



# **ASX Announcement**

16<sup>th</sup> December 2013

# 68m at 3.2g/t Au incl. 8m at 10g/t Au at Bongou

Predictive Discovery (ASX: PDI) is pleased to announce additional excellent drill assay results in holes BNGRD005 and BNGRD006 from its Bongou Gold Prospect in Eastern Burkina Faso, West Africa.

# Highlights:

BNGRD005: **68m (52m true width) at 3.2g/t Au** from 99m, including:

• 7.8m (6m true width) at 10.2g/t Au

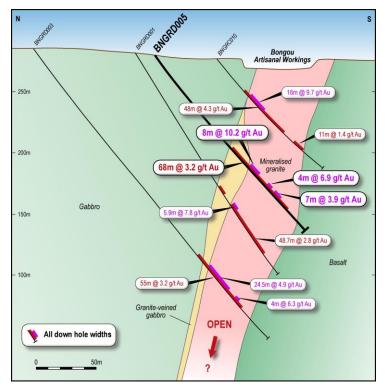


Figure 1: Cross Section through drill holes BNGRC010, BNGRD001, BNGRD003 and BNGRD005. No vertical exaggeration. Only down-hole widths are shown on this cross-section; estimated true widths are provided in Figures 2 and 4 and Table 1 (for BNGRD005) and PDI's ASX release of 2<sup>nd</sup> December 2013 ("Thick, high-grade gold intercepts at Bongou Prospect").

- High grade gold mineralisation at northern contact with gabbro in BNGRD005 as in previous holes
- Potential for increased strike length at depth supported by a gold mineralised granite intercept in hole BNGRD006 (3m at 1.35g/t Au)

#### 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: 301M shares

Share Price: 2.1 cents

Market Capitalisation: \$6.3

Cash (at 30<sup>th</sup> October 2013): \$1.8M

Directors

Phillip Harman Non-Exec Chairman

Paul Roberts Managing Director

Phil Henty Non-Executive Director Tim Markwell Non-Executive Director



Mr Paul Roberts, the Company's Managing Director said: "The excellent BNGRD005 result confirms the remarkable consistency of the central Bongou gold mineralised body in terms of grade, width and high grade gold values on the northern gabbro contact.

The BNGRD006 result is also very significant. We can now see that gold-bearing mineralised granite is present at depth below earlier drill holes in which no gold mineralisation was intersected. Our geological interpretation is that the mineralised granite body has been faulted downwards east of the Bongou artisanal workings. This suggests that thick mineralised granite may extend eastwards at depth, which would increase the tonnage potential at Bongou substantially.

We are now planning our next drill program with a focus on discovering extensions to the known gold deposit at depth and along strike."

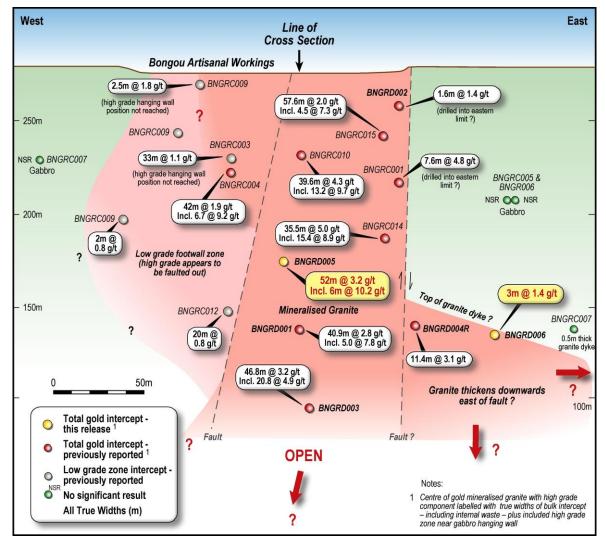


Figure 2: Long Section through the mineralised body oriented at 065 degrees, showing true width drill intercepts of both the total gold mineralised body at a 0.5g/t Au cut-off and true widths of the higher grade hanging wall mineralisation calculated at a cut-off grade of 3g/t Au. Data for these results are provided in Table 1 and PDI's ASX release of 2<sup>nd</sup> December 2013 ("Thick, high-grade gold intercepts at Bongou Prospect").



