



23<sup>rd</sup> November 2015

# 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:** 651M shares

Share Price: 0.3 cents

**Market Capitalisation:** \$1.95M

#### **Directors**

Phillip Jackson
Non-Exec Chairman

Paul Roberts

Managing Director

Phil Henty
Non-Executive Director

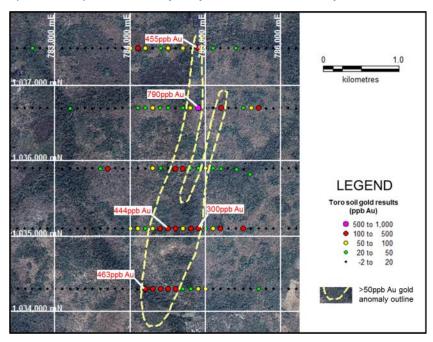
Tim Markwell Non-Executive Director

# Infill gold-in-soil results strengthen Cote D'Ivoire targets

Predictive Discovery Limited (ASX:PDI) is pleased to report on infill gold-in-soil results from exploration of the Company's Boundiali permit in northern Cote D'Ivoire by Joint Venture partner, Toro Gold Limited:

- ☐ The **new 5.6km long gold-in-soil anomaly** reported 20 October 2015 was strengthened by these results, the southern 3.2km long section now showing:
  - plus 400ppb gold results in four of five 800m-spaced lines, and
  - anomalous values in adjacent samples over widths of up to 1.2km.
- Additional 3km long gold-in-soil anomaly 5km south of the above anomaly, coinciding with a 90g/t Au rock chip sample reported on 10 November 2015.
- □ 200 x 50m infill soil sampling on strongest gold anomalies now in progress.
- ☐ RAB drilling expected in March Quarter 2016.

Mr Paul Roberts, the Predictive's Managing Director said: "These new results take us another step forward in our understanding of the new, large Boundiali soil anomaly. The infill values confirm the quality and consistency of the 5.6km anomaly, especially in a 3.2km long zone at its southern end. We are also starting to see positive results – both in soil and rock chip values – further to the south. Boundiali is now shaping up as a very interesting project. Toro Gold is moving fast and we expect more positive news flow from here in the next few months."

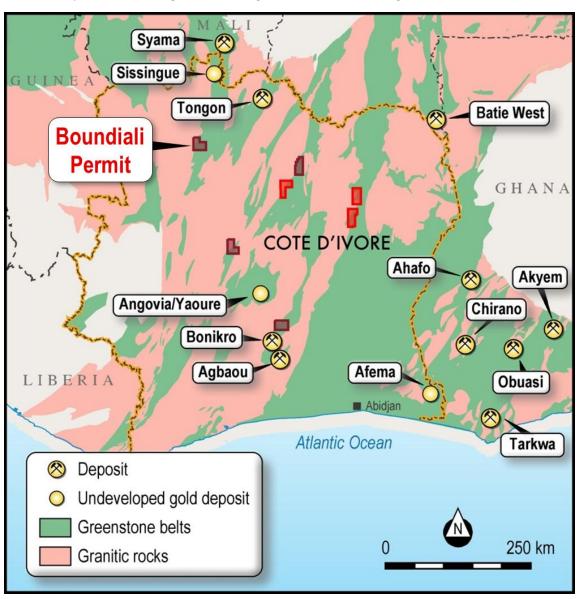


**Figure 1:** Soil geochemical results at southern end of 5.6km long geochemical anomaly (reported 20/10/15) on satellite imagery background. Note that: (1) gold values above 20ppb Au are regarded as anomalous and (2) the current sample spacing is a very broad 800 x 100m.



#### INTRODUCTION

Predictive is in Joint Venture with Toro Gold Limited (**Toro**), a UK-based company, on four permits in Cote D'Ivoire (Figure 2). Under the terms of the Joint Venture agreement, Toro can earn a 51% interest in Predictive Discovery Cote D'Ivoire SARL (Predictive CI), which holds Predictive's interest in the four permits, by spending US\$1 million on exploration and option payments. Once Toro has achieved its 51% interest, PDI may contribute 49% of expenditure from then on or dilute. If PDI decides to dilute, Toro can earn a further 14% in Predictive CI by spending an additional US\$2.5 million on exploration of the ground, leaving PDI with a 35% holding.



**Figure 2:** Locality map showing location of Boundiali permit and PDI's other exploration ground interests in Cote D'Ivoire. The Toro Gold joint venture permits are shown in brown and the ground covered by PDI's agreement on the Bobosso Project with the Ivoirian company, XMI SARL, is shown in red.

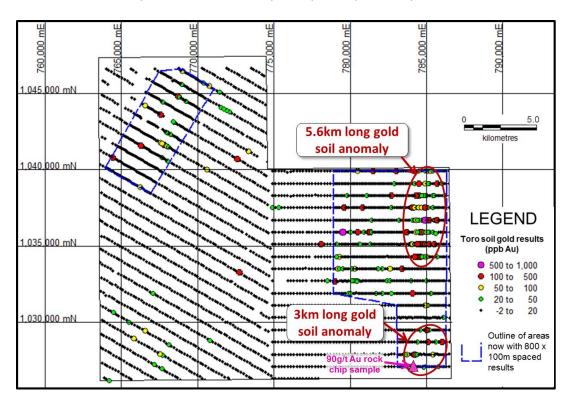


# **Boundiali Background**

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. The southern part of this belt has had little exploration to date and represents a first class opportunity to make new large gold discoveries.

## **Toro Soil Survey - Boundiali**

Toro previously carried out a soil sampling program covering the entire Boundiali permit on 800m spaced lines. Samples were collected 100m apart on each line but, initially, only every second sample was submitted for analysis, resulting in a reported station spacing of 800m x 200m. Following receipt of the 800 x 200m soil sample analyses, Toro submitted the intervening 100m samples from areas with interesting soil results for gold analysis. The results reported here combine these new analyses with the soil analyses reported previously (ASX release 20/10/15).



