predictive discovery LIMITED

31st October 2017

Quarterly Report for the Period Ending 30th September 2017

EXPLORATION

Côte d'Ivoire - Toro Gold Joint Venture

- Boundiali Project:
  - Agreement reached with a local vendor on a 400km^2 permit application north of the Boundiali permit, covering approximately 20km of the same structure which is inferred to control the Nyangboue gold mineralisation.
  - Results reported from RC drill testing of two gold-in-soil anomalies, totalling 4.274m, including:
    - **1m at 22.2g/t Au** from 51m (Gbemou),
    - **1m at 9.48g/t Au** from 5m (Nyangboue South).

Côte D'Ivoire – Bobosso Project

- Diamond drilling results reported in July 2017 including:
  - **8.7m at 3.3g/t Au** from 39.6m including **1.2m at 14.3g/t Au,**
  - **17m at 1.47g/t Au** from 41m including **2m at 6.95g/t Au,**
  - **28m at 1.00 g/t Au** from 0m including **16m at 1.32g/t Au.**

Burkina Faso

- Joint venture agreement covering the current Burkina Faso properties underway with Progress Minerals International (Inc) commencing 1st October 2017.

Planned December Quarter Exploration Program

Côte d'Ivoire

- Toro JV
  - Aeromagnetic survey covering parts of the Boundiali, Ferkessedougou North and Ferkessedougou South permits.
  - Large trenching program on Ferkessedougou North and Ferkessedougou South permits in preparation for RC drilling in early 2018.
- Progress-XMI JV (Bobosso) - 5,000m RC drilling program on Bobosso Prospect.

Burkina Faso

- Power auger drilling program in preparation for RC drilling in early 2018.

Project Generation

- Application for new permits in Burkina (100% PDI) when tenement map is re-opened for applications.
- Project generation elsewhere in West Africa.

CORPORATE

- $0.7M cash at 30th September 2017 and no debt. Higher than normal quarterly expenditure resulted from catch-up contributions to Toro JV expenditure.
- A Rights Issue to raise up to $2.6 million was announced on 26th October 2017.

ASX Announcement

Predictive Discovery Limited is a gold exploration company with strong technical capabilities focused on its advanced gold exploration projects in West Africa.

ASX: PDI

Issued Capital: 163 million shares

Share Price: 6.0 cents

Market Capitalisation: $9.8m

Directors

Phillip Jackson
Non-Exec Chairman

Paul Roberts
Managing Director

David Kelly
Non-Executive Director

INTRODUCTION

PDI's principal focus is in the countries of Cote D'Ivoire and Burkina Faso in West Africa.

In Cote D'Ivoire (Figures 1 and 2), the Company has interests in six granted exploration permits and two permit applications, totalling 2,749km^2, which are being actively explored under the terms of a joint venture with Toro Gold Limited (Toro). PDI is also conducting exploration under an agreement with Progress Minerals Inc (Progress) and Ivoirian Company, West African Venture Investments SARL (WAVI), on the Bobosso Project, which covers 1,200km^2. A further six permit applications covering 2,320km^2 were announced on 6 February 2017.

In Burkina Faso, the Company has a large regional tenement package in the north-east of the country covering 949km^2 (Figure 7). PDI's exploration focus is on the high-grade Bongou gold discovery and the surrounding area. A formal Mineral Resource Estimate on Bongou resulted in 184,000oz of gold in the Inferred and Indicated Mineral Resource categories with an average grade of 2.6g/t Au, including 136,000oz at 3.8g/t Au (ASX release dated 4/9/14).

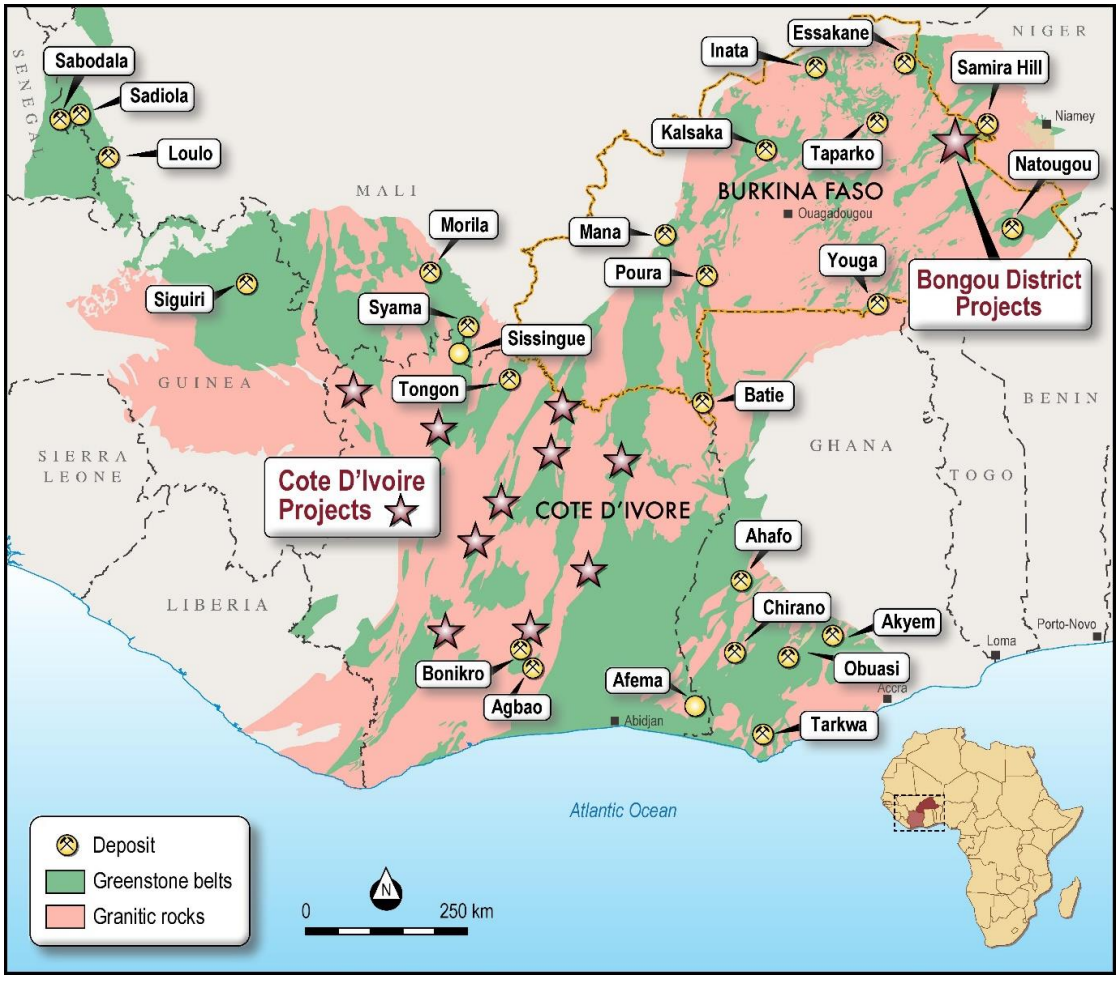

Figure 1: *Map of the Birimian Gold Belt showing major mines/gold deposits and PDI project areas (stars).*

Predictive's current strategy is to maintain a high level of exploration activity on all of its projects through project-level funding, either via joint ventures or direct cash investments into private companies which hold the Company's ground. The Toro, Progress and Cape Clear Joint Ventures are operating well and have been generating significant newsflow. At the same time, the Company contunues to seek new ground in West Africa on which it can undertake early stage exploration in its own right.

