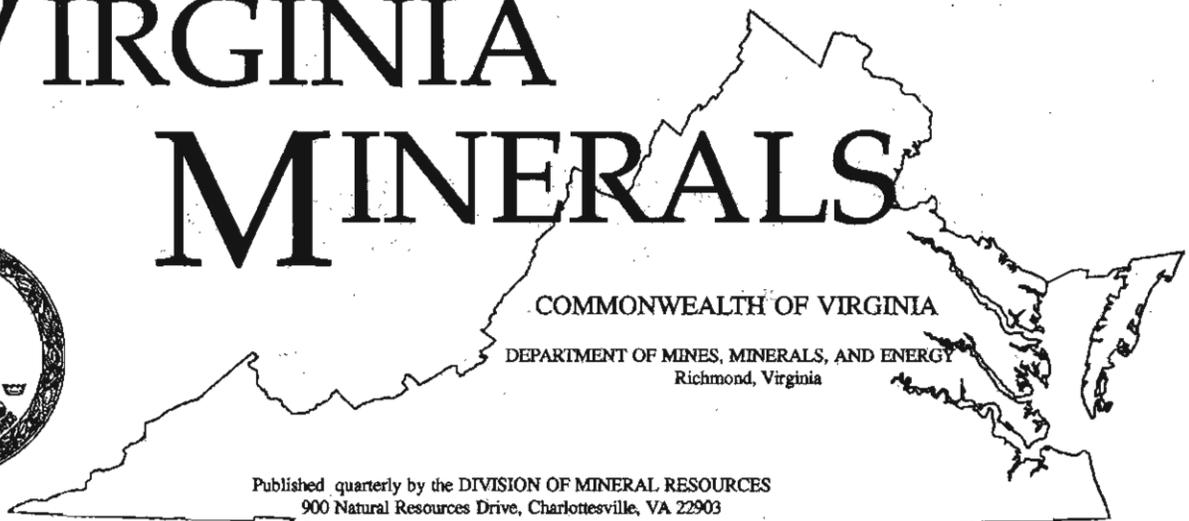


VIRGINIA MINERALS



Published quarterly by the DIVISION OF MINERAL RESOURCES
900 Natural Resources Drive, Charlottesville, VA 22903

VOL. 41

MAY 1995

NO. 2

UPDATE ON UNREPORTED OCCURRENCES OF GOLD-SILVER IN VIRGINIA

Palmer C. Sweet

INTRODUCTION

A refinement of sodium cyanide leaching technology introduced by the U.S. Bureau of Mines in the 1950s is the main factor contributing to a seven-fold increase in domestic gold production from 1,465,686 troy ounces in 1982 to an estimated production of almost 11 million troy ounces produced at a value of more than \$3.7 billion in 1993. As a result many former Virginia gold mines that were previously considered unprofitable may now be worked at a profit. For this reason it becomes important to locate as many old mines as possible.

Since 1969, the Virginia Division of Mineral Resources has been intermittently updating the locations and descriptions of precious-metal sites in the Commonwealth. In 1991, the Division published "Precious-metal mines, prospects, and occurrences in Virginia—an update" in *Virginia Minerals* (volume 37, number 1) which noted 293 gold and silver mines, prospects, and occurrences in Virginia. This article describes eight previously unreported gold-silver occurrences, as well as one revised-updated site (Concord mine). Data on these new listings were compiled from old file clippings, inquiries and conversations with local residents and from field investigations. This article supplements reports by Sweet, 1980; Sweet and Trimble, 1982; Sweet and Trimble, 1983; Sweet and Lovett, 1985; and Sweet, 1991.

EXPLORATION AND MINING IN VIRGINIA

Interest by mining companies continues in the Gold-pyrite belt located in the Piedmont Province and in the mineralized areas in the Blue Ridge Province. Metal mining companies continue to evaluate these areas through geophysical methods, geochemical sampling, geologic mapping, and core drilling. Some core drilling was done in Fluvanna, Goochland, and Louisa Counties during 1993 and 1994. The release of the 1993 Virginia Geologic map (scale 1:500,000) is a valu-

able asset to exploration programs as it defines rock units with detailed descriptions in the mineralized areas. As of July 1, 1994, two gold operations have permits to operate - Southern Piedmont Mining Corporation at the old Moss mine in Goochland County and the Gold Crown Mining Company at the Kentuck prospect in Pittsylvania County. It is reported that Minerals and Chemicals Corporation produced five ounces of gold in Goochland County within the past year. Because of the continuing interest in precious-metals, this report supplies descriptive information on additional unreported mines, prospects, and occurrences located since 1991. General locations of the sites described are shown on Figure 1.

BAREBONES CREEK GOLD OCCURRENCE

The Barebones Creek gold occurrence is located in Nottoway County (Figure 2), on the Crewe East 7.5-minute quadrangle, 1.7 miles northwest of Fergusonville, in Little West Creek (formerly Barebones Creek), 0.65 mile north of State Road 615 (N4,123,970 E757,440, Zone 17).

Several flakes of gold were panned from the creek by a local resident (Doug Jones, 1989, personal communication). During a visit to the site in 1990, outcrops of granodiorite were observed in and near the creek. The only rock observed that could be a possible source of the gold is iron-oxide stained quartz that contains flakes of muscovite. Very few heavy minerals were obtained by panning in the creek and no gold was observed during panning.

