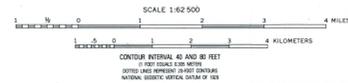


- DESCRIPTION OF MAP UNITS**
- Qal Surficial deposits
 - Qh Alluvium (Holocene)
 - Ql Landslide deposits (Holocene)
 - Qa Stream deposits, undivided (Holocene and Pleistocene)—Alluvium and older terrace gravels, some colluvium included
 - Qd Nonstratified deposits of glacial drift (Pleistocene)—Includes moraine and kame deposits; dotted lines show form of most prominent moraine
 - Qg Terrace gravel (Pleistocene)
 - Qld Lacustrine deposits (Pleistocene)
 - Or Rock glaciers (Pleistocene)
 - Ti QUARTZ PORPHYRY DIKE COMPLEX OF NORTH FORK LAKE (EOCENE)
 - Td High-level intrusive rocks (Eocene)
 - Tc CHALLIS VOLCANICS (EOCENE)
 - Tol Chalk(?) feeder dikes
 - Tsl QUARTZ MONZONITE STOCKS OF SUMMIT AND LAKE CREEKS, AND ASSOCIATED HYPABYSSAL ROCKS (EOCENE)
 - Tkc CLASTIC ROCKS (LOWER TERTIARY? TO UPPER CRETACEOUS?)
 - INTENSIVE COMPLEX OF THE PIONEER WINDOW
 - Qw Quartz monzonite phase (Eocene)
 - Grandolitic phase (lower Tertiary? to Upper Cretaceous?)
 - WOOD RIVER FORMATION
 - Ppw Upper part (Lower Permian to Upper Pennsylvanian)—Includes unit 4 and younger units of Hall and others (1974); individual units locally distinguished on cross sections by numbers 4 (oldest) to 8 (youngest)
 - Pwl Lower part (Middle Pennsylvanian)—Includes units 2 and 3 of Hall and others (1974), and the Haley Conglomerate Member at the base; individual units locally distinguished on cross sections by letter h (oldest) or number 2 and 3 (youngest)
 - Mw WHITE KNOB LIMESTONE (UPPER MISSISSIPPIAN)
 - Ml COPPER BASIN FORMATION (UPPER MISSISSIPPIAN)
 - Mg Gila Mountain plate
 - Green Lake Limestone Member (Lower Mississippian)
 - Copper Basin plate
 - Mcu Upper diatic unit (Mississippian)
 - Mcd Disconformable Mine Limestone Member (Lower Mississippian)
 - Moc Little Copper Member (Lower Mississippian)
 - Ml Limestone of Buck Canyon (PALEOZOIC)
 - Dc CAREY DOLOMITE (MIDDLE AND LOWER DEVONIAN)
 - Dm MILLIGAN FORMATION (DEVONIAN)
 - DSa ARGILLACEOUS ROCKS (DEVONIAN AND SILURIAN)
 - DSb CALCAREOUS ROCKS OF WILDHORSE AND DRY CANYON WINDOWS (DEVONIAN TO ORDOVICIAN)—Individual units distinguished on cross sections by symbols Tc, Sc, and Oa
 - SOg TRAIL CREEK AND PHE KAPPA FORMATIONS (SILURIAN AND ORDOVICIAN)
 - Oa METASEDIMENTARY ROCKS OF EAST FORK FORMATION (UPPER AND OR) MIDDLE ORDOVICIAN—Individual units a (oldest) to 3 (youngest) shown in section B-B' by symbols Oa, Oa1, and Oa2
 - OEH METASEDIMENTARY ROCKS OF HYNDMAN FORMATION (ORDOVICIAN AND PROT-ERZOIC)—Individual units a (oldest) to d (youngest) shown in section B-B' by symbols OEH, OEH1, OEH2, and OEH3
 - Om MARBLE INCLUSIONS (MIDDLE ORDOVICIAN AND OR) OLDER
 - Os SCHIST INCLUSIONS (MIDDLE ORDOVICIAN AND OR) OLDER
 - Xwu GNEISS COMPLEX OF WILDHORSE CREEK (PROTEROZOIC X)
 - Xum Upper gneiss unit
 - Xum Marble marker bed
 - Xul Lower gneiss unit
- STUDY AREA BOUNDARY**
PROJECTION OF BEDDING ABOVE GROUND, OR TRACE OF BEDDING IN SUBSURFACE, ON CROSS SECTION
CONTACT—Dashed where approximately located, quartered where uncertain
