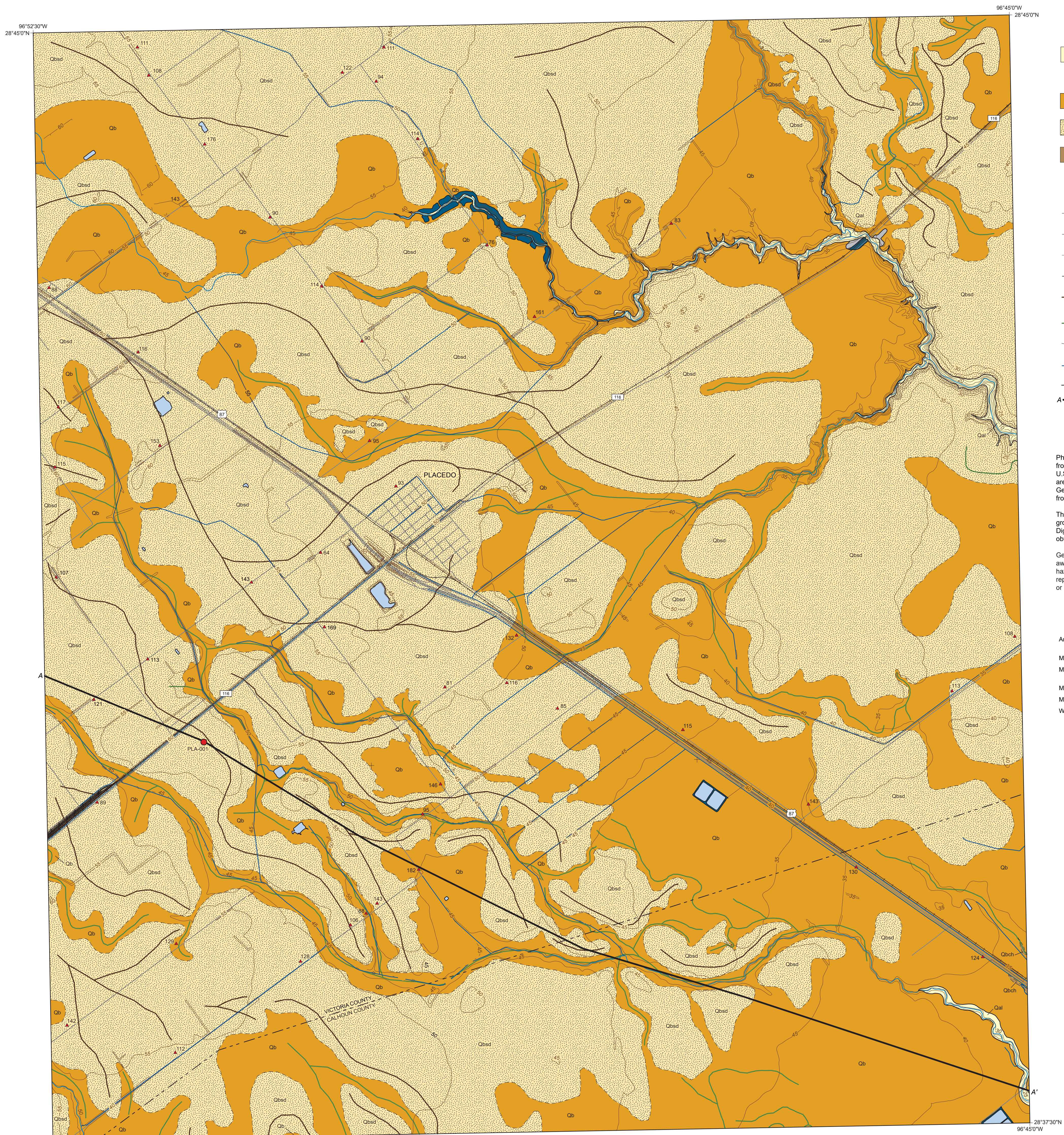




Explanation

Qal

Qal—Alluvium. Sand, silt, and clay.

Qb

Qb—Baumont Formation. Clay, silt, and sand. Deposited in fluvial-deltaic, interdistributary, and distributary setting. Includes flood-plain and delta-plain deposits and undifferentiated minor stream-channel, levee, and crevasse-splay deposits.

Qbsd

Qbsd—Baumont Formation sandy facies. Sandy mud, silt, and some sand. Deposited in fluvial-deltaic and distributary channel setting.

Qbch

Qbch—Baumont Formation channel facies. Sandy clay to clayey sand channel facies mapped on basis of topographic expression.

Map Symbols

Contact (distinct)

Contact (gradational)

Road

Railroad

Axis of Baumont Formation channel complex (approximate)

Axis of Baumont Formation channel low (approximate)

Elevation (ft); contour interval 5 ft

Intermittent stream, drainage ditch, or canal

County line

Cross-section line

Time-domain EM sounding for subsurface lithostratigraphic interpretation

174 Apparent electrical conductivity (in millisiemens per meter, or mS/m) of the ground measured using a Geonics EM31 ground conductivity meter in the vertical dipole coil orientation. Value shown is bulk conductivity from the surface to depths of 10 to 20 ft (McNeill, 1980a, 1980b).

Water

Selected ponded water

Fill

Pit

Acknowledgments

Photography used in the study was 1-m pixel, natural color, National Agriculture Imagery Program digital imagery, photographed in 2016. Photography was obtained from the Texas Natural Resources Information System (TNRIS). Photography was supplemented by a 3-m cell size digital elevation model (DEM) obtained from the U.S. Geological Survey (USGS). The DEM was constructed from data acquired during an airborne lidar survey flown in 2011. Previous regional maps that cover this area include the 1:250,000-scale Geologic Atlas of Texas, Beeville–Bay City Sheet (Aronow and others, 1975; revised 1987); the 1:125,000-scale Environmental Geologic Atlas of Texas, Port Lavaca Sheet (McGowen and others, 1976); and the 1:125,000-scale map of Distribution of Wetlands and Benthic Macroinvertebrates from the Submerged Lands of Texas, Port Lavaca area (White and others, 1989).