# INTRODUCTION

The Bongou gold prospect is located in Eastern Burkina Faso (Figure 3). It underlies artisanal workings which form an irregular open pit approximately 150m long and 50m wide.

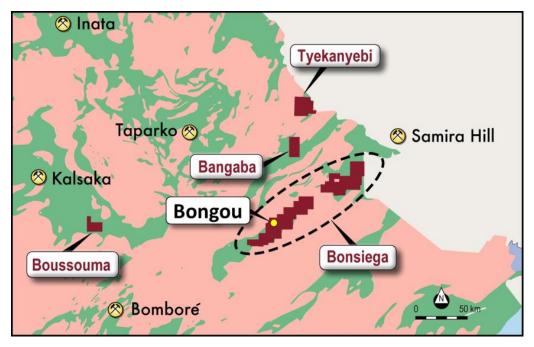


Figure 3: Locality map of PDI permits in eastern Burkina Faso, showing location of Bongou Prospect.

Exploration at Bongou prior to November 2013 by PDI included rock chip sampling, trenching, ground geophysical surveys and completion of 14 RC holes, which obtained a number of very encouraging drill intersections<sup>1</sup> including:

- BNGRC010: 48m (39.6m true width) at 4.3g/t Au from 34m, including 16m (13.2m true width) at 9.7g/t Au
- BNGRC014 : 37m (35.5m true width) at 5.0g/t Au from 111m, including 16m (15.4m true width) at 8.9g/t Au
- BNGRC001 : 20m (7.6m true width) at 4.8g/t Au from 70m
- BNGRC004 : 50m (42m true width) at 1.9g/t Au from 47m, including 8m (6.7m true width) at 9.2g/t Au.

Results from the first five holes of November 2013 RC/diamond drilling campaign released on 2<sup>nd</sup> December 2013<sup>1</sup> also obtained excellent results:

BNGRD003: 55.0m (46.8m true width) at 3.2 g/t Au from 215m, including 24.5m at 4.9 g/t Au

<sup>&</sup>lt;sup>1</sup> See ASX release dated 2<sup>nd</sup> December 2013 ("Thick, high-grade gold intercepts at Bongou Prospect").



- BNGRD001: 48.7m (40.9m true width) at 2.8g/t Au from 144.3m including 5.9m (5.0m true width) at 7.8g/t Au and 7.9m (6.6m true width) at 4.5g/t Au
- BNGRC015: 64m (57.6m true width) at 2.0g/t Au from 14m including 5m (4.5m true width) at 7.3g/t Au
- BNGRD004R: 15m (11.4m true width) at 3.1g/t Au from 166m including 4.8m at 5.3g/t Au
- BNGRD002: 3.3m (approx. 1.6m true width) at 1.44g/t Au

Locations of the all the drill holes completed to date are provided on Figure 4.

Gold mineralisation at Bongou is contained within an intensely silicified and quartz veined, pyritebearing granite intrusion.

## DRILLING PROGRAM

PDI carried out an eight hole drilling program, totalling 1,720m, at the Bongou Prospect in Burkina Faso (Figure 3) during November 2013. The program was conducted using a multi-purpose rig (with combined reverse circulation and diamond coring capacity). Assay results from the last three holes are reported here.

The drilling program consisted mainly of reverse circulation (**RC**) pre-collars and diamond cored "tails". Only one hole, BNGRC015, was drilled entirely with RC. The aims of the program were to identify extensions to the Bongou mineralisation and obtain several infill intercepts to improve understanding of the mineralisation's continuity and grade variability. Samples were analysed at the SGS laboratory in Ouagadougou Burkina Faso. Details of the drilling, sampling and quality control methods used are provided in the notes which follow Table 1.

#### **Drill Results**

The three holes reported in Table 1 of this release obtained the following results:

- BNGRD005: 68.0m (52.4m true width) at 3.2 g/t Au from 99m, including:
  - o **7.8m** (6.0m true width) at **10.2 g/t Au**
  - 4.0m (3.1m true width) at 6.9g/t Au
- BNGRD006: 3.0m (2.8m true width) at 1.4g/t Au from 172m
- **BNGRD007:** No significant result.



