

REPORT
OF THE
CHIEF
ASTRONOMER
1910
—
MAPS

DEPT.
OF THE
INTERIOR

DEPARTMENT OF THE INTERIOR

MAPS AND PLATES TO ACCOMPANY APPENDIX No. 6 OF THE REPORT OF THE CHIEF ASTRONOMER FOR 1910.

- | | |
|----------------------------|----------------------------|
| Sheet 1—Clarke Range | Sheet 10—Midway Mountains, |
| “ 2—Galton Range. | “ 11—Osoyoos Lake. |
| “ 3—Rocky Mountain Trench. | “ 12—Kruger Mountain. |
| “ 4—Yahk Range | “ 13—Okanagan Range. |
| “ 5—Moyie Range. | “ 14—Hozomeen Range. |
| “ 6—Purcell Trench. | “ 15—Skagit Range. |
| “ 7—Pend D'Oreille River. | “ 16—Chilliwack River. |
| “ 8—Rossland Mountains. | “ 17—Sumas Lake. |
| “ 9—Christina Lake. | |
- Plate 72—Views of the Rocky and Selkirk Ranges.
- “ 73—Views of the Selkirk, Columbia and Cascade Ranges.
- Erratum Sheet.

ERRATA

Appendix 6.

Report of the Chief Astronomer 1910

Part III—maps

Sheet 17.—Boundary Monument 19 is 0.94 miles west of Mon. 20
 " 15.— " 59 is 1.02 " " 60

" 10.— " 144 should be deleted
 " 145 should read 144
 " 146 " " 145
 " 147 " " 146
 " 148 " " 147
 " 149 " " 148
 " 150 " " 149
 " 151 " " 150
 " 152 " " 151
 " 153 " " 152
 " 154 " " 153
 " 155 " " 154

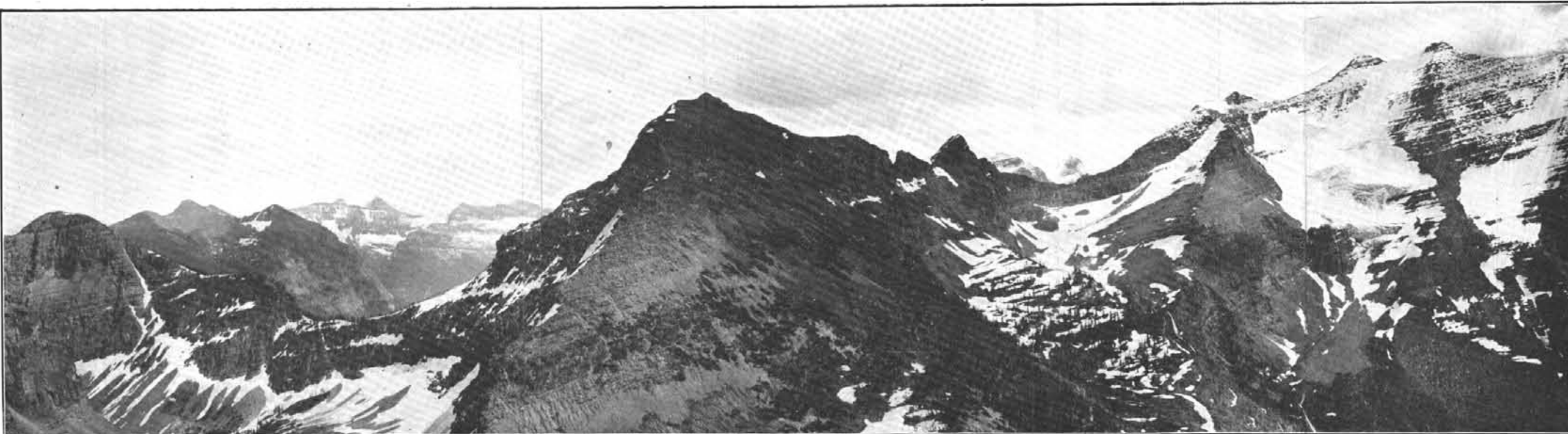
Sheet 9. — " 156 " " 155
 " 157 " " 156
 " 158 " " 157
 " 159 " " 158
 " 160 " " 159
 " 161 " " 160
 " 162 " " 161
 " 163 " " 162
 " 164 " " 163
 " 165 " " 164

Sheet 5.— " 165 is a few yards east of the railway track near Laurier.
 " 207 is 2.72 miles west of Mon. 208

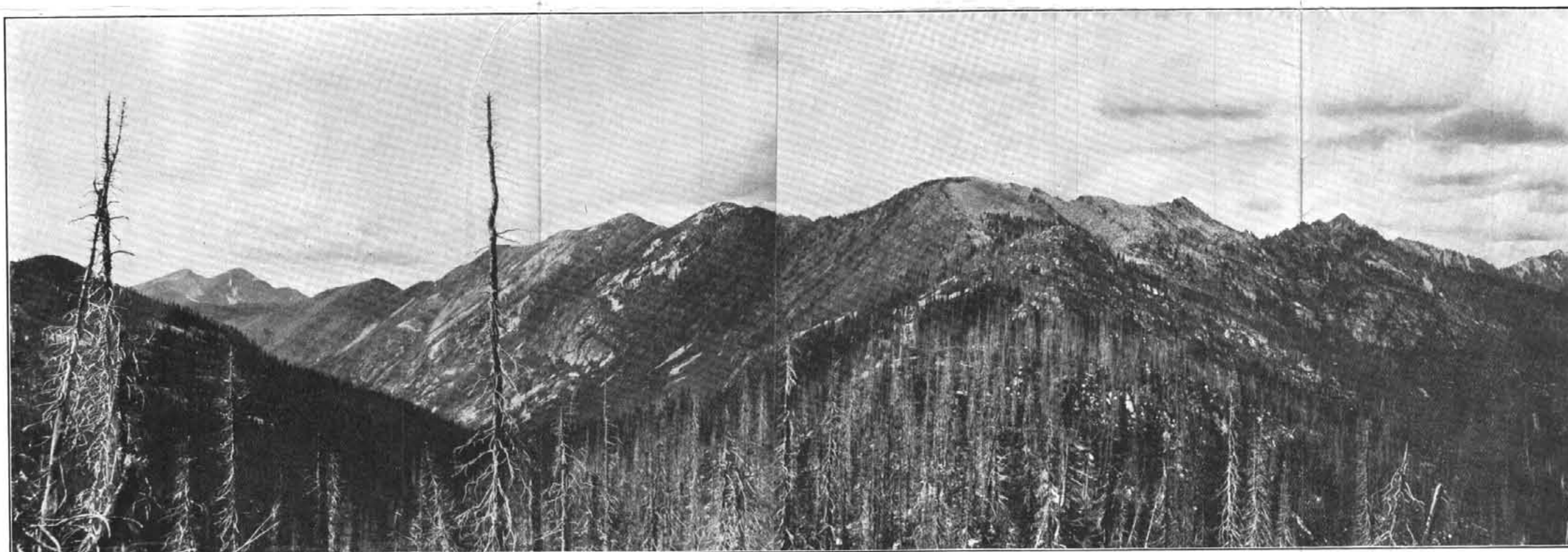
" 207 should read 208
 " 208 " " 209
 " 209 " " 210
 " 210 " " 211
 " 211 " " 212
 " 212 " " 213
 " 213 " " 214
 " 214 " " 215
 " 215 " " 216
 " 216 " " 217
 " 218 is 0.02 miles east of Mon. 217
 " 217 should read 219
 " 218 " " 220
 " 219 " " 221
 " 220 " " 222
 " 221 " " 223
 " 222 " " 224
 " 223 " " 225
 " 224 " " 226
 " 225 " " 227

Sheet 4.— " 226 should read 228
 (continued) " 227 " " 229
 " 228 " " 230
 " 229 " " 231
 " 230 " " 232
 " 231 " " 233
 " 232 " " 234
 " 233 " " 235
 " 234 " " 236
 " 235 " " 237
 " 236 " " 238
 " 237 " " 239
 " 238 " " 240
 " 239 " " 241
 " 240 " " 242
 " 241 " " 243
 " 242 is 0.22 miles west of Mon. 245
 " 242 should read 245
 " 243 " " 246
 " 244 " " 247
 " 245 " " 248
 " 246 " " 249
 " 247 " " 250
 " 248 " " 251
 " 252 is 1.35 miles east of Mon. 251
 " 249 should read 253
 " 250 " " 254
 " 251 " " 255
 " 252 " " 256
 " 257 is 2.59 miles east of Mon. 256
 " 253 should read 258
 " 258 is 2.14 miles east of Mon. 258
 " 254 should read 260
 " 255 " " 261
 " 256 " " 262
 " 257 " " 263
 " 258 " " 264
 " 259 " " 265
 " 260 " " 266
 " 261 " " 267
 " 262 " " 268
 " 269 is 0.94 miles west of Mon. 270
 " 263 should read 270
 " 264 " " 271
 " 265 " " 272
 " 273 is 1.16 miles east of Mon. 272

Sheet 4.— Boundary Monument 226 should read 228
 (continued) " 227 " " 229
 " 228 " " 230
 " 229 " " 231
 " 230 " " 232
 " 231 " " 233
 " 232 " " 234
 " 233 " " 235
 " 234 " " 236
 " 235 " " 237
 " 236 " " 238
 " 237 " " 239
 " 238 " " 240
 " 239 " " 241
 " 240 " " 242
 " 241 " " 243
 " 242 is 0.22 miles west of Mon. 245
 " 242 should read 245
 " 243 " " 246
 " 244 " " 247
 " 245 " " 248
 " 246 " " 249
 " 247 " " 250
 " 248 " " 251
 " 252 is 1.35 miles east of Mon. 251
 " 249 should read 253
 " 250 " " 254
 " 251 " " 255
 " 252 " " 256
 " 257 is 2.59 miles east of Mon. 256
 " 253 should read 258
 " 258 is 2.14 miles east of Mon. 258
 " 254 should read 260
 " 255 " " 261
 " 256 " " 262
 " 257 " " 263
 " 258 " " 264
 " 259 " " 265
 " 260 " " 266
 " 261 " " 267
 " 262 " " 268
 " 269 is 0.94 miles west of Mon. 270
 " 263 should read 270
 " 264 " " 271
 " 265 " " 272
 " 273 is 1.16 miles east of Mon. 272



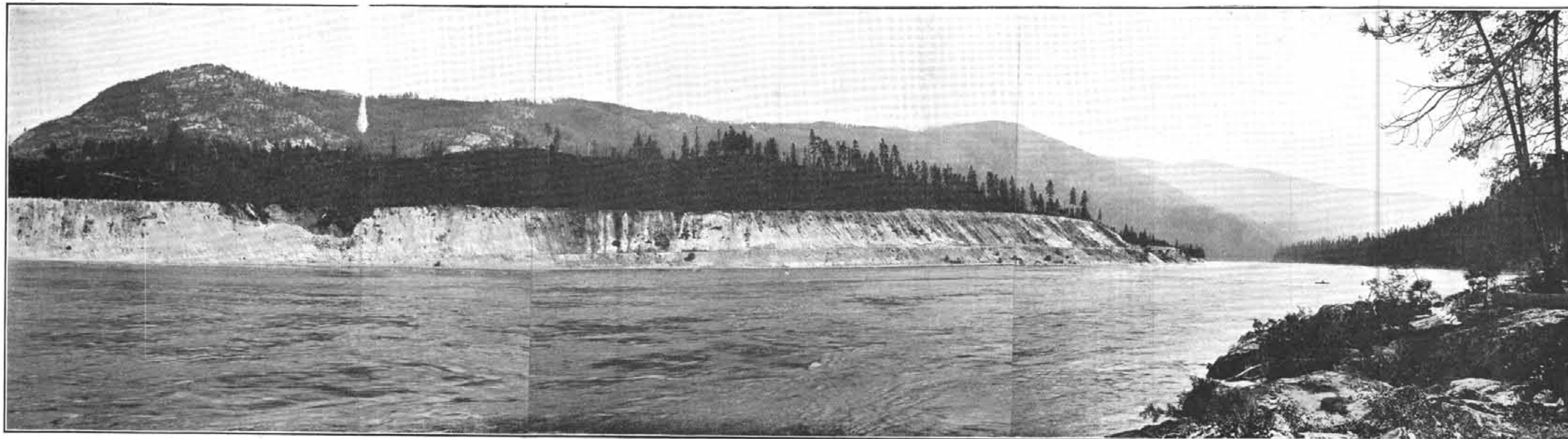
Typical view in the Clarke range. Looking eastward from head of Starvation Creek. The slope in middle of view is composed of the Siyeh formation capped by the Purcell Lava which is overlain by the Kintla formation.



