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**THE RELATIONSHIP BETWEEN BIODIESEL STABILITY INDICATORS AND
DEPOSITION TENDENCY, PART 2: EFFECT OF AGING ON STABILITY AND
DEPOSITION TENDENCY OF B100'S AND B20'S**

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Two of the three additive-free B100's used in the work previously reported in Part 1 were selected for further investigation. These two B100's, an unusually stable soy-based B100 (Rancimat induction period of 9.1 hours) and a more typical stability soy-based B100 (Rancimat induction period of 5.0 hours) were aged by two procedures: ASTM D2274 stressing and six weeks quiescent aging at 60 C with sealed and non-replenished headspace. B20's were blended using the two B100's and an ultra-low sulfur No. 2 diesel fuel (ULSD). Properties of the two B100's and the two B20's relating to stability were evaluated before and after the aging. The two B100's and two B20's were also evaluated for their tendency to form deposits on a hot steel surface by using the Jet Fuel Thermal Oxidation Stability Tester (JFTOT). JFTOT runs were performed at both 260 C and 300 C, and tube deposit volume was evaluated using ellipsometry. Select stability-related properties of the two B100's and two B20's were also measured after JFTOT stressing. All data was evaluated and correlated to provide further information on how stability-related properties impact a biodiesel fuel's deposit-forming tendency, and how hot steel-surface stressing can further affect stability.