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The ν_3 , ν_4 , and ν_6 Bands
of Formaldehyde:
A Spectral Catalog
From 900 cm^{-1} to 1580 cm^{-1}

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INTRODUCTION

This catalog presents the results of a complete high resolution study of the three vibration-rotation bands ν_3 , ν_4 , and ν_6 using both TDLs and FT-IR spectroscopy. The results are given in terms of a table of over 8000 predicted transition frequencies and strengths. A plot of the predicted and observed spectra is also shown. Over 3000 transitions were assigned and used in the simultaneous analysis of the three bands. The simultaneous fit permitted a rigorous study of Coriolis and other type interactions among the bands yielding improved molecular constants. Line intensities of 28 transitions measured by a TDL and 20 transitions from the FTS data were used, along with the eigenvectors from the frequency fitting, in a least squares analysis to evaluate the band strengths.

EXPERIMENTAL

High resolution FT-IR spectra of H_2CO from 890 to 1580 cm^{-1} have been recorded with a Bomem interferometer at the Herzberg Institute of Astrophysics in Ottawa. This instrument has an unapodized resolution of $\sim 0.0024 \text{ cm}^{-1}$. The spectra reported were apodized using a Hamming window yielding an observed width of 0.004 cm^{-1} . The spectra contained nearly 4000 transitions arising from the ν_3 , ν_4 , and ν_6 bands. A peak finder program running on the PDP-11 computer of the Bomem interferometer provided a measured wavenumber listing for these transitions. A trace of CO_2 gas introduced into the sample cell provided for absolute calibration. The spectra were recorded in four separate bands; 889 to 1095 cm^{-1} with a CO_2 pressure of 4 torr and 200 millitorr of H_2CO , 1079 to 1280 cm^{-1} with 4 torr of CO_2 and 200 millitorr of H_2CO , 1275 to 1450 cm^{-1} with 100 millitorr of H_2CO , and 1418 to 1580 cm^{-1} with 75 millitorr of H_2CO . All measurements were taken in a 6.75 meter cell at room temperature.

The observed transitions obtained from the FT-IR spectrum were assigned using ground-state-combination-differences. This method determines the upper state energy levels by a combination of observed infrared transition wavenumbers and the appropriate ground state energies. Line assignments were governed by the selection rules for an asymmetric top (formaldehyde is a near prolate symmetric top with

$\kappa=-0.961$). For any infrared-active band, the selection rules for the total angular momentum are $\Delta J=-1, 0$, or $+1$ for the P, Q, or R branches respectively, with the constraint that no transitions occur between states with $J=0$ in both upper and lower levels. The selection rules for K_a and K_c are:

A-type bands: $\Delta K_a = 0, +/-2, +/-4, \dots$; $\Delta K_c = +/-1, +/-3, +/-5, \dots$
 B-type bands: $\Delta K_a = +/-1, +/-3, +/-5, \dots$; $\Delta K_c = +/-1, +/-3, +/-5, \dots$
 C-type bands: $\Delta K_a = +/-1, +/-3, +/-5, \dots$; $\Delta K_c = 0, +/-2, +/-4, \dots$

In formaldehyde, ν_3 , ν_4 , and ν_6 are A-, C- and B-type bands respectively.

The ground state energy levels for all transitions up to $J''=30$ and $K_a''=10$ were generated from the ground state rotational constants reported by Cornet and Winnewisser (1). Using these values in the GSCD computations, yielded predicted transition frequencies within 1 milli-wavenumber of the observed for transitions with $J < 15$ and $K_a < 5$. The errors in predicting higher J and K_a transitions were within 3 milli-wavenumbers.

THEORY

Frequency Analysis

The application of rotation-vibration theory to the analysis of the interacting ν_4 , ν_6 , and ν_3 bands of formaldehyde has been discussed elsewhere (2,3,4,5) and, as such, will only be very briefly summarized here. The rotational Hamiltonian used in the current study is the Watson A reduced Hamiltonian with all terms up to sextic in centrifugal distortion included (6). The $|\Delta K|=1$ a-type coriolis interaction between ν_4 and ν_6 , as well as the b-type Coriolis interaction between ν_4 and ν_3 and the c-type Coriolis interactions between ν_6 and ν_3 are included as is a further higher order asymmetric effect $|\Delta K|=2$ interaction between ν_4 and ν_6 (3). All of these terms, excluding some of the sextic centrifugal distortion terms, were included in an earlier analysis of these bands (2). However, to adequately explain the data in the current study it was found necessary to include a higher order $|\Delta K|=3$ interaction term between ν_6 and ν_3 . The effect of this term, which is partly due to a combined Coriolis interaction and asymmetric effects has been discussed earlier (3) but its magnitude

had not been accurately determined. This term is most important for transitions ending in $K_a=6$ of ν_6 and $K_a=3$ in ν_3 and has little effect on other states. It was also found to be necessary to include more of the sextic centrifugal distortion terms in this analysis than in reference (2) because of the higher spectral resolution and greater range in J and K of the present data. A more complete description of the theory and the method of calculation of energies for the Hamiltonian described above, (including the form of the matrix elements), may be found in references (4,5).

Intensity Analysis

Given the transformation matrices which diagonalize the ground and upper state molecular Hamiltonians written in a rigid rotor-harmonic oscillator basis set, one can calculate the intensity of a given transition by pre-multiplying the transition dipole matrix, (written in the same basis set), by the ground state transformation and post multiplying it by the upper state transformation. For a given vibrational state the transition dipole matrix is a multiple of the derivative of the dipole moment with respect to the vibrational coordinate times a direction cosine term. When there are elements in the molecular Hamiltonian which connect different vibrational basis sets (e.g. Coriolis coupling terms) the intensity contains terms from more than one vibrational state and the relative signs of the dipole moment derivatives for the various vibrational motions become important. In the current work the magnitudes and relative signs of the derivatives for ν_3 , ν_4 , and ν_6 were determined by a least squares fitting procedure using intensity data determined in a diode laser study (7). Again, for a more thorough discussion of the intensity fitting procedure the reader is referred to references (4,5).

RESULTS

The molecular parameters resulting from the fitting of the observed infrared and excited state microwave transition frequencies are given in Table 1. The parameters fit are the rotationless energies of each of the upper states as well as the rotational constants, the quartic centrifugal distortion constants, the diagonal sextic constants, except for H_J , and five inter-state interaction coefficients. This choice of parameter set is reasonable but somewhat arbitrary, and the least squares fit is not a well posed problem. However, this set of 41 constants was the fewest which could be used in

Table 1: Molecular Constants for the v_3 , v_4 and v_6 Bands of H_2CO .

	<u>Ground State</u> ^a	<u>$v_4=1$</u>	<u>$v_6=1$</u>	<u>$v_3=1$</u>	
V_0		1167.25675(4) ^b	1249.09438(4)	1500.17452(5)	
A	9.4055259	9.38109(121)	9.39539(121)	9.46712(1)	
B	1.2954310	1.291412(3)	1.298153(1)	1.295821(4)	
C	1.1341914	1.1356615(6)	1.1296077(31)	1.1295653(35)	
Δ_K	6.479062	2.1096(47)	10.9804(45)	6.8893(36)	$\times 10^{-4}$
Δ_{JK}	4.304664	3.7045(70)	5.2059(74)	4.1347(50)	$\times 10^{-5}$
Δ_J	2.511582	2.4727(7)	2.5605(8)	2.7282(9)	$\times 10^{-6}$
R_5	-1.711235	-1.2204(37)	-2.1158(45)	-2.2614(49)	$\times 10^{-5}$
δ_J	3.487999	2.9385(27)	3.6526(37)	4.6264(33)	$\times 10^{-7}$
H_K	1.500705	1.503(141)	1.572(138)	1.951(31)	$\times 10^{-7}$
H_{KJ}	-0.374192	-2.749(74)	4.234(99)	-4.519(143)	$\times 10^{-8}$
H_{JK}	0.96797	0.188(85)	2.828(59)	-0.687(68)	$\times 10^{-9}$
H_J	1.04856	c	c	c	$\times 10^{-12}$
h_J	1.41427	c	c	c	$\times 10^{-12}$
h_{JK}	5.22558	c	c	c	$\times 10^{-10}$
h_K	4.5769	c	c	c	$\times 10^{-8}$

Coriolis Constants

ξ_{64}^a	10.44086(473)
ξ_{34}^b	1.7505(2)
ξ_{36}^c	0.68836(62)
η_{64}^{bc}	$-1.9532(122) \times 10^{-3}$
z_{36}	$-7.968(80) \times 10^{-6}$

- From reference 1.
- The uncertainties in parenthesis are 1σ from the least-squares fit, right-adjusted to the last digit of the parameter.
- These parameters were fixed to the ground state values.

Weighted fitting error = 0.852

Normalized fitting error = $7.47 \times 10^{-4} \text{ cm}^{-1}$

which fitting results were not markedly improved by the addition of further fitting parameters. Also given in Table 1 are two measures of goodness of fit; the weighted fitting error defined as: $(\sum \omega_i \Delta_i^2 / (N - N_p))^{1/2}$ and the normalized fitting error defined as: $(\sum \omega_i' \Delta_i^2)^{1/2}$. In these expressions ω_i is the inverse of the squared error in measurement i , Δ_i is the residual of the fit for transition i , N is the total number of lines fit, N_p is the number of parameters, and $\omega_i' = \omega_i / \sum \omega_i$. The uncertainties chosen for the infrared transitions were 0.0005 cm^{-1} for upper states with $J < 15$ and $K < 5$ and 0.001 cm^{-1} for most of the rest of the lines, although some blended lines were assigned uncertainties of 0.002 cm^{-1} . The low J and K uncertainty is about 2-3 times the measurement error, as determined from the CO_2 calibration lines. The excess uncertainty reflects effects of terms not included in the fitting process which are expected to have more influence at higher J and K . The uncertainties for the microwave data were taken to be the experimental error (1). Note that the weighted fitting error should be about 1 if the weights are correct. The parameters obtained were not strongly dependent upon the weights chosen.

The results of the fitting procedure for the intensities are given in Table 2. Here the measured intensities for ν_4 and ν_6 were taken from a diode laser study (7) and the intensities for ν_3 were taken from the FTIR data described above. To convert the ν_3 FTS intensity data to the diode laser units about 20 observed and calculated relatively weak (transmittance $> 70\%$) ν_6 lines were used as a transfer standard. That is, the average multiplicative factor required to make the observed ν_6 intensities agree with the calculated FT-IR ν_6 intensities was applied to observed ν_3 lines in the same intensity range. The multiplicative factor is expected to be a weak function of line strength and, in fact, it seems to vary about 5% over the intensity range chosen. This slight variation, which may be due to other effects, was ignored. As may be seen from the table essentially all of the calculated intensities agree with the observed to better than 10 to 20 percent, although there are a few outliers. It should be noted that the results degraded significantly if mixing of vibrational states was ignored in the determination of the intensities or if different relative signs were used for the dipole moment derivatives. The uncertainties used in determining the weights used in the least squares fitting procedure were taken to be the experimental uncertainty given in reference (7) for the diode data (with an additional error of 0.001 added) while the FTS data was given less weight.

A complete listing of all H_2CO ν_3 , ν_4 , and ν_6 lines whose calculated intensities are greater than 0.01% of the strongest line is given in Table 3. For those lines which were identified and used in the frequency fitting procedure the residual (obs. - cal.

Table 2: Results of Intensity Fitting.

Band v	Upper State J K _a K _c			Lower state J K _a K _c			Obs. Int cm ⁻² atm ⁻¹	Obs.-Cal. cm ⁻¹	Frequency
6	17	4	14	18	5	13	0.00323	-0.00066	1148.3347
6	17	4	13	18	5	14	0.00340	-0.00049	1148.3602
4	11	2	9	10	3	7	0.02113	-0.00118	1148.3451
4	3	0	3	4	1	3	0.04737	0.00651	1148.4704
4	16	1	15	16	2	15	0.01866	0.00187	1148.5084
4	1	0	1	1	1	1	0.02953	-0.00004	1159.1358
4	2	0	2	2	1	2	0.04846	-0.00009	1159.2718
4	28	2	27	28	1	27	0.00594	0.00067	1159.2931
4	15	2	13	14	3	11	0.01883	-0.00319	1159.3918
6	6	6	1	7	7	0	0.00744	0.00194	1159.4110
4	9	1	9	8	2	7	0.00743	-0.00051	1159.4397
4	3	0	3	3	1	3	0.06663	0.00019	1159.4717
4	18	2	17	18	1	17	0.03208	0.00402	1172.3860
4	6	1	6	6	0	6	0.02843	0.00026	1172.5256
6	12	2	1	13	3	10	0.01898	-0.00043	1180.6443
6	4	4	1	5	5	0	0.01921	0.00163	1180.7330
4	24	0	24	23	1	22	0.00261	-0.00143	1180.8077
4	11	2	10	11	1	10	0.03400	-0.00142	1180.8323
6	13	2	11	14	3	12	0.01651	-0.00247	1180.8831
6	10	4	7	10	5	6	0.01400	0.00274	1192.6082
6	3	3	1	4	4	0	0.01000	0.00116	1192.6272
6	9	4	6	9	5	5	0.01400	0.00321	1192.6657
6	18	1	17	19	2	18	0.00601	-0.00068	1192.7378
6	7	4	4	7	5	3	0.01083	0.00237	1192.7652
6	10	1	10	11	2	9	0.00589	-0.00023	1192.7954
6	6	4	3	6	5	2	0.00824	0.00180	1192.8068
6	5	4	2	5	5	1	0.00489	0.00119	1192.8428
6	19	7	13	18	6	12	0.00820	0.00058	1440.1333
6	20	7	14	19	6	13	0.00730	0.00094	1442.2636
6	17	8	10	16	7	9	0.02300	0.00104	1460.1858
6	18	8	11	17	7	10	0.01930	0.00048	1462.2888
6	20	8	13	19	7	12	0.01377	0.00047	1466.4432
6	22	8	15	21	7	14	0.00973	0.00079	1470.5292
3	24	1	24	25	1	25	0.04110	0.00757	1442.2324
3	22	2	20	23	2	21	0.01742	0.00435	1446.2075
3	22	3	20	23	3	21	0.04194	0.00924	1447.1261
3	19	0	19	20	0	20	0.03563	0.00355	1453.7086
3	20	6	14	21	6	15	0.00584	0.00015	1453.7134
3	17	4	13	18	4	14	0.02590	0.00405	1458.7240
3	17	4	14	18	4	15	0.02440	0.00255	1458.7334
3	1	0	1	2	0	2	0.03269	0.00058	1495.3252
3	1	0	1	0	0	0	0.01545	-0.00093	1502.6116
3	9	6	4	9	6	3	0.01936	0.00067	1502.6545
3	11	6	6	11	6	5	0.01317	0.00062	1502.9181
3	5	2	4	4	2	3	0.04578	-0.00504	1512.6594
3	5	2	3	4	2	2	0.04562	-0.00516	1512.7188
3	6	5	1	5	5	0	0.02354	-0.00271	1516.3326

Number of lines fit = 48

Rotational Partition Function = 2.8285908x10³

frequency difference) is also given. Lines marked by an asterisk were included in the fit with zero weight and correspond to very blended lines, or lines expected to be perturbed by terms not included in the molecular Hamiltonian. Lines marked by R were excluded from the fit because their residuals were greater than 5 standard deviations. Strengths are given in terms of $\text{cm}^{-2}\text{atm}^{-1}$. The last part of Table 3 gives the residuals for 74 excited state pure rotation transitions which were included in the fitting .

Figure 1 is a plot of the observed and calculated spectrum from 900 cm^{-1} ($11.1 \mu\text{m}$) to 1580 cm^{-1} ($6.33 \mu\text{m}$). In this figure the top trace is the observed spectrum, the middle trace is the calculated spectrum normalized so that the strongest feature in each band has a transmittance of 5% and the bottom trace is the same as the middle trace except that full scale corresponds to 90% transmittance. This figure was obtained in the following manner. It was found that the observed spectral lines in each of the 4 regions described in the experimental section could be modelled quite well by a gaussian line shape although the optimal line width varied from about 0.0033 cm^{-1} to 0.0024 cm^{-1} . The entire spectrum was therefore calculated as a 0.0028 cm^{-1} gaussian and in each region 5 to 10 lines were used to find a multiplicative factor which minimized the difference between the observed and calculated spectra (which were both in absorbance). In each region the spectrum was scaled so as to make the exponential of the strongest calculated feature = 0.05. The scaling factor was applied to the entire observed and calculated spectra. This figure is for illustrative purposes only.

Finally, Table 4 gives the energies of all the states up to $J = 30$ in the ground and excited states ν_3 , ν_4 , and ν_6 . The near coincidences of $\nu_4 K_a = 4$ and $\nu_6 K_a = 2$ states, $\nu_6 K_a = 6$ and $\nu_3 K_a = 3$ states, and $\nu_3 K_a = 7$ and $\nu_4 K_a = 10$ states are quite evident in this Table.

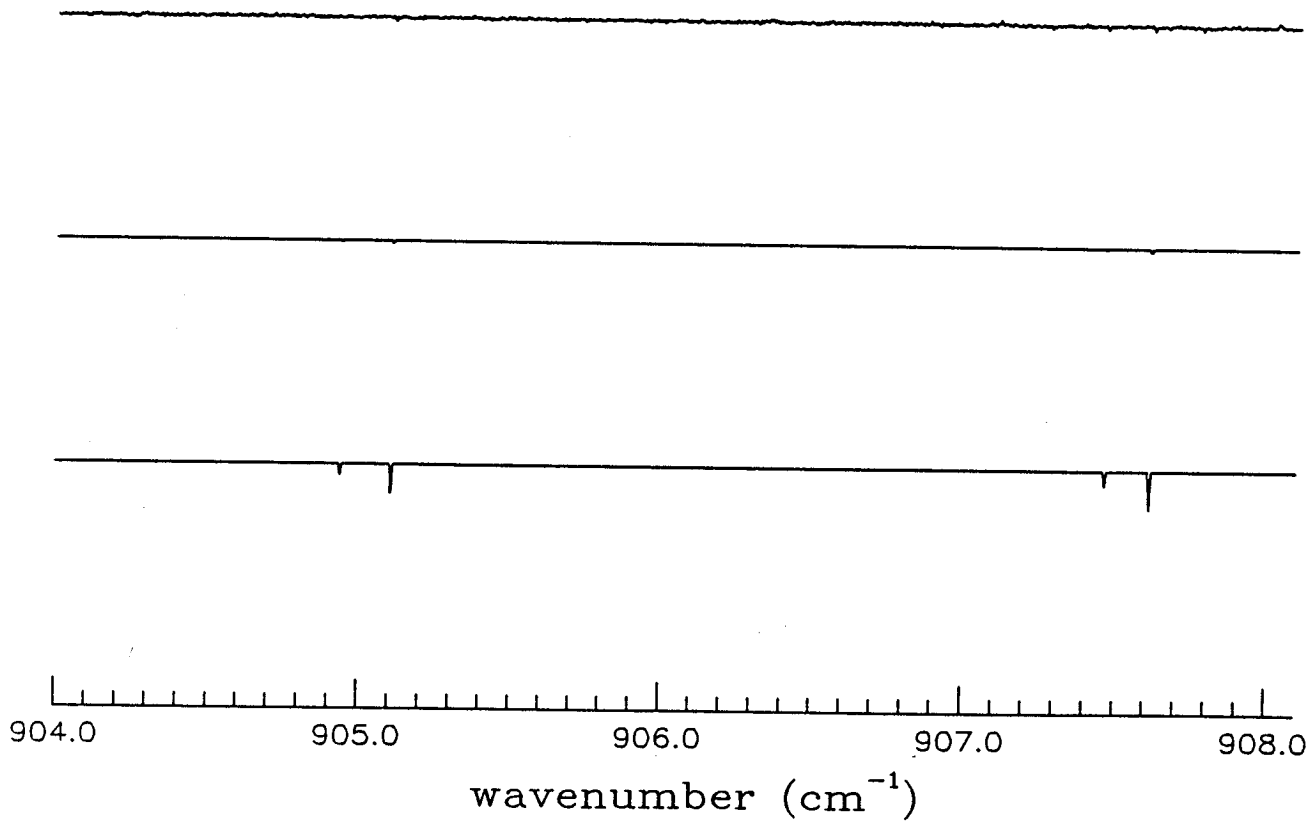
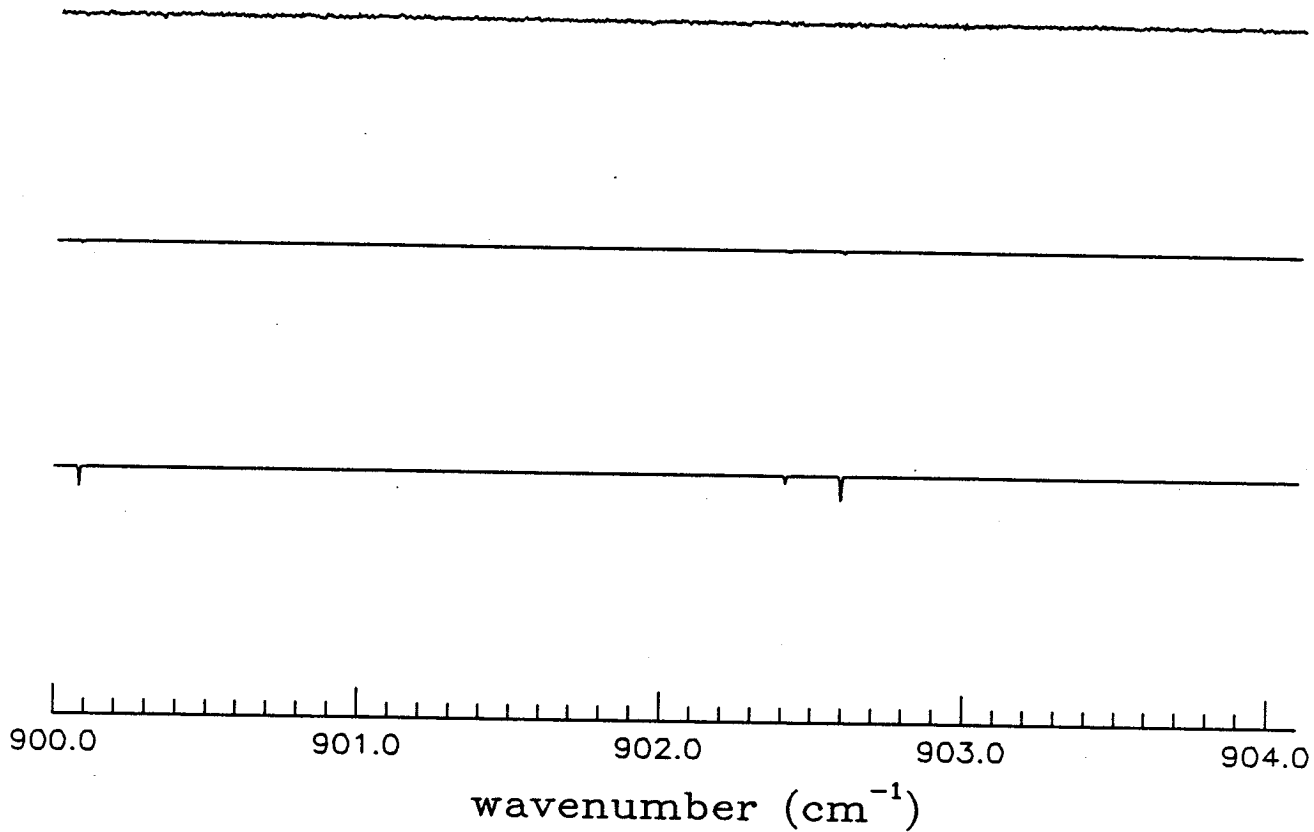
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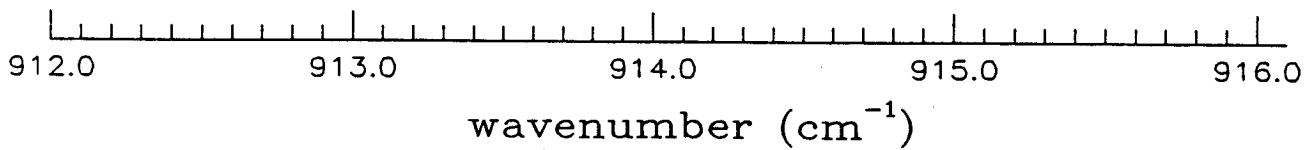
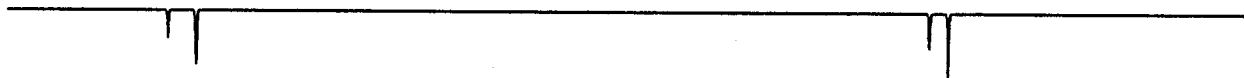
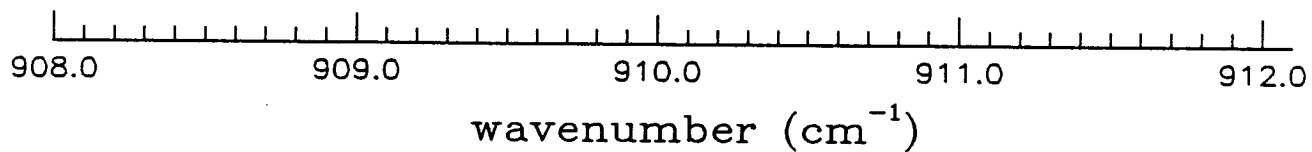
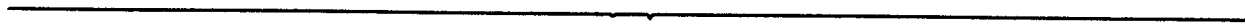
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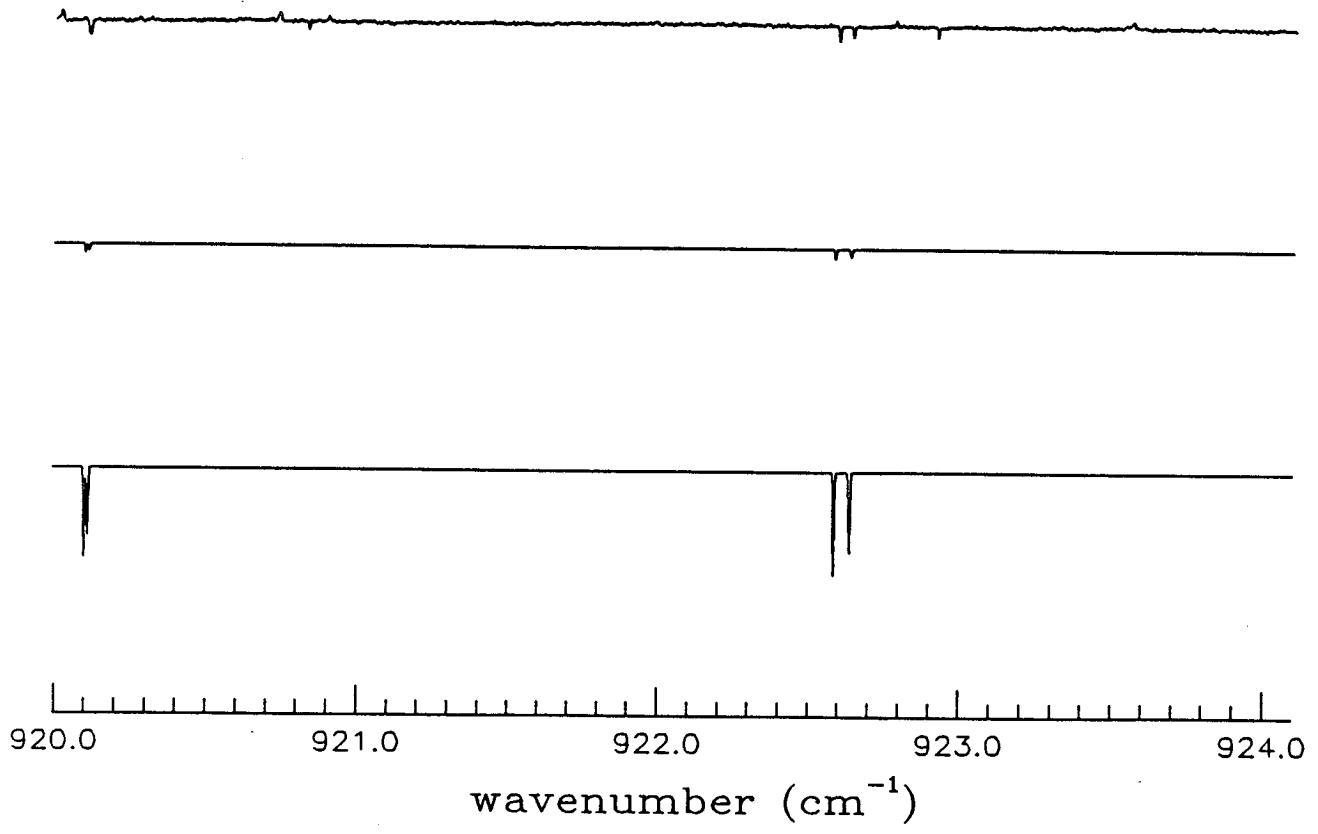
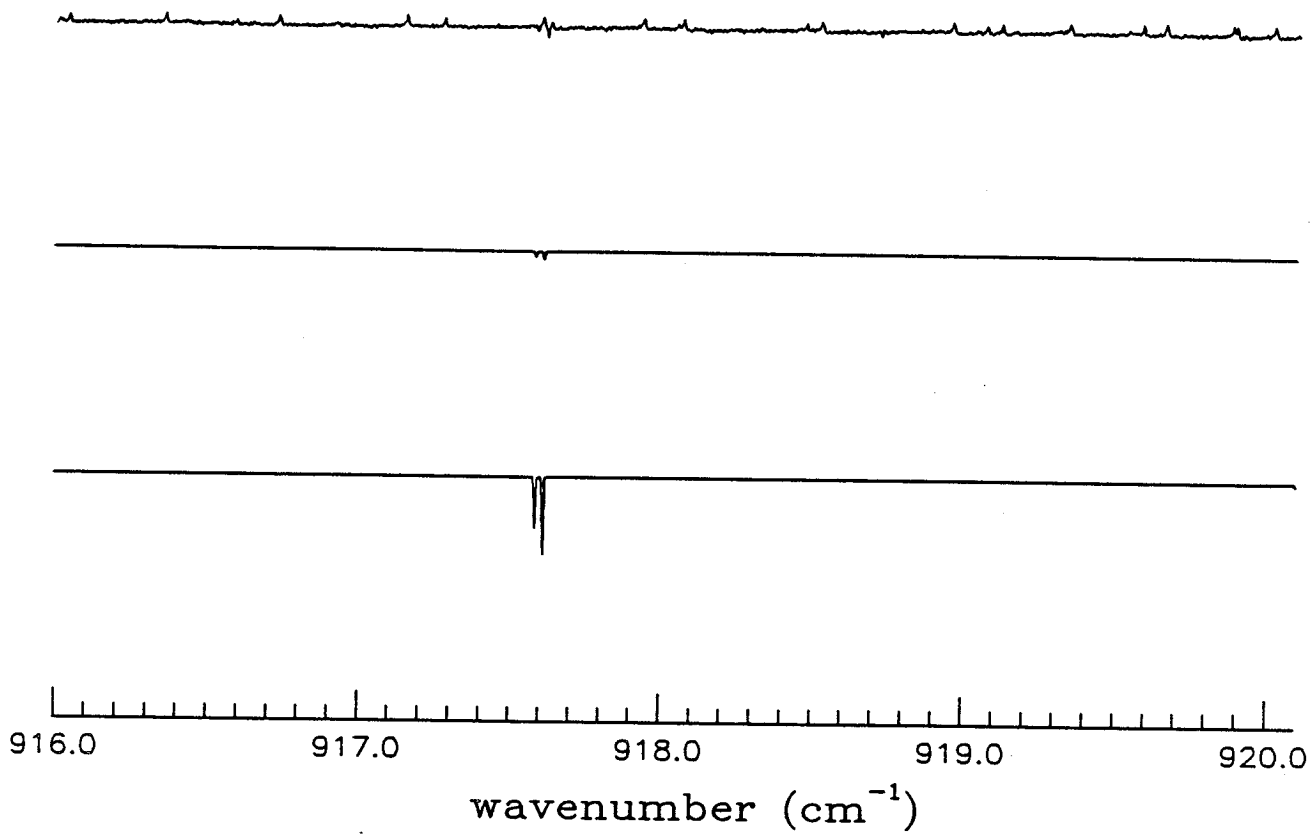
Figure 1: Observed and Calculated Spectra of the ν_3 , ν_4 , and ν_6 Bands of H_2CO from 900 cm^{-1} to 1580 cm^{-1} .

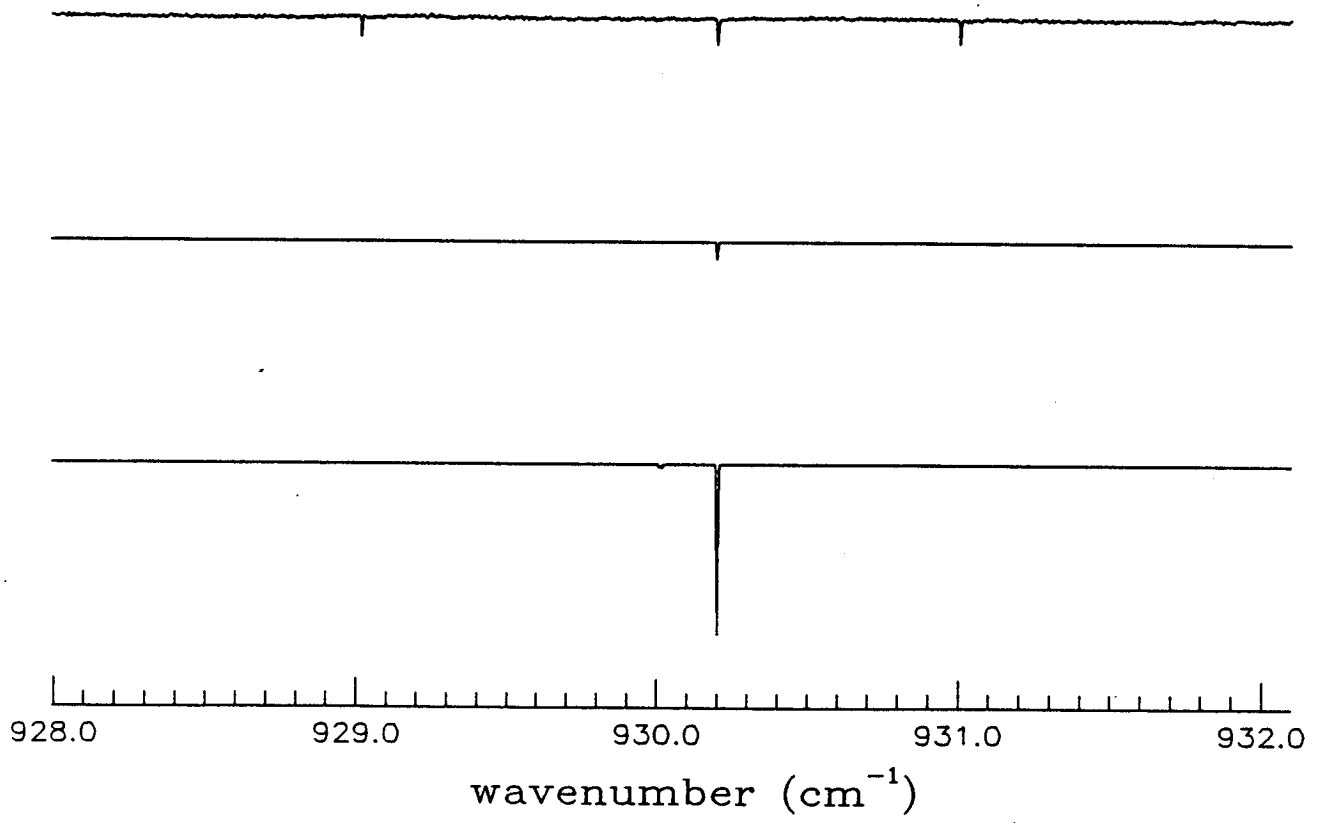
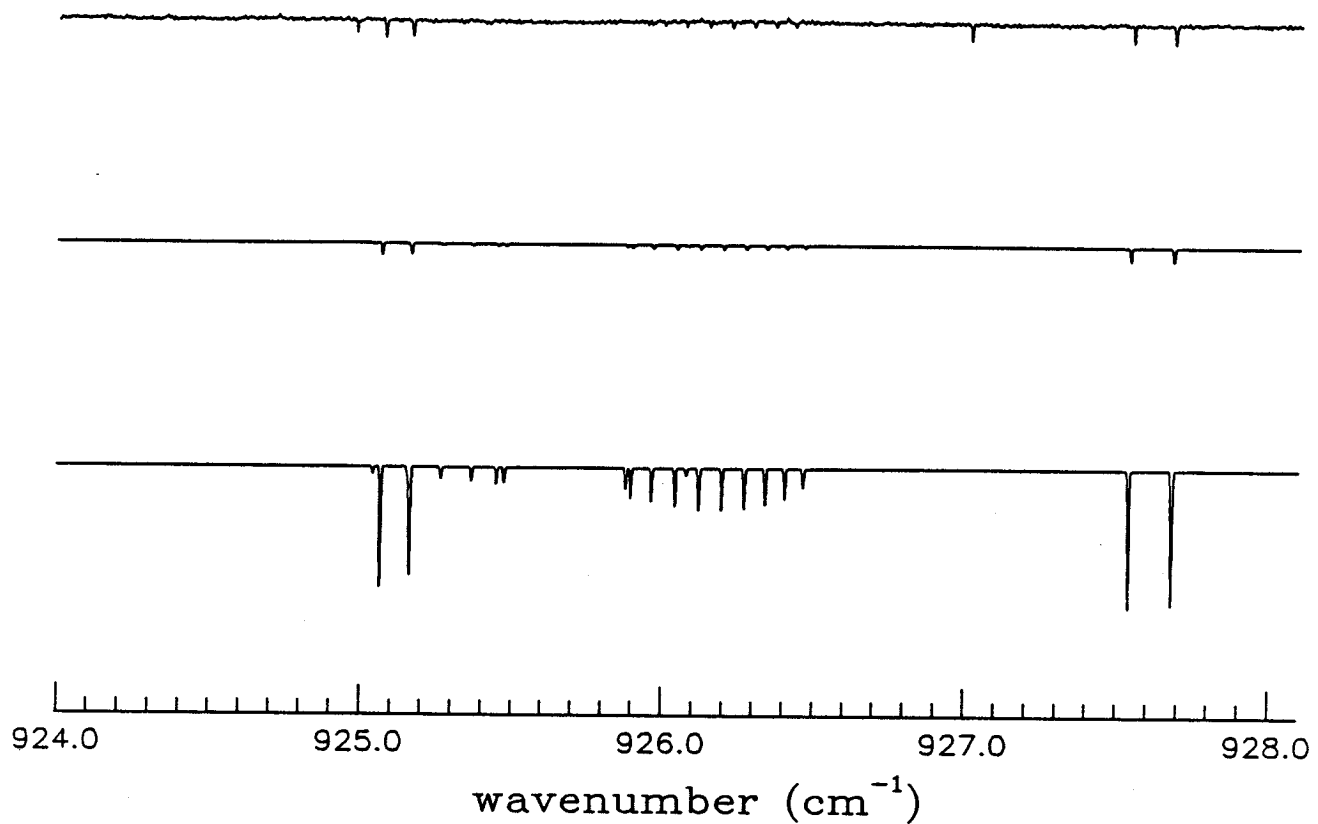
The top trace is the observed spectrum.

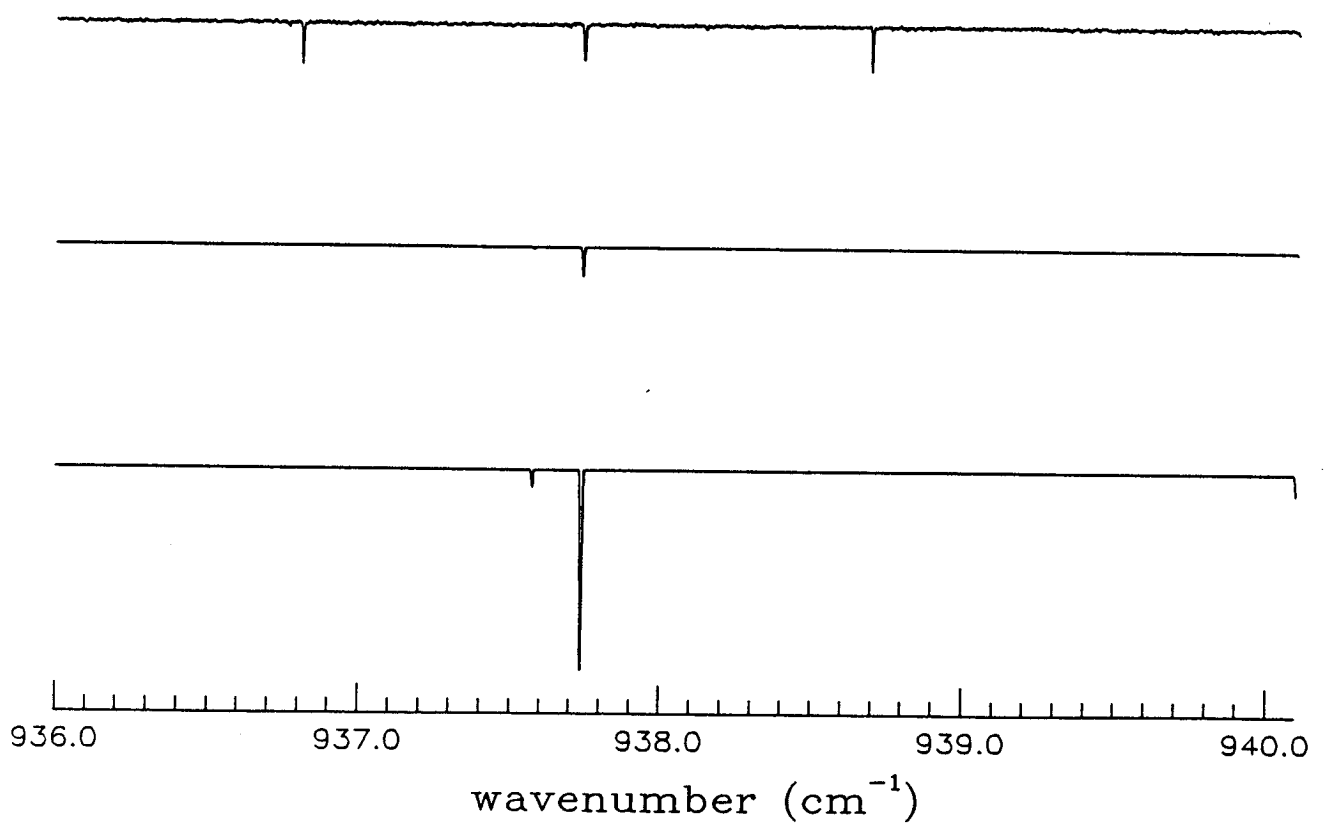
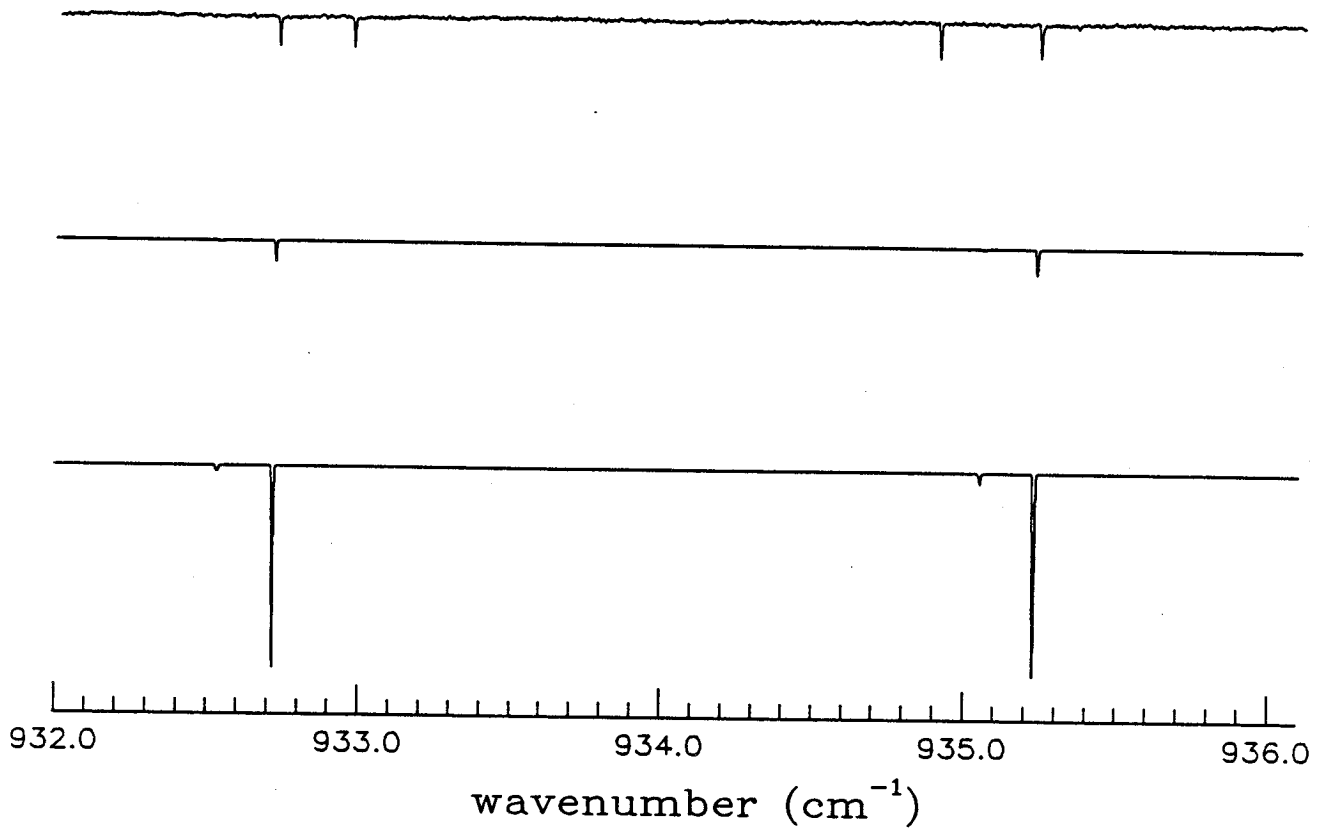
The middle trace is the calculated spectrum normalized so that the strongest feature in each band has a transmittance of 5% and the bottom trace is the same as the middle trace except that full scale corresponds to 90% transmittance.

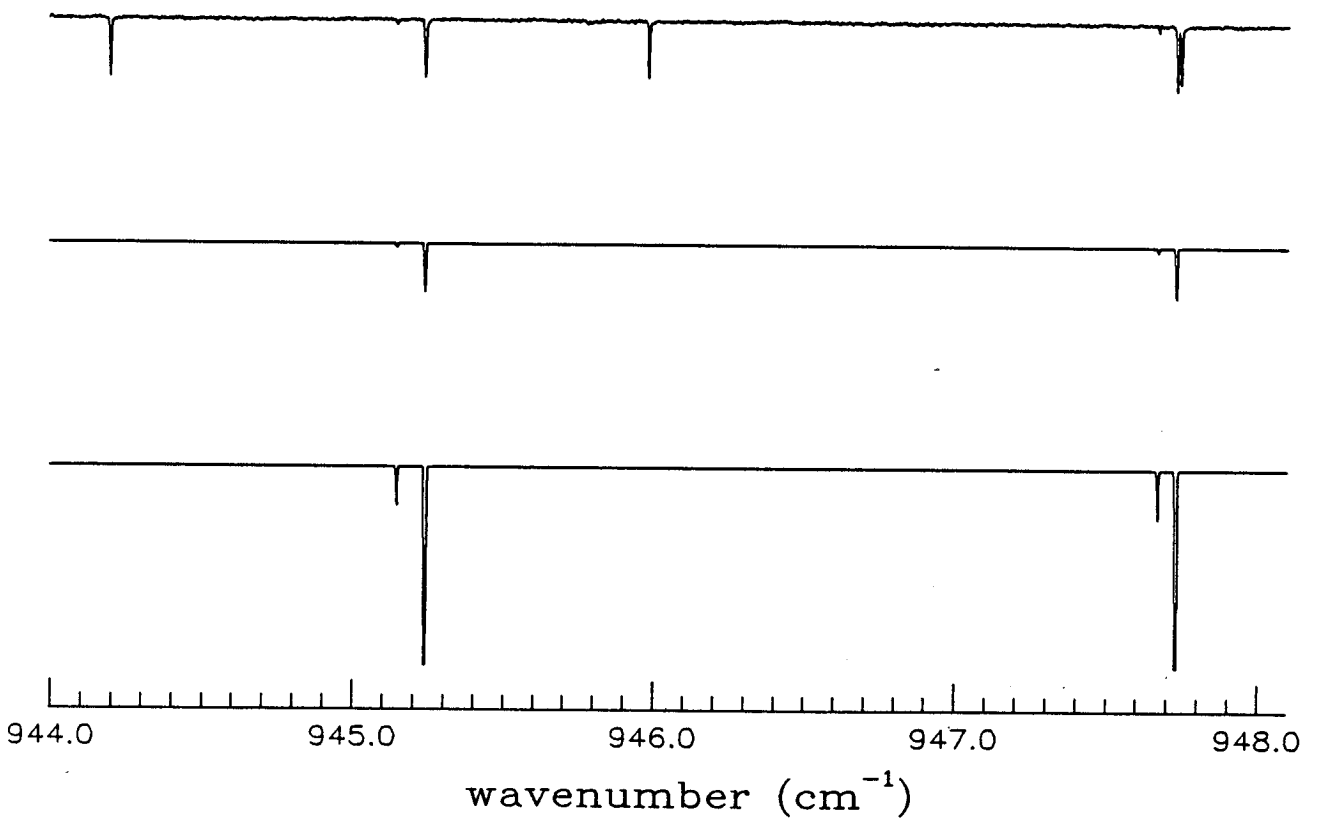
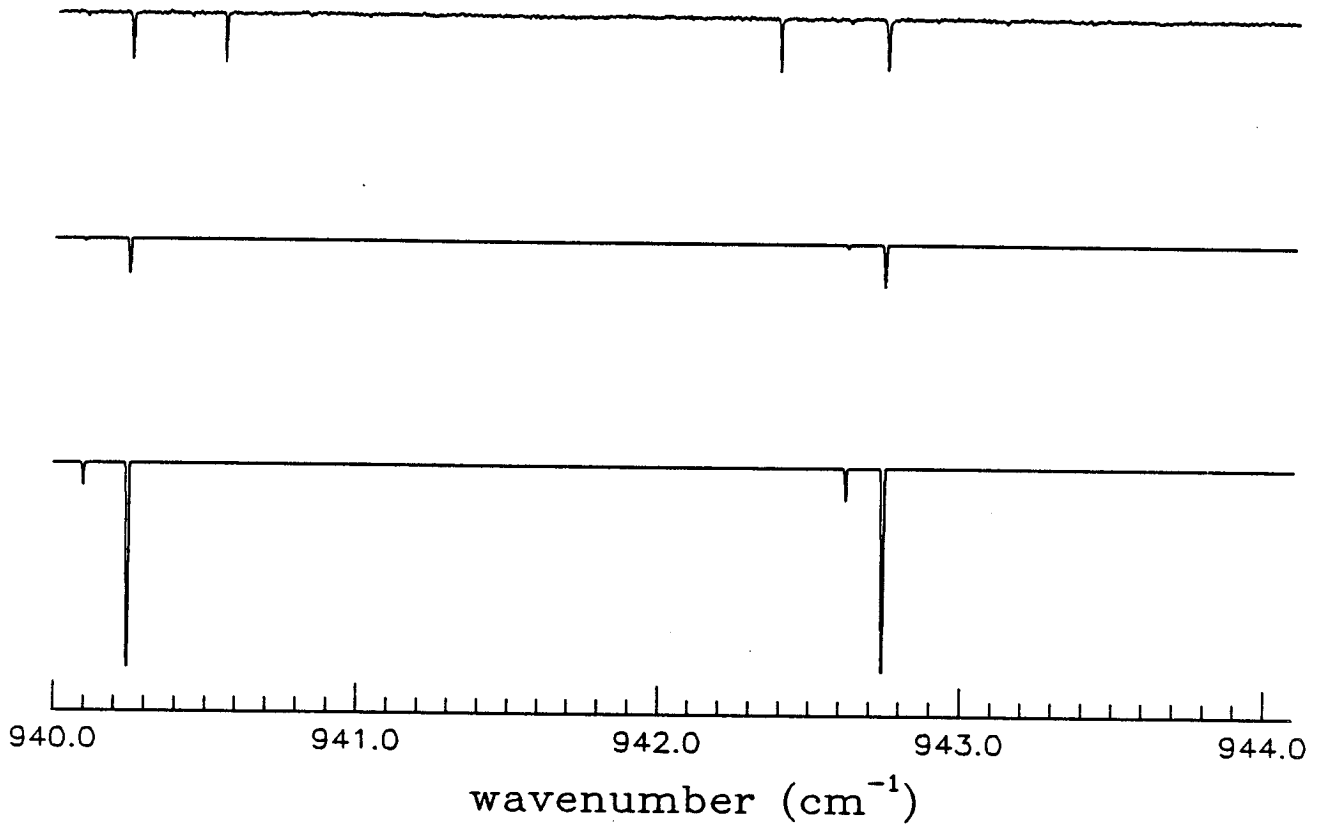


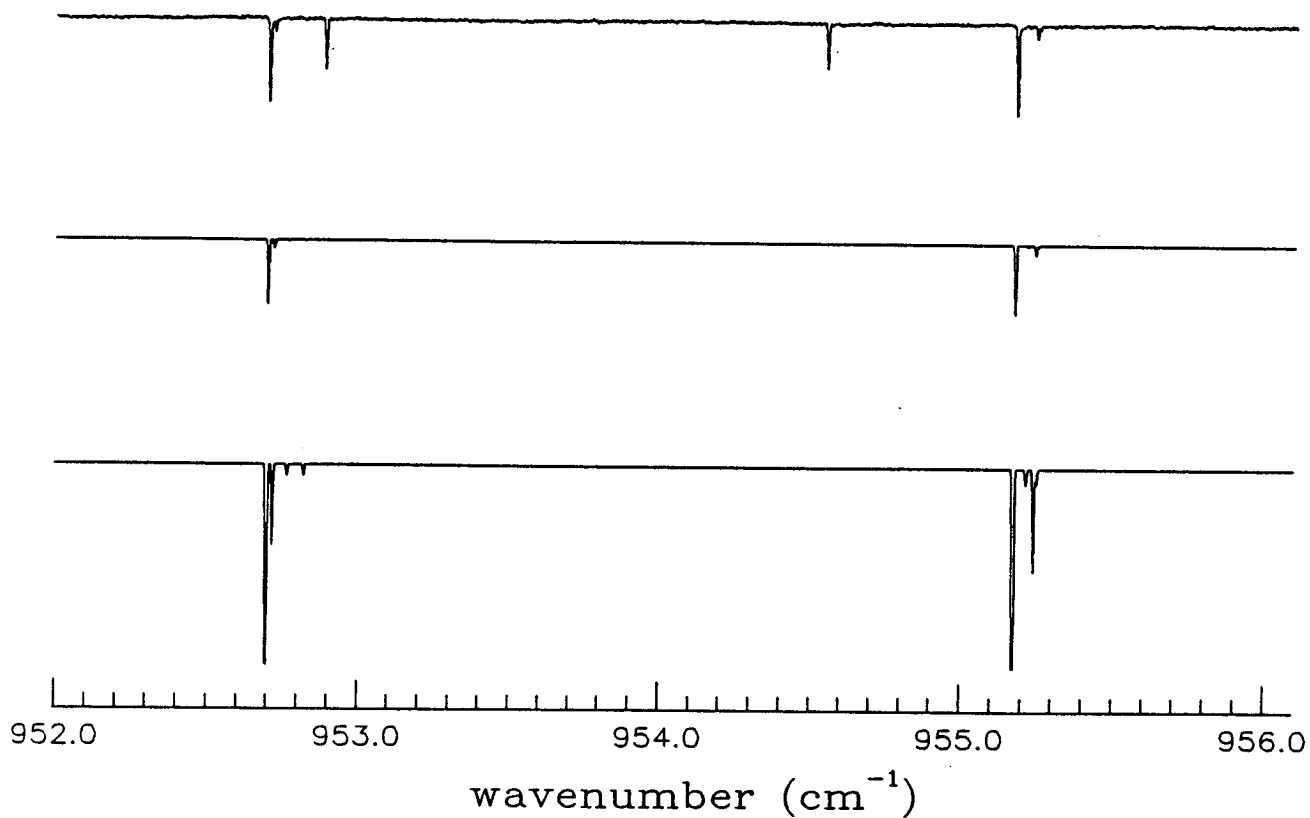
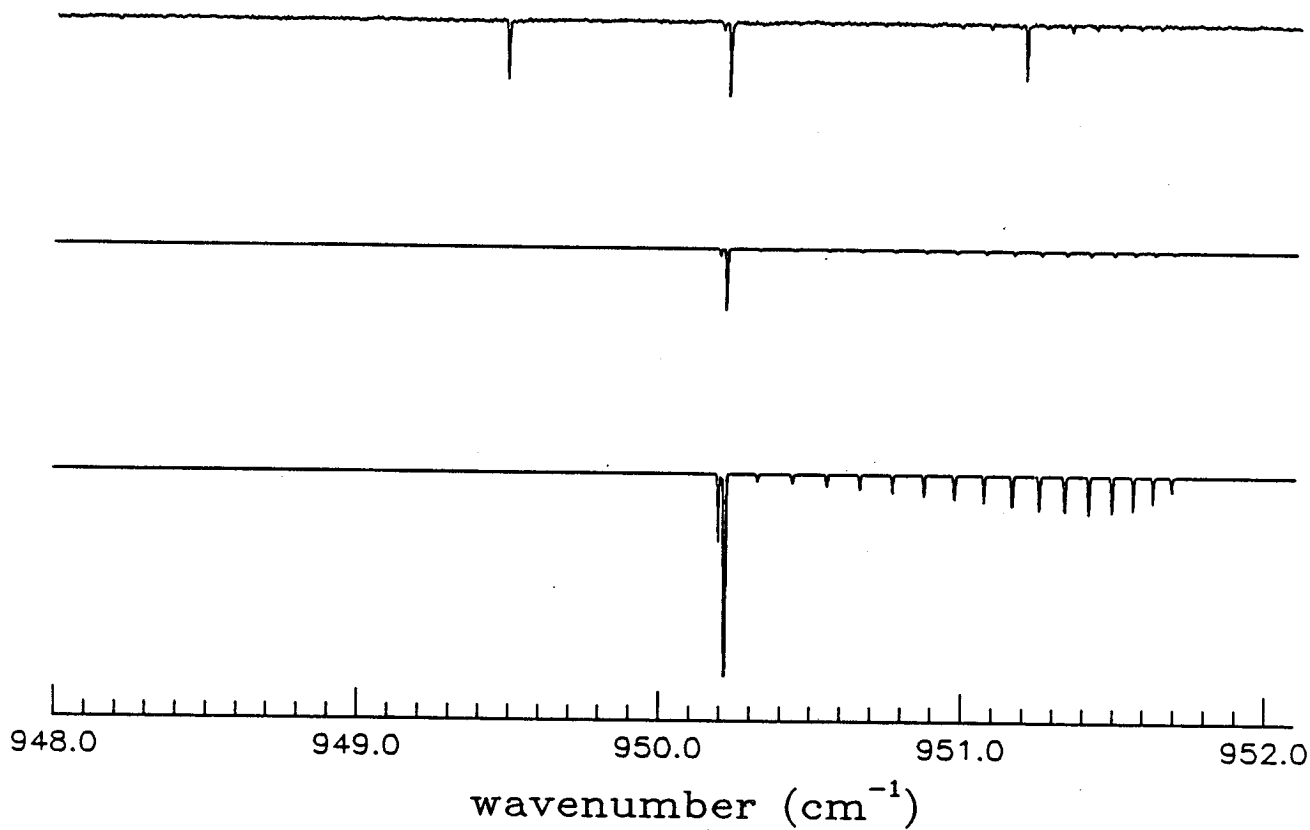


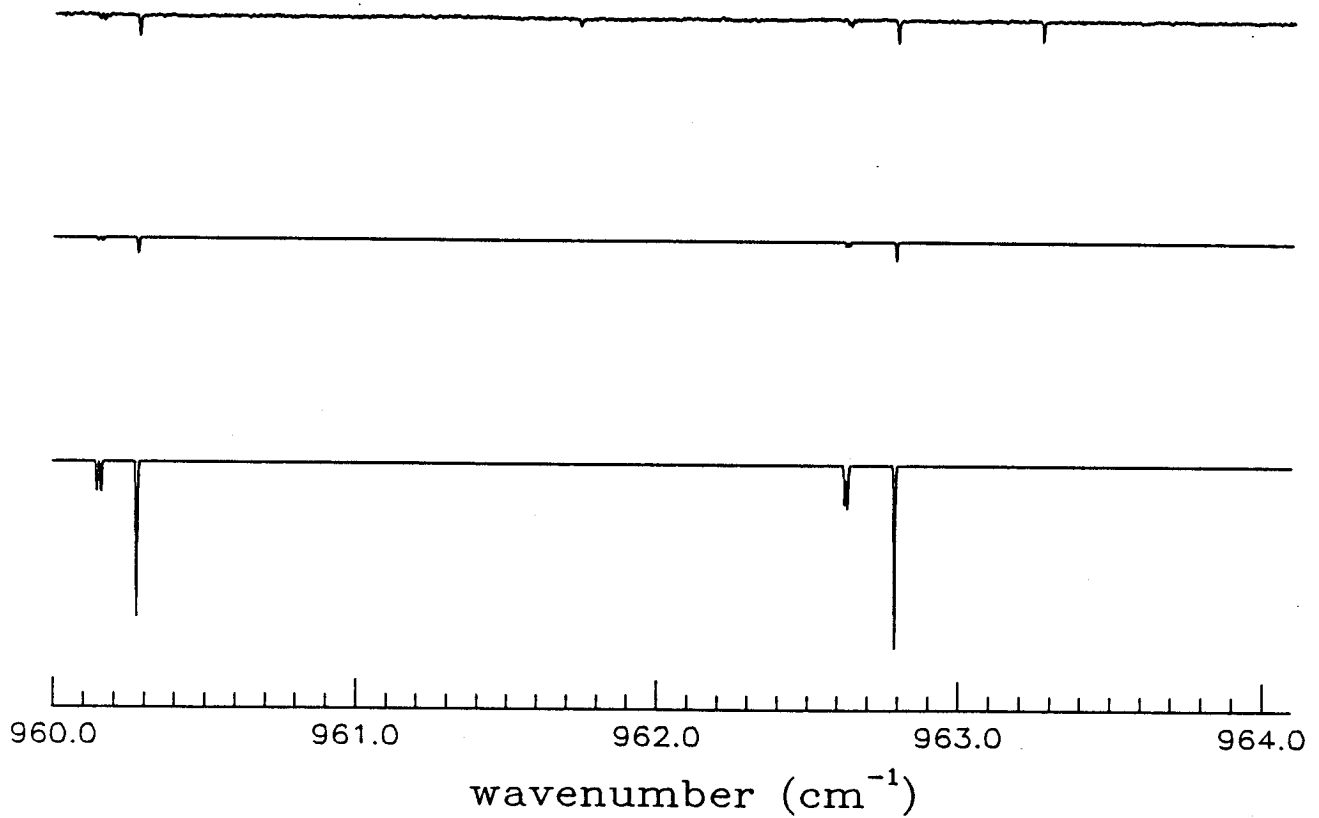
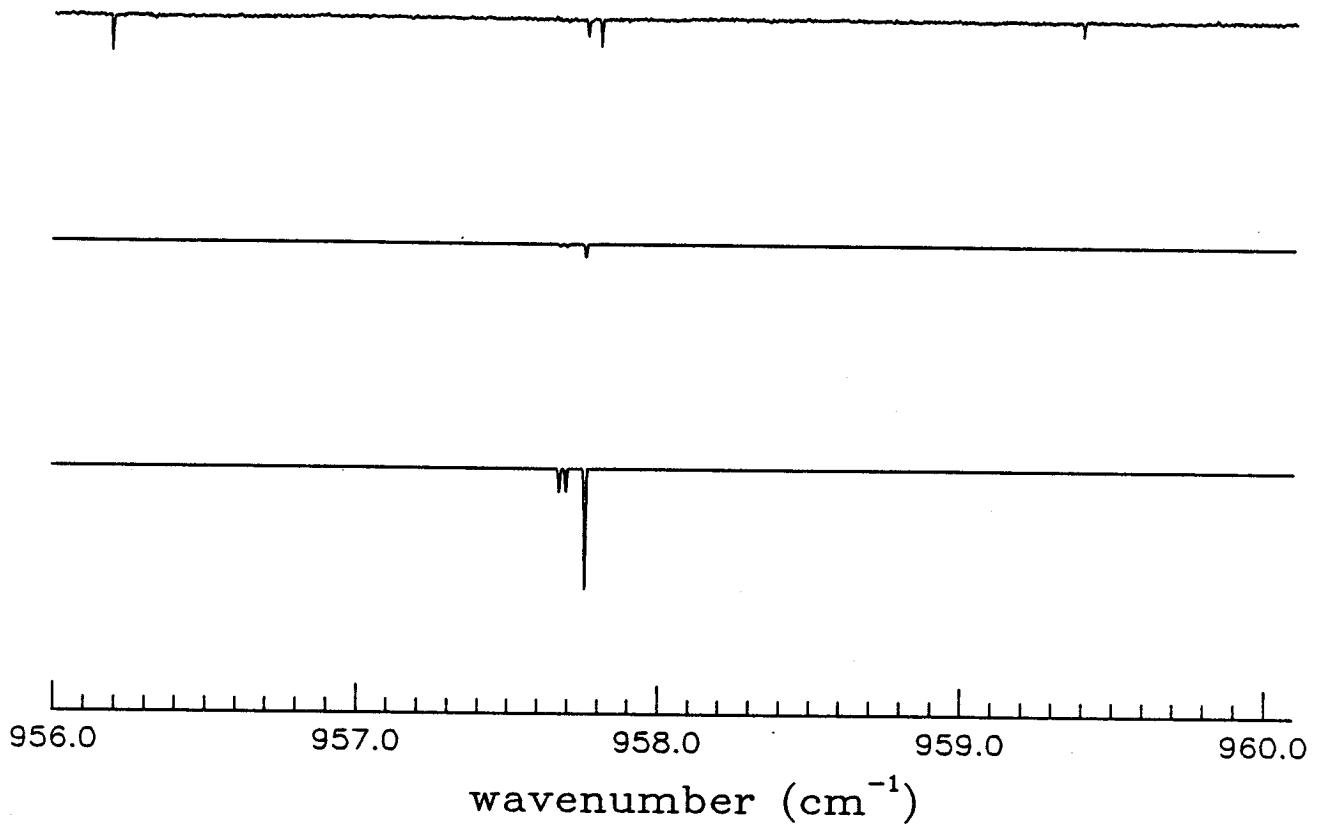


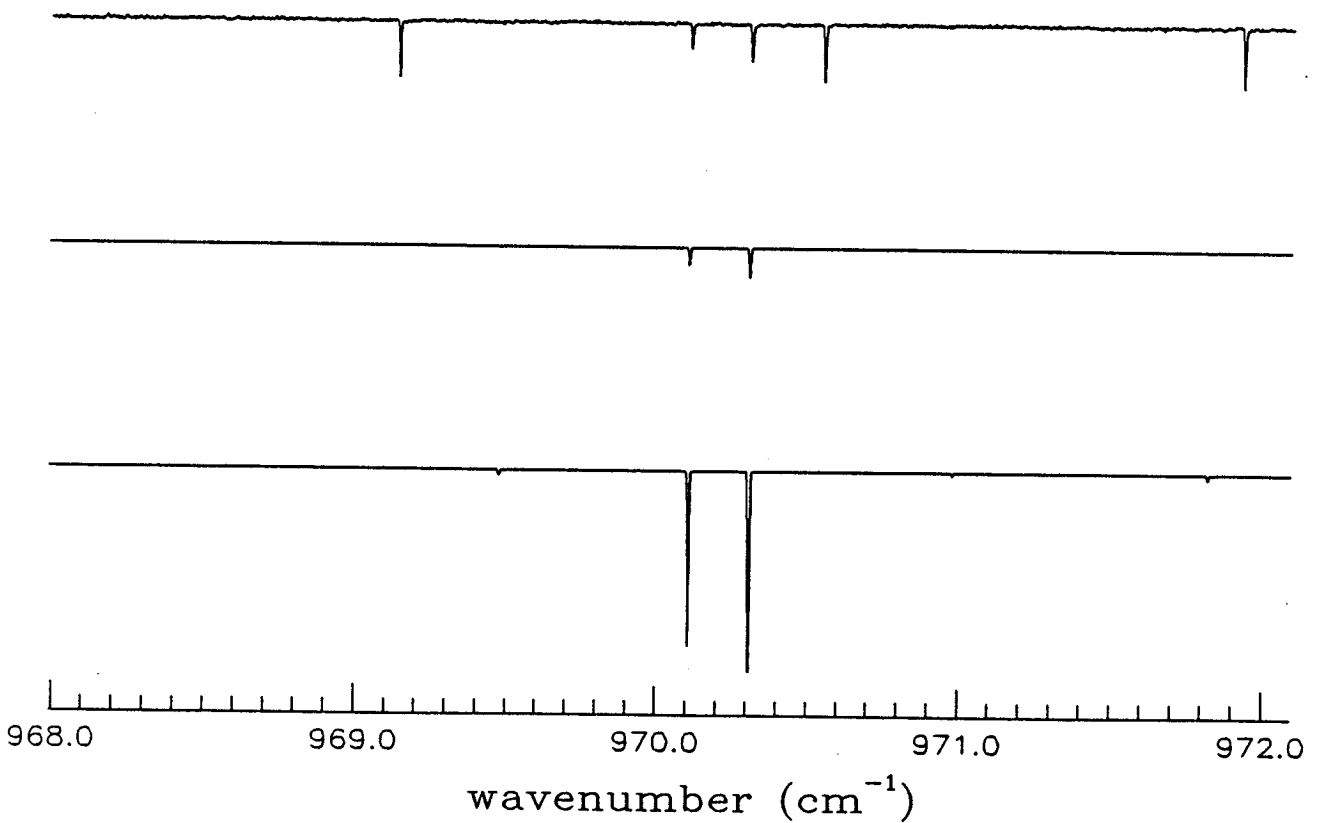
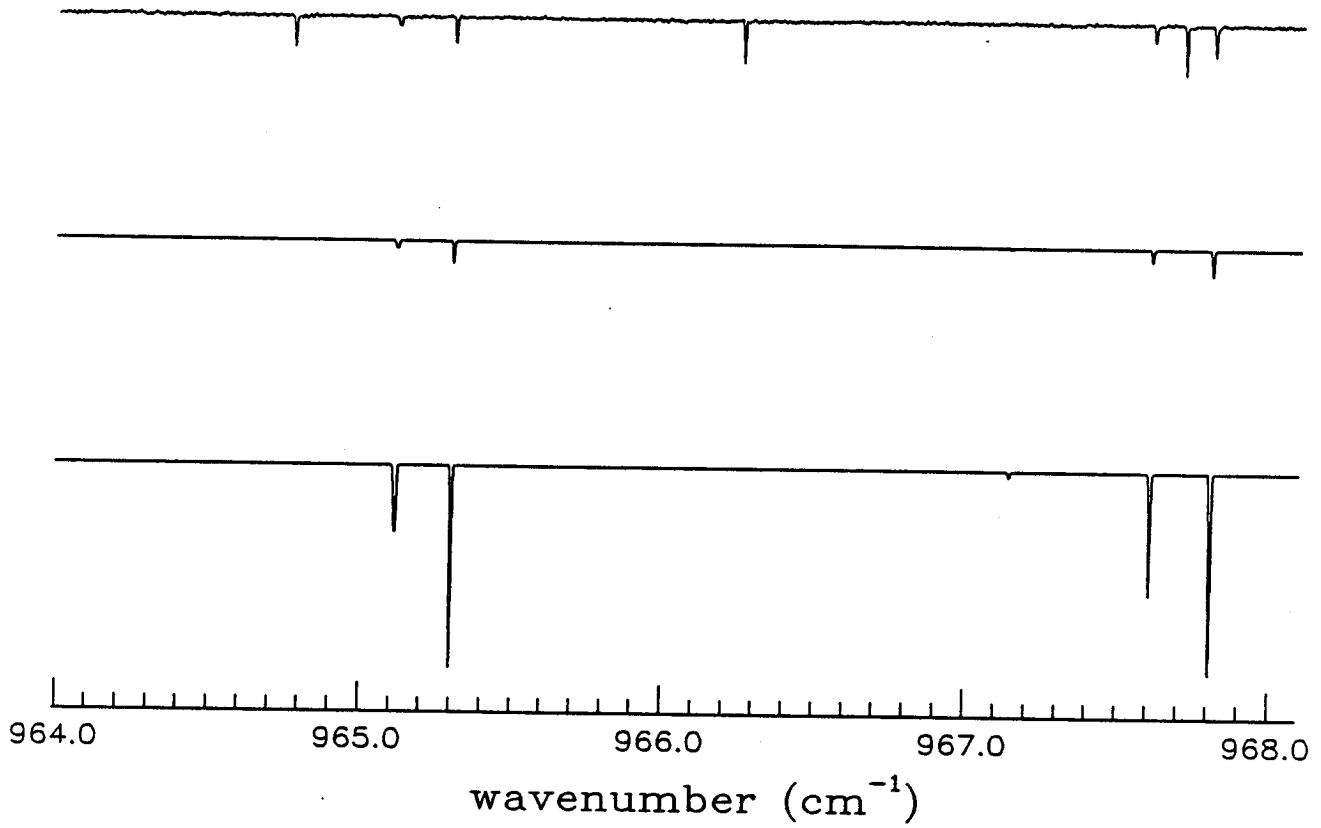












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This catalog presents the results of a complete high resolution study of the three vibration-rotation bands ν_3 , ν_4 , and ν_6 using both TDLs and FT-IR spectroscopy. The results are given in terms of a table of over 8000 predicted transition frequencies and strengths. A plot of the predicted and observed spectra is also shown. Over 3000 transitions were assigned and used in the simultaneous analysis of the three bands. The simultaneous fit permitted a rigorous study of Coriolis and other type interactions among the bands yielding improved molecular constants. Line intensities of 28 transitions measured by a TDL and 20 transitions from the FTS data were used, along with the eigenvectors from the frequency fitting, in a least squares analysis to evaluate the band strengths.

EXPERIMENTAL

High resolution FT-IR spectra of H_2CO from 890 to 1580 cm^{-1} have been recorded with a Bomem interferometer at the Herzberg Institute of Astrophysics in Ottawa. This instrument has an unapodized resolution of $\sim 0.0024 \text{ cm}^{-1}$. The spectra reported were apodized using a Hamming window yielding an observed width of 0.004 cm^{-1} . The spectra contained nearly 4000 transitions arising from the ν_3 , ν_4 , and ν_6 bands. A peak finder program running on the PDP-11 computer of the Bomem interferometer provided a measured wavenumber listing for these transitions. A trace of CO_2 gas introduced into the sample cell provided for absolute calibration. The spectra were recorded in four separate bands; 889 to 1095 cm^{-1} with a CO_2 pressure of 4 torr and 200 millitorr of H_2CO , 1079 to 1280 cm^{-1} with 4 torr of CO_2 and 200 millitorr of H_2CO , 1275 to 1450 cm^{-1} with 100 millitorr of H_2CO , and 1418 to 1580 cm^{-1} with 75 millitorr of H_2CO . All measurements were taken in a 6.75 meter cell at room temperature.

The observed transitions obtained from the FT-IR spectrum were assigned using ground-state-combination-differences. This method determines the upper state energy levels by a combination of observed infrared transition wavenumbers and the appropriate ground state energies. Line assignments were governed by the selection rules for an asymmetric top (formaldehyde is a near prolate symmetric top with

$\kappa = -0.961$). For any infrared-active band, the selection rules for the total angular momentum are $\Delta J = -1, 0, \text{ or } +1$ for the P, Q, or R branches respectively, with the constraint that no transitions occur between states with $J=0$ in both upper and lower levels. The selection rules for K_a and K_c are:

A-type bands: $\Delta K_a = 0, +/-2, +/-4, \dots$; $\Delta K_c = +/-1, +/-3, +/-5, \dots$
 B-type bands: $\Delta K_a = +/-1, +/-3, +/-5, \dots$; $\Delta K_c = +/-1, +/-3, +/-5, \dots$
 C-type bands: $\Delta K_a = +/-1, +/-3, +/-5, \dots$; $\Delta K_c = 0, +/-2, +/-4, \dots$

In formaldehyde, ν_3 , ν_4 , and ν_6 are A-, C- and B-type bands respectively.

The ground state energy levels for all transitions up to $J''=30$ and $K_a''=10$ were generated from the ground state rotational constants reported by Cornet and Winnewisser (1). Using these values in the GSCD computations, yielded predicted transition frequencies within 1 milli-wavenumber of the observed for transitions with $J < 15$ and $K_a < 5$. The errors in predicting higher J and K_a transitions were within 3 milli-wavenumbers.

THEORY

Frequency Analysis

The application of rotation-vibration theory to the analysis of the interacting ν_4 , ν_6 , and ν_3 bands of formaldehyde has been discussed elsewhere (2,3,4,5) and, as such, will only be very briefly summarized here. The rotational Hamiltonian used in the current study is the Watson A reduced Hamiltonian with all terms up to sextic in centrifugal distortion included (6). The $|\Delta K| = 1$ a-type coriolis interaction between ν_4 and ν_6 , as well as the b-type Coriolis interaction between ν_4 and ν_3 and the c-type Coriolis interactions between ν_6 and ν_3 are included as is a further higher order asymmetric effect $|\Delta K| = 2$ interaction between ν_4 and ν_6 (3). All of these terms, excluding some of the sextic centrifugal distortion terms, were included in an earlier analysis of these bands (2). However, to adequately explain the data in the current study it was found necessary to include a higher order $|\Delta K| = 3$ interaction term between ν_6 and ν_3 . The effect of this term, which is partly due to a combined Coriolis interaction and asymmetric effects has been discussed earlier (3) but its magnitude

had not been accurately determined. This term is most important for transitions ending in $K_a=6$ of ν_6 and $K_a=3$ in ν_3 and has little effect on other states. It was also found to be necessary to include more of the sextic centrifugal distortion terms in this analysis than in reference (2) because of the higher spectral resolution and greater range in J and K of the present data. A more complete description of the theory and the method of calculation of energies for the Hamiltonian described above, (including the form of the matrix elements), may be found in references (4,5).

Intensity Analysis

Given the transformation matrices which diagonalize the ground and upper state molecular Hamiltonians written in a rigid rotor-harmonic oscillator basis set, one can calculate the intensity of a given transition by pre-multiplying the transition dipole matrix, (written in the same basis set), by the ground state transformation and post multiplying it by the upper state transformation. For a given vibrational state the transition dipole matrix is a multiple of the derivative of the dipole moment with respect to the vibrational coordinate times a direction cosine term. When there are elements in the molecular Hamiltonian which connect different vibrational basis sets (e.g. Coriolis coupling terms) the intensity contains terms from more than one vibrational state and the relative signs of the dipole moment derivatives for the various vibrational motions become important. In the current work the magnitudes and relative signs of the derivatives for ν_3 , ν_4 , and ν_6 were determined by a least squares fitting procedure using intensity data determined in a diode laser study (7). Again, for a more thorough discussion of the intensity fitting procedure the reader is referred to references (4,5).

RESULTS

The molecular parameters resulting from the fitting of the observed infrared and excited state microwave transition frequencies are given in Table 1. The parameters fit are the rotationless energies of each of the upper states as well as the rotational constants, the quartic centrifugal distortion constants, the diagonal sextic constants, except for H_J , and five inter-state interaction coefficients. This choice of parameter set is reasonable but somewhat arbitrary, and the least squares fit is not a well posed problem. However, this set of 41 constants was the fewest which could be used in

Table 1: Molecular Constants for the v_3 , v_4 and v_6 Bands of H_2CO .

	<u>Ground State^a</u>	<u>$v_4=1$</u>	<u>$v_6=1$</u>	<u>$v_3=1$</u>	
v_0		1167.25675(4) ^b	1249.09438(4)	1500.17452(5)	
A	9.4055259	9.38109(121)	9.39539(121)	9.46712(1)	
B	1.2954310	1.291412(3)	1.298153(1)	1.295821(4)	
C	1.1341914	1.1356615(6)	1.1296077(31)	1.1295653(35)	
Δ_K	6.479062	2.1096(47)	10.9804(45)	6.8893(36)	$\times 10^{-4}$
Δ_{JK}	4.304664	3.7045(70)	5.2059(74)	4.1347(50)	$\times 10^{-5}$
Δ_J	2.511582	2.4727(7)	2.5605(8)	2.7282(9)	$\times 10^{-6}$
R_5	-1.711235	-1.2204(37)	-2.1158(45)	-2.2614(49)	$\times 10^{-5}$
δ_J	3.487999	2.9385(27)	3.6526(37)	4.6264(33)	$\times 10^{-7}$
H_K	1.500705	1.503(141)	1.572(138)	1.951(31)	$\times 10^{-7}$
H_{KJ}	-0.374192	-2.749(74)	4.234(99)	-4.519(143)	$\times 10^{-8}$
H_{JK}	0.96797	0.188(85)	2.828(59)	-0.687(68)	$\times 10^{-9}$
H_J	1.04856	c	c	c	$\times 10^{-12}$
h_J	1.41427	c	c	c	$\times 10^{-12}$
h_{JK}	5.22558	c	c	c	$\times 10^{-10}$
h_K	4.5769	c	c	c	$\times 10^{-8}$

Coriolis Constants

ξ_{64}^a	10.44086(473)
ξ_{34}^b	1.7505(2)
ξ_{36}^c	0.68836(62)
η_{64}^{bc}	$-1.9532(122) \times 10^{-3}$
z_{36}	$-7.968(80) \times 10^{-6}$

- From reference 1.
- The uncertainties in parenthesis are 1σ from the least-squares fit, right-adjusted to the last digit of the parameter.
- These parameters were fixed to the ground state values.

Weighted fitting error = 0.852

Normalized fitting error = $7.47 \times 10^{-4} \text{ cm}^{-1}$

which fitting results were not markedly improved by the addition of further fitting parameters. Also given in Table 1 are two measures of goodness of fit; the weighted fitting error defined as: $(\sum \omega_i \Delta_i^2 / (N - N_p))^{1/2}$ and the normalized fitting error defined as: $(\sum \omega_i' \Delta_i^2)^{1/2}$. In these expressions ω_i is the inverse of the squared error in measurement i , Δ_i is the residual of the fit for transition i , N is the total number of lines fit, N_p is the number of parameters, and $\omega_i' = \omega_i / \sum \omega_i$. The uncertainties chosen for the infrared transitions were 0.0005 cm^{-1} for upper states with $J < 15$ and $K < 5$ and 0.001 cm^{-1} for most of the rest of the lines, although some blended lines were assigned uncertainties of 0.002 cm^{-1} . The low J and K uncertainty is about 2-3 times the measurement error, as determined from the CO_2 calibration lines. The excess uncertainty reflects effects of terms not included in the fitting process which are expected to have more influence at higher J and K . The uncertainties for the microwave data were taken to be the experimental error (1). Note that the weighted fitting error should be about 1 if the weights are correct. The parameters obtained were not strongly dependent upon the weights chosen.

The results of the fitting procedure for the intensities are given in Table 2. Here the measured intensities for ν_4 and ν_6 were taken from a diode laser study (7) and the intensities for ν_3 were taken from the FTIR data described above. To convert the ν_3 FTS intensity data to the diode laser units about 20 observed and calculated relatively weak (transmittance $> 70\%$) ν_6 lines were used as a transfer standard. That is, the average multiplicative factor required to make the observed ν_6 intensities agree with the calculated FT-IR ν_6 intensities was applied to observed ν_3 lines in the same intensity range. The multiplicative factor is expected to be a weak function of line strength and, in fact, it seems to vary about 5% over the intensity range chosen. This slight variation, which may be due to other effects, was ignored. As may be seen from the table essentially all of the calculated intensities agree with the observed to better than 10 to 20 percent, although there are a few outliers. It should be noted that the results degraded significantly if mixing of vibrational states was ignored in the determination of the intensities or if different relative signs were used for the dipole moment derivatives. The uncertainties used in determining the weights used in the least squares fitting procedure were taken to be the experimental uncertainty given in reference (7) for the diode data (with an additional error of 0.001 added) while the FTS data was given less weight.

A complete listing of all H_2CO ν_3 , ν_4 , and ν_6 lines whose calculated intensities are greater than 0.01% of the strongest line is given in Table 3. For those lines which were identified and used in the frequency fitting procedure the residual (obs. - cal.

Table 2: Results of Intensity Fitting.

