



Breakaway Research

March 2013

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Company Information

ASX Code	VML
Share Price	A\$0.026
Ord Shares	241.3m
Options	76.4m
Market Cap	A\$6.3m
Cash A\$	2.4m
Total Debt	-
Enterprise Value A\$	3.9m

Board of Directors

Non-Executive Chairman	David Macoboy
Chief Executive Officer	Mark Strizek
Non-executive Director	Peter Cordin
Non-executive Director	Andrew Simpson
Non-executive Director	Doug Stewart

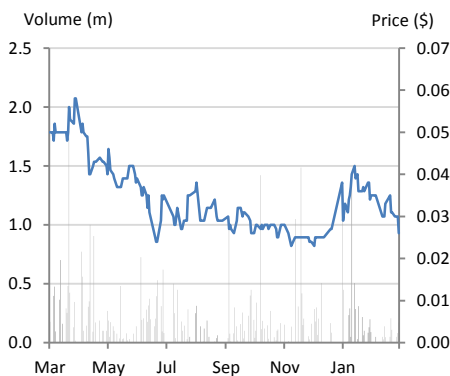
Substantial Shareholders

Citicorp Nominees Pty Ltd	9.4%
Mr Rex Harbour	7.7%
JP Morgan Nominees Aust	5.6%

Company Details

Address	64 Churchill Avenue Subiaco WA 6008
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12-Month Price Chart



Source: Bloomberg

Vital Metals (VML)

Watershed tungsten DFS completion anticipated in early 2013. Drilling results from initial Burkina Faso program available during March 2013

Recommendation: Speculative BUY

Company Update

Key Points

- **The company's flagship Watershed tungsten project in Queensland continues to rank among the top ten undeveloped tungsten deposits in the world, with appraisal work continuing.**
- **Watershed is at an advanced stage, with the Definitive Feasibility Study (DFS) (fully funded by Japan's JOGMEC) set for completion during Q1 2013 and project permitting by the end of H1 2013.**
- **The development prospects for Watershed have never looked better, with the biggest game-changer being the vastly improved outlook for tungsten, which regarded as a strategic metal.**
- **Active exploration drilling has resumed in early 2013 at the Doulnia Project in Burkina Faso, following up previous results that included 5m @ 60.36g/t Au from 75m and 44m @ 6.39g/t from 8m.**

Vital Metals has historically been a tungsten-focused company, with 100% ownership of one of the world's most advanced, undeveloped tungsten deposits – the Watershed Project in far north Queensland. Watershed is being fully funded through DFS at a cost of \$5.4m by Japan's JOGMEC group.

The company has actively diversified its exploration focus by farming-into an exploration project in southern Burkina Faso, West Africa, where gold is the primary target. Drilling has so far returned highly encouraging results, with the company returning for an aggressive follow-up campaign in 2013.

Company Overview

Vital Metals was listed on the ASX in October 2005 to explore and appraise its flagship Watershed tungsten project in northern Queensland. The project has a history dating back to the early 1980s, when it was discovered by Utah Corporation of the US. A significant JORC-compliant resource was defined and a Pre-Feasibility Study (PFS) was completed during late 2008.

During August 2011 Japan Oil, Gas and Metals National Corporation (JOGMEC) confirmed a potential 30% earn-in to the project by undertaking to spend \$5.4m to fund completion of a Definitive Feasibility Study (DFS), with work almost complete and results set for release during early 2013.

Vital has enhanced its exploration appeal via an offshore move to Burkina Faso, where high-grade gold results were returned from first pass drilling campaigns. Initial 2013 drilling has just been completed, with results due before the end of March. Prior hits included 5m @ 60.36 g/t Au from 75m.



Investment Review

Vital has interests in tungsten in Queensland and gold in West Africa

Vital Metals is an Australian advanced tungsten exploration company listed on the Australian Securities Exchange (ASX: VML). The company is simultaneously advancing two majority-owned projects: its 100%-owned Watershed tungsten project in Queensland; and its 60%-owned Doulunia gold project in Burkina Faso.

