

# Variscan mines

# **Highlights**

W At the St Pierre gold project, 3D modelling of the La Bellière mine workings and structural controls for the shear hosted gold mineralisation is nearing completion. Auger soil sampling to help define targets over parallel shears is also progressing.

W At the Tennie base metal project, two zinc/lead anomalies have been defined in soil geochemistry.

Variscan has another six licence applications in France, one of which has now advanced to the final stage of the approvals process.

W A VTEM survey by Eastern Iron at Nowa Nowa generated four strong anomalies potentially associated with massive sulphide copper-lead-zinc mineralisation, including one anomaly over the Three Mile prospect where former drilling intersected 13.6 metres at 3.8% copper.

Eastern Iron also continued the Mine Feasibility Study on its Nowa Nowa iron project. The study confirmed the low Capex (\$33.6 million) and low operating costs (\$26.10 at mine gate). The company is assessing other transport options following the recent withdrawal of the availability of the SEFE port facility near Eden.

W Thomson Resources completed modelling of results from a large VTEM survey over a number of its target areas in NSW. Two significant EM anomalies were generated at the Wilga Downs and Achaye prospects.

Silver City Minerals completed assessment work of recently completed drilling and mapping at its Sellheim project in Queensland. The work identified a potentially mineralised corridor at Mount Richardson which has been drilled. Assay results are expected shortly.

 $\overline{\mathbf{w}}$  As at the end of the quarter, the Company held \$1.6 million in cash. Liquid investments held in listed resource companies totalled \$3.6 million.

ASX Code: VAR ACN: 003 254 395 Issued Shares: 175.7M Unlisted Options: 25.3M VAR Cash Balance: \$1.6M VAR Investments: \$3.6M

#### **Directors**

Pat Elliott Greg Jones **Dr Jack Testard** Kwan Chee Seng Dr Kah Foo Alan Breen

#### **Top Shareholders**

Kwan Chee Seng **UOB Kay Hian Private Limited** Chris and Betsy Carr

Top 20 Shareholders - 73.8%

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# **Exploration**

# FRANCE

## St Pierre

As announced on 14 February 2014 the Company's European subsidiary, Variscan Mines SAS was granted the St Pierre exploration licence (Permis Exclusif de Recherche or PER) covering an area of 386 square kilometres over an important gold district believed to have been the third largest gold producer in France.

Within the St Pierre PER, the La Bellière gold mine is recorded to have produced about 334,000 ounces of gold\* (plus silver) from 1906 to 1952, up to a maximum depth of 170 metres intermittently over a strike length of about 1.6 kilometres. The average production grade was 12 g/t gold, mined from a series of stacked, high grade veins hosted within an east-west oriented shear zone. The high grade quartz – sulphide veins individually vary in true thickness from 1 to 16 metres and dip steeply to the south.

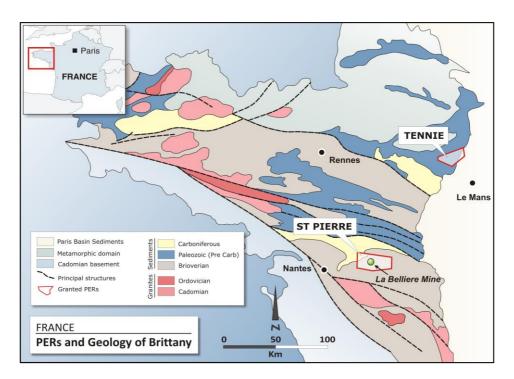


Figure 1 – Location of Variscan PERs

Variscan is compiling and electronically converting all available records from the old mining area as well as former exploration conducted by the BRGM (Bureau de Recherches Géologiques et Minières - the French Geological Survey) during the 1980's. With the help of structural studies currently being conducted by the University of Orleans, the Company is constructing a 3D model of the La Bellière mine which will be used to help elucidate the structural controls on mineralisation and target surface core drilling. This work is now well advanced.

