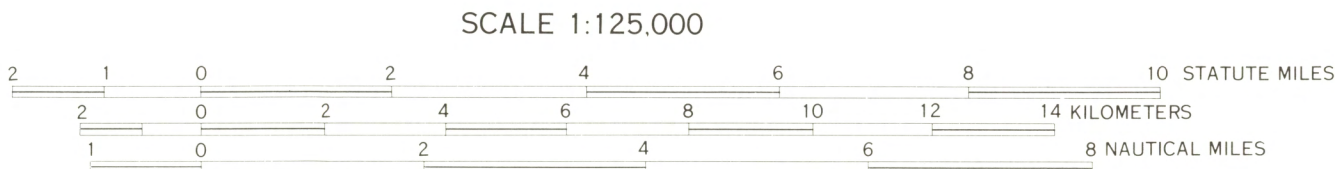


SOUTHEAST TEXAS LIGNITE BELT
ENVIRONMENTAL GEOLOGY
YEGUA-JACKSON TREND
SHEET 5



1982
MAPPING SUPPORTED BY A GRANT FROM THE ENERGY LANDS PROGRAM. U.S. GEOLOGICAL SURVEY

EXPLANATION

- Areas of inferred lignite resources.

Order of characteristics for each unit below follows that given in table 1.
- GEOMORPHIC UNITS

BOTTOMLAND UNITS

FLOODPLAIN. Alluvium; clay mud with sand and minor gravel, commonly fines upward; clay and clay loam soils; slopes less than 2 percent, includes terraces less than 10 ft above floodplain elevation; high- to moderate-frequency flooding, recharge, ponding; pine forest; aquifer, commercial timberland, pastureland.

UNDIFFERENTIATED ALLUVIUM AND COLLUVIUM. Fluvial and slope deposits; clay mud and sand with minor gravel along low-order tributaries; fine sandy loam and clay loam soils; slopes less than 5 percent; low- to high-frequency flooding; pine forest; commercial timberland, pastureland.

RIVER TERRACE UNITS

CLAY MUD TERRACE. Alluvium; clay mud with sand and minor gravel, commonly fines upward; fine sandy loam soils; slopes less than 2 percent; sheetwash, minor recharge, ponding, rare flooding; pine forest; commercial timberland, minor aquifer, pastureland.

SANDY MUD TERRACE. Alluvium; clay mud and sand with minor gravel, commonly fines upward; fine sandy loam and loamy fine sand soils; slopes less than 2 percent; rare flooding, recharge; pine forest; commercial timberland, minor aquifer, pastureland.

MISCELLANEOUS GEOMORPHIC UNITS

DISSECTED SAND AND MUD. Interbedded sand, mud, and sandy mud; fine sandy loam and clay loam soils; slopes 10 to 30 percent; recharge, erosion, gully; pine forest; commercial timberland, pastureland.

ALLUVIAL FAN. Gravel, sand, and clay mud; fine sandy loam and clay loam soils; slopes less than 2 percent, fan shaped in plan view, low- to moderate-frequency flooding, recharge; pine forest; aquifer, commercial timberland, pastureland.

SUBSTRATE UNITS

SAND AND MUD UNITS

LOW-RELIEF SAND AND MUD—PINE FOREST. Interbedded sand, mud, and sandy mud, locally indurated and iron-stained; fine sandy loam and

loamy fine sand soils; slopes less than 3 percent; recharge; pine forest; commercial timberland, minor aquifer, pastureland, recreation.

MODERATE-RELIEF SAND AND MUD—PINE FOREST. Interbedded sand, mud, and sandy mud, locally indurated and iron-stained; fine sandy loam and loamy fine sand soils; slopes 3 to 10 percent; recharge; pine forest, commercial timberland, minor aquifer, pastureland, recreation.

LOW-RELIEF MUD WITH SAND—PINE FOREST. Mud with locally interbedded fine sand, fine sandy loam and clay loam soils; slopes less than 3 percent; runoff, pine forest; commercial timberland, pastureland, recreation.

MODERATE-RELIEF MUD WITH SAND—PINE FOREST. Mud with locally interbedded fine sand; fine sandy loam and clay loam soils; slopes 3 to 10 percent; runoff, gully; pine forest; commercial timberland, pastureland, recreation.

SAND UNITS

SAND HILLS. Compact to loose sand and silty sand; expressed as a prominent ridge; recharge, gully; pine forest; aquifer, commercial timberland, pastureland.

LOW ROLLING SANDS. Compact to loose sand and silty sand; fine sandy loam soils; slopes less than 3 percent; recharge, gully; pine forest; aquifer, commercial timberland, pastureland.

FINE SAND. Friable to loose fine sand and silty sand; fine sandy loam soils; slopes less than 10 percent; recharge, gully; pine forest; aquifer, commercial timberland, pastureland.

MISCELLANEOUS SUBSTRATE UNIT

HIGH-RELIEF IRON-CEMENTED UPLANDS. Interbedded iron-cemented sand and minor mud, locally conglomeratic; thin fine sandy loam soils; slopes 10 to 30 percent, forms prominent hills; minor recharge; pine forest; rangeland.

MAN-MADE UNITS

SURFACE-MINED LAND. Land disturbed by mining for clay, sand, gravel, or ironstone; soils absent; slopes variable; erosion; vegetation sparse; land use minimal if not currently mined.

CONTROLLED INUNDATION. Land upstream from reservoirs below elevation of spillway but not regularly inundated; soils, processes, vegetation, and land use variable; slopes less than 3 percent.

INDEX MAP

Mapped by Mary L. W. Jackson and L. E. Garner, assisted by Guy G. Cleveland and Robert A. Rountree. Scribing and cartography by Barbara Hartmann, assisted by Margaret Evans and Richard Flores; Dan F. Scranton, Chief Cartographer.

Base adapted from USGS 7 1/2' and 15' quadrangles. 10,000-meter Universal Transverse Mercator grid, zones 14 and 15, shown in blue.

References: Arbingast and others (1976), Barnes (1967), Dumble (1918), Dolezel (1980), Henry and Basciano (1979), Kaiser and others (1980), Sellards and others (1932), and Veatch (1902).