



## Significant Cobalt Returned from Initial Sampling of Historic Stolln 7 Mullock Dump, Aue Project

### HIGHLIGHTS

- First pass reconnaissance rock sample from Stolln 7 uranium exploration waste dump returns **0.8% Cobalt and 1.3% Ni**
- Despite mineral collectors previously targeting the waste dump, all results returned demonstrate cobalt mineralisation
- Soil samples from around the historic Koenig David sulphide mine with a Pb-Zn-Ag signature and an area of noted Bi-Co-Ni mineralisation currently being tested
- Ongoing field testing of known historic cobalt mines to identify priority targets

Vital Metals Limited (ASX: VML) ("Vital" or the "Company") is pleased to announce that initial results from rock samples taken at the 100% owned Aue Project in Saxony, Germany, have returned **0.8% Cobalt** and **1.3% Ni** from the historic 1950's Stolln 7 uranium exploration waste dump.

Vital Metals Managing Director Mark Strizek said,

*"This is an exceptional result from the initial sampling of the Stolln 7 mullock dump. Given the old 1950's uranium exploration waste dump has been picked over by mineral collectors for decades, the fact that all samples reported cobalt mineralisation, is a true indication of the potential waiting to be unlocked at Aue.*

*"While it is still early to assess what the ultimate potential could be, the signs at this stage are very encouraging and exploration activities will continue as we work to unlock its potential."*



Figure 1. AU0030 returning 1.3% Ni, 0.8% Co, 0.3%Bi and 19ppm Ag

The Aue Project (Figure 3) is located in an area with a rich history of cobalt production, spanning from the 16<sup>th</sup> century through to the late 1930s. Originally a by-product from silver mining, due to extent of the cobalt mineralisation present, numerous cobalt blue factories operated within the area producing blue porcelain and glass.

Records show that there are five historic mines where cobalt was mined or known to occur within the Aue permit lying along a corridor that is over 10km long. Vital commenced its initial exploration activities in April 2018, with a small geochemical program carried out aiming to positively identify cobalt mineralisation at two key targets:

- Rock samples (5) at the Stolln 7 mullock (dump) heap on the Schwarzwasser river between Aue and Lauter.
- Soil samples (16) and a single rock chip sample from the bottom of the historic Koenig David mine pit.

Stolln 7, located on the Schwarzwasser river was driven into a steep rock face around 1950 to explore potential uranium mineralisation. Instead of uranium the miners encountered a Bi-Co-Ni vein striking WNW-ESE. A minor amount of material was extracted and the adit was closed and sealed (Figure 2).



Figure 2. Adit Stolln 7

The mullock heap of the adit is located on the opposite site of the Schwarzwasser river and is known by mineral collectors for its occurrence of cobalt and bismuth minerals.

During the visit, the Vital field team encountered multiple mineral collector diggings in the otherwise overgrown mullock heap. One of these digging contained a significant amount of material with pinkish secondary cobalt mineral coatings (erythrite, a secondary cobalt carbonate). Multiple samples were taken, including some showing greyish primary mineralisation as well as light coloured native bismuth.

Samples were submitted to ALS Romania for multi-element geochemistry. All samples from Stolln 7 contained Co concentrations ranging from 300 to 700ppm with the best mineralised sample containing **1.3% Ni, 0.8% Co, 0.3%Bi and 19ppm Ag** (full results see Table 1).

	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	Ni-OG62	EAST	NORTH
ELEMENT	Ag	Co	Cu	Ni	Pb	Ni	455200	5605850
UNITS	ppm	ppm	ppm	ppm	ppm	%		
AU-0010	1.9	493	13	511	14			
AU-0027	3.1	576	10	913	16			
AU-0029	1.4	290	10	461	5			
AU-0030	19.6	8280	345	>10000	621	1.33		
AU-0032	2.9	645	30	990	33			

**Table 1. Results of initial rock chip sampling program at Stolln 7**

Soil samples taken from around the historic Koenig David sulphide mine with a Pb-Zn-Ag signature and an area of noted Bi-Co-Ni mineralisation are currently being analysed and the Company will report findings as soon as they become available.

Further field work will test locations with either known historic cobalt mining or are known to have Bi-Co-Ni mineralisation. Aue is located right in the heart of Europe's technology and manufacturing centre with actual and forecast demand for cobalt showing no sign of slowing.

While it is still too early to know what the ultimate potential could be, the signs at this stage are very encouraging and give the Company confidence to continue exploration activities that could unlock its potential.

**ENDS**

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**Competent Person's Statement**

The 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.

## ABOUT VITAL METALS

Vital Metals Limited (ASX: VML) is an explorer and developer holding a portfolio of technology metals, gold and base metals. Our projects range from shovel ready development to advanced exploration across a range of jurisdictions in Australia, West Africa and Germany.

### 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 development-ready having a completed Definitive Feasibility Study (DFS), is fully permitted and has all landowner and Indigenous agreements in place.