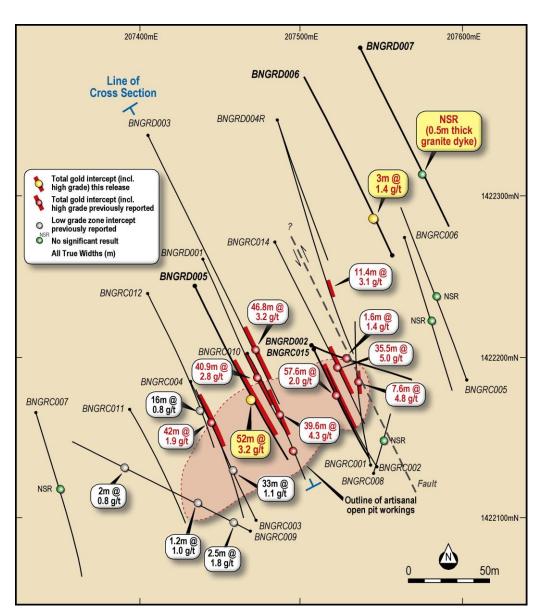


Figure 4: Drill hole locality plan, Bongou Prospect. Gold intercepts are all shown as estimated true widths. "Total" intercepts were calculated across the width of gold mineralised altered granite, irrespective of the width of internal waste zones at a cut-off grade of 0.5g/t Au. Data for this diagram are provided in Table 1 and PDI's ASX release dated 2<sup>nd</sup> December, 2013 ("Thick, high-grade gold intercepts at Bongou Prospect").

Interpretation of the recent drill results along with detailed new geological mapping of the artisanal workings has indicated that:

- The bulk of the known mineralisation exists within a single, steeply north-dipping, strongly silicified granite body containing quartz-carbonate veining, minor disseminated pyrite (iron sulphide) and lesser sericite and magnetite. High gold grades appear to be associated with coarse crystalline pyrite.
- Higher gold grades are consistently located against the northern "hanging wall" boundary of the altered granite with sheared gabbro (Figure 1).
- The western and eastern limits of the main mineralised body are affected by steep dipping faults



which are not yet fully understood (Figure 2), however:

- At least two faults on the western side of the mineralisation cut off part of the high-grade hanging wall position, leaving a lower grade remnant in outcrop and some of the western holes. One of those faults is shown on Figure 2. The displaced high-grade mineralisation may be located at depth to the west and will be a target for future drilling.
- An inferred fault at the eastern end of the mineralised granite displaces the mineralised granite to the north and apparently downwards (Figures 2 and 4). The BNGRD004R intercept (Figure 4) lies on the eastern side of that inferred fault. Also, the BNGRD002 and BNGRC001 mineralised intercepts appear to terminate against the same structure (Figures 2 and 4). The presence of a series of mineralised and altered granite veins in drill hole BNGRD006 with a maximum individual true width of 4m located 40m east of the BNGRD004R intercept suggests that the same mineralised granite body plunges shallowly to the east (Figure 4). The earlier RC holes, BNGRC005 and BNGRC006 above BNGRD006 did not intersect granite which implies that the granite is likely to thicken below BNGRD006.

### FOLLOW-UP PROGRAM

PDI is now planning the next phases of work at Bongou, as follows:

- RC and diamond drilling to test for extensions of the known Bongou mineralisation which remains open at depth and along strike.
- Trenching followed by RC and/or RAB and/or air core drilling of the known gold geochemical anomalies west and north-west of Bongou aimed at discovering additional Bongou-style mineralisation within a few hundreds of metres of the drilled prospect.
- Geochemical drilling of targets along the strike of the Bongou Structure, aimed initially at 10km of the 43km of strike length within PDI's exploration permits.
- Metallurgical test work to determine the bond work index of the ore and to identify
  potential low cost and efficient metallurgical treatment routes. Results for previous
  metallurgical test work at Bongou were released to the ASX on 14 May 2013. These
  preliminary results demonstrated a high recovery at Bongou of 94% from cyanidation of a
  composite sample of primary gold mineralisation using a 75 micron grind size.

