ASX Announcement

12th July 2012

Further high grade drill results from Bangaba

Highlights

- New Bangaba RC drill results include:
  - Solna:
    - **2m at 20.4g/t Au** from 70m including **1m at 40g/t Au**
    - **4m at 8.0g/t Au** from 194m including **1m at 29g/t Au**
    - **5m at 5.7g/t Au** from 39m including **1m at 12g/t Au**
    - **2m at 10g/t Au** from 134m including **1m at 19g/t Au**
    - **2m at 10g/t Au** from 51m
    - Analysis of 1m samples from 2m composites upgrades the **SOLRC011** intersection from 6m at 12g/t Au from 40m to **6m at 20g/t Au** including **1m at 111g/t Au**
  - Tambiri:
    - **20m at 2.3g/t Au** from 48m including **1m at 15g/t Au**
    - **20m at 2.2g/t Au** from 138m including **4m at 7.0g/t Au**
    - **12m at 1.7g/t Au** from 88m
    - **12m at 1.4g/t Au** from 96m
    - **12m at 1.4g/t Au** from 108m
- Both holes with 20m intercepts at Tambiri (listed above) extend mineralisation north and south with mineralisation still open in both directions and at depth.
- Considerable scope for further discoveries along the 8km of mostly untested power auger gold bedrock geochemical anomalies along strike from Solna and Tambiri.

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Predictive Discovery Limited (**ASX: PDI**) announces that assays have been received from infill and extension RC drilling on the Tambiri and Solna Prospects in the Bangaba Project in eastern Burkina Faso.

Managing Director's Assessment of Drill Results

Mr Paul Roberts, PDI's Managing Director commented: "***These new RC drilling results confirm that Solna is an intrinsically high grade gold deposit and have clarified our understanding of the geology of both Solna and Tambiri. At Tambiri, the broad gold intercepts at both the northern margin and the southern end point to additional mineral potential in both directions. These encouraging results move us significantly closer to a maiden JORC Resource at Bangaba in the next 6 months.***

Previously we announced that more than 8km of gold in bedrock geochemical anomalies have been identified at Bangaba, mostly along strike from Solna and Tambiri. Most of these remain untested and indicate significant gold potential within the Bangaba Project outside of the Solna and Tambiri Prospects."

Bangaba Project Background

The Bangaba project in Eastern Burkina Faso (Figure 1) covers areas of extensive artisanal mining. PDI is earning a 95% interest in the 128 km^2 Bangaba exploration permit by making a series of staged payments in cash and shares. PDI's equity now stands at 68%.

It is estimated that artisanal miners have produced several tonnes of gold at Bangaba over 27 years. Artisanal workings are located on two complex structures on the north-west and south-east contacts of a granodiorite-diorite body (Figure 2).

Previous RC and diamond drilling programs at the two major sites of artisanal mining, Solna and Tambiri, have generated a series of high grade intercepts, including: **2m at 56g/t Au**, **5m at 17g/t Au**, **7m at 13g/t Au**, **9.3m at 4.9g/t Au** and **5.6m at 16g/t Au**.

This release summarises assay results from a 6,584m RC drilling program completed in April-May 2012.

RC Drilling Program

This RC drill program was designed primarily to infill or test extensions of the known mineralisation at Solna and Tambiri, and resulted in gold intersection spacings of between 40 and 80m. Results from all the holes drilled are tabulated at the end of this release.

Tambiri (Figure 3)

At Tambiri, better intercepts included:

- **20m at 2.3g/t Au** from 48m including **1m at 15g/t Au** - northern extension
- **20m at 2.2g/t Au** from 138m including 4m at 7.0g/t Au – southern extension
- **12m at 1.7g/t Au** from 88m
- **12m at 1.4g/t Au** from 96m
- **12m at 1.4g/t Au** from 108m

The Tambiri Prospect is an open pit target with underground potential. These drill results largely confirmed the earlier geological interpretation except that the two 20m intercepts listed above extended the outline of thicker gold intercepts both to the north and south (Figure 3). The northern intercept was approximately 40m below surface and the southern intercept was about 130m below surface, indicating an overall shallow southward plunge. Mineralisation remains open to the north and south.

