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Geologic map of the Bonanza NE quadrangle,
Chaffee and Saguache Counties, Colo., (1 pl.
and explanation, scale 1:62,500 (1 inch =
about 1 mile).

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U. S. Geological Survey
OPEN FILE REPORT **75-53**
This report is preliminary and has
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3 sheets

Open-file report

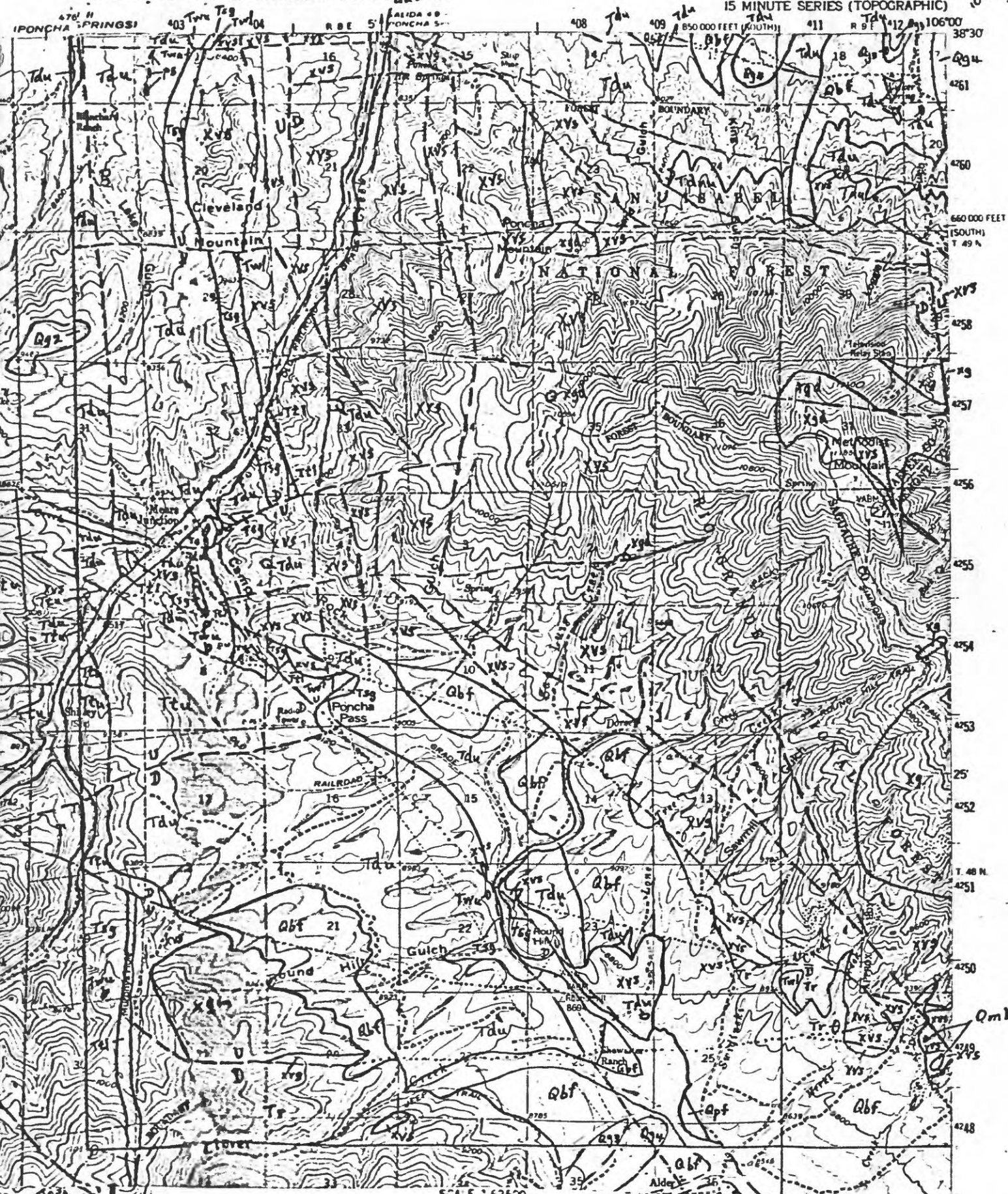
GEOLOGIC MAP OF THE BONANZA NE QU"
CHAFFEE AND SAGUACHE COUNTIES, CO.

BONANZA QUADRANGLE

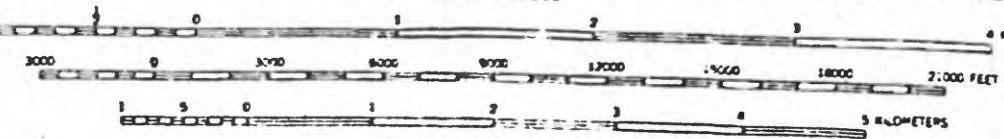
COLORADO

15 MINUTE SERIES (TOPOGRAPHIC)

ICAMERON (2)



COLORADO
7
QUADRANGLE LOCATION



Geology by
R. E. Van Alstine
1966-70

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EXPLANATION FOR GEOLOGIC MAP OF THE
BONANZA NE QUADRANGLE, COLORADO

(3)

BONANZA NE QUADRANGLE, COLORADO

Holocene	Qa1	Alluvium	QUATERNARY	
	Qpf	Pinedale fan alluvium		
Pleistocene	Qbf	Bull Lake fan alluvium		
	Qg4	Illinoian gravel		
	Qg3	Kansan gravel		
	Qg2	Nebraskan gravel		
UNCONFORMITY				
Miocene and Pliocene	Tduu ps	Dry Union Formation - clay, silt, sand, and gravel Tduu, upper part; mainly debris from Precambrian rocks ps, slide blocks of Paleozoic rocks	TERTIARY	
	Tdu			
UNCONFORMITY				
Oligocene	Twu	Upper ash-flow tuff, rhyolitic; porphyritic devitrified welded tuff, commonly with sphene and chatoyant sanidine		
	Ttu	Upper trachyandesite flow - contains phenocrysts of plagioclase and pyroxene generally in a vesicular or amygdaloidal groundmass		
	Tsg	Squirrel Gulch rhyodacite flow - contains phenocrysts of plagioclase and biotite, locally has vesicular, amygdaloidal, perlitic, columnar, or platy structures and vitric or lithic tuff		
	Ttl	Lower trachyandesite flow - contains phenocrysts of plagioclase and pyroxene in a vesicular groundmass		
	Twl	Lower ash-flow tuff, rhyolitic to quartz latitic; porphyritic devitrified welded tuff; thin black vitrophyric welded tuff locally at base		
Eocene(?)	Tr	Rawley trachyandesite flows, tuffs, and laharic breccias		
UNCONFORMITY				
	Omh	Manitou Dolomite and Harding Sandstone	ORDOVICIAN	
UNCONFORMITY				
	Xgd	Methodist Mountain Granodiorite	PRECAMBRIAN	
	Xgm	Quartz monzonite		
	Xg	Metagabbro		
	Xvs	Metavolcanic and metasedimentary rocks - interlayered quartz-feldspar-biotite gneiss, granofels, quartzite, hornblende gneiss, amphibolite, and schist locally cut by tabular bodies of pegmatite		

R.E. Van Alstine, 1975