

16 April 2020

DIAMOND DRILLING EXTENDS GOLD MINERALISATION AT OUARIGUE SOUTH, COTE D'IVOIRE

14.00m at 10.74g/t Au and 51.00m at 1.27g/t Au

SUMMARY

- ▶ Nine-hole diamond drilling (DD) program, totalling 1,659.19m completed at the Ouarigue South Prospect within the Ferkessedougou North Gold Project, located in northern Cote D'Ivoire.
- ▶ Managed by joint venture partner Resolute Mining (ASX: RSG), results have confirmed a continuous, easterly-dipping, gold-mineralised zone, extending from surface to a vertical depth of 175m, which remains open at depth.
- ► Excellent potential remains to find further mineralised bodies like Ouarigue South within the 17km-long zone of gold-in-soil anomalies (the "Leraba Trend"), which remains largely untested by drilling.

FERKESSEDOUGOU NORTH DRILLING HIGHLIGHTS

Better intersections included:

- ► FNDC011: **51.00m at 1.27g/t gold** from 169.00m
- ► FNDC012: **14.00m at 10.74g/t gold** from 33.00m
- ► FNDC015: **33.00m at 1.62g/t Au** from 28.00m
- ► FNDC016: **17.15m at 1.39g/t Au** from 110.85m
 - 18.00m at 1.95g/t Au from 134.00m
- ► FNDC018: **13.65m at 2.13g/t gold** from 194.00m
 - 25.00m at 0.98g/t gold from 154.00m
 - 40.40m at 1.88g/t Au from 105.60m
- ► FNDC019: **9.75m at 7.46g/t gold** from 104.00m
- ► First drilling completed since June 2019 when first pass diamond drilling returned outstanding results¹ including:
 - ▶ 45.3m at 3.16g/t gold from 45.9m including 9m at 10.31g/t gold
 - ▶ 39.7m at 3.54g/t gold from 51.4m including 4.5m at 11.00g/t gold¹
- An infill and extension program has been planned to further test the down dip extent of the system and improve understanding of the grade distribution and potential internal high-grade plunges.

ASX: PDI

¹ ASX Announcement 4 June, 2019 – CONFIRMATION OF SIGNIFICANT NEW GOLD DISCOVERY AT FERKESSEDOUGOU NORTH, COTE D'IVOIRE https://www.investi.com.au/api/announcements/pdi/02e800f8-176.pdf



Commenting on the results, Managing Director Paul Roberts:

"The results from Ouarigue South provide further strong encouragement of the strength of this mineralised gold system and highlights the potential of making more discoveries along the "Leraba" gold-in-soil geochemical trend. These results further strengthen our confidence that Ouarigue South has the potential to host a valuable gold resource, the limits of which are still to be defined."

Predictive Discovery Limited (Predictive or Company) is pleased to announce diamond drilling results from a diamond drilling (DD) program at its Ferkessedougou North Project, located in Northern Cote D'Ivoire (Figure 1). These results form part of the 2020 Resolute Mining (ASX:RSG) Joint Venture Cote D'Ivoire exploration program which is focused on the Ferkessedougou North and Boundiali Projects.



Figure 1 – Predictive Discovery Portfolio of Gold Projects including Joint Venture Projects held with Resolute Mining (ASX:RSG)



DRILLING - DETAILED INFORMATION

Resolute has provided the following description and images from their work:

In late January 2020, the joint venture commenced a diamond drilling program at Ouarigue South to outline the full extent of the gold mineralisation (Figure 2). Nine holes were drilled for 1,659m and 1,842 samples were sent to the Bureau Veritas laboratory in Abidjan for routine sample prep and 50g fire assay.

The drilling targeted the interpreted eastern down dip extension of the mineralised granitoid intrusive. Drilling successfully defined the granitoid intrusion as striking for 150m, dipping moderately to the east for over 200m, 60 to 100m thick and open at depth (Figure 3). The controlling mineralised structure continues to the north and south, outside of the main tonalite intrusion.

