



ASX Announcement

31 August 2018

ASX: PDI

Issued Capital: 236
million shares

Share Price: 2.1 cents

Market Capitalisation:
\$5.0m

Directors

Phillip Jackson
Non-Exec Chairman

Paul Roberts
Managing Director

David Kelly
Non-Executive Director

13KM LONG GOLD-IN-SOIL ANOMALY AT BOUNDIALI NORTH, COTE D'IVOIRE

Highlights

- Soil geochemistry sampling on the **new Boundiali North** permit has identified a series of new gold anomalies extending for **13km**.
- Higher gold values include **1,185, 806 and 626 ppb Au**.
- Completed soil program **comprised 6,338 samples** covering a previously untested 16km section of the inferred Nyangboue gold structure.
- These new results complement **the excellent drill assays** obtained from the Nyangboue Prospect in the adjacent permit directly to the south (best intercept **30m at 8.3g/t Au** – ASX release 29/5/17).

Predictive Discovery (“*Predictive or Company*”) is very pleased to announce initial results of a recent soil geochemistry program, managed by Joint Venture Partner Toro Gold Limited (“*Toro*”), at the Company’s Boundiali Project.

The Boundiali project is located in northern Côte D’Ivoire on the intersection of two gold mineralised trends - the Syama-Sissingue and Tongon trends. Reconnaissance sampling across most of the new Boundiali North permit resulted in the discovery of a series of new gold-in soil anomalies over a strike length of approximately 13km (Figure 1) north of the previously drilled Nyangboue Prospect (Figure 2).

“The Company is encouraged by the results from this extensive soil program. The Boundiali exploration program is capably managed and funded by our trusted Joint Venture Partner, Toro Gold. This 13km zone of anomalies adds substantially to the list of potential drill targets on the two permits comprising the Boundiali Project.

The reported results are located on a very broad grid, meaning that infill soil assay results will more closely define the gold anomalies for follow-up and can reasonably be expected to yield some higher gold values.” – said Paul Roberts, Predictive’s Managing Director.

The program covered most of the Boundiali North Permit (Figure 1) and consisted of 6,338 samples, collected on a 400 x 100m grid. The results of 1,356 samples, spaced 800 x 200m apart, are reported here (Table 1). Infill samples will now be assayed to delineate the soil in gold anomalies more accurately.

The next steps will be to complete the 400 x 100m soil infill analyses and then infill the sampling further (to 200 x 50m) on areas of interest in the December Quarter. Follow-up exploration after that is expected to involve trenching, geophysics and RC drilling.

The Boundiali and Boundiali North permits are 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.

In March 2015 Toro Gold entered in to a joint venture agreement with Predictive Discovery whereby it had the right to earn a 65% equity of the project. After 3 years of field work, Toro Gold currently owns 65% in the joint venture with PDI owning the remaining 35%. Both PDI and Toro Gold have been contributing to further funding on a pro-rata basis while Toro Gold remains the manager of the work programs.