The Tambiri gold mineralisation is also open at depth directly beneath the zone of higher grade intercepts (pink shaded area on Figure 4). Several holes in this area steepened more than was anticipated with the result that one hole stopped in low grade mineralisation and a second hole may have failed to reach the lode position.

The gold mineralisation dips steeply to the south-east and all intercepts correlate clearly within a gold-bearing quartz vein system that is typically between 5 and 20m thick.

Solna (Figure 4)

At Solna, better drill hole intercepts included:

- **2m at 20.4g/t Au** from 70m including **1m at 40g/t Au**
- **4m at 8.0g/t Au** from 194m including **1m at 29g/t Au**
- **5m at 5.7g/t Au** from 39m including **1m at 12g/t Au**
- **2m at 10g/t Au** from 134m including **1m at 19g/t Au**
- **2m at 10g/t Au** from 51m

The Solna Prospect is targeted as an open pit and underground gold deposit. A revised interpretation based on the new results (Figure 4) suggests a simpler interpretation than previously understood. The bulk of the gold mineralisation is located within the “B Lode” which

generally dips to the south-east at an angle of approximately 50 degrees. A higher grade zone (e.g. **5.6m at 16g/t Au**, **7m at 13 g/t Au**, **4m at 8g/t Au**, **2m at 10g/t Au**) appears to plunge shallowly towards the east (see Figure 4). These grades and widths are likely to support underground mining and warrant follow-up because mineralisation remains open at depth.

South of the B Lode, two other lodes are identified, both with high grade cores which peak at **2m at 56g/t Au** ("A Lode") and **6m at 20g/t Au** ("D Lode"). The second intercept is an upgraded value resulting from recent analysis of 1m samples taken from the previously reported 2m composites; it includes a single metre interval of **1m at 111g/t Au**. Both lodes are open at depth.

Drilling in the recent program targeted at the northern extension of the "C Lode" (Figure 4) did not intersect high grade mineralisation, however the recent geological re-interpretation suggests that this lode may trend in a different orientation towards the north-east and therefore has not yet been effectively tested.

Outlook

The current drilling program has clarified the geological interpretation at both Solna and Tambiri to enable preparation of a JORC Resource calculation. Some additional drilling will be required to achieve this over the full extent of the mineralisation identified to date, and this is planned for October-November 2012. Drill testing of the new extensions at Tambiri and Solna may also be carried out at the same time.

A preliminary program of metallurgical testwork on samples from both Solna and Tambiri is also planned over the coming months.