Watershed is an advanced tungsten deposit

The Watershed project is amongst the top-ten undeveloped tungsten resources outside of China and is well positioned as a potential new ore supply as demand for the metal continues to grow. The Watershed deposit was originally identified and explored by Utah Development Company Limited during the early 1980s, with some additional work conducted by Peko-Wallsend during the mid-1980s. Vital acquired the project in 2005 and has since been actively appraising it.

Watershed hosts a well-defined JORC-compliant resource

The Watershed project hosts an undiluted, JORC-Compliant Indicated Resource of 20.66Mt grading 0.25% WO₃ for 50.7kt contained metal at a cut-off of 0.1%. The resource comprises 997 mineralised intercepts, including 304 intercepts exceeding 5m @ 0.5% WO₃ (of which 160 exceed 5m @ 1.0% WO₃). The average length of the mineralised intercepts is 5.4m. Vital's tenure position encompasses an area of more than 600 sq km.

Resource upside is considered to be considerable

Vital's geological team believes that there is significant scope to extend the limits of the known scheelite mineralisation at depth - having observed a trend for the mineralisation to continue – demonstrated by MWD119, which intersected 20m @ 1.27% WO₃ from 302m (reported to ASX 17 February 2007).

JOGMEC is funding the DFS, completion expected during Q1 2013

Japan Oil, Gas and Metals National Corporation (JOGMEC) can earn a 30% stake in Watershed by spending \$5.4 million to fund completion of a Definitive Feasibility Study (DFS) for the project, which is on track for completion during Q1 2013. Excellent progress is also being made on the metallurgical front, with whole-of-ore (WOO) flotation test-work in China generating outstanding results. Concentrate grades of 65% have been achieved, with scheelite recovery of more than 80%.

Evidence of strong Japanese corporate interest

JOGMEC and Vital have had meetings with five Japanese companies that have declared an interest in the project as potential partners and off-take buyers.

Burkina Faso represents a diversification of exploration interests

Vital has enhanced and diversified its exploration interests to include gold and base metal projects in Burkina Faso, West Africa. The gold projects are located in favourable geological settings at, or in close proximity to, the intersection of the Markoye Fault Corridor (host of Essakane, Tarpako, Bombore, Kiaka and Youga gold deposits of >16 Moz combined resource/reserve) and the 1,200km long Bole Shear Zone (host to Castle Minerals' and Azumah Resources' exciting gold projects).

Previous drilling intersected high-grade gold results

Previous drilling on the company's Burkina Faso gold projects exciting results, with intercepts including **5m @ 60.36 g/t gold** from 75m depth (including **2m @ 128.50 g/t gold** from 76m) in hole KRC260 and **44m @ 6.39 g/t gold** from 8m depth (including **4m @ 58 g/t gold** from 24m) in KRC 210.

Drilling results from initial 2013 program awaited

Exploration activity resumed during early 2013, with the company completing an initial 2,300-metre RC drilling program that targeted the limits of known gold mineralization at the Kollo prospect. Results are expected within the coming weeks.

