ELDORE MINING CORPORATION LIMITED
ABN 82 110 884 262

Quarterly Activities Report
Quarter Ended 31 December 2010

BURKINA FASO - KNIGHTS LANDING LIMITED (100% reducing to 40%)

HIGHLIGHTS

- Predictive Discovery Limited (PDI) achieved the minimum expenditure commitment under the terms of the Heads of Agreement dated 8 January 2010.
- Power auger drilling at the Fouli prospect, totaling 2,099m, extended the area of gold anomalous bedrock geochemistry to the west and east of Fouli.
- Power auger drilling commenced on the Sirba permit with a total of 1,122m completed by the end of December.
- Approximately, 2,990 line km of airborne magnetic and radiometric data were collected and processed.
- RC drilling commenced at the Fouli prospect with 602m completed by quarter end.

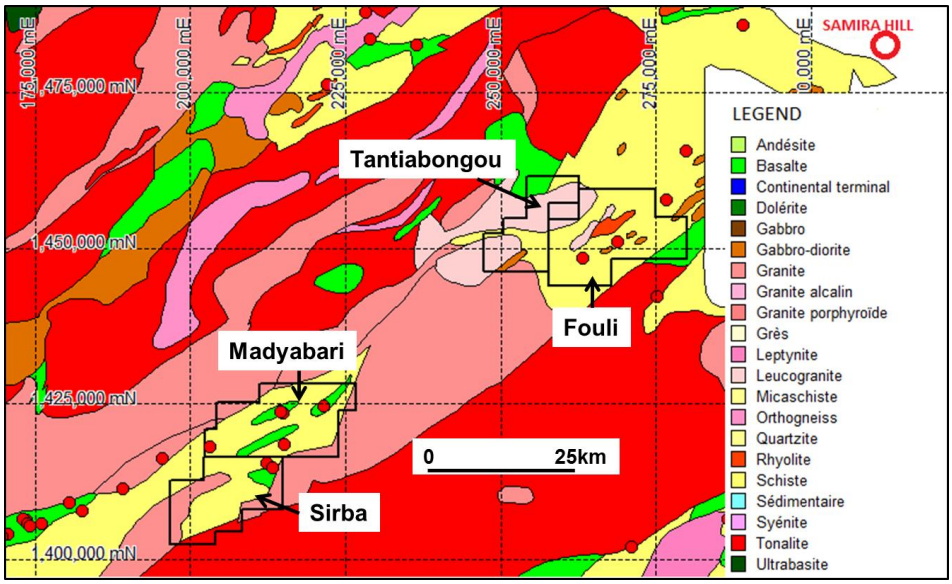


Figure 1: Locality Plan - ElDore Joint Venture exploration permits, Eastern Burkina Faso. Tenement locations are superimposed on Government geological map of the area. Red dots signify historic artisanal gold mine workings recorded in the Government database.

1 QUALIFYING EXPENDITURE

Under the terms of the Heads of Agreement which covers this joint venture, PDI was required to have spent more than $600,000 by 30th November, 2010 in order to be entitled to proceed with the earn-in. PDI advised ElDore Mining Corporation in writing on 12th December 2010 that it estimated that it had spent $761,000 on exploration of the four permits between the date when the Heads of Agreement was signed (8th January 2010) and 30th November 2010.

2 POWER AUGER DRILLING

PDI's power auger exploration program commenced on 1st November 2010. Work commenced at the Fouli prospect and was followed by commencement of drilling on the large Laterite Hill grid.

2.1 **Fouli prospect** (Fouli permit)

At Fouli, 321 holes were drilled for a total depth of 2,099 metres. This program identified extensions to the bedrock gold anomalism discovered in PDI's 2010 RAB drilling program including a physically separate zone of gold anomalism on the western edge of the grid (Figure 2). The latter is approximately coincident with a north-west structure previously noted in PDI's ground magnetic survey. Anomalous values of up to 1g/t Au were obtained on the westernmost line of sampling.

