



## Vital Metals confirms new gold targets Zinc opportunities develop in Burkina Faso

### HIGHLIGHTS

- Auger drilling has defined new gold targets for follow up including:
  - **A 4km long by 1.5 km wide north-south corridor has been defined at Tangasso with peak auger grades of up to 3.5 g/t Au**
  - **A 4km long west-north-west trending corridor has been defined north east of Bounou South including peak auger grades of 1.1 g/t Au**
- Zinc rich VMS style mineralisation intersected in exploration drilling at Kollo South and Kollo Hill. Mineralisation style confirms it is part of the Loubel zinc VMS prospect that has a strike extent of over 7km
- Loubel is part of a regional zinc VMS camp that wraps around the Tiebele dome. Collectively the zinc prospects, including the advanced Nabenia prospect which has ore grade intercepts have a strike of over 30km around the Tiebele dome
- Geological interpretation and planning continues for the next round of exploration activities post the wet season
- Drilling results are outstanding from eight RC drill holes completed at Nabenia and Loubel zinc prospects

Gold explorer Vital Metals Limited (ASX:VML) is pleased to report results at its 100%-owned Kollo Gold Project in Burkina Faso, West Africa.

Vital's Managing Director Mr Mark Strizek said:

“Our regional auger program has identified two high value targets to hit once the wet season ends. In addition we see some exciting opportunities to add value from the base metal potential in Burkina Faso.”

“Historical exploration has defined multiple Zn-Pb-Cu anomalies over 30 km of lightly explored contact around the Tiebele Dome. Previous drilling only tested depleted oxide zone or shallow mineralisation. The presence of gold mineralisation occurring with or in close proximity to zinc mineralisation has the potential to add further value to any discovery”.

## Tangassogo

Auger drilling identified a 4km long by 1.5 km wide north south trending corridor at Tangassogo with peak auger grades of up to 3.5g/t Au. This north-south trending corridor is believed to be a significant structural feature and is postulated to be one of the controlling structures responsible for the ENE trending Kollo mineralization. Our auger drilling was able to sample the saprolite confirming the anomaly is primary and requires follow up.

## Boungou South

A 4km west-northwest trending auger anomaly with peak auger grades of up to 1.1g/t Au is located to the north-east of the Boungou South gold prospect where RC drilling reported shallow gold mineralisation<sup>1</sup>:

- BOURC004: 8m @ 9.3 g/t Au from 56m
- BOURC018: 9m @ 3.6 g/t Au from 39m
- BOURC002: 20m @ 1.5 g/t Au from 16m
- BOURC019: 5m @ 3.2 g/t Au from 22m

This prospective corridor is associated with a structural feature interpreted from aeromagnetic data and infill auger drilling is planned.

## Kollo South

In total 723 metres of diamond drilling was completed at Kollo South with a truck mounted diamond drill rig (two diamond holes and two diamond tails). Core drilling has intersected potential ore grade zinc mineralisation with sphalerite mineralisation noted in most of the drill core recovered. The sphalerite is honey coloured and has been observed as disseminated, stringer and occasionally massive style intervals.

KDD008 was extended from 167m to 387m (which is the deepest hole drilled at Kollo South) to test for gold mineralisation around 180m below high grade gold intercepts in KRC303. The drill-hole hit the target structure with the core intersecting a number of intensely sheared, altered, highly silicified intervals with abundant sulphides, with zinc mineralisation being dominant.

Exploration drilling at Kollo South has intersected high value gold with previous intersections of more than 100 gram metres traced over 100m strike and depth<sup>2</sup>:

- KRC353: 13m at 9.0 g/t Au from 174 including 2m at 46.2 g/t Au
- KRC352: 17m at 6.0 g/t Au from 114m including 2m at 30.5 g/t Au

---

<sup>1</sup> Results reported 29/06/2017 - The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous announcements.

<sup>2</sup> Results reported 22/05/2017 and 6/06/2017 - The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous announcements.

- KRC303: 17m @ 3.34 g/t Au from 145m

The latest drilling has shown that the geometry of the gold mineralisation is complex and the interplay with zinc mineralised is not fully understood. Further drilling will be required to map out both mineralised systems.

Results from six RC holes drilled to test for a repetition of the sheared marker unit on the western side of a north-south trending fault returned the following assay result:

- KRC386: 4m @ 3.7 g/t Au from 40m
- KRC388: 2m @ 6.6 g/t Au from 70m
- KRC382: 2m @ 2.3 g/t Au from 22m
- KRC381: 2m @ 1.5 g/t Au from 18m

A listing of drill results along with plans and sections are contained in this announcement.

### **Kollo Hill**

The company drilled 19 holes for 1,326 metres on four drill fences at Kollo Hill using a track mounted RC rig. Gold assays of RC drill chips reported a number of anomalous gold results from highly weathered and oxidised material:

- KHRC011: 6m @ 0.8 g/t Au from 44m
- KHRC013: 2m @ 1.0 g/t Au from 2m
- KHRC013: 2m @ 0.9 g/t Au from 14m
- KHRC011: 4m @ 0.4 g/t Au from 28m

Analysis of RC pulps using a semi-quantitative portable XRF<sup>3</sup> unit has reported zinc mineralisation present in broad anomalous zones (both depleted oxide zones as well as fresh sulphide) over a strike length of 450m. The pulps have been sent for base metal analysis. The results of this first pass program drilling program are being interpreted and will be used to determine the next steps.

### **Zinc VMS Camp**

Our drilling at Kollo has demonstrated that high grade gold mineralisation sits within a large zinc VMS mineralised trend (Loubel). This in turn is part of a large zinc VMS camp which wraps around the Tiebele dome.