### Nahouri Gold Project – Burkina Faso

The Nahouri Gold Project (100% Vital) is located in southern Burkina Faso. The Project is made up of three contiguous permits; the Nahouri, Kampala and Zeko exploration permits. The Project is located in highly prospective Birimian Greenstone terrain with 400km<sup>2</sup> of contiguous tenements lying on the trend of the Markoye Fault Corridor.

### Bouli Gold Project – Niger

The Bouli Gold Project is a portfolio of three highly prospective gold permits in Niger, West Africa covering 4,289km<sup>2</sup> held by a subsidiary of SUMMA (a private Turkish company). Vital is working to earn interest in the project via the funding of an exploration work program.

### Aue Project – Germany

The Aue Project (100% Vital) is located in the western Erzgebirge area of the German state of Saxony. The permit, comprising an area of 78km<sup>2</sup> is located in the heart of one of Europe's most famous mining regions 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, cobalt, uranium and silver mineralisation.

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#### Board & Management

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Chairman

Mark Strizek  
CEO and Managing Director

Peter Cordin  
Non-Executive Director

Andrew Simpson  
Non-Executive Director

Francis Harper  
Non-Executive Director

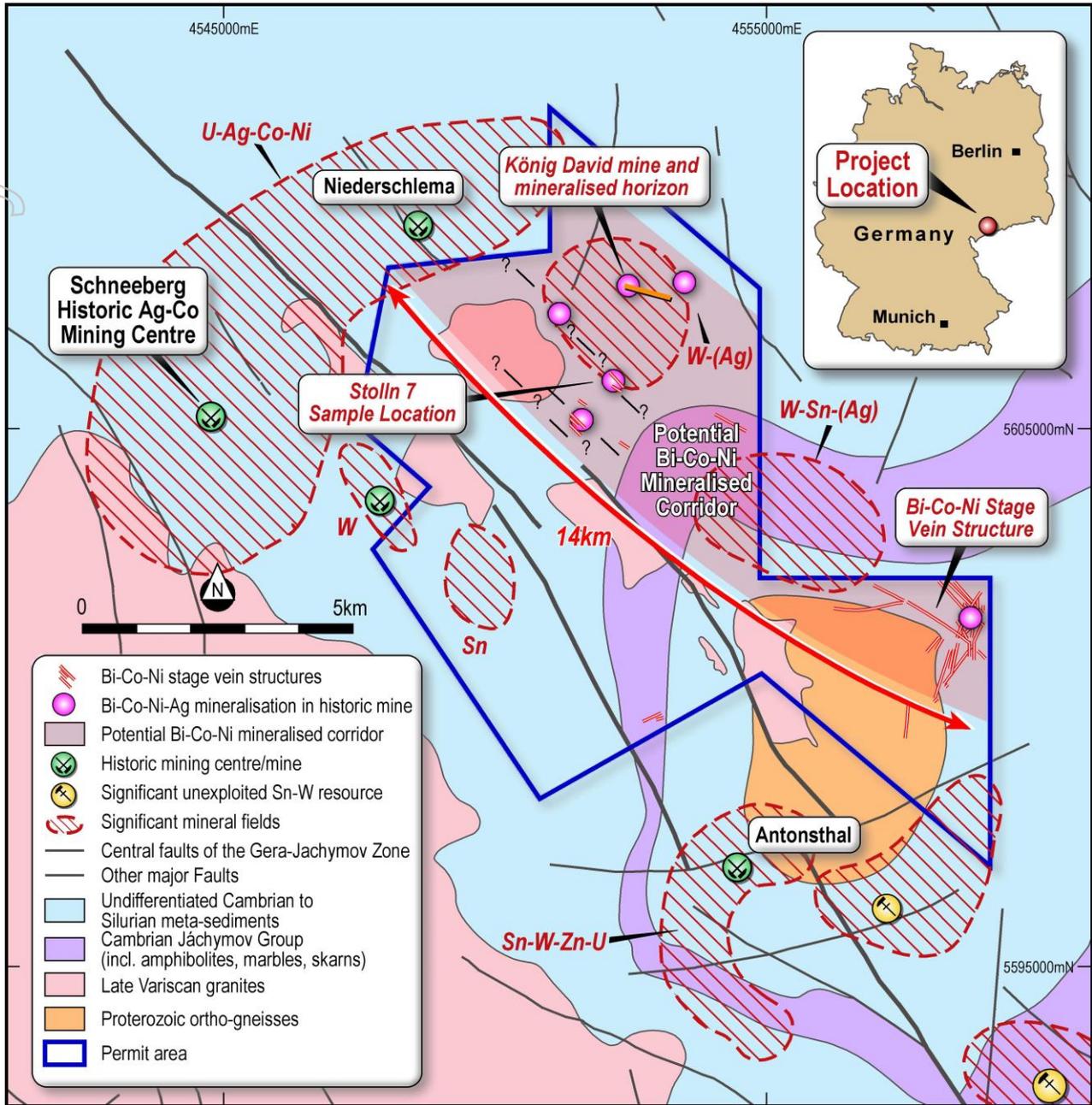
Matt Foy  
Company Secretary

#### Capital Structure

1,649 million shares

231 million unlisted options

Figure 3: Project Location Plan



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JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
Sampling Technique	<p>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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>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.</p>	<p>Samples were taken from a waste rock mullock dump. The samples were identified, logged and sampled on site.</p> <p>The mullock dump was created in the 1950's by the Soviet-German mining company SDAG Wismut who were for uranium. They did not find uranium in the Stolln 7 exploration adit and instead uncovered a lens of BiCoNi mineralisation. No further exploration was undertaken and the adit was sealed.</p> <p>Selective rock chip samples were submitted to ALS Romania for multi-element geochemistry. Four acid digests followed by Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES). Results are corrected for spectral interelement interferences.</p>
Drilling	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.).	No drilling results being reported
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	No drilling results being reported
Logging	<p>Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc.) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	No drilling results being reported. Samples are rock chips taken from mullock dump. They are selective and are reconnaissance in nature. Logging was completed on a qualitative and quantitative basis.
Sub-Sampling Technique and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No drilling results being reported.

	<p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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. Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>Samples are rock chips taken from mullock dump. They are selective and are reconnaissance in nature.</p> <p>The samples sizes were appropriate for the size of the material being sampled.</p>
<b>Quality of Assay Data and Laboratory Tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<p>The analytical techniques used are appropriated and are considered total.</p> <p>Samples were pulverised and crushed to 95% passing &lt;106micron. Samples were prepared and analysed in ALS Laboratories Romania. Four acid digests followed by Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES). Results are corrected for spectral interelement interferences and are considered appropriate.</p> <p>No bias was detected in laboratory standards. No external checks have been undertaken.</p>
<b>Verification of Sampling and Assaying</b>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data</p>	<p>No independent verification has been completed to date. No adjustment was performed to assay data</p>