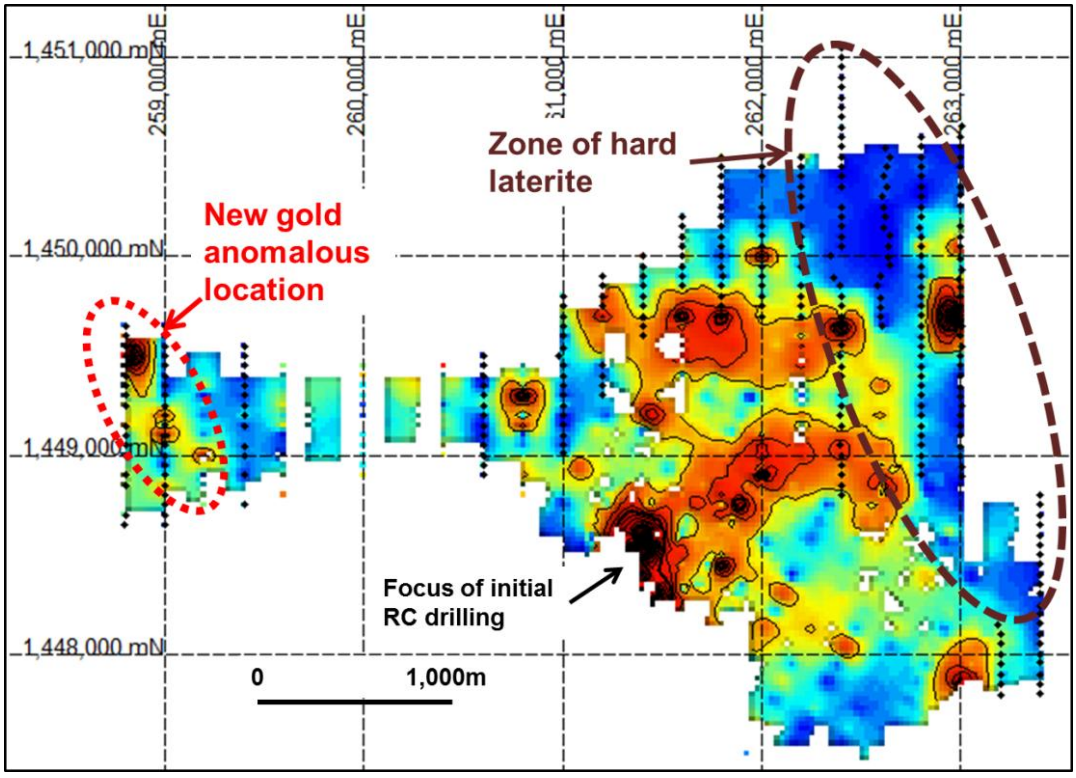


Figure 2: Fouli prospect: gridded and contoured values obtained from both the earlier RAB drilling and the recent auger sampling. The small black diamonds are auger sample sites. Values for the RAB holes were calculated by averaging the top 8m of each drill hole thereby matching approximately the position of the auger samples. Contours are at 25ppb (parts per billion) intervals. The location of an area of hard laterite which prevented auger penetration to bedrock in the north-east corner of the prospect is also shown.

The program was only partially successful in investigating the north-east extension of the principal 1.7 km long north-east trending gold anomalous zone because most of the holes drilled there could not penetrate through the hard laterite encountered there. Therefore, low gold values obtained from some bottom of hole samples may not be representative of the underlying weathered bedrock. A sample of laterite containing 0.9g/t Au on the easternmost line might be an indication that the zone persists beneath the laterite.

2.2 Laterite Hill grid (Sirba and Madyabari permits)

Power auger sampling commenced in mid-December 2010. By month's end, 210 holes had been drilled totalling 1,122 metres. The planned program consists of 1,536 holes totalling approximately 7,500m. It is designed to test a 15km strike length of large, buried structures (probable shear zones) identified from aerial magnetic maps (Figure 3). The gridded area is considered to be highly prospective because of the presence of artisanal mine workings in the small areas of exposed bedrock within this zone. Reverse circulation drilling reported by a previous explorer in this zone obtained intercepts of up to 11m of 6.0g/t Au. The planned power auger lines are 400m apart with holes at 50m intervals along lines.

