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MINERALS LIMITED

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# SIGNIFICANT GOLD POTENTIAL HIGHLIGHTED FROM REVIEW OF REGIONAL EXPLORATION DATABASE

**Highlights:**

- **Substantial progress made with review of regional exploration database for the Couflens Project**
- **Regional exploration database includes surface geological mapping, geochemical surveys, geophysical surveys, rock chip sampling and limited diamond drilling**
- **Regional exploration potential considered significant with numerous tungsten-copper-gold and gold only targets identified within the project area**
- **Recent rock chip sampling programs confirm gold occurrences associated with fault structures, typically with tungsten mineralisation around the margins of the granodiorite at Salau**
- **High grade gold only occurrence (6.91 g/t gold) in quartz veining 500m west of the granodiorite highlights potential for shear hosted gold deposits**
- **Follow-up field campaign underway with results anticipated in the coming months**

Apollo Minerals Limited is pleased to report on progress following an initial review of the regional exploration database for its 80% owned Couflens Project in France.

The Couflens Project combines the potential reactivation of the high grade Salau tungsten mine coupled with significant untapped regional exploration potential within the surrounding 42km² licence area.

Following the recent acquisition of the Project, the Company initially reported on its review of a significant historical database related to the Salau mine, which has rapidly advanced the Company's knowledge of the geology, mining and processing methods at Salau and de-risks the upcoming exploration and study programs.

The Company has subsequently undertaken a review of a database relating to the exploration potential of the wider licence area which reveals considerable exploration potential for tungsten-copper-gold and gold only deposits, particularly within a highly prospective corridor that extends for 5km along strike to the west of the Salau mine.

The available regional exploration datasets comprise a wealth of surface geological mapping, geochemical surveys, geophysical surveys, rock chip sampling and limited diamond drilling.

The review of the available exploration data has demonstrated that the gold potential of the region has been largely underestimated and that the nature of the gold mineralisation has previously not been fully understood.

The recent work has shown that this gold is associated with hydrothermal fluids focused by east-west trending fault structures recognised within the granodiorite at Salau. Numerous gold occurrences (up to 5.81 g/t gold) have been observed with tungsten where these fault structures intersect the granodiorite-carbonate bearing sediments contact.

Significantly, a high-grade gold only occurrence (6.91g/t gold) in quartz veining located approximately 500m to the west of the granodiorite highlights the potential for shear hosted gold mineralisation to be associated with regional fault structures.

Accordingly, the three main fault structures recognised within the granodiorite at Salau and their extensions, along strike and at depth, represent priority gold exploration targets

The Company will continue regional exploration activities, focusing initially on identifying extensions to the recently discovered high-grade gold only occurrence, as well as generating new targets. Surface exploration programs will be implemented to further assess identified tungsten-copper-gold prospects and advance them to the drill ready stage.

These regional exploration initiatives complement the Company's main focus which is on brownfields activities associated within, and immediately adjacent to, the historical Salau mine.

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## COUFLENS PROJECT OVERVIEW

The Couflens Project area is located 130km south of Toulouse, within the Pyrenees region (Figure 1). The Couflens Project comprises the Couflens exploration licence (permis exclusif de recherches – "**PER**") which covers an area of 42km$^2$ centred on the Salau mine, formerly one of the world's highest-grade tungsten mines.


*Figure 1: Couflens Project / Salau Mine Location*

### Regional Exploration Data

Regional exploration datasets available for the Couflens PER comprise surface geological mapping, geochemical surveys, geophysical surveys, rock chip sampling, and limited diamond drilling covering the majority of the 42km$^2$ licence area.

The regional datasets have been obtained from historical exploration programs carried out from the early 1960's until 1985, and recent field campaigns completed during 2015 and 2016. The historical exploration programs were undertaken by the Bureau de Recherches Géologiques et Minières ("**BRGM**"), whilst the recent field campaigns have formed part of a PhD thesis focussed on the Salau deposit and supervised by the University of Orléans.

The historical exploration programs included an airborne (helicopter) electromagnetic survey and ground based magnetic, resistivity and gravity surveys. Geochemical surveys included stream sediment sampling (analysed for 24 elements).

Detailed geological mapping, structural analysis and tectono-metamorphic studies were also completed. Seventeen diamond drill holes for approximately 3,700m were drilled during this period. Geological logs are available for these drill holes but limited assay data.

The modern exploration programs undertaken during 2015 and 2016 have involved geological mapping at 1:10,000 scale, the measurement of 170 line kilometres of ground magnetics, and the collection of over 860 rock chip samples and 965 structural measurements. The majority of the rock chip samples (842 samples) have been analysed by X-ray fluorescence ("**XRF**") and 150 samples analysed for gold by fire assay method. All significant rock chip sample results, along with the details of the sample location and geological description, are summarised in Appendix A.

The majority of this historical regional exploration data has now been converted to digital format and input into an ArcGIS software package to facilitate data integration and interpretation.

## Salau Deposit and Regional Geology

The Salau deposit is a tungsten-bearing (primarily scheelite) skarn developed at the contact between Devonian pelites and calcareous sediments of the Barregiennes Formation and a Hercynian-aged granodiorite stock ("**Fourque**") (Figure 2). 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-copper-gold bearing solutions that reacted with the host rocks to form the skarns and deposit metal-bearing minerals.

Contact metamorphism effects are clearly evident around the Fourque granodiorite, with the metamorphic aureole of variable width up to approximately 1km. The temperature increase caused by the intrusion of magma has resulted in mineralogical changes in the surrounding host rocks. The outer limit of the metamorphic aureole at Salau is marked by the appearance of minerals such as biotite, albite or tremolite. Within the inner alteration halo, the rocks are characterised by a hornfels appearance and mineral assemblages including diopside, idocrase, garnet and epidote.

