

DRILLING AND FIELD WORK RECOMMENCE IN WEST AFRICA

Predictive Discovery Limited (**Predictive** or **Company**) is pleased to announce that drilling and field work programs have recommenced across Cote D'Ivoire and Guinea.

COTE D'IVOIRE (RESOLUTE JV)

Ferkessedougou North Project IN

- **Follow-up Diamond Drilling (DD)** to start next week at the exciting **Ouarigue South discovery** where first pass 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 gold

GUINEA (100%-OWNED)

Kaninko Project

- **Trenching** with an excavator has commenced at the Bankan Creek workings where earlier rock chip sampling obtained up to **52g/t gold**².
- **200-hole power auger drill program** commencing shortly, covering over 2km of strike length, testing the promising Bankan Creek and North-East Bankan prospects³ in preparation for air core or RC drilling in the March Quarter.

Kankan Project

- **Ground magnetics survey** has recommenced.
- **Induced polarisation geophysical survey over** principal geochemical targets due to start shortly, designed to identify underlying geological structures to narrow down targeting for air core or RC drilling later in the March Quarter.

Nonta Project

- **Power auger drill samples** have been submitted to the SGS Laboratory in Bamako, Mali with results pending.

Pending Applications (New Ground)

- New landholdings are expected in the March Quarter and will be announced once grant documents are received, with new tenement applications submitted and discussions with a local party regarding several properties within the Siguiro Basin at an advanced stage.

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

² ASX Announcement - UP TO 52g/t GOLD RETURNED FROM KANINKO ARTISANAL MINE SAMPLES
<https://www.investi.com.au/api/announcements/pdi/49756a56-ed9.pdf>

³ ASX Announcement - HIGH-POTENTIAL GOLD DRILL TARGETS IDENTIFIED IN GUINEA
<https://www.investi.com.au/api/announcements/pdi/d7ab1b63-5ff.pdf>

"The Toro Gold/Resolute Mining transaction has provided Predictive with an experienced and well-funded joint venture partner to manage our exciting Ferkessedougou North and Boundiali Projects in Cote D'Ivoire. We are very pleased to announce that the much-anticipated follow-up diamond drilling program on the Ouarigue South gold discovery in the Ferkessedougou North permit is now imminent.

In Guinea, exploration is accelerating across three high priority projects with drilling, trenching, magnetics and IP programs all designed to delineate targets for air core or RC drilling programs in the coming months. The team is hard at work in the field, ensuring we position the Company for exploration success in what is the best region globally for greenfields gold discovery. The next few months will see a steady stream of news flow and results as we strive to make the next Predictive gold discovery" – **Commented Managing Director Paul Roberts.**



Figure 1 – Managing Director Paul Roberts directing a power auger drilling program at the Nonta Project, located in Guinea.

Predictive Discovery has been operating in West Africa since 2010, initially as a single project explorer that successfully discovered the Bongou deposit in Burkina Faso. In recent years, the Company has assembled a large portfolio of properties across the world-class Birimian greenstone belts of Cote D'Ivoire, Guinea and Burkina Faso (Figure 2).

The Predictive strategy aims to maximise the likelihood of making multiple gold discoveries while tightly controlling expenditure and the frequency of dilutive capital raisings. As part of this strategy, Predictive has

entered into joint ventures with development-orientated partners on projects in Cote D'Ivoire and Burkina Faso, with exploration activity in those countries being largely funded by these partners.

This approach has already yielded gold discoveries in Cote D'Ivoire and Burkina Faso, including the recently announced Ouarigue South discovery at Ferkessedougou North Project. The Company is also in the early stages of exploring a series of 100%-owned projects in Guinea, which have produced encouraging gold geochemical anomalies at the Nonta and Kankan Projects



Figure 2 – Predictive Discovery's West African portfolio across the greenstone belts of Guinea, Cote D'Ivoire and Burkina Faso