<b>Location of Data points</b>	<p>Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</p> <p>Specification of the grid system used Quality and adequacy of topographic control</p>	<p>Handheld GPS was used and cross checked with locate geological maps.</p> <p>The accuracy of sampling locations has been located to a sufficient level of accuracy.</p> <p>The samples are reconnaissance in nature and will not be used for mineral resource estimation UTM-WGS84 ZONE 33N</p>
<b>Data Spacing and Distribution</b>	<p>Data spacing for reporting of Exploration Results 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.</p> <p>Whether sample compositing has been applied</p>	<p>Not applicable. The samples are reconnaissance in nature and will not be used for Mineral Resource estimation.</p>
<b>Orientation of Data in Relation to Geological Structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</p>	<p>Not applicable.</p>

	introduced a sampling bias, this should be assessed and reported if material.	
<b>Sample Security</b>	The measures taken to ensure sample security	Industry standard steps were taken to ensure sample security. Samples were dropped off with commercial courier who transported samples to ALS Laboratories in Romania. Sample weights and numbers were then cross checked with no discrepancies noted.
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data	No external reviews or audits have been completed to date.
<b>Section 2 Reporting of Exploration Results</b>		
<b>Criteria</b>	<b>JORC Code Explanation</b>	<b>Commentary</b>
<b>Mineral Tenement and Land Tenure Status</b>	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. 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.	The Aue permit was granted by the German Department of Mines on the 18th of February 2015 for an initial period of 5 years. The permit is located in the state of Saxony with the majority of the mineralised zones located in areas of commercial forest (logging). At this point in time Vital Metals are not aware of any issues with the security of tenure.
<b>Exploration Done by Other Parties</b>	Acknowledgment and appraisal of exploration by other parties.	Previous exploration by other parties is detailed in historical reports held by the Geological Survey and the Wismut.  The two main explorers in the region were the East German Geological survey who were exploring for tungsten and the Soviet-German mining company SDAG Wismut who were predominantly exploring for uranium.  Information sighted to date appears to be of a high standard.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The local geology comprises Palaeozoic metamorphosed sediments which are intruded by Carboniferous S-type granites and intersected by the major Gera-Jachymov fault zone. Both the granites and the Gera-Jachymov fault zone are closely linked to the known world-class mineral deposits in the region.

<b>Data Aggregation Methods</b>	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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths	No data aggregation completed.
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it	No drill hole intercepts being reported.
<b>Diagrams</b>	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should	A location plan has been included in the text of this document.
<b>Balanced Reporting</b>	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high	Data is currently insufficient to determine if historical information is representative. Rock samples taken from the area in 2014 indicate the mineralisation is present sometimes in spectacular quantities.
<b>Other Substantive Exploration Data</b>	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	The reference to metallurgical testwork was sourced from a report completed by a geologist working for the East German Geological Survey. It is reported that the samples were taken from the drive 83a. At 4 locations with previous channel samples, they pushed the roof by 30cm to obtain material for testing. The methods for the metallurgical testwork are unknown.
<b>Further Work</b>	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling.  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further exploration work is planned this will initially involve sourcing historical drill information and converting the information to digital format for interpretation.