BETHEL GREEN "SILVER MINE"

The Bethel Green "Silver Mine", is reportedly located about 2 miles north of Greenville and 4.5 miles west of Mint Spring in Augusta County (Figure 3). It was remembered by several local residents, but it is difficult to verify its exact location. Johnny Break of Greenville, noted in 1993 that the

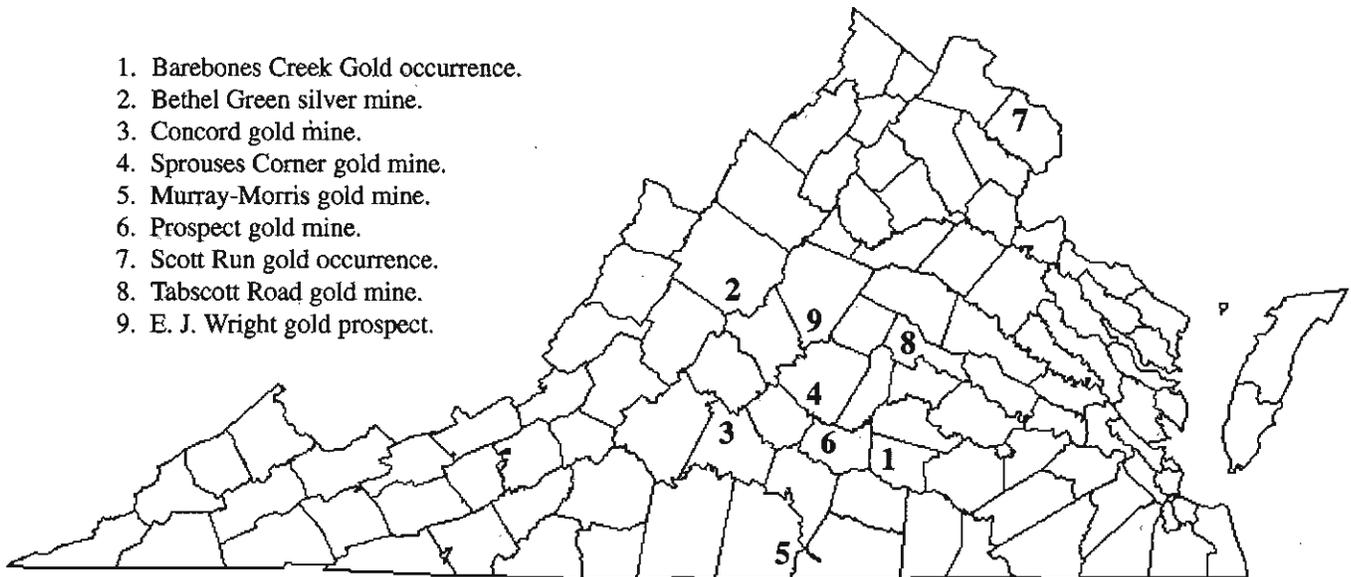


Figure 1. Location of additional and updated gold-silver mines, prospects, and occurrences in Virginia.

old "mine" was thought to have been located near the old John Rarue farm, just south of the former site of the Bumgardner Distillery, which was operated in the early 1800s. A better location of the site is 0.15 mile east of the intersection of State Road 693 (Bethel Green Road, formerly the Silver Mine Road) and State Road 701 (Howardsville Road) (W. Brubeck, 1993, personal communication). This approximate location of the mine site is on the Greenville 7.5-minute quadrangle (N4,211,750 E661,550, Zone 17).

The mine area is reportedly in an 1880s geological report as an area in which the rock is suitable for bearing silver (J.W. Break, 1993, personal communication). Shirey (1966) notes that the "Silver Mine" was just west of Mint Spring, but he is not sure that any metal was mined.

The supposed area of the old silver mine is near the contact of the Beekmantown Group rocks with rocks of the Elbrook Formation. Pieces of brecciated dolomite with chert and some black mineralized material was present near an old pile of rubble. A sample of this material was assayed by XRAL Activation Services Inc., Ann Arbor, Michigan in January, 1994. Results indicate less than 0.001 ppm of gold per ton and less than 0.1 ounce of silver per ton.

CONCORD GOLD MINE

The Concord gold mine is located in Campbell County (Figure 4), on the Concord 7.5-minute quadrangle, 0.95 mile west-northwest of Concord, 0.35 mile northeast of State Road 646, 1.2 miles by road northwest of its intersection with State Highway 24 (N4,135,150 E677,900, Zone 17).

The main shaft is located further to the northwest than was reported by Sweet and Trimble, 1982. The mine was reportedly worked prior to the Civil War, and was worked intermittently in the 1920s, 1930s, and in the 1940s, before it was shut down due to water problems. Sweet and Trimble (1982) note that the original workings consisted of shafts and pits, with one shaft reported to be at least 40 to 50 feet deep with drifts leading off from it. Another caved shaft is present,

along strike, across the creek. This shaft has a forest litter dump around the rim and is presently about 10 feet in diameter.

Observations, in late 1993, indicate that the main shaft is caved and is currently 30 feet in diameter and 12 feet deep. Pipe from an old pump remains in the shaft (Figure 5). Around the shaft is a large rim dump with numerous pieces of white to clear quartz with iron-oxide staining, but no mineralization was observed. The country rock is schist and phyllite of the Mine Run complex. Just 80 feet to the east and up the hill, is a 10-15 foot wide quartz vein that is exposed in a perpendicular exploratory trench (Figure 6). The barren white quartz exposed in this trench shows no visible mineralization. A fire assay, performed on the quartz sample by XRAL Activation Services, Ann Arbor, Michigan in April, 1994, indicated <0.1ppm of gold per ton and <0.1 ounce of silver per ton.