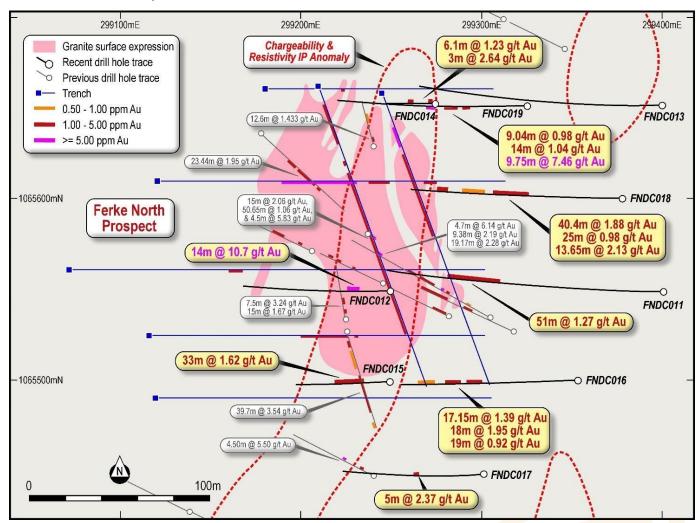


Figure 2 – Ouarigue South - Drill hold locations overlain previous drilling and trenching results with interpreted geology

Trenching and drilling programs to date on the permit have intersected a sheared sedimentary package of argillites and sandstones, variably intruded by granitoid dykes.

Mineralised zones have been defined as an upper hangingwall contact; basal footwall contact and central zone, and consist of silica-chlorite-biotite-sericite and ankerite-hematite alteration assemblages, quartz veining and disseminated pyrite, with variably developed, local structurally controlled high grade zones



within these broader envelopes, defined by intense brecciation, silica flooding, styolitic and disseminated pyrite, and milky and smoky grey quartz vein stockworks. Detailed information on all drill hole locations and assay results is presented in Table 1.

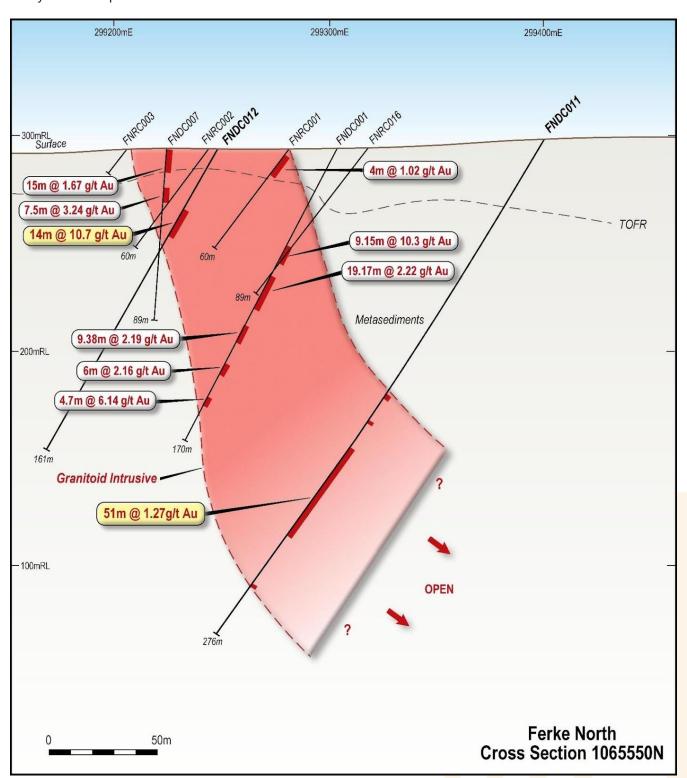


Figure 3 - Ouarigue South – Cross section 1065550N highlighting the



NEXT STEPS

An infill and extension program has been planned to further test the down dip extent of the system and improve understanding of the grade distribution and potential internal high-grade plunges. Continuing review and interpretation of the regional results may show other areas along strike on the main structure of other intrusives or potential traps for the mineralising fluids.

FERKESSEDOUGOU NORTH PROJECT BACKGROUND

In 2016, soil sampling at Ferkessedougou North revealed a 17km-long zone of gold-in-soil anomalies. Follow-up trenching in 2017 and reconnaissance RC drilling in 2018 revealed widespread gold mineralisation mainly in altered sheared granite bodies, with a series of drill intercepts from the Ouarigue South prospect extending over more than 1km of strike and including a best intercept of 25m at 3.06g/t gold from 64m, including 4m at 13.78g/t gold.