HICKNACLE FAULT—Dashed where approximately located, dotted where concealed; Arrow on map shows direction of dip; half arrow in cross section shows vertical component of relative movement; bar and ball on downthrown side
THRUST FAULT—Dashed where approximately located; dotted on map where concealed and on cross sections where position inferred above ground level; sawtooth on upper plate; arrow on cross section shows direction of relative movement of upper plate
Major postmetamorphic thrust fault
Major pre- or synmetamorphic thrust fault
Pioneer thrust fault system—Sole thrust of allochthonous rocks of lower Paleozoic; schistose rocks (western flank of western Pioneer Mountains); also marks abrupt metamorphic break along Pioneer window contact. Sawtooth on upper plate
Wildhorse thrust fault system—Sole thrust separating allochthonous Mississippian Copper Basin Formation sequences from pre-Mississippian sequences in tectonic windows; along Pioneer window contact, marks abrupt metamorphic break with metamorphic rocks and coincides with sheared contact of intrusive complex. Sawtooth on upper plate
Minor thrust fault
MAJOR FOLD AXES—Arrow shows trace of axial surface and points down plunge
Anticline
Overtured anticline
Syncline
Minor fold axes
MINOR FOLD AXES—Arrow shows trace of axial surface and points down plunge
Anticline
Overtured anticline
Syncline
Overtured anticline
MINOR FOLD AXES—Arrow shows trace of axial surface and points down plunge
Anticline
Overtured anticline
Syncline
Overtured anticline
CIRCULATIONS OR GROUPS OF MINOR FOLD AXES—Shows average bearing and plunge
STRIKE AND DIP OF BEDS
Horizontal
Vertical
Overtured
STRIKE AND DIP OF METAMORPHIC FOLIATION
Inclined
Vertical
STRIKE AND DIP OF FOLIATION IN IGNEOUS OR METAGNEISSOUS ROCKS
Inclined
Vertical
- RESIDUAL MAGNETIC CONTOURS**
Showing total intensity magnetic field of the Earth in gamma units relative to an arbitrary datum; background to indicate areas of lower intensity. Contour interval east of long 114°15' W. is 10 gamma; M. High, L, low. A regional trend of 7.13 gamma/mile north and 5.17 gamma/mile east was removed using P. O. G. O. updated to March 1974. Map shows original computer-drawn contours. West of long 114°15' W. is separate survey, prepared using different datum; contour interval 20 and 100 gamma; X, and number indicate high and low
FLIGHT PATHS—Showing location and spacing of magnetic data. Flight-line spacing approximately 1 mile (1.6 kilometers)

Data from U.S. Geological Survey 1:25,000
Aerial photos, Blough Creek, Blough Creek SW,
Cotton Park, Cotton Park NW, Terry Canyon,
Hart Peak, Hyndman Peak, Meridian Peak,
Phe Kappa Mountain, Phe Kappa Canyon,
Ran Peak, Starbuck Peak and Star Valley,
1957, and 1:50,000 Copper Basin, Green
Mackay, and Mukdon Canyon, 1960

Data east of long 114°15' W. flown and compiled
March 1974, Aerial Survey, Salt Lake City, Utah
Flown at 12,000 ft aerometric altitudes
Data west of long 114°15' W. flown at 12,000 ft
altitudes; elevation by Science Airborne Geophysics, Inc.,
1971; compiled by U.S. Geological Survey



RESIDUAL MAGNETIC INTENSITY, BOULDER-PIONEER WILDERNESS STUDY AREA AND VICINITY,
BLAINE AND CUSTER COUNTIES, IDAHO