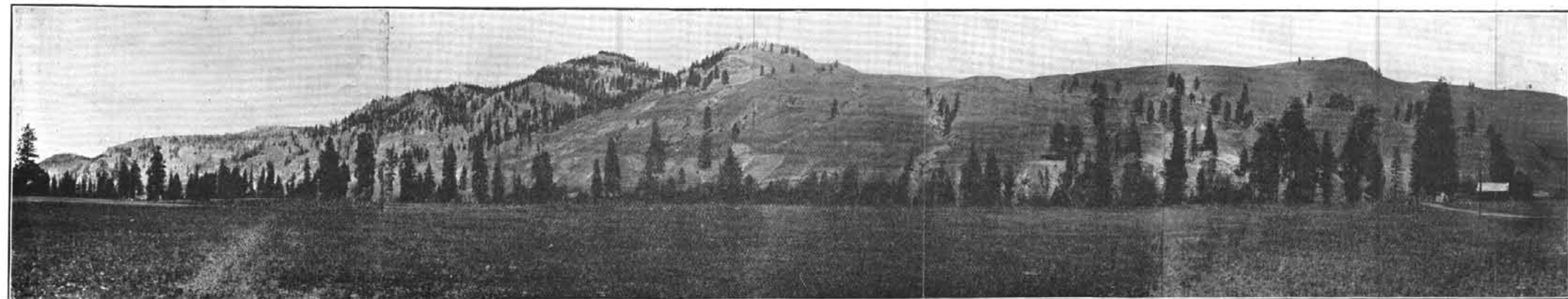
Summit of the Nelson range (Selkirk system). Looking north from a point a half-mile south of the Dewdney trail. Beehive Mountain distant, on the left.



Nelson range, looking west from summit ridge north of Dewdney trail. Ridges of near distance composed of vertical quartzites, etc., of the Summit series.



Columbia River terrace and the Pend D'Oreille mountains (Selkirk system). Looking southwest from near International Boundary.



Typical view in the Midway Mountains. Looking northeastwardly across Kettle River near bridge six miles above Midway.



Typical view in the Skagit range. Looking east from divide between Middle and Slesse creeks. Chilliwack River valley on the left. View shows accordance of summit levels.

LEGEND

MIOCENE PLEISTOCENE & RECENT

Glacial drift and alluvium
including winged-out moraine of the Flathead valley

MIDDLE CAMBRIAN (?)

Kn
Kishenehn formation
chiefly bluish-grey slates; interbeds of grey sandstone/limestone

Sh
Sheppard formation
chiefly thin-bedded, light grey, siliceous dolomite; an inter-bedded flow of basic lava

Pu
Purcell lava
massive, basic flow

Si
Siyeh formation
chiefly massive, dark grey, siliceous magnesian limestone; also much greenish-grey metagillite

Gr
Grinnell formation
chiefly thin-bedded, red metagillite; an inter-bedded flow of basic amygdaloid

Ap
Appakunni formation
generally thin-bedded, light greenish-grey metagillite; subordinate quartzite and magnesian limestone lenses

BELTIAN

A
Allyn formation
thin-to thick-bedded, light grey, generally sandy, siliceous, magnesian limestone; bearing fossil, *Helicotoma dentata*

Wt
Waterton formation
massive, dark grey, 'oleophanized' dolomite

CAMBRIAN (?)

Intrusive

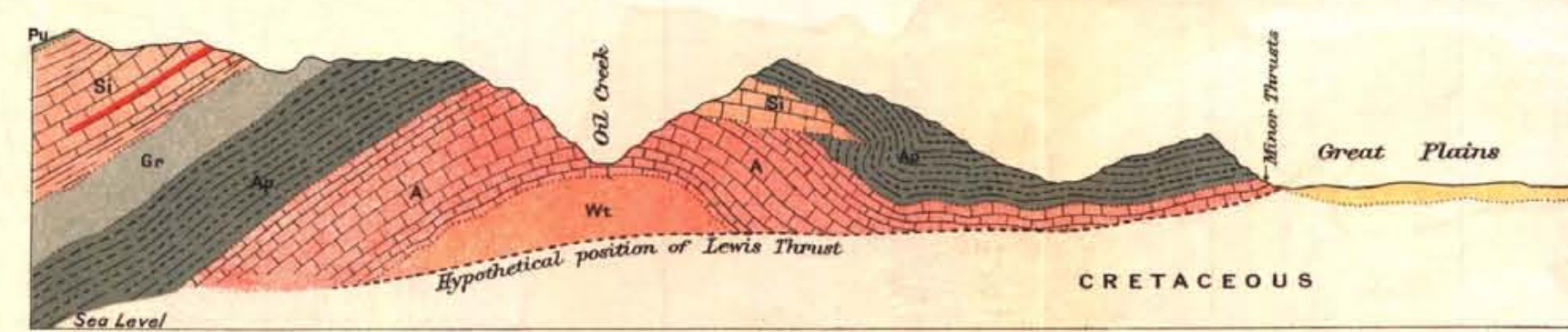
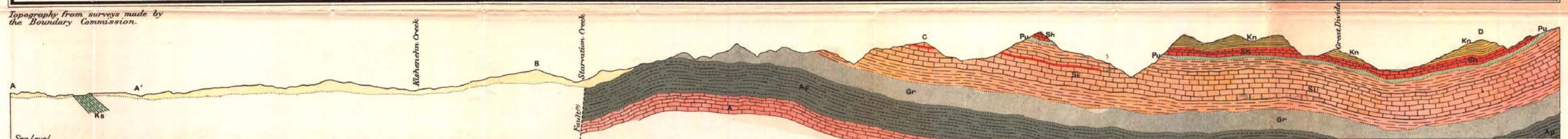
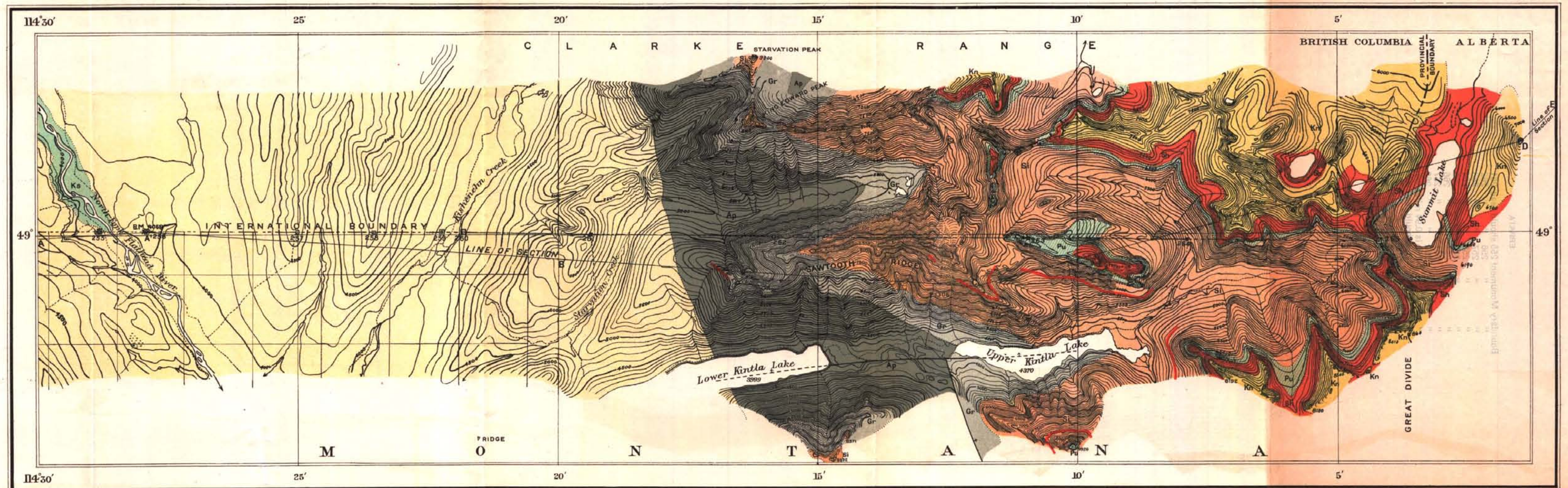
Abnormal Gabbro

Symbols

Geological boundary

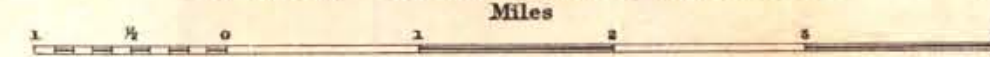
Fault

Note. Localities of chemically analyzed rocks, shown thus, + 1306



Sections along line A-A'B-C-D-E-F
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: 62500 = 0.9864 Statute Miles to 1 Inch



Contour interval, 100 feet

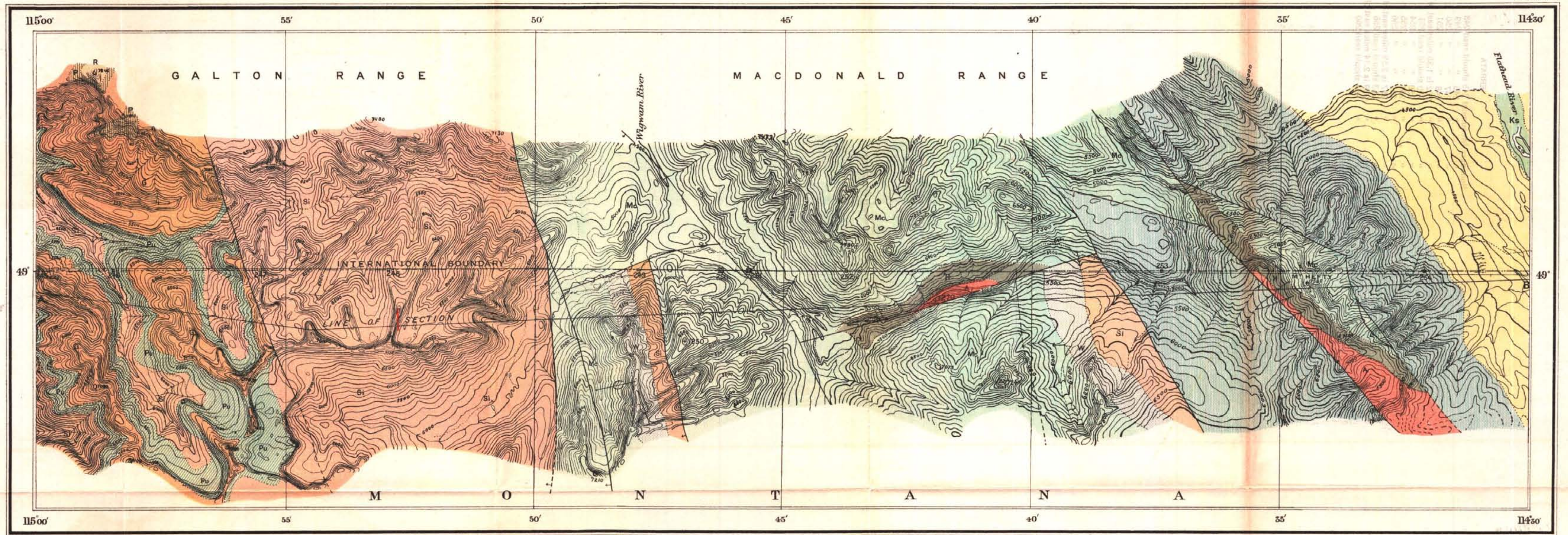
LEGEND

- PLEISTOCENE & RECENT
Glacial drift and alluvium
- MISSISSIPPIAN & DEVONIAN MIOCENE
Ks
Kishenehn formation
chiefly bluish-grey clay, interbeds of grey sandstone; fossiliferous
- Limestone
massive, grey, fossiliferous
- R
Rooseville formation
light green and grey, thin-bedded metargillite
- P
Philips formation
purplish to red, thin-bedded metargillite & quartzite
- G
Gateway formation
chiefly thin-bedded, siliceous metargillite, some dolomite at base
- Pu
Parcell lava
massive, basalt flow
- Si
Siyeh formation
massive, dark grey, siliceous magnesian limestone, with much greenish-grey metargillite
- W
Wigwam formation
thin to thick-bedded, red sandstone and metargillite
- Mc
MacDonald formation
thin to thick-bedded, grey metargillite, with rare lenses of dolomite
- H
Hefty formation
chiefly thick-bedded, reddish sandstone
- A
Altyn formation
thin-bedded, siliceous dolomite
- CAMBRIAN(?)
Intrusive
Abnormal gabbro

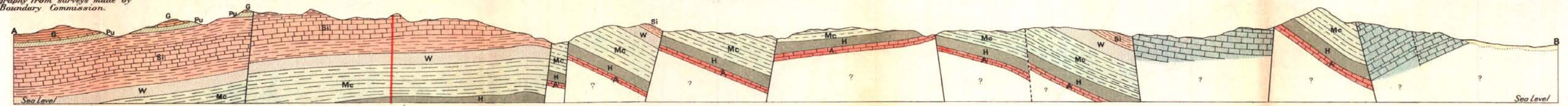
Symbols

- Geological boundary
- Fault
- Glacial Striae

Note. Localities of chemically analyzed rocks, shown thus, +1250



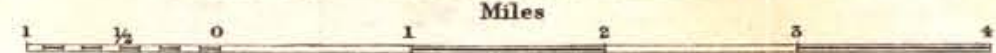
Topography from surveys made by the Boundary Commission.



Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: 62500 - 09864 Statute Miles to 1 Inch

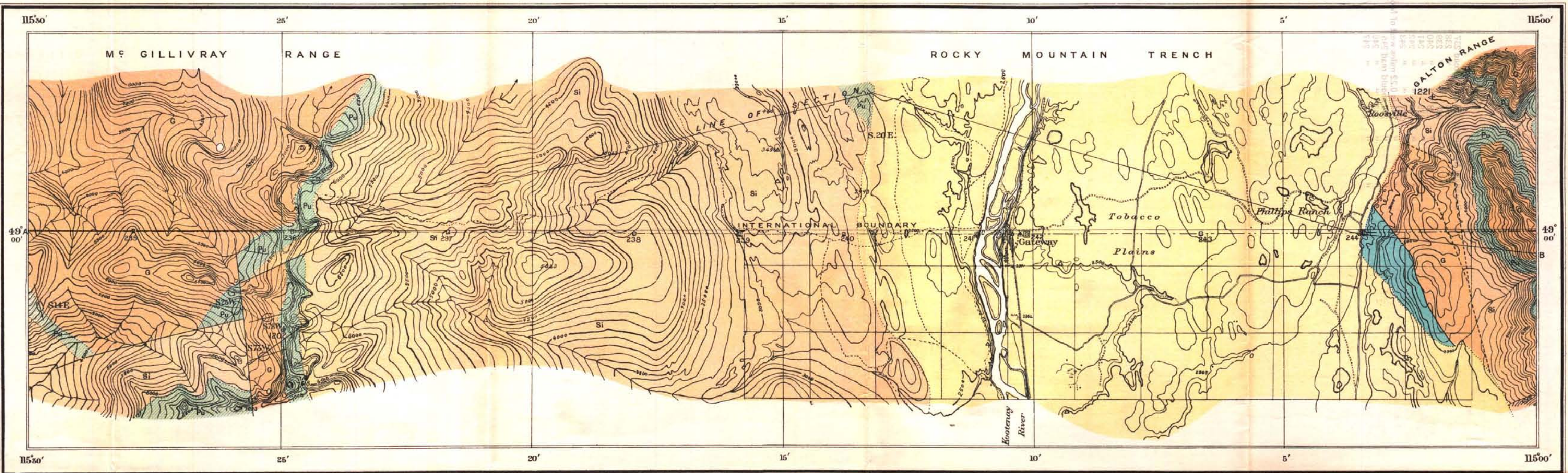


Contour interval, 100 feet

PLEISTOCENE & RECENT
DEVONIAN
Chiefly
MIDDLE CAMBRIAN
LOWER CAMBRIAN

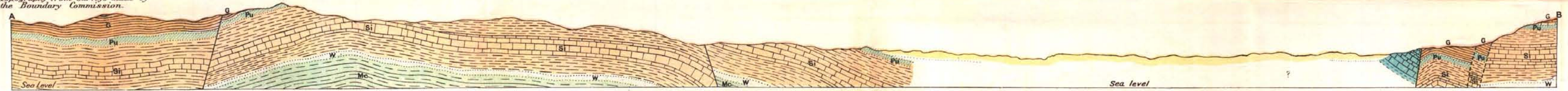
LEGEND

- Glacial drift and alluvium
 - Limestone and quartzite massive; limestone fossiliferous
 - G Gateway formation chiefly thin-bedded, siliceous metargillite; some dolomite at base
 - Pu Purcell lava massive, basic flows
 - Si Siyeh formation thin-to thick-bedded, greenish grey metargillite, with massive, siliceous, magnesian limestone
 - W Wigwam formation thin-to thick-bedded, red sandstone and metargillite
 - Mc MacDonald formation thin-to thick-bedded, grey metargillite
- Symbols
- Geological boundary
 - Fault
 - Glacial striae

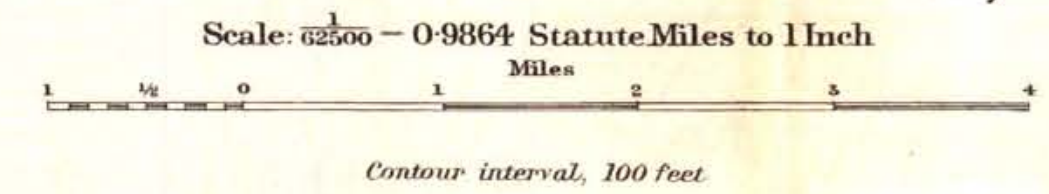


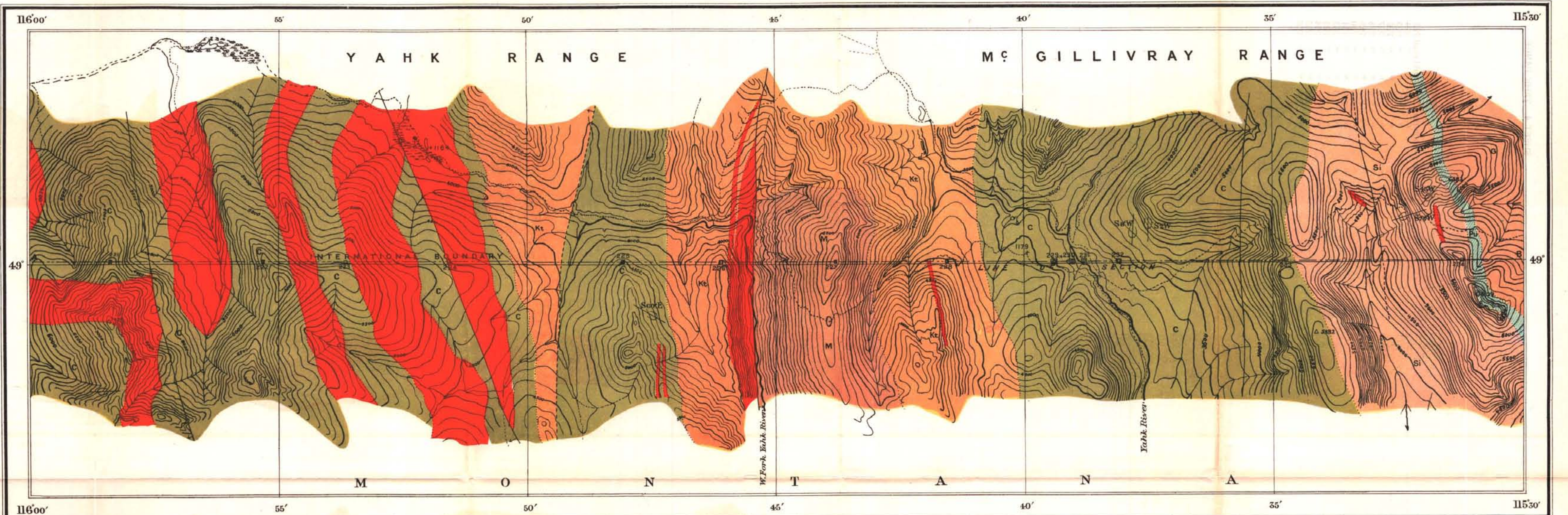
Note. Localities of chemically analyzed rocks, shown thus, +1202

Topography from surveys made by the Boundary Commission.

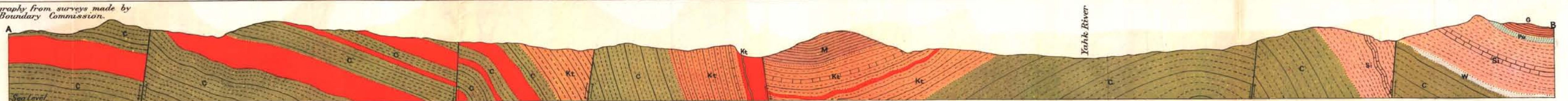


Section along line A B
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A.Daly.





*Topography from surveys made by
the Boundary Commission.*



Scale: $\frac{1}{32500}$ - 0.9864 Statute Miles to 1 inch

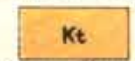
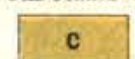
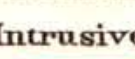
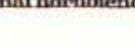
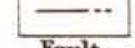
Miles

1 $\frac{1}{2}$ 0 1 2 3 4

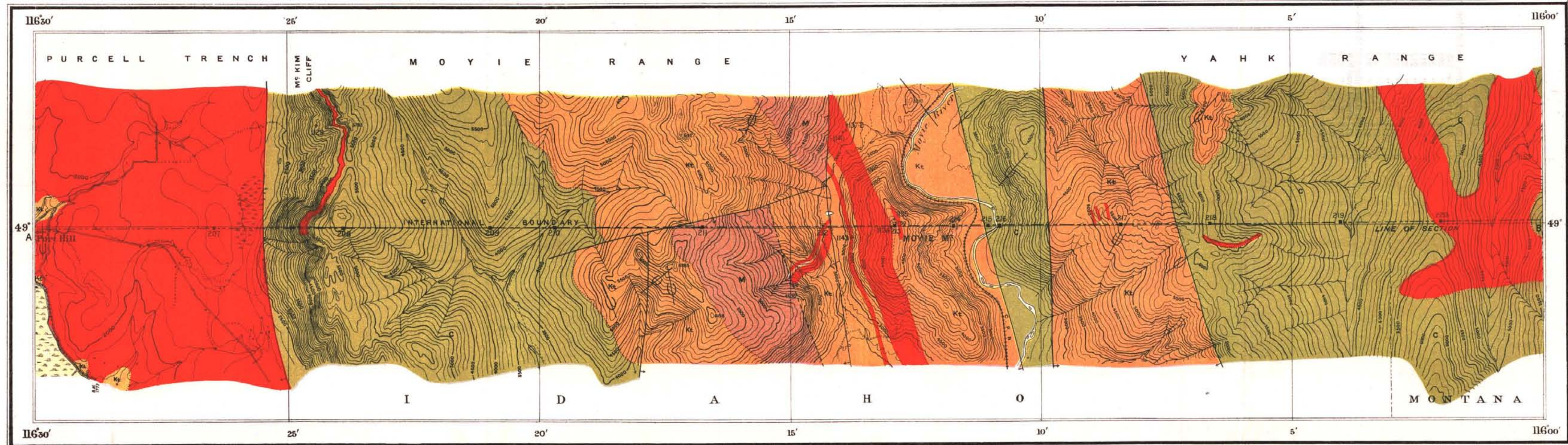
1910 (4)

chiefly
MIDDLE
CAMBRIAN
& BELTIAN
CAMBRIAN RECENT

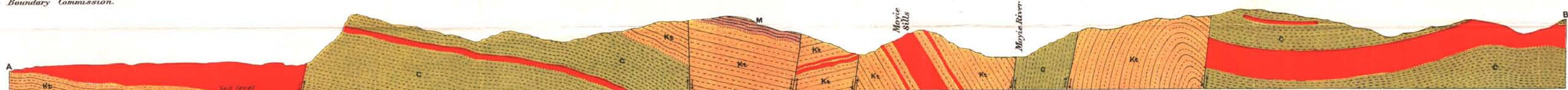
LEGEND

-  Alluvium
-  M
Moyie formation
thin to thick-bedded, shales, metagillite and quartzite; white, grey, blackish, greenish & purplish
-  Kt
Kitchener formation
thin to thick-bedded, greenish-grey quartzite and interbedded metagillite
-  C
Creston formation
massive to thin-bedded, grey quartzite and subordinate metagillite
-  Intrusive
Abnormal hornblende gabbro
-  Symbols
Geological boundary
-  Fault
-  Glacial striae

