

# **Revegetation of a Remediated Brine-Contaminated Soil. (S06-osborne114601-Poster)**

## **Authors:**

- H.D.Osborne\* - *Stephen F. Austin State University*
- K.W.Farrish - *Stephen F. Austin State University*

## **Abstract:**

A field study is being conducted to continue monitoring changes in selected physico-chemical properties and the success of revegetation efforts on an oilfield brine soil in Louisiana. The selected soil physico-chemical properties are sodium adsorption ratio, electrical conductivity, soil reaction, bulk density, and infiltration rate. Decreases in sodium adsorption ratio, electrical conductivity, and bulk density on the site occurred following remediation activities and revegetation. Also, infiltration rates increased. Survival and growth rate of planted loblolly pine (*Pinus taeda*) are also being measured. Data collected between April 2001 and July 2002 have been analyzed and compared to previous data collected during an earlier phase of the study to determine if significant changes in selected physico-chemical properties were occurring. During the current phase of the study, there has been little change in electrical conductivity, sodium adsorption ratio, bulk density, soil reaction, and infiltration with differences not being statistical significant. Survival and growth rates of planted *P. taeda* indicate initial success in growth of the seedlings with a good first year survival rate of 84 percent.

## **Corresponding Author Information:**

Heather Osborne	phone: 936-468-2272
Stephen F. Austin State University	fax: 936-468-2489
P.O. Box 6109 SFA	e-mail: heather_96@hotmail.com
Nacogdoches, TX 75962	

## **Presentation Information:**

Presentation Date: Tuesday, November 12, 2002

Presentation Time: 2:00-4:00 pm

Poster Board Number: 1826

## **Keywords:**

physico-chemical, revegetation, brine-contaminated soil