MURRAY-MORRIS GOLD MINE

The Murray-Morris gold mine is located in Halifax County (Figure 7), on the Nelson 7.5-minute quadrangle, 0.45 mile southeast of Red Bank, off the north-northeast side of State Road 606, 0.25 mile by road southeast of its intersection with State Road 602.

There are 2 separate shafts at this gold mine. Shaft No. 1 (N4,051,800 E701,500, Zone 17) is nearest the road and is caved. It is now about 12 feet deep and about 20 feet in diameter (Figure 8). A large dump covered with forest litter can be traced downhill to the northeast. Red jasper, iron-oxide stained quartz and sandstone, pieces of greenstone and some weathered, yellowish-orange slate are present in the dump. An exposure of the weathered slate is present in the west wall of the shaft; it has a strike of N 10° E and a vertical dip. Some of the jasper along with the iron-oxide stained material was assayed by XRAL Activation Services inc., Ann Arbor, Michigan in April, 1993. The assays show 0.002 ppm of gold per ton; no silver was detected.

Shaft No. 2, about 250 feet to the east-southeast of Shaft

No. 1 (N4,051,780 E701,580, Zone 17), is 25 feet in diameter and water filled (Figure 9). Six-foot high dumps covered with forest litter are present on both sides of the shaft. Bits of white quartz and yellowish-orange, weathered slate are present on the dump. No mineralization was observed.

PROSPECT GOLD MINE

The Prospect gold mine is located in Prince Edward County (Figure 10), on the Prospect 7.5-minute quadrangle, 1.6 miles north of Prospect, 0.2 mile north of State Road 652, and 0.5 mile (by road) east of its intersection with State Road 609. Locations of the 2 open shafts on the ridge are N4,133,830 E716,110 and N4,133,790 E716,150, both in Zone 17.

The large open shafts were reportedly opened to mine iron ore in the mid-1850s. The associated large rim dumps contain pieces of iron-oxide stained quartz and pieces of ferruginous quartzite with associated oxidized pyrite as well as boxwork structures indicating the former presence of pyrite. Exposures of ferruginous quartzite are present at the top of the ridge south of the shafts. The quartzite has a N 15° W strike and a dip steeply to the northeast. The northern shaft, which is about 8 feet in diameter at the top, is about 40-feet deep and was dug in a circular manner (Figure 11). A large dump surrounds the shaft. Some quartzite is exposed 15 feet down the shaft in the northwest wall. The southern shaft is 35-40 feet deep and is about 15 feet across at the top and 7 feet in diameter near the bottom. The shaft is surrounded by a large "spread out" forest litter-covered dump to the southeast (Figure 12). No rocks are exposed in the wall of this shaft.

Samples from dumps around both shafts were assayed by XRAL Activation Services Inc., Ann Arbor, Michigan in December, 1992. These assays show 0.01 ppm of gold per ton and less than 0.1 ounce of silver per ton in the samples from the northern shaft and 0.003 ppm of gold per ton and less than 0.1 ounce of silver per ton in the sample from the southern shaft.

SCOTT RUN GOLD OCCURRENCE

The Scott Run gold occurrence is located in Fairfax County (Figure 13), on the Falls Church 7.5-minute quadrangle, at Swinks Mill, in Scott Run, on the southwest side of State Highway 193 (Georgetown Pike) (N4,314,290 E308,860, Zone 18).

Gold was reportedly panned from Scott Run in early 1993 (George Hamilton, 1993, written communication). Exposed in the bed of Scott Run are metamorphosed intermediate and mafic volcanic rocks of the Chopawamsic Formation. Predominant rock type is chlorite schist which contains quartz veins that have been highly folded. A large abundance of black sand is present in the stream, however only one microscopic piece of gold was observed during panning of the stream sediments.

SPROUSES CORNER GOLD MINE

The Sprouses Corner gold mine is located in Buckingham County (Figure 14), on the Dillwyn 7.5-minute quadrangle, 1.2 miles west-southwest of Dillwyn, on the west side of U.S. Highway 15, 0.3 mile south of its intersection with State Highway 20 (N4,157,560 E722,810, Zone 17).

An 8-foot square, 4-foot deep open shaft is present on the property (September, 1993) (Figure 15). Exposures of ferruginous quartzite and quartz with boxwork structure are present at the surface in the east wall of the shaft. Fragments of quartz-sericite schist, garnetiferous chlorite schist, greenstone, and iron-oxide stained quartz are present on extensive dumps at the site. An open trenchcut extends for about 300 feet along a northeast-southwest strike. Perpendicular open cuts have been dug at right angles to this trench and toward the highway. A second shaft (west of the open shaft which in 1983 was caved and 15 feet deep) has now been back-filled and covered. There are also about 10 shallow pits on the property. The exposed quartzites and chlorite schists on the surface at the mine have a N 10-30° E strike and a steep dip to the southeast. There are also about 10 shallow pits on the property.

A sample of iron-oxide stained quartz with some boxwork structure and sericite schist was assayed by XRAL Activation Services Inc., Ann Arbor, Michigan in April, 1993. These assays show 0.850 ppm of gold per ton; no silver is present.

TABSCOTT ROAD GOLD MINE

The Tabscott Road gold mine (formerly Prospect B in Sweet, 1980) is located in Goochland County (Figure 16), on the Caledonia 7.5-minute quadrangle, 1.4 miles southeast of Tabscott, on the northwest side of State Road 605, 0.75 mile (by road) southwest of its intersection with State Road 681 (N4,193,100 E756,280, Zone 17).

