

# HIGH GRADE TUNGSTEN PROJECT SECURED JOINT VENTURE AGREEMENT SIGNED

- The Couflens exploration licence has been granted over the Salau mine, France, formerly one of the world's highest grade tungsten mines
- Salau is recorded to have produced 0.93Mt at 1.5% WO₃ for around 11,500 tonnes of WO₃ in concentrate prior to closure in 1986
- In the mine's latter years, production grades were 2.0 to 2.5% WO<sub>3</sub>
- In addition to tungsten, Salau is recorded to contain significant copper and gold values, particularly deeper in the deposit (circa 10g/t gold in Veronique)
- Previous drilling below the base of the underground workings confirmed the continuation of the mineralised system, enabling the mine operator to calculate a non-JORC resource, which remains unmined and open at depth
- To fund exploration, a Joint Venture agreement has been executed between Ariege Tungsten SAS and Variscan
- Variscan is free-carried at 20% until a DFS is completed or total expenditure of
  €25 million is reached
- Salau has strong potential to be brought back into production, with initial work aimed at generating a 2012 JORC resource possibly leading towards mine feasibility studies

Variscan Mines Limited (ASX: VAR) is pleased to announce that its wholly owned European subsidiary Variscan Mines SAS has received confirmation of the grant of its seventh exploration licence within France. The Couflens licence (PER), located in the Pyrenees region, covers an area of  $42 \text{km}^2$  centred on the Salau tungsten mine. Prior to its closure in 1986, Salau was one of the highest grade tungsten mines in the world, with an average recorded Life of Mine production grade of approximately 1.5% WO<sub>3</sub>.

The Company considers that Salau has strong potential to be brought back into production, with exploration work by the previous mine owners defining a high grade mineral resource (non-JORC) below the old workings. Other tungsten-copper-gold prospects have been identified within and adjacent to the mine.

An initial programme of mine sampling, followed by underground development and drilling is planned in order to outline sufficient high grade mineralisation to facilitate commencement of feasibility studies and potential reactivation of the old mine.

To fund exploration and initial underground development, Variscan has entered into a Joint Venture agreement with Ariege Tungsten SAS, where Ariege will earn into the Couflens tungsten-copper-gold project through the completion of a DFS or the expenditure of €25 million (~\$AUD36 million) (whichever is achieved first). Variscan will maintain a free carried interest of 20% until this is achieved.

**ASX Code:** VAR **Web -** www.variscan.com.au



# **SALAU MINE**

The Salau skarn tungsten deposit is located approximately 130 km south of Toulouse, within the Pyrenees region near the border with Spain (Figure 1).

The deposit was discovered in 1964 by the BRGM (Bureau de Recherches Géologiques et Minières). Les Mines d'Anglade (LMA) operated the mine from April 1971 to November 1986 which is reported to have produced 0.93 million tonnes of ore at an average of 1.5%  $WO_3$ to approximately 11,500 tonnes of WO<sub>3</sub> in **Notwithstanding** concentrate. existence of remaining resources, the discovery of promising mineralised zones elsewhere (Fonteilles et al., 1989) and the much higher grade production from the last years of production (up to 2.48% WO<sub>3</sub>) (Figure 2), the precipitous fall in the tungsten price caused by Chinese dumping in 1986 led to mine closure.

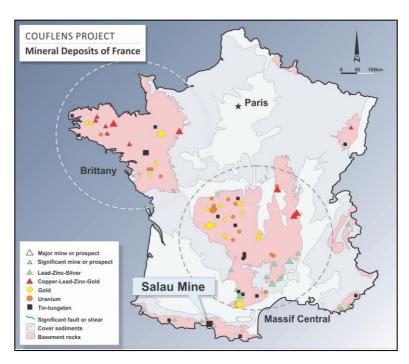


Figure 1 - Location of the Salau mine and other significant mineral deposits in France

