

# ASX Announcement

14 September 2021

# EXCELLENT GOLD RECOVERIES FROM INITIAL BANKAN METALLURGICAL TESTWORK

Predictive Discovery Limited (ASX: PDI) ("Predictive" or "the Company") is pleased to advise that initial scoping-level metallurgical testwork completed for its Bankan Gold Project in Guinea has returned excellent gold recoveries under standard test conditions.

# HIGHLIGHTS

- Bankan gold mineralisation confirmed as **free-milling with high gold recoveries**, and amenable to a simple, industry-standard comminution and carbon-in-leach process circuit.
- Metallurgical testwork results included:
  - Cyanide leach recoveries from all gold mineralisation types ranged from **94.2% to 98.5%** under optimised conditions (75-micron grind, 24 hours).
  - Very good leaching kinetics with at least 94% of extractable gold dissolution within 24 hours.
  - Gravity gold recoveries ranging from 13.1% to 37% with values from the tonalite and tonaliteskarn ore ranging from 19.6% to 37%.
- The ore is relatively hard with breakage characteristics pointing to (a) a three-stage crushing and ball mill circuit or (b) two-stage crushing and High Pressure Grinding Roll (HPGR) before milling or (c) a Semi Autogenous Ball Mill Crushing Circuit (SABC).
- Under optimised conditions, cyanide consumption is anticipated to be 0.7 to 0.9 kg/t and lime consumption of 0.1kg/t or less.
  - Mintrex Pty Ltd who are engaged as metallurgical and process engineering consultants, have reviewed the results and will advise Predictive on future metallurgical testwork programs and flowsheet design.

Following the recent military coup in Guinea, the Company notes that all personnel are safe, exploration has continued as normal without interruption and drill samples can be sent across the border to SGS in Mali for analysis.

**Predictive Managing Director, Paul Roberts** said "This is a high impact announcement and a major derisking event for the Bankan Project. To have achieved excellent gold recoveries and clear indications that the deposit can provide free milling ore to a conventional mill is a critical step forward.

Our next important step is to release our maiden Mineral Resource Estimate (MRE) for the two Bankan deposits





by the end of this month. We believe that the combination of these initial metallurgical results with the maiden MRE outcomes, will substantially enhance appreciation of the economic potential of the Bankan Project.

At the same time, it is very clear that we are still in the early stages of the Bankan discovery journey and understanding its full-scale potential. We are actively exploring to expand our gold discoveries both at depth beneath the two Bankan deposits and along the entire 35km long Bankan structural trend."

## BANKAN SCOPING LEVEL METALLURGICAL TESTWORK PROGRAM

A detailed, scoping level metallurgical testwork program was completed at the Company's Bankan Project and was carried out on samples from both the NE Bankan and Bankan Creek Prospects. The testwork was undertaken on 11 separate gold mineralised intercepts, representing softer saprolite (oxide) mineralisation and harder fresh rock mineralisation<sup>1</sup>.

The scope of the test work program included:

- Comminution testwork (abrasion, ball mill, rod mill and SAG mill work indices).
- Optimisation of grind size and leaching characteristics.
- Gravity concentration and recovery.
- Bulk cyanide leaching tests.

The test work program has provided initial process flowsheet data suitable for use in a scoping study and has assisted in identifying the possible design and processing flow for a Bankan Project processing plant.

The testwork program was completed by Metallurgy Pty Ltd under the technical supervision of Dr Leon Lorenzen of Mintrex Pty Ltd. Both groups are based in Perth, Western Australia.

# SAMPLES

Eleven samples with a total weight of 305kg were selected from the Bankan Creek and NE Bankan deposits, with selection criteria aimed to cover a variety of host rock, gold grades and ranges in trace elements. All samples were quarter NQ diamond drill ("DD") core apart from one (saprolite) sample of reverse circulation ("RC") chips. Sample details are listed in Tables 1 and Table 7.