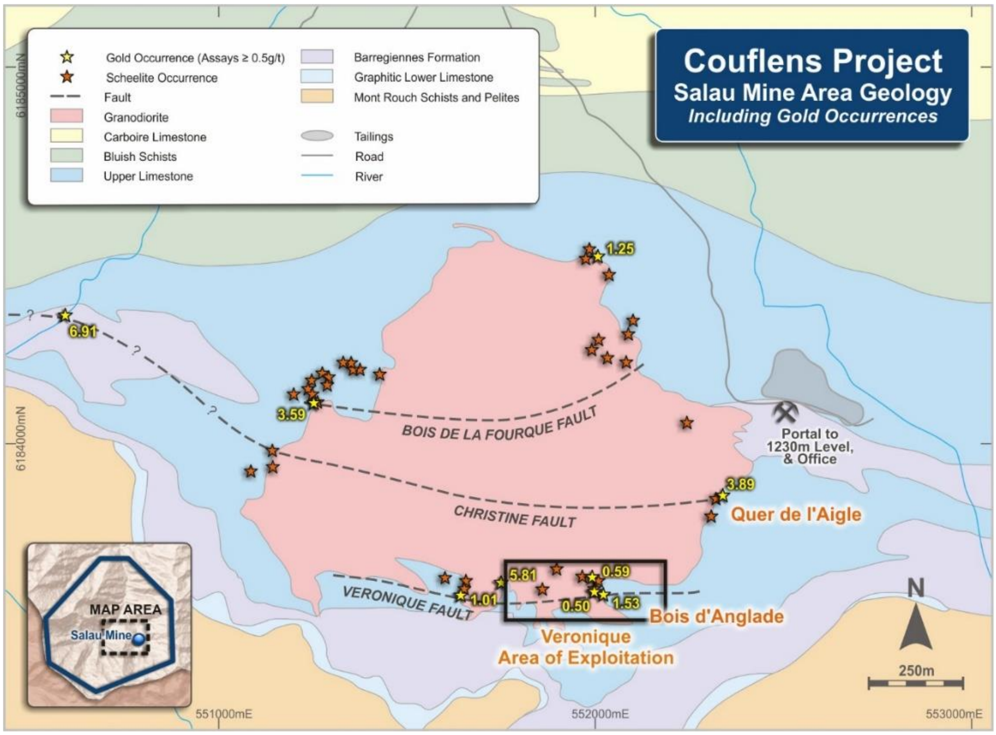

*Figure 2: Salau Mine Area Geology*

The regional geology and stratigraphy within the broader Couflens PER area is shown in Figure 3. The Palaeozoic series in the region extends the oldest Mont Rouch formation (Ordovician) in the south and the youngest Carboire Limestone (Devonian) to the north. These formations were folded several times and metamorphosed to the greenschist facies during the Hercynian orogeny.

A thick package of prospective carbonate bearing sediments (Barregiennes Formation and Upper Limestone) strike in an east-west direction and extend for approximately 5km to the west, and 2.5km to the east, of the Salau deposit.

The contact metamorphism aureole (biotite isograde) is also observed to extend to the west for approximately 5km up to the boundary of the PER (Figure 3). This potentially reflects the presence of shallow buried granodiorite intrusives and associated hydrothermal fluid circulations.

Further, a number of small outcropping granodioritic bodies (apexes) are observed to intrude these prospective host rocks within and external to the PER boundary. Scheelite and/or pyrrhotite mineral occurrences are noted in the vicinity of these granodiorite intrusions.

Within the Salau mine, limited sampling of material from the lower section of the Veronique zone indicated the presence of high grade gold (*Fonteilles et al, 1989*). Gold occurrences are also recorded in outcropping shear zones, typically in association with tungsten mineralisation around the margins of the Fourque granodiorite. Significantly however, a high-grade gold occurrence is observed 500m to the west of the granodiorite, without associated tungsten (Figure 2).