## **BONGOU BACKGROUND**

The Bongou Prospect is located in Burkina Faso, West Africa where PDI has established a wellqualified Burkina-based exploration team and a large regional tenement package mainly in the north east of the country, covering 1,605km<sup>2</sup> (Figure 3).

PDI's tenement holding in Burkina Faso includes approximately 100 km of strike length in the Samira Hill greenstone belt in eastern Burkina Faso (the Bonsiega permit group, Figure 3). 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 now owns 100% or rights to earn 95% to 100% of all its permits in Burkina Faso.

In the immediate area around Bongou, PDI owns 100% of the Madyabari, Bassieri and Tamfoagou permits which cover both Bongou and any possible extensions along the Bongou structure over a strike length of 43km within PDI's ground (Figure 5).

The Bongou prospect is located within the Madyabari exploration permit which covers an area of 172 km<sup>2</sup> and was granted in July, 2005. This permit was initially acquired, along with three other nearby permits (Sirba, Fouli and Tantiabongou), by Birrimian Pty Ltd (**Birrimian**), which is a British Virgin Islands-registered company now 100% owned by PDI. The original owners of Birrimian subsequently entered into an agreement with ElDore Mining Corporation Limited (**ElDore**) through which ElDore could acquire the Birrimian permits through a series of payments and a commitment to issue US\$2 million worth of ElDore stock on completion of a Bankable Feasibility Study on one or more ore deposits within the Birrimian permits.

PDI initially acquired an interest in the four Birrimian permits via a joint venture with ElDore which commenced in January 2010. In 2012, ElDore changed its name to Stratos Resources Limited (ASX: SAT) after which PDI bought out SAT's residual interest (in late 2012). In acquiring Birrimian, PDI also inherited the one remaining commitment in the original ElDore agreement with the original Birrimian shareholders. This commitment is now agreed to mean that PDI will issue US\$2 million worth of PDI shares to the original Birrimian shareholders after PDI accepts (at its sole discretion) an offer of finance for development of a mine on the Birrimian permits following completion of a Bankable Feasibility Study.

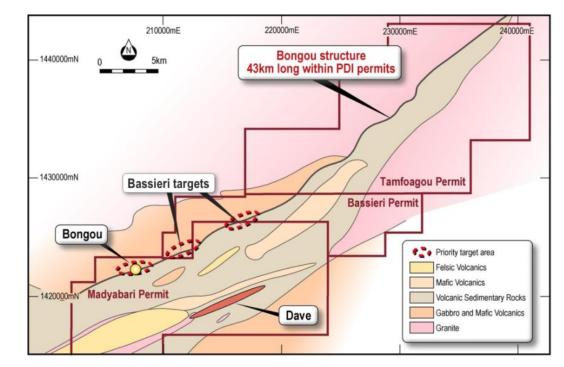


Figure 5: Regional geological map of the area near Bongou, showing location of Bongou itself and two target zones (red dashed line ellipses) 4km and 10km north-east of Bongou and the Dave Prospect.



	Dri	ll hole co	ollar	detai	ls		0.	5 g/t cut-o	ff	3.0	) g/t cut-o	ff	Comments
Hole Number	UTM East	UTM North	RL	UTM Azim uth (°)	Hole dip (°)	Hole depth (m)	From (m)	Interval (true width in brackets)	Au g/t	From (m)	Interval (true width in brackets)	Au g/t	
BNGRD005	207434	1422243	280	153	-51	188.2	99	14 (10.8)	2.52				
BNGRD005	207434	1422243	280	153	-51	188.2				104.6	2.3 (1.8)	4.48	
BNGRD005	207434	1422243	280	153	-51	188.2				108.5	3.5 (2.7)	3.88	"Tata III tata ang taong taong ta
BNGRD005	207434	1422243	280	153	-51	188.2				111	1 (0.8)	8.39	"Total" intercept was 68m (52.4m true width) at
BNGRD005	207434	1422243	280	153	-51	188.2	118.6	48.4 (37.3)	3.72				3.18g/t Au from 99m. RC samples from 99 to 103m,
BNGRD005	207434	1422243	280	153	-51	188.2				120.2	7.8 (6.0)		the remaining assays are
BNGRD005	207434	1422243	280	153	-51	188.2				135	2 (1.5)	5.97	all from diamond drill core.
BNGRD005	207434	1422243	280	153	-51	188.2				140	4 (3.1)	6.89	
BNGRD005	207434	1422243	280	153	-51	188.2				149	7 (5.4)	3.90	
BNGRD005	207434	1422243	280	153	-51	188.2				166	1 (0.8)	8.64	
BNGRD006	207502	1422374	276	154	-60	209.2	172	3 (2.8)	2.05				Diamond drill core
BNGRD007	207537	1422392	276	154	-60	230.3							No significant result. Best value was 0.7m at 0.88g/t Au from 192.7m