COTE D'IVOIRE

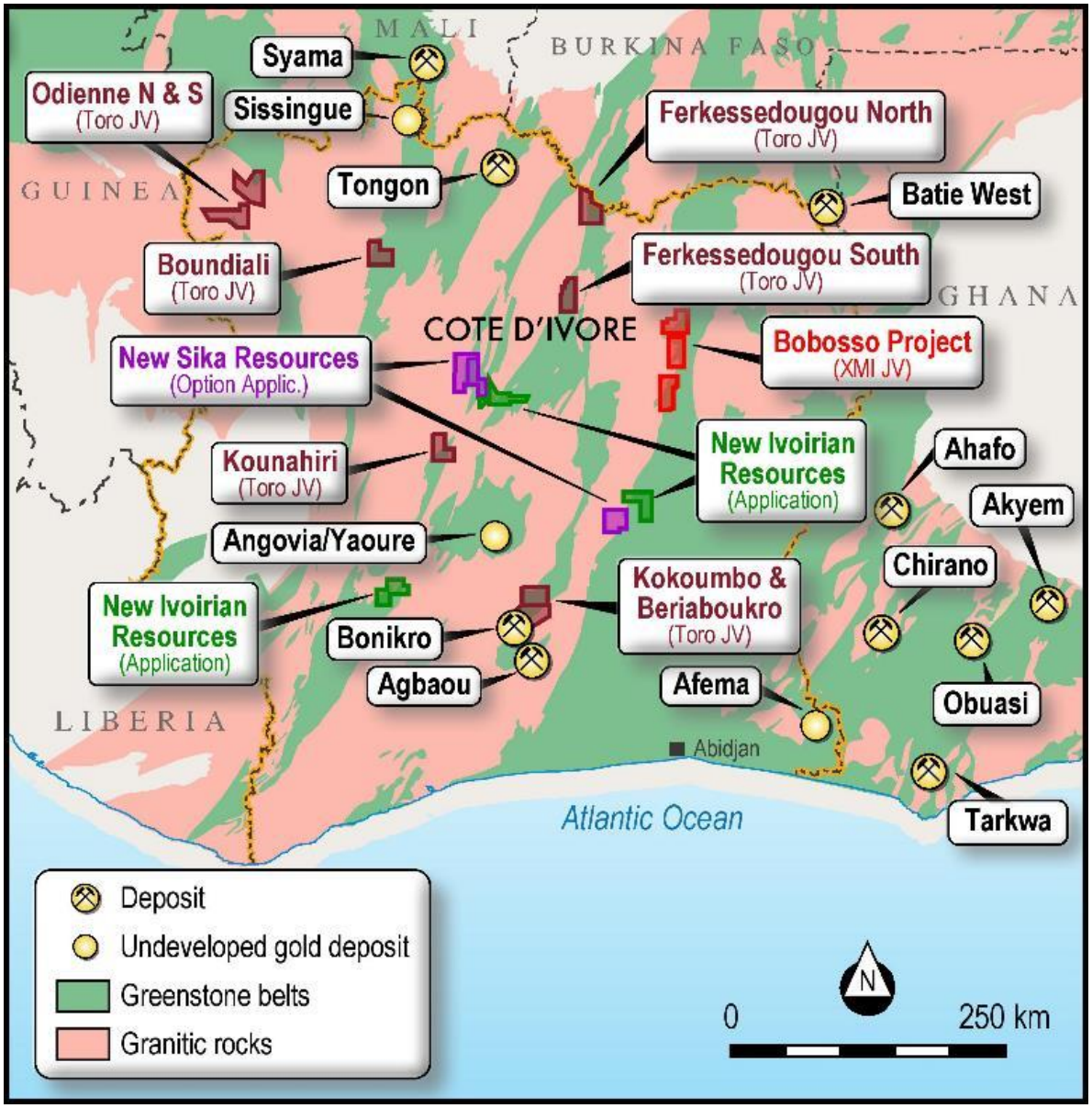

Figure 2: *Locality map showing the Toro JV permits/applications (in brown), permits/applications covered by PDI's agreement with XMI SARL and Progress Minerals Inc over the Bobosso Project (red), the wholly owned Ivoirian Resources SARL permit applications (in green) and the optioned Sika Resources permit applications (in magenta).*

Introduction

Predictive has been increasingly focused on Cote D'Ivoire in recent years. The country covers over a third of the highly prospective Birimian gold belt, more than any other country in West Africa. Cote D'Ivoire is highly underexplored for gold because the exploration investment boom in the last decade largely bypassed the country because of political instability. Since the accession of President Alassane Ouattara in 2011 and his comfortable re-election in 2015, and with investment certainty provided by an updated Mining Act and a forward-looking Mines Administration, Cote D'Ivoire has become a highly attractive exploration investment destination.

In Cote D'Ivoire, Predictive holds joint ventures with (1) Toro Gold Limited, a UK-based company and (2) West African Ventures Investment SARL (WAVI) SARL and Progress Minerals International (Inc) of Canada (Progress). It has also entered into an option agreement with Sika Resources Pty Ltd on three permit applications held by Sika's subsidiary, Moaye Resources SARL.

Toro Gold Joint Venture (Predictive 35%)

Background

Predictive is in joint venture with Toro Gold Limited, a UK-based company, on six granted permits and two permit applications in Cote D'Ivoire (Figure 2). The Toro Joint Venture operates through Predictive Discovery Limited's former subsidiary, Predictive Cote D'Ivoire SARL (Predictive CI) of which Predictive now holds 35%. Predictive is currently contributing 35% of ongoing expenditure by Predictive CI.

Boundiali North Permit Application

This permit application is located directly north of the Nyangboue gold discovery (Figure 3). It covers the interpreted north-trending structure which is inferred to control the location of the Nyangboue mineralisation and the gold-in-soil anomalous trend which extends south from there to the Nyangboue South prospect[1]. Acquisition of this ground is a highly significant step forward for the joint venture as it doubles the amount of gold prospective strike held in the Boundiali area (Figures 2 and 3). Initial geochemical exploration is planned to commence soon after this permit is granted.

The permit application was made by a local Cote D'Ivoire company, DS Resources SARL (DSR). Predictive Discovery Cote D'Ivoire SARL has entered into an agreement with DSR to acquire up to 85% ownership of the permit by completion of a definitive feasibility study. DSR may contribute its share of mine development costs or convert its interest into a net smelter return royalty at the rate of 1% of royalty for 10% of equity i.e. a maximum royalty of 1.5%.

[1] *A small percentage of the permit area may be excised to exclude classified forest. Discussions about this matter are continuing with the relevant government authorities.*

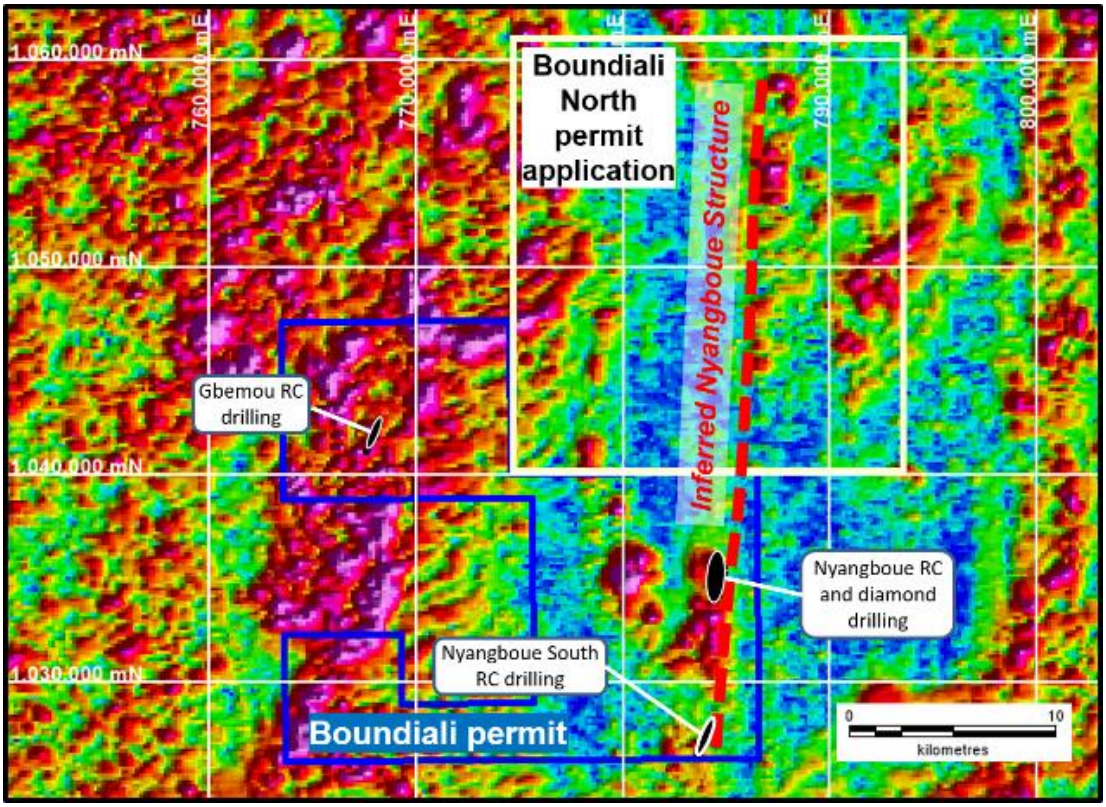

Figure 3: *Location of Boundiali & Boundiali North plus drilling on regional aeromagnetic map*

Boundiali Permit

The Boundiali permit is located within a very well mineralised greenstone belt which contains the large operating Tongon and Syama gold mines in Cote D'Ivoire and Mali respectively (Figure 2). The southern part of this belt has had little exploration to date and represents a first-class opportunity to make new large gold discoveries.

