EZ-ID provides geologists, geoscientists, and ge metallurgists with the tools to identify minerals, create more accurate mineral maps and vector alteration to mineralization

**Porphyry Alteration Minerals**
Sericite/Muscovite, Chlorite, Biotite, Anhydrite, Epidote, Illite, Kaolinite, Alunite, Calcite, Smectite

**Porphyry Leach Cap Minerals**
Jarosite, Alunite, Pyrophyllite, Diaspore, Zunyite, Dickite

**Epithermal—Low Sulfdation Alteration Minerals**
Illite, Smectite, Montmorillonite, Kaolinite, Calcite, Buddingtonite, Chlorite, Epidote

**Epithermal—High Sulfdation Alteration Minerals**
Alunite, Pyrophyllite, Kaolinite, Illite, Chlorite, Diaspore, Dickite, Smectite, Montmorillonite

**IOCG Alteration Minerals**
Albite, Sericite/Muscovite, Biotite, Calcite, Chlorite, Epidote, Phlogopite

**Rare Earth Minerals**
Apatite, Monazite, Bastnaesite, Parasite, Xenotime

**Uranium**
Uraninite, Sericite, Dickite, Chlorite, Kaolinite, Illite, Pyrite, Chalcopyrite
Mineral identification has never been faster, easier, or more accurate than with EZ-ID software from SPECTRAL EVOLUTION. EZ-ID provides mineral identification capabilities for the oreXpress, RS-5400 and SR-6500 spectrometers for mining exploration.

You can perform mineral identification in seconds by matching your target minerals against the latest USGS library of 266 minerals and 466 spectra. The optional SPECMin and GeoSPEC High Resolution libraries provide an additional 2216 scans for fast identification of over 731 minerals. EZ-ID compares the target spectra versus the library, allows you to select regions of interest for closer examination, provides the most likely matches with weighted scores and offers scalars to enhance the geologist’s understanding of crystallinity changes, alteration pattern shifts and geochemical conditions. A batch processing capability allows a geologist to select target files, their information and rankings, and import that data into a Microsoft Excel spreadsheet, a comma delimited file, or a tab delimited file, for geological modeling or mine planning. EZ-ID software can be used on unknown samples found on outcrops, in pits, hand samples, cores, anywhere mineral identification is performed. EZ-ID features include:

- Fast and accurate identification of an unknown mineral to a known library sample
- Easy-to-use—just collect your scan using the oreXpress, RS-5400 or ultra-high resolution SR-6500 and see results in real time
- Scalars provide a geologist with a better understanding of mineral formation conditions
- Software provides a weighted score for best matches
- Include or exclude spectral regions of interest for optimal results and display results and scores in multiple columns in different combinations for comparison
- Fast scanning is perfect for collecting/identifying target minerals in a core logging shack

EZ-ID works through the DARWin SP Data Acquisition software interface for all our spectrometers and spectroradiometers. You can select the Match Analysis function or Library Builder.

Alunite
Alunite identified by EZ-ID with a match to the SPECMin library—available along with the USGS and Colorado School of Mines libraries. The sample shows the characteristic absorption features near: 1440, 1475, 1760, 2165/2206, 2320 nm.

Kaolinite
Kaolinite (a clay) identified by the GeoSPEC library, showing characteristic absorption features at 960, 1400/1412, 2100/2206, 2310, 2350, 2380 nm. In this sample there seems to be some iron in the mix as represented by the large feature around 400-500 nm and a large water feature at 1900 nm.

Pyrophyllite
This sample of pyrophyllite, identified by the GeoSPEC library, shows the characteristic features at 1396, 2066/2078, 2168, 2320 nm. Using the multiple scoring column feature in EZ-ID we have been able to fine tune our analysis by focusing on different combinations of features, all in one display.