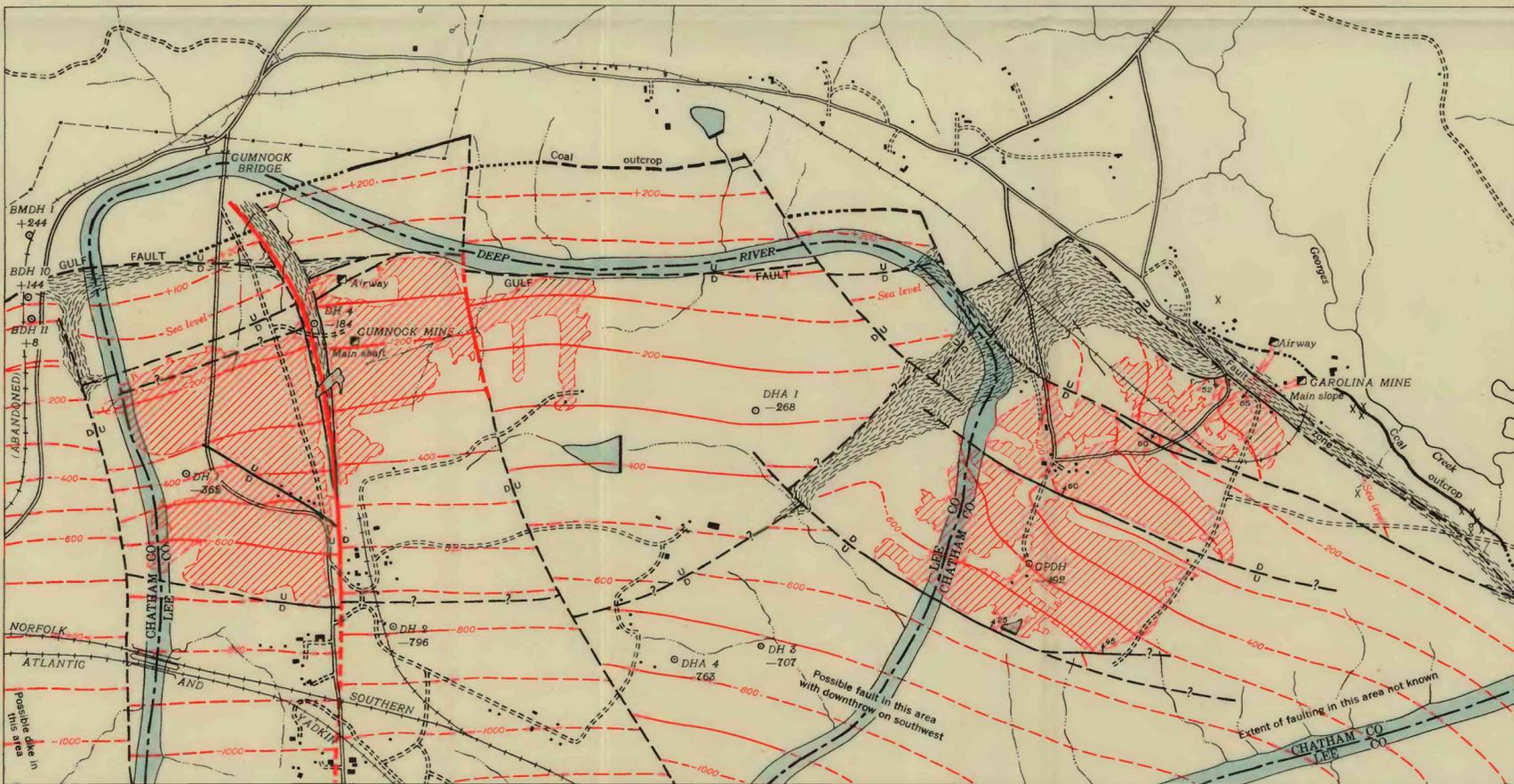


SURFACE GEOLOGY



SUBSURFACE GEOLOGY

- EXPLANATION**
- SEDIMENTARY ROCKS**
- QUATERNARY**
- Qal Alluvium
 - Stream deposits
 - Qg 2 Terrace gravel deposits
 - Qg 3 Unconsolidated clay, sand, and gravel; Qg 2, middle terrace; Qg 3, higher terrace
- Upper Triassic**
- Ks Sanford formation
 - Red, brown, and gray claystone, shale, siltstone, and sandstone
 - Kc Cumnock formation
 - Gray and black claystone, shale, siltstone, and sandstone
 - Kp Fekin formation
 - Red, brown, and gray claystone, shale, siltstone, and sandstone
- TRIASSIC**
- IGNEOUS ROCKS**
- Td Diabase dike
- Structural Features**
- Outcrop of Cumnock coal bed
 - Dashed where approximately located; dotted where concealed
 - Contact, showing dip
 - Dashed where approximately located
 - Fault, showing dip
 - Dashed where approximately located; dotted where concealed. Faults on subsurface map drawn on top of main bench of Cumnock coal bed
 - Probable fault
 - U, upthrown side; D, downthrown side
- Other Features**
- Area of intense faulting, folding and metamorphism
 - Most coal probably not recoverable in these areas
 - Strike and dip of beds
 - Shaft and airway
 - Generalized outline of mine workings
 - X Coal pit
 - DH-3 Diamond-drill hole
 - From N. C. Geol. and Econ. Survey Bull. 33 (Campbell and Kimball, 1923) and map by W. F. Cooke, 1925
 - DHA-1 Diamond-drill hole
 - Eavenson and associates, 1930
 - CPDH Diamond-drill hole
 - Coal Products, Inc., 1944
 - BMDH 1 Diamond-drill hole
 - U. S. Bureau of Mines, 1945
 - BDH II Diamond-drill hole
 - Walter Bledsoe and Co., 1945
 - Structure contour
 - Shows elevation of top of main bench of Cumnock coal bed. Dashed where error in elevation may exceed 25 feet
 - 243^x Temporary bench mark and elevation established by Saville (1924, p. 12)
 - 202 W.S. Elevation of water surface established by Saville (1924, p. 5)
 - 282 Plane table elevation
 - 184 Elevation of top of main bench of Cumnock coal bed
 - Datum is mean sea level

Horizontal and vertical control by U.S.G.S., based on U.S.C. and G.S. bench marks. Topography by U.S.G.S., surveyed in 1948 and 1949

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D. C. M. P. 3988

Geology by John A. Reinemund, 1950

GEOLOGIC MAPS OF CUMNOCK AND CAROLINA MINES AND ADJACENT AREAS, CHATHAM AND LEE COUNTIES, NORTH CAROLINA

