

VIRGINIA MINERALS



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT
Richmond, Virginia

Published quarterly by the DIVISION OF MINERAL RESOURCES, James L. Calver, Commissioner
Mineral Resources Building, McCormick Road, Charlottesville, VA 22903

Vol. 20

FEBRUARY, 1974

No. 1

MINERAL-AND FOSSIL-COLLECTING LOCALITIES IN VIRGINIA

Palmer C. Sweet

This article presents the most recent information available on mineral and fossil localities that are operated on a fee basis for people who are interested in collecting in Virginia (Figure 1). All the listed localities were open and the information was correct as of autumn 1973. However, as time elapses, ownership and fees for collecting may change and some localities may be closed to collectors. Some of these sites have been operated commercially as mines, but today all the listed localities are operated only as collecting sites. For additional information on the localities, the individual operator should be contacted. The listing of localities mentioned in this report as collecting sites does not give one permission to enter and collect without the permission of the owner. It should be stressed that before attempting to collect any material on private property, an individual should make himself known to the owner and obtain permission. *Entering private property without permission violates trespass laws and is punishable under law.* The location of the owners house or place of business is shown on the topographic-map portions (Figures 2-11).

Directions to the localities may be easier to follow with the official State Highway Map as well as individual county road maps, both of which are available from the Department of Highways, 1221 East Broad Street, Richmond, Virginia. Topographic maps are available from the Virginia Division of Mineral Resources, Box 3667, Charlottesville, Virginia and from the Distribution Section of the U. S. Geological Survey, 1200 South Eads Street, Arlington, Virginia.

Kenneth E. Rice Memorial Museum and Fossil Pit.
—This pit is located in the City of Hampton, 2.35 miles southeast of Langley Air Force Base, off the west side of Harris Creek Road approximately 0.25 mile by road north of its intersection with Fox Hill Road in the Hampton, Virginia 7.5-minute quadrangle. It is operated by Mr. and Mrs. W. Macon Rice of Hampton, Virginia (Figure 2).

An admission fee of \$0.75 per hour is charged for collectors to go into the fossil pit; group rates are available. Rates for school children are \$0.50 per person per day. Pit and museum are open from 9:30 a.m. to 5:30 p.m. on weekdays and from 2:00 to 6:00 p.m. on Sundays. The pit contains the fossils of many Miocene species. Specimens that have been found in the silt and sand include many species of mollusks, entire skeletal remains of whales, teeth of sharks and porpoises, and worm tubes.



Figure 1. Index map showing mineral- and fossil-collecting localities in Virginia.

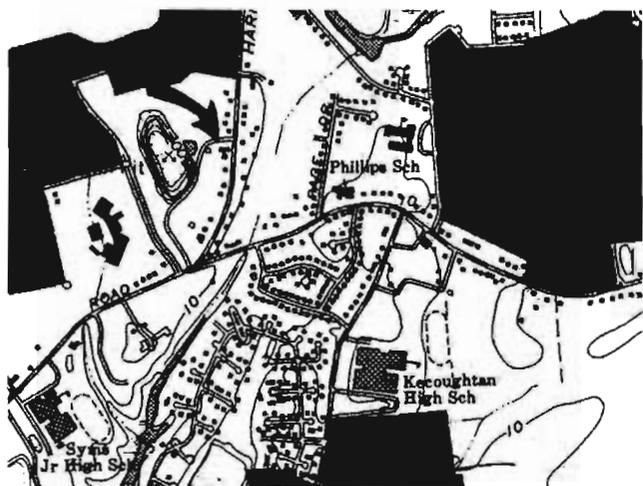


Figure 2. Portion of the topographic map of the Hampton 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of Kenneth E. Rice Memorial Museum and Fossil Pit; scale 1:24,000 (1 inch equals 2000 feet).

Zook's pit.—This pit is located 1.1 miles west of Yorktown, York County, about 0.1 mile off the northwest side of State Highway 238 approximately 0.2 mile by road northeast of its intersection with State Road 638 in the Yorktown, Virginia 7.5-minute quadrangle.



Figure 3. Portion of the topographic map of the Yorktown 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of Zook's pit; scale 1:24,000 (1 inch equals 2000 feet).

It is operated by O. D. Zook of Yorktown, Virginia (Figure 3).

