

**REPORT FOR THE QUARTER ENDED 30 SEPTEMBER 2010**

**Highlights**

- Early stage exploration program at the Doulnia Gold Project continues to provide encouraging results.
- Completes high resolution aeromagnetic structural interpretation.
- Completes hyperspectral mineral studies fluid flow interpretation.
- Integrates multiple exploration datasets to generate new drill targets.

**Corporate**

No significant board or corporate activities during the quarter.

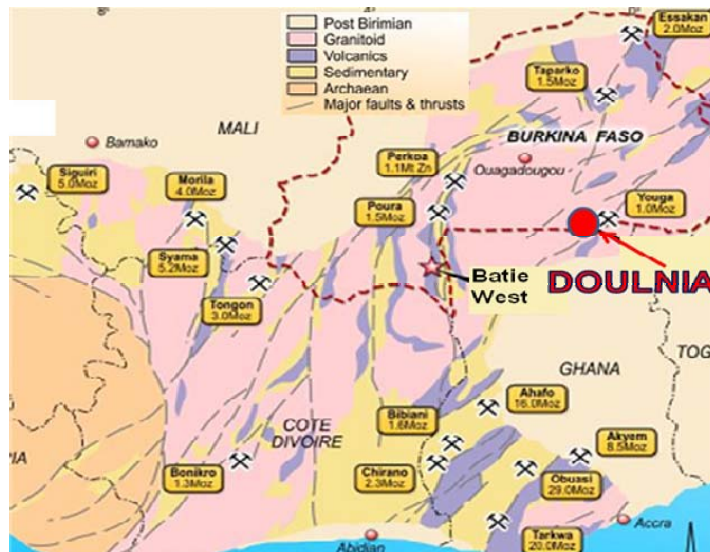
**Cash Balance**

Vital had a cash balance of \$2 118 000 at 30 September 2010. During the quarter Vital received \$425 000 to complete the Mt Mulgine project sale transaction and \$30 000 to complete the Mt Alexander sale transaction. Vital has sufficient working capital to meet all of its obligations and budgeted expenditure into the second quarter of 2011.

**Operations**

**Doulnia, Gold Project, Burkina Faso**

Vital Metals is focussed on gold exploration within the Doulnia Gold Project area, in southern Burkina Faso. Doulnia is located among the NE trending West African Greenstone belts which host a number of multi-million ounce gold deposits (Figure 1).



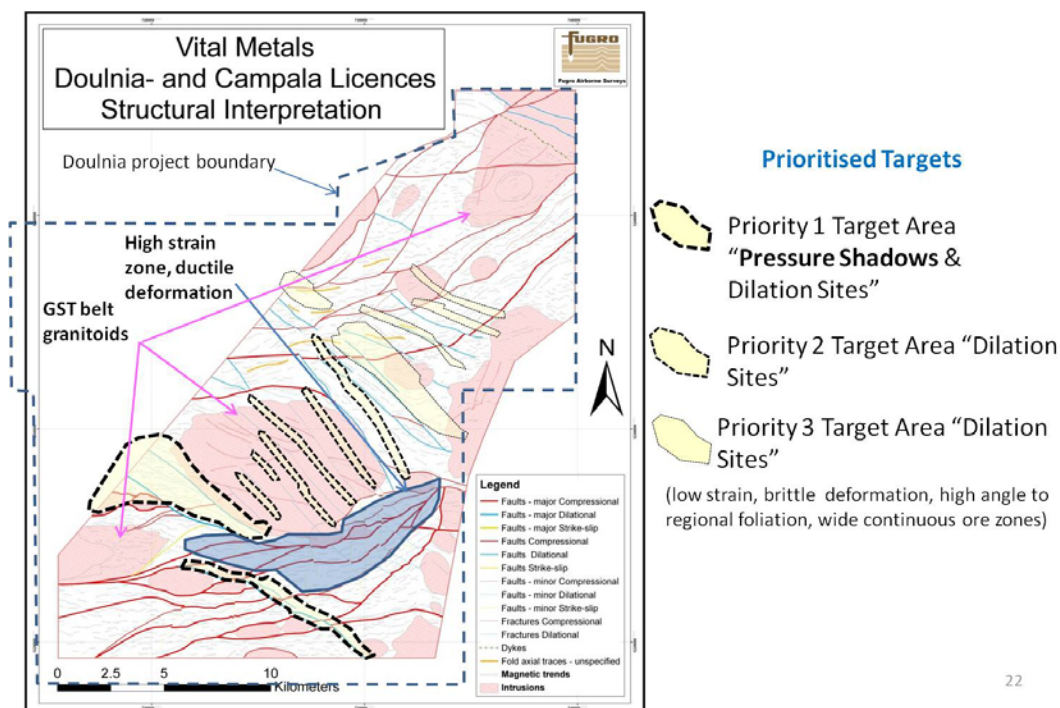
**Figure 1. Location of Doulnia Gold Project, in southern Burkina Faso and other significant West African gold deposits**

