Little more than prospect pits have ever been discovered in the
gneisses of Northampton County. Two small excavations have been
found on the south slope of South Mountain about one and a half miles
northwest of Hellertown (87 and 88) and another one on the western
nose of the mountain south of Freemansburg (86). A pit about one
mile south of Lower Saucon Church (89) revealed a vein of ore about
two feet thick but of no commercial importance.

On his 1878 map Prime locates a mine near the summit of Morgan
Hill (85) about a mile from the Delaware River which was owned
by J. A. Conklin. This is probably the mine that M. S. Henry, in an
unpublished manuscript, says was worked between 1795 and 1800. He
says the vein was five to six feet wide and was worked to a depth of
120 feet. The ore was hauled to a furnace in the lower part of New
Jersey.

Copper

Throughout the eastern United States the rocks of Triassic age in
many places contain traces of copper. Many of these Triassic copper
deposits have been worked, particularly in Colonial times, but very
few operations have been successful. In Northampton County, cop-
er minerals occur in two places, and both localities have been pros-
ppected. One of the deposits is one mile south of Leithsville on the
Lehigh-Northampton line and the other about the same distance south-
west of Leithsville on the Bucks-Northampton line. A few years ago
they were investigated by James Fisher, of Bethlehem, who dug sev-
eral trenches and shallow shafts but did not succeed in discovering
any ore that was commercially valuable.

In both localities the minerals, associated rocks, and manner of oc-
currence are similar. The ore-bearing rock is a conglomerate that is
loosely cemented with red to gray clay or shale. The pebbles have a
maximum size of four inches, are well rounded, and consist of quartz-
ites, limestones, and shales. The copper is in the form of malachite
and occurs as a thin coating that surrounds the quartzite and lime-
stone pebbles. It has in part replaced some of the cementing mate-
rial that was formerly present but in the main has been formed by
precipitation in the pore spaces of the conglomerate. In some speci-
mens the coating of malachite about the pebbles is a quarter of an inch
thick, but usually it is thinner.

As the copper-bearing rock has never been thoroughly sampled the
value of the ore can not be determined. In picked specimens of small
size the copper content is 4 or 5 percent, but the strata thus far
exposed that carry the malachite average only a fraction of 1 per-
cent copper, which is entirely too low to be of any economic value.