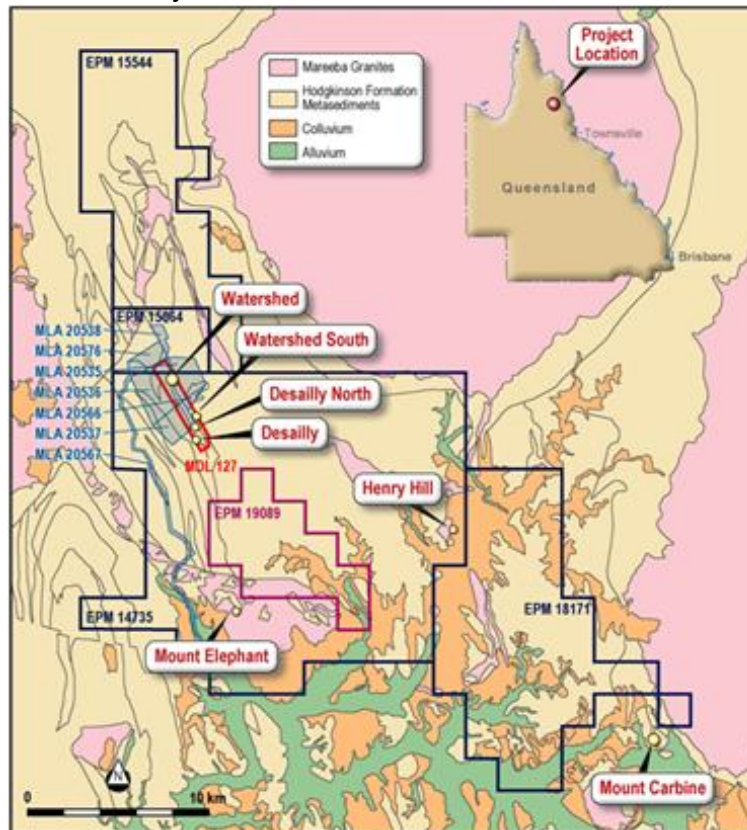


Project Review

Watershed Project

The company's 100%-owned Watershed scheelite deposit ranks amongst the top ten unexploited tungsten deposits worldwide. The current JORC-compliant resource comprises 20.6 Mt grading 0.25% for 50,700 tonnes (5.07 million metric tonne units – (MTU's)) of contained WO₃, occurring in both scheelite-bearing quartz-feldspar veins and disseminated scheelite in altered metamorphosed host-rock.

Watershed Project Location



Source: Vital Metals

~600 sq km acreage position

The Watershed tungsten deposit was originally located and explored by Utah Development Company Limited during the early 1980s, with additional work conducted by Peko-Wallsend Operations Limited during the mid-1980s. Vital acquired the project in 2005 and has been appraising the deposit since that time.

Project history dating back to the early 1980s

Watershed is located in hilly open woodlands at the headwaters of the Palmer and Mitchell Rivers, about 160km NW of Cairns, in far north Queensland. The deposit lies around 35km northwest of the historic Mount Carbine tungsten deposit, which produced 10,000t WO₃ over 16 years between 1970 and 1986.

A vast amount of work has been undertaken

The Watershed deposit has been defined by more than 44,000m of diamond drilling and 3,800m of RC drilling. Mineralization has been encountered over a strike length of approximately 1,500m and down-dip to 450m. Importantly, the deposit is open both at depth and along strike. In addition to the Watershed deposit, there are also exciting exploration targets at the Watershed South, Desailly and Desailly North prospects.