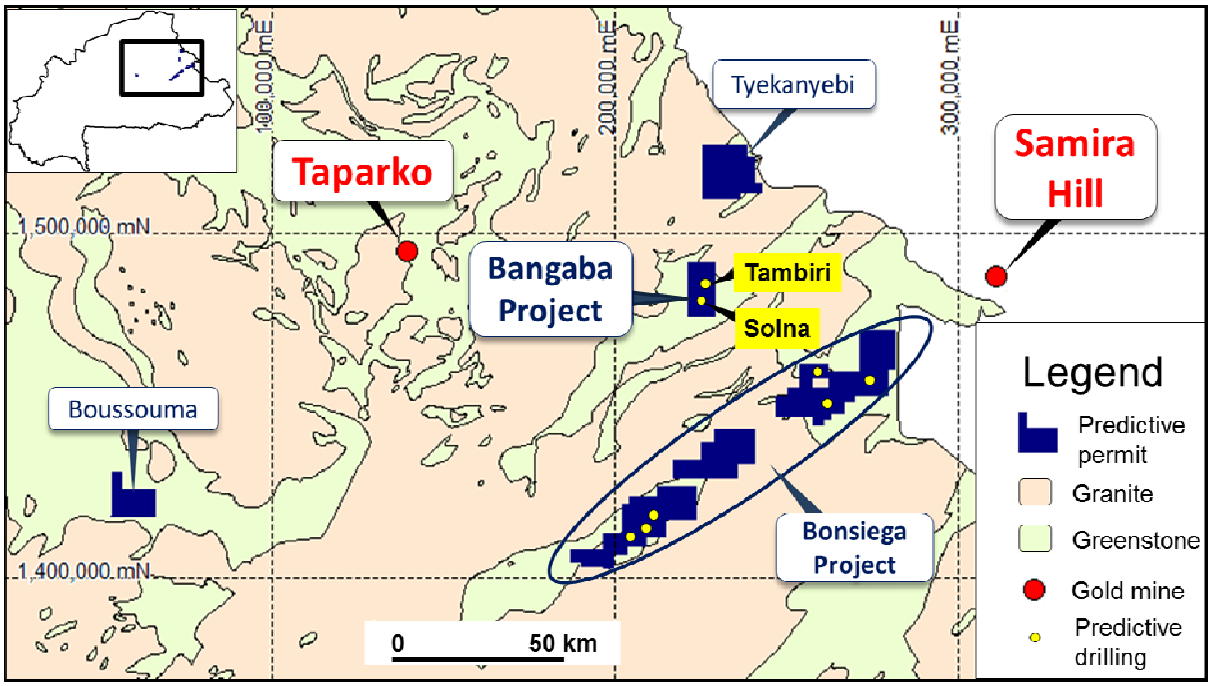

Figure 1: Geological map of eastern Burkina Faso showing PDI's tenements with the locations of the Tambiri and Solna Prospects highlighted.

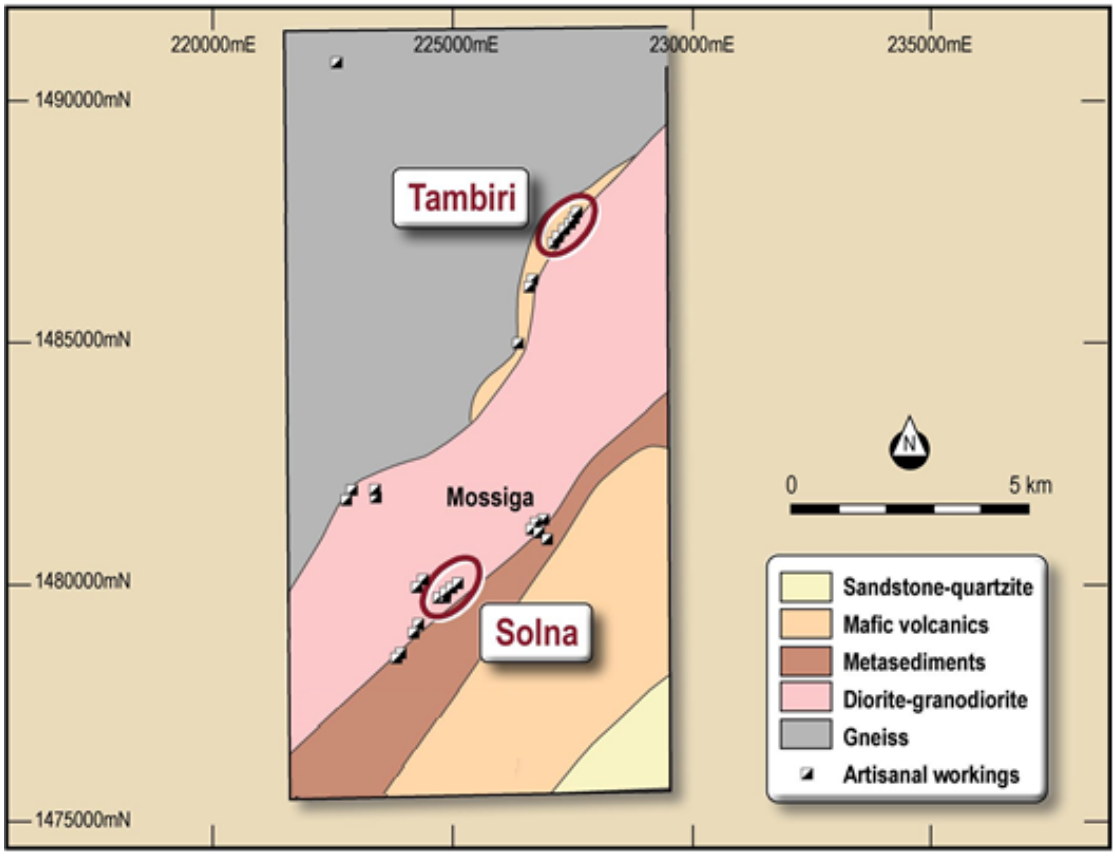

Figure 2: Bangaba geological Interpretation showing location of Solna and Tambiri

