DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

BEDROCK GEOLOGIC MAP OF THE LUDLOW QUADRANGLE,
HAMPDEN AND HAMPSHIRE COUNTIES, SOUTH-CENTRAL
MASSACHUSETTS

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GEOLOGIC QUADRANGLE MAP
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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

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

Strike and dip of foliation

Strike and dip of cleavage

Bearing and plunge of lineation

Strike and dip of joints

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.

Shadows

Adit, tunnel, or slope

Prospect

Quarry

Gravel pit

Oil well

Dry hole abandoned

Shut-in abandoned

Drilling