


DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

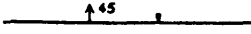
**GEOLOGIC MAP OF THE LIVERMORE MOUNTAIN QUADRANGLE,  
LARIMER COUNTY, COLORADO**


**By William A. Braddock and Jon J. Connor**


GEOLOGIC QUADRANGLE MAP  
Published by the U.S. Geological Survey, 1988


**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

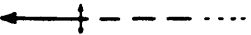
 Fault – Dashed where approximately located; short dashed where inferred; dotted where concealed


 Fault, showing dip – Ball and bar on downthrown side

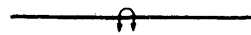
 Normal fault – Hachured on downthrown side

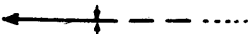
 Fault – Showing relative horizontal movement


 Thrust fault – Sawteeth on upper plate

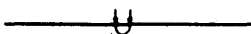
 Anticline – Showing direction of plunge; dashed where approximately located; dotted where concealed


 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

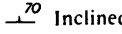

 Overturned syncline – Showing direction of dip of limbs

 Monocline – Showing direction of plunge of axis

 Minor anticline – Showing plunge of axis

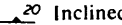


 Minor syncline – Showing plunge of axis

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

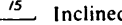


 70° Inclined     Horizontal

 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


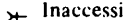
 40° Inclined     Vertical     Horizontal


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

 Prospect

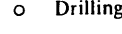
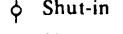
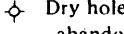
Quarry

 Active     Abandoned

Gravel pit

 Active     Abandoned

Oil well

 Drilling     Shut-in     Dry hole abandoned

 Gas     Show of gas

 Oil     Show of oil