COTE D'IVOIRE

Ferkessedougou North Project

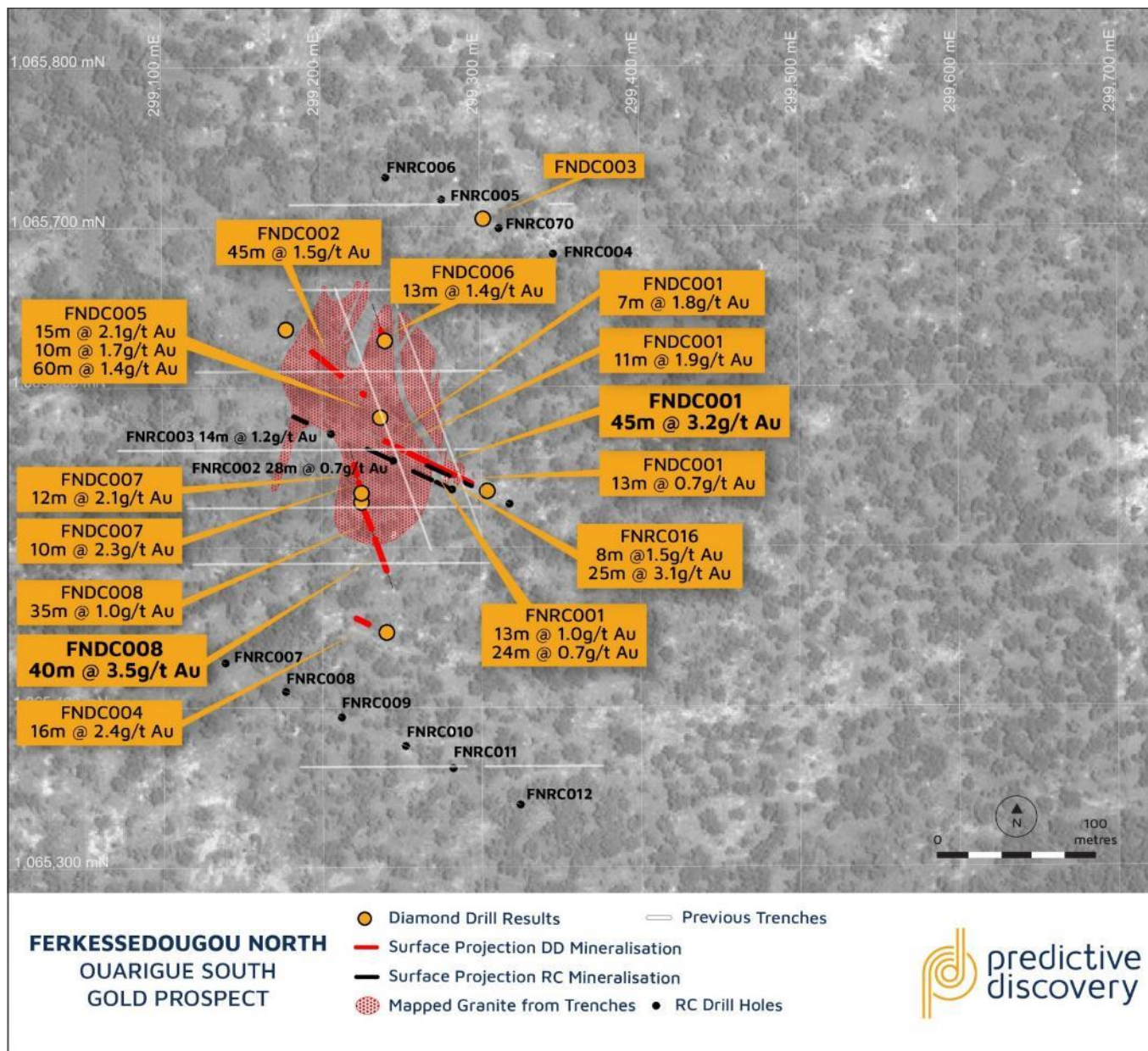


Figure 3 – Drill-hole locations and results from first pass drilling at the Quarigue South Gold Prospect.

