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GEOLOGICAL AND NATURAL HISTORY SURVEY  
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REPORT ON DUDLEY BLACK GRANITE QUARRY

by

E.F. Bean

Open-File Report 30-1

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1930

Miss  
Quarry sites

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The quarry was examined April 22, 1930.

Location. The quarry is east of STH 63 in the NW $\frac{1}{4}$  of Sec. 23, T.53N., R.8E. It is 2.5 miles from the railroad at Gleason, which is on the Otis-Kalinke Branch of the Milwaukee Railway 18 miles from Merrill.

Description of Rock. Two types of rock are quarried - the black and the gray. The Black "granite" is a diabase which is intrusive into the gray granite. The diabase takes polish well, and the contrast between the etched and polished surfaces is exceptionally good. The rock should be durable, as no objectionable minerals were observed.

The gray granite is the country rock. It is a rock of good quality and takes polish well. Near the contact with the dike there are stringers of the diabase in the gray which render the gray granite unfit for monumental and building stone. This zone appears to be 3-5 feet in width.

Quarry Opening. A pit has been sunk, largely in the diabase, to a depth of 40 feet, and a length of 42 feet. The gray granite has been stripped south of the pit over an area about 35' x 40'. The stripping has been removed east of the pit for a distance of 85 feet. The stripping, consisting of gravel and disintegrated granite, is heaviest over the gray granite, and ranges from 1 foot to 12 feet in thickness.

Quantity of Rock. The company owns title to a strip 1200 feet in width along the diabase dike, together with sufficient ground for the plant (I did not see the deed). The dike is 15 feet wide at the west end of the pit, 16 feet wide at the east end of the pit, 18 feet wide 30 feet east of the pit, and at least 17 feet wide 81 feet east of the pit. 1200 feet east of the pit, angular boulders indicate a width of 60 feet. The dike appears to be vertical. Assuming a length of 1200 feet, a width of 16 feet, and a depth of 100 feet, there is 1,920,000 cubic feet of the "black granite" available.

Since the gray granite is the country rock, the available quantity of the rock is very large.

Uses for Stone.

1. Monumental Stone. Both the black and gray could be sold for this purpose. I estimate a net profit of 50 cents per cubic foot for the rough dies and \$1.00 per cubic foot for the polished dies.
2. Building Stone. With proper connections considerable stone could be sold for both exterior and interior work.

5. Crushed Stone. Fine crushed stone for roofing granules, terrazzo floors, etc. Coarser crushed stone for railroad ballast and concrete aggregate. The profit on the coarser crushed stone would be small. Without a railroad siding, I believe that profitable sale would be impossible.

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