

ACHIEVE ROCK SOLID MINERALS ANALYSIS

The Measure of Confidence



Agilent Technologies solutions for Geochemistry, Mining and Metals

Agilent is the proven leader in elemental analysis for geochemistry, mining, and metals industries. We offer the broadest atomic spectroscopy portfolio on earth, with AA, MP-AES, ICP-OES and ICP-MS solutions that solve your toughest challenges. Our innovative and unique solutions also create opportunities for you to advance and define new levels of performance. From exploration and production to mine site rehabilitation, Agilent is the single source you require to achieve rock-solid minerals analyses with maximum speed, accuracy, safety and cost savings.

Agilent solutions for geochemistry, metals & mining

- Rugged, reliable, low cost atomic absorption spectrometers ideal for challenging conditions
- Revolutionary Microwave Plasma Atomic Emission Spectrometer (MP-AES), which runs on air, enabling unattended multi-element analyses without flammable and expensive gases
- Robust, productive ICP-OES chosen by mining labs around the world for fast, accurate and reproducible geochemical analysis
- ICP-MS for ultimate confidence in trace analysis
- Micro GC for the analysis of mine gas
- Handheld FTIR for at-site rock and mineral measurement

“With the MP-AES instrument Agilent seems to have hit a homerun for both gold analysis and base metal analysis.”

— BOBBY JOE REICHEL, NEWMONT MINES



**Reduce costs, work anywhere
with safe elemental analysis that
RUNS ON AIR!**

Agilent lets you take high-performance, low cost minerals analysis to any mine location. Learn how the 4200 MP-AES can free up your minerals analysis.

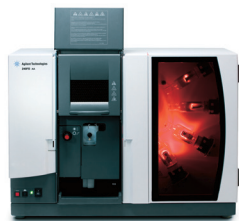
Visit:

www.agilent.com/chem/mpaes_mining



Agilent Technologies

Atomic Absorption (AA)



- Low system cost
- Moderate productivity
- High ppb to %

Analyze base metals in ore grade material, minor or major components in steel and alloys, and high purity gold with Agilent's rugged and reliable atomic absorption spectrometers.

Microwave Plasma-Atomic Emission Spectroscopy (MP-AES)



- Low running cost
- Unattended operation
- Low ppb to %

Free up your minerals analysis by locating the 4200 MP-AES where your samples are. With no need for ongoing gas supply, remote sites and mobile laboratories no longer need to source gas, or have gas delivered to a remote location.

Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES)



- Highest productivity (<30 s per sample) with SVS 2+
- Low ppb to %
- Vertically oriented torch
- As high as 30% total dissolved solids

Determine traces in the presence of line rich elements such as iron and titanium, analytes from trace to percentage levels, or handle digests with high levels of dissolved solids. The robust Agilent 5100 ICP-OES is also the world's most productive ICP-OES.

Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)



- High productivity (<60 s per sample) with ISIS 3
- Low ppq to %
- Up to 25% total dissolved solids

Agilent's 7900 ICP-MS redefines ICP-MS performance. The Ultra-High Matrix Introduction (UHMI) option extends matrix tolerance up to 25% dissolved solids, and the Octopole Reaction System (ORS⁴) removes all common polyatomic interferences in a single, universal cell mode. The 8800 Triple Quadrupole ICP-MS (ICP-QQQ) adds advanced interference removal in reaction mode, for unrivalled accuracy at ultra-trace levels.

Micro GC



Perform fast, on-site analysis of mine gas with the Agilent 490 Micro GC. Ensure the safety of the mine workers especially for oxygen and low carbon monoxide levels, and explosive gases like methane, hydrogen, ethane and ethylene as an early warning of a fire or potential explosion.

Fourier Transform Infrared (FTIR)



Analyze the molecular composition of rocks and minerals with little or no sample preparation using the Agilent 4300 HandHeld FTIR.

Discover how you can achieve rock-solid minerals analysis:
www.agilent.com/chem/mining

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© Agilent Technologies, Inc. 2014
Published in USA, July 18, 2014
5991-0686EN

