predictive discovery

ASX Announcement

26 February 2020

KANINKO POWER AUGER RESULTS OUTLINE LARGE TARGET FOR AC/RC DRILLING WITH PEAK VALUES UP TO 8G/T GOLD

SUMMARY

- An extensive soil sampling program completed in late 2019 across the 100%-owned Kaninko Project, located in Guinea, outlined the large North-East Bankan and Bankan Creek Prospects[1].
- 3,178m of shallow power auger drilling was completed at North-East Bankan and Bankan Creek in January-February as part of the Predictive Discovery (ASX: PDI) 2020 exploration program.
- Results from 81 shallow power auger holes (totalling 1,550m) at North-East Bankan has outlined a north-north-east trending gold zone 460m long and up to 300m wide (covering over 12 hectares), open to the north and south (Figure 1).
- Assay results from 118 vertical power auger holes (totalling 1,628m) at Bankan Creek are expected in the next 3 weeks.
- First drill target fully defined for Air Core/Reverse Circulation drilling program commencing in mid-March 2020.

NORTH-EAST BANKAN PROSPECT HIGHLIGHTS

- Shallow power auger drilling has outlined a gold anomalous area **with saprolite gold values exceeding 0.25g/t gold** indicated over **12.8 hectares**. Some of the better values included[2]:
  - **7.83g/t gold** (composite sample 15-22m)
  - **4.84g/t gold** (composite sample 11-22m)
  - **2.27g/t gold** (composite sample 7-12m)
  - **1.69 g/t gold** (composite sample 9-14m)
- The drilling showed that the zone is north-north-east trending and **open to the north and south**, and therefore likely to grow further.

OTHER GUINEA DRILL TARGETS

- **118 vertical power auger holes totalling 1,628m** have recently been completed at the Bankan Creek Prospect, also on the Kaninko permit, with assays pending. A trenching program is also in progress at Bankan Creek.
- At Kankan, drill target preparation is underway with a ground magnetics and an Induced Polarisation (IP) survey currently underway in anticipation of mixed Reverse Circulation/Air-Core drilling program to begin in March 2020.

[1] ASX Announcement – High-Potential Gold Drill Targets Identified in Guinea
https://www.investi.com.au/api/announcements/pdi/d7ab1b63-5ff.pdf
[2] Assayed auger samples are saprolite composites with the average saprolite composite representing a 5-10m sample collected from holes drilled to depths between 13 and 27m.