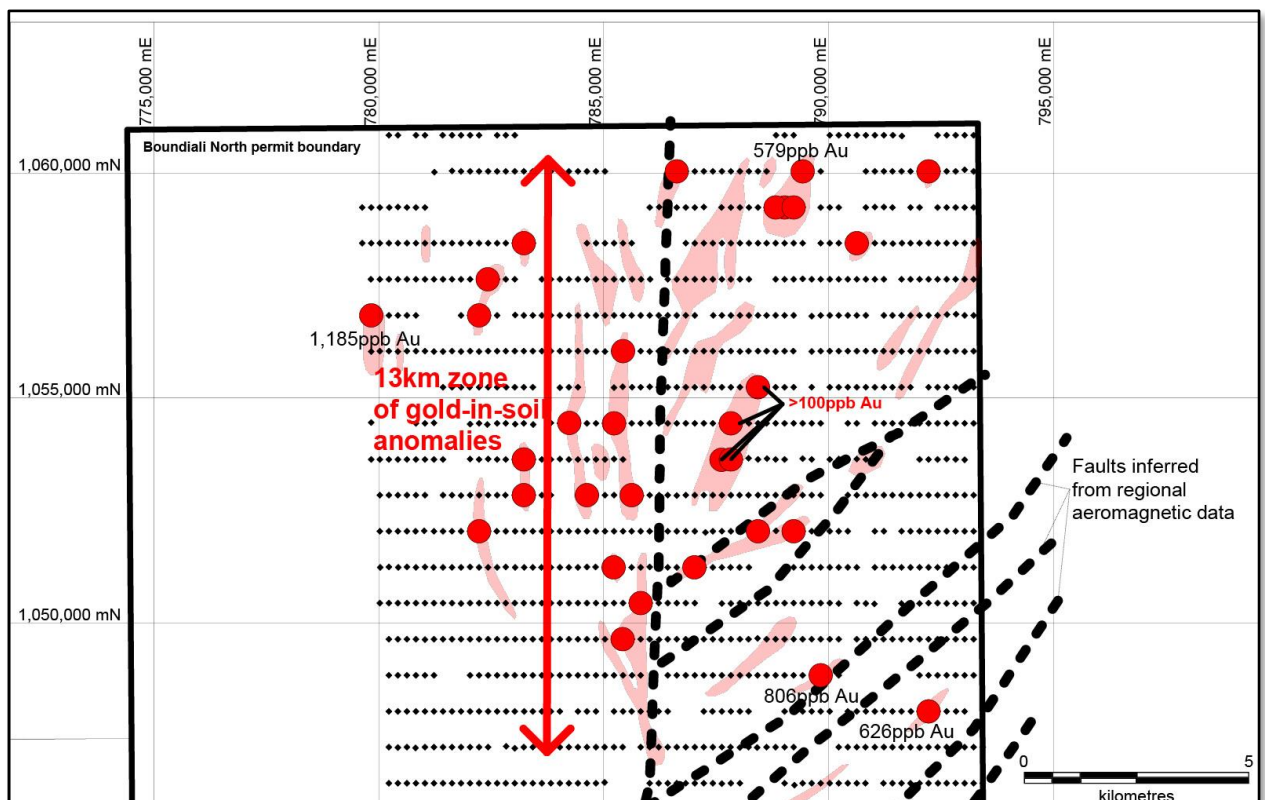


Figure 1 - Soil geochemistry program covering Nyangbou structure showing all areas of gold values exceeding 20ppb Au, with plus 100ppb Au values highlighted as red dots. The north-south dashed line is the trace of the Nyangbou Structure which hosts the drilled Nyangbou gold zone, approximately 10km to the south.

