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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: FIBER KING PROPERTY

ALTERNATE NAMES:

GROUP SURVEY 3788
SALT BANK GROUP
RIVERSIDE GROUP

GILA COUNTY MILS NUMBER: 280

LOCATION: TOWNSHIP 5 N RANGE 16 E SECTION 12 QUARTER C
LATITUDE: N 33DEG 50MIN 10SEC LONGITUDE: W 110DEG 35MIN 40SEC
TOPO MAP NAME: BLUE HOUSE MTN - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

ASBESTOS LONG FIBER
ASBESTOS SHORT FIBER

BIBLIOGRAPHY:

STEWART 1956 CHRYS-ASB DEPTS OF AZ SUPP USBM
IC 7745 P 25-28
USGS BLUE HOUSE MTN QUAD
BLM MINING DISTRICT SHEET 179
MOORE R T MIN DEPTS FT APACHE IND RES AZBM
BULL 177 1968 P 51-58
USGS BULL 1077-N
ADMMR FIBER KING DEPT FILE, MAP UPSTAIRS-D 7

FIBER KING DEPOSITS

REFERENCES

GILA COUNTY

T5N R16E Sec. 13

USBM IC 7745, p. 25-28

Maps Upstairs in the flat file area - Drawer 7

Mineral Deposits of the Fort Apache Indian Res. Geology Files p. 53, 54

MILS Sheet sequence number 0040070078

Preliminary Report on the Fiber King Asbestos Deposits,
Gila County, Arizona

By A. F. Shride

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The Fiber King asbestos deposits are about 7 miles down Salt River from U. S. Highway 60, and are one-half mile north of the river. A mine access road, to be completed in February 1944, is being built to these properties from Highway 60, which reaches Salt River about 7 miles east of the mine. Probably not more than 10 tons of asbestos of all grades has been produced from the Fiber King deposits since they were first worked in 1922. The writer visited the Fiber King deposits on November 20, 1943 to consider the possibilities of these deposits for Bureau of Mines exploratory work.

Geology.--Each deposit is in the vicinity of some local geologic feature, such as a crosscutting diabase sill or bedding-plane fault, which affected a small limestone area before mineralization. Because the limestone was prepared for mineralization only over a small area in each case, none of the deposits are considered large enough to be potential producers of asbestos. The deposits can be best described by considering them separately. The localities referred to are noted by numbers on the accompanying sketch map.

Locality 1. This is the most promising deposit of the group. The asbestos zone is in massive limestone beds, which are 100 feet stratigraphically below the base of the algal member of the Mescal limestone. There is a 110 foot adit, from which some stoping has been done, in this deposit. A diabase sill, which is 3 to 7 feet below the asbestos zone in the adit, cuts across the fiber zone 30 feet northwest of the adit. This crosscutting diabase follows a tear fault, which is approximately parallel to the adit. Thus this deposit is limited to the northwest. Near the crosscutting diabase there was much pre-serpentine bedding-plane and tear faulting.

The asbestos-serpentine zone, as exposed in the adit, averages 10 inches in thickness, and contains one-half to 2 inches (average $1\frac{1}{2}$ inches) of asbestos. The serpentine and asbestos seem to decrease in quantity away from the surface. The asbestos is very irregularly distributed, and #1 and #2 grades of asbestos can be seen only near the portal of the adit. Thirty feet east of the adit portal only traces of asbestos can be seen. Farther east the limestone is poorly serpentinized.

This deposit seems to be confined to a narrow width of fractured limestone, near the crosscutting portion of the diabase sill. Therefore the writer does not believe that much asbestos could be developed by further prospecting in this deposit. The adit probably exposes the best portion of the deposit, and no mineable asbestos is to be seen in the present faces.

Locality 2. At this locality there was pre-mineral bedding plane faulting at the base of the algal limestone. This faulting disturbed the limestone beds, as seen in the present outcrop for a distance of about 70 feet. The limestone was also warped slightly by the intrusion of the diabase sill, which changes from a concordant to a discordant sill about 40 feet below the best exposure of asbestos.

A maximum of $1\frac{1}{2}$ inches of asbestos is exposed. The asbestos and serpentine pinch out very abruptly along the outcrop. The asbestos zone exposed here is about 50 feet across.

Localities 3 and 4. In both localities there are lenses of asbestos, about 30 feet across as exposed at the surface. These deposits are in bedding-plane shear zones, which affect about 50 feet of limestone at the base of the algal member in each locality. A maximum of $1\frac{1}{2}$ inches of asbestos, some of which is number 2 grade fiber, is exposed.

Localities 2, 3, and 4 are sites of local concentrations of asbestos, where there was a small amount of bedding-plane faulting previous to serpentinization. The faulting and mineralization are not widespread, therefore only a small amount of asbestos, probably none in mineable quantities, can be expected in each locality.

Locality 5. The asbestos zone here is 100 feet stratigraphically below the base of the algal limestone. The zone is 5 feet above a concordant diabase sill, and is along a small monoclinical structure. A small amount of bedding-plane faulting occurred in the vicinity of the monocline. Asbestos occurs for a distance of 50 feet along the outcrop, which is well exposed on a cliff face. From the best surface exposure of asbestos an adit 30 feet long has been driven. At the portal of the adit there is $1\frac{1}{2}$ inches of soft to semi-harsh asbestos in a ten inch serpentine zone. At the end of the adit there is no asbestos.

The writer believes that this is a local lens of asbestos developed along a small fold in the limestone beds. Because the dip is flattening in the adit, which is along the axis of the fold, this structure probably does not continue into the hill. There is no chance of finding mineable asbestos in this locality.

Locality 6. Work was started here on a promising outcrop of asbestos in November 1942 by the owners. The asbestos-serpentine zone of this deposit is probably in the same beds (100 feet stratigraphically below the algal limestone) as the asbestos in locality 1. The fiber zone, which contains 1 to $1\frac{1}{2}$ inches of soft to semi-harsh fiber at the surface, pinches out 30 feet into the hill, where the limestone beds, which dip 7 to 10 degrees to the northwest at the surface, are almost horizontal. The asbestos horizon is cut off 55 to 60 feet from the surface by crosscutting diabase. The contact of this crosscutting diabase strikes N. 75 E., or approximately parallel to the surface. Therefore there is no chance of developing much asbestos in this deposit.

Recommendations.--The Fiber King deposits were all controlled by some small structural feature, which did not affect very large areas; therefore none of the deposits can be recommended for exploration by the Bureau of Mines. The localities described are the only ones which show any promise, and no further geological work should be done by the Geological Survey.

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