Unseasonably late heavy rains in the area in the second half of 2019 made access to the Company's Ouarigue South deposit difficult and delayed follow-up drilling. The planned diamond drilling program, totalling approximately 1,000m, will now commence next week, to further explore the exciting discovery made in June⁴ 2019 with results including:

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

- 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 gold
- 10.9m at 1.94g/t gold from 95.7m
- 4.7m at 6.14g/t gold from 134m

Joint venture partner Resolute Mining Limited is managing the planned drilling program, with further work also expected along the Ferkessedougou North 17km-long gold-in-soil trend in the coming months.

GUINEA

Predictive holds approximately 500km² of prospective landholdings across five projects in Guinea, all containing artisanal gold workings (Figure 4). All five projects are within the Siguiri Basin which hosts AngloGold's large Siguiri Mine (+10Moz). These project areas were identified by Predictive during its terrain-scale assessment of the Siguiri Basin in late 2018 using the Company's Predictore™ gold targeting system.

Predictive's regional assessment has confirmed that the Siguiri Basin is both highly prospective for gold mineralisation and underexplored. The Basin forms 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.

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, Boroto and Saman Projects with drill target generation work ongoing at Kankan, Nonta and Kaninko. This initial exploration work has identified wide zones of anomalous to high-grade gold.

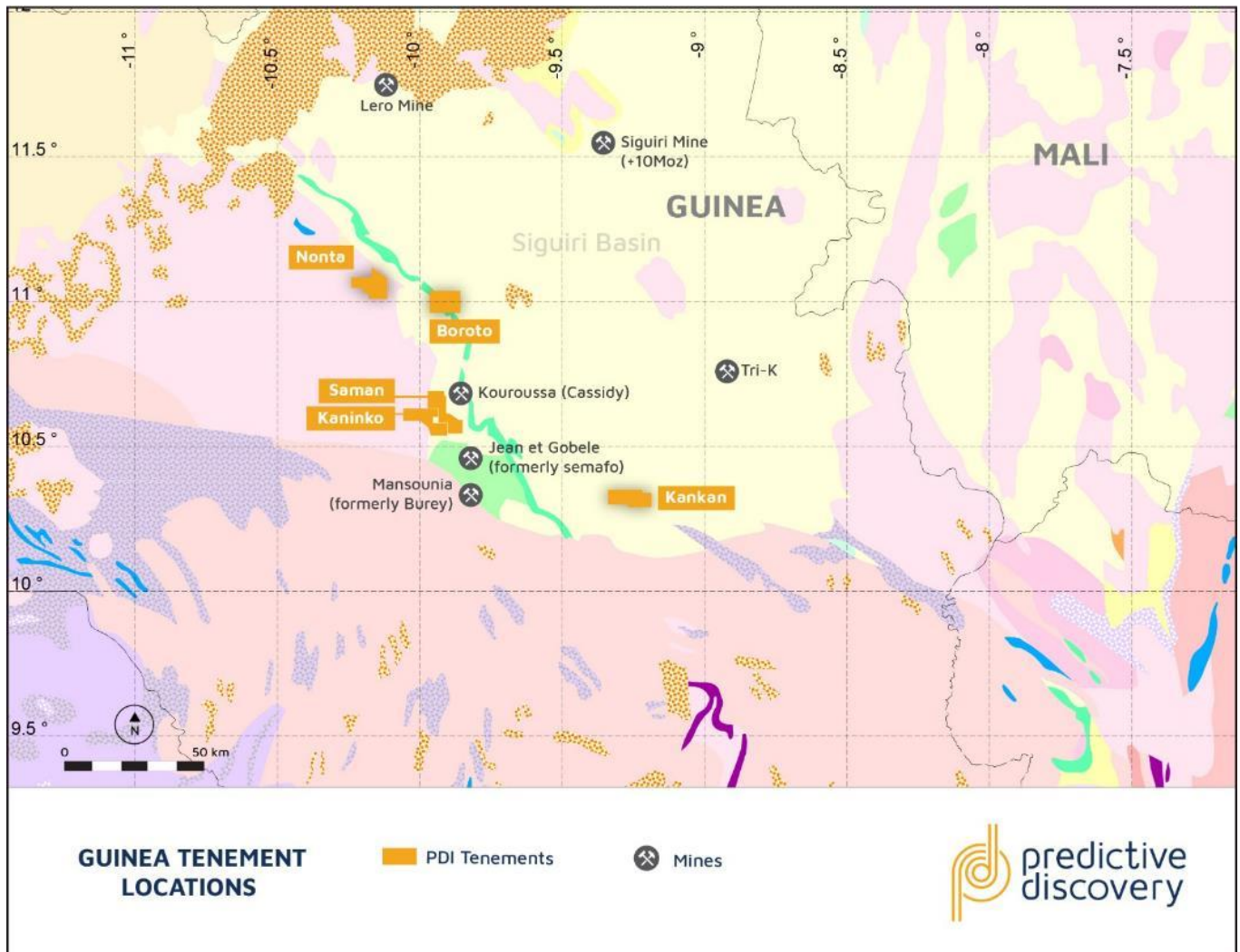


Figure 4 – Predictive's 100%-owned projects located within and around Guinea's emerging Siguiri Basin

KANINKO PROJECT

Results of a large soil sampling program on the Kaninko Project were reported on 18 December 2019⁵ with a peak value of 1.4g/t gold and results enlarging the area of recorded anomalous gold values at the Bankan North-East Prospect from 350m to nearly 1km-long and the Bankan Creek Prospect from 230m to 900m-long (Figure 5). The potential for enlarging the target at Bankan Creek further remains as regolith in the area is partly transported and power auger drilling is required to test beneath the surface layer.

The soil program built on previous saprolite and laterite testing programs which included a peak value of 52.1g/t gold at Bankan Creek and 1.83 g/t gold at Bankan North-East⁶.

⁵ ASX Announcement – HIGH-POTENTIAL GOLD DRILL TARGETS IDENTIFIED IN GUINEA

<https://www.investi.com.au/api/announcements/pdi/d7ab1b63-5ff.pdf>

⁶ ASX Announcement - UP TO 52g/t GOLD RETURNED FROM KANINKO ARTISANAL MINE SAMPLES