Band v	Upper State J K _a K _c	Lower state J K _a K _c	Obs. Int cm ⁻² atm ⁻¹	Obs.-Cal. cm ⁻¹	Frequency
6	17 4 14	18 5 13	0.00323	-0.00066	1148.3347
6	17 4 13	18 5 14	0.00340	-0.00049	1148.3602
4	11 2 9	10 3 7	0.02113	-0.00118	1148.3451
4	3 0 3	4 1 3	0.04737	0.00651	1148.4704
4	16 1 15	16 2 15	0.01866	0.00187	1148.5084
4	1 0 1	1 1 1	0.02953	-0.00004	1159.1358
4	2 0 2	2 1 2	0.04846	-0.00009	1159.2718
4	28 2 27	28 1 27	0.00594	0.00067	1159.2931
4	15 2 13	14 3 11	0.01883	-0.00319	1159.3918
6	6 6 1	7 7 0	0.00744	0.00194	1159.4110
4	9 1 9	8 2 7	0.00743	-0.00051	1159.4397
4	3 0 3	3 1 3	0.06663	0.00019	1159.4717
4	18 2 17	18 1 17	0.03208	0.00402	1172.3860
4	6 1 6	6 0 6	0.02843	0.00026	1172.5256
6	12 2 1	13 3 10	0.01898	-0.00043	1180.6443
6	4 4 1	5 5 0	0.01921	0.00163	1180.7330
4	24 0 24	23 1 22	0.00261	-0.00143	1180.8077
4	11 2 10	11 1 10	0.03400	-0.00142	1180.8323
6	13 2 11	14 3 12	0.01651	-0.00247	1180.8831
6	10 4 7	10 5 6	0.01400	0.00274	1192.6082
6	3 3 1	4 4 0	0.01000	0.00116	1192.6272
6	9 4 6	9 5 5	0.01400	0.00321	1192.6657
6	18 1 17	19 2 18	0.00601	-0.00068	1192.7378
6	7 4 4	7 5 3	0.01083	0.00237	1192.7652
6	10 1 10	11 2 9	0.00589	-0.00023	1192.7954
6	6 4 3	6 5 2	0.00824	0.00180	1192.8068
6	5 4 2	5 5 1	0.00489	0.00119	1192.8428
6	19 7 13	18 6 12	0.00820	0.00058	1440.1333
6	20 7 14	19 6 13	0.00730	0.00094	1442.2636
6	17 8 10	16 7 9	0.02300	0.00104	1460.1858
6	18 8 11	17 7 10	0.01930	0.00048	1462.2888
6	20 8 13	19 7 12	0.01377	0.00047	1466.4432
6	22 8 15	21 7 14	0.00973	0.00079	1470.5292
3	24 1 24	25 1 25	0.04110	0.00757	1442.2324
3	22 2 20	23 2 21	0.01742	0.00435	1446.2075
3	22 3 20	23 3 21	0.04194	0.00924	1447.1261
3	19 0 19	20 0 20	0.03563	0.00355	1453.7086
3	20 6 14	21 6 15	0.00584	0.00015	1453.7134
3	17 4 13	18 4 14	0.02590	0.00405	1458.7240
3	17 4 14	18 4 15	0.02440	0.00255	1458.7334
3	1 0 1	2 0 2	0.03269	0.00058	1495.3252
3	1 0 1	0 0 0	0.01545	-0.00093	1502.6116
3	9 6 4	9 6 3	0.01936	0.00067	1502.6545
3	11 6 6	11 6 5	0.01317	0.00062	1502.9181
3	5 2 4	4 2 3	0.04578	-0.00504	1512.6594
3	5 2 3	4 2 2	0.04562	-0.00516	1512.7188
3	6 5 1	5 5 0	0.02354	-0.00271	1516.3326

Number of lines fit = 48

Rotational Partition Function = 2.8285908x10³

frequency difference) is also given. Lines marked by an asterisk were included in the fit with zero weight and correspond to very blended lines, or lines expected to be perturbed by terms not included in the molecular Hamiltonian. Lines marked by R were excluded from the fit because their residuals were greater than 5 standard deviations. Strengths are given in terms of $\text{cm}^{-2}\text{atm}^{-1}$. The last part of Table 3 gives the residuals for 74 excited state pure rotation transitions which were included in the fitting.

Figure 1 is a plot of the observed and calculated spectrum from 900 cm^{-1} ($11.1\ \mu\text{m}$) to 1580 cm^{-1} ($6.33\ \mu\text{m}$). In this figure the top trace is the observed spectrum, the middle trace is the calculated spectrum normalized so that the strongest feature in each band has a transmittance of 5% and the bottom trace is the same as the middle trace except that full scale corresponds to 90% transmittance. This figure was obtained in the following manner. It was found that the observed spectral lines in each of the 4 regions described in the experimental section could be modelled quite well by a gaussian line shape although the optimal line width varied from about 0.0033 cm^{-1} to 0.0024 cm^{-1} . The entire spectrum was therefore calculated as a 0.0028 cm^{-1} gaussian and in each region 5 to 10 lines were used to find a multiplicative factor which minimized the difference between the observed and calculated spectra (which were both in absorbance). In each region the spectrum was scaled so as to make the exponential of the strongest calculated feature = 0.05. The scaling factor was applied to the entire observed and calculated spectra. This figure is for illustrative purposes only.

Finally, Table 4 gives the energies of all the states up to $J = 30$ in the ground and excited states ν_3 , ν_4 , and ν_6 . The near coincidences of $\nu_4\ K_a = 4$ and $\nu_6\ K_a = 2$ states, $\nu_6\ K_a = 6$ and $\nu_3\ K_a = 3$ states, and $\nu_3\ K_a = 7$ and $\nu_4\ K_a = 10$ states are quite evident in this Table.

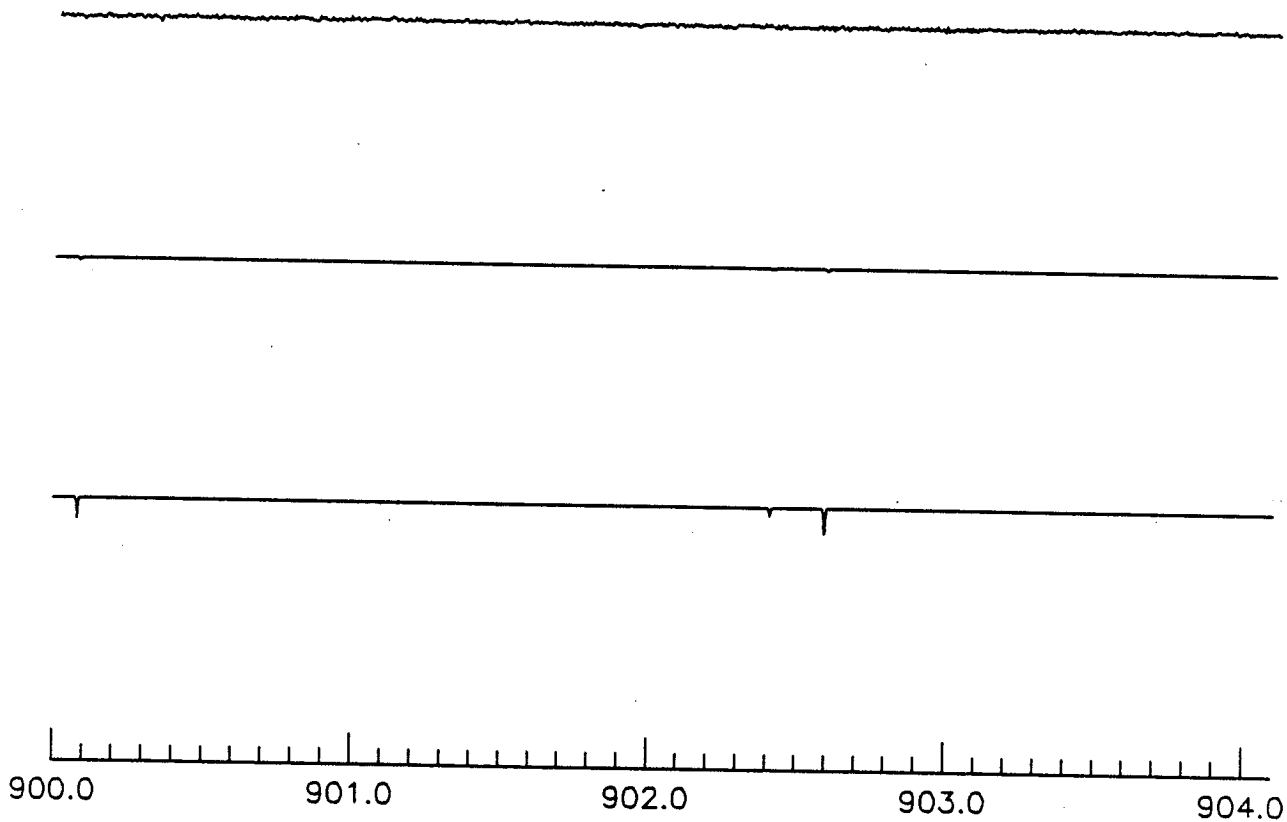
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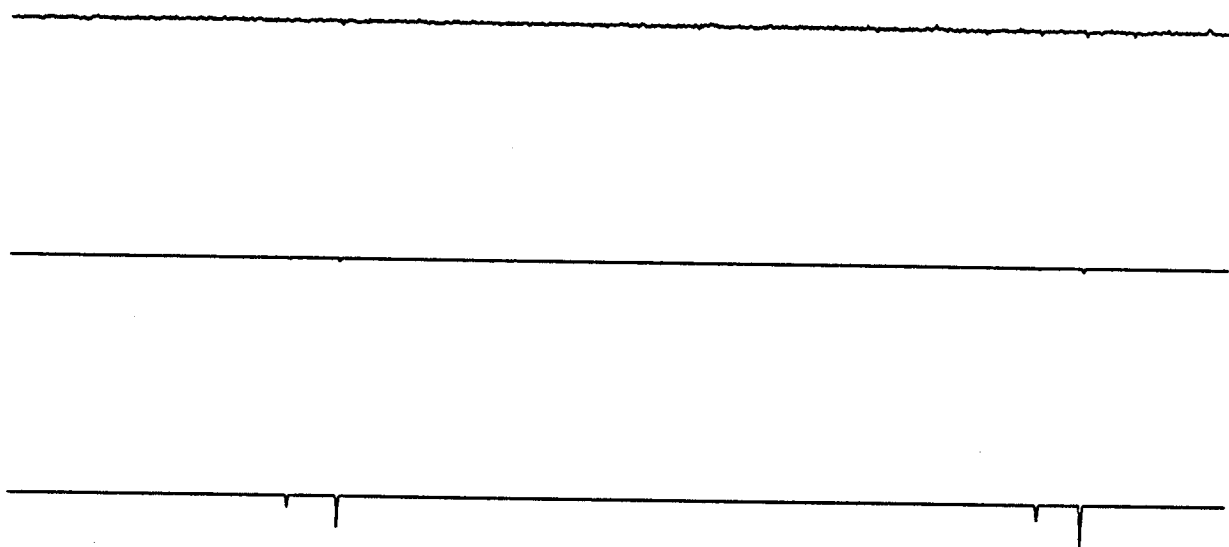
Figure 1: Observed and Calculated Spectra of the ν_3 , ν_4 , and ν_6 Bands of H_2CO from 900 cm^{-1} to 1580 cm^{-1} .

The top trace is the observed spectrum.

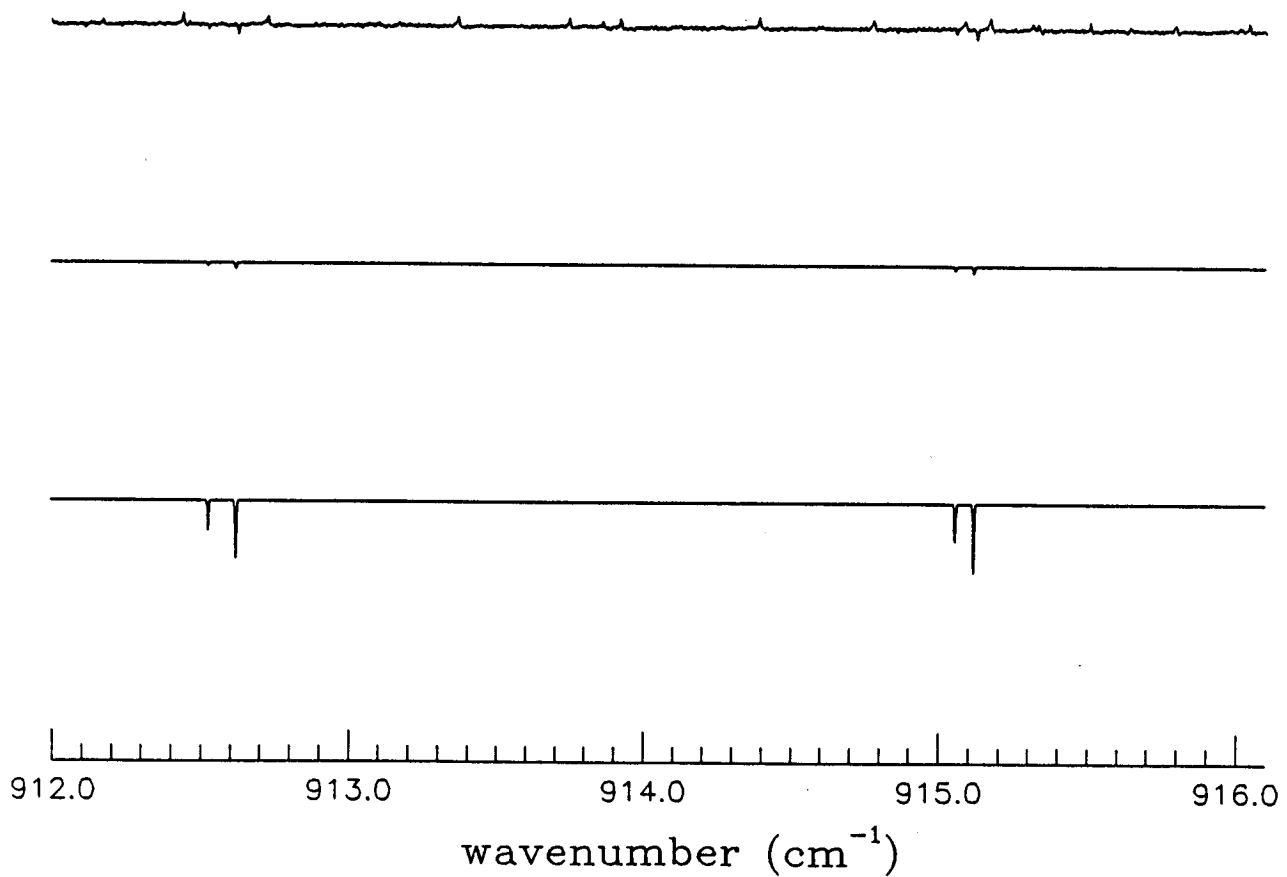
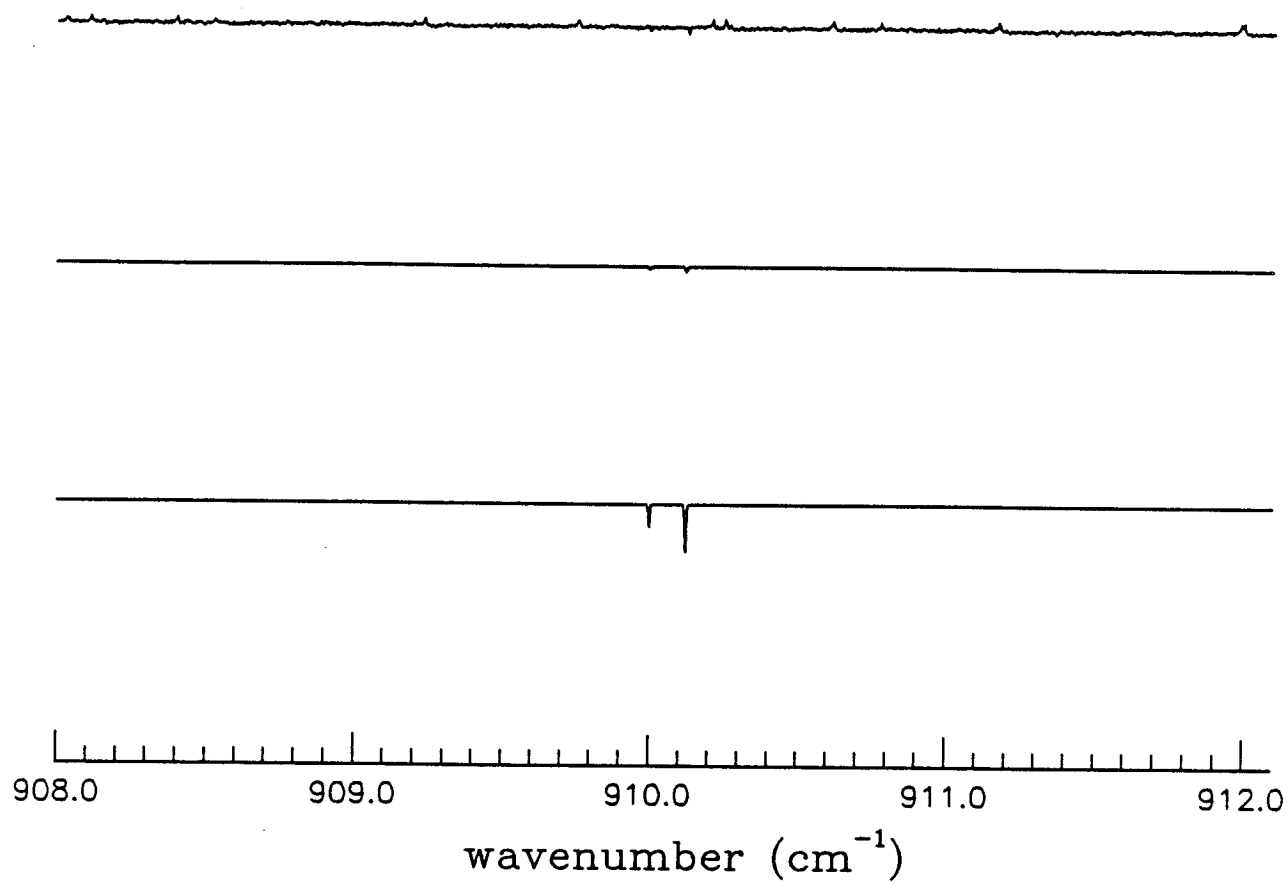
The middle trace is the calculated spectrum normalized so that the strongest feature in each band has a transmittance of 5% and the bottom trace is the same as the middle trace except that full scale corresponds to 90% transmittance.

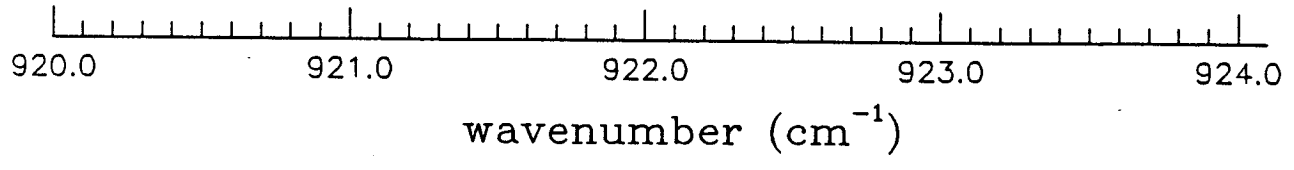
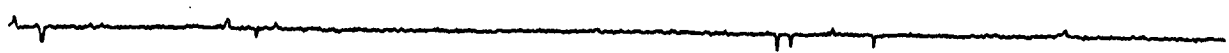
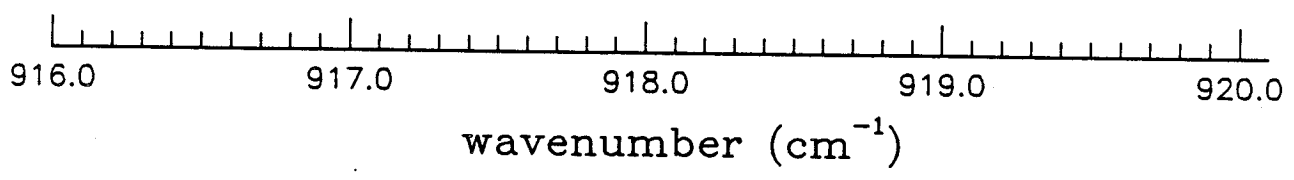
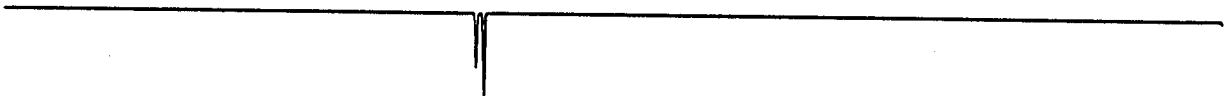


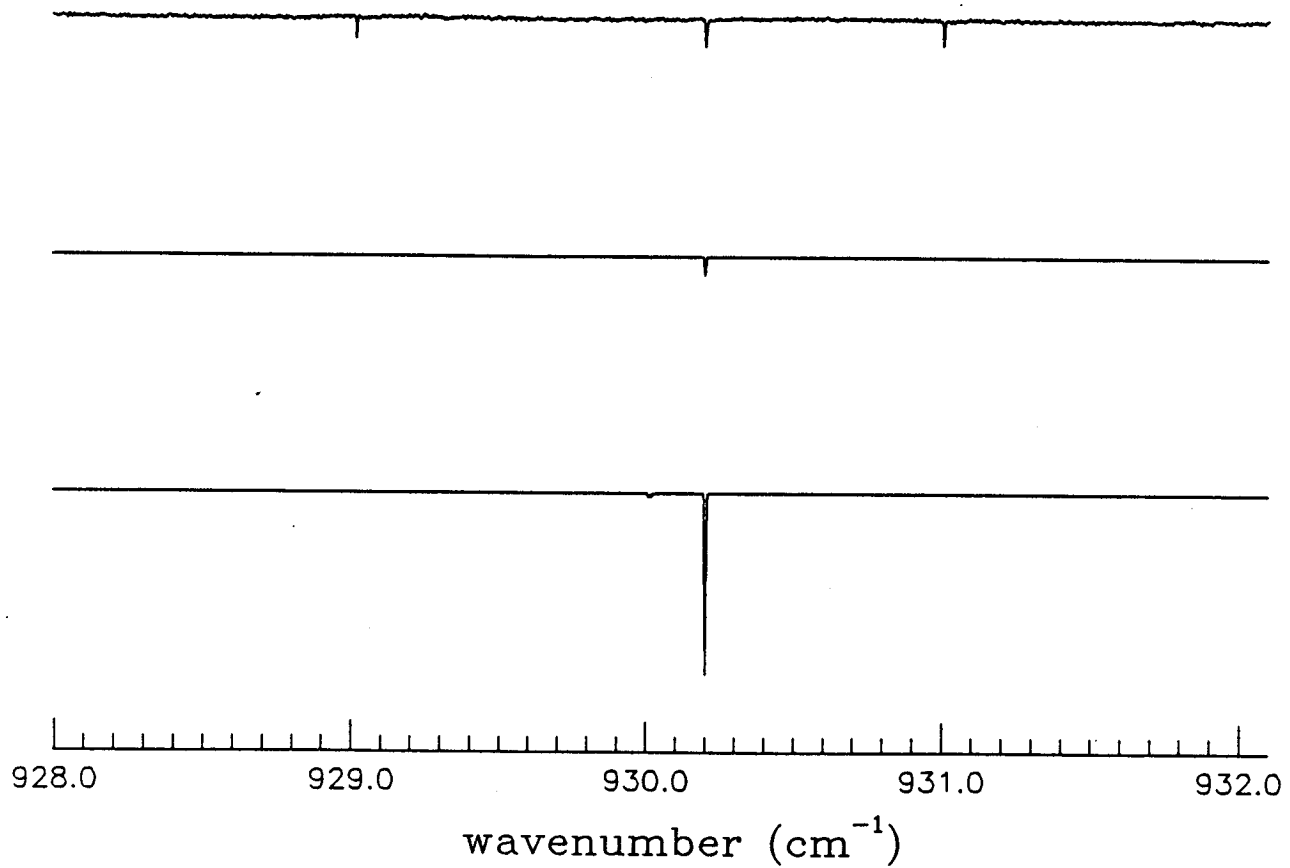
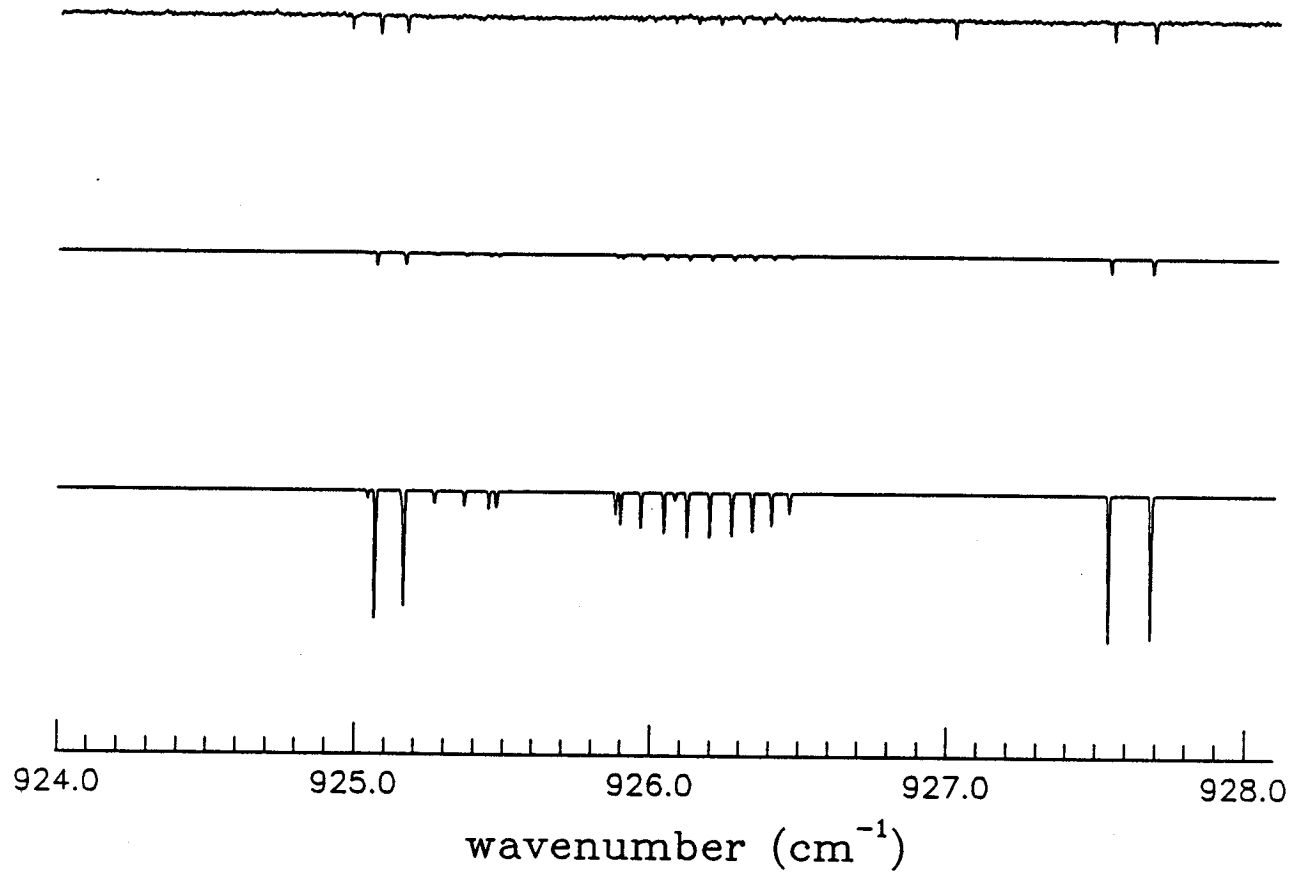
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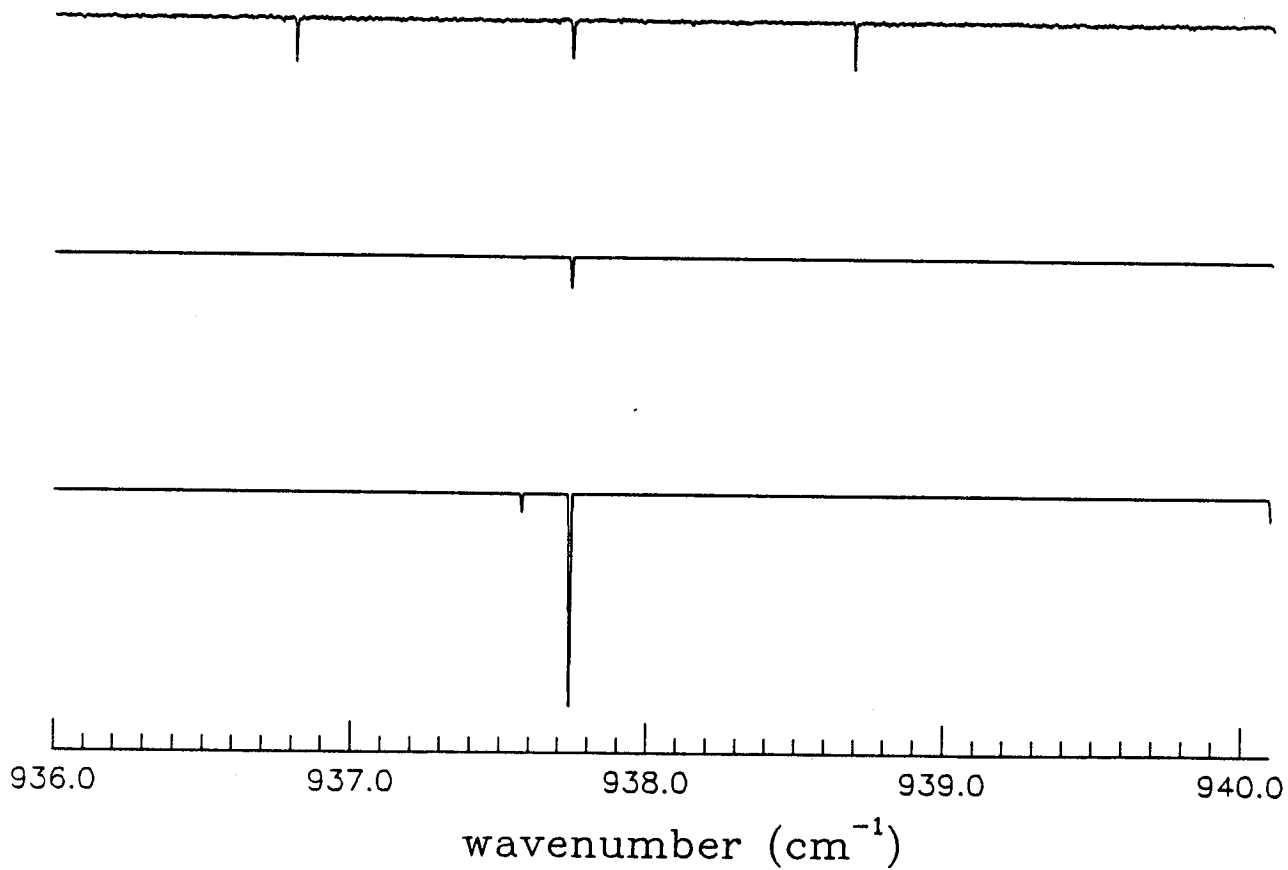
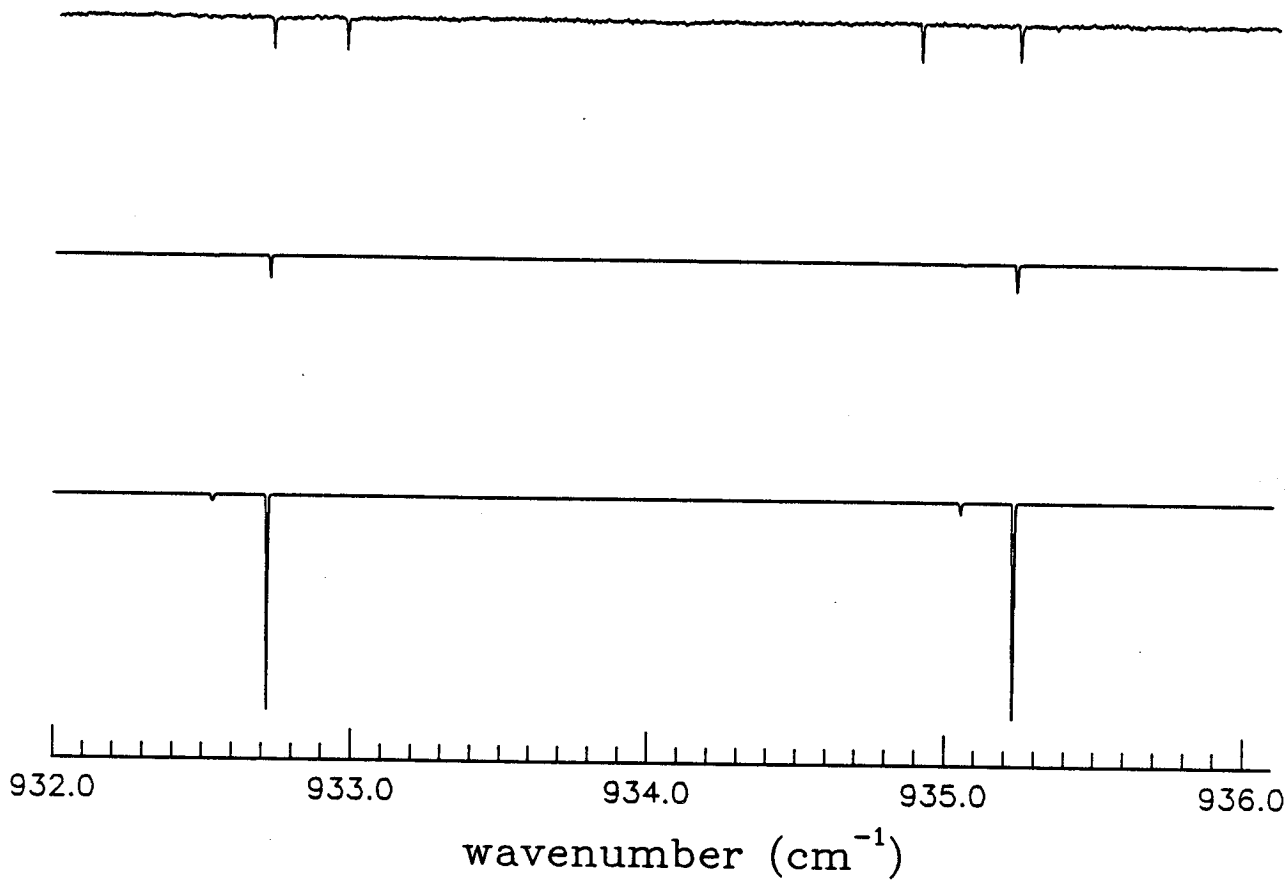


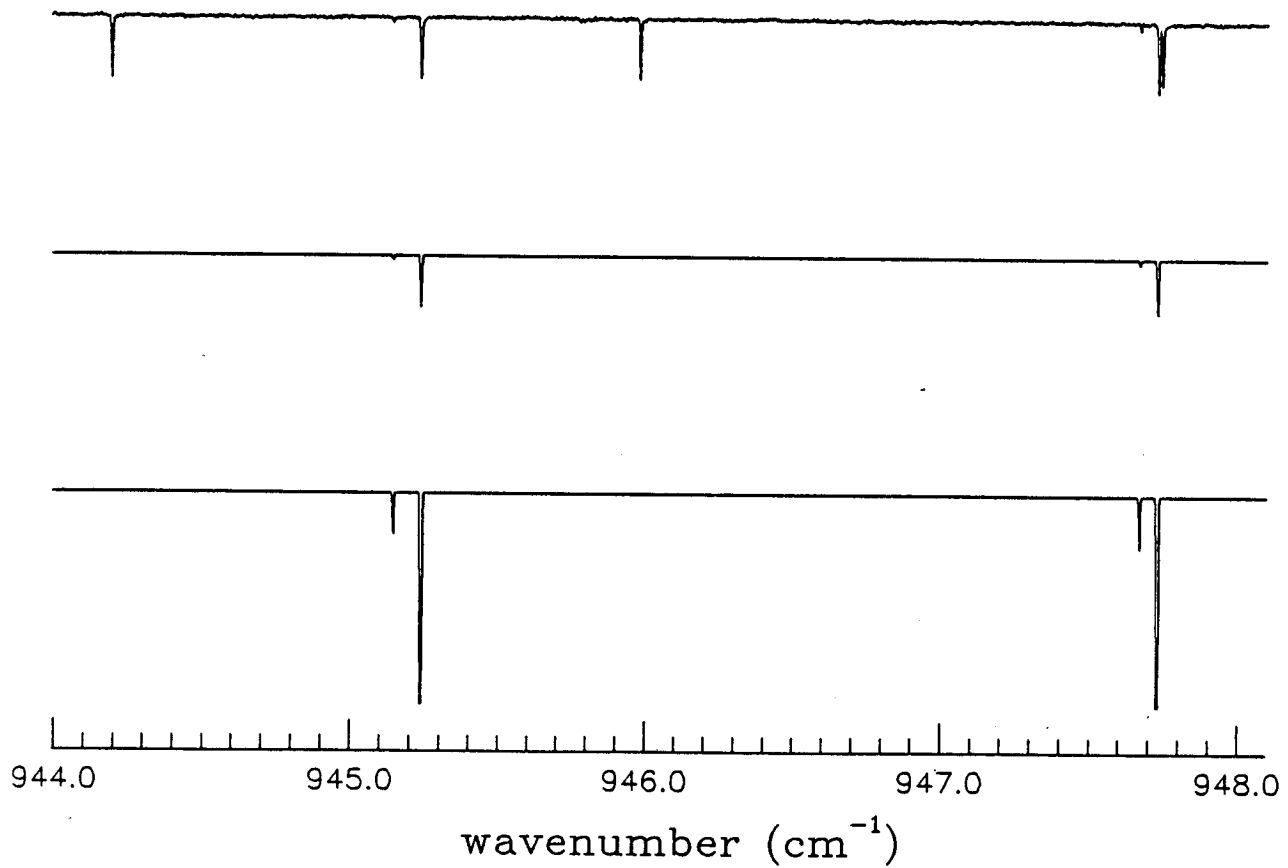
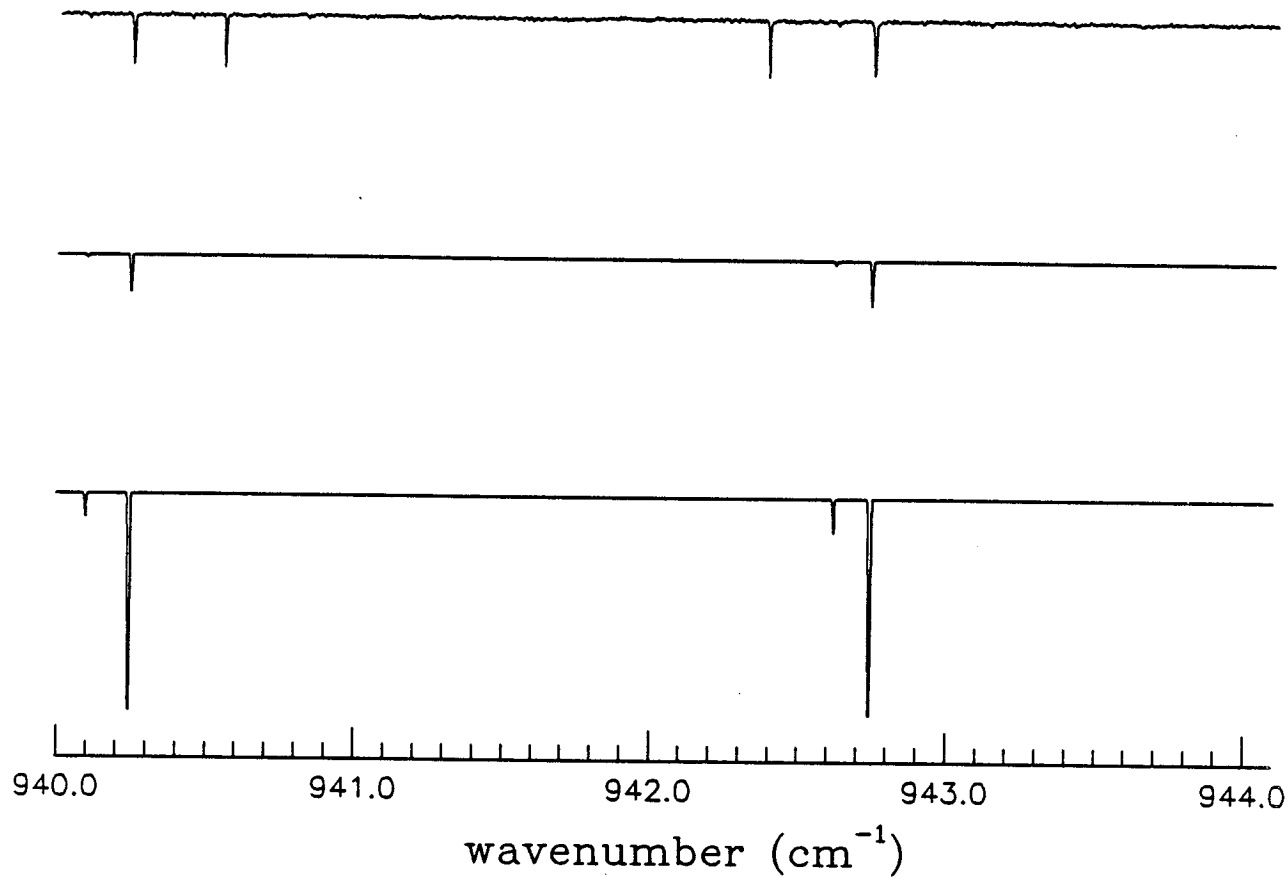
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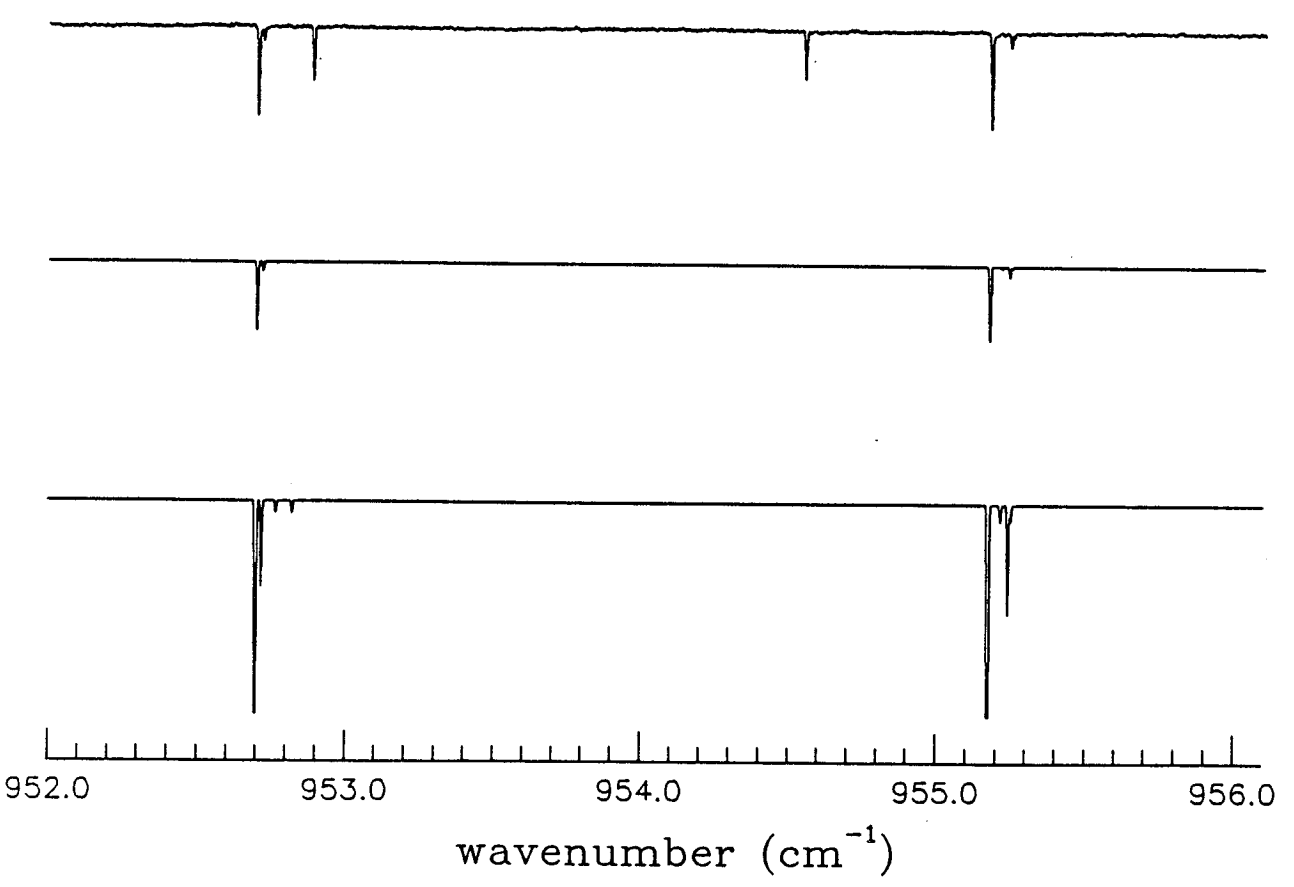
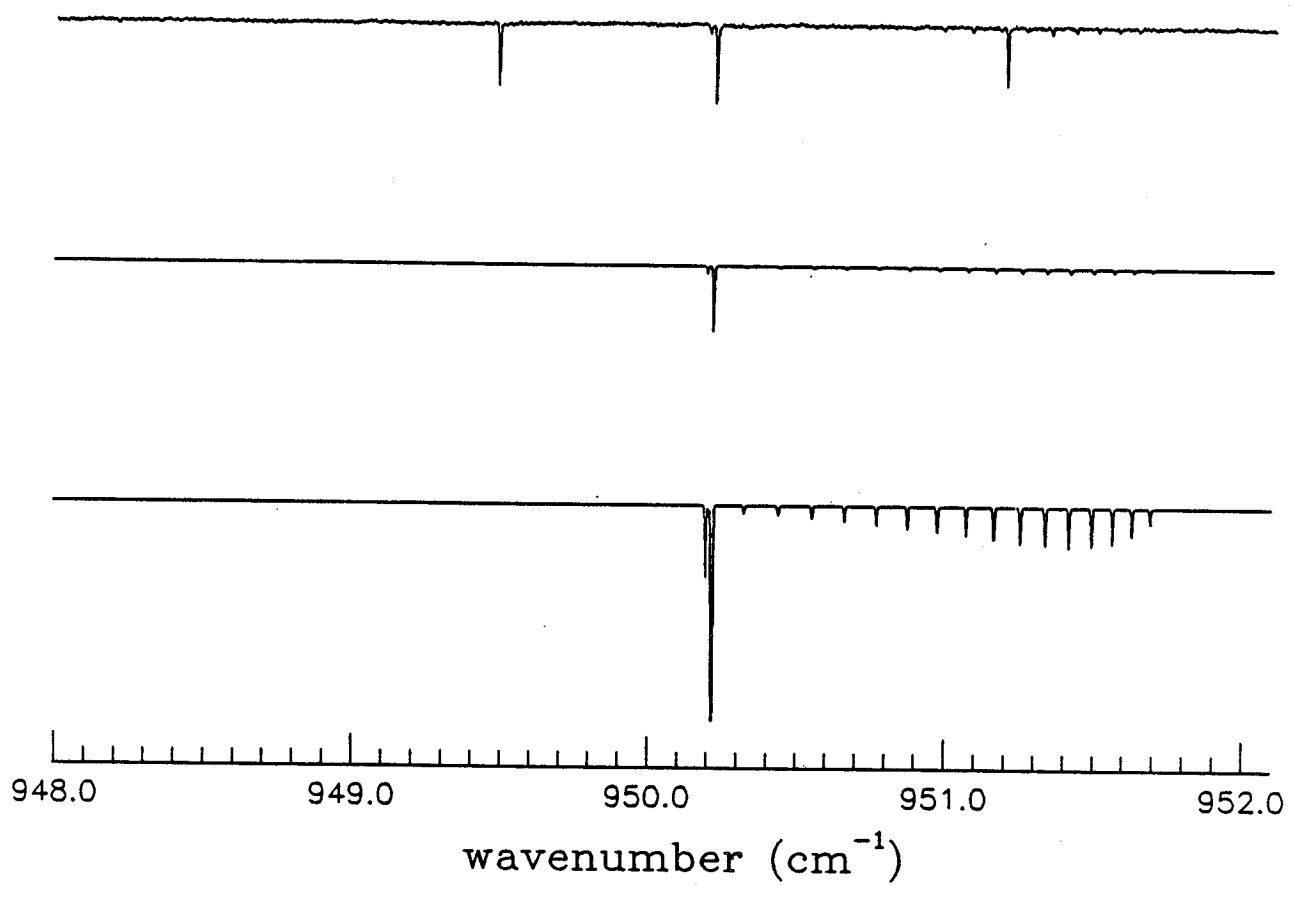


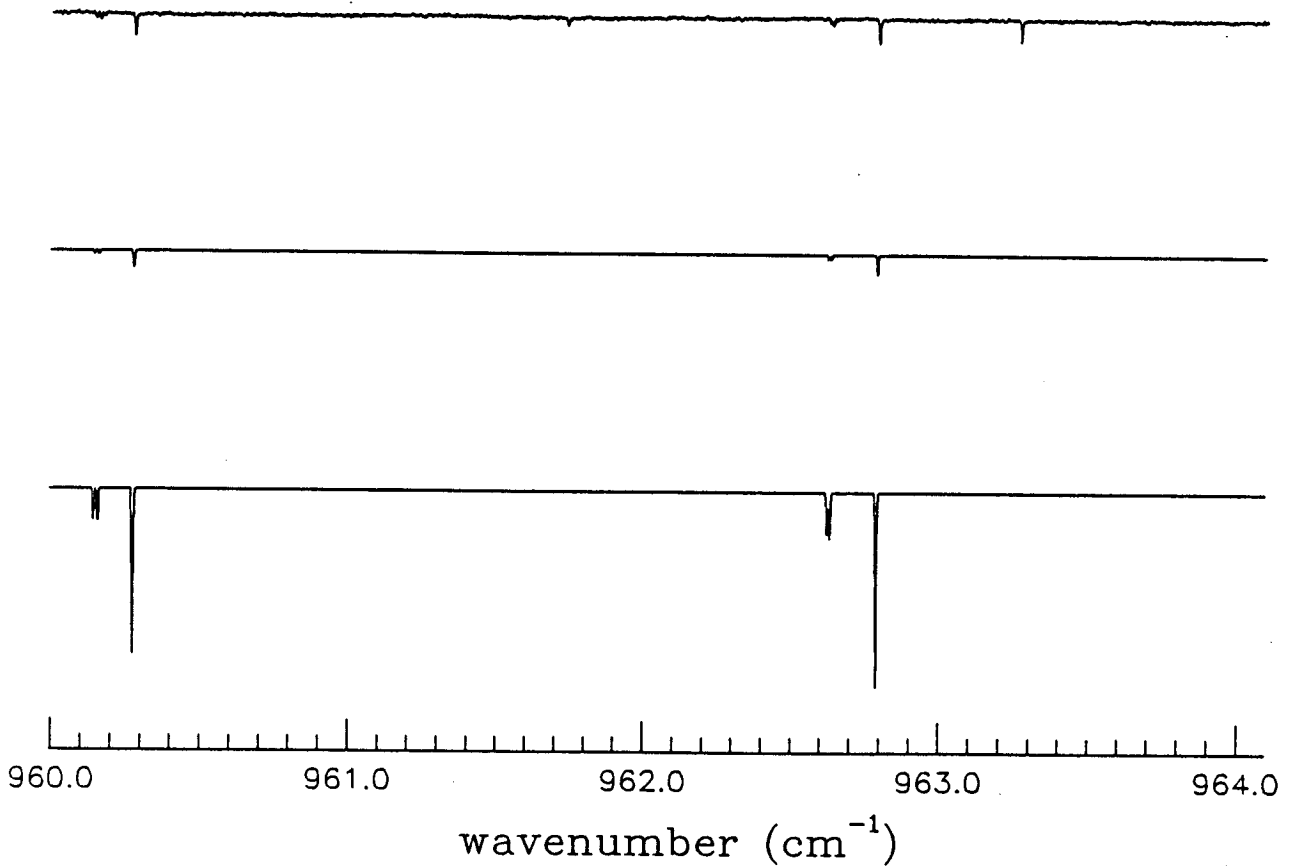
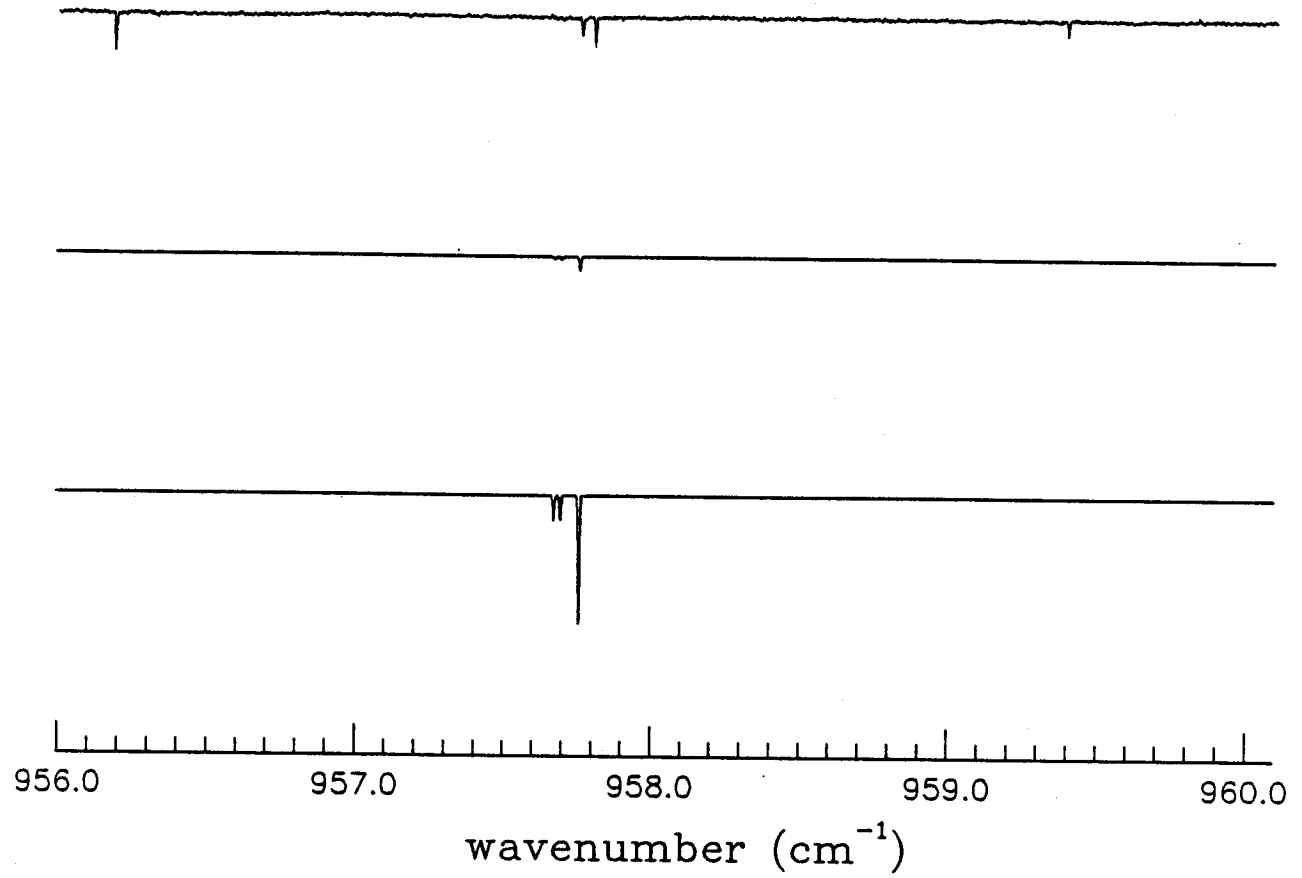


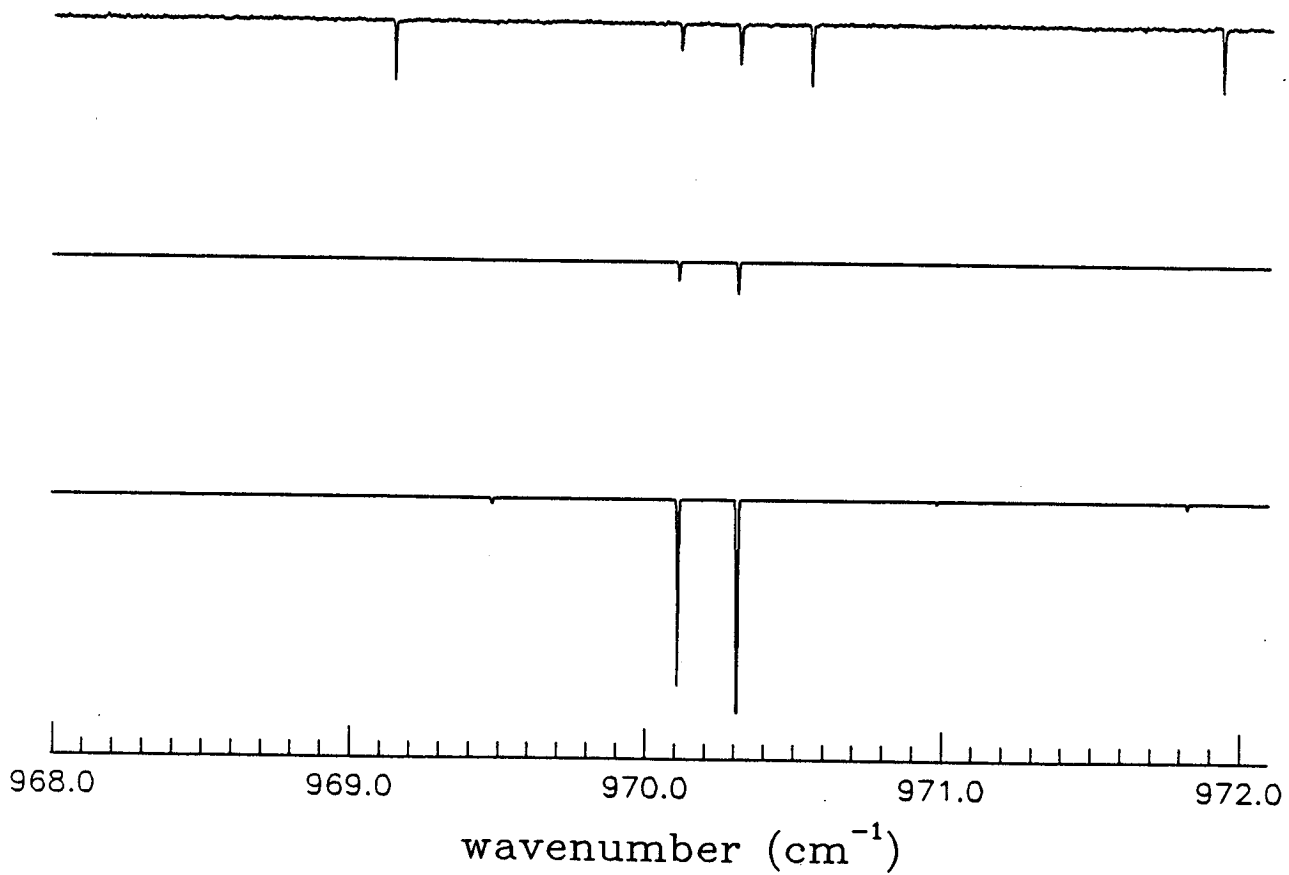
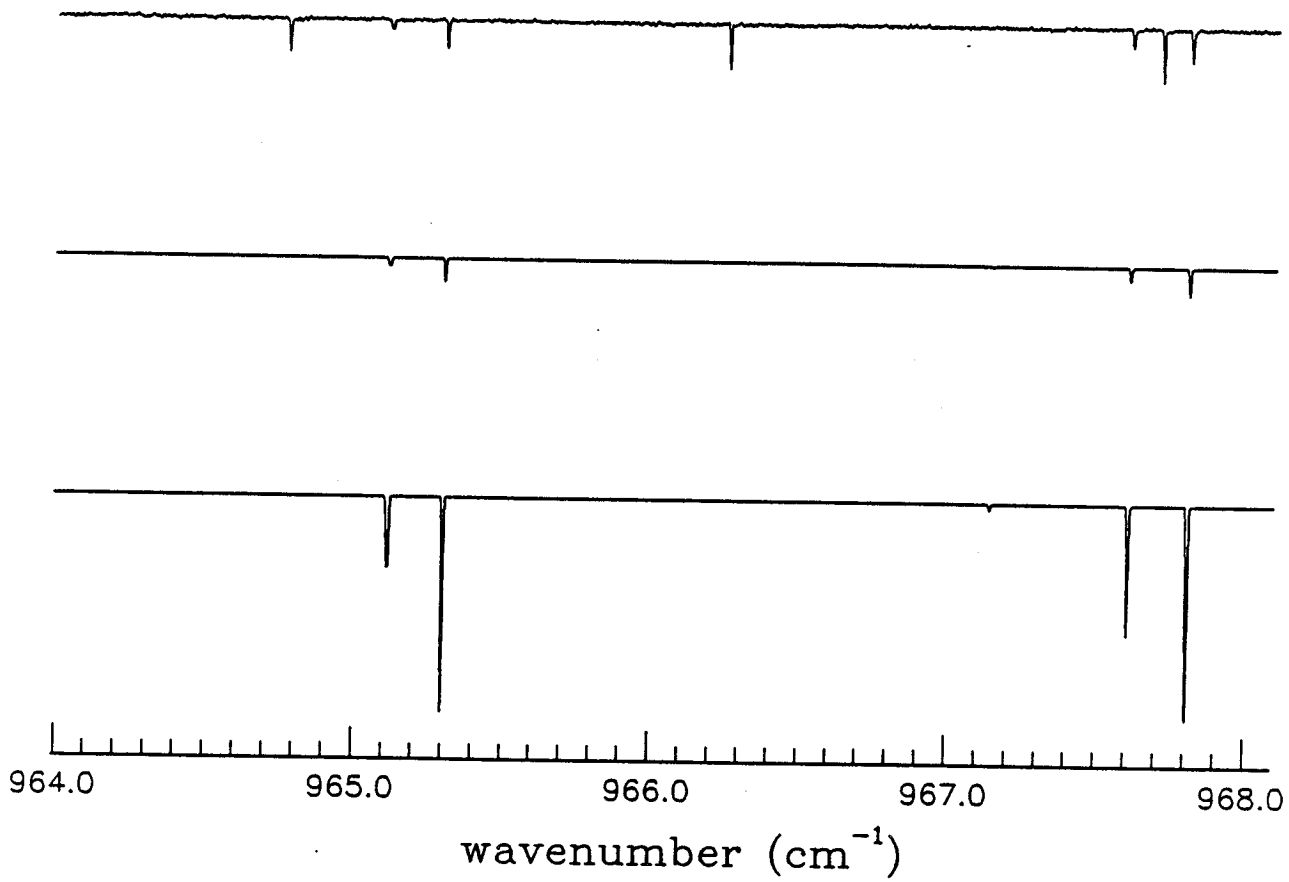


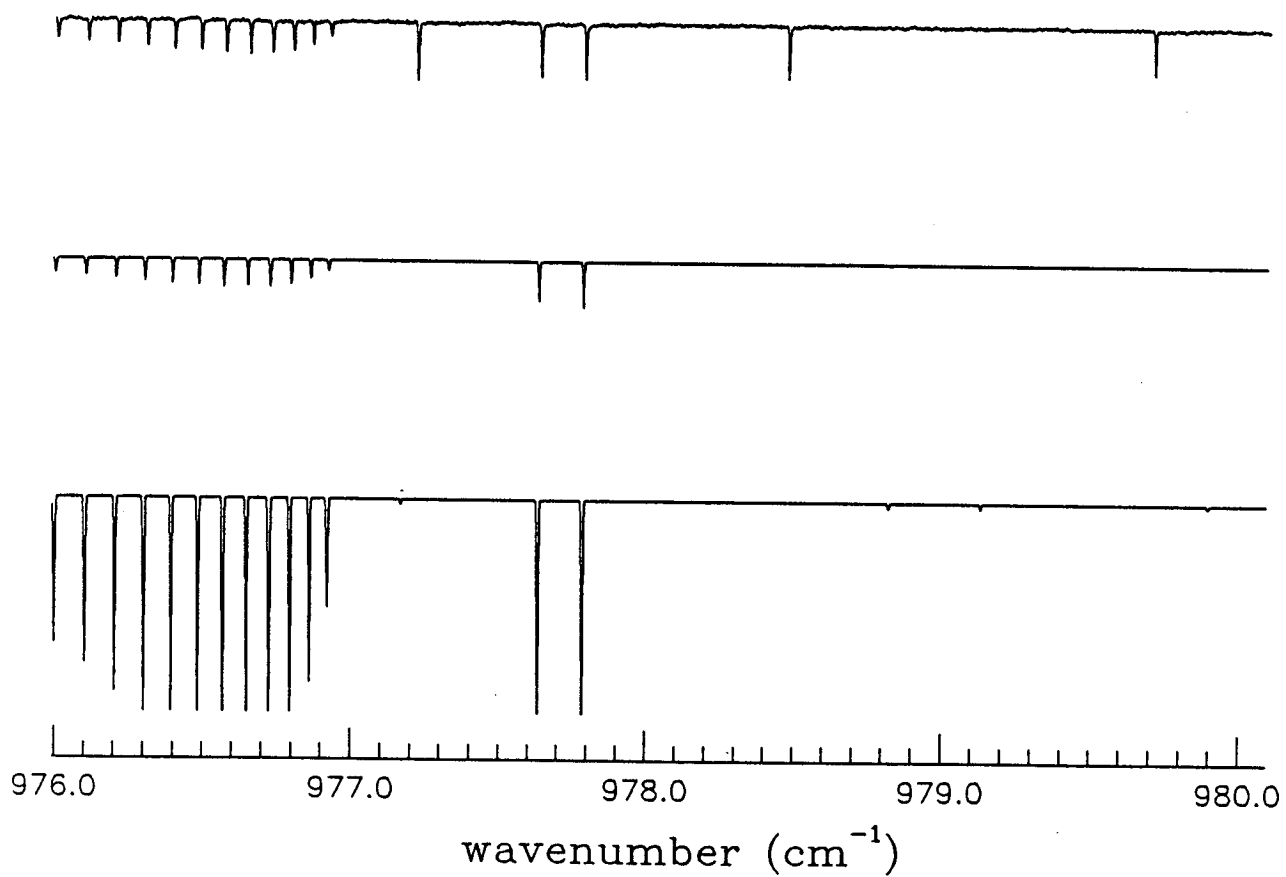
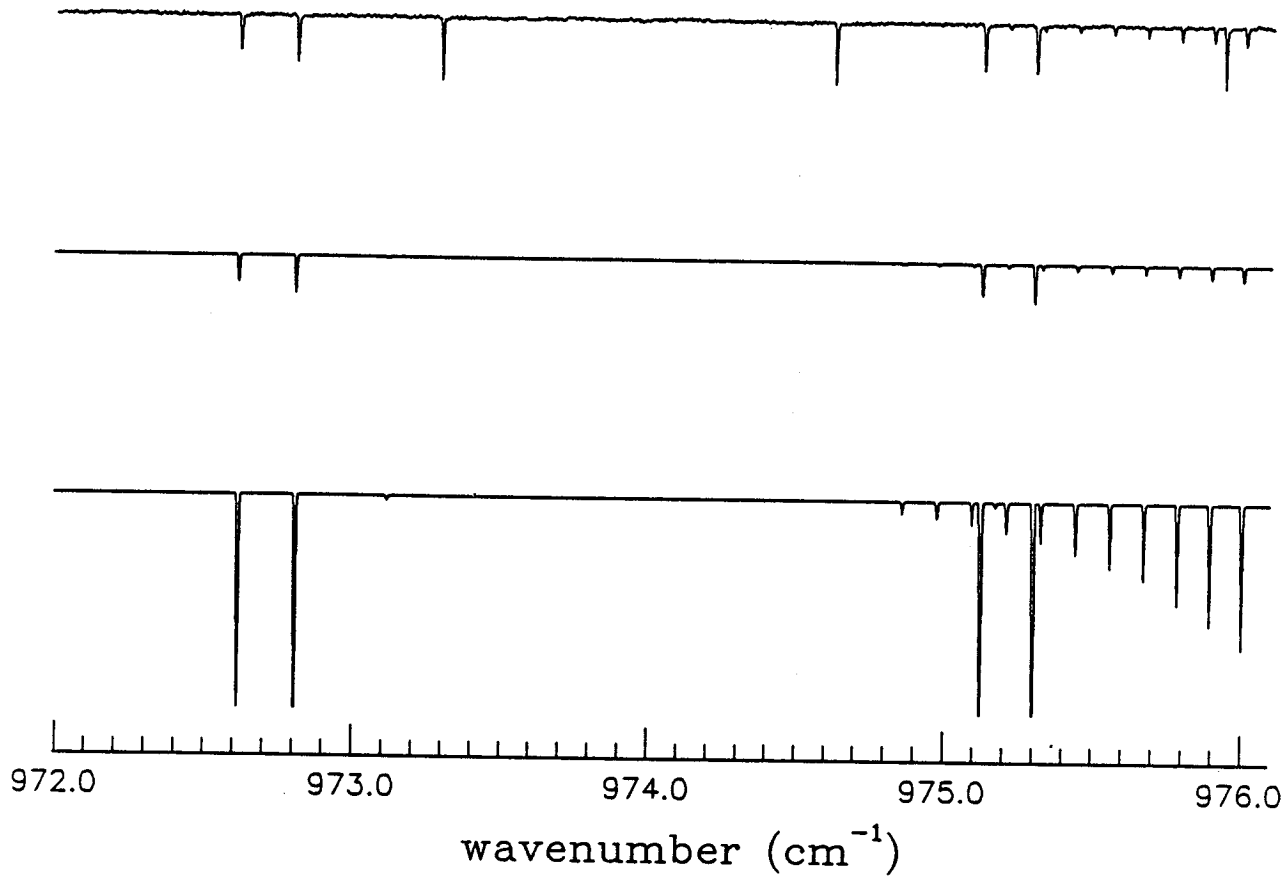


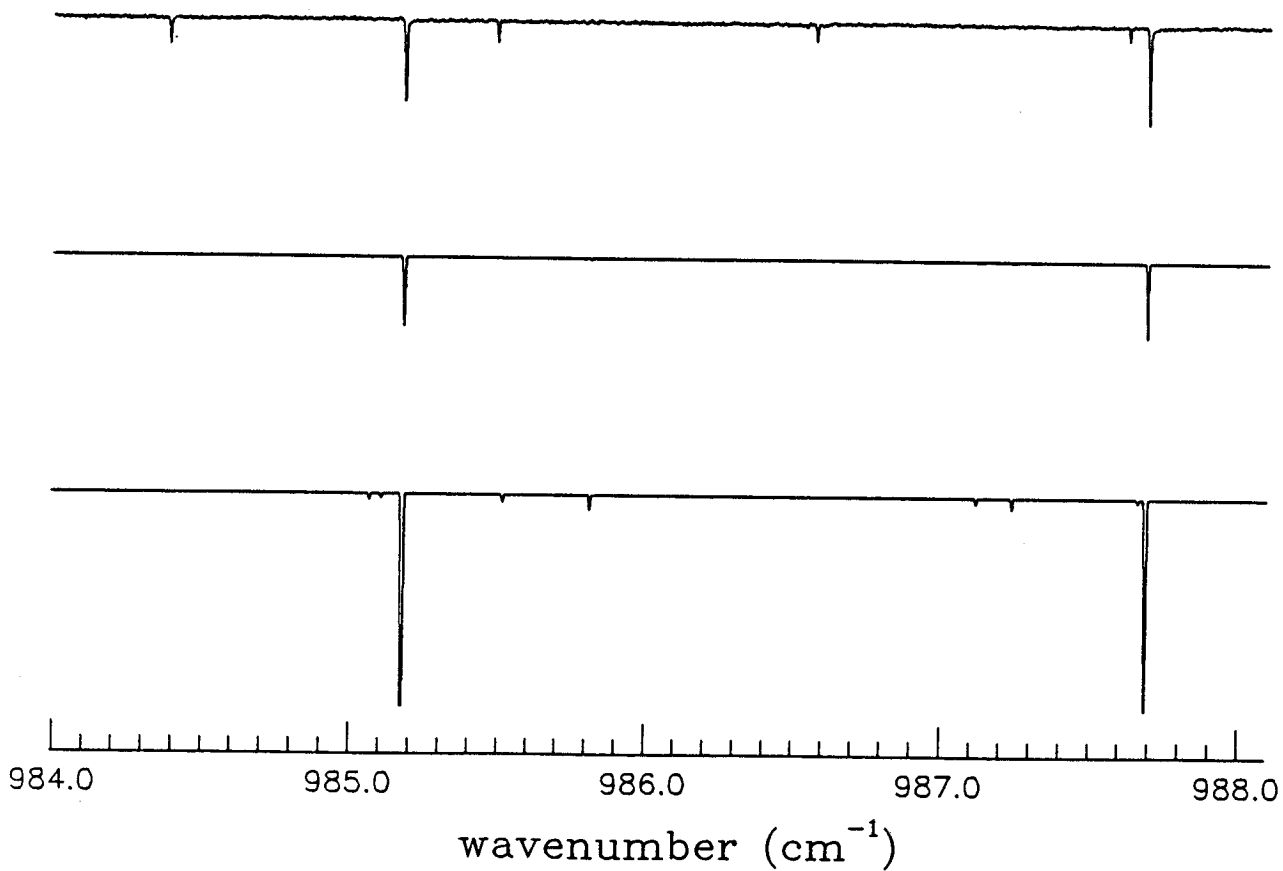
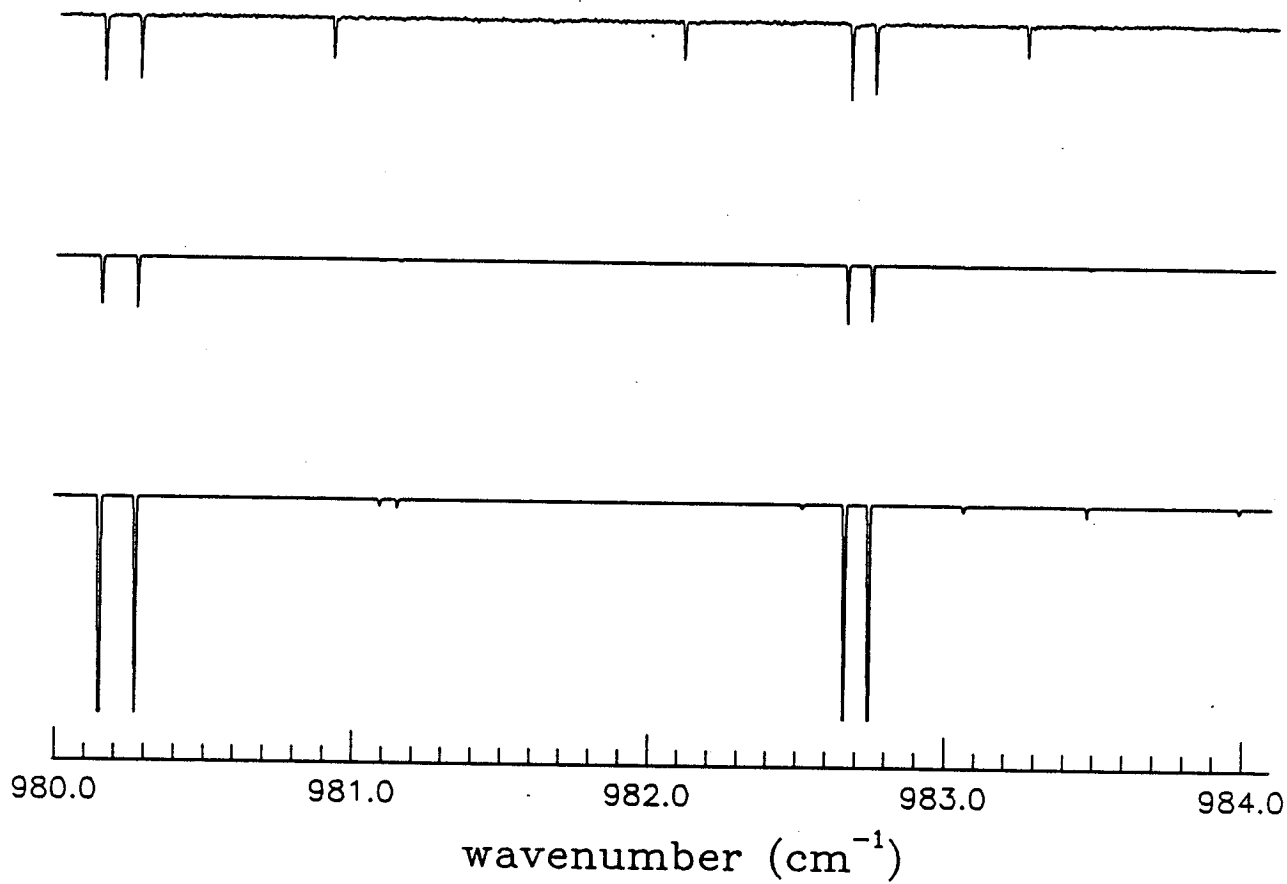


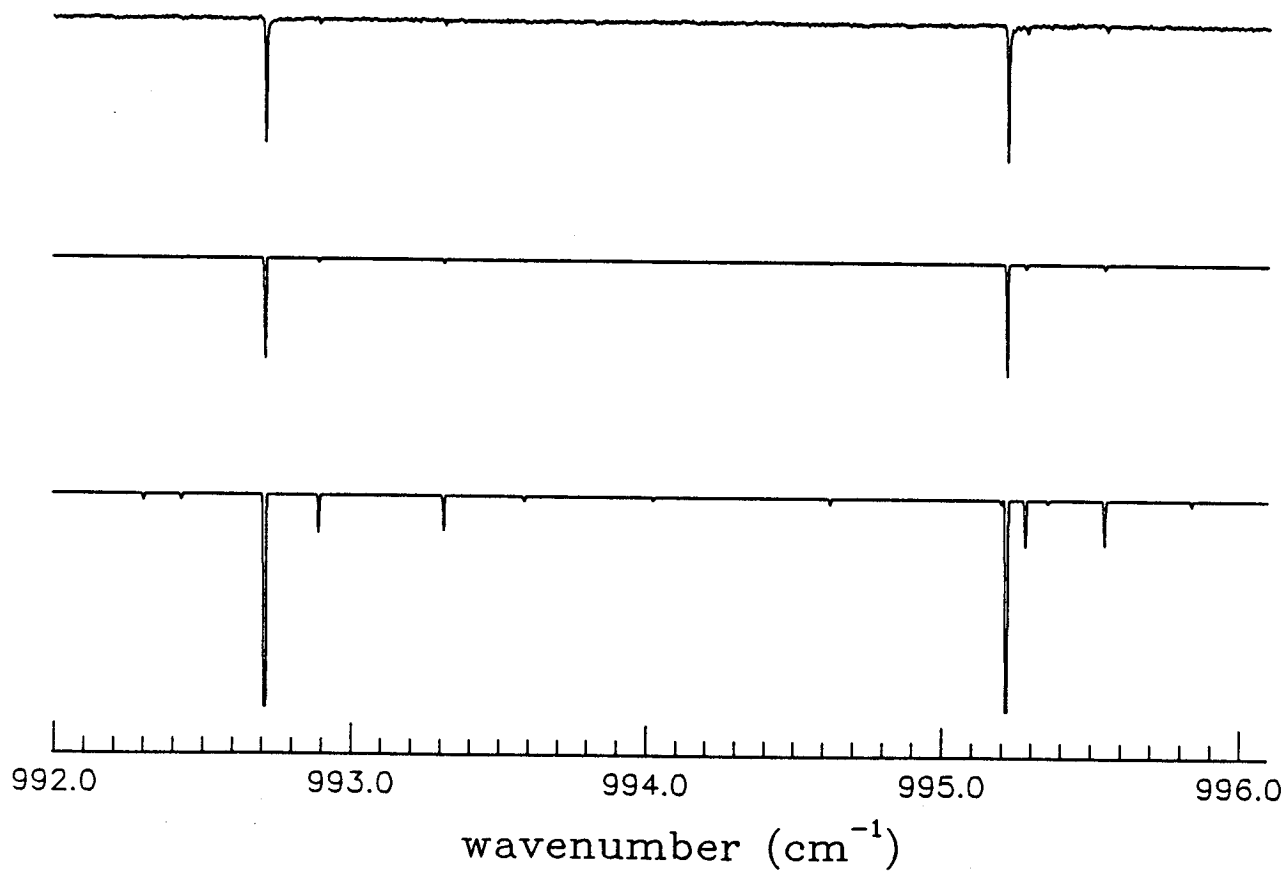
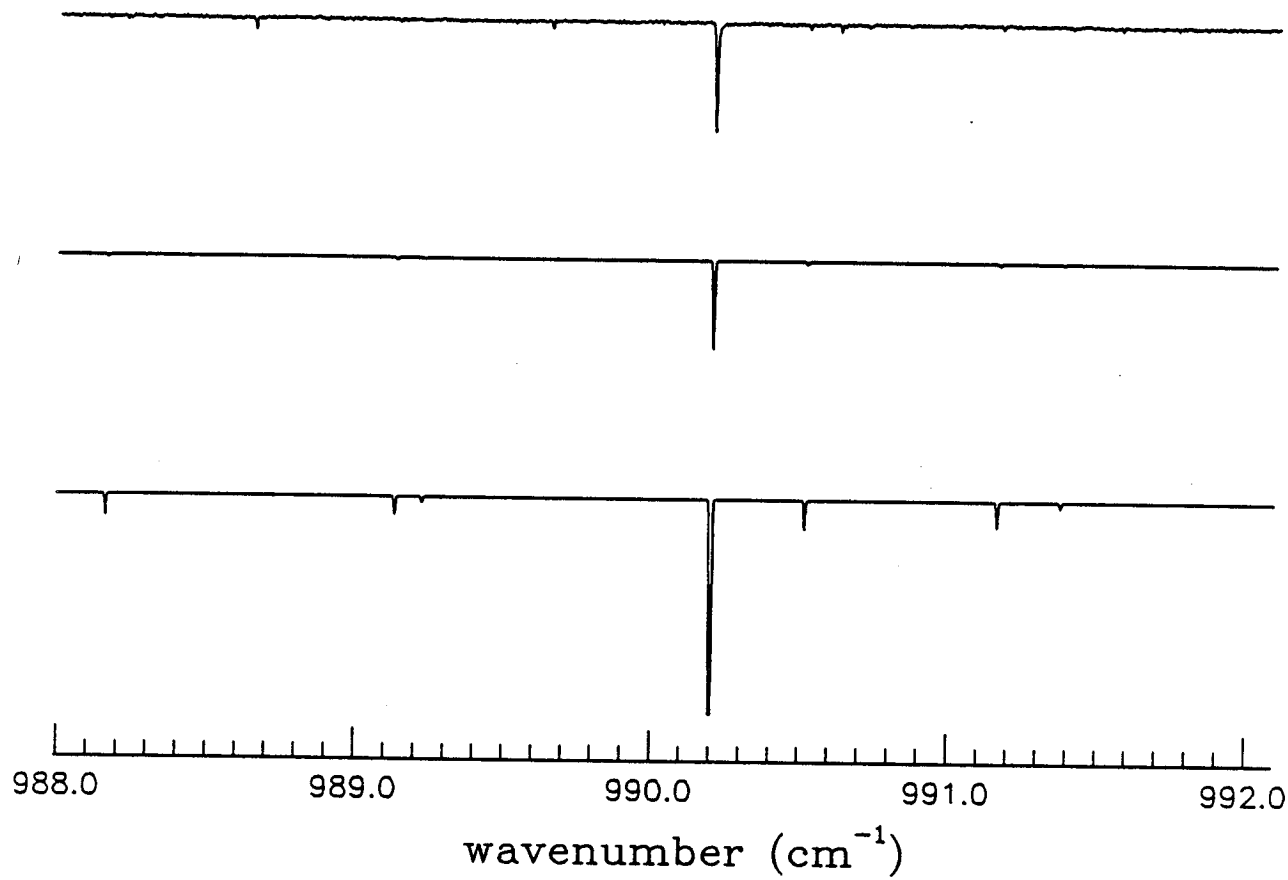


