

15 April 2020

OUTSTANDING DRILL RESULTS CONFIRM NEW GOLD DISCOVERY IN GUINEA

46m at 6.58 g/t gold including 10m at 26.52 g/t gold

HIGHLIGHTS

- Assay results received from a 24-hole air-core/reverse circulation drilling program on the North-East Bankan Prospect have confirmed a significant gold discovery on Predictive's 100%-owned Kaninko Gold Project, located in Guinea.
- ▶ Drilling has demonstrated the presence of a very broad, north-trending zone containing some high-grade gold intercepts, which is at least 450m long, and open in all directions and at depth.
- Significant intersections include:
 - ▶ 46m (to EOH) at 6.58 g/t gold from 4m including:
 - ▶ 10m at 26.52 g/t gold from 34m
 - ► 42m (to EOH) at 2.92 g/t gold from 8m
 - ▶ 50m (to EOH) at 1.53 g/t gold from surface including:
 - ▶ 20m at 2.51 g/t gold from 30m
 - ▶ 42m at 1.56g/t gold from surface including:
 - ▶ 30m at 2.07 g/t gold from 12m
 - ▶ 20m at 1.35g/t gold from surface
 - ▶ 50m (to EOH) at 1.27 g/t gold from surface
 - ▶ 34m at 1.06 g/t gold from surface
 - ▶ 48m at 1.15 g/t gold from surface
- All holes were drilled to a maximum downhole depth of 50m. Reportable gold intercepts (Table 1) were obtained in 23 of 24 holes, with many results from surface.
- A further 23 holes are pending from the Bankan Creek Prospect.
- ▶ Upon receipt of final assays, the Company will complete a review of all results and announce the next steps for its Guinea exploration programs, including plans for the recently announced Koundian Property Package¹.

¹ ASX Announcement - PREDICTIVE SECURES LARGE, WELL MINERALISED GROUND PACKAGE NEAR PLUS-2 MILLION OUNCE GOLD DEPOSITS IN GUINEA https://www.investi.com.au/api/announcements/pdi/e04057f9-1b1.pdf



► The Company is also awaiting assays from its Ferkessedougou North Project (45.3m at 3.16 g/t gold from 45.9m including 9m at 10.31 g/t gold²), with diamond drill results from joint venture partner Resolute Mining (ASX: RSG) expected shortly.

Managing Director Paul Roberts Commenting on the Kaninko results:

"We are very pleased by these results, which are an excellent first step in defining what appears to be a significant new gold discovery in West Africa. With this initial shallow program, we have confirmed the presence of the broad mineralised widths suggested by the earlier power auger drilling³ along with some impressively high gold grades. Many of the holes either started or stopped in gold mineralisation, which is therefore open both at depth and to the east and west on most drill lines. The mineralisation is also open to the north and south so there is plenty of scope to grow this further with more drilling.

We are also waiting for assays from our recently completed Bankan Creek drilling only 3km south-west of this discovery, which is a separate broad, gold mineralised system that has already demonstrated promising trenching and power auger drill results³.

This new discovery highlights the opportunity presented by our greenfields exploration strategy on 100% owned ground in the prolific Siguiri Basin of Guinea, as well as the speed with which we can advance these projects.

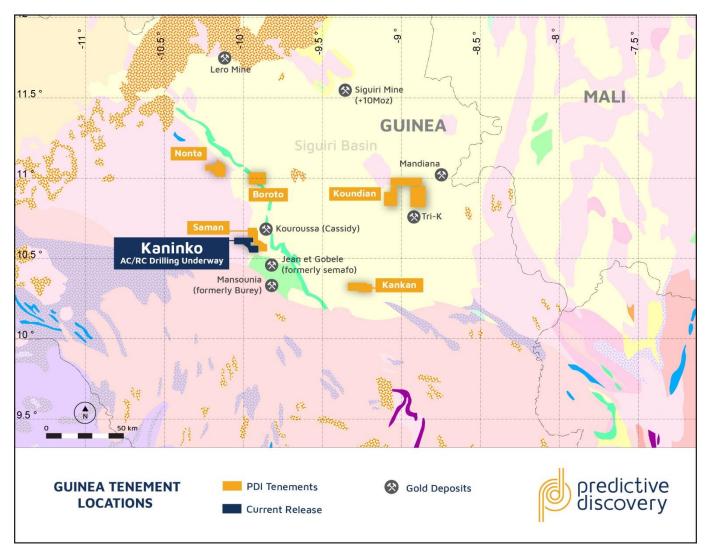
Kaninko was granted to us just over nine months ago. Since then, through the strenuous efforts of our Guinea team, we have transformed a greenfields property with no known prior exploration to an exciting new gold discovery. With further drill results still pending and the recently announced acquisition of the Koundian Property Package, the Company now has multiple opportunities for discovering a 100%-owned +1Moz deposit in Guinea."