Note. Localities of chemically analyzed rocks, shown thus, +H34



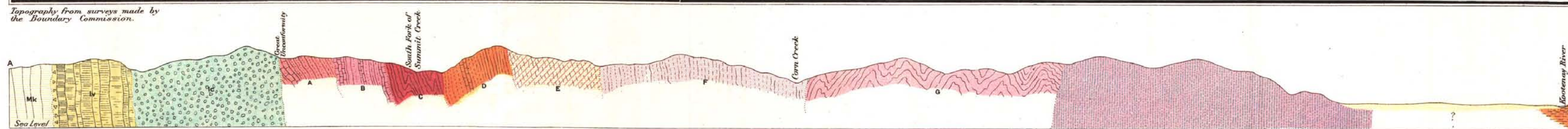
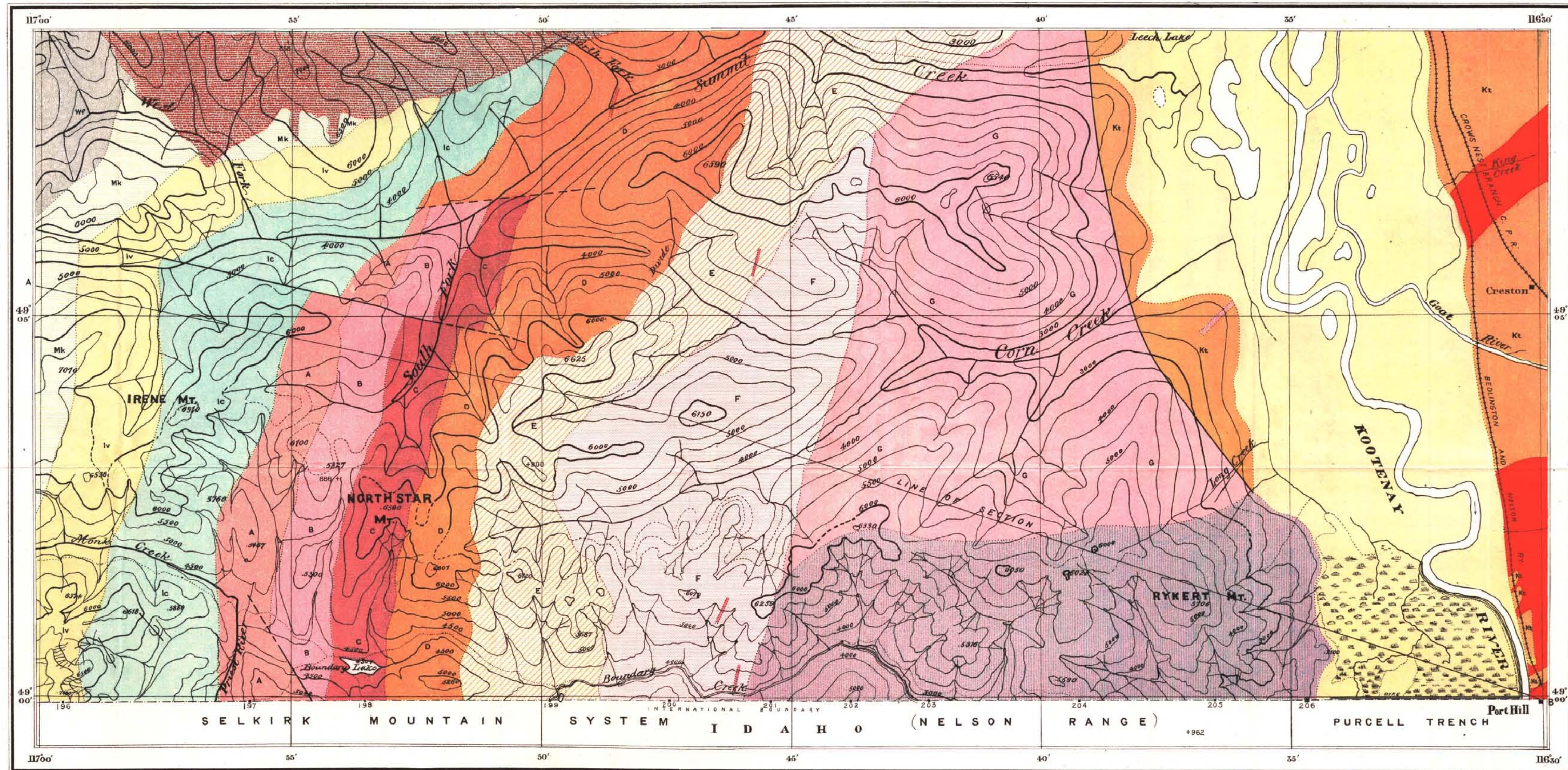
Topography from surveys made by the Boundary Commission.



Section along line AB
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale $\frac{1}{62500}$ - 0.9864 Statute Miles to 1 Inch
Miles 1 2 3 4

Contour interval, 100 feet



GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: 62500 = 0.9864 Statute Miles to 1 Inch

Miles 1 2 3 4

Contour interval, 500 feet

LEGEND

- Alluvium
- Kitchener formation
greenish-grey quartzite
- Wolf formation
massive grey gneiss and arkose in very thick beds, subordinate sandstone
- Monk formation
alternating phyllite and metamorphosed (schistose) gneiss, sandstones and conglomerates; grey colour.
- Irene volcanic formation
thick flows of pyroxene andesites, with some pyroclastics and a massive interbed of magnesian limestone
- Irene conglomerate
massive, greatly cherted thin sandstone lenses
- mica schists, quartzites and dolomites
- dolomites, quartzite and phyllite
- phyllites and sericite-quartz schist
- sheared, massive quartzite, with sericite and chlorite schist
- sericite schist, spunged with large biotite crystals
- schistose quartzite and mica schist
- glistening mica schists and sheared quartzite
- Intrusive
- Bayouville batholith
basic granodiorite
- Rykert batholith
sheared, porphyritic, biotite (muscovite) granite
- Abnormal hornblende granite
probably a sill
- Abnormal hornblende gabbro
sills in Kitchener formation
- Greenstone
dikes and sheets in the Priest River terrane

Symbols

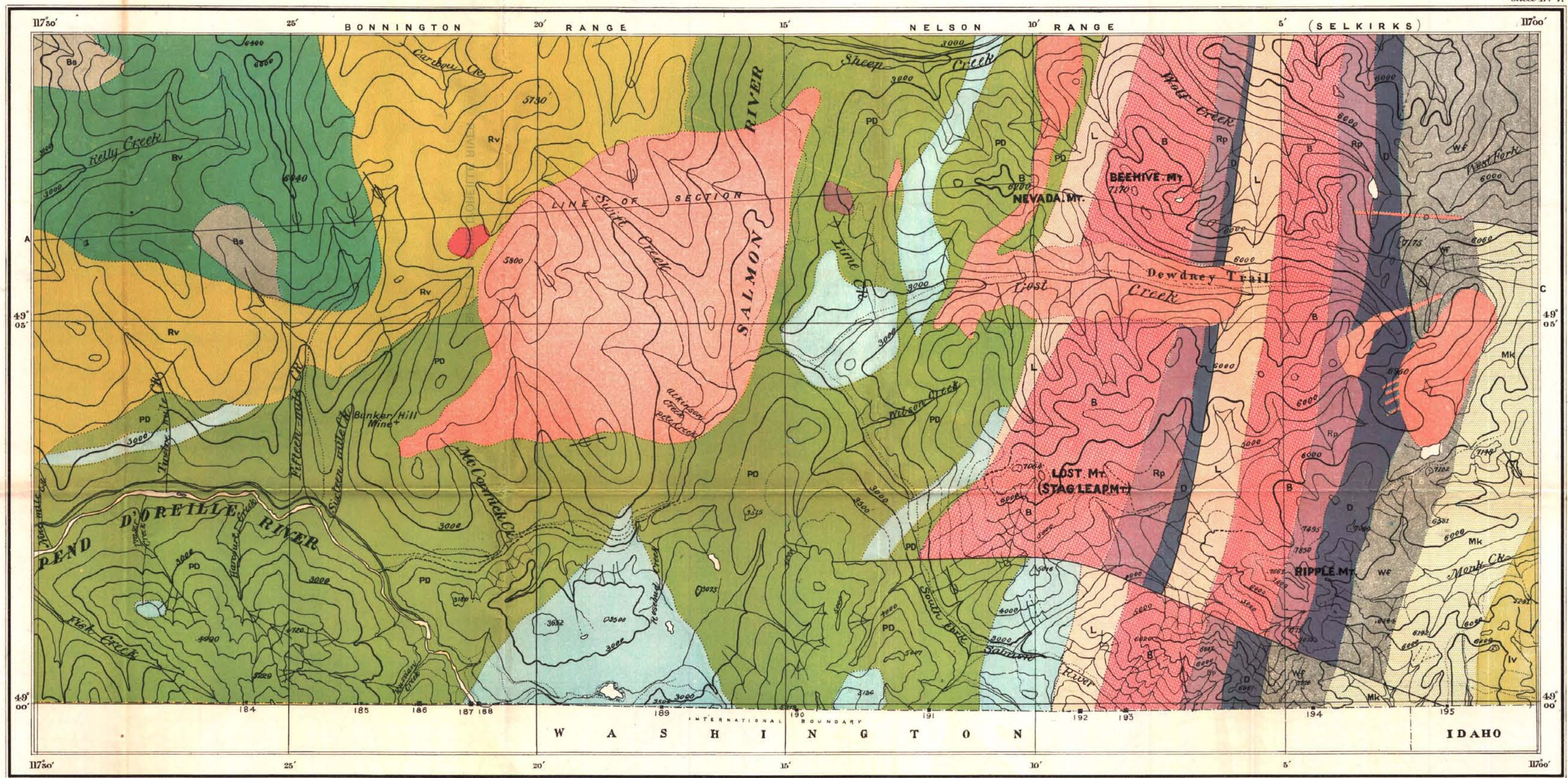
- Geological boundary
- Fault
- Glacial striae

Note. Structure of Pre-Beltian series shown in section, merely diagrammatic. Localities of chemically analyzed rocks, shown thus, +200

LEGEND

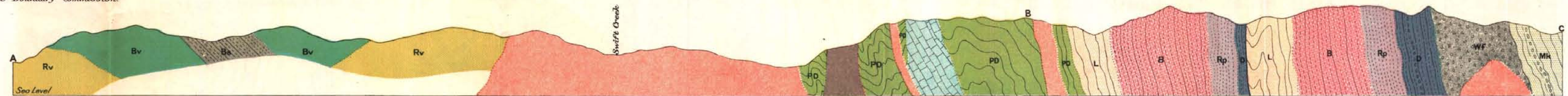
TERTIARY
 CARBONIFEROUS TO CRETACEOUS
 CARBONIFEROUS TO ORDOVICIAN
 MIDDLE CAMBRIAN
 LOWER CAMBRIAN & BELTIAN
 BELTIAN
 TERTIARY

- Bs**
Beaver Mountain sediments
 - Bv**
Beaver Mountain volcanics
 - Rv**
Rossland volcanic formation
flows and pyroclastic deposits of rhyolite andesite and basalt
 - PD**
Pend D'Oreille limestone
white to bluish, massive marbles
 - PD**
Pend D'Oreille schist
carbonaceous phyllite with quartzitic and amphibolite intercalations
 - L**
Lone Star formation
dark grey, carbonaceous phyllite with quartz schist and quartzite
 - B**
Beehive formation
banded quartzite, with thin interbeds of metapelite
 - Rp**
Ripple formation
massive, white quartzite
 - D**
Dewdney formation
banded quartzite, with conglomerate interbeds
 - WF**
Wolf formation
massive grey gneiss and schist in very thick beds; subordinate sandstone
 - Mk**
Monk formation
alternating phyllites and metamorphosed (schistose) gneiss, sandstones, and conglomerates; grey colours
 - Iv**
Irene volcanic formation
thick flows of pyroxene andesites, with some pyroclastics
 - Intrusive**
Salmon river monzonite stock
 - Granite**
satellite to Beysan batholith
 - Olivine syenite**
stock
- Symbols**
- Geological boundary
 - Fault
 - Glacial striae



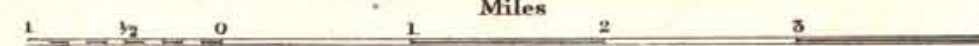
Topography from surveys made by the Boundary Commission.