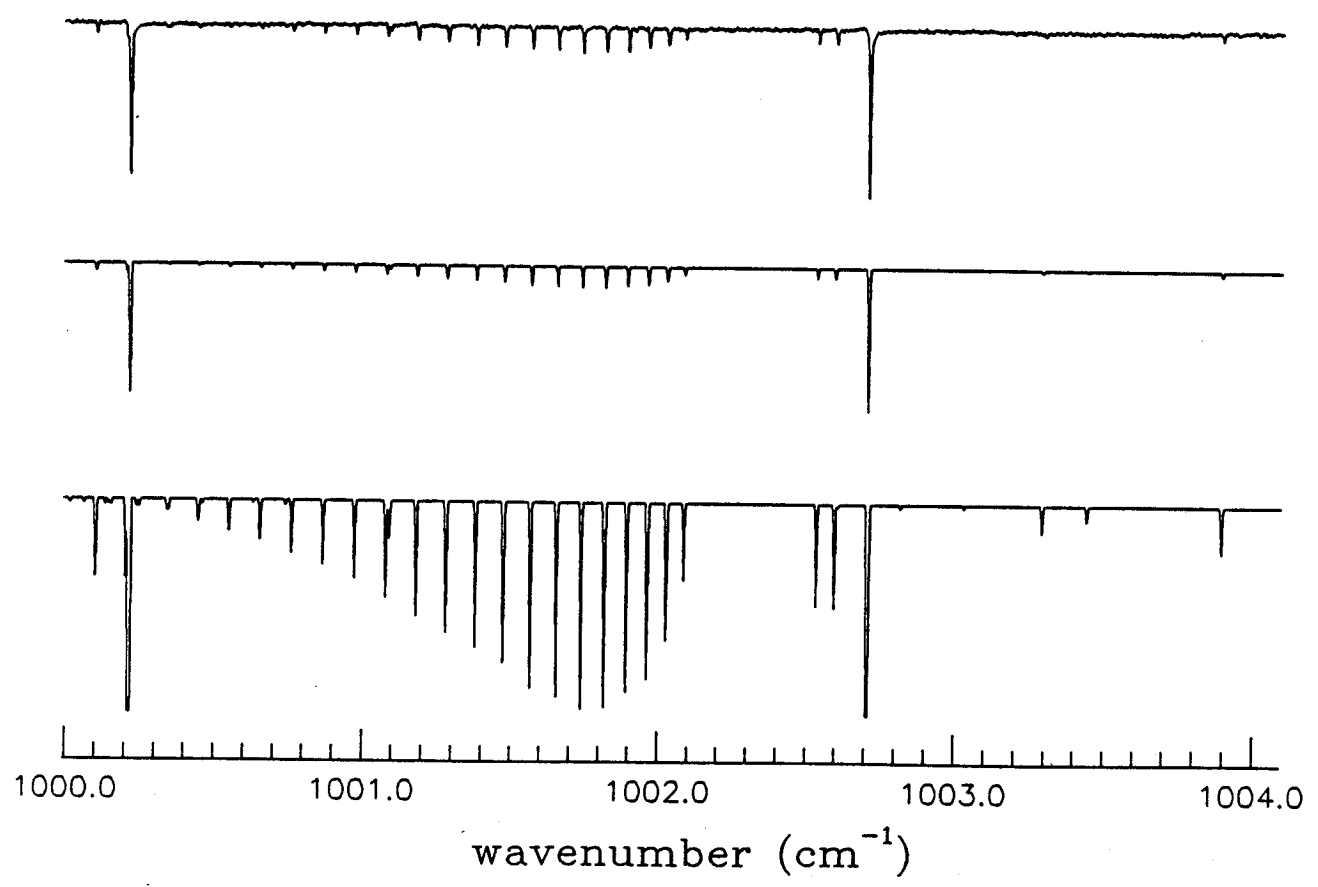
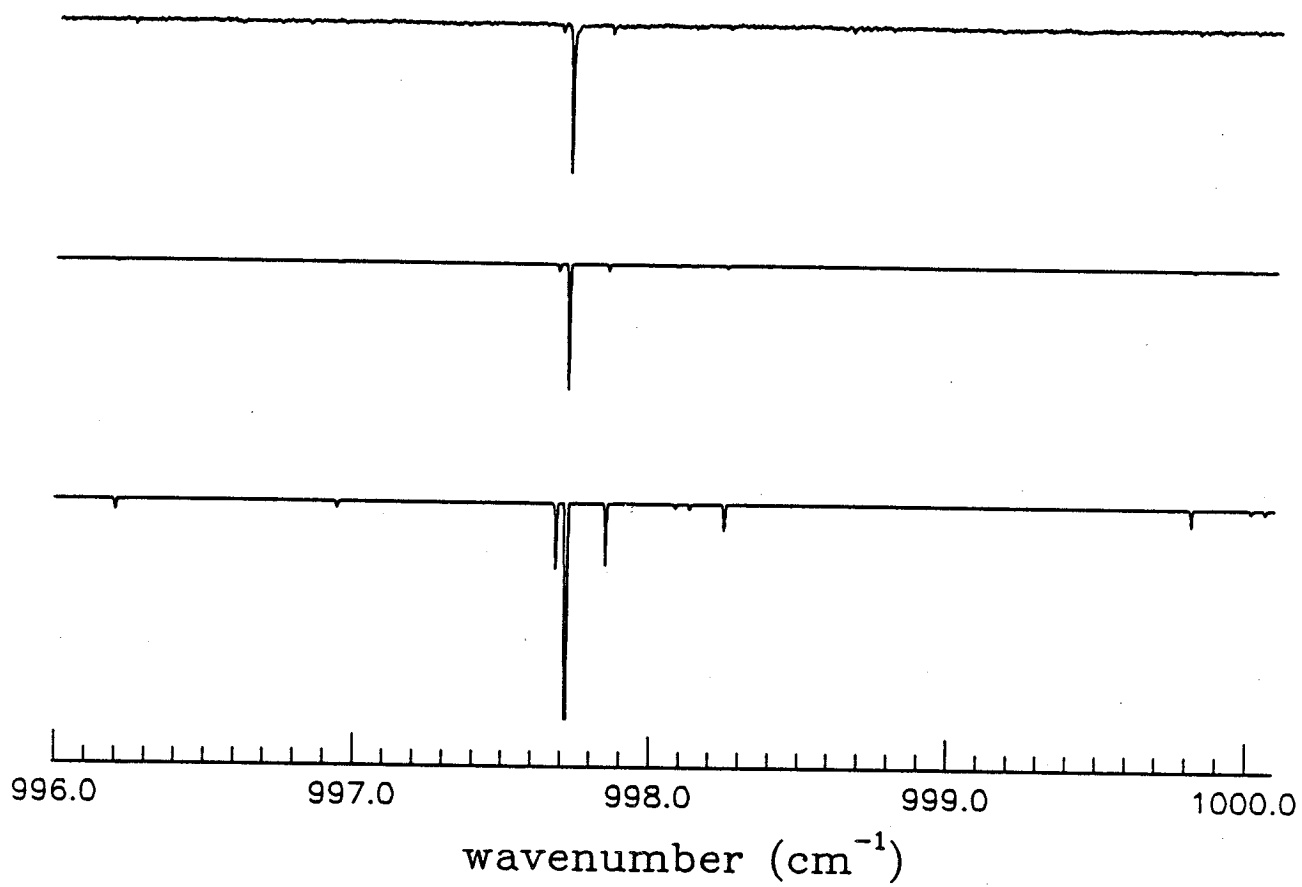


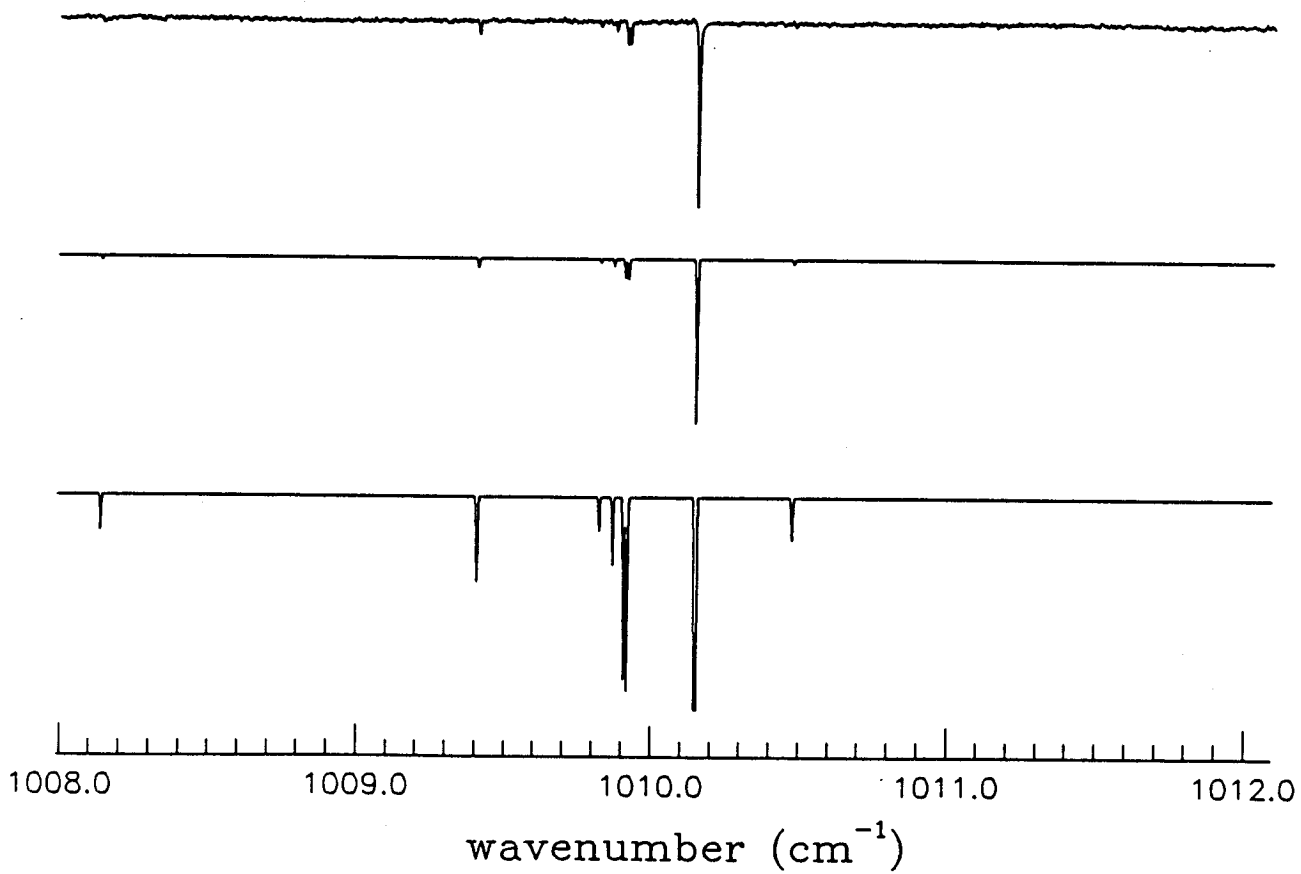
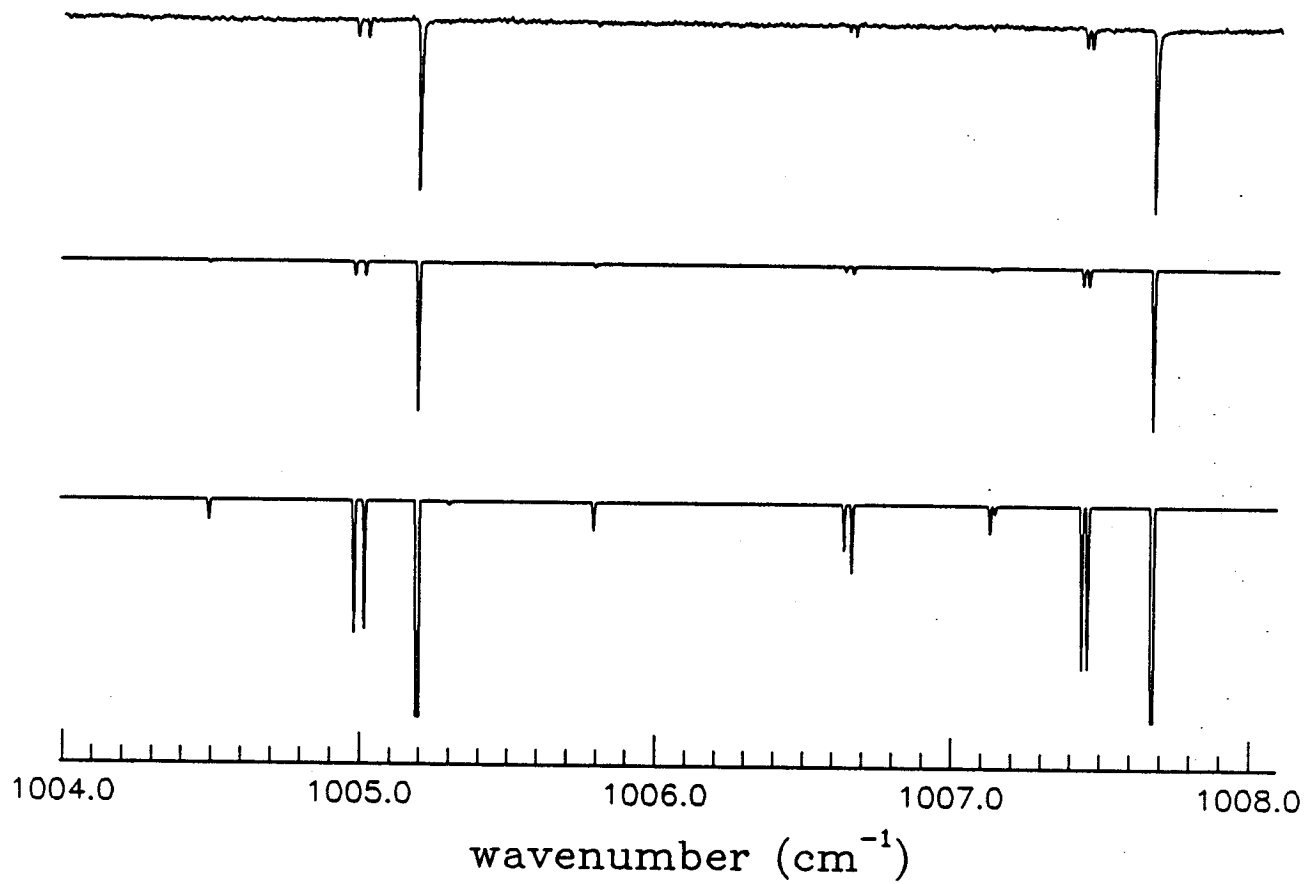


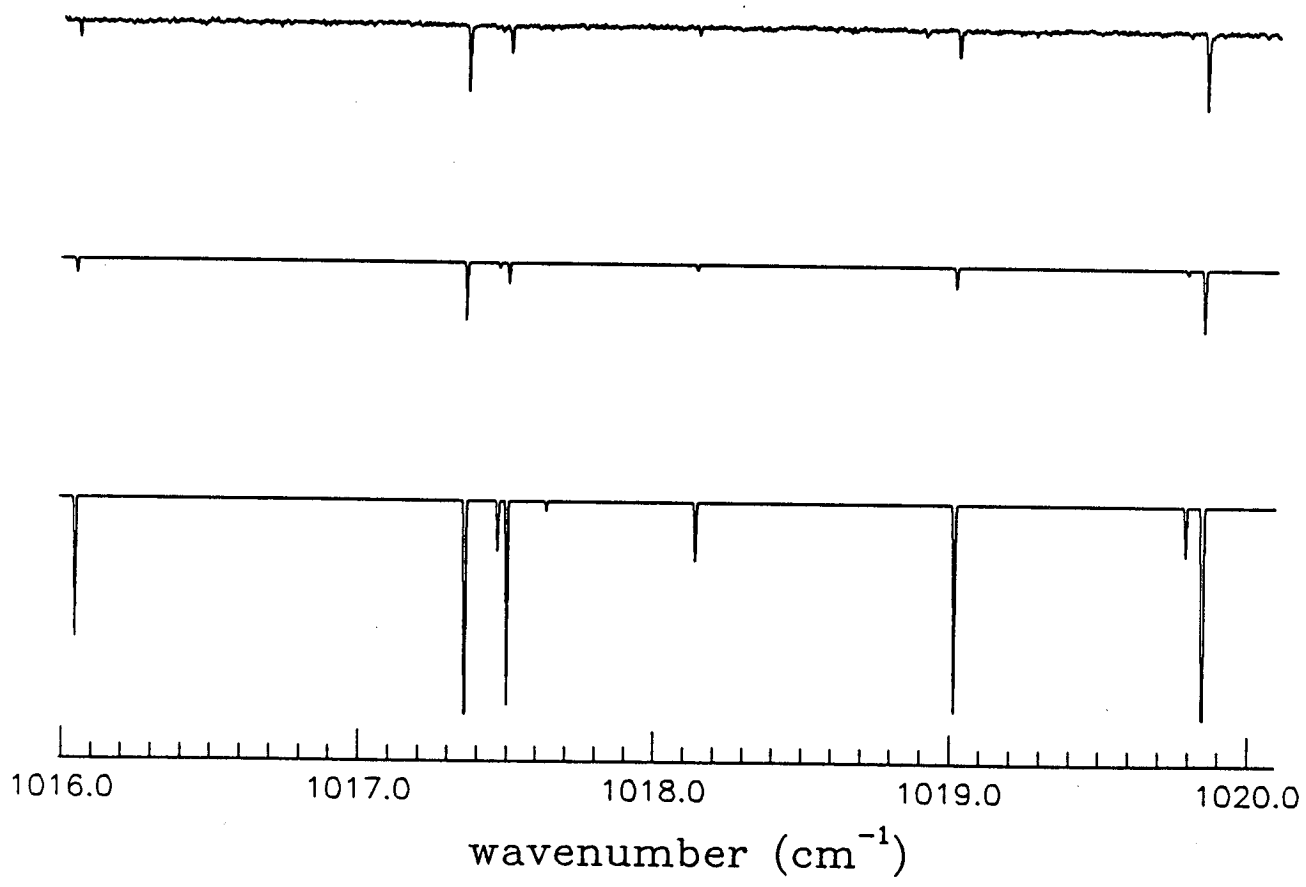
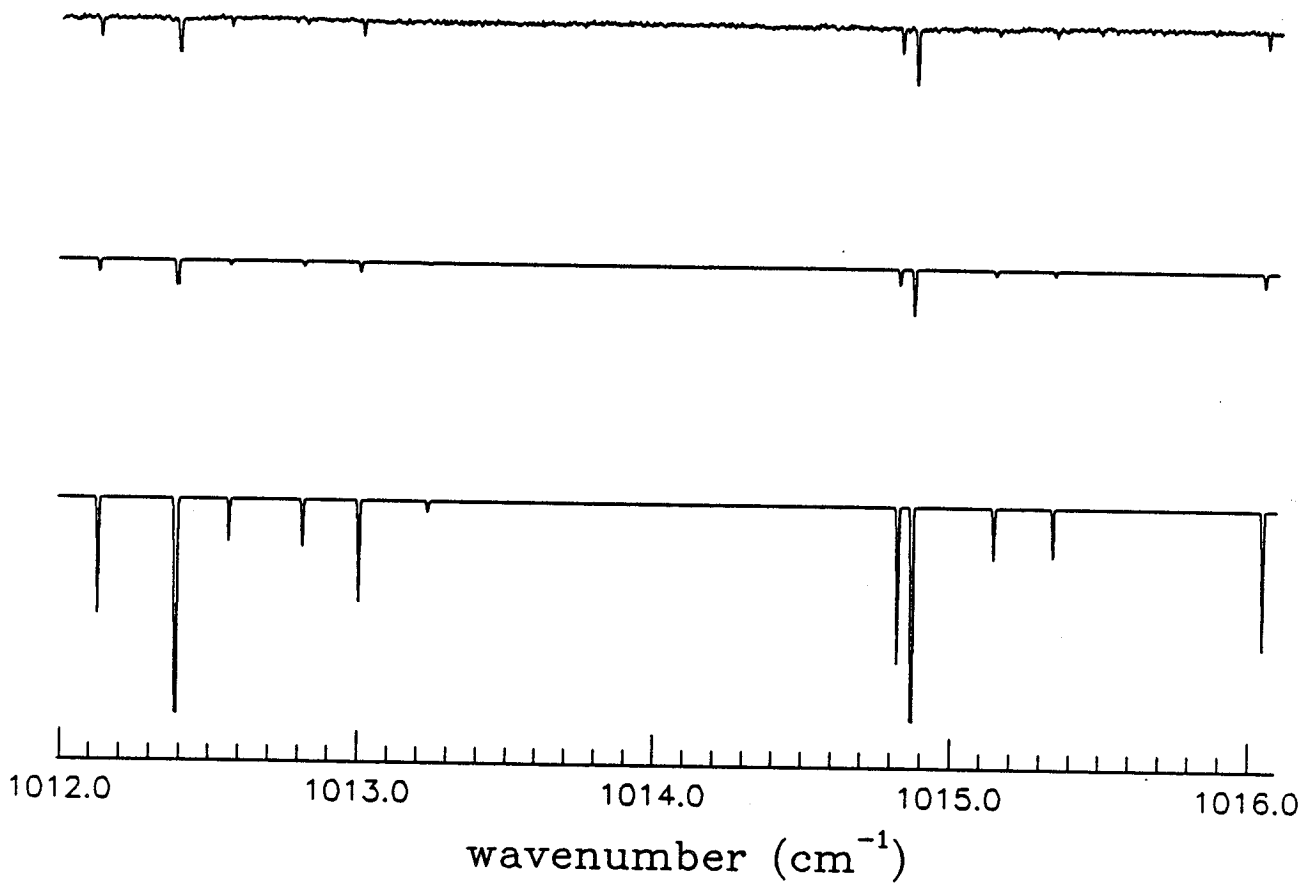


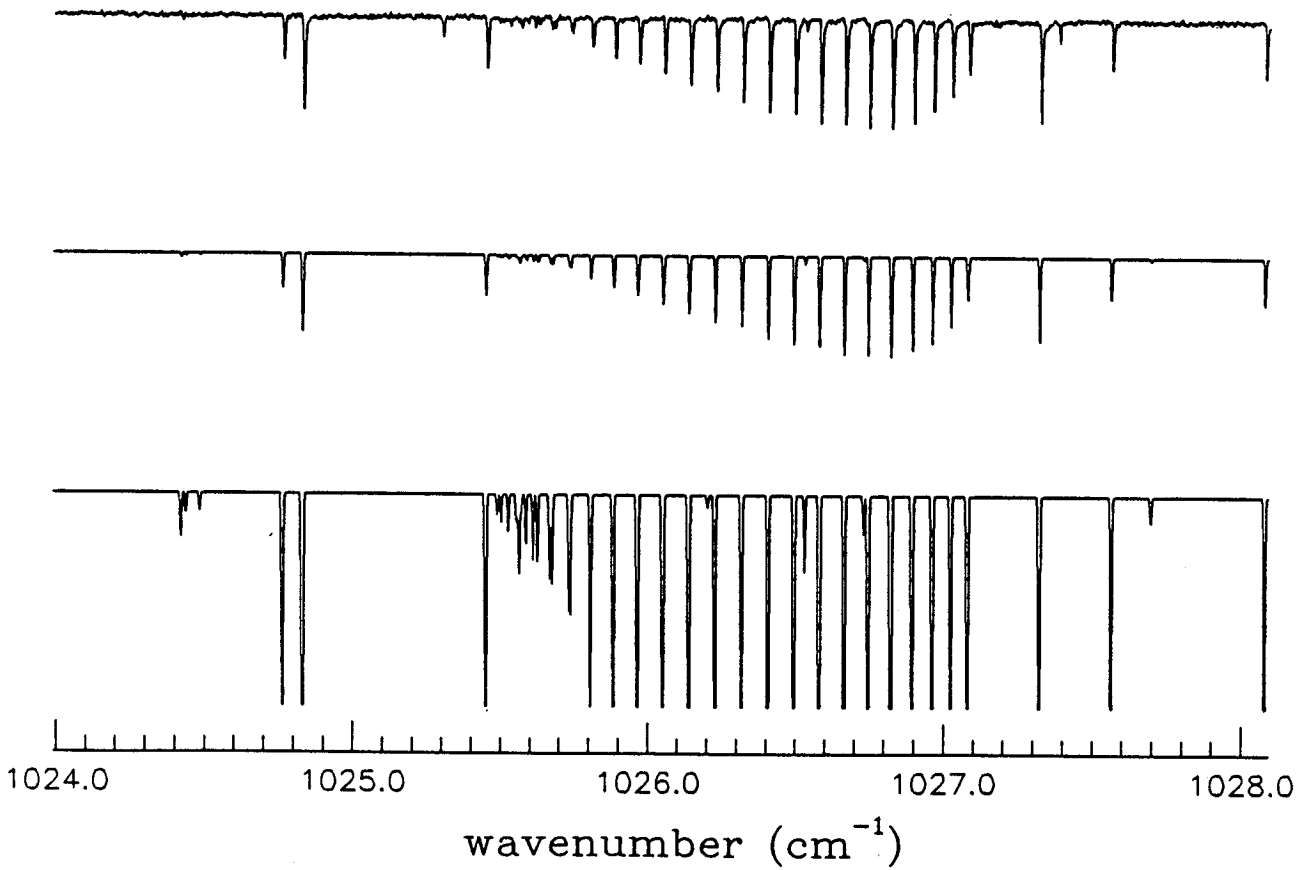
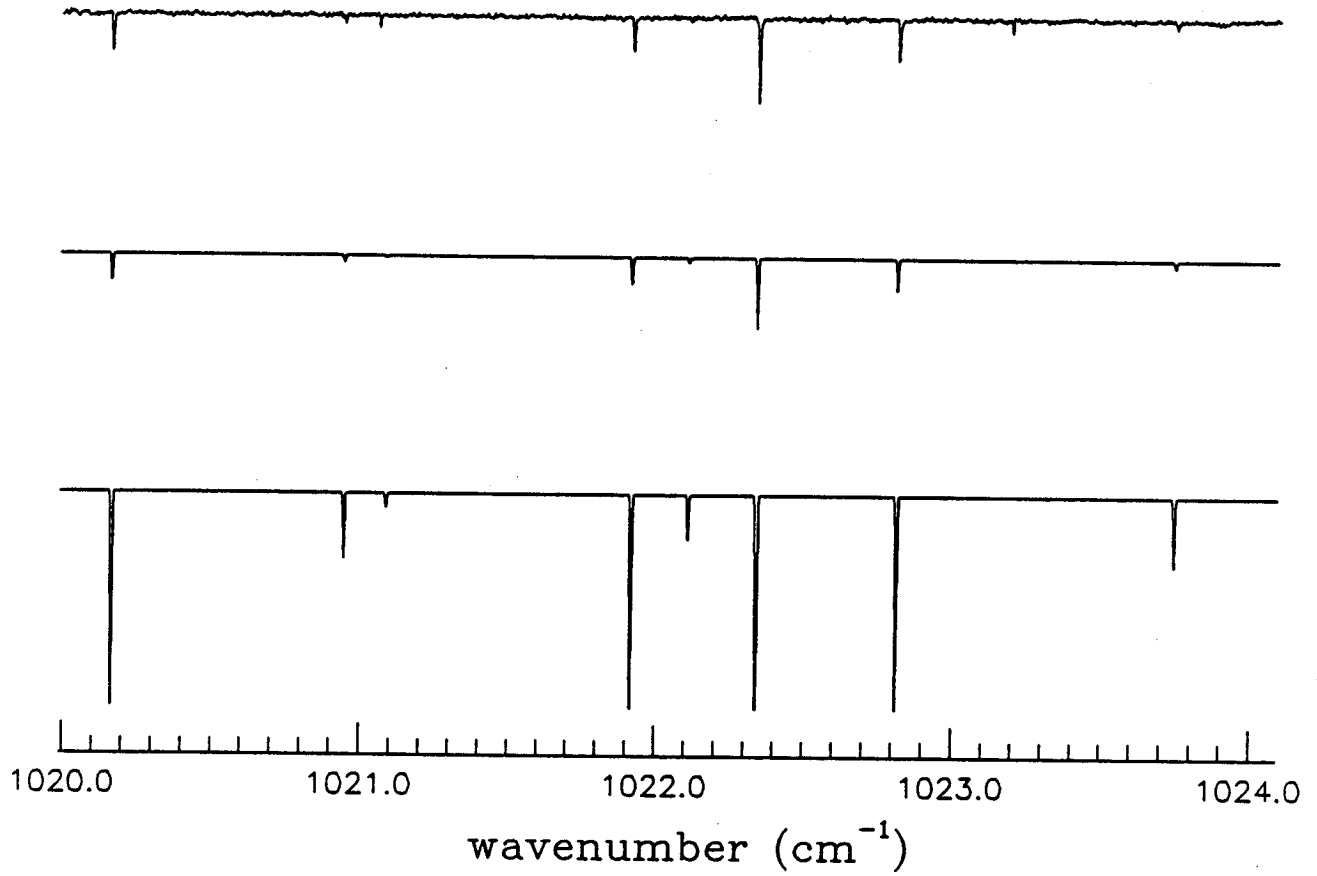


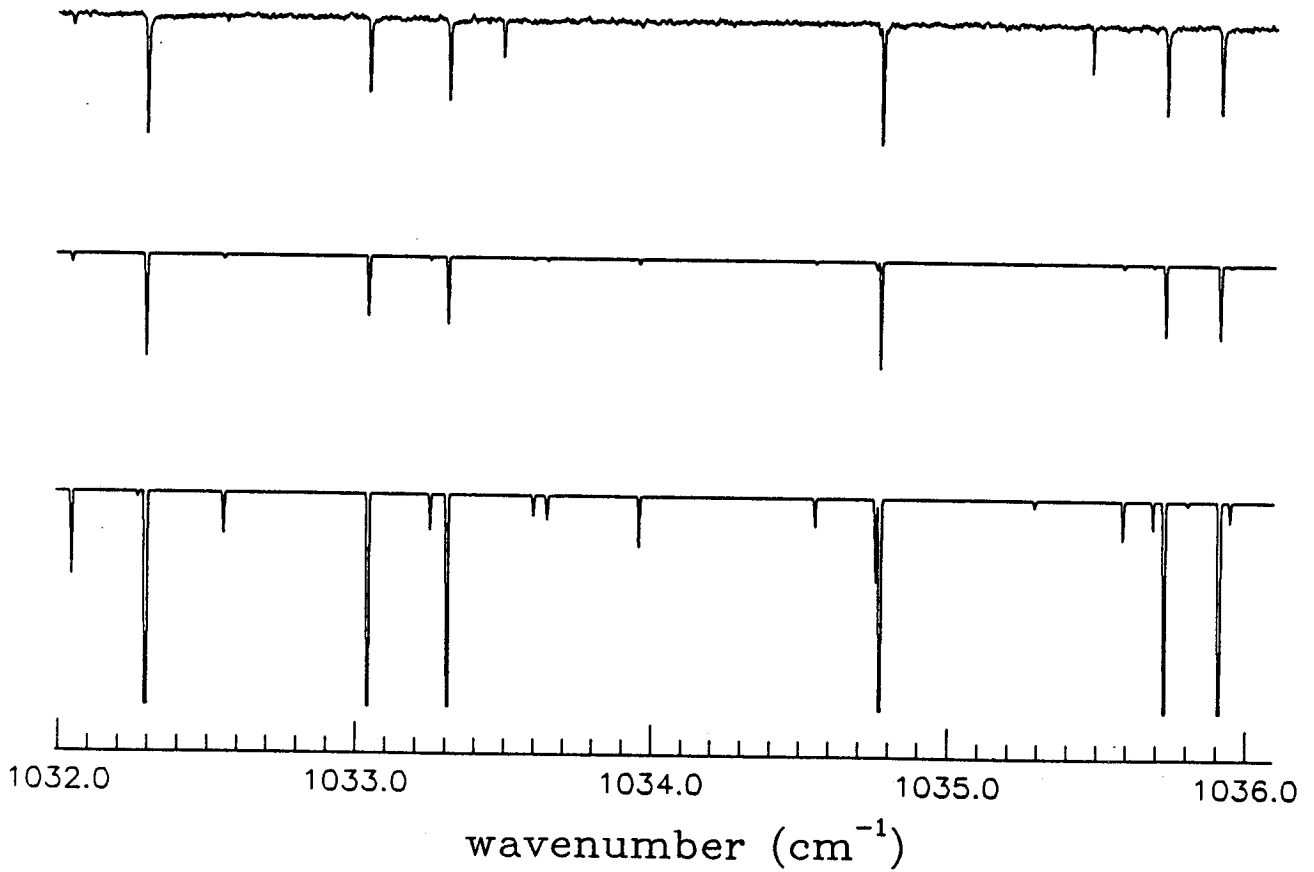
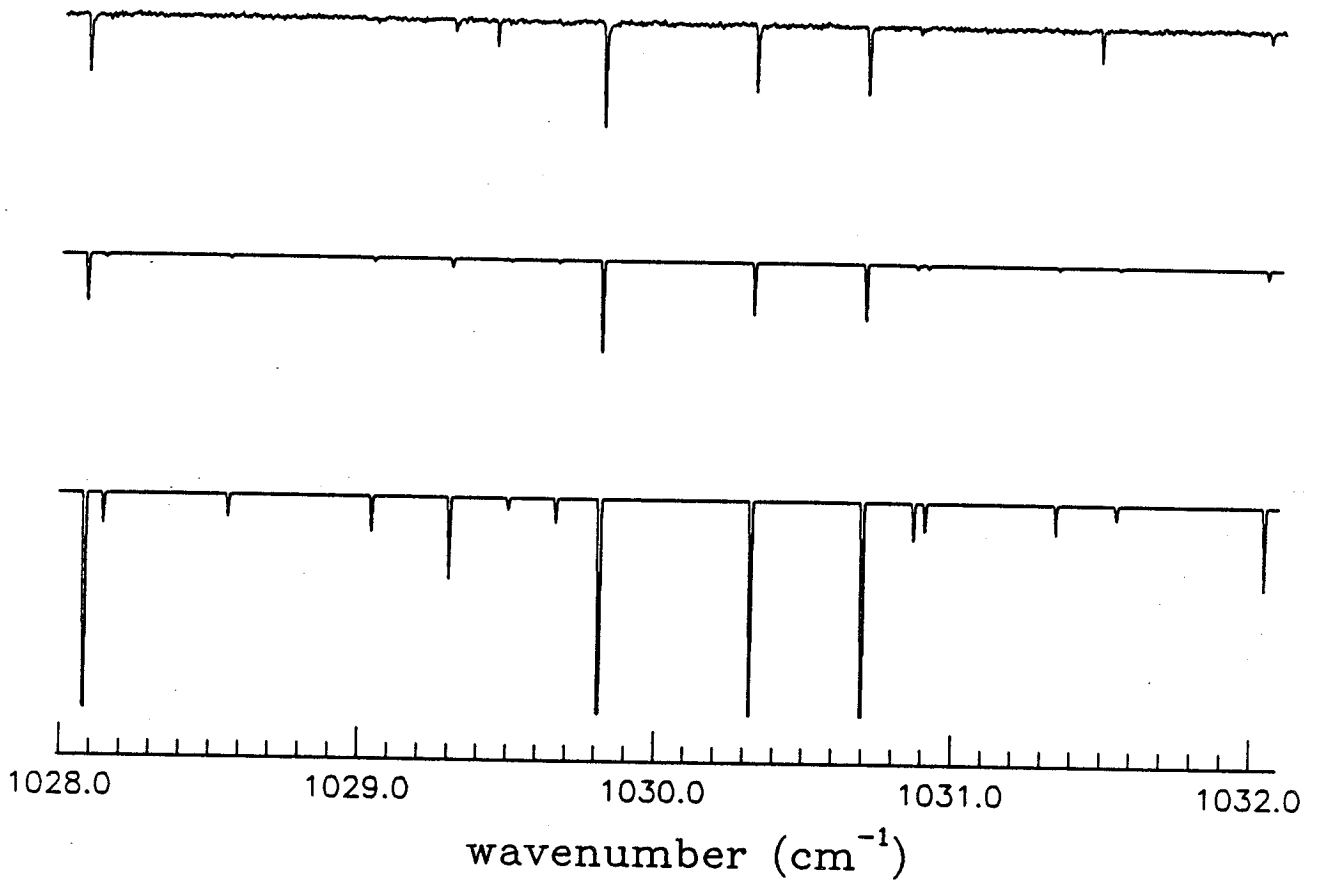


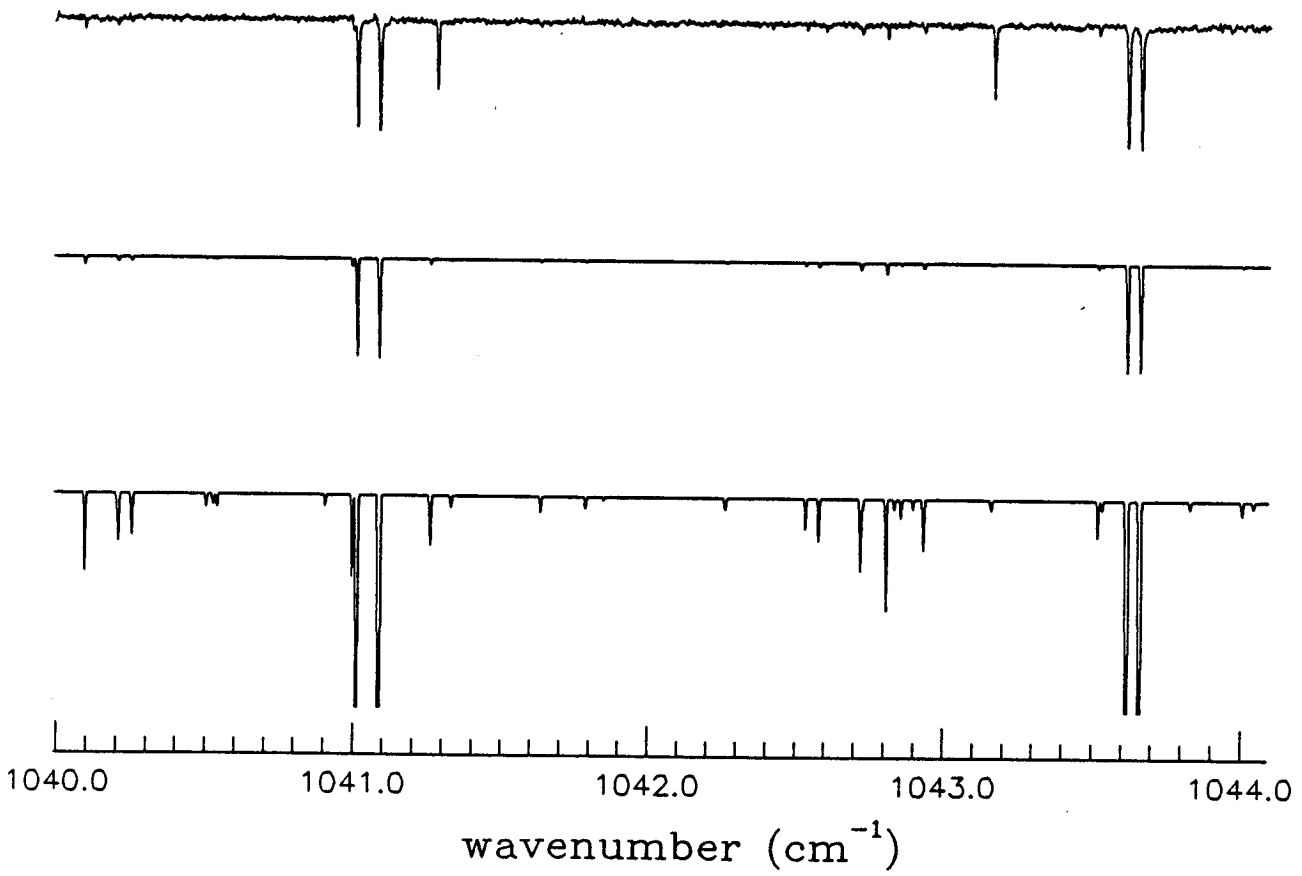
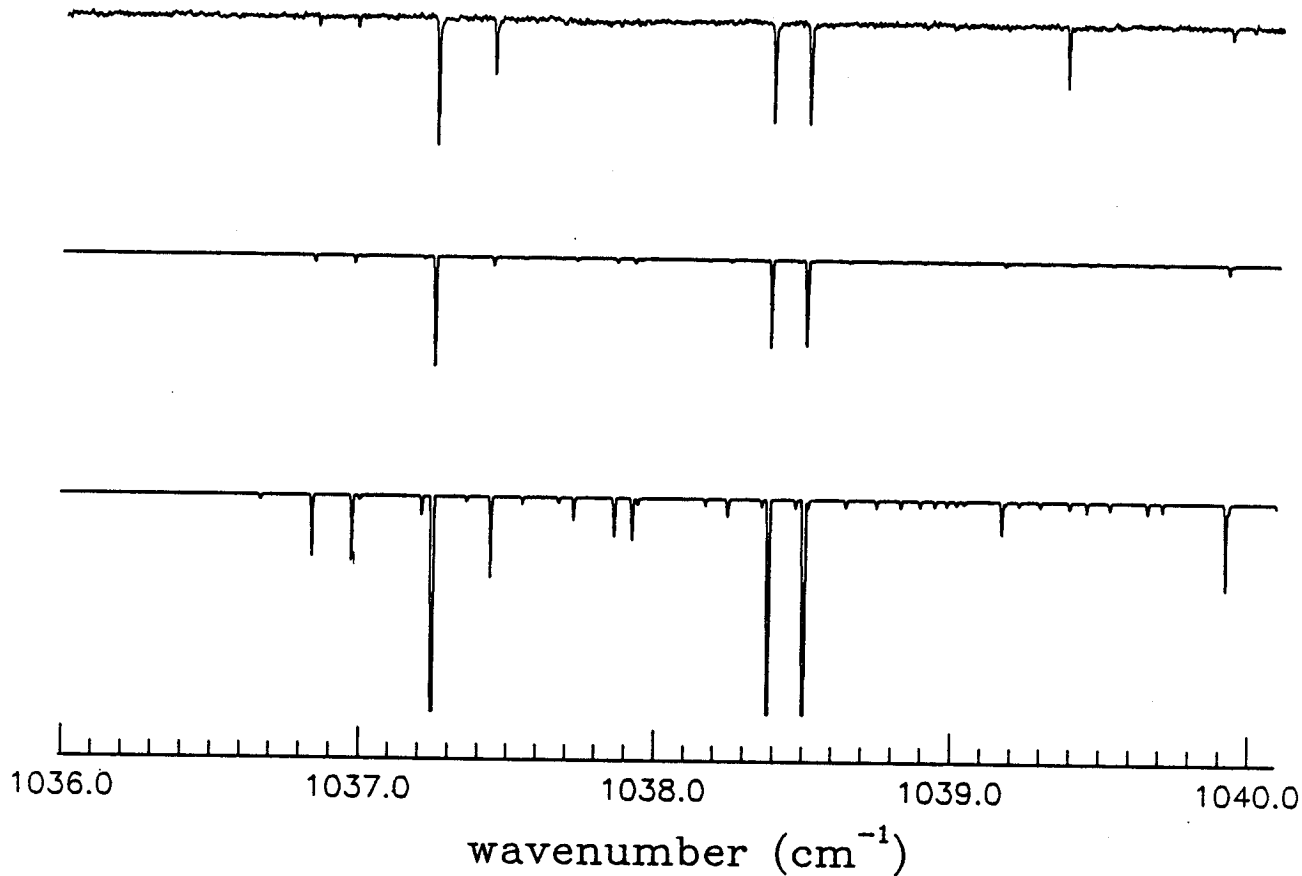


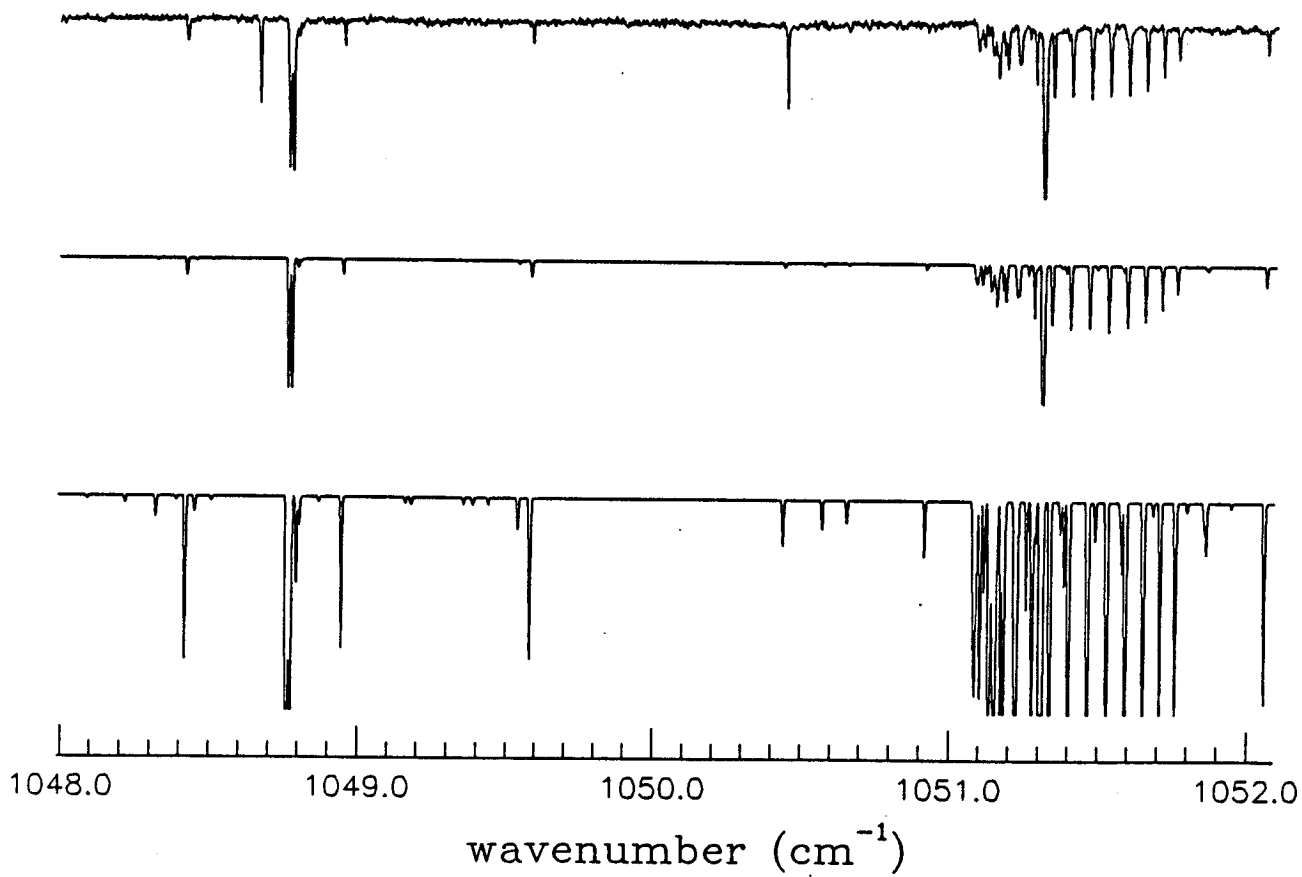
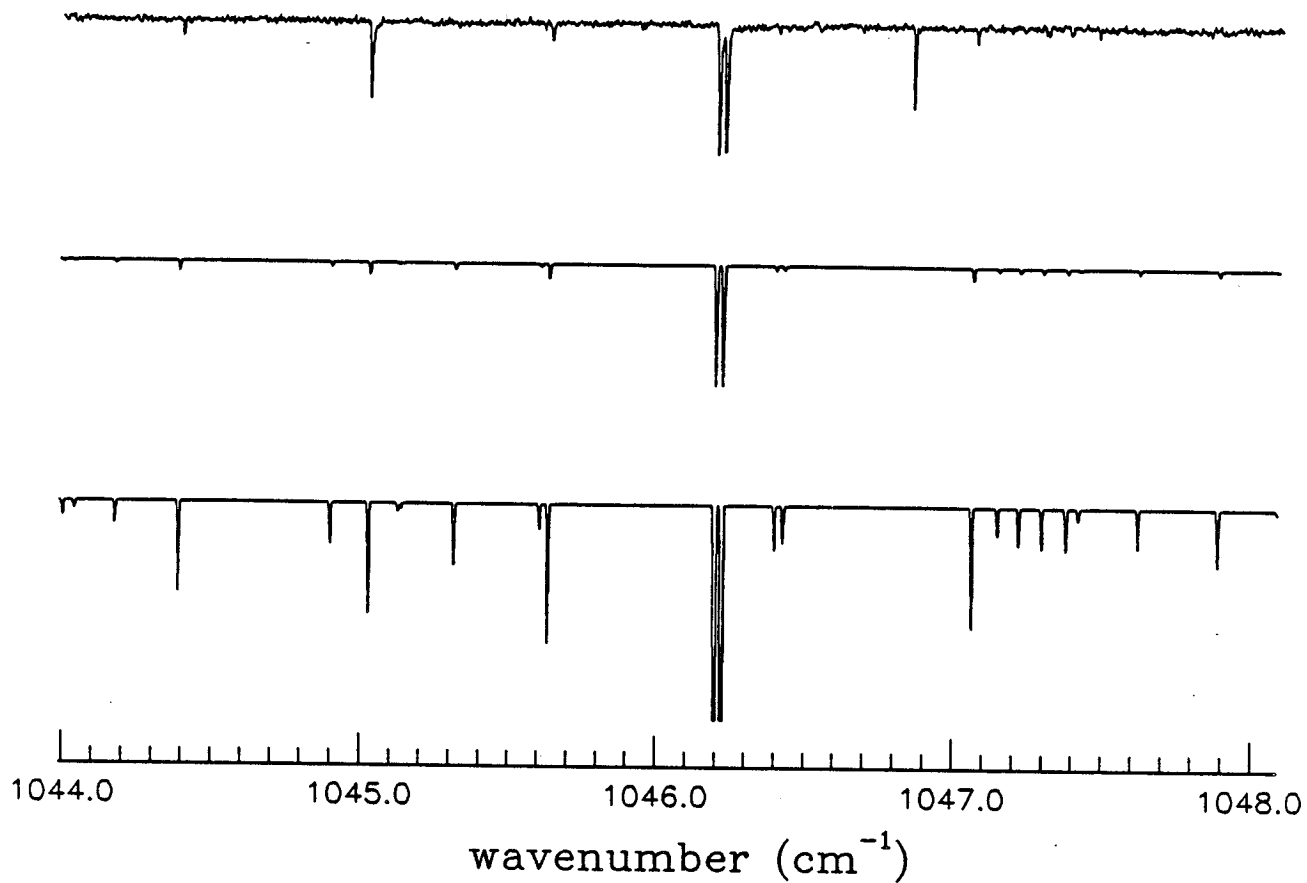


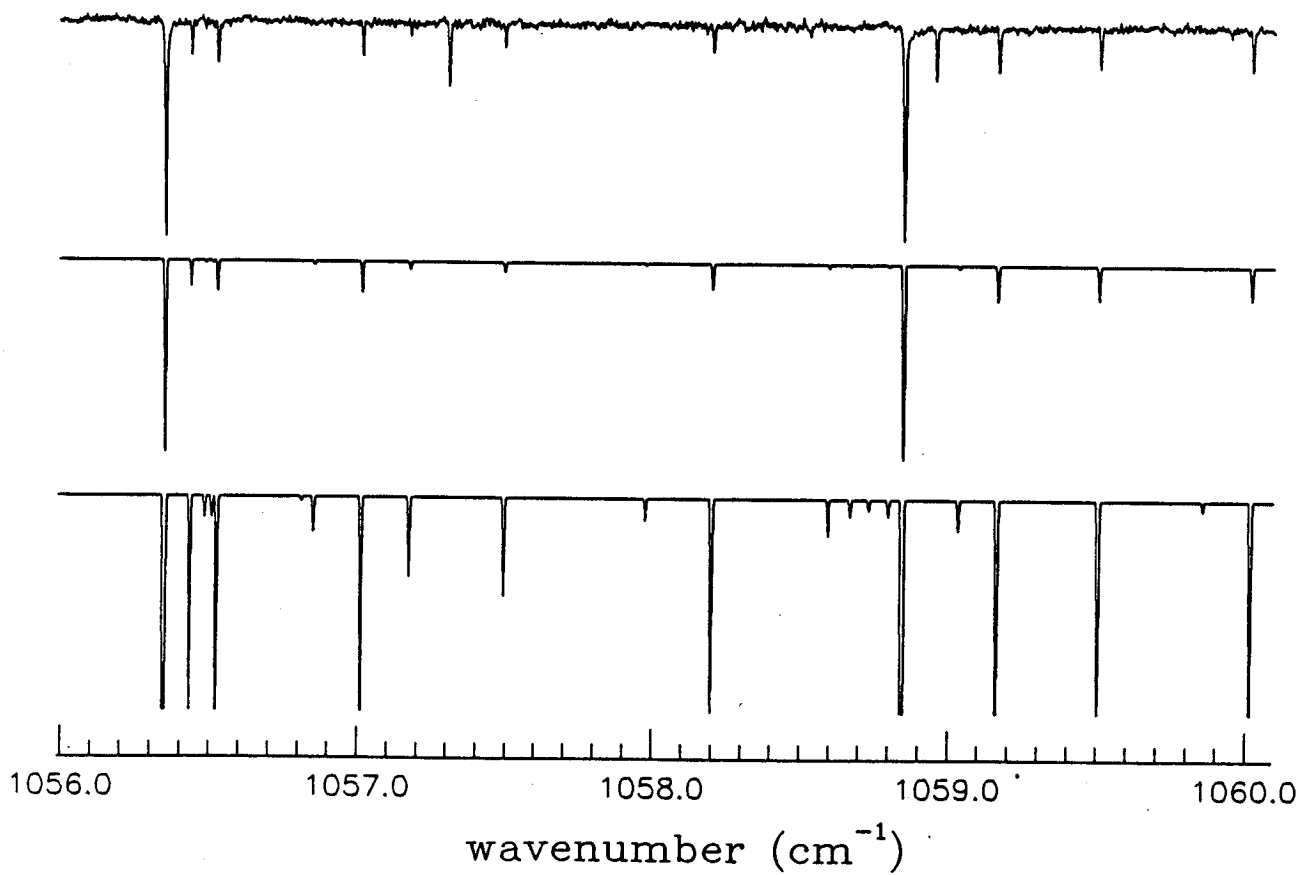
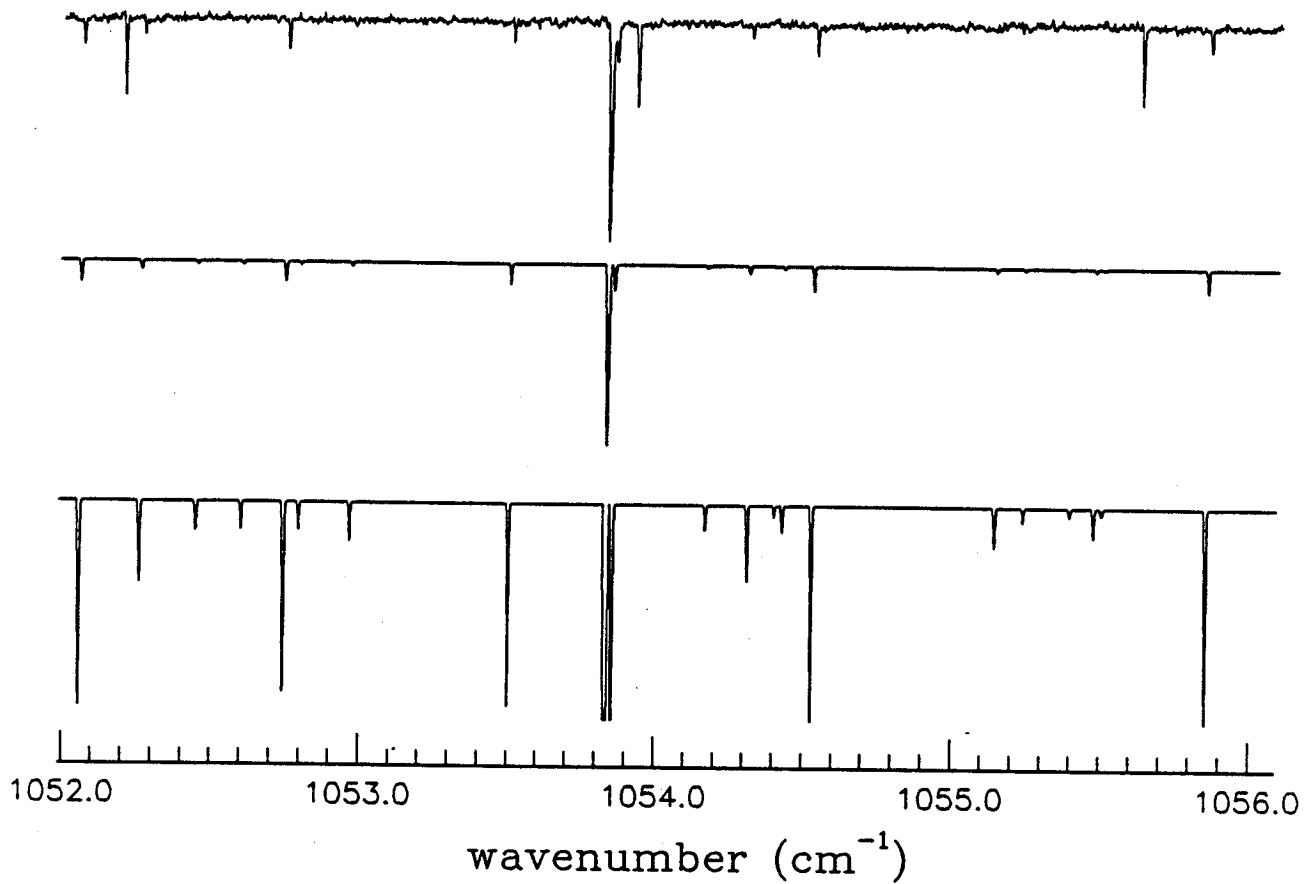


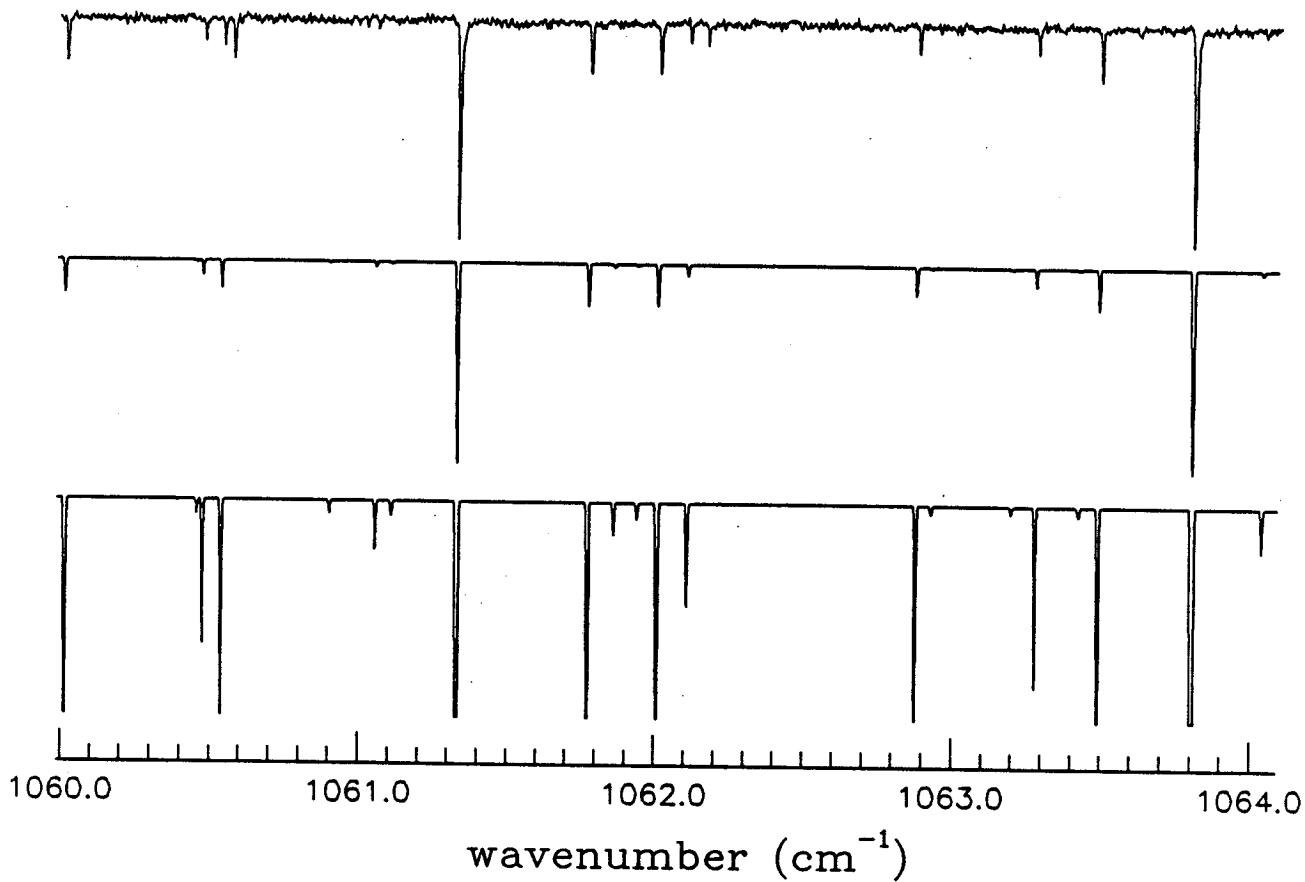


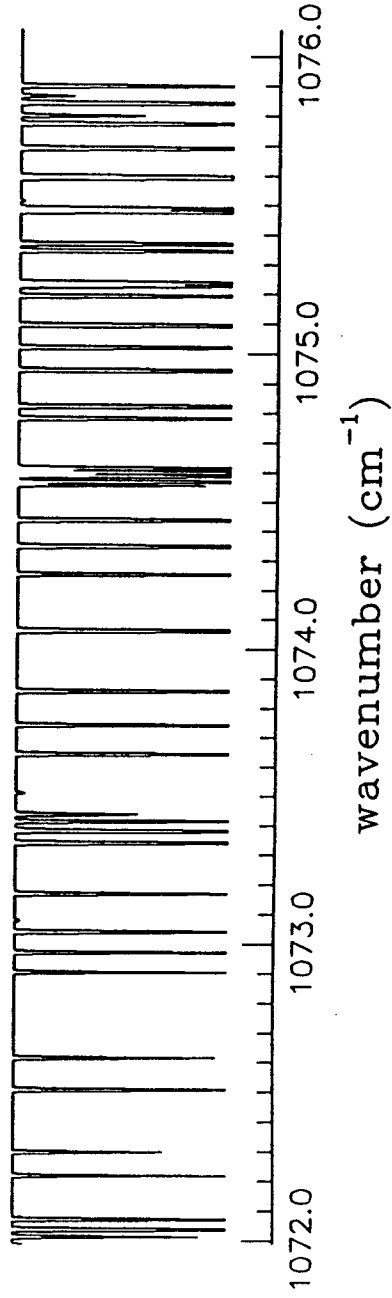
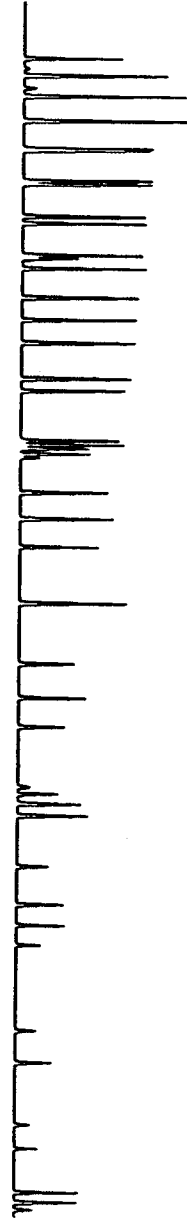
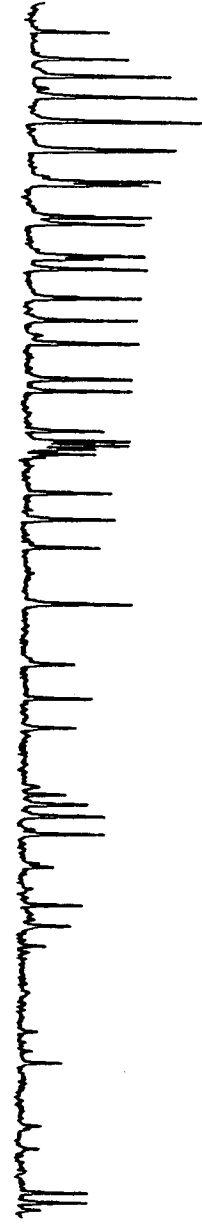
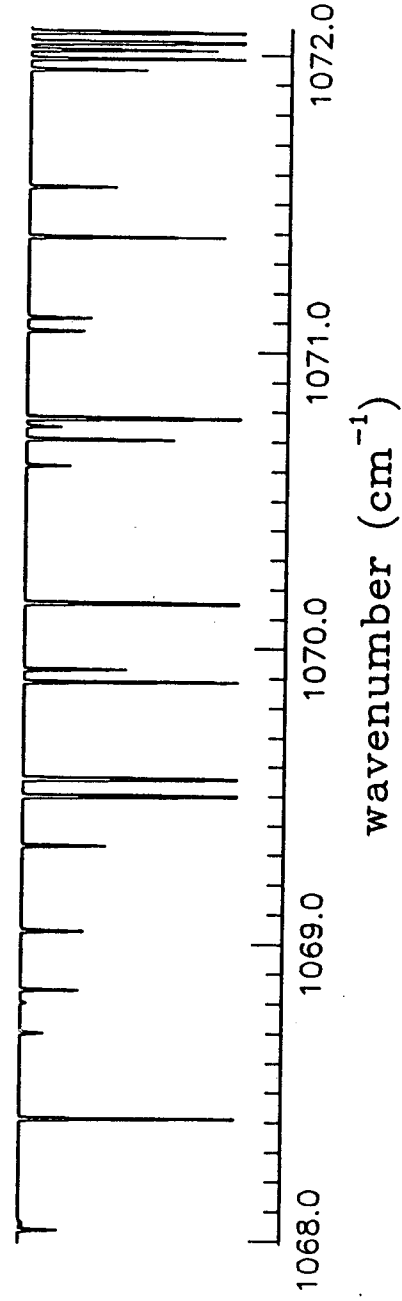
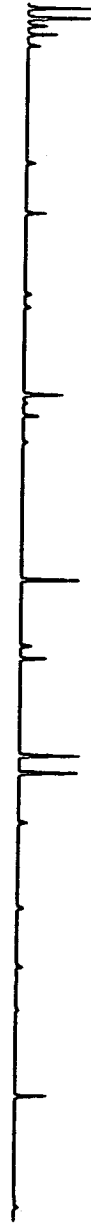


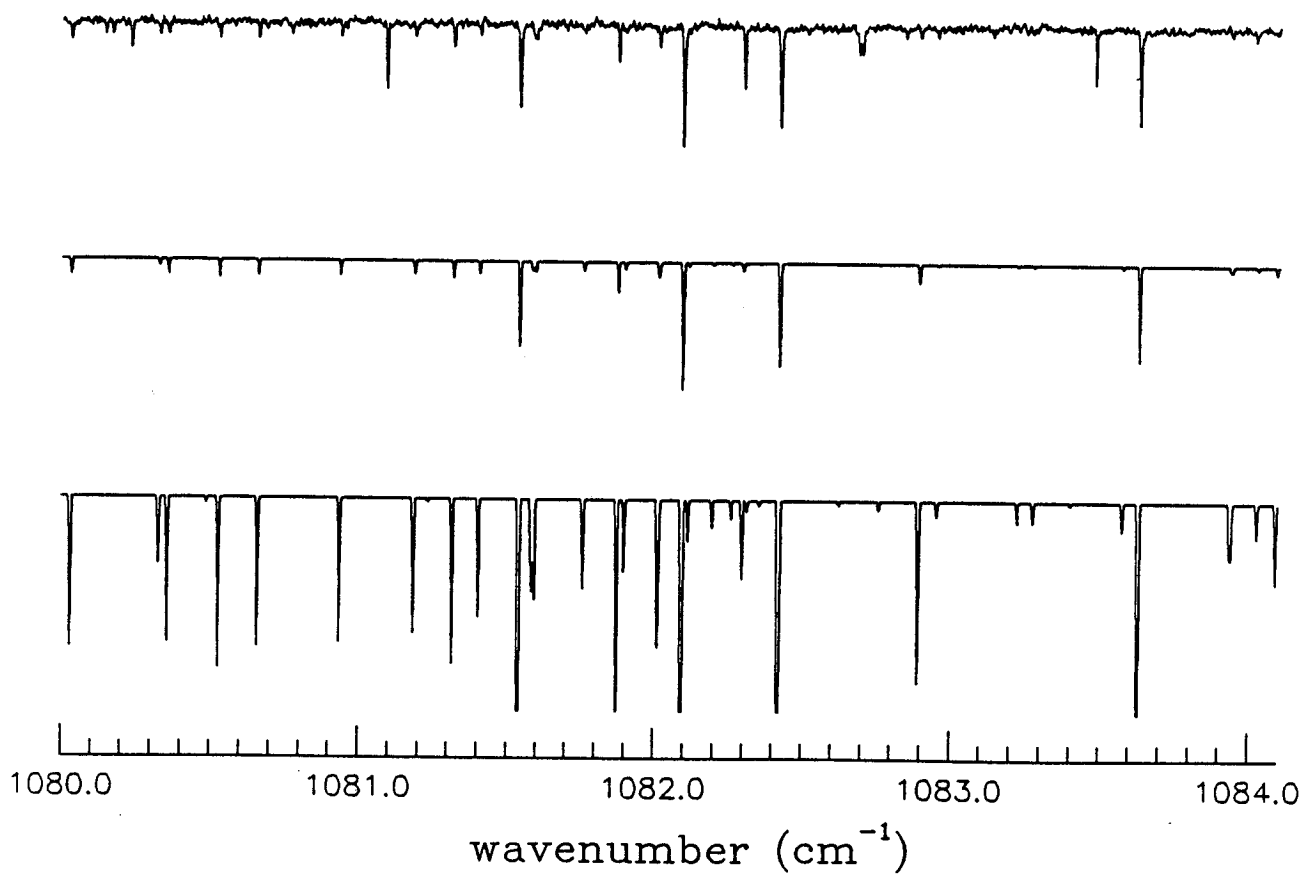
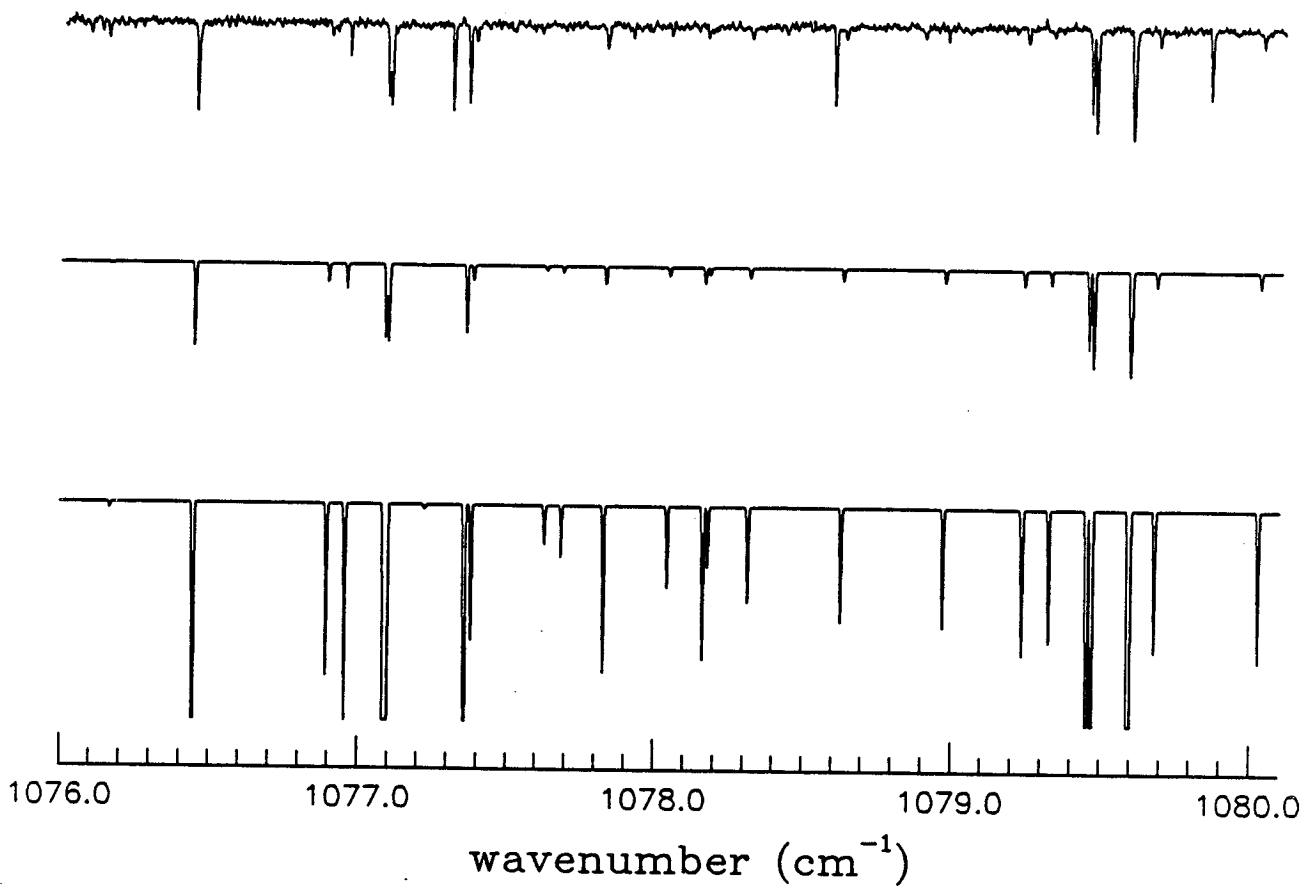


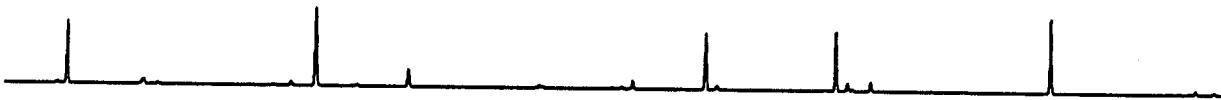
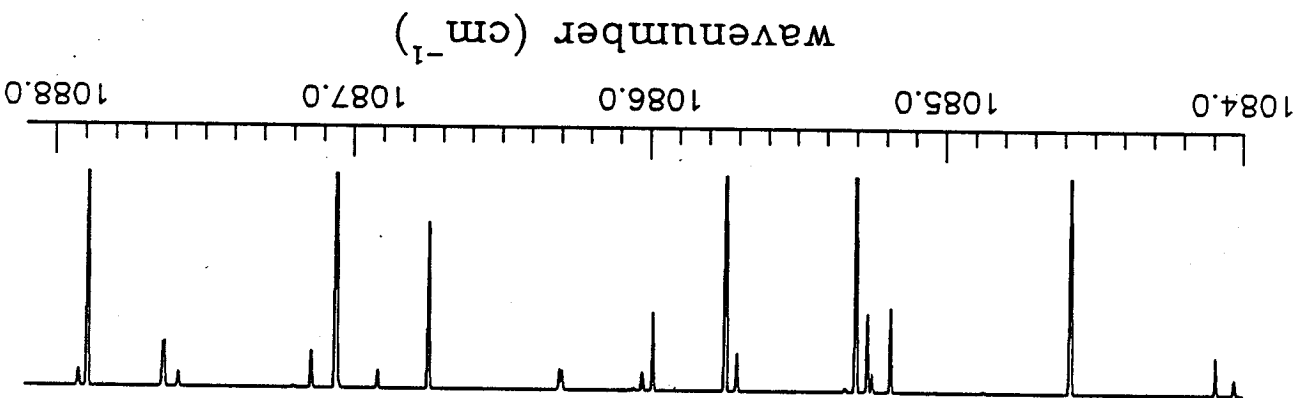
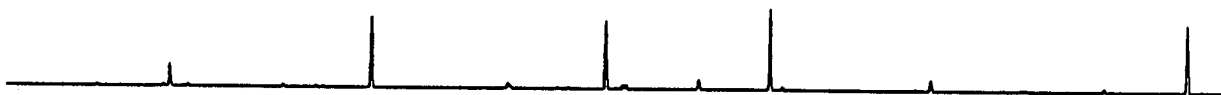
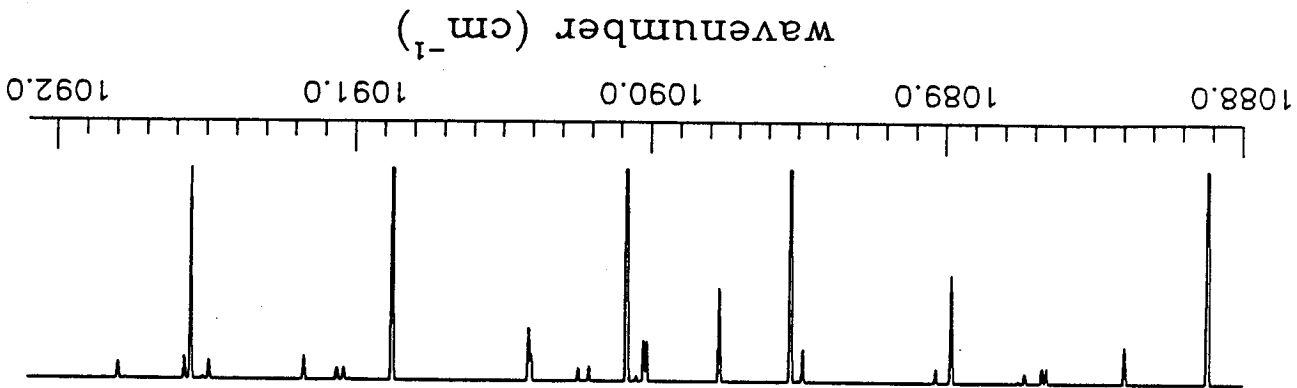


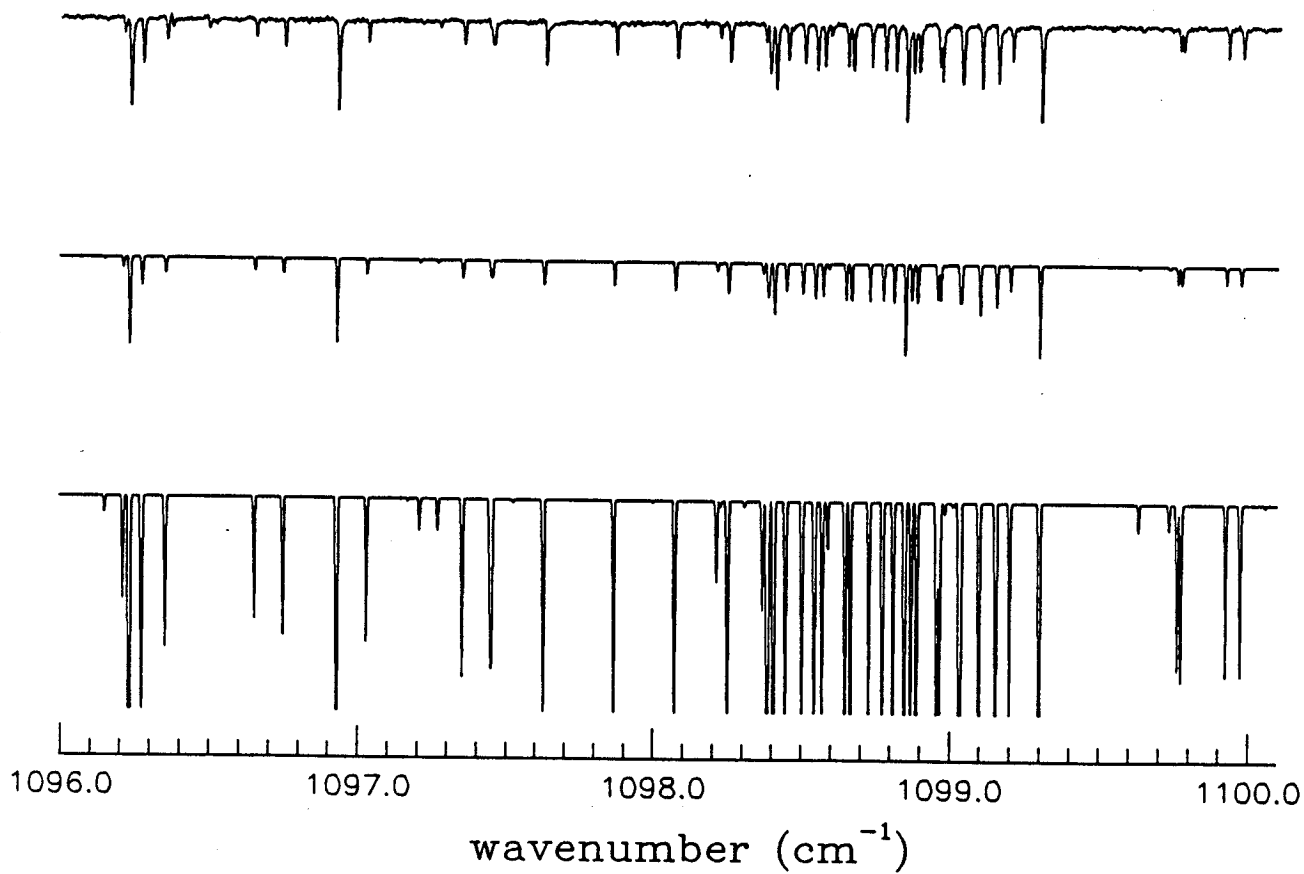
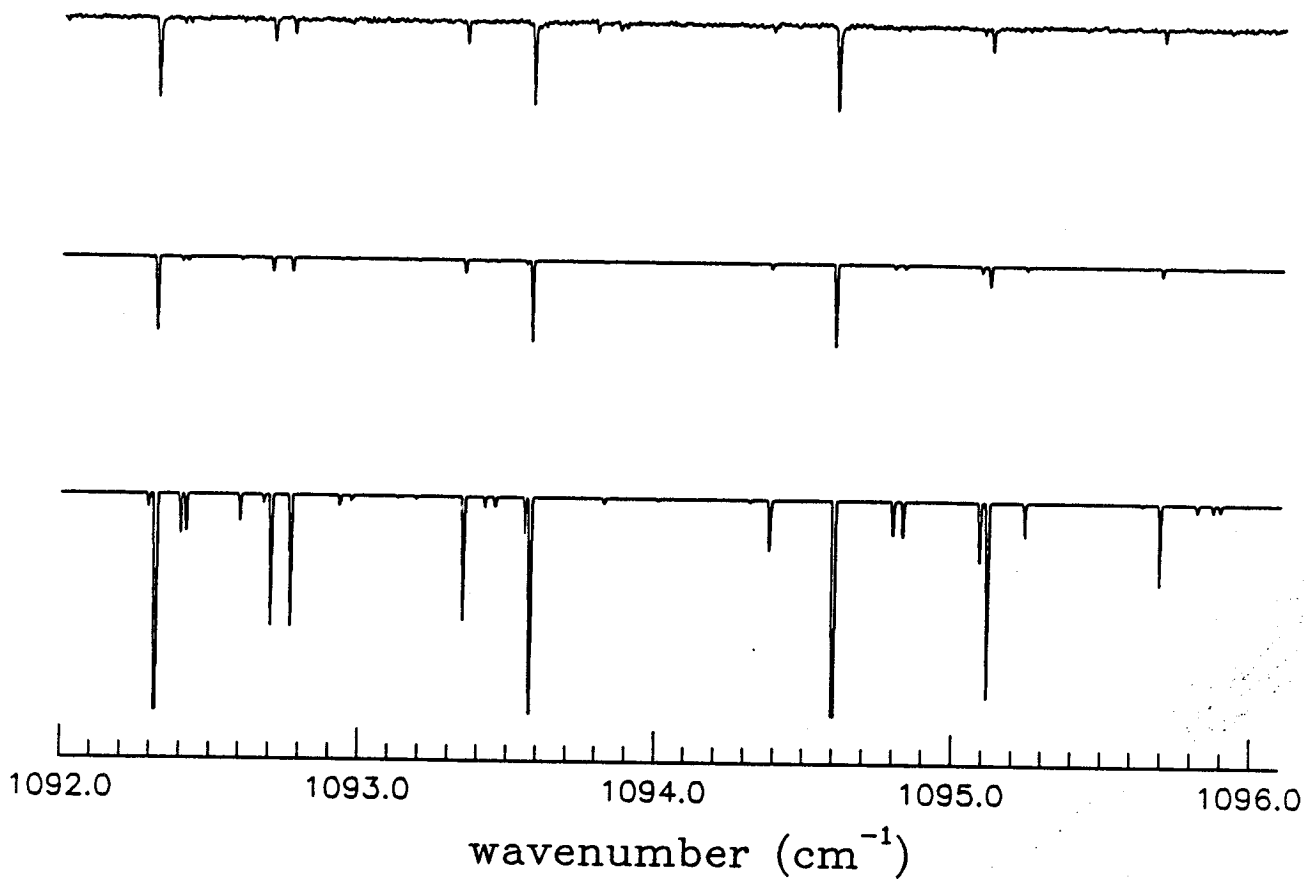


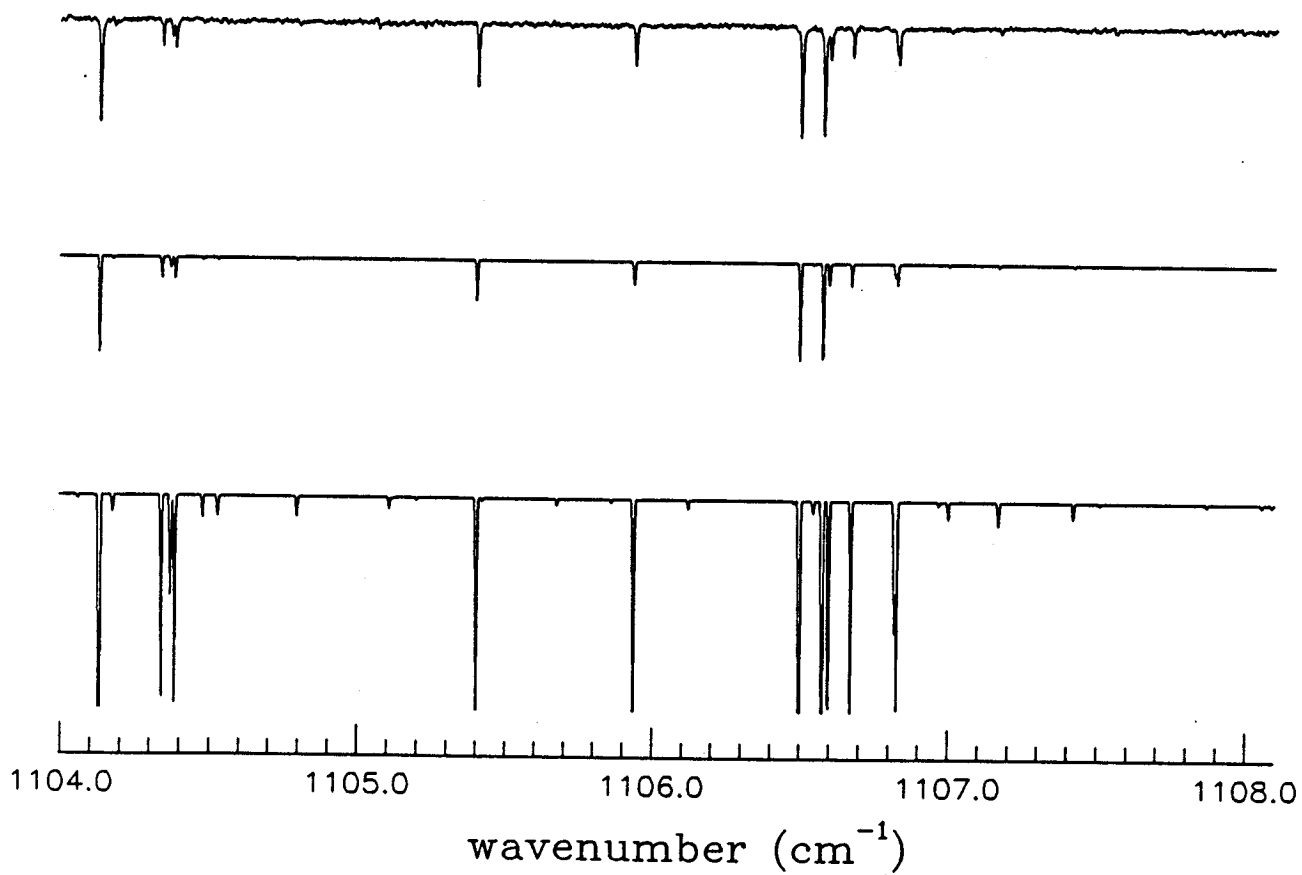
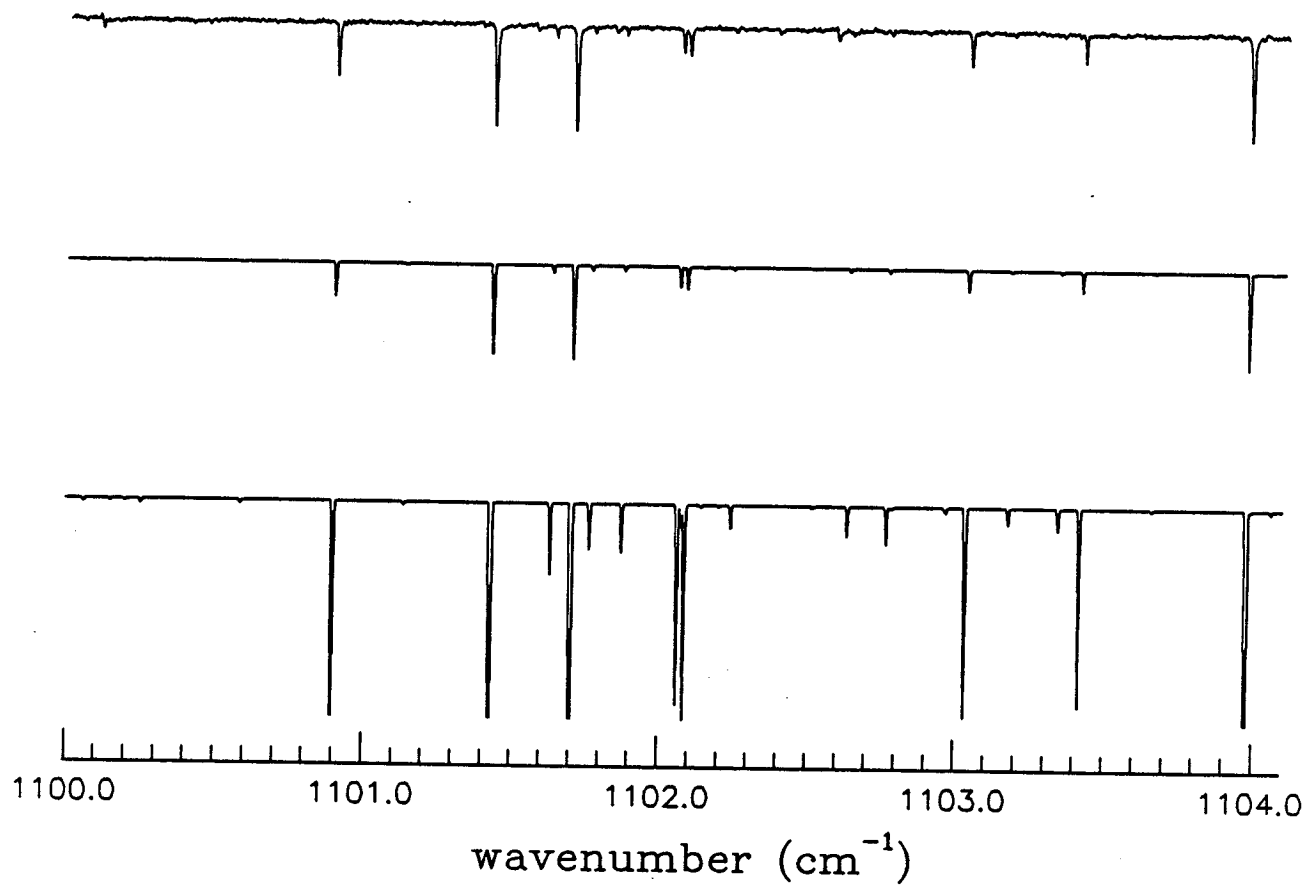


