

The capabilities of MHB and RPB were evaluated on two test projects in the year 2000 on I-40 in Brinkley and Menifee townships. At each location, about 2000' long in-service JRCF was rubblized using MHB. An adjacent section of the same length was rubblized using RPB. The fractured layers were seated and overlaid with 9" thick HMA.

As observed on the ODOT test projects, the Arkansas tests indicated that the RPB equipment generally provided smaller particles at the surface of the rubblized layer and throughout the depth of the fractured slab (Figures 50, 51).

Deflection tests were conducted to compare the structural characteristics of the test pavements. The results of the Arkansas deflection testing on outside lanes are plotted in Figures 52 and 53. As shown, the modulus values for the rubblized layer fractured with the RPB are lower and less variable than those produced by the MHB. This result is consistent with the smaller, more uniform particle size observed for the RPB operation.

On both the projects, the two fracturing equipment (MHB and RPB) produced rubblized layers whose stiffness values were less than 1000ksi, the threshold value beyond which reflection cracking is expected to occur [9]. Figures 52 and 53 indicate stiffness values of rubblized layer on MHB sections are relatively higher than those of RPB sections. Whether the observed variation in the stiffness has an impact on the overall pavement performance can only be investigated by collecting and analyzing long term performance data.