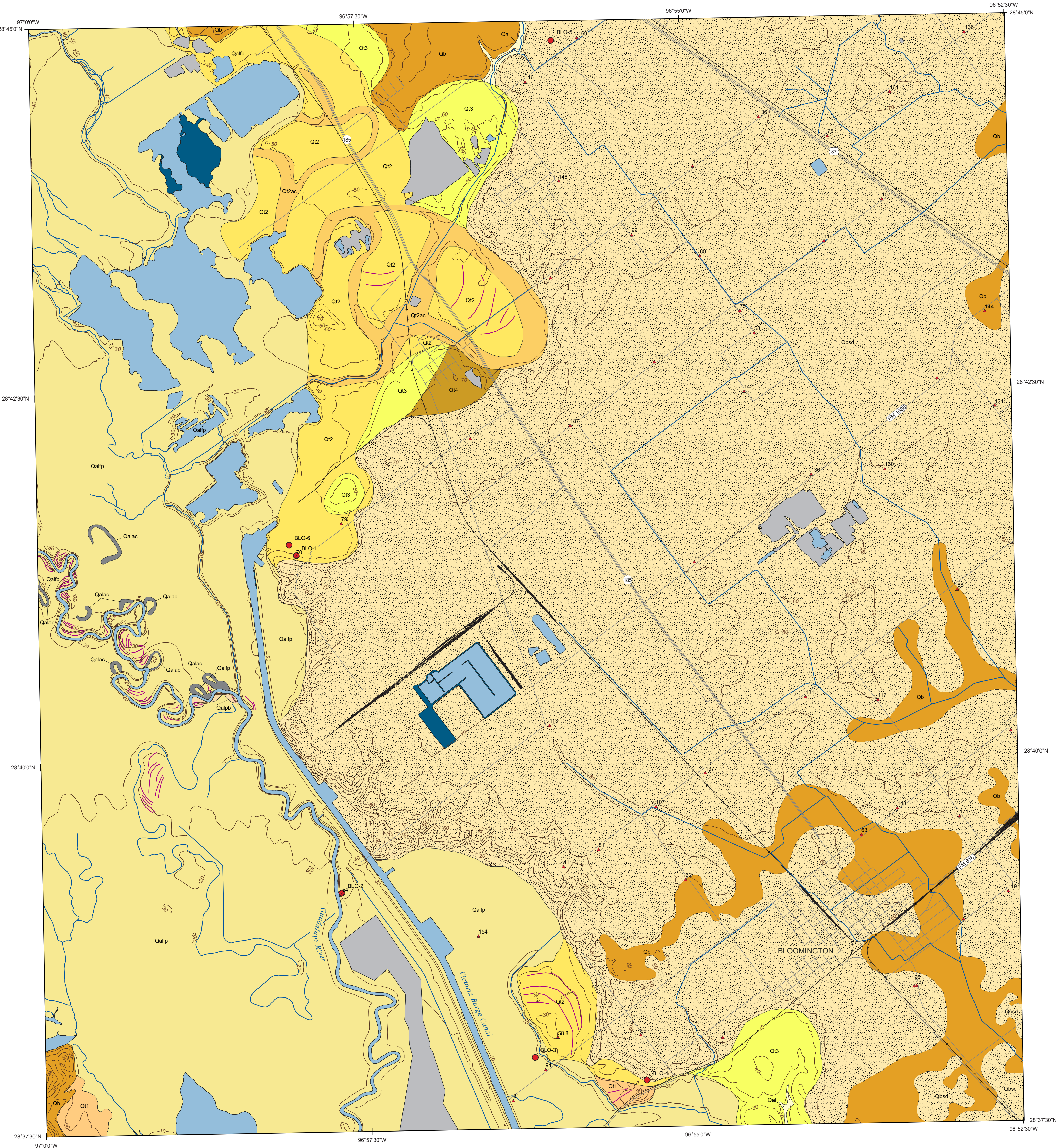




Explanation

Holocene	
	Qal—Alluvium. Sand, silt, and clay.
	Qalac—Abandoned-channel deposits. Clay, silt, and sand.
	Qalfp—Flood-plain deposits. Clay, silt, and sand. Includes some undifferentiated minor fluvial levees, crevasse splays, and active and abandoned stream channels.
	Qalpb—Point-bar deposits. Sand, silt, and clay.
Holocene to Upper Pleistocene	
	Qt1—First (lowest) terrace deposits. Sand, silt, clay, and gravel. Includes stream-channel, flood-plain, levee, and point-bar deposits. Inset into and overlying Beaumont Formation.
	Qt2—Second terrace deposits. Sand, silt, clay, and gravel. Includes stream-channel, flood-plain, levee, and point-bar deposits. Inset into and overlying Beaumont Formation.
	Qt2ac—Abandoned-channel deposits, second terrace. Clay, sand, silt, and gravel. Inset into and overlying Beaumont Formation.
	Qt3—Third terrace deposits. Sand, silt, clay, and gravel. Includes stream-channel, flood-plain, levee, and point-bar deposits. Inset into and overlying Beaumont Formation.
	Qt4—Fourth (highest) terrace deposits. Sand, silt, clay, and gravel. Includes stream-channel, flood-plain, levee, and point-bar deposits. Inset into and overlying Beaumont Formation.
Pleistocene	
	Qb—Beaumont 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—Beaumont Formation sandy facies. Sandy mud, silt, and some sand. Deposited in fluvial-deltaic and distributary channel setting.

Map Symbols

	Contact (distinct)		Time-domain EM sounding for subsurface lithostratigraphic interpretation