Predictive Discovery Limited ("**Predictive**" or "**Company**") is pleased to announce the receipt of initial assay results from combined AC/RC drilling at the Company's 100%-owned Kaninko Project, located in Guinea, demonstrating a new shallow gold discovery, with significant growth potential.

In Guinea, Predictive holds approximately 800km² of prospective landholdings across nine exploration permits/authorisations, all containing artisanal gold workings (Figure 1). All permits are within the Siguiri Basin which hosts Anglogold's large Siguiri Mine (+10Moz). The Guinea projects were identified by Predictive during its terrain-scale assessment of the Siguiri Basin in late 2018 using the Company's PredictoreTM gold targeting system.

Kaninko was granted to Predictive in July 2019. Through rapid, targeted low-cost exploration, the Company has progressed it from a greenfields tenement with no known history of past exploration, to a property on which significant gold mineralisation has now been identified.





 $Figure\ 1-Predictive\ Discovery's\ Guinea\ Projects,\ highlighting\ drilling\ activities\ currently\ underway\ at\ the\ Kaninko\ and\ Kankan\ Projects$

KANINKO DRILLING

In January-February 2020, the Company completed 3,178m of shallow power auger drilling and 490m of trenching at Kaninko, with better results including **11.90 g/t gold** from bottom-of-hole Power Auger sampling at North-East Bankan Prospect and **18m at 1.60 g/t gold** from trenching at the Bankan Creek Prospect⁴.

During March 2020, the Company completed 24 holes (totalling 1,193m) of angled air core/reverse circulation drilling along seven traverses, testing beneath the better intercepts from the previously announced power auger results. Holes were drilled at -50 degrees to a maximum downhole depth of 50m (approximately 38m vertical depth). The drilling was carried out by Target Drilling.

Two metre composite samples were assayed by fire assay at the SGS laboratory in Bamako, Mali. The drill samples were provided to SGS in two batches on 30-31 March 2020., and assay results reported in this release were received by Predictive on Friday, 10 April, 2020.

⁴ ASX Announcement - HIGH GOLD GRADES AND BROAD MINERALISED WIDTHS FROM AUGER AND TRENCHING PROGRAMS AT KANINKO, GUINEA https://www.investi.com.au/api/announcements/pdi/07ea4287-530.pdf



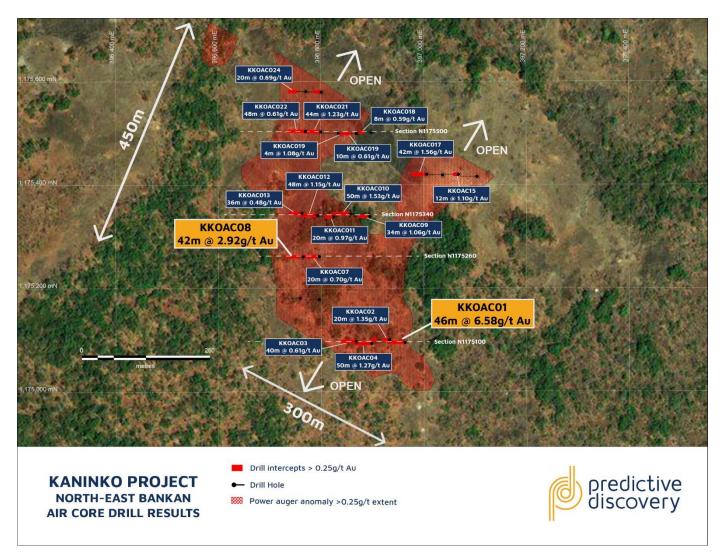


Figure 2 – North-East Bankan Prospect, Drill Hole Location Plan AC/RC drill traverses showing significant gold intercepts