Historical exploration work has defined multiple Zn-Pb-Cu anomalies over 30 km of lightly explored contact. Previous drill holes only tested depleted oxide zone or shallow

---

<sup>3</sup> A portable XRF Niton unit was used to analyse the pulps. Assay by four acid digestion and ICP-OES is planned.

mineralisation and there are a number of highly prospective zinc VMS style prospects with significant potential to discover a large zinc deposit as these have either not been drill tested or where there is drilling mineralised zones are not closed off.

### **Nabenia Zinc Prospect**

This is the most advanced zinc prospect with a 150 x 800 m multi-element soil geochemical anomaly. Historic RC and DD drilling<sup>4</sup> includes:

- 19.1m @ 2.7% Zn from 44m (inc 7.65m @ 4.9% Zn)
- 10m @ 2.7% Zn from 30m
- 7m @ 2.1% Zn from 59m (inc 2m @ 6.5% Zn)

Three RC holes for 395 metres were completed at Nabenia and the assay results are outstanding.

### **Loubel Zinc Prospects**

Located on the southern side of the Tiebele Dome and includes a large 100ppm Zn anomaly up to 7km long and 1.5km wide. Historical drilling includes:

- 5m @ 3.8% Zn from 66m
- 21m @ 1.7% Zn from 97m

Five RC holes for 998 metres were drilled at Loubel with assay results outstanding at time of writing.

### **Regional**

38 holes for 1,145 metres of shallow RAB/RC drilling completed at Geunon to test high grade auger of 16 g/t Au. Only sub-economic mineralisation was intersected; however a number of holes intersected pegmatites and these will be assessed for their lithium potential. 21 holes for 1,160 metres of RAB/RC drilling completed at Tangassago to acquire regolith and stratigraphic data to calibrate our structural model.

### **Airborne geophysics program**

2,688 line km Heli-mag survey completed on Zeko permit to acquire magnetic and radiometric data. This has been processed and incorporated into structural model used to fast drill target delineation

---

<sup>4</sup> Results reported previously 21/04/2008. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous announcements.

## Next Steps

Work continues on the analysis of assay pulps using our portable XRF unit to build a multi-element database. This will be used to assist geological interpretation and planning the next round of exploration activities in Burkina Faso post the wet season.

### Contact:

Mark Strizek  
Managing Director  
Vital Metals Ltd  
Phone: +61 8 9388 7742  
Email: <mailto:vital@vitalmetals.com.au>

### Media Inquiries:

Nathan Ryan  
Investor Relations  
NWR Communications  
Phone: +61 420 582 887  
Email: [nathan.ryan@nwrcommunications.com.au](mailto:nathan.ryan@nwrcommunications.com.au)

## Competent Person's Statement

Information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Mark Strizek, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Strizek is a full time employee of the Company. Mr Strizek has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Strizek consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

### Forward looking statements

Certain written statements contained or incorporated by reference in this new release, including information as to the future financial or operating performance of the Company and its projects, constitute forward-looking statements. All statements, other than statements of historical fact, are forward-looking statements. The words "believe", "expect", "anticipate", "contemplate", "target", "plan", "intend", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward-looking statements.

Forward-looking statements include, among other things, statements regarding targets, estimates and assumptions in respect of tungsten, gold or other metal production and prices, operating costs and results, capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates. Forward-looking statements are necessarily based upon a number of estimates and assumptions related to future business, economic, market, political, social and other conditions that, while considered reasonable by the Company, are inherently subject to significant uncertainties and contingencies. Many known and unknown factors could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Such factors include, but are not limited to: competition; mineral prices; ability to meet additional funding requirements; exploration, development and operating risks; uninsurable risks; uncertainties inherent in ore reserve and resource estimates; dependence on third party smelting facilities; factors associated with foreign operations and related regulatory risks; environmental regulation and liability; currency risks; effects of inflation on results of operations; factors relating to title to properties; native title and aboriginal heritage issues; dependence on key personnel; and share price volatility and also include unanticipated and unusual events, many of which are beyond the Company's ability to control or predict.

For further information, please see the Company's most recent annual financial statement, a copy of which can be obtained from the Company on request or at the Company's website: [www.vitalmetals.com.au](http://www.vitalmetals.com.au). The Company disclaims any intent or obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. All forward-looking statements made in this new release are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, not to put undue reliance on such statements.