Note: Some narrow, though narrow dikes of minute, cutting the schists in the Pend D'Oreille valley are not shown.
 Note: Localities of chemically analysed rocks, shown thus, +686



Section along line ABC
 GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: 62500 = 0.9864 Statute Miles to 1 Inch
 Miles



Contour interval, 500 feet

LEGEND

TERTIARY

LOWER CARBONIFEROUS TO CRETACEOUS

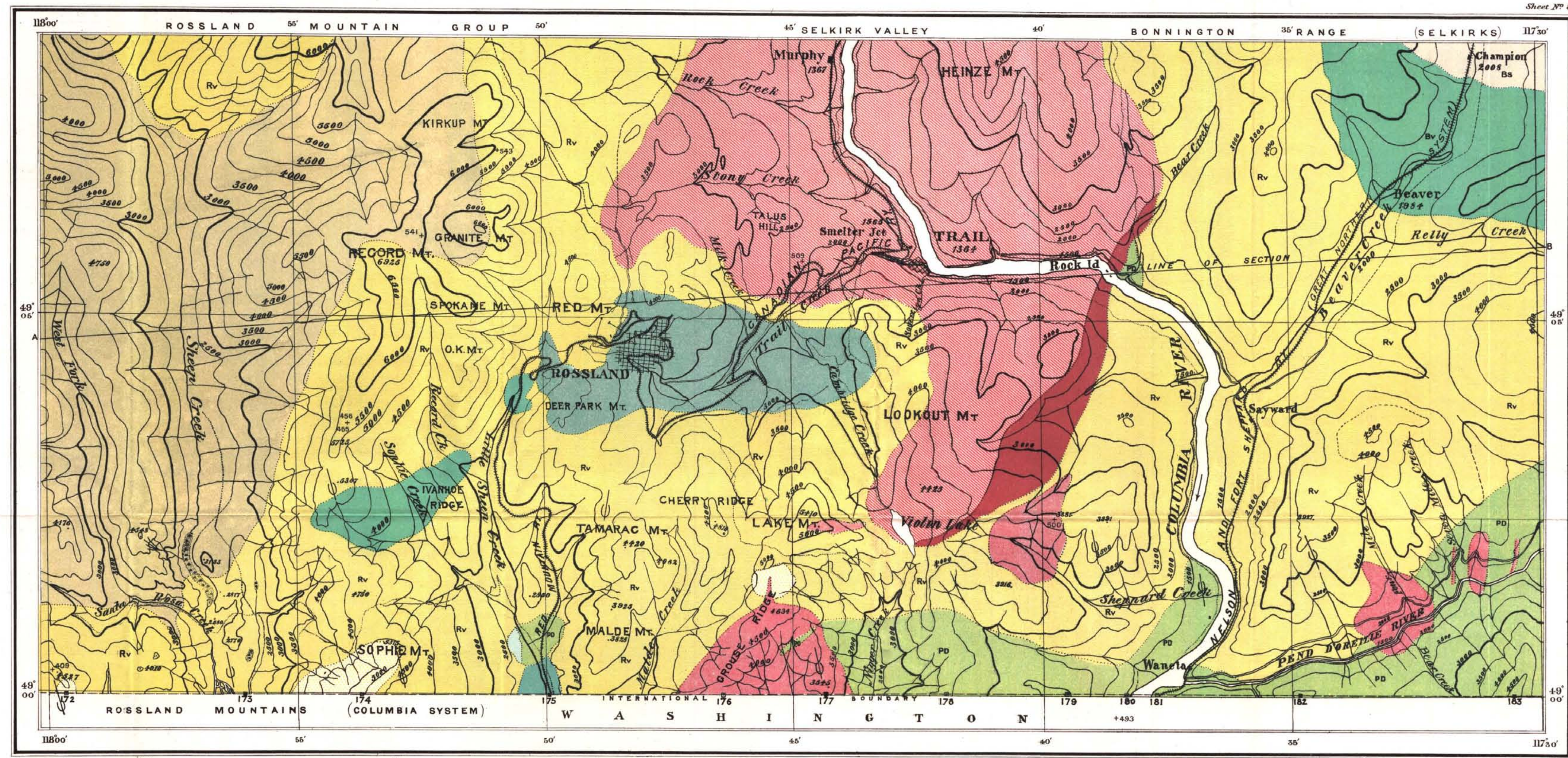
- Conglomerate fossiliferous on Sophie mountain
- Bs Beaver mountain sediments grey and brown shales and sandstones
- Bv Beaver mountain volcanics flows and pyroclastic deposits of andesite and basalt
- Rv Rossland volcanic formation flows and pyroclastic deposits of latites, andesites and basalt
- Carbonaceous argillite, sandstone, etc. fossiliferous
- PD Pend D'Oreille limestone white marble, fossiliferous
- PD Pend D'Oreille schist carbonaceous phyllite, with quartzite and greenstone intercalations

Intrusive

- Coryell batholith hornblende-biotite syenite (pyroxenite) with phases of cyclothene porphyry
- Sheppard granite biotite granite; stocks and dikes
- Shatterzone of Trail batholith
- Trail batholith granodiorite
- Rossland monzonite stock
- Dunite and Serpentine dikes and chertlike

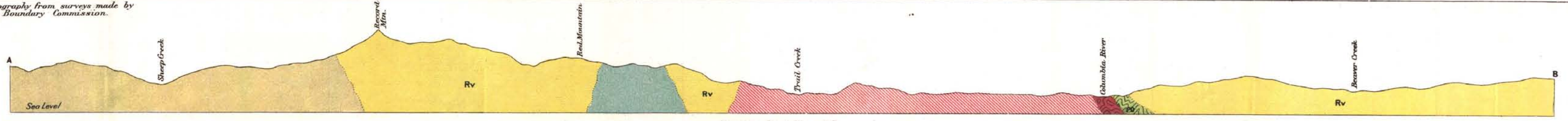
Symbols

- Geological boundary
- Glacial striae

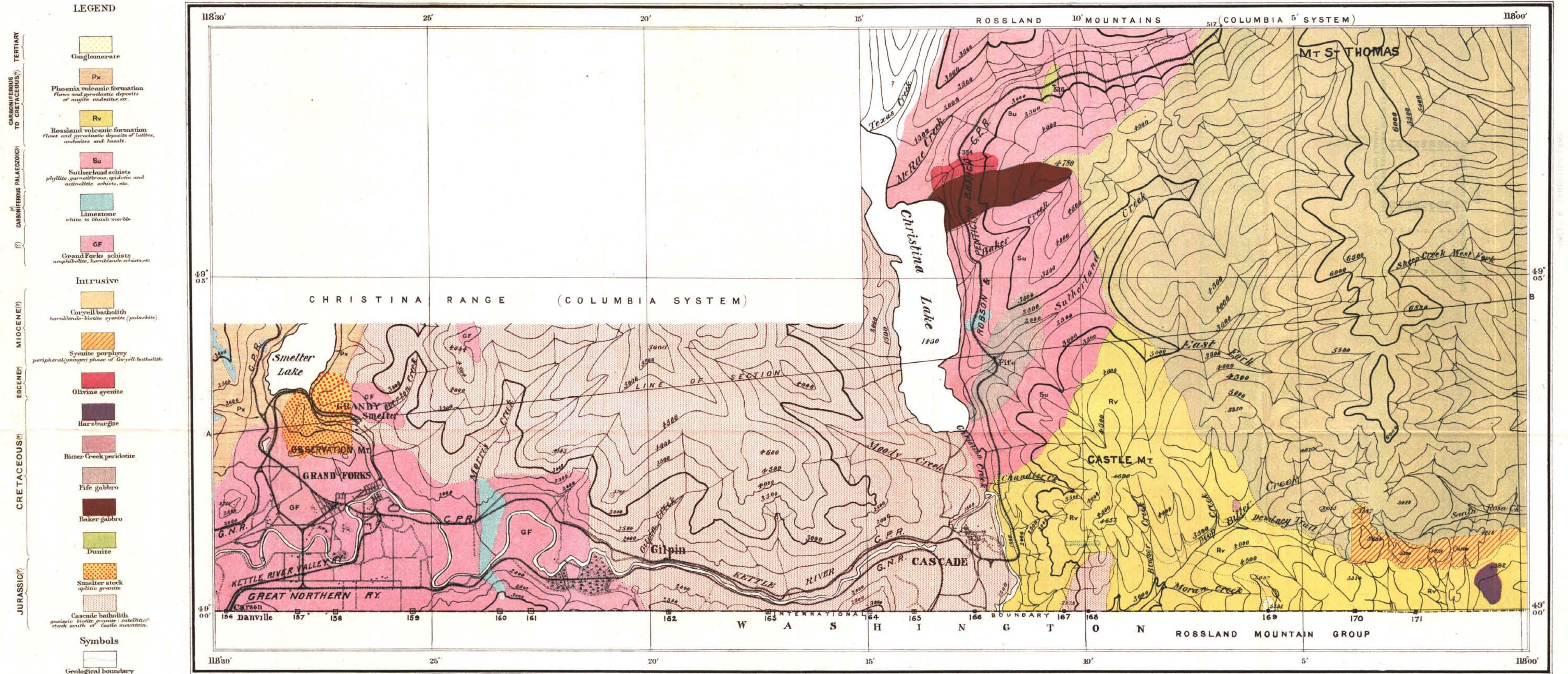


Note: Many minettes and other micro-igneous rocks cut the Pend D'Oreille schists in the Pend D'Oreille river gorge, as well as the older rocks in the Rossland mining camp. Numerous porphyry dikes syngenetic with the Rossland volcanics are not shown and apophyseal dikes from batholiths and stocks are likewise not plotted. Localities of chemically analyzed rocks, shown thus, +409

Topography from surveys made by the Boundary Commission.



Section along line A B
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A.Daly.
Scale: 62500 = 0.9864 Statute Miles to 1 Inch
Contour interval, 500 feet

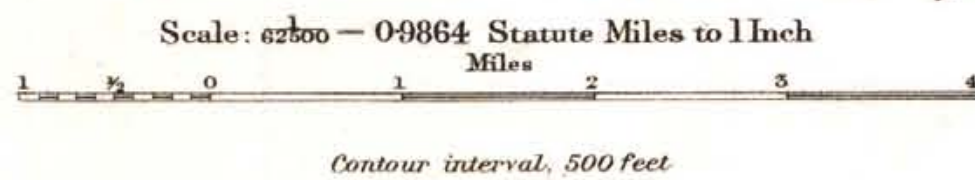


Note. Folded structure of Sutherland and Grand Forks schists in section, merely diagrammatic. Many apophyseal dikes from large intrusive masses not shown. Localities of chemically analyzed rocks, shown thus: + 517

Topography from surveys made by the Boundary Commission.