The drilling was planned as a shallow test aimed at exploring the potential width of the mineralised zone below the surface laterite. As such, most holes stopped in very strongly weathered saprolite where primary rock recognition is difficult. Saprock was reached in a few holes, however, and the remnant rock textures suggest that the host rock is a mafic volcanic and/or intrusive body. Deeper drilling into fresh rock is required to confirm that geological interpretation.

Panning of higher-grade intercepts has identified some visible gold (e.g. Figure 3).

The gold mineralisation is shallow: 18 of the 24 holes intersected reportable gold intercepts (i.e. with values greater than 0.25g/t Au) from less than 5m (vertically) below surface. Also, 10 of the holes stopped in gold mineralisation. Gold mineralisation is therefore open to the west and east along most drill lines and at depth. Cross sections (Figures 4 to 7) show that known mineralised widths extend up to 150m without the full width having been completely tested on any drill line.

Detailed information on all drill hole locations and assay results is presented in Table 1 and shown on Figures 2 and 4-7.



Significantly, hole KKOAC001, drilled on the southernmost section, returned **46m at 6.58 g/t gold** from 4m, including a higher-grade zone of **10m at 26.52 g/t gold** from 34m (Figure 4). This new intersection is located close to where previous auger drilling returned a bottom-of-hole sampling result of **11.90 g/t gold**. The result is seen as highly encouraging and highlights the potential for further discoveries along trend and elsewhere at the Bankan Creek prospect.



Figure 3 – Visible gold from hole KKOAC001, 38-40m.

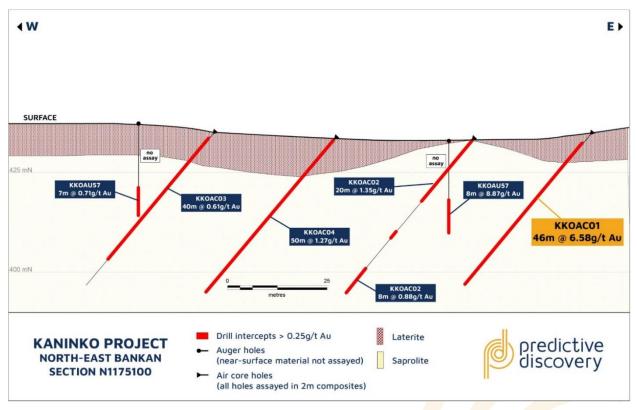


Figure 4 – Kaninko Project, North-East Bankan Prospect drilling, cross section 1,175,100N (see Figure 2 for location)



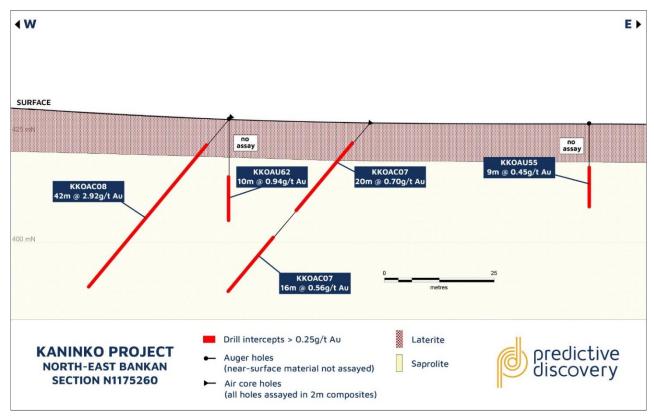


Figure 5 - Kaninko Project, North-East Bankan Prospect drilling, cross section 1,175,260N (see Figure 2 for location)