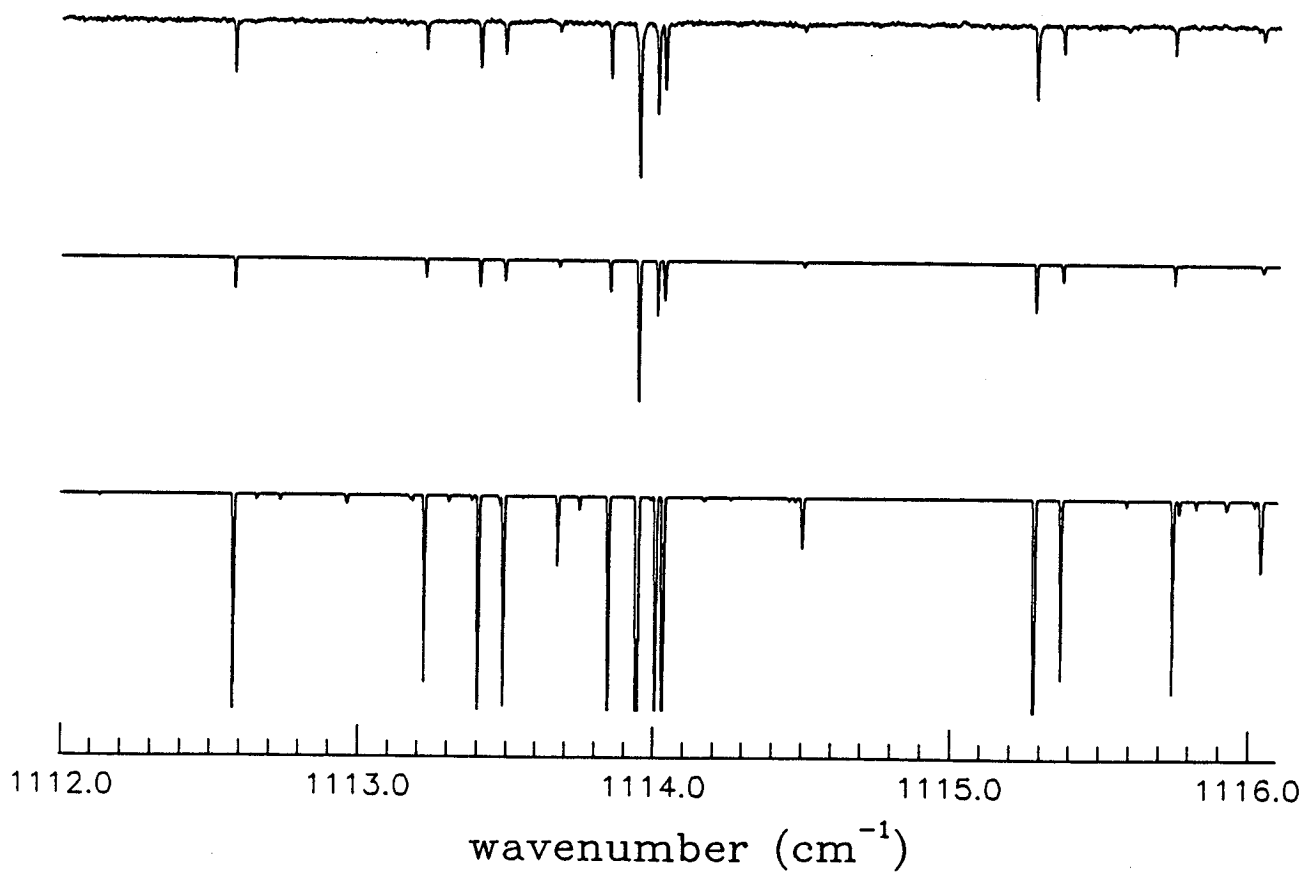
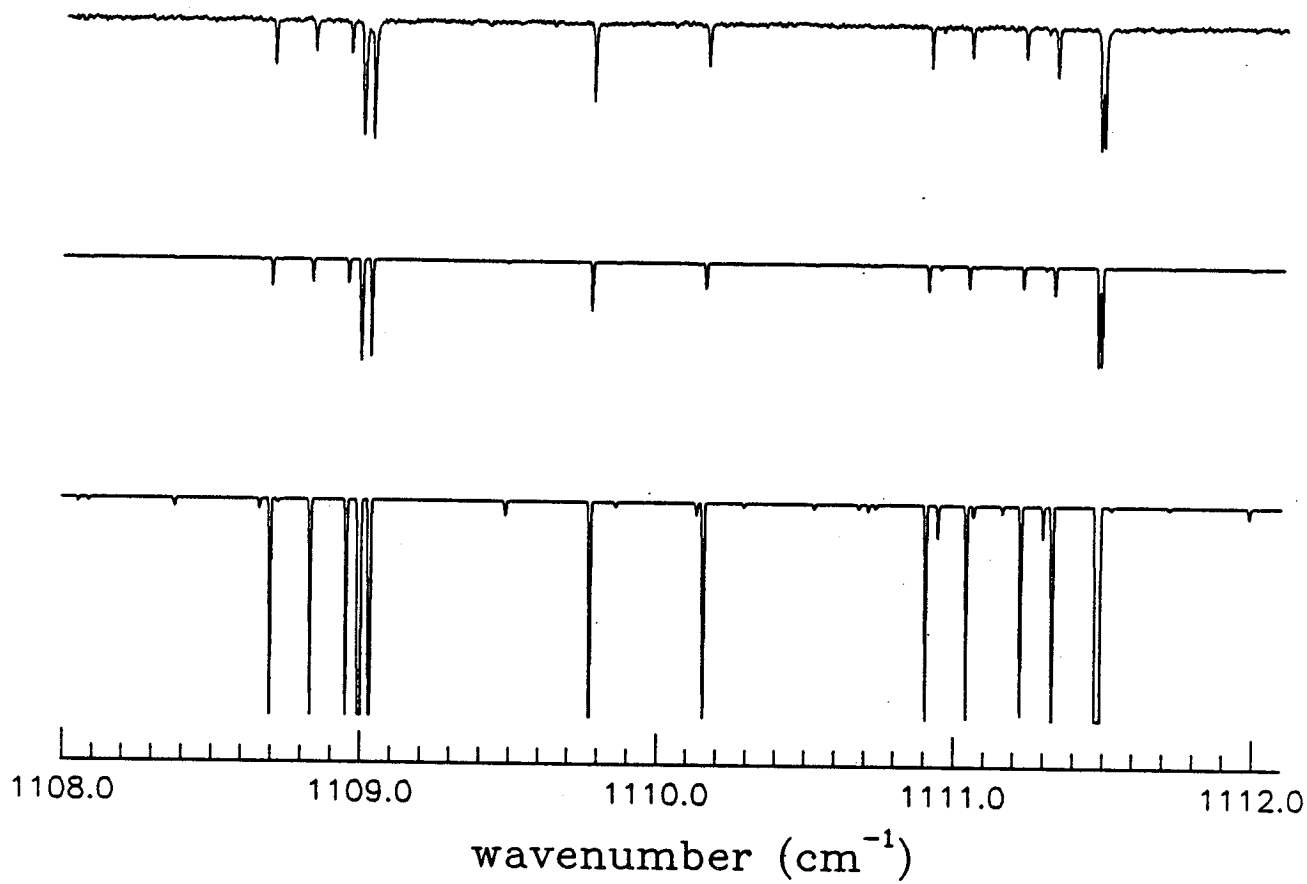


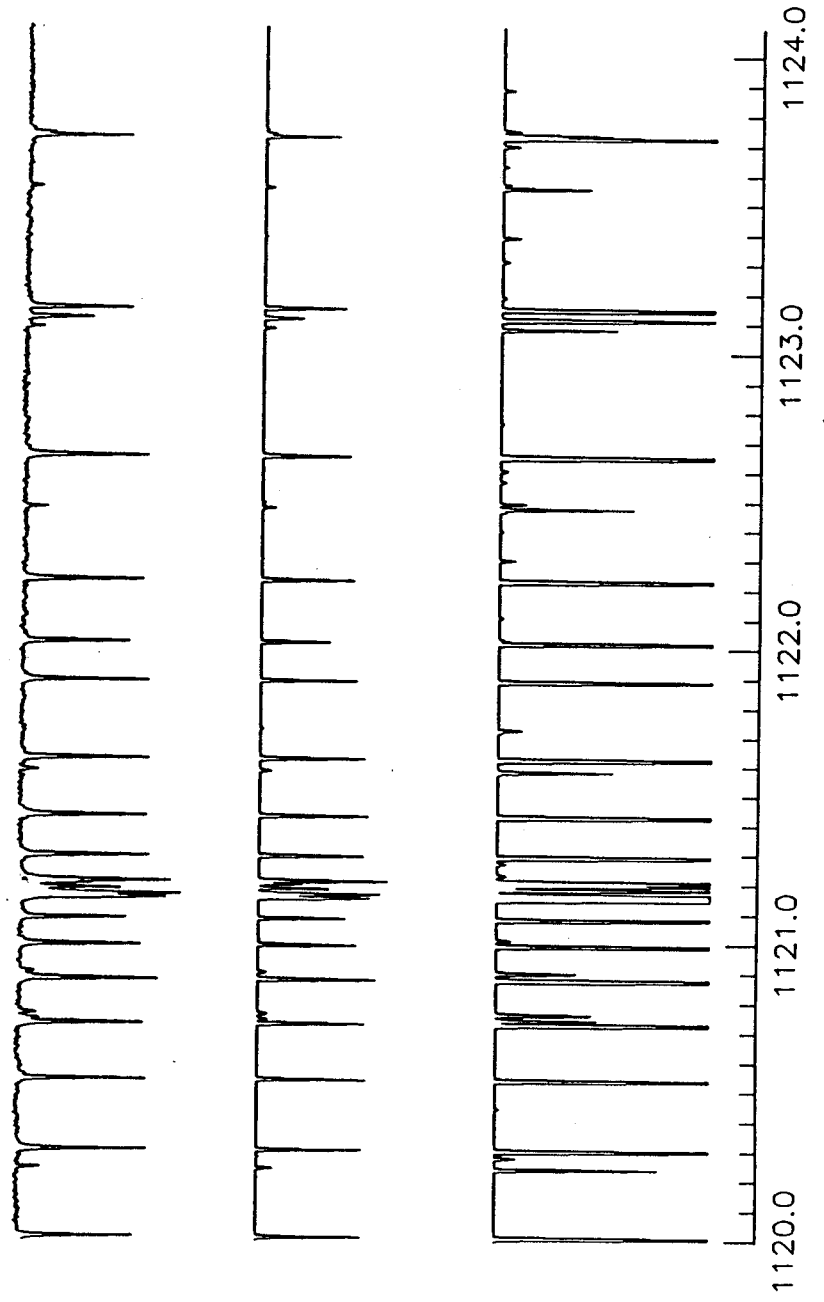
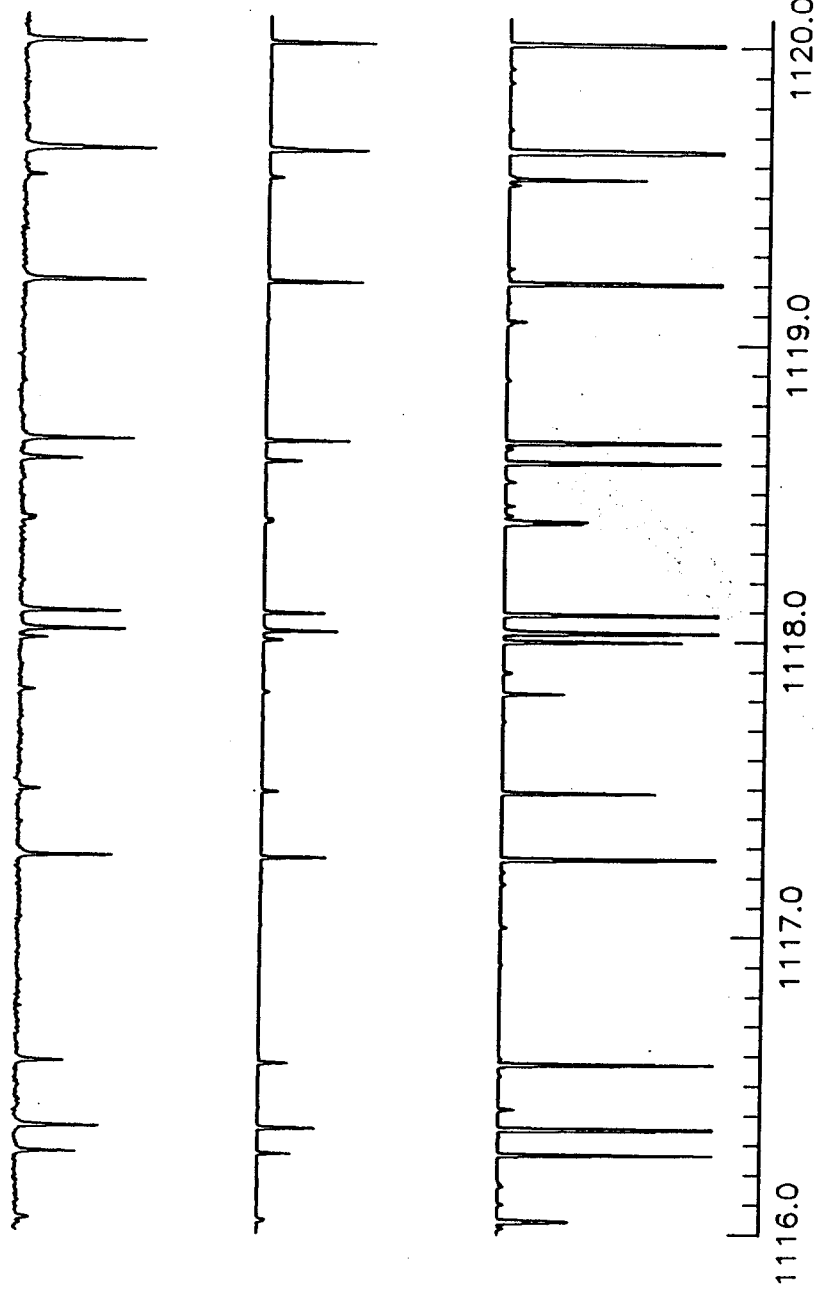


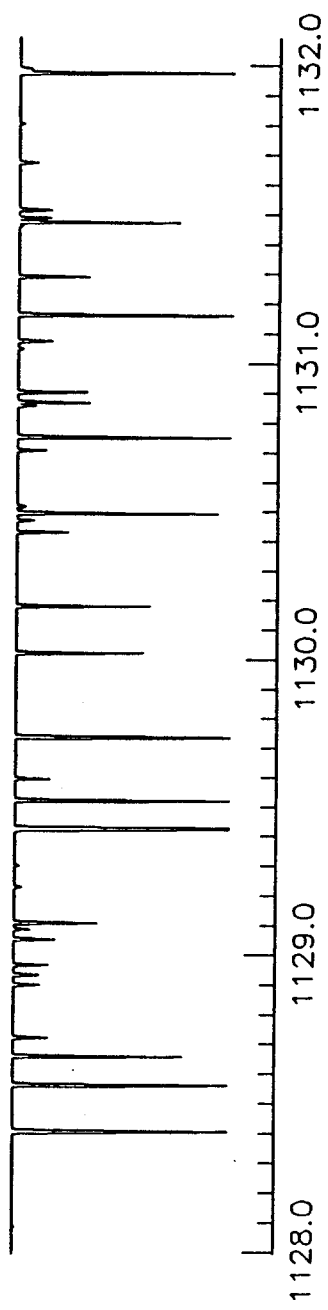
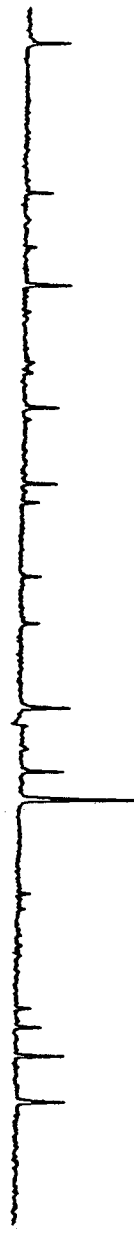
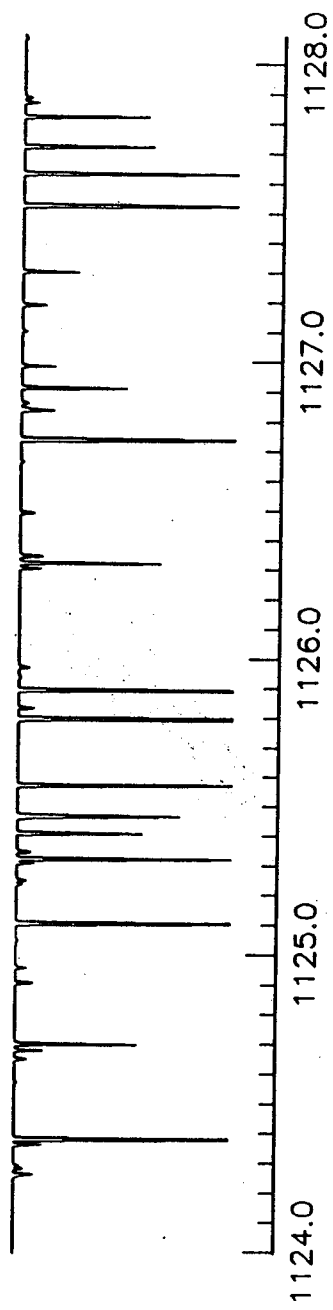




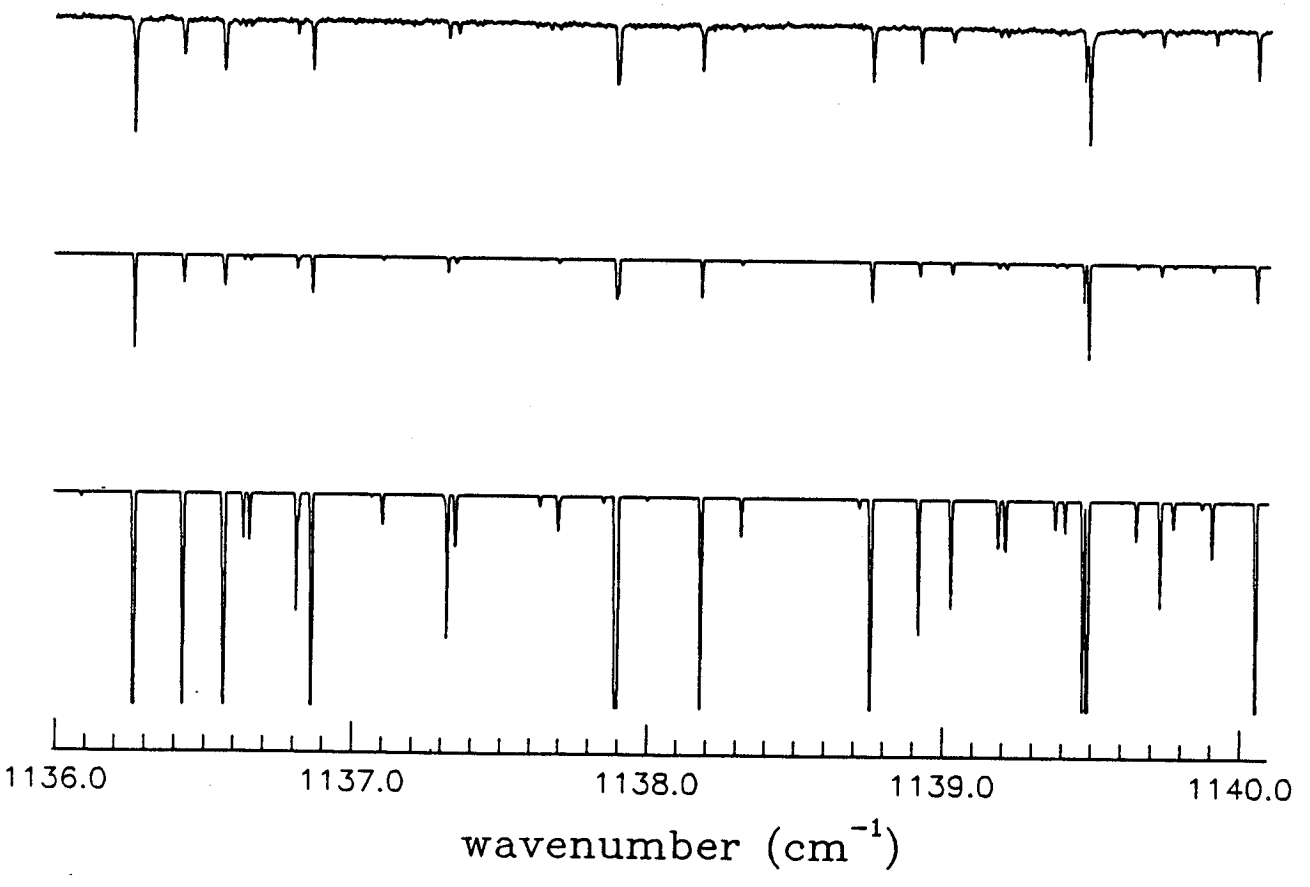
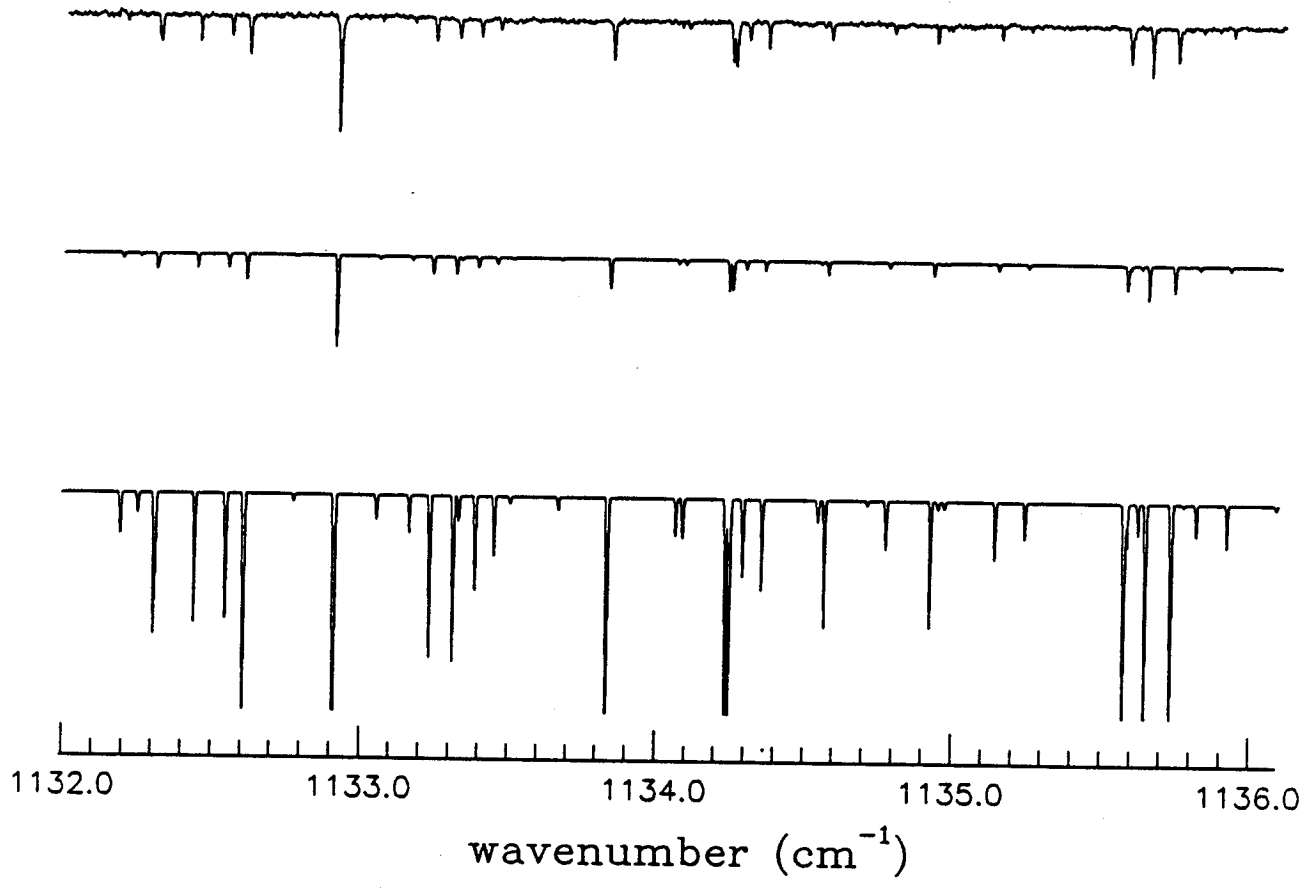


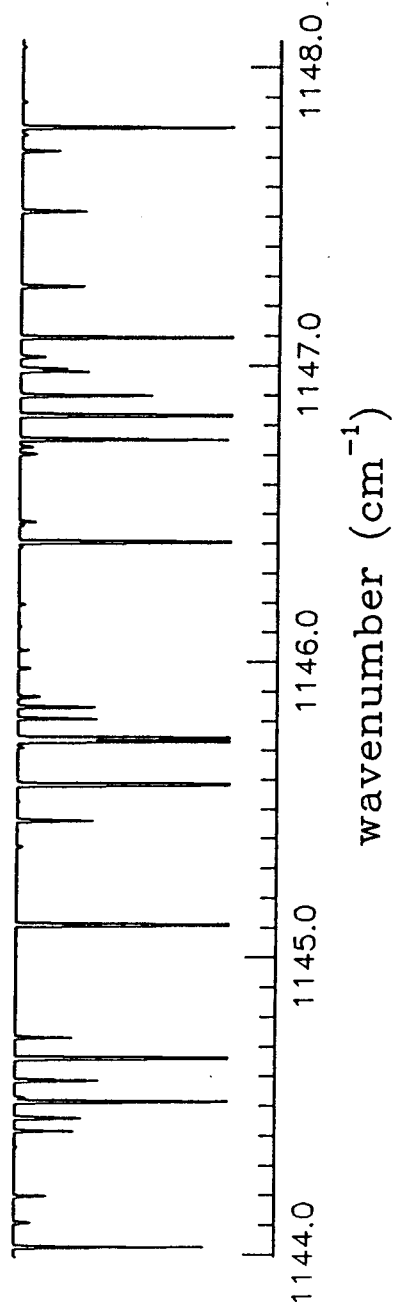
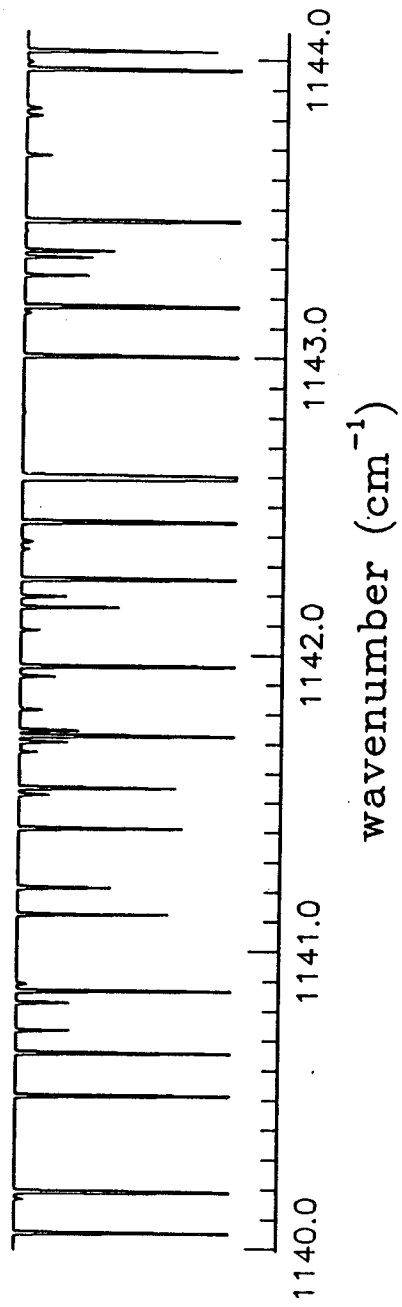


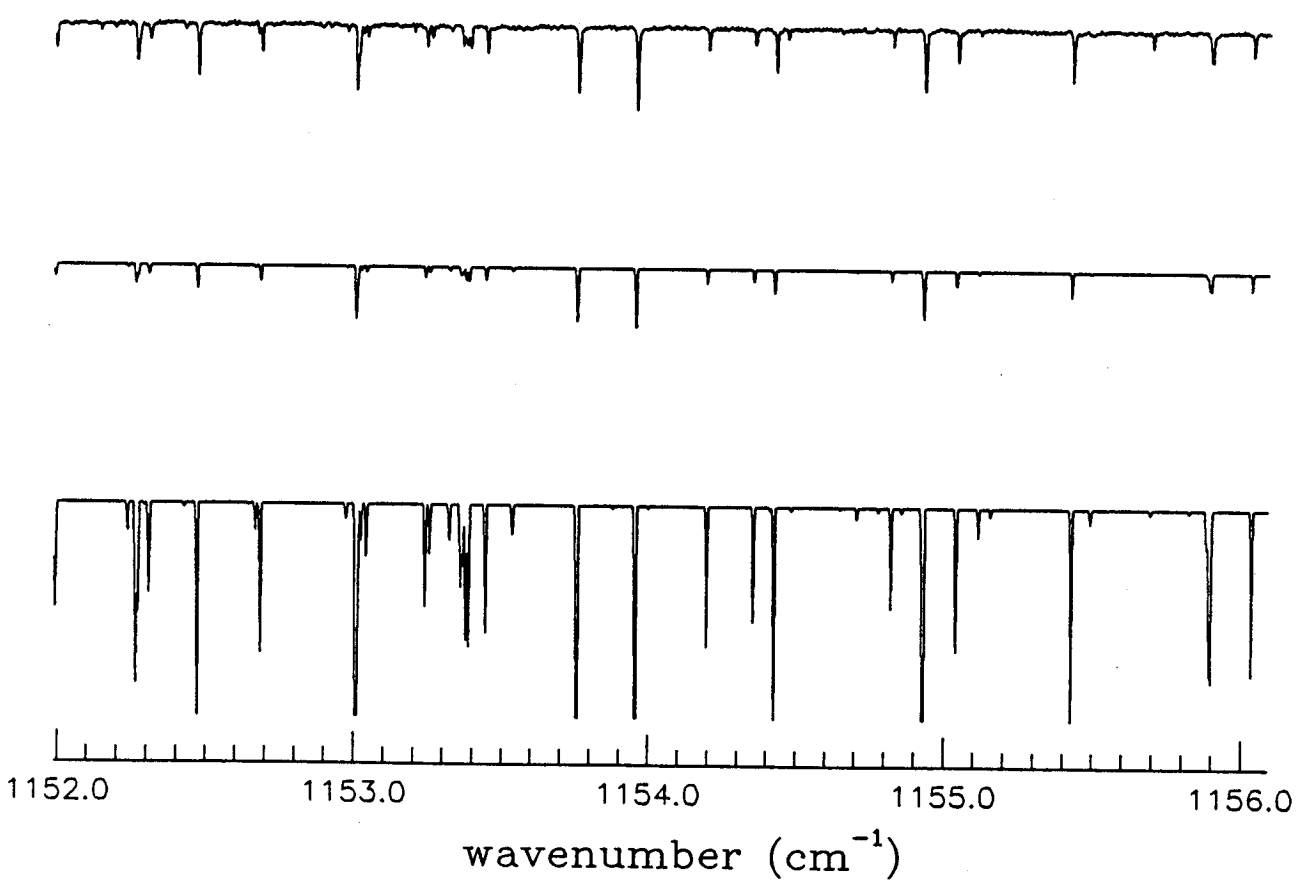
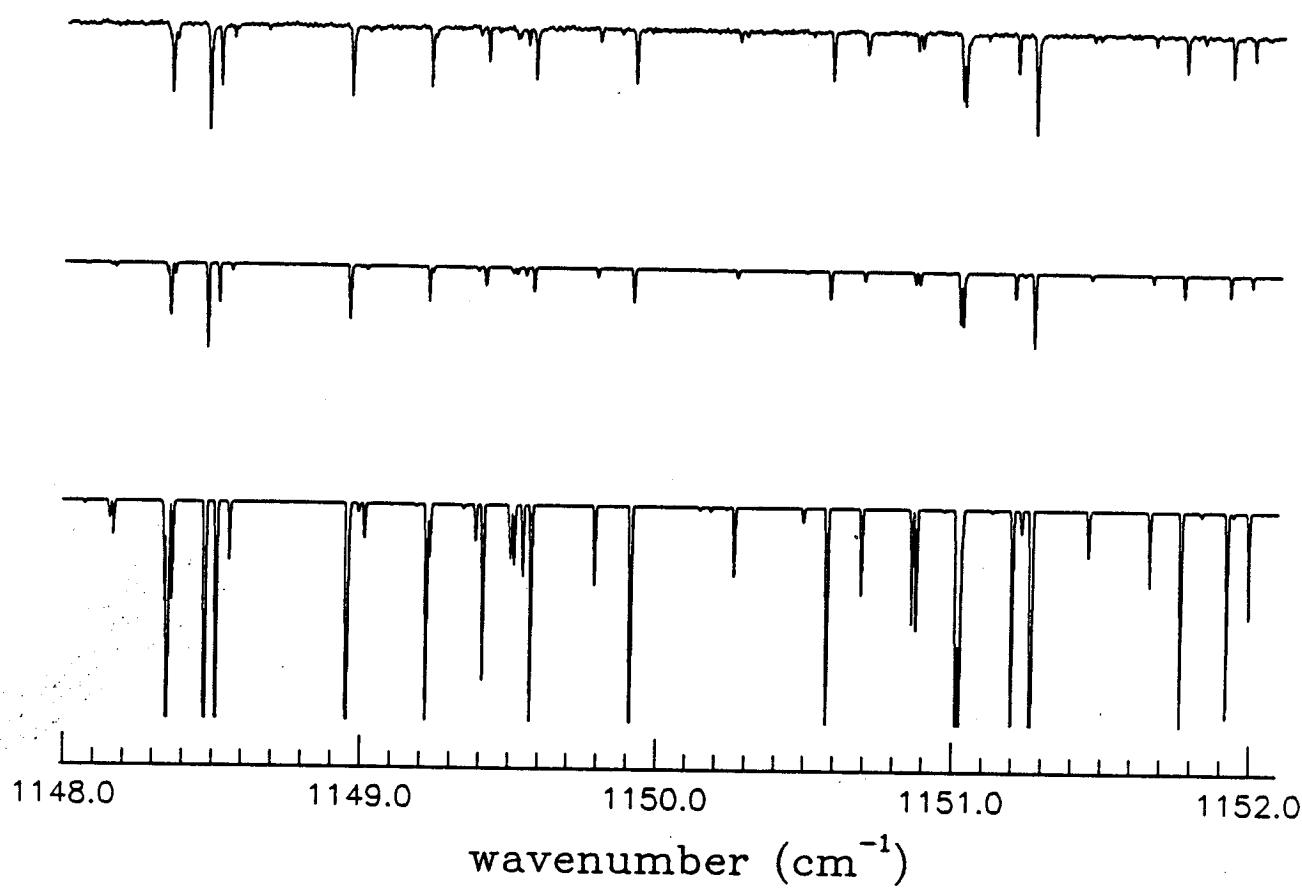


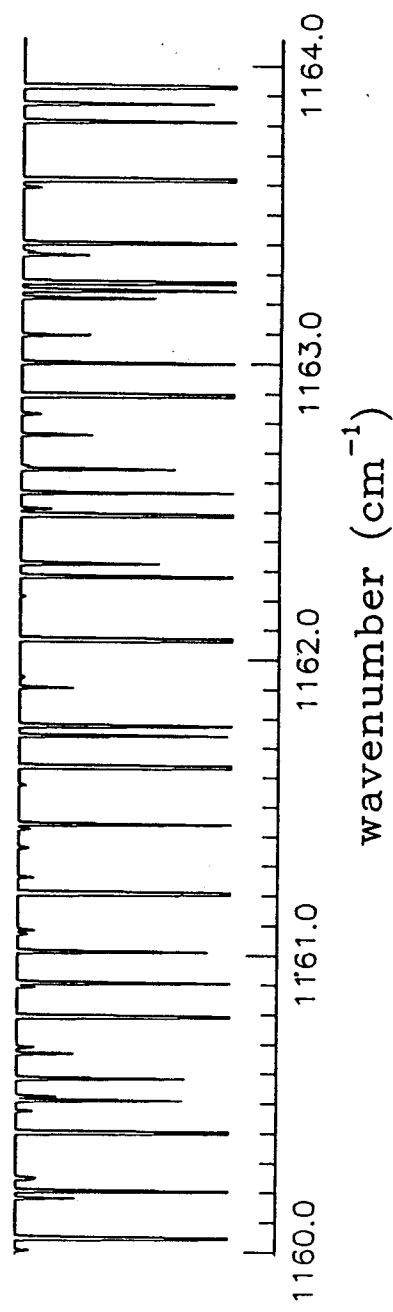
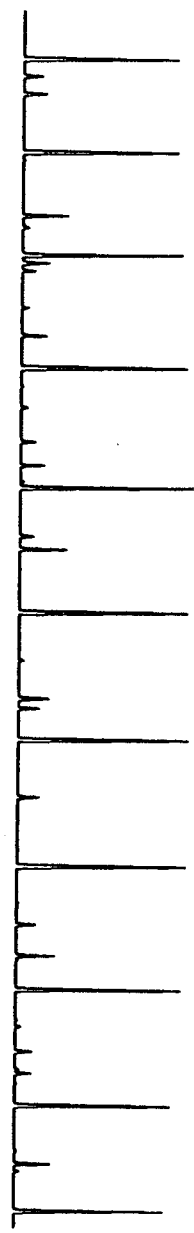
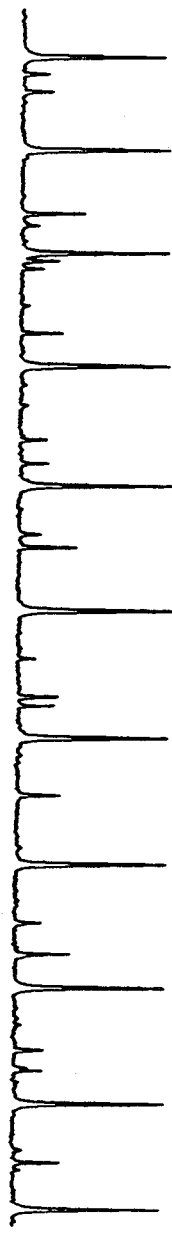
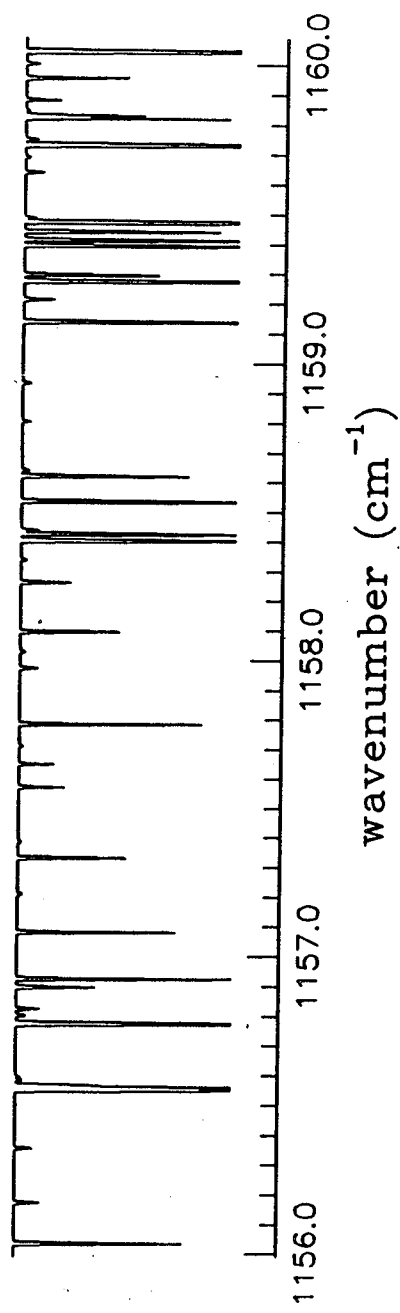
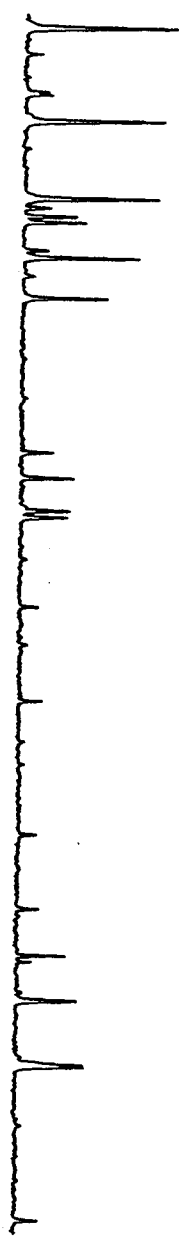


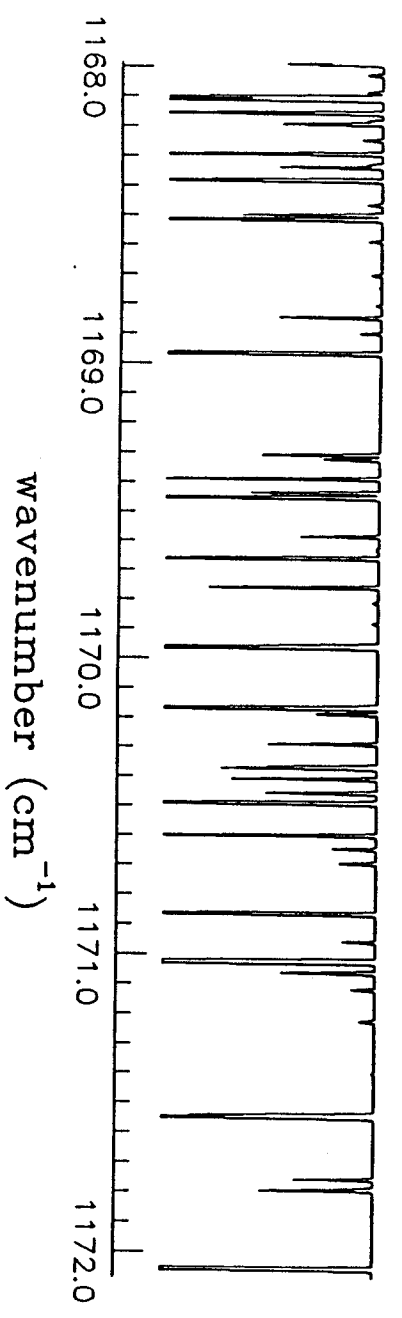
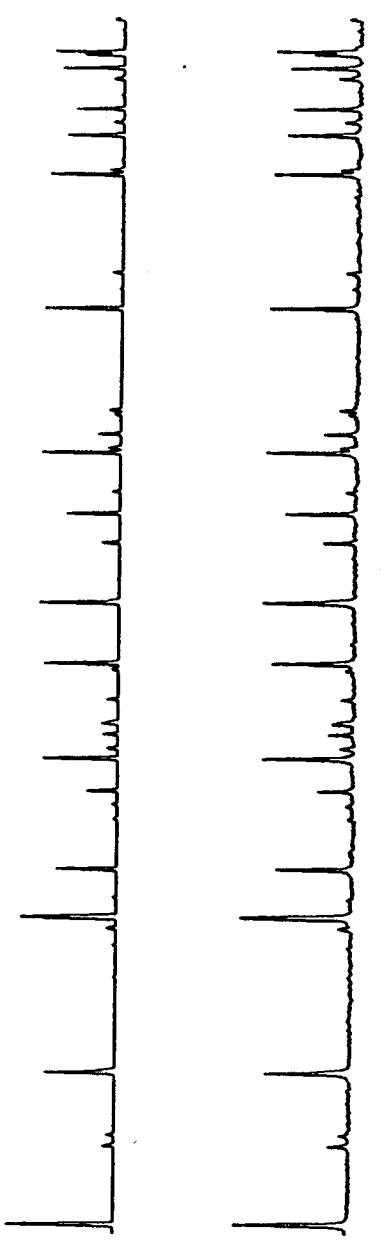
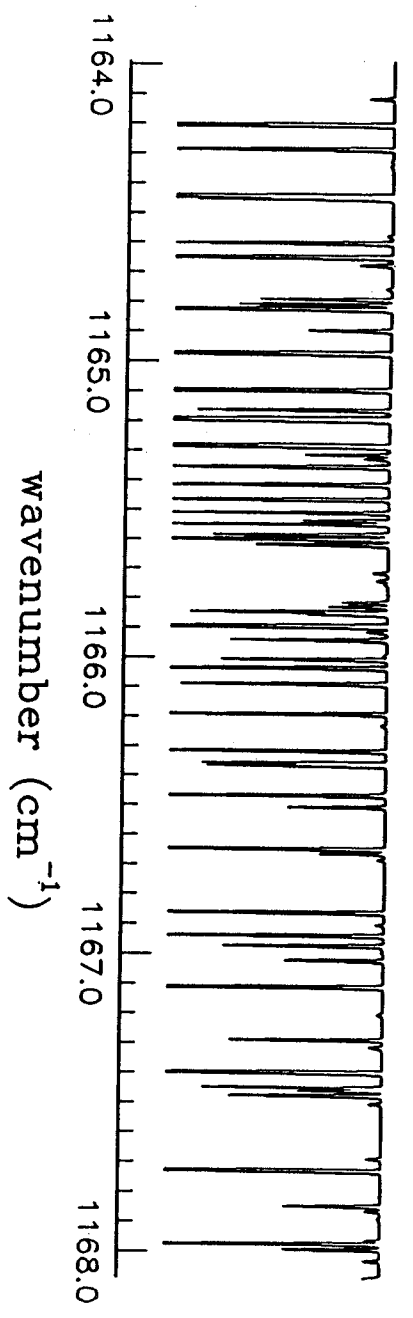
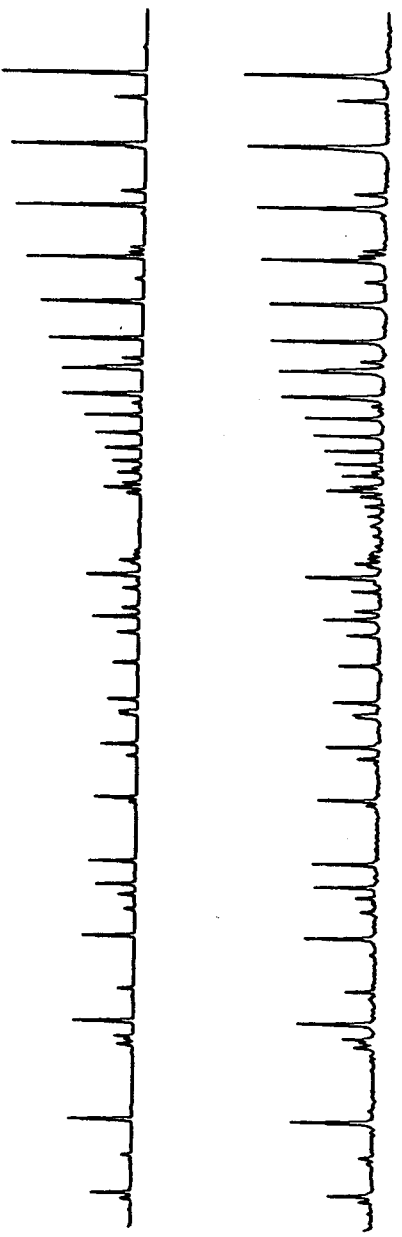
wavenumber (cm⁻¹)

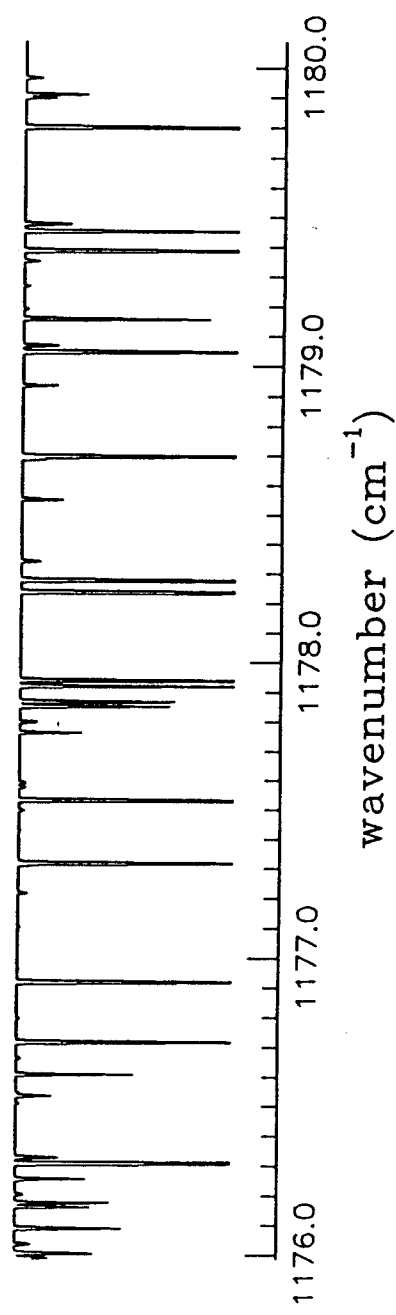
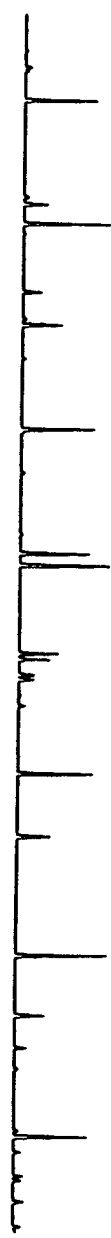
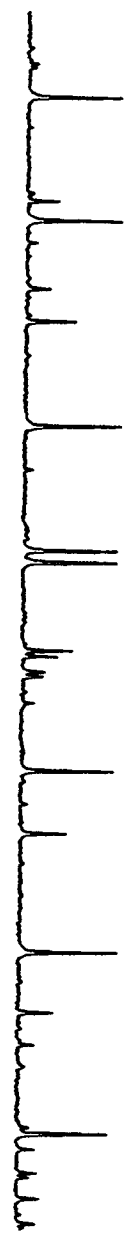
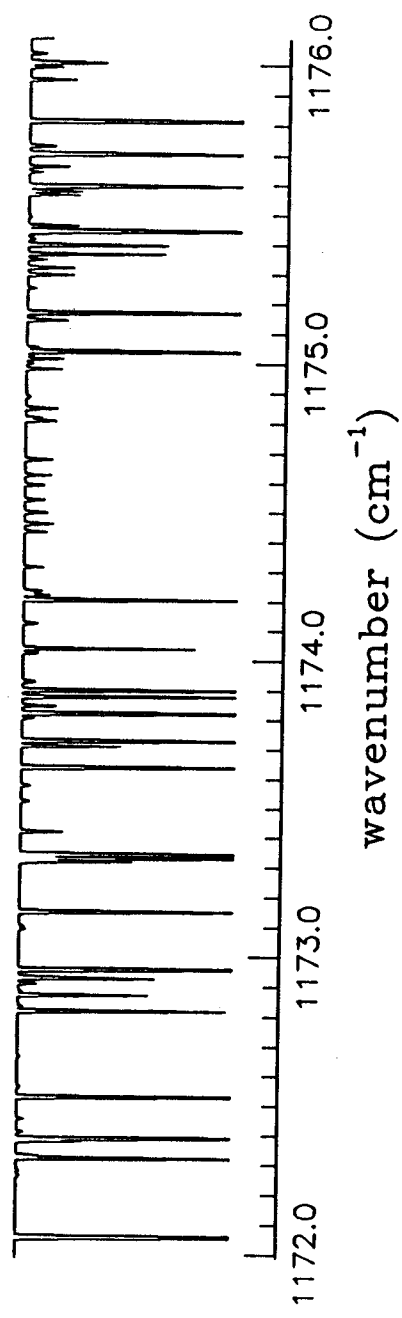
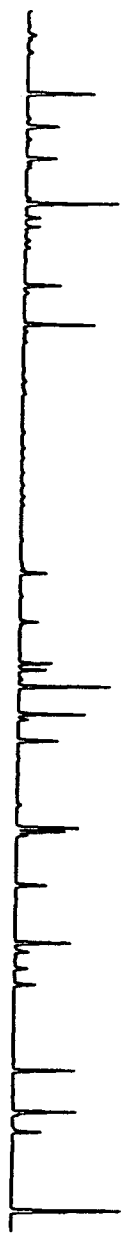


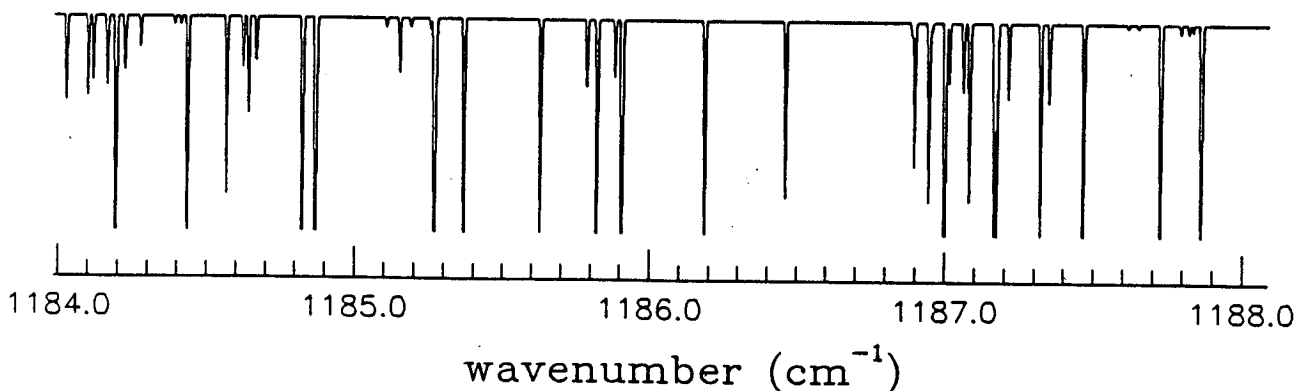
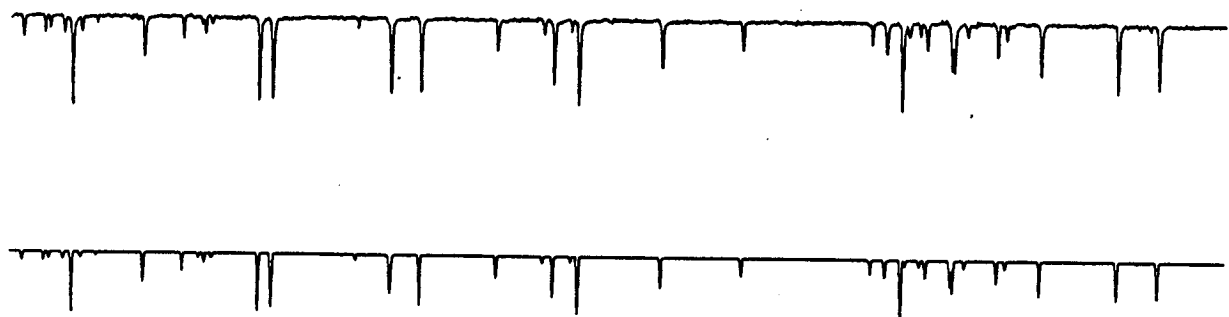
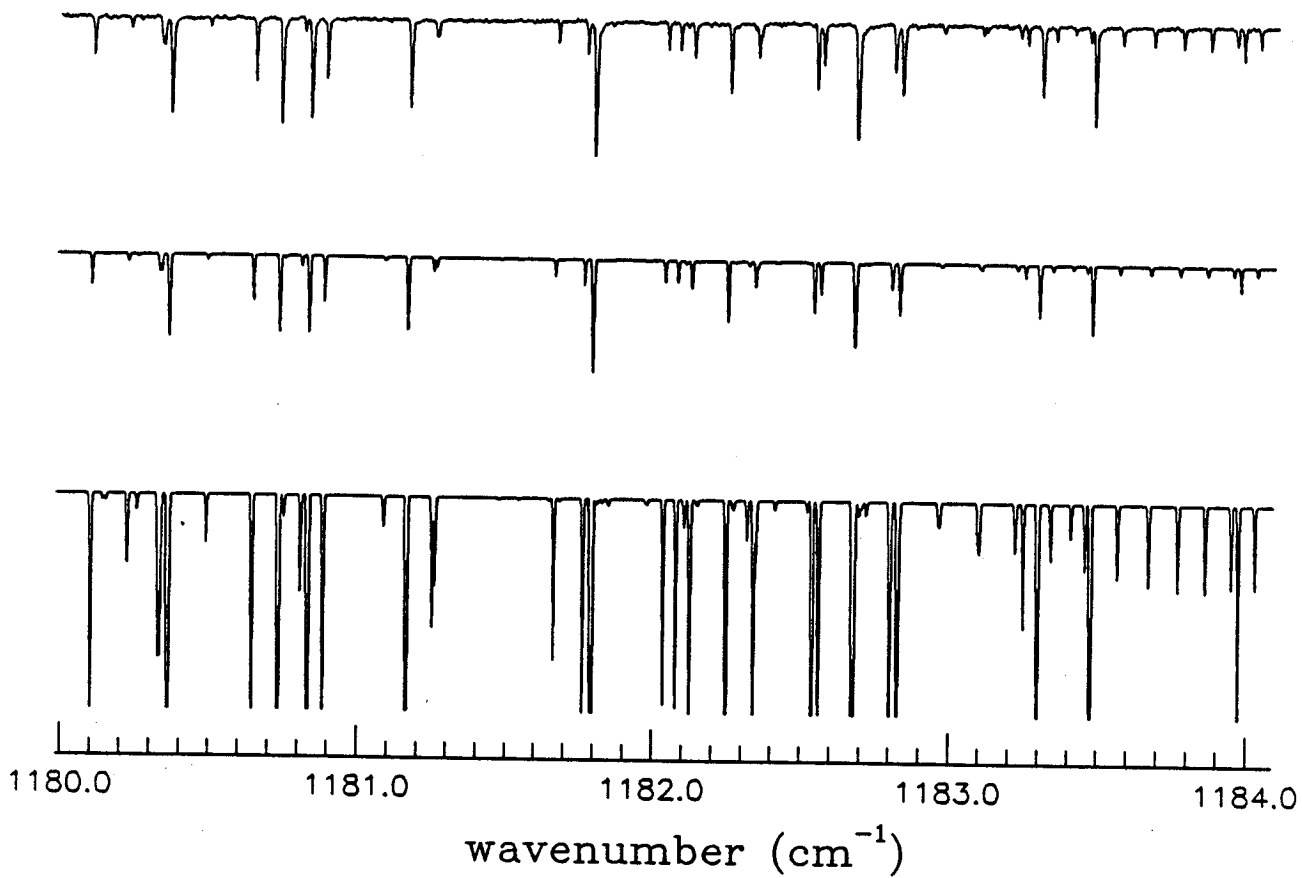


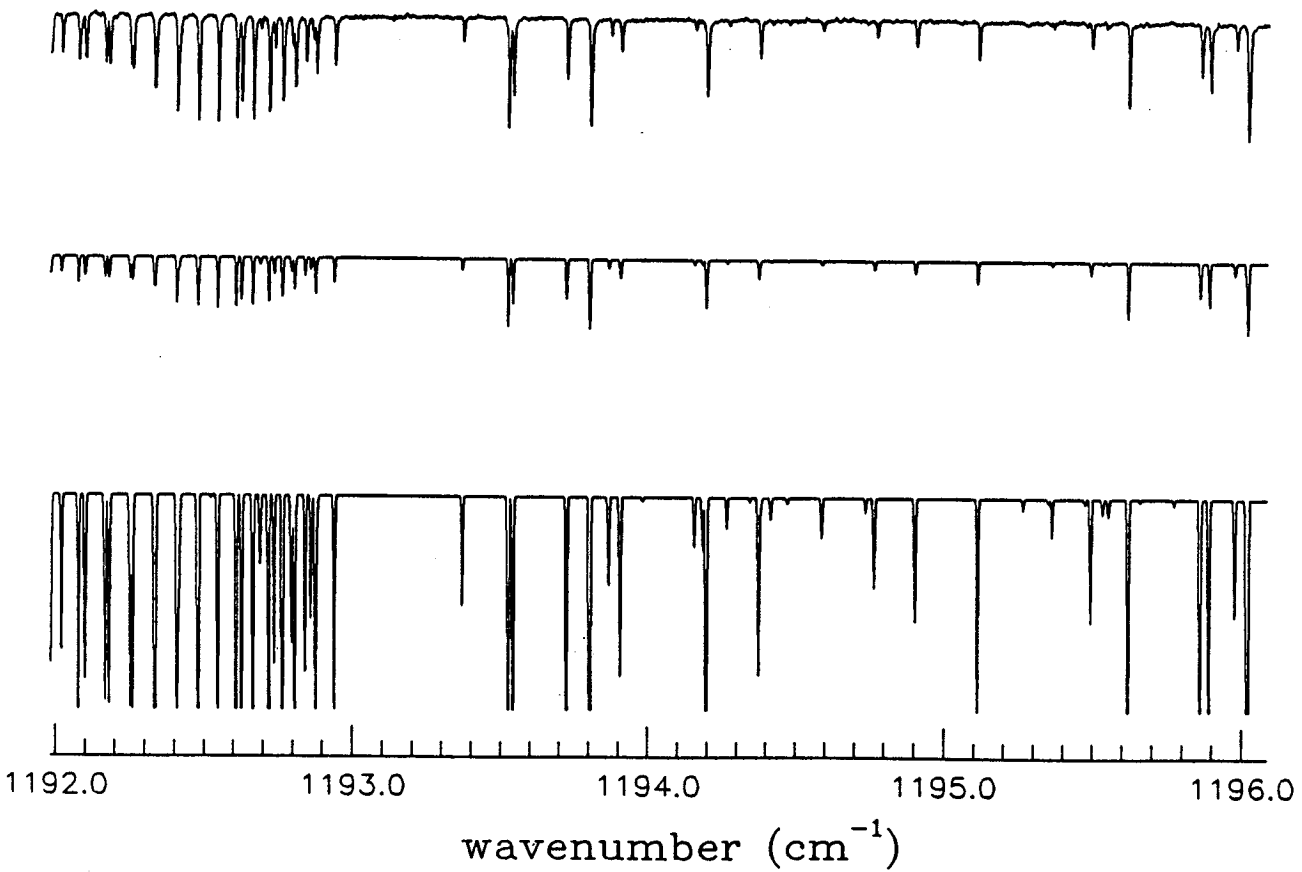
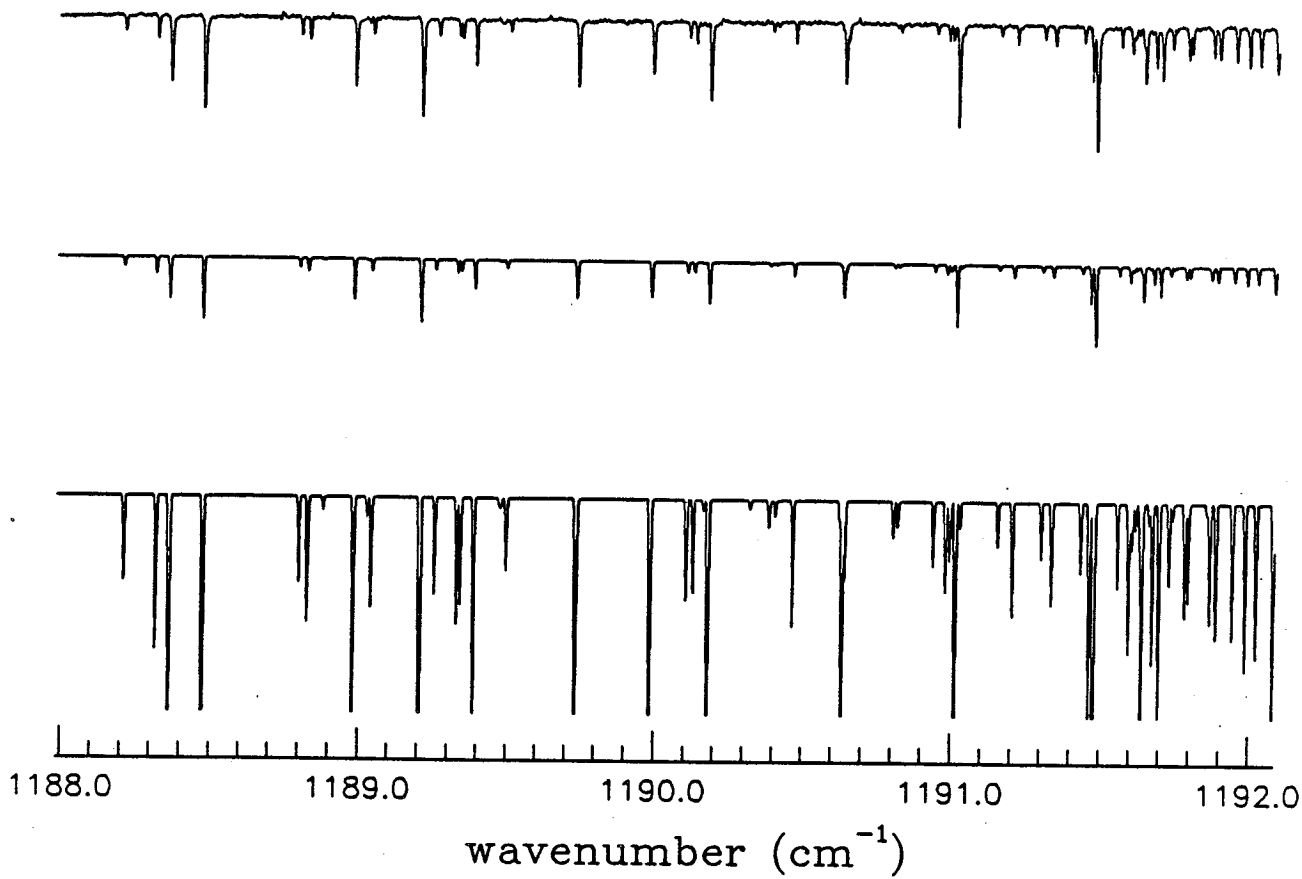


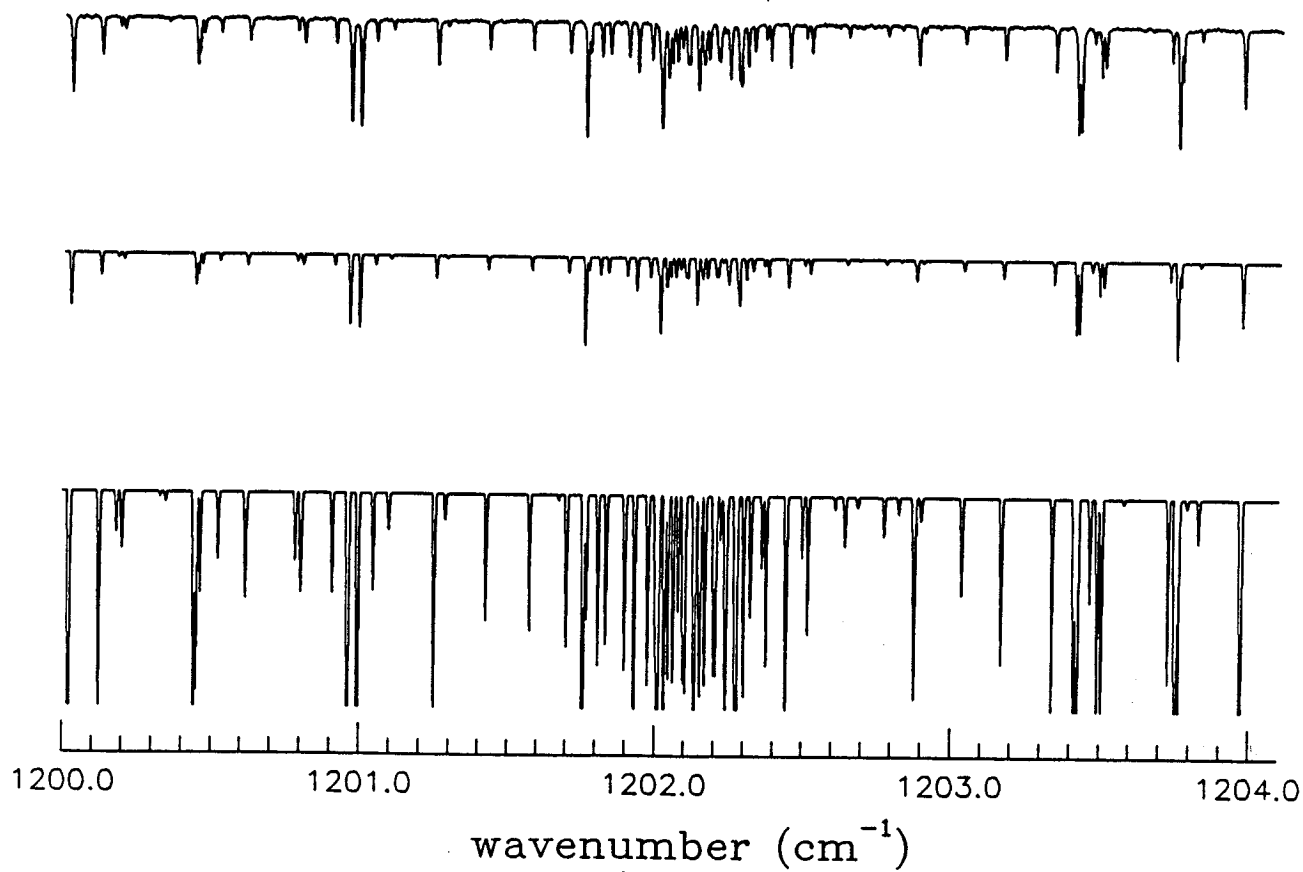
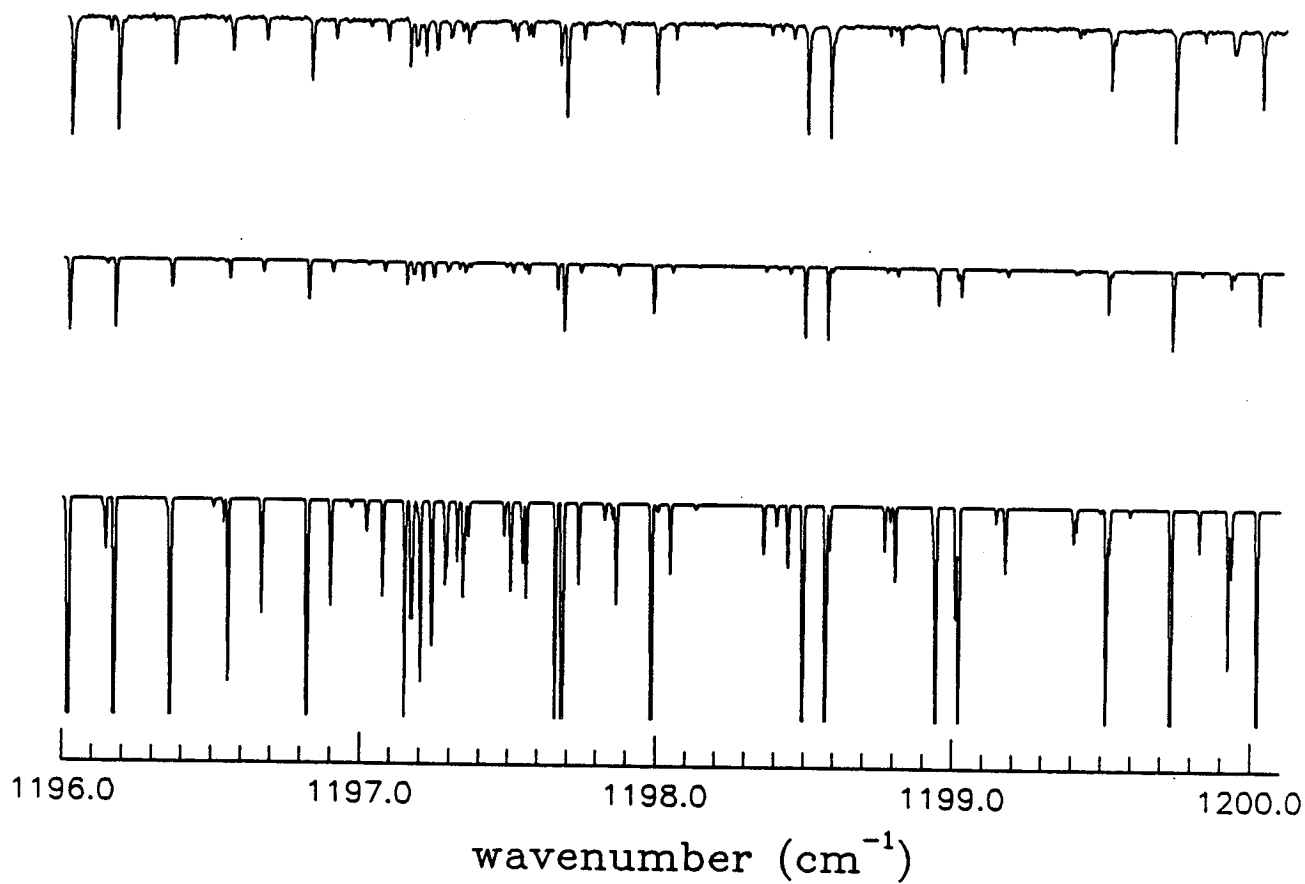


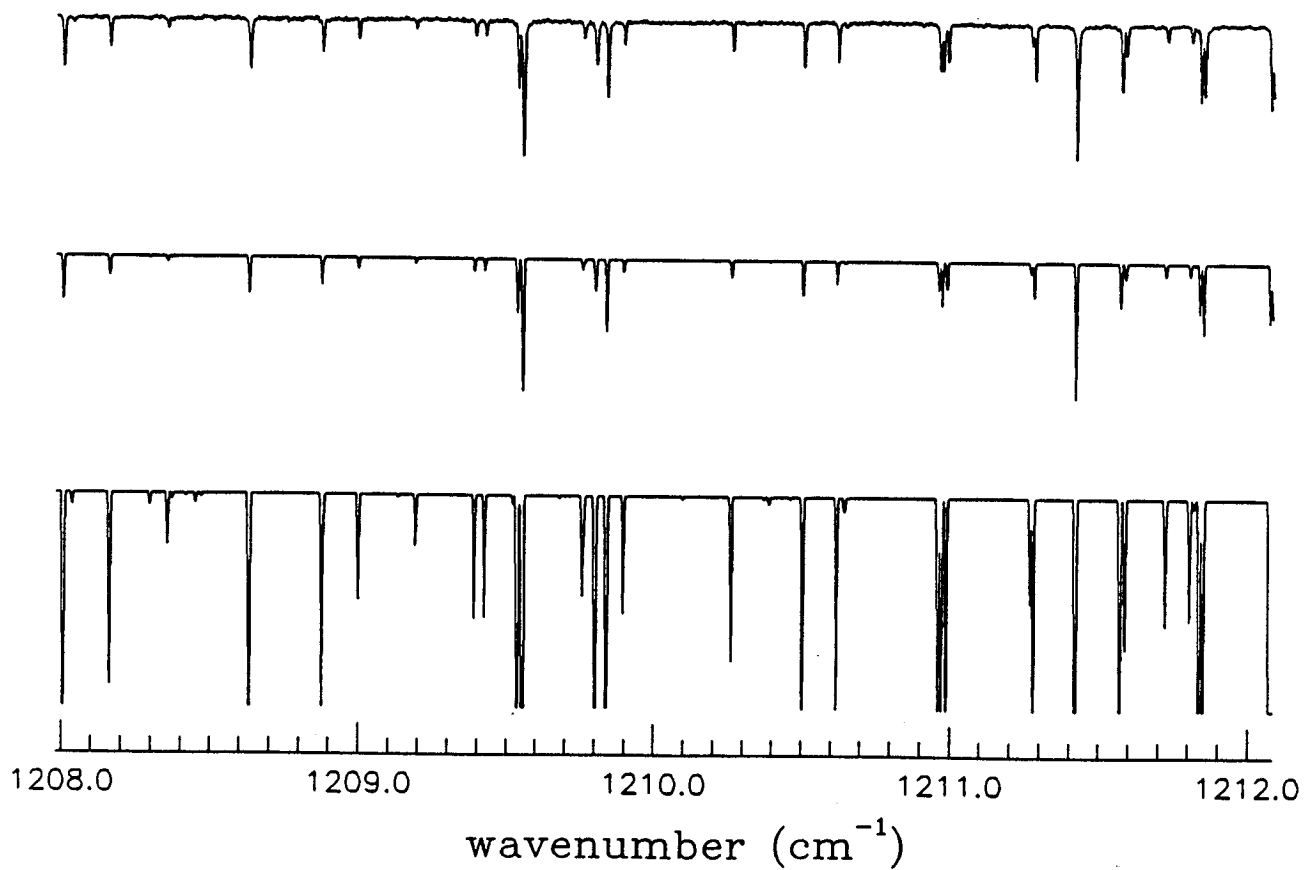
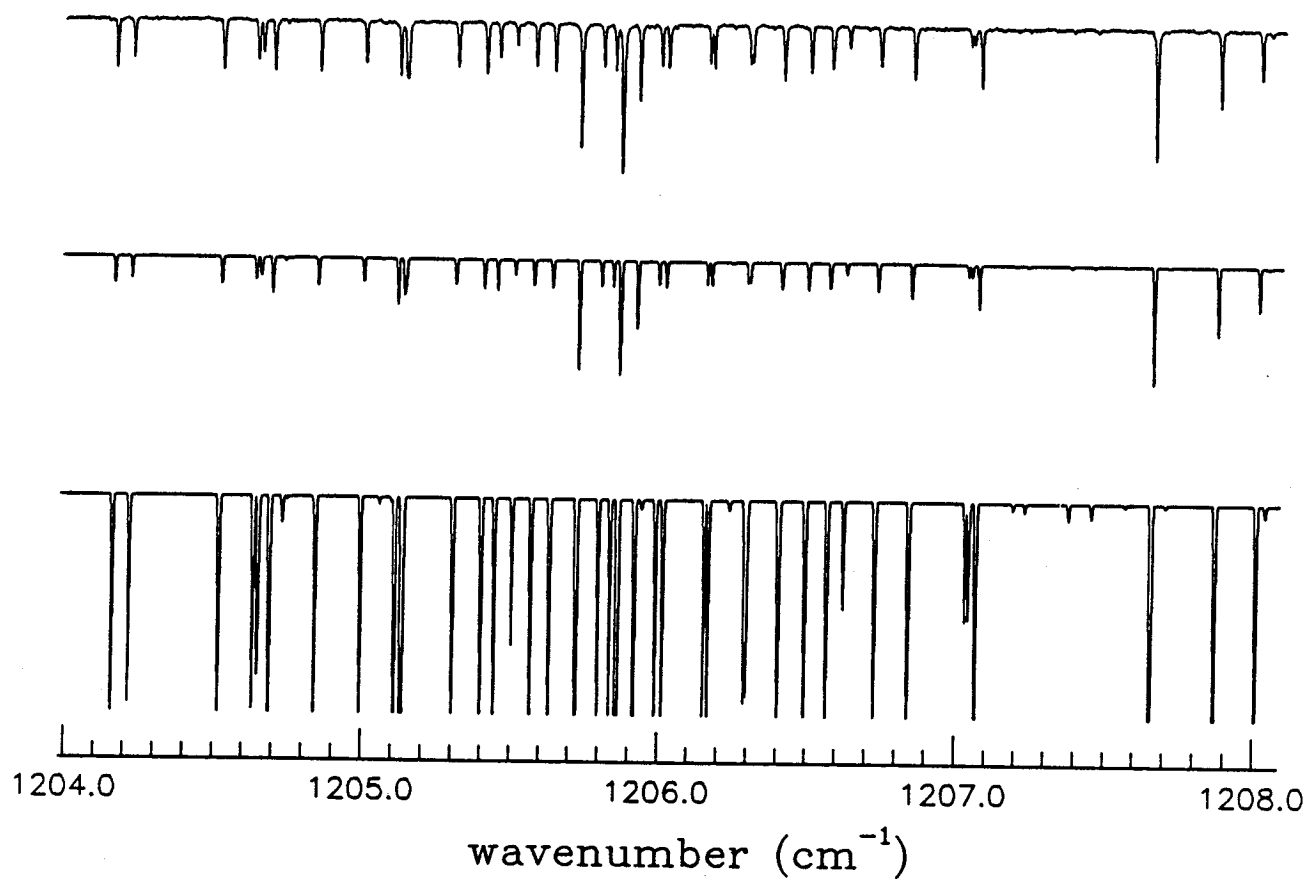