\* C Louis. Les exploitations minières dans le Massif Armoricain. Déclin ou progrès. In: Norois. N°141, 1989. pp. 5-32

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To the north and south of La Bellière old data indicates the presence of parallel shears, highlighting the potential for additional gold deposits within the immediate proximity of the mine and in the remainder of the St Pierre PER. To help define this potential the Company has commenced a detailed auger soil geochemistry programme around the mine which will help generate additional drilling targets. Assay results are now being received and will be reported once a sufficient number has been compiled and interpreted.

#### Tennie

The Tennie PER covers 205 square kilometres of the eastern section of a Palaeozoic sedimentary package (Figure 1) which hosts the Rouez copper-gold-lead-zinc-silver VMS/hybrid SEDEX deposit owned by the French energy group, TOTAL.

Variscan has completed a first pass programme of 3,825 shallow auger soil geochemical holes over accessible areas of fertile Brioverian rocks within the PER. Although results are still being interpreted, two large areas of coincident, subtle zinc/lead anomalism have been defined towards the northeast and northwest boundaries of the PER (Figure 2). Both anomalies appear developed close to the boundary of the Brioverian sedimentary sequence and may be associated either with VMS/SEDEX type mineralisation, similar to that found at Rouez or vein style, hydrothermally emplaced sulphide mineralisation common in other parts of Brittany. Follow-up work to ascertain the style and significance of the base metal anomalism is planned.

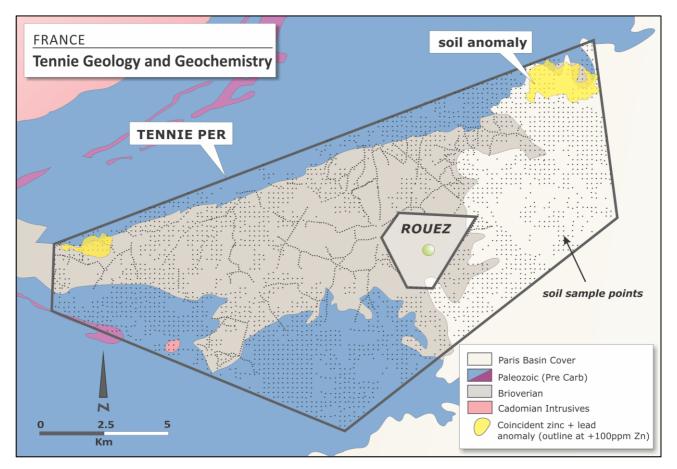


Figure 2 – Soil geochemistry at Tennie



#### **Other Applications**

Variscan has six other applications for exploration licences in France within the approvals process, each of them over projects with good potential for short term resource generation and/or major new discoveries. One of these applications has now reached the final stage of the application process.

## AUSTRALIA

Exploration activity within Variscan's Australian joint ventures was subdued for the quarter. No significant work was completed.

# **Investments**

Variscan maintains a diversified portfolio of investments within a number of ASX-listed resource companies. The companies within the portfolio are:

Eastern Iron – Advanced iron project and VMS copper-gold exploration in Victoria

Silver City Minerals – Exploration interests at Broken Hill, North Queensland and New Zealand

Thomson Resources – Dominant landholding within the Thomson Fold Belt, NSW

WPG Resources - Iron, coal and gold projects in South Australia

Aguia - Phosphate and potash projects in Brazil

As at 24 September 2014, the total value of the Variscan shareholdings in ASX listed resource companies stood at approximately \$3.6 million.

# EASTERN IRON LIMITED

Eastern Iron (ASX: EFE) continued the Definitive Feasibility Study at the Nowa Nowa Iron Project in eastern Victoria. The Company recently announced results that confirmed scoping study outcomes, indicating a low capital cost (\$33.6M) and robust margins over the projected life of the mine at low production costs of \$26.10 per tonne of finished product at the mine gate.

During the quarter, work focused on review other shipping alternatives to the use of the SFEF bulk ship loading facility at Eden, southern NSW.