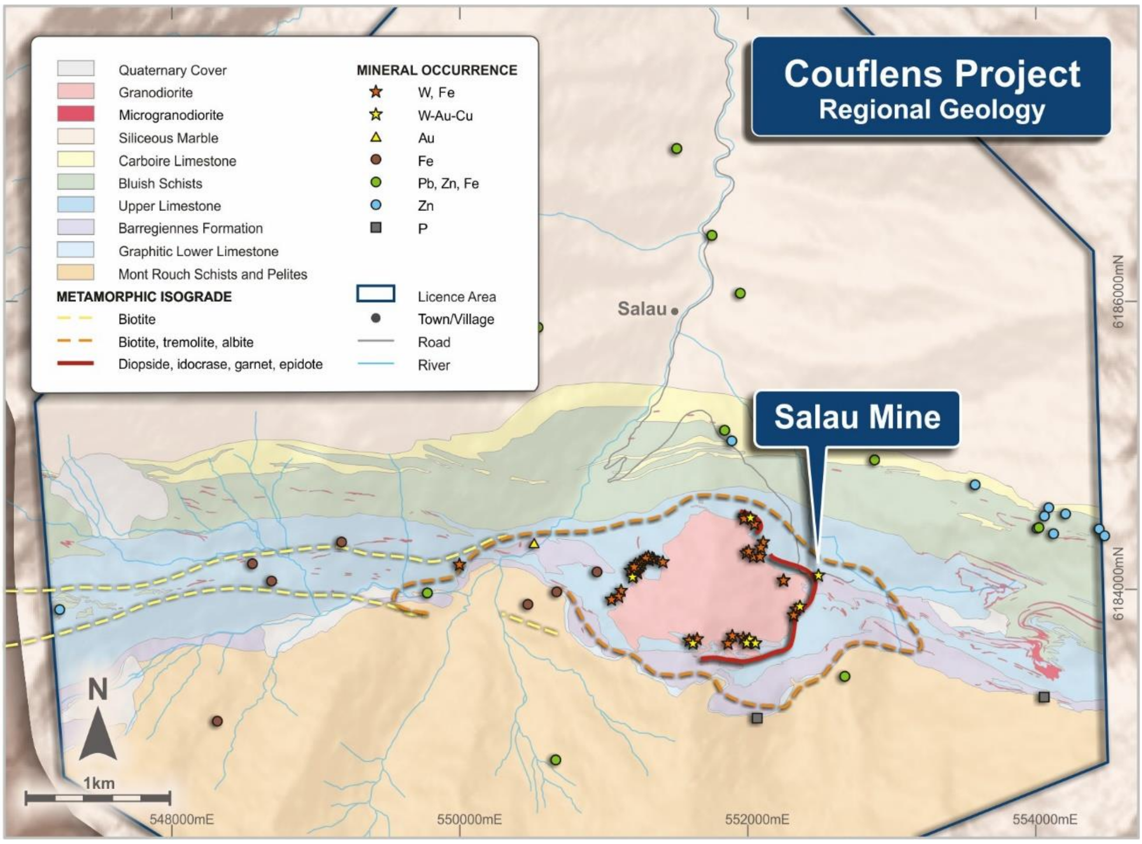


*Figure 3: Couflens Project - Regional Geology*

## Regional Exploration Potential

Regional exploration potential is considered significant with numerous tungsten-copper-gold targets identified within the broader project area based on historical surface exploration data and recent field campaigns completed during 2015 and 2016.

The Salau deposit was discovered in the early 1960's as a result of systematic exploration by the BRGM, using the following key criteria to identify favourable geological settings for the formation of scheelite skarns:

- Contacts between granitic intrusions and carbonate rocks;
- Small granite apex (limited to a few km$^2$); and
- The presence of sulphides (pyrrhotite, chalcopyrite).

The presence of a thick package of carbonate bearing sediments, locally intruded by small granodioritic bodies (apexes) with associated scheelite and/or pyrrhotite mineral occurrences, highlights the potential for new tungsten-copper-gold discoveries within a highly prospective corridor extending for 5km along strike to the west of the Salau deposit (Figures 4 and 5).

Geophysical anomalism and indications of contact metamorphism within this prospective corridor are interpreted as potentially the product of shallow buried granodiorite intrusions. These represent priority targets for scheelite skarn mineralisation and potentially intrusive related gold systems (Figure 5).