An admission charge of \$0.50 per person, any day of the week, is charged to collect fossils of Miocene species that are preserved in the Yorktown Formation. School groups are allowed to enter and collect fossils, if accompanied by a supervisor. Specimens of brachiopods, bryozoans, gastropods, pelecypods, and other fossils have been found in the pit.

Harris mica mine.—This site is located 1.95 miles south of Hewlett, Hanover County, about 1.15 miles off the north side of State Road 738 approximately 1.5 miles by road east of its intersection with State Road 601 in the Hewlett, Virginia 7.5-minute quadrangle. It is operated by O. W. Harris of Beaverdam, Virginia (Figure 4).

The present collecting area is the site of the dumps and workings of the abandoned Saunders No. 1 and 2 mica mines. The deposits, located on a series of granitic pegmatites and formerly operated by Barr, Johnson and Company of Erie, Pennsylvania, yielded more than 60,000 pounds of mica from 1867 to 1870. Some additional work was done in 1883, in 1907, and by the Virginia Manganese Corporation of Richmond in 1943.

An admission fee of \$1.00 per person, any day of the week, is charged to look for orthoclase moonstone and kyanite crystals in the creek and on the adjacent

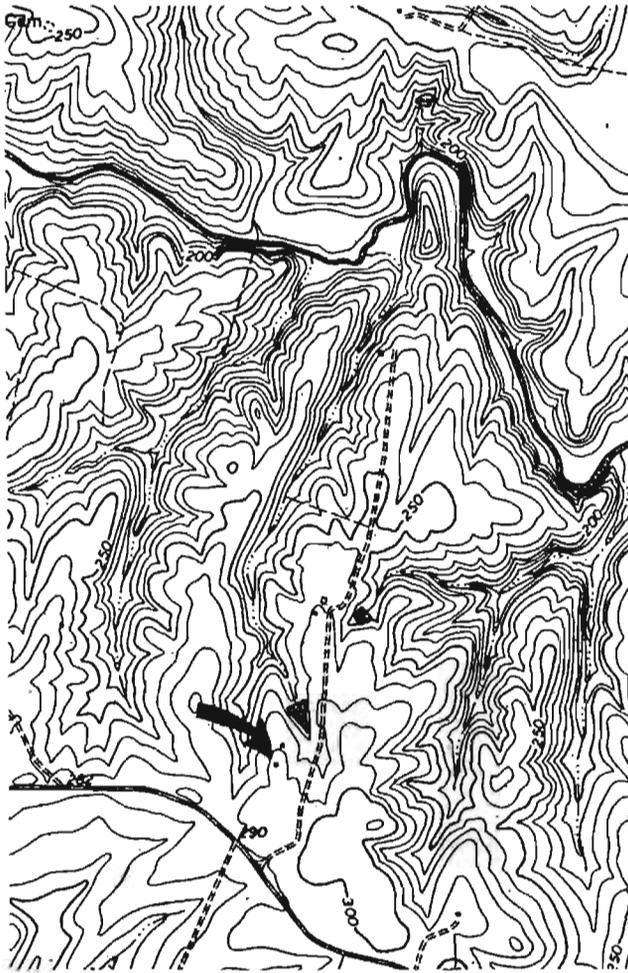


Figure 4. Portion of the topographic map of the Hewlett 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the Harris mica mine; scale 1:24,000 (1 inch equals 2000 feet).

hillside. The angular fragments of moonstone, which have a weak to fairly strong and attractive silvery adularescence and a high degree of translucency, usually occur in the gravels in the creek. The moonstone probably weathered from the dark grayish-green gneiss which is crossed by the creek. Muscovite, some oligoclase, and small almandine garnets may be found in the mine dump.

Morefield mine.—This site is located 3.8 miles east of Amelia Court House, Amelia County, about 0.4 mile off the northeast side of State Road 628 approximately 1.0 mile by road southeast of its intersection with U. S. Highway 360 in the Amelia Court House, Virginia 7.5-minute quadrangle. It is operated by D. R. Boyles of Amelia Court House, Virginia (Figure 5).