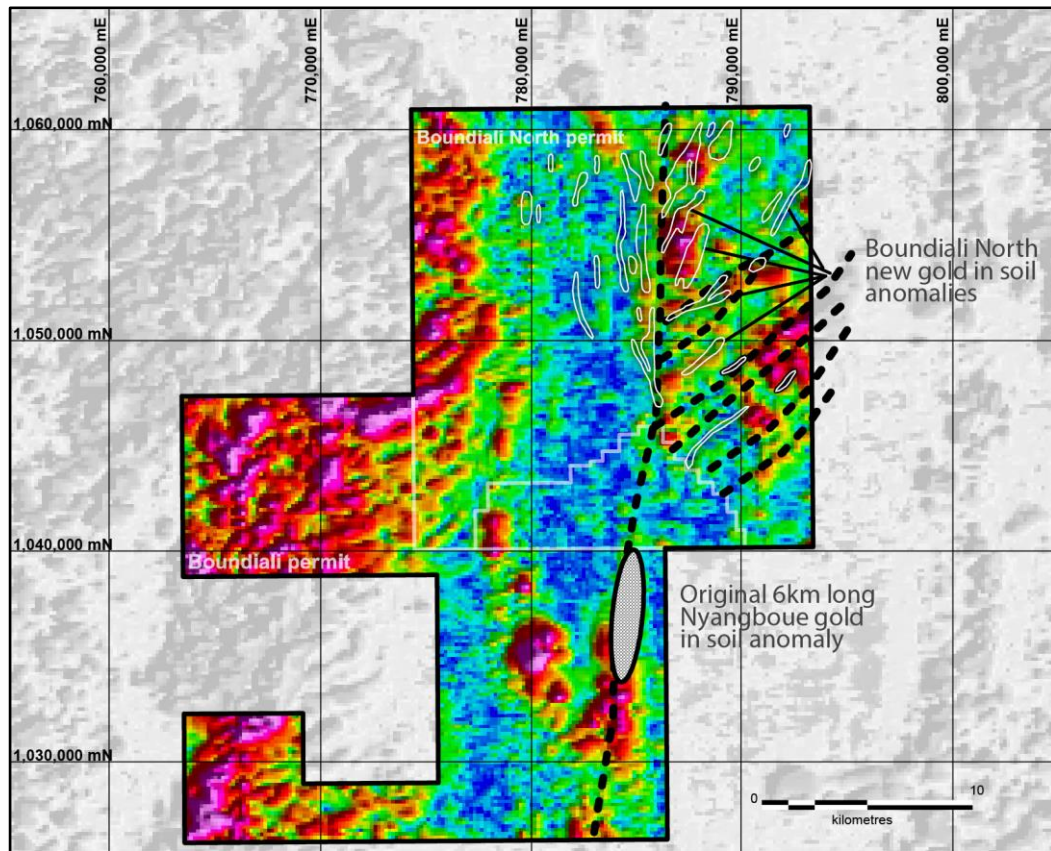


Figure 2 - New gold soil anomalies at Boundiali North (white outlined areas) superimposed on a colour image of regional aeromagnetic data (analytical signal). The dashed lines are structures inferred from the aeromagnetic map.

-End-

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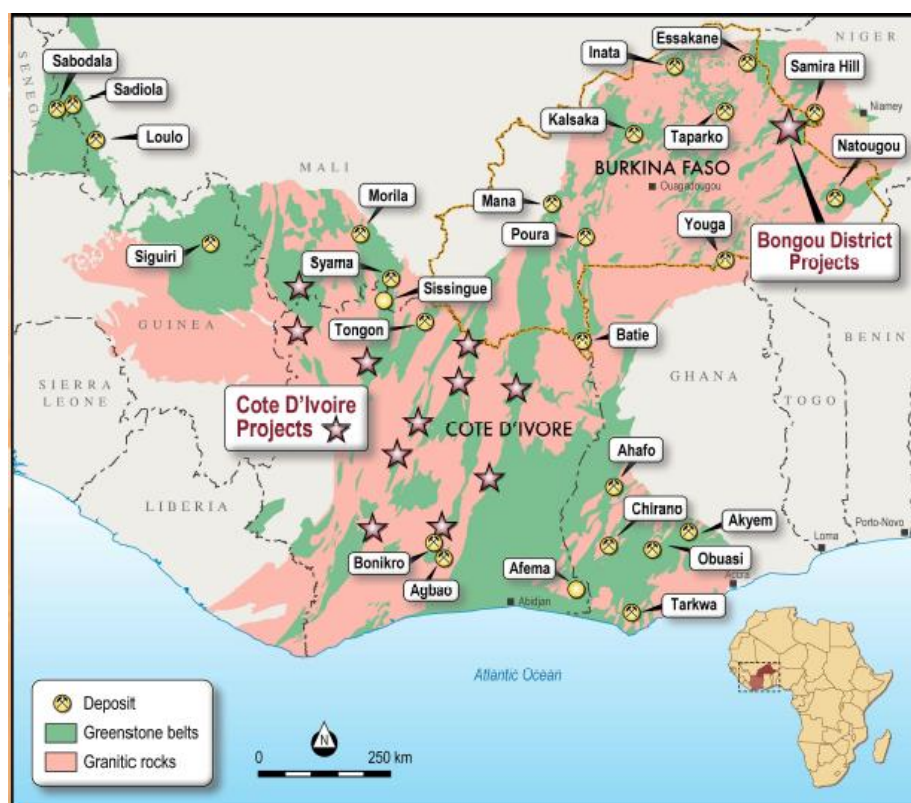
ABOUT PREDICTIVE DISCOVERY

Predictive Discovery (ASX:PDI) is focused on 12 projects across West Africa's Mali, Cote D'Ivoire and Burkina Faso (Figure 2) – a proven and prolific gold region.