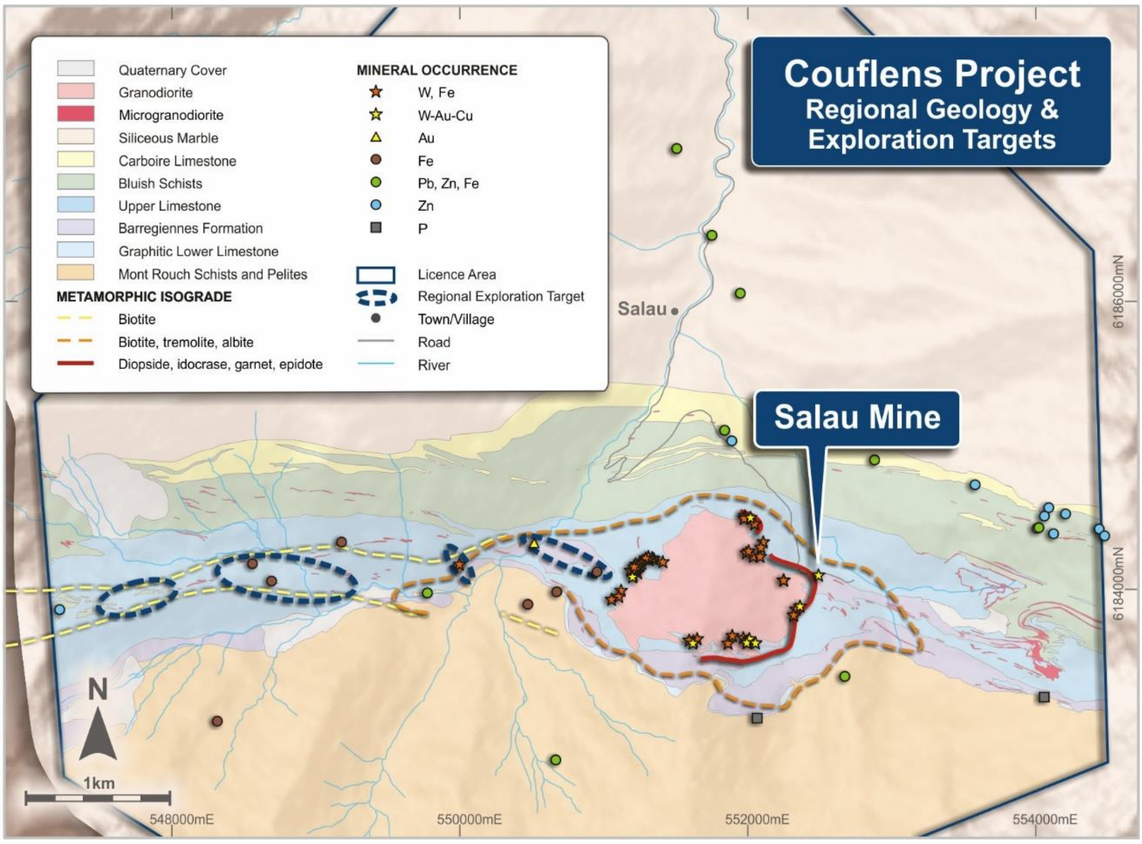


*Figure 4: Couflens Project - Regional Geology and Exploration Targets*

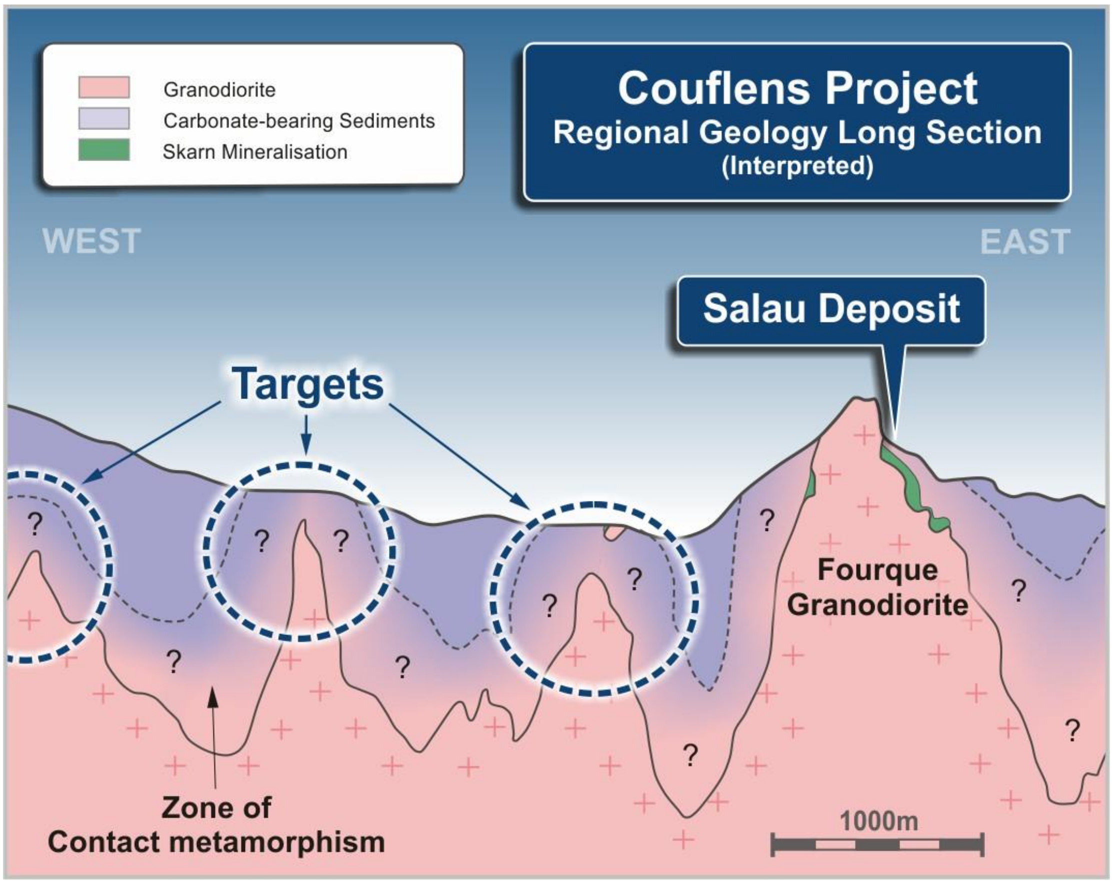


*Figure 5: Couflens Project - Interpreted Regional Long Section and Exploration Targets*

### *Gold potential*

Gold was not discovered in the Salau mine until very late in the mine life (and as a result was never recovered in milling). Limited sampling of material from the lower section of the Veronique ore zone indicated the presence of high grade gold (Fonteilles et al, 1989).

Work undertaken in recent years as part of a PhD thesis has demonstrated that the gold contained in the Salau deposit has potentially been largely underestimated and that the nature of the gold mineralisation had previously not been fully understood. Further, as the presence of gold did not appear systematically with tungsten mineralisation, it was considered erratic and therefore largely excluded from historical exploration programs.

The recent work has shown that this gold is associated with hydrothermal fluids focused by the "Veronique" type faults. Numerous gold occurrences (up to 5.81 g/t gold) have been observed with scheelite and sulphides where these fault structures intersect the granodiorite-carbonate bearing sediments contact (Figure 6).

Whilst these fault structures can only concentrate tungsten mineralisation near the pre-existing skarn, it is plausible that these same faults could provide the fluid pathways and focusing mechanisms required for the development of shear hosted gold deposits outside the tungsten-rich zones. The recent discovery of a high-grade gold occurrence (6.91g/t gold) in quartz veins located approximately 500m to the west of the Fourque granodiorite, without associated tungsten, supports this interpretation (Figure 6).

Accordingly, the three main east-west trending fault structures recognised within the Fourque granodiorite (Veronique Fault, Christine Fault and Bois de la Fourque Fault, which have a cumulative strike length of approximately 3km) and their extensions, along strike and at depth, represent priority gold exploration targets (Figure 6).