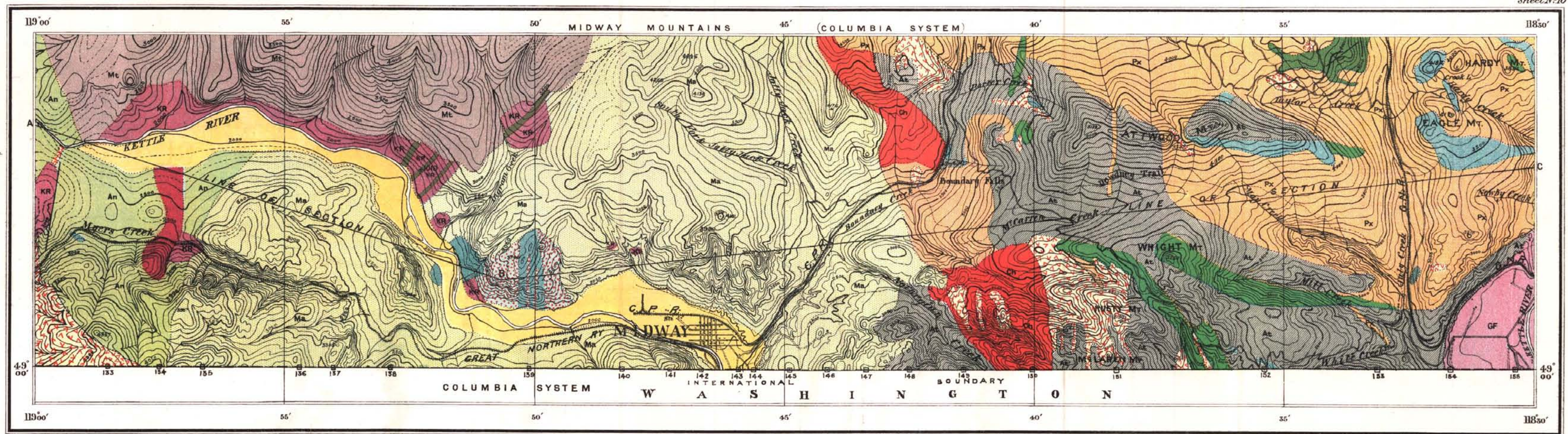
Section along line AB
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.



LEGEND

PERMIAN
TRIASSIC
CARBONIFEROUS
OLIGOCENE
MIOCENE
QUATERNARY

- Alluvium and glacial drift
- Midway volcanic group
trachyte and andesite, rhyolite, flows and pyroclastic deposits
- Midway volcanic group
andesites and basalt, flows and pyroclastic deposits
- Kettle river formation
sandstone, conglomerate, shale, arkose
- Phoenix volcanic formation
flows and pyroclastic deposits of augite andesite, etc.
- Attwood series
argillite, quartzite, limestone
- Anaxelst series
quartzite, phyllite, shales, greenstones with some limestone, poole
- Limestone
crystalline, bluish-gray to white
- Chlorite and hornblende schist
- Grand Forks schist
amphibolite, hornblende schists, etc.
- Intrusive
- Pulaskite porphyry
dikes and sills
- Rhomb - porphyry
- Porphyrite
andesite, dikes and sills
- Granodiorite
stocks, dikes, etc.
- Serpentine
dikes, etc.
- Symbols
- Geological boundary
- Glacial striae

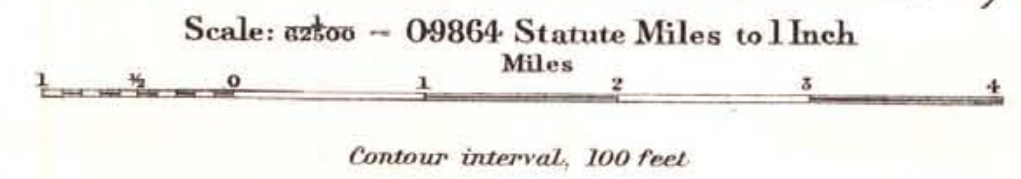


Topography from surveys made by the Boundary Commission.



Note: Structures shown in schists and limestone merely diagrammatic. On account of the small scale, many dikes and intrusive sheets of porphyrites and porphyries, as well as granodiorite apophyses are not plotted. Similarly many dikes which are syngenetic with the volcanics are not shown. Localities of chemically analyzed rocks, shown thus, + 1010

Section along line A B C
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.



1910 (12)

LEGEND

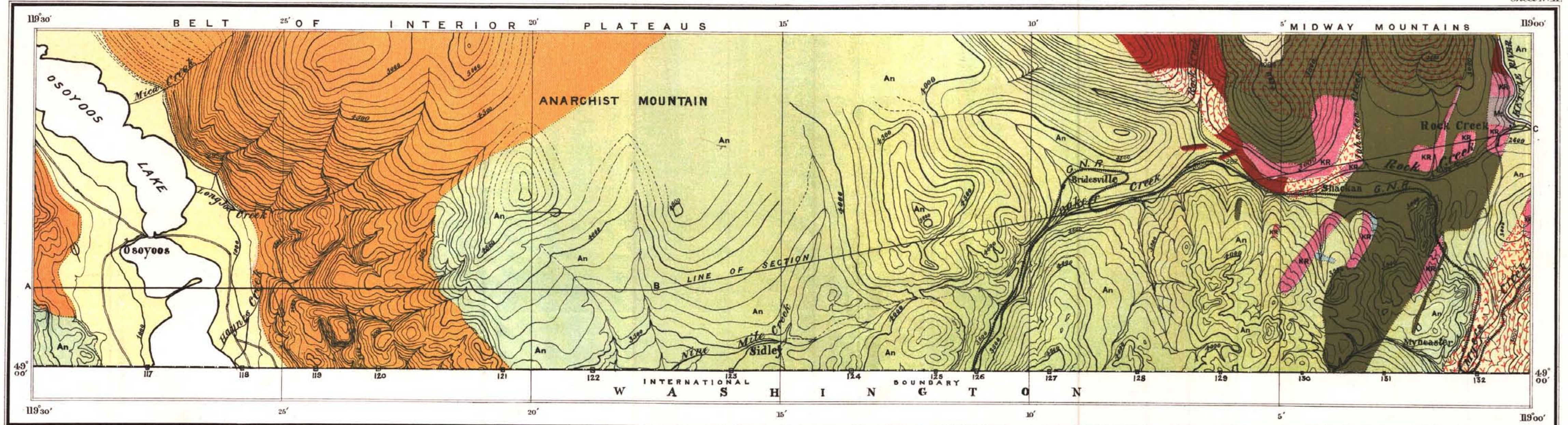
- PLEISTOCENE & RECENT
Glacial drift and alluvium
- MIOCENE
Shackanite
Flows (part of Midway volcanic group)
- OLIGOCENE
Extrusive rhomb-porphry
Flows (part of Midway volcanic group)
- CARBON-IFEROUS
KR
Kettle river formation
sandstone, conglomerate, shale, arkose
- UPPER PALAEOGEOGIC
Limestone of Anarchist series
white to bluish-grey, crystalline
- MIOCENE
An
Anarchist series
quartzite, phyllite slates, greenstones,
with limestone poils.
- JURASSIC
Intrusive
Intrusive rhomb-porphry
chamoliths and dikes
- JURASSIC
Granodiorite
- JURASSIC
Osogyos batholith
gneissic derivative of granodiorite
- JURASSIC
Diorite and gabbro
- JURASSIC
Dumite

Symbols

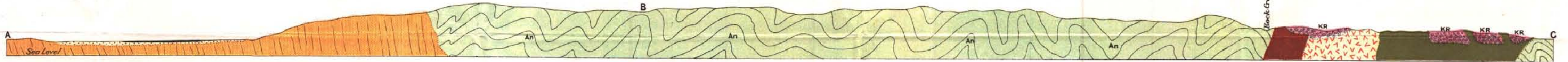
Geological boundary

Glacial striae

Note: Structures of Anarchist series, shown in the section, merely diagrammatic.
Localities of chemically analyzed rocks, shown thus, +295

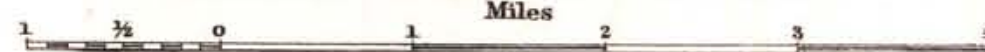


Topography from surveys made by the Boundary Commission.

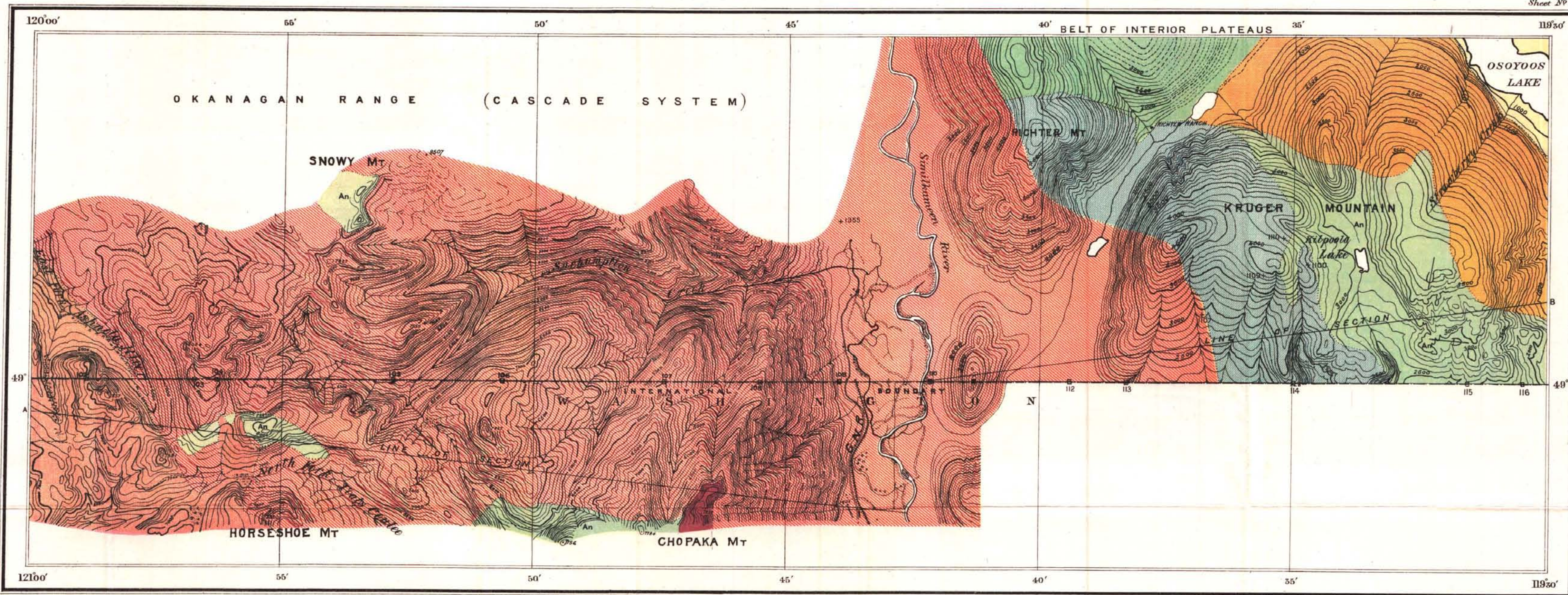


GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

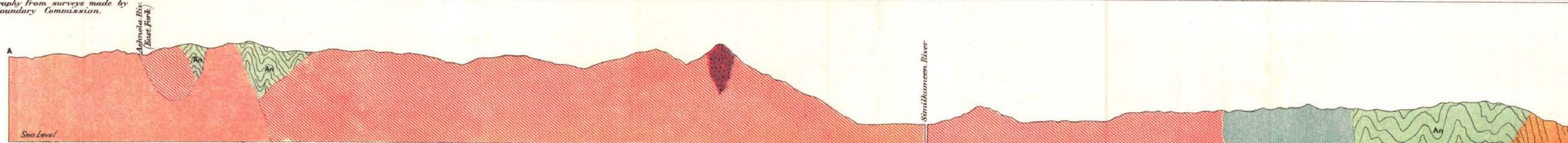
Scale: 62500 - 09864 Statute Miles to 1 inch



Contour interval, 100 feet



Topography from surveys made by the Boundary Commission.