T +61 8 9216 1020 F +61 9321 4692
Level 2, 33 Ord Street, West Perth WA 6005

ASX: PDI
predictivediscovery.com

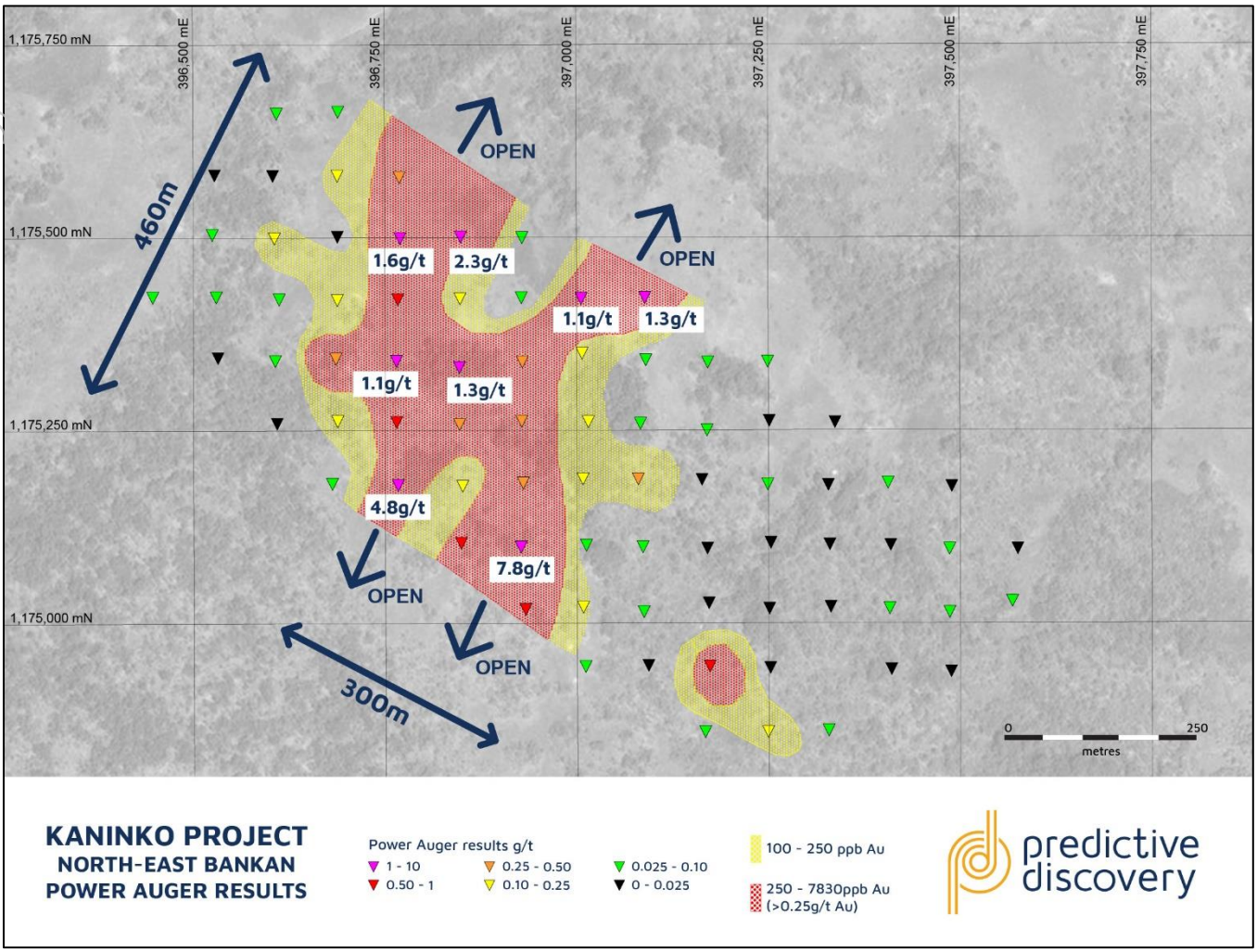

Figure 1 – North-East Bankan Prospect with power auger locations and results.

Commented Paul Roberts, Predictive Discovery Managing Director:

"Building on the earlier soil sampling and rock chip sampling programs, these power auger results from North-East Bankan have exceeded our expectations and confirmed the quality of the first of our planned drill targets. The anomalous gold samples were collected at depth beneath the lateritic cover and are interpreted to be from deeply weathered bedrock. Contrary to the previous (west-north-west) interpretation, we now know that the mineralised zone is north-north-east trending and therefore untested along strike to the north and south, providing excellent potential to enlarge the zone . Also, the power auger results are much higher than surface samples in places, indicating that the mineralised zone may extend under cover beneath low surface soil values.

The examples provided by the operating large and profitable mines within the Siguiri Basin of Guinea illustrate the potential of the Kaninko Project. Deep weathering in most areas of the Siguiri Basin means that soft saprolite can extend to 100m. Also, the metasediment-hosted gold mineralisation can form in very wide zones with low stripping ratios resulting in easy to mine deposits. Both the Siguiri Mine (Anglogold, +10Moz in past production and known resources) and the Lefa Mine (Nordgold, +5Moz) have been operating with average head grades of around 1g/t gold or even less. Given that these very encouraging initial auger saprolite assays

from North-East Bankan suggest a broad mineralised zone, this is the type of deposit we are targeting at Kaninko.

We are looking forward to releasing power auger and trenching results from the nearby Bankan Creek Prospect in the next few weeks, which will complete the data we need to target the planned air core and RC drilling on Kaninko."