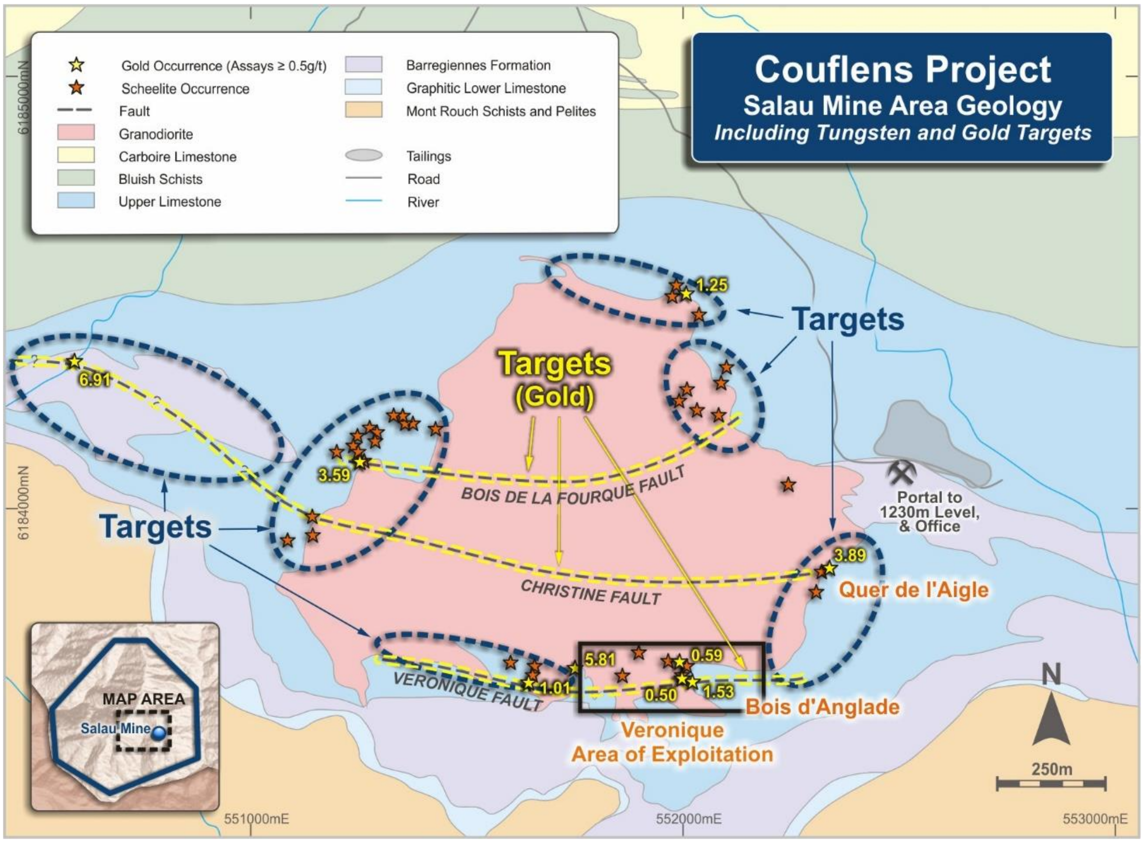


*Figure 6: Tungsten-Copper-Gold and Gold Only Exploration Targets within Salau Mine Area*

## Work Plan – Regional Exploration

The regional exploration work plan includes:

- Follow-up field campaign focussed on identifying extensions to the high-grade gold occurrence located 500m west of the Fourque granodiorite (currently underway)
- Surface exploration programs to further assess identified prospects and advance them to the drill ready stage
- Generation of new targets within the broader project area
- Continued review and digitisation of available regional exploration data

The Company will undertake the work program with a strong commitment to all aspects of sustainable development with an integrated approach to economic, social, environmental, health and safety management.

## Competent Persons Statement

*The information in this report that relates to Exploration Results is based on information compiled by Robert Behets, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Behets is a holder of shares and options in, and is a director of, Apollo Minerals Limited. Mr Behets 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 Behets 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*

