

(200)
R220
no. 970

PRELIMINARY MATERIALS MAP OF THE CHESTER
QUADRANGLE, HAMPSHIRE AND HAMPDEN COUNTIES, MASSACHUSETTS

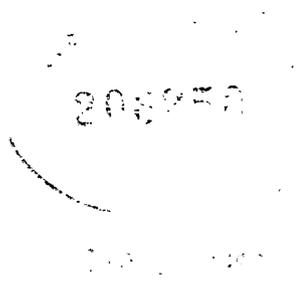
BY

W. WILLIAM HOLMES

U.S. Geological Survey

Reports - open file series no. 970: 1967

BFR 67-117



accompanied
(200) Weld - Int. 2905
R291
no. 970

GEOLOGIC DIVISION
U.S. GEOLOGICAL SURVEY
Washington, D. C.
20242

For release DECEMBER 6, 1967

The U. S. Geological Survey is releasing in open files the following reports. Copies are available for consultation in the Geological Survey Libraries, 1033 GSA Bldg., Washington, D. C. 20242; Bldg. 25, Federal Center, Denver, Colo. 80225; 345 Middlefield Rd., Menlo Park, Calif. 94025; and in other offices as listed:

1. Preliminary materials map of the Chester quadrangle, Hampshire and Hampden Counties, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000, 1 table. Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass. 02114; and USGS, 80 Broad St., Boston, Mass. 02110. Material from which copy can be made at private expense is available at the Broad St. address.

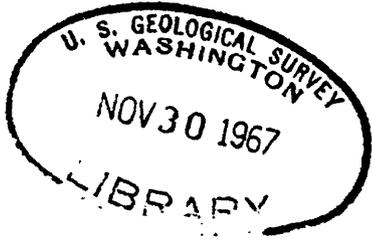
2. Preliminary materials map of the Massachusetts portion of the Hancock quadrangle, Massachusetts-New York, by G. William Holmes. 1 map, scale 1:24,000, 5 tables. Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass. 02114; and USGS, 80 Broad St., Boston, Mass. 02110. Material from which copy can be made at private expense is available at the Broad St. address.

3. Marine phosphorite deposits--economic considerations, by James B. Cathcart. 21 p., 1 table.

4. Phosphate exploration in Colombia--a case history, by James B. Cathcart. 19 p., 1 fig., 1 table.

5. Florida type phosphorite deposits--origin and techniques for prospecting, by James B. Cathcart. 27 p., 1 fig., 2 tables.

6. Distribution and geologic habitat of marine halite and associated potash deposits, by Robert J. Hite. 35 p., 11 figs.



Field and megascopic observations:

Station number 1

Location: County Hampden Town Chester Pit Active Inactive
Chester Center 42° 16' N
Road location Route 20 1 m. SE of Coordinates 72° 58' W

Geologic unit or occurrence Alluvial fan deposit

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 1400' x 1700' Estimated thickness 30'

Dimensions of pit: Areal extent 100' x 200' Exposed thickness 15'

Lithologic composition (approximate %) See below

Grain size: Maximum 30" Mean 1/16" Est. % of sand 50 Est. % fines 5-8

Rounding Subrounded Grading med-well Sorting med-well

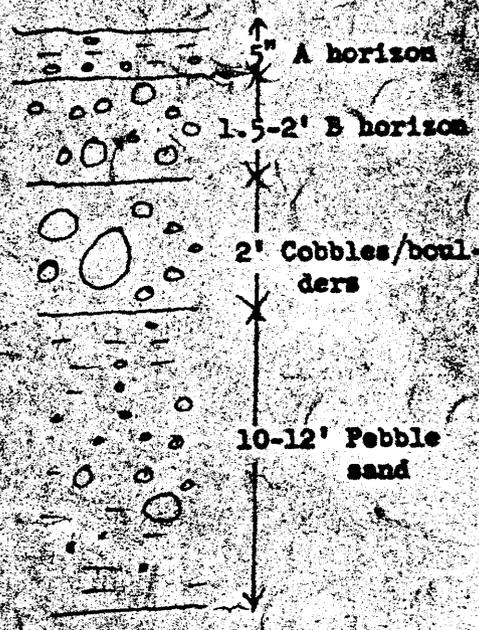
Soil development A 5" B 18-24" Color A 10 YR 3/2 B 10 YR 6/3

Oxidation or staining Leaching

Secondary deposition Reactive matter CaCO₃

CHESTER QUADRANGLE MASS STATE GEOLOGICAL SURVEY S. C. KILLER AUGUST 1967 DATE MASS MATERIALS PROJECT

Section:



Rock type	
Sandstone	8
Quartzite	6
Granite	48
Gneiss	8
Amphibolite	20
Quartz	4
Schist	6

General Description: Silty A horizon. Block of cobble till incorporated. Nearly horizontal stratification, but some cut and fill. Very limited supply of good quality gravel in an area of sparse supplies.