Predictive Discovery Limited (**Predictive** or **Company**) is pleased to announce results from a power auger drilling program completed at its 100%-owned Kaninko Project, located in Guinea.

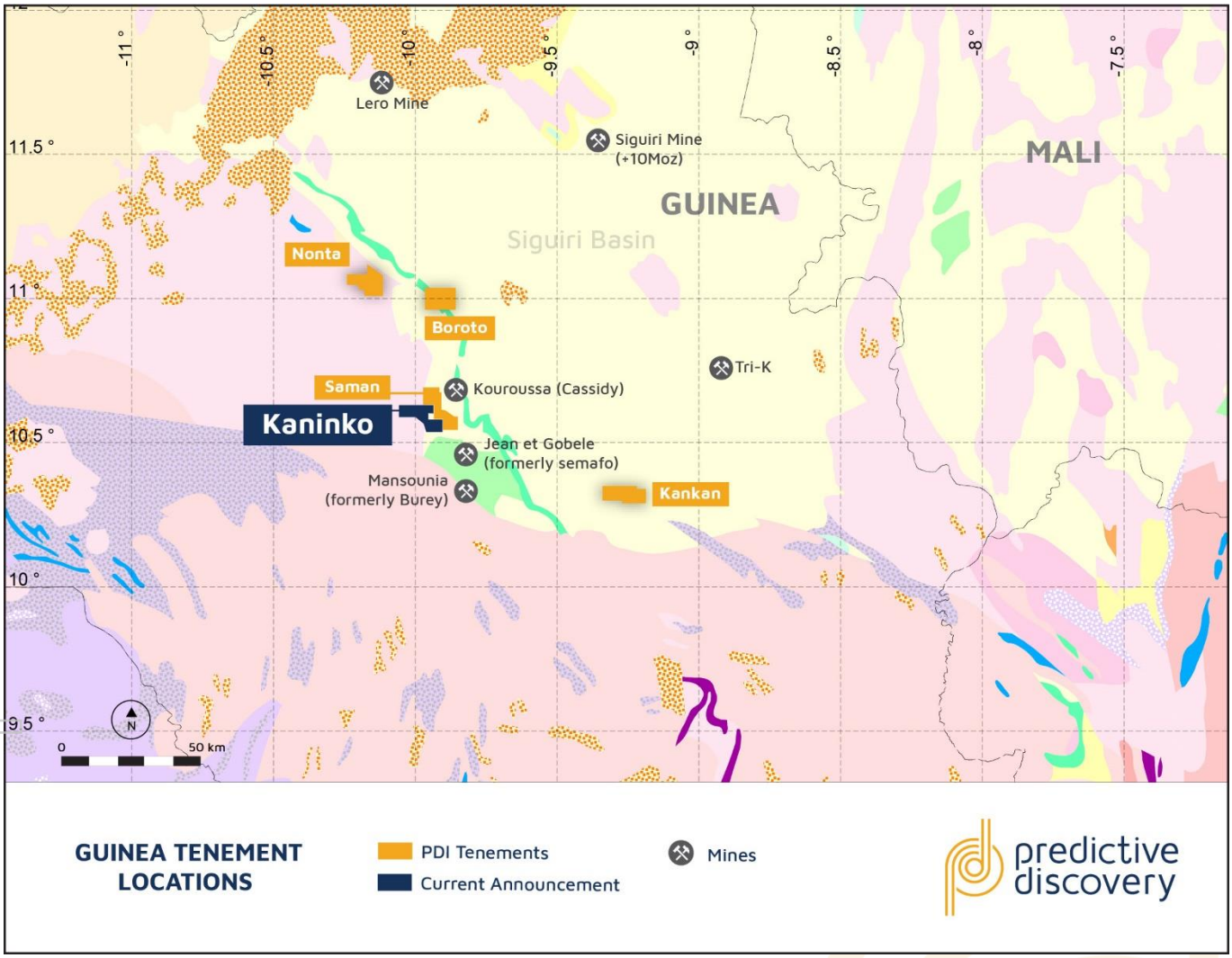

Figure 2 – Predictive Discovery's Guinea Projects

Predictive holds approximately 500km^2 of prospective landholdings across five projects all containing artisanal gold workings (Figure 2). Four of the projects 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 Predictore™ gold targeting system.

