Fluorspar mines in Nevada were visited on June 25 and 27, 1974. The Daisy Mine of Crowell Fluorspar Co. is located about 5 miles southeast of Beatty, Nye County, Nevada. An automobile sedan can be used to drive to the mine by driving 1.2 miles south of the four corners at Beatty, turn left onto a gravel road, keep to the right and drive 3.6 miles to the mine shaft. UTM: Northing 4081800 Easting 527400. The mine is on the north slope of Bare Mountain, and at the northend of Amargosa Desert. The property includes 9 unpatented mining claims, originally owned and operated by Continental Fluorspar Co. from 1919-1920, then by J. Irving Crowell Senior from 1928-1935, by J. Irving Crowell Junior from 1939 to 1972, and now by Jack Crowell the latters'son. The Crowell Fluorspar Co. is a family operation. The third generation Crowell is now running the mine, and J. Irving Crowell, Sr. is the official bookkeeper and salesman.

On July 27, I went underground with Jack Crowell and examined the 6th and 8th level workings. Underground, they were only working two ore faces with 4 men and Jack Crowell. The mine was very dry except for one local area along a fault where surface seepage made excessive timbering necessary. The ore drifts are a heterogeneous mess, honey combed with raises, winzes, drifts, stopes, and blowout pockets in all directions. They mine by following the ore. Sometimes they drill an exploratory 10, 20, or 30 foot air drilled hole to explore ahead of a barren face. Normally they do not use geologic guides just leads. They do not use the diamond drilling information that was obtained by the U.S. Bureau of Mines drilling program in 1946. RI No. 4133. The ore veins and pipes have a general NE-SW trend and a steep easterly rake. Before I had completed the tour of one level, I had lost all sense of direction.

The ore deposit is described thoroughly on pages 7 to 11 in the Union Pacific Railroad Company-Fluorspar Resources of California, Nevada, Utah, Idaho, and Colorado, 1952. In 1944 and 45 the geology of the deposit was studied by U.S. Geological Survey geologists, and their results were published in strategic Minerals Investigations Preliminary Report 3-209, 1945, final release 1949.

Certain unique features of the ore are worth mentioning. The white and purple fluorspar ore is usually soft and appears brecciated. Most of it can be drilled by an electric auger. The limestone or dolomite wall rock next to the ore is hard and brittle and has the typical petroliferous or rotten egg odor when scratched or broken. Post-ore faulting and solution activity have dissolved out some of the ore, and then late precipitation deposited fluorspar cinnabar and calcite. The thin red cinnabar stringers occur between the fluorspar and the calcite bands. Calcite appears to represent the last deposition.

Apparently Jack Crowell has many surface and underground leads to explore or develop in the future. As long as Geneva Steel Company and Bethlehem Steel Companies in the Salt Lake City, Utah, area can use this sandy, gritty met-spar, they are in business. Crowell trucks the ore to the railroad at Las Vegas and the steel companies pay the freight. The ore has an excessive percentage of fines less than 8 mesh and is only suitable for open hearth furnaces. But, because it usually assays 70 to 73% CaF_2 effective, and the silica content is low, limited amounts can be used in a basic oxygen furnace. But, Kaiser Steel Company at Fontana, Calif., stopped using Crowell's ore because of the excessive fines.

Crowell is now producing about 350 tons per month. They could easily ship 500 to 600 tons per month. In February 1974, they lost their contract to ship low-grade met-spar to Monolith Cement Company at Tehatchapi, California. The Spor Brothers underbid them.