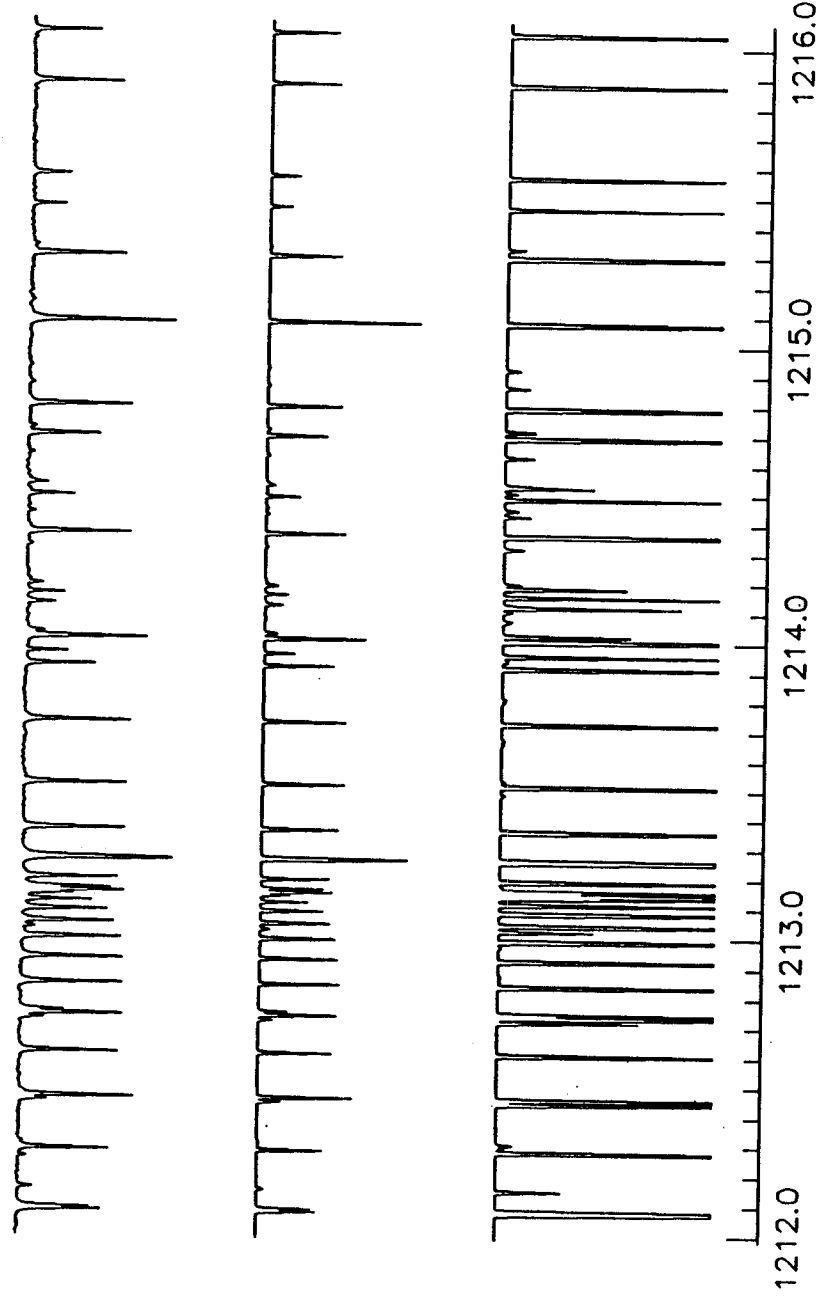




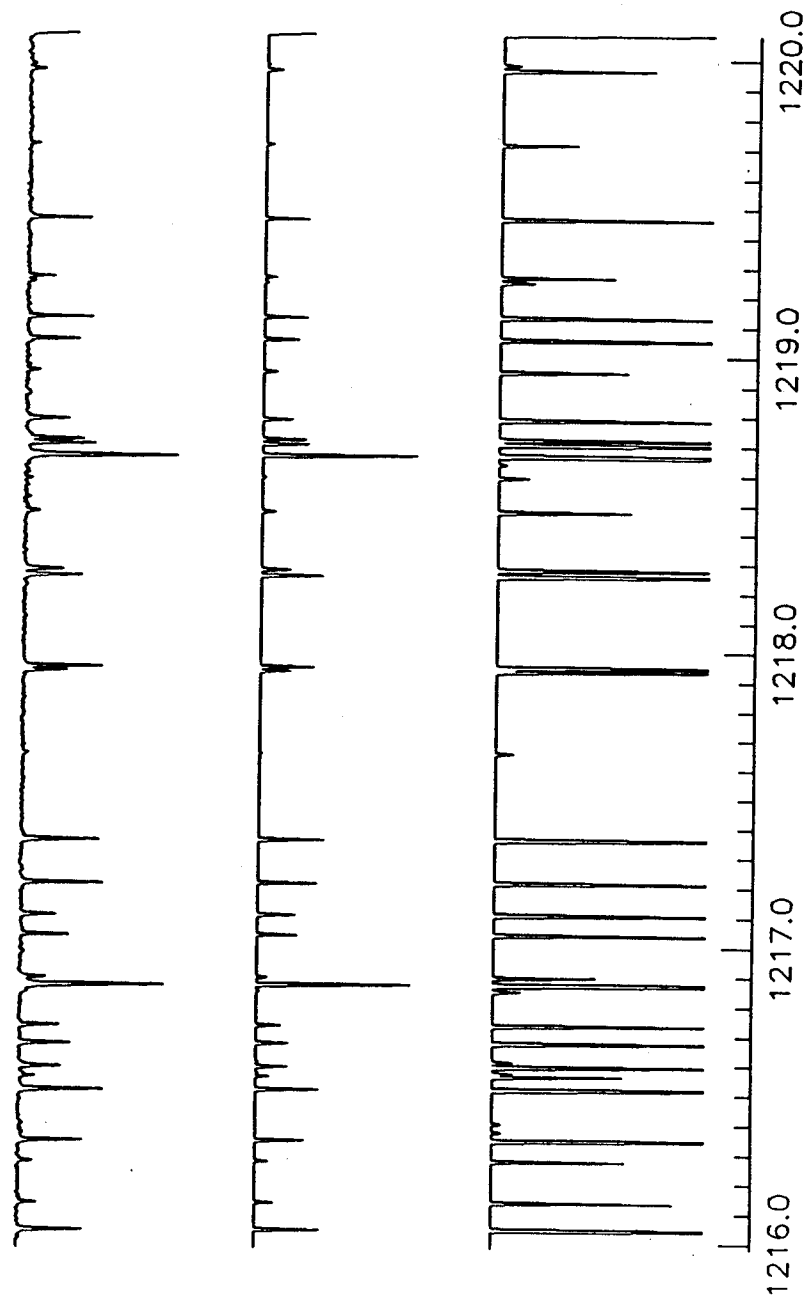




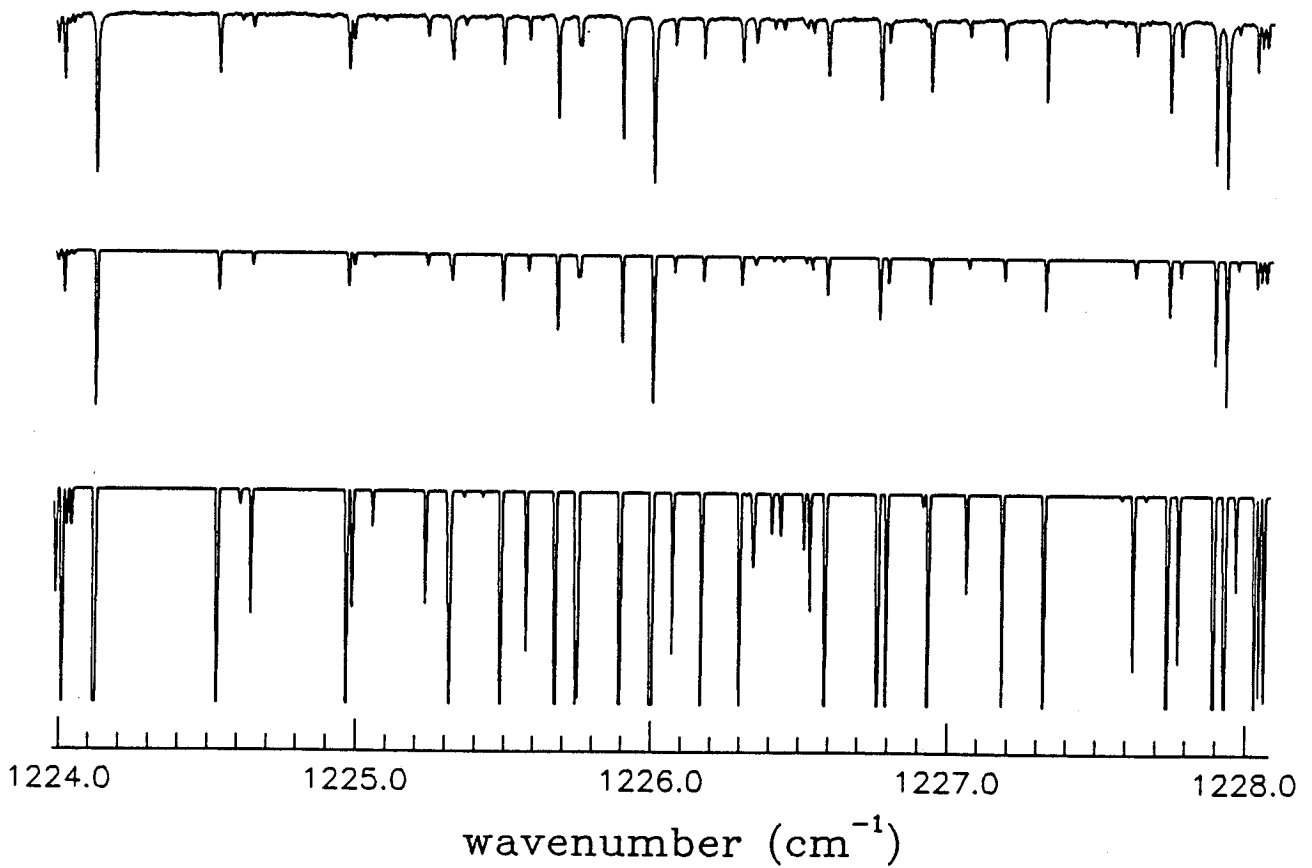
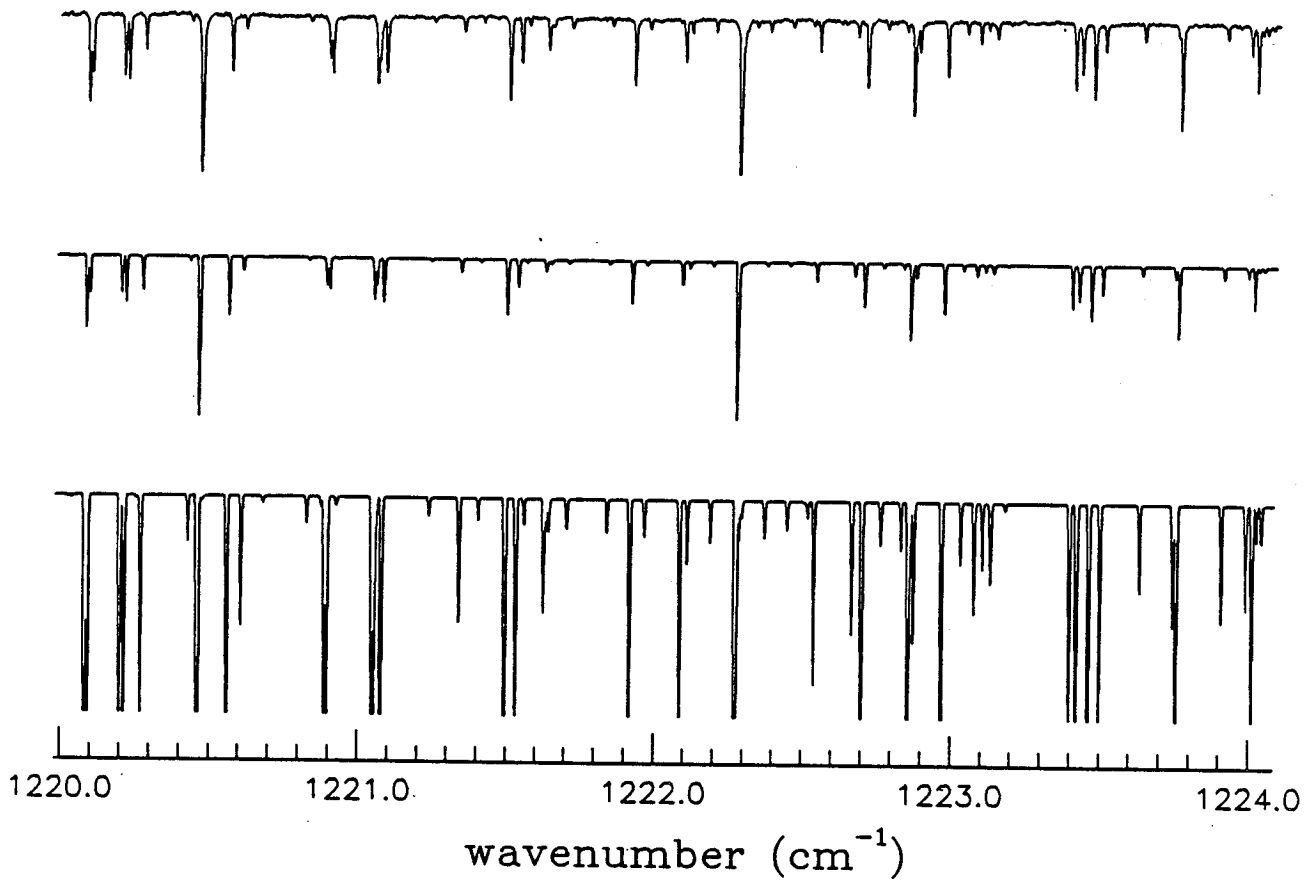


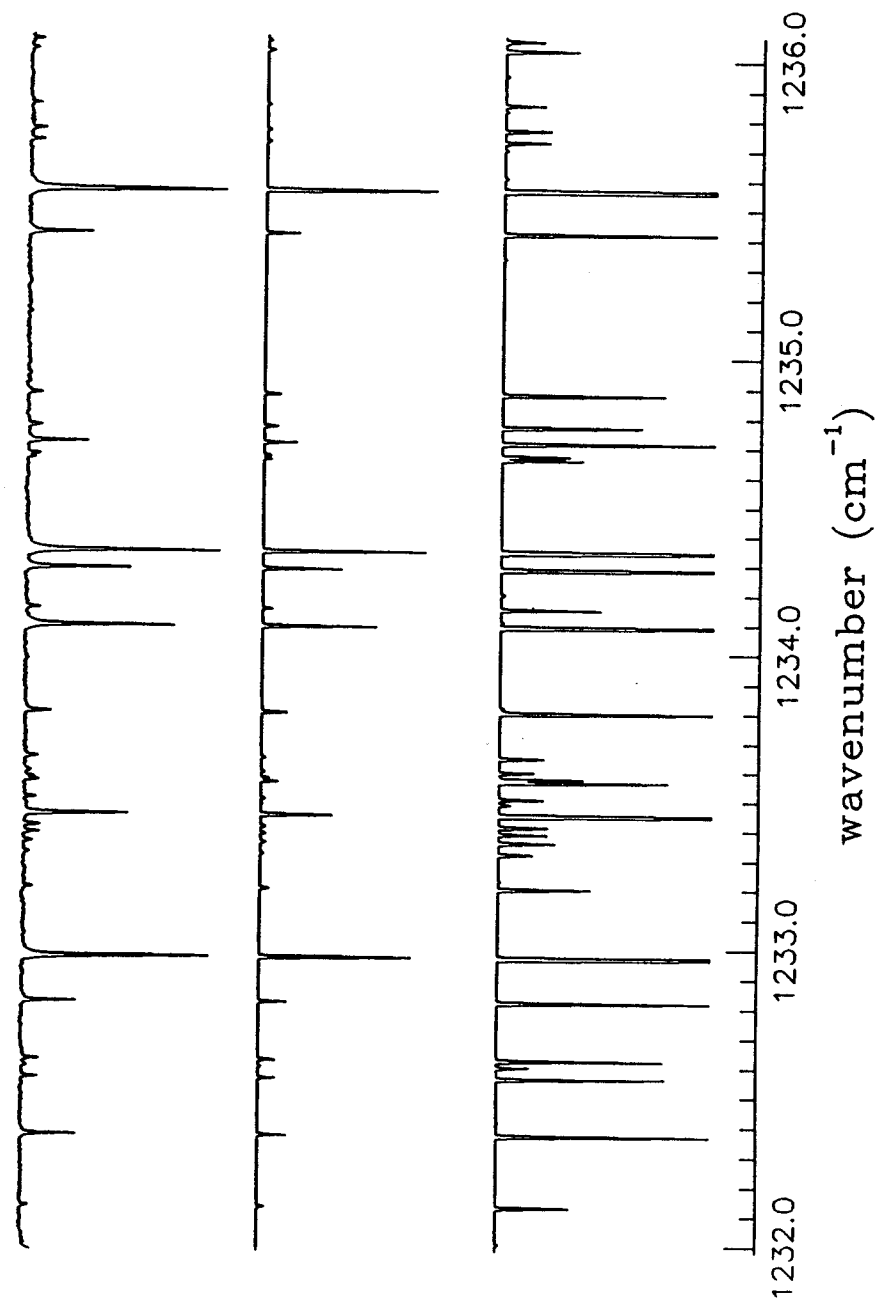
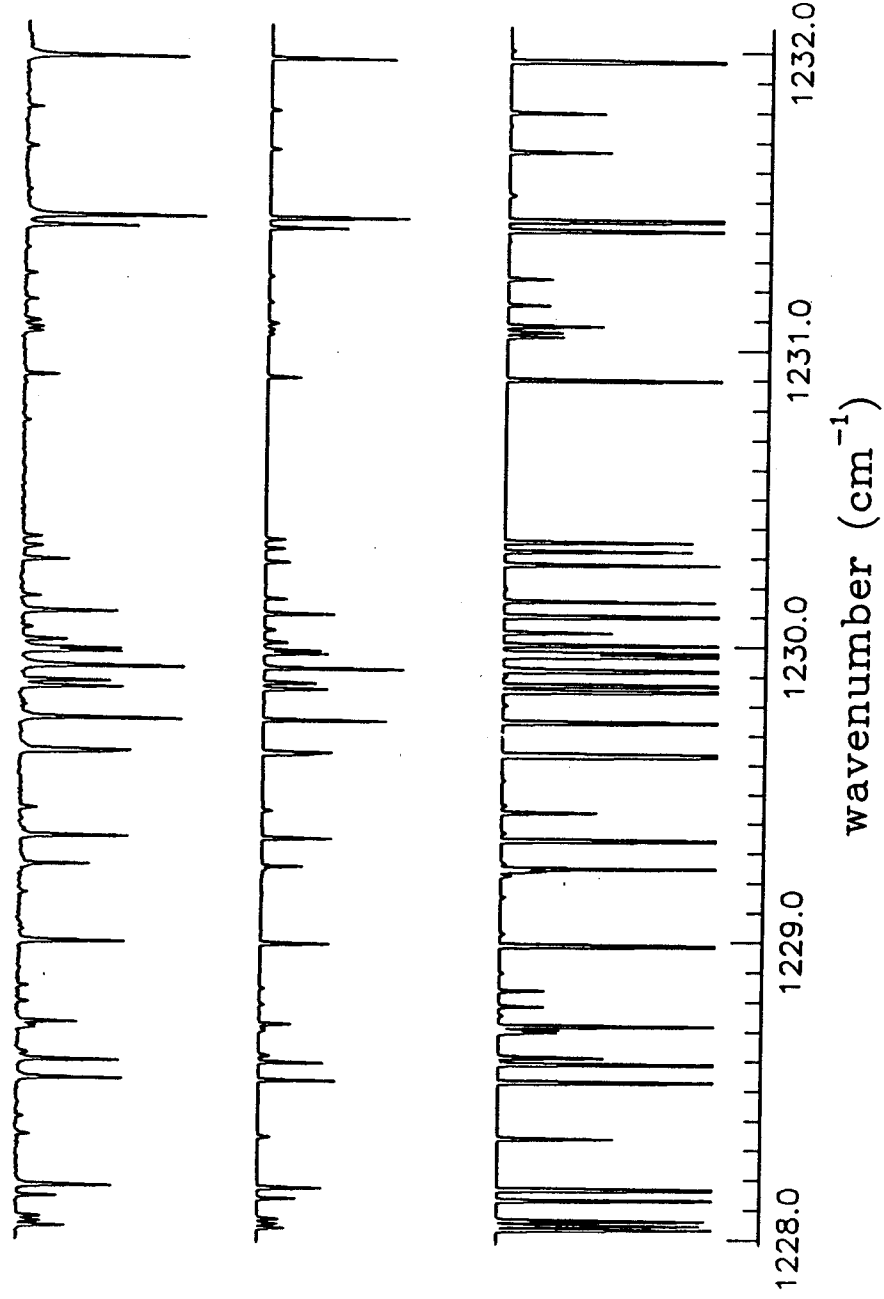


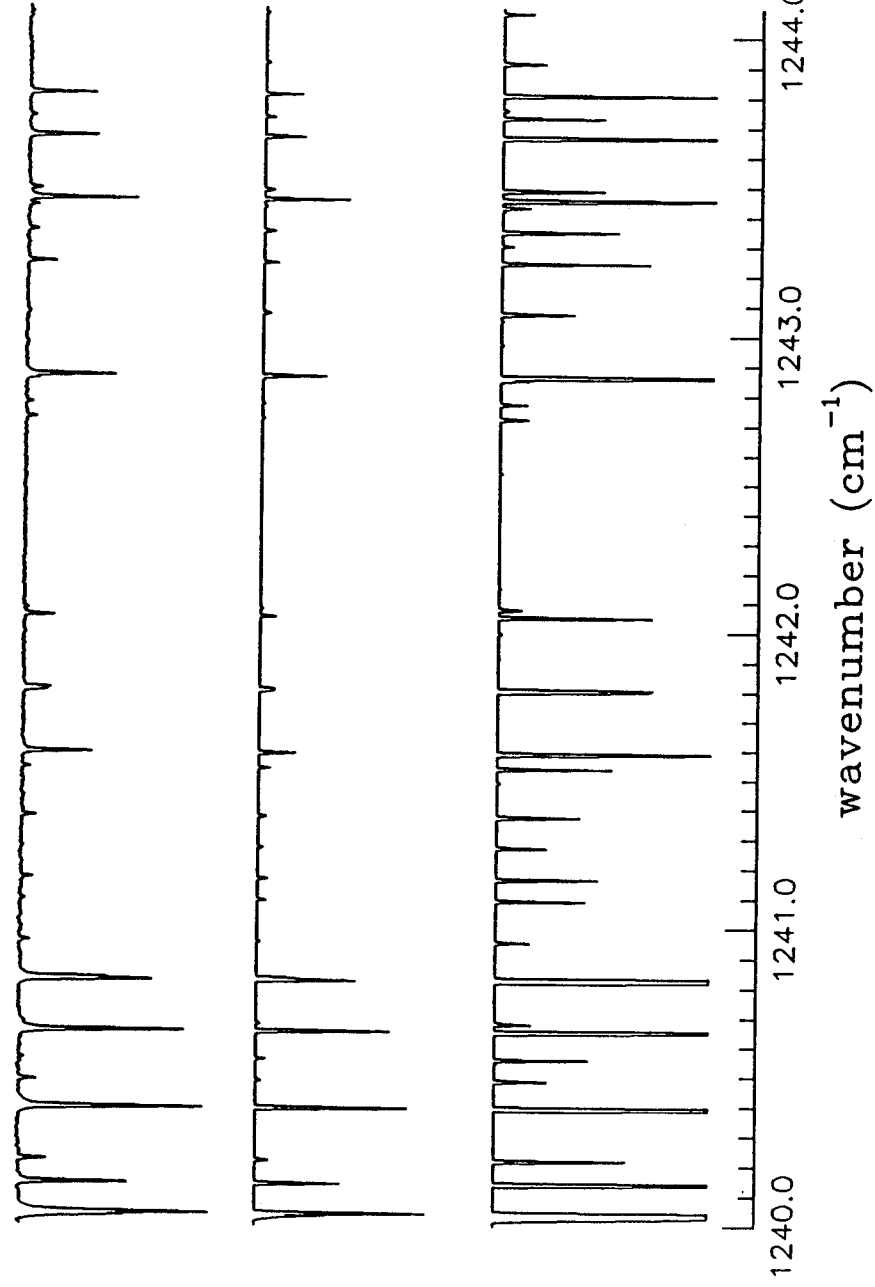
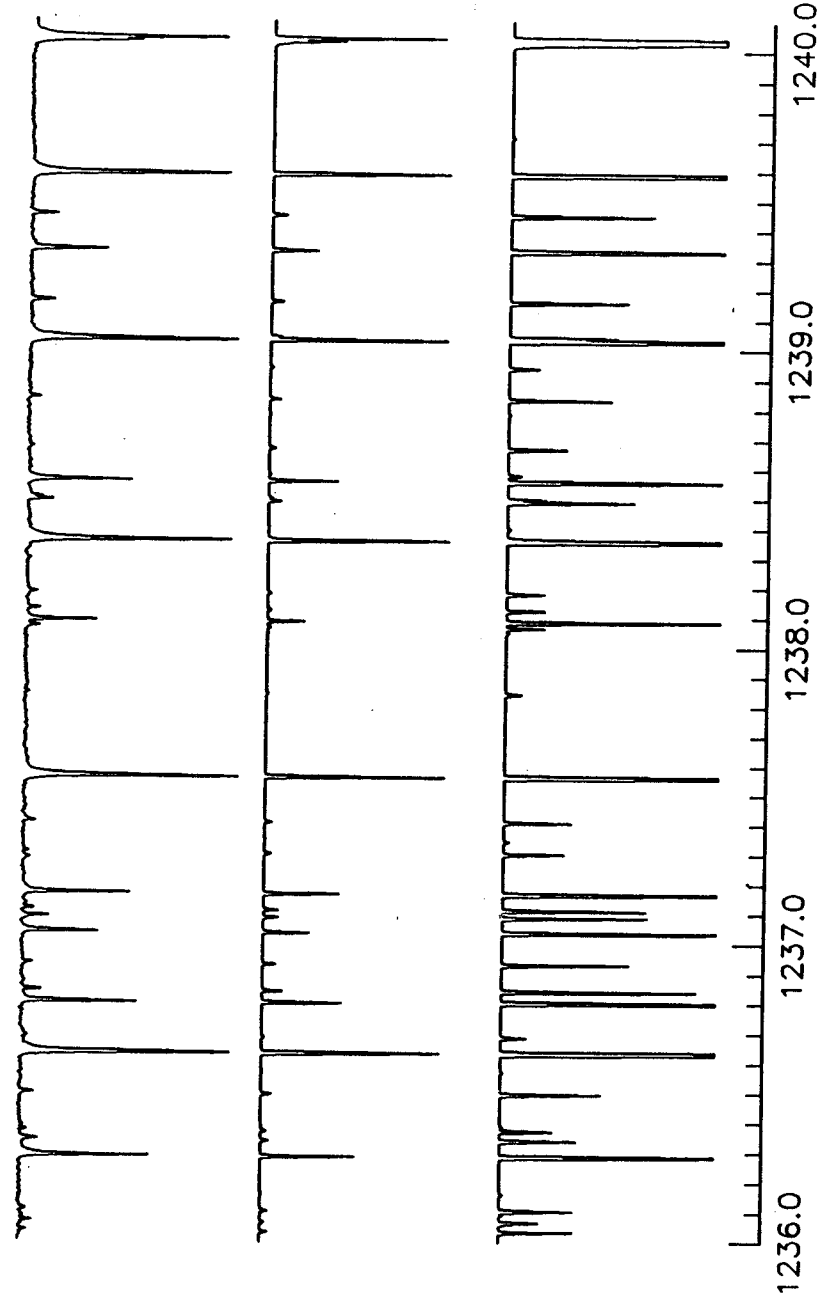
wavenumber (cm^{-1})

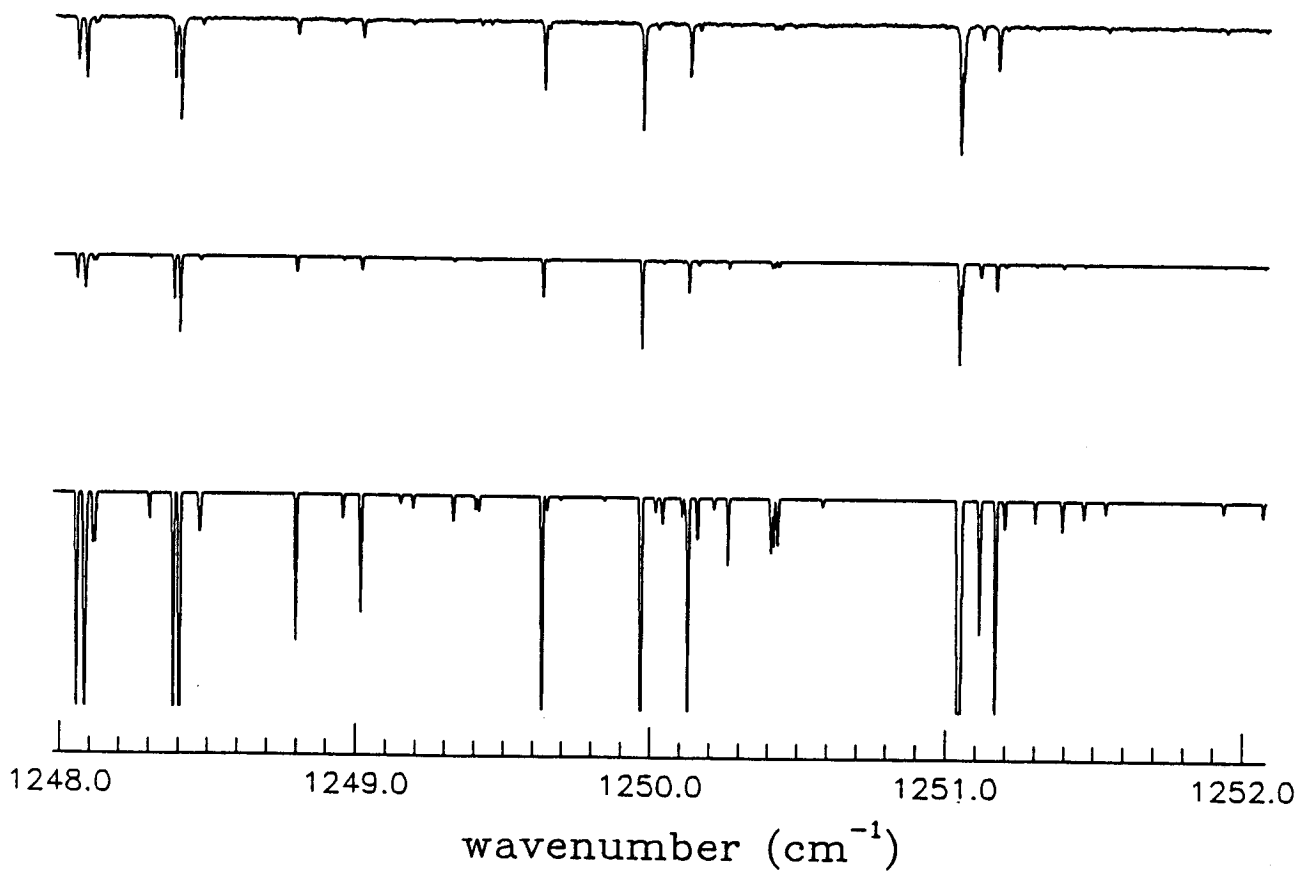
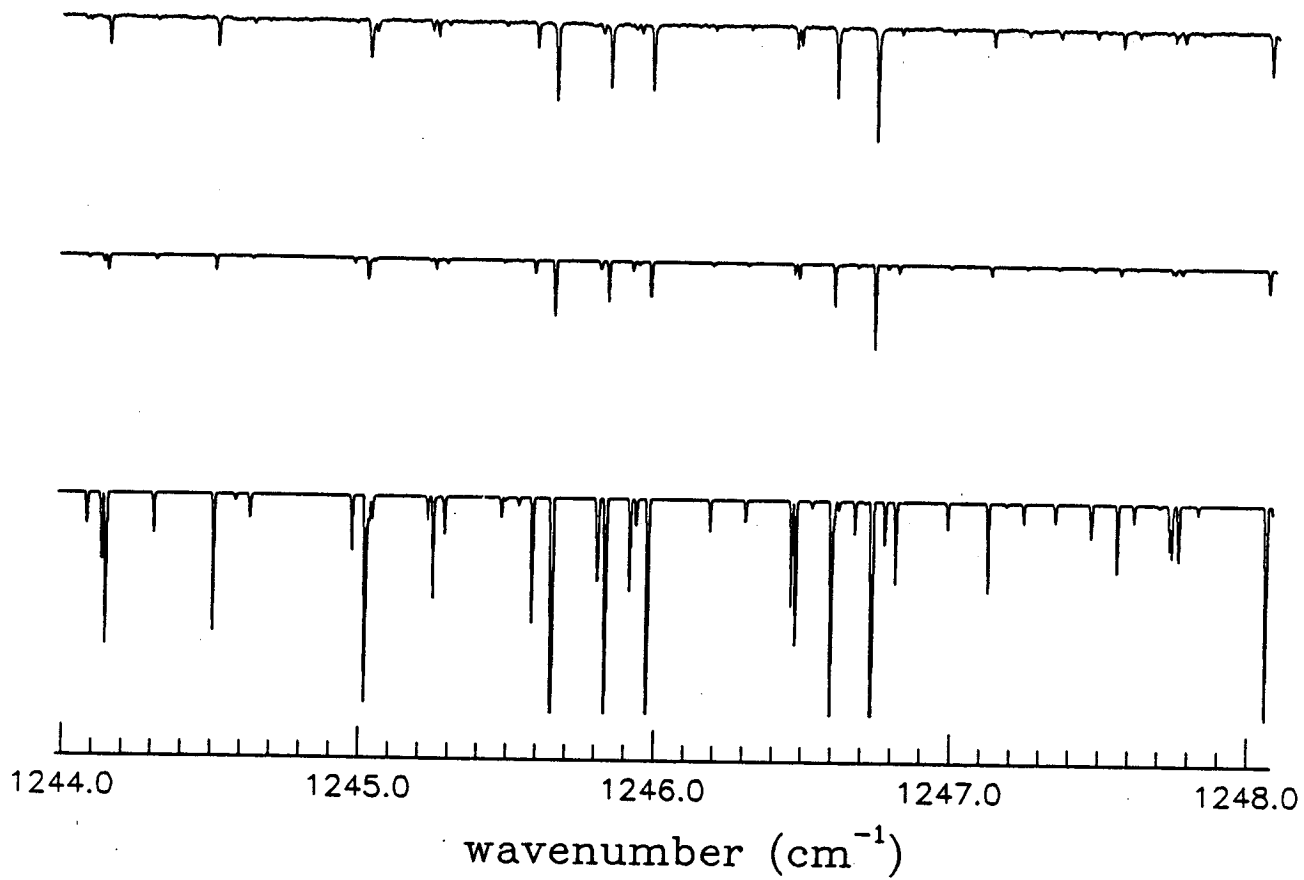


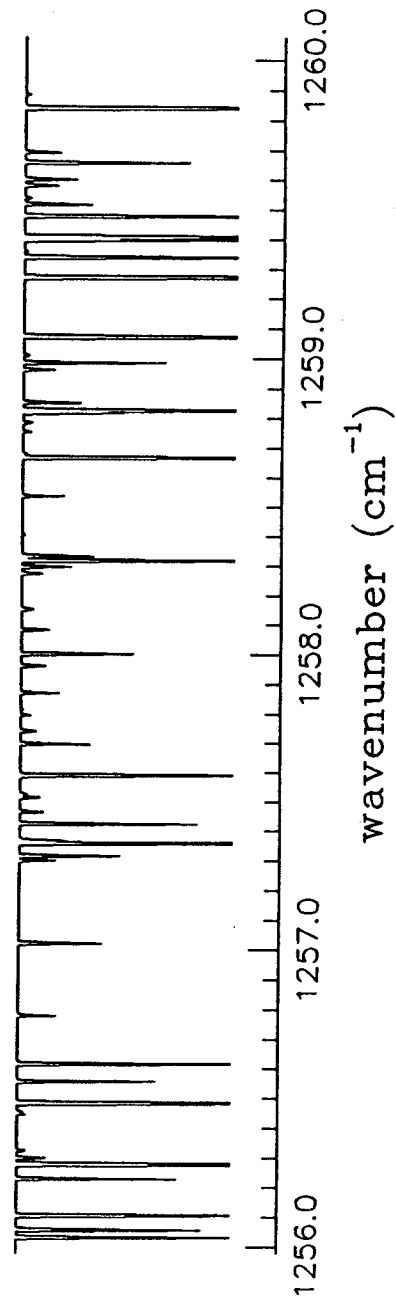
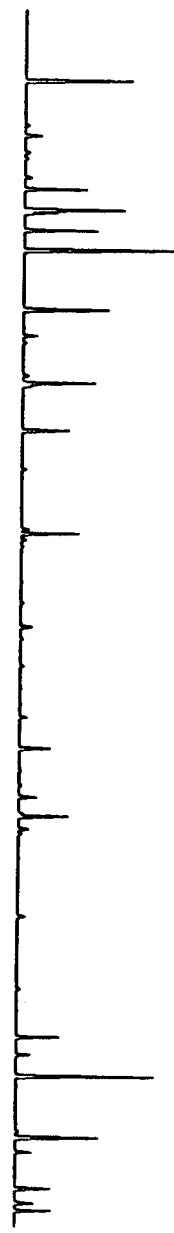
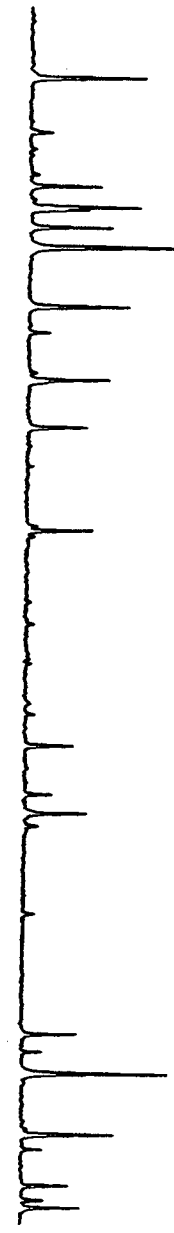
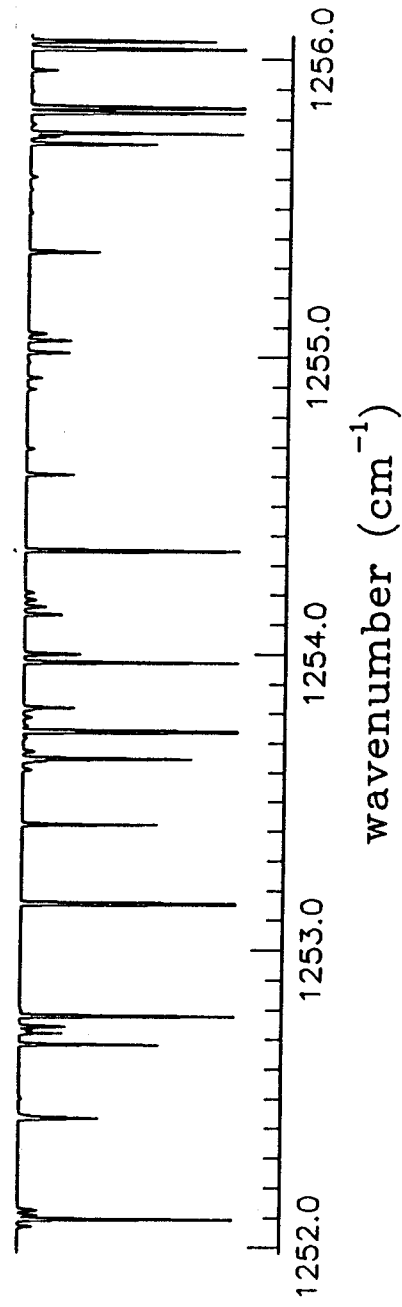
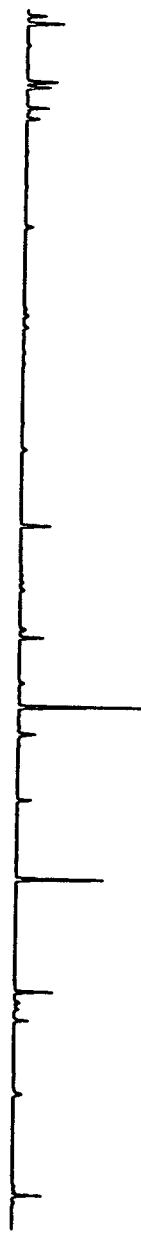
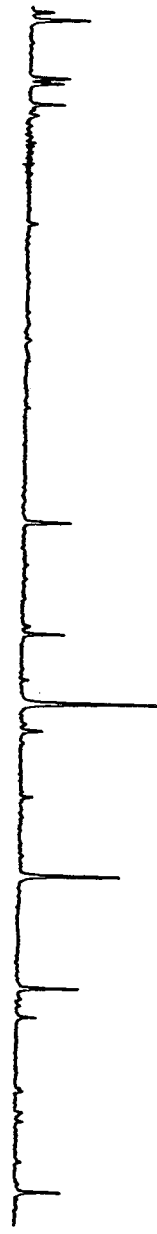
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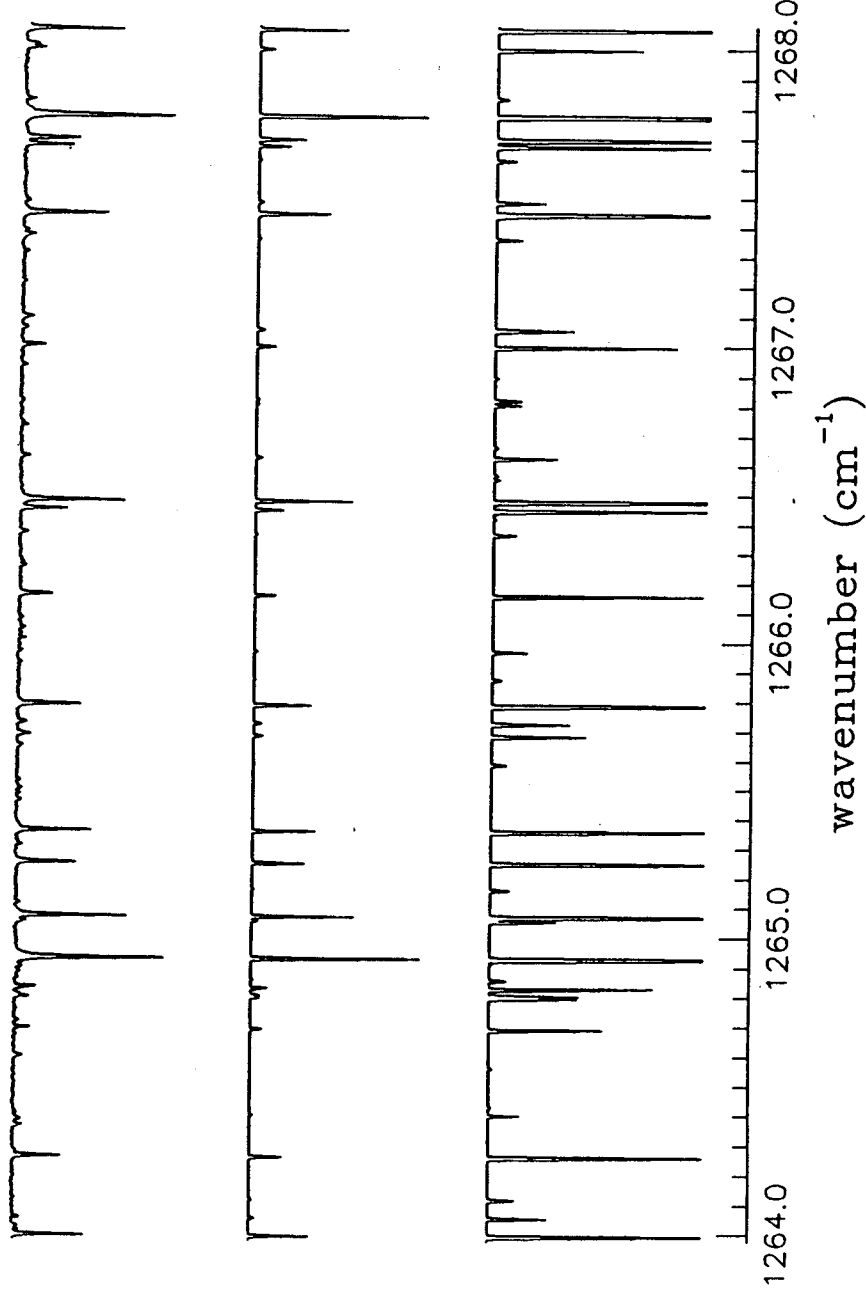
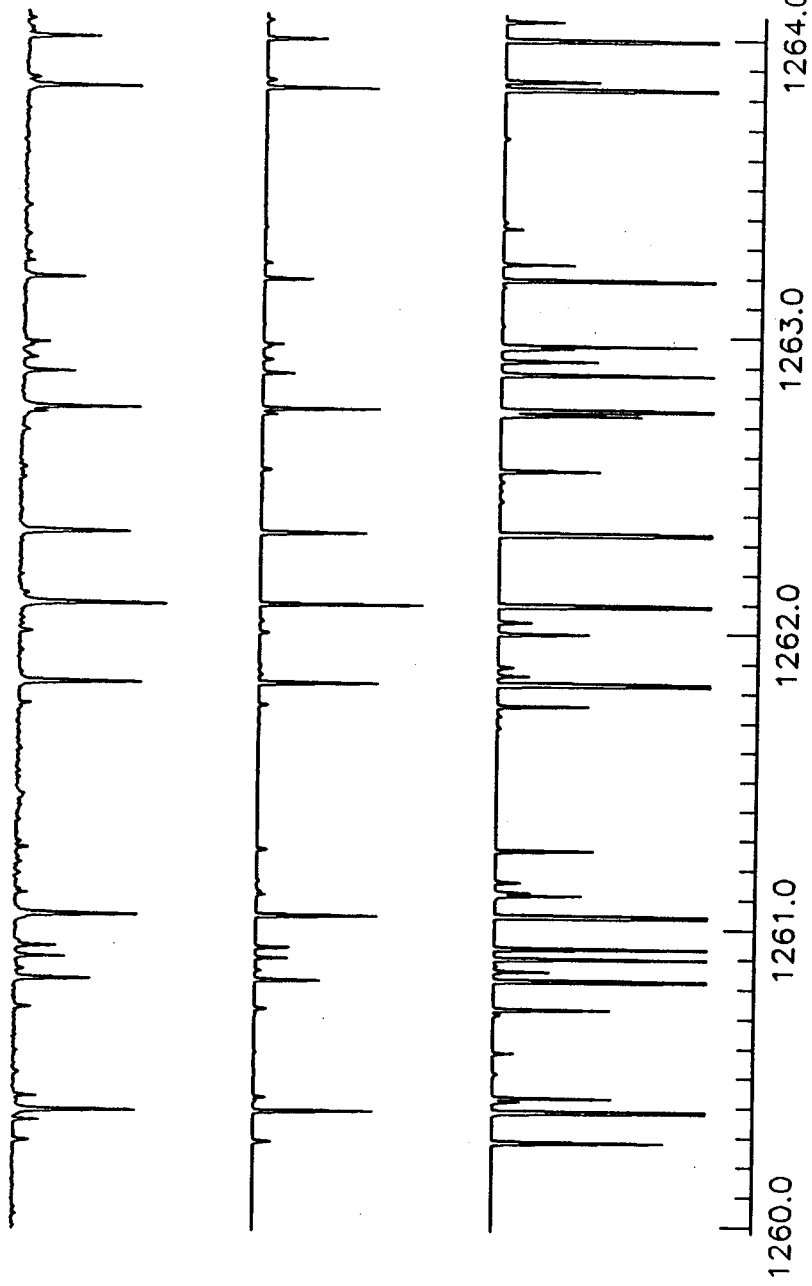


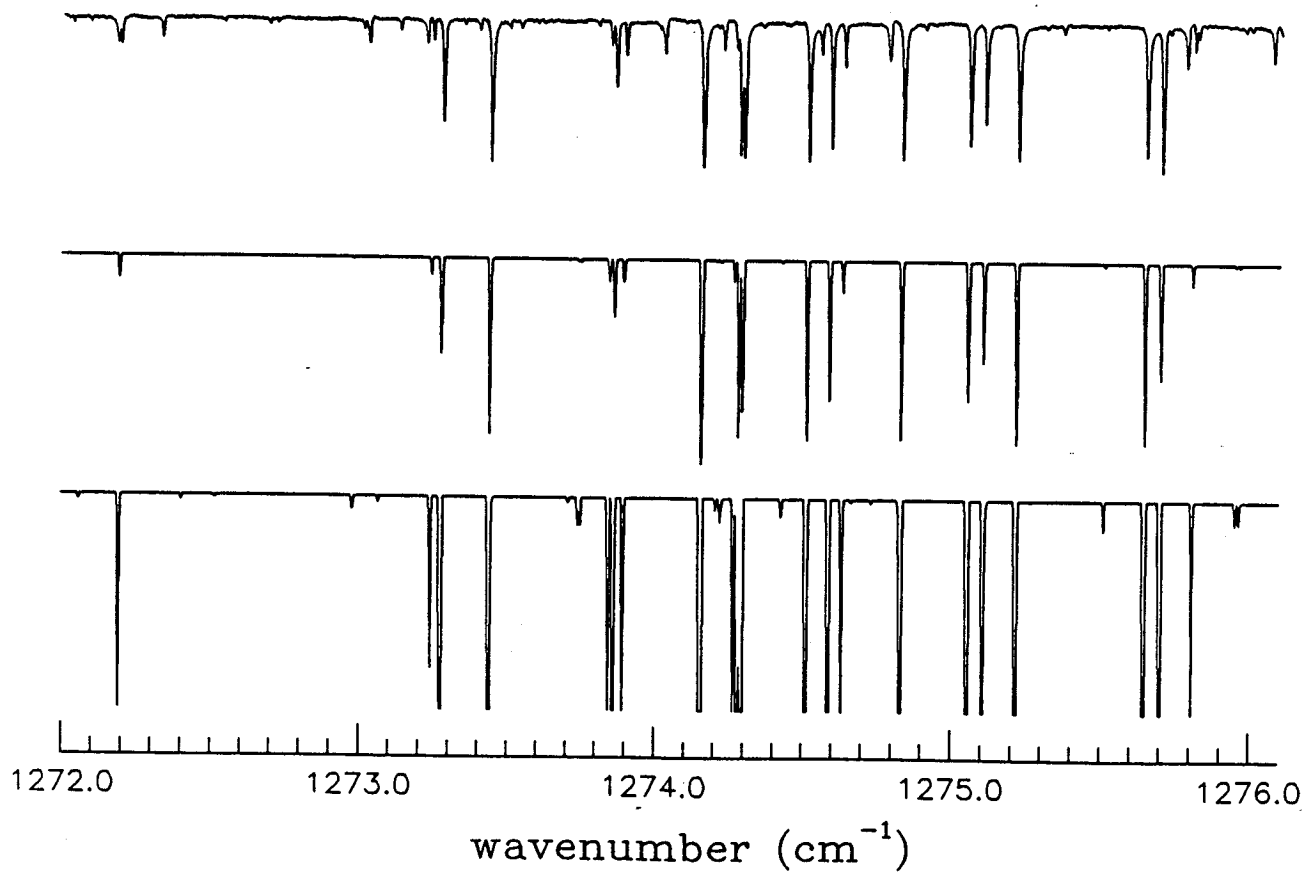
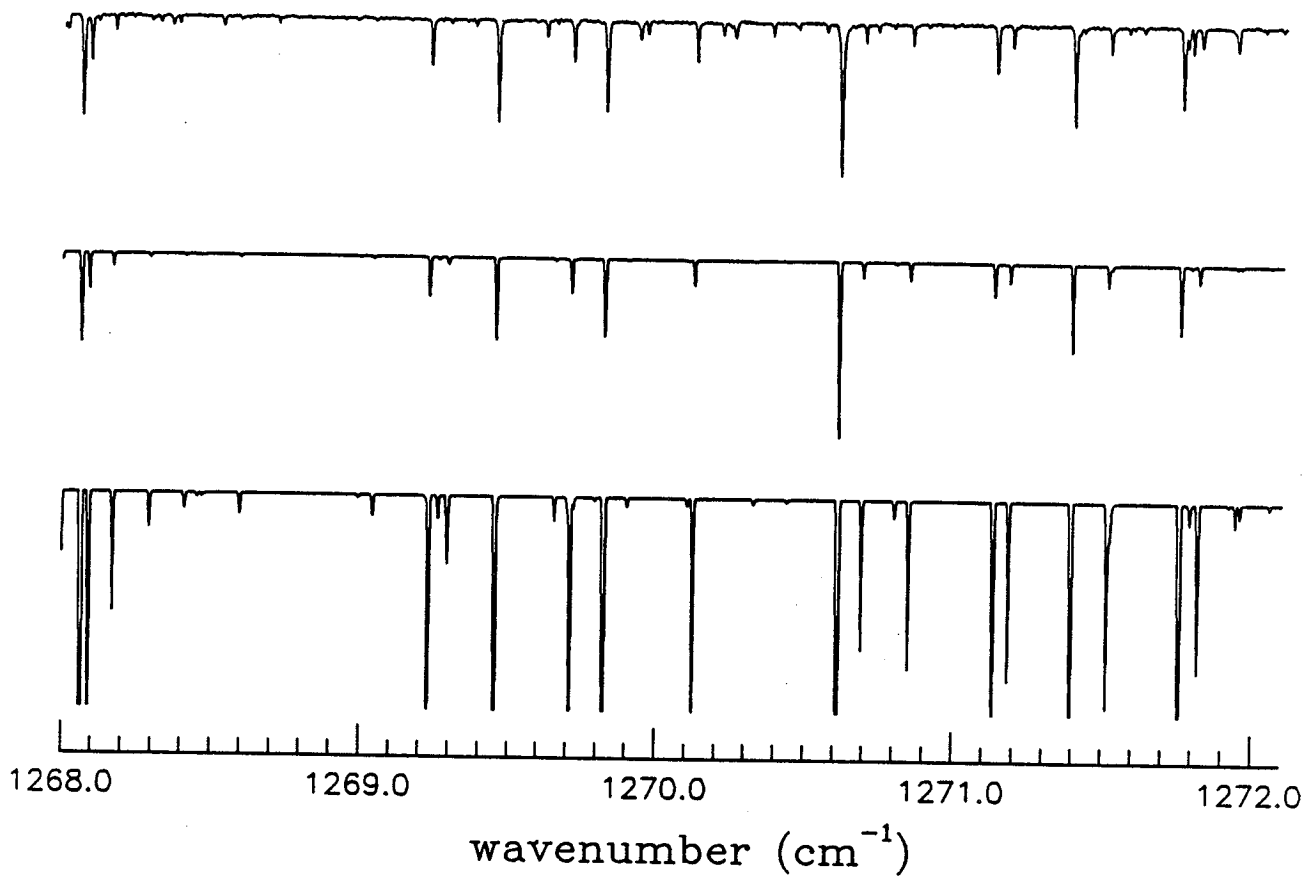


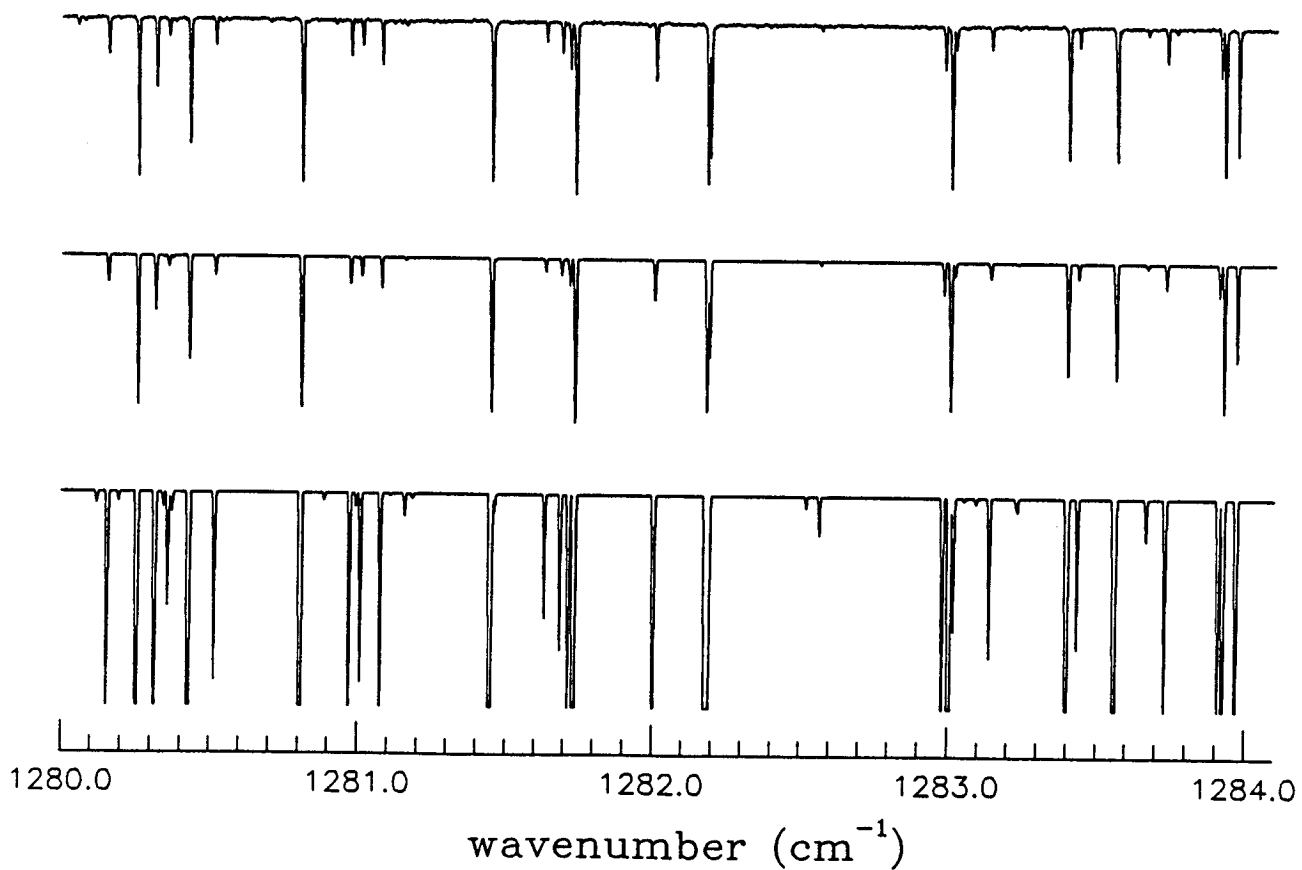
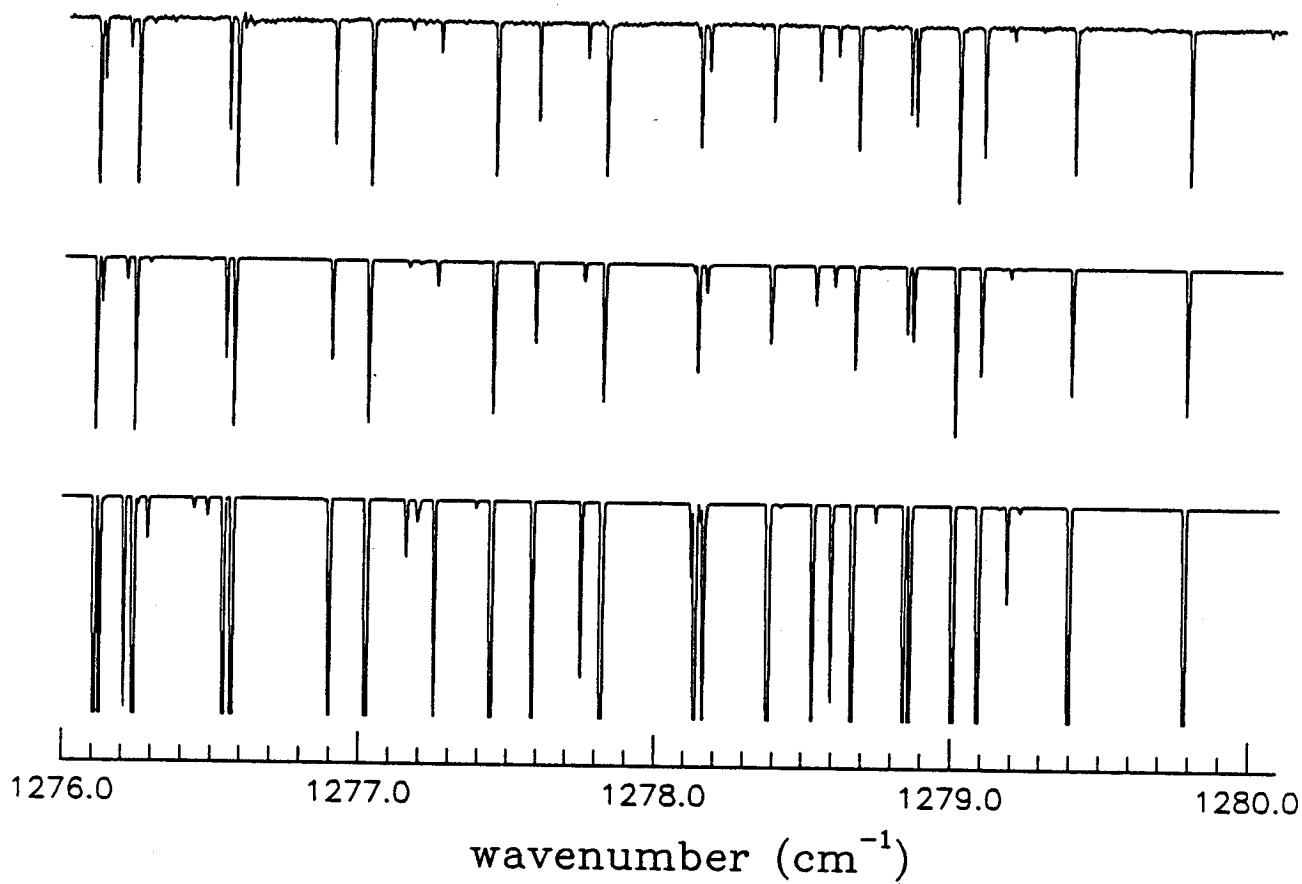


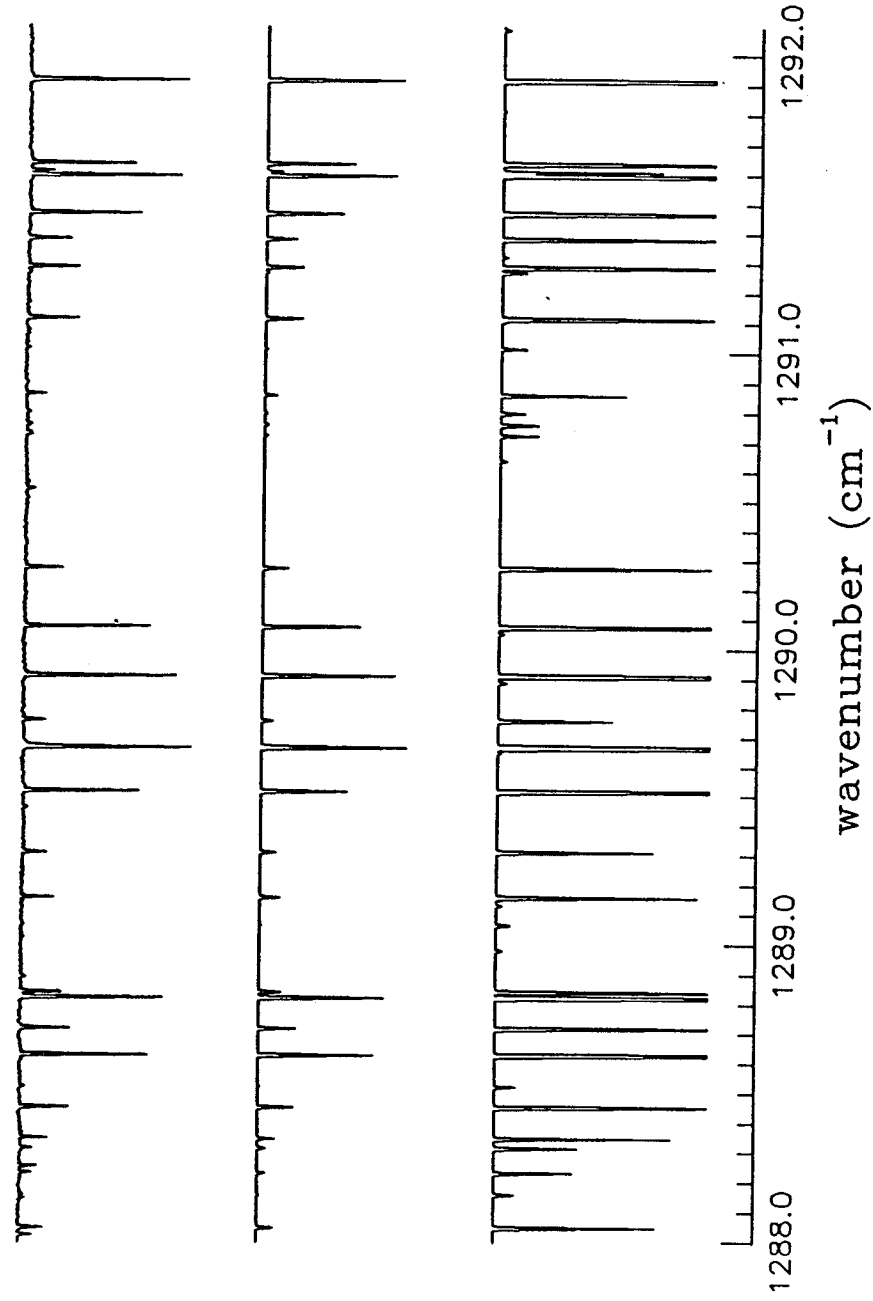
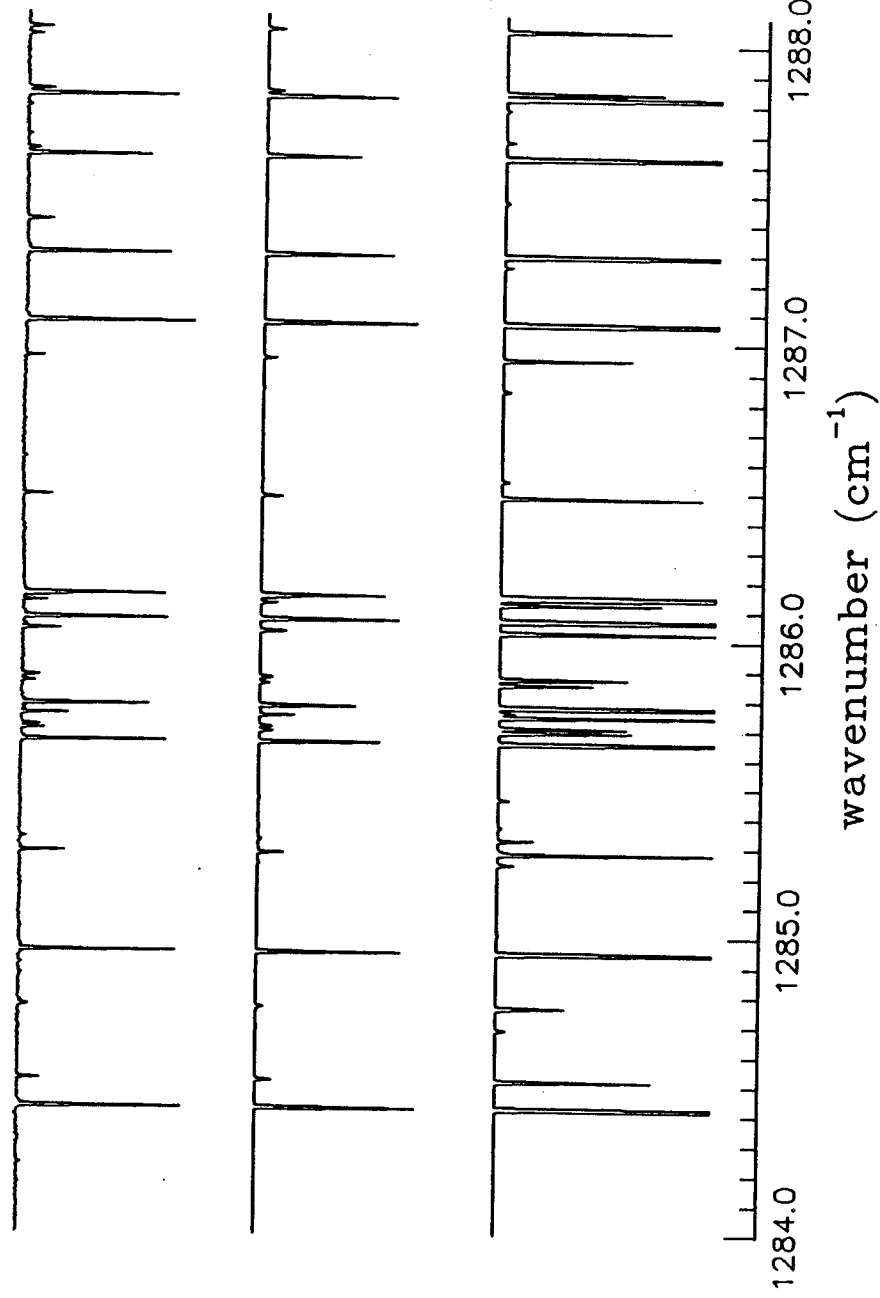


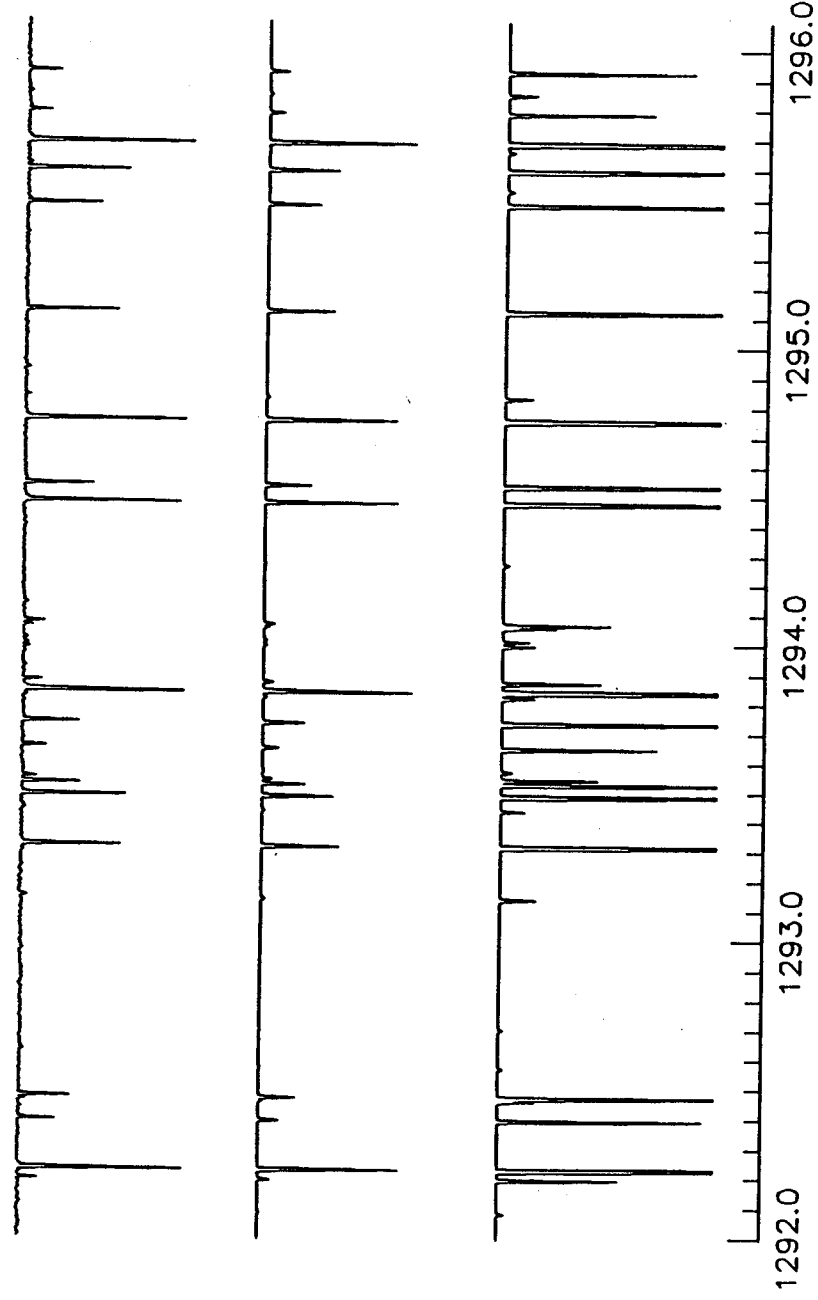




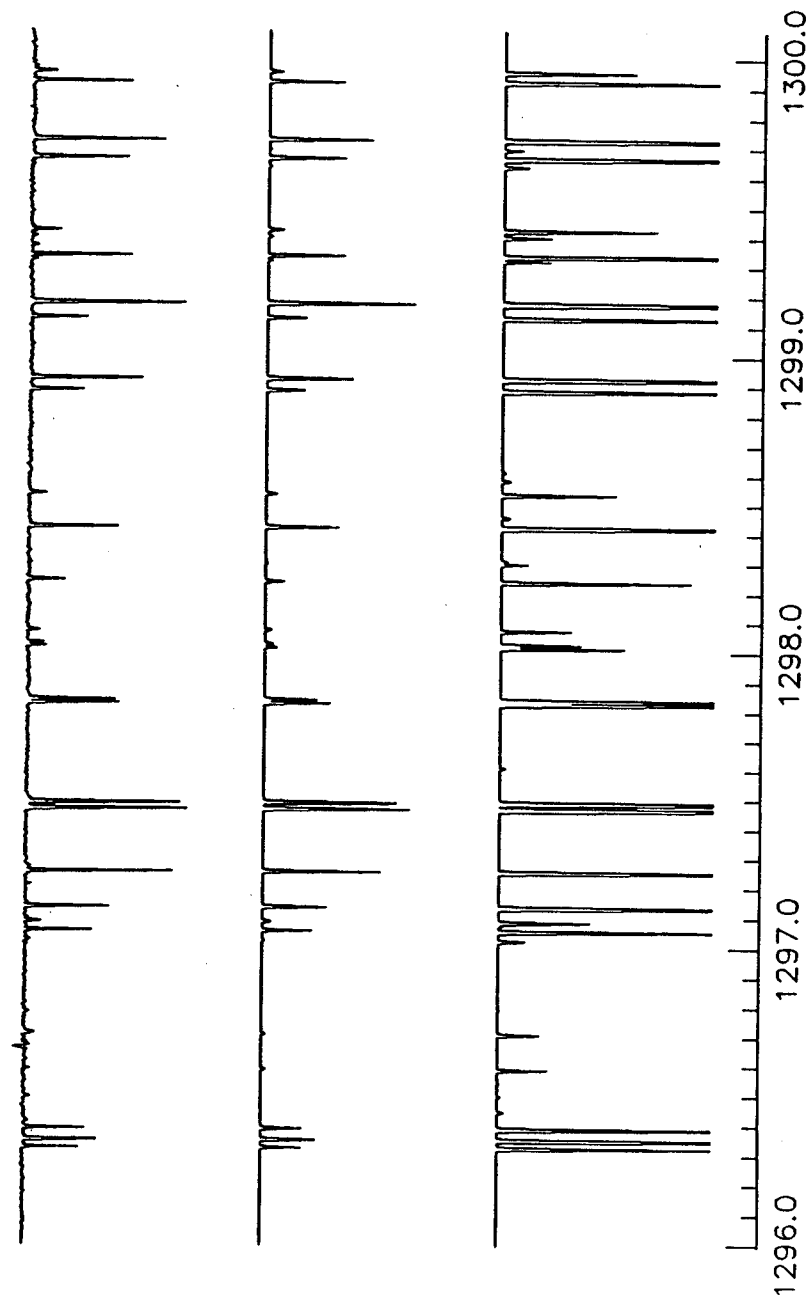




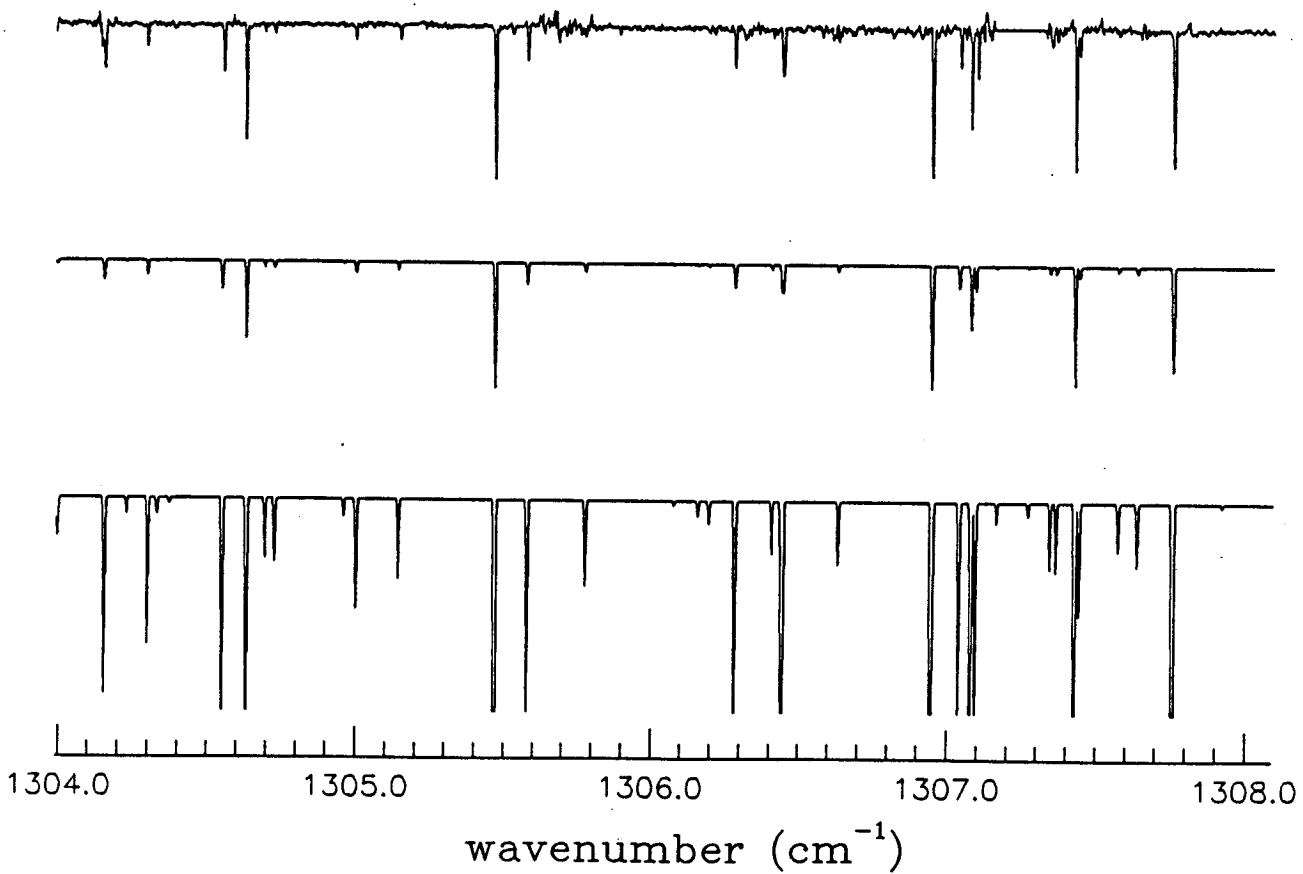
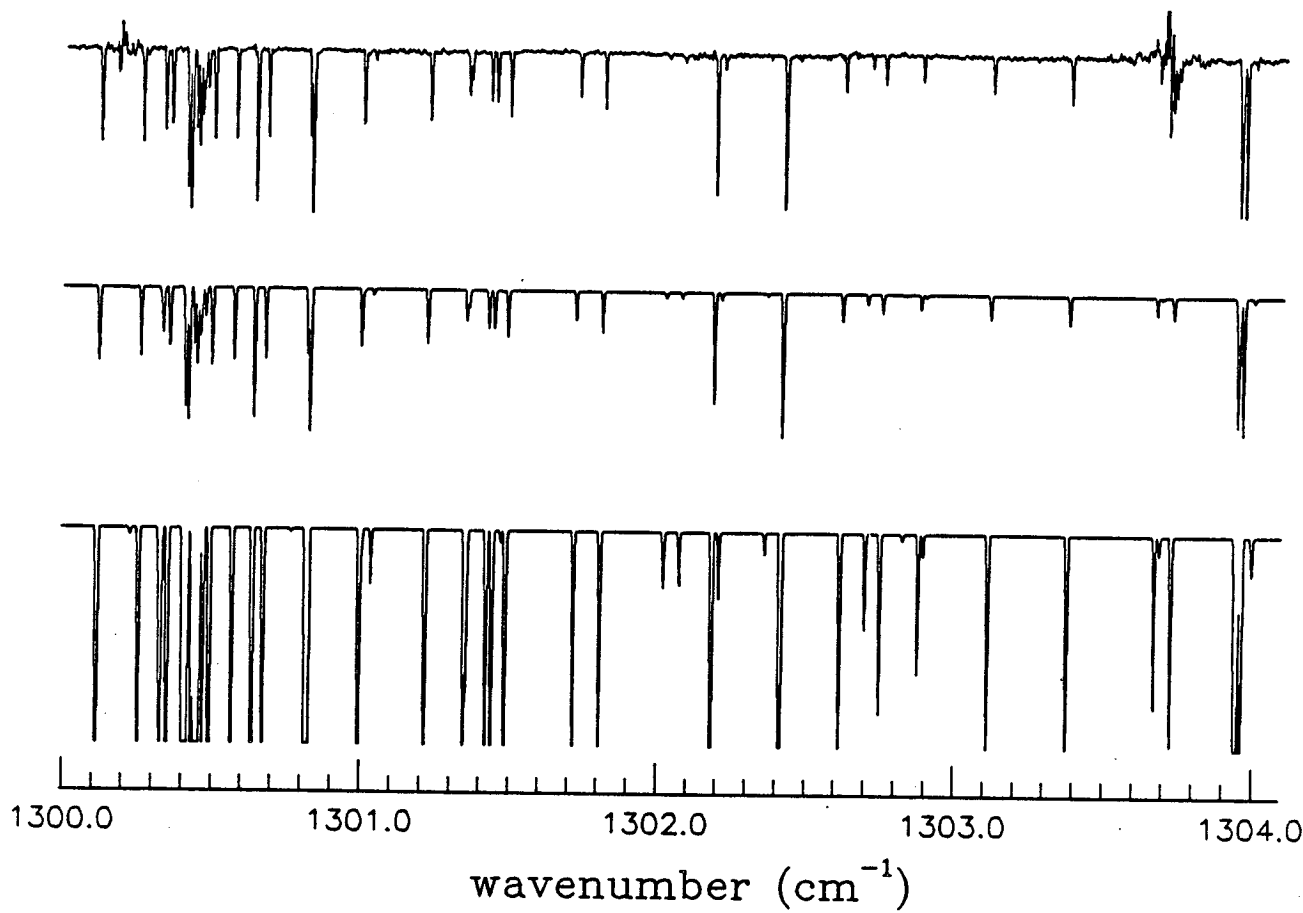


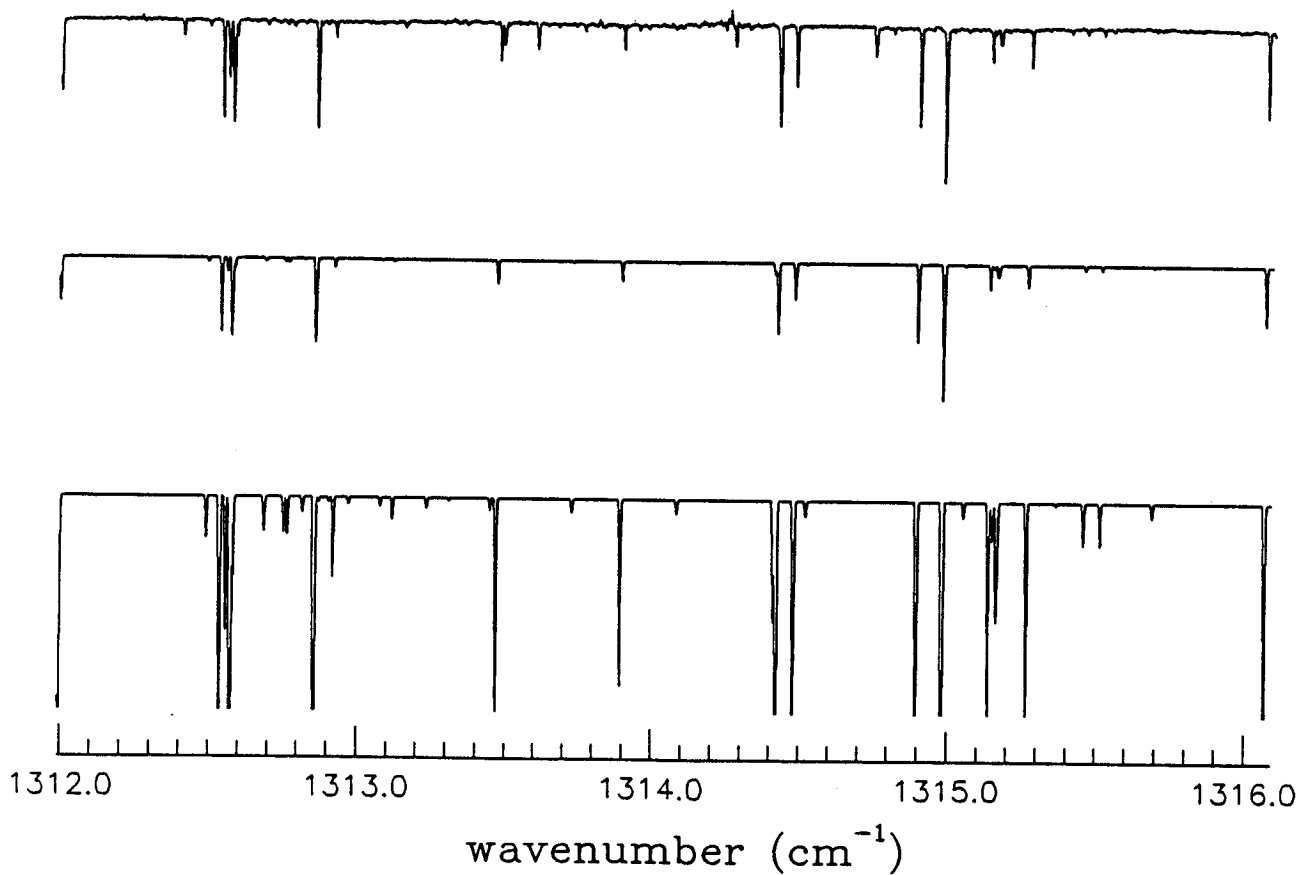
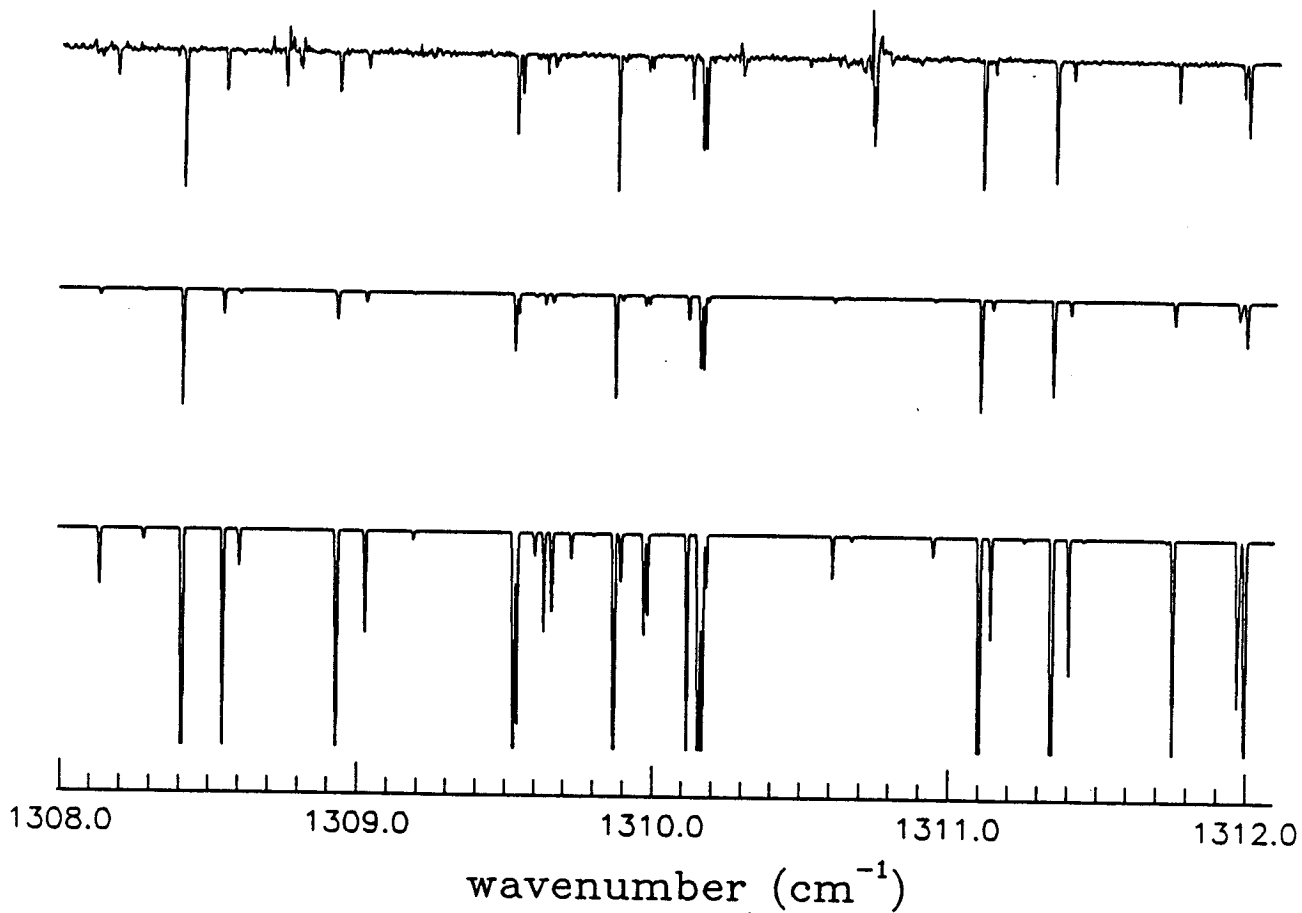