Predictive was granted the Boundiali permit in January 2014. The Company's first exploration program on the permit was a BLEG stream sediment survey (*ASX release dated 4/8/14*) which discovered a series of strong stream sediment anomalies, the best of which, a 24ppb Au anomaly, lies downstream of the new Nyangboue gold mineralised zone intersected in the 2016 RC drilling program.

RC and diamond drilling at Nyangboue has revealed a series of drill intercepts, the majority lie along a 1.2km long mineralised shear zone with best intercepts of:

- NDC007 - **30m at 8.3g/t Au** from 39m includes **1.5m at 56.9g/t Au** and **4.5m at 26.5g/t Au**.
- BRC003 - **28m at 4.04g/t Au** from 3m, including **1m at 49.7g/t Au.**
- BRC004 - **20m at 1.97g/t Au** from 0m.
- BRC004 - **14m at 5.51g/t Au** from 32m, including **1m at 31.6g/t Au.**

- BRC004BIS (twin hole) – **20m at 10.45g/t Au** from 38m including **1m at 145.5g/t Au.**
- BRC006 – **9m at 7.9 g/t Au** from 99m including **1m at 44.7g/t Au.**
- BRC023 – **7m at 3.8g/t Au** from 33m including **1m at 11.3g/t Au.**
- BRC048 – **28m at 1.55g/t Au** from 1m including **1m at 27.4g/t Au.**

Nyangboue South and Gbemou Prospects

These two prospects were defined by geochemical sampling in 2015 and 2016 (Figure 4).

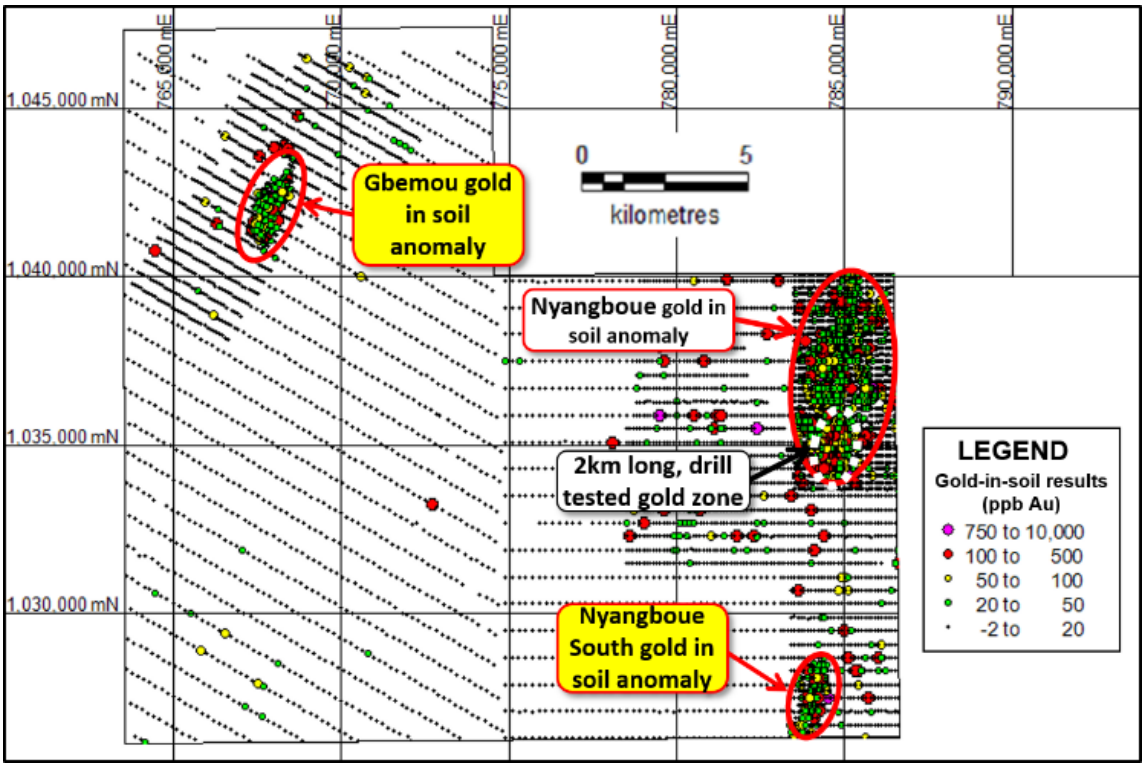

Figure 4: *Toro Gold soil sampling grid covering the entire Boundiali exploration permit (results reported to the ASX on 20/10/15, 23/3/16 and 2/2/17. The two RC drilled areas are highlighted in yellow.*

RC Drill Program

A reconnaissance RC drilling program was designed to test portions of both soil anomalies on 200m spaced lines. 78 holes were drilled, 35 on Nyangboue South and 43 on Gbemou, for a total of 4,274m. Holes were drilled towards the west at an angle of -50 degrees typically to a downhole depth of about 50m.

The Gbemou RC drilling covered about 1,200m of strike length (Figure 5) and the Nyangboue South program tested approximately 1,000m of strike length in two sections separated by an 800m long gap (Figure 6).

The drilling was carried out by Energold and the drill samples were assayed by ALS at Loughreagh in Ireland. Additional details about the program are provided in Table 1.

At Nyangboue South, the drilling encountered a package of metasedimentary rocks like those intersected at the Nyangboue Prospect i.e. conglomerates, sandstones and siltstones/shales. At Gbemou, the drilling intersected similar metasediments as well as granitic intrusives. In both areas, gold values were encountered at multiple locations (see Figures 5 and 6) with a few high values e.g.:

- 1m at 22.2g/t Au from 51m (Gbemou)
- 1m at 7.59g/t Au from 16m (Gbemou)
- 1m at 9.48g/t Au from 5m (Nyangboue South)

Multiple thin zones of low-moderate grade gold mineralisation were intersected at the southern end of the Gbemou drill grid.