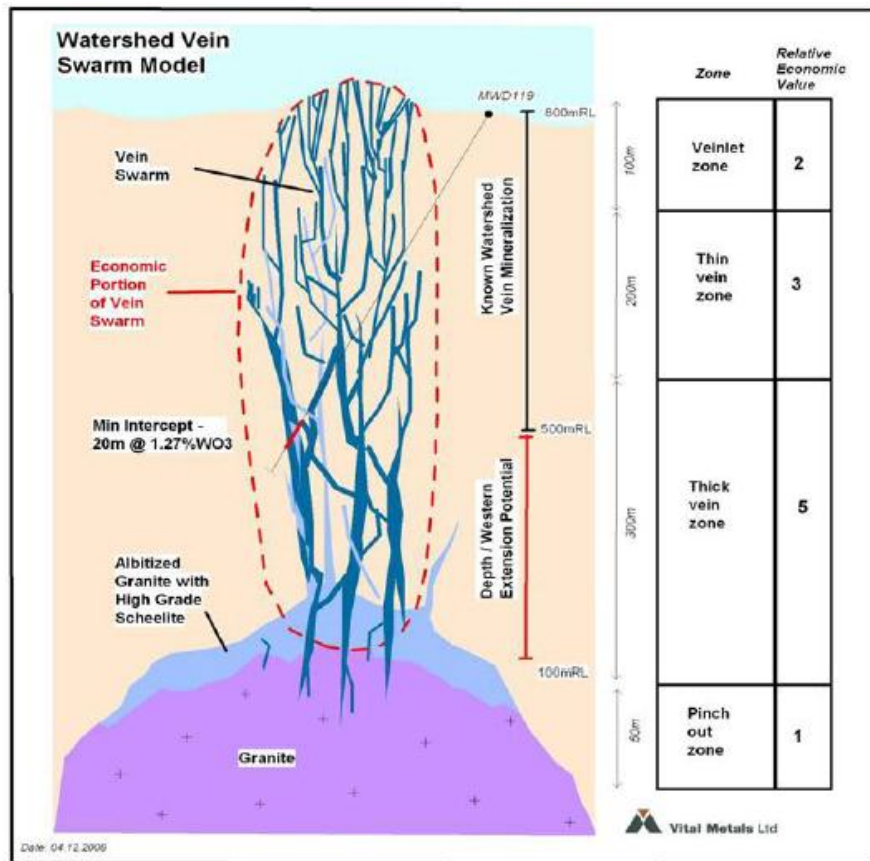


Mineralisation

The mineralisation is observed to occur predominantly in quartz-scheelite vein swarms. These are usually oriented east-west with some locally developed north-northwest-trending veins (parallel to the dominant foliation), although observation from closely-spaced drilling indicates that some shallow-dipping mineralised structures may also be present. Vein widths observed in drill core range from 0.5cm to 100cm. Minor pyrrhotite, pyrite and arsenopyrite may sometimes be present.

The veins display the highest tungsten grade where biotite is present in addition to calc-silicate alteration. The mineralisation vein swarms are best developed in the arenaceous units and are relatively attenuated in the argillaceous units. Quartz-scheelite veins are most abundant in the arenite in the hinge zone of the anticline which forms the Watershed Ridge.

Watershed Vein Swarm Model



Source: Vital Metals

There is considerable potential for resource extensions at depth

Vital's geological team believes that there is significant scope to extend limit of the known scheelite mineralisation at depth - having observed a trend for the mineralisation to deepen, as shown in hole MWD119 which intersected 20m @ 1.27% WO₃ from 302m (reported to ASX on 17 February 2007).

Using the vein swarm model (which demonstrates a good correlation with drilling), it appears that there is potential for the mineralisation to exhibit significantly higher grade and thickness at depth. Further drilling will be required to confirm grades and continuity; however there appears to be reasonable potential for an underground mining operation in the future.



The mineralisation potential at Watershed is vast

Project Resource

The Watershed Project contains an Indicated Resource at 0.10% WO₃ cut-off of 20.6 million tonnes at 0.25% WO₃ for 50,700 tonnes (5.07 million metric tonne units – MTUs) of contained WO₃. WO₃ occurs in both scheelite-bearing quartz-feldspar veins and as disseminated scheelite in the altered metamorphosed host rock. The mineralisation at Watershed is open at depth and along strike in both directions.

Resource Summary

Measured		Indicated		Inferred		Combined			
WO ₃ % Cut off	Mt	WO ₃ %	Mt	WO ₃ %	Mt	WO ₃ %	Mt	WO ₃ %	WO ₃ % Tonnes
0.05	9.47	0.16	28.36	0.14	11.49	0.15	49.32	0.14	70,400
0.1	4.42	0.25	11.51	0.24	4.73	0.26	20.66	0.25	50,700
0.15	2.69	0.34	6.66	0.32	2.83	0.35	12.18	0.33	40,400
0.2	1.93	0.41	4.56	0.39	2.05	0.41	8.53	0.40	34,100
0.3	1.09	0.53	2.4	0.52	1.17	0.54	4.66	0.53	24,600

Source: Vita Metals

The JOGMEC farm-in is a major vote of confidence in Watershed's future

Prefeasibility Study

Watershed is at an advanced stage in the assessment process, with a Pre Feasibility Study (PFS) completed in late 2008. This comprehensive study looked at all aspects of the development of possible mining and processing scenarios for Watershed. Vital is greatly encouraged by prices being obtained for tungsten, which are at a level where the development of Watershed, as contemplated in the PFS, will be economically viable. Vital reviewed the results of the PFS and has developed a strategy for commercialisation of the Watershed resource.