The pegmatite mine was first worked commercially about 1929 and in following years for such minerals

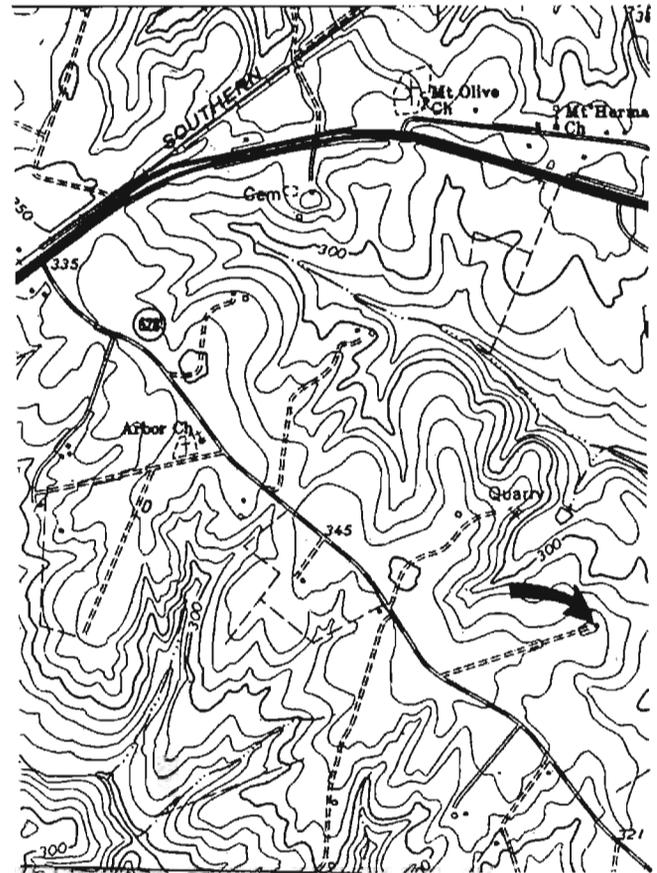


Figure 5. Portion of the topographic map of the Amelia Court House 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the Morefield and the beryl mines; scale 1:24,000 (1 inch equals 2000 feet).

as mica, feldspar, gem amazonstone (microcline), beryl, phenacite, and minerals of the tantalite-columbite series. Commercial mining operations ceased in 1948.

An admission fee of \$2.00 per person per day, any day of the week, is charged to look through the numerous pits, cuts, and dumps on the "old Morefield property." Other than the minerals previously listed, those commonly found in the dumps include the feldspar albite (clevelandite), topaz, spessartite garnet, and quartz. Masses of glassy quartz are present with partly kaolinized albite, perthite, muscovite, and biotite. Glass (1935) lists the following minerals from the complex part of the dike: beryl, cassiterite, columbite, fluorite, galena, manganotantalite, microlite, monazite, phenacite, pyrolusite, spessartite garnet, topaz, tourmaline, triplite, zinnwaldite, and zircon. Lemke, Jahns and Griffiths (1952) have identified allanite, almandite-spessartite, apatite, bertrandite, chalcopyrite, pyrite, and rutile.

Beryl mine.—This site is located 3.8 miles east of Amelia Court House, Amelia County, off the southwest side of State Road 628 approximately 1.65 miles by road southeast of its intersection with U. S. Highway 360 in the Amelia Court House, Virginia 7.5-minute quadrangle. It is operated by D. R. Boyles of Amelia Court House, Virginia (Figure 5).

An admission fee of \$2.00 per person per day, any day of the week, is charged to collect from the Dobbin (Thraves) prospect, which was last worked by the Seaboard and Southern Materials Company prior to World War II. The kaolinized pegmatite contains quartz and white to pale greenish-blue to clear beryl crystals. Rum-colored to clear mica is also present in the pit, which is about 50 feet long.

Rutherford mine.—This site is located 0.95 mile north of Amelia Court House, Amelia County, about 0.6 mile off the west-southwest side of State Road 609 approximately 0.3 mile by road north of its intersection with the U. S. Highway 360 By-pass in the Amelia Court House, Virginia 7.5-minute quadrangle. It is operated by Crawford Keener of Amelia Court House, Virginia (Figure 6).