The mine consists of about 6 caved pits and 2 caved shafts. Sweet (1980) noted 15 water-filled and caved pits at the site. The pits are aligned along a northeast to southwest trend. There is evidence of slumping at a right angle to (southeast) the pits that indicates collapsed underground drifts (Figure 17). Iron-oxide-stained, white quartz is present along with chlorite and muscovite schist on the dumps.

A sample from the dumps was assayed by XRAL Activation Services Inc., Ann Arbor, Michigan in April, 1993. Assays indicate 0.008 ppm of gold per ton; no silver was detected.

E.J. WRIGHT GOLD PROSPECT

The E.J. Wright gold prospect is located in Albemarle County (Figure 18), on the Covesville 7.5-minute quadrangle, 1.2 miles south-southwest of South Garden. This property can be reached by traveling 1.15 miles along a dirt road that turns off the southwest side of State Road 712 (N4,197,310 E707,370, Zone 17).

Reference to this old gold prospect was found in records in the Albemarle County courthouse. A field investigation revealed several shallow depressions with numerous piles of

country rock on the hillside. Pieces of quartz biotite gneiss as well as graphite and sericite schist were found, but there was no evidence of gold being present.

REFERENCES CITED

Bradshaw, H.C., 1955, History of Prince Edward County, Virginia: The Dietz press, Inc., Richmond, Virginia, 934 p.

Shirey, P.C., 1966, Guidebook to Augusta County, Staunton and Waynesboro, Virginia, Schmid's Printery, Staunton, Virginia, 85 p.

Sweet, P. C., 1980, Gold in Virginia: Virginia Division of Mineral Resources Publication 19, 77 p.

Sweet, P. C., and Trimble, D., 1982, Gold occurrences in Virginia, an update: Virginia Division of Mineral Resources Virginia Minerals, v. 28, n. 4, p. 33-41.

Sweet, P. C., and Trimble, D., 1983, Virginia gold-resource data: Virginia Division of Mineral Resources Publication 45, 196 p.

Sweet, P.C., and Lovett, J.A., 1985, Additional gold mines, prospects, and occurrences in Virginia: Virginia Division of Mineral Resources Virginia Minerals, v. 31, n. 4, p.41-52.

Sweet, P.C., 1991, Precious-metal mines, prospects, and occurrences in Virginia - An update: Virginia Division of Mineral Resources Virginia Minerals, v. 37, n. 1, p.1-6.

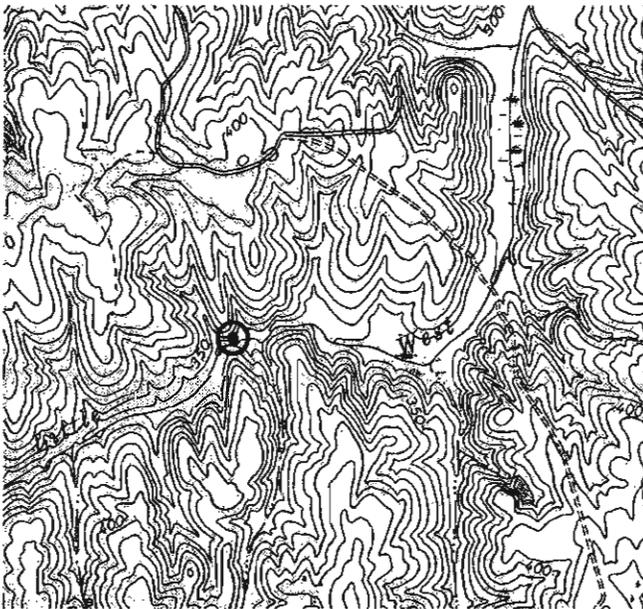


Figure 2. Location of the Barebones Creek gold occurrence, Crewe East 7.5-minute quadrangle, Nottoway County.

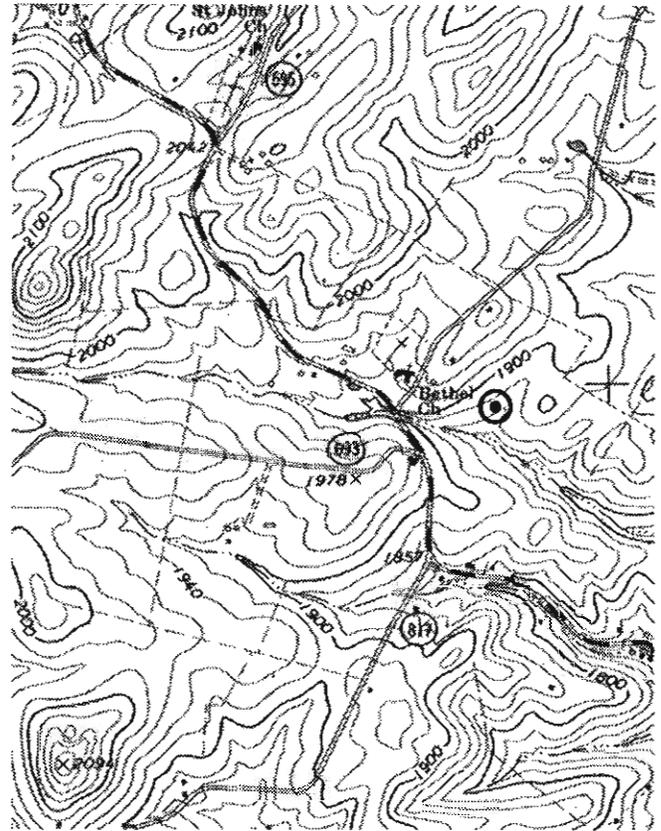


Figure 3. Location of the Bethel Green Silver Mine, Greenville 7.5-minute quadrangle, Augusta County.