#### **TABLE 1 – DRILL RESULTS**

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.	All of the sampling described in this report refers to either reverse circulation (RC) drill samples or diamond drill core samples. The RC drilling was used to obtain 1 m samples from which 2 kg was pulverised to produce a 50 g charge for fire assay. The RC samples were reduced to a 2kg sample by riffle splitting on site. The diamond core samples were cut in half longitudinally using a diamond saw. Measures were taken to avoid wet RC drilling and the drilling method was changed from RC to diamond coring at or before the point when the air pressure from the RC rig was incapable of keeping the samples dry. The drill samples are judged to be representative of the rock being drilled because representative sub-sampling of both the RC and diamond core samples was achieved.			
	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.				



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).	RC drilling was carried out using a 4.5 inch or 5.5 inch face sampling hammer. The RC precollars varied from 103 to 160m long and the diamond drill tails were up to 115m long. The diamond core size was NQ apart from up to 3m of HQ core which was drilled immediately after the changeover from RC to diamond coring. The diamond core was oriented using a Reflex Act II RD core orientation device.
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.	Sample recovery was estimated for all samples. RC recoveries were estimated by measuring the volume of material in each bag relative to the known volume of the drill hole. Core samples were measured from core block to core block once core had been placed in the core trays. Sample recovery was maximised in the RC drilling by use of a face sampling hammer and by converting to diamond coring when it was no longer possible to drill dry samples. A petrological study of the mineralisation and the absence of any high-grade gold value above 32.9g/t Au throughout the whole database both point to the gold grainsize typically being below 50 microns which would also mitigate against sampling not being representative.
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.	Detailed geological logging has or is in the process of being carried out on all drill samples, recording lithology, weathering, structure, (including orientation where the core is oriented), veining and/or mineralisation, grainsize and colour. Logging of sulphide mineralization and veining is quantitative. RQDs are recorded routinely. Photography of the cut core is not yet complete but will be carried out in the next month. 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.	Core samples were cut in half longitudinally with a diamond core saw with one half submitted for assay and the remaining half retained in core trays which are stored at PDI's field camp in Gayeri. Core sampling intervals were defined by variations in lithology and mineralogy but are typically 0.5-1.0m. An on-site riffle splitter was employed to produce a 2kg assay sample for submission to SGS. Either one or two reference riffle-split 2kg samples are retained from the RC samples for future re-assay or metallurgical testwork. The sampling (and analytical) methods were appropriate for the style of mineralisation, especially as no visible gold has been observed and previous petrological studies indicate that the typical gold grain size is less than 50 microns.
	appropriate to the grain size of the material being sampled.	



	Quality of Assay Data and Laboratory Tests	The nature, quality appropriateness of and laboratory pro and whether the te considered partial
		For geophysical to spectrometers, hai instruments, etc, th used in determinin including instrume model, reading tim factors applied and etc.
		Nature of quality cr procedures adopte standards, blanks, external laboratory whether acceptabl accuracy (ie lack o precision have bee
	Verification of Sampling and Assaying	The verification of intersections by eil independent or alto company personno The use of twinned verification of signi intersections by eil independent or alto company personno adjustment to asse
	Location of Data points	Accuracy and qual used to locate drill down- hole survey mine workings and used in Mineral Re estimation.
$\bigcirc$		Specification of th used Quality and topographic contro
	Data Spacing and Distribution	Data spacing for re Exploration Result
	1	Whether the data s distribution is suffic the degree of geol grade continuity ap the Mineral Resou Reserve estimation and classifications
		Whether sample co been applied
	Orientation of Data in Relation to Geological Structure	Whether the orient sampling achieves sampling of possib and the extent to v known, considering type. If the relationship b drilling orientation orientation of key r structures is consisi introduced a samp