<sup>1</sup> No samples were tested of transition material in this study because the transitional layer between fully oxidised saprolite/saprock and fresh rock is very thin.

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#### **TABLE 1 – SAMPLE DETAILS**

Sample ID	Metallurgical Drill Hole ID	Meters From/To	Domain/Orebody	Total Sample Mass (kg)	Gold Grade (g/t) (Fire Assay)	Lithology
PDG-MT001	BNERD002	148.85/175	NE Bankan Deposit	26.35	2.00	Altered tonalite
PDG-MT002	BNERD007	150/164	NE Bankan Deposit	13.9	1.89	Mafic volcanics
PDG-MT003	BNERD007	178/196	NE Bankan Deposit	20.52	5.47	Altered tonalite
PDG-MT004	KKODD013	33/60	NE Bankan Deposit	27.6	0.833*	Saprolite
PDG-MT005	KKODD015	8/35	NE Bankan Deposit	27.2	1.33	Saprolite
PDG-MT006	BNERC058	30/47	NE Bankan Deposit	25.7	0.833*	Saprolite
PDG-MT007	KKODD020	82/112	Bankan Creek Deposit	33.68	1.712*	Skarn, marble, tonalite, vein quartz
PDG-MT008	KKODD020	112/143	Bankan Creek Deposit	33.37	1.712*	Skarn, marble, tonalite, vein quartz
PDG-MT009	KKODD011	97/127	NE Bankan Deposit	31.92	2.73	Altered tonalite
PDG-MT010	BNERD003	200/230	NE Bankan Deposit	31.36	0.90	Altered tonalite
PDG-MT011	BNERD014	188/218	NE Bankan Deposit	33.1	2.04	Mafic volcanics
	MT005 were com MT008 were com					

# CONCLUSIONS

The following scoping study-level conclusions were reported to Predictive by Mintrex:

- The ore has a moderate proportion of gravity-recoverable gold for all domains and ore characteristics (13% to 37% gravity gold recovered in this testwork program).
- Using optimum leaching conditions (see below), it was found that:
  - over 94% of the leach feed gold could be recovered in 24 hours (test results ranged from 94.2% to 98.5% gold recovery);
  - Cyanide consumption is anticipated to be 0.7 0.9 kg/t. Further testwork may reduce this.
  - Lime consumption was around 0.1 kg/t for all domains. Further optimisation testwork may also reduce this.
- The optimum conditions for the ore were investigated and found to be:
  - Grind size approximately 75 microns.
  - Either air or oxygen sparging (not an oxygen consumer).
  - Solids concentration had minimal effect, with 40% selected. For further design work 45% is

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suggested.

- Leaching times in excess of 24 hrs were not necessary and were in any case not reflective of the likely process.
- Lead nitrate addition was not necessary.
- The ore is relatively hard, with breakage characteristics pointing to (a) a three-stage crushing and ball mill circuit or (b) two stage and High-Pressure Grinding Roll (HPGR) before milling or possibly (c) Semi Autogenous Ball Mill Crushing Circuit (SABC). Comminution testwork results include:
  - Abrasiveness index (Ai) results indicate that the ore is mostly non-abrasive;
  - Hardness test results of:
    - 18 to 25 kWh/t (Bond Ball Mill Index BWi),
    - 21 to 26 kWh/t (Bond Rod Mill Index RWi), and
    - A\*b of 22 to 36<sup>2</sup> (SMC tests)

indicating that the ore is hard apart from the weathered composites which were either very soft or too friable for testing.

• RWi is generally slightly higher than the BWi, which indicates that the ore is slightly more competent at larger sizes. This supports consideration of either a three-stage crushing and ball mill or two stage HPGR circuit - subject to further testwork and comminution modelling during a pre-feasibility study.

