Table 1: Freqs, ZPT=5721.6 (cm-1) HARM FUND CORR Mode 1 3832.2 3619.5 3619.5 2 3731.93532.43532.43 1618.51525.41584.24 913.5858.0858.0888.15 818.3818.36 696.4657.8657.8

Table 2: A	BC (cm-1)
Constant	Value
$\overline{A_0}$	9.659009
$B_0$	0.795297
$C_0$	0.768410
$A_1$	9.513865
$B_1$	0.796336
$C_1$	0.769840
$A_2$	9.483843
$B_2$	0.796657
$C_2$	0.769366
$A_3$	9.545067
$B_3$	0.798080
$C_3$	0.768440
$A_4$	9.929258
$B_4$	0.785740
$C_4$	0.760892
$A_5$	9.650853
$B_5$	0.788587
$C_5$	0.758964
$A_6$	9.656057
$B_6$	0.786146
$C_6$	0.760746

Table 3: Deltas					
Constant	GHz	MHz	m kHz	$_{ m Hz}$	$\mathrm{mHz}$
$\Delta_J$	0.000	0.103	102.927	102927.435	102927435.000
$\Delta_K$	0.012	11.706	11706.058	11706057.549	11706057549.200
$\Delta_{JK}$	0.002	1.919	1919.335	1919335.084	1919335083.800
$\delta_J$	0.000	0.004	4.050	4050.027	4050026.900
$\delta_{\kappa}$	0.001	0.740	739.559	739558.754	739558754.300

			Table 4: Phis		
Constant	$\mathrm{kHz}$	$_{ m Hz}$	m mHz	$\mathrm{uHz}$	m nHz
$\Phi_J$	-0.000	-0.006	-5.639	-5638.538	-5638538.471
$\Phi_K$	3.560	3559.925	3559925.066	3559925066.000	3559925066000.000
$\Phi_{JK}$	0.009	8.631	8630.846	8630846.323	8630846323.000
$\Phi_{KJ}$	0.072	71.602	71602.089	71602089.220	71602089220.000
$\phi_j$	0.000	0.022	21.725	21724.948	21724947.950
$\phi_{jk}$	0.011	11.351	11350.873	11350873.200	11350873200.000
$\phi_k$	2.274	2274.198	2274197.573	2274197573.000	2274197573000.000

Table 5: Geom (A or Deg)				
COORD	R(EQUIL)	R(ALPHA)		
r(O1-O2)	1.5283027	1.5429019		
r(O2-H3)	0.9651581	0.9716735		
r(O2-H4)	0.9651581	0.9716735		
∠(O2-O1-H3)	100.6670973	100.0678971		
∠(O2-O1-H4)	100.6670973	100.0678971		
∠(O2-H3-H4)	106.9033367	107.4340913		

Table 6: Fermi Resonances  $2\nu_5{=}\nu_6{+}\nu_4{=}\nu_3$