

Peak Resources Ltd

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Stock Exchange
Australian Stock Exchange
Symbols: **PEK, PEKO**

Issued Capital
59.5m Shares
32.7m Sept '09 Options
0.6m Dec '10 Options

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Tanzania:

Gold

- Lupa
- Geita
- North Mara
- Ikoma
- Igunga

Phosphate

- Ngualla Carbonatite
- Panda Hills Carbonatite

Western Australia:

Base Metals:

- Ashburton
- Mt Vernon
 - Pingandy

Gold:

- Menzies
Peak Hill
- Peak Hill West

Nickel:

- Yellowdine

DECEMBER QUARTERLY ACTIVITIES REPORT

Key Developments

- High tenor of gold anomalism brings forward exploration programme at Lupa & Igunga with programme to commence in January.
- Trenching programme on gold targets to provide data to optimise drill targeting and reduce costs.
- Tanzanian gold and phosphate portfolio grows with additional licence applications.
- *Historical soil data at Ngualla highlights the potential for large tonnage phosphate resource*
- *Ashburton Base Metal Project—RC drilling returns encouraging initial results with a peak of 5m @ 1.4 % Pb and broad anomalous plumes including 65 metres @ 0.2% Pb from 15m*
- *Corporate restructure and cost cutting commences.*

Overview

Positive outcomes from operations in Tanzania continue to drive the Company's outlook into 2009 with a strong focus on gold projects.

The recent success in first pass gold exploration programmes together with the emerging and significant potential of the Company's phosphate programme has enabled Peak to map out programmes for the first half of 2009. Initially, the Company is moving towards drilling phases of exploration at the Lupa and Igunga gold projects in Tanzania. This will be led by an extensive trenching programme to provide a better understanding of mineralised structures thereby lowering cost in drilling. The trenching will commence in late January.

In the next six months Peak is looking to a positive outcome though successful gold exploration programmes together with continuing to progress its phosphate project interests.

The directors believe that advancing the phosphate projects could have a major impact on the Company in 2009. Following the execution of agreements with Minergy in August 2008 Peak undertook a field programme at the Nguala Phosphate Prospect, Tanzania, with the objective of verifying historical data. The outcome of this work has been extremely encouraging. Once the Nguala tenement is granted the Company will provide further information on this project and work to be undertaken.

Australia based work during the quarter included completing an initial drilling programme at Mt Vernon, (Ashburton Base Metal Project) in late November. The drilling encountered broad zones of anomalous mineralisation. Work at Peak Hill outlined a number of anomalous gold zones. Of particular interest has been anomalous zones within the Peak Hill Mine Sequence..

Tanzania Operations

Peak Resources completed a review during the December Quarter of field work on its Tanzanian Gold Projects. While a small number of results remain outstanding from the soil programme at the Igunga Gold Project and trenching and rock chip sampling from the Lupa Gold Project anomalism returned in soil results to date encouraged Peak to advance the Lupa and Igunga projects with trenching to commence in January 2009.

A trenching programme of approximately 3,000 metres over two project areas in total is to be conducted. At Lupa 2,000 meters of trenching will be undertaken in conjunction with detailed mapping. Approximately 1,000 metres of trenching will also be undertaken at the Igunga Gold Project in the southern Lake Victoria Goldfield. The programme at Lupa is scheduled to commence in late January and will run for approximately six weeks (subject to seasonal and ground conditions). Following completion of the Lupa programme work will start at Igunga towards the end of March.

The trenching will provide the Company with detailed knowledge of the structure and mineralisation thus allowing an optimal positioning of the drill rigs and, in extremis, a further check on the viability of the targets. Given the lower labour costs in Tanzania against drilling costs this should lower the cost of the overall programme. This is useful as drilling normally takes place in the dry season from May to October.