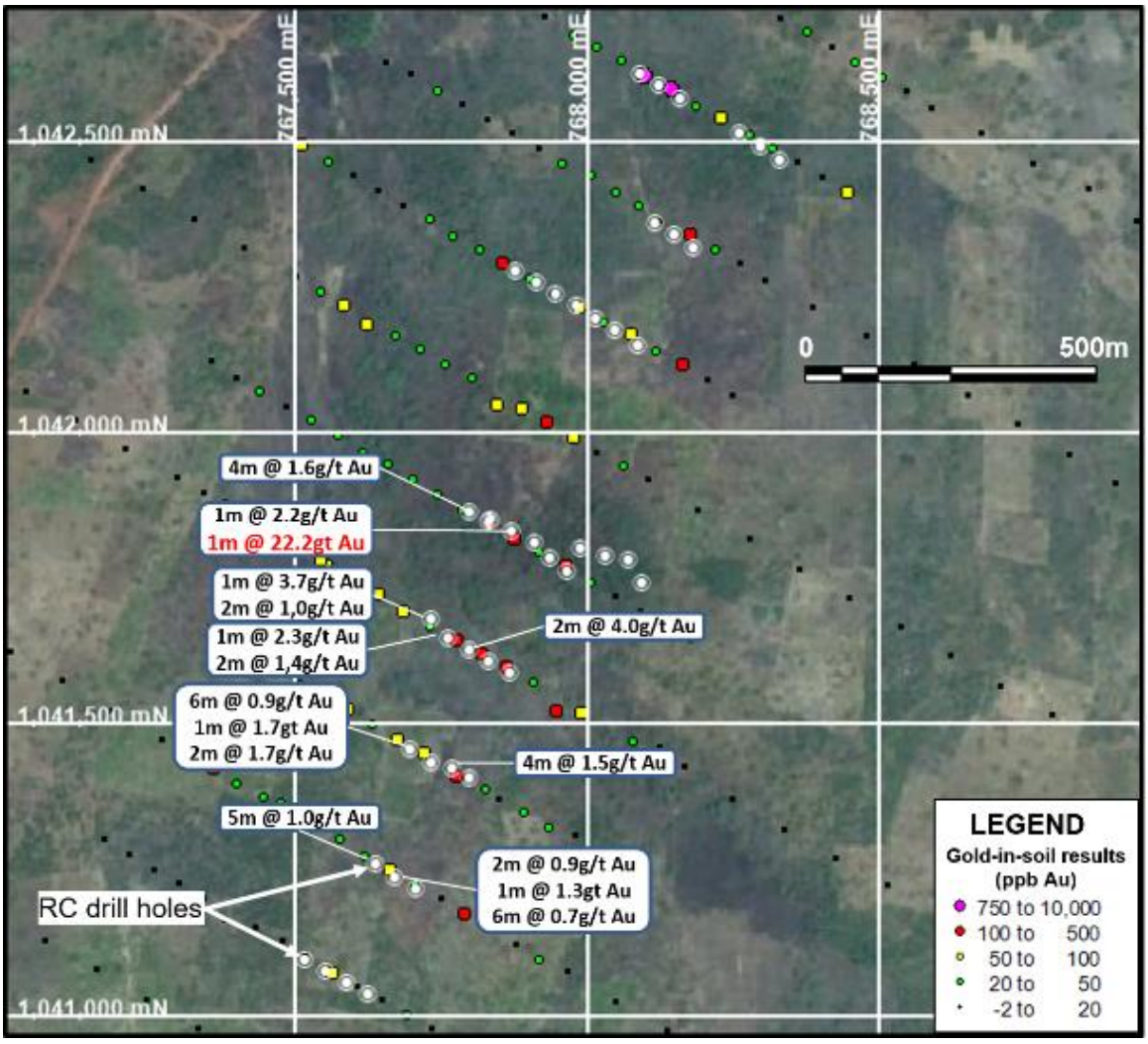

Figure 5: *Gbemou RC drill hole locality plan plotted on satellite imagery with soil geochemical results and selected RC gold drill assay results.*

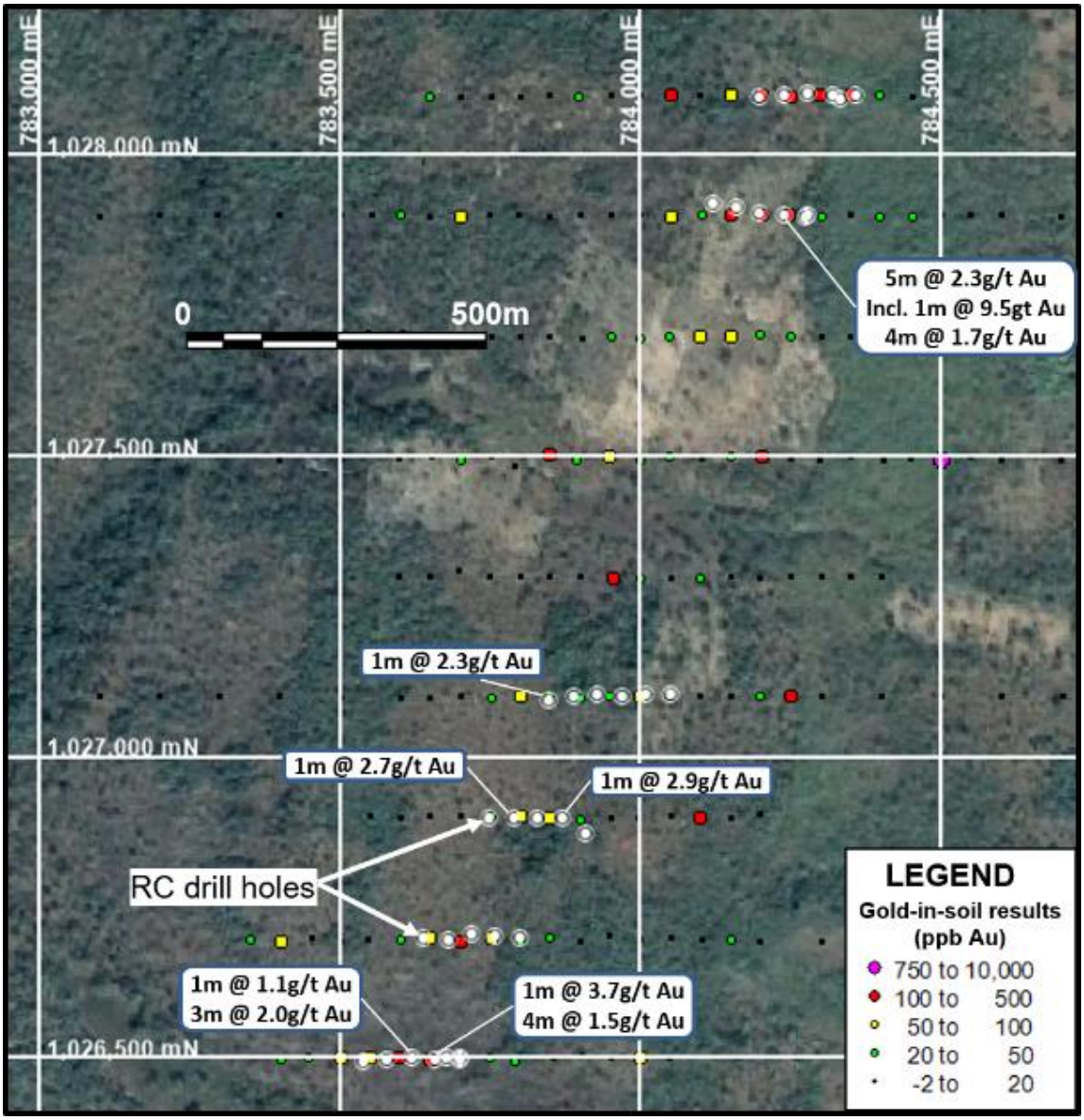

Figure 6: *Nyangboue South RC drill hole locality plan plotted on satellite imagery with soil geochemical results and selected RC gold drill assay results.*

Planned December Quarter Work Program – Toro Gold JV

Field work will re-commence during the December Quarter now that the rainy season has passed.

Work during the December Quarter is expected to include:

- Aeromagnetic surveys on prospective areas in the Boundiali, Ferkessedougou North and Ferkessedougou South permits.
- A large trenching program on the Ferkessedougou North and South permits following up the soil geochemical anomalies recorded on both permits previously. Up to 6km of trenching will be carried out with a backhoe.

RC drilling is now expected to re-commence early in the March Quarter of 2018.

Bobosso Project, Cote D'Ivoire (Predictive 37%)

Introduction

The Bobosso Project consists of two granted exploration permits, Bassawa and Wendene in northern Cote D'Ivoire (Figure 2), which are held by an Ivoirian company, XMI SARl (**XMI**). Bassawa and Wendene are located in the southern extension of the well mineralised Hounde Belt in Burkina Faso, which includes Semafo's Mana Mine (5 Moz in ore resources and reserves[2]).

Previous exploration by Equigold, Lihir and Newcrest including a series of large drilling programs totalling 569 RC holes and 11 diamond drill holes. This obtained many gold mineralised intercepts beneath a 7km^2 gold-in-soil geochemical anomaly (ASX release dated 28/10/15) indicating the presence of a large gold mineralised system.