## METALLURGICAL TESTWORK PROGRAM – IN DETAIL

#### Leach Optimisation and gravity separation

This phase of testwork was focussed on optimising the conditions for leaching the gold from the ore by cyanidation including gravity separation testwork via the following steps:

- 1) Gravity separation before the leach using samples from each geological domain.
- 2) Two ore composites (A and B) were selected to determine the optimum leaching conditions for the majority of the gold mineralisation.
  - A. Composite A (altered tonalite) comprised PDG-MT-001, PDG-MT-003, PDG-MT-009 and PDG-MT010 (see Table 1 for sample details)
  - B. Composite B (saprolite) comprising of PDG-MT-004, PDG-MT-005 and PDG-MT-006 (See Table 1 for details).

<sup>2</sup> A is the resistance of breaking larger particles, b is breakage of smaller particles, A\*b allows comparison of different ore – the smaller value the greater resistance to comminution.





3) Once the optimum leaching conditions were determined, additional tests were also carried out on other, less abundant ore types i.e. skarn-tonalite (Bankan Creek) and mafic volcanics (NE Bankan).

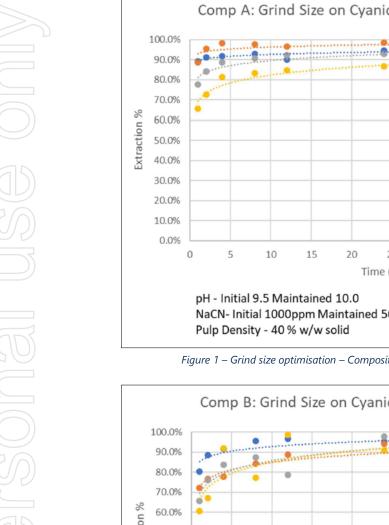
	TABLE 2 –	GRAVITY TESTWORK RES	ULTS
	Sample ID	Calculated Gold Grade (g/t)	Gold Gravity Recovery (%)
5	PDG-MT-001	2.01	31.8%
	PDG-MT-002	2.07	20.0%
2	PDG-MT-003	5.40	19.6%
$\supset$	PDG-MT-004+006	1.14	13.1%
	PDG-MT-005	1.39	33.8%
	PDG-MT-007+008	1.76	32.6%
	PDG-MT-009	2.58	37.0%
	PDG-MT-010	0.92	26.5%
	PDG-MT-011	1.83	28.1%

#### **TABLE 2 – GRAVITY TESTWORK RESULTS**

Grind size optimisation tests were carried out on the two composite samples (A and B) over a range of grind were achievable at all grind sizes after 24 hours of leaching. Both composites recorded >90% recoveries after 24 hours at 106 microns indicating that there is potential to vary grind size to optimise energy costs while maintaining gold recoveries at or above 90%. Test results are illustrated in Figures 1 and 2.







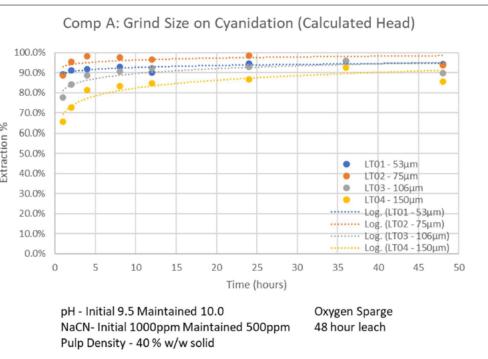


Figure 1 – Grind size optimisation – Composite A (fresh tonalite gold mineralisation)

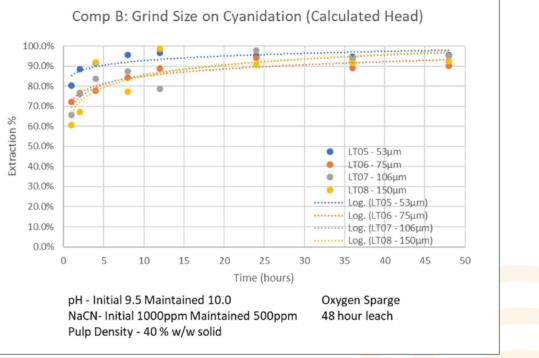


Figure 2 – Grind size optimisation – Composite B (saprolite - oxide – gold mineralisation)

A series of tests were then carried out to enable optimisation of leach conditions with respect to other parameters including effects of air, lead nitrate, cyanide levels and solids concentration on gold recoveries and to determine the oxygen uptake rate.