Definitive Feasibility Study – Awaiting Completion

On 22nd August 2011 Japan Oil, Gas and Metals National Corporation (JOGMEC) farmed into the Watershed Project and can earn a 30% stake by spending \$5.4m to fund completion of a Definitive Feasibility Study (DFS). The DFS is reviewing and update the PFS numbers previously identified. The Earn-in by JOGMEC represented a major turning point for the Watershed project. In addition to the benefit of a project funding partner, JOGMEC brings considerable technical and development expertise to the DFS process, and can also assist in terms of future off-take.

Vital is utilising JOGMEC to advance exploration in the Watershed region

Exploration

Vital is assisting JOGMEC geologists and geophysicists that are working on the development and application of remote-sensing techniques to advance the exploration of the Watershed region. JOGMEC personnel have visited the exploration area to check identified anomalies in the field and take samples for further analyses with a mobile hyperspectral unit and petrological studies in Japan. JOGMEC will use the information collected to refine their technology and expect to produce a prospect map during 2013. Vital also submitted a new exploration permit application during the December 2012 quarter, comprising Slaty Range EPM 25102 that covers a total of 93 sub-blocks. The tenement is situated along strike/trend of the major tungsten deposits within the region.

Slaty Range is an exciting new exploration area



Latest Project Developments

A major project milestone was reached during December 2012 with the registration of the Indigenous Land Use Agreement (ILUA) with the National Native Title Tribunal (NNTT). Apart from environmental approvals, all of the major requirements needed for approval of the mining leases are now in place.

Native Title agreements in place

The Guangzhou Research Institute of Non-ferrous Metals (GZRINM) delivered the final reports on the lock cycle and variability test-work for the Whole of Ore (WOO) flotation study during the December quarter for review. It was concluded that the WOO process achieved consistent mass and metal stability in producing a scheelite concentrate of 65.5% WO₃ for a recovery of 84%.

Positive ore flotation studies

As Vital is using an X-Ray ore sorter on the processing front-end (which effectively halves the amount of ore which needs grinding by rejecting non-mineralised rocks), the net recovery of scheelite is forecast to be around 78%.

High scheelite recoveries

GZRINM is undertaking work on the optimisation of the dosage of flotation reagents to find the balance between scheelite recovery and minimisation of the operating costs of the WOO process. Vital has also retained GZRINM to undertake a flotation program on the gravity spiral tails.

Vital is currently examining two potential process flow-sheets for the recovery of scheelite from the Watershed ore:

1. A standard flow-sheet that involves ore-sorting with down-stream gravity + float processing (G+F);
2. Whole of Ore (WOO) flotation that involves up-front milling to provide float-feed at a specified size.

WOO is currently the preferred option due to its higher metal recoveries; however the G+F process has the potential to provide a lower operating cost. With the first rougher results for the flotation cleaning of the gravity spiral tails being comparable to that achieved on WOO samples, it is expected that the final net recoveries for the G+F process may be within 5% of the net WOO recovery.

This work by GZRINM on flotation cleaning the gravity spiral tail is scheduled to be completed during Q1 2013. Once this is completed, a full analysis of the costs and benefits of the respective processes will be assessed and a process nominated.

Work on completing the Environmental Management Plan (EM Plan) is progressing, with the final remaining item being the management of waste from the mining and processing operations. Vital, in consultation with the Department of Environment and Heritage Protection (DEHP) has agreed to remove the tailings dam from the project and will instead be producing a "dry process residue", which will be dumped within the waste dump.