Also during the quarter Eastern Iron completed a detailed heli-borne electromagnetic VTEM (Versatile Time-Domain Electromagnetic) survey for copper-lead-zinc deposits over the Nowa Nowa exploration licence. VTEM is widely considered the best helicopter EM massive sulphide detection and imaging tool with notable recent successes including the discovery of the Mallee Bull prospect by Peel Mining in NSW and Artemis prospect by Minotaur Exploration in Queensland. The survey was completed following a review of previous exploration and the identification of extensive Silurian volcanics believed to be the same rocks that host important volcanogenic massive sulphide (VMS) deposits in Victoria and NSW such as Benambra (Stockman) approximately 100 kilometres to the north in Victoria and Woodlawn in NSW.

Previous drilling carried out within the area by explorers such as CRAE intersected significant copper, lead, zinc and gold mineralisation in altered volcanics and sediments, with a best intersection of 13.6 metres assaying 3.8% copper at the Three Mile prospect in the south eastern



corner of the licence (Figure 3).

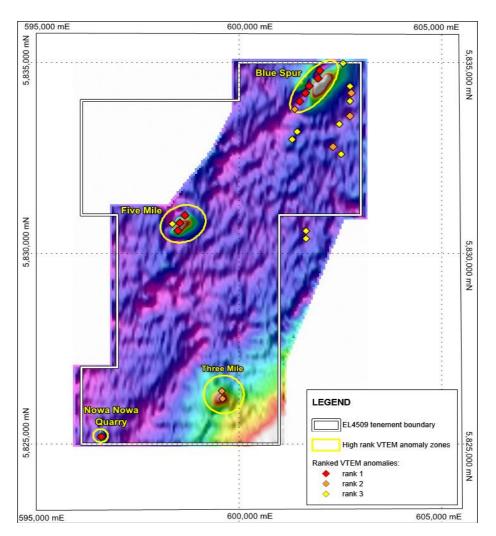


Figure 3 - VTEM image from Nowa Nowa with the main prospects (courtesy of Eastern Iron).

Recent processing of the survey data by Resource Potentials Ltd has generated four significant strong conductors, one of which is located at the Three Mile prospect (Figure 3). These may represent massive sulphide deposits and will be followed up with ground-based EM to more accurately define the geometry and location of the conductors prior to drilling.

Variscan's shareholding in Eastern Iron is 52.9 million ordinary shares (36.7%). As at 24 September 2014 EFE shares were trading at \$0.04. More details regarding Eastern Iron's activities can be obtained from its website.

# THOMSON RESOURCES LTD

Thomson Resources (ASX: TMZ) completed a large VTEM survey over its priority prospects. The survey detected several conductive anomalies in a number of areas including the Wilga Downs prospect and the Achaye prospect.



#### Wilga Downs

The Wilga Downs prospect lies 35 kilometres west of Byrock, NSW in the same geological setting as the Tritton VMS copper deposits 90 kilometres to the southeast. Tritton is marked by a magnetic anomaly and was discovered by ground EM (SIROTEM).

Wilga Downs features several distinct magnetic anomalies, one of which has been drilled with two holes in the 1970's by AMAX and CRAE, both of which returned highly anomalous copper and zinc. Of the several EM conductive anomalies identified in the area by the VTEM survey, the most prominent is coincident with this magnetic feature. The VTEM anomaly has been modelled as a shallowly south-dipping plate that lies between and <u>below</u> the zone tested by previous drilling (Figure 4). The anomaly is strong and persists from mid to late-response times suggesting a highly conductive zone possibly associated with sulphides. It is one of Thomson's priority drilling targets.

