



# HyLogger™ scalar definitions

Acronym	Definition
<b>VIS-NIR</b>	Visible near-infrared 380nm-1300nm
<b>SWIR</b>	Shortwave Infrared 1300nm-2500nm
<b>TIR</b>	Thermal Infrared 6000nm-14500nm
<b>Min1</b>	Primary mineral component of sample
<b>Min2</b>	Secondary mineral component of sample
<b>Min3</b>	Tertiary mineral component of sample
<b>Grp1</b>	Grouping of Min1 minerals by common, more generalised, classification
<b>Grp2</b>	Grouping of Min2 minerals by common, more generalised, classification
<b>Grp3</b>	Grouping of Min3 minerals by common, more generalised, classification
<b>u</b>	Mineral match generated from a library subset chosen by an analyst
<b>TSA</b>	The spectral assistant algorithm used to match library spectra to the measured spectra
<b>jCLS</b>	Joint Constrained Least Squares algorithm used to match Thermal Infrared spectra to library spectra. "Joint" implies SWIR results influence TIR results.
<b>V</b>	Visible near-infrared minerals
<b>S</b>	Shortwave infrared minerals
<b>T</b>	Thermal infrared minerals

## SCALAR PLOT EXAMPLES

### Min1 uTSAS

- Min1 Primary mineral component of sample;
- u** Mineral match generated from a library subset chosen by an analyst;
- TSA** The spectral assistant algorithm used to match library spectra to the measured;
- S** Shortwave infrared minerals.

### Grp1 uTSAV

- Grp1 Grouping of Min1 minerals by common, more generalised, classification;
- u** Mineral match generated from a library subset chosen by an analyst;
- TSA** The spectral assistant algorithm used to match library spectra to the measured;
- V** Visible near-infrared minerals.

## Grp EXAMPLES

**WHITE-MICA:** Muscovite, Paragonite and Phengite

**KAOLIN:** Kaolinite, Dickite and Nacrite