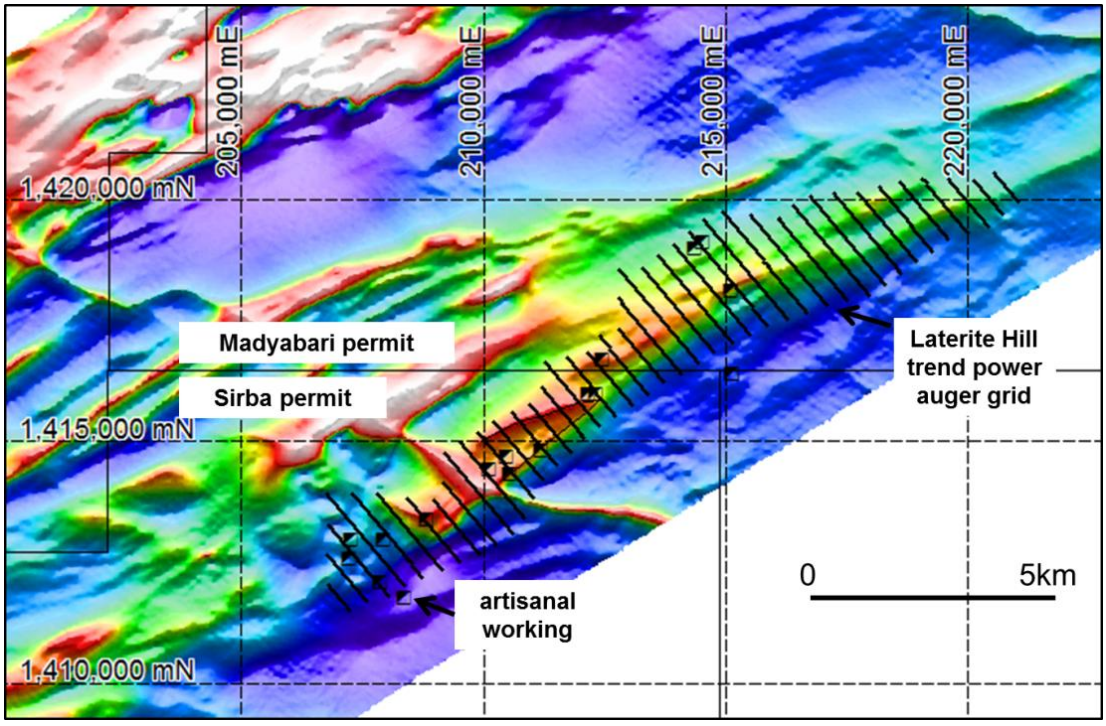


Figure 3: Laterite Hill grid: location of power auger grid lines superimposed on an aerial magnetic image showing a series of north-east trending structures. The lines are 400m apart, with holes spaced at 50m along them. The artisanal workings extend over a 10km length and are found where small outcropping areas are found within the alluvial floodplain of the Sirba River.

3 REVERSE CIRCULATION DRILLING - FOULI

A 2,000m RC drilling program was designed late in the quarter based partly on new detailed geological mapping on outcropping areas adjacent to the RAB drill grid, which was carried out during November. RC drilling commenced in the area highlighted in Figure 2 in late December. By month's end, 602m had been completed, testing a north-west oriented zone of bedrock gold anomalism which was identified by earlier RAB drilling, and included 15m at 2.3 g/t Au and 11m of 1.3 g/t Au.

Drilling is also planned on the Watamtonga prospect on the Tantiabongou permit, north-west of Fouli after completion of this drilling at Fouli is finished.

4 AIRBORNE GEOPHYSICAL SURVEYS

PDI carried out an airborne magnetic and radiometric surveys on the Fouli and Tantiabongou permits in October. The survey was carried out on lines spaced 100m apart and totalled approximately 2,990 line kilometres. The This survey revealed a series of prospective structural features which are targets for follow-up mapping and geochemical surveys. Wavelet analysis processing of the data (Figure 4) provided additional valuable insights for exploration targeting.