Geological mapping and re-logging of historical diamond drill core by Predictive staff has demonstrated that the gold mineralisation is hosted in a sequence of mafic volcanics, with lesser felsic to intermediate volcanics and minor metasediments. Gold mineralisation is found in both broad, moderate grade alteration zones (silica-sericite-carbonate-pyrite) and narrower, higher grade quartz veins.

PDI has earned a 37% equity in the Bobosso project through an agreement which was signed in October 2015 with the owner of XMI, West Africa Venture Investment (**WAVI**). More recently, Predictive and WAVI have entered into a funding agreement with Progress Minerals Inc (**Progress**) by which Progress is funding US$1 million of expenditure to earn a 30% equity in the project (ASX release dated 16/3/17). The reported diamond drilling program formed a major part of that commitment.

Diamond Drilling Program

A diamond drilling program, totalling 17 holes and 1657m and testing four separate areas, was completed in May 2017. Results were reported to the ASX on 20th July 2017 and in the June Quarterly Report. Better drill results included:

- **8.7m at 3.3g/t Au** from 39.6m including **1.2m at 14.3g/t Au**
- **17m at 1.47g/t Au** from 41m including **2m at 6.95g/t Au**
- **28m at 1.00 g/t Au** from 0m including **16m at 1.32g/t Au**
- **13.5m at 1.36g/t Au** from 77m
- **9.3m at 1.72g/t Au** from 0m
- **2m at 4.64g/t Au** from 54m, including **1m at 7.63g/t Au**

This drill program showed that:

[2] *See http://www.semafo.com/English/operations-and-exploration/reserves-and-resources/default.aspx*

- The predominant, disseminated gold mineralisation style can be traced from hole to hole over distances of more than 100m and, in the areas tested, strikes between NE through E-W to ESE. Foliation and occasional bedding orientations vary through the same range of strike orientations as the disseminated mineralisation, suggesting that mineralisation distribution is controlled by the structures seen in the aeromagnetic map (Figure 7).
- The mineralisation continuity demonstrated in this program will be helpful in planning future resource drill-outs over the Bobosso mineralised system.
- Given that the previous drilling is oriented very obliquely to the mineralisation strikes observed in this program, there is significant potential to find more such mineralisation, potentially in multiple parallel zones in the large gaps between the earlier drill lines. Most of the mineralisation drilled in this program is open along strike on both directions.
- The higher-grade quartz vein style appears to be less persistent along strike and will require more detailed drilling to define resources.

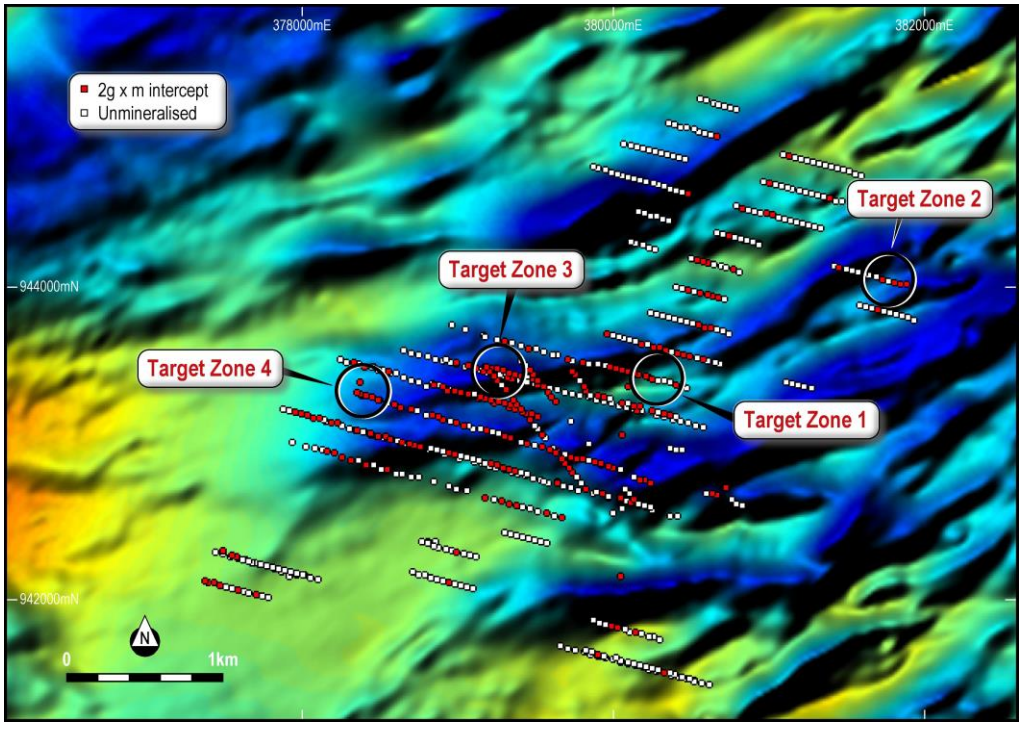

Figure 7: *Diamond drill target locations plotted on a map showing east-west to east-north-east structures defined by aeromagnetic data, gold mineralised historical drill holes (containing at least 2 gxm) as red dots and unmineralised holes as white dots. Note the scale of the gold mineralised system with drilling extending over 4km of strike length on multiple structures.*

Planned December Quarter Work Program – Bobosso JV

A 5,000m RC drilling program has been planned to test extensions to mineralisation drilled in the April-May diamond drilling program along with new target areas. Drilling is due to commence in early November, 2017.

BURKINA FASO (Predictive 100%)

The Company's tenement holding covers 949km^2 including approximately 100km of strike length in the Samira Hill greenstone belt in eastern Burkina Faso (Figure 8). This belt hosts the 2.5 million ounce Samira Hill gold deposit across the border in Niger and contains numerous active artisanal gold mine sites along its length. PDI owns 100%, or has the rights to earn 95% to 100% of all its permits in Burkina Faso.

PDI has discovered gold mineralisation on multiple prospects in Eastern Burkina Faso during the past four years including the Bongou gold deposit. A formal Mineral Resource Estimate on Bongou resulted in 184,000oz of gold in the Inferred and Indicated Mineral Resource categories with an average grade of 2.6g/t Au, including 136,000oz at 3.8g/t Au (ASX release dated 4th September, 2014).

