



USGS - EPA Utah AML Project

SIR 2004-5241

Fe-bearing Minerals and Water

International Smelter site, Oquirrh Mountains

AVIRIS high-altitude data

August 5, 1998

Run 9, NEW3 calibration

Tetracorder 3.6a9 Product

**Iron Sulfide and Sulfate Minerals**

- pyrite
- copiapite
- fine-grained jarosite
- coarse-grained jarosite
- goethite + jarosite

**Iron Hydroxide Minerals**

- goethite: thin coating
- goethite: fine-grained
- goethite: medium-grained
- goethite: coarse-grained

**Iron Oxide Minerals**

- hematite: fine-grained
- hematite: medium-coarse grained

**Other Iron Minerals**

- minerals with generic Fe<sup>2+</sup> absorptions
- generic Fe<sup>2+</sup> with goethite and muscovite
- generic Fe<sup>2+</sup> with hematite
- minerals with generic Fe<sup>3+</sup> absorptions
- Fe<sup>2+</sup> minerals (including muscovite /sericite, +/- jarosite, +/- goethite)

**Mineral Assemblages with Low to Moderate Acid-Neutralizing Potential**

- chlorite + muscovite
- chlorite + goethite

**Water Classes**

- water + sediment
- water + red algae
- water with high chlorophyll content



500 m