Early exploration has confirmed Siguiri Basin as being both highly prospective for gold mineralisation and underexplored with the area part of the richly mineralised West African Birimian gold belt and consists largely of metasediments with minor granitic rocks, metavolcanics and mafic to ultramafic intrusives. The early exploration work has also identified wide ones of anomalous to high-grade gold.

In only 12 months, the Company has completed numerous early stage exploration programs including soil geochemical sampling, BLEG stream sediment sampling, ground magnetics, rock-chip sampling and mapping across the Kankan, Nonta, Kaninko and Boroto Projects.

NORTH-EAST BANKAN POWER AUGER DRILL RESULTS (DETAILED)

Power auger drilling is a rapid and cost-effective exploration method for the collection of bedrock samples below tracts of lateritic and transported cover. The auger holes in the current drill program were focussed on the North-East Bankan and Bankan Creek Prospects, two large gold-anomalous zones identified through previously completed soil, laterite and saprolite sampling programs.

81 holes totalling 1,550m were completed on an 80m x 80m grid, with the assayed saprolite composites typically representing 5 to 10m depth intervals collected from holes drilled to an average depth of 19m.

The results to date have successfully outlined a new high-tenor gold anomaly 460m long and up to 300m wide, defined by 18 holes, each with assay values exceeding 0.25g/t gold. All holes drilled penetrated the overlying laterite into mottled clay and saprolite with composite sample results including peak grades of 7.83g/t gold, 4.84g/t gold, 2.27g/t gold and 1.69g/t gold.

The drill program was undertaken by Sahara Mining Services and the samples were assayed at the SGS laboratory in Bamako, Mali.

Details of all the holes including assay results are provided in Table 1.

OTHER RC/AC DRILL TARGETING ACTIVITIES

The auger program has now been completed on the Kaninko Permit with assays pending from Bankan Creek.

The Bankan Creek power auger drill samples were submitted to the SGS Laboratory in Bamako, Mali on 23 February and results are expected in the next 3 weeks. The Company is also carrying out a trenching program at the Bankan Creek site after some delays and results will be released once the trenching is further advanced.

A combined Reverse Circulation and Air-Core drilling program is expected to start in mid-March 2020 with a minimum 2,500m program to be completed across the North-East Bankan and Bankan Creek prospects as well as targets on the Kankan Permit (Figure 2).

