## Panthera Resources plc

("Panthera" or "the Company")

## **IP Survey Adds High Priority Targets at Kalaka Project**

Panthera Resources Plc (AIM: PAT), the diversified gold exploration and development company with assets in West Africa and India, is pleased to announce that its associate company, Moydow Holdings Limited ("Moydow") has completed the expanded Induced Polarisation (IP) survey at the Kalaka Project in Mali. The survey has enhanced the definition of existing targets as well as identified several additional targets, in particular in the east of the survey area to the east of a prominent interpreted package of graphitic sediments.

### Highlights

- Extension IP survey completed 150 line kilometres
- Several new high order chargeability highs indicating possible disseminated sulphides at depth
- The largest anomalies exceed 4km in strike length
- Many chargeability highs are associated with geochemical anomalies and artisanal mining activity
- A drill rig has been secured to drill test the highest priority anomalies after the wet season later in the year

Commenting on the announcement, Mark Bolton, Managing Director of Panthera said:

"The IP geophysical technique has been proven to be a highly successful targeting tool on all of our West African gold projects. The enhanced definition of existing drill targets at Kalaka is highly encouraging and the identification of additional targets to the east of an interpreted package of graphitic sediments adds an entirely new mineralisation trend.

We now have over 20 walk-up drill targets defined by chargeability highs (suggestive of sulphide alteration zones) with support from resistivity highs, geochemistry, other geophysical techniques and/or previous explorer drilling.

We look forward to our maiden drilling programme at this project immediately following the conclusion of the current wet season in Mali."

### Project Background

The Kalaka gold project is located in southern Mali, approximately 250km southeast of the capital city Bamako and within 50-100 kilometres of the large Morila and Syama gold mines (Figure 1).

The Kalaka Project interest is held by our associated Company, Moydow. Moydow is earning an 80% interest in the Kalaka Project. Panthera holds a 45.8% equity interest in Moydow.

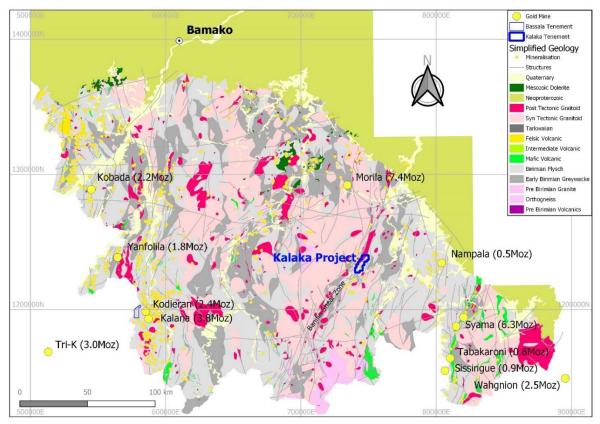


Figure 1: Kalaka Project Location Plan

A programme of 150 line kilometres of time domain, gradient array, induced polarisation (IP) surveying has been completed to the east of the existing survey and initial results have now been received. This geophysical technique can be used to indirectly measure disseminated sulphide content (often, but not always, associated with gold mineralisation) using the chargeability readings and silicification (often, but not always, associated with the host lithologies to gold mineralisation) using the resistivity readings. Conductivity is essentially the inverse of resistivity and measures how conductive the host rock is, with the most conductive units generally being graphitic schists, massive sulphides and saline water filled structures which all conduct electricity well. This is different to chargeability which measures how long the host rock holds a charge and may be used to measure disseminated (unconnected) sulphides.

The results are shown as images of chargeability, resistivity and conductivity in Figures 2 to 4 respectively.

Four main geological zones can be interpreted using this data, along with several distinct faults/shears (Figures 5 & 6):

<u>Zone 1</u>: This is a zone of generally low chargeability (with several discrete chargeability highs), low to moderate resistivity and low-moderate conductivity. The resistivity tends to increase to the northwest. This is interpreted as being reflective of a sequence of metasediments (sandstones & siltstones) with some mafic to intermediate intrusions. This grades to granite in the north and west as suggested by the higher resistivity.