<https://www.investi.com.au/api/announcements/pdi/49756a56-ed9.pdf>

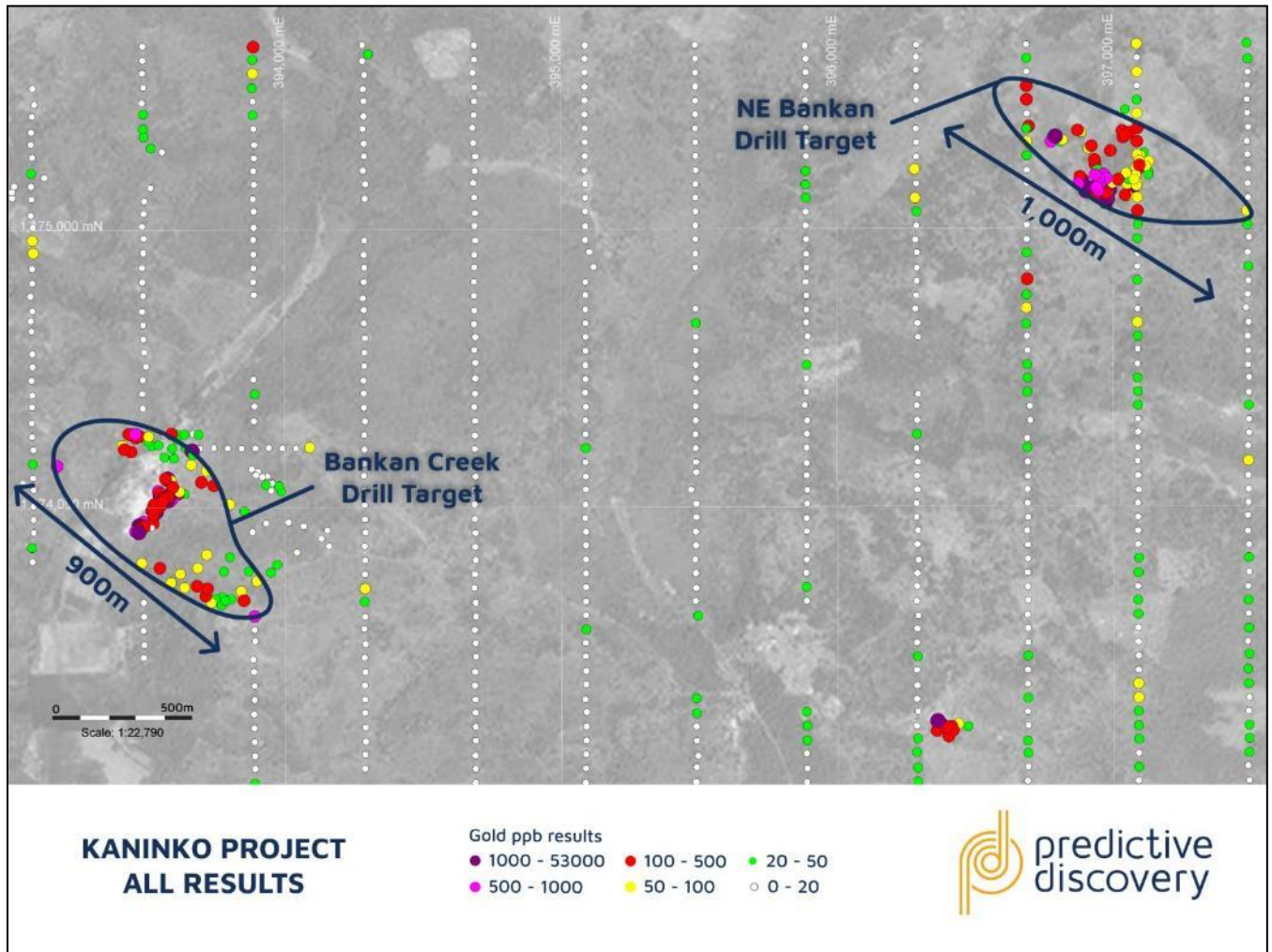


Figure 5 - High potential drill targets with a combined length of almost 2km-long across the Kaninko Project

The Company now has two high-potential targets with a combined length of almost 2km with trenching in progress, with power auger drilling expected to start next week and RC or air core drilling later in the March Quarter.

KANKAN PROJECT

Building on a previously completed soil sampling program which outlined a 7km-long gold-in-soil anomaly with a peak value of 570ppb gold⁷, a further infill soil sampling program was completed with 340 samples collected on a 200 x 25m grid and peak values of 1.0g/t and 2.5g/t gold recorded, much higher than the previous sampling program.

The sampling identified higher grade coherent anomalies to the west and east of the Kankan soil grid, being Drill Targets A and B (Figure 6).

⁷ASX Announcement - KANKAN RESULTS EXTEND ZONE OF GOLD ANOMALIES TO OVER 7KM
<https://www.investi.com.au/api/announcements/pdi/57ee0674-e4d.pdf>

