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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SNOWROCK CLAIMS

ALTERNATE NAMES:

GRAHAM COUNTY MILS NUMBER: 236

LOCATION: TOWNSHIP 8 S RANGE 22 E SECTION 25 QUARTER C LATITUDE: N 32DEG 42MIN 36SEC LONGITUDE: W 110DEG 03MIN 02SEC TOPO MAP NAME: BLUE JAY PEAK - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY: MICA

BIBLIOGRAPHY: ADMMR SNOWROCK CLAIMS FILE

Conference at Willows, 450 M. (

SNOWROCK CLAIMS

Conference with Albert T. Faulk, 450 N. Curtis, Willcox, Arizona

Discussion of the Snowrock Claims, containing mica, located about 40 miles NW of Wilcox, and owned by Albert Faulk, Waddell Falk and a Mrs. Shepard. Mr. Faulk stated that he has not made an agreement with a company to purchase the mica yet. Mr. Faulk also stated that he is planning on trading his mill in for another mill which would be more suitable for processing the mica.

Mr. Faulk also brought some clay samples, and gypsum samples with him, and asked the field engineer to take them to the Arizona Bureau of Mines at Tucson for testing. This he promised to do.

Conference at Willcox ALJ 4/8/65

DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

Mine ' Snowrock Claims

Date Nov. 13, 1962

District Clabk Mining District, Graham Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Albert Falk & Waddell Faulk & Personal Visit.

Location Approximately Sec. $25 - T \ 8 \ S - R \ 22 \ E$ on the National Forest. The mill is about 8 miles and the mine about 11 miles NW of the village of Bonita. From Bonita, drive about 3 miles NW on the Klondyke road, then take the 76 Ranch road, and drive 5 miles to the 76 Ranch. Drive through a gate at the ranch and continue about 1/4 mile further to the mill by Jeep. Continue for about another 3 miles by Jeep to the mine.

Number of Claims 12 unpatented claims, located about 2 1/2 years ago.

Owners ' Ace Mining Co. ' Albert T. Faulk, 450 N. Curtis, Willcox, Ariz. Waddell Faulk, 1327 Vanderbilt, San Antonio, Texas.

Principal Minerals Mica

Present Activity None at present.

Geology The deposit consists of:

(1) One pegmatite vein, containing quartz, feldspar and mica, which is practically vertical and from 7 to 8 ft. in width. The vein has been estimated to contain from 15 % to 25 % of mica by weight.

(2) About 9 or 10 smaller pegmatite veins, from a few inches to 2 or 3 ft in width, most of them being nearly vertical. They contain about the same amount of mica.

(3) A large deposit of mica schist on both sides of the large pegmatitie, and surrounding all the smaller pegmatite veins. This mica schist deposit is, at least, one mile wide, and probably from 1 to 2 miles long, and of considerable depth. The mica schist shows considerable weathering and alteration, and crumbles under a very small amount of pressure, as, for example, with a light blow of the sample pick. A mill test (see enclosed) showed the schist to contain 30.4 % of recoverable mica. The rock on the SE and NW of the mica formation is granite.

Ore Values According to George Roseveare, who examined a sample from the large pegmatite vein, this mica is muscovite of good color and could be marketed as scrap mica.

Also, according to Roseveare, who made a mill test of the mica contained in the large mica schist deposit (see enclosed), this mica is about 1/3 biotite, and 2/3 muscovite, with some of the muscovite being stained with iron. Consequently, the dark color would prevent it from coming up to the standards generally required for scrap mica, and it would be very difficult to market.

Ore in Sight & Probable

(1) The main pegmatite vein is from 7 to 8 ft. wide and several thousand feet long, and appears to have considerable depth. This amounts to considerable tonnage, but only a very small amount of this would yield itself to open pit operations.

(2) The large mica schist deposit, which extends for over a mile in each direction, also appears to have considerable depth, as it outcrops at the bottom of a very deep valley. The overburden, covering the deposit, is only from a few inches to a foot in thickness. The schist is very soft and could be mined with little or no blasting. This deposit, of several million tons, could be mined very cheaply by open pit mining operations. This could be a profitable operation if the mica could be marketed.

DEPARTMENT OF MINERAL RESOURCES state of arizona field engineers report

Page 2

Snowrock Claims

Date

Engineer

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District

Mine

Subject: Field Engineers Report (continued)

Mill The mill, which was purched by the owners of the mine, to mill the mica in the pegmatite vein, is located about 1/4 mile from the 76 Ranch, and about 3 miles from the mica claims at a much lower elevation. The road from the mine to the mill is very rough and steep, and requires a jeep for transportation. The mill was manufactured by Denver Equipment 60. and consists of a 1 ton ore bin, a Feeder, a Jaw Crusher, a set of Rolls, 2 belt conveyors, and triple deck Denver Dillon Shaker Screens. The machinery is driven with a 42 KVA Westinghouse Electric Generator. The plant capacity, according to Mr. Faulk, is about 2 tons per hour.