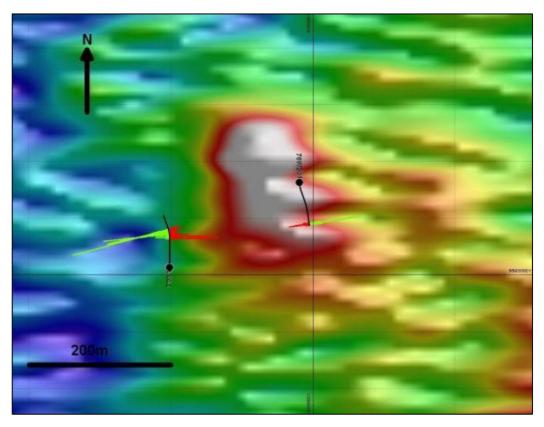


Figure 4 - Late time channel (48) plan view VTEM image over the Wilga Downs prospect. The two previous holes are shown with copper (red) and zinc (green) downhole values. Maximum values are 0.2% Cu, 0.7% Zn. (Courtesy of Thomson Resources)

#### Achaye Prospect

The Achaye prospect is located in the Havilah base and precious metal project 20 kilometres southeast of Mudgee, central NSW. It lies within Silurian volcanics and volcaniclastic sediments of the eastern Lachlan Fold Belt, known to host high grade copper-lead-zinc-silver-gold VMS deposits such as Woodlawn and Captains Flat. The VTEM survey area covered zones of previously identified base metal sulphide mineralisation where historic drilling had tested a SIROTEM anomaly and intersected strongly anomalous copper (up to 1% over 1m) and zinc (up to 2.2% over 1m)

associated with sporadic massive sulphide (pyrrhotite) mineralisation.

The VTEM survey defined a stronger, deeper anomaly around 400 metres west of the Achaye drilling which has not been previously tested. It represents a priority VMS target and will be followed up with soil and rock chip geochemistry as well as a ground EM geophysics survey to confirm the geometry and dip of the conductor prior to drilling.

Variscan holds 18.0 million fully paid Thomson shares, or 25.7% of the company. As at 24 September 2014 TMZ shares were trading at \$0.022. For further details please refer to the Thomson Resources website.

#### SILVER CITY MINERALS LIMITED

#### Sellheim

Work during the quarter by Silver City (ASX: SCI) focussed on preparing for a new drilling programme at Sellheim where the company is targeting intrusive related copper-gold deposits beneath an eluvial goldfield and old copper-gold workings.

Previous drilling completed by Silver City in May 2014 tested a number of strong Induced Polarisation (IP) geophysical anomalies in an area where rock chip samples had returned anomalous gold, silver, copper, bismuth and molybdenum. This drilling returned a number of intersections of gold, copper and silver mineralisation predominantly hosted in skarn alteration and quartz-sulphide veins. The best intersection recorded was 11.1 metres at 0.66 g/t gold and 0.28% copper from 496.9 metres in hole 14SH004 (Figure 5) which is hosted in magnetite-quartz skarn close to a major fault and breccia complex.

SCI believes that the mineralised skarns formed as a result of fluids emanating from the tonalite intrusion immediately west of Mount Richardson (a north-trending zone of silicification and phyllic alteration with gossanous quartz-sericite rocks and tourmaline breccias), or from other discrete intrusive stocks. The company has identified a structural corridor at Mount Richardson (including a breccia complex) which it considers to be prospective for gold-copper mineralisation. Recent geological mapping and rock chipping has identified a north-trending copper and gold-bearing intrusion immediately to the north of the breccia complex confirming that igneous intrusions in this area maybe the potential source rocks for gold in the adjacent eluvial goldfield.

Early in October 2014 the Company commenced drilling five reverse circulation holes to test targets including mineralised intrusions within the structural corridor (Figure 5). A total of 1,266 metres were completed and analytical results are expected in early November.

#### **Broken Hill**

Silver City has also commenced a comprehensive assessment of all geological aspects of the Broken Hill region. The first part of this study has defined the geological parameters of the target Broken Hill-type (BHT) mineralisation (zinc-lead-silver mineralisation in sulphide-rich deposits). The second part will utilise these parameters to define large, probably non-outcropping targets for follow-up detailed exploration including drilling. This evaluation is anticipated to be finished by the end of November.