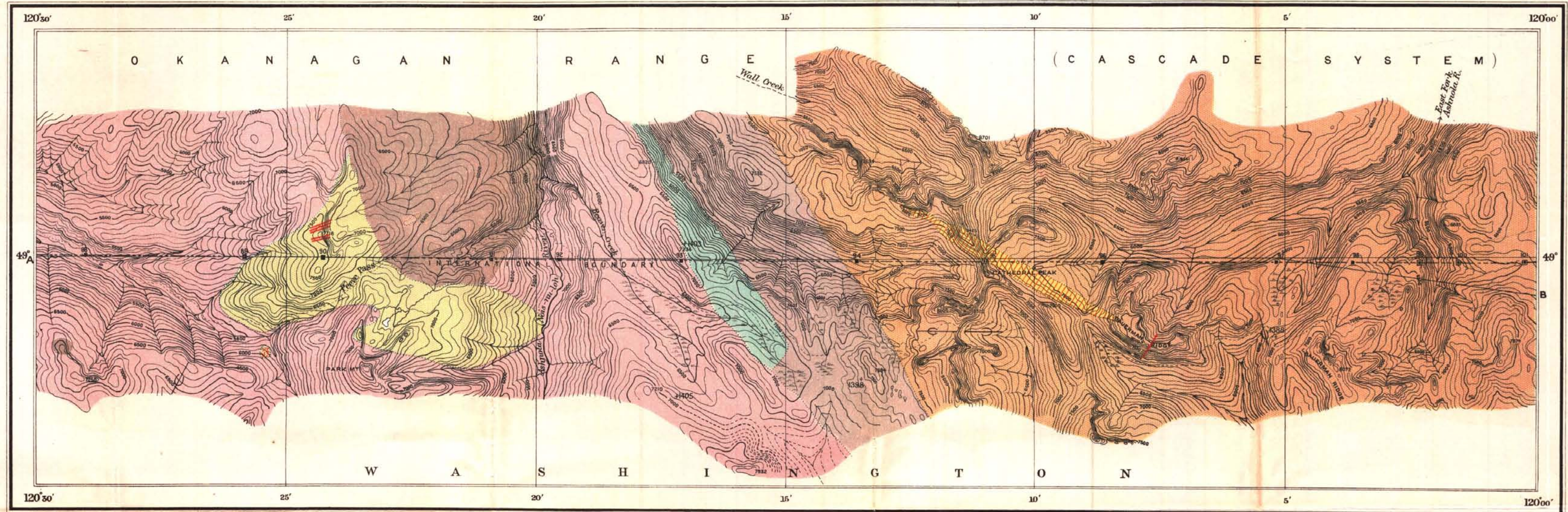
GEOLOGY OF THE FORTY-NINTH PARALLEL. By R.A.Daly.

Scale: 62500 - 09864 Statute Miles to 1 Inch

Miles

Contour interval, 100 feet

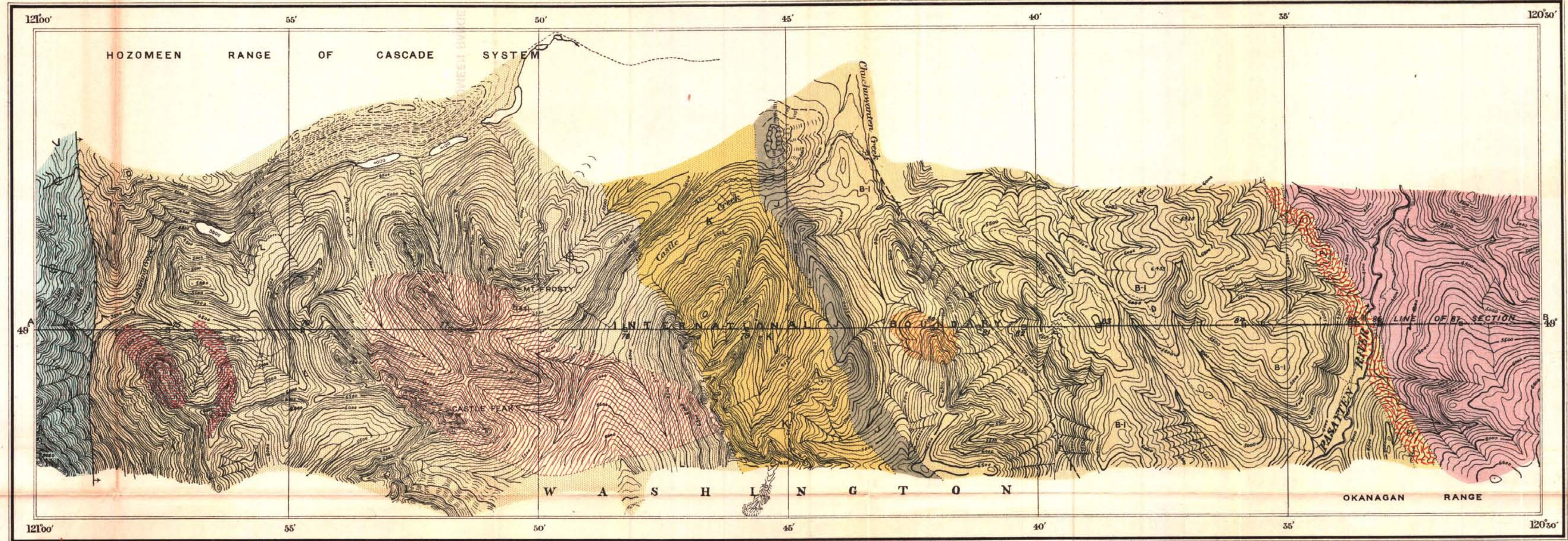
1910 (14)



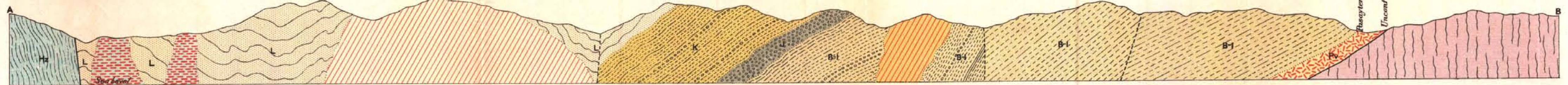
LEGEND

- CRETACEOUS (SHALY) SERIES**
Pasayten series
- L Member L, black argillite
 - K Member K, green and grey sandstone, with interbeds of shale and conglomerate
 - J Member J, coarse conglomerate
 - B-1 Members B-1 to B-10, arkose and sandstone, chiefly, with conglomerate and shale
 - Pv Pasayten volcanic formation, andesitic breccia
- HOZOMEEN SERIES**
greenstone, cherty quartzite & limestone pods
- INTRUSIVE**
- Syenite porphyry, hornblende
 - Castle Mountain stock, granodiorite
 - Lightning Creek stocks, diorite
 - Rommel batholith, western phase, sheared granodiorite
- SYMBOLS**
- Geological boundary
 - Fault
 - Glacial striae
- Geological Time Scale**
- CRETACEOUS (SHALY) SERIES
 - UPPER CRETACEOUS
 - MIOCENE (?)
 - JURASSIC (?)

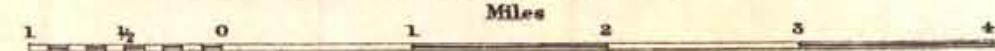
Note. Structure of Hozomeen series, shown in section, merely diagrammatic. Localities of chemically analyzed rocks, shown thus, +1441



Topography from surveys made by the Boundary Commission.



Section along line AB
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.
Scale: 62500 -- 0.9864 Statute Miles to 1 Inch.



Contour interval, 100 feet

1910 (16)

LEGEND

PLEISTOCENE & RECENT

Glacial drift and alluvium

OLIGOCENE (?)

Skagit volcanic formation
lapilli tuff

Skagit volcanic formation
andesite flows and pyroclastic deposits

CARBONIFEROUS CARBONIFEROUS

Ch
Chilliwack series
locally argillite and sandstone

Hs
Hozomeen series
cherty quartzite, greenstone,
phyllite, and limestone beds

Intrusive

Chilliwack batholith
granodiorite
granite at Skagit River

Monzonite
stock and dikes

MIOCENE (?)

Harzburgite

JURASSIC (?)

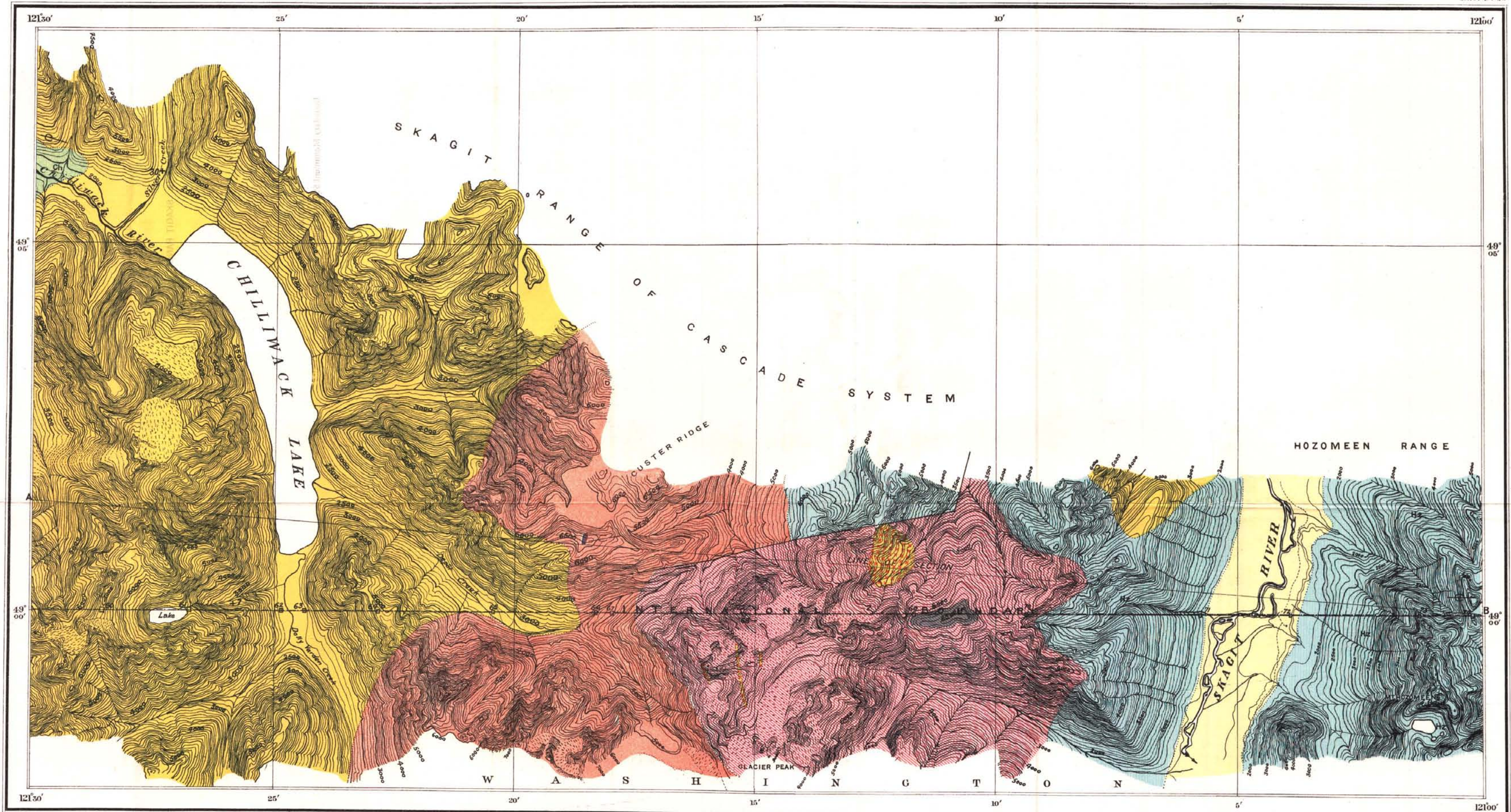
Custer granite gneiss
sheared granodiorite

Symbols

Geological boundary

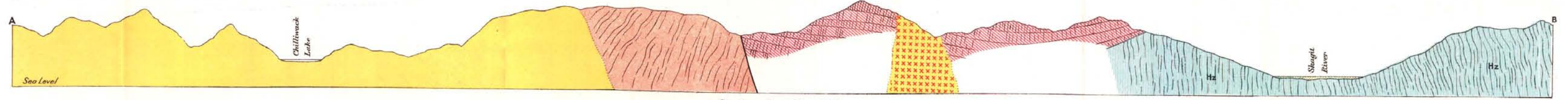
Fault

Glacial striae

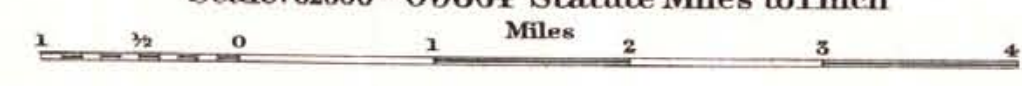


Note. Structure of Hozomeen series shown on section, merely diagrammatic. Localities of chemically analyzed rocks shown thus: 47

Topography from surveys made by the Boundary Commission.