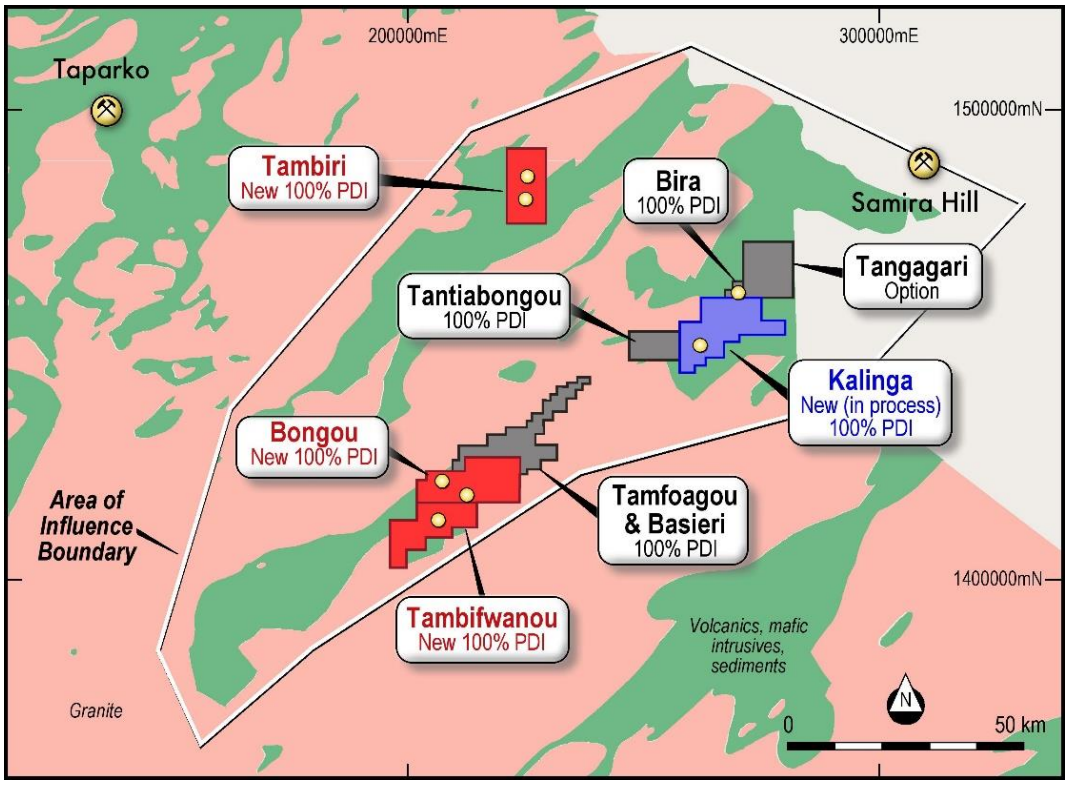

Figure 8: *Locality map of PDI permits in eastern Burkina Faso, showing location of the Company's permits on a geology background and area of influence location for the new joint venture with Progress Minerals Inc. Red coloured polygons are new permits replacing old permits which reached the end of their terms in July 2017. The blue polygon is the Kalinga permit for which fees have now been paid (and therefore formal grant of the new permit grant is expected soon). Apart from Bira, these four new permits cover all the key gold prospects explored by PDI (yellow dots). The grey polygons are older permits also held by Predictive*

Permit Replacements

Predictive has been working with the Burkina Faso Mines Department to renew and/or replace some of the older permits in the tenement package for the past 12 months. This has involved

payment of some substantial permit renewal fees. In the September Quarter, three new permits were granted, replacing three old permits: Bongou (replacing Madyabari), Tambifwanou (replacing Sirba), Tambiri (replacing Bangaba). The fourth older permit, Fouli, is in the process of being replaced by a new permit, Kalinga. These four permits cover the Company's most important prospects (see Figure 8). The new permits will each have a life of nine years, giving the company ample time to advance the prospects through to feasibility and, hopefully, development.

Joint Venture with Progress Minerals

The Company entered into a joint venture agreement with Canada-based company Progress Minerals International Inc (Progress) on PDI's eastern Burkina Faso exploration permits during the September Quarter (ASX release dated 15/9/17). Agreement details include the following:

- Progress can earn a 70% interest in the project by funding a US$5 million (A$6.3 million) program of exploration and evaluation in three stages:
    - US$1 million expenditure (minimum expenditure) within 1 year to earn 51%.
    - Additional US$1.5million expenditure by the end of the second year to increase its equity to 60%.
    - Additional US$2.5 million expenditure by the end of the fourth year to increase its equity to 70%.

Other aspects of the agreement are:

- The agreement commenced effective from 1st October 2017 (ASX release dated 25/10/17).
- If Progress decides not to continue spending money after achieving a 51% equity, it is obliged to offer its entire interest back to Predictive. If a price cannot be agreed, Predictive has the option to dilute Progress's equity down through in-ground expenditure in accordance with a standard dilution formula.
- Progress is now taking responsibility for PDI's current Burkina Faso overhead costs.
- The Joint Venture arrangements will extend to any permits that are granted to either party within an Area of Influence around the current permits (Figure 8).
- The Companies' joint objective is to advance PDI's eastern Burkina Faso prospects as quickly as possible towards a scoping study on a multi-pit mining operation feeding a central mill.
- Progress details – a Vancouver-based private company with strong mine development expertise. Predictive's current JV partner on the Bobosso Project in Cote D'Ivoire.

AUSTRALIA

Cape Clear Joint Venture – Predictive 25%

Introduction

Exploration Licence 5434 is located west of Ballarat in Victoria (Figure 9). It was granted to PDI in July 2013. The area is highly prospective for shallowly concealed Stawell-style gold mineralisation. PDI previously carried out geological mapping and a gravity survey over part of the EL area. Execution of a binding farm-in agreement with Cape Clear Minerals Pty Ltd (CCM) on this EL was announced to the ASX on 22nd September 2014. Under that agreement, CCM could earn 75% equity in the licence by spending $500,000 on exploration, including at least 1,000m of drilling. CCM has complied with those conditions and has therefore achieved a 75% equity in the project.

Figure 9: *Cape Clear Exploration Licence Location*

Exploration on EL5434 is targeted at discovery of Stawell-style and/or Ballarat-style gold mineralisation on the margins of a concealed Cambrian basalt ridge located on the west side of the major north-south striking Avoca Fault. The Stawell gold deposit is located in a comparable geological position on the western side of a basalt ridge, which is, in turn, west of the major Coongee Fault.

Predictive and CCM revised the joint venture arrangements in the June Quarter such that Predictive will participate in exploration of the northern portion of EL5434 (as a 25% partner), which PDI regards as being more prospective, and CCM will explore the southern portion in its own right. In return for ceding its rights over the southern portion of the EL, PDI has rights to a 1% net smelter return royalty on any production from that area.

No field work was undertaken during the September Quarter.

CORPORATE

Cash Position

The Company held $711,000 in cash at the end of the September Quarter with no debt.

The Company made substantial payments for the Toro Joint Venture during the Quarter, including back payments for expenditure incurred by Toro above the earn-in amount of US$3.5 million in the period from mid-February to end June. Actual expenditure in the September Quarter was therefore substantially higher than normal.

Rights Issue

Predictive announced a Rights Issue to the ASX on 26th October 2017. Significant points in this announcement included the following:

- 8 for 21 renounceable rights issue at $0.042 per share to raise approximately $2.6 million (fully subscribed) before costs.
- Attractively priced at 34% discount to 30-day VWAP of $0.064.
- 1 free listed option for every 1 new share subscribed (exercise price $0.060 and expiring on 30 November 2019).
- Shareholders may apply for additional shares as part of the Rights Issue.
- Partially underwritten for $1 million by CPS Capital, Lead Manager of the Offer.
- Up to $1.6 million to be raised from clients and affiliates of the Sprott Group of Companies – primarily through the shortfall allocation from this Offer.
- Funds will be used to advance Predictive's exploration strategy in West Africa through its own exploration programs and contributions to joint ventures (where justified) plus working capital and costs of the Offer.

TABLE 1 – DRILL RESULTS – TORO BOUNDIALI RC DRILL PROGRAM (NYANGBOUE SOUTH AND GBEMOU PROSPECTS)

Hole No.	UTM 29N Easting	UTM 29N Northing	RL (m)	Hole depth (m)	Hole dip (°)	Azimuth (°)	Depth from (m)	Down-hole interval (m)[1]	Au (g/t) at 0.25g/t Au cut-off grade[2]	Comments
Nyangboue South Prospect										
BRC093	783700	1026499	411	39	-50	270	no significant intercept			
BRC093BIS	783700	1026502	411	53	-50	270	no significant intercept			
BRC094	783660	1026498	410	50	-50	270	16	1	3.67	Broader zone of 12m at 0.74g/t Au
BRC094	783660	1026498	410	50	-50	270	24	4	1.52	
BRC095	783620	1026501	409	50	-50	270	19	2	0.71	Broader zone of 11m at 0.69g/t Au
BRC095	783620	1026501	409	50	-50	270	27	3	2.00	
BRC096	783580	1026498	409	50	-50	270	no significant intercept			
BRC097	783540	1026495	404	50	-50	270	no significant intercept			
BRC098	783800	1026700	414	50	-50	270	no significant intercept			
BRC099	783760	1026702	414	50	-50	270	no significant intercept			
BRC100	783720	1026705	414	50	-50	270	no significant intercept			
BRC101	783680	1026698	413	50	-50	270	14	1	1.54	
BRC102	783640	1026701	413	50	-50	270	no significant intercept			
BRC103	783870	1026900	414	56	-50	270	2	1	2.92	
BRC104	783830	1026899	414	50	-50	270	no significant intercept			
BRC105	783790	1026900	412	50	-50	270	0	1	2.66	
BRC106	783750	1026899	410	50	-50	270	no significant intercept			
BRC107	784050	1027104	417	50	-50	270	no significant intercept			
BRC108	784010	1027104	417	56	-50	270	no significant intercept			
BRC109	783970	1027100	416	50	-50	270	no significant intercept			
BRC110	783930	1027105	416	50	-50	270	no significant intercept			
BRC111	783890	1027100	416	50	-50	270	no significant intercept			
BRC112	783850	1027095	416	50	-50	270	44	1	2.27	
BRC113	783910	1026875	419	50	-50	270	no significant intercept			
BRC114	784280	1027900	411	59	-50	270	50	3	0.77	
BRC115	784240	1027902	410	50	-50	270	no significant intercept			
BRC116	784200	1027905	409	50	-50	270	no significant intercept			
BRC117	784160	1027915	408	50	-50	270	0	2	0.84	
BRC118	784120	1027920	408	50	-50	270	no significant intercept			
BRC119	784360	1028100	413	47	-50	270	no significant intercept			
BRC120	784320	1028100	409	50	-50	270	13	1	1.45	
BRC120	784320	1028100	409	50	-50	270	29	1	1.02	
BRC121	784280	1028104	409	50	-50	270	no significant intercept			
BRC122	784240	1028100	409	50	-50	270	no significant intercept			
BRC123	784200	1028098	407	50	-50	270	no significant intercept			
BRC124	784335	1028095	409	88	-65	270	**1**	**5**	**2.34**	includes **1m at 9.48g/t Au**