Figure 1: Project Location Plan

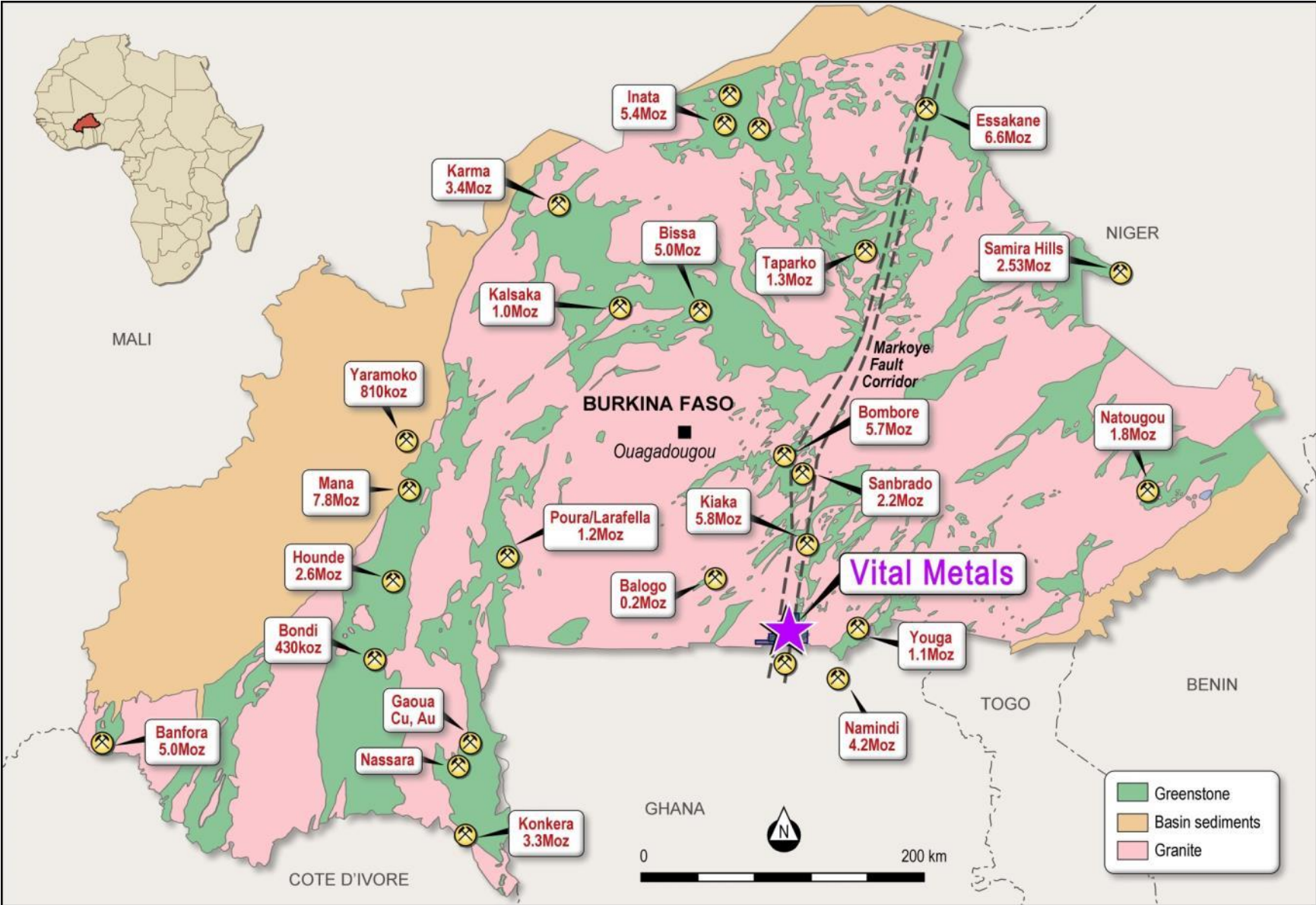




Figure 2: Plan showing gold and zinc prospects

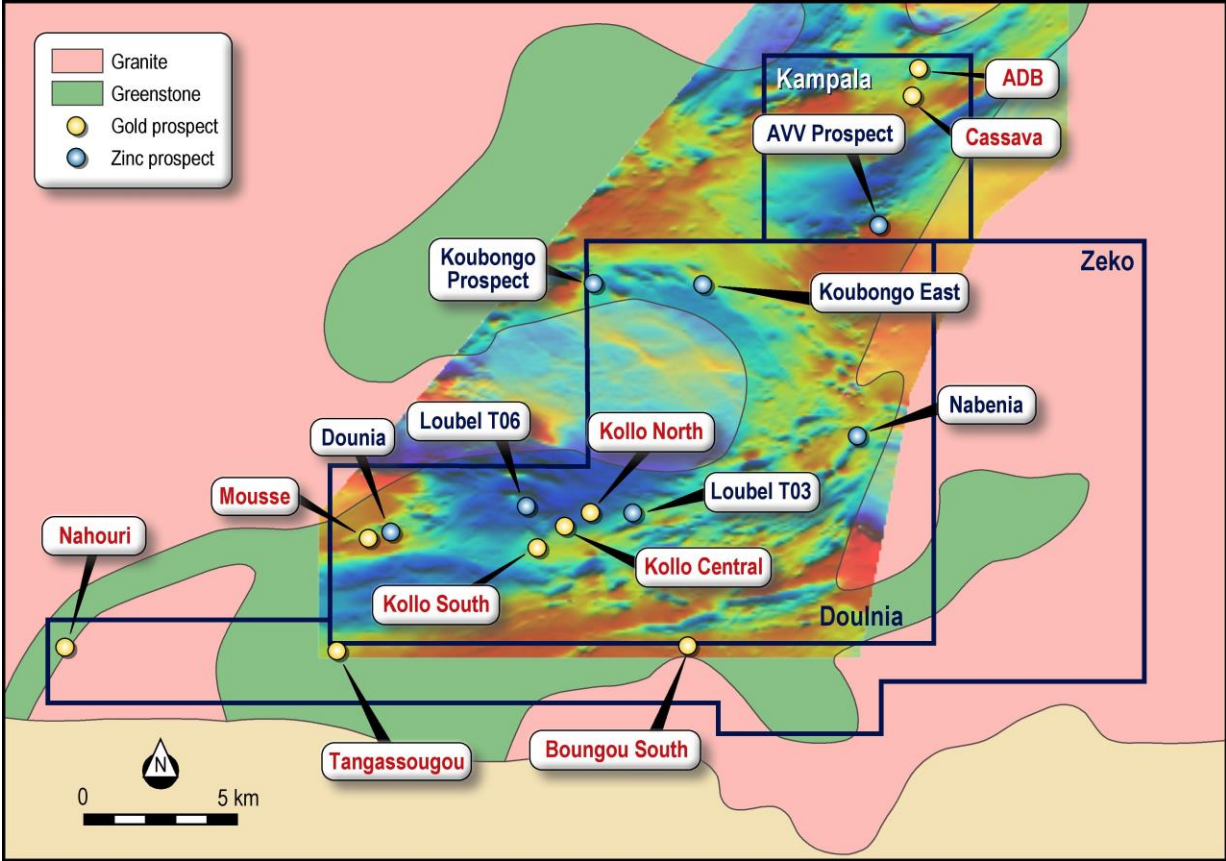