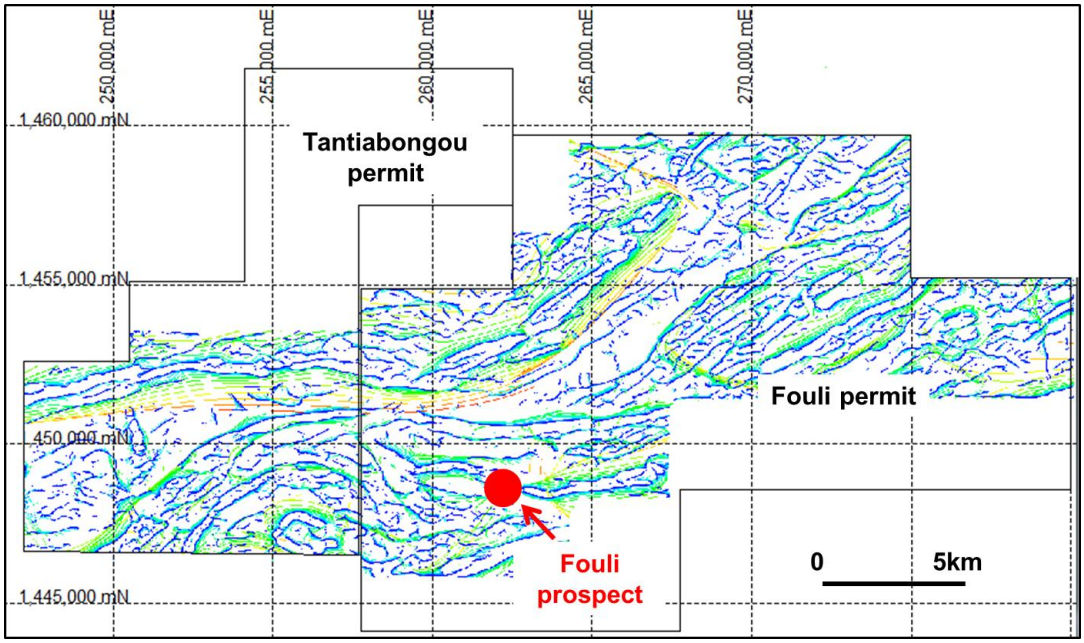


Figure 4: Wavelet analysis treatment of new airborne magnetic data covering Fouli and Tantiabongou

5 APPLICATION OF PREDICTORE™

Work commenced using the Ausmodel fluid flow modelling technology on the Fouli prospect in December. In accordance with the Company's standard procedure, the initial focus has been on understanding the known distribution of gold mineralisation at Fouli, based on the RAB drilling results. This work will be completed in the March Quarter, and will be used to select RC drill targets for the planned March exploration campaign.

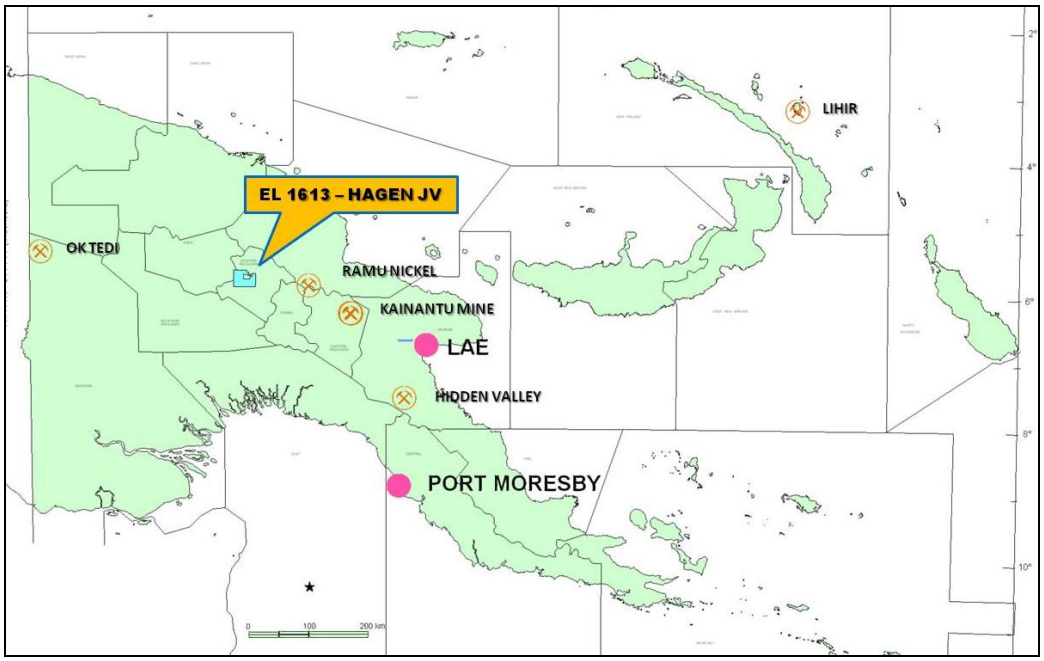
The information in this report that relates to exploration, mineral resources or ore reserves is based on information compiled by Mr Paul Roberts (BSc, MSc and FAIG) of Predictive Discovery and have been by reviewed by Mr Peter Cook (B.AppSc.) MSc (Min Econ.) MAusIMM who is a consultant/advisor to ElDore Mining Corporation Limited. Mr Cook has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as described by the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cook consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

