GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS

LEGEND

CENOZOIC

QUATERNARY

10 — Recent alluvial, talus and bog deposits, stratified sands, gravel, and clay

CRETACEOUS OR TERTIARY

9 — Piercement(?) breccia: fragments of sediments and diabase embedded in gypsum or(?) anhydrite (occurs in Fig. 1 only)

MESOZOIC

CRETACEOUS

UPPER CRETACEOUS

CENOMANIAN TO(?) CONIACIAN AND YOUNGER

8 — Upper Cretaceous shale division: poorly consolidated bluish grey to dark grey shale, characteristically blue-grey weathering; minor siltstone; numerous whitish grey to yellowish grey concretions of hard, dark-grey shale (occurs in Fig. 2 only)

LOWER CRETACEOUS

ALBIAN

7 — Albian shale-siltstone division: soft to hard, dark grey to greenish grey shale and siltstone; minor sandy siltstone, sandstone, and pebble conglomerate at base; numerous concretions and bands of dark grey, hard shale (occurs in Fig. 2 only)

UPPERMOST BARREMIAN AND APTIAN

6 — Upper sandstone division: mainly resistant, light grey, buff or rusty weathered, fine- to medium-grained sandstone, commonly grading into sand; considerable soft, grey, silty or clayey, shale-like sandstone and siltstone; some shale and clay ironstone; minor gritty sandstone and pebble conglomerate

UPPER HAUTERIVIAN AND BARREMIAN

5 — Upper shale-siltstone division: dark grey shale and siltstone; rusty weathering clay ironstone common; considerable grey silty, shale-like sandstone near middle and top; minor resistant, light coloured sandstone near top

LOWER AND MIDDLE HAUTERIVIAN

4 — Coal-bearing division: lower part non-marine, mostly dark grey to bluish grey, coaly sandstone, interbedded with siltstones, and shales; several coal seams; upper part predominantly hard, grey, buff, or rust coloured, fine- to medium-grained sandstone; dark grey shale and siltstone unit in middle; some clay ironstone (occurs in Fig. 1 only)

UPPER BERRIASIAN AND VALANGINIAN

3 — Lower sandstone division: resistant, light grey, white and buff, fine- to coarse-grained sandstone; minor soft dark grey, clayey, shale-like sandstone and similar siltstone; some gritty sandstone and pebble conglomerate near top; upper part non-marine

JURASSIC AND CRETACEOUS

UPPER JURASSIC AND LOWER CRETACEOUS

UPPER OXFORDIAN(?) TO UPPER BERRIASIAN

2 — Lower shale-siltstone division: dark to brownish grey shale and siltstone; rusty weathering clay ironstone common; considerable sandy siltstone and silty sandstone in upper part; minor gritty to pebbly sandstone and glauconitic sandstone; pebble conglomerate and coquina sandstone

PALAEOZOIC AND MESOZOIC

JURASSIC AND EARLIER

1 — 1a, Palaeozoic rocks: red weathering conglomerate and sedimentary breccia; resistant buff to rust coloured fine- to medium-grained, marine sandstone; grey, bluish black, buff, and reddish, soft to hard shale and argillite; 1b, Jurassic rocks: resistant, light grey to buff or rust coloured, fine-grained sandstone; considerable grey, silty, shale-like, sandstone and sandy siltstone; minor grey shale, grit, and pebble conglomerate (1a occurs in Fig. 1 only)

Geological boundary (defined, approximate, assumed)

Limit of geological mapping

Bedding (inclined, vertical, overturned, horizontal)

Bedding (from air photographs or distant observation)

Fault (defined, approximate, assumed, arrow indicates relative movement)

Thrust fault (defined, approximate, teeth in direction of dip)

Anticline (approximate, arrow indicates plunge)

Syncline (approximate, arrow indicates plunge)

