

## **A SOIL ANALYSIS OF THE STRIP MINE SPOIL BANK AT FAIRFIELD, TEXAS**

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As an initial step in understanding the spoil material, the chemical and physical properties of areas disturbed by the strip mining of lignite near Fairfield, Texas were determined. The exchangeable cations, available phosphorus, Kjeldahl nitrogen, reaction, texture and moisture content were determined for both the strip mined area and adjacent undisturbed soil. All of the essential plant nutrients were found to be present in adequate concentrations on the spoil bank, but on the agriculturally depleted undisturbed soil, deficiencies of phosphorus and calcium were observed. Reaction, texture, and moisture content of the spoil bank were found to be suitable for plant growth. Compared to the adjacent undisturbed land, the spoil bank has a higher productivity potential and is highly suitable for revegetation in all respects.

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