Last year at this meeting we reported our serendipitous observation of \( \sim 80 \) sharp transitions observed in the \( Q_1(1) \) region of hydrogen apparently induced by methane imbedded in the parahydrogen crystal. We have since recorded the FTIR and high-resolution laser spectra of several more methane doped parahydrogen crystals with varying methane and ortho-hydrogen concentrations. We are in the initial stages of analyzing this data, and it appears that there are a number of interesting phenomena occurring. In this talk we will present the new data and discuss our progress in the understanding of this fascinating problem.