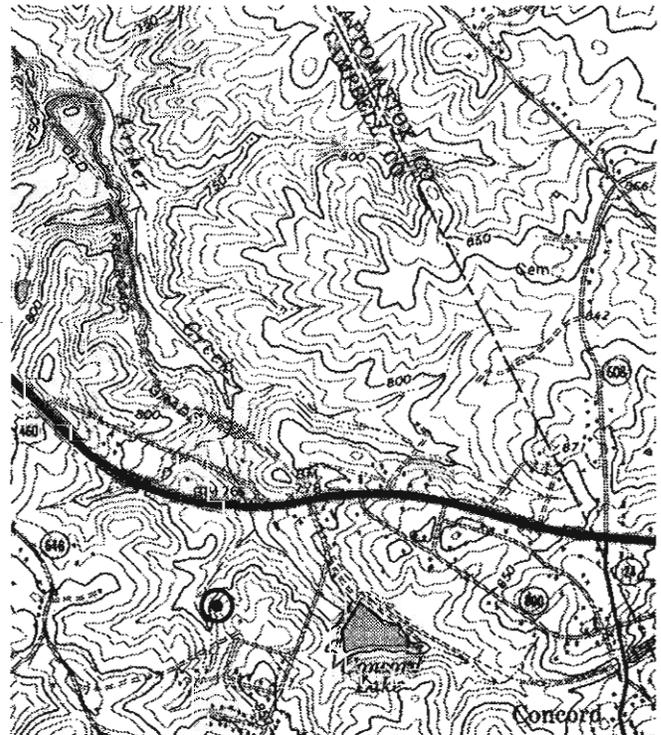


Figure 4. Location of the Concord gold mine, Concord 7.5-minute quadrangle, Campbell County.



Figure 5. Main shaft, with remains of old pump Concord gold mine, Campbell County (notebook paper for scale).



Figure 6. Cross-cut through quartz vein, Concord gold mine, Campbell County (notebook paper for scale).

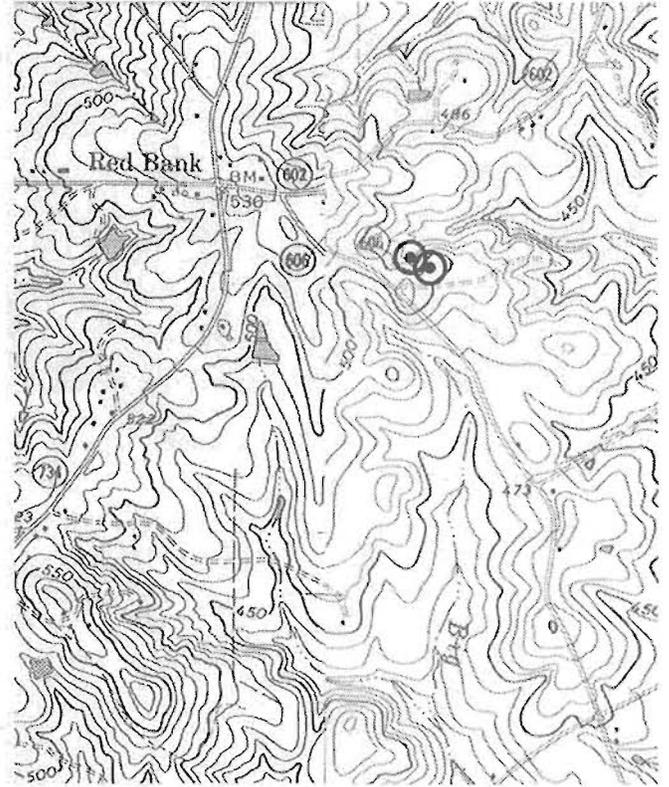


Figure 7. Location of Murray-Morris gold mine, Nelson 7.5-minute quadrangle, Halifax County.

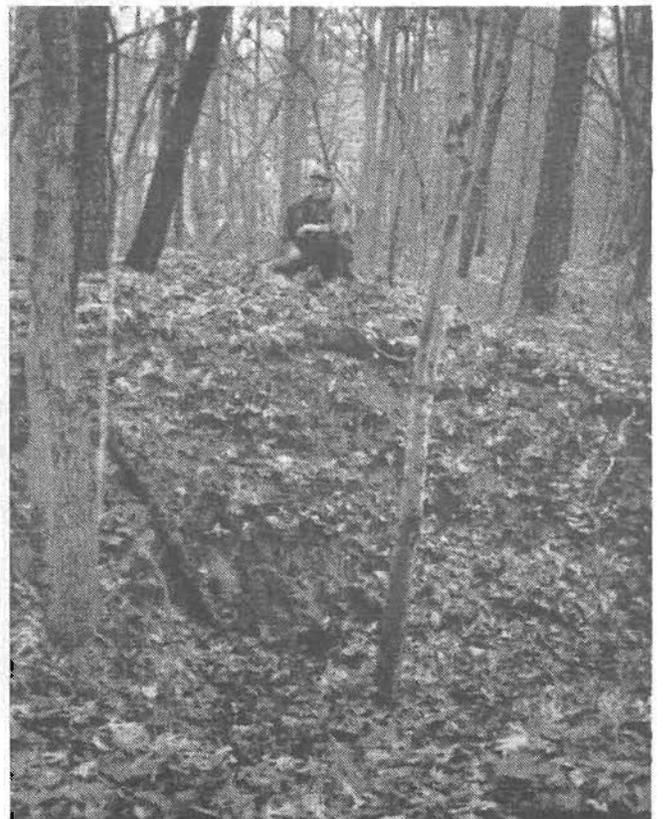


Figure 8. Caved shaft No. 1 at the Murray-Morris gold mine, Halifax County.



