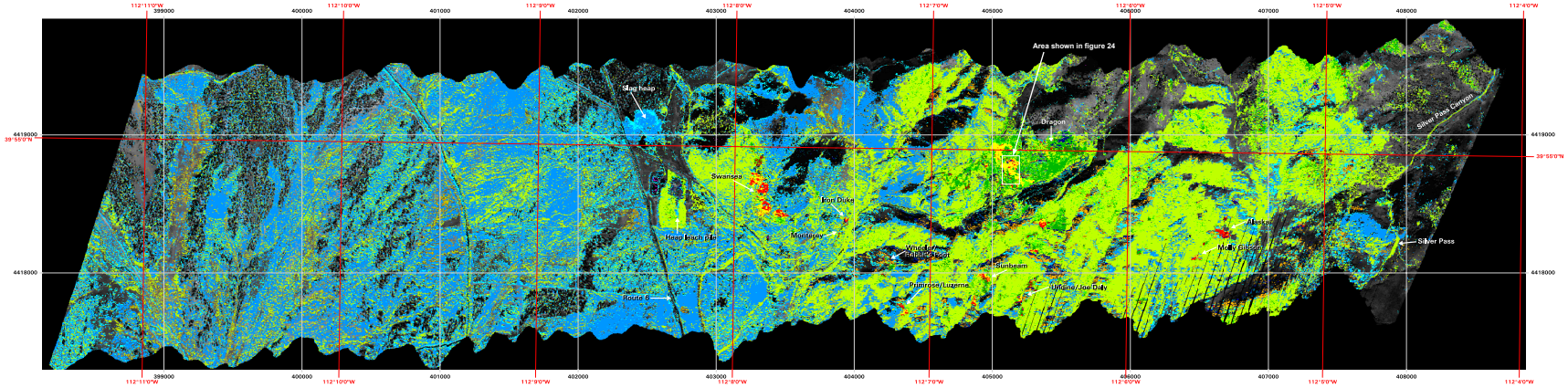
Tintic Mining District, Utah and Juab Counties, Utah

Map of Fe-bearing minerals and water produced from low-altitude AVIRIS imagery



Low-altitude AVIRIS flightline data:

- flightline designation: f991018t01p02_r04
- acquisition date: October 18, 1999
- altitude of Twin Otter platform: 17,500 feet
- ground speed: 85.5 knots
- geocorrected pixel size: 3 m

Scale

0.2 0 0.2 0.4 0.6 0.8 1 1.2 Kilometers

0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 Miles

UTM Projection
Zone 12
Clarke 1866 Spheroid
NAD27 Datum

N

Explanation for low-altitude AVIRIS mapping: Fe-bearing minerals and water

Iron Sulfate Minerals
- fine-grnd. jarosite: mine waste
- coarse-grnd. jarosite: mine/natural
- goethite + jarosite

Iron Hydroxide Minerals
- goethite: thin coating
- goethite: fine-grained
- goethite: medium-grained
- goethite: coarse-grained

Iron Oxide Minerals
- hematite: fine grained
- hematite: med.- to coarse-grained

Fe^{2+}-bearing Minerals
- generic
- with hematite
- with goethite and illite/muscovite

- chlorite + goethite
- other iron oxides/hydroxides
- water + red algae + sediment (heap leach drain pond)