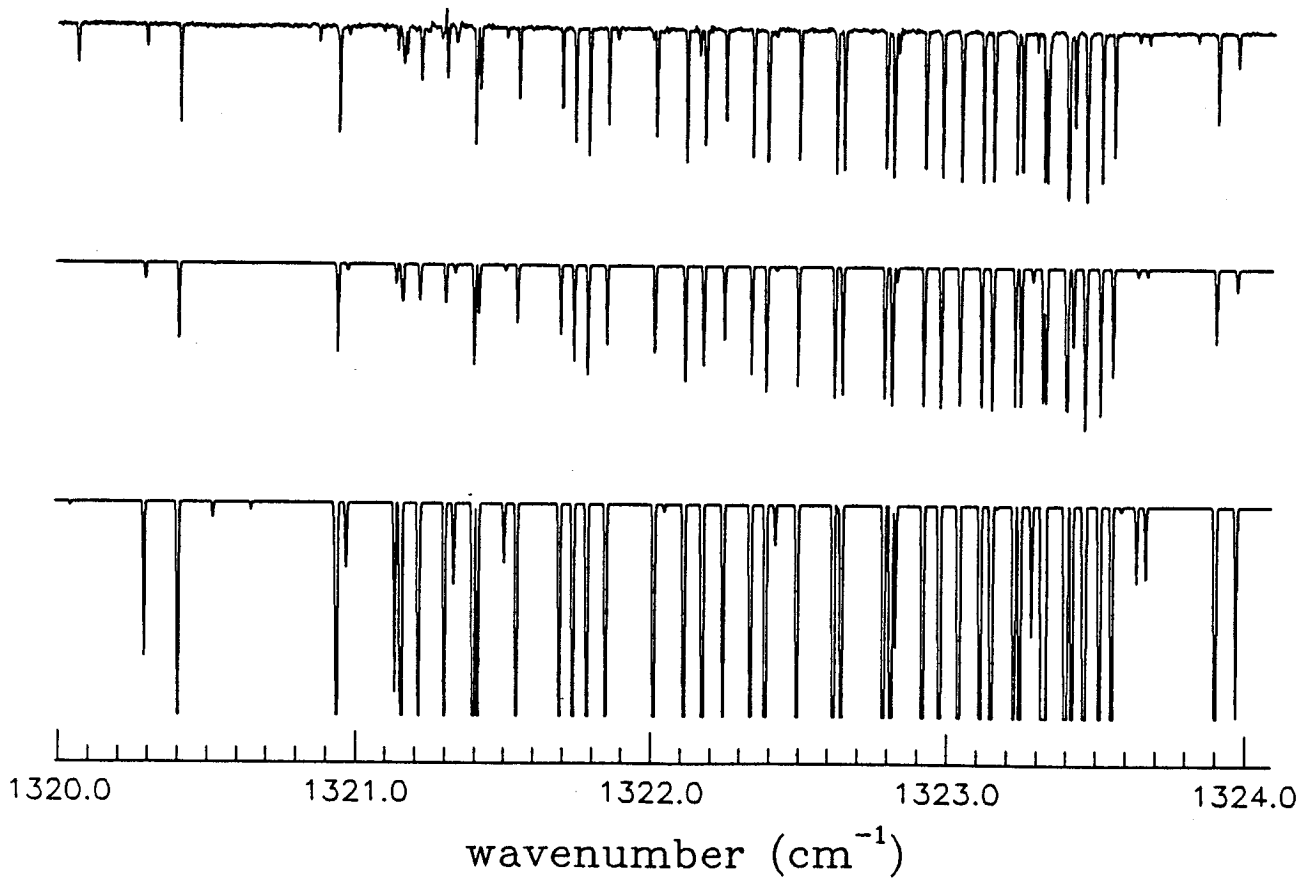
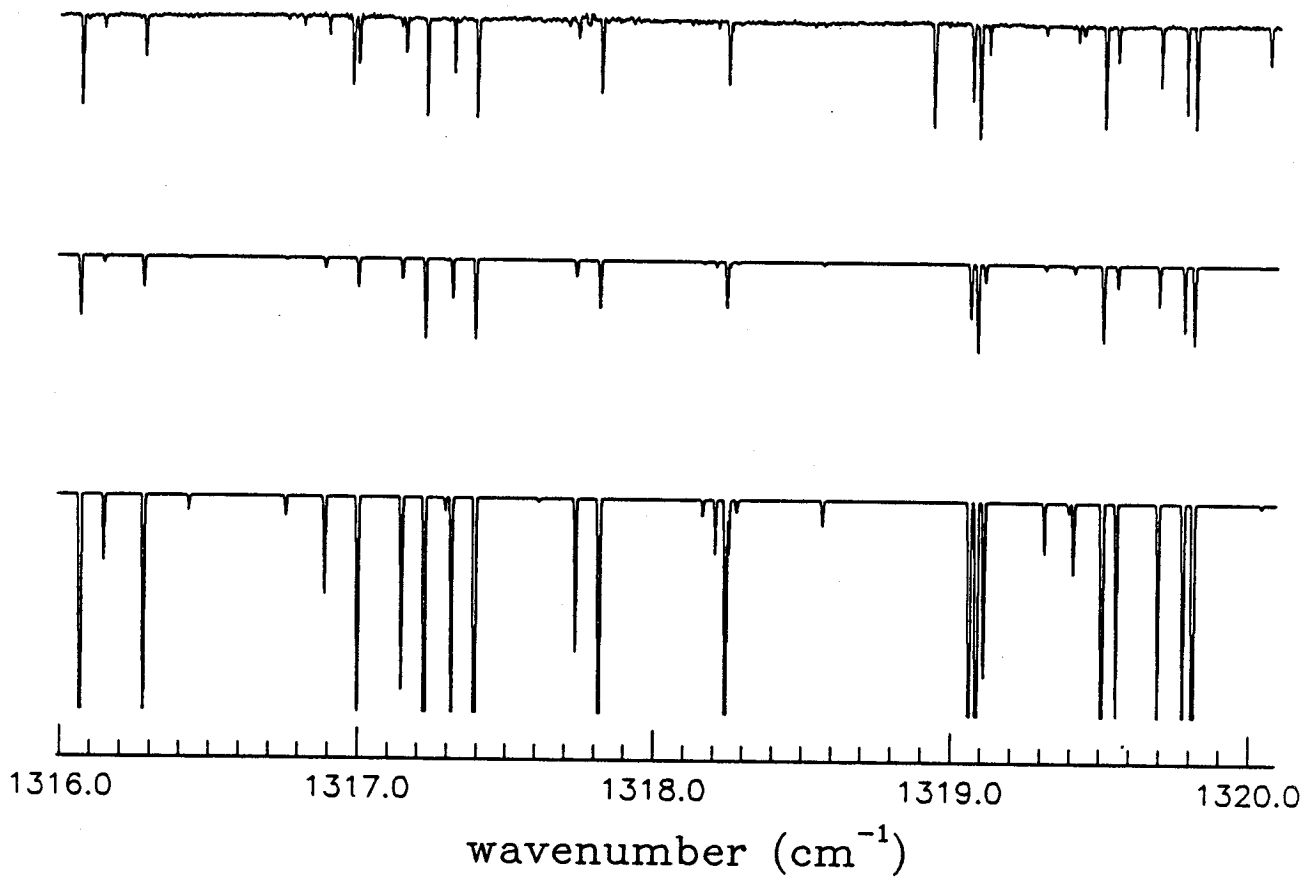
wavenumber (cm⁻¹)

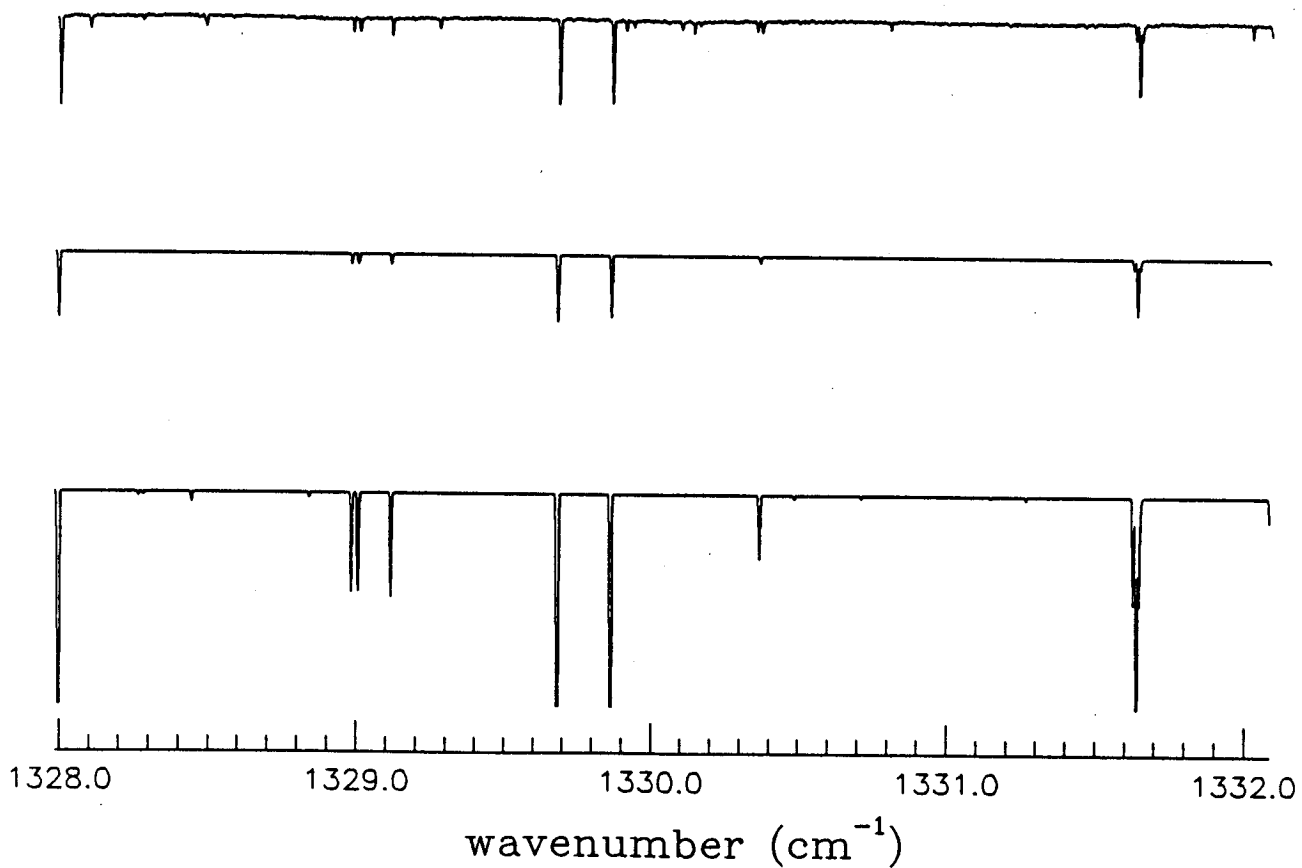
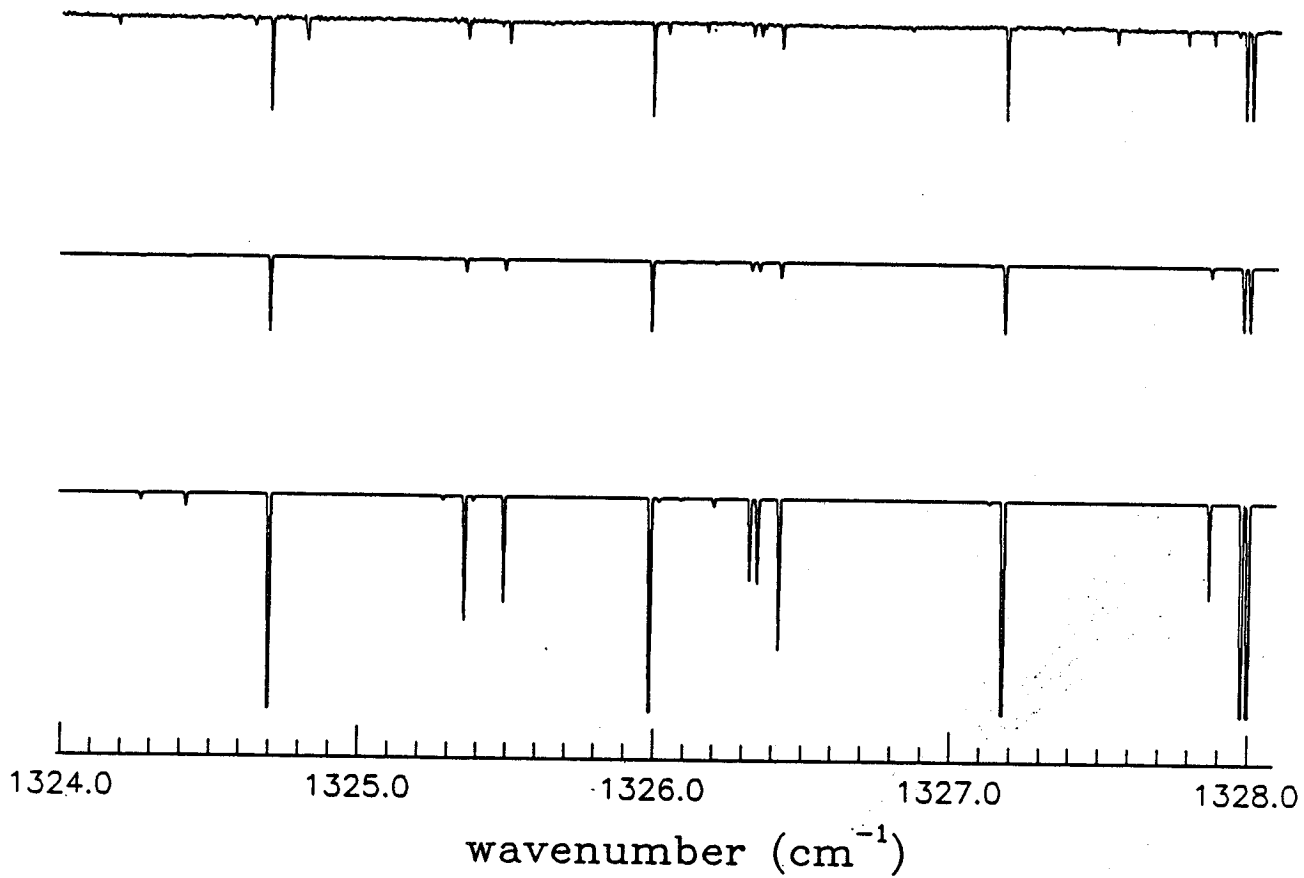


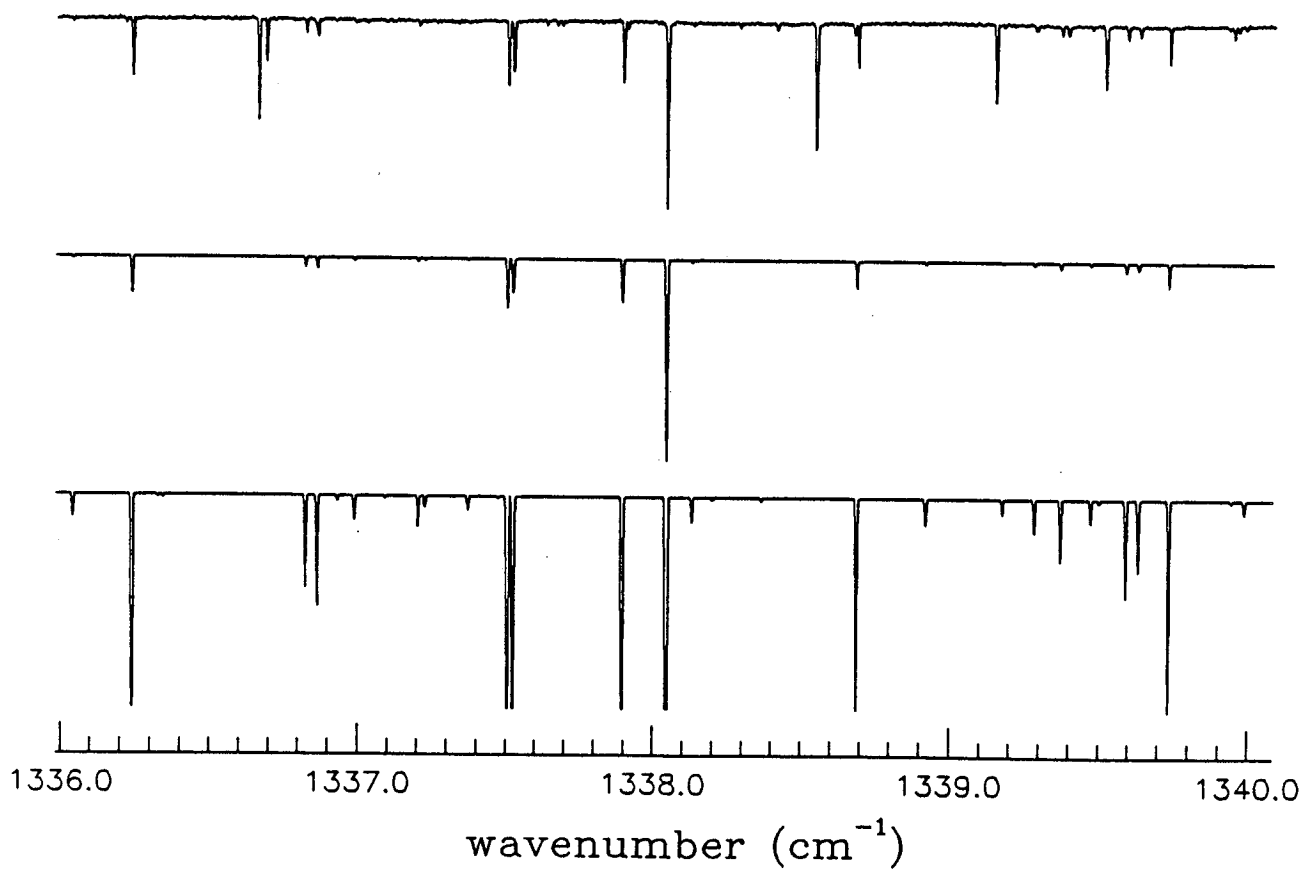
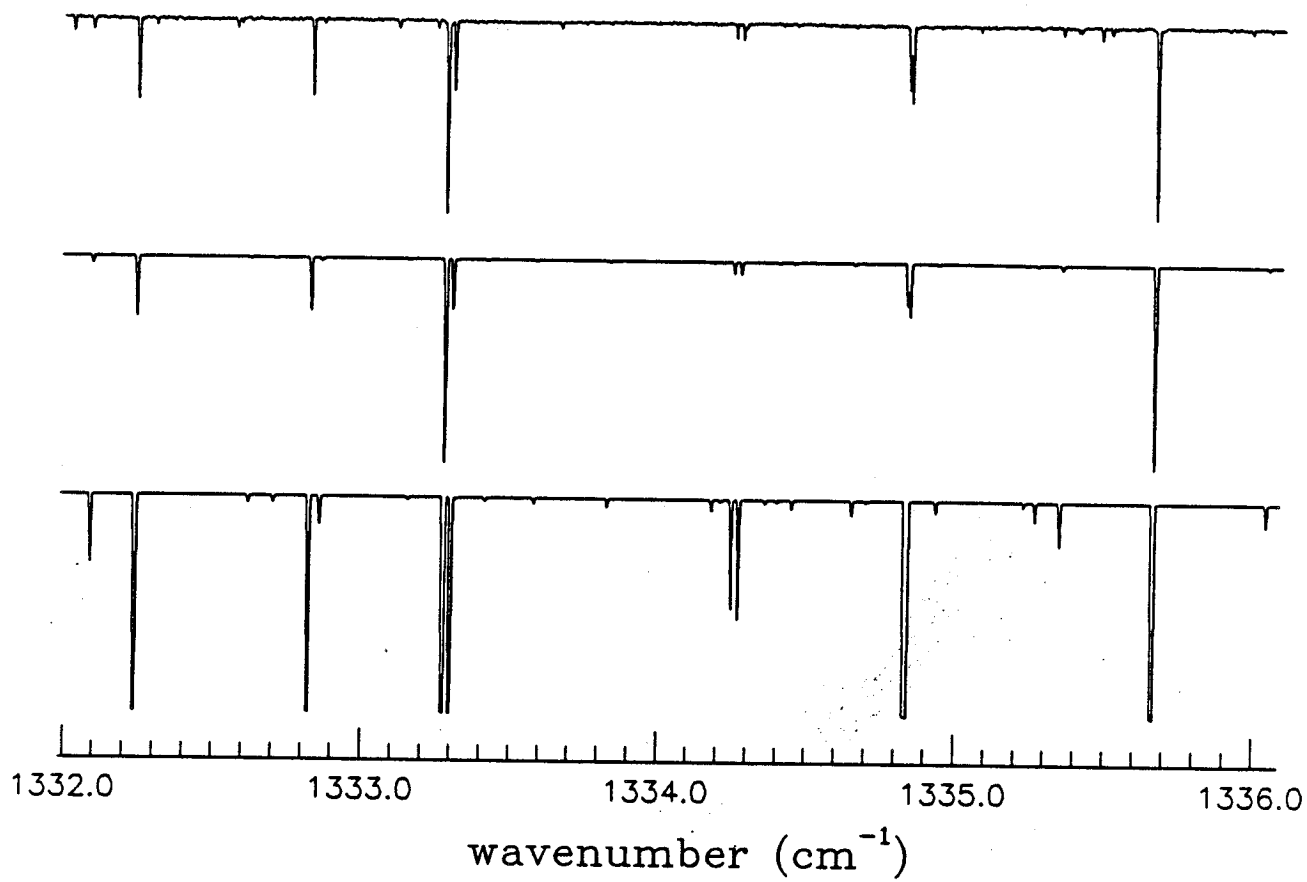
wavenumber (cm⁻¹)

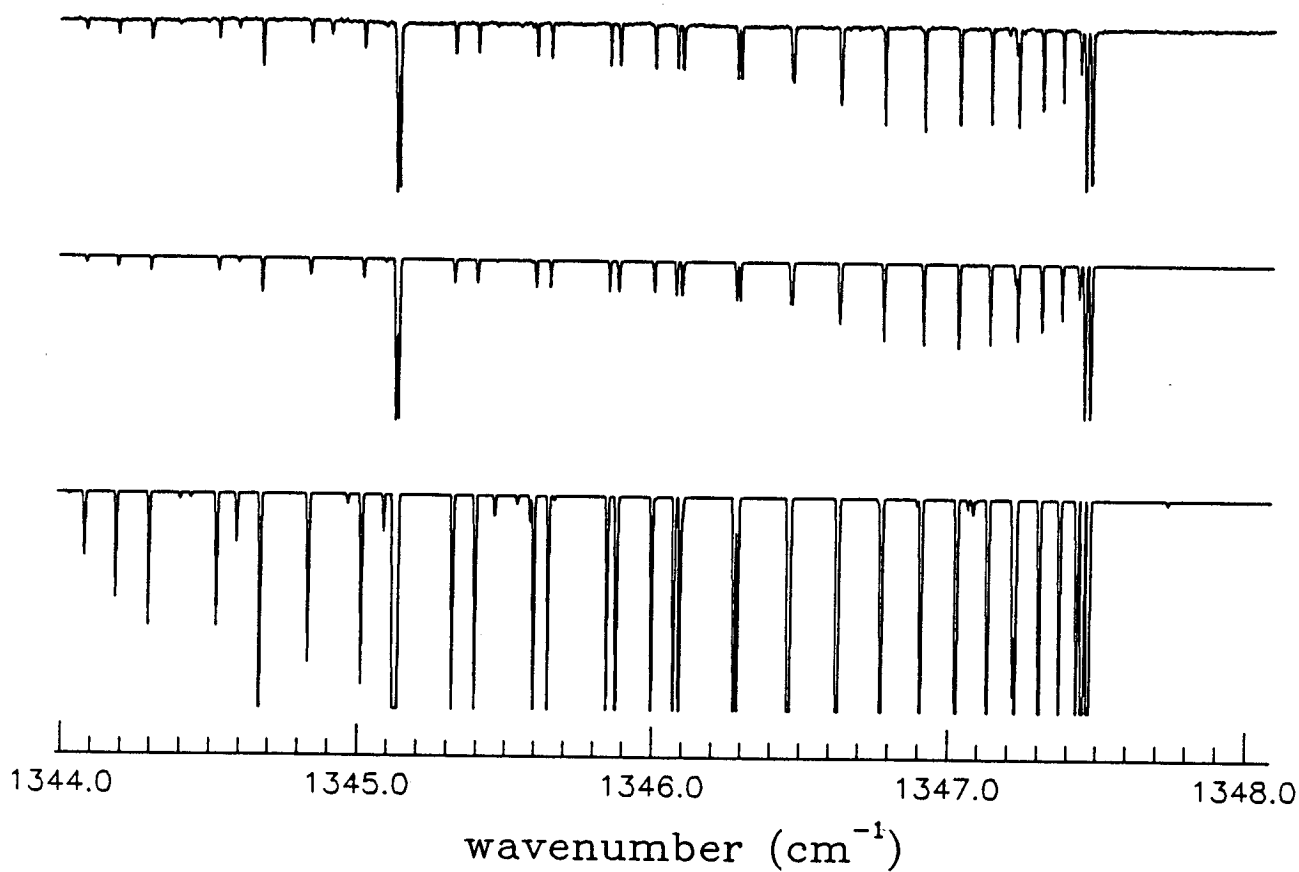
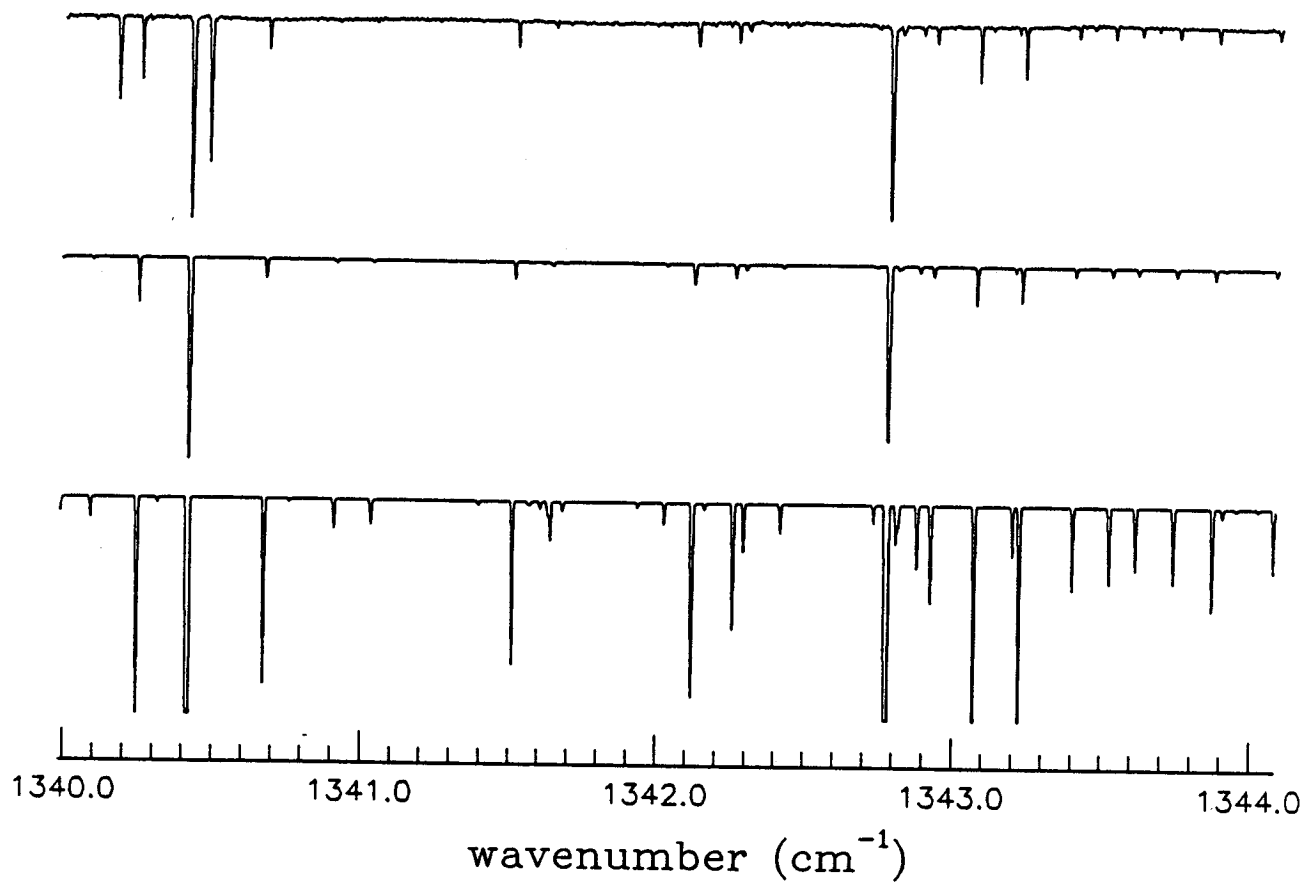


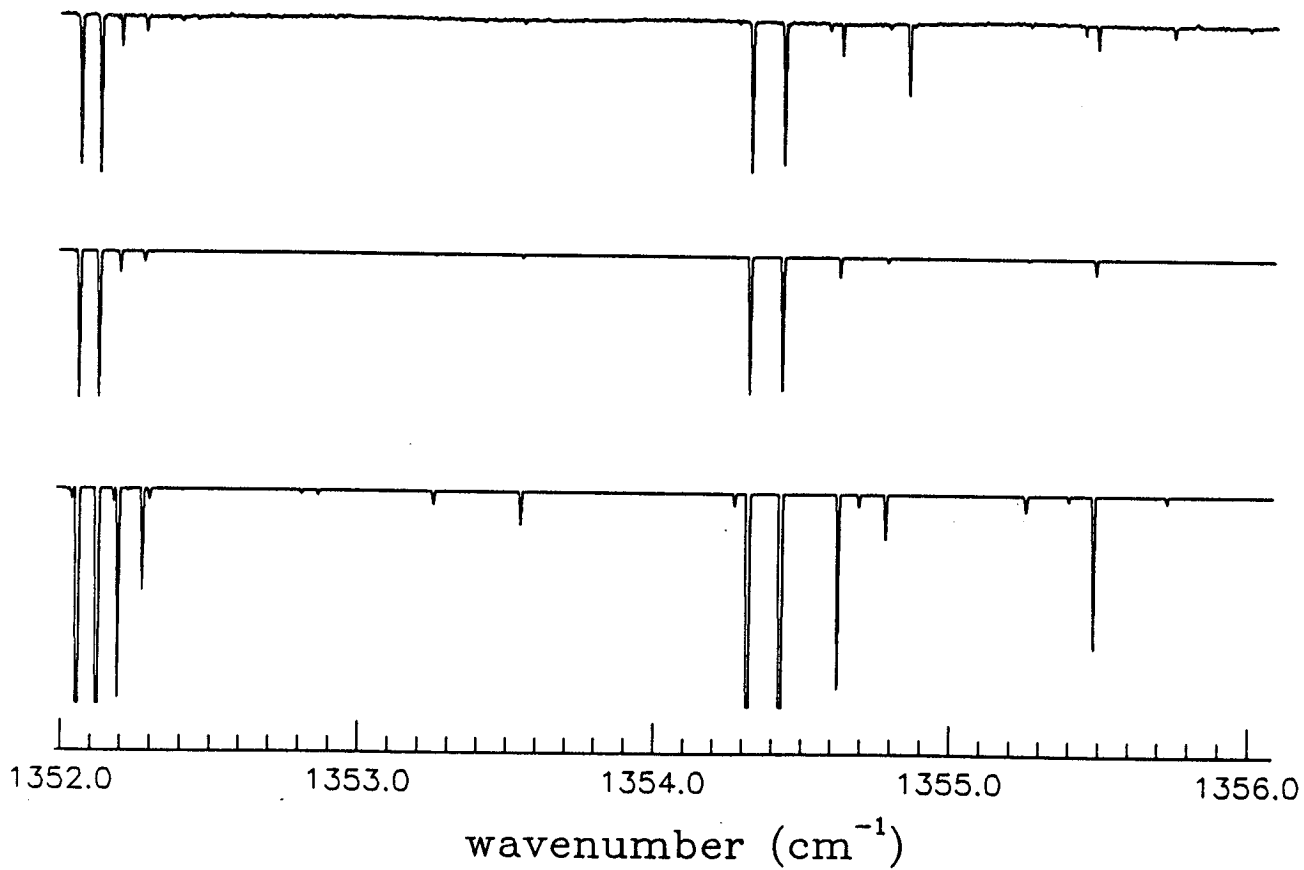
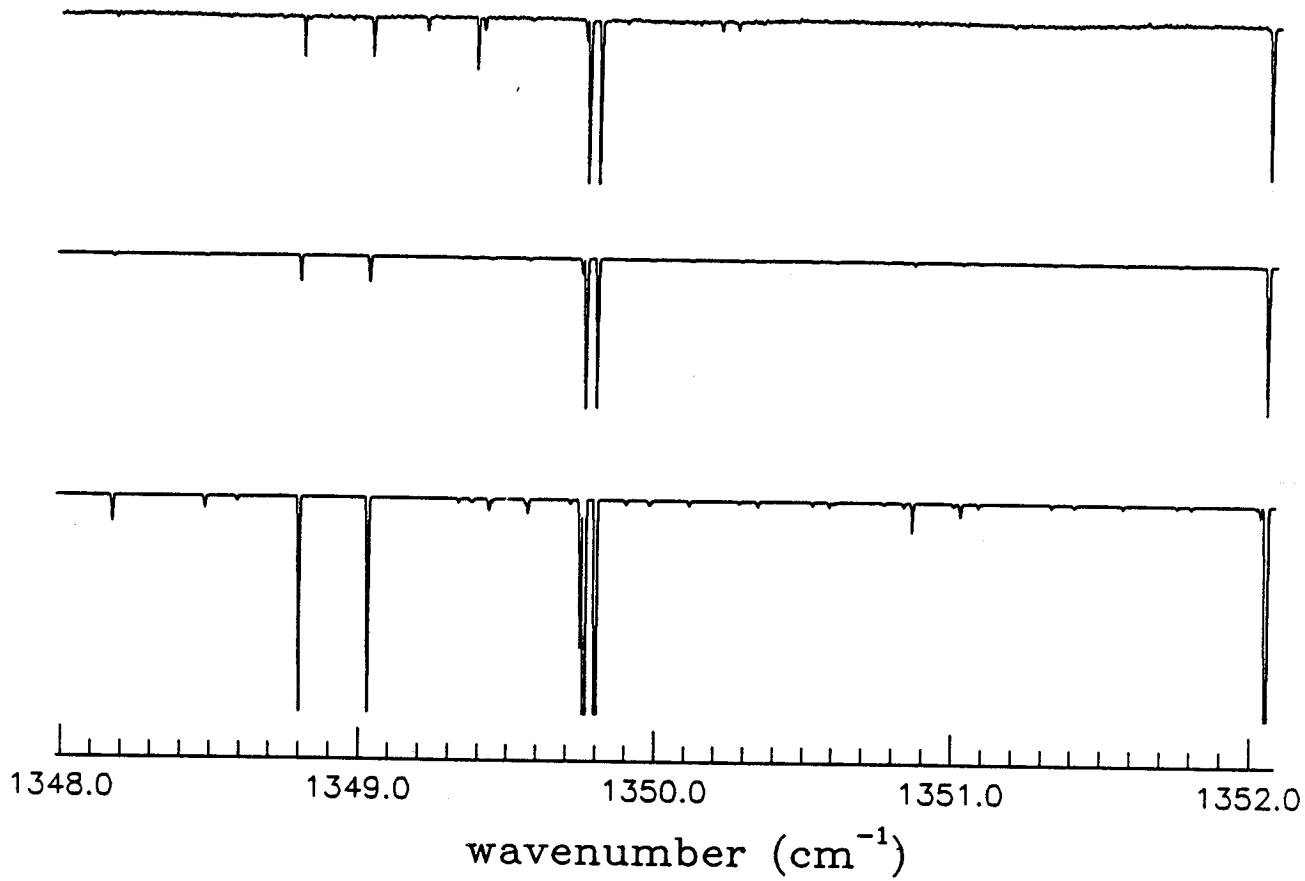


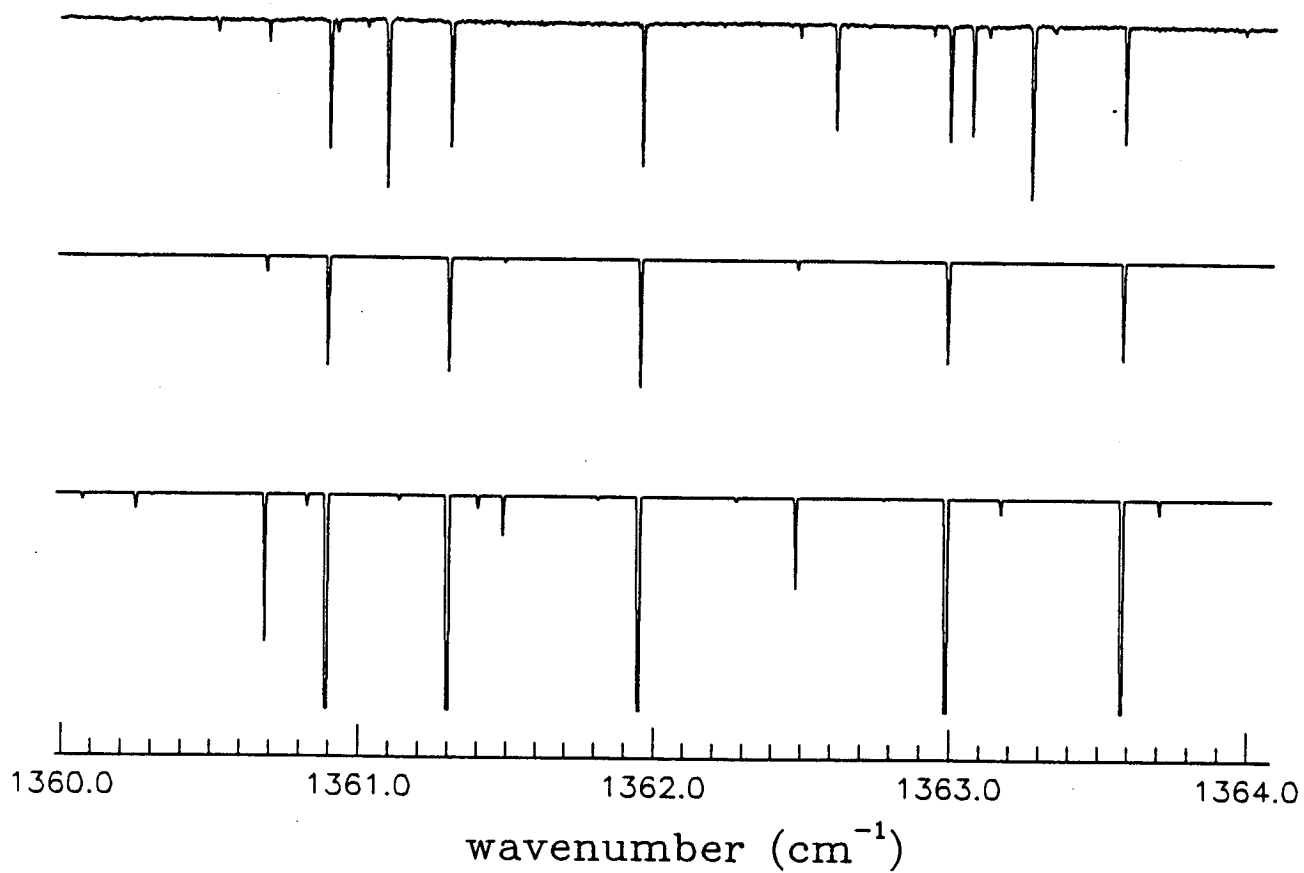
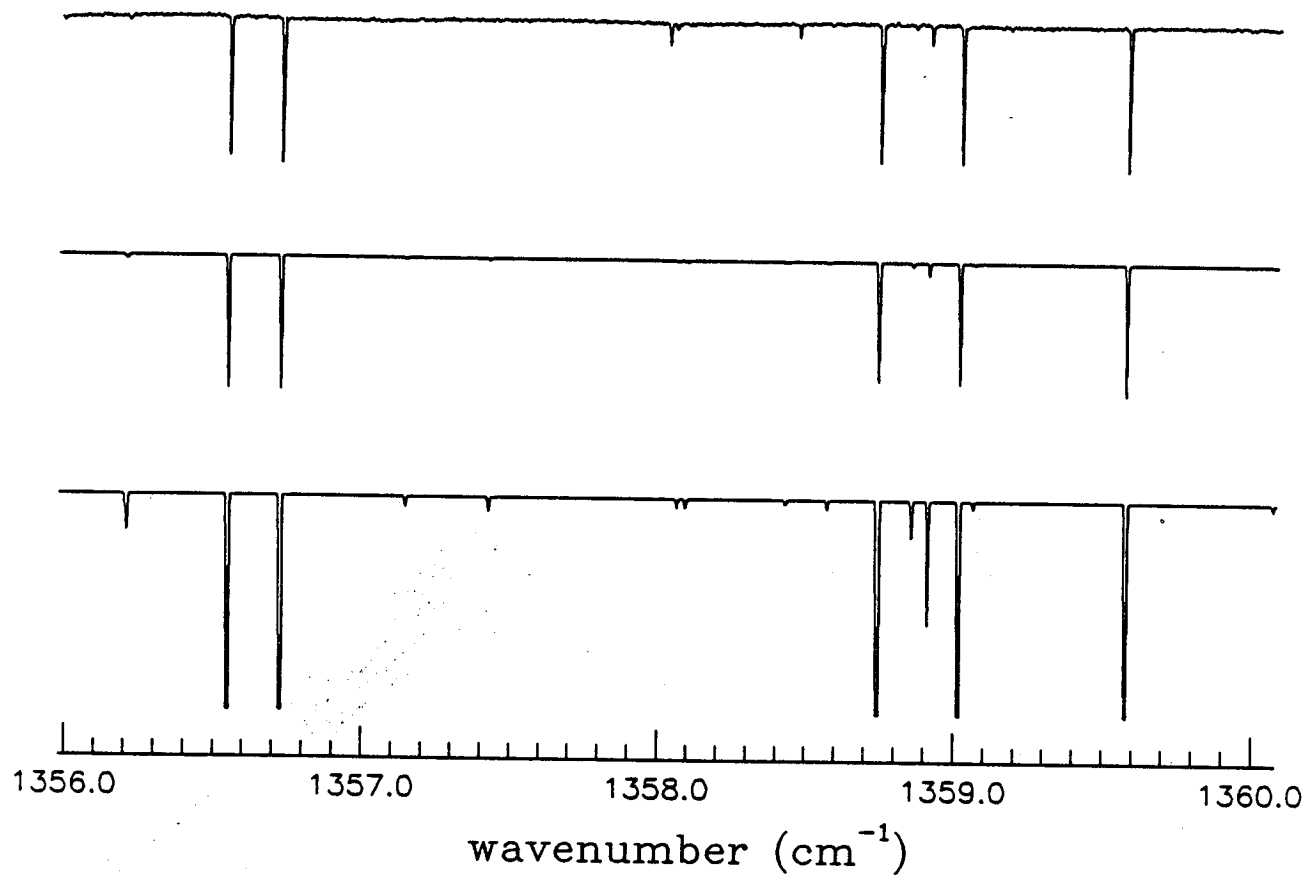


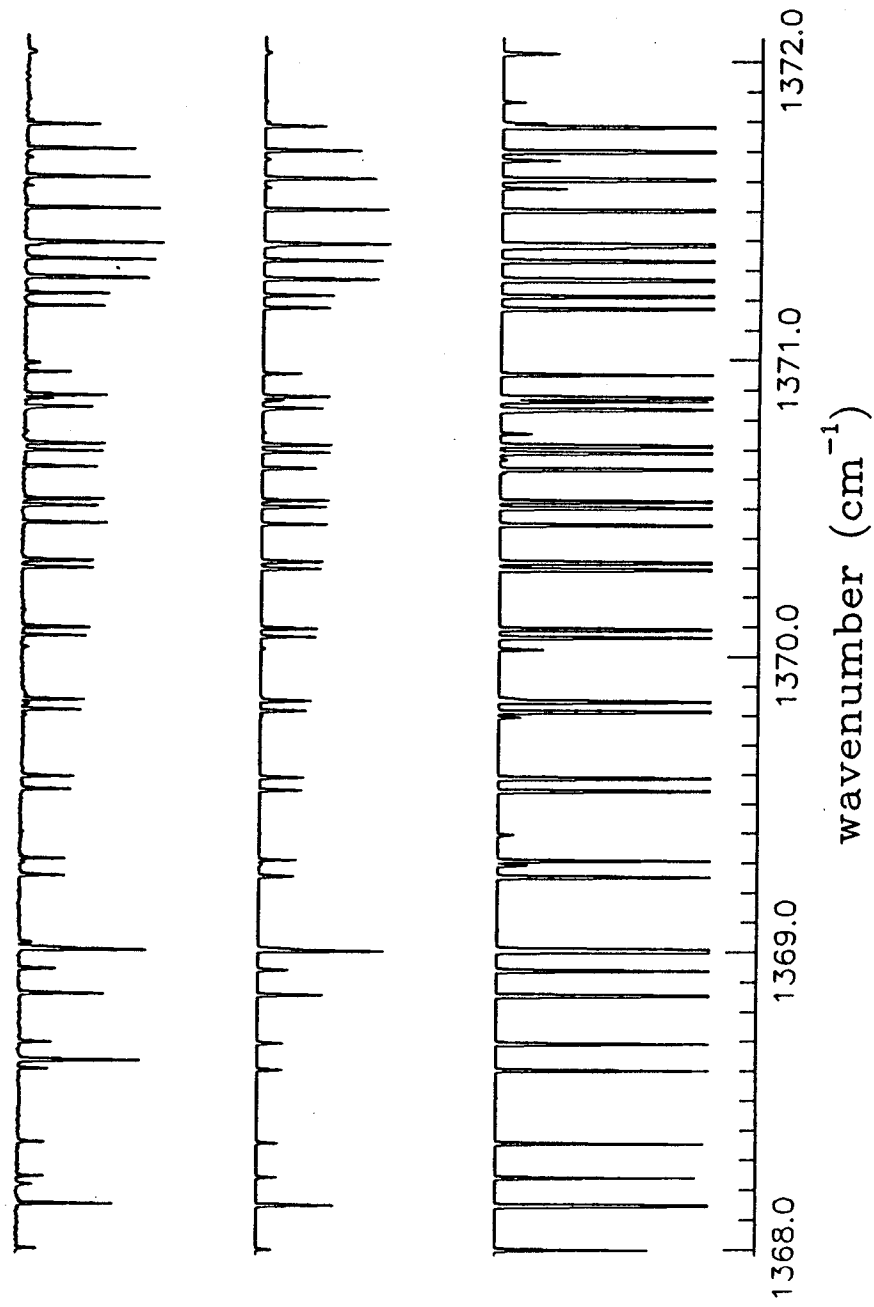
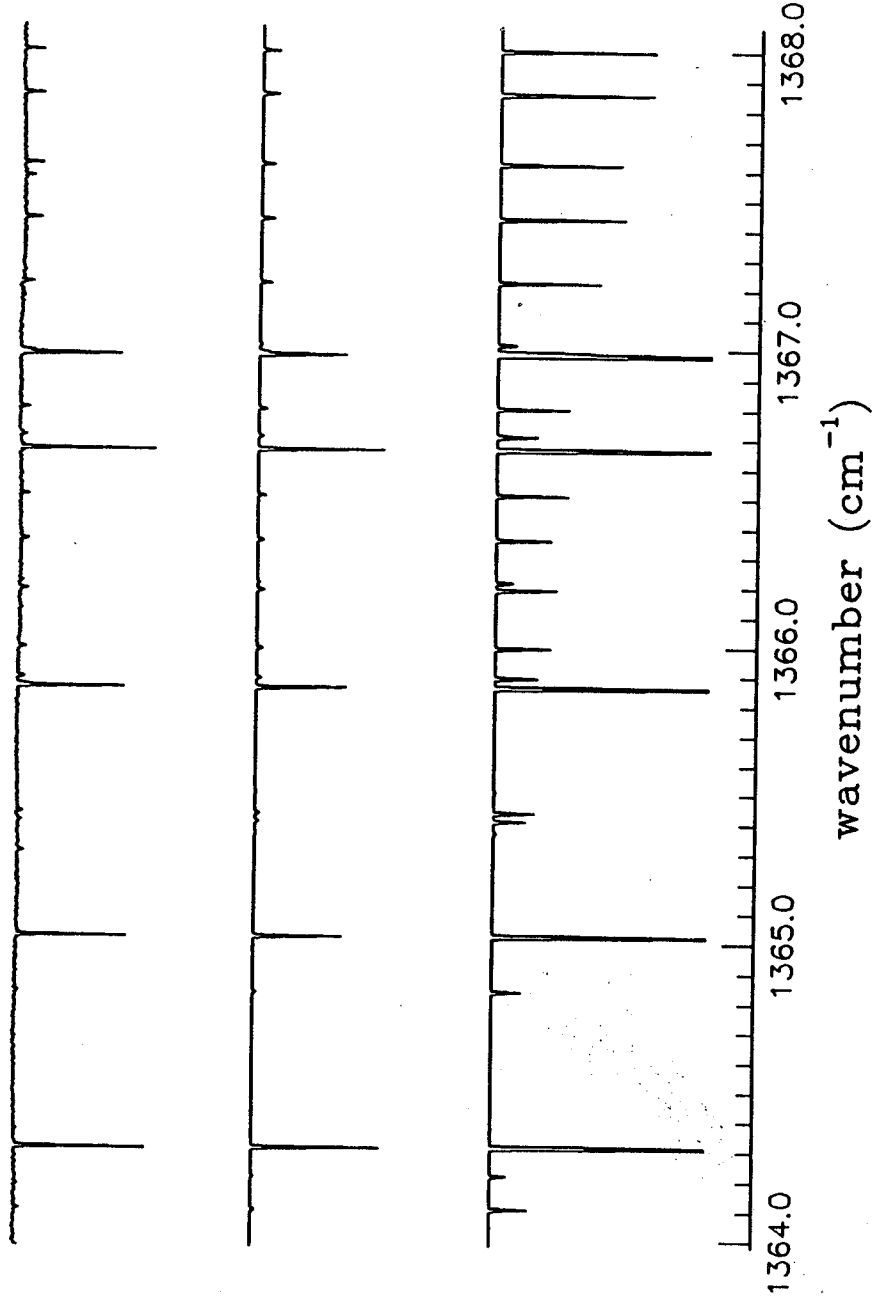


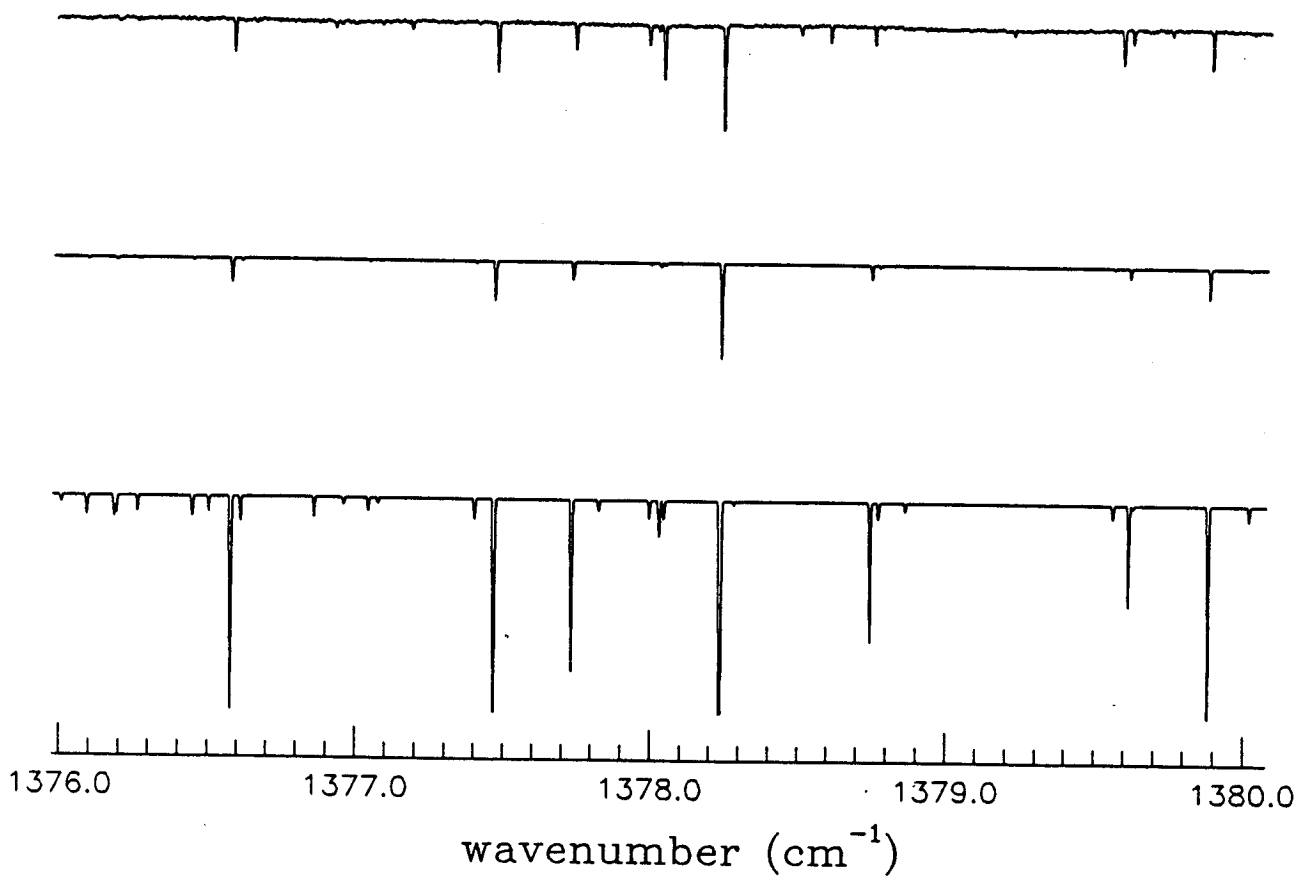
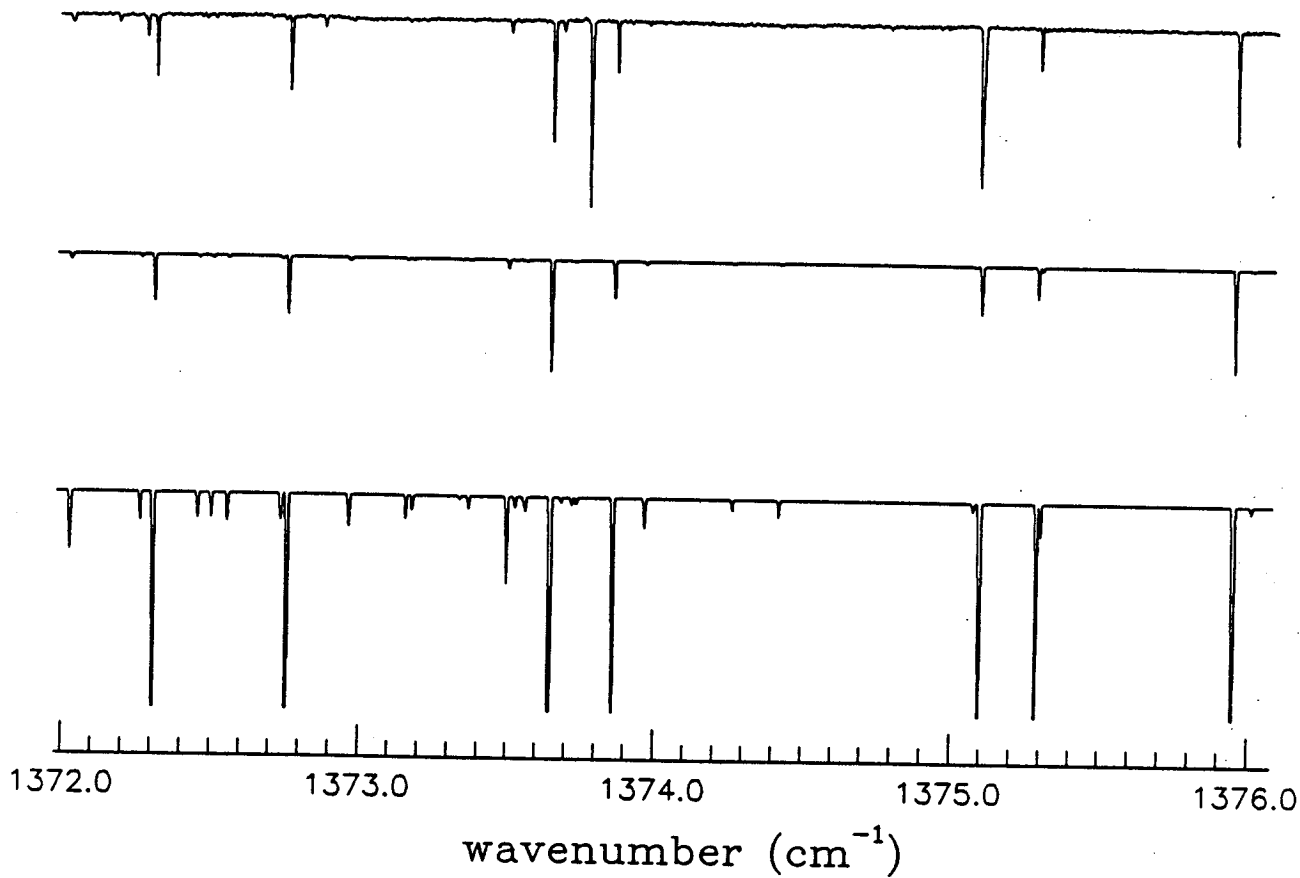


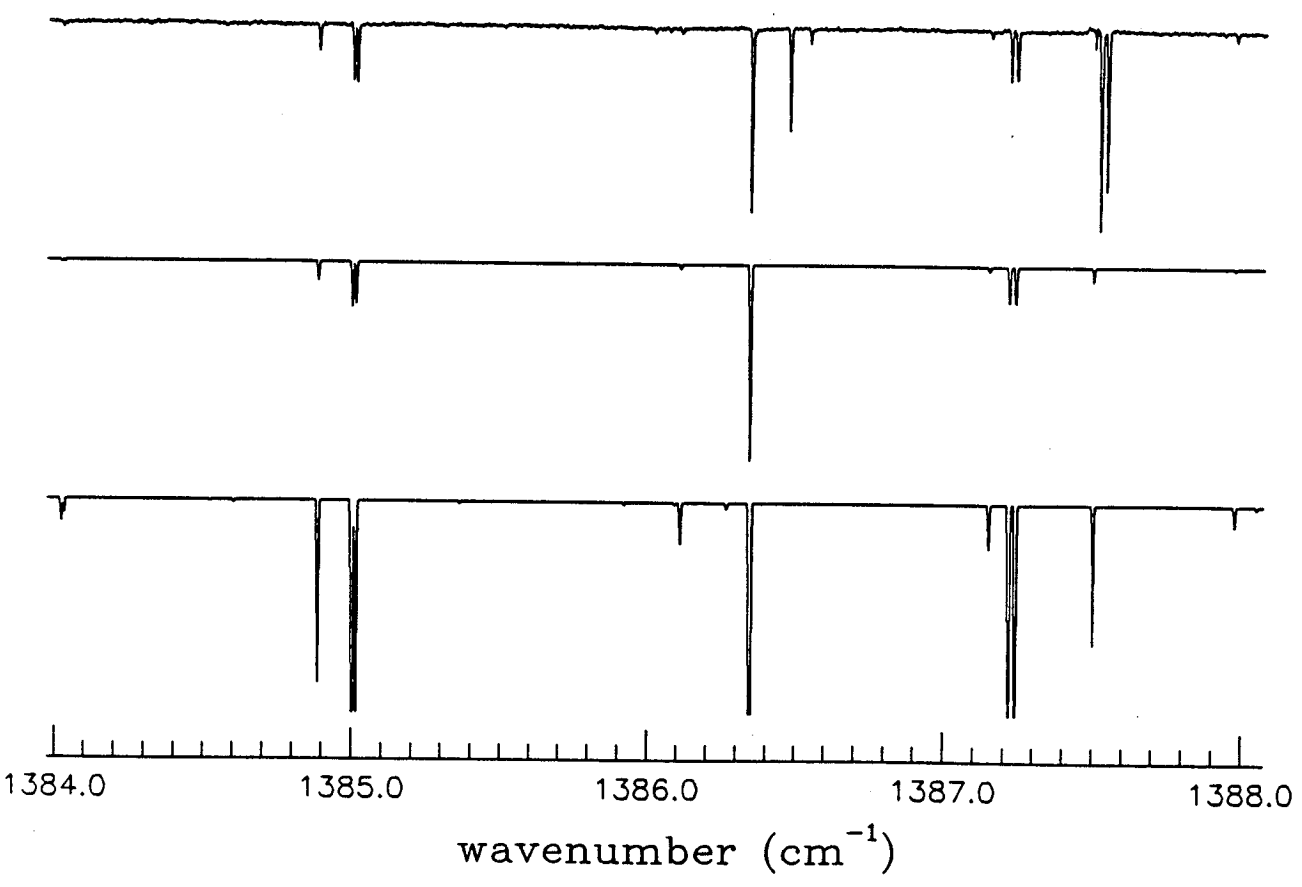
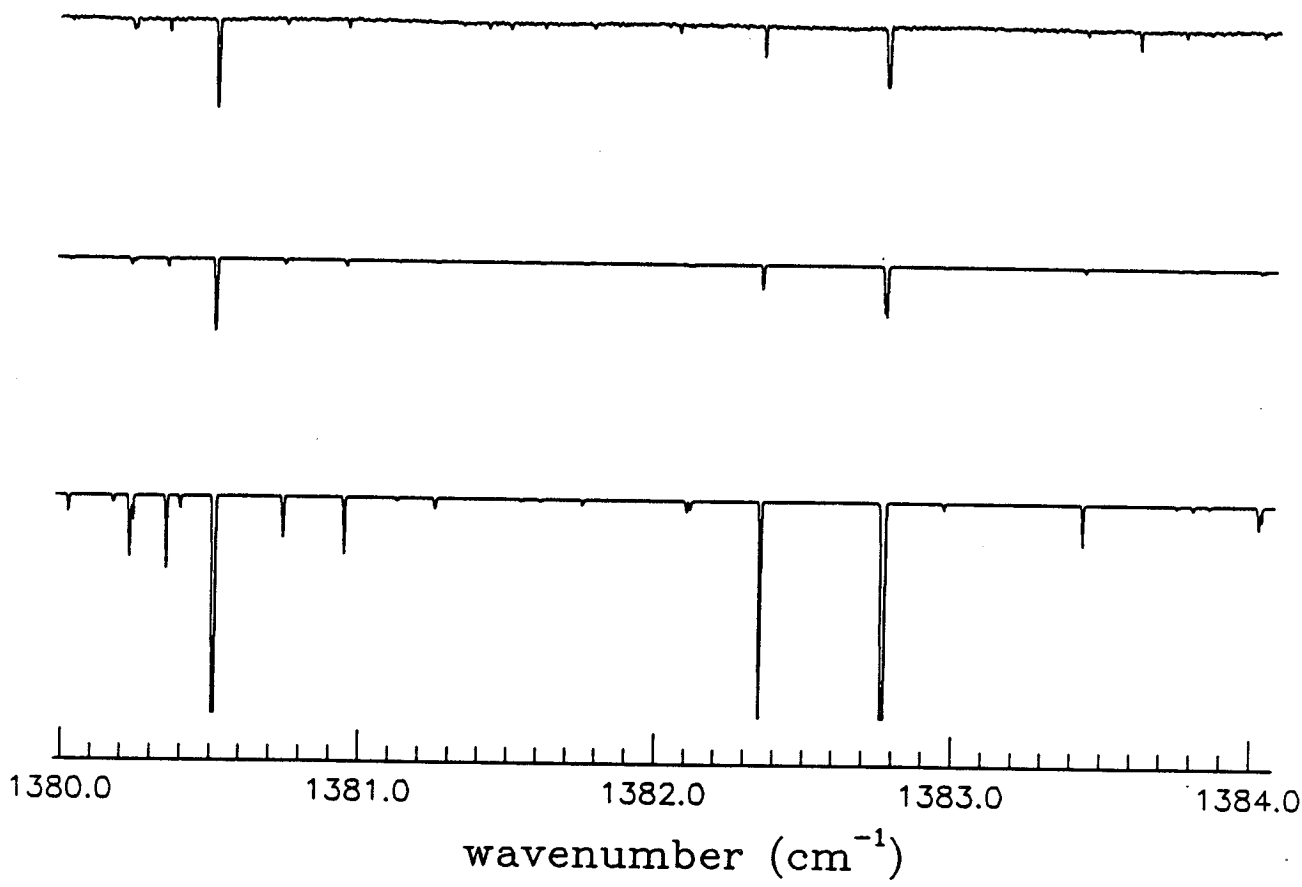


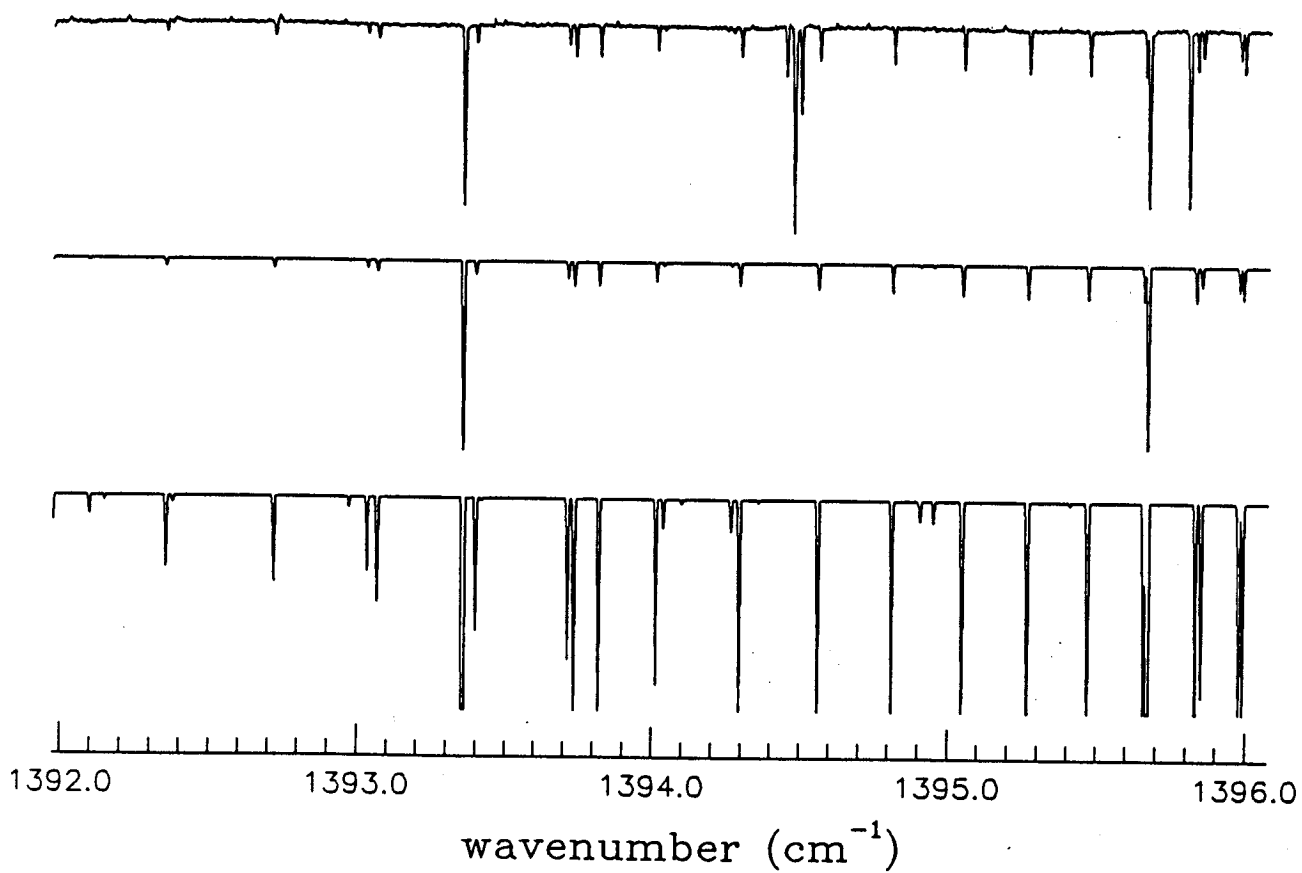
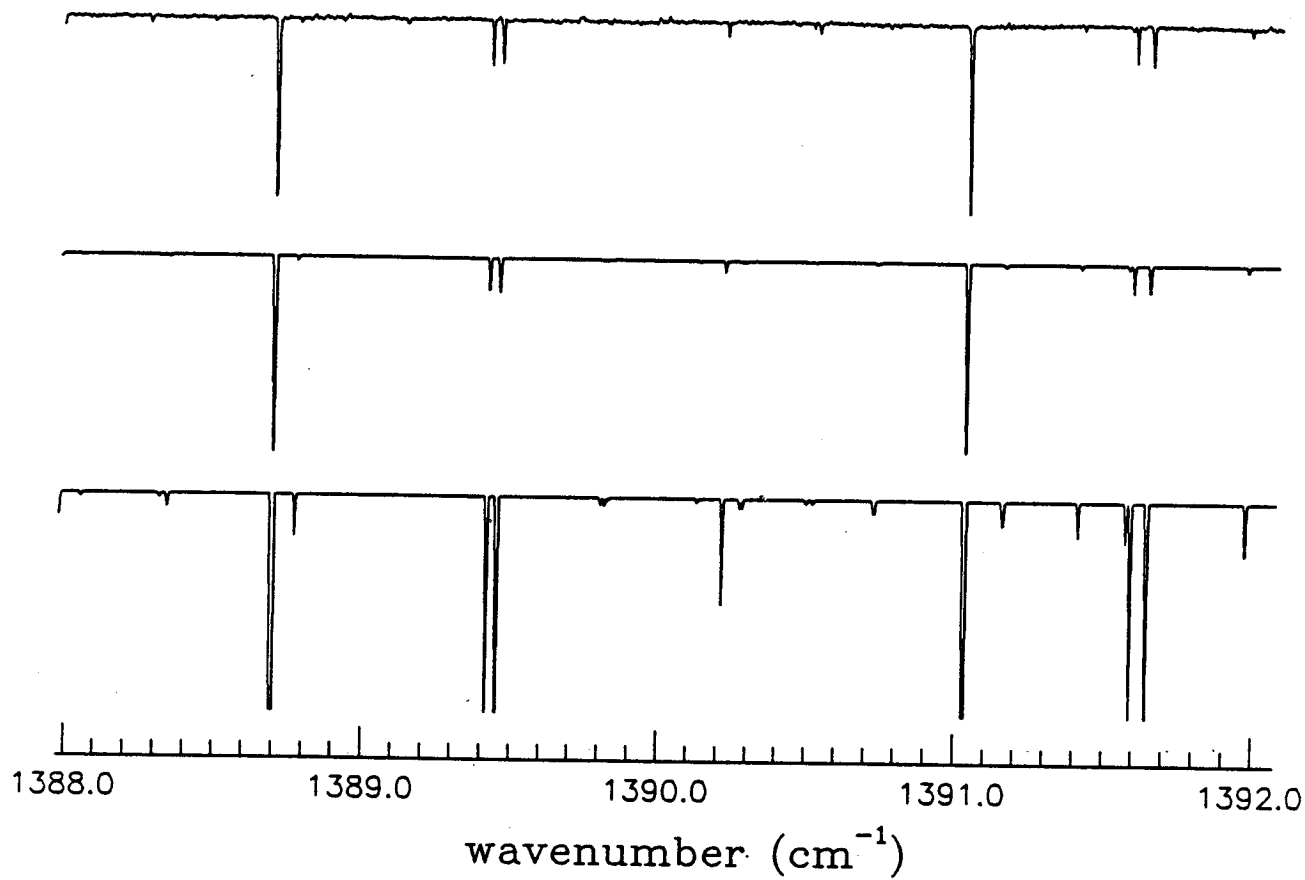


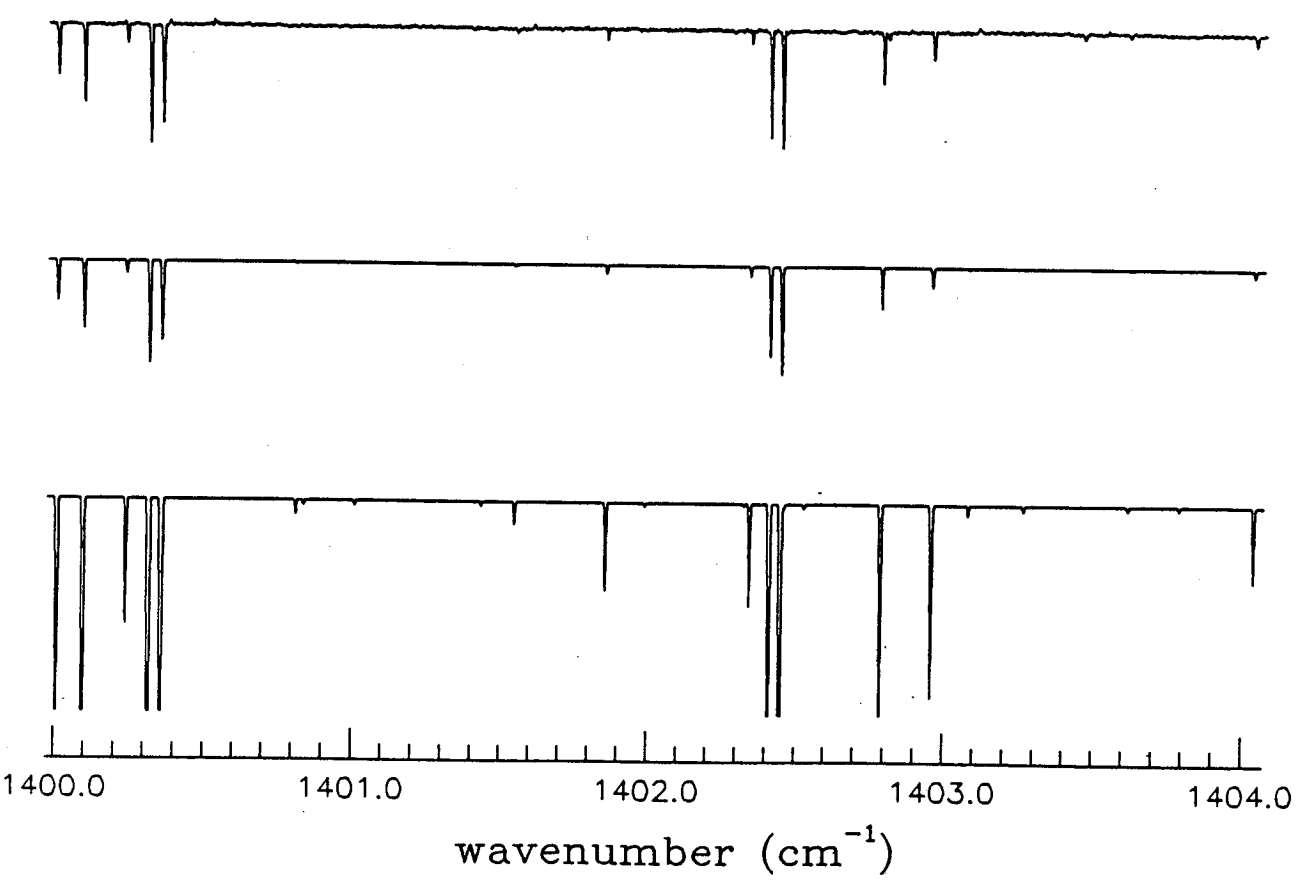
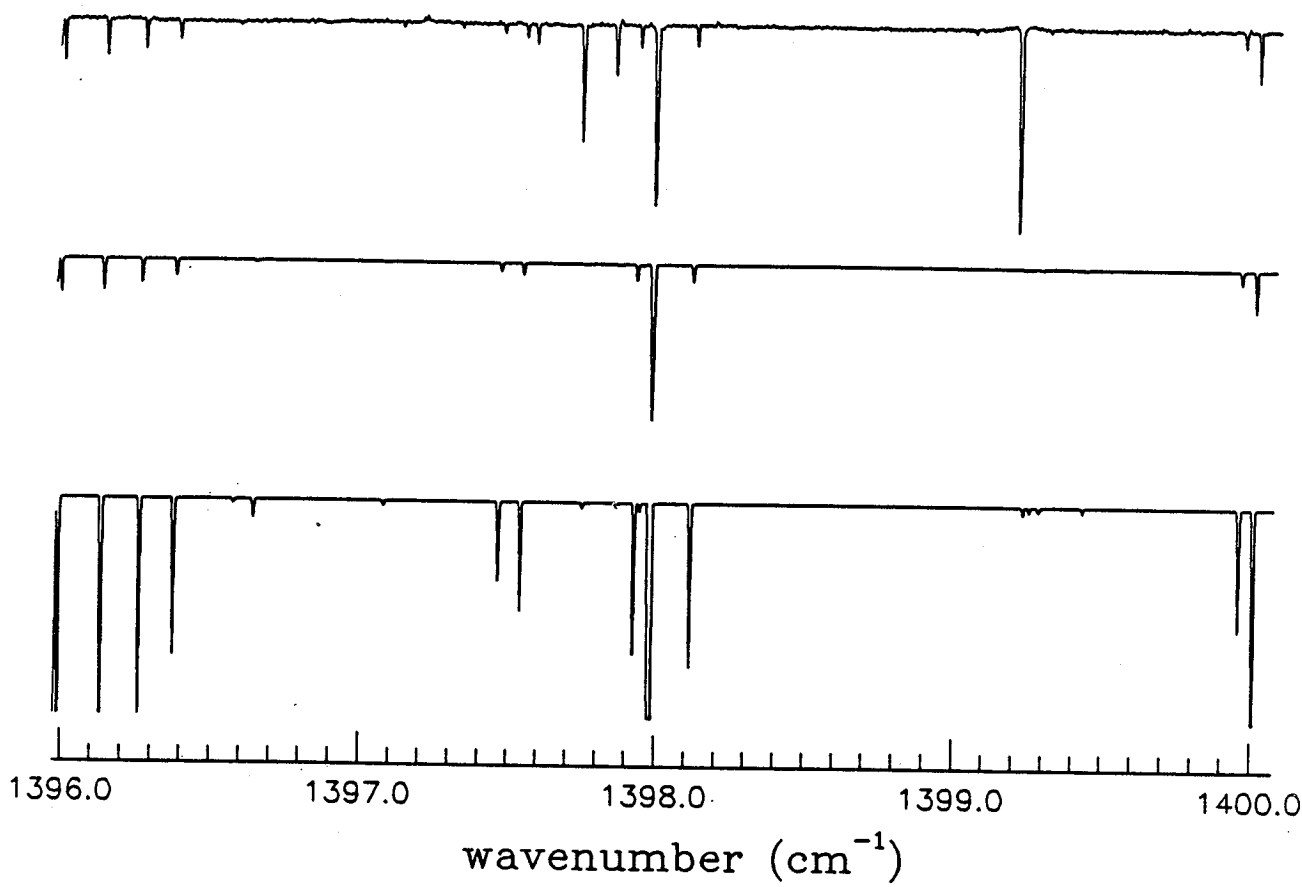


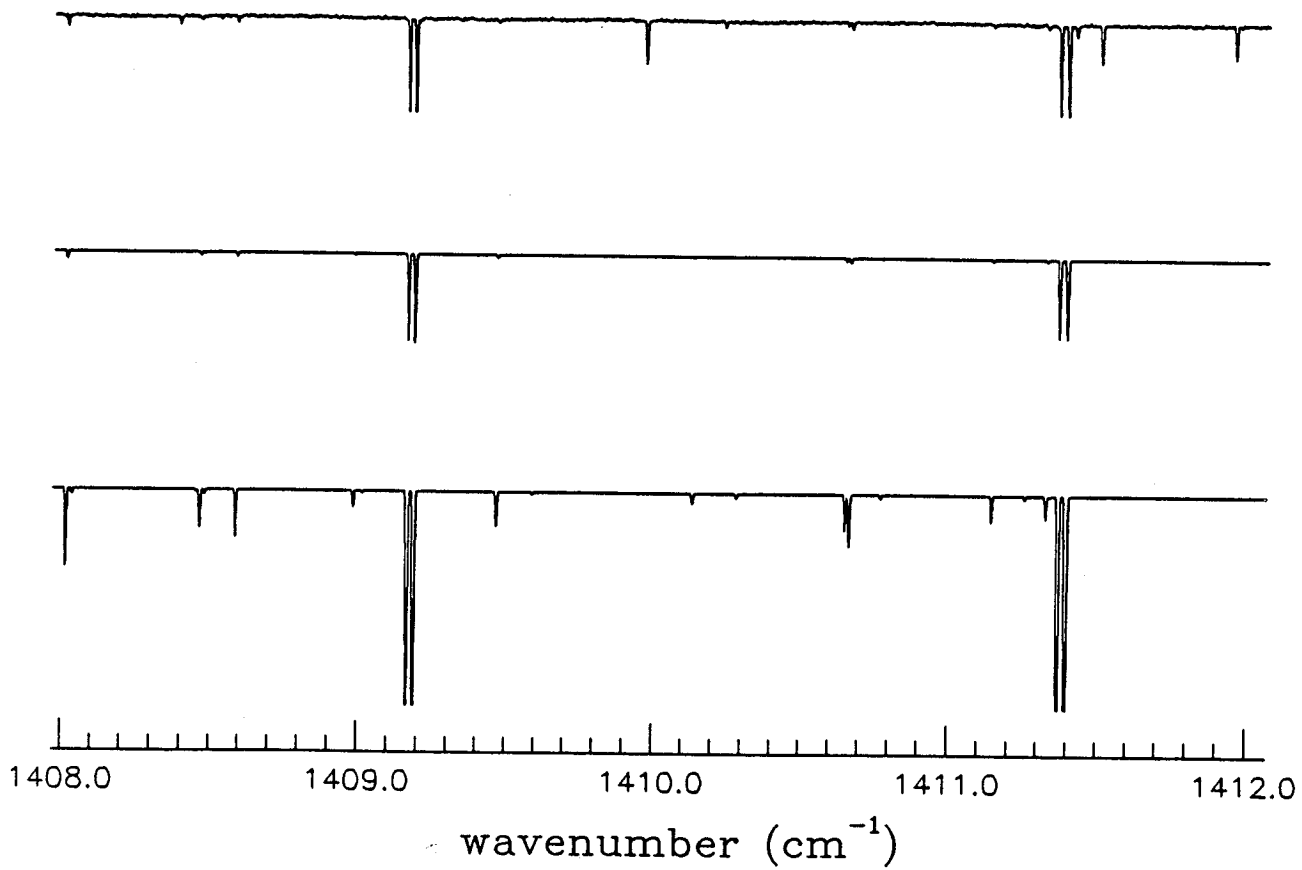
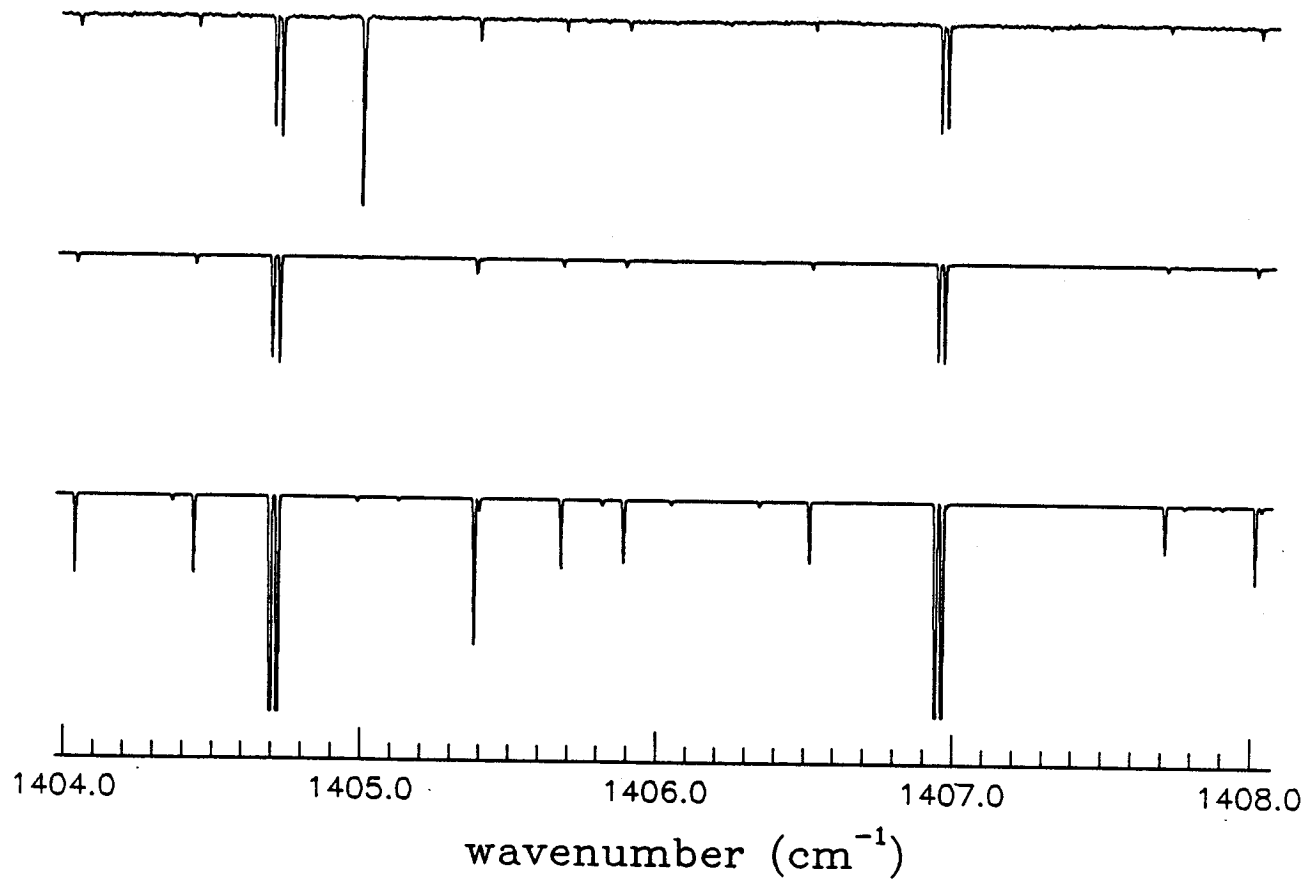