MT HAGEN JV (Earning 60%)

EL1613 is located near Mt Hagen City in the Western Highlands Province, Papua New Guinea. See Figure 1.

The tenement is subject to a farm-in agreement with Pacific Niugini Limited ("PNR") signed in January 2010, whereby EDM can earn a 60% interest by spending $2 million on exploration. Pacific Niugini Minerals ("PNM") Limited a wholly owned subsidiary of Pacific Niugini Limited (ASX: PNR) manages a; on-ground activity for and on behalf of EDM.

EL1613 is located within the New Guinea Mobil Belt (NMB) a collision zone between the northward moving Australian Plate and northwest moving Pacific Plate. The NMB geomorphology is represented by rugged topography and mobile landforms evident within the tenement.



Basement rocks consist of Cretaceous to Upper Jurassic volcanic and metasediments, consisting of greywacke, sandstones, siltstones, volcano-clastics and shale. These un-conformably overlay the Kubor granodiorite. Volcanic comprises basic to intermediate agglomerates, volcanic breccia, tuff, basic lava and volcano-clastics. The Kubor granodiorite and metasediments are both intruded by Miocene granodiorite and by multiphase Pliocene diorites, dolerites, gabbro and microdiorites.

Gold, copper, molybdenum and base metals mineralisation is spatially associated with Pliocene intrusive events. During the Pliocene Diorites intruded the Bismarck Fault and Bundi Zone Complex, which is defines the key exploration target for copper – gold deposit.

The Bismarck - Bundi Fault Zone is a major tectonic discontinuity trending northwest - southeast. This Fault Zone is up to 43km wide and has a strike length of 200km. The fault is integral part of the New Guinea Mobile Belt (NMB) development, characterised by NW trending anatomising faults.

The Bismarck and Bundi Fault Zone corridor towards the northern and north-eastern margin of the EL1613, hosts widespread occurrences of copper, gold, molybdenum, mineralisation coincidental to diorite intrusions. The Yandera copper molybdenum (127MT Cu equiv.) and Simbai gold deposits are

located on the Bismarck and the Bundi Fault Zones. Kuta epithermal gold and base metal prospect is located immediately south of EL1613.

The tenement is considered to have significant potential to host porphyry copper –gold and epithermal gold + base metal deposits.

During 2010 fieldwork significantly progress technical understanding of the tenement geology, mineralisation style, host rocks, distribution and gold, copper and base metals occurrences. Porphyry style copper – gold mineralisation was discovered in outcrop at Paglum and at Kotna. See Figure 2. Different phases of fieldwork were carried out including creek outcrop sampling, ridge & spur soils, costean and review of aeromagnetic data.

Elevated copper – gold – molybdenum mineralisation was traced to outcrop at Kotna. Detail geological mapping and high-density outcrop sampling ensued over most of 2010.