In April 2019, a 9-hole diamond drilling program, totalling 1,059m was completed at the Ouarigue South prospect (Figure 4), designed to explore the shape and grade distribution of the Ouarigue South gold mineralised body, which was initially encountered in reconnaissance RC drilling and trenching programs.

Better intersections included²:

FNDC001: 45.3m at 3.16g/t gold from 45.9m including 9m at 10.31g/t gold,

FNDC001: 10.9m at 1.94g/t gold from 95.7m, and

FNDC001: 4.7m at 6.14g/t gold from 134m

FNDC002: **45.0m at 1.52g/t gold** from 42.1m

FNDC004: 16.5m at 2.43g/t gold from 24m including 4.5m at 5.50g/t gold

FNDC005: 15m at 2.06g/t gold from surface, and

FNDC005: 10.5m at 1.71g/t gold from 34.5m,

FNDC005: 59.7m at 1.35g/t gold from 49.5m including 4.5m at 5.83g/t gold

FNDC008: **34.9m at 0.98g/t gold** from 12m

FNDC008: **39.7m** at **3.54g/t** gold from 51.4m including **4.5m** at **11.00g/t** gold

² ASX Announcement 4 June, 2019 – CONFIRMATION OF SIGNIFICANT NEW GOLD DISCOVERY AT FERKESSEDOUGOU NORTH, COTE D'IVOIRE https://www.investi.com.au/api/announcements/pdi/02e800f8-176.pdf



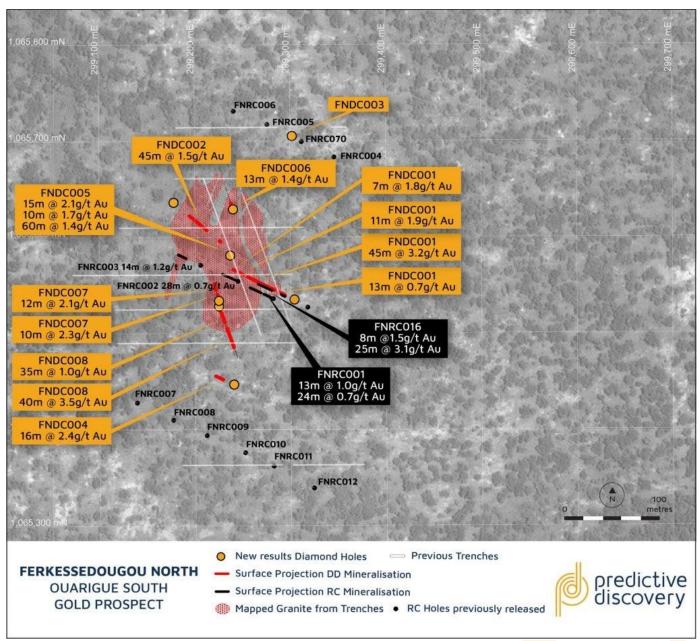


Figure 4 – Previously announced diamond drilling results from Ouarigue South



RESOLUTE JOINT VENTURE

Ongoing Work Program

Resolute has advised that, owing to current COVID-19 restrictions in Cote D'Ivoire, the planned power auger and air core drilling programs that were scheduled to commence after the Ferkessedougou North diamond drilling program was completed have been suspended. Predictive will advise the market when the suspension is ended and the planned work can go ahead.

Equity Calculation

Resolute has advised that, based on expenditure to the end of June 2019, Predictive's equity in the Joint Venture is 23.5%. Following receipt and audit of documentary evidence that covered the 6 months to end June 2019, a process that was delayed by the Resolute takeover of Toro Gold last year, Predictive is now a position to confirm to Resolute that this equity was calculated correctly. So, while Predictive's current equity in the Joint Venture remains at 30%, its equity percentage will fall to 23.5% when the required number of additional shares in the Joint Venture holding company, Toro Gold Equatorial Limited, are issued to Resolute.