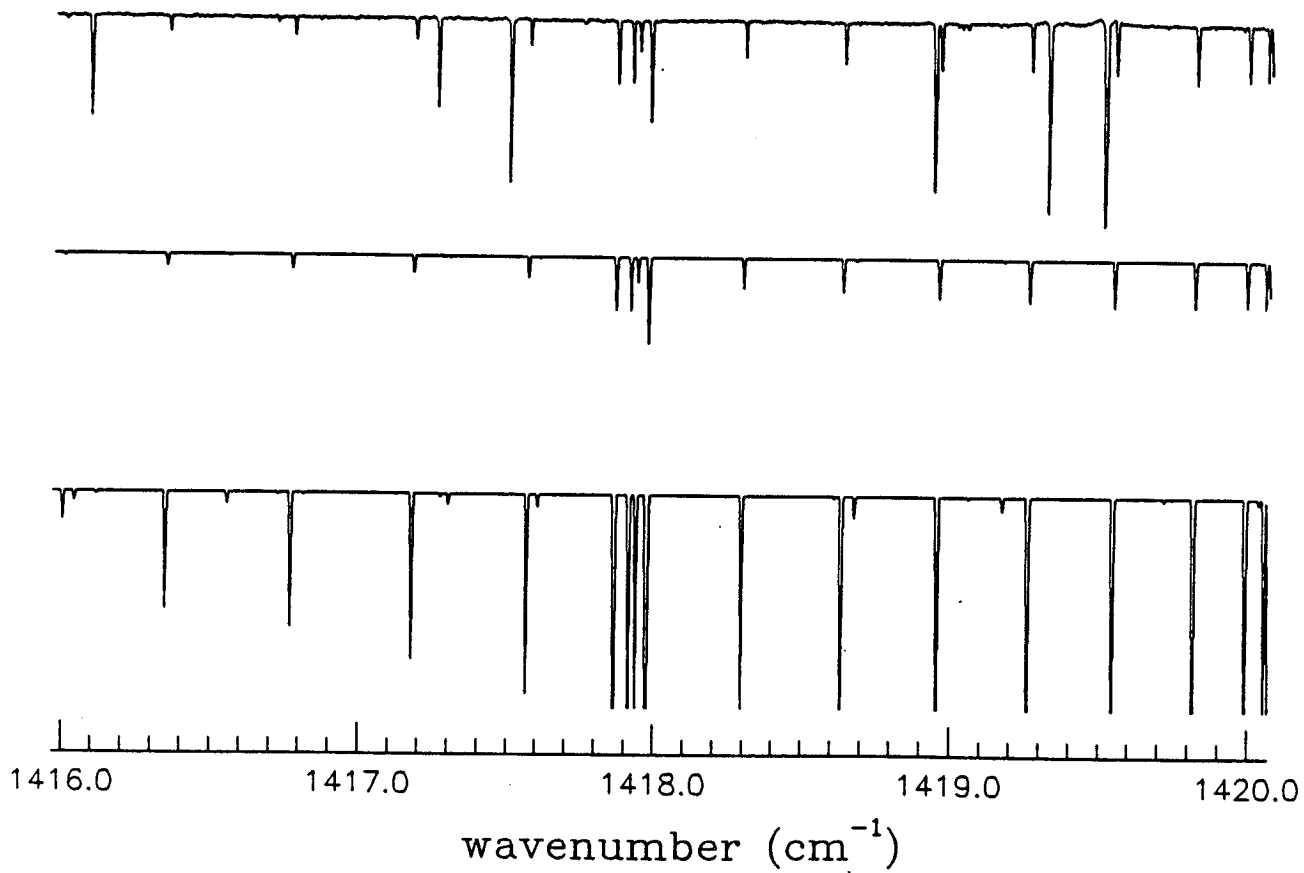
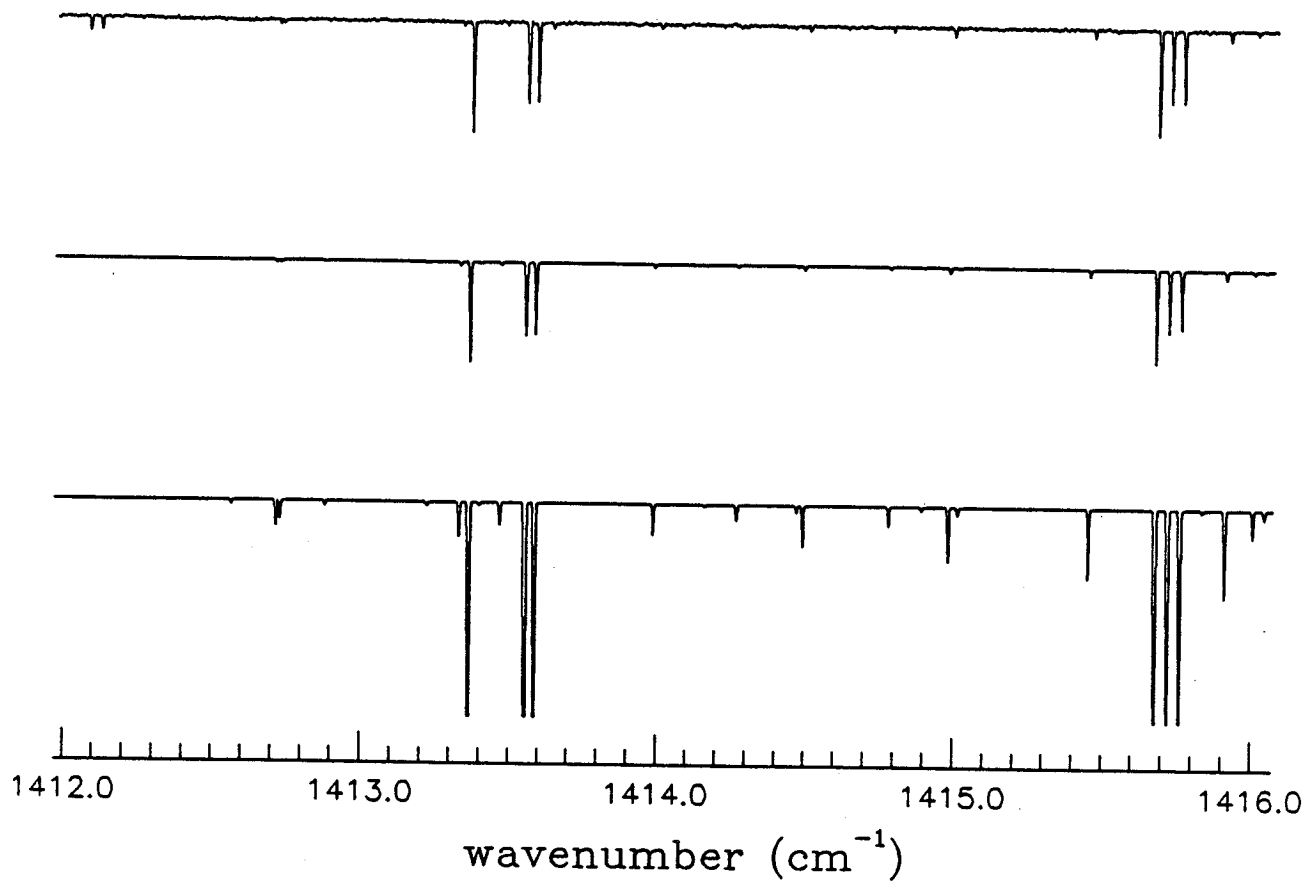


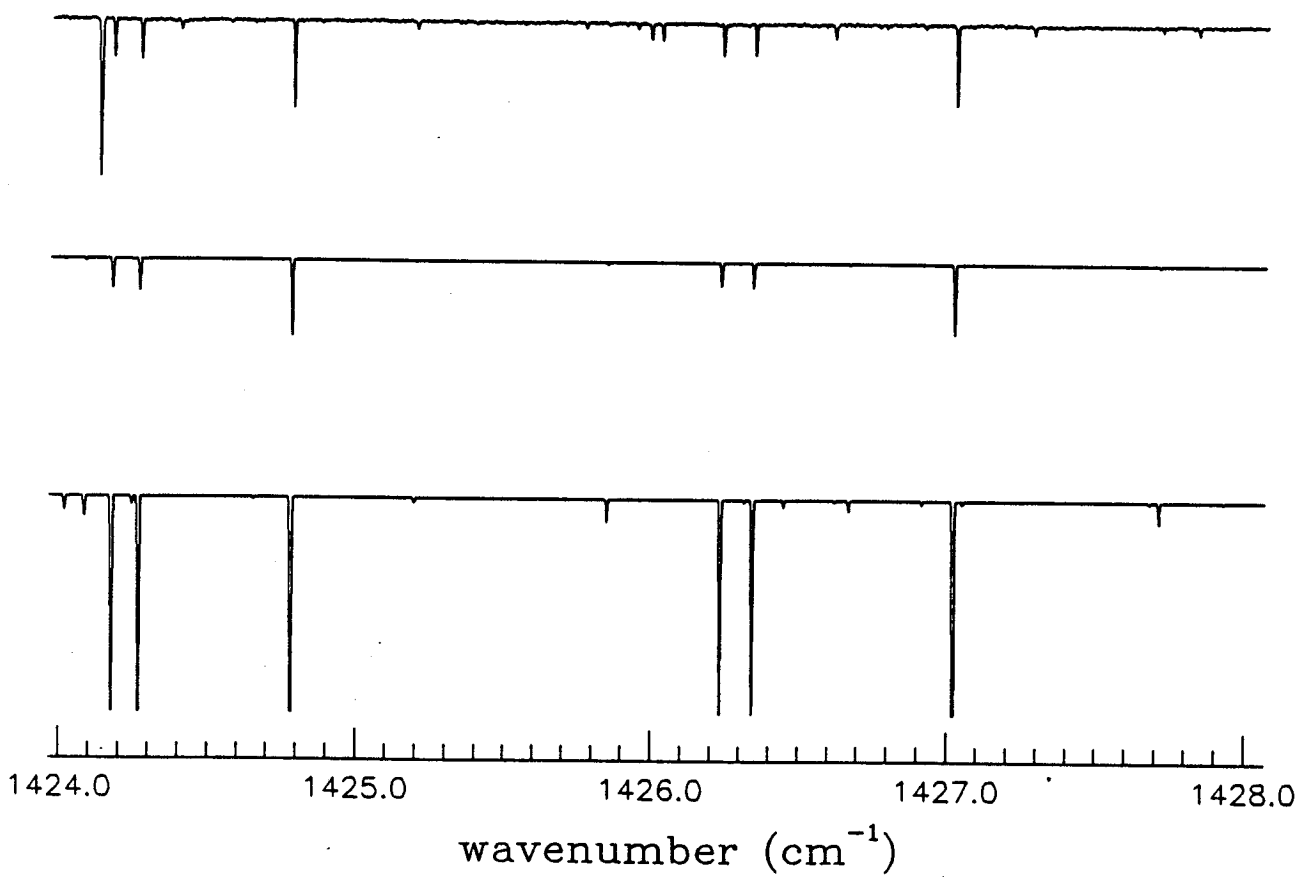
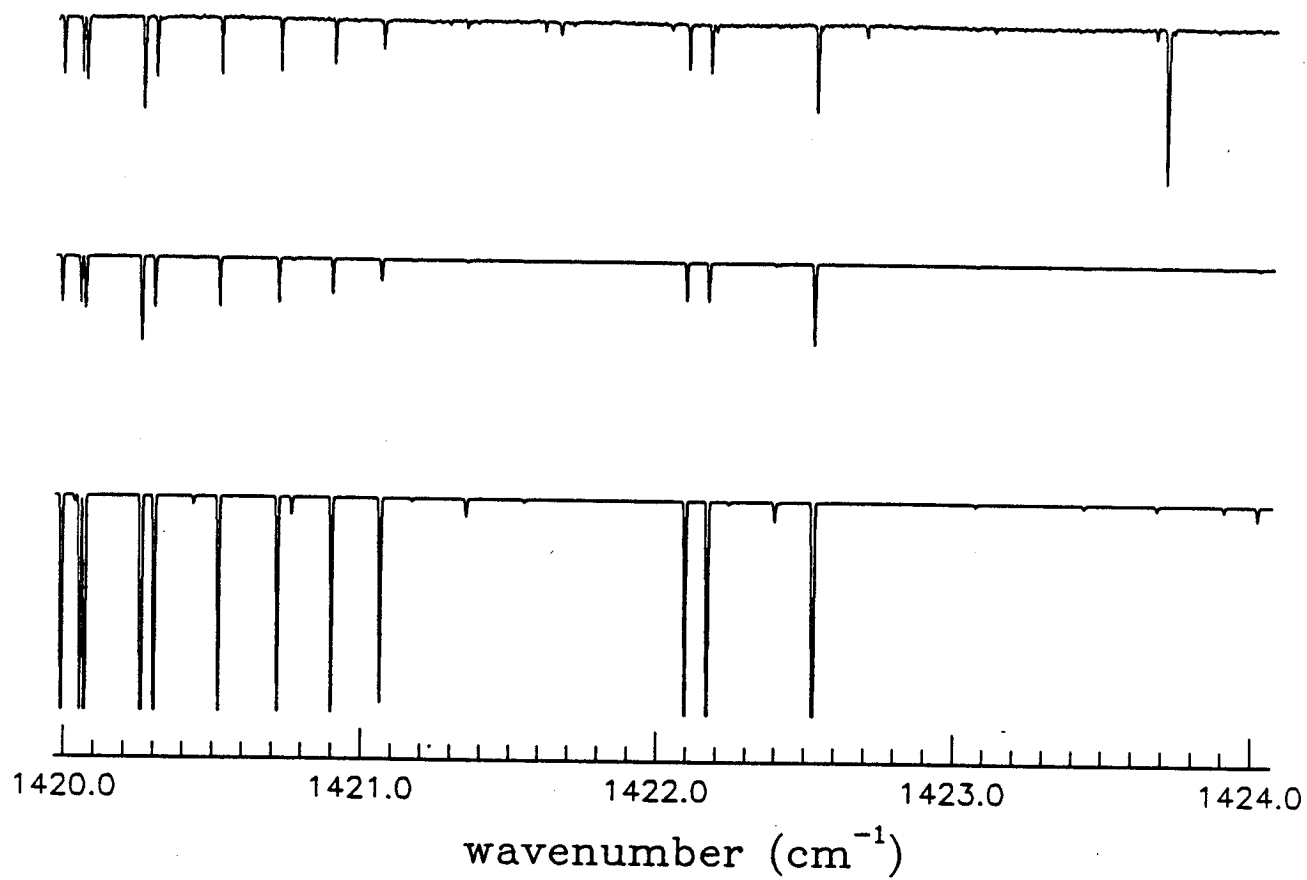


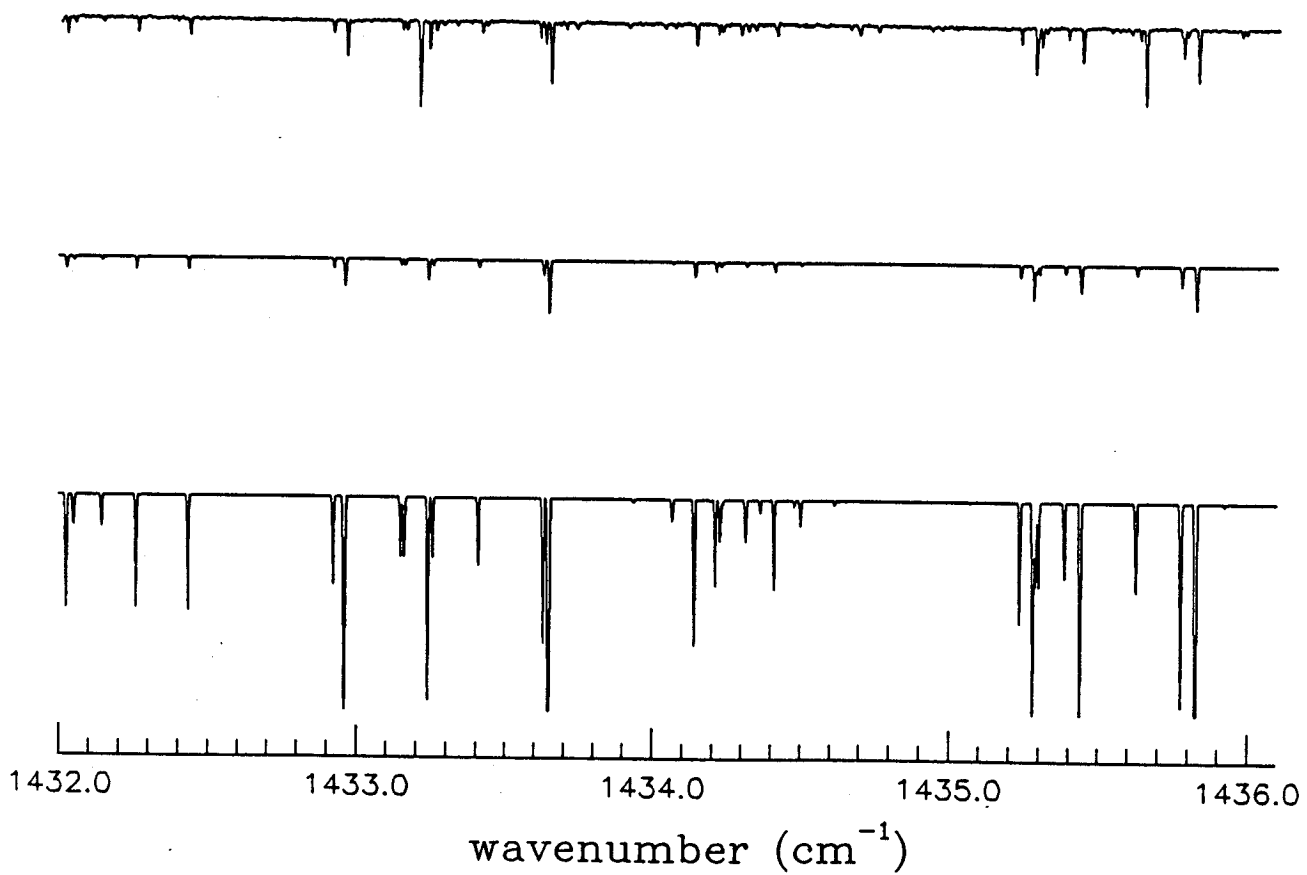
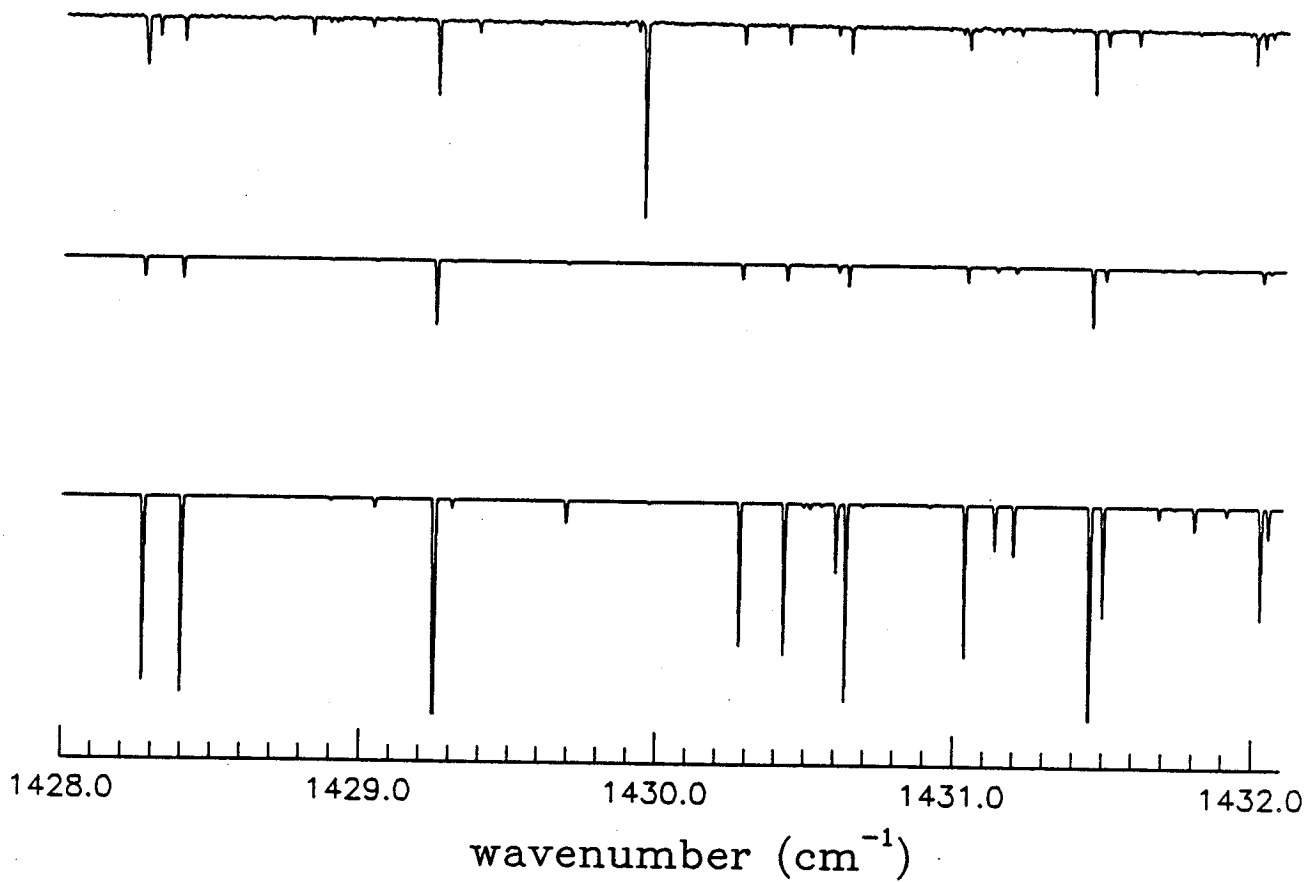


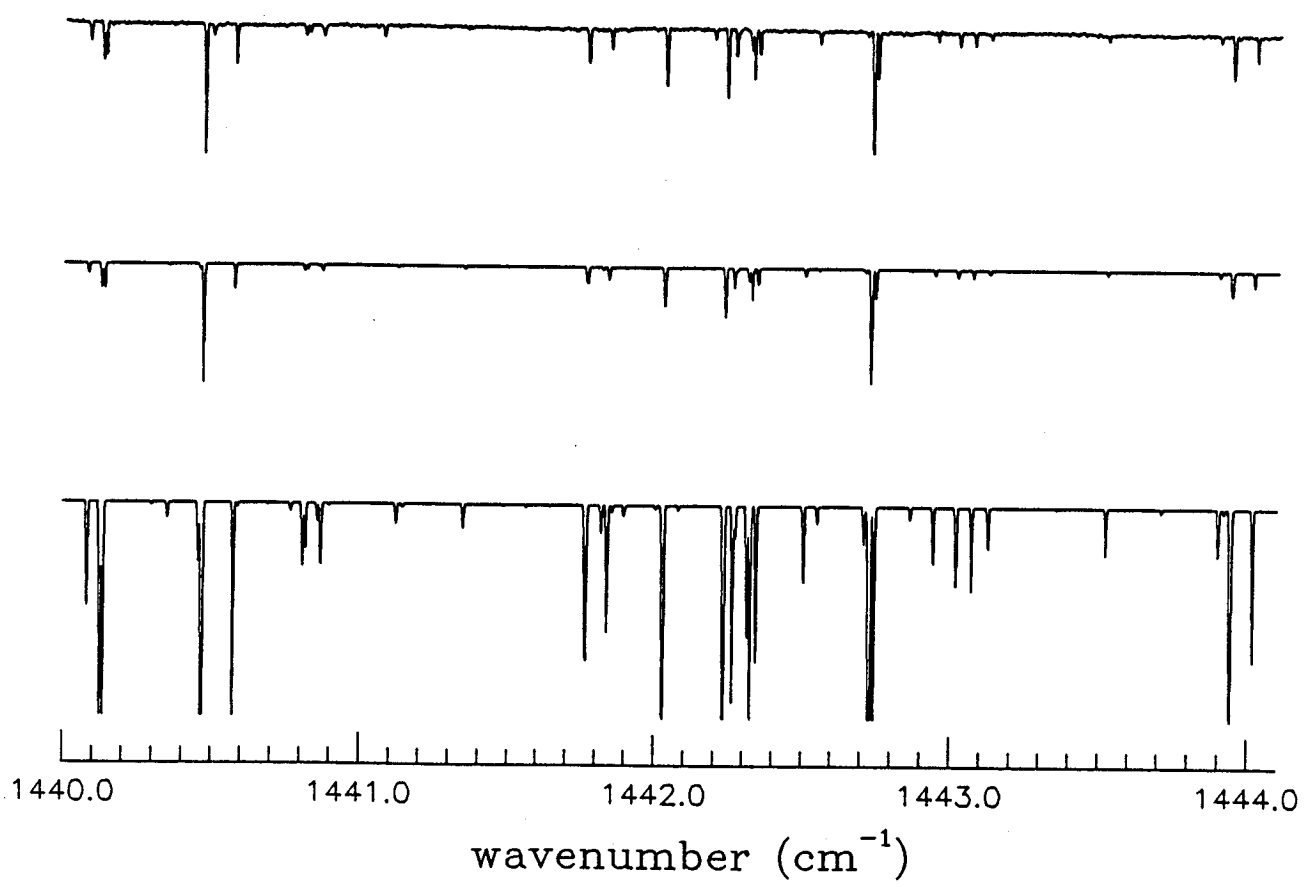
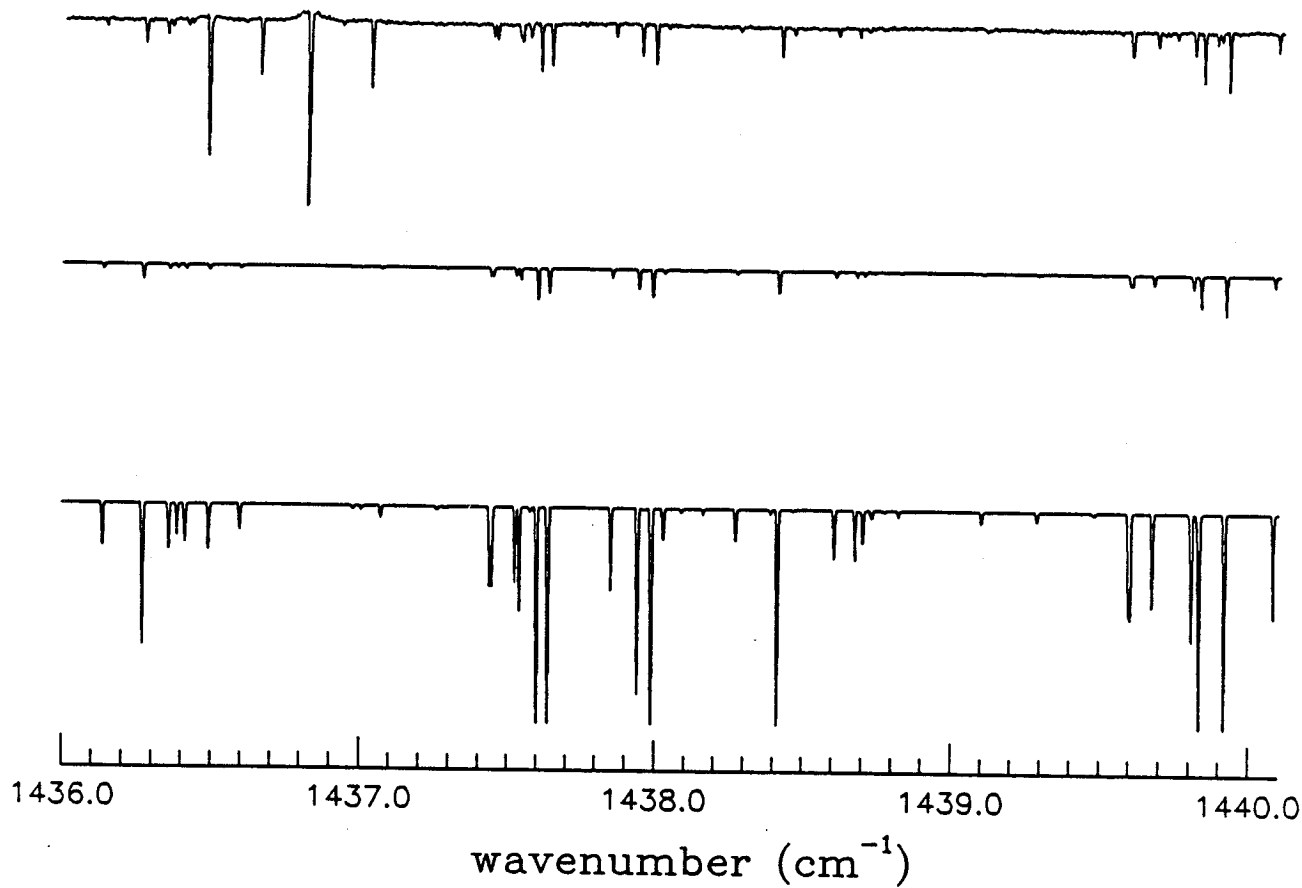


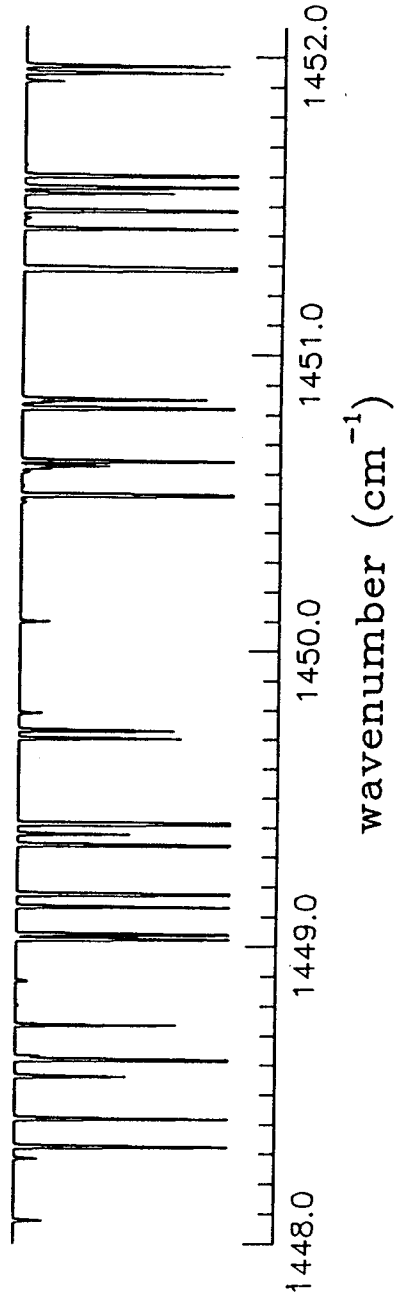
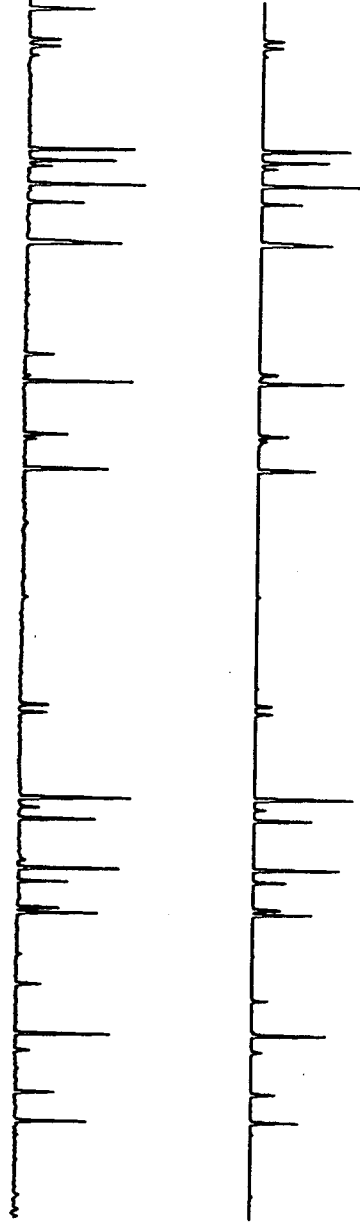
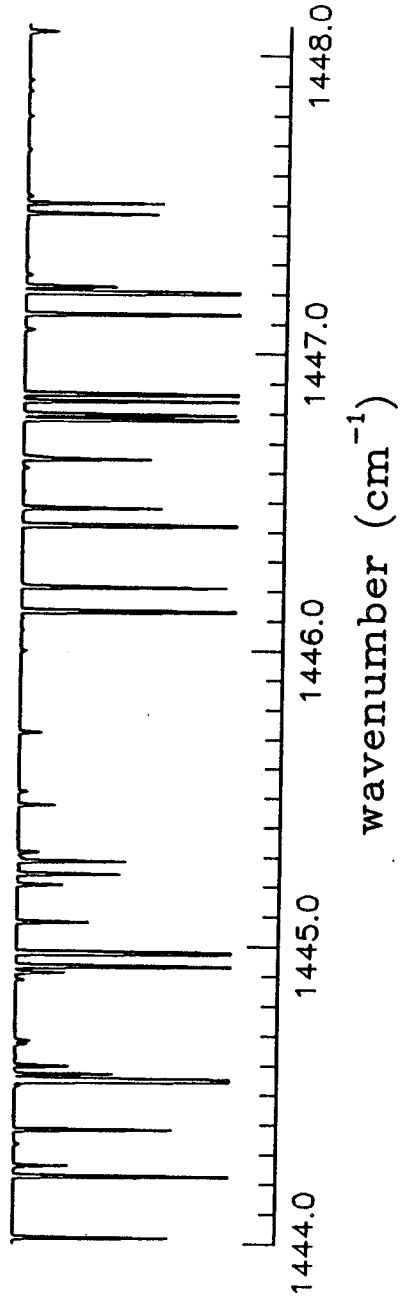
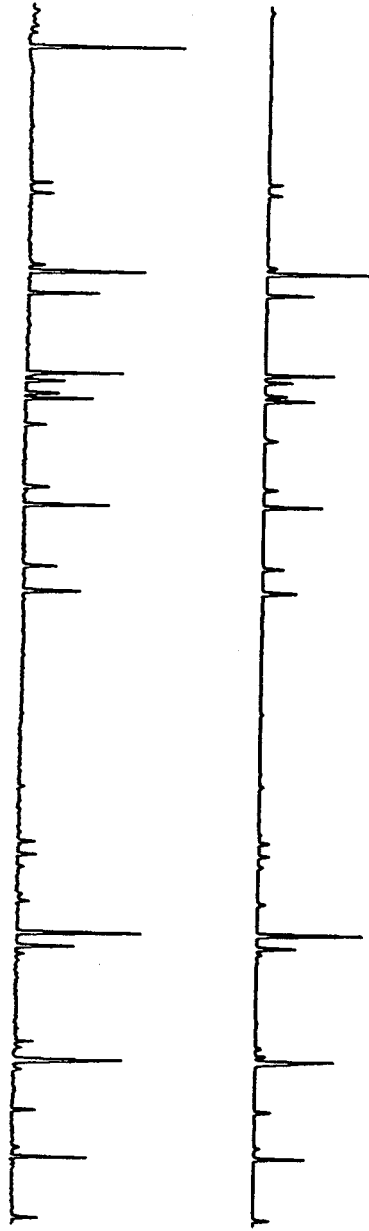


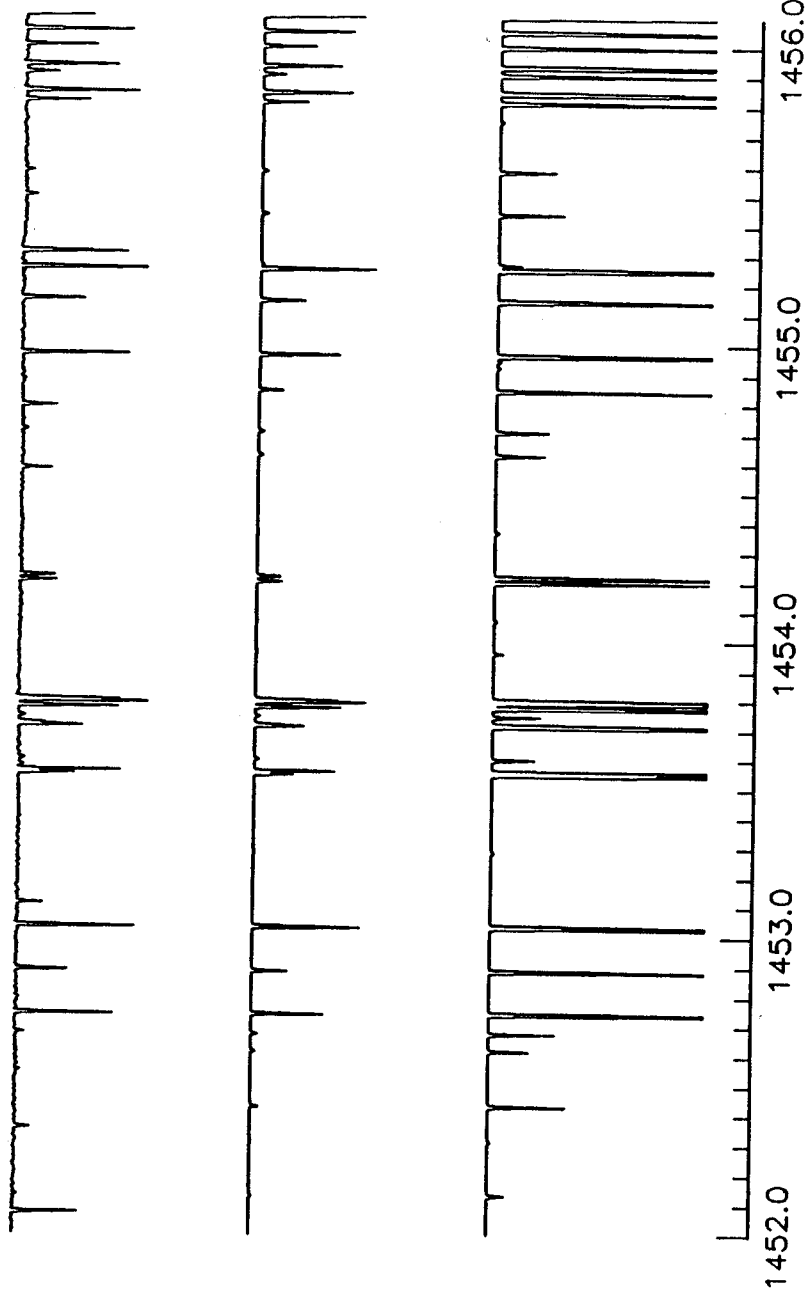




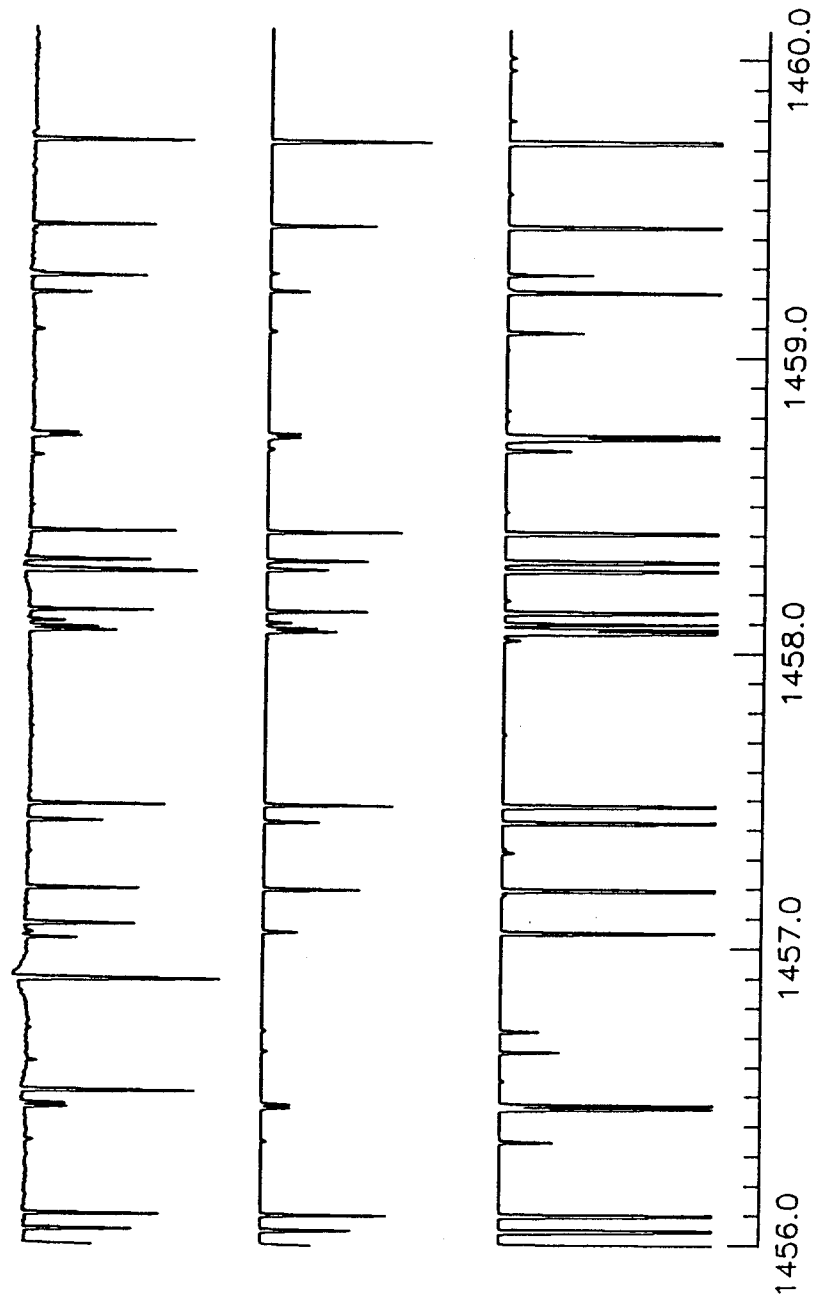




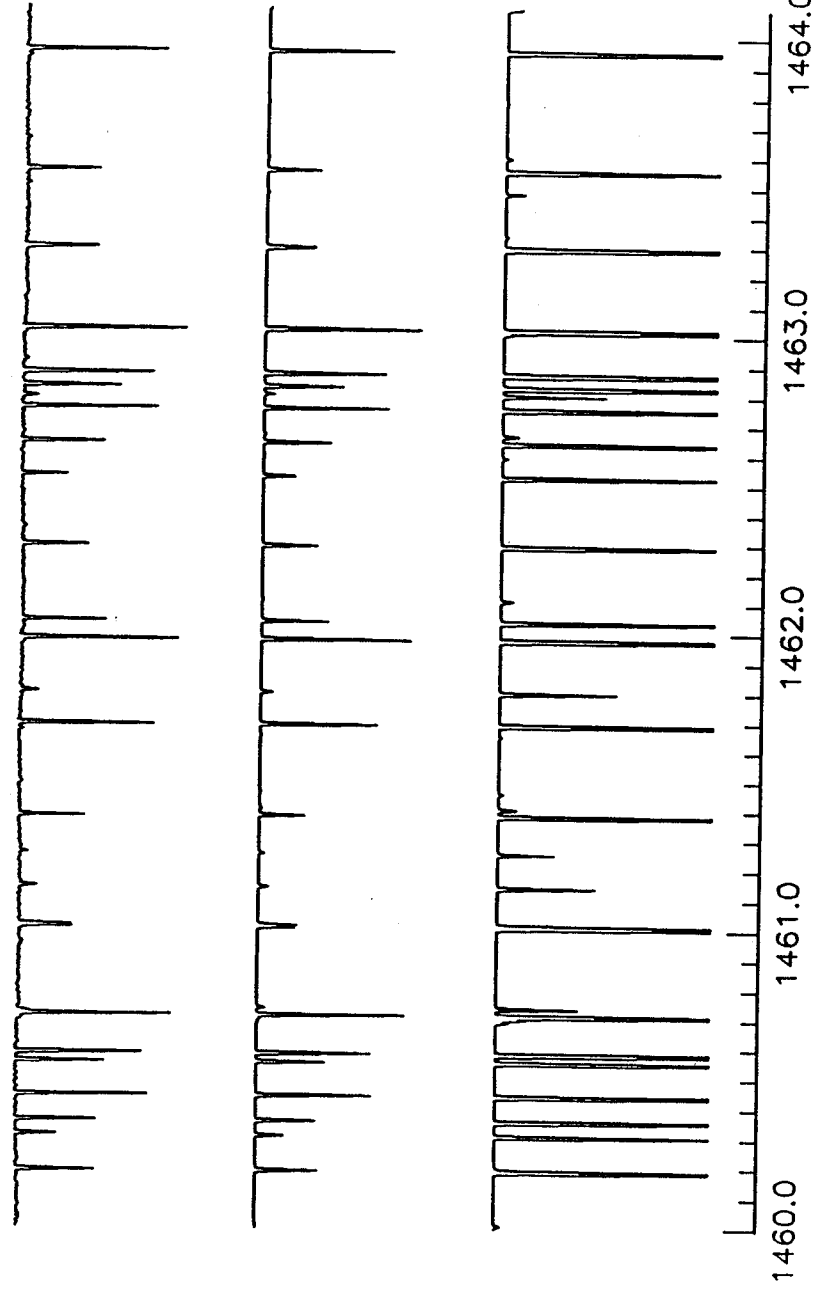




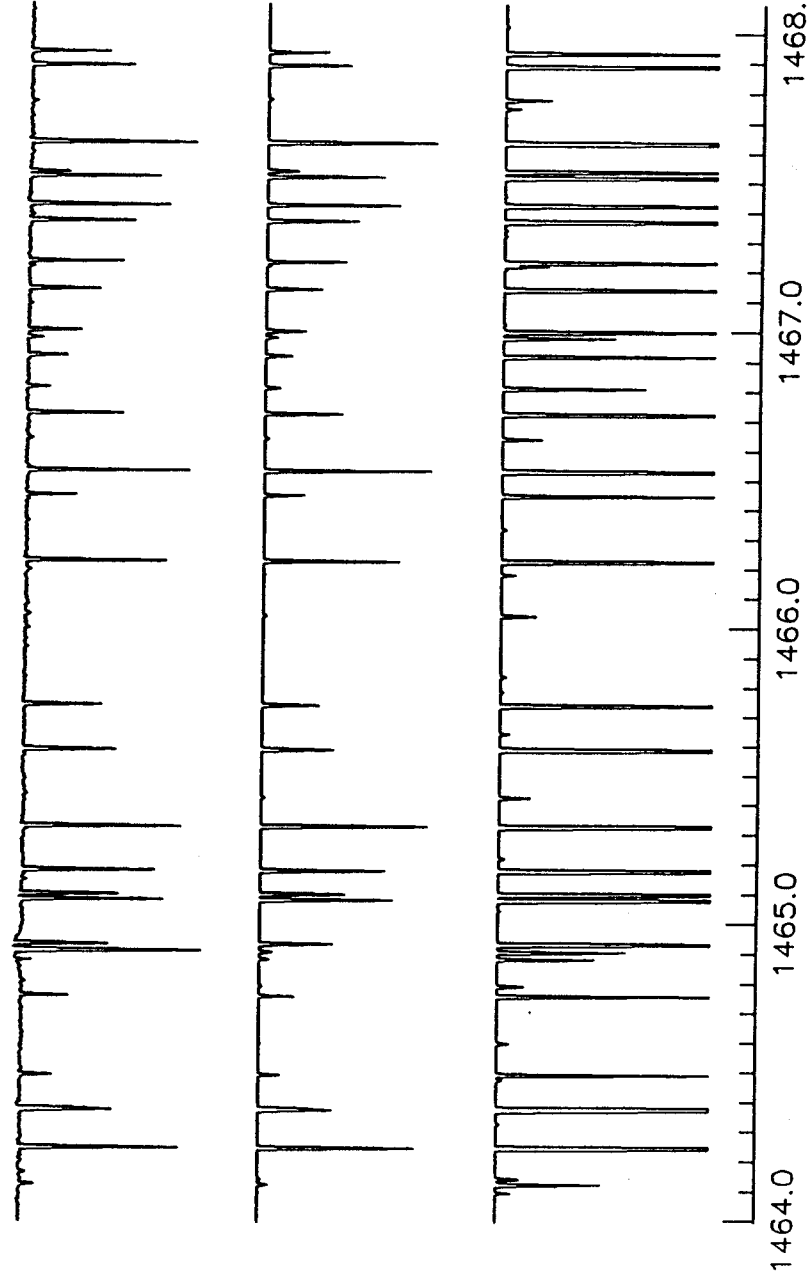
wavenumber (cm⁻¹)



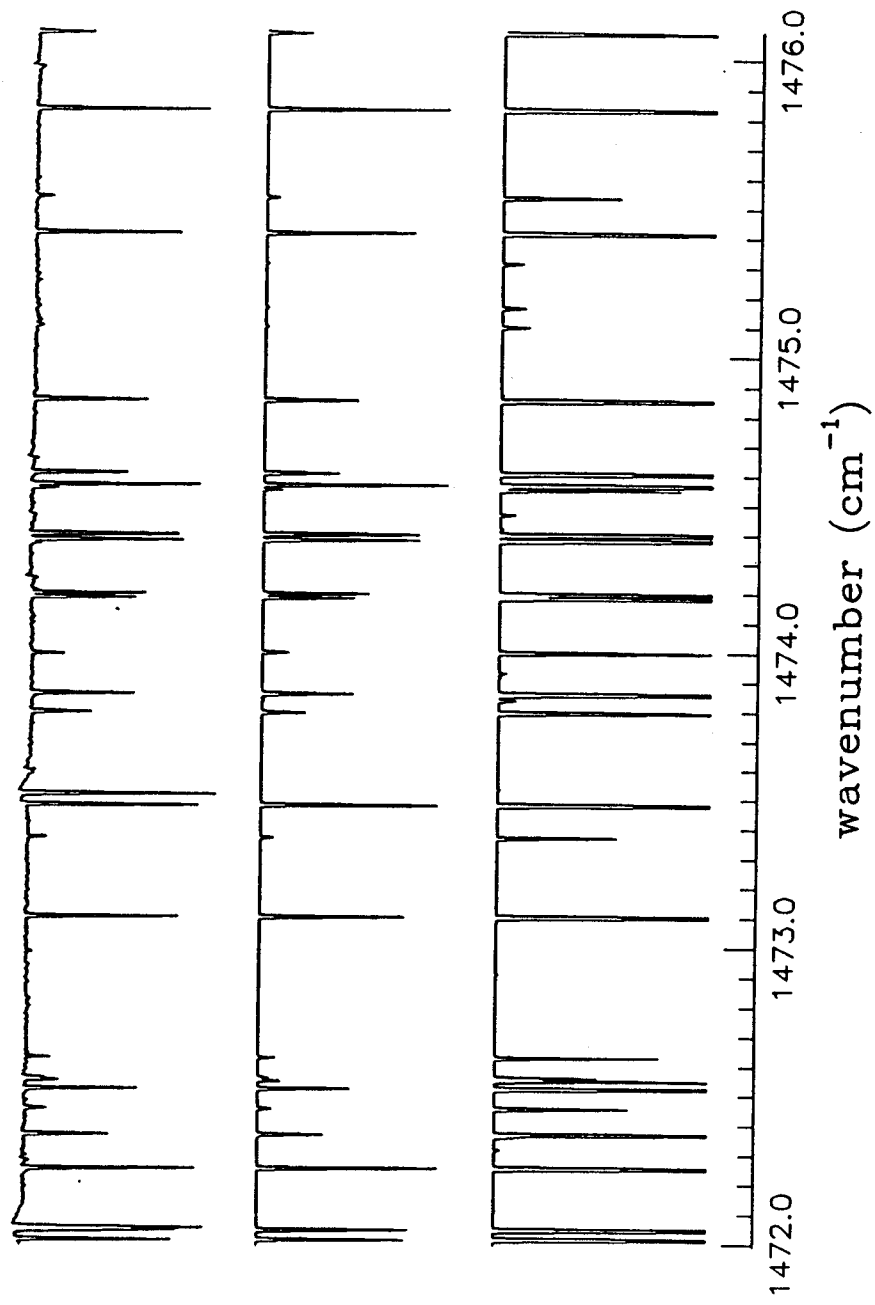
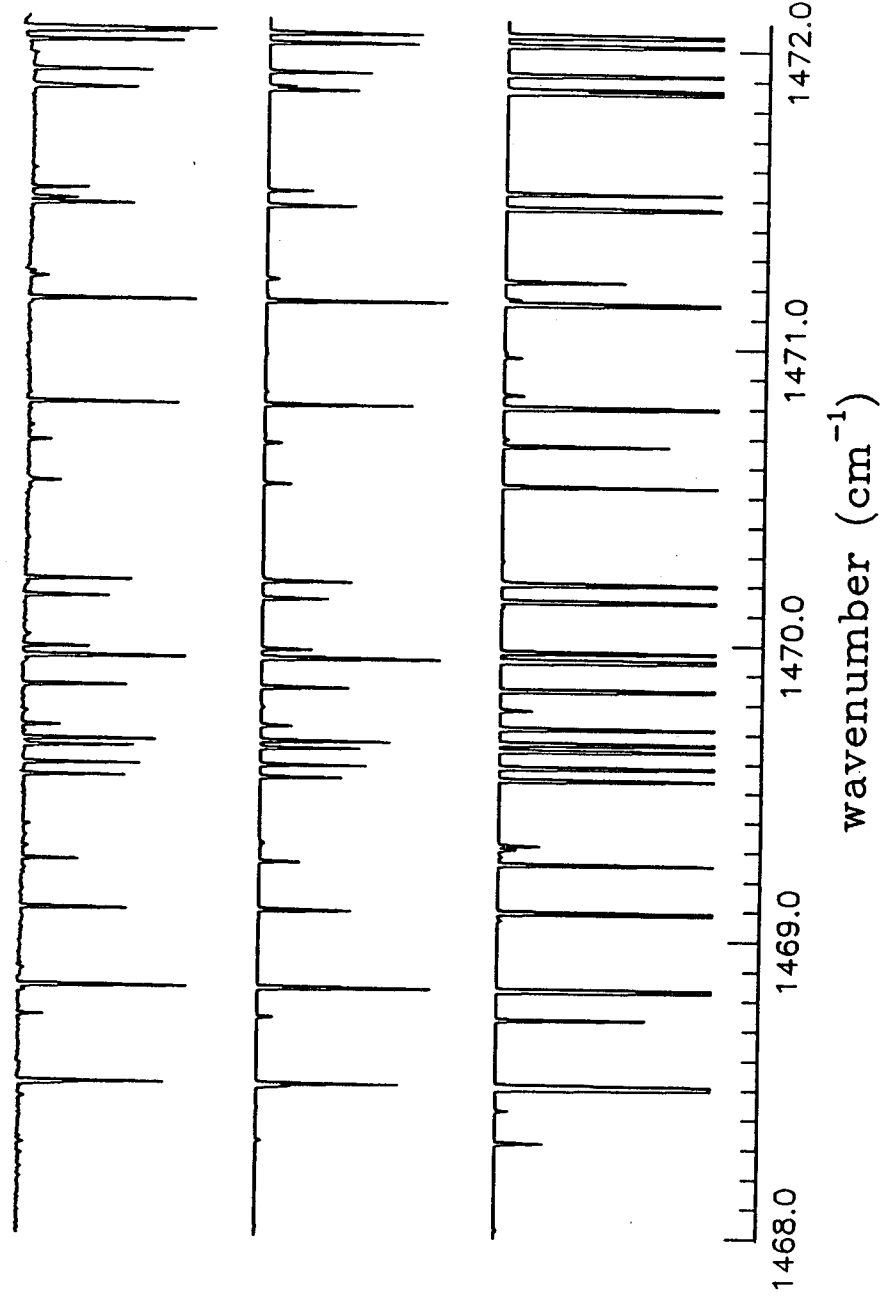
wavenumber (cm⁻¹)

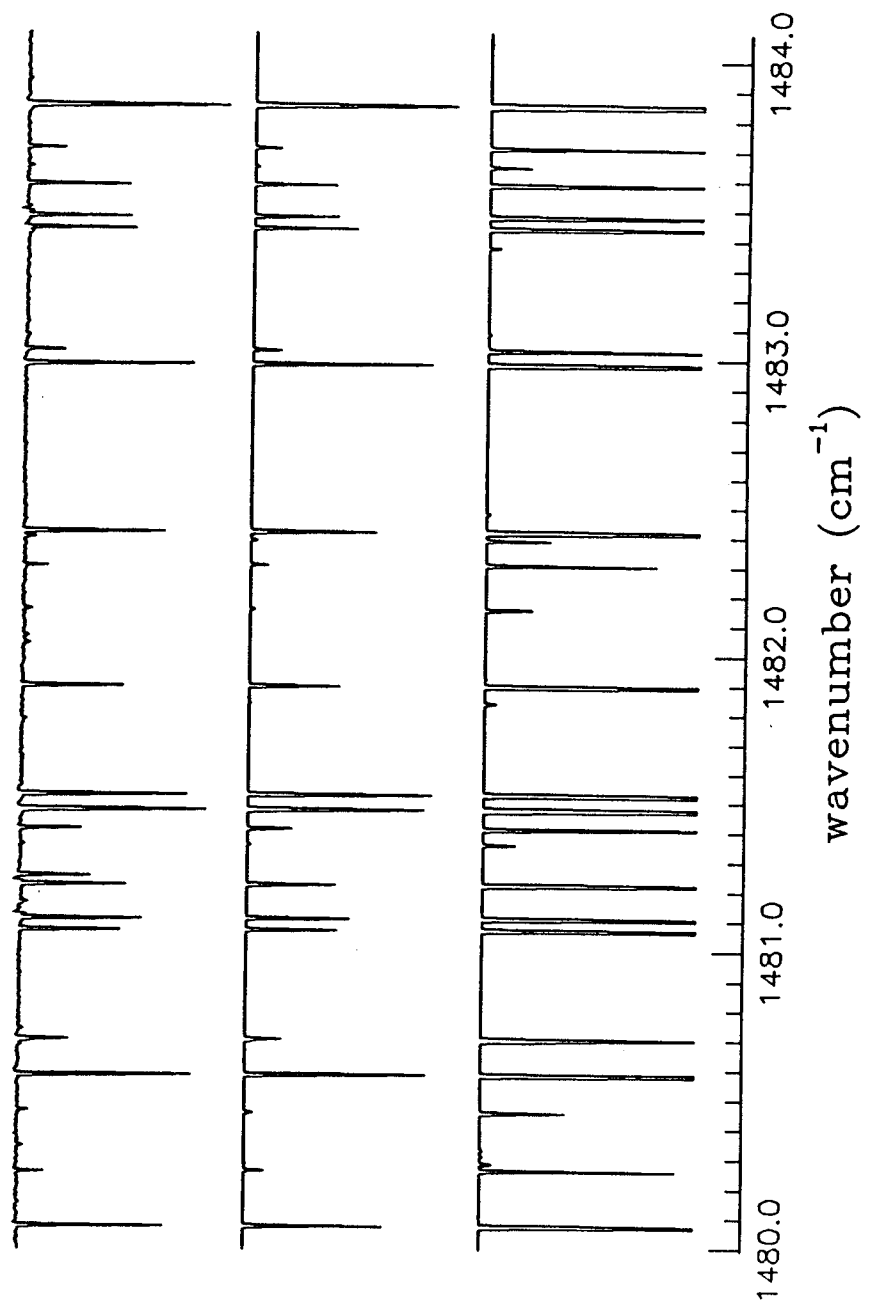
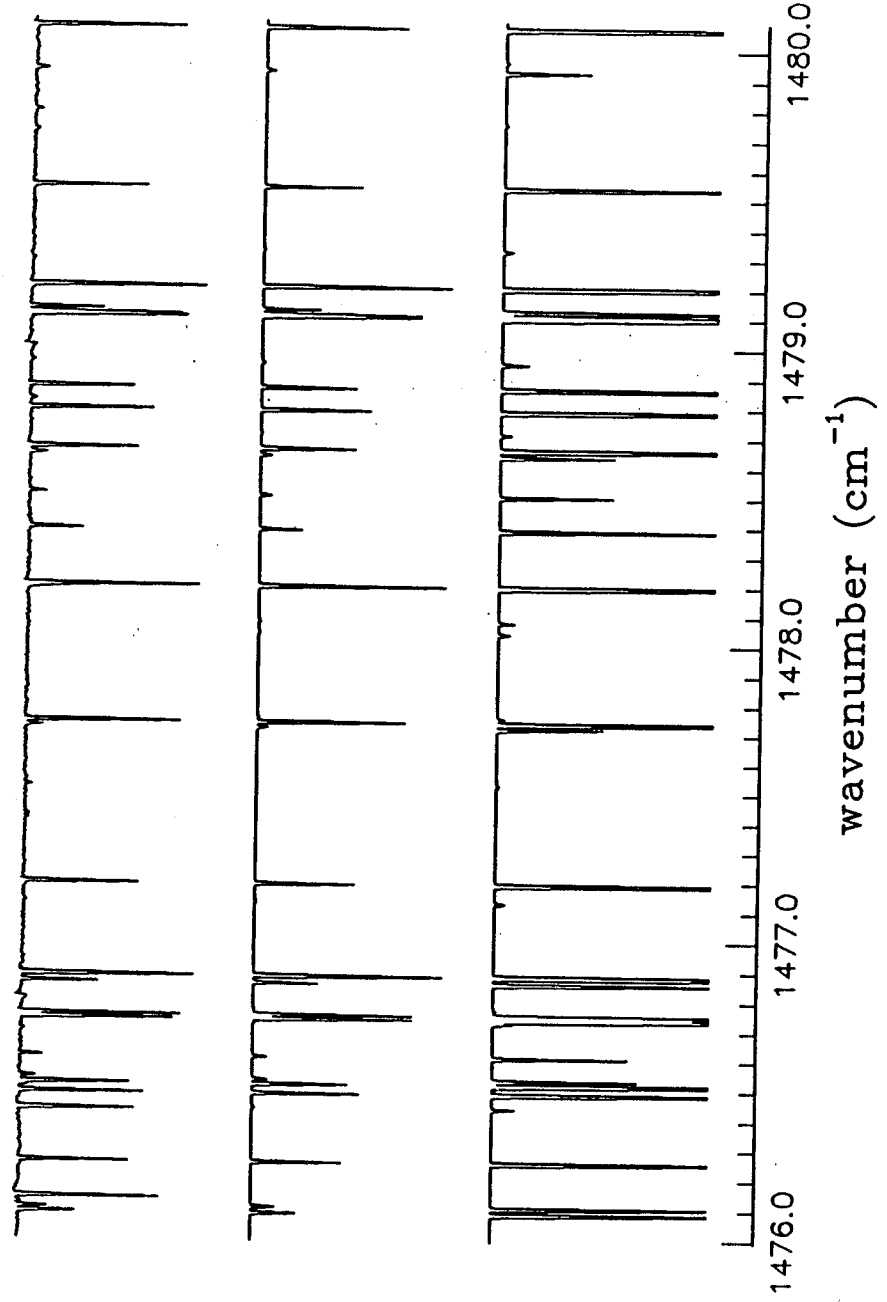


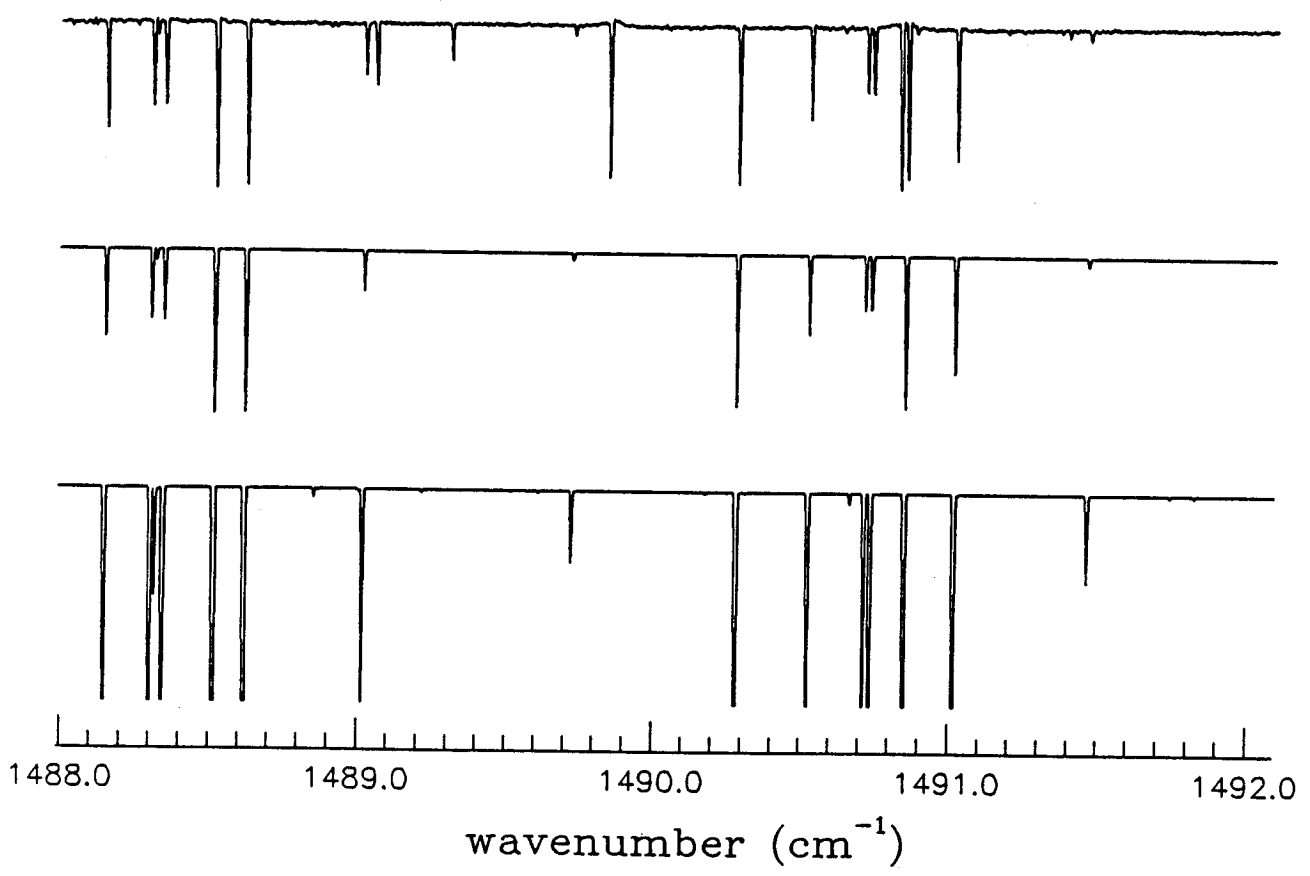
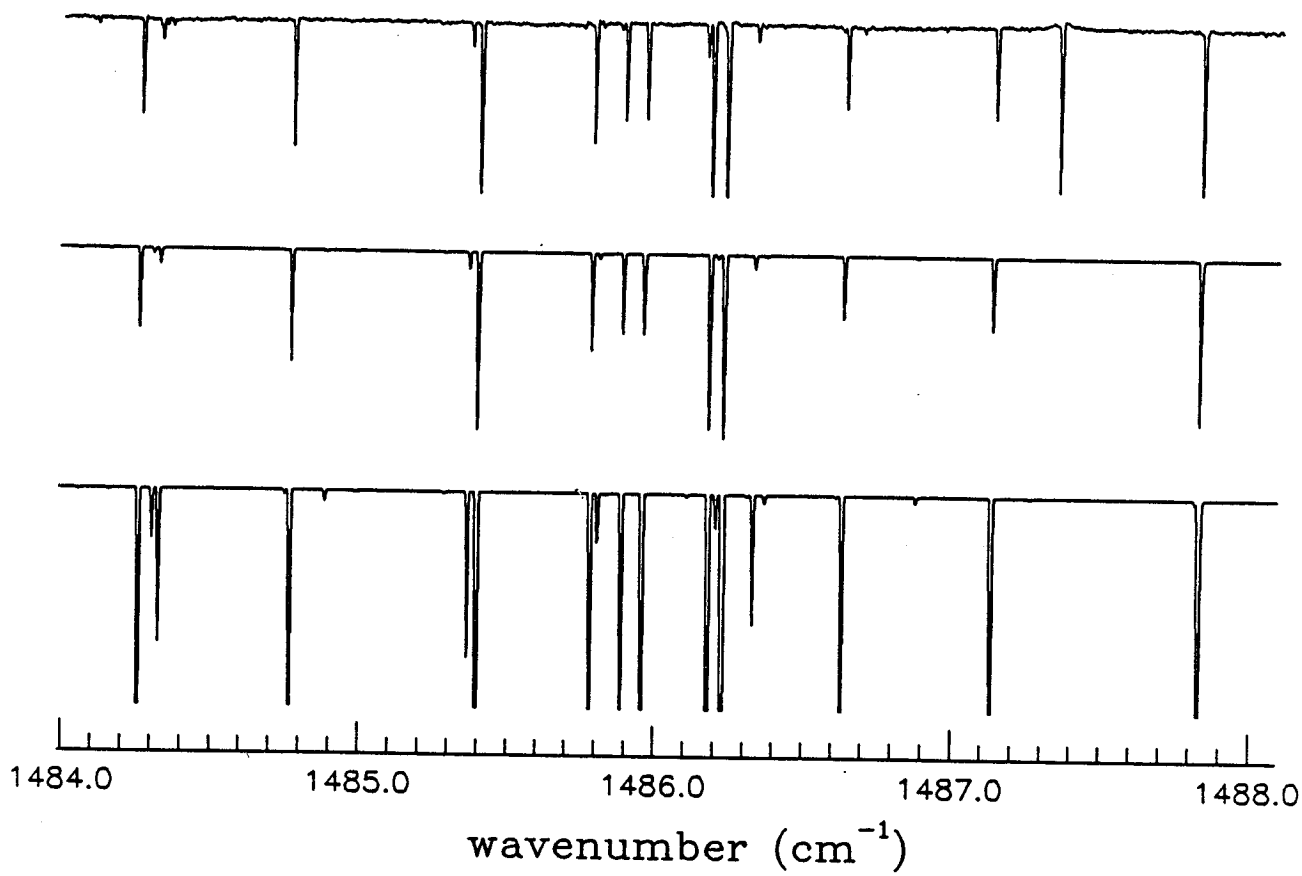
wavenumber (cm^{-1})

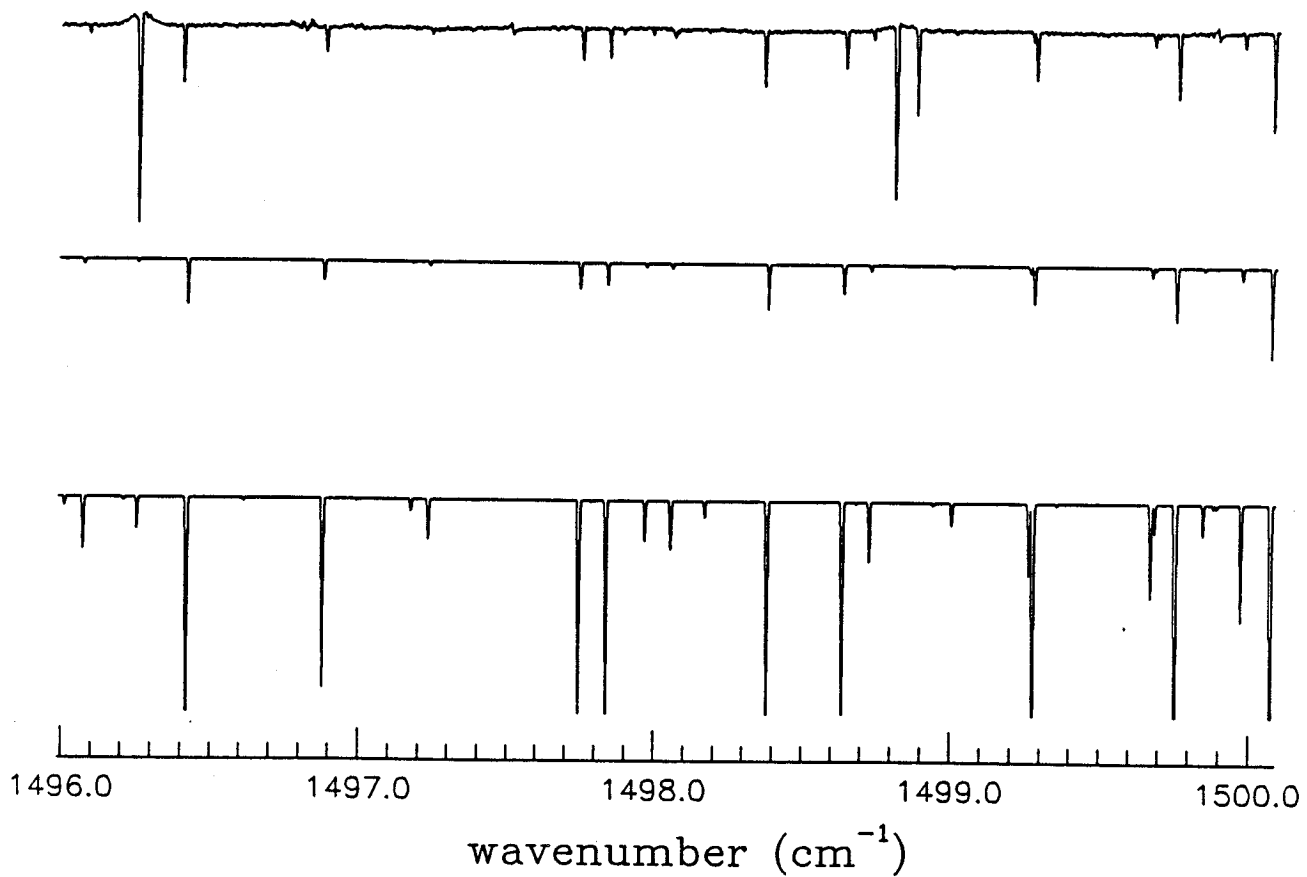
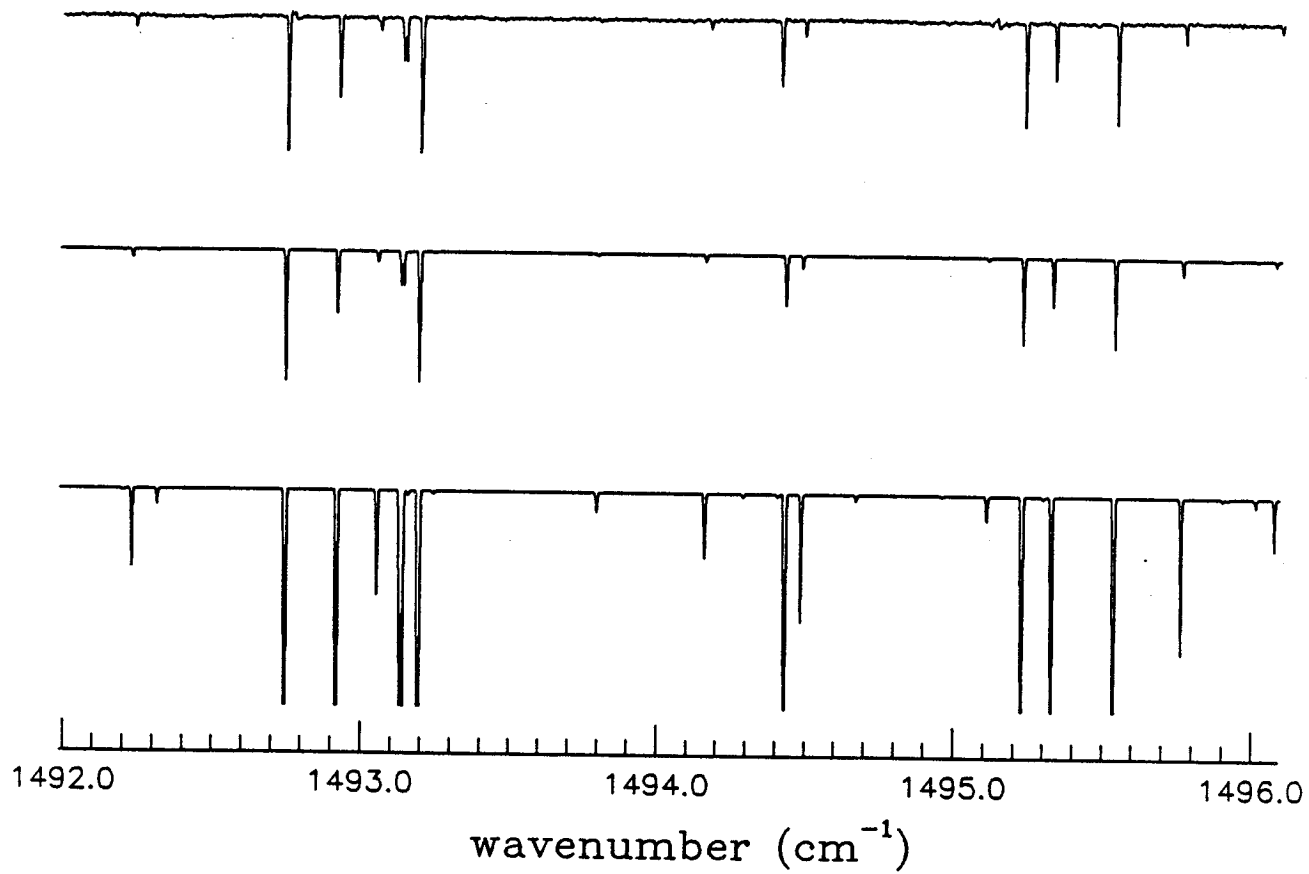


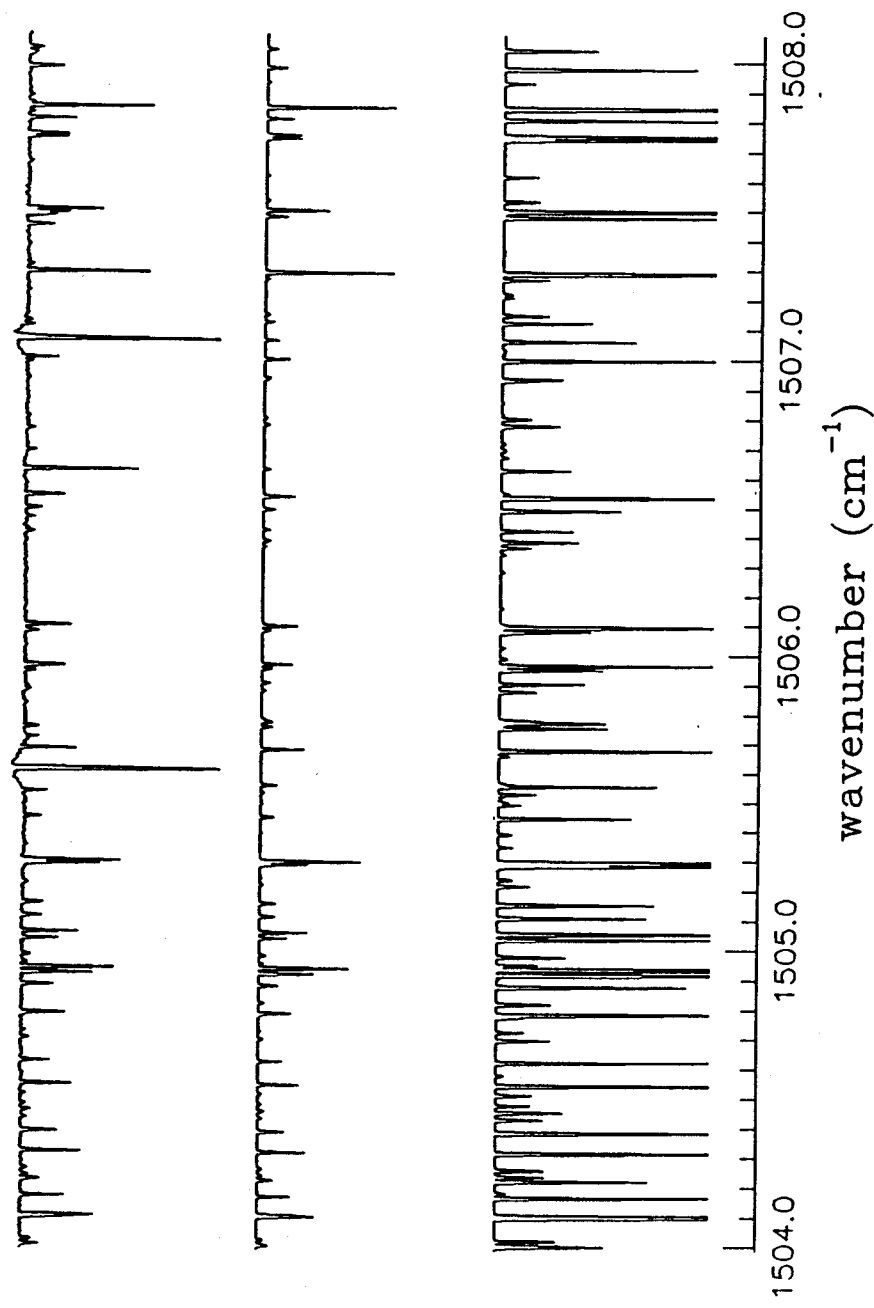
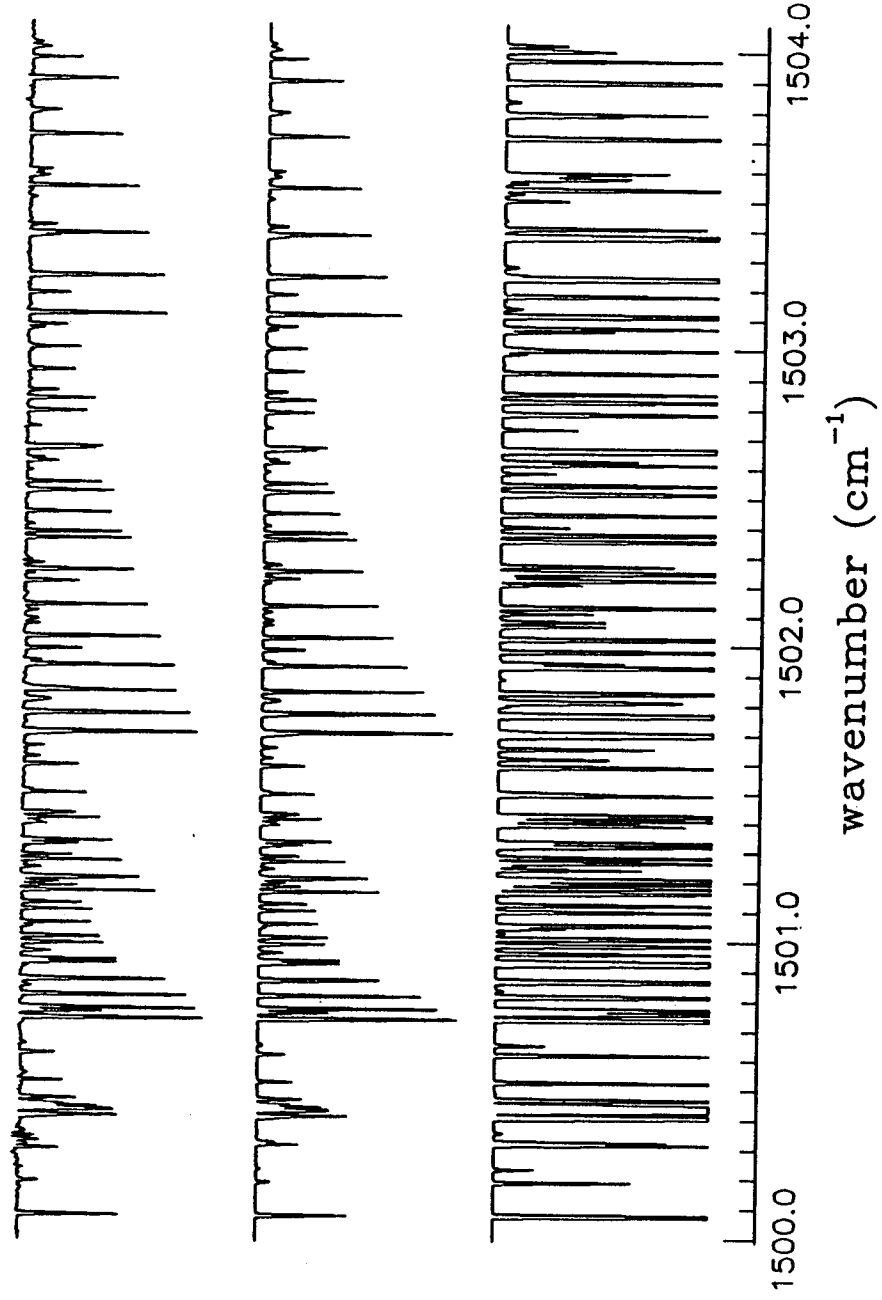
wavenumber (cm^{-1})