Figure 3: Plan showing drilling and interpreted targets

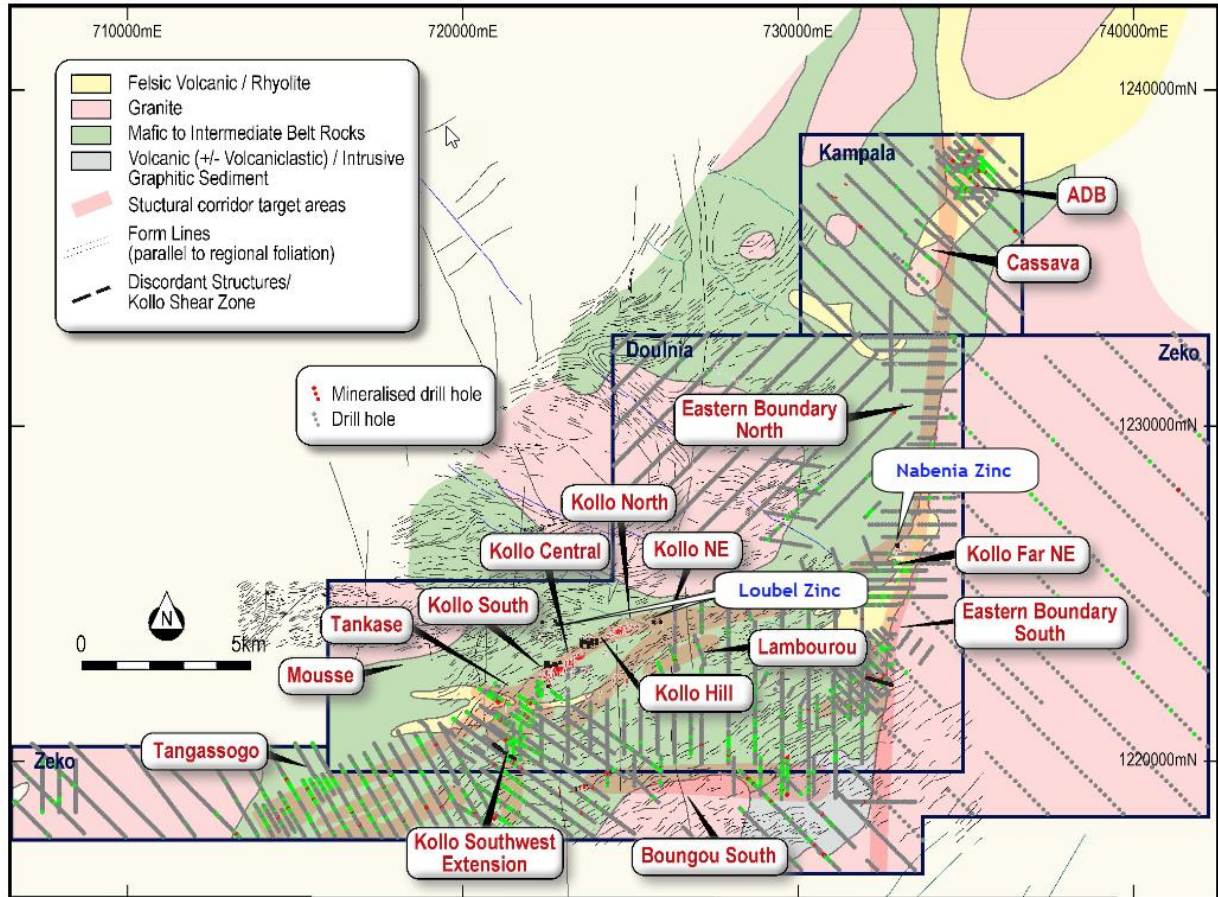
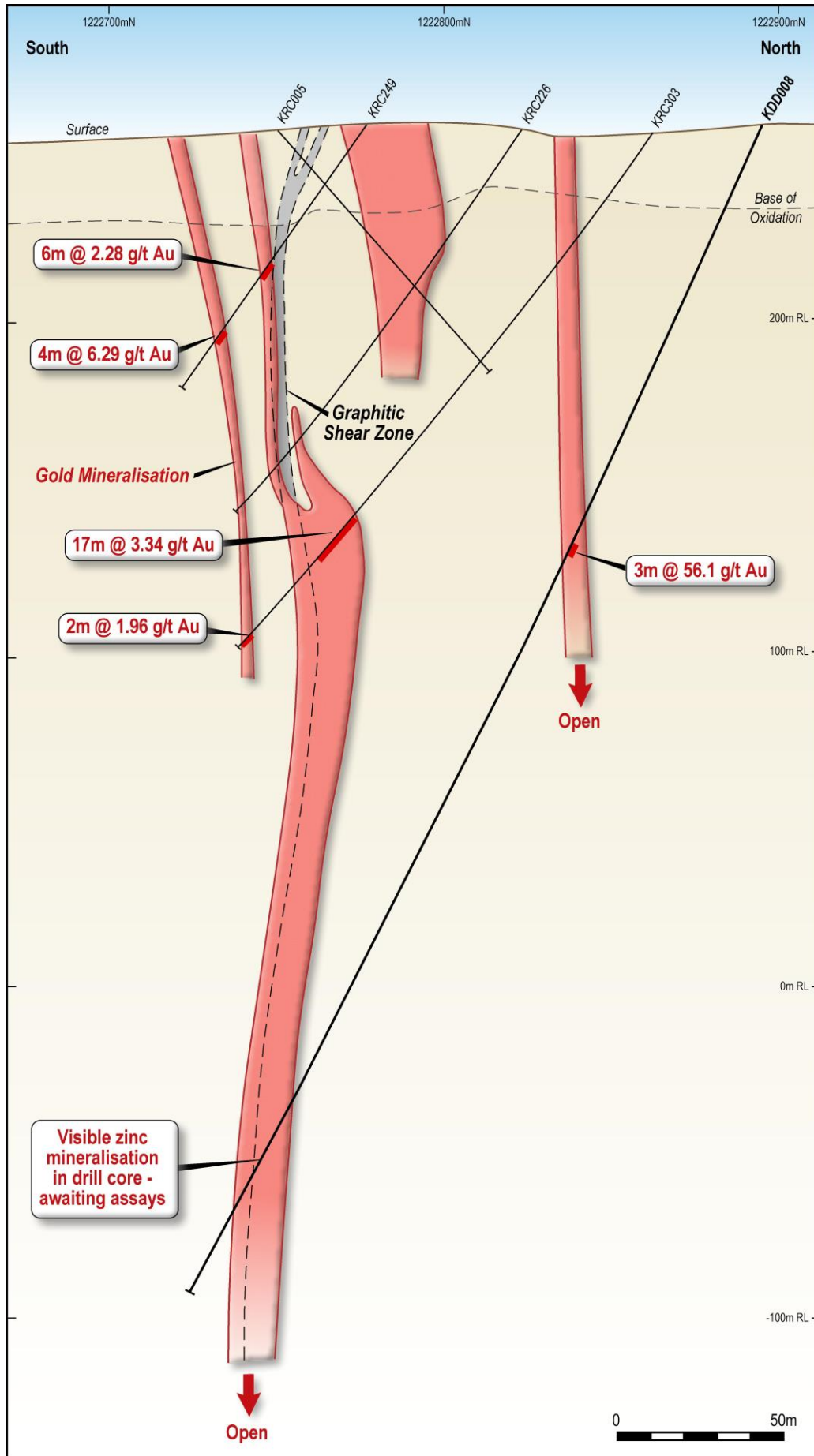




