








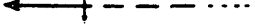







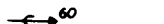
DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

































**GEOLOGIC MAP OF THE PINWOOD LAKE QUADRANGLE,  
BOULDER AND LARIMER COUNTIES, COLORADO**

**By Raymundo Punongbayan, James C. Cole,  
William A. Braddock, and Roger B. Colton**

GEOLOGIC QUADRANGLE MAP  
Published by the U.S. Geological Survey, 1989

# **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
	Overtured 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
	Overtured 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	
	Inclined
	Horizontal
	Vertical
	Overtured
Strike and dip of foliation	
	Inclined
	Vertical
	Horizontal
Strike and dip of cleavage	
	Inclined
	Vertical
	Horizontal
Bearing and plunge of lineation	
	Inclined
	Vertical
	Horizontal
Strike and dip of joints	
	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