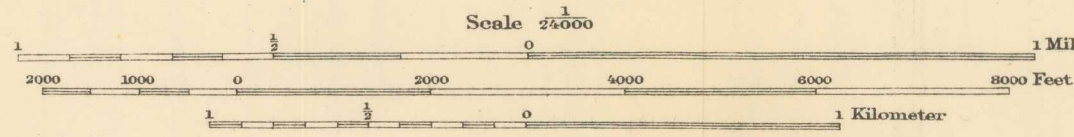
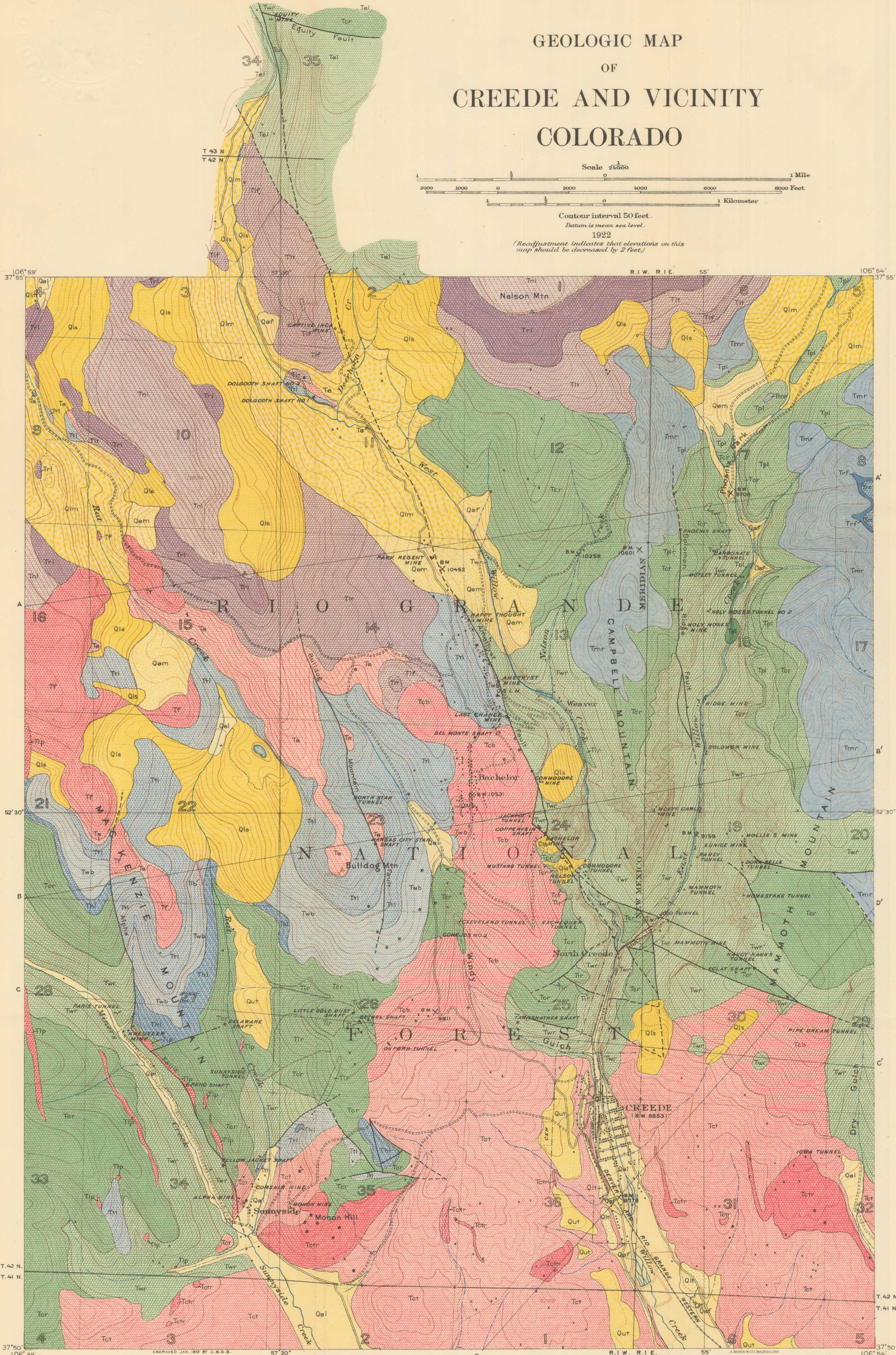


GEOLOGIC MAP OF CREEDE AND VICINITY COLORADO



Contour interval 50 feet.
Datum is mean sea level.