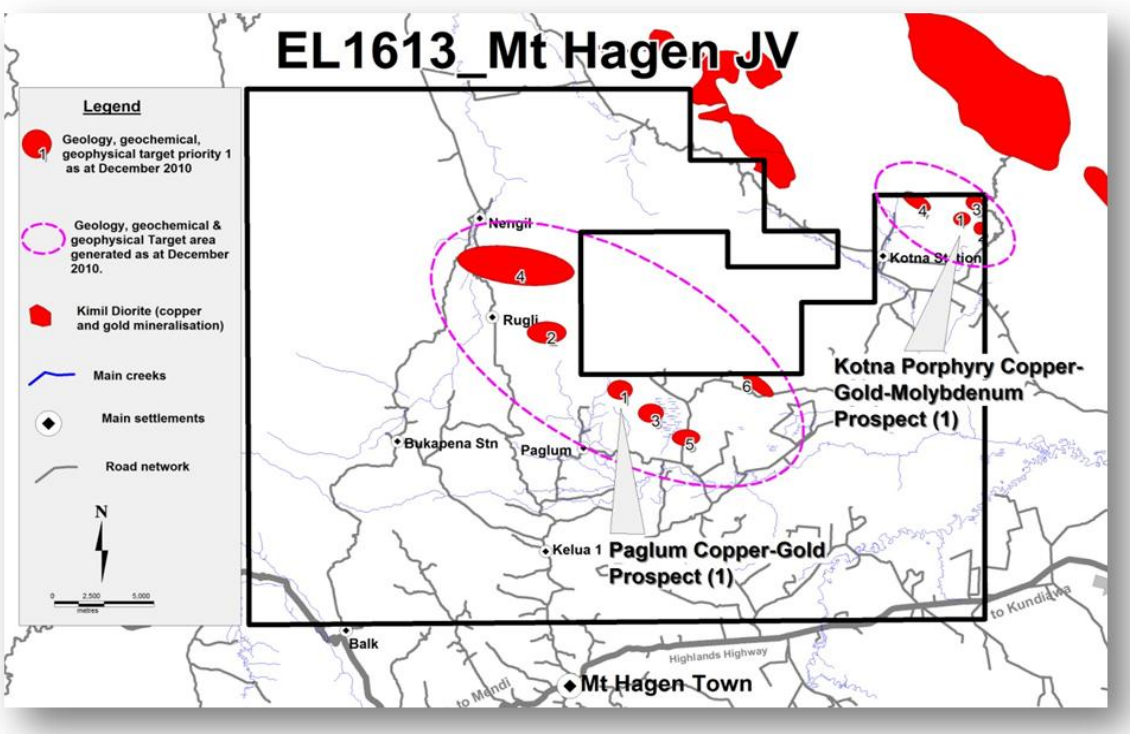


Figure 2: Paglum and Kotna Copper Propects.

KOTNA COPPER PROSPECT

Kotna is underlain by volcanic, consisting of tuff, volcanic breccias, volcanolithic sediments and calcareous sediments. Both the volcanic and sedimentary units are later intruded by multiple phased porphritic diorites. Copper and gold occurrences have been spatially related to the diorite intrusions in the Bismarck Fault Zone. Field mapping discovered extensive hydrothermal alteration and copper – gold – molybdenum mineralisation.

The following are discernible hydrothermal alterations in diorites;

- Prophylitic alteration (*chlorite + epidote +/- hematite + quartz + pyrite) assemblage*. Epidote is widespread and dominant.
- Phyllic alteration (sericite + quartz + pyrite assemblage).
- Potassic alteration (K-feldspar and biotite) restricted to structures

- Argillic (clay - kaolinite +/- pyrite +/- silica) restricted to major structures.

Copper Mineralisation styles noted are;

- Disseminated pyrite + chalcocite +/- covellite (supergene) and chalcopyrite+/-bornite.
- Discrete quartz + pyrite + chalcopyrite +/- chalcocite +/- covellite +/- bornite veins. Vein thickness ranged from 2cm to 20cm wide.
- Stock-work quartz + pyrite + chalcopyrite + bornite veins ranged in outcrop from 1m to 40m wide zones.