The operators have run a small quantity of rock (probably less than 50 tons) from the large pegmatite vein, through this mill, and have 20 to 30 sacks of screened mica in a storage shed near the mill. This screened mica is of 2 sizes --- the oversize from each of 2 screens (the third screen which came with the mill was not used). The waste dump from the milling operations contains a large amount of mica, which they could not recover, as it went through both screens.

Engineers Recommendations

(1) Reg. the mica in the pegmatite veins:

(a) Open pit operations of the pegmatite vein is not practical, as the footwall and hanging wall would cave in at relatively shallow depths, as the mica schist on both sides of the vein is very soft.

(b) Underground operations on the pegmatite vein would be too expensive, and could not be done at a profit.

(c) A flotation circuit would have to be added to the mill to recover the fine mica.

(d) Mill should be located at the claims, instead of 3 miles away.

(2) Reg. the mica schist deposit

(a) Submit a 100 to 200 lb. sample to George Roseveare of the Arizona Bureau of Mines for a mill test to determine the percentage and set and set and set and the schist, the grade of the mica recovered, and the best method of milling. The sample was taken with the assistance of the field engineer, about 15 to 20 lbs. from each of 8 widely scattered locations on the claims. Enclosed, find a report by George Roseveare on this mill test. As you will notice, the mica schist contains 30.4 % of recoverable mica --- 7.8 % recovered by screening, and 22.6 % by flotation.

(b) Find a possible market for the mica product before constructing a mill with flotation for milling.

Antipolia duncau or unnas das reprino anivies De comber 11, 1962

Gre Test 10,1712

Mr. E. V. Fask 1323 Venderbilt Ban Antonio, Texas

Dear Mr. Pauks

The sample you delivered to the Arisona Bureau of Mines is a mica schist. There are two variaties of mica in the sample; muscovite, a unite mica, and biotite, a dark mica. Some of the biotite has been bleached to a light color.

A sample was crushed thru 6-mesh with rolls. Only a small part of the miss was liberated into individual flakes. Tabling at this mesh would produce a low tonnage of mics. The sample was ground in a pebble mill and screened on 35-mesh. Nost of the material on 35-mesh was a mixture of light and dark mics.

The minus 35-mesh was treated by flotation after dealining to produce a concentrate 1 and 2, middling and tailing. The concentrates were sized on a 150-mesh screen and the middlings on a 65-mesh screen. The percentage of products are given in the following table:

Preduct	Weight, per cant
Heads Concentrate plus 35-mesh Flotation Conct. Noll plus 150-mesh 2 plus 150-mesh 1 minus 150-mesh	100.0
2 plus 150-mesh 1 minns 150-mesh	4:1 3:7 3:4
2 minus 150-mesh	5.4
Viotation Middling plus 65-mean minus 65-mean	ıž:T
Plotation Tailing	40.6
Slimes	15.2

The plus 35-mesh product was mostly light colored mice but contained enough black to make the product not soluble. It amounted to 7.0 per cent of the total weight.

DIGAL PERVLYS COTAMED ABOVE CHORED BE CONSIDERED AS ONLY APPLICABLE TO DATERIAL

University of Arizona Arizona Bureau of Mines Ore testing Service

D

Mr. E. W. Fauk

The flotation concentrates were mixtures of miscovite and biotite with the first concentrate much heavier in the light mica.

The fine fractions were too buff a color to be acceptable to the trade.

The middling which was plus 65-mesh is nearly all biotits. The fine fraction is mainly round mica.

It is the writer's opinion that the mica concentrate product from this material would not be acceptable to the market.

I am sending you the products for your inspection.

The other sample of ore rock was clean mica but I did no work on it.

Yours very truly,

George H. Poseveare Metallurgist

GHR/h Enclosure

> METALLURGICAL RESULTS OBTAINED ADOVE SHOULD BE CONSIDERED AS ONLY APPLICABLE TO MATERIAL Conforming to the character of the sample upon which the tests were made.

MICA DEPOSIT

July 20, 1961

CLARK DISTRICT, COCHISE COUNTY (Near Fort Grant)

Interview with E. Waddell Faulk, 1327 Vanderbildt St., San Antonio, Texas.

Owner: A. T. Faulk, Willcox, Arizona.

Property: 2 claims Sunpatented).

Work: Location trenches and pits.

Mineral: Mica.

<u>Geology</u>: The mica occurs with white feldspar and quartz in pegmatitic lenses in granite and schist. The schist also contains much mica (Sericitic in places). The mica books range from 1/16 up to 2 inches in section, but most are under 1 inch. The pegmatitic lenses range from a few inches to several feet wide and up to 75 feet long.

Mr. Faulk stated that they had a 6 x 12 jaw crusher, and multiple screens. He wanted to obtain a second hand cyclone. He plans to send a sample to George Roseveare (Arizona Bureau of Mines) for tests and the working out of a flow sheet for the proposed Plant. H. G. Smith, Buckeye, offered \$32 to \$35 per ton for their concentrates, f.o.b. at Buckeye. The property is about 25 miles from Willcox, on a good graded and surfaced county highway.

LEWIS A. SMITH