(Readjustment indicates that elevations on this map should be decreased by 2 feet.)



EXPLANATION

- Recent**
 - Qal Alluvium (Sands and gravels in flood plains of streams)
 - Qaf Tormentil fans
 - Qls Landslides (Chaotic mixtures of soil and large and small blocks from cliffs and slopes above)
- Platistocene**
 - Qlm Lower (younger) terrace deposits (Sands and gravels)
 - Qim Later glacial moraine
 - Qut Upper (older) terrace (Sands and gravels)
 - Qem Earlier glacial moraine
- Creede formation**
 - Tp Quartz latite porphyry (Intrusive dikes)
 - Tf Fisher quartz latite (Flow; characterized by plagioclase phenocrysts)
 - CONSIDERABLE EROSION INTERVAL**
 - Tcb Upper member (Breccia, conglomerate, and tuff, with intercalated lava flows)
 - Tcl Lower member (Thinly laminated white shaly tuff, in part sandy and with some breccia and conglomerate; interbedded trachyte, Tct)
 - CONSIDERABLE EROSION INTERVAL**
 - Tm Nelson Mountain quartz latite (Flow; carries phenocrysts of plagioclase, hornblende, quartz, orthoclase, biotite, and augite)
 - Tcr Rat Creek quartz latite (Chiefly flows, some interbedded tuff)
 - Tt Quartz latite tuff (Nearly white to drab quartz latite tuff, with some interbedded breccia and flows of rhyolite and quartz latite, Ttl)
 - CONSIDERABLE EROSION INTERVAL**
 - Ta Andesite (Several flows with some intercalated tuff breccia)
 - Tib Intrusive basalt (Dike)
 - Ttr Tridymite latite (Flows; characterized by phenocrysts of plagioclase, orthoclase, and biotite and nearly white lenslike porous bands rich in tridymite)
- Piedra group**
 - Twb Western area
 - Twe Eastern area
 - Twr Windy Gulch rhyolite breccia (Light red-brown rhyolite flow-breccia and tuff; characterized by fragments of rhyolite pumice)
 - Twt Rhyolite tuff (Poorly bedded white to pale-drab tuff, Ttl, with thin flows; rhyolite flow-breccia near base, Ttl)
 - Tth Hornblende-quartz latite (Thin flows and breccia beds; some hornblende andesite and rhyolite)
 - Ttm Mammoth Mountain rhyolite (A single flow of red-brown mottled rhyolite)
 - CONSIDERABLE EROSION INTERVAL**
 - Ttq Equity quartz latite (Chiefly a single flow of drab fluidal biotite-quartz latite)
 - Ttp Phoenix Park quartz latite (Chiefly flows; some rather coarse tuff-breccia. Mostly characterized by phenocrysts of plagioclase, hornblende, quartz, orthoclase, and biotite)
 - CONSIDERABLE EROSION INTERVAL**
 - Ttr Intrusive rhyolite-porphry (Dikes and sheets)
 - Tcm Campbell Mountain rhyolite (Flows of dull reddish-brown or drab mottled rhyolite)
 - Tcw Willow Creek rhyolite (Several flows of purplish drab to gray fluidal banded foliatic rhyolite)
 - PROBABLE EROSION INTERVAL**
 - Tol Outlet Tunnel quartz latite (Chaotic aggregate of flows and breccia beds; some pumiceous rhyolite)
- Alhorts group**
 - Fault (The principal veins are in the fault planes)
 - Shaft
 - Tunnel

R. B. Marshall, Chief Geographer.
Sledge datum, Geographer in charge.
Topography by R. H. Reineck.
Control by J. F. McBeth and J. E. Chapson.
Surveyed in 1910.

Geology by E. S. Larsen
Surveyed in 1911 and 1912