Several significant copper mineralised structures were mapped trending northwest and northeast and discreet massive quartz – copper + sulphide veins are common.

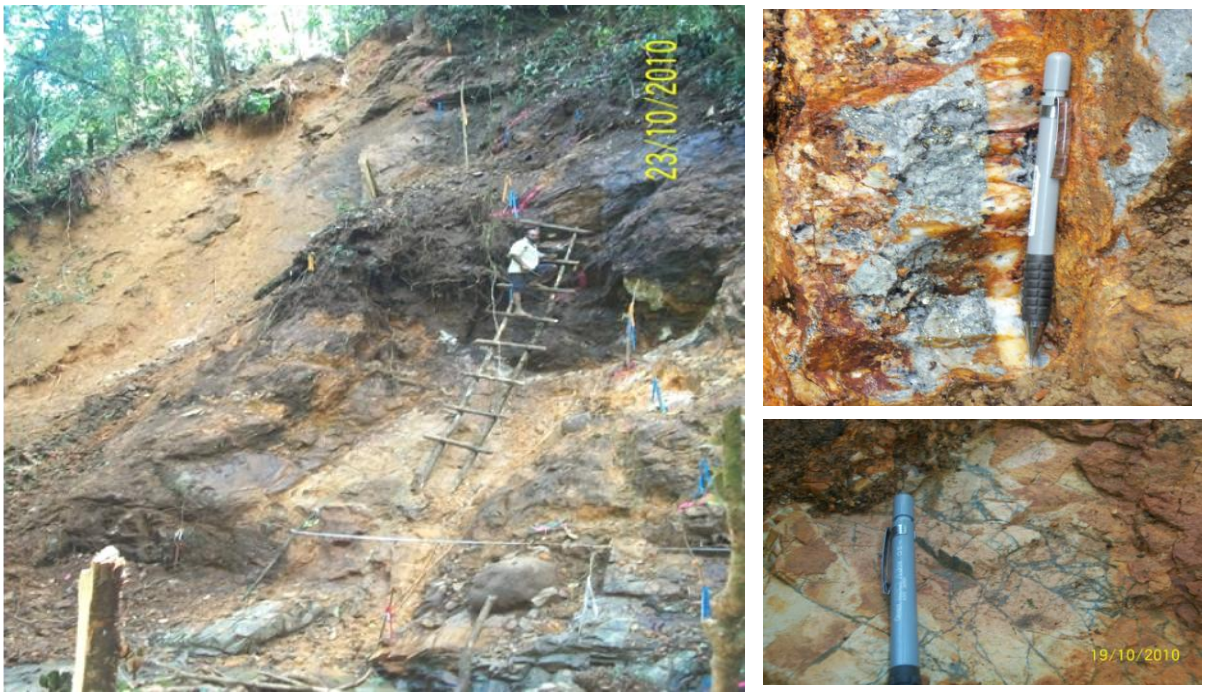


Figure 3: Copper mineralised diorite in outcrop. Assays returned 21m @ 0.9% Cu.

During the December 2010 Quarter reconnaissance ground works continued to map out and define the source of prevalent copper-gold-molybdenum anomalism in the Kotna area. Work completed included detail creek outcrop geological mapping, locating constructing manual costean and sampling, interpretation of aeromagnetic data, drill camp construction and grid based soil sampling.

Trenching completed during the quarter returned a number of significant results including:

- 2m @ 1.27% Cu, 0.03g/t Au, & 10 ppm Mo in Trench KNTC54
- 2m @ 0.35 % Cu, 0.1g/t Au, & 130 ppm Mo in Trench KNTC59
- 14m @ 0.14% Cu, 0.01g/t Au, & 10 ppm Mo, inclunding
  4m @ 0.36% Cu, 0.01g/t Au & 30 ppm Mo Trench KNTC55:

A grid base soil sampling campaign also commenced over Paglum Prospect.

The technical experts of PNM interpret the styles of alteration and mineralisation to be the surface expression of a buried porphyry system and the significance of the copper – gold – molybdenum results to date to be highly encouraging for a large porphyry copper-gold-molybdenum deposit and they have recommended a drilling program to further test this theory.