Lupa Gold Project

The Lupa Gold Project is located in south-western Tanzania, approximately 50km northeast of the major regional centre of Mbeya (See Fig 1). Mbeya sits on a main highway linking Dar Es Salaam, on the coast, to the Zambian capital Lusaka, as well as a railway connecting the Zambian copper belt to the Tanzanian port at Dar Es Salaam.

The Lupa Goldfield is the second largest goldfield in Tanzania, and is currently subject to gold exploration by a number of exploration companies. Peak's Lupa Project comprises eight tenements and applications covering an area of approximately 90km².

In its first phase of exploration Peak undertook geological mapping, 100m x 25m soil sampling, rockchip sampling and minor trenching at Lupa in August. This programme was initially designed to validate, refine and develop targets for drilling.

Results from soil sampling have provided confidence to further advance its exploration programme at Lupa. Soil sampling delivered significant encouragement with numerous high tenor gold in soil anomalies being identified, two of which are considered to represent priority targets.

FIGURE 1 — TANZANIA PROJECT LOCATIONS

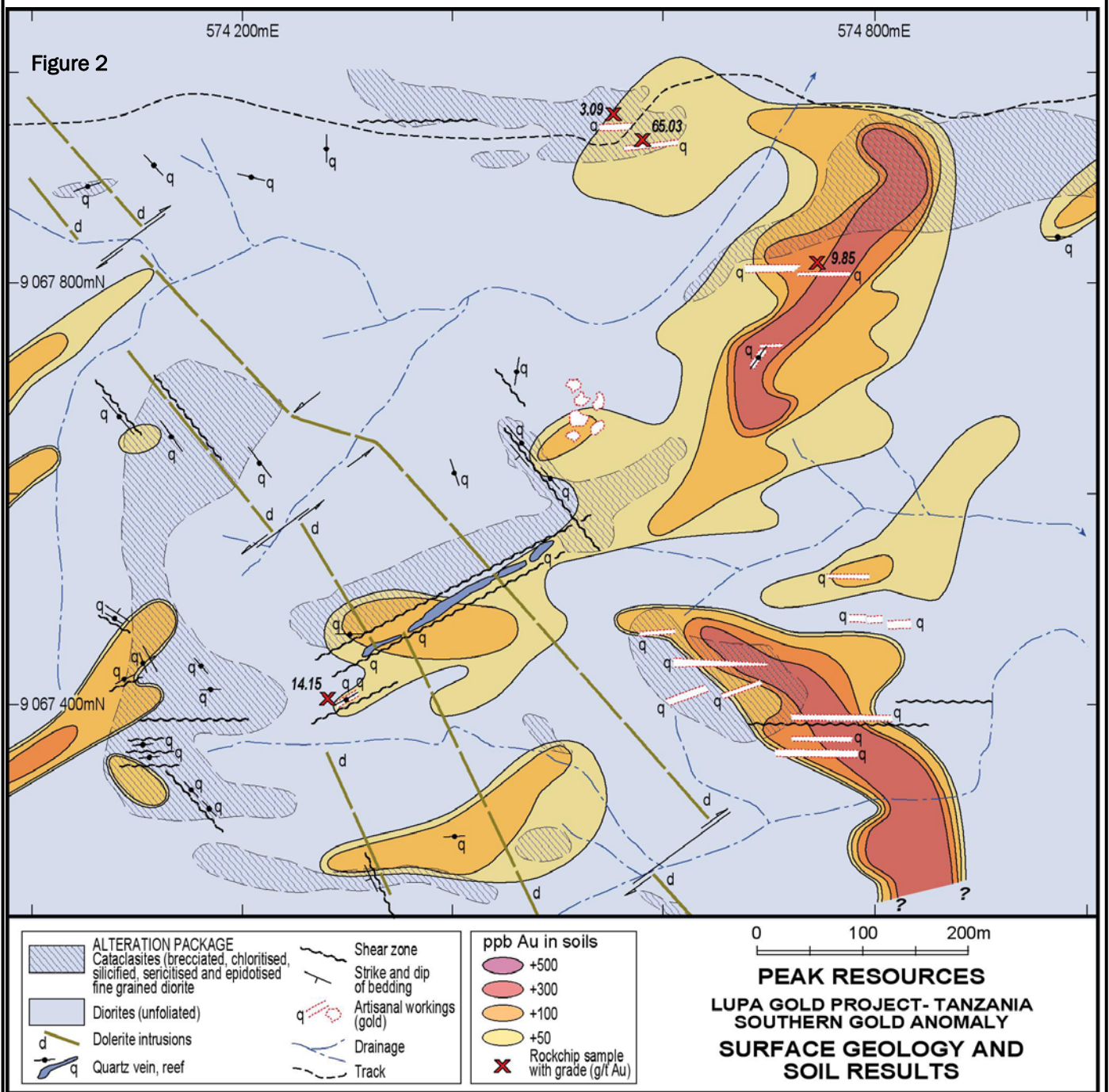


The first, is cohesive at 50ppb gold, contoured 700m x 200m with a maximum gold in soil value of 1,412ppb gold (1.41g/t). The northeast portion of this soil anomaly extends for 300m at +500ppb gold (0.50g/t). This anomaly is closely associated with a northeast trending structure.

The second extends for 400m x 100m at 50ppb gold (open to the southeast) with a maximum gold in soil result of 1,635ppb gold (1.63g/t). This second anomaly correlates well with observed structural orientations in the region, where the interplay of the dominant northwest and the secondary northeast & north trending structures are potentially creating a favourable zone allowing for mineralised fluid to flow from the corridor (NW trend) through the area and precipitate gold.

The trenching programme will run traverses across the soil anomalies for a total of approximately 2,000 metres. In association with the work further detailed mapping is to be undertaken to improve Peak's understanding of the structural geology within this region of the Lupa Gold Project.