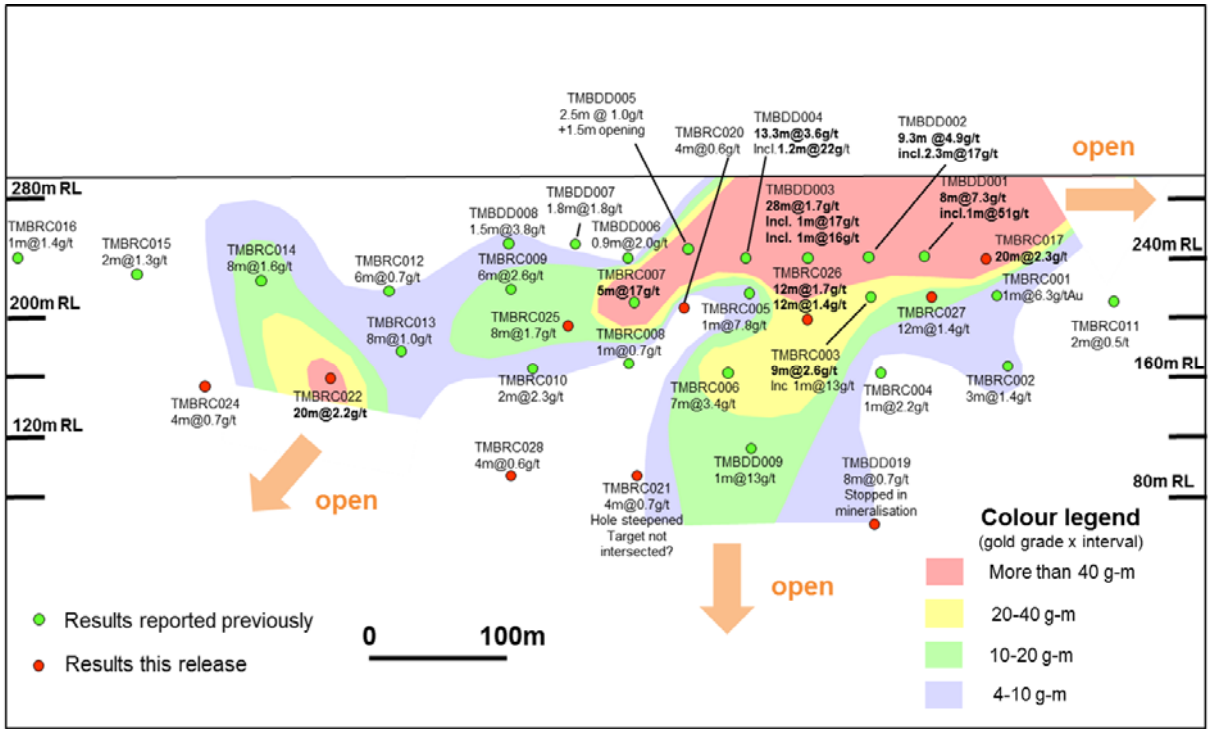

Figure 3: Tambiri longitudinal projection, showing gold grade x interval metre contours