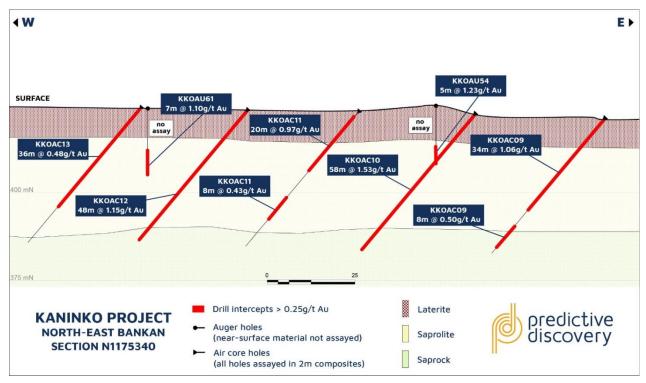


Figure 6 – Kaninko Project, North-East Bankan Prospect drilling, cross section 1,175,340N (see Figure 2 for location)



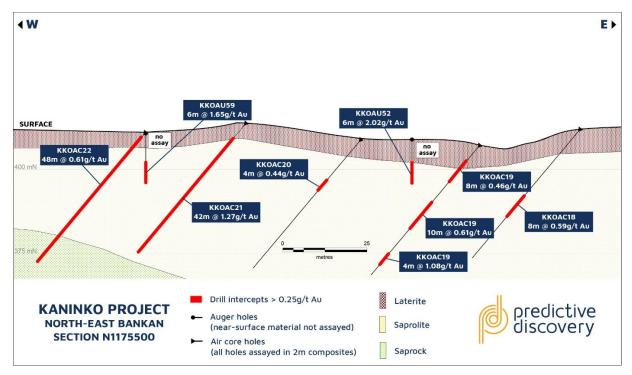


Figure 7 – Kaninko Project, North-East Bankan Prospect drilling, cross section 1,175,500N (see Figure 2 for location)



Figure 8 – Drill plan showing planned drilling and power auger geochemical anomalies on the two Kaninko prospects – NE Bankan (now reported) and Bankan Creek (results pending).



DRILL RESULTS PENDING

Further assay results are expected in coming weeks from the 23 RC-AC holes now completed at the Bankan Creek Prospect (see Figure 8 for location).

The planned drilling at Kankan (Figure 1) is on hold pending resolution of an issue with the drill rig. Subject to that being resolved, the Kankan drilling is expected to be completed in the coming weeks and results reported thereafter.