**Figure 3:** Toro Gold soil sampling grid covering the entire Boundiali exploration permit. Results in grade intervals are shown for all of Toro soil results to date. The large NE Boundiali gold anomaly and the emerging southern soil gold anomaly are highlighted on this map.

801 additional soil samples were analysed for gold by fire assay at the ALS laboratory at Loughrea in Ireland. The new, infill results confirmed the consistency of the **5.6km long gold-in-soil anomaly** reported to the ASX on 20/10/15 and have highlighted **a 3km long gold-in-soil anomaly** south of there, which had only shown scattered results in the initial 800 x 200m survey (Figure 3).



Figure 1 shows that the northern 5.6km long gold-in-soil anomaly includes a particularly strong 3.2km long section at its southern end, with continuous anomalous (>20ppb Au) values extending over widths of up to 1.2km. Values exceeding 400ppb Au (0.4g/t Au) are now seen on four of the five 800m spaced lines and a strong NNE trend is apparent.

Figure 3 shows that a **3km long gold-in-soil anomaly** in the SE corner of the Boundiali permit is significant and also worthy of detailed follow up. While anomalous values are a little more scattered than in the northern anomaly, possibly suggestive of several separate mineralised zones, gold values of **up 394ppb Au** have now been recorded in this area. In addition, a single rock chip sample of an outcrop at the southern end of this anomaly contained **90g/t Au** (ASX release 10/11/15) further highlighting its potential.

Given an 800 x 100m sample spacing, these are excellent soil results. A 30m wide, one kilometre long gold deposit with a 50 to 100m low grade gold halo around it might generate just seven or eight anomalous values in such a grid. These results are suggestive of at least one and possibly two gold mineralised systems which are substantially larger than that.

## Follow-up Work

Toro is currently carrying out 200 x 50m soil sampling on high priority areas at Boundiali. Results are expected either in December or early January.

Based on the strength of the results so far, an initial RAB drilling program is planned for the March Quarter of 2016.

#### TABLE 1 – SOIL SAMPLING RESULTS

Sample numbers	Northing (WGS84- 30N)	Easting (WGS84 – 30N)	RL	Hole dips	Azimuth	Hole Depth	From	Interval	Au (ppb)
numbers in the range14350- 15000 and	Figures 1 and 3 for map locations of all	Refer to Figures 1 and 3 for map locations of all samples	notes	samples described		Soil samples were collected from 10-50cm depth	samples described	relevant to the samples	See notes and Figures 1and 3.

Notes: Soil sampling is a reconnaissance exploration technique. In the sampling and sample preparation method used by Toro, soil samples were collected from shallow holes and dried and sieved to -80 mesh at a local field camp. The prepared samples were then sent to the ALS laboratory in Loughrea in Ireland for fire assay analysis. RL ranges for the Boundiali permit are 360 to 442m. Individual RLs are not reported in this announcement because they are not relevant to interpreting geochemical data of this type.

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	The sampling described in this report refers samples obtained from the Boundiali exploration permit in Cote D'Ivoire.	



	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.	The soil and lag samples were collected from shallow holes with depths between 10 and 50cm.
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	This is not relevant to a soil sampling program.
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.	This is not relevant to a soil sampling program.
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.	Soil samples are described in terms of soil type, regolith and landscape classification and colour. Descriptions are largely qualitative.
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	The sample preparation method is appropriate and standard for soil samples of this type.



	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.		
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.	The analytical method used has a very low (1ppb Au) detection limit which is appropriate for samples of this type.	
	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.		
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	This is not relevant to a soil sampling program.	
Location of Data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Coordinates shown on the locality maps (Figures 1 and 3) are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 29 - Northern Hemisphere.	
	Specification of the grid system used Quality and adequacy of topographic control		
Data Spacing and Distribution	Data spacing for reporting of Exploration Results	The soil sampling grid was 800 x 100m and is considered appropriate for a reconnaissance exploration grid of this type. No Mineral Resource can be estimated from these	
	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.	data.	
	Whether sample compositing has been applied		
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.		The samples were collected along lines which were designed to cross cut the interpreted bedding and foliation strike orientations in permit.	



	1			
Sample Security	The measures taken to ensure sample security	Samples are stored securely at Toro Gold's field office in Yamoussoukro.		
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 soil sampling program.		
S	ection 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 Boundiali exploration permit was granted to PDI Cote D'Ivoire SARL in January 2014.Toro Gold Limited may earn a 51% interest in PDI Cote D'Ivoire SARL by spending US\$1 million.		
	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.			
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 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.	This is not relevant to a soil sampling program. Sample coordinate information is provided in Table 1 and on the maps included in this release.		
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.	This is not relevant to a soil sampling program		
Relationship Between Mineralisation Widths and Intercept Lengths	These relationships are particularly important in the reporting of Exploration Results	This is not relevant to a soil sampling program.		
	If the geometry of the mineralisation			



	with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	Appropriate maps and sections (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 locations of the soil samples, classified by results, are shown in this release.
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.	Results from all assayed soil samples have been reported.
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, new exploration data is reported in this 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.	Follow-up infill soil sampling is planned on the permit as outlined in this release.

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's major focus is in Burkina Faso, West Africa where it has assembled a substantial regional ground position totalling 1,605km² 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 high grade Bongou gold deposit on which a resource estimate was calculated in September 2014. PDI also has interests in a strategic portfolio of tenements in Côte D'Ivoire covering a total area of 1,533 km².

## **Competent Persons Statement**

The exploration results and the Exploration Target 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