Figure 4: Cross section showing KDD008



**Table 1. Significant Drill Intersections**

Hole ID	From	To	Interval	Au g/t	Target
KRC381	18.0	20.0	2.0	1.50	KSW
KRC382	22.0	24.0	2.0	2.29	KSW
KRC382	38.0	40.0	2.0	0.57	KSW
KRC384	6.0	8.0	2.0	0.41	KSW
KRC386	40.0	44.0	4.0	3.67	KSW
KRC388	70.0	72.0	2.0	6.56	KSW
KRC388	78.0	82.0	4.0	0.75	KSW
KRC388	100.0	101.0	1.0	0.82	KSW
KRC388	137.0	138.0	1.0	3.77	KSW
KDD011	66.0	67.0	1.0	0.81	KS
KDD011	146.0	147.0	1.0	0.72	KS
KDD011	153.0	153.7	0.7	1.01	KS
KDD011	193.0	194.0	1.0	0.38	KS
KDD011	199.0	204.0	5.0	0.59	KS
KDD011	227.0	228.0	1.0	2.53	KS
KDD011	236.0	237.0	1.0	0.62	KS
KHRC004	50.0	52.0	2.0	0.37	KH
KHRC007	10.0	12.0	2.0	0.47	KH
KHRC007	22.0	24.0	2.0	0.46	KH
KHRC011	28.0	32.0	4.0	0.39	KH
KHRC011	44.0	50.0	6.0	0.83	KH
KHRC013	2.0	4.0	2.0	0.97	KH
KHRC013	14.0	16.0	2.0	0.94	KH
KHRC014	34.0	36.0	2.0	0.50	KH
KHRC016	26.0	28.0	2.0	0.49	KH
KHRC018	20.0	22.0	2.0	0.38	KH

- Sampling is done over 1m intervals within mineralised areas or a 2m composite sample is taken where drilling is taking place within first pass areas.
- Composite intervals selected using a 0.4 g/t Au cut-off, 3m max included waste and no top cut
- Gold assaying was completed at ALS, BIGS, SGS and ACTLABS laboratories in Ouagadougou using 50g fire assay and an atomic absorption spectrometer (AAS) finish