FIGURE 2 — LUPA PROJECT GOLD IN SOILS



Igunga Project

The Igunga Project is located approximately 80km ESE of the 3.5 Moz Golden Pride Mine (Resolute Mining Limited ASX:RSG). The project comprises prospective Achaean greenstones and Banded Iron Formations (BIF) that has had little recorded systematic exploration completed to date. Previous exploration conducted over the area has shown the potential for the project to host two separate styles of mineralisation, namely:

- Shear hosted quartz veining; and
- BIF hosted gold.

Soil geochemistry conducted by previous explorers has highlighted anomalous gold in soil and identified outcropping pyritic (sulphide) BIF sequences (repeated) that subcrop over a strike length of approximately 1 kilometre before being masked by recent cover within the Igunga Tenements.

Peak completed initial soil sampling based on an approximated grid of 25m x 100 metres over the project area with this work highlighting a soil anomalism (peak of 164ppb Au) that is coincident with subcropping BIF.

The Company will now proceed to trenching over the anomaly rather than conducting an infill soil sampling programme. Trenching is to be conducted after the Lupa programme has been completed.

Ngualla Project Review

The Company completed initial field work, reconnaissance and literary reviews at the Ngualla Phosphate Project during the December Quarter designed to verify historic data. The Ngualla carbonatite is a plug like intrusive system with a surface diameter greater than 4km that has undergone successive carbonatite intrusive phases. Carbonatites are known to be rich in phosphate, Rare Earth Elements (REE) & other minerals.

Field based exploration and reconnaissance was initiated by Peak Resources at Ngualla, with exploration being focused on:

- Verifying previous exploration completed by a Canadian Non-Government Organisation (NGO).
- Carrying out sampling traverses over the carbonatite; and
- Obtaining an understanding of the size and scope of the project.

During this reconnaissance it came to light that the local villagers are undertaking ad hoc small scale mining of the sampled areas, with the practice having an unknown history, though extending over at least two generations.

