

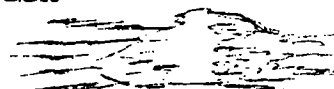
FRANCON QUARRY

Strontianite SrCO_3 in Francon Quarry has a great variety of form, it is most often seen in limestone as radiating tufts or balls of white acicular crystals but at Francon this form is unusual. Francon crystals are usually much stouter and less delicate.

One form is a radiating cluster composed of crystals having a base to length ratio of 1:3. Individuals from these clusters may be up to 5mm in length. The cross section is roughly circular, the whole being cone shaped.



Singles of the above crystalline cluster are quite often seen on their side, when they have the appearance of double cones joined at the base. Some of these have acicular projections extending from the ends parallel to the length.



The forms described above are sometimes more massive. These will sometimes terminate in a flat surface or a wedge shape.



Probably the most unusual is the "worm" shape. These are curving cylinders with hemispherical ends, composed of crystalites radiating from the center. They are up to a centimeter in length and have a cross section of about 2mm. The surface is irregular being mainly composed of rough terminations. A broken cross section shows the radiating crystalites solidly filling the interior. In nearly every case the center has dark inclusions, probably sulphides.



Strontiodresserite and hydrodresserite, two minerals from Francon Quarry have recently been described and named in the Canadian Mineralogist Vol. 15 part 3.

Dresserite	$\text{BaAl}_2 (\text{CO}_3)_2 \text{OH}_4 \cdot \text{H}_2\text{O}$
Strontiodresserite	$\text{SrAl}_2 (\text{CO}_3)_2 \text{OH}_4 \cdot \text{H}_2\text{O}$
Hydrodresserite	$\text{BaAl}_2 (\text{CO}_3)_2 \text{OH}_4 \cdot \text{H}_2\text{O}$

The hydrodresserite is distinctive and can be easily recognized under the microscope. You may have some in your Francon material. Both Strontiodresserite and Dresserite are orthorhombic but Hydrodresserite is triclinic. Dresserite usually occurs in spheres up

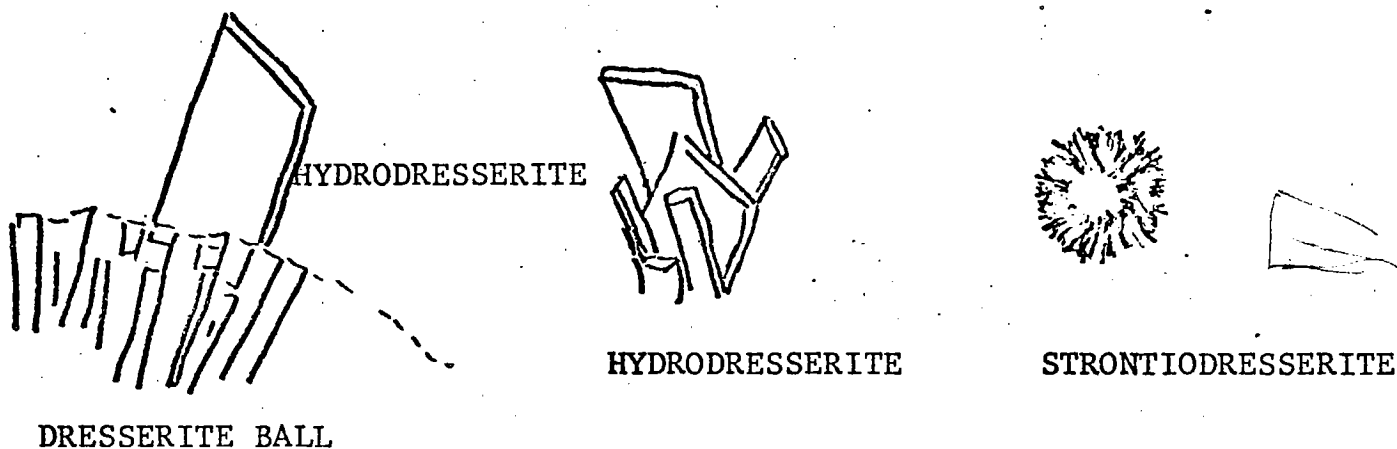
NOTE: Francon and Black Hills information taken from the Canadian Micromounters Bulletin via Cleves Dodge.

FRANCON QUARRY (cont)

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to 2mm in diameter which when broken disclose a silky fibrous radiating structure. The terminations seem flat at the circumference of the sphere. Hydrodresserite will often form a loose clump of crystals which might be mistaken for Dresserite but the Hydrodresserite crystals have an angular termination. They are clear to cloudy rather than silky. The Hydrodresserite will often be found growing on the Dresserite balls, taking its orientation from the Dresserite. The Hydrodresserite can nearly always be seen as individual crystals.

Strontiodresserite is described as vitreous to silky white coatings some of which are atoll shaped.



NEW MINERALS DISCOVERED IN BLACK HILLS OF SOUTH DAKOTA (Dec. 1976)

William Roberts, curator of mineralogy at the S. Dakota Museum of Mines and Technology, has discovered three totally new minerals. They have been named Robertsite, Segelerite and Jahnsite. All were found in the Tip-Top mine near Custer, South Dakota.

The minerals were X-rayed, chemically analysed at the Tech Experimental Station, and the data mailed to Dr. Paul D. Moore of the University of Chicago for further research. The findings have been sent to members of the International Committee on Minerals and New Mineral Names in several countries.

The International Committee has approved the description and names of the new minerals as follows:

JAHNSITE - minute crystals (under one quarter inch size) of nut brown, yellow-orange, or greenish-yellow colors. Named for Professor Richard H. Jahns, Dean of Earth Science, Stanford University.

SEGELERITE - Microscopic crystals, pale yellow to chartreuse to colorless. Named for Curt Segeler, an amateur mineralogist of Broadland, New York. Mr. Segeler has done extensive work with micromounts.

ROBERTSITE - Crystals of up to one quarter inches across, which cover areas as large as three to four inches in size. Named for finder, Mr. Roberts, Curator of Mineralogy at South Dakota Museum of Geology.