The pegmatite has been worked for mica and rare and unusual minerals, especially amazonstone, a

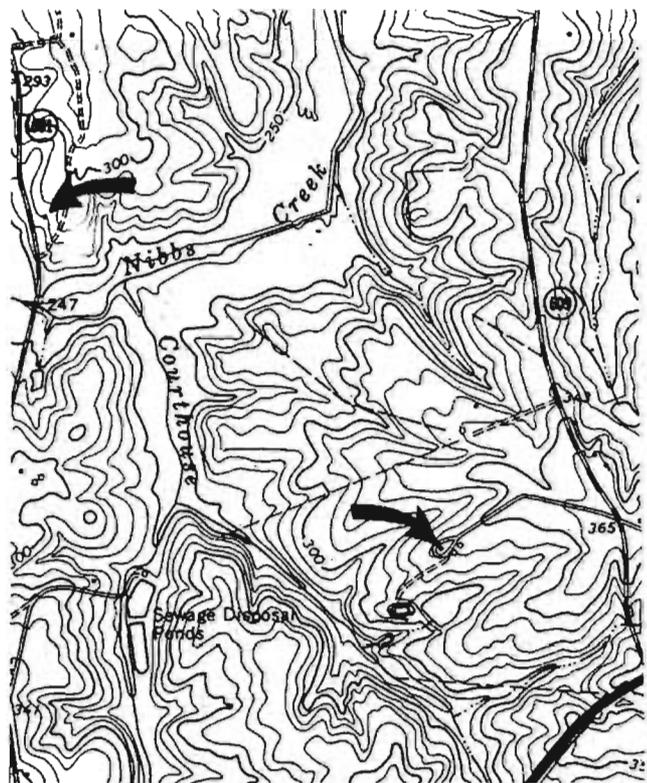


Figure 6. Portion of the topographic map of the Amelia Court House 7.5-minute quadrangle; arrow is pointed toward the residences of the operators of the Rutherford and the Trueheart mines; scale 1:24,000 (1 inch equals 2000 feet).

bluish-green variety of microcline (potash feldspar). Earliest recorded mining was for mica in 1873. From 1912 to 1932, 15 tons of gem amazonstone were mined by the American Gem and Pearl Company of New York. Commercial operations ceased in late 1959, when the deposit was again being worked for mica.

An admission fee of \$1.00 per person per day, any day of the week, with the same rate for individuals in school groups, is charged to look through the large dump piles that have recently (June 1973) been turned over and to collect from several cuts and pits on the Rutherford property. The previously mentioned minerals and clevelandite, a platy variety of albite (plagioclase feldspar), are commonly found. Glass (1935) identified albite, allanite, almandite, apatite, bertrandite, beryl, calcite, cassiterite, cerussite, chalcopyrite, columbite, fergusonite, fluorite, galena, helvite, manganotantalite, microcline, microlite, monazite, muscovite, phenacite, pyrite, quartz, spessartite, topaz, tourmaline, and zircon.

Trueheart mine.—This site, which is owned by Mrs. B. M. Trueheart, is located 2.2 miles north-northwest of Amelia Court House, Amelia County, about 0.1 mile off the east side of State Road 681 approximately 2.05 miles by road north of its intersection with the U. S. Highway 360 By-pass in the Amelia Court House, Virginia 7.5-minute quadrangle. It is operated by W. W. McMillion of Amelia Court House, Virginia (Figure 6).

An admission fee of \$1.00 per person, any day of the week, is charged to look for clear to smoky quartz, black tourmaline crystals, tiny golden and aquamarine beryl crystals and small mica books. These minerals can usually be found in the dumps and in the shallow pits cut into a pegmatite body that has a large quartz core and a thin feldspathic wall zone.

Ligon Number 1 mine.—This site is located 5.7 miles north of Chula, Amelia County, about 0.2 mile off the west side of State Road 651 approximately 1.0 mile by road north-northeast of its intersection with State Road 692 in the Chula, Virginia 7.5-minute quadrangle. It is operated by Kenneth Holley of Amelia Court House, Virginia (Figure 7).

The four sites were first opened in pegmatite about 1923, but mining was discontinued in 1928; some prospecting took place in 1944. The mines were worked for muscovite; some feldspar, quartz, and large beryl crystals were also recovered.

The site is closed on Sunday; however, during all other days an admission fee of \$2.00 per person, with no charge for small children, is charged to look for clear to rum-colored, small, flat mica books, some of which are soft, clay-stained, and fractured; clear and rose quartz; pale beryl crystals; tourmaline; and various feldspars. The cut in the quartz and kaolinized-



Figure 7. Portion of the topographic map of the Chula 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the Ligon Number 1 mine; scale 1:24,000 (1 inch equals 2000 feet).

feldspar pegmatite is about 35 feet long and 15 to 20 feet wide.