Quality of Assay Data and Laboratory Tests	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	All samples were assayed for gold by 50g fire assay at the SGS laboratory in Ouagadougou, Burkina Faso. The technique is considered a total analysis. No geophysical tools, spectrometers or handheld XRF instruments have yet been employed although XRF scanning of some of the core using a hand held XRF instrument is planned. Unlabelled standards were submitted with all assay batches, generally at the rate of one standard every 15 <sup>th</sup> sample, whether from RC or diamond drilling. Blanks were also submitted with RC sample batches. Where any problems with bias or accuracy, especially outside of a +/- 10% envelope is observed, samples are reassayed. External laboratory checks are planned but have not yet been carried out.
	whether acceptable levels of accuracy (ie lack of bias) and precision have been established. The verification of significant	
Verification of Sampling and Assaying	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	No holes have yet been twinned. Field data collection is undertaken by the company's Burkina Faso-based geologists. All results are checked by Mr Paul Roberts, the company's Managing Director.
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 hand held GPS with a location error of +/- 3m. Collar RLs were established by interpolation between surveyed points established for an earlier geophysical survey with an estimated elevation error of less than 2m. Collar coordinates listed in the table are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 31 - Northern Hemisphere.
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 drill intercepts are irregularly spaced but approximately 40 x 40m. No judgement has yet been made by an independent qualified consultant on whether the drill density is sufficient to calculate a Mineral Resource. Sample compositing was applied only to samples thought to be un- mineralised. Sample composites were mostly either 4m or 8m.
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 strike of the target mineralization. The mineralisation appears to be a disseminated type with no evidence yet identified for ore distribution being in any orientation other than parallel to strike of the mineralised body.
Sample Security	The measures taken to ensure sample security	The large RC sample bags are stored at a sample farm on PDI's exploration permits. These are guarded at all times by local individuals hired for this purpose. 2kg reference samples are stored at the company's field camp in the town of Gayeri, which is guarded 24 hours per day. Pulp
in Relation to Geological Structure	grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied 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 strike of the target mineralization. The mineralisation appears to be a disseminated type with no evidence yet identified for ore distribution being in any orientation other than parallel to strike of the mineralised body. The large RC sample bags are stored at a sample farm on PDI's exploration permits. These are guarded at all times by local individuals hired for this purpose. 2kg reference samples are stored at the company's