PHOSPHATE MATERIAL IN OUTCROP



NGUALLA CARBONATITE VIEW FROM NW



Mining undertaken by the villagers comprise:

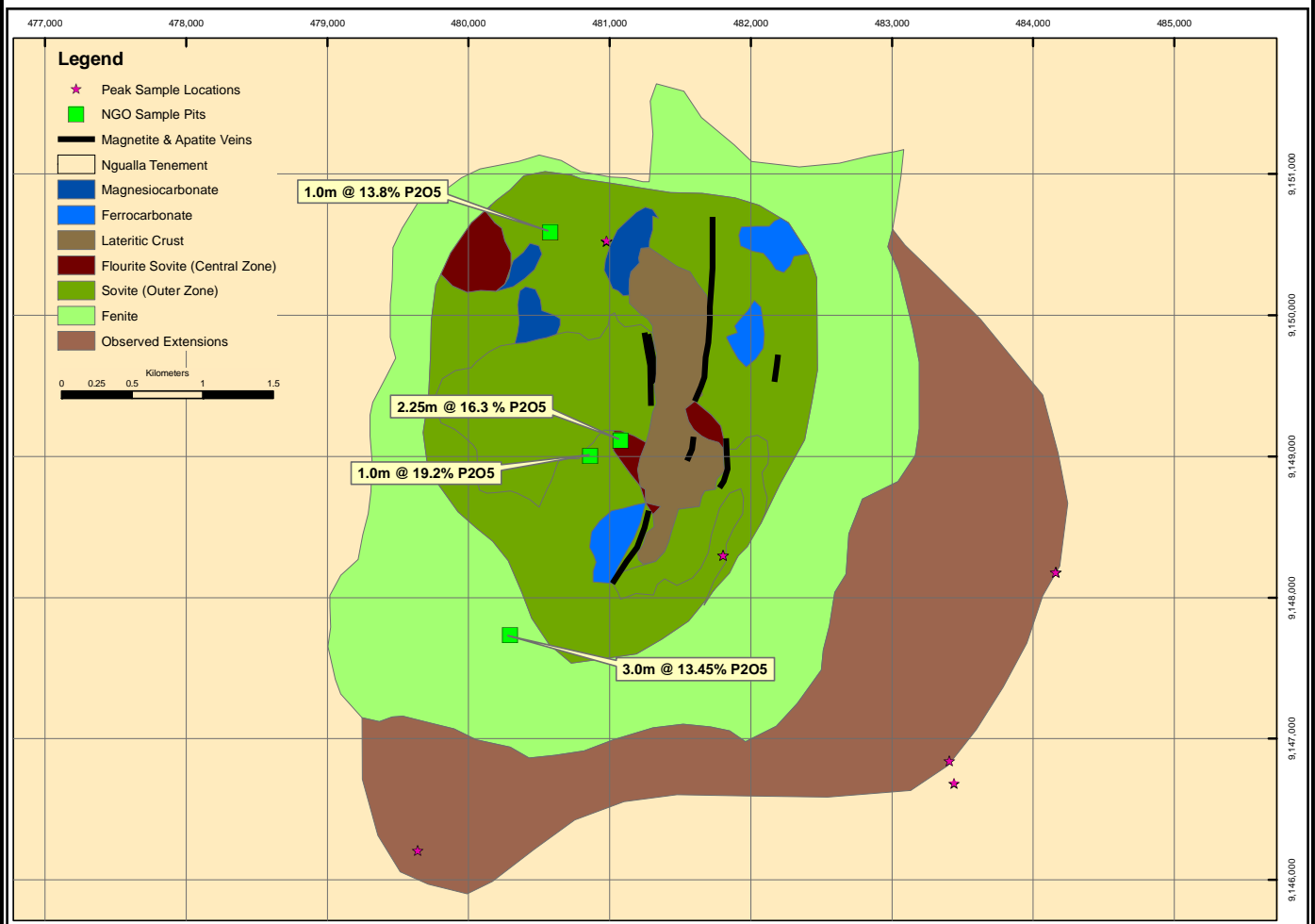
- Collecting up to 40 kg (each individual) of decomposed softer material from each of visited sample sites;
- Blending and concentrating the material (boiling); and
- Applying the concentrated material locally to enhance crop yields as well as being sold by the village to a nearby Prison Farm.