<u>Zone 2</u>: This is a discrete north-easterly trending zone of very high conductivity and low resistivity and is interpreted as being related to a package of graphitic shales and schists. Chargeability is generally low in the north but several distinct highs occur in the south and on its margins. These are interpreted as being related to higher sulphide contents due to alteration around shear zones.

<u>Zone 3</u>: This is a zone with similar resistivity and conductivity signature as Zone 1 but with generally much higher chargeability. This is interpreted as a package of sediments and possibly felsic volcanics/volcaniclastics

and associated sulphidic sediments and exhalatives. The zones of higher resistivity in the extreme east are most probably granites.

<u>Zone 4</u>: This is a zone of subdued chargeability and conductivity and increased resistivity, especially near its margins, and is interpreted as a granitic intrusion with silicified margins.

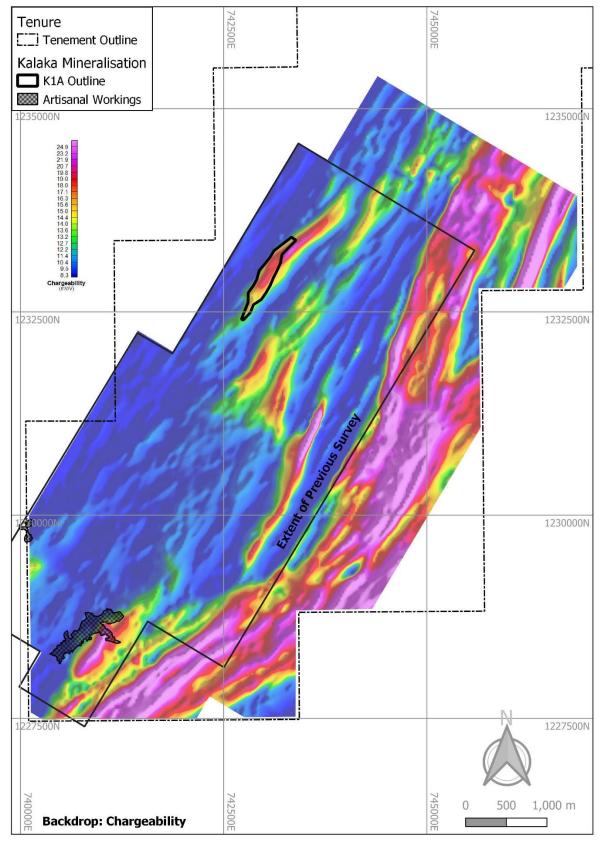


Figure 2: IP Results - Chargeability, Kalaka Project

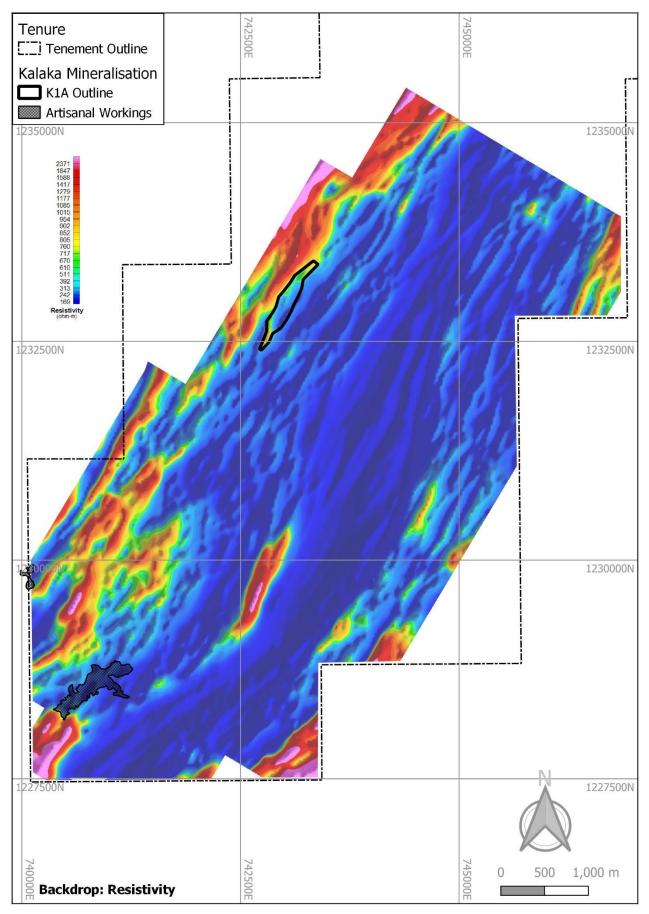


Figure 3: IP Results - Resistivity, Kalaka Project

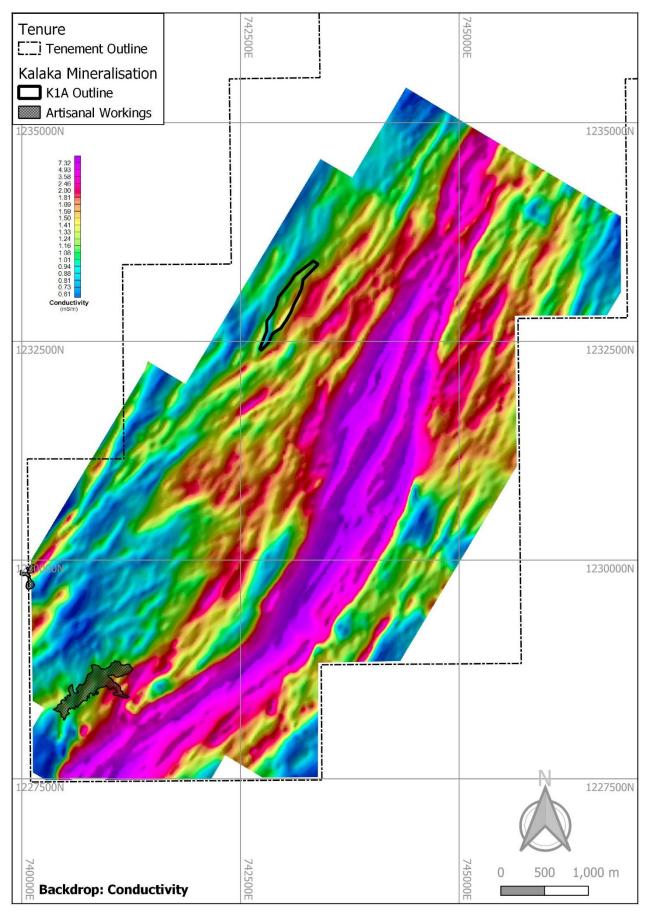


Figure 4: IP Results - Conductivity, Kalaka Project