The study included field observations of surficial deposits, collection and interpretation of surface and subsurface electrical conductivities measured using ground-based electromagnetic induction conductivity meters (Geonics EM31 and EM38) and a time-domain electromagnetic induction instrument (ABEM WalkTEM). Digital elevation contour files for generalized topography were adapted from USGS topographic data obtained from TNRIS. Digital files of roads and railroads were obtained from TNRIS. Streams and drainage ditches were mapped from aerial imagery and the lidar-derived DEM.

Geologic mapping and map production were supported partly by the U.S. Geological Survey National Cooperative Geologic Mapping Program through STATEMAP award G18AC00195, 2018 (Jeffrey G. Paine, Principal Investigator), and partly by Bureau of Economic Geology STARR funds for geologic mapping and geologic hazards. Graphics were by Jana S. Robinson. Editing was by Stephanie Jones. Views and conclusions contained in this map should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government. The authors disclaim any responsibility or liability for interpretations from this map or digital data or decisions based thereon.

Selected References

Aronow, S., Brown, T. E., Brewton, J. L., Eargle, D. H., and Barnes, V. E., 1975 (revised 1987), Geologic atlas of Texas: Beeville–Bay City sheet: The University of Texas at Austin, Bureau of Economic Geology, scale 1:250,000.

Marvin, R. F., Shaller, G. H., and Dale, D. C., 1962, Ground-water resources of Victoria and Calhoun counties: Texas Board of Water Engineers, Bulletin 6202, 147 p.

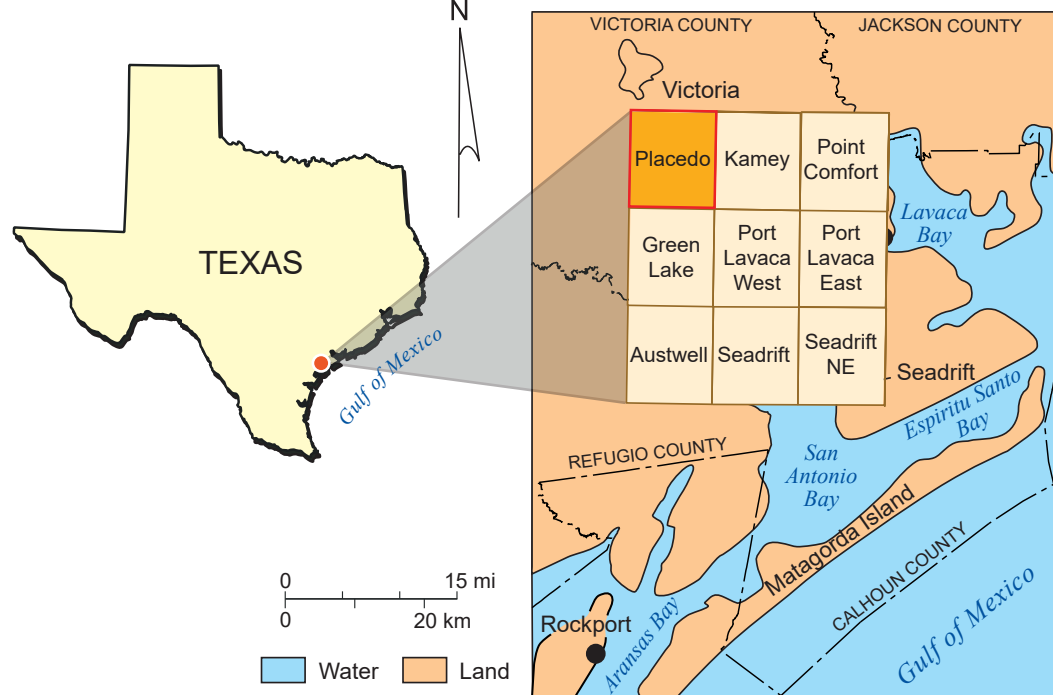
McGowen, J. H., Proctor, C. V., Jr., Brown, L. F., Jr., Evans, T. H., Fisher, W. L., and Groat, C. G., 1976, Environmental geologic atlas of the Texas coastal zone: Port Lavaca area: The University of Texas at Austin, Bureau of Economic Geology, scales 1:125,000 and 1:250,000, 107 p.

McNeill, J. D., 1980a, Electrical conductivity of soil and rocks: Geonics Limited, Mississauga, Ontario, Canada, Technical Note TN-5, 22 p.

McNeill, J. D., 1980b, Electromagnetic terrain conductivity measurement at low induction numbers: Geonics Limited, Mississauga, Ontario, Canada, Technical Note TN-6, 15 p.

White, W. A., Calnan, T. R., Morton, R. A., Kimble, R. S., Littleton, T. G., McGowen, J. H., Nance, H. S., and Schmiedes, K. E., 1989, Submerged lands of Texas, Port Lavaca area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands: The University of Texas at Austin, Bureau of Economic Geology, 154 p.

System	Series	Time Ma	Map and Cross Section Units
Quaternary	Holocene	0.012	Fluvial-Deltaic System Qal
	Pleistocene	2.60	Qb, Qbsd, Qbch



**GEOLOGIC MAP OF THE PLACEDO QUADRANGLE,
TEXAS GULF OF MEXICO COAST**

Jeffrey G. Paine and Lucie Costard
2019