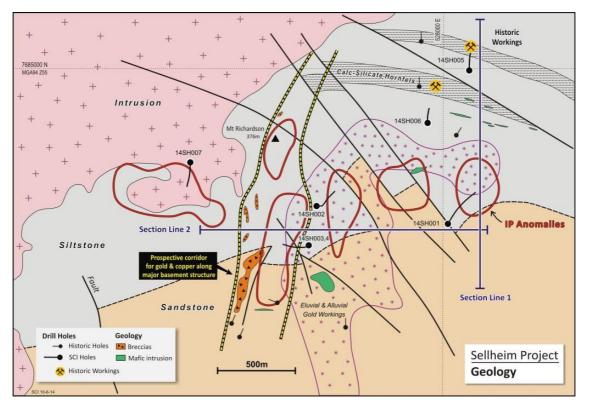


Figure 5 – Plan of the local geology showing relationship of IP anomalies (modelled at 200 metres below surface) to the eluvial/alluvial goldfield and drill holes. Structural corridor through Mt Richardson is considered to be favourable for gold-copper mineralisation (courtesy of Silver City).

Other work completed at Broken Hill included geological mapping and re-logging of core and RC chip samples undertaken in conjunction with portable XRF soil surveys. Projects evaluated include Razorback West, Dora, Balaclava and VTEM anomalies Acacia, Parnell and Newfold. RAB drilling is scheduled for the Balaclava prospect, the Acacia VTEM anomaly and Parnell project areas.

#### New Zealand

The company has been granted two tenements in the North Island of New Zealand approximately 35 kilometres east of Rotorua in the Taupo volcanic zone. The tenure covering an area of 94 square kilometres was applied for by Silver City on the basis of historic exploration data and records that indicated gold mining had taken place in the area in the 1920s. Intermittent modern exploration programs have been conducted since the early 1980s but have failed to locate the historic mining activities within the dense exotic pine forest. All programs have however located anomalous gold in stream sediments and recognised high level advanced argillic alteration features typical of fossil epithermal systems. Discussions for site access are progressing with local landholders.

Variscan holds 14.5 million fully paid shares in Silver City, or 12.5% of the company. As at 24 September 2014 Silver City shares were trading at \$0.04. For further details refer to the Silver City website.



## WPG RESOURCES LTD

WPG Resources (ASX: WPG) is an iron ore, coal and gold exploration and development company with exploration tenements in South Australia. WPG's current focus is on two advanced gold projects in the Gawler Craton, South Australia - Tunkillia (WPG holds approximately 70%) and Tarcoola (WPG holds 100%) where previous feasibility and scoping studies at Tarcoola, had defined a significant gold resource. In July 2014, WPG announced that it would fast track development of the Tarcoola project with the objective of commencing operations late next year. The company stated that a review of data had confirmed that the Tarcoola gold project could be successfully developed into a heap leach mining operation with an initial mine life of four to five years.

Variscan holds 10.4 million fully paid WPG shares, or 4.2% of the company. As at 24 September 2014 WPG shares were trading at \$0.046. For further details refer to the WPG Resources website.

## AGUIA RESOURCES LIMITED

Aguia Resources (ASX: AGR) holds interests in substantial phosphate and potash projects in Brazil. Aguia has reported JORC compliant resources at its Lucena and the Tres Estradas phosphate projects, with potential for further resource expansion apparent at both projects.

Variscan holds 1.185 million fully paid shares. As at 24 September 2014 Aguia shares were trading at \$0.04. For further details refer to the Aguia website.

# **Business development**

Variscan is progressing project acquisition work in France. It is currently in the advanced stages to secure additional licences within regions with demonstrated potential to host significant mineral deposits. The Company has significantly reduced its landholding of projects in both NSW and SA and has scaled back expenditure within Australia to assist in preserving its cash position.

# **Financial**

Cash expenditure by Variscan on exploration and project appraisal for the quarter was \$0.2 million. Expenditure by joint venture parties on projects in which Variscan has an interest was \$42,000 for the quarter. Cash available for Variscan and for the Company at 30 June 2014 was \$1.62 million.