Top of prominent mountain

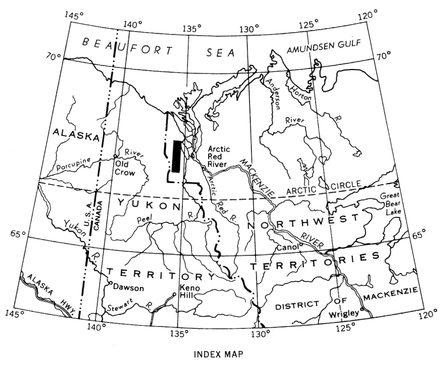
Geology by J.A. Jeletzky, 1955 and 1958

Approximate magnetic declination, Fig.1, 39° 36' East; Fig. 2, 39°24' East

Geographical names subject to revision

Cartography by the Geological Survey of Canada, 1960

To accompany Paper 59-14, by J.A. Jeletzky



INDEX MAP

Scale: One Inch to One Mile = 1/63,360

Miles 1 1/2 0 1 2 3

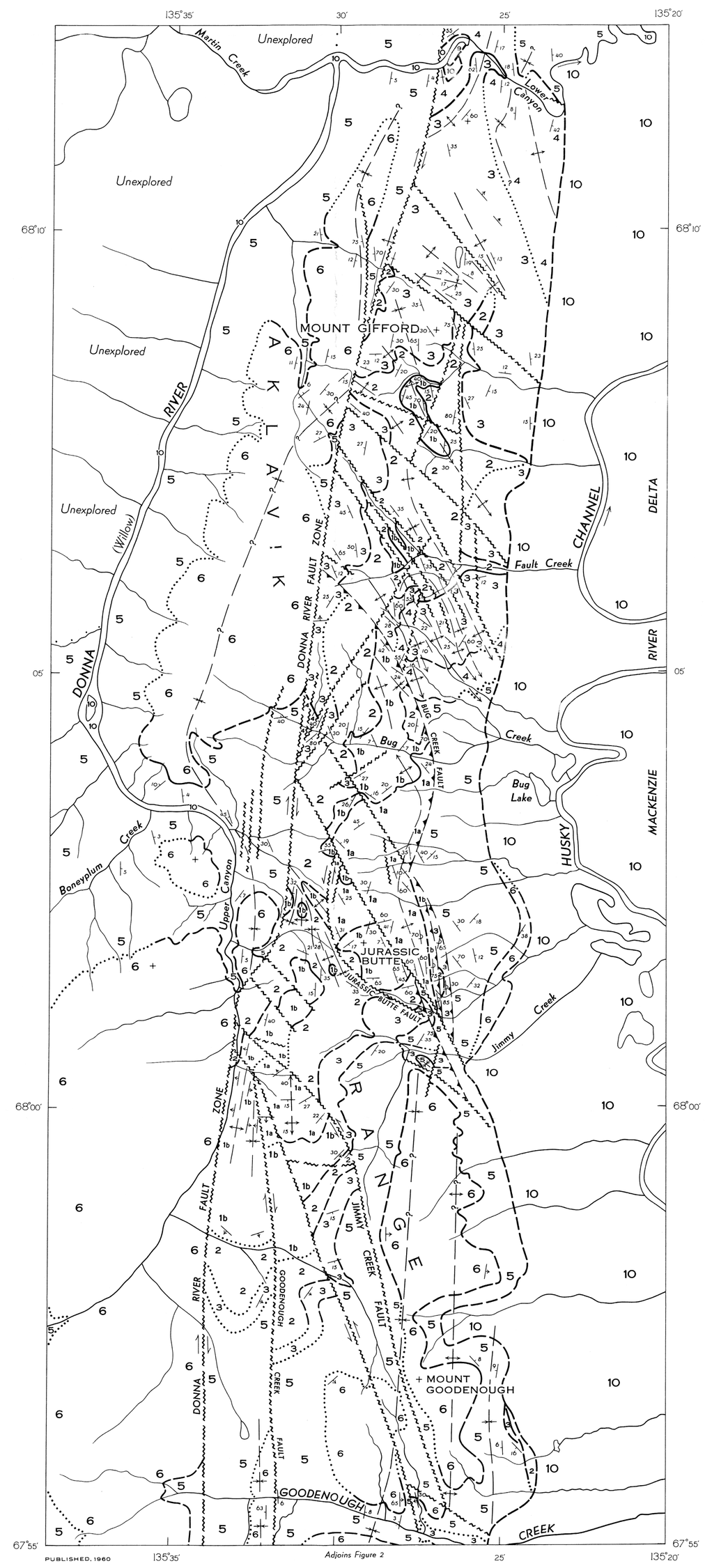


Figure 1. Sketch map showing geology and structure of Aklavik Range, District of Mackenzie, N.W.T.

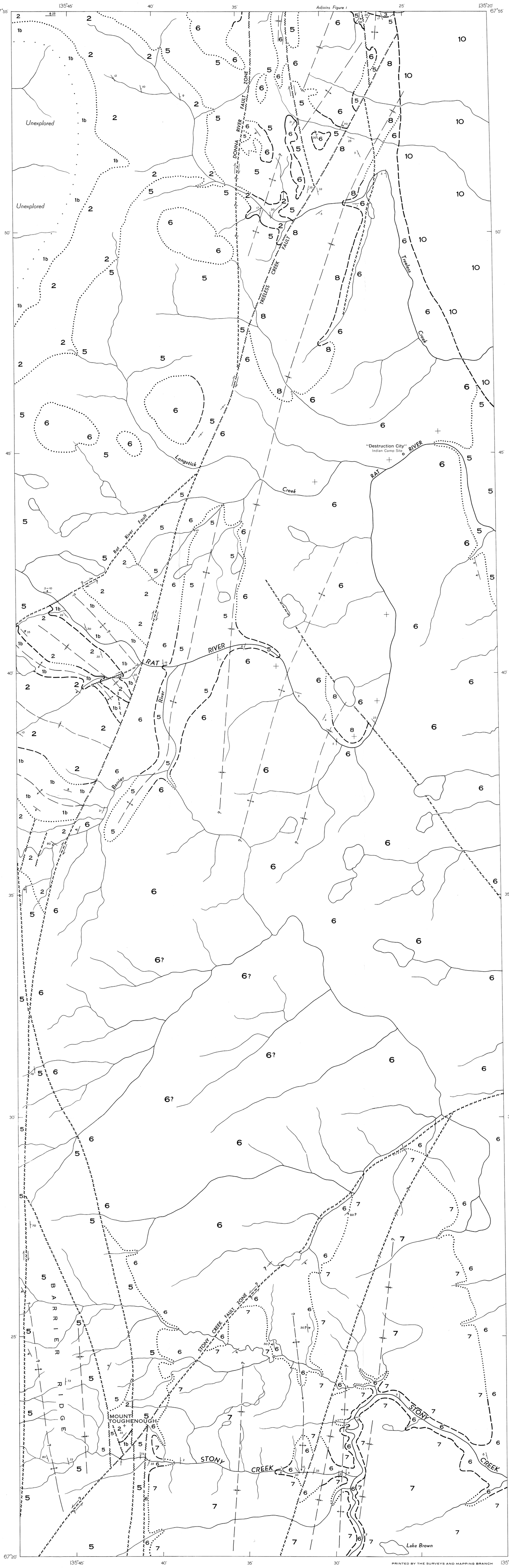


Figure 2. Sketch map showing geology and structure of the southern part of Aklavik Range and of the Rat River-Stony Creek area, District of Mackenzie, N.W.T.

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