## Appendix A - Summary of Significant Rock Chip Sample Results

| Sample number | Latitude | Longitude | Elevation (m) | $WO_3$ (%) | Au (ppm) | Cu (ppm) | Description |
|---|---|---|---|---|---|---|---|
| TPCOU13 | 42.736580 | 1.194760 | 1608 | 0.24 | NA | 6843 | Massive pyrrhotite with scheelite |
| TPCOU15 | 42.736440 | 1.197520 | 1475 | 0.79 | NA | 9508 | Massive pyrrhotite and chalcopyrite with scheelite |
| MPCOU01 | 42.736580 | 1.194760 | 1605 | 0.23 | NA | 157 | Dark green garnet, pyroxene and scheelite skarn |
| MPCOU02 | 42.736580 | 1.194760 | 1605 | 1.63 | NA | 1457 | Sheared quartz with sulphides and scheelite (rich in boxworks) |
| AACOU02 | 42.736450 | 1.195840 | 1532 | 0.93 | NA | 3974 | Massive pyrrhotite in calcic hornfels with chalcopyrite and scheelite |
| TP53 | 42.737029 | 1.194937 | 1534 | 2.28 | < LOD | 8269 | Massive pyrrhotite and chalcopyrite with scheelite |
| TP56 | 42.737087 | 1.194933 | 1541 | 0.89 | < LOD | 1453 | Garnet and pyroxene skarn with beds of pyrrhotite and chalcopyrite |
| TP58 | 42.737224 | 1.194711 | 1545 | 0.27 | < LOD | 185 | Garnet and pyroxene banded skarn |
| TP61 | 42.736766 | 1.194607 | 1565 | 0.66 | 0.01 | 1532 | Contact between garnet and pyroxene banded skarn and massive pyrrhotite with chalcopyrite |
| TP62 | 42.736928 | 1.194591 | 1572 | 0.02 | < LOD | 3467 | Massive sulphides (chalcopyrite, pyrrhotite) at contact with garnet and pyroxene skarn |
| TP63 | 42.736771 | 1.195005 | 1578 | 0.33 | 0.32 | 49 | Garnet and pyroxene banded skarn with pyrrhotite |
| TP73 | 42.748112 | 1.207177 | 1347 | < LOD | 0.04 | 5929 | Calcite sheared veins with sphalerite, pyrite, chalcopyrite and galena lodes |
| TP137 | 42.741329 | 1.185057 | 1381 | 0.36 | 3.59 | 2509 | Skarn with pyrrhotite and chalcopyrite beds |
| TP146 | 42.743312 | 1.196022 | 1338 | < LOD | 0.23 | 236 | Banded skarn with pyrrhotite and scheelite at contact between granodiorite and marble |
| TP151 | 42.744398 | 1.195239 | 1348 | 1.83 | 0.47 | 266 | Massive sulphides (pyrrhotite, chalcopyrite and arsenopyrite) |
| TP154 | 42.744796 | 1.194260 | 1399 | 2.16 | 1.25 | 2615 | Massive pyrrhotite and chalcopyrite |
| TP203 | 42.739069 | 1.198729 | 1339 | 0.21 | 3.89 | < LOD | Garnet, scheelite and pyroxene banded skarn with pyrrhotite and chalcopyrite |
| TP309 | 42.735726 | 1.219865 | 1866 | < LOD | 0.39 | 32 | Talc and pyrite schist at contact with microgranite sill |
| TP430 | 42.737447 | 1.193976 | 1600 | 0.77 | 0.24 | 15998 | White quartz lode very oxidized with chalcopyrite, pyrrhotite and scheelite (true thickness 4-5 m) |
| TP433 | 42.736999 | 1.193434 | 1632 | 0.01 | 0.02 | 7545 | Breccia with white quartz and granodiorite clasts cemented in a sulphide matrix (mainly chalcopyrite) |
| TP482 | 42.736766 | 1.194607 | 1565 | 0.38 | 0.20 | 2233 | Calcite sheared vein (20 cm) with pyrrhotite |
| TP483 | 42.736766 | 1.194607 | 1565 | 0.13 | 0.40 | 4471 | Massive sulphides (pyrrhotite, chalcopyrite) and scheelite |
| TP488 | 42.736766 | 1.194607 | 1565 | 0.19 | 0.21 | 3654 | White quartz fault very fractured with sulphides and abundant scheelite, cross cutting the granodiorite |
| TP495 | 42.736766 | 1.194607 | 1565 | 3.19 | 0.50 | 4273 | Garnet, scheelite and pyroxene skarn with beds of massive sulphides (pyrrhotite, chalcopyrite) |
| TP499 | 42.736766 | 1.194607 | 1565 | 0.88 | < LOD | 6468 | Massive sulphides (pyrrhotite, chalcopyrite) at contact with garnet and pyroxene skarn |
| TP503 | 42.737475 | 1.194274 | 1584 | 1.70 | 0.59 | 1323 | Garnet and pyroxene skarn with pyrrhotite at contact with the granodiorite and a white quartz lode |
| TP505 | 42.737463 | 1.193396 | 1647 | 0.16 | 0.49 | 678 | Garnet and pyroxene skarn with massive pyrrhotite |
| TP506 | 42.736897 | 1.192046 | 1729 | 0.07 | 0.13 | 270 | Skarn with massive pyrrhotite in the marbles |
| TP507 | 42.736849 | 1.191533 | 1757 | 0.17 | 0.31 | 128 | Garnet and pyroxene skarn with massive pyrrhotite |
| TP508 | 42.737019 | 1.191347 | 1772 | 0.29 | 5.81 | 1153 | Massive sulphides (pyrrhotite, chalcopyrite) |
| TP509 | 42.737321 | 1.189940 | 1880 | 0.12 | 0.18 | 349 | Garnet and pyroxene quartz skarn with massive pyrrhotite |
| TP513 | 42.737031 | 1.189945 | 1872 | 0.22 | 1.01 | 90 | Garnet and pyroxene quartz skarn with pyrrhotite very siliceous and oxidized |
| TP574 | 42.736153 | 1.193272 | 1691 | < LOD | 0.35 | < LOD | Granodiorite very altered (silicified and very oxidised) at contact with the marbles |
| TP595 | 42.738046 | 1.196175 | 1479 | 2.49 | 0.46 | 2677 | Black centimeter quartz lodes at contact with a granodiorite very altered and rich in pyrrhotite |
| TP600 | 42.744951 | 1.193506 | 1418 | 2.78 | 0.01 | 3943 | Blue-grey quartz vein fractured with white quartz (thickness 30 cm) |
| TP603 | 42.742244 | 1.191500 | 1599 | < LOD | 0.10 | < LOD | Sheared two micas quartz granodiorite with presence of sulphides |
| TP617 | 42.736766 | 1.194607 | 1565 | < LOD | 0.12 | < LOD | Quartz vein with massive pyrrhotite |
| TP618 | 42.736766 | 1.194607 | 1565 | 0.04 | 0.20 | 593 | Calcite vein with pyrrhotite and chalcopyrite |
| TP619 | 42.736766 | 1.194607 | 1565 | 0.17 | 0.15 | 338 | Fractured grey white quartz with pyrrhotite and chalcopyrite metric lodes |
| TP661 | 42.742849 | 1.176924 | 978 | < LOD | 6.91 | 117 | Quartz lode with pyrrhotite and arsenopyrite (thickness of 10 cm) cross cutting the marbles |
| TP738 | 42.736771 | 1.195005 | 1578 | 19.54 | 1.53 | 4955 | Massive sulphides at contact with garnet and pyroxene skarn |
| QMSAL91 | 42.742738 | 1.195006 | 1411 | 0.37 | NA | 58 | Garnet and pyroxene skarn with beds of sulphides (pyrrhotite, chalcopyrite) |
| QMSAL92 | 42.742738 | 1.195006 | 1411 | 2.76 | NA | 1084 | Massive sulphides (pyrrhotite, chalcopyrite, arsenopyrite) |

