THE INFRARED SPECTRUM OF HBO

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The free radical HBO was generated in a high-temperature furnace at 1400°C. The infrared spectra of the two major isotopic species, $H^{11}BO$ and $H^{10}BO$, were recorded in emission with a Fourier transform spectrometer (Bruker IFS 120HR). The wavenumber range from 400 to 3500 cm^{-1} was detected at a resolution of 0.01 cm^{-1}. The three fundamental vibrational bands as well as various combination and hot bands have been observed. A vibrational-rotational analysis of the spectra will be presented.