Figure 4: Summary of interpreted surface geology and proposed holes.

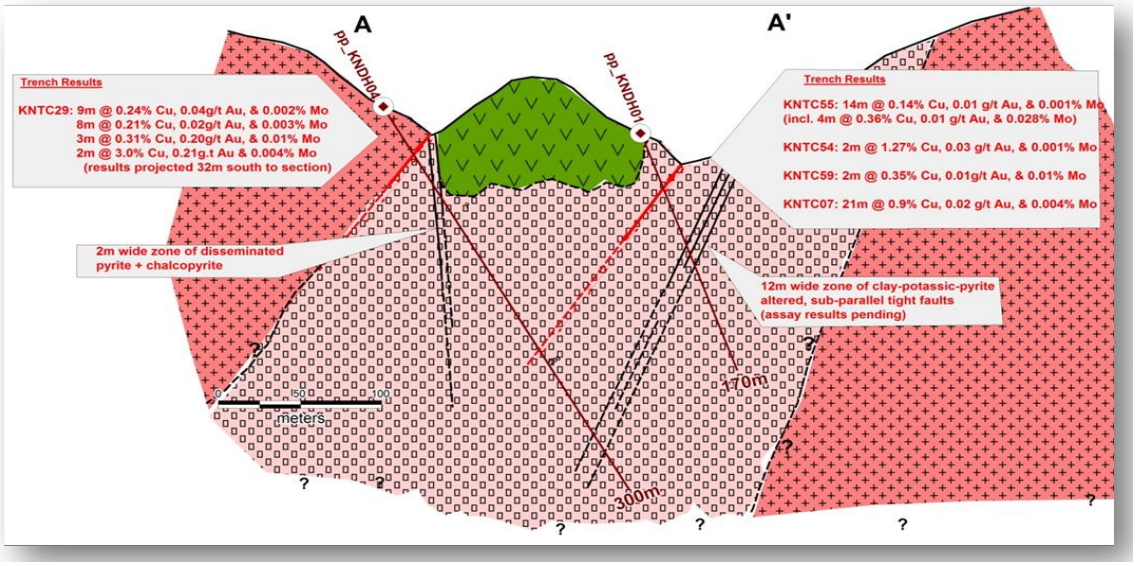


Figure 5: Generalised Geological Section (looking north) & Proposed Holes.

PNM have projected the various elevations and locations of the alteration and mineralisation discovered to date on to following interpretive cross section with the planned drill holes to provide an interpretation and perspective of the size of the target to be tested.

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based upon information compiled by Mr David M Osikore B.Sc.(Geol), MAusIMM. Mr Osikore is a full-time employee of the Pacific Niugini Minerals Limited. Mr Osikore has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activities, which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Osikore consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

WYO WELL PROJECT (100%)

The Wyo Well Project is located in the Kurnalpi region of WA approximately 60km east north east of Kalgoorlie. The Project is strategically located in greenstone terrain in close proximity to a number of significant nickel sulphide mines and prospects, notably the Silver Swan mine, approximately 60km to the WNW of the project.

No work was undertaken on the Wyo Well Project during the quarter.

CORPORATE

In December 2010, the company announced that a mandate had been executed for a private placement of up to 100,000,000 ordinary fully paid shares (**Shares**) at a subscription price of $0.01 each (together with, subject to shareholder approval, the grant of one free option exercisable at $0.03 each on or before 31 December 2012 (**Options**) for every Share subscribed for and issued) to raise an amount of $1,000,000. The terms of the mandate include a 5% placement fee and 1% management fee for the issue.

Subscriptions were received for 106,500,000 Shares raising an amount of $1,065,000 and, subsequent to the end of the quarter the company allotted and issued 106,500,000 Shares under the Company's 15% placement capacity, as allowed under the ASX Listing Rules. The 106,500,000 free attaching Options, will be issued upon and subject to shareholder approval.

The funds will be used for the drilling of the company's projects and for general working capital.

A R HAMILTON
Chairman

Dated: 31 January 2011