	Contact (gradational)		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).
	Meander scar		Selected ponded water, stream, or channel
	Road		Fill
	Railroad		Pit
	Elevation (ft); contour interval 5 ft		
	Intermittent stream, drainage ditch, or canal		
	Cross-section line		

Acknowledgments

Photography used in the study was 0.6-m pixel, natural color, National Agriculture Imagery Program digital imagery, photographed in 2018. 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 airborne lidar surveys flown in 2007 and 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).

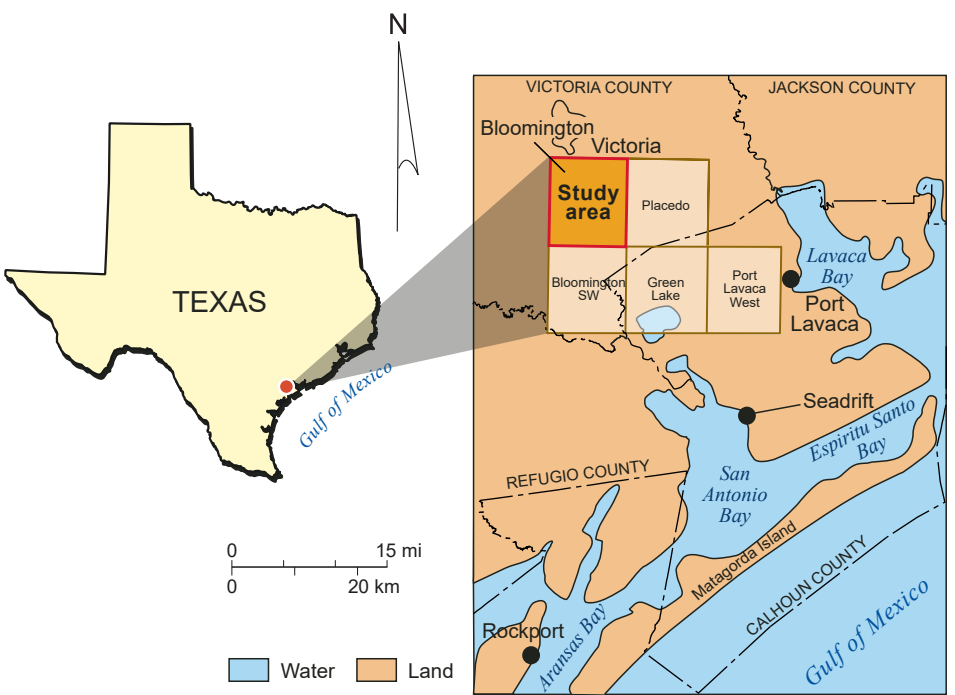
The study included field observations of surficial deposits collection and interpretation of surface and subsurface electrical conductivities measured using ground-based electromagnetic induction conductivity meters (Geonics EM31 and EM38) and a time-domain electromagnetic induction instrument (ABEM WalkTEM). Subsurface data included water-well records from the Texas Water Development Board and Marvin and others (1962). 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 the Texas Department of Transportation. Streams and drainage ditches were mapped from aerial imagery and the lidar-derived DEM.

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System	Series	Time Ma	Map and Cross Section Units	
Quaternary	Holocene	0.012	Fluvial-Deltaic System	
	Pleistocene	2.60		



GEOLOGIC MAP OF THE BLOOMINGTON QUADRANGLE, TEXAS GULF OF MEXICO COAST

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2020