TABLE 1 – POWER AUGER DRILL RESULTS, NE BANKAN PROSPECT, KANINKO PERMIT

Hole ID	Easting (UTM, 29N)	Northing (UTM, 29N)	Inclination	RL	Depth	Depth From (m)	Interval	Gold (ppb)
KKOAU0001	397568	1175028	Vertical	416	20	13	6	38
KKOAU0002	397575	1175096	Vertical	415	21	10	10	24
KKOAU0003	397489	1175177	Vertical	419	21	10	10	8
KKOAU0004	397486	1175096	Vertical	421	22	11	10	25
KKOAU0005	397486	1175014	Vertical	426	21	12	8	53
KKOAU0006	397488	1174937	Vertical	424	23	13	9	8
KKOAU0007	397410	1174940	Vertical	433	25	14	10	12
KKOAU0008	397408	1175019	Vertical	425	23	12	10	56
KKOAU0009	397409	1175101	Vertical	420	21	10	10	10
KKOAU0010	397406	1175182	Vertical	421	19	11	7	44
KKOAU0011	397337	1175260	Vertical	420	17	10	6	17
KKOAU0012	397328	1175179	Vertical	415	19	10	8	7
KKOAU0013	397330	1175102	Vertical	427	19	8	10	16
KKOAU0014	397331	1175021	Vertical	425	23	10	12	11
KKOAU0015	397328	1174861	Vertical	428	23	10	12	32
KKOAU0016	397250	1174779	Vertical	426	23	15	7	16
KKOAU0017	397249	1174859	Vertical	431	23	8	14	173
KKOAU0018	397252	1174942	Vertical	435	23	10	12	16
KKOAU0019	397251	1175019	Vertical	430	23	8	14	13
KKOAU0020	397253	1175104	Vertical	426	19	8	10	13
KKOAU0021	397249	1175180	Vertical	422	19	10	8	49
KKOAU0022	397251	1175262	Vertical	409	17	10	6	22
KKOAU0023	397249	1175339	Vertical	408	15	10	4	27
KKOAU0024	397171	1175338	Vertical	412	17	10	6	38
KKOAU0025	397170	1175250	Vertical	418	17	10	6	28
KKOAU0026	397163	1175186	Vertical	422	18	17	0	15
KKOAU0027	397170	1175097	Vertical	430	19	10	8	18
KKOAU0028	397172	1175026	Vertical	435	21	12	8	13
KKOAU0029	397173	1174944	Vertical	437	23	19	3	522
KKOAU0030	397167	1174859	Vertical	428	23	19	3	34
KKOAU0031	397093	1174945	Vertical	427	25	20	4	16
KKOAU0032	397087	1175015	Vertical	432	23	16	6	55
KKOAU0033	397086	1175099	Vertical	432	21	8	12	41
KKOAU0034	397080	1175187	Vertical	427	17	14	2	296
KKOAU0035	397083	1175259	Vertical	426	15	10	4	38
KKOAU0036	397090	1175341	Vertical	424	13	10	2	37
KKOAU0037	397089	1175422	Vertical	408	13	7	5	**1320**
KKOAU0038	397006	1175421	Vertical	409	14	12	1	**1160**

KKOAU0039	397007	1175350	Vertical	412	13	11	1	168
KKOAU0040	397015	1175261	Vertical	420	17	12	4	137
KKOAU0041	397008	1175187	Vertical	428	21	15	5	100
KKOAU0042	397012	1175101	Vertical	433	21	12	8	75
KKOAU0043	397008	1175021	Vertical	435	23	9	13	100
KKOAU0044	397011	1174944	Vertical	432	23	16	6	39
KKOAU0045	396933	1175018	Vertical	424	25	21	3	593
KKOAU0046	396927	1175099	Vertical	429	23	15	7	**7830**
KKOAU0047	396930	1175182	Vertical	428	19	10	8	408
KKOAU0048	396928	1175262	Vertical	426	17	10	6	307
KKOAU0049	396929	1175339	Vertical	419	15	10	4	320
KKOAU0050	396928	1175422	Vertical	411	15	8	6	54
KKOAU0051	396929	1175500	Vertical	406	13	7	5	92
KKOAU0052	396849	1175501	Vertical	408	13	7	5	**2370**
KKOAU0053	396848	1175421	Vertical	410	15	9	5	140
KKOAU0054	396847	1175332	Vertical	419	17	12	4	**1300**
KKOAU0055	396847	1175258	Vertical	423	19	10	8	415
KKOAU0056	396851	1175178	Vertical	428	21	16	4	174
KKOAU0057	396849	1175104	Vertical	432	23	16	6	759
KKOAU0058	396769	1175578	Vertical	403	13	8	4	429
KKOAU0059	396770	1175499	Vertical	409	15	9	5	**1690**
KKOAU0060	396767	1175420	Vertical	409	17	10	6	954
KKOAU0061	396765	1175340	Vertical	415	19	12	6	**1150**
KKOAU0062	396765	1175261	Vertical	424	23	13	9	861
KKOAU0063	396767	1175179	Vertical	435	23	11	11	**4840**
KKOAU0064	396681	1175181	Vertical	431	25	8	16	27
KKOAU0065	396688	1175262	Vertical	421	27	11	15	122
KKOAU0066	396686	1175343	Vertical	419	21	9	11	340
KKOAU0067	396688	1175419	Vertical	422	17	8	8	127
KKOAU0068	396688	1175501	Vertical	415	17	8	8	19
KKOAU0069	396688	1175580	Vertical	406	15	8	6	107
KKOAU0070	396689	1175663	Vertical	400	15	9	5	89
KKOAU0071	396609	1175661	Vertical	393	13	10	2	72
KKOAU0072	396604	1175580	Vertical	401	17	10	6	24
KKOAU0073	396606	1175499	Vertical	407	19	13	5	152
KKOAU0074	396612	1175420	Vertical	415	19	11	7	74
KKOAU0075	396607	1175340	Vertical	417	21	9	11	35
KKOAU0076	396609	1175259	Vertical	431	25	16	8	15
KKOAU0077	396532	1175344	Vertical	415	19	8	10	22
KKOAU0078	396530	1175423	Vertical	415	17	12	4	99
KKOAU0079	396525	1175504	Vertical	411	15	9	5	67
KKOAU0080	396528	1175581	Vertical	407	15	9	5	11
KKOAU0081	396447	1175423	Vertical	415	13	8	4	30