#### Variscan Mines Limited



Greg Jones Managing Director

The information in this report that relates to Exploration Results is based on information compiled by Greg Jones, BSc (Hons), who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Jones is a Director of Variscan Mines Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Jones consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# JORC Code – Table 1

## Section 2 - Reporting of Exploration Results - Tennie PER

Criteria	Commentary
Sampling techniques	<ul> <li>Auger soil samples were collected on a 200m x 200m grid in accessible areas using hand augers. Two samples were taken, a sample close to or at surface and a deeper sample generally between 0.5 to 1.0m below surface to penetrate thin loess and/or ploughed material.</li> <li>The samples taken are part of early stage exploration to test for subsurface sulphide mineralisation away from the Rouez deposit.</li> <li>Sample size was around 1 kilogram.</li> <li>No field duplicates were collected.</li> <li>Samples were logged by company geologists.</li> </ul>
Drilling techniques	No drilling undertaken
Drill sample recovery	No drilling undertaken
Logging	Each sample was briefly described with details entered into the geological database
Sub-sampling techniques and sample preparation	<ul> <li>Samples were transported to the e-Mines sample prep./assay laboratory located in Dun, southern France</li> <li>Samples were dried and crushed to -2 mm</li> <li>Samples were then split down with riffle box to recover 100 g</li> <li>The sample splits were pulverized in a hammer mill to -80 μm</li> <li>5 grams of the material was pressed into pellets ready for loading into the NITON XRF analytical device</li> <li>Sample sizes and preparation techniques employed are considered to be appropriate for the generation of early stage exploration results</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Samples were analysed within the e-Mines laboratory using a handheld Thermoscientific NITONXL3T GOLDD+ XRF machine</li> <li>Readings were conducted over 45 seconds with an appropriate calibration mode for soil and rock samples. Both major and trace elements are recorded.</li> </ul>
Verification of sampling and assaying	<ul> <li>Data storage in Excel spreadsheets and GIS database</li> <li>Further field checking of samples with high base metal assays</li> </ul>
Location of data points	<ul> <li>GPS coordinates captured with Garmin GPS in latitude-longitude decimal degrees</li> <li>Projection and recording of data points into the GIS database into the RGF93-Lambert93 system</li> </ul>
Data spacing and distribution	• Soil sampling on 200m x 200m grid except where access issues meant that sampling points were moved
Orientation of data in relation to geological structure	<ul> <li>Samples were taken on a regularised grid pattern (EW-NS) which is considered appropriate to detect any anomalism from underlying mineral deposits in this area.</li> </ul>
Sample security	Samples were transported to the Dun facility by Variscan geologists
Audits or reviews	There has been no external audit or review of the Company's techniques or data.



## Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>Tennie PER (Permis Exclusif de Recherche de Mine, a French exploration licence)</li> <li>No known impediments for future exploration and development</li> </ul>
Exploration done by other parties	• Previous regional exploration by the BRGM included broad stream sediment sampling and airborne magnetic surveys and mapping.
Geology	VMS or hybrid SEDEX base and precious metal deposits.
Drill hole Information	• No drilling has been completed on the PER to date (outside the general area around the Rouez deposit).
Data aggregation methods	No aggregation or high grade cuts have been applied to the data reported
Relationship between mineralisation widths and intercept lengths	No drill holes are reported in this announcement
Diagrams	Summary of geochemical results provided.
Balanced reporting	• A commentary on the subtle nature of the anomalies is made. There are no high grade values present.
Other substantive exploration data	No substantive other exploration data is available.
Further work	<ul> <li>Field checking and infill sampling including possible isotope analysis to help determine the possible causative style of mineralisation and the importance of the anomalies.</li> <li>Additional infill soil geochem and mapping should further encouraging results be received.</li> <li>Possible follow-up electrical geophysics and drilling</li> </ul>