TABLE 1 - NORTH-EAST BANKAN AC/RC DRILL RESULTS

Hole No.	UTM 29N Easting	UTM 29N Northing	RL (m)	Hole dip	Hole azimuth	Hole depth				,	Comments		
							From (m)	Interval (m)	Au g/t	From (m)	Interval (m)	Au g/t	
KKOAC001	396963	1175095	435	-50	270	50	4	46	6.58	4	14	0.95	Stopped in gold
KKOAC001	396963	1175095	435	-50	270	50				22	2	0.52	mineralisation. Includes
KKOAC001			435	-50	270	50				26	24	11.93	10m at 26.52g/t Au.
KKOAC002	396933	1175100	435	-50	270	50	0	20	1.35	0	12	1.99	
KKOAC002	396933	1175100	435	-50	270	50				14	2	0.60	Includes 2m at 5.56g/t
KKOAC002			435	-50	270	50	30	2	0.63	30	2	0.63	Au.
KKOAC002	396933	1175100	435	-50	270	50	42	8	0.88	44	6	1.09	
KKOAC003	396868	1175097	425	-50	270	50	2	40	0.61	6	24	0.77	
KKOAC003	396868	1175097	425	-50	270	50				32	2	0.52	
KKOAC003	396868	1175097	425	-50	270	50				36	6	0.52	
KKOAC004	396898	1175093	429	-50	270	50	0	50	1.27	2	2	0.57	Stopped in gold
KKOAC004	396898	1175093	429	-50	270	50				6	44	1.39	mineralisation
KKOAC005	396796	1175178	430	-50	270	50	0	8	0.43	4	2	0.53	
KKOAC006	396759	1175181	425	-50	270	50							
KKOAC007	396797	1175261	428	-50	270	50	6	20	0.70	6	10	0.89	
KKOAC007	396797	1175261	428	-50	270	50				22	4	0.86	
KKOAC007	396797	1175261	428	-50	270	50	34	16	0.56	38	2	0.71	
KKOAC007	396797	1175261	428	-50	270	50				44	2	1.73	
KKOAC008	396765	1175261	419	-50	270	50	8	42	2.92	8	42	2.92	Stopped in gold mineralisation. Includes 4m at 7.40g/t Au.
KKOAC009	396895	1175339	418	-50	270	50	0	34	1.06	8	24	1.39	0. 1. 1.
KKOAC009	396895	1175339	418	-50	270	50	40	8	0.50	40	2	0.54	Stopped in gold mineralisation
KKOAC009	396895	1175339	418	-50	270	50				46	2	1.00	Tillieralisation
KKOAC010	396858	1175344	423	-50	270	50	0	50	1.53	4	14	1.45	Stopped in gold
KKOAC010	396858	1175344	423	-50	270	50				26	2	0.53	mineralisation. Includes 2m at 5.59 g/t Au and
KKOAC010	396858	1175344	423	-50	270	50				30	20	2.51	2m at 8.57 g/t Au
KKOAC011	396825	1175338	423	-50	270	50	2	20	0.97	2	2	0.56	
KKOAC011	396825	1175338	423	-50	270	50				6	14	1.19	
KKOAC011	396825	1175338	423	-50	270	50	32	8	0.43	36	2	0.58	
KKOAC012	396793	1175341	413	-50	270	48	0	48	1.15	8	40	1.30	Stopped in gold mineralisation
KKOAC013	396763	1175345	419	-50	270	50	0	36	0.48	4	2	0.57	
KKOAC013			419	-50	270	50				12	8	0.91	
KKOAC013	396763	1175345	419	-50	270	50				30	2	0.66	



KKOAC014	307104	1175/116	410	-50	270	50	6	8	0.28				
							_			_	4	2.55	
KKOAC015	397068	11/5420	409	-50	270	50	0	12	1.10	6	4	2.55	
KKOAC016	397037	1175419	411	-50	270	47	2	6	0.28				
KKOAC017	397006	1175420	408	-50	270	50	0	42	1.56	12	30	2.07	Includes 2m at 13.40g/t Au
KKOAC018	396899	1175502	410	-50	270	50	4	6	0.33				
KKOAC018	396899	1175502	410	-50	270	50	26	8	0.59	28	4	0.73	
KKOAC019	396869	1175499	405	-50	270	50	6	8	0.46	10	2	0.84	
KKOAC019	396869	1175499	405	-50	270	50	22	10	0.61	22	2	1.26	
KKOAC019	396869	1175499	405	-50	270	50				30	2	0.90	
KKOAC019	396869	1175499	405	-50	270	50	42	4	1.08	42	4	1.08	
KKOAC020	396834	1175500	411	-50	270	50	16	4	0.44	18	2	0.57	
KKOAC021	396800	1175503	398	-50	270	50	6	44	1.23	8	42	1.27	Stopped in gold mineralisation
KKOAC022	396770	1175504	409	-50	270	50	2	48	0.61	6	24	0.73	Stopped in gold
KKOAC022	396770	1175504	409	-50	270	50				40	6	1.06	mineralisation
KKOAC023	396801	1175580	406	-50	270	48	4	16	0.29	6	2	0.59	
KKOAC024	396771	1175581	405	-50	270	50	6	4	0.45				Stopped in gold
KKOAC024	396771	1175581	405	-50	270	50	30	20	0.69	36	12	0.94	mineralisation

Cuitouio	JORC Code	Commentary				
Criteria	Explanation					
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.	Samples assayed were air core drill samples and reverse circulation drill chips. One metre samples were collected using a spear (PVC pipe) and combined into 2 metre composites for analysis, each of which weighed 2-3kg. Individual 1 m samples were also retained for re-assay. A spear is typically preferred to a riffle splitter with air core samples. Sampling was supervised by qualified geologists. Samples were dried, crushed and pulverised at the SGS laboratory in Bamako to produce a 50g fire assay charge.				
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-	Drill type was air core and, where necessary, reverse circulation using a 90mm diameter air core blade bit and a 118mm diameter reverse circulation hammer. Most of the drilling was air core.				