During the previous quarter Vital completed its 24 RC hole, Phase 1 Drill Programme at Doulunia, largely testing active, to recently active, artisanal workings. Whilst these results confirm the presence of shallow, wide, high grade gold intersections at Doulunia, Vital believes the application of modern exploration science is necessary for the cost-effective discovery of a significant gold resource.

To this end Vital has used the September quarter to acquire, interpret and integrate a wide range of exploration datasets, with the objective of defining prioritised Phase 2 drill targets. The understanding of the controls on mineralisation at Doulunia improves in concert with Vital’s continually evolving exploration datasets. As such, the definitive list of Phase 2 drill targets and the precise Phase 2 drill programme will remain subject to modification.

Significant exploration advances completed by Vital during the September quarter are detailed below.

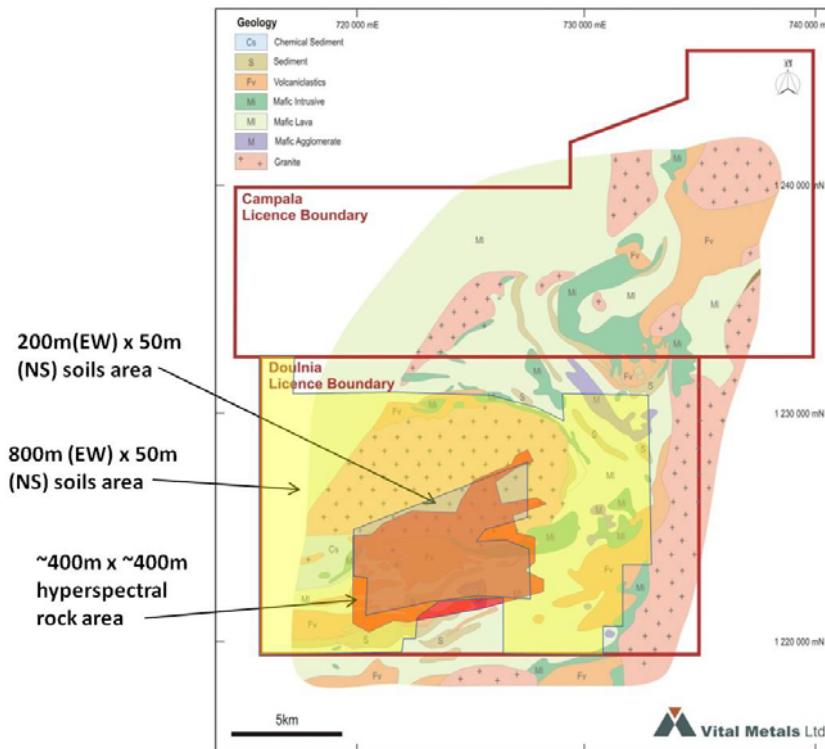
1. Independent interpretation of over 4000 line kilometres of high density (100m line spaced) aeromagnetic and radiometric data. Fugro Airborne Services completed an independent structural and lithological interpretation of the data which confirmed and improved Vital’s previous structural interpretation. Fugro identified a number of new conceptual gold target domains associated with interpreted pressure shadows and dilation sites (Figure 2). Fugro’s structural interpretation identified that Doulunia is favourably located at the junction of three major gold bearing structures; the southern margin of the Tenkedogo Shear Zone, the Markoye Shear Zone and a major splay from the Bole Shear Zone.