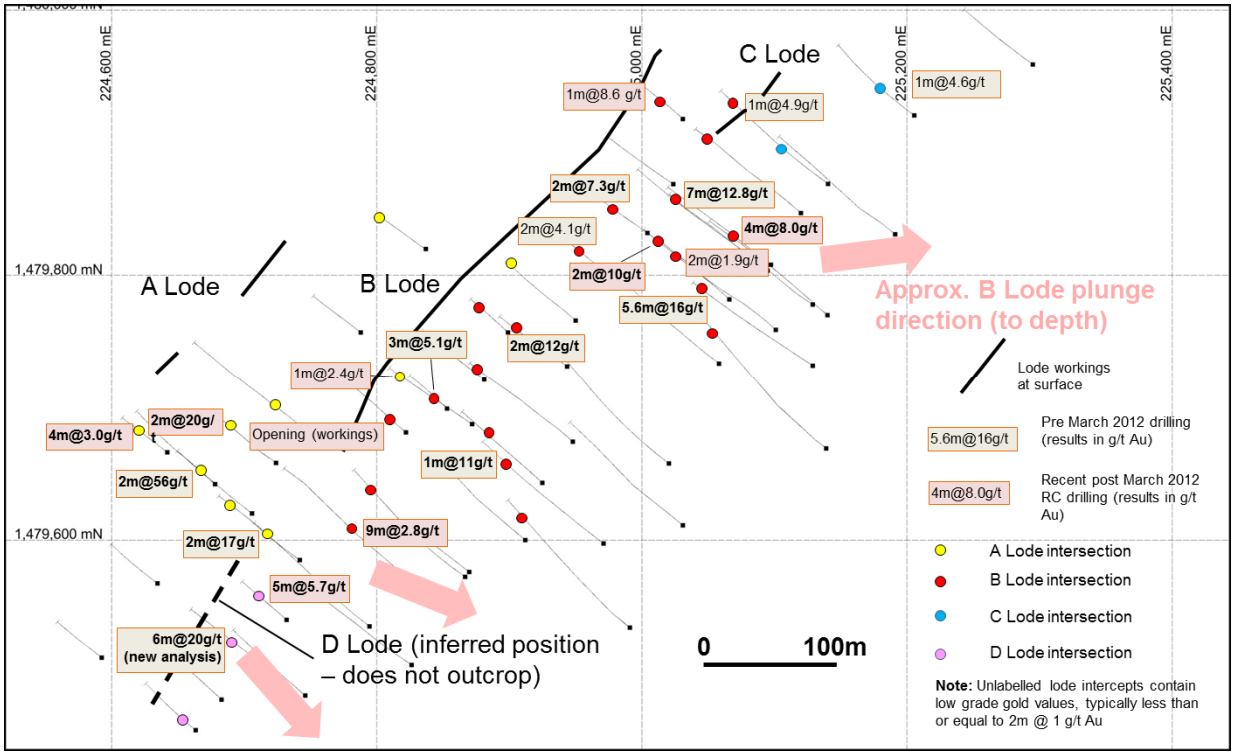

Figure 4: Solna plan view of drill holes, showing interpreted lode positions and ore grade and width intercepts