In 2019, Predictive formally committed to contribute its equity share of expenditure in the Joint Venture for the 6 month period to end December 2019. The Company now believes that Resolute will proceed with issuing an invoice for that amount to Predictive in the coming weeks, which the Company will then pay. At this stage, the invoice amount is not known as Resolute has not yet provided Predictive with the total expenditure for that period or the detailed documentation to allow the Company to verify the expenditure, however Predictive has made what it believes is an adequate allowance in its budget to pay that amount in the current Quarter.

TABLE 1 - FERKESSEDOUGOU NORTH (OUARIGUE SOUTH PROSPECT) DIAMOND DRILL RESULTS

Hala ID	North	East	RL	Din	Azi	ЕОН	From	То	Width	Au
Hole_ID	(WGS)	(WGS)	(m)	Dip	(WGS)	(m)	(m)	(m)	(m)	(g <mark>/t)</mark>
FNDC011	1065549	299400	288	-60	274	275.98	139	142	3	0. <mark>99</mark>
							154	156	2	1. <mark>96</mark>
							169	220	51	1.27
							247	249	2	1. <mark>13</mark>
FNDC012	1065549	299249	300	-60	270	161.04	6	27	21	0.88
							33	47	14	10 <mark>.74</mark>
							56.75	59	2.25	0.74
FNDC013	1065651	299399	295	-60	270	265.3 <mark>8</mark>	192	201	9	0.96
							5	8	3	2.64
							24	30.1	6.1	1.23
							45	48.7	3.7	0.44



FNDC015	1065499	299249	295	-60	270	103.83	28	61	33	1.62
FNDC016	1065500	299353	307	-60	270	202.43	110.85	128	17.15	1.39
							134	152	18	1.95
							163	182	19	0.92
FNDC017	1065448	299301	299	-60	270	154.12	74	79	5	2.37
							96	106	10	0.47
FNDC018	1065600	299377	298	-60	270	237.6	105.6	146	40.4	1.88
							154	179	25	0.98
							194	207.65	13.65	2.13
FNDC019	1065651	299325	296	-60	270	152.15	63.96	73	9.04	0.98
							78	92	14	1.04
	·						104	113.75	9.75	7.46
							129.8	132	2.2	1.04

Notes to Table:

- ► Grid coordinates are WGS84 Zone 30 North
- ▶ Diamond core are sampled every 1m on average by cutting the core in half to provide a 2-4kg sample
- ► Cut-off grade for reporting of intercepts is >0.5g/t Au with a maximum of 4m consecutive internal dilution included within the intercept; only intercepts >=2m are reported
- ▶ Samples are analysed for gold by 50g fire assay fusion with AAS instrument finish

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.	Sampling described in the text refers to diamond core drill holes. Diamond drill core was cut in half lengthways down the core axis usually in 1m intervals and submitted for crushing, pulverising and gold assay. The remaining half was retained in the core trays for future reference, re-logging and check sampling. The assayed drill samples are judged to be representative of the rock being drilled because half core sampling was successful and core recoveries were high.
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).	Angled, orientated diamond drilling by a reliable independent contractor Energold produced standard NQ, HQ & NTW sized drill core.
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.	DD recovery is directly measured by comparing length of core received from the driller's estimate of depth drilled, and averaged over 98%. All data recorded at the drill site by experienced company staff, then entered into a digital database. No relationship between core recovery and grade has been observed.
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 DD 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 Quality of Assay Data and Laboratory Tests	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 nature, quality and appropriateness of the assaying and laboratory procedures used and	The core was cut in half longitudinally. Half core samples were collected for assay, and the remaining half core samples stored in the core trays. Core samples were submitted for assay in generally 1m intervals; maximum 1.5m. DD samples were collected for analysis and submitted to the laboratory for the normal processes of crushing, grinding and splitting out a representative sample for analysis. The sampled material is considered to be representative of the samples as a whole. The assaying and laboratory procedures are considered appropriate for samples of this type.
Laboratory Tests	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 DD samples were assayed for gold by 50g fire assay at the Bureau Veritas laboratory in Abidjan, Core d'Ivoire. At the lab, regular assay repeats, lab standards, checks and blanks were inserted and analysed. Certified Reference Materials (CRMs) and blanks were inserted at the rate of 5% of each by Resolute personnel on site. Results have all been within acceptable limits.
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	No twin holes have been drilled as yet at Ferke Nth. Drilling has been in the vicinity of previous holes of differing orientations and have been seen to be closely comparable. Field data collection of all sample media was undertaken by Resolute geologists and supervised by Resolute senior 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.	Drill Collar positions were located using a hand-held GPS with a location error of +/-3m. All DD drill holes were surveyed down hole every 50m using the Reflex system.
	Specification of the grid system used Quality and adequacy of topographic control	Coordinates are for the WGS84 datum, Zone 30 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	Drill holes reported were drilled on 50m spaced section lines typically between 50m, 100m apart; at -60 to grid west. 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 from east to west, generally orthogonal to the interpreted mineralisation orientation.
Sample Security	The measures taken to ensure sample security	The drill samples are currently stored securely at Resolute's compound in the town of Boundiali or head 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 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 license to operate in the area.	The Ferkessedougou North exploration permit was granted to GIV Minerals SARL in 2015. Predictive Discovery Cote D'Ivoire SARL may earn a 51% interest by spending US\$1 million and 85% by completing a DFS. Predictive Discovery Limited holds 30% of Predictive Discovery Cote D'Ivoire SARL. All tenements are in good standing with expenditures up to date and within renewal periods.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	Resolute is not aware of any effective gold exploration over the above-mentioned permits, 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 permits consists of granitoid intrusives, metasediments, typical of granite – greenstone belt Birimian terrains. Mineralisation style is typical structurally controlled, mesothermal, lode gold orogenic style.