Rhodonite prospect.—This site is located northwest of Fork Union, Fluvanna County, in the Palmyra, Virginia 7.5-minute quadrangle. It is operated by F. C. Landes of Fork Union, Virginia, and can be visited only with Mr. Landes' permission and in his company; the fee for collecting specimens is paid at the Dixie Rock and Mineral Shop, Dixie, Virginia.

In 1918, Dr. J. T. Cleveland prospected for manganese in the rhodonite-quartz vein at this locality; there is no record of any production. Smith, Milici, and Greenberg (1964) report the minerals at the site include rhodonite, pyrolusite in massive quartz, jasper, specularite, chlorite, actinolite, magnetite, goethite, and hematite.

Amethyst field.—This site is located 2.7 miles north-northeast of Rice, Prince Edward County, about 0.35 mile off the east side of State Road 619 approximately 0.6 mile by road northeast of its intersection with

State Road 688 in the Rice, Virginia 7.5-minute quadrangle. It is operated by George R. Smith, Sr. of Rice, Virginia (Figure 8).

An admission fee of \$2.00 per person per day, any day of the week, is charged to look for crystals that range from clear quartz to deep purple amethyst. These crystals were probably in a quartz lens in granitic rocks and may now be found in a recently disked field in brownish-yellow, sandy residuum over the igneous rocks.

Amethyst site.—This site is located 4.35 miles southeast of Amherst, Amherst County, about 1.0 mile off the south side of State Road 659 approximately 1.1 miles by road east of its intersection with State Road 604 in the Amherst, Virginia 7.5-minute quadrangle. It is operated by Mrs. Charles R. Schaar of Amherst, Virginia (Figure 9).

An admission fee of \$2.00 per person per day, any day of the week, is charged. Clear quartz and purple amethyst crystals occur in a large bulldozed cut and in large piles of red to reddish-brown residual clays derived from underlying granites.

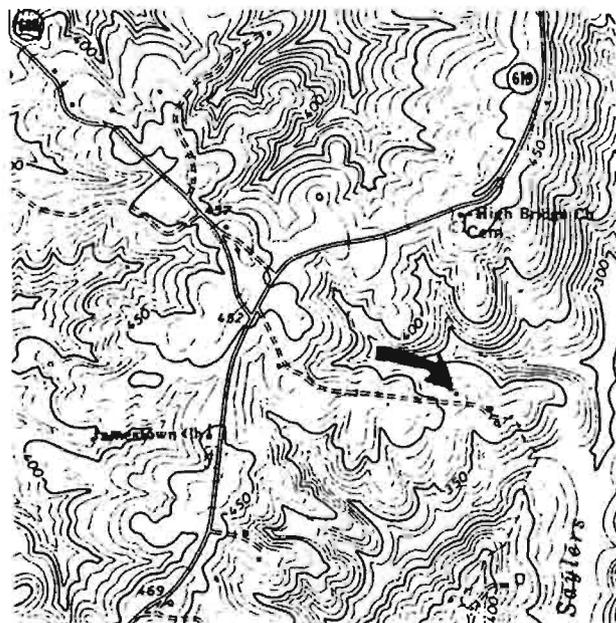


Figure 8. Portion of the topographic map of the Rice 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the amethyst field; scale 1:24,000 (1 inch equals 2000 feet).

Chestnut Ridge quartz-crystal locality.—This site is located 5.7 miles north of Panther Gap, Bath County, on the eastern slope of the northeastern edge of Chestnut Ridge, about 0.35 mile off the northwest side of State Road 640 approximately 2.5 miles by road south of its intersection with State Road 629 in

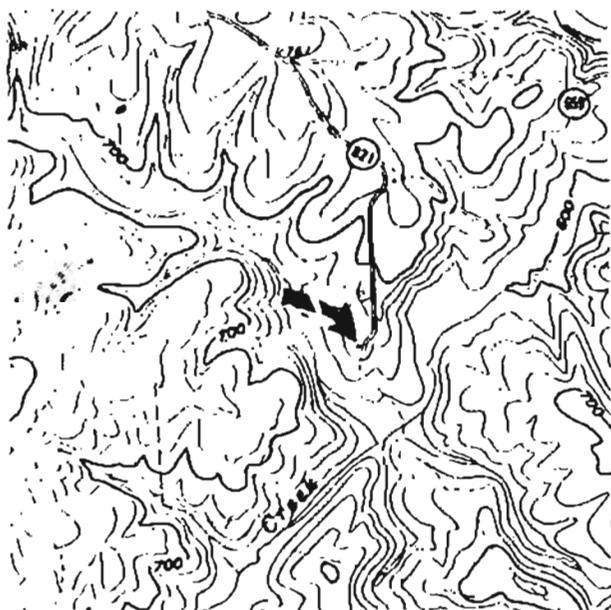


Figure 9. Portion of the topographic map of the Amherst 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the amethyst site; scale 1:24,000 (1 inch equals 2000 feet).

the Green Valley, Virginia 7.5-minute quadrangle. It is operated by C. A. Loan of Millboro, Virginia (Figure 10).

