

Abstract

The statistical optimization of two responses, the oil recovery and the concentration in the percentage area was evaluated having extraction time, volume of methanol, and weight of a sample as independent variables. The oil recovery showed significant results in ANOVA as compared to the concentration in the percentage area. The most optimized condition for the oil recovery was 30g of sample with 300ml of methanol for 6 hours. The most optimized condition for concentration in percentage area was 20g of sample with 300ml of the methanol for 6 hours. The most prominent factor was the weight of the sample. The volume of methanol and the weight of the sample have a prominent combined effect.