Drill Hole	A summary of all information material	All of the required data is provided in Table 4 (share)
Information	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 • lif the exclusion of this 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	In reporting Exploration Results,	Core was generally sampled in 1m intervals; some lithology
Aggregation Methods	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.	controlled sampling resulted in variable widths, between 0.3 – 1.5m. No top cuts have been applied to the drill results. Up to 4m (down-hole) of internal waste (any assay <0.5g/t Au) is included. Mineralised intervals are reported on a weighted average basis, the intersection cut off grade is 0.5g/t Au, minimum 2m down holes thickness. Broader lower grade zones are sometimes reported illustrating the extent of gold mineralisation at a cut-off grade of approximately 0.1g/t Au
Relationship	These relationships are particularly	True widths have not been estimated as the geological controls
Between Mineralisation Widths and Intercept Lengths	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').	on mineralisation in these initial drill holes into the prospect are not yet completely understood; but expected to be around 80% of down hole width. All holes (and trenches) were cut/drilled at right angles or as across the mineralised zones and structural grain of the geology as possible, as estimated from mapping & geological understanding.
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 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.	Generally, all intercepts containing grades above 0.5g/t Au and at least 1g/t x m with a maximum thickness of internal waste of 4.0m 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 highlightingthe areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

Further work will be considered once drill results are analysed, regional data reviewed in an ongoing interpretation and may involve detailed soil sampling, trenching, RC or AC (aircore) drilling and DDH.

Competent Persons Statement

The exploration results reported herein, insofar as they relate to mineralisation are based on information compiled by Mr Bruce Mowat (Fellow of the Australian Institute of Geoscientists). Mr Mowat 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 Mowat consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

-END-

Predictive advises that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.

This announcement is authorised for release by Predictive Discovery Managing Director, Paul Roberts.

For further information please contact:

Paul Roberts

Managing Director Tel: +61 402 857 249

Email: paul.roberts@predictivediscovery.com

Bruce Waddell

Company Secretary Tel: +61 8 6143 1840

Email: bruce.waddell@predictivediscovery.com

About Predictive Discovery

100%-OWNED GUINEA PORTFOLIO

Predictive holds approximately 800km² of prospective landholdings across nine permits/authorisations in Guinea, all containing artisanal gold workings.

All projects are within the Siguiri Basin which hosts AngloGold's large Siguiri Mine (+10Moz), the Siguiri Basin forms part of the richly mineralised West African Birimian gold belt.

JOINT VENTURE PORTFOLIO

Predictive holds a number important Joint Ventures across Cote D'Ivoire and Burkina Faso. The Cote D'Ivoire joint venture has provided Predictive with an experienced and well-funded project partner (Resolute Mining) to manage our exciting Ferkessedougou North and Boundiali Projects.