**Table 2. Drill Collars**

Hole ID	Easting	Northing	RL	Az	Dip	EOH	Target
BOURC001	727,575	1,219,636	236	360	-50	68	BOU
GRC-17-009	732,781	1,222,279	253	120	-50	30.0	GUE
GRC-17-010	732,762	1,222,285	266	120	-50	30.0	GUE
GRC-17-011	732,743	1,222,290	271	120	-50	30.0	GUE
GRC-17-012	732,726	1,222,294	286	120	-50	30.0	GUE
GRC-17-013	732,707	1,222,300	251	120	-50	30.0	GUE
GRC-17-014	732,690	1,222,306	249	120	-50	30.0	GUE
GRC-17-015	732,669	1,222,311	250	120	-50	30.0	GUE
GRC-17-016	732,658	1,222,315	256	120	-50	30.0	GUE
GRC-17-017	732,635	1,222,322	253	120	-50	30.0	GUE
GRC-17-018	732,619	1,222,326	255	120	-50	30.0	GUE
GRC-17-019	732,599	1,222,331	256	120	-50	30.0	GUE
GRC-17-020	732,581	1,222,338	257	120	-50	30.0	GUE
GRC-17-021	732,562	1,222,344	253	120	-50	30.0	GUE
GRC-17-022	732,526	1,222,350	253	120	-50	30.0	GUE
GRC-17-023	732,522	1,222,346	251	120	-50	30.0	GUE
GRC-17-024	732,508	1,222,350	256	120	-50	30.0	GUE
GRC-17-025	732,494	1,222,354	254	120	-50	30.0	GUE
GRC-17-026	732,472	1,222,369	261	120	-50	30.0	GUE
GRC-17-027	732,454	1,222,373	260	120	-50	30.0	GUE
GRC-17-028	732,436	1,222,380	254	120	-50	30.0	GUE
GRC-17-029	732,418	1,222,384	255	120	-50	30.0	GUE
GRC-17-030	732,399	1,222,390	258	120	-50	30.0	GUE
GRC-17-031	732,380	1,222,394	256	120	-50	30.0	GUE
GRC-17-032	732,359	1,222,402	257	120	-50	30.0	GUE
GRC-17-033	732,344	1,222,408	261	120	-50	30.0	GUE
GRC-17-034	732,328	1,222,411	260	120	-50	30.0	GUE
GRC-17-035	732,312	1,222,410	267	120	-50	35.0	GUE
GRC-17-036	732,294	1,222,421	263	120	-50	30.0	GUE
GRC-17-037	732,275	1,222,425	270	120	-50	30.0	GUE
GRC-17-038	732,236	1,222,433	268	120	-50	30.0	GUE
GRC-17-039	732,236	1,222,438	263	120	-50	30.0	GUE
GRC-17-040	732,218	1,222,442	266	120	-50	30.0	GUE
GRC-17-041	732,200	1,222,448	285	120	-50	30.0	GUE
GRC-17-042	732,183	1,222,451	265	120	-50	30.0	GUE
GRC-17-043	732,145	1,222,463	263	120	-50	30.0	GUE
GRC-17-044	732,109	1,222,473	262	120	-50	30.0	GUE
GRC-17-045	732,073	1,222,483	256	120	-50	30.0	GUE
GRC-17-046	732,054	1,222,483	256	120	-50	30.0	GUE
KHRC001	723,543	1,223,425	317	360	-50	120.0	KH
KHRC002	723,545	1,223,495	336	360	-50	60.0	KH
KHRC003	723,544	1,223,530	337	360	-50	60.0	KH
KHRC004	723,548	1,223,565	330	360	-50	60.0	KH
KHRC005	723,749	1,223,426	333	360	-50	60.0	KH

KHRC006	723,749	1,223,390	328	360	-50	60.0	KH
KHRC007	723,752	1,223,459	340	360	-50	60.0	KH
KHRC008	723,750	1,223,495	345	360	-50	60.0	KH
KHRC009	723,754	1,223,528	347	360	-50	60.0	KH
KHRC010	724,002	1,223,491	313	360	-50	60.0	KH
KHRC011	724,001	1,223,526	321	360	-50	60.0	KH
KHRC012	723,999	1,223,557	319	360	-50	66.0	KH
KHRC013	723,996	1,223,598	332	360	-50	60.0	KH
KHRC014	723,866	1,223,571	349	360	-50	60.0	KH
KHRC015	723,864	1,223,604	344	360	-50	60.0	KH
KHRC016	723,864	1,223,494	315	360	-50	120.0	KH
KHRC017	723,861	1,223,491	316	180	-50	120.0	KH
KHRC018	723,648	1,223,541	324	360	-50	60.0	KH
KHRC019	723,645	1,223,574	338	360	-50	60.0	KH
KDD008	722,704	1,222,895	255	180	-65	387.0	KS
KDD011	722,797	1,222,880	259	180	-60	300.0	KS
KRC387	722,551	1,222,239	245	340	-45	108.0	KS
KRC388	722,899	1,222,929	262	180	-50	145.0	KS
KRCD375	722,712	1,222,868	253	180	-63	221.0	KS
KRCD390	722,746	1,222,923	257	180	-55	291.0	KS
KRC381	722,531	1,222,950	253	180	-45	70.0	KSW
KRC382	722,529	1,222,897	253	180	-45	70.0	KSW
KRC383	722,531	1,222,846	247	180	-45	70.0	KSW
KRC384	722,482	1,222,925	258	180	-45	70.0	KSW
KRC385	722,480	1,222,875	256	180	-45	70.0	KSW
KRC386	722,483	1,222,827	249	180	-45	70.0	KSW
KRC389	722,625	1,222,827	251	180	-50	70.0	KSW
KRC379	725,889	1,224,157	291	180	-50	130.0	LOUBEL
KRC380	725,689	1,224,151	292	180	-50	157.0	LOUBEL
KRCD376	722,769	1,224,196	275	155	-50	240.0	LOUBEL
KRCD377	722,833	1,224,059	279	155	-50	224.0	LOUBEL
KRCD378	722,369	1,224,159	287	155	-50	247.0	LOUBEL
NTRC-016	732,973	1,226,393	279	140	-55	95.0	NAB
NTRC-017	732,967	1,226,457	280	140	-55	140.0	NAB
NTRC-018	732,946	1,226,436	268	140	-55	160.0	NAB
TARC001	721,540	1,220,065	278	305	-50	156.0	TAN
TARC002	721,485	1,220,114	222	305	-50	71.0	TAN
TARC003	721,448	1,220,142	228	305	-50	61.0	TAN
TARC004	721,416	1,220,153	242	305	-50	65.0	TAN
TARC005	721,246	1,220,268	231	305	-50	50.0	TAN
TARC006	721,177	1,220,317	228	305	-50	50.0	TAN
TARC007	721,151	1,220,332	233	305	-50	50.0	TAN
TARC008	721,120	1,220,349	223	305	-50	30.0	TAN
TARC009	721,105	1,220,365	223	305	-50	30.0	TAN
TARC010	721,095	1,220,387	230	305	-50	30.0	TAN
TARC011	721,079	1,220,398	233	305	-50	30.0	TAN

