



EXPLANATION

Q	Undivided Quaternary sediments
Tnp	North Park Formation
Tar	Arikaree Formation
Tmp	Middle Park Formation
Volcanics	Upper Tertiary Rocks
	Lower Tertiary stocks and volcanics
	Undivided Paleozoic-Mesozoic sediments
spg	Pikes Peak Granite
gbr	Gabbroic rocks
qz	Quartzite
spg	Silver Plume Granite
bcg	Boulder Creek Granite
pm	Pegmatite
umr	Undivided metamorphic rocks
hg	Hornblende gneiss

Contact Fault Shear Zone

Gravity contours
Interval = 1 milligal

Gravity station

Geologic base references

Lovering, T. S., and Goddard, E. N., 1950, Geology and ore deposits of the Front Range, Colorado: U.S. Geol. Survey Prof. Paper 223, 319 p.

Braddock, W. A., 1969, Geology of the Empire quadrangle, Grand, Gilpin, and Clear Creek Counties, Colorado: U.S. Geol. Survey Prof. Paper 616, 55 p.

Theobald, P. K., 1965, Preliminary geologic map of the Berthoud Pass quadrangle, Clear Creek and Grand Counties, Colorado: U.S. Geol. Survey Misc. Geol. Inv. Map 1-445.

Sims, P. K., 1964, Geology of the Central City quadrangle, Colorado: U.S. Geol. Survey Geol. Quad. Map GQ-267.

Sheridan, D. H., Maxwell, C. H., and Albee, A. L., 1967, Geology of the Ralston Buttes district, Jefferson County, Colorado: U.S. Geol. Survey Prof. Paper 520, 121 p.

Wells, J. D., 1967, Geology of the Eldorado Springs quadrangle, Boulder and Jefferson Counties, Colorado: U.S. Geol. Survey Bull. 1221-D, 85 p.

Harrison, J. E., and Wells, J. D., 1959, Geology and ore deposits of Chicago Creek area, Clear Creek County, Colorado: U.S. Geol. Survey Prof. Paper 319, 92 p.

Hawley, C. C., and Moore, F. B., 1967, Geology and ore deposits of the Lawson-Dumont-Fall River district, Clear Creek County, Colorado: U.S. Geol. Survey Bull. 1231, 92 p.

Izett, G. A., 1966, Geology of the Hot Sulphur Springs quadrangle, Grand County, Colorado: U.S. Geol. Survey Prof. Paper 586, 79 p.

Terrain corrections were computed on a digital computer to a radius of 166.7 kilometers by a method described by Plouff (1966).

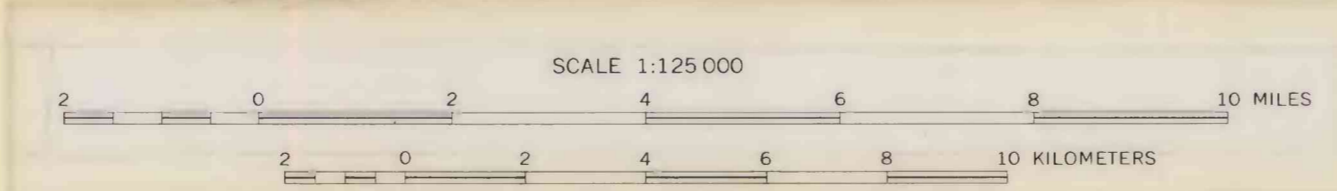
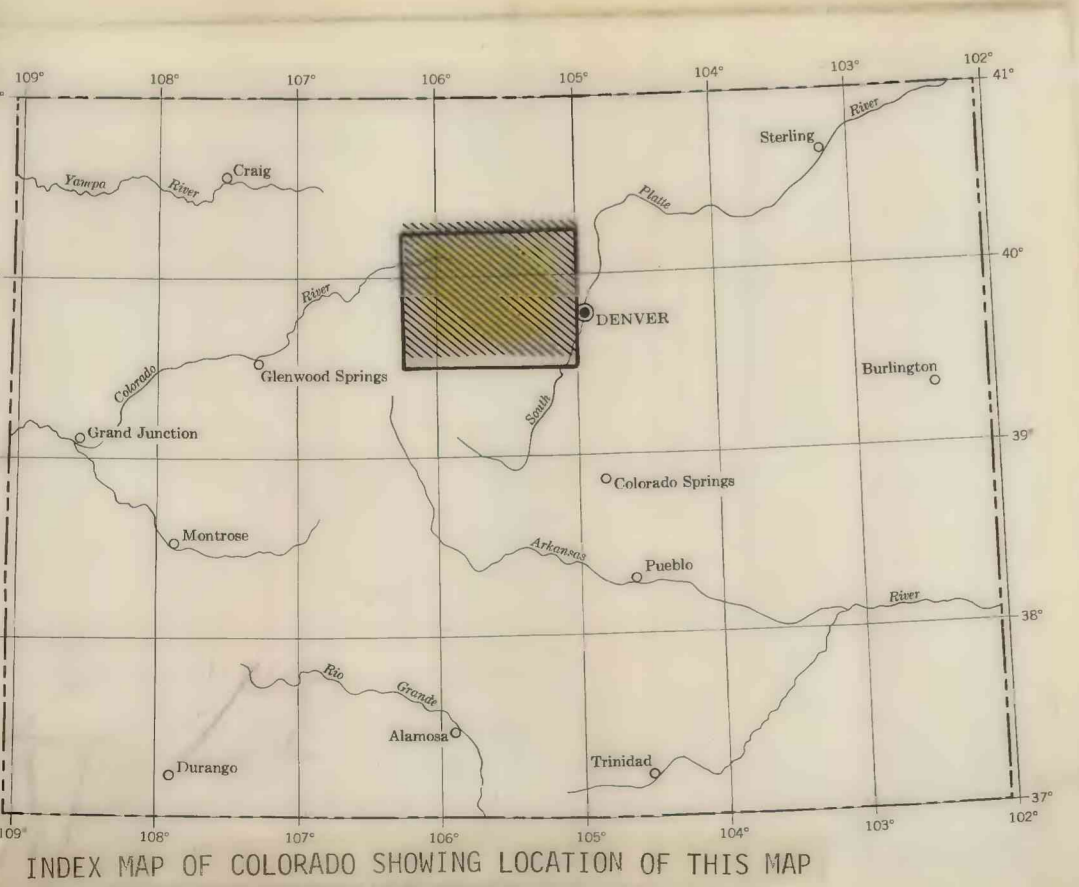
The gravity values were referenced to airport base station W91 (Behrendt and Koolard, 1961) at Fremont, Colorado.

A density of 2.67 grams per cubic centimeter was assumed in reducing the data to the complete Bouguer anomaly.

References

Behrendt, J. C., and Koolard, G. P., 1961, An evaluation of the gravity control network in North America: *Geophysics*, v. 26, no. 1, p. 63.

Plouff, Donald, 1966, Digital terrain corrections based on geographic coordinates: *Geophysics*, v. 31, no. 6, p. 1208.



COMPLETE BOUGUER ANOMALY GRAVITY MAP AND GENERALIZED GEOLOGY OF AN AREA WEST OF DENVER, COLORADO

BY
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1970

U.S. GEOLOGICAL SURVEY
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MAY 20 1970

This map is preliminary and has not been edited or reviewed for conformity to Geological Survey standards.