BRC124	784335	1028095	409	88	-65	270	64	4	1.68	
BRC125	784276	1027898	411	90	-70	270	no significant intercept			
BRC126	783679	1026500	411	90	-65	270	no significant intercept			
Gbemou Prospect										
BRC127	768158	1042576	395	50	-50	120	no significant intercept			
BRC128	768123	1042596	394	50	-50	120	no significant intercept			
BRC129	768088	1042616	393	50	-50	120	25	1	1.205	
BRC130	768093	1041744	393	50	-50	120	no significant intercept			
BRC131	768069	1041785	401	50	-50	120	no significant intercept			
BRC132	768031	1041789	398	50	-50	120	no significant intercept			
BRC133	767988	1041803	396	42	-50	120	no significant intercept			
BRC134	767965	1041763	402	50	-50	120	0	1	1.065	
BRC135	767936	1041788	402	50	-50	120	no significant intercept			
BRC136	767908	1041812	401	50	-50	120	1	1	1.18	
BRC137	767871	1041832	401	56	-50	120	9	1	2.19	
BRC137	767871	1041832	401	56	-50	120	**51**	**1**	**22.2**	
BRC138	767831	1041849	402	56	-50	120	no significant intercept			
BRC139	767798	1041867	403	50	-50	120	13	3	0.50	
BRC139	767798	1041867	403	50	-50	120	36	4	1.56	
BRC140	767767	1041426	394	53	-50	120	25	4	1.53	
BRC140	767767	1041426	394	53	-50	120	44	2	0.60	
BRC141	767832	1041853	402	108	-50	120	61	1	3.03	
BRC142	767865	1041590	399	60	-50	120	no significant intercept			
BRC143	767831	1041610	397	60	-50	120	no significant intercept			
BRC144	767796	1041630	399	60	-50	120	15	2	4.04	Includes **1m at 7.59g/t Au**
BRC145	767761	1041650	399	85	-50	120	5	1	2.32	
BRC145	767761	1041650	399	85	-50	120	50	2	1.37	
BRC145	767761	1041650	399	85	-50	120	59	2	0.76	
BRC146	767732	1041683	401	50	-50	120	11	1	3.71	
BRC146	767732	1041683	401	50	-50	120	49	1	1.05	
BRC147	767731	1041437	393	63	-50	120	12	2	0.95	
BRC148	767694	1041457	393	110	-50	120	43	6	0.85	Broader zone of 18m at 0.60g/t Au
BRC148	767694	1041457	393	110	-50	120	54	1	1.66	
BRC148	767694	1041457	393	110	-50	120	59	2	1.70	
BRC148	767694	1041457	393	110	-50	120	106	1	1.19	
BRC149	767796	1041409	394	50	-50	120	8	7	0.36	
BRC150	767704	1041220	407	57	-50	120	no significant intercept			
BRC151	767670	1041239	413	50	-50	120	1	2	0.92	
BRC151	767670	1041239	413	50	-50	120	7	1	1.07	
BRC151	767670	1041239	413	50	-50	120	27	1	1.30	
BRC151	767670	1041239	413	50	-50	120	36	6	0.75	
BRC152	767635	1041262	412	45	-50	120	5	4	0.45	
BRC152	767635	1041262	412	45	-50	120	17	5	0.96	
BRC153	767622	1041038	412	59	-50	120	no significant intercept			
BRC154	767587	1041058	411	49	-50	120	no significant intercept			
BRC155	767552	1041077	410	50	-50	120	no significant intercept			
BRC156	767516	1041098	411	50	-50	120	no significant intercept			
BRC157	767946	1042239	416	49	-50	120	no significant intercept			
BRC158	767912	1042260	415	51	-50	120	no significant intercept			
BRC159	767877	1042280	414	46	-50	120	no significant intercept			
BRC160	768014	1042198	416	57	-50	120	no significant intercept			

BRC161	767981	1042219	416	63	-50	120	no significant intercept			
BRC162	768048	1042178	416	50	-50	120	27	4	0.59	
BRC163	768086	1042151	416	40	-50	120	no significant intercept			
BRC164	768116	1042362	412	60	-50	120	no significant intercept			
BRC165	768149	1042343	412	65	-50	120	22	2	0.56	
BRC166	768182	1042317	413	50	-50	120	28	3	0.54	
BRC167	768261	1042515	393	51	-50	120	no significant intercept			
BRC168	768297	1042491	392	60	-50	120	no significant intercept			
BRC169	768330	1042469	392	41	-50	120	no significant intercept			

[1]True widths are not reported because the orientation of the gold mineralisation is not yet properly understood.
[2] Minimum grade x width interval reported of 1 g/t x m. Maximum down-hole internal waste of 3.0m apart from the broader mineralised interval reported in Comments column. All assayed in 1m intervals.

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Technique	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	All of the sampling described in Table 1 refers to RC drill holes. A representative subsample of the RC drill chips was obtained using an on-rig riffle splitter. A second reference sample was obtained using a spear. The assayed drill samples are judged to be representative of the rock being drilled because representative sub-sampling of the RC drill samples was achieved.
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).	The drilling was largely carried out by reverse circulation with a face sampling hammer. The holes were collared using a blade bit, which was used to refusal (towards base of saprolite/saprock).

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.	RC recovery was assessed by weighing the sample bags and calculating recoveries using an estimate of rock density. The Toro site geologists report that recoveries are consistently good.
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.	Logging of RC holes records lithology, mineralogy, mineralisation, alteration, structure, weathering and other features of the samples. Logging of sulphide mineralization and veining is quantitative. All holes were logged in full. No judgement has yet been made by independent qualified consultants on whether the geological and geotechnical logging has been sufficient to support Mineral Resource estimation, mining and metallurgical studies.
Sub-Sampling Technique and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	The RC samples submitted for assay were all sub-sampled by a riffle splitter. The sampled material is considered to be representative of the samples as a whole.

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 reported in this release were assayed for gold by 50g fire assay at the ALS laboratory in Loughrea in Ireland. High grade samples were checked at the laboratory by gravimetric means. At the lab, regular assay repeats, lab standards, checks and blanks were inserted and analysed. Unlabelled standards (Certified Reference Materials), blanks and duplicate samples were also inserted by Toro personnel on site at Boundiali. Samples were prepared at Toro's sample preparation laboratory at Mako in Senegal.
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	One hole was re-drilled(BRC093BIS) however gold results were low in both holes so no useful information was obtained on gold grade variability. Field data collection was undertaken by Toro Gold geologists and supervised by Toro Gold management.
Location of Data points	Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used Quality and adequacy of topographic control	Collar positions were located using a handheld GPS with a location error of +/- 3m. Collar coordinates listed in the table are for the WGS84 datum, Zone 29 North.
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 holes reported here were drilled on two lines spaced 200m apart with hole collars approximately 40m apart. No judgement has yet been made by an independent qualified consultant on whether the drill density is sufficient to calculate a Mineral Resource. The samples were not composited.
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.	All drill holes reported here were drilled approximately at right angles to the anticipated strike of the target geochemical anomaly (Figures 5 and 6).

