

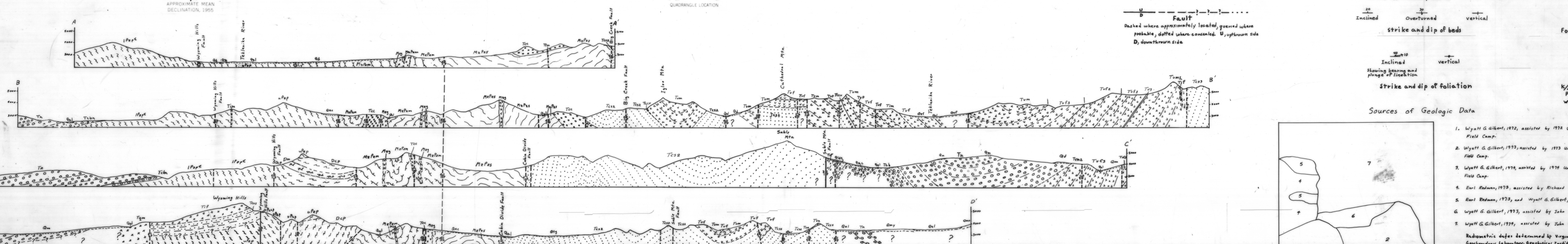
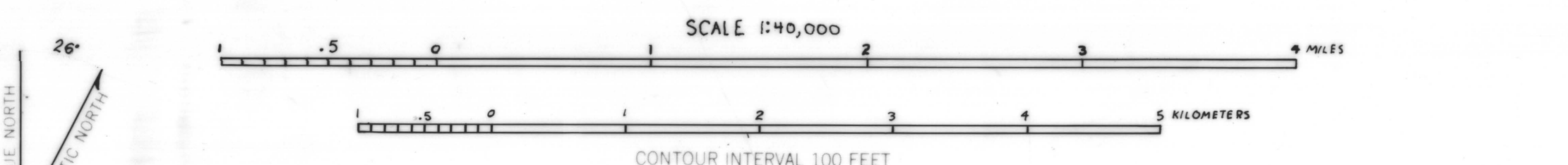
GEOLOGIC MAP and STRUCTURE SECTIONS of HEALY C-6 QUADRANGLE, ALASKA

by Wyatt G. Gilbert and Earl Redman



EXPLANATION

<p>Quaternary</p> <p>Qaf Alluvial fan deposits</p> <p>Qal Alluvium</p> <p>Qac Undifferentiated alluvial and colluvial deposits</p> <p>Qld Landslide deposits eg. rock slides</p> <p>Qtg Terrace gravel</p>	<p>Pleistocene</p> <p>Qd Glacial drift Undifferentiated glacial outwash and marginal deposits</p> <p>UNCONFORMITY</p> <p>Tn Nenana Gravel Predominantly poorly consolidated, poorly sorted, rounded-subrounded pebble-cobble conglomerate. Primarily volcanoclastic in south part of quadrangle, but contains appreciable fluvial, sedimentary, and metamorphic clasts in north part of quadrangle.</p> <p>UNCONFORMITY (C)</p> <p>Tcb Coal Bearing Group Lenticular, poorly consolidated, poorly sorted, medium to coarse-grained, quartz-cemented sandstone, siltstone and granite-pebble conglomerate, with minor coal and clay.</p> <p>UNCONFORMITY</p> <p>Tva Hornblende andesite flow Porphyritic hornblende andesite flow, with columnar jointing, massive, weathering pink.</p>	<p>Oligocene-Miocene</p> <p>Tob Undifferentiated Coal Bearing Group and Nenana Gravel</p> <p>UNCONFORMITY</p> <p>Tva Hornblende andesite sill</p>	<p>Eocene</p> <p>Tva Undifferentiated volcanic rocks Undifferentiated felsic and mafic flows, and pyroclastic rocks.</p> <p>UNCONFORMITY</p> <p>Tva Upper Tektanika volcanic sequence Thin, basaltic to andesitic flows, with abundant radiating rock and pillow basalt. Tva1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 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often marlstone and conglomerate.</p> <p>Tas2 Sandstone and siltstone Interbedded dark colored fine to medium, silty, marlstone, calcareous, and marlstone. Some beds of sandstone, siltstone, and marlstone. Some beds of sandstone, siltstone, and marlstone.</p> <p>Tas3 Sandstone and conglomerate Interbedded fine to medium, calcareous, and marlstone. Some beds of sandstone, siltstone, and marlstone.</p> <p>Tas4 Volcanic and sedimentary rocks Interbedded quartz, siltstone, and marlstone. Some beds of sandstone, siltstone, and marlstone.</p>	<p>UNCONFORMITY</p> <p>Tas5 Conglomerate Granite-pebble conglomerate and medium to coarse-grained quartz sandstone. Clasts derived from immediately underlying metamorphic rocks, conglomerate on northeast side of Healy River. Matrix composed of granitic clasts.</p> <p>UNCONFORMITY</p> <p>Tas6 Gabbro Dioritic to gabbro and minor diorite. Locally dynamic metamorphic textures, but generally altered to chlorite and sericite.</p> <p>UNCONFORMITY</p> <p>Tas7 Basalt and felsite Altered pillow basalt and felsite, commonly highly altered along faults.</p>	<p>Devonian</p> <p>Wyo Slate Gray, fine to medium grained, with abundant chlorite, sericite, and mica. Weakly metamorphosed by a single metamorphic event. Original stratigraphic relationship between Wyo and Healy uncertain.</p> <p>UNCONFORMITY</p> <p>Wyo Siliceous marble and slate Dark gray, finely laminated, siliceous marble, interbedded with mica-schist. Weakly metamorphosed by a single metamorphic event.</p> <p>UNCONFORMITY</p> <p>Wyo Quartzite phyllite and Quartzite Metamorphic light gray and light green quartzite phyllite and quartzite. Metamorphosed to lower greenschist facies. Textured with well-developed schistosity and schistosity. Some beds of quartzite, phyllite, and schist. Some beds of quartzite, phyllite, and schist.</p> <p>UNCONFORMITY</p> <p>Wyo Quartzite and schist Metamorphic light green and gray medium grained quartzite and schist. Metamorphosed to lower greenschist facies. Textured with well-developed schistosity and schistosity. Some beds of quartzite, phyllite, and schist. Some beds of quartzite, phyllite, and schist.</p>
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- Sources of Geologic Data
- Wyatt G. Gilbert, 1932, assisted by 1932 University of Alaska Summer Field Camp.
 - Wyatt G. Gilbert, 1933, assisted by 1933 University of Alaska Summer Field Camp.
 - Wyatt G. Gilbert, 1934, assisted by 1934 University of Alaska Summer Field Camp.
 - Earl Redman, 1935, assisted by Richard Stone.
 - Earl Redman, 1935, and Wyatt G. Gilbert, 1935.
 - Wyatt G. Gilbert, 1935, assisted by John Deane.
 - Wyatt G. Gilbert, 1935, assisted by John Deane.
- Redman's data determined by Virginia M. Kinnel and Donald L. Taylor, Geology Laboratory, Princeton University, University of Alaska.