**Figure 2. Fugro’s structural interpretation and prioritised conceptual gold target areas**

2. Vital had three soil sampling teams operational over the wet season and at the end of September had collected nearly 5000 samples. At the Kollo Prospect, Phase 1 soil sampling on a 200 x 50m grid (Figure 3.) and simultaneous rock-chip sampling programmes have been completed. Phase 2 soil sampling on

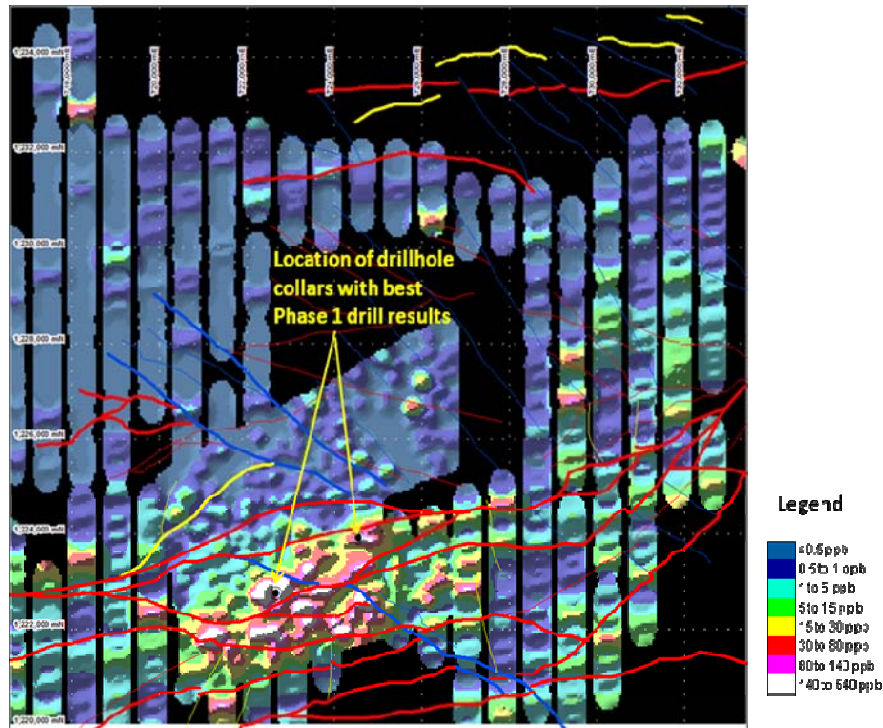
an 800 x 50m grid has been completed over the majority of the Doulunia Exploration Licence (Figure 3) and will be extended into the Campala Exploration Licence in the next quarter.



**Figure 3. Location of soil and rock-chip sampling areas completed as of September 30, 2010.**

Assay results for more than 4000 soil and 55 rock-chip samples have been received, cross-checked, processed and are presented below (Figure 4). Contiguous gold anomalism (>25ppb) has been identified across the entire 15km ENE strike extent of the survey area, defining an area of approximately 22km<sup>2</sup> centred on the Kollo Prospect. Highest gold-in-soil (>75ppb) anomalism is generally coincident with ENE trending, foliation-parallel, structures.

