

FAULTS OF SOUTH AND CENTRAL TEXAS

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A B S T R A C T

The map entitled "Faults of South and Central Texas" (accompanying this paper) shows the location, depth of trace, and approximate vertical displacement of the various normal faults located in the area covered by the investigation. The information on the faults was derived from: published sources (listed below); various individuals including especially, William Pittman, Wilford Stapp, and Porter Montgomery; and studies in company files.

The writer found that most reports on a given area were broadly about the same, but might differ considerably in detail. Certainly, no two maps were identical; each geologist seems to have his particular style of fault interpretation. Additional faults will undoubtedly be discovered in the future and the interpretations presented will require alteration.

Most of the faults in the region fall within the major fault systems. A few of the faults occur over structures of "punch-type" origin such as salt domes and igneous masses; radial fault patterns and grabens are commonly associated with these structures (for example, see northern McMullen Co.). A number of faults are associated with folds such as the Pearsall and Chittim anticlines. Finally, there are many faults which appear to be structurally independent and which lie outside the fault systems.

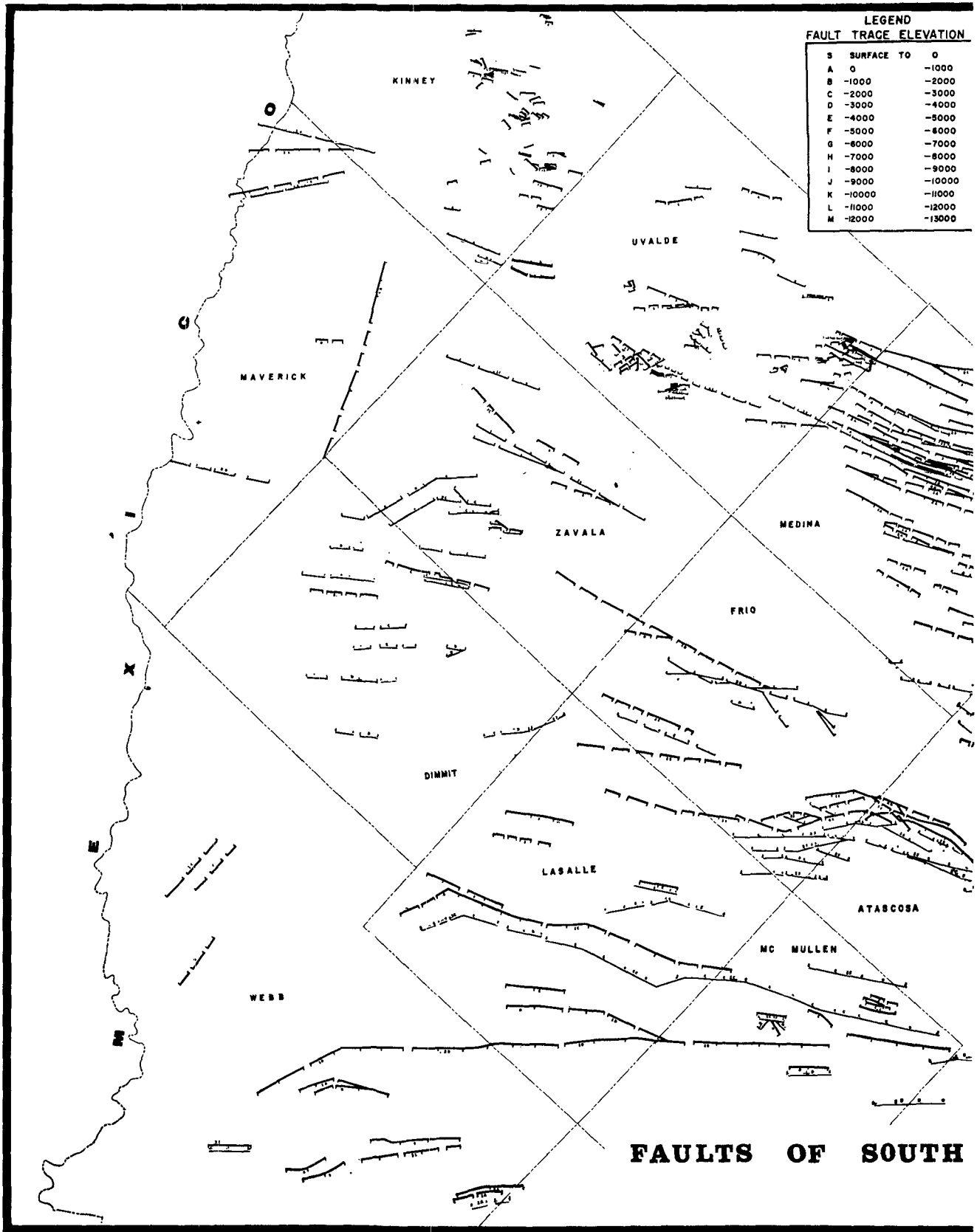
The largest known fault displacement in the region is less than 1000 feet; most displacements do not exceed 200 feet. The total displacement of the down-to-the-coast faults is usually about the same as the total displacement of the opposing nearby up-to-the-coast faults. The individual faults and fault systems generally have strikes which are within 10 to 20 degrees of the strikes of the beds in which they occur. Surface and subsurface studies both show that the ends of controlled faults often turn in down-dip direction.

The actual movements on the faults constituting the major fault systems appear to have occurred only in the downthrown blocks; these blocks are almost invariably lower than persistent regional stratigraphic surfaces. The upthrown blocks are usually even with these surfaces.

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Prints of this map on the original scale measuring 82" x 51 3/4" may be ordered from Cambe Log Library, Inc., 718 Milam St., Houston, Texas at reproduction cost. A printed map 45" x 29" also is available.