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Based on optimised parameters derived from the above work, three additional samples representing a lower grade tonalite composite from NE Bankan, mafic volcanic-hosted gold mineralisation from NE Bankan and tonalite-skarn-quartz ore from Bankan Creek were ground to 75 microns and subjected to cyanidation at 500ppm sodium cyanide (NaCN), with oxygen sparging and a solids concentration of 40%. Comparison of these new results with those obtained on Composite Samples A and B under the same conditions are detailed in Table 3.

Sample	Assa Lithology Head		Leach Extraction (%)		Cyanide consumption	Lime consumption (kg/t)	
		(g/t)	12 hr	24 hr	(kg/t)	(kg/t)	
Comp A	Altered tonalite HG	2.79	96.7%	98.5%	1.13	0.00	
MT001 and MT010	Altered tonalite LG	1.20	91.4%	98.4%	1.05	0.00	
MT007 and MT008	Skarn, marble, tonalite, vein quartz	1.71	89.0%	95.8%	0.88	0.00	
MT011	Mafic volcanics	2.04	95.7%	98%	1.19	0.00	
Comp B	Weathered Saprolite	1.00	88.9%	94.2%	1.57	0.30	

## TABLE 3 – BULK CYANIDATION TEST RESULTS

# Comminution Testwork

The comminution testwork program included bond abrasion index (Ai), bond ball mill work index (BWi), bond rod mill work index (RWi) and SMC tests. The tests were designed to help determine the ore's hardness, abrasion and breakage properties in order to provide input for comminution modelling.

The results are summarised as follows.

- The fresh rock ore is hard, with breakage characteristics pointing to a possible three-stage comminution and ball mill circuit or (pending detailed testwork) a two-stage comminution circuit with HPGR before milling. HPGR, if feasible, is expected to reduce overall energy consumption costs.
- While oxide samples could not be used in all tests, the oxide ore is generally soft, as expected.
- The bond abrasion index (Ai) test indicates that the ore is mostly non-abrasive.

While the fresh rock ore is relatively hard, similar BWi values are quite common in gold ores and are not an impediment to successful gold recovery.

Bond ball mill work and abrasion indices are listed in Table 4 and bond rod mill indices are listed in Table 5.





	SAMPLE ID	TYPE	PRODUCT SIZE <i>P80 (μΜ)</i>	BOND BALL WORK INDEX <i>(KwH/T)</i>	HARDNESS	ABRASION INDEX <i>(AI)</i>	ABRASIVENESS
	PDG-MT-001	Fresh	60	24.8	Hard	0.413	Non- Abrasive
$\bigcirc$	PDG-MT-002	Fresh	55	18.5	Hard	0.281	Non- Abrasive
75	PDG-MT-003	Fresh	59	21.7	Hard	0.413	Non- Abrasive
	PDG-MT-004	Oxide	20	2	Hard	0.005	Non- Abrasive
J.	PDG-MT-005	Oxide	NA	NA	Hard	NA	Non- Abrasive
	PDG-MT-006	Oxide	20	2	Hard	NA	Non- Abrasive
	PDG-MT-007	Fresh	61	21.1	Hard	0.245	Non- Abrasive
IJ	PDG-MT-008	Fresh	61	21.1	Hard	0.4885	Non- Abrasive
	PDG-MT-009	Fresh	59	21.2	Hard	0.494	Non- Abrasive
	PDG-MT-010	Fresh	59	24.3	Hard	0.304	Non- Abrasive
	PDG-MT-011	Fresh	25.4	25.4	Hard	0.33	Non- Abrasive