Our Prospect Generator model of Exploration – Partnership – Growth provides a pipeline of continuous and early stage exploration work with investment exposure to world class gold opportunities and limited downside risk.

Once initial discovery work has been completed we identify a venture partner to fund and undergo the exploration work, leveraging their expertise to drive project outcomes and allowing us to realise shareholder value.

Our project generator model, joint venture partners and exposure to a world class gold region are core drivers for our business that allow us to accelerate portfolio potential. A diligent focus on these core drivers make Predictive Discovery an exciting investment opportunity.



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

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.

TABLE 1 – SOIL SAMPLING RESULTS – BOUNDIALI NORTH PERMIT

Sample numbers	Northing (WGS84-29N)	Easting (WGS84 – 29N)	RL	Hole dips	Azimuth	Hole Depth	From	Interval	Au (ppb)
Toro sample numbers in the ranges CV08-26598-26600, CV08-79602-79625, CV08-83772-90214.	Refer to Figures 1 and 2 for map locations of all samples	Refer to Figures 1 and 2 for map locations of all samples	See notes	Not relevant to the samples described in this report	Not relevant to the samples described in this report	Soil samples were collected from 10-50cm depth	Not relevant to the samples described in this report	Not relevant to the samples described in this report	See notes and Figures 1 and 2

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 sampled areas of the Boundiali North permit are approximately 350 to 400m. 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	<p>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 representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>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.</p>	<p>The sampling described in this report refers samples obtained from the Boundiali North exploration permit in Cote D'Ivoire.</p> <p>The soil and lag samples were collected from shallow holes with depths between 10 and 50cm.</p>
Drilling	<p>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).</p>	<p>This is not relevant to a soil sampling program.</p>

Drill Sample Recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	This is not relevant to a soil sampling program.
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	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	<p>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.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p>	The sample preparation method is appropriate and standard for soil samples of this type.
Quality of Assay Data and Laboratory Tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	The analytical method used has a very low (1ppb Au) detection limit which is appropriate for samples of this type.

Verification of Sampling and Assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data</p>	This is not relevant to a soil sampling program.
Location of Data points	<p>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.</p> <p>Specification of the grid system used Quality and adequacy of topographic control</p>	Coordinates shown on the locality maps (Figures 1 and 2) are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 29 - Northern Hemisphere.
Data Spacing and Distribution	<p>Data spacing for reporting of Exploration Results</p> <p>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.</p> <p>Whether sample compositing has been applied</p>	The soil sampling grids of 800 x 200m are considered appropriate for reconnaissance exploration grids of this type. No Mineral Resource can be estimated from these data.
Orientation of Data in Relation to Geological Structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	The samples were collected along east-west lines which were designed to cross cut the regional foliation and structure orientations in permit.
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.
Section 2 Reporting of Exploration Results		
Mineral Tenement and Land Tenure Status	<p>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.</p> <p>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.</p>	The Boundiali North exploration permit was granted to DS Resources SARL in March 2018. Predictive Discovery Cote D'Ivoire SARL in which Predictive holds a 35% stake is earning an 85% interest in the Boundiali North permit by completion of a definitive feasibility study. DS Resources can either fund its 15% share of the joint venture to production or convert its interest into a 1.5% NSR royalty.

Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	PDI is not aware of any effective gold exploration over the BoundialiNorth 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	<p>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:</p> <ul style="list-style-type: none"> • 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 <p>this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	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	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	This is not relevant to a soil sampling program.
Relationship Between Mineralisation Widths and Intercept Lengths	<p>These relationships are particularly important in the reporting of Exploration Results</p> <p>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</p> <p>hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	This is not relevant to a soil sampling program.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included	An appropriate plan showing the locations of the soil samples, and

	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.	plus 20ppb gold-anomalous soil samples, is 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 RC drilling is planned on the permit as outlined in this release.