*Coordinate system: WGS 84*

# Appendix B: JORC Code, 2012 Edition – Table 1 Report

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | *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.* | 860 rock samples were collected as grab/chip samples from outcrops as part of early stage regional exploration undertaken within the boundaries of the Couflens PER during 2015 and 2016. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | Sample size was approximately 1kg in weight. Where mineralisation was observed, rock samples were collected from an area of approximately 50cm² to enhance representivity.<br>Rock sample locations were surveyed using standard Garmin GPS equipment achieving sub metre accuracy in horizontal and vertical position. |
| | *Aspects of the determination of mineralisation that are Material to the Public Report. 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.* | Rock samples were collected from outcrops, with sample sizes of approximately 1kg.<br>Rock samples were transported to the e-Mines sample preparation/assay laboratory in Dun, southern France (Dr Michel Bonnemaison, a Director of Apollo Minerals Limited, is a director and beneficial shareholder of e-Mines). Samples were dried and crushed to -2mm. Samples were then split using a riffle splitter to recover 100g. Sample splits were pulverised to -80µm. 5g of the sample were pressed into pellets for multi-element analysis by X-ray fluorescence (XRF) using a NITON XRF analytical device.<br>Selected mineralised samples (30g of powder) were transported to the ALS laboratory in Loughrea, Ireland for gold analysis by fire assay. |
| ***Drilling techniques*** | *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 reported |
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.* | No drilling results reported |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | No drilling results reported |
| | *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 reported |
| ***Logging*** | *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.* | No drilling results reported<br>Rock samples were described (lithology, mineralogy, texture, structures) with details entered into an Excel based Geological Database |
| | *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | No drilling results reported |
| | *The total length and percentage of the relevant intersections logged.* | No drilling results reported. |
| ***Sub-sampling techniques*** | *If core, whether cut or sawn and whether quarter, half or all core taken.* | No drilling results reported |
| ***and sample preparation*** | *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | No drilling results reported |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | Rock samples from the 2015 and 2016 field campaigns were transported to the external sample preparation/assay laboratory in Dun, southern France. Samples were dried and crushed to -2mm. Samples were then split using a riffle splitter to recover 100g. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | | Sample splits were pulverized in a hammer mill to -80µm. 5g of the material was pressed into pellets ready for loading into a NITON XRF analytical device.<br><br>Sample sizes and preparation techniques employed are considered to be appropriate for the generation of early stage exploration results. |
| | *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | No sub-sampling was applied into sample batches before arriving to the external laboratory.<br><br>External laboratories QA/QC procedures involved the use of standards and blanks which are inserted into sample batches at a frequency of approximately 5%. |
| | *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.* | Sample size was approximately 1kg in weight. Where mineralisation was observed, rock samples were collected from an area of approximately 50cm² to enhance representivity.<br><br>No field duplicates were collected for the rock samples. |
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | The scheelite can be either fine grained (< 50µm) or coarse grained (> 200µm), depending of the ore type. Previous test work carried out by e-Mines using different sample sizes has demonstrated that the selected sample size is appropriate. |
| ***Quality of assay data and laboratory tests*** | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | Samples were analysed at the e-Mines laboratory (Dun, France) using a handheld Thermoscientific NITONXL3T GOLDD+ XRF device. Readings were conducted over 90 seconds with an appropriate calibration mode for soil and rock samples. Both major and trace for 40 elements were recorded.<br><br>150 selected samples were analysed at the ALS laboratory (Loughrea, Ireland) by four acid ICP-AES. Gold was analysed by Au 30g fire assay fusion with AAS finish. The technique is considered total. |
| | *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.* | Samples were analysed at the e-Mines laboratory using a handheld Thermoscientific NITONXL3T GOLDD+ XRF device. Readings were conducted over 90 seconds with an appropriate calibration mode for soil and rock samples. |
| | *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.* | The external laboratories used maintain their own process of QA/QC using standards, sample duplicates and blanks.<br><br>Review of the external laboratory quality QA/QC reports, has shown no sample preparation issues, acceptable levels of accuracy and precision and no bias in the analytical datasets. |
| ***Verification of sampling and assaying*** | *The verification of significant intersections by either independent or alternative company personnel.* | No drilling results reported |
| | *The use of twinned holes.* | No drilling results reported |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | All primary data is recorded in specifically designed templates.. Assay data from the external laboratories was received in spreadsheets and downloaded directly into an Excel based Geological Database managed by the Company. Data is entered into controlled Excel templates for validation. Daily backups of all digital data are undertaken. |
| | *Discuss any adjustment to assay data.* | Tungsten (ppm) assays received from the external laboratory are converted to $WO_3$ (ppm) using the stoichiometric factor of 1.2611. |
| ***Location of data points*** | *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.* | GPS coordinates of rock sample locations were captured using a Garmin GPS in latitude-longitude decimal degrees with sub-metre accuracy in horizontal and vertical position. |
| | *Specification of the grid system used.* | Sample locations were projected from latitude-longitude decimal degrees and recorded into the GIS database in the RGF93-Lambert93 system. |
| | *Quality and adequacy of topographic control.* | Topographic control is based on a digital terrain model with sub metric accuracy sourced from the French Institute Geographic National (Institut Géographique National). |