#### **TABLE 4 – BOND BALL MILL WORK INDEX AND ABRASION INDEX RESULTS**

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Sample ID	Closing Screen Size (µm)	F80 (µm)	P80 (μm)	RWi(kWh/t)
PDG-MT-001	1180	11143	834	24.4
PDG-MT-002	1180	11436	811	21.3
PDG-MT-003	1180	10969	843	22.8
PDG-MT-004	1180	5297	421	3.0
PDG-MT-005	NA	NA	NA	NA
PDG-MT-006	NA	NA	NA	NA
PDG-MT-007+008	1180	10276	878	22.3
PDG-MT-009	1180	10808	854	24.0
PDG-MT-010	1180	10723	877	24.0
PDG-MT-011	1180	10885	842	26.5

#### **TABLE 5 – BOND ROD MILL WORK INDEX RESULTS**

The SMC suite of testwork was carried out to provide additional parameters for comminution modelling including for possible use of a SAG Mill. JKTech undertook this testwork under instructions from Metallurgy Pty Ltd. Results are listed in Table 6.

#### TABLE 6 – SMC TEST RESULTS

15							SMC					
	Sample Info	A	b	Axb	DWi (kWh/m3)	DWi (%)	ta	Mia (kWh/t)	Mic (kWh/t)	Mih (kWh/t)	SCSE (kWh/t)	SG
	PDG-MT-001	71.0	0.40	28.4	9.8	85.0	0.27	25.9	20.6	10.7	11.79	2.75
	PDG-MT-003	59.4	0.52	30.9	9.0	78.0	0.29	24.2	19.0	9.8	11.3	2.75
	PDG-MT-007	55.8	0.64	35.7	7.7	64.0	0.34	21.3	16.2	8.4	10.55	2.76
2	PDG-MT-008	67.5	0.52	35.1	7.9	67.0	0.33	21.8	16.7	8.6	10.63	2.76
	PDG-MT-009	85.1	0.28	23.8	12.1	97.0	0.22	29.5	24.6	12.7	13.33	2.86
	PDG-MT-010	98.0	0.24	23.5	11.7	95.0	0.22	29.9	24.7	12.8	12.93	2.73
	PDG-MT-011	84.0	0.27	22.7	12.0	96.0	0.22	30.7	25.5	13.2	13.14	2.72
	Unweighted Average	74.4	0.41	28.6	10.0	83.1	0.27	26.2	21.0	10.9	12.0	2.76

Parameters listed in the above table are defined as follows:

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- A is the resistance of breaking larger particles.
- b is breakage of smaller particles.
- A\*b allows comparison of different ore the smaller value the greater resistance to comminution.
- t<sub>a</sub> is a measure of resistance to abrasion grinding.
- Mia is the work index for the grinding of coarser particles (> 750 micron) in tumbling mills such as autogenous (AG), semi-autogenous (SAG), rod and ball mills.
- Mih is the work index for the grinding in High Pressure Grinding Rolls (HPGR) and
- Mic for size reduction in conventional crushers.
  - Along with the DWi values, Mia, Mih and Mic values are required for comminution circuit modelling during a pre-feasibility study.

As with the other bond work indices, the A\*b values (of 22 to 36) from this testwork indicate that fresh ore is relatively hard. The SAG Circuit Specific Energy (SCSE) is derived from simulations of a "standard" circuit of a single stage SAG mill in closed circuit. The SCSE results for these composites indicate that the ore is likely to be suitable for (a) three-stage crushing or (b) two-stage crushing followed by HPGR circuit, consistent with the earlier Bond work index data.

## NEXT STEPS

The Mineral Resource Estimate (MRE) process for NE Bankan and Bankan Creek is well underway and the MRE is expected to be released in late September 2021.

Diamond drilling of deep holes within and below the newly recognised high grade gold zone at NE Bankan is in progress. Release of results from several of these holes is expected shortly.