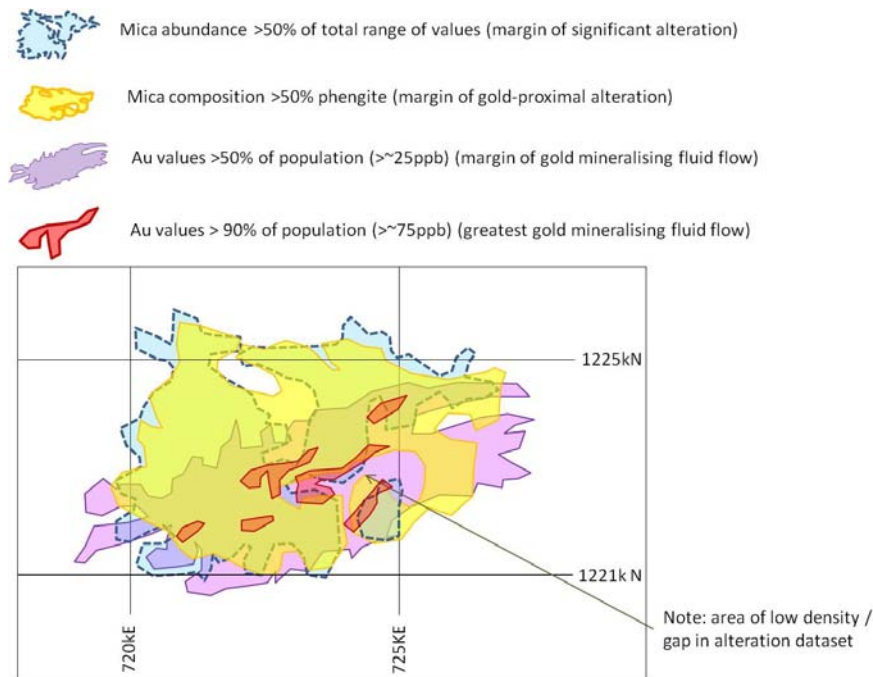
Vital's Phase 1 Drill Programme completed in the previous quarter, identified two distinct areas of shallow, wide, high grade gold mineralisation at Kollo. These best drill intersections are enveloped by a contiguous, >75ppb gold-in soil anomalies which remain largely untested by drilling. Staged soil and rock chip sampling programmes will continue at Doulunia for the foreseeable future. Sampling rates are exceeding those set out in the 2010 Doulunia work programme.



**Figure 4. Doulunia soil sampling results, structure and location of best drill intersections from Phase 1 Drill Programme (for location within tenements refer to Figure 3)**

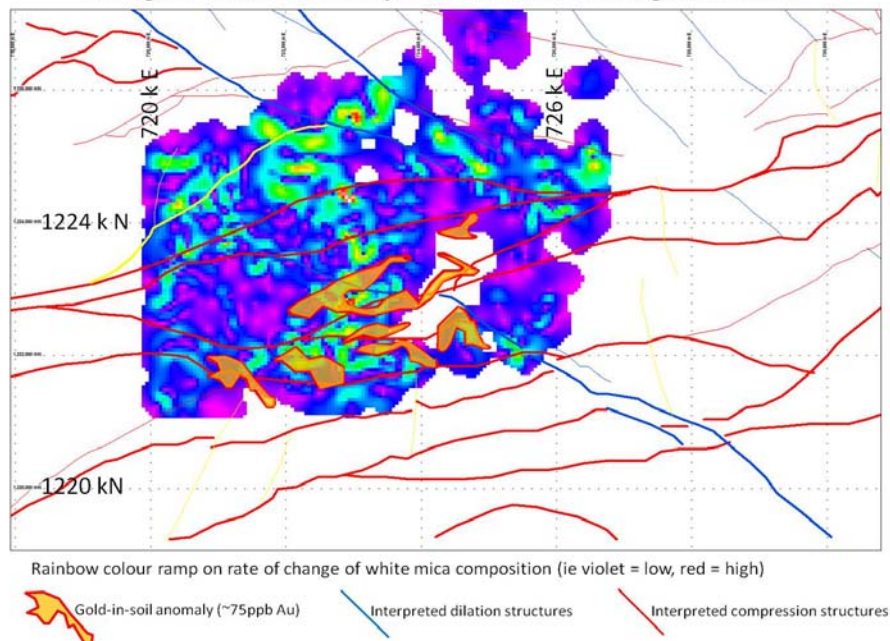
3. Vital collected a suite of around 550 surface rock-chip samples from the Kollo Prospect area for hyperspectral analysis (Figure 3) using CSIRO's automated HyLogger. Hyperspectral analysis has been shown to effectively map regional-to-local alteration haloes around large gold deposits and significantly increases the understanding of critical ore-forming fluid flow. Vital has engaged leading American geochemical consultant Dr Sue Driberg of Geochemical Services Pty Ltd, to oversee the processing, interpretation and integration of the hyperspectral and rock chemistry data with Vital's other rapidly evolving datasets.