An admission fee of \$0.50 is charged per person per day, any day of the week, to collect clear to smoky quartz crystals that are in clusters in cavities and along fractures in highly iron-oxide-stained and broken sandstone. Inclusions (individual and twinned crystals) in the quartz crystals have been identified at the Smithsonian Institution as sphalerite ("ruby zinc" variety). Some quartz crystals are coated with a yellowish-brown, red, or black iron-oxide crust. Crystals found by the author were as much as 7 mm in diameter and about 15 mm in length; most of the small crystals (1 mm in length) tended to be perfectly formed.

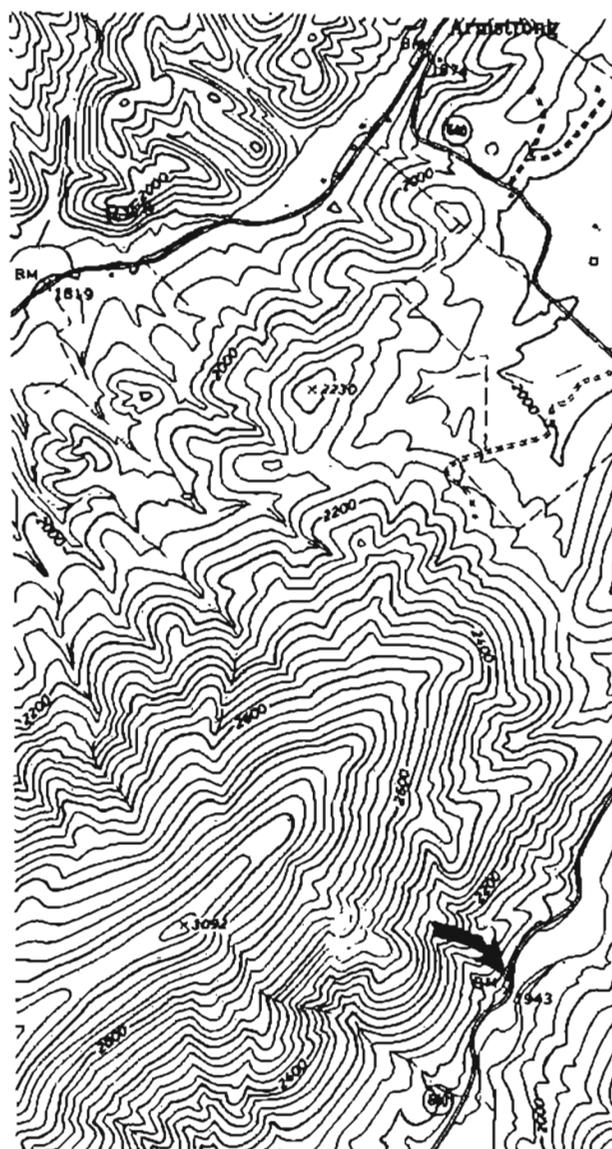


Figure 10. Portion of the topographic map of the Green Valley 7.5-minute quadrangle; arrow is pointed toward the residence of the operator of the Chestnut Ridge quartz-crystal locality; scale 1:24,000 (1 inch equals 2000 feet).

REFERENCES

- Glass, J. J., 1935. The pegmatite minerals from near Amelia, Virginia: *Am. Mineralogist*, vol. 20, p. 741-768.
- Genke, R. W., Jahn, R. H., and Griffiths, W. R., 1952. Mica deposits of the southeastern Piedmont: Pt. 2, Amelia district, Virginia: U. S. Geol. Survey Prof. Paper 248-B, p. 103-139.
- Smith, J. W., Milici, R. C. and Greenberg, S. S., 1964. Geology and mineral resources of Fluvanna County, Virginia: Virginia Division of Mineral Resources Bulletin 79, 62 p.