#### - 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 Managing Director, Paul Roberts.

For further information visit our website at <u>www.predictivediscovery.com</u> or contact: **PAUL ROBERTS** Managing Director

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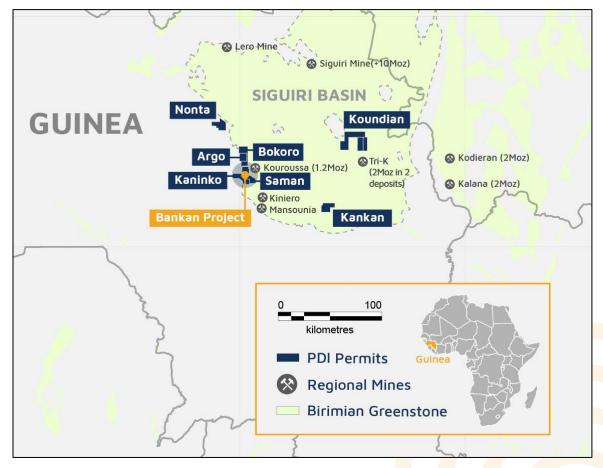
#### **COMPETENT PERSONS STATEMENT**

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.

#### **ABOUT PREDICTIVE**

Predictive Discovery (ASX: PDI) is focused on its 100%-owned Guinea portfolio in the prolific Siguiri Basin. The Company has made two discoveries at Bankan Creek and NE Bankan, located 3km apart. Bankan is a true greenfields gold discovery with no previous drilling having been completed on the licences.

At NE Bankan the Company has identified a high-grade core with recent intercepts including 49.7m @ 11.7g/t Au and 44m @ 8.0g/t Au<sup>3</sup>, both returned in July 2021. The Company is building towards a Maiden Resource Estimate at the Bankan Project whilst continuing to expand its regional exploration coverage.



*Figure 3 - Predictive Discovery's 100%-owned Guinea Portfolio of gold projects* 

<sup>3</sup> ASX Announcement - BONANZA GOLD GRADES AS HIGH-GRADE ZONE REVEALED AT BANKAN (19 July 2021)

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#### **TABLE 7 – METALLURGICAL SAMPLE DETAILS**

Metallurgical composite Sample ID	Drill Hole ID	North	East	RL	From	То	Deposit name	Total Sample	Gold Grade (g/t)	Lithology
4		UTM (WGS84)	UTM (WGS84)		(m)	(m)		Mass (kg)	(Fire Assay)	
PDG-MT001	BNERD0002	396612	1175182	456	148.85	175	NE Bankan Deposit	26.35	2.00	Altered tonalite
PDG-MT002	BNERD0007	396637	1175022	459	150	164	NE Bankan Deposit	13.9	1.89	Mafic volcanics
PDG-MT003	BNERD0008	396547	1175021	452	178	196	NE Bankan Deposit	20.52	5.47	Altered tonalite
PDG-MT004	KKODD013	396761	1175101	461	33	60	NE Bankan Deposit	27.6	0.833*	Saprolite
PDG-MT005	KKODD015	396759	1175340	448	8	35	NE Bankan Deposit	27.2	1.33	Saprolite
PDG-MT006	BNERC0058	396693	1175420	445	30	47	NE Bankan Deposit	25.7	0.833*	Saprolite
PDG-MT007	KKODD020	393462	1174016	398	82	112	Bankan Creek Deposit	33.68	1.712*	Skarn, marble, tonalite vein quartz
PDG-MT008	KKODD020	393462	1174016	398	112	143	Bankan Creek Deposit	33.37	1.712*	Skarn, marble, tonalite vein quartz
PDG-MT009	KKODD011	396640	1175260	454	97	127	NE Bankan Deposit	31.92	2.73	Altered tonalite
PDG-MT010	BNERD0003	396566	1175260	450	200	230	NE Bankan Deposit	31.36	0.90	Altered tonalite
PDG-MT011	BNERD0014	396564	1174943	451	188	218	NE Bankan Deposit	33.1	2.04	Mafic volcanics

\*MT007 and MT008 were combined for Head Assay

#### **TABLE 8 – JORC TABLE – METALLURGICAL SAMPLES**

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	Pre-existing half NQ core from all holes except BNERC 058 was quartered with one quarter being retained in the core tray and the other quarter combined in composite samples for each of the intervals listed in Table 7. Reference samples from BNERC 058 were split in half, with half retained and the other half sample combined into a single composite sample for submission for metallurgical testwork.