Drill Sample Recovery	whether core is oriented and if so, by what method, etc). 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	Each 1 metre drill sample was weighed. Sample recoveries were in general high and no unusual measures were taken to maximise sample recovery. Significant sample bias is not generally expected with spear sampling of saprolitic materials however check assaying of samples sub-sampled by other means will be undertaken later.
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.	All drill samples were logged systematically for lithology, weathering and alteration and minor minerals. Minor minerals are estimated quantitively.
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. Whether sample sizes are appropriate to the grain size of the material being sampled.	The samples were collected using a spear pushed through the sample to the bottom of each large sample bag. Samples were generally dry. The sampling method is considered adequate for a reconnaissance air core drilling program. One field duplicate was taken and assayed every 25m



All samples were assayed by SGS technique FAA505 for gold with a detection limit of
5ppb Au. All samples with gold values exceeding 10g/t Au were re-assayed using SGS method FAA515 with a detection limit of 0.01g/t Au. Field duplicates, standards and blank samples were each submitted for every 25 composite samples. Duplicate and standards analyses were all returned were within acceptable limits of expected values. Duplicate and standards analyses were all returned were within acceptable limits of expected values.
t At this stage, the intersections have not been verified independently.
No twin holes have been drilled to date. e any
Drill hole collar locations were recorded at the completion of each hole by handheld GPS. Positional data was recorded in projection WGS84 Zone 29N. The accuracy provided by hand-held GPS is adequate for the reconnaissance nature of the drill program.
The drill holes were drilled on 80m spaced lines and designed to test highly anomalous (generally >0.5g/t Au) power auger sample locations. Drilling was "heel to toe" with hole collars 32m apart on average along drill lines. The drilling has not fully tested the plus-0.25g/t Au geochemical anomaly outlined by power auger drilling. riate d Ore d Drill hole spacing is not adequate, at this stage, for Mineral Resource estimation.
There is very limited outcrop in the immediate area but based on the small number of geological observations and the overall strike of the anomaly, an east west line orientation with holes inclined to the west was considered most likely to test the target mineralised zone. the ed ave this orientation with a content of the west was considered most likely to test the target mineralised zone.
re Large samples are stored in guarded location close to the nearby Bankan Village. Coarse rejects and pulps will be eventually recovered from SGS in Bamako and stored at Predictive's field office in Kouroussa.
No reviews or audits of sampling techniques were conducted.
ues Re



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 Kaninko Reconnaissance Authorisation was granted to a Predictive subsidiary in Guinea in June 2019. It was converted to an Exploration Permit in early October 2019. It is 100% owned by Predictive.
	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.	Predictive is not aware of any significant gold exploration over the permit.
Geology	Deposit type, geological setting and style of mineralisation.	The geology of the Kaninko permit consists of metasediments, mafic volcanics and intrusives, and granitic rocks.
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.	See Table 1 and the accompanying notes in these tables.
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.	Drill sampling was generally either one metre intervals. No top cuts have been applied to the assay results Up to 4m (down-hole) of internal waste is included for results reported at both for the 0.25g/t Au and 0.5g/t Au cut-off grades. 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 not been estimated as the overall orientation of mineralised zones is not well understood.



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 map and cross sections are included in this release (Figures 2 and 4-7).
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.	Comprehensive reporting of the drill results is provided in Table 1.
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 other exploration data on this area has been reported previously by PDI.
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.	Once all results have been received from the Kaninko drilling program, new programs involving power auger drilling and either air core or RC drilling or both will be carried out.

-END-

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

Competent Persons Statement

The exploration results reported herein 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.

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.



ASX:PDI