencing with geological mapping and drill site preparation on its high priority drill targets. The Company plans to start an RC and/or RAB drilling program late in the Quarter.

Cote D'Ivoire

No activity was carried out during the Quarter, pending the grant of the Komboro exploration permit.

Australia

Victoria - Gold (PDI 100%)

No activity was carried out during the September Quarter

CORPORATE

At 30th September, 2012, PDI held cash and term deposits of \$583,000 and no debt.

During the Quarter, the Company received \$761,000 through a \$2 million Entitlement Issue. Since the end of the Quarter, the Company has obtained commitments to raise \$3.3 million via a placement in two tranches, subject to EGM approval for the second tranche. The EGM to approve the second tranche will be held in early December 2012.

In the light of the current, difficult capital raising environment and hence the slower pace of exploration activity, PDI reduced its overheads substantially during the September Quarter through a series of measures, including salary reductions, retrenchment of some personnel and lowering of office costs. However, the Company retained its key personnel and establishment in Burkina Faso,. With the benefit of this process, PDI is now equipped to carry out a highly efficient exploration program in 2012-13 with its expenditure focused on drilling in Burkina Faso.

DRILL ASSAY RESULTS TABLE

HoleID	Easting (UTM)	Northing (UTM)	Azimuth (degrees)	Inclination (degrees)	Depth From (m)	Interval (m)	Au (g/t)
DAVRC236	214,700	1,419,245	140	-50	10	2	0.93
DAVRC236	214,700	1,419,245	320	-50	34	2	1.54
DAVRC236	214,700	1,419,245	320	-50	62	2	1.34
DAVRC236	214,700	1,419,245	320	-50	72	2	0.50

DAVRC236	214,700	1,419,245	320	-50	76	4	1.91
DAVRC236	214,700	1,419,245	320	-50	104	6	1.97
DAVRC237	214,735	1,419,200	320	-50	16	2	0.62
DAVRC237	214,735	1,419,200	320	-50	22	2	0.78
DAVRC237	214,735	1,419,200	320	-50	28	4	3.15
DAVRC237	214,735	1,419,200	320	-50	40	2	0.70
DAVRC237	214,735	1,419,200	320	-50	76	2	0.65
DAVRC237	214,735	1,419,200	320	-50	82	2	0.74
DAVRC238	214,721	1,419,195	140	50	6	2	0.64
DAVRC238	214,721	1,419,195	140	-50	22	2	0.53
DAVRC238	214,721	1,419,195	140	-50	26	14	1.46
DAVRC238	214,721	1,419,195	140	-50	66	2	1.11
DAVRC239	214,747	1,419,217	230	-50	24	8	1.25
DAVRC239	214,747	1,419,217	230	-50	42	4	2.14
DAVRC239	214,747	1,419,217	230	-50	66	2	0.95
DAVRC240	216,016	1,419,688	140	-50	78	6	2.44
DAVRC240	216,016	1,419,688	140	-50	90	4	1.12
DAVRC240	216,016	1,419,688	140	-50	98	12	0.90
DAVRC241	216,061	1,419,670	230	-50	10	2	1.28
DAVRC241	216,061	1,419,670	230	-50	26	2	0.53
DAVRC241	216,061	1,419,670	230	-50	38	2	3.05
DAVRC241	216,061	1,419,670	230	-50	46	2	0.67
DAVRC241	216,061	1,419,670	230	-50	50	10	1.14
DAVRC241	216,061	1,419,670	230	-50	62	4	0.66
DAVRC242	216,029	1,419,640	050	-50	24	2	0.58

Notes regarding the drilling and the assay table:

1. 0.5g/t Au cut-off grade applied.
2. Down-hole surveys were performed on all holes.
3. Analytical standards, blanks and duplicates were added to all sample batches for quality control.
4. Analyses were performed by fire assay at the SGS laboratory in Ouagadougou.
5. Average assay values are calculated with a maximum of 2m of internal waste.

About Predictive Discovery:

Predictive Discovery Limited (PDI) was established in late 2007 to explore for gold and uranium. The Company is focused principally on exploration for gold in West Africa with one additional gold project in Australia. PDI has a distinctive technological capability, known as Predictore™, which is designed to increase drill targeting efficiency thereby reducing ore discovery cost. The Company's major focus is in Burkina Faso, West Africa where it has assembled a substantial regional ground position totalling 1,544km² and is exploring for large open-pittable gold ore deposits.

Competent Persons Statement

The exploration results reported herein, insofar as they relate to mineralisation, 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 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). 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.

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