TABLE 1 – DRILL RESULTS

Hole No	Collar	Inclination	Azimuth	Depth	Interval	Au	Comments

	Coordinates		(degrees)	(degrees)	from (m)	(m)	(g/t)	
	UTM East	UTM North						
Solna								
SOLRC017	225373	1480517	-50	310				No significant results
SOLRC018	225128	1480200	-50	310	25	1	1.7	
SOLRC019	224724	1479658	-50	310	70	**2**	**20.3**	**Including 1m @ 40g/t Au**
SOLRC020	225362	1480007	-50	310				No significant results
SOLRC021	225295	1479959	-50	310				No significant results
SOLRC022	224788	1479757	-50	310	15	1	1.4	
SOLRC023	224818	1479576	-50	310	63	**1**	**8.3**	
					71	1	4.9	
SOLRC024	224837	1479820	-50	310				4m @ 0.46 g/tAu from 66m; 4m composite
SOLRC025	225191	1479831	-60	310	222	4	1.4	
SOLRC026	225129	1479778	-50	310				No significant results
SOLRC027	225140	1479770	-60	310	166	1	3.6	
					194	**4**	**8.0**	**Including 1m @ 29g/t Au**
SOLRC028	225120	1479847	-50	310	59	1	0.84	
SOLRC029	225031	1479918	-50	310	42	1	8.6	
SOLRC030	224822	1479681	-50	310				No significant results
SOLRC031	224881	1479721	-50	310	86	1	2.4	
SOLRC032	224948	1479674	-50	310	133	1	0.82	
SOLRC033	225031	1479611	-60	310				No significant results
SOLRC034	224950	1479766	-50	310				1m @ 0.23 g/tAu from 118m
SOLRC035	225139	1479669	-60	310	219	1	1.1	
SOLRC036	225101	1479759	-50	310	191	2	1.9	
SOLRC037	225066	1479782	-50	310	134	**2**	**10.2**	**Including 1m @ 19g/t Au**
SOLRC038	224991	1479534	-60	310				1m @ 0.55 g/tAu from 208m
SOLRC039	224912	1479600	-50	310				No significant results
SOLRC040	224732	1479540	-50	310	39	**5**	**5.7**	**Including 1m @ 12g/t Au**
SOLRC041	224746	1479483	-50	310				No significant results
SOLRC042	224683	1479480	-50	310				No significant results
SOLRC043	224401	1479144	-50	310	20	1	2.9	
SOLRC044	224406	1480114	-50	310	13	6	0.74	
SOLRC045	225355	1479126	-50	310				No significant results
SOLRC046	225321	1479152	-50	310				No significant results
SOLRC047	224925	1479643	-50	310	88	92		
SOLRC048	224742	1479585	-50	310				4m @ 0.45 g/tAu from 108m; 4m composite
SOLRC049	224853	1479699	-50	310				No significant results
SOLRC050	224899	1479757	-50	310				No significant results
SOLRC051	224678	1479642	-50	310	51	**2**	**10.4**	**Including 1m @ 20g/t Au**
Tambiri								
TMBRC017	227639	1487620	-50	310	48	**20**	**2.3**	Includes 3m internal waste. **Including 1m @ 15g/t Au**
TMBRC018	227627	1487472	-50	310				Stopped short, no intersection
TMBRC019	227703	1487462	-50	310	252	8	0.69	Stopped in mineralisation; 4m composites
TMBRC020	227541	1487439	-50	310	92	4	0.6	4m composite
TMBRC021	227559	1487375	-60	310	200	4	0.7	4m composite
TMBRC022	227406	1487242	-50	310	138	**20**	**2.2**	**Including 4m at 7.0g/t Au**:

								4m composite
TMBRC023	227461	1487260	-60	310				Hole over-steepened, no intersection
TMBRC024	227356	1487177	-50	310	150	4	0.65	4m composite
TMBRC025	227493	1487377	-50	310	104	**8**	**1.7**	4m composites
TMBRC026	227600	1487502	-50	310	88	**12**	**1.7**	4m composites
					108	**12**	**1.4**	4m composites
TMBRC027	227644	1487574	-50	310	96	**12**	**1.4**	4m composites
TMBRC028	227545	1487281	-50	310	232	4	0.6	4m composite

Notes regarding the drilling and the assay table:

1. Down-hole surveys were performed on all holes.
2. Analytical standards, blanks and duplicates were added to all sample batches for quality control.
3. Analyses were performed by fire assay at the SGS laboratory in Ouagadougou.
4. Average assay values are calculated with a maximum of 1m of internal waste except where noted.
5. Assays pending on 1m samples from within 4m composites from Tambiri prospect, where noted in Comments column.

About Predictive Discovery:

Predictive Discovery Limited (PDI) was established in late 2007 to explore for gold and uranium. The Company is focused principally on exploration for gold in West Africa with one additional gold project in Australia. PDI has a distinctive technological capability, known as Predictore™, which is designed to increase drill targeting efficiency thereby reducing ore discovery cost. The Company's major focus is in Burkina Faso, West Africa where it has assembled a substantial regional ground position totalling 1,544km^2 and is exploring for large open-pittable gold ore deposits.

Competent Persons Statement

The exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr Paul Roberts (Fellow of the Australian Institute of Geoscientists). Mr Roberts is a full time employee of the company and has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). Mr Roberts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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