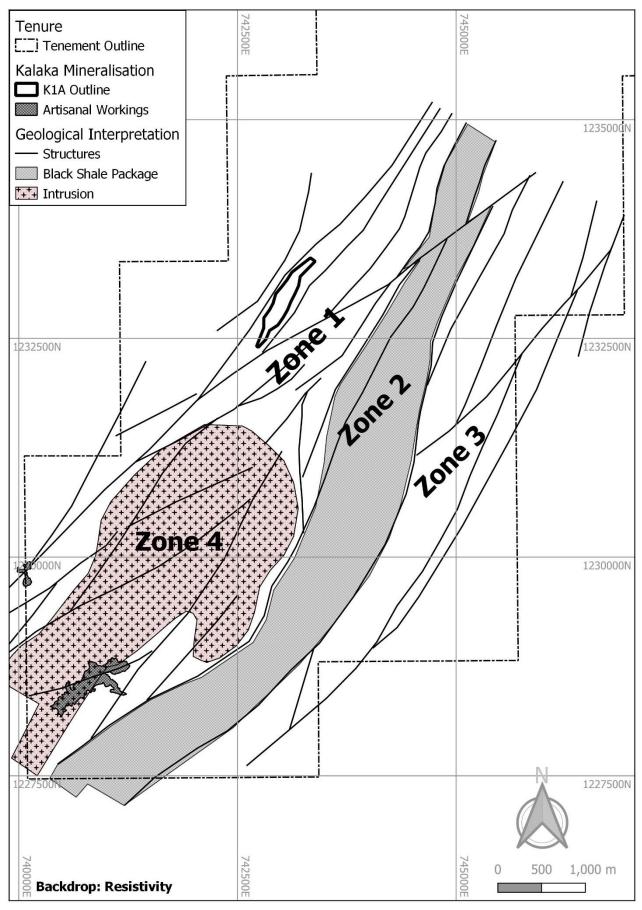


Figure 5: Geological Interpretation Based on Modelled IP Data

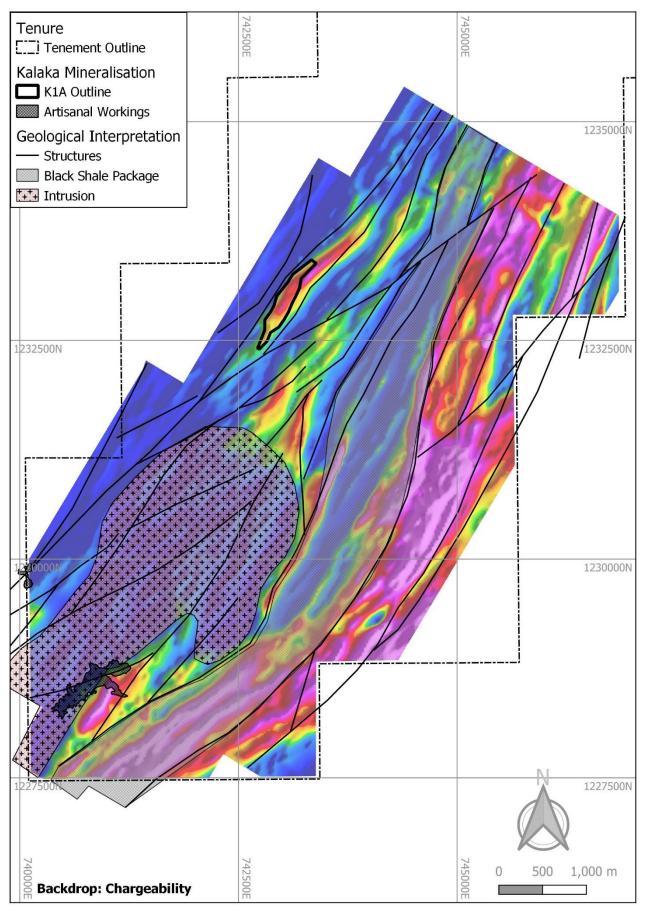


Figure 6: Geological Interpretation Based on Modelled IP Data – Chargeability Image Backdrop

Using the revised interpretation, along with the previous explorers' data including gold in soil geochemistry, other geophysical techniques (including magnetics, radiometrics and electromagnetics) and RAB, AC, RC and DD drilling, a total of twenty walk-up drill targets have been identified (Figures 7 & 8) as discussed below (note Targets 1 to 7 identified by the previous survey and discussed in an earlier report but repeated here for completeness).

**Targets 1 and 2** are considered the highest priority targets as they appear to cut across the general stratigraphic trends in the district and they are very close to the main area of artisanal mining activity which is interpreted as targeting transported gold at the base of a paleo river valley (due to most of the plus 1000 shafts finishing in slightly weathered rock at the base of the laterite profile) which may be draining the source of the IP chargeability anomaly.

**Targets 3 and 4** have lower order chargeability anomalies, suggesting fewer sulphides, but are in an interesting structural position in the pressure shadow of an interpreted granitoid intrusion. These targets have associated low order resistivity anomalies suggesting some silicification, similar to the signature at K1A. Historical RAB drilling, by previous explorers, to the north of these targets, has identified gold mineralisation in the oxide profile including 9m @ 0.31g/t Au from 13m, 34m @ 0.22g/t Au from the surface and 2m @ 1.19g/t Au from 1m. These are from areas with much lower chargeability responses and it is possible that the higher responses represent stronger sulphide alteration and hence have the potential for higher grade and wider zones of gold mineralisation.

**Targets 5 and 6 (A & B)** are located along with both contacts of the interpreted graphitic shale sequence. Target 5 is a strong linear anomaly that has no previous drilling. Target 6 is a similar anomaly that has limited drilling toward its northern end (generally on the eastern end of drill lines) which, through work done by previous explorers, returned significant drill intercepts including 18m @ 0.83g/t Au from the surface, 40m @ 0.47g/t Au from 1m (end of hole), 70m @ 0.26g/t Au from 42m (including 12m @ 0.57g/t Au from 45m) and 4m @ 1.14g/t Au from 30m (end of hole).

