

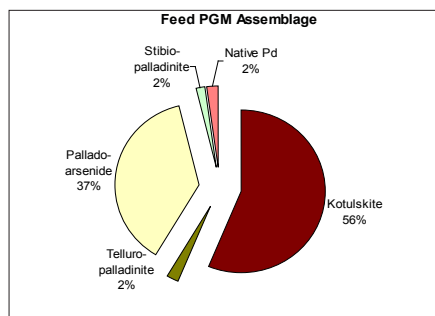
QUANTITATIVE TRACE MINERAL ANALYSIS

SGS ADVANCED MINERALOGY NETWORK

CHARACTERIZATION OF PRECIOUS AND TRACE MINERAL COMPONENTS

High Definition Mineralogy is valuable for the identification and characterization of precious or trace mineral components in an ore, metallurgical product or soil sample. These components, including gold, uranium, and platinum group minerals, or contaminant heavy metals such as lead, mercury or arsenic, commonly occur in the range of 1 to 100 parts per million, and are normally very costly and time consuming to locate.

QEMSCAN™ is capable of automated, high magnification searches at detailed point spacing, and can locate particles as small as 0.5 to 1 micrometer in diameter.



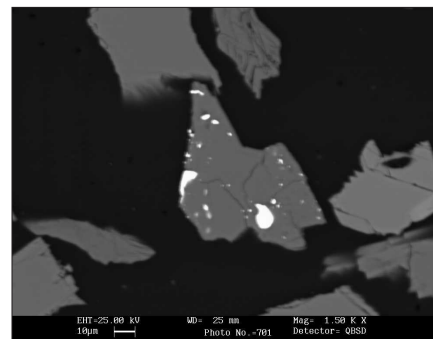
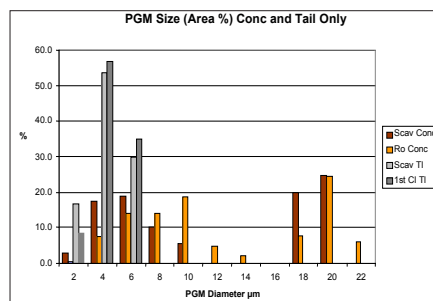
PRECIOUS MINERALS (GOLD AND PLATINUM GROUP ELEMENTS)

In drill cores and composite samples, detailed characterization of precious minerals is essential to the primary economic evaluation of the deposit, and later, the selection, development and optimization of metallurgical processes.

High Definition Mineralogy analysis provides:

- identification of precious mineral components,
- particle and grain size distribution,
- elemental department,
- mineralogical associations and
- locking characteristics.

Right, fine-grained platinum group minerals (PGM) occur as attachments and inclusions in silicate minerals. The charts below illustrate the PGM assemblage in a metallurgical feed sample (left) and detailed size distribution data for PGM grains in concentrates and tailings (right).



CONTACT INFORMATION

Email us at minerals@sgs.com
www.sgs.com/mining