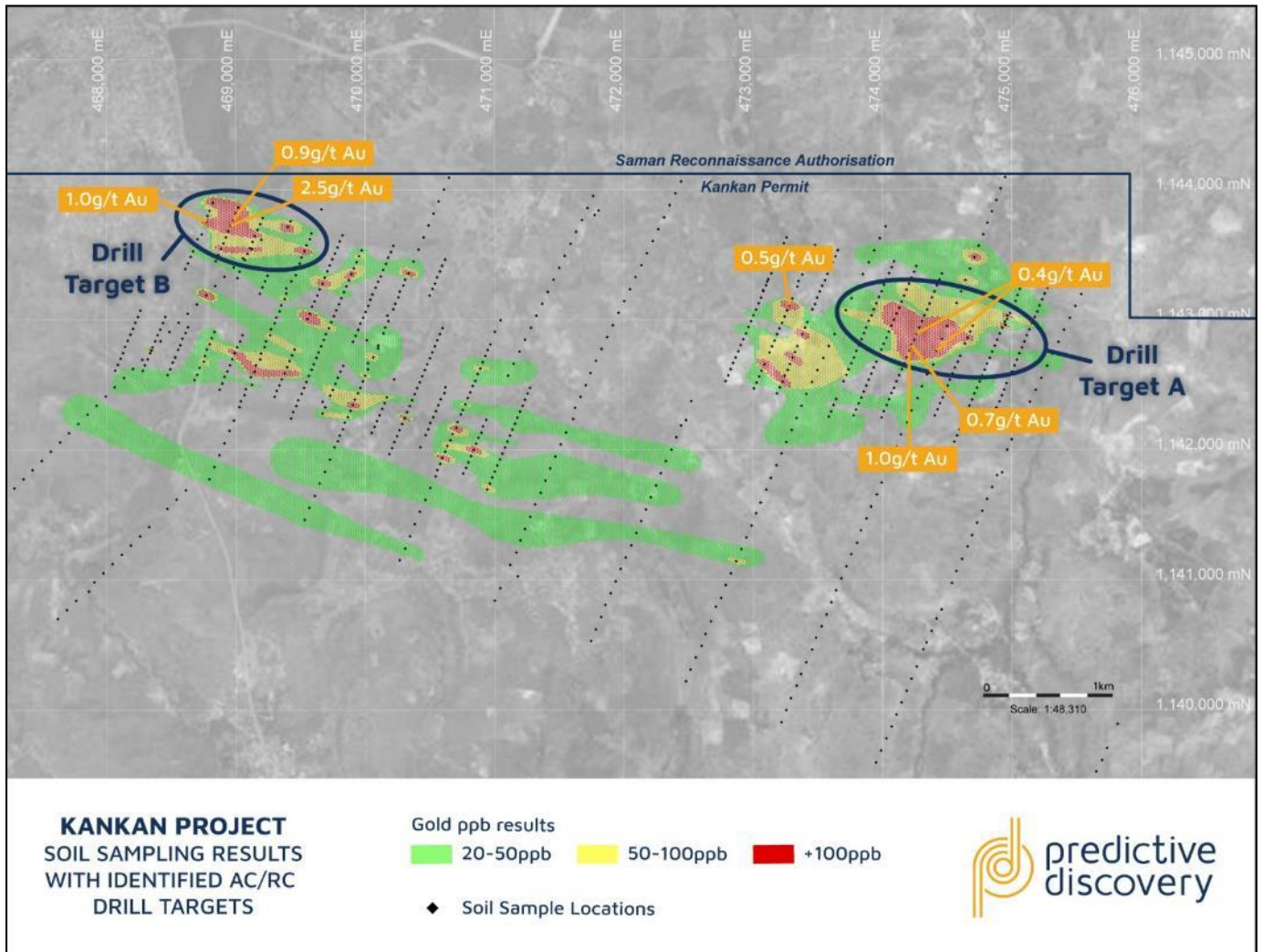


Figure 6 – Drill Targets A & B highlighted by zones of +100ppb soil sample results

A follow-up program of ground magnetics is currently in progress (Figure 7) and an induced polarisation survey is due to start next week, both designed to further vector down on the current geochemical targets and identify the most prospective locations for the upcoming drill campaign; RC or air core drilling is expected in the March Quarter.



Figure 7 - Predictive Discovery Principal Geologist Amie Nganare co-ordinating the ground magnetics program on the Kankan Project

NONTA PROJECT

Following encouraging early soil sampling results which identified a 5km-long zone of anomalous gold and included peak values of 1250ppb and 325ppb gold, the company undertook a program of power auger drilling (Figure 8) to better understand the complex regolith. The work was completed on 23 December with results to be released in the coming weeks.



Figure 8 – Power auger drilling on the Nonta Project

ONGOING ASSESMENT OF THE SIGUIRI BASIN

The Company continues to assess the Siguiri Basin, using its Predictore™ gold targeting system, to acquire new ground for early stage exploration and discovery.

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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.

About Predictive Discovery

With exposure to over 6,000km² of highly prospective ground on the West African Birimian greenstone belts of Guinea, Cote d'Ivoire and Burkina Faso, Predictive is focused on its 100%-owned and Joint Venture gold projects.

PDI has a pipeline of early stage exploration opportunities, including partnering with experienced and respected companies to fund ongoing exploration and leveraging their expertise to realise shareholder value. The Company's present intention is to advance to the drilling stage on one or more of its Guinea properties.



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