TARC012	721,061	1,220,407	232	305	-50	30.0	TAN
TARC013	721,047	1,220,416	229	305	-50	30.0	TAN
TARC014	721,021	1,220,416	229	305	-50	30.0	TAN
TARC015	721,008	1,220,428	230	305	-50	30.0	TAN
TARC016	720,996	1,220,447	232	305	-50	30.0	TAN
TARC017	720,978	1,220,458	234	305	-50	30.0	TAN
TARC018	720,962	1,220,468	240	305	-50	30.0	TAN
TARC019	720,947	1,220,480	239	305	-50	30.0	TAN
TARC020	720,935	1,220,492	225	305	-50	30.0	TAN
TARC021	720,920	1,220,506	232	305	-50	30.0	TAN



## Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Kollo gold prospects were drilled using Reverse Circulation (RC) techniques. Holes are angled to optimally intersect mineralised zones. All RC samples were weighed to determine recoveries. All potentially mineralised zones were then split and sampled at 1m intervals using three-tier riffle splitters. QA/QC procedures were completed as per industry best practice standards (certified blanks and standards and duplicate sampling). Samples were despatched to ALS, SGS, BIGS and ACTLABS in Ouagadougou for sample preparation, where they were crushed, dried and pulverised to produce a sub sample for analysis using a fire assay facility in Ouagadougou where 50g fire assays, AAS finishes and screen fire assays have been conducted.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation "RC" drilling within the exploration area comprises 5 1/8 inch diameter face sampling hammer and hole depths range from 13m to 100m.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core was reconstructed into continuous runs for orientation; marking depths were checked against the depths marked on core blocks. RC recoveries are logged and recorded in the database. Overall recoveries are &gt;75% for the RC; there are no significant sample recovery problems. A technician is always present at the rig to monitor and record recovery. A cyclone and splitter were used to provide a uniform sample and were routinely cleaned. Vital Metals employees managed sampling to ensure correct sampling practices. RC samples were</li> </ul>

		<p>visually checked for recovery, moisture and contamination. A booster was used when drilling wet holes, to maintain dry samples each wet hole was purged after a rod change and before the commencement of drilling the next rod. Core recoveries were generally good with 90% average recovery. As the mineralised zone is generally silicified and competent, core loss was not observed to be an issue over the mineralised zones. No significant bias is expected and any potential bias is not considered material.</p>
Logging	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Vital Metals uses specifically designed log sheets to capture all geological data. During logging, part of the RC sample is washed, logged and placed into chip trays, which are stored on site. Geotechnical logging was carried out on all diamond drill holes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure/Geotech table of the database. Logging of diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, alteration, colour and other features of the samples. Core was photographed in both dry and wet form. All drilling has been logged to a standard that is appropriate for inclusion in any future Mineral Resource estimation or mining studies and metallurgical studies.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond core sampling intervals were based on lithological or alteration boundary contacts, with a minimum down hole length of 0.2m and maximum of 1.28m. The core was photographed, structurally logged, cut and half core was sent for assay. Sampling of RC holes was completed on 1-metre downhole intervals or as a 2-metre composite sample; bulk samples were taken from the cyclone by Vital Metals field assistants and split through a three-tier Jones riffle splitter to collect 2 6.5kg samples. Every attempt was made to ensure that the splitter that was used was in</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>good condition, level and that the splitter was cleaned with compressed air after each sample was passed through it to minimise contamination. Every effort was made to ensure that samples were sampled dry. Field QAQC procedures included the insertion of field duplicates and commercial standards. Field duplicates were inserted at 15m intervals or where mineralisation was anticipated and Standards were inserted at 30m intervals. Approximately 1:15 RC field duplicates were taken from 1m riffle split samples at the rig. Sample sizes are considered to be appropriate to accurately represent the gold mineralisation at Kollo based on the intersections, the sampling methodologies, observed gold particle size and assay values.</p>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Assaying was completed at ALS, BIGS, SGS and ACTLABS laboratories in Ouagadougou using 50g fire assay and an atomic absorption spectrometer (AAS) finish which is considered a near total assaying technique if completed properly. This method is appropriate and returns accurate and precise values for gold. Field QAQC procedures included the insertion of field duplicates and commercial standards. The laboratory inserted feldspar flushes, standards, repeats and duplicates. Repeat or duplicate analysis for samples shows that the precision of samples is within acceptable limits.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Several independent personnel visually verified intersections in diamond core and RC chips as well as trenches and outcrops. Primary data was collected using a set of company standard Excel templates on Toughbook laptop computers using lookup codes. The geo-information was validated on-site by the Company's database technicians and then validated and merged into a final database by the company's database manager. There has not been any adjustment to assay data</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole collar locations as reported have been picked-up using a Garmin GPS. Final locations will come from a pickup by a surveyor using a total</li> </ul>