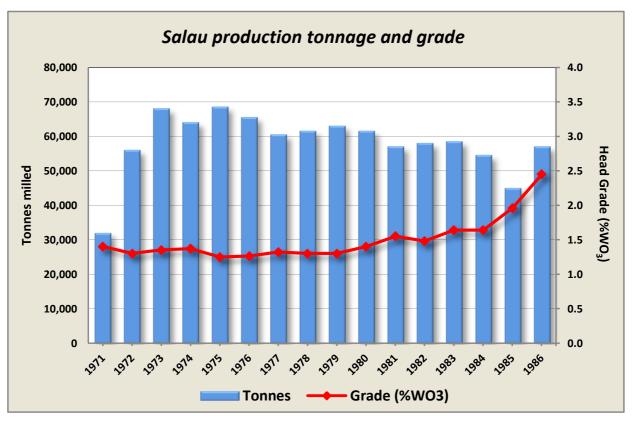


Figure 2 - Salau mine production



## **GEOLOGY**

Salau is a tungsten-bearing (primarily scheelite) skarn deposit developed at the contact between Devonian pelites and calcareous sediments (the 'Barregiennes') and a Hercynian-aged granodiorite stock ('Fourque') (Figure 3). The skarn formed within both the carbonate-bearing sediments and, to a much lesser degree, the host granodiorite. Mineralisation is directly related to the Fourque granodiorite which provided hot, tungsten-gold-copper bearing solutions that reacted with the host rocks to form the skarns and deposit metal-bearing minerals.

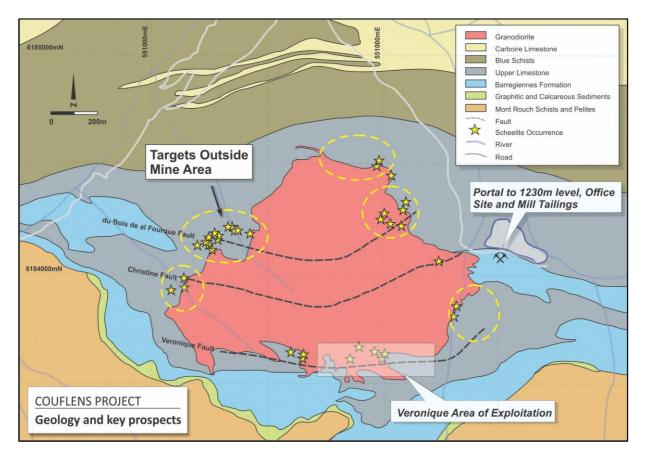


Figure 3 - Plan view of the geology and targets with recorded scheelite occurrences at surface around the Salau tungsten mine

Salau consists of two known mineralised systems, the 'Bois d'Anglade' embayment (North Formation, Gulf South Formation, Column and SC ore zones) and 'Veronique' (Figure 4). Bois d'Anglade was discovered first and provided the bulk of the early production. Veronique, 300 metres to the west, was discovered in 1975 and provided higher grade tungsten production (average  $1.9\%~WO_3$ ), including gold-rich material (not recovered in milling) towards the end of the mine life. In limited sampling this material graded around 10g/t gold in the lower section of the Veronique Southeast zone (Fonteilles et al, 1989).

The geometry of the orebodies at Salau is complex and appears controlled mainly by irregularities in the intrusive contact and by faulting. Two principal types of metalliferous skarns are developed:

*Prograde skarns* – initial metasomatism resulted in the formation of broad zones of prograde skarns containing modest tungsten values (0.2 to 0.5% WO<sub>3</sub>),

Retrograde skarns - later hydrothermal fluids overprinted the prograde skarns and deposited sulphide-



rich material (mainly pyrrhotite) containing substantially higher values of tungsten, gold and copper. It is these sulphide-rich skarns which provided the bulk of the former production from Salau.

In a general sense Salau can be compared to the Mactung and Cantung skarn deposits of the Yukon, USA. These large tonnage, high grade systems, (e.g. Mactung, 44.8 Mt at  $0.85\% \text{ WO}_3$  - Narciso H. et al, 2009) are skarn deposits formed by multistage granodiorite intrusions into calcareous sequences, similar to Salau.