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.	The sampling described in this report refers to power auger drill samples. In all the power auger drill holes reported here, 2kg samples were collected from composite samples within saprolite beneath lateritic surficial materials. The samples were submitted for fire assay gold analysis at the SGS laboratory in Bamako, Mali with a 5ppb detection limit.
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-sampling bit or other type, whether core is oriented and if so, by what method, etc).	The power drilling was carried out using a 4WD-mounted power auger rig.
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.	Sample recovery is not assessed for power auger drilling as it is a geochemical method. In general, however, recoveries are good because the hole has to be cleared by the screw-type rods in order for the drill rods to advance downwards.

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.	None of these samples will be used in a Mineral Resource estimation. Nonetheless, all power auger holes were geologically logged in a qualitative fashion.
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.	Each 1 m interval in the composite interval was subsampled using a scoop. The sample is considered sufficiently representative of the drilled material in a geochemical drilling program.
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. 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.	The analytical method used was an SGS fire method with a 5ppb Au detection which is appropriate for a geochemical drilling program. No company standards or blanks were added to the sample batch. Based on SGS's own repeat results, the analytical results are judged to be suitable for a geochemical drilling program.
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	Hole twinning is not normally practised with power auger drilling.
Location of Data points	Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys),	Collar locations were located using a hand held GPS with a location error of +/-3m. Collar coordinates referenced in the table are for Universal Transverse Mercator (UTM), Datum WGS 84, Zone 29 - Northern Hemisphere.

	trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used Quality and adequacy of topographic control	
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	Power auger holes were located on an 80m square grid because the orientation of the target zone was not well understood. This type of drilling is not appropriate for the calculation of any Mineral Resource estimate.
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.	Power auger holes were spaced on an 80m square grid because the orientation of the target zone was not well understood. This approach helped define the NNE orientation which was contrary to the initial expectation of a WNW strike. There is no rock outcrop in the area to guide sample line orientations
Sample Security	The measures taken to ensure sample security	Reference samples are stored at PDI's sample store in Kouroussa, Guinea..
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 licence to operate in the area.	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.
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	The required information is provided in Table 1.

	• 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.	
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.	No weighted average or truncation methods were used for the power auger results.
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 cannot be estimated for the power auger drill results As the orientation of the underlying weathered rocks is 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.	An appropriate map is provided in Figure 2.
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.	All results are reported 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;	Apart from the previously reported surface gold geochemical results, there are no other exploration data which are relevant to the results reported in this release.

	bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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.	Air core or RC drilling is planned to test the new zone in March 2020.

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, 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.

-END-

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

Predictive Discovery is a West African focused gold explorer with a portfolio of 21 exploration projects and applications strategically located in the prolific Birimian greenstone belts of Guinea, Cote d'Ivoire and Burkina Faso.

The Company has begun work on its five 100%-owned exploration properties in Guinea with a 500km2 landholding in the highly prospective but underexplored Siguiri Basin, which contains AngloGold's world-class Siguiri Mine (+10Moz). All permits are located close to widespread artisanal workings with drilling expected to begin in early 2020.

predictivediscovery.com

ASX: PDI