Peak has undertaken sampling in areas that have been mined by the local villagers for phosphate. Additionally, exploration completed extended the mapped footprint of the carbonatite by approximately 40%. Literary reviews have also revealed the extent of phosphate occurring in residual soils with work completed by NGO Geologists (Figure 3) highlighting:

- Four exploration pits being dug over an area of approximately 3km x 1km returning up to 20% P_2O_5 , including 1m @ 19.2%, 2.25m @ 16.3%, 3m @ 13.45% and 1 m@ 13.8% P_2O_5 in channel sampling;
- The existence of a late phase 15-20 metre wide magnetite-apatite vein that extends over several hundred metres;
- Two separate discoveries of phosphate minerals, with the primary phosphate rich zone centered on possible apatite rich carbonatites and fenites which have been discovered in dyke like zones with higher magnetic and radiometric signatures. A peak sample was returned of 39% P_2O_5

Exploration is now being planned to commence following grant of the licence.

FIGURE 3 — NGUALLA HISTORIC SOIL SAMPLE PITS



Samples collected by Peak during the initial visit have been submitted for ICP/AES analysis which will determine most elements before the assay pulps are transported to Canada for further analysis by ICP/MS for Rare Earth Elements (REE).

Ngualla Project Background

The Ngualla Carbonatite is subject to an agreement between Peak Resources and Minergy Tanzania Limited (Minergy) a Mauritian based Indian resource and investment group. The Ngualla carbonatite is located within a priority tenement application that Minergy acquired from Zari Exploration in order to pursue its uranium potential.

Under the agreement Peak has the right to earn:

- A 80% interest in phosphate occurrences within the tenement;
- A 20% contributory interest in uranium occurrences identified by Peak; and
- A 60% interest in other forms of mineralisation also identified by Peak.

Peak has granted a 10% interest in Peak's interest in the project to Zari Exploration for assistance in facilitating the Minergy transaction.

Peak Hill West Project

During the previous quarter, Peak Resources completed a data review over its Peak Hill West Tenure. From this work, eleven prospective targets were identified that had minimal exploration completed. These targets were subsequently tested by broad spaced soil geochemistry and reconnaissance that was completed during the December Quarter.

Of the eleven tested areas, three of the areas have reported encouraging results with up to 1.1 g/t Au reported in soils from favourable geological settings, further infill sampling is now being planned over these areas prior to drilling.

During the conduct of the filed work, the manganese potential of the area was highlighted and a moderate sized manganese occurrence that had previously been mined was identified at MAF Hill.

MAF Hill Manganese – Peak Hill West

Field reconnaissance was carried out over a historically mined manganese occurrence at Peak Hill West. Historical research has subsequently indicated that manganese was mined sporadically between 1922 and 1960 with a recorded production of 110,000 tonnes with grades of approximately 68.5% Mn from an ore concentrate. Mining was conducted by predominantly scraping the surface of a small hill (Figure 4A) that has a surface expression of approximately 700 x 300 metres with a minimum exposed depth of at least 5 to 8 metres. Mining was short lived and no evidence of drilling has been found to indicate further work was conducted over the prospect.

Peak conducted rock chip sampling over the area to gain a greater understanding of the potential grade of the occurrence prior to drilling. Assays are still pending.