**Target 7** is interpreted as a continuation of the K1A mineralisation, possibly offset, that has a higher chargeability response suggesting stronger sulphide alteration. Historical drilling by previous explorers at K1A has reported broad mineralised intersections including:

- 249.3m @ 0.54g/t Au from 52m (to end of hole) including 8m @ 3.17g/t Au from 107m
- 191.8m @ 0.52g/t Au (to end of hole) including 6m @1.47g/t Au and 4m @ 2.47g/t Au
- 176.4m @ 0.49g/t Au from 24m (to end of hole) including 8m @ 1.83g/t Au from 52m
- 43m @ 0.56g/t Au from 5m and 78m @ 0.52g/t Au from 51m including 5m @ 2.08g/t Au from 99m

**Target 8** is a moderate chargeability anomaly with some historical drilling by previous explorers, along strike to the south, in an area of relatively low chargeability response, that returned intercepts of 22m @ 0.40g/t Au from surface to end of the hole and 35m @ 0.44g/t Au from 82m followed by 22m @ 0.51g/t Au from 178m to the end of the hole. If the chargeability anomaly represents higher sulphide content, then that could be a higher-grade zone, assuming gold content is associated directly with sulphide content.

**Target 9** is a high order chargeability high with an associated low order resistivity high along with an interpreted fault structure. No previous drilling exists in this target area.

**Target 10** is a well-defined chargeability high on the interpreted sheared boundary between a package of generally high conductivity with a package of generally low conductivity. No previous drilling exists in this area.

**Target 11** is discrete and very high order chargeability high and is considered to be a high priority target. No previous drilling exists in this area.

**Targets 12 to 14** are high order chargeability highs with some associated resistivity highs. While very high order, they appear to be part of a stratigraphic trend and may be related to sulphidic sediments or felsic volcanics. However, as there is no previous drilling in this area some preliminary broad spaced testing is warranted.

**Targets 15 and 16** are similar to Targets 12 to 14 but have higher resistivities and may be close to or on the granite contact.

Target 17 is similar to Targets 12 to 14.

**Targets 18 and 19** are discrete chargeability highs within the interpreted graphitic black shale package which generally does not have high chargeability. These are likely to be related to sulphides within the package and represent reasonable drill targets.

Target 20 is possibly a repeat or extension of Target 5.

The highest priority of these targets will be drill tested using an Aircore drilling rig once access is available following the current wet season in Mali.