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		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.	
	Drilling	Drill type (eg core, reverse	Drilling to collect the samples was conducted by multipurpose (RC-DD and
		circulation, open- hole hammer,	AC-DD) rigs and a dedicated DD rig – as reported for each individual hole in
		rotary air blast, auger, Bangka,	previous ASX releases.
		sonic, etc) and details (eg core	P
715		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).	
$1 \cap$	Drill Sample	Method of recording and	Not relevant to samples collected for metallurgical testwork.
リノ	Recovery	assessing core and chip sample	
- 4	-	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	
10		may have occurred due to	
		preferential loss/gain of	
		fine/coarse material.	
	Logging	Whether core and chip samples	All drill samples were logged systematically for lithology, weathering, alteration,
		have been geologically and	veining, structure and minor minerals. Minor minerals were estimated
		geotechnical logged to a level of	quantitively.
$\bigcirc$		geotechnical logged to a level of detail to support appropriate	
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	Sub-Sampling	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.	quantitively.
	Sub-Sampling Technique 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	quantitively. The diamond drill samples were collected by longitudinally splitting half
		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. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether	quantitively. The diamond drill samples were collected by longitudinally splitting half core using a core saw or a knife where core was very soft and clayey. Half of
	Technique 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. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split,	quantitively. The diamond drill samples were collected by longitudinally splitting half core using a core saw or a knife where core was very soft and clayey. Half of this material was combined into a single composite sample for each of the
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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 head assays recorded in Table 7 were obtained from each of the compo samples.
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	Not relevant to samples collected for metallurgical testwork
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. Specification of the grid system used Quality and adequacy of topographic control	Drill hole collar locations were surveyed using a digital GPS system.
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	Not relevant to samples collected for metallurgical testwork
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.	Not relevant to samples collected for metallurgical testwork
Sample Security	The measures taken to ensure sample security	Core trays and RC chips are stored in a guarded location close to the nearby Bankan Village. Coarse rejects and pulps are being progressively recovered from SGS in Bamako and stored at Predictive's field office in
Audits or Reviews	The results of any audits or reviews of sampling techniques and data	Kouroussa. No reviews or audits of sampling techniques were conducted.

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	Mineral Tenement and Land Tenure Status Exploration	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. Acknowledgment and	The Bankan Gold Project comprises 4 exploration permits, Kaninko (100%), Saman (100%), Bokoro (100%) and Argo JV (58%). Licences are held by Predictive subsidiaries in Guinea or in a joint venture structure.
	Done by Other Parties	appraisal of exploration by other parties.	permit.
10	Geology	Deposit type, geological setting and style of mineralisation.	The geology of the Kaninko permit consists of felsic intrusives including granite and tonalite, with mafic to intermediate volcanics and intrusives. Metasediments including marble, chert and schists have also been observed.
	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 • hole length • hole length • lif 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 7 and the accompanying notes in this table.
	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.	Not relevant to samples collected for metallurgical testwork
	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').	Not relevant to samples collected for metallurgical testwork
	Diagrams	Appropriate maps and sections (with scales) and tabulations of	Not relevant to samples collected for metallurgical testwork

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# **ASX Announcement**

	Balanced Reporting	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. Where comprehensive reporting of all Exploration Results is not practicable, representative	Comprehensive reporting of the metallurgical testwork results is provided in Tables 2-6 and the accompanying text.
		reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
	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; methallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not relevant to samples collected for metallurgical testwork
,0,	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.	Additional metallurgical testwork is expected in 2022 for pre-feasibility study level assessment of the Bankan project gold mineralisation.

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