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no. 970

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

BY

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*U.S. Geological Survey*

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accompanied

(200) Weld - Int. 2905

R291

no. 970

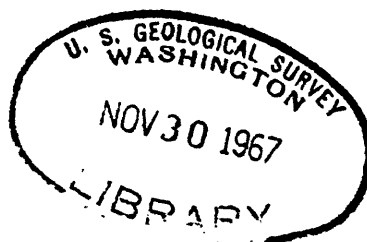
~~✓~~ GEOLOGIC DIVISION  
U.S. GEOLOGICAL SURVEY  
Washington, D. C.  
20242

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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.

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## Field and megascopic observations:

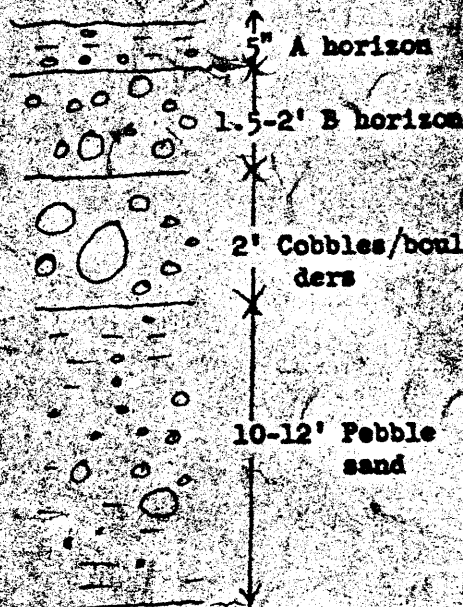
Station number 1

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

Geologic unit or occurrence Alluvial fan depositTextural description Gravel of mixed sizes Eng. Soil Type GNDimensions 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 belowGrain size: Maximum 30" Mean 1/16" Est. % of sand 50 Est. % fines 5-8Rounding Subrounded Grading med-well Sorting med-wellSoil development A 5" B 18-24" Color A 10 YR 3/2 B 10 YR 6/3Oxidation or staining LeachingSecondary deposition Reactive matter CaCO<sub>3</sub>

## 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.

CHESTER  
QUADRANGLEMASS  
STATES. C. KILLEY  
GEOLOGICALAUGUST 1967  
DATEMASS MATERIALS  
PROJECT

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