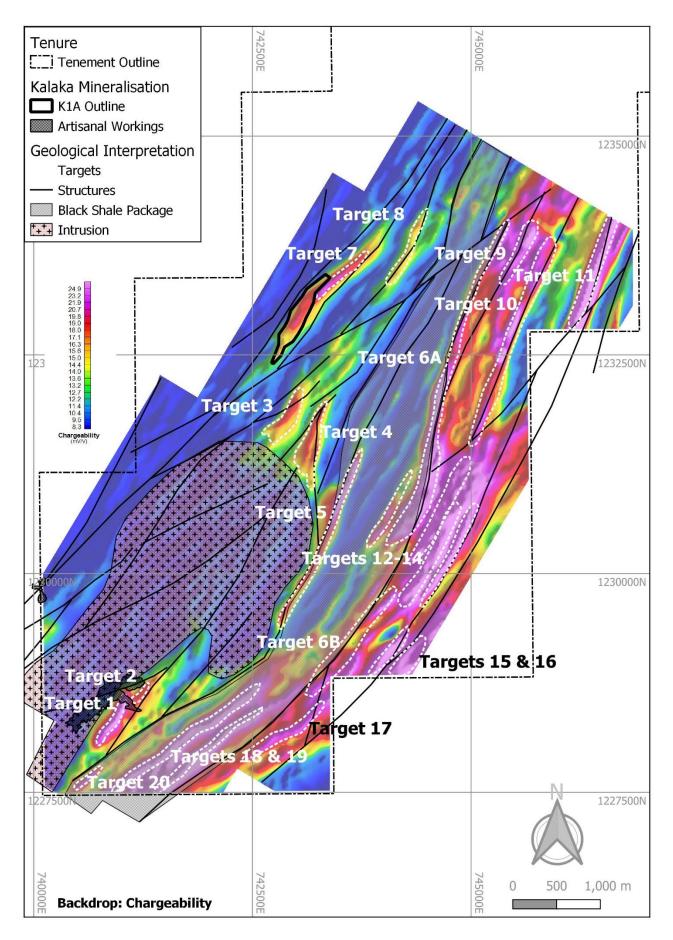


Figure 7: Targets on Chargeability Image

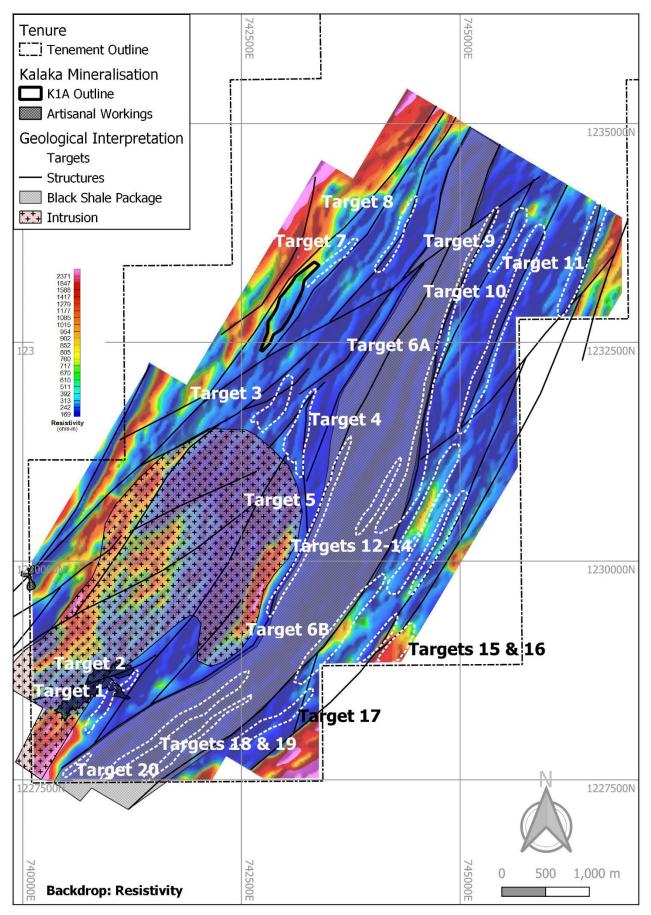


Figure 8: Targets on Resistivity Image

Contacts

Panthera Resources PLC Mark Bolton (Managing Director)

+61 411 220 942 contact@pantheraresources.com

Allenby Capital Limited (Nominated Adviser & Broker) John Depasquale / Vivek Bhardwaj (Corporate Finance)

**Financial Public Relations** Vigo Consulting Ltd Oliver Clark / Chris McMahon

+44 (0)20 7390 0230 panthera@vigoconsulting.com

+44 (0) 20 3328 5656

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# **Qualified Person**

The technical information contained in this disclosure has been read and approved by Antony Truelove (BSc (Hon), MAusIMM, MAIG), who is a qualified geologist and acts as the Competent Person under the AIM Rules - Note for Mining and Oil & Gas Companies. Antony Truelove is the COO of Panthera Resources PLC.

## UK Market Abuse Regulation (UK MAR) Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information for the purposes of Regulation 11 of the Market Abuse (Amendment) (EU Exit) Regulations 2019/310. Upon the publication of this announcement via a Regulatory Information Service ("RIS"), this inside information is now considered to be in the public domain.

### **Forward-looking Statements**

This news release contains forward-looking statements that are based on the Company's current expectations and estimates. Forward-looking statements are frequently characterised by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate", "suggest", "indicate" and other similar words or statements that certain events or conditions "may" or "will" occur. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results implied or expressed in such forward-looking statements. Such factors include, among others: the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; possible variations in ore grade or recovery rates; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing; and fluctuations in metal prices. There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Forward-looking statements are not guarantees of future performance and accordingly, undue reliance should not be put on such statements due to the inherent uncertainty therein.