

**COMPARISON OF SITE QUALITY FOR LOBLOLLY PINE
ON SELECTED MINED AND NON-MINED SOILS
IN PANOLA COUNTY, TEXAS**

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Non-mined Sacul soil (Aquic Hapludult) sites and reclaimed lignite mine spoil sites supporting loblolly pine plantations 2, 3, 4, 5, and 7 years of age were compared for tree total height and stem diameter (15 cm above root collar), foliar and soil nutrient content, and other soil chemical and physical properties. The non-mined site trees were generally larger in diameter and total height. The mined site yielded the larger trees of the two four-year-old plantations studied.

The mined sites had the greater abundance of soil and foliar plant nutrients, higher soil pH, greater CEC and base saturation. Soil nitrogen and occasionally phosphorus were deficient on both site types. Cumulative infiltration at 60 minutes and bulk density of the surface were similar between site types. Poor internal soil drainage and paucity of nitrogen probably accounted for generally poorer tree growth on the mined site.

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