	<p><i>workings and other locations used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<p>station. Base stations have been set up on site based on the Trigonometrical point outside of town of Po. Downhole surveying was completed by the drilling contractor using a Reflex EZ-shot Downhole Survey instrument. All drill holes have been located using UTM grid WGS84 Z30N. Topographic control has been gained with the use of ASTER data on 50m centres. Spot heights have been measured by surveyors in areas with moderate to high relief.</p>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further drilling is required to test zones of gold anomalism. Drill fences are spaced on 100m to 400m centres. There appears to be reasonable geological and grade continuity between sections however further drilling is required to enable support for the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code. There has been no compositing of samples with samples reported as a weighted average across zones of mineralisation.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill sections are approximately orientated North to South with respect to grid North. This orientation allows for the delineation of East-West structures internal to the shear zone as well as the overall ENE-WSW trend. Holes are drilled at -65° to -50° with a lift and westerly deviation generally observed in downhole surveys.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Chain of custody is managed by Vital. Samples are stored on site and delivered by Vital personnel to ALS, SGS and ACTLABS Ouagadougou for sample preparation. Whilst in storage, they remain under guard in a locked yard. Tracking sheets are used track the progress of batches of samples</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Vital personnel and consultants have completed numerous site visits and data reviews since acquiring the project. No material issues have been noted.</li> </ul>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<p><i>Mineral tenement and land tenure status</i></p>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Kollo gold project is located on the Doulunia exploration permit, which is one of Vital's three contiguous exploration tenements (Doulunia, Kampala and Zeko). The permits are held by Vital Metals Burkina SARL (a wholly owned subsidiary of Vital Metals). The combined area of the permits covers over 400km<sup>2</sup> and give the holder the right to explore for gold. Annual licence fees have been paid up to date with the Burkinabe authorities. The current Mining Code provides free state equity participation of 10 per cent in all companies on the delivery to the company of an industrial exploitation permit for a large-scale mine. This state equity participation is free and non-dilutable. The Doulunia Permit is subject to a 2.25% net smelter royalty with Ampella Mining Burkina SARL. The Mining Code also provides for payment of a gross production royalty ranging from 3% (&lt;US\$1000), 4% (\$1000-1300) and 5% (&gt;\$1300).</li> </ul>
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>There was a high level of zinc exploration conducted over the area in the mid 1990's to the mid 2000's. A number of drill holes in the immediate vicinity of the Kollo Gold Project were drilled for Zinc by Anmercosa. A number of trenches were completed by Ampella Mining SARL in 2008-2009.</li> </ul>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Vital's Kollo Project sits within the Markoye Structural Corridor that is host to several world class gold deposits, including at least two recent major gold discoveries (Cardinal Resources' Namdini Project in Ghana and West African Resources' Sanbrado Project). The geometry of mineralized structures, with significant dilation along steep east-west veins, is consistent with dextral movement along the ENE trending Kollo Shear Corridor. The main rock types observed in diamond core from Kollo are; fine grained moderately to strongly foliated, variably</li> </ul>



		sheared mafic to intermediate intrusive, and; a mixed deformed unit consisting of strongly foliated schist and ductile tectonic breccia. Fe-carbonate, pyrite and strong silica alteration are associated with gold mineralization and hosted in zones of brittle deformation which overprint the sheared intrusive.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Intercepts that form the basis of this announcement are detailed in a table within the body of this announcement and incorporate Hole ID, Easting, Northing, Dip, Azimuth, Depth and Assay data for mineralised intervals. Appropriate maps and plans also accompany this announcement.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Mineralised weighted average intercepts were calculated using a 0.4 g/t gold cut-off grade and maximum of 1.0m internal dilution. Higher grade intercepts will typically be reported in addition to the overall intercept i.e. 15m @ 7.78g/t from 105m (inc 1m @ 59.76/t from 115m).</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole angles of -60 and -55 to grid North are adequate for the mineralisation intercepted. All exploration drilling results to date have been reported as down hole lengths.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to diagrams in text</li> </ul>

	<i>should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All grades, high and low, are reported accurately with “from” and “to” depths and “hole identification” shown.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further infill drilling is planned and is ongoing. A figure showing proposed work programs is included in the body of this report.</li> </ul>

## **ABOUT VITAL METALS**

Vital Metals Limited (**ASX: VML**) is an explorer and developer , focused on progressing three highly prospective mineral Projects: the Watershed Tungsten Project in far north Queensland, Australia, the Aue Tungsten Project in Saxony, Germany and the Doulnia Gold Project in southern Burkina Faso, West Africa.

### **Doulnia Gold Project – Burkina Faso**

The Doulnia Gold Project (100% Vital) is located in southern Burkina Faso. The Project is made up of three contiguous permits; the Doulnia, Kampala and Zeko exploration permits. The Project is located in highly prospective Birimian Greenstone terrain with 400 sq. km of contiguous tenements lying on the trend of the Markoye Fault Corridor and hosting the Kollo Gold Project and Boungou South Gold Prospect.

### **Watershed Tungsten Project – Queensland**

The Watershed scheelite (calcium tungstate) Project, in far north Queensland, 150 kilometres north-west of Cairns, is the Company's flagship venture. The Watershed Tungsten Project is a development-ready project that has a completed Definitive Feasibility Study (DFS), is fully permitted and has all landowner and Indigenous agreements in place.

### **Aue Tungsten Project – Germany**

The Aue Tungsten Project (100% Vital) is located in the western Erzgebirge area of the German state of Saxony. The permit, comprising an area of 78 sq. km is located in the heart of one of Europe's most famous mining regions, being surrounded by several world class mineral fields. Historical mining and intensive exploration work carried out between from the 1940's and 1980's showed high prospectivity of the Aue permit area for tungsten, tin, uranium and silver mineralisation.

#### **Vital Metals Limited**

ASX Code: VML

ACN: 112 032 596

Suite 1, 91 Hay Street,  
Subiaco, WA 6008

T: +61 8 9388 7742

F: +61 8 9388 0804

E: vital@vitalmetals.com.au

[www.vitalmetals.com.au](http://www.vitalmetals.com.au)

#### **Board & Management**

David Macoboy  
Chairman

Mark Strizek  
CEO and Managing Director

Peter Cordin  
Non-Executive Director

Francis Harper  
Non-Executive Director

Andrew Simpson  
Non-Executive Director

Ian Hobson  
Company Secretary

#### **Capital Structure**

1,055.7 million shares

186.9 million unlisted options