

DEPARTMENT OF THE INTERIOR  
UNITED STATES GEOLOGICAL SURVEY

GEOLOGIC MAP OF THE JEWELL RIDGE QUADRANGLE,  
BUCHANAN AND TAZEWELL COUNTIES, VIRGINIA

By Kenneth J. Englund

GEOLOGIC QUADRANGLE MAP  
Published by the U.S. Geological Survey, 1981

**GEOLOGIC MAP SYMBOLS**  
**COMMONLY USED ON MAPS OF THE UNITED STATES GEOLOGICAL SURVEY**  
(Special symbols are shown in explanation)

|  |   |
|--|---|
|  | Contact—Dashed where approximately located; short dashed where inferred; dotted where concealed   |
|  | Contact—Showing dip; well exposed at triangle   |
|  | Fault—Dashed where approximately located; short dashed where inferred; dotted where concealed     |
|  | Fault, showing dip—Ball and bar on downthrown side  |
|  | Normal fault—Hachured on downthrown side  |
|  | Fault—Showing relative horizontal movement  |
|  | Thrust fault—Sawteeth on upper plate  |
|  | Anticline—Showing direction of plunge; dashed where approximately located; dotted where concealed |
|  | Asymmetric anticline—Short arrow indicates steeper limb   |
|  | Overturned anticline—Showing direction of dip of limbs  |
|  | Syncline—Showing direction of plunge; dashed where approximately located; dotted where concealed  |
|  | Asymmetric syncline—Short arrow indicates steeper limb  |
|  | Overturned syncline—Showing direction of dip of limbs   |
|  | Monocline—Showing direction of plunge of axis   |
|  | Minor anticline—Showing plunge of axis  |
|  | Minor syncline—Showing plunge of axis   |

Strike and dip of beds—Ball indicates top of beds known from sedimentary structures

70° Inclined    Horizontal  
 Vertical    40° Overturned

Strike and dip of foliation

20° Inclined    Vertical    Horizontal

Strike and dip of cleavage

15° Inclined    Vertical    Horizontal

Bearing and plunge of lineation

15° Inclined    Vertical    Horizontal

Strike and dip of joints

40° Inclined    Vertical    Horizontal

Note: Planar symbols (strike and dip of beds, foliation or schistosity, and cleavage) may be combined with linear symbols to record data observed at same locality by superimposed symbols at point of observation. Coexisting planar symbols are shown intersecting at point of observation.

Shafts

Vertical    Inclined

Adit, tunnel, or slope

Accessible    Inaccessible

X Prospect

Quarry

Active    Abandoned

Gravel pit

Active    Abandoned

Oil wells

Drilling    Shut-in    Dry hole, abandoned  
 Gas    Show of gas  
 Oil    Show of oil