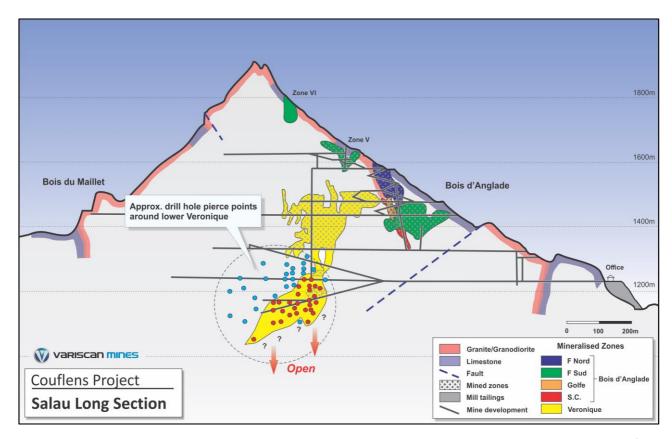


Figure 4 - Composite long section through the Salau mineralised system showing the key mineralised zones defined from previous exploration/mining. Approximate recorded position of LMA underground drilling testing the lower section of Veronique shown in yellow (red - >1.0% WO<sub>3</sub>, blue - low grade/barren). Source - Dr. Nick Le Boutilliere.

# **EXPLORATION TARGETS AND UPSIDE**

Previous underground drilling by the former mine owners recorded a number of high grade tungsten-bearing skarn intersections below the 1230 metre level access adit (Figure 4), the down-plunge continuation of the Veronique ore system. This enabled a non-JORC resource to be calculated by LMA with a similar tungsten grade to that derived from mining in the upper levels of Veronique. The system remains open at depth and is believed to contain substantial gold credits as stated in Fonteilles et al, 1989.

Potential also remains around the other previously mined areas (Veronique and Bois d'Anglade systems) where remnant zones of tungsten-bearing material appear present.

In addition, unexplored discoveries documented by LMA occur at "Ouer d'Aigle" and "Christine", plus a number of other scheelite skarn occurrences at the surface on the flanks of the Fourque granodiorite (Figure 3).



## **EXPLORATION PLAN**

The initial exploration work plan for Salau includes -

- · Acquisition and electronic conversion of available mine and exploration data
- Initial access and, where necessary, rehabilitation of previously developed mine areas
- Mapping and sampling of mineralisation
- Generation of robust 3D model of the geology, ore zones and principal controls on mineralisation
- Possible underground development in upper mine area to establish underground drill platforms
- Underground drilling to confirm resource blocks and extend mineralisation
- Generation of a Mineral Resource to 2012 JORC reporting standards
- Commencement of an incline to provide access below the base of the mine and remaining resource and to allow more extensive drill testing of the down plunge position of the Veronique system and parallel structural positions

Work will focus on defining sufficient high grade tungsten mineralisation to justify commencement of mine feasibility studies, as well as testing the gold potential within and adjacent Salau. Site works including establishment of office facilities and safety audits of the accessible mine workings will commence shortly.

#### JV STRUCTURE

To fund the exploration and initial underground development of the mine area to prove up sufficient mineral resource to justify mine feasibility studies, Variscan has entered into a joint venture with Ariege Tungsten SAS, an EU registered company. Ariege will fulfil its joint venture minimum spend requirement through the expenditure of €2.5 million (over a maximum of 3 years). Variscan will then be free-carried at 20% until the completion of a DFS or the total expenditure of €25 million (~\$AUD36 million), whichever is the earlier.

Yours faithfully

**Greg Jones** 

**Managing Director** 

The information in this report that relates to Exploration Results is based on information compiled by Greg Jones, BSc (Hons), a Competent Person, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Jones is a full-time employee and 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.

## References

Fonteilles M., Soler P., Demange M., Derré C., 1989; "The Scheelite Skarn Deposit of Salau (Ariège, French Pyrenees)", Economic Geology, Vol 84, pp 1172 – 1209

Narciso H., Iakovlev I., Marinus A., de Ruijter A., Impey G., Cowie S., Tanase A., Nichols A., Collins J., Goodall N., Lacroix P., Trimble R., 2009; "Amended Technical Report on the Mactung Property", Wardrop report to North American Tungsten Corporation Ltd, 372 pages