Section along line A B
GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.
Scale: 62500-09864 Statute Miles to 1 inch



Contour interval, 100 feet

1910 (17)

LEGEND

TA
Tambly series
conglomerate, green and black sandstones,
and grey shales

C
Cylus formation
dark grey to black argillite, with interbeds of grit,
sandstone and conglomerate

Cv
Chilliwack volcanic formation
chiefly flows of andesite and basaltic
andesites, with ash-beds

Ch
Chilliwack series
outcrop of fossiliferous limestone

Ch
Chilliwack series
argillite, quartzite sandstone, and limestone,
with interbeds of grit and conglomerate

Intrusive

3
Chilliwack batholiths
granodiorite, with granitic phases

2
Slesse stock
diorite

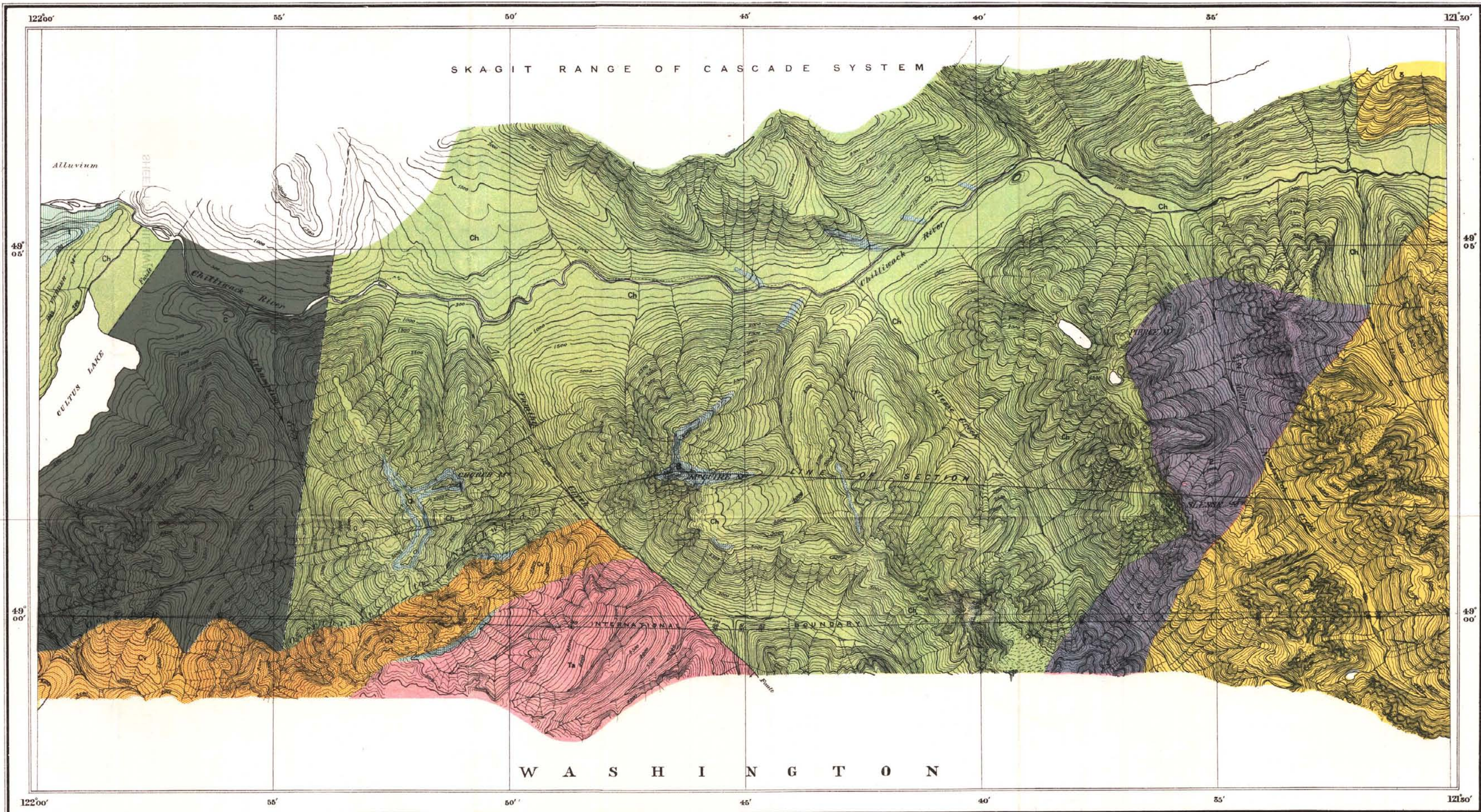
1
Vedder greenstone

Symbols

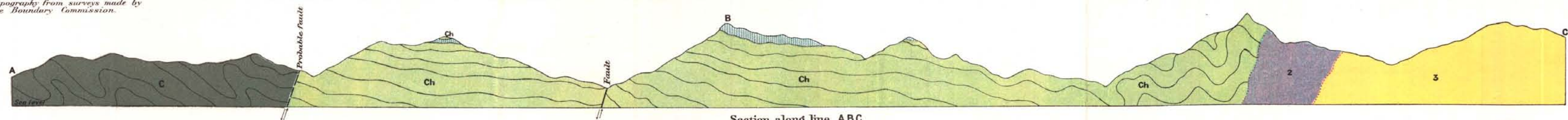
Geological boundary

Fault

Note: Structure of Cylus formation,
shown on section, merely diagram-
matic.
Localities of chemically analyzed
rocks, shown thus: 454

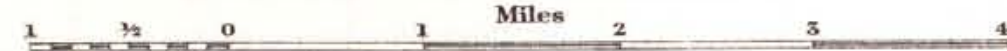


Topography from surveys made by
the Boundary Commission.



GEOLOGY OF THE FORTY-NINTH PARALLEL. By R.A. Daly.

Scale: 62500-09864 Statute Miles to Inch



Contour interval, 100 feet

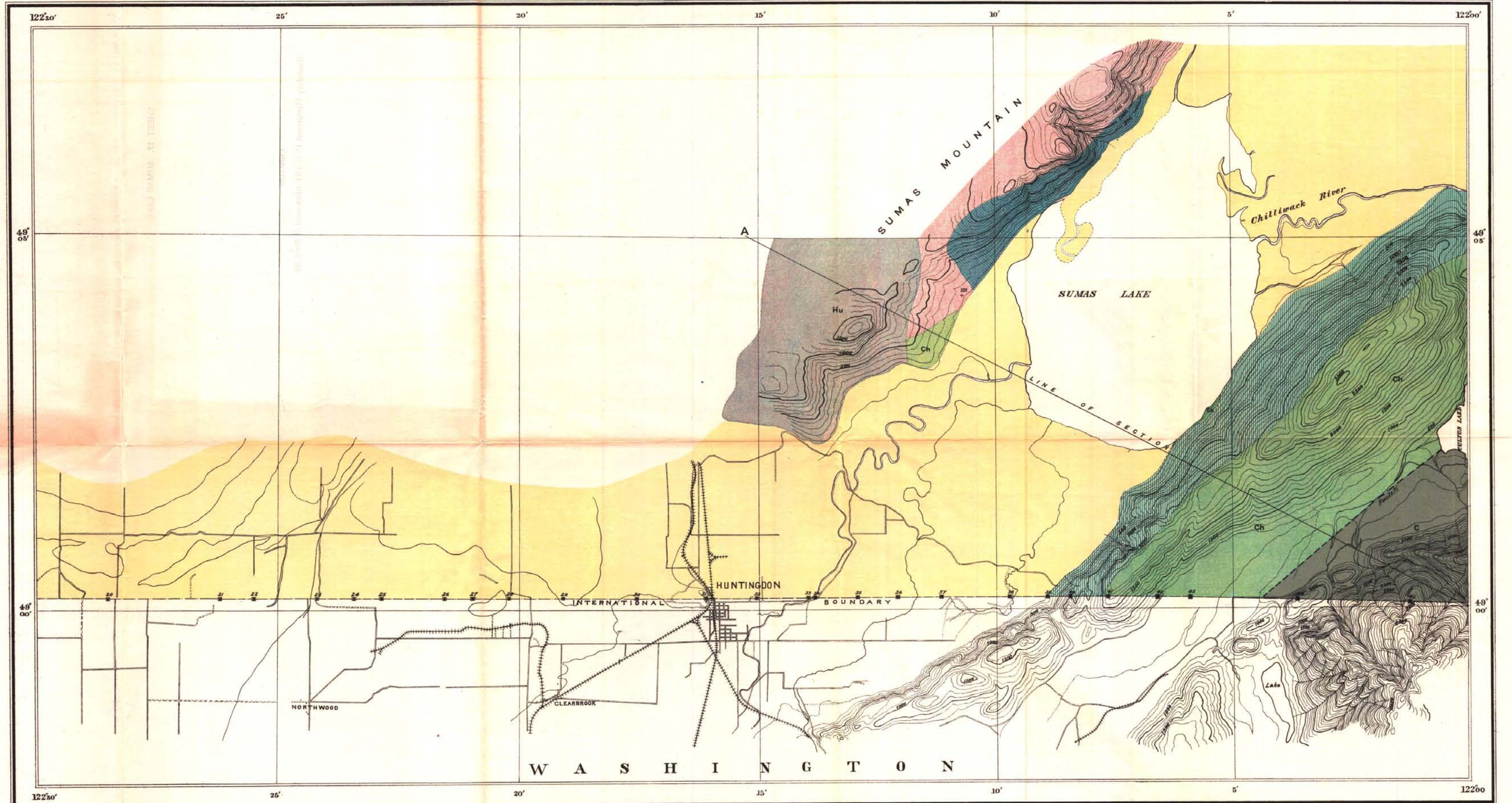
1910 (18)

PLEISTOCENE AND RECENT
Eocene
TRIASSIC
CARBONIFEROUS (and older)
JURASSIC
CARBONIFEROUS

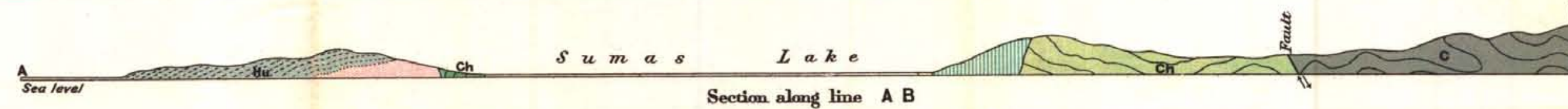
LEGEND

- Alluvium and glacial drift
(north of Boundary Line)
- Hu
Huntingdon formation
sandstone, conglomerate, shale and thin coal-beds
- C
Cultus formation
chiefly dark-grey to black argillite, with
sandstone and fine-grained conglomerate.
- Ch
Chilliwack series
argillite, sandstone and fine conglomerate
(here unfossiliferous)
- Intrusive
- Sumas batholith
granite
- Sumas diorite
cut by granite (plutonic breccia)
- Vedder greenstone
- Symbols
- Geological boundary
- Fault

Note. Localities of chemically analyzed
rocks, shown thus, +201



Topography from surveys made by
the Boundary Commission.



GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: 62500 - 09864 Statute Miles to 1 Inch



Contour interval, 100 feet

1910 (19)