Figure 9. Water-filled shaft No. 2 at the Murray-Morris gold mine (white hard hat for scale).

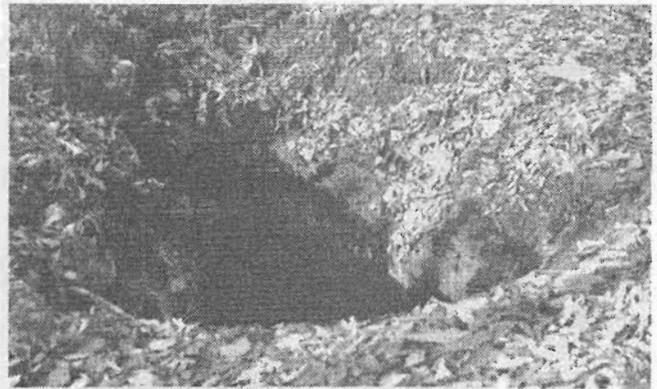


Figure 11. Open northern shaft of Prospect gold mine, Prince Edward County (notebook paper for scale).

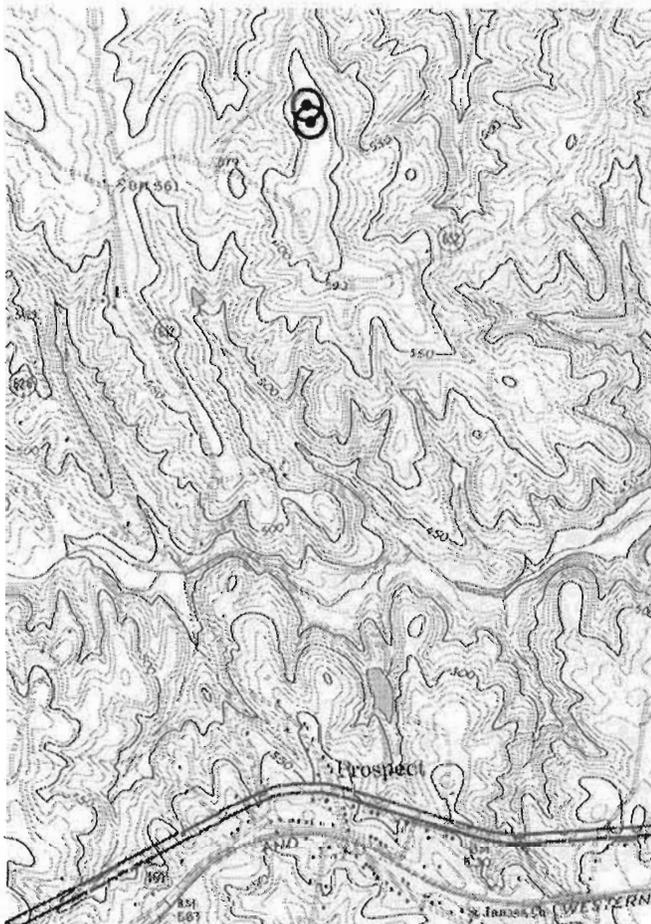


Figure 10. Location of the Prospect gold mine, Prospect 7.5-minute quadrangle, Prince Edward County.

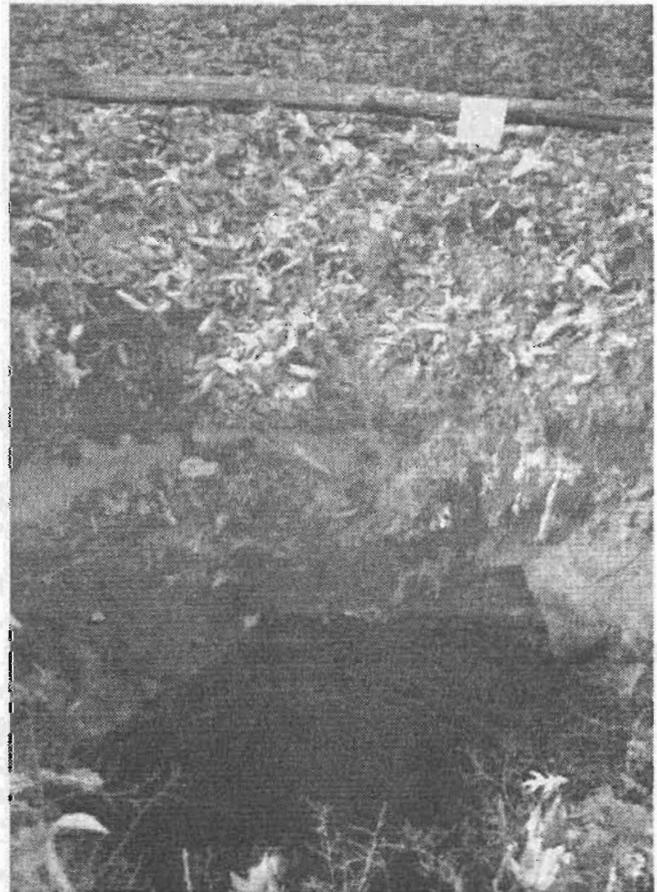


Figure 12. Open southern shaft of Prospect gold mine, Prince Edward County (notebook paper for scale).