Ashburton Base Metal Project

(E08/1239—Mt Vernon & E08/1240- Pingandy) - Peak Resources 100% (Metminco earning 40%)

The Ashburton project is located 70 km south of the township of Paraburdoo and 300km NNW of Meekatharra, Western Australia. The Project consists of two granted Exploration Licences E08/1239 (Mt Vernon) & E08/1240 (Pingandy) covering a total combined area of 412km². Metminco Limited is earning a 40% interest by expending \$1 million over two years.

An 11 hole RC Drilling programme was completed during the December Quarter by farm in partner, Metminco and managed by Peak at the Mt Vernon Prospect. Drilling was designed to test underneath high level surface anomalism within a large (+5km regional structural trap). Drilling returned encouraging results with broad 65m anomalous intersections being returned,. A peak result of 5m @ 1.4% Pb from 175 metres was returned from MVRC001. Significant results are tabled below:

Table 1 – Mt Vernon RC Drilling Results

Hole	East	North	Dip/Azi m	From	To	Interval	Cu	Mn	Pb	Zn	REMARKS
MVRC001	584272	7357569	-60/270	170	175	5	120	1886	14017	108	
MVRC002	584469	7357601	-60/270								NSA
MVRC003	584672	7357600	-60/270								NSA
MVRC004	584206	7357107	-60/310	15	80	65	221	671	1704	216	Including 5m @ 0.4% Pb from 15 metres
MVRC005	584190	7357118	-60/310	0	65	65	95	535	991	186	Including 5m @ 0.2% Pb from 30 metres
MVRC006	584679	7356905	-60/290								NSA
MVRC007	584119	7357157	-60/310	0	45	45	115	865	1369	413	
MVRC008	584068	7357222	-60/310								NSA
MVRC009	583999	7357280	-60/310								NSA
MVRC010	583855	7357406	-60/310								NSA
MVRC011	584020	7356900	-60/290	5	65	60	159	415	1478	210	Including 5m @ 0.5% Pb from 45 metres

Notes on Table

All Co-ordinates are in GDA94 Zone 50

All Assay results are in ppm

While extremely encouraging for a first pass drill programme an initial review by Peak has led us to consider that the programme was tightly focussed for early stage exploration. While noting this the results support the overall direction of exploration and potential of the project to generate a large mineralised system. Further work is needed to better define RC drilling targets.

Corporate

In order to ensure the availability of cash to fund ongoing exploration programmes the Board of Directors has undertaken a review of all aspects of the Company's operations during the quarter. The review while focusing on reducing where possible operational costs also looked at the direction of the Company in the near term. The Directors have unanimously supported a plan to which will result in:

- the Board of Directors being reduced from five to three members;
- The Executive Technical Director to take up a new role as a technical consultant; and
- implementation of a general cost reduction programme including a reduction in employee/contractor costs.

Changes being implemented primarily target non field exploration costs and reflect an increasing focus on activities in Tanzanian following our early success in 2008. Australian based projects are now largely subject to either farm out or joint venture arrangements.

Peak Resources Chairman, Paul Price, has retired effective of 31 December 2008 and the Technical Director, Kell Nielsen, is scheduled to retire as an executive director on 31 January 2009 to take up a position as a geological consultant to the Company. Peak's Australian based Project Geologist will also leave the Company at the end of January. While taking on the role of Executive Chairman the Company's managing director will accept a reduction in remuneration.

Tanzanian operations will continue to be supported by a full time geologist and part time GIS geologist provided by the Company's Tanzanian operators, Zari Exploration Limited. In Australia, Peak Resources will make greater use of contractors for its field activities as well as draw on an additional input from non executive directors Rodney Foster and Alastair Hunter on geological and field exploration matters.

The restructure is to ensure that Peak Resources is able to optimise funding to exploration with an aggressive programme in Tanzania.

Cash on hand at the end of the quarter was \$1.21m

The information in this report is based on information compiled by Mr. Kell Nielsen, a Member of the Australian Institute of Mining and Metallurgy. Mr. Nielsen is a full-time employee of Peak Resources Limited and 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 defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Nielsen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.