			samples are retained at company premises in Ouagadougou which are also guarded 24 hours per day.
		Section 2 Reportin	ng of Exploration Results
NUO DSN	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 Bongou Prospect lies entirely within the Madyabari Permit (Arrêté N°2011 /11/352/MCE/SG/DGMGC) which covers an area of 172 sq km. There are no overriding reserves or national parks over this permit. In a future mining operation, the Government of Burkina Faso is entitled to a 10% share of any mine along with a 3-5% ad valorem royalty, the percentage of which is determined by the gold price prevailing at the time. The company believes that (a) the permit is securely held as it has complied with all the necessary government requirements and (b) the permit can be replaced in due course by a mining licence as long as a feasibility study shows that a future mine would be viable and that company completes meets the Government's legal requirements, which it fully intends to do.
			Birrimian permits via a joint venture with Eldore which commenced in January 2010. In 2012, Eldore changed its name to Stratos Resources Limited (ASX: SAT) after which PDI bought out SAT's residual interest (in late 2012). In acquiring Birrimian, PDI also inherited the one unfulfilled commitment in the original Eldore agreement with the original Birrimian shareholders. This commitment has now been agreed to mean that PDI will issue US\$2 million worth of PDI shares after PDI accepts an offer of finance for development of a mine on the Birrimian permits at its sole discretion) following completion of a Bankable Feasibility Study.
	Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	Past exploration over the Bongou prospect consisted of wide spaced soil sampling and an aeromagnetic survey. Previous explorers did not recognise the significance of the Bongou mineralisation, which appears to have been discovered by artisanal miners.
SJD	Geology	Deposit type, geological setting and style of mineralisation.	Mineralisation consists of an intensely silicified and quartz veined granite body which lies sandwiched between a sheared gabbro on the mineralisation's northern margin and a basalt body (partly sheared) on its southern margin. The gabbro and basalt contacts are approximately parallel to one another. Pyrite is disseminated throughout the mineralisation with higher gold grades apparently associated with coarse grained pyrite. The quartz veins contain some carbonate and the mineralisation contains minor magnetite and some sericite in fractures.
$\bigcirc$	-		Mineralisation appears to be terminated at surface at both ends by steep dipping faults which may to down throw the mineralisation so that the strike length at depth may be significantly longer than the strike length in the near surface.
			The mineralised body lies within a large structure which is approximately 43km long within three contiguous permits owned 100% by the company (Madyabari, Bassieri and Tamfoagou). The mineralisation is interpreted as a variant of the orogenic gold mineralisation style, which is known throughout the Birimian Belt of West Africa.
	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:	Intercepts that form the basis of this announcement are tabulated in Table 1 within the body of the announcement and incorporate Hole Number, Easting, Northing, Dip, Azimuth, Depth and Assay data for mineralised intervals. An appropriate locality map also accompanies this announcement.
		easting and northing of the drill hole collar     elevation or RL (Reduced	



	<ul> <li>interception depth</li> <li>hole length</li> <li>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.</li> </ul>	
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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Over 95% of the gold mineralised material (with grades exceeding 0.5g/t Au) was sampled in one meter intervals. No top cuts have been applied to exploration results as the maximum value in the entire assay database is 32.9g/t Au and only 4 samples contain more than 20g/t Au. For the 0.5g/t Au cut-off calculations, up to 4m (down-hole) of internal waste is included. For the 3g/t Au cut-off calculations, up to 2m (down-hole) of internal waste is included. For the "total intercept" average grade recorded for hole BNGRD005 in the Comments column, the average grade is calculated with a cut-off grade of 0.5 g/t Au and up to 5.5m of internal waste (down-hole). Mineralised intervals are reported on a weighted average basis.
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 been estimated for all intercepts based on the assumption that the gold mineralisation is oriented parallel to the hanging wall and foot wall contacts.
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.	An appropriate plan and cross section has been 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 average gold grades exceeding 2g-m (e.g. 1 g/t Au over a down-hole width of 2m) are reported. All of the holes for which assays were available for this ASX release contained at least some intervals which exceeded this limit. The gabbro and basalt intersected by the reported holes commonly contain less than 0.01g/t Au.
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.	Preliminary metallurgical test work has been completed on one composite sample of RC chips and reported previously (ASX release entitled "Excellent Gold Recoveries from Metallurgical Test Work" on 14 <sup>th</sup> May 2013); a gold recovery of 94% was recovered by CIL testwork using a standard 75 micron grind. Additional metallurgical testwork is planned in 2014.



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.

Further drilling is planned to test for down-dip and along strike extensions. The next phase of drilling will consist mainly of step-out holes at a spacing of 40-80m x 40-80m. The detailed drill program has not yet been designed.

Predictive Discovery Limited (PDI) was established in late 2007. The Company is focused on exploration for gold in West Africa. PDI has a distinctive technological capability, known as Predictore<sup>®</sup>, 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 1,605km<sup>2</sup> and is exploring for large open-pittable gold deposits. Exploration in eastern Burkina Faso has yielded a large portfolio of exciting gold prospects, including the Bongou trend where a series of high-grade gold drill intercepts have been obtained recently. PDI also has interests in a strategic portfolio of tenements and tenement applications in Cote D'Ivoire.

#### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Paul Roberts who is a Fellow of the Australian Institute of Geoscientists. Mr Paul Roberts is a full time employee of the company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration 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.

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