

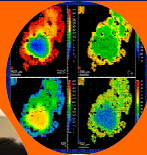
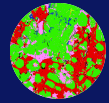
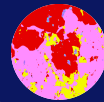
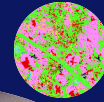
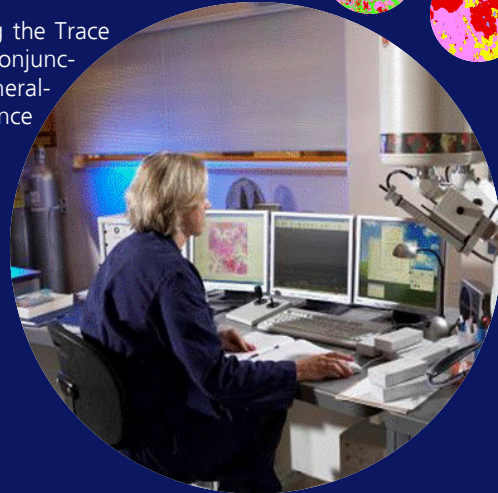
Diagnostic Gold Mineralogy...

QEMSCAN Quantitative Mineralogy

XPS has the capability to measure gold grains and gold minerals using the Trace Mineral Search (TMS) mode of operation. This QEMSCAN method, in conjunction with standard Particle Measurement Analysis (PMA) for modal mineralogy measurement helps our clients understand the nature and occurrence of native gold and gold bearing minerals.

Our methods produce gold deposit mineral characterisation for:

- Ore and gangue mineralogy, preg robbing minerals
- Grain sizes
- Grain shapes
- Associations with alteration minerals
- Liberation in concentrator or metallurgical test products
- Quantify diluting minerals in concentrates
- Quantify form of gold losses in tailings

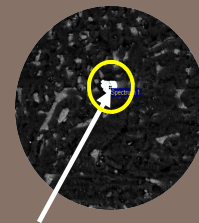
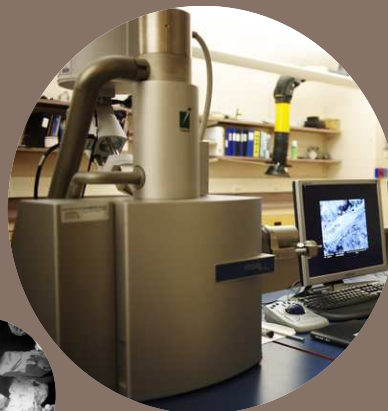


Cameca Electron Microprobe Analyzer

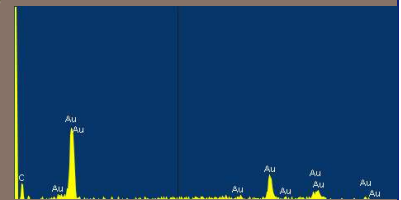
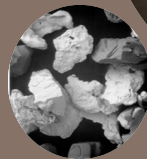
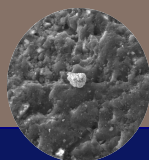
- The SX-100 EPMA provides low detection limits of a few hundred ppm for most elements
- Analyse grains down to 10µm or check compositional zoning
- Check refractory gold in pyrite, arsenopyrite at higher detection limits prior to using SIMS, PIXE or Laser Ablation
- Check for deleterious elements: As, Bi, Se, Te etc. in host gangue and ore minerals such as calaverite and sylvanite
- Use mineral compositions with QEMSCAN modal % data for calculated assays and accurate metal department

TESCAN Environmental SEM

- Suited to high magnification characterisation of micron scale Au and gangue mineralogy, coconut shell carbon and Zn powder used in the Merrill-Crowe Process
- Oxford INCA energy dispersive x-ray microanalysis system plus Feature Analysis for EDS level composition data
- Below and Right: Calcium deposits [light grey patches] on activated carbon and gold grain [white]



Ca covering activated carbon



For further information on gold diagnostic mineralogy services please contact:

dfragomeni@xstrataprocesssupport.ca

lkormos@xstrataprocesssupport.ca

Tel: +1 (705) 699 3400

Fax: +1 (705) 699 3431

www.xstrataprocesssupport.com