| ***Data spacing and distribution*** | *Data spacing for reporting of Exploration Results.* | Rock samples were randomly collected i.e. not on a fixed grid pattern. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.* | The data spacing is not considered sufficient to assume geological and grade continuity, and will not allow the estimation of Mineral Resources. |
| | *Whether sample compositing has been applied.* | No compositing of samples in the field was undertaken. |
| ***Orientation of data in relation to geological structure*** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* | In the Salau mine area, the mineralised zone strikes east-west and is steeply dipping (70°N to vertical). |
| | *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.* | No drilling results reported |
| ***Sample security*** | *The measures taken to ensure sample security.* | In the field, samples were numbered with plastic labels and indelible ink in a tied plastic bag. Samples were counted and grouped by ten units in labelled plastic bag each day on the field base camp. Samples were then transported to the Dun facility. Upon arrival at the external laboratory, a check counting control was undertaken for each sample before commencement of sample preparation activities. |
| ***Audits or reviews*** | *The results of any audits or reviews of sampling techniques and data.* | There has been no external audit or formal review of the techniques used or data collected during the 2015 and 2016 field campaigns. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | *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 Couflens Project comprises the granted Couflens exploration licence (permis exclusif de recherches – "PER") which covers an area of 42km$^2$ centred on the historical Salau mine.<br>The Couflens PER was applied for, and granted to, Variscan Mines SAS ("Variscan France"), a wholly owned subsidiary of Variscan Mines Limited. The PER has been granted for an initial period of five (5) years commencing 11 February 2017,<br>Apollo Minerals Limited ("Apollo Minerals") wholly owns Ariege Tungstene SAS ("Ariege"), which holds an 80% interest in Mines du Salat SAS ("MdS"). MdS is governed by a Shareholder Agreement with Variscan France, the holder of the Couflens PER, pursuant to which Variscan France will transfer the Couflens PER to MdS.<br>No historical sites, wilderness or national parks are located within the Couflens PER. The Couflens PER is located within the Pyrenees Ariegeoises Regional Natural Park (which is not a National Park) and adjacent to the village of Salau. |
| | *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.* | Tenure in the form of a PER (permis exclusif de recherches, a French exploration licence) has been granted and is considered secure. In accordance with the French Mining Code, the PER may be extended for two additional periods of a maximum of 5 years each.<br>There are no known impediments to obtaining a licence to operate in this area. |
| ***Exploration done by other parties*** | *Acknowledgment and appraisal of exploration by other parties.* | Previous regional exploration on Couflens PER (outside Salau mine area) was undertaken by BRGM during 1960's to 1980's. Work completed included geological mapping, geophysical surveys, geochemical surveys, rock sampling and diamond drilling.<br>Historical geophysical surveys included an airborne (helicopter) electromagnetic survey and ground based magnetic, resistivity and gravity surveys. Geochemical surveys included stream sediment sampling.<br>A detailed assessment of the historic data is in progress. No significant issues with the data have been detected to-date. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| ***Geology*** | *Deposit type, geological setting and style of mineralisation.* | The tungsten skarn mineralisation of the Salau deposit is hosted within Devonian marbles adjacent to the La Fourque granodiorite. The mineralisation typically occurs as a 70°N to sub-vertical dipping lenses occurring between surface and 600m depth, and remain open at depth. The style of the tungsten mineralisation includes veins and disseminated mineralisation in a fault called Veronique related to late brittle deformation. Scheelite is the tungsten ore. Most of the mineralisation is hosted within Veronique shear zone and contact metamorphism halo in marbles. This deposit can be considered as a tungsten skarn cross-cut by a later auriferous shear-zone system. |
| ***Drill hole Information*** | *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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.* | No drilling results reported |
| | *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.* | No drilling results reported |
| ***Data aggregation methods*** | *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.* | No high grade cuts have been applied to the rock sample data reported |
| | *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.* | No aggregation has been applied to the rock sample data reported |
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | No metal equivalent values are used. |
| ***Relationship between mineralisation widths and intercept lengths*** | *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.* | No drilling results reported |
| | *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').* | No drilling results reported |
| ***Diagrams*** | *Appropriate maps and sections (with scales) and tabulations of intercepts 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.* | Appropriate diagrams, including geological plans and a regional long section (interpreted), are included in the main body of this release. |
| ***Balanced reporting*** | *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.* | All results are reported in Appendix A of this release. |
| ***Other substantive exploration data*** | *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.* | A ground regional magnetic and VLF survey was conducted in 2016 within the Couflens PER, using a GSM-19 GW total field proton magnetometer with "overhauser" effect of the GEM SYSTEM brand with integrated GPS.<br>The resolution of each measure is 0.01 nT. 200 line kms representing approximately 270,000 magnetic and 1,200 VLF measurements were acquired. Modelling and interpretation of this data is ongoing. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Further work*** | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* | Further regional exploration related work planned for the Couflens PER includes ongoing review of the historical exploration datasets and systematic follow-up geological mapping, rock sampling and geophysical surveys over identified prospects and exploration targets. |
| | *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | These diagrams are included in the main body of this release. |