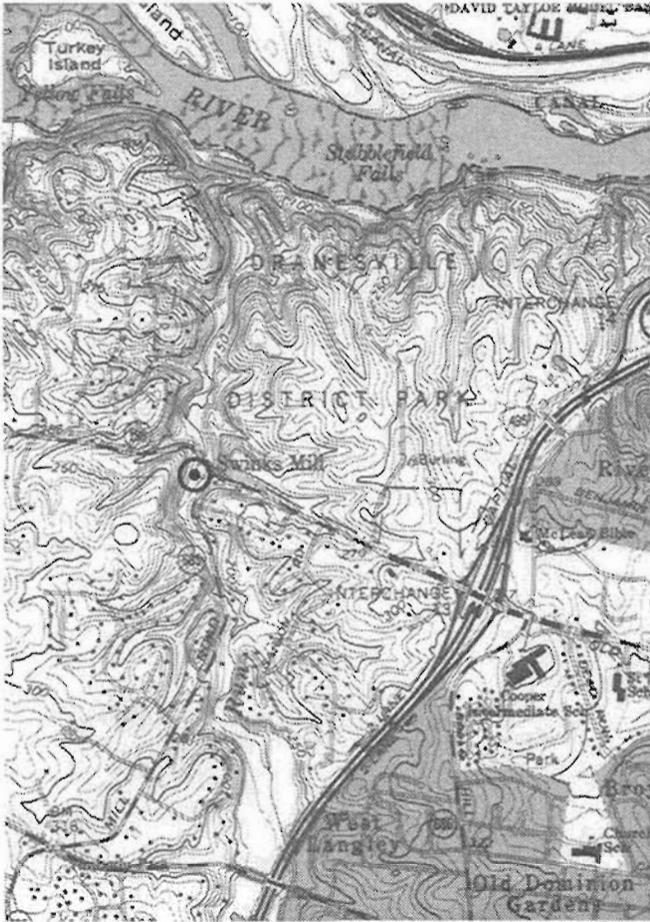


Figure 13. Location of the Scott Run gold occurrence, Falls Church 7.5-minute quadrangle, Fairfax County.

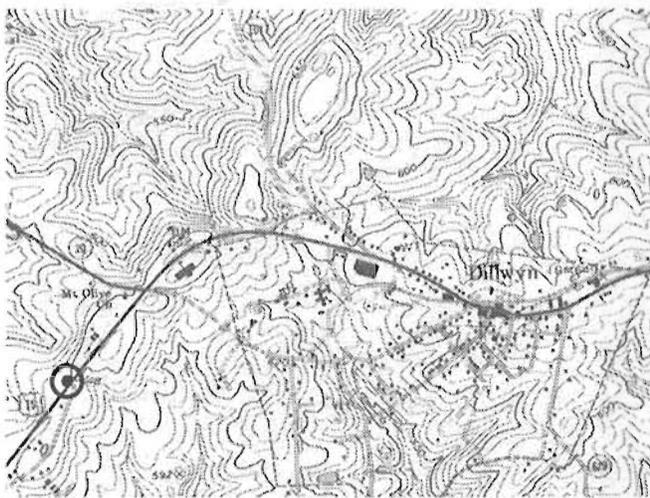


Figure 14. Location of the Sprouses Corner gold mine, Dillwyn 7.5-minute quadrangle, Buckingham County.

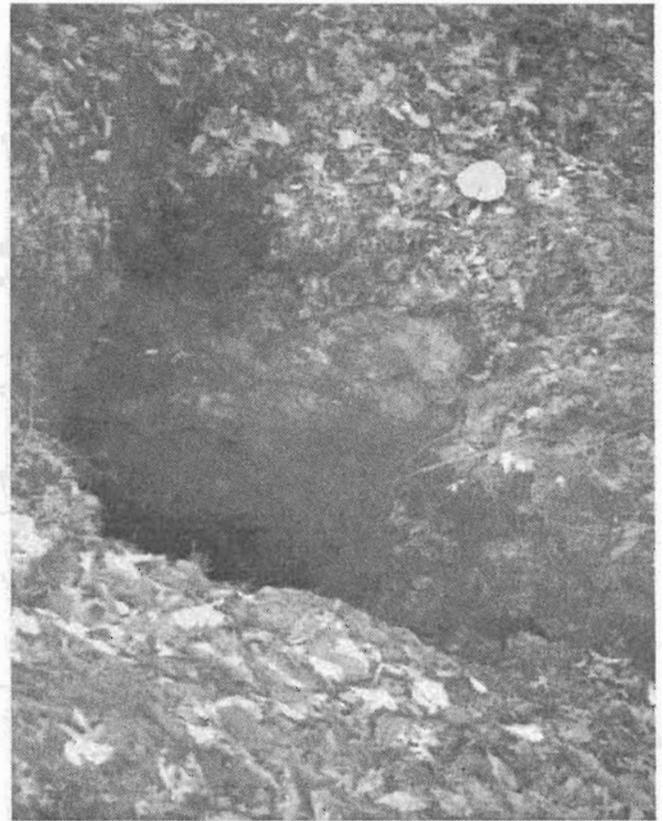


Figure 15. Open shaft at the Sprouses Corner gold mine, Buckingham County (white hard hat for scale).

