

### EXPLANATION

Darker color indicates areas of abundant outcrop

**Quaternary**

- Qal Alluvium
- Qlg Older terrace deposits  
*Largely gravels; some of the higher gravels may be of Tertiary age*

**Tertiary**

- Tw White River group  
*Gravel, sand, and volcanic ash. The upper part has been reworked locally*

**Pennsylvanian**

- Pm Minnelusa sandstone  
*Pm, sandstone, siltstone, and limestone. Pml, limestone and chert. Pms, sandstone*

**Mississippian**

- Mp Pahasapa limestone  
*Massive buff limestone*
- Me Englewood limestone  
*Slabby pebbly lavender limestone*

**Cambrian**

- Cd Deadwood formation  
*Conglomerate, sandstone, and glauconitic sandstone*

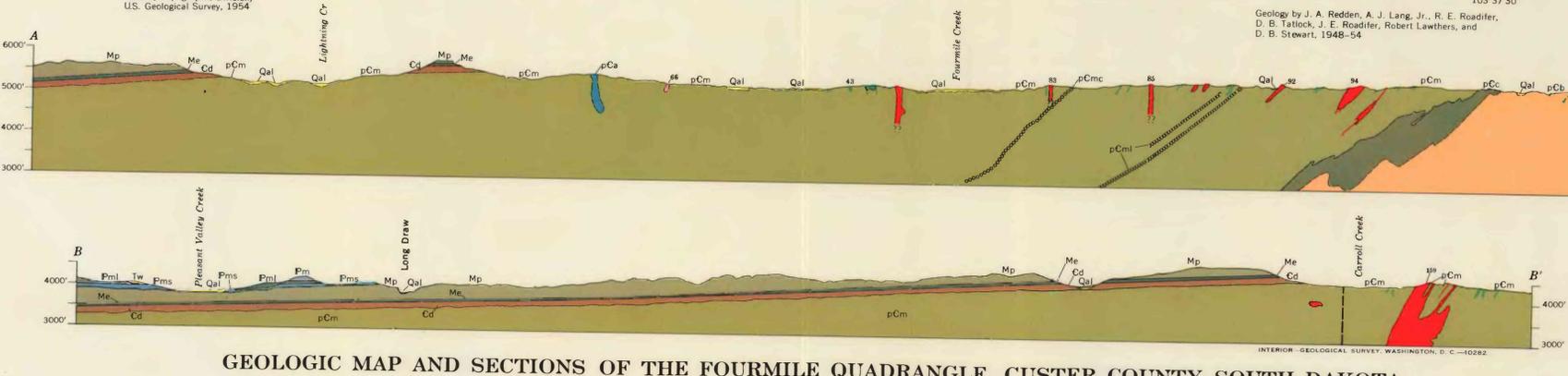
**Precambrian**

- pCa Zoned pegmatite  
*Including larger, fracture-filling bodies*
- pCm Homogeneous pegmatite
- pCmc Layered pegmatite
- pCa Quartz veins
- pCm Amphibolite  
*Small sills, dikes, and irregular bodies*
- pCm Mayo formation  
*Quartz-mica-feldspar schists and variegated schists containing garnet, actinolite, and sillimanite*
- pCm Crow formation  
*Variegated schists and gneisses composed of amphibole, carbonate, cordierite, feldspar, biotite, diopside, and quartz*
- pCm Bugtown formation  
*Quartz-mica schists; rare sillimanite and garnet*

**Structural Symbols**

- Contact, showing dip  
*Dashed where approximately located; short dashed where indefinite*
- Limit of outcrop
- Fault  
*Dashed where approximately located, dotted where concealed. U, upthrown side; D, downthrown side*
- Breccia zone
- Syncline  
*Showing approximate trace of axial plane*
- Plunge of fold axis
- Strike and dip of axial plane and plunge of fold axis
- Strike and dip of beds
- Strike and dip of schistosity
- Strike and dip of crosscutting schistosity
- Strike and dip of pseudobedding
- Plunge of lineation  
*P, elongate pebble; E, calc-silicate ellipsoid*
- The above structure symbols can be used in combination
- Strike and dip of joints
- Strike of vertical joints
- Intersection of structural symbols indicates that readings were made at point of intersection
- Dip of pegmatite
- Vertical pegmatite
- Plunge of roll in pegmatite contact
- Vertical shaft
- Inclined shaft
- Adit
- Open-cut
- Trench
- Prospect pit

Scale: 1:24,000  
Contour Interval: 40 Feet  
Datum: Mean Sea Level



GEOLOGIC MAP AND SECTIONS OF THE FOURMILE QUADRANGLE, CUSTER COUNTY, SOUTH DAKOTA

### INDEX TO GEOLOGIC MAPPING

MINE OR PROSPECT	PEGMATITE	COORDINATE
Big Tom	64	C-3
Caledonia (gold)	—	C-2
Corky	58	G-3
Gayle-Royal Flush	88	D-1
Helen Beryl	66	C-3
Lithia Lode	9	C-1
Lincoln No. 7	81	E-2
MaeArthur	137	G-4
May (gold)	—	B-4
Michael Beryl	68	B-4
New York	74	D-4
Pleasant Valley	41	D-3
Punch	161	G-6
Rainbow No. 4	46	D-2
Red Spar	70	B-5
Rock Ridge	113	F-2
Ruberta (gold)	—	E-2
Tin Mountain	1	B-1
Tip Top	79	E-3
Volcano	53	C-2
Warren Draw	12	C-1
White Spar	99	G-1
Wright Mica Lode	22	C-1