Sample Security	The measures taken to ensure sample security	The drill samples are currently stored securely at Toro Gold's compound in the town of Boundiali.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data	No audits or reviews of sampling techniques and data have been carried out given the reconnaissance nature of this drill program.
Section 2 Reporting of Exploration Results		
Mineral Tenement and Land Tenure Status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Boundiali exploration permit was granted to PDI Cote D'Ivoire SARL in January 2014.Toro Gold Limited has earned a 65% interest in PDI Cote D'Ivoire SARL by spending US$3.5 million.
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 information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	All of the required data is provided in Table 1 (above).
Data Aggregation Methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All RC samples were collected and assayed in 1m intervals. No top cuts have been applied to the drill results. Up to 3m (down-hole) of internal waste is included. Mineralised intervals are reported on a weighted average basis.

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship Between Mineralisation Widths and Intercept Lengths	These relationships are particularly important in the reporting of Exploration Results If the geometry of the mineralisation with respect to the drill 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').	True widths have not been estimated as the geological controls on mineralisation in these initial drill holes into the prospect are not yet well understood. The holes were drilled from east to west to test a steeply east dipping foliation in the rock exposures seen in the area.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate plans showing the location of the drill holes are included in the text of this document.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All intercepts containing grades above 0.25g/t Au and at least 1g/t x m with a maximum thickness of internal waste of 3m are reported in this release.
Other Substantive Exploration Data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data is either reported in this release or has been reported previously and is referred to in the release.
Further Work	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling. Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Gold-bearing drill samples from this drill program and earlier RC and diamond drilling on the Nyangboue Prospect have been submitted for screen fire assay and bulk leach assays in order to determine the effects of coarse gold on gold grade variability. Following assessment of those results, further drilling will be considered.

Predictive Discovery Limited (PDI) was established in late 2007 and listed on the ASX in December 2010. The Company is focused on exploration for gold in West Africa. The Company operates in Burkina Faso, West Africa where it has assembled a substantial regional ground position covering 949km^2 and has been exploring for large, open-pittable gold deposits. Exploration in eastern

Burkina Faso has yielded a large portfolio of exciting gold prospects, including the high grade Bongou gold deposit on which a resource estimate was calculated in September 2014. PDI also has interests in a large portfolio of permits and permit applications in Côte D'Ivoire covering a total area of over 6,000 km^2.

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 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.

For further details please contact:

Paul Roberts
Managing Director
Tel: +61 402 857 249
Email:
paul.roberts@predictivediscovery.com

Ric Moore
Company Secretary
Tel: +61 8 6143 1840
Email:
rmoore@auroraminerals.com

TENEMENT STATUS – SEPTEMBER QUARTER, 2017

Name	Number	Location	Area (sq. km)	PDI equity	Changes in holding during September Quarter, 2017
Kalinga (formerly Fouli)	New permit grant awaited	Burkina Faso	186	100%	Fouli surrendered, new Kalinga permit application accepted
Tantiabongou	arrêté 2017-054 /MCE/SG/DGMGC	Burkina Faso	50	100%	None
Tambifwanou (formerly Sirba)	arrêté 2017-119/MCE/SG/DGMGC	Burkina Faso	136	100%	New permit granted
Bongou (formerly Madyabari)	arrêté 2017-121/MCE/SG/DGMGC	Burkina Faso	171	100%	New permit granted
Tamfoagou	arrêté 2015-281/MCE/SG/DGMGC)	Burkina Faso	83	100%	Renewal in progress.
Tangagari	arrêté 2013-37 /MCE/SG/DGMGC	Burkina Faso	94	Earning 95%; current equity 0% (until final cash payment is made)	Renewal in progress
Tambiri (formerly Bangaba)	arrêté 2017-120/MCE/SG/DGMGC	Burkina Faso	127	Earning 95%; current equity 84%	New permit granted
Bira	arrêté 2016-129/MCE/SG/DGMGC	Burkina Faso	12	100%	None
Basieri	arrêté 2017-117/MCE/SG/DGMGC	Burkina Faso	73	100%	Invitation to pay fees for the renewal has been received and fees have been paid.
Kokoumbo	Mining exploration permit No. 307	Cote D'Ivoire	300	Predictive CI earning 90%. PDI now owns 35% of Predictive CI.	None
Ferkessedougou South	Mining exploration permit No. 310	Cote D'Ivoire	290	35%	None
Boundiali	Mining exploration permit No. 414	Cote D'Ivoire	299	35%	None

Kounahiri	Mining exploration permit No. 317	Cote D'Ivoire	260	35%	None
Bassawa	Mining exploration permit No. 570	Cote D'Ivoire	400	37% beneficial interest	None
Wendene	Mining exploration permit No. 572	Cote D'Ivoire	400	37% beneficial interest	None
Dabakala	Mining exploration permit application	Cote D'Ivoire	400	37% beneficial interest	None
Beriaboukro (Toumodi)	Mining exploration permit No. 464	Cote D'Ivoire	400	Predictive CI can earn 85% in the permit. PDI currently owns 35% of Predictive CI.	None
Ferkessedougou North	Mining exploration permit No. 367	Cote D'Ivoire	400	Predictive CI can earn 85% in the permit. PDI currently owns 35% of Predictive CI.	None
Odienne North	Mining exploration permit application	Cote D'Ivoire	400	Subject to it being granted, Predictive CI can earn 85% in the permit. PDI currently owns 35% of Predictive CI.	None
Odienne South	Mining exploration permit application	Cote D'Ivoire	400	Subject to it being granted, Predictive CI can earn 85% in the permit. PDI currently owns 35% of Predictive CI.	None
Cape Clear	EL 5434	Victoria, Australia	63	25%	Permit area reduced to 63km^2

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

PREDICTIVE DISCOVERY LIMITED

ABN	**Quarter ended ("current quarter")**
11 127 171 877	30 SEPTEMBER 2017

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (3 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation*	(701)	(701)
	(b) development		
	(c) production		
	(d) staff costs**		
	(e) administration and corporate costs*	(232)	(232)
1.3	Dividends received (see note 3)		
1.4	Interest received	2	2
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Research and development refunds		
1.8	Other (provide details if material)		
1.9	**Net cash from / (used in) operating activities**	**(931)**	**(931)**

**The company's accounting policy allocates staff costs to activities and are accordingly included in items 1.2 (a) and 1.2 (e).

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	**Net cash from / (used in) investing activities**	**-**	**-**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
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 (provide details if material)		
3.10	**Net cash from / (used in) financing activities**	**-**	**-**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	1,642	1,642
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(931)	(931)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**711**	**711**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	691	1,506
5.2	Call deposits	20	136
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**711**	**1,642**

6.	Payments to directors of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	63
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Fees paid to directors

7.	Payments to related entities of the entity and their associates	Current quarter $A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

8.	**Financing facilities available** *Add notes as necessary for an understanding of the position*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
8.1	Loan facilities		
8.2	Credit standby arrangements		
8.3	Other (please specify)		

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	**Estimated cash outflows for next quarter**	**$A'000**
9.1	Exploration and evaluation	450
9.2	Development	
9.3	Production	
9.4	Staff costs	
9.5	Administration and corporate costs	150
9.6	Other (provide details if material)	
9.7	**Total estimated cash outflows**	**600**

10.	**Changes in tenements (items 2.1(b) and 2.2(b) above)**	**Tenement reference and location**	**Nature of interest**	**Interest at beginning of quarter**	**Interest at end of quarter**
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	Fouli Sirba Madyabari Bangaba Cape Clear EL5434	Ownership (Permits in Burkina Faso surrendered) Area	100% 100% 100% 84% 120km^2	0% 0% 0% 0% 63km^2
10.2	Interests in mining tenements and petroleum tenements acquired or increased	Kalinga Tambifwanou Bongou Tambiri	Ownership (Permits in Burkina Faso replacing the above surrendered permits)	0% 0% 0% 0%	100% 100% 100% 84%

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.

Sign here: Date: 31 October 2017

(Company secretary)

Print name: Eric Moore

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.

2. If this quarterly 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 report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.