

INTRODUCTION

This report was prepared in cooperation with the city of Houston and the Harris-Galveston Coastal Subsidence District. The report shows the altitudes of water levels in the Chicot and Evangeline aquifers in the Houston metropolitan area. Of the 425 wells measured, 307 were used to construct the maps of potentiometric surface.

The Chicot and Evangeline aquifers are composed of several sand layers, each with a separate potentiometric surface. These maps, however, show a single potentiometric surface which represents the collective water levels for the sand layers comprising each aquifer. Maps showing the altitudes of water levels have been published in many reports on ground-water development in the Houston area, the most recent of which (Gabrysch and others, 1988) presented maps of the altitudes of potentiometric surfaces for 1988.

REFERENCES CITED

Gabrysch, R.K., Ranzau, C.E., and Coplin, L.S., 1988, Approximate altitude of water levels in wells in the Chicot and Evangeline aquifers in the Houston area, Texas, spring 1988: U.S. Geological Survey Open-File Report 88-334, 2 sheets.

CONVERSION FACTORS

Values in this report are given in inch-pound units. Conversion factors for metric (International System) units are listed below:

| Multiply inch-pound units | By | To obtain metric units |
|---------------------------|--------|------------------------|
| foot | 0.3048 | meter |
| mile | 1.609 | kilometer |

Sea Level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called "Mean Sea Level of 1929."

EXPLANATION

---100--- WATER-LEVEL CONTOUR--Shows altitude at which water level would have stood in tightly cased wells. Dashed where approximately located. Contour interval 50 feet. Datum is sea level.

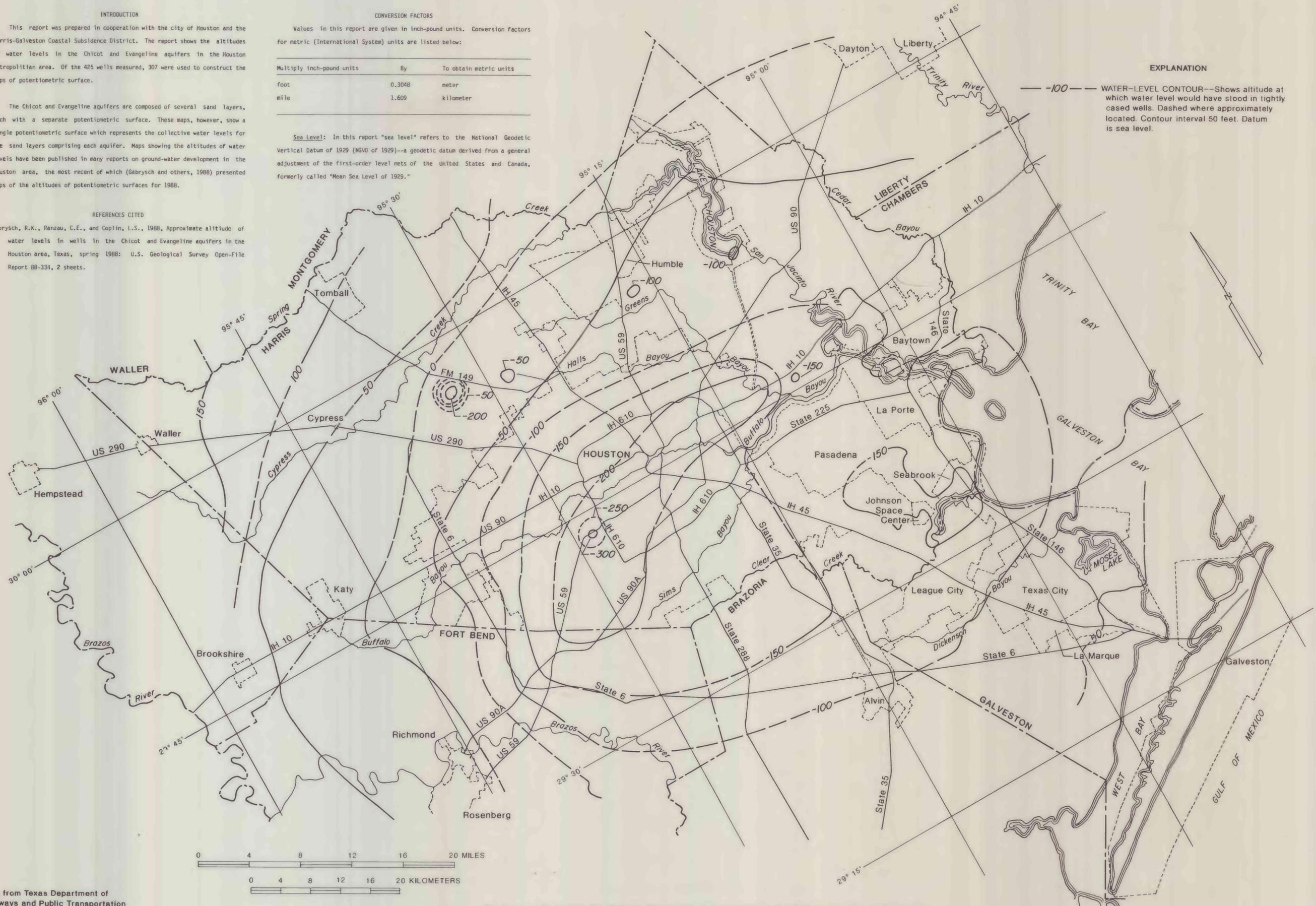


Figure 1.--Approximate altitude of water levels in wells in the Chicot aquifer, spring 1989

APPROXIMATE ALTITUDE OF WATER LEVELS IN WELLS IN THE CHICOT AND EVANGELINE AQUIFERS IN THE HOUSTON AREA, TEXAS, SPRING 1989

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1989

Base from Texas Department of
Highways and Public Transportation
General Highway Map