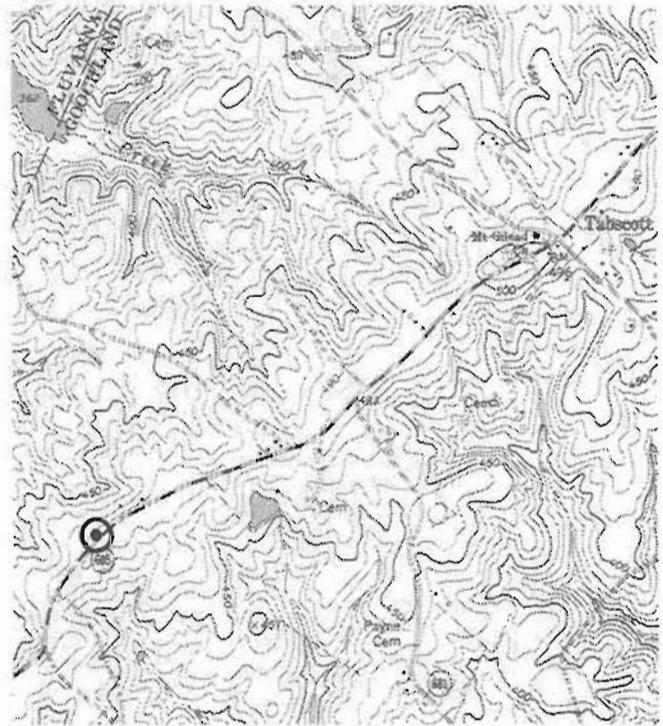


Figure 16. Location of the Tabscott Road gold mine, Caledonia 7.5-minute quadrangle, Goochland County.

Postmaster:
Send address corrections to:
Virginia Division of Mineral Resources
P.O. Box 3667
Charlottesville, VA 22093

Virginia Minerals
Second-Class postage paid at
Charlottesville, VA
ISSN0042-6652

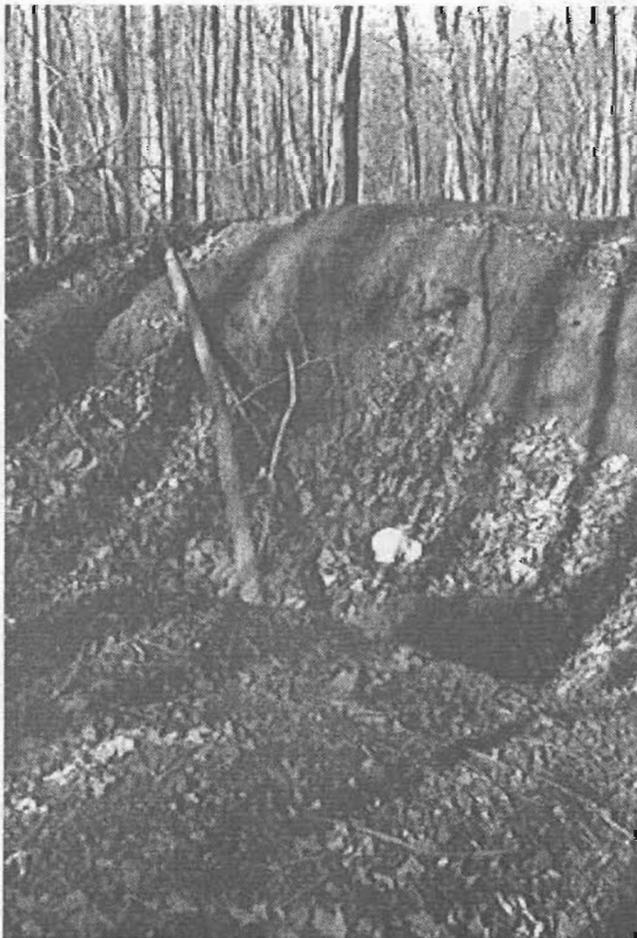


Figure 17. Open shaft with dumps at the Tabscott Road gold mine, Goochland County (white hard hat for scale).

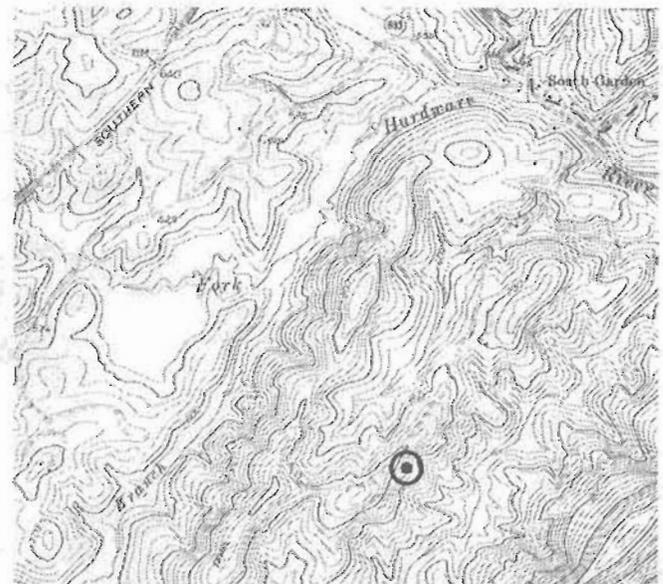


Figure 18. Location of the E.J. Wright gold prospect, Covesville 7.5-minute quadrangle, Albemarle County.

NEW BROCHURE

COAL AND VIRGINIA, by Roy Sites, 1995.

Free