Work on Environmental Management Plan is progressing

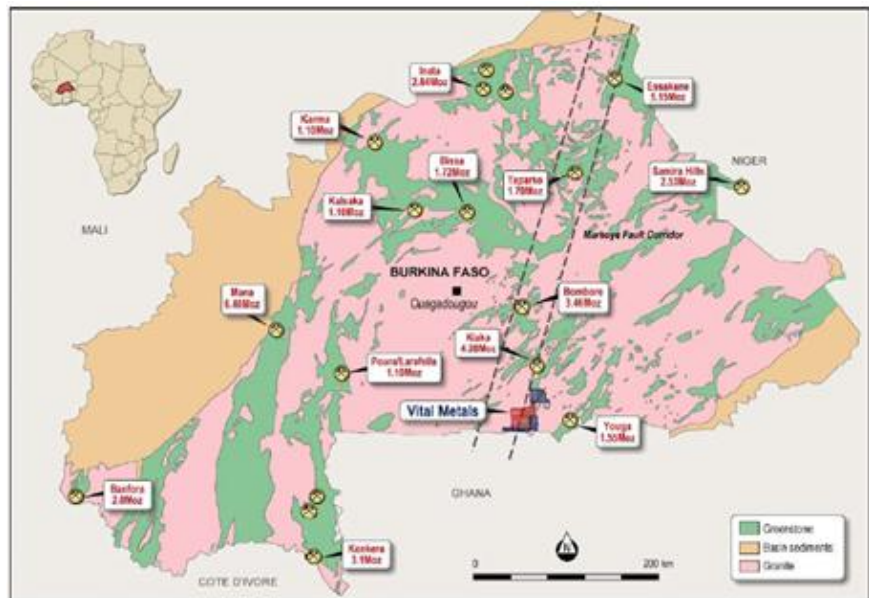
Work on engineering the process change is underway and it appears that any extra operating cost and capital costs will be balanced out by a reduction in project water usage, as well as savings in diesel usage due to the reduction of haulage distances as the waste rock dump is able to be moved closer to the processing plant and the mine.



Doulnia Project, Burkina Faso

In November 2009, Vital entered into a farm-in agreement with Ampella Mining to earn up to 80% of the Doulnia Gold Project in southern Burkina Faso, West Africa. Vital's projects are located in favourable geotectonic settings at, or near to, the intersection of the Markoye Fault Corridor (host of Essakane, Tarpako, Bombore, Kiaka and Youga gold deposits of >16 Moz combined resource/reserve) and the 1,200km long Bole Shear Zone (host to Castle's and Azumah's exciting gold projects).

Map Highlighting Major Regional Discoveries



Source: Vital Metals

Vital's ground position in Burkina Faso is 850 sq km

RC drilling program was recently completed, with results expected before the end of March

Previous drilling has identified shallow, high-grade gold mineralisation

The target is commercially mineable, open-pit gold mineralisation

Vital kicked off its 2013 exploration program with a recently-completed 2,300m RC drilling program aimed at extending the limits of known gold mineralisation at the Kollo Gold Project on the Doulnia Tenement (Vital 60%, Ampella 40%) and the Boungou South Gold Project on the Zeko Tenement (100% Vital). The program is targeting shallow gold mineralisation which could be exploited via open cut methods. We anticipate the release of assay results by the end of March.

Previous drilling on the company's Burkina Faso 'Kollo' gold projects returned fabulous gold mineralisation, with intercepts including **5m @ 60.36 g/t gold** from 75m depth (including **2m @ 128.50 g/t gold** from 76m) in hole KRC260 and **44m @ 6.39 g/t gold** from 8m depth (including **4m @ 58 g/t gold** from 24m) in hole KRC 210.

The particular importance of these results is that they have extended the limits of known gold mineralisation (still open along strike and at depth) on the Kollo trend. The team is now working to complete the interpretation of the gold mineralisation with the objective of defining a maiden JORC-compliant resource. Vital's exploration strategy is to target shallow, high-grade gold mineralisation at Kollo.

Vital continues to be positive about the potential for open-pittable gold resources. The mineralisation is open along strike and at depth at all areas and, significantly, the balance of the Kollo trend (>2.5km) remains untested by drilling. We therefore keenly await the release of results from the company's recently completed RC drilling program over the coming weeks.



Analyst Verification

We, Grant Craighead and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

Disclosure

Breakaway Investment Group (AFSL 290093) may receive consultancy fees and commissions on sale and purchase of the shares of Vital Metals and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

Disclaimer

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