This exercise identified an area of strong phengite (Fe-rich mica) alteration enveloping the contiguous 25ppb Au-in-soil and discrete 75ppb Au-in-soil anomalies (Figure 5). Intense phengite alteration is commonly located at, or close to, the core of well mineralised mesothermal gold deposits. It is interpreted that identified mineralisation at Kollo is centrally located within a large alteration cell, similar to other well studied, multi-million ounce mesothermal gold deposits.



**Figure 5. Kollo Prospect gold-in soil anomalies and white mica alteration mapping (for location within tenements refer to Figure 3)**

Areas of most rapid change in mica composition are often interpreted to represent the mixing of disparate fluids within (gold-mineralisation) controlling structures. At Kollo, mica composition rapidly changes within narrow, elongate zones which intersect the dominant ENE structures, at a high angle (Figure 6). These intersection zones envelope the majority of strong gold-in-soil anomalies and one of the areas of shallow, wide, high grade gold intersections from the Phase 1 drill programme. These intersection zones are interpreted to be highly prospective for gold mineralisation and will likely be the focus of exploration activities for the immediate future.



**Figure 6. Kollo Prospect interpreted elements of gold-mineralising fluid flow architecture (for location within tenements refer to Figure 3.)**

West Africa in general, and Burkina Faso in particular, are currently experiencing a strong surge in gold exploration activities and suitable drilling rigs are in short supply. Vital is keen to commence its Phase 2 Drill programme as soon as is practically possible.

### **Watershed Tungsten Project, Queensland**

During the quarter Vital has updated the Watershed financial model using CRU's predicted Tungsten prices extrapolated to the end of mine life, current USD:AUD exchange rates and more recent estimates of mining costs. Using a discount rate of 12.5% and these input parameters, Watershed's predicted internal rate of return is close to, but not yet at, Vital's required benchmark of 15%. Vital will continue to monitor fluctuations in market conditions and update the financial model, to take advantage of improved economics at the earliest opportunity.

Work continued on the investigation and compliance issues related to progression of the Watershed EIS, including the monitoring of groundwater flows.

The camp at Watershed remains on a care and maintenance basis.

*The information in this report that relates to exploration results is based on information compiled by Dr Howard Carr, who is a Member of the Australasian Institute of Geoscientists. Dr Carr is an employee of Vital Metals Ltd*

*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". Dr Carr consents to the inclusion in the report of the matters based on his information in the form and context in which it appears*

For further details, refer to the company's website: [www.vitalmetals.com.au](http://www.vitalmetals.com.au)

Or Contact:

Dr Howard Carr  
CEO & MD

Vital Metals Ltd  
Suite 44c Cottesloe Central, Peppermint Grove, WA  
PO Box 8243, Subiaco East WA 6008  
Telephone: +61 89436 9644  
Email: [vital@vitalmetals.com.au](mailto:vital@vitalmetals.com.au)  
Website: [www.vitalmetals.com.au](http://www.vitalmetals.com.au)