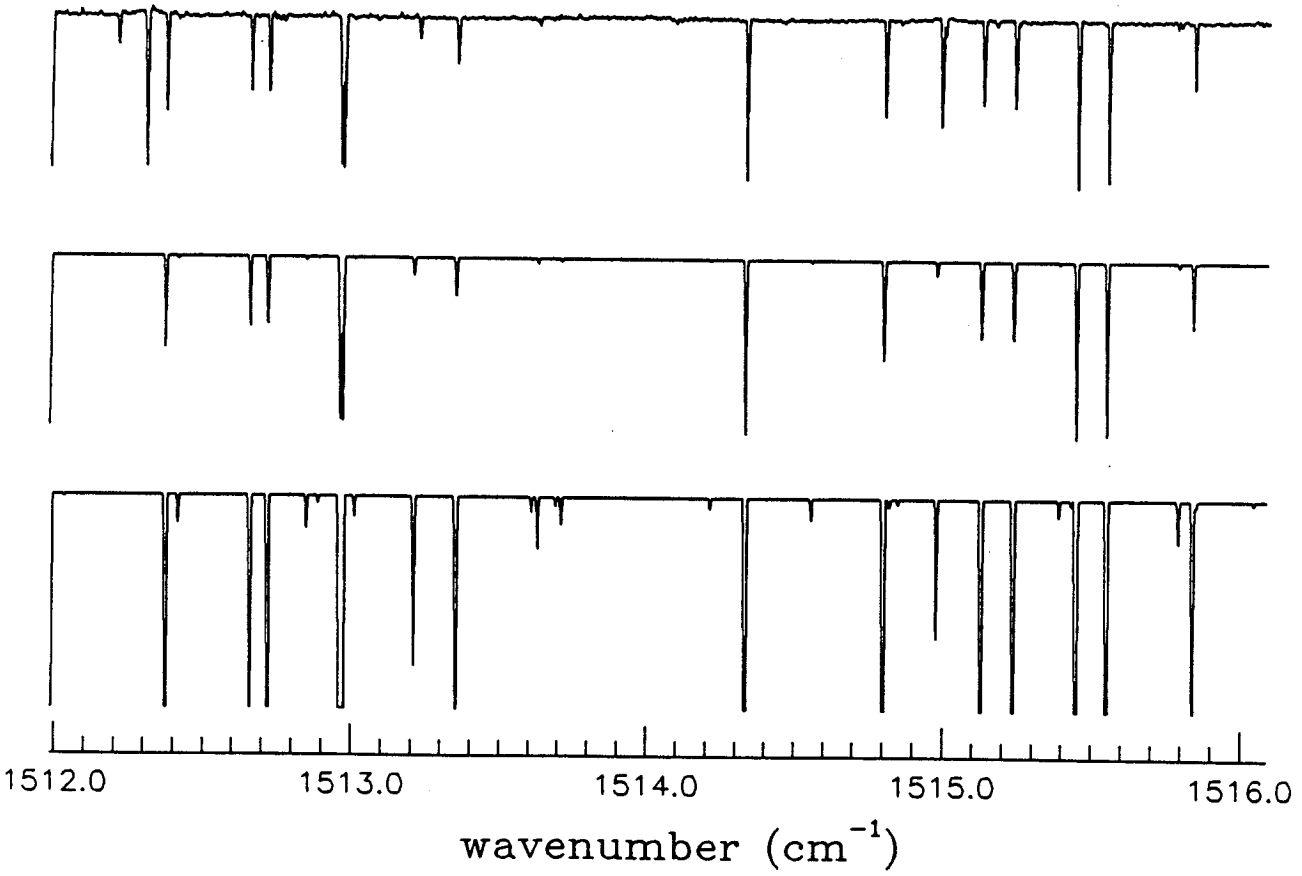
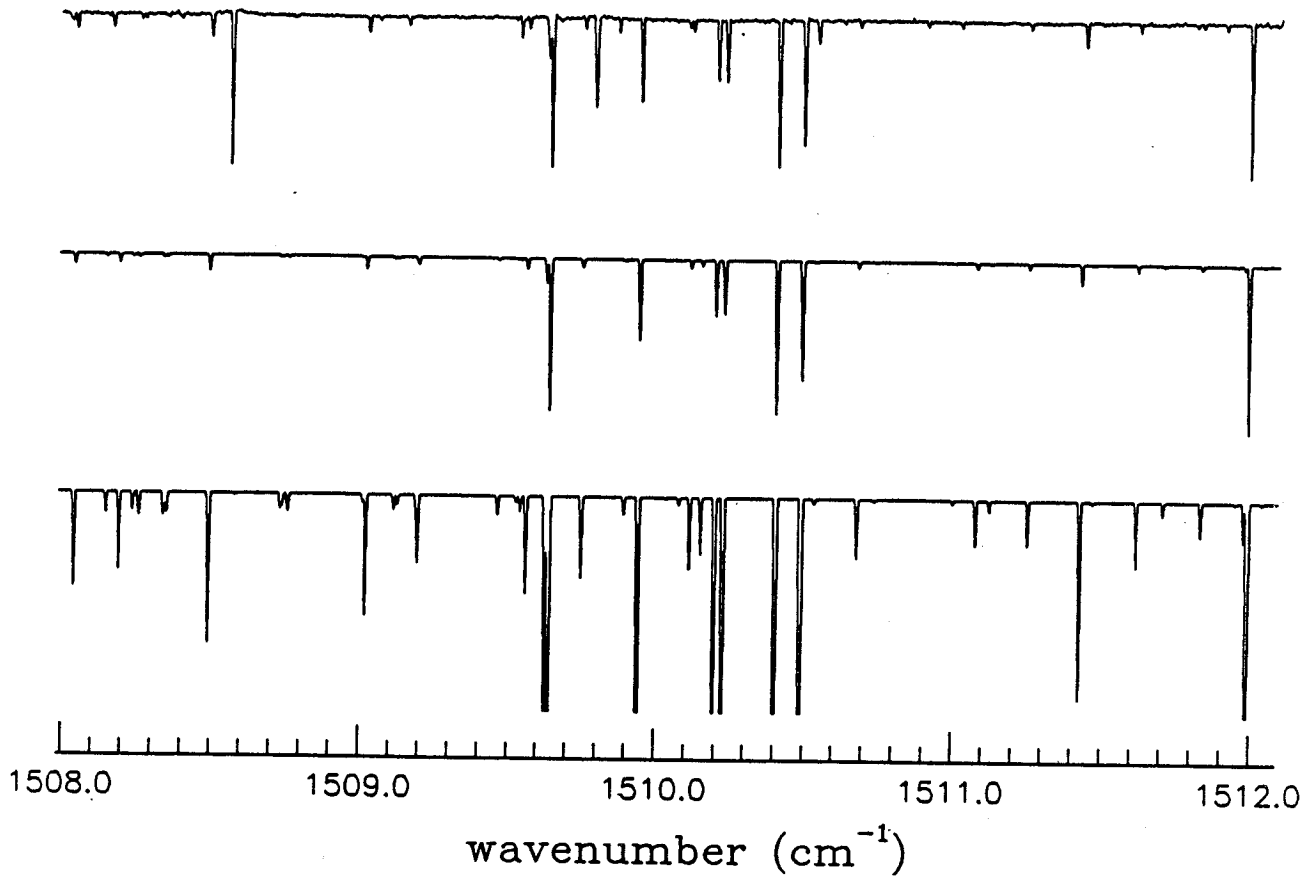


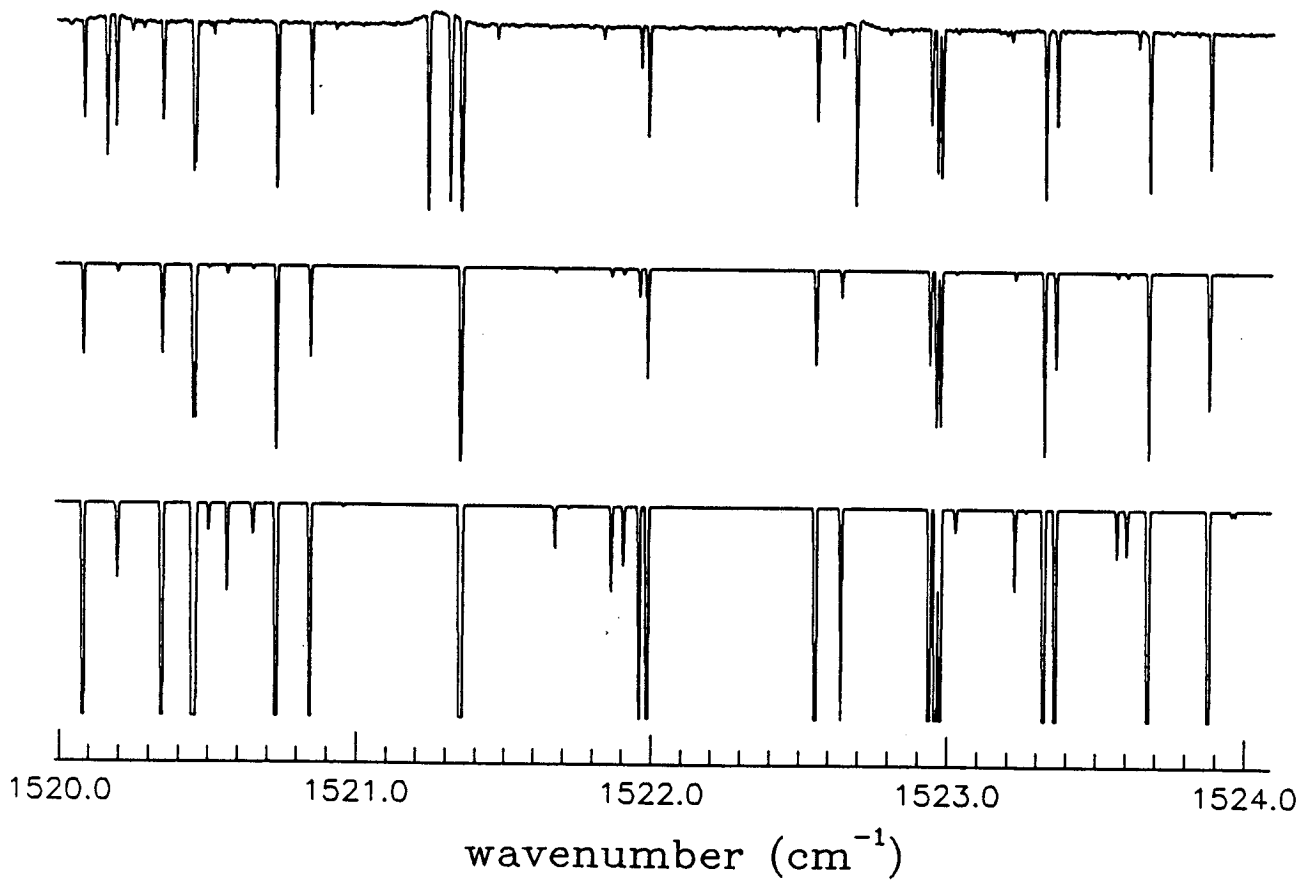
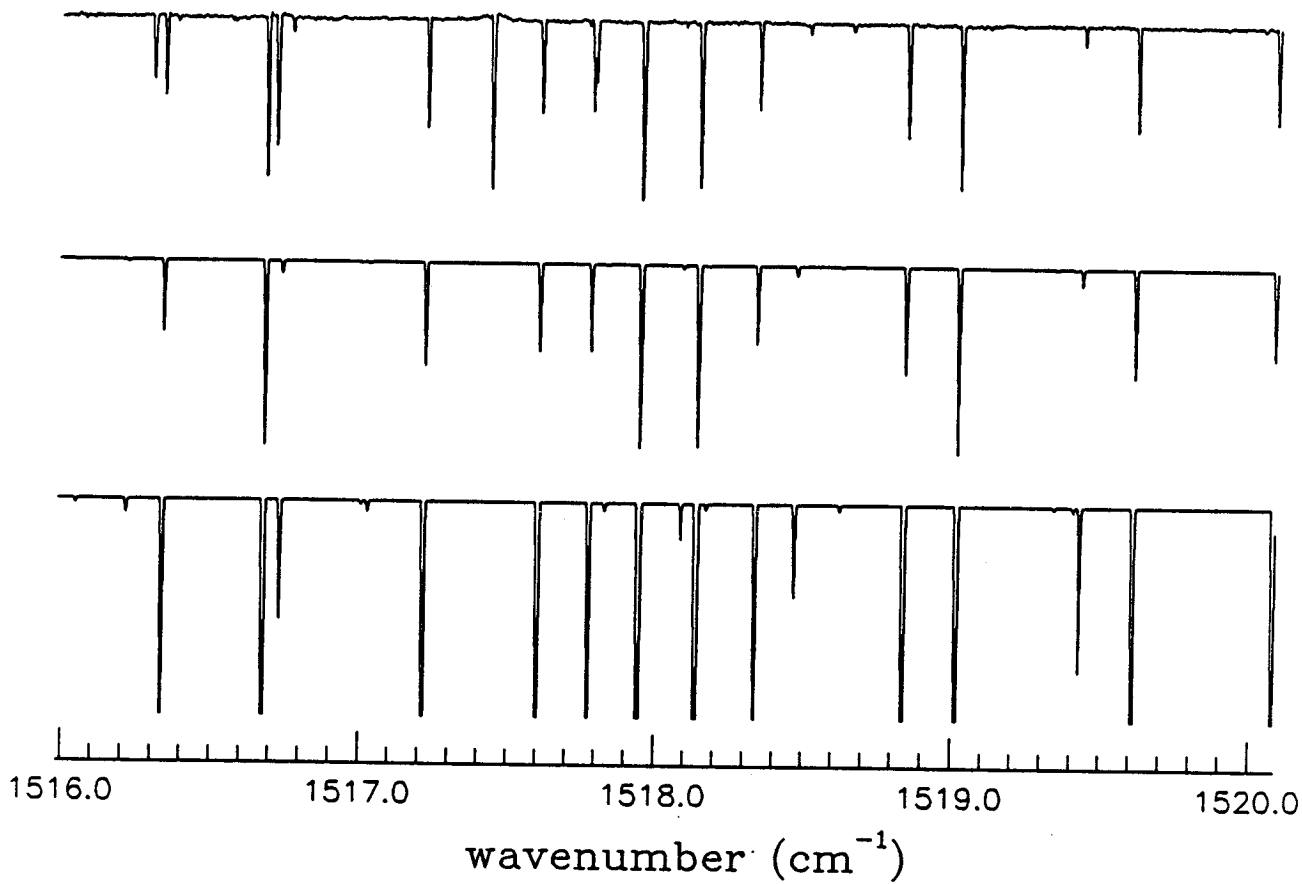


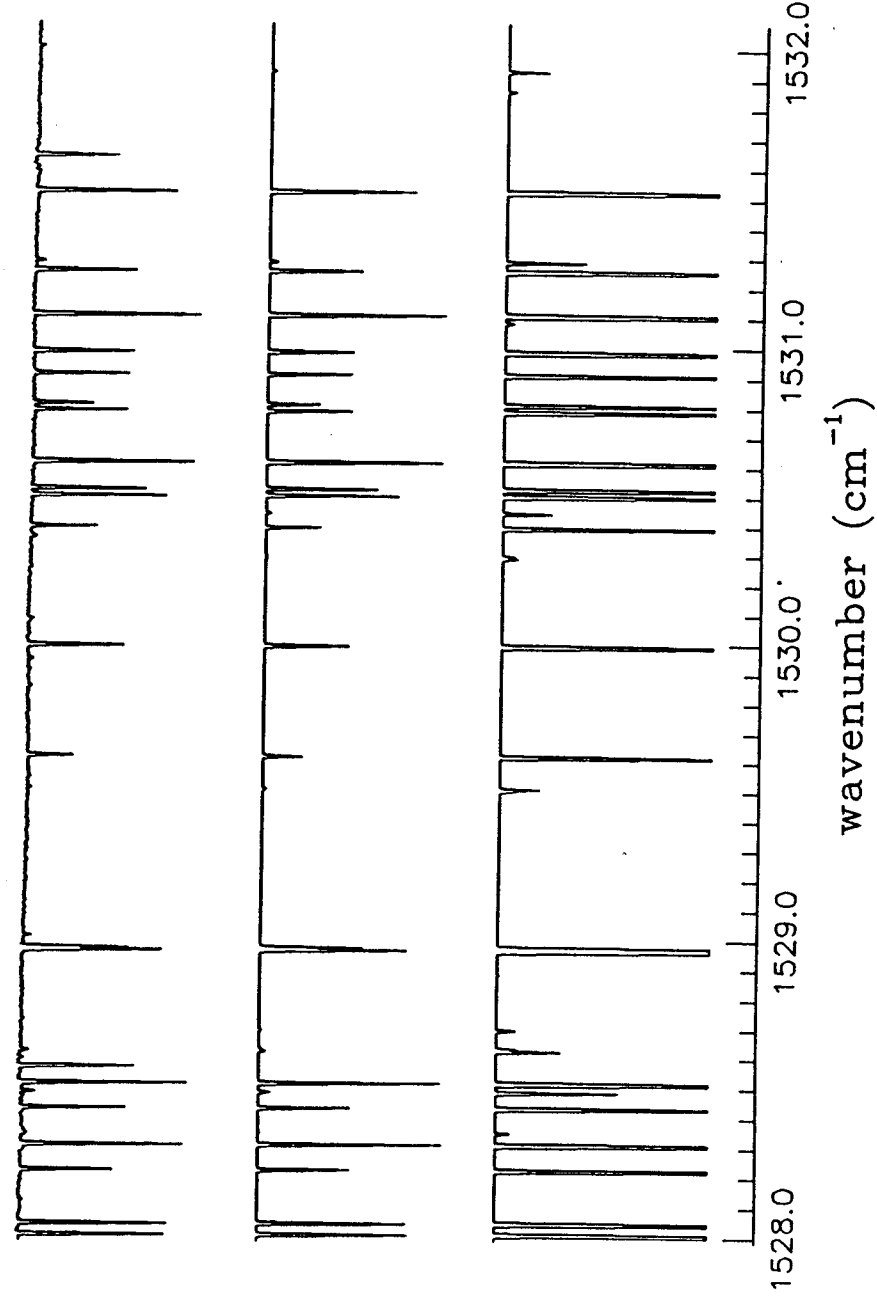
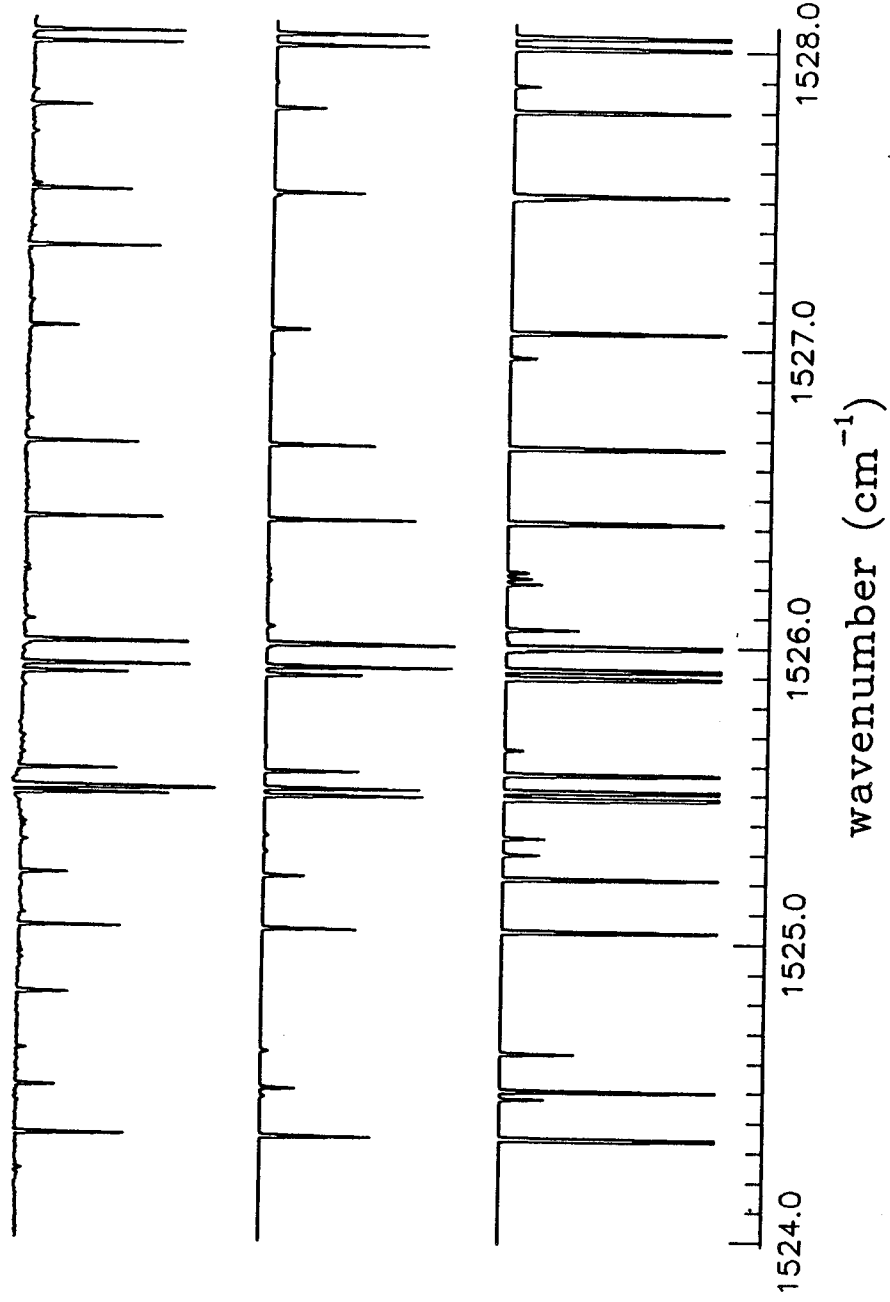


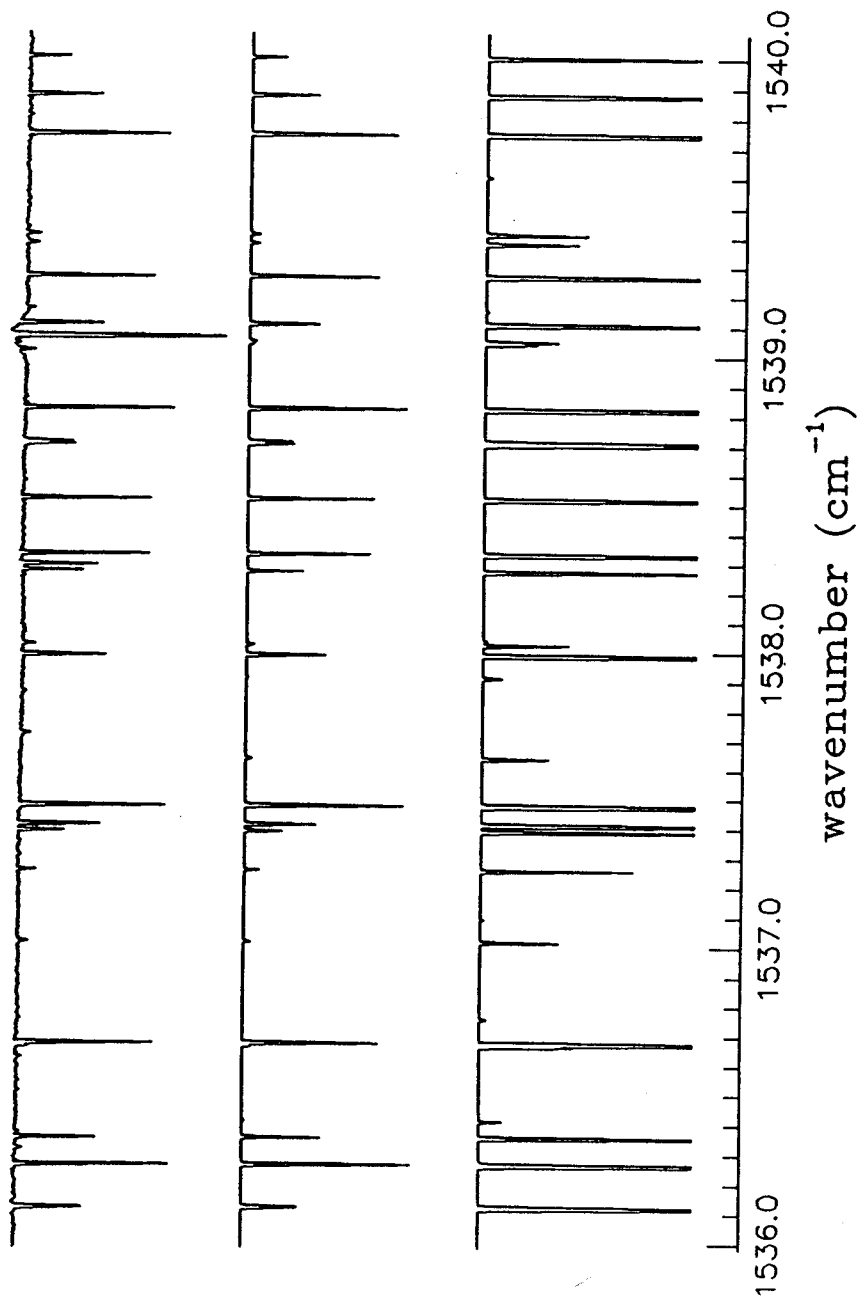
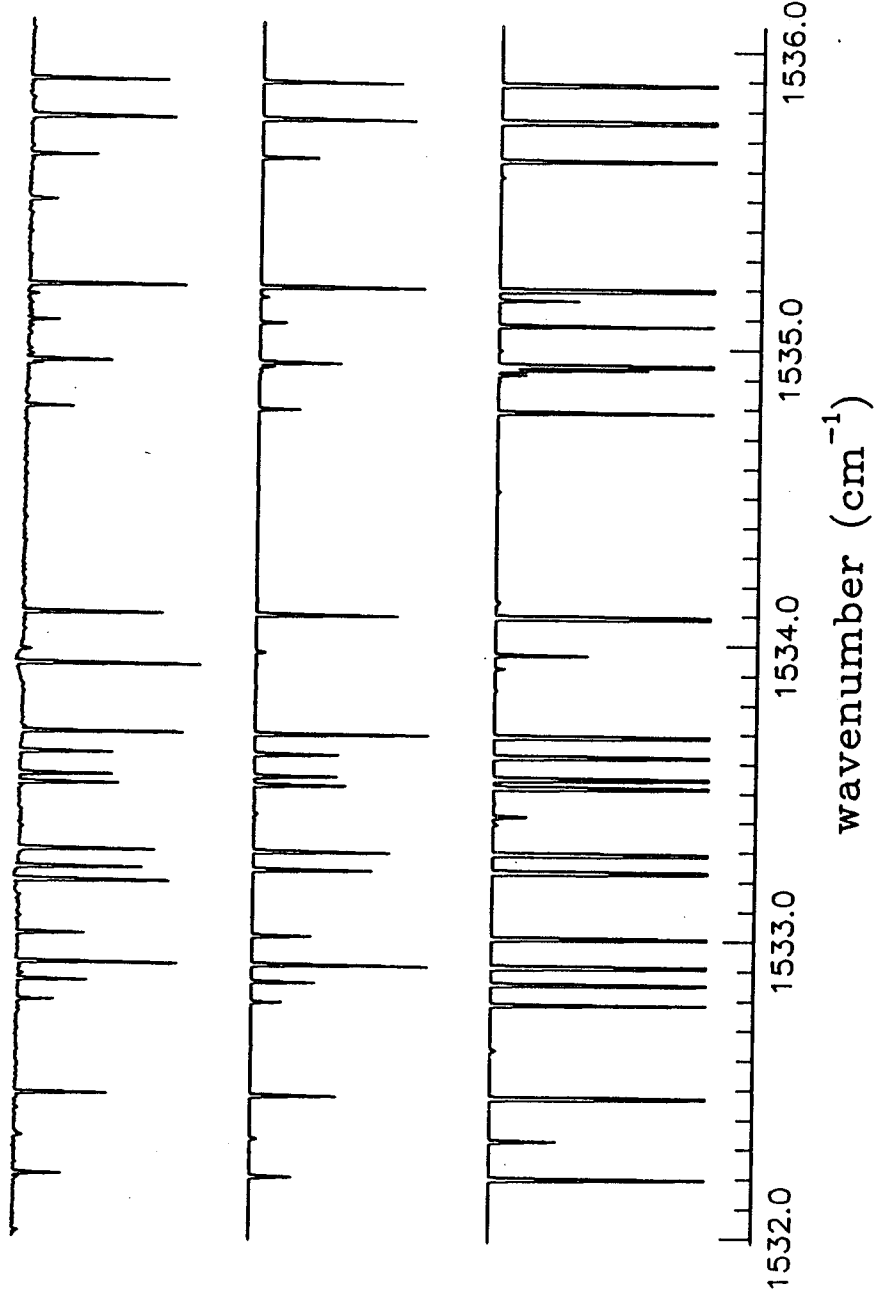


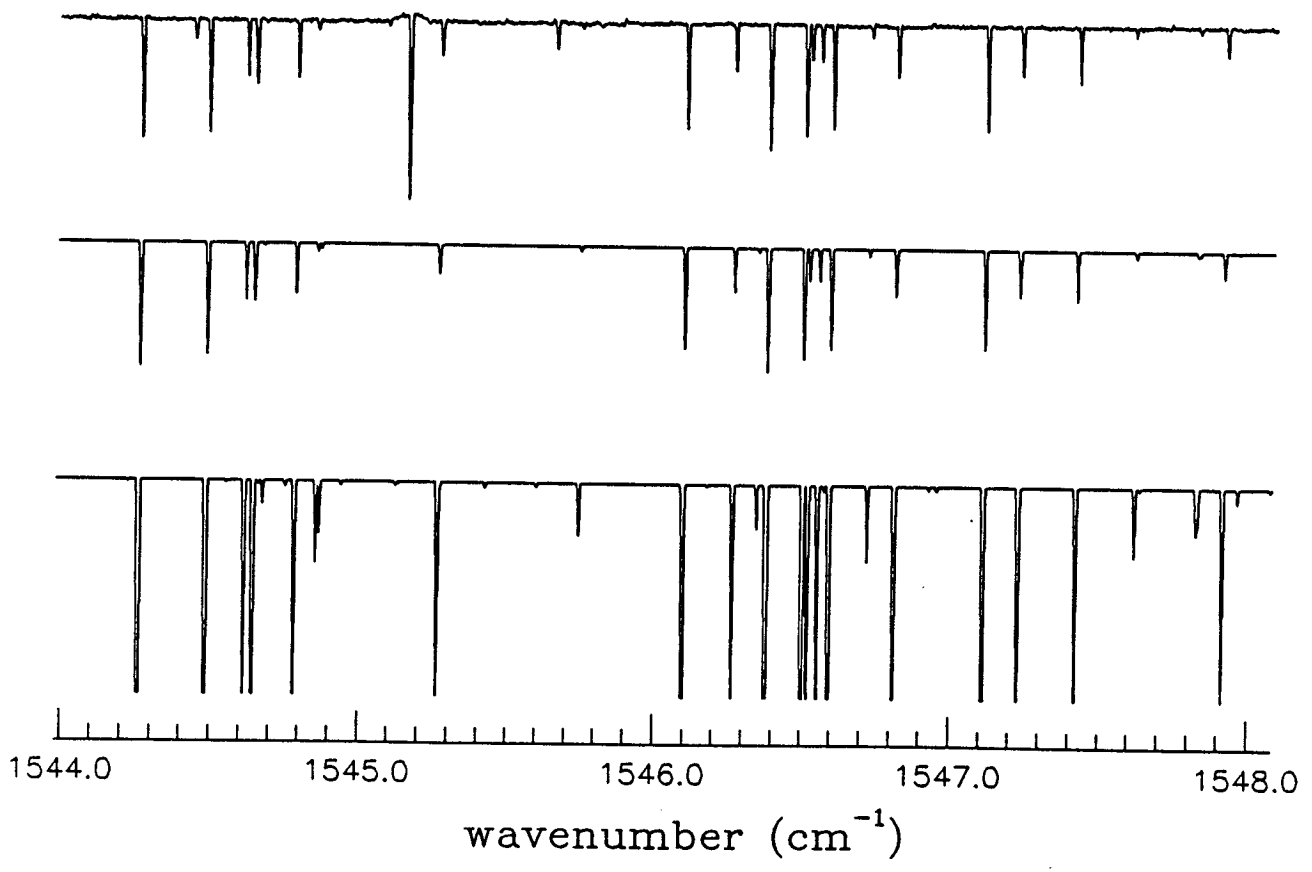
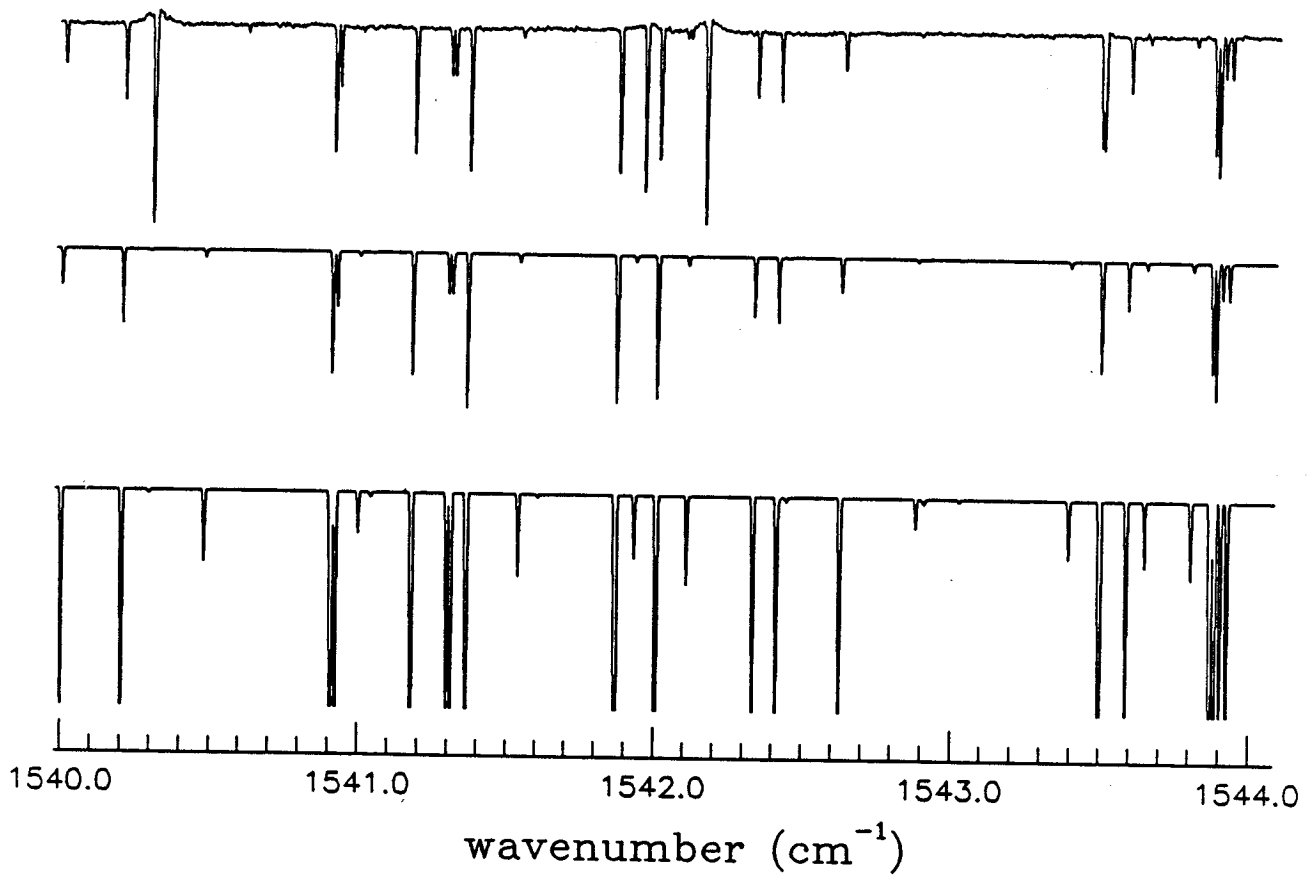


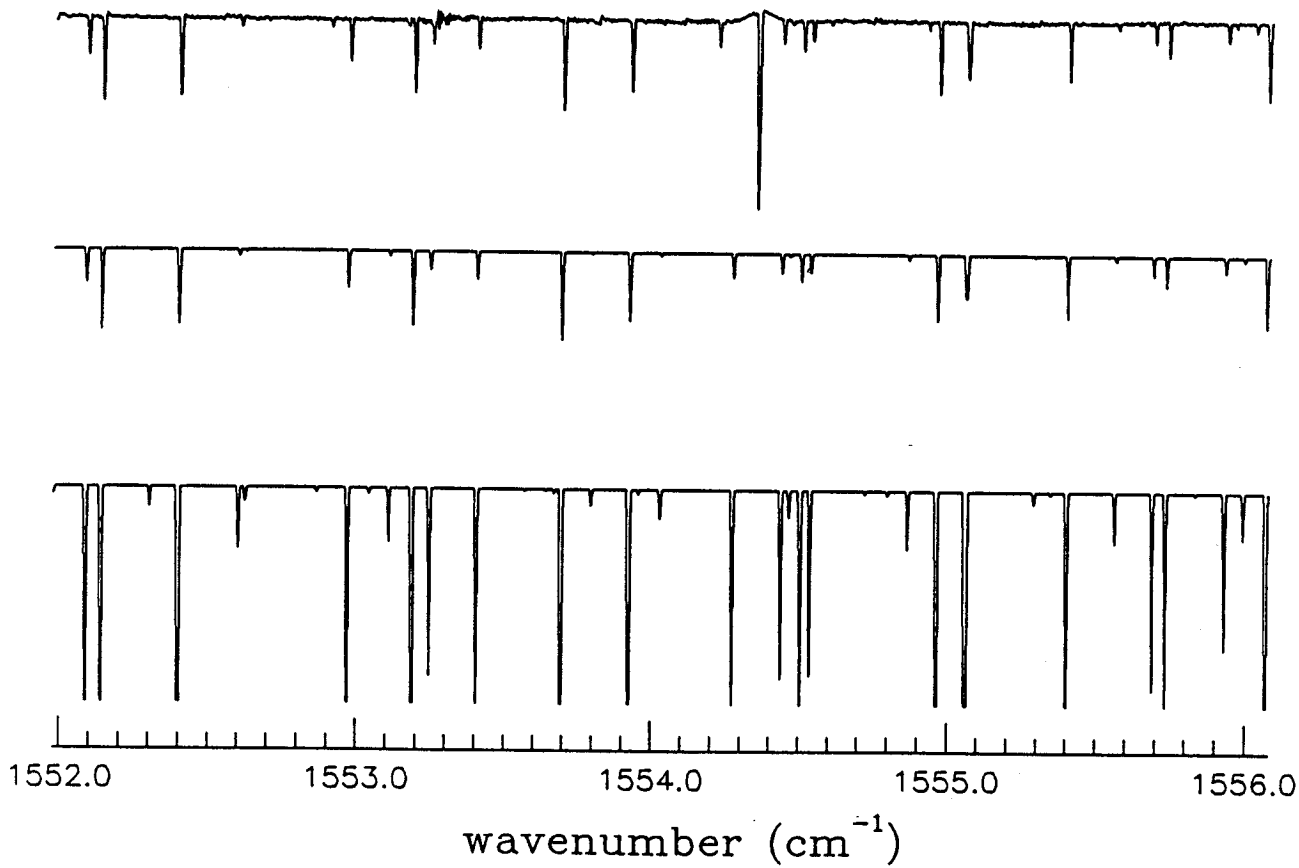
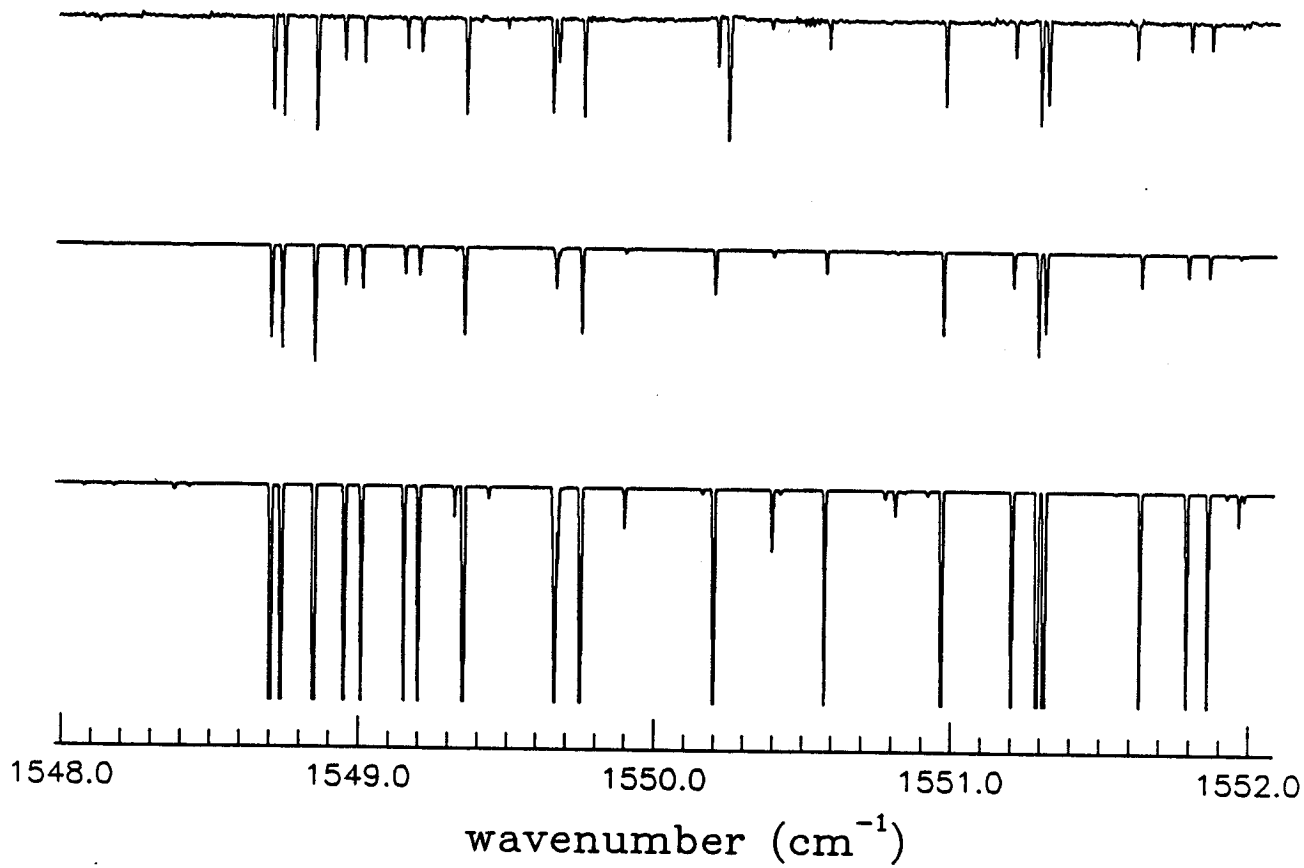


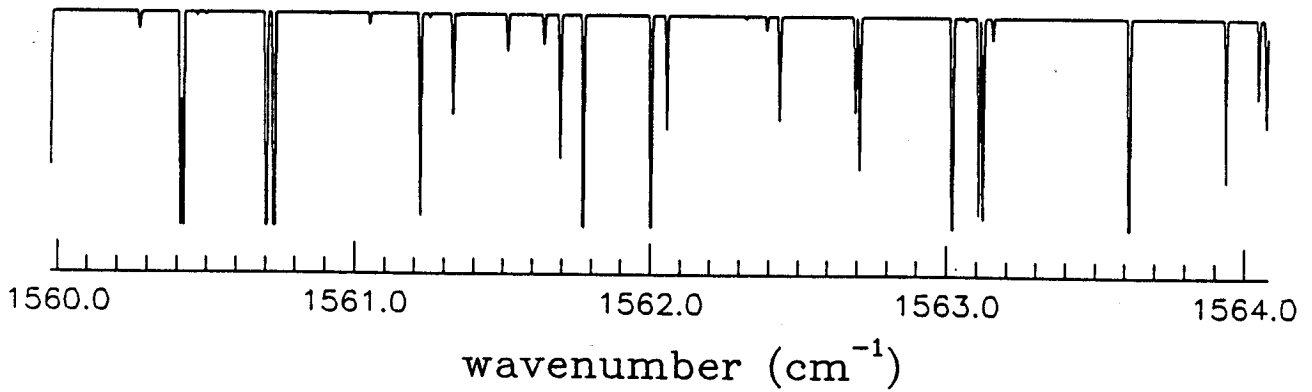
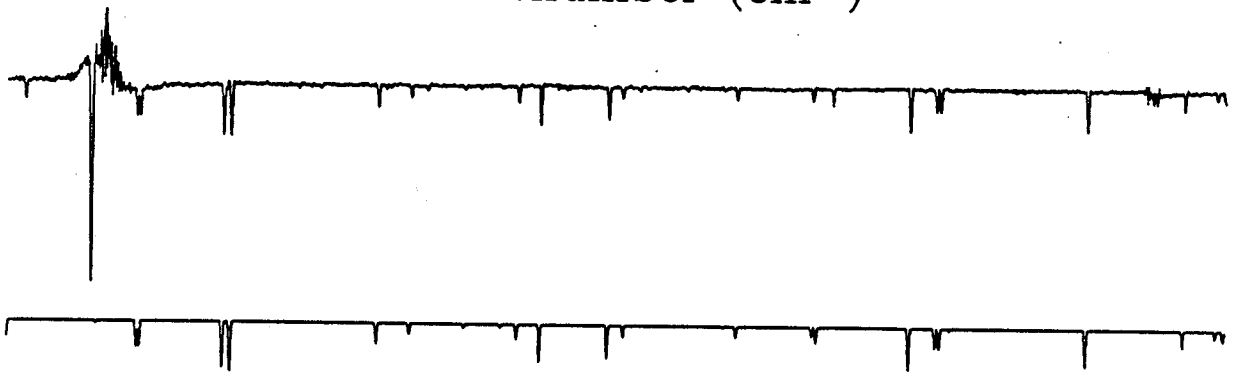
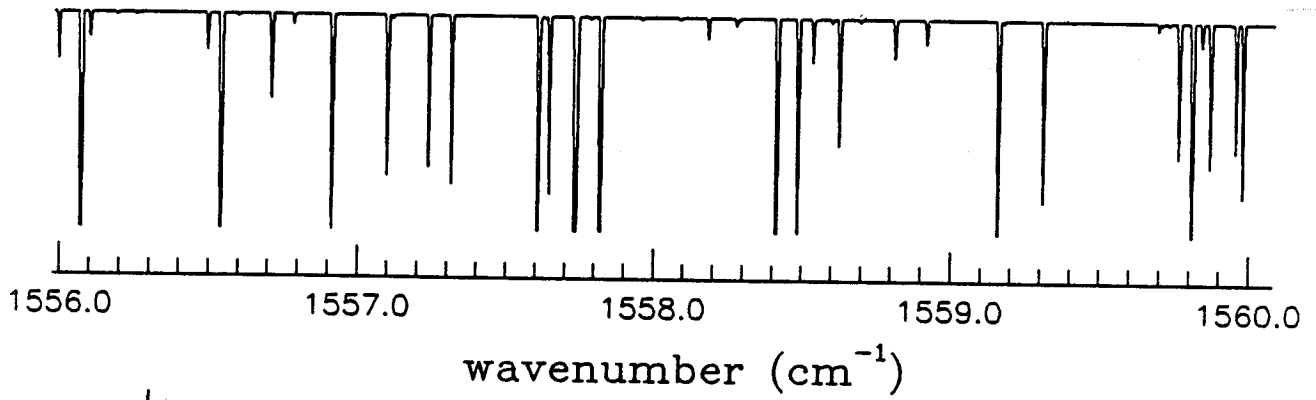
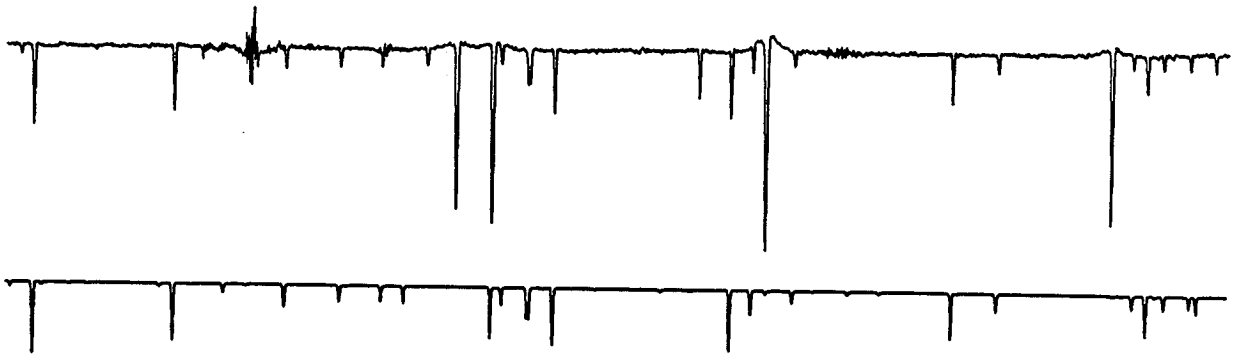


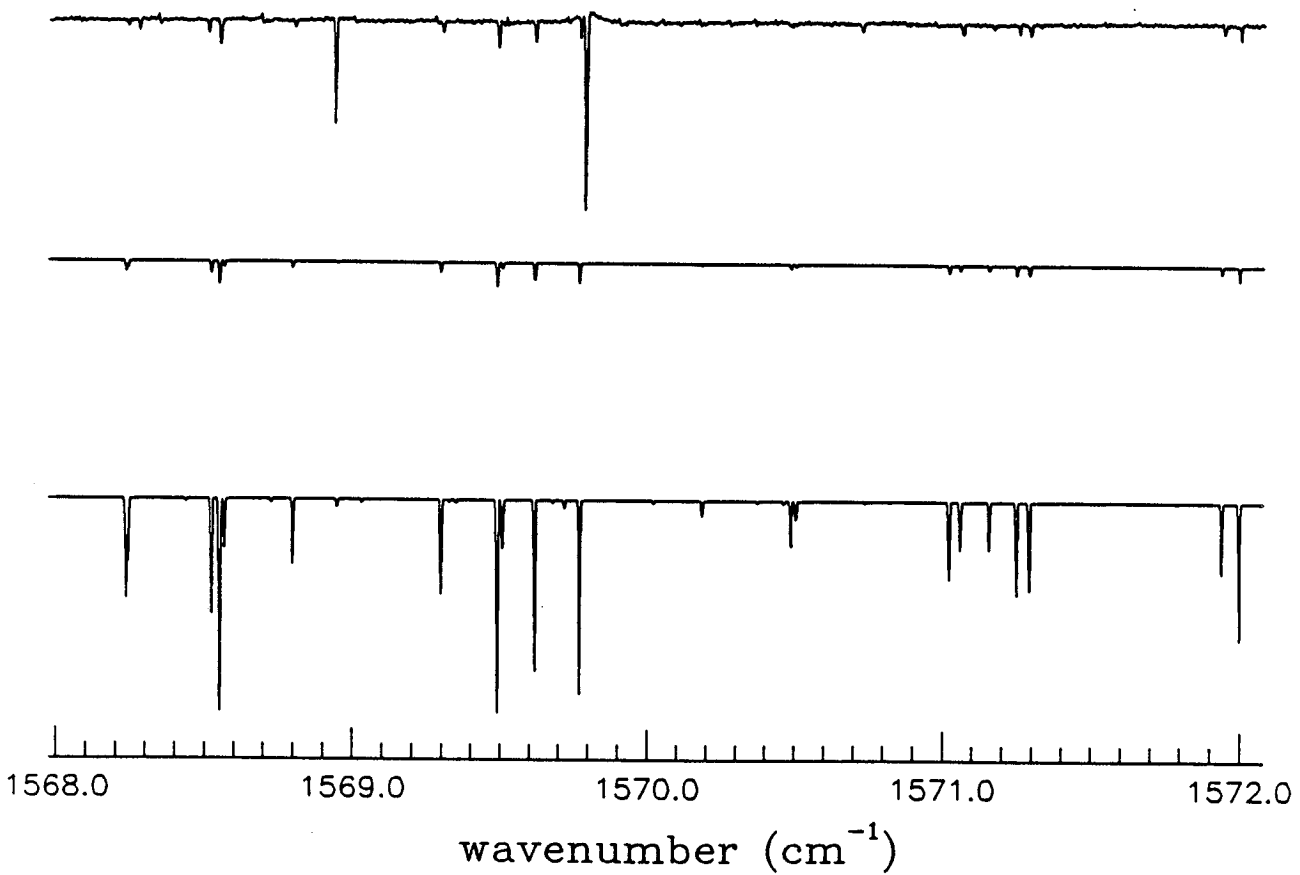
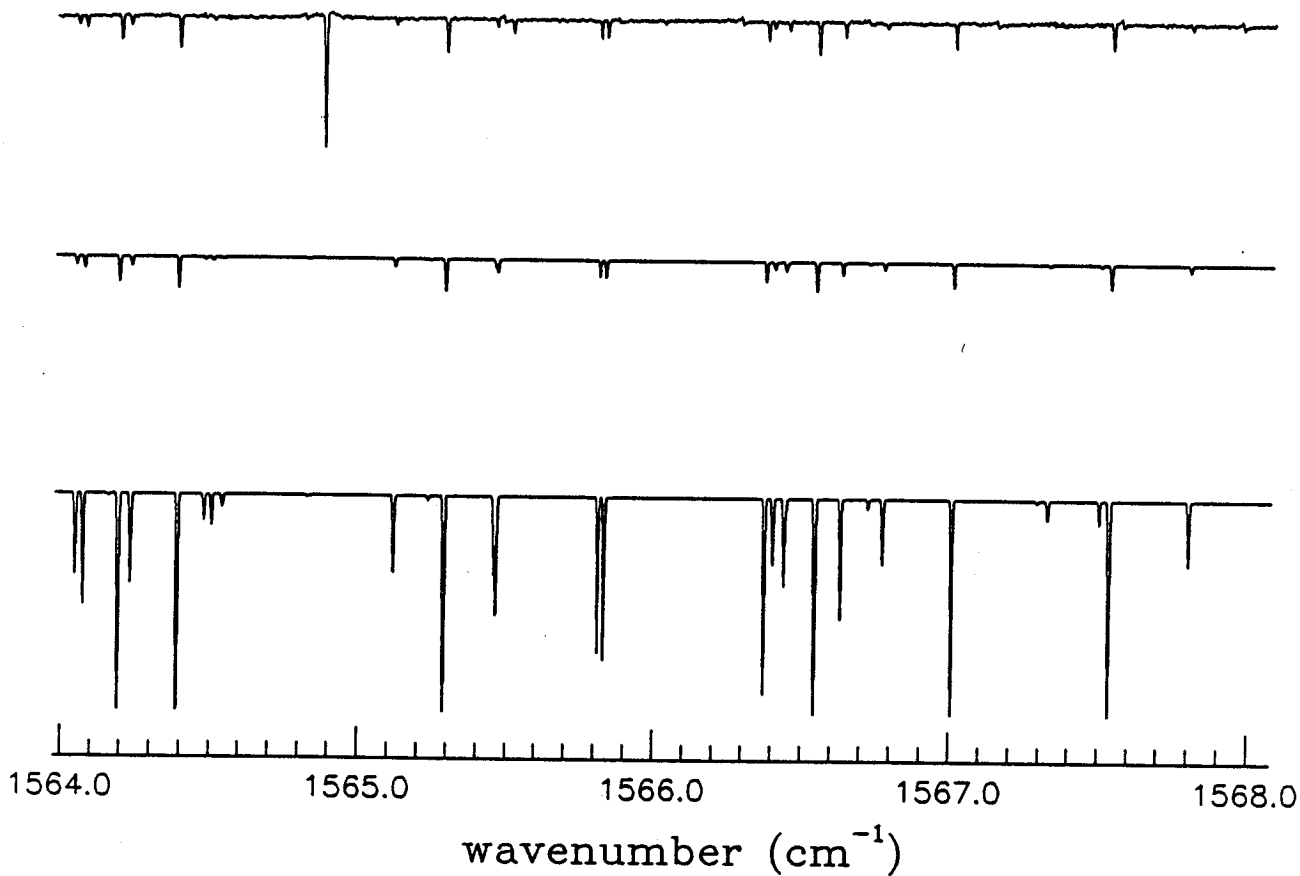












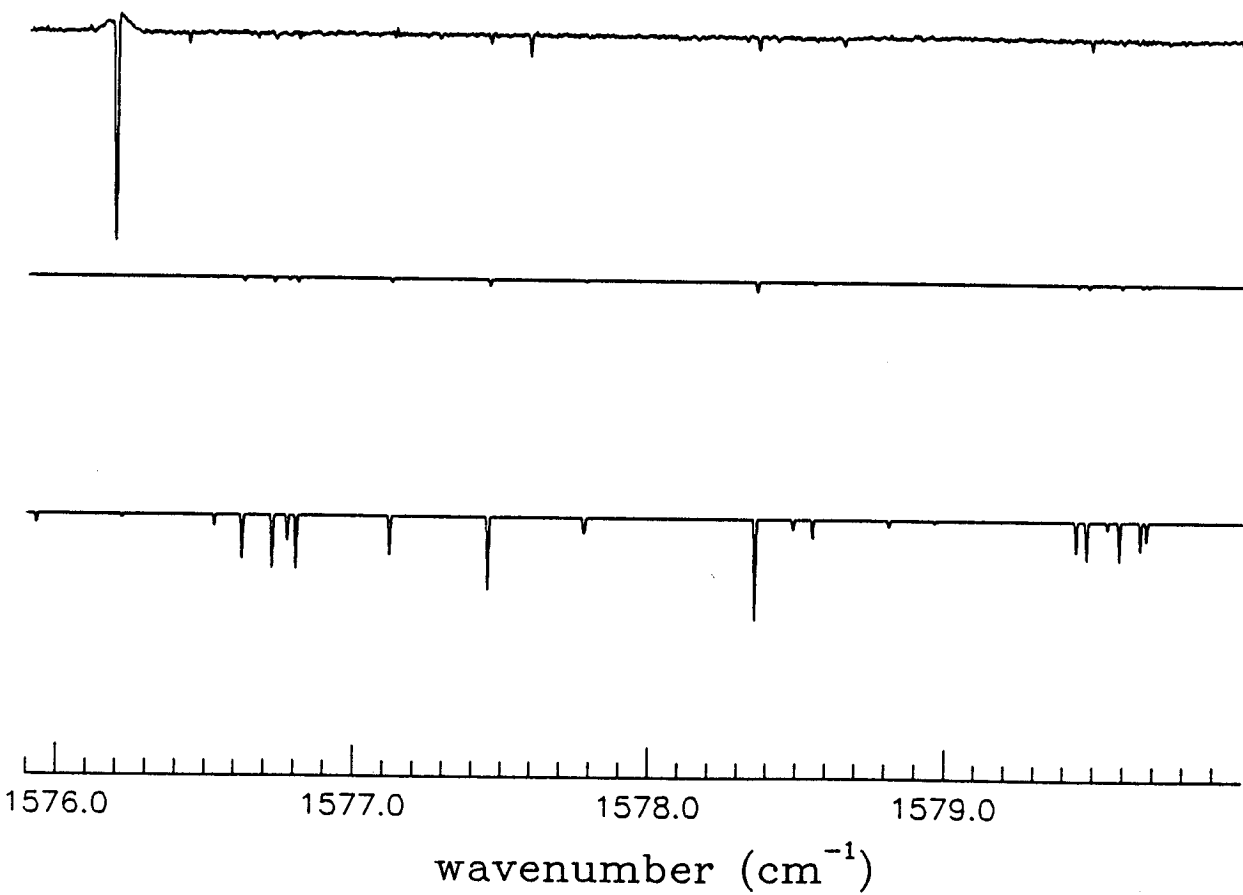
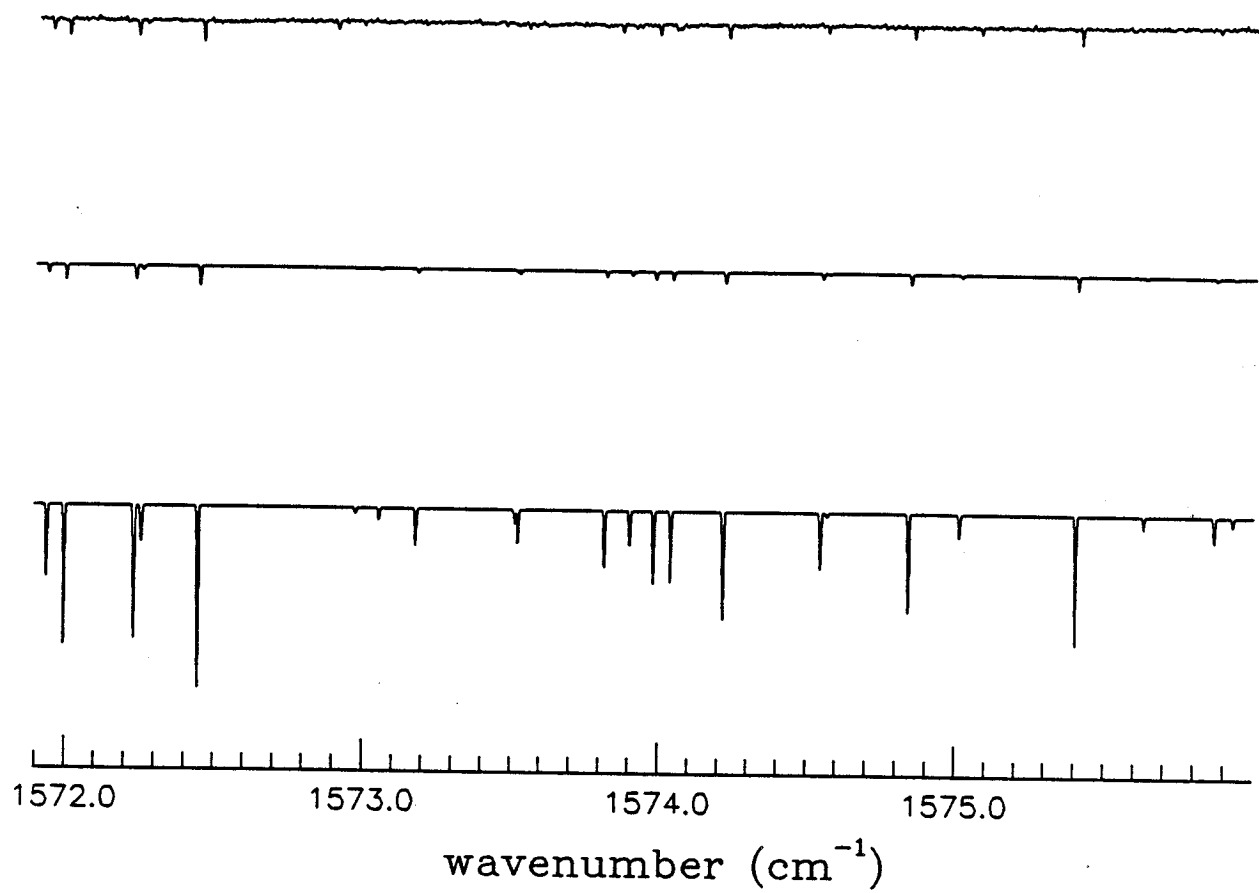


Table 3: Observed and Calculated Line Transitions of the ν_3 , ν_4 , and ν_6 Bands of H_2CO from 900 cm^{-1} to 1580 cm^{-1} .

Frequencies are given in wavenumbers (cm^{-1}).
Line strengths are given in terms of $\text{cm}^{-2}\text{ atm}^{-1}$.

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	20	9	11		21	10	11	900.0778		0.1671E-03	4	22	10	12		22	11	12	925.4467		0.1434E-03
4	20	9	12		21	10	12	900.0778		0.1671E-03	4	21	10	12		21	11	10	925.4721		0.1328E-03
4	29	8	22		30	9	22	902.4078		0.6875E-04	4	21	10	11		21	11	11	925.4721		0.1328E-03
4	29	8	21		30	9	21	902.4081		0.6875E-04	4	20	10	11		20	11	9	925.8775		0.1830E-03
4	19	9	11		20	10	11	902.5927		0.2119E-03	4	20	10	10		20	11	10	925.8775		0.1830E-03
4	19	9	10		20	10	10	902.5927		0.2119E-03	4	19	10	9		19	11	9	925.8947		0.2539E-03
4	28	8	21		29	9	21	904.9362		0.9894E-04	4	19	10	10		19	11	8	925.8947		0.2539E-03
4	28	8	20		29	9	20	904.9364		0.9894E-04	4	18	10	9		18	11	7	925.9624		0.2962E-03
4	18	9	10		19	10	10	905.1045		0.2657E-03	4	18	10	8		18	11	8	925.9624		0.2962E-03
4	18	9	9		19	10	9	905.1045		0.2657E-03	4	17	10	7		17	11	7	926.0399		0.3295E-03
4	27	8	20		28	9	20	907.4656		0.1351E-03	4	17	10	8		17	11	6	926.0399		0.3295E-03
4	27	8	19		28	9	19	907.4657		0.1351E-03	3	21	7	15		21	11	10	926.0764		0.6052E-04
4	17	9	8		18	10	8	907.6131		0.3293E-03	3	21	7	14		21	11	11	926.0764		0.6052E-04
4	17	9	9		18	10	9	907.6131		0.3293E-03	4	18	10	7		18	11	5	926.1183		0.3538E-03
4	26	8	19		27	9	19	909.9954		0.1859E-03	4	18	10	6		18	11	6	926.1183		0.3538E-03
4	26	8	18		27	9	18	909.9955		0.1859E-03	4	15	10	5		15	11	5	926.1948		0.3652E-03
4	16	9	8		17	10	8	910.1181		0.4035E-03	4	15	10	6		15	11	4	926.1948		0.3652E-03
4	16	9	7		17	10	7	910.1181		0.4035E-03	4	14	10	5		14	11	3	926.2681		0.3585E-03
4	25	8	18		26	9	18	912.5252		0.2529E-03	4	14	10	4		14	11	4	926.2681		0.3585E-03
4	25	8	17		26	9	17	912.5252		0.2529E-03	4	13	10	4		13	11	2	926.3375		0.3270E-03
4	15	9	7		16	10	7	912.6195		0.4889E-03	4	13	10	3		13	11	3	926.3375		0.3270E-03
4	15	9	6		16	10	6	912.6195		0.4889E-03	4	12	10	3		12	11	1	926.4028		0.2630E-03
4	24	8	17		25	9	17	915.0545		0.3398E-03	4	12	10	2		12	11	2	926.4028		0.2630E-03
4	24	8	16		25	9	16	915.0545		0.3398E-03	4	11	10	2		11	11	0	926.4635		0.1575E-03
4	14	9	5		15	10	5	915.1189		0.5861E-03	4	11	10	1		11	11	1	926.4635		0.1575E-03
4	14	9	6		15	10	6	915.1189		0.5861E-03	4	9	9	0		10	10	0	927.5388		0.1247E-02
4	23	8	16		24	9	16	917.5830		0.4511E-03	4	9	9	1		10	10	1	927.5388		0.1247E-02
4	23	8	15		24	9	15	917.5830		0.4511E-03	4	19	8	11		20	9	11	927.6805	-0.0001	0.1245E-02
4	13	9	4		14	10	4	917.6102		0.6950E-03	4	19	8	12		20	9	12	927.6805	-0.0001	0.1245E-02
4	13	9	5		14	10	5	917.6102		0.6950E-03	4	28	7	22		29	8	22	930.0070		0.5834E-04
4	12	9	3		13	10	3	920.0992		0.8158E-03	4	28	7	21		29	8	21	930.0159		0.5847E-04
4	12	9	4		13	10	4	920.0992		0.8158E-03	4	18	8	11		19	9	11	930.1990	0.0000	0.1557E-02
4	22	8	14		23	9	14	920.1102		0.5919E-03	4	18	8	10		19	9	10	930.1990	0.0000	0.1557E-02
4	22	8	15		23	9	15	920.1102		0.5919E-03	4	27	7	21		28	8	21	932.5262		0.8138E-04
4	11	9	3		12	10	3	922.5837		0.9482E-03	4	27	7	20		28	8	20	932.5311		0.8146E-04
4	11	9	2		12	10	2	922.5837		0.9482E-03	4	17	8	10		18	9	10	932.7144	0.0000	0.1926E-02
4	21	8	13		22	9	13	922.6357	-0.0010	0.7674E-03	4	17	8	9		18	9	9	932.7144	0.0000	0.1926E-02
4	21	8	14		22	9	14	922.6357	-0.0010	0.7674E-03	4	26	7	20		27	8	20	935.0468		0.1121E-03
4	26	10	16		26	11	16	925.0373		0.6287E-04	4	26	7	19		27	8	19	935.0495		0.1121E-03
4	26	10	17		26	11	15	925.0373		0.6287E-04	4	16	8	8		17	9	8	935.2266	0.0001	0.2355E-02
4	10	9	1		11	10	1	925.0637		0.1092E-02	4	16	8	9		17	9	9	935.2266	0.0001	0.2355E-02
4	10	9	2		11	10	2	925.0637		0.1092E-02	4	25	7	19		26	8	19	937.5690		0.1524E-03
4	25	10	16		25	11	14	925.1527		0.8049E-04	4	25	7	18		26	8	18	937.5706		0.1524E-03
4	25	10	15		25	11	15	925.1527		0.8049E-04	4	15	8	7		16	9	7	937.7351	0.0001	0.2846E-02
4	20	8	13		21	9	13	925.1593	-0.0002	0.9831E-03	4	15	8	8		16	9	8	937.7351	0.0001	0.2846E-02
4	20	8	12		21	9	12	925.1593	-0.0002	0.9831E-03	4	24	7	18		25	8	18	940.0927		0.2047E-03
4	24	10	15		24	11	13	925.2623		0.1011E-03	4	24	7	17		25	8	17	940.0936		0.2047E-03
4	24	10	14		24	11	14	925.2623		0.1011E-03	4	14	8	7		15	9	7	940.2398	0.0003	0.3401E-02
4	23	10	14		23	11	12	925.3633		0.1236E-03	4	14	8	6		15	9	6	940.2398	0.0003	0.3401E-02
4	23	10	13		23	11	13	925.3633		0.1236E-03	4	23	7	17		24	8	17	942.6174		0.2715E-03
4	22	10	13		22	11	11	925.4467		0.1434E-03	4	23	7	16		24	8	16	942.6179		0.2716E-03

ORIGINAL PAGE IS
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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	13	8	6		14	9	6	942.7402	0.0001	0.4021E-02	4	19	7	12		20	8	12	952.7155	-0.0005	0.7452E-03
4	13	8	5		14	9	5	942.7402	0.0001	0.4021E-02	4	29	6	23		30	7	23	952.7637		0.2025E-03
4	22	7	16		23	8	16	945.1425		0.3559E-03	4	29	6	24		30	7	24	952.8176		0.2017E-03
4	22	7	15		23	8	15	945.1429		0.3559E-03	4	8	8	0		9	9	0	955.1719	0.0002	0.8009E-02
4	12	8	4		13	9	4	945.2363	0.0001	0.4703E-02	4	8	8	1		9	9	1	955.1719	0.0002	0.8009E-02
4	12	8	5		13	9	5	945.2363	0.0001	0.4703E-02	4	28	6	22		29	7	22	955.2114		0.2863E-03
4	21	7	15		22	8	15	947.6676		0.4809E-03	4	18	7	11		19	8	11	955.2371	-0.0006	0.9307E-03
4	21	7	14		22	8	14	947.6676		0.4809E-03	4	18	7	12		19	8	12	955.2371	-0.0006	0.9307E-03
4	11	8	4		12	9	4	947.7277	0.0002	0.5446E-02	4	28	6	23		29	7	23	955.2467		0.2856E-03
4	11	8	3		12	9	3	947.7277	0.0002	0.5446E-02	4	27	6	21		28	7	21	957.6709		0.3998E-03
4	20	7	14		21	8	14	950.1921		0.5896E-03	4	27	6	22		28	7	22	957.6937		0.3991E-03
4	20	7	13		21	8	13	950.1922		0.5896E-03	4	17	7	11		18	8	11	957.7568	-0.0002	0.1149E-02
4	26	9	16		28	10	16	950.2030		0.5045E-04	4	17	7	10		18	8	10	957.7567	-0.0002	0.1149E-02
4	26	9	17		28	10	17	950.2030		0.5045E-04	4	26	6	20		27	7	20	960.1412		0.5512E-03
4	10	8	3		11	9	3	950.2142	0.0001	0.6245E-02	4	26	6	21		27	7	21	960.1557		0.5506E-03
4	10	8	2		11	9	2	950.2142	0.0001	0.6245E-02	4	16	7	10		17	8	10	960.2736	-0.0004	0.1401E-02
4	25	9	17		25	10	15	950.3216		0.6516E-04	4	16	7	9		17	8	9	960.2736	-0.0004	0.1401E-02
4	25	9	16		25	10	16	950.3216		0.6516E-04	4	25	6	19		26	7	19	962.6211		0.7503E-03
4	24	9	15		24	10	15	950.4377		0.8291E-04	4	25	6	20		26	7	20	962.6301		0.7498E-03
4	24	9	16		24	10	14	950.4377		0.8291E-04	4	15	7	9		16	8	9	962.7874	-0.0006	0.1688E-02
4	23	9	14		23	10	14	950.5511		0.1039E-03	4	15	7	8		16	8	8	962.7874	-0.0006	0.1688E-02
4	23	9	15		23	10	13	950.5511		0.1039E-03	4	24	6	18		25	7	18	965.1092		0.1008E-02
4	22	9	14		22	10	12	950.6617		0.1281E-03	4	24	6	19		25	7	19	965.1147		0.1008E-02
4	22	9	13		22	10	13	950.6617		0.1281E-03	4	14	7	7		15	8	7	965.2978	-0.0005	0.2012E-02
4	21	9	12		21	10	12	950.7691		0.1554E-03	4	14	7	8		15	8	8	965.2978	-0.0005	0.2012E-02
4	21	9	13		21	10	11	950.7691		0.1554E-03	4	17	10	7		18	11	5	967.1391		0.5099E-04
4	20	9	12		20	10	10	950.8732		0.1851E-03	4	17	10	8		18	11	6	967.1391		0.5099E-04
4	20	9	11		20	10	11	950.8732		0.1851E-03	4	23	6	17		24	7	17	967.6044	0.0021	0.1339E-02
4	19	9	10		19	10	10	950.9737		0.2165E-03	4	23	6	18		24	7	18	967.6077	-0.0012	0.1338E-02
4	19	9	11		19	10	9	950.9737		0.2165E-03	4	13	7	6		14	8	6	967.8044	-0.0006	0.2370E-02
4	18	9	9		18	10	9	951.0705		0.2480E-03	4	13	7	7		14	8	7	967.8044	-0.0006	0.2370E-02
4	18	9	10		18	10	8	951.0705		0.2480E-03	4	18	10	8		17	11	6	969.4754		0.5260E-04
4	17	9	9		17	10	7	951.1634		0.2778E-03	4	18	10	9		17	11	7	969.4754		0.5260E-04
4	17	9	8		17	10	8	951.1634		0.2778E-03	4	22	6	16		23	7	16	970.1055	0.0013	0.1754E-02
4	16	9	8		16	10	6	951.2522		0.3034E-03	4	22	6	17		23	7	17	970.1074	-0.0006	0.1754E-02
4	16	9	7		16	10	7	951.2522		0.3034E-03	4	12	7	6		13	8	6	970.3066	-0.0006	0.2762E-02
4	15	9	7		15	10	5	951.3367		0.3214E-03	4	12	7	5		13	8	5	970.3066	-0.0006	0.2762E-02
4	15	9	6		15	10	6	951.3367		0.3214E-03	6	29	3	26		30	6	25	970.9789		0.5666E-04
4	14	9	6		14	10	4	951.4168		0.3280E-03	4	19	10	10		18	11	8	971.8207		0.5074E-04
4	14	9	5		14	10	5	951.4168		0.3280E-03	4	19	10	9		18	11	7	971.8207		0.5074E-04
4	13	9	4		13	10	4	951.4923		0.3186E-03	4	21	6	15		22	7	15	972.6113	0.0008	0.2271E-02
4	13	9	5		13	10	3	951.4923		0.3186E-03	4	21	6	16		22	7	16	972.6124	-0.0003	0.2271E-02
4	12	9	3		12	10	3	951.5631		0.2878E-03	4	11	7	4		12	8	4	972.8043	-0.0006	0.3184E-02
4	12	9	4		12	10	2	951.5631		0.2878E-03	4	11	7	5		12	8	5	972.8043	-0.0006	0.3184E-02
4	11	9	3		11	10	1	951.6289		0.2294E-03	6	28	3	25		29	6	24	973.1118		0.6861E-04
4	11	9	2		11	10	2	951.6289		0.2294E-03	4	30	8	23		30	9	21	974.8557		0.1006E-03
4	10	9	1		10	10	1	951.6898		0.1362E-03	4	30	8	22		30	9	22	974.8563		0.1006E-03
4	10	9	2		10	10	0	951.6898		0.1362E-03	4	29	8	22		29	9	20	974.9727		0.1378E-03
4	9	8	2		10	9	2	952.6957	0.0002	0.7099E-02	4	29	8	21		29	9	21	974.9730		0.1378E-03
4	9	8	1		10	9	1	952.6957	0.0002	0.7099E-02	4	28	8	21		28	9	19	975.0901		0.1863E-03
4	19	7	13		20	8	13	952.7154	-0.0005	0.7452E-03	4	28	8	20		28	9	20	975.0903		0.1863E-03

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	20	6	14	21	7	14	14	975.1208	0.0005	0.2903E-02	4	18	6	12	19	7	12	980.1465	0.0003	0.4571E-02	
4	20	6	15	21	7	15	15	975.1214	-0.0001	0.2903E-02	4	18	6	13	19	7	13	980.1466	0.0001	0.4570E-02	
4	27	3	24	28	6	23	23	975.1889	0.0000	0.7945E-04	4	8	7	1	9	8	1	980.2686	-0.0007	0.4607E-02	
4	27	8	20	27	9	18	18	975.2077	0.0000	0.2484E-03	4	8	7	2	9	8	2	980.2686	-0.0007	0.4607E-02	
4	10	7	19	27	9	19	19	975.2078	0.0000	0.2484E-03	4	24	3	21	25	6	20	981.0581	0.0000	0.9860E-04	
4	10	7	4	11	8	3	3	975.2078	-0.0007	0.3634E-02	4	28	5	23	29	6	23	981.1454	0.0000	0.1280E-03	
4	10	7	3	11	8	4	4	975.2970	-0.0007	0.3634E-02	4	22	3	20	23	6	17	982.5166	0.0001	0.6343E-04	
4	26	8	19	26	9	17	17	975.3249	0.0000	0.3267E-03	4	17	6	11	18	7	11	982.6608	0.0000	0.5630E-02	
4	26	8	18	26	9	18	18	975.4413	0.0000	0.4234E-03	4	7	7	1	8	8	1	982.7429	-0.0008	0.5131E-02	
4	25	8	17	25	9	17	17	975.4413	0.0000	0.4234E-03	4	7	7	0	8	8	0	982.7429	-0.0008	0.5131E-02	
4	24	8	16	24	9	16	16	975.5566	0.0000	0.5408E-03	4	23	3	20	24	6	19	983.0576	0.0000	0.1008E-03	
4	23	8	16	23	9	15	15	975.5566	0.0000	0.5408E-03	4	27	5	22	28	6	19	983.0576	0.0000	0.1008E-03	
4	23	8	15	23	9	15	15	975.6703	-0.0009	0.6805E-03	4	28	5	24	29	6	24	983.4739	0.0000	0.1800E-03	
4	22	8	15	22	9	15	15	975.7821	-0.0005	0.8432E-03	4	22	3	19	23	6	18	983.9825	0.0000	0.7990E-04	
4	22	8	14	22	9	14	14	975.7821	-0.0005	0.8432E-03	4	21	3	19	22	6	16	985.0635	0.0000	0.1010E-03	
4	21	8	13	21	9	13	13	975.8916	-0.0003	0.1028E-02	4	16	6	11	17	7	10	985.1036	0.0000	0.6936E-04	
4	21	8	14	21	9	12	12	975.8916	-0.0003	0.1028E-02	4	16	6	11	17	7	11	985.1749	0.0000	0.6851E-02	
4	20	8	13	20	9	11	11	975.8985	0.0000	0.1233E-02	4	26	5	21	28	6	23	985.1749	0.0000	0.6851E-02	
4	19	8	12	19	9	10	10	975.9985	0.0000	0.1233E-02	4	26	5	21	27	6	21	985.5131	0.0000	0.1270E-03	
4	19	8	11	19	9	11	11	976.1024	0.0004	0.1453E-02	4	21	3	18	22	6	22	985.8101	0.0000	0.2501E-03	
4	18	8	11	18	9	10	10	976.1024	0.0004	0.1453E-02	4	20	3	18	21	6	15	987.1154	0.0001	0.1953E-03	
4	18	8	10	18	9	10	10	976.2032	0.0002	0.1680E-02	4	15	6	10	16	7	9	987.2357	0.0001	0.7367E-04	
4	17	8	11	17	9	9	9	976.3004	0.0005	0.1904E-02	4	25	5	20	26	6	20	987.6879	0.0001	0.8236E-02	
4	17	8	10	17	9	9	9	976.3937	0.0008	0.2110E-02	4	25	5	20	26	6	20	987.6879	0.0001	0.8236E-02	
4	16	8	9	16	9	7	7	976.4830	0.0005	0.2279E-02	4	25	5	20	26	6	20	988.1565	0.0001	0.8236E-02	
4	16	8	8	16	9	7	7	976.4830	0.0005	0.2279E-02	4	25	5	20	26	6	21	988.1565	0.0001	0.8236E-02	
4	15	8	7	15	9	6	6	976.5680	0.0005	0.2389E-02	4	14	6	9	15	7	9	989.1281	0.0002	0.3436E-03	
4	14	8	6	14	9	6	6	976.5680	0.0005	0.2389E-02	4	14	6	9	15	7	9	989.1281	0.0002	0.3436E-03	
4	14	8	7	14	9	5	5	976.6484	0.0005	0.2413E-02	4	24	5	19	25	6	19	990.1991	0.0002	0.4662E-03	
4	13	8	6	13	9	4	4	976.6484	0.0005	0.2413E-02	4	24	5	19	25	6	19	990.1991	0.0002	0.4662E-03	
4	13	8	5	13	9	4	4	976.7240	0.0005	0.2321E-02	4	24	5	20	25	6	20	991.1621	0.0002	0.4662E-03	
4	12	8	4	12	9	3	3	976.7240	0.0005	0.2321E-02	4	24	5	20	25	6	20	991.1621	0.0002	0.4662E-03	
4	11	8	3	11	9	2	2	976.7946	0.0006	0.2076E-02	4	29	2	28	30	5	25	992.2975	0.0001	0.5234E-04	
4	11	8	2	11	9	2	2	976.7946	0.0006	0.2076E-02	4	29	2	28	30	5	25	992.2975	0.0001	0.5234E-04	
4	10	8	2	10	9	2	2	976.8600	0.0003	0.1641E-02	4	13	6	8	14	7	8	992.4241	-0.0001	0.7014E-04	
4	10	8	3	10	9	1	1	976.8600	0.0003	0.1641E-02	4	13	6	8	14	7	8	992.4241	-0.0001	0.7014E-04	
4	9	8	2	9	9	1	1	976.9201	0.0005	0.9670E-03	4	23	5	19	24	6	18	992.7079	0.0001	0.1149E-01	
4	9	8	1	9	9	0	0	976.9201	0.0005	0.9670E-03	4	23	5	19	24	6	18	992.7079	0.0001	0.1149E-01	
4	26	3	23	27	6	22	22	977.1671	0.0004	0.8828E-04	4	18	9	10	19	6	14	993.3094	0.0000	0.5805E-03	
4	19	6	13	20	7	13	13	977.6328	0.0006	0.3665E-02	4	25	6	25	26	6	23	993.3094	0.0000	0.5805E-03	
4	19	6	14	20	7	14	14	977.6332	0.0006	0.3665E-02	4	18	9	10	17	10	7	994.6208	0.0000	0.5248E-04	
4	9	7	7	10	8	2	2	977.7846	-0.0007	0.4109E-02	4	17	3	15	18	6	12	994.6208	0.0000	0.5248E-04	
4	9	7	2	10	8	3	3	977.7846	-0.0007	0.4109E-02	4	17	3	15	18	6	12	995.1958	0.0000	0.7401E-04	
4	29	5	24	30	6	24	24	978.8217	0.0007	0.9006E-04	4	12	6	6	13	7	6	995.2134	-0.0001	0.1333E-01	
4	25	3	22	26	6	21	21	979.1306	0.0007	0.9459E-04	4	12	6	7	13	7	7	995.2134	-0.0001	0.1333E-01	
4	23	3	21	24	6	18	18	979.8958	0.0007	0.5636E-04	4	22	5	17	23	6	17	995.2764	-0.0001	0.8262E-03	
4	23	3	21	24	6	18	18	979.8958	0.0007	0.5636E-04	4	22	5	17	23	6	17	995.2764	-0.0001	0.8262E-03	

ORIGINAL PAGE IS
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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	22	6	18		23	6	18	995.5447		0.7887E-03	4	17	7	10		17	8	10	1001.3772	0.0000	0.1315E-02
6	17	3	14		18	6	13	995.8352		0.8288E-04	4	17	7	11		17	8	9	1001.3772	0.0000	0.1315E-02
6	28	2	27		29	5	24	998.1952		0.1660E-03	4	16	7	9		16	8	9	1001.4727	-0.0001	0.1474E-02
4	19	9	10		18	10	8	998.9397		0.5071E-04	4	16	7	10		16	8	8	1001.4727	-0.0001	0.1474E-02
4	19	9	11		18	10	9	996.9397		0.5071E-04	4	15	7	9		15	8	7	1001.5647	-0.0002	0.1616E-02
6	16	3	14		17	6	11	997.6747		0.6973E-04	4	15	7	8		15	8	8	1001.5647	-0.0002	0.1616E-02
4	21	5	18		22	6	16	997.6801		0.1078E-02	4	14	7	8		14	8	6	1001.6530	-0.0001	0.1727E-02
4	11	6	5		12	7	5	997.7151	-0.0001	0.1629E-01	4	14	7	7		14	8	7	1001.6530	-0.0001	0.1727E-02
4	11	6	6		12	7	6	997.7151	-0.0001	0.1629E-01	4	13	7	7		13	8	5	1001.7371	-0.0004	0.1791E-02
4	21	5	17		22	6	17	997.8472		0.1048E-02	4	13	7	6		13	8	6	1001.7371	-0.0004	0.1791E-02
4	20	1	19		21	4	17	998.0792		0.5412E-04	4	12	7	6		12	8	4	1001.8167	-0.0005	0.1791E-02
6	16	3	13		17	6	12	998.1288		0.7553E-04	4	12	7	5		12	8	5	1001.8167	-0.0005	0.1791E-02
4	29	4	26		30	5	26	998.2451		0.4135E-03	4	11	7	5		11	8	3	1001.8915	-0.0002	0.1705E-02
6	27	2	26		28	5	23	999.8131		0.2850E-03	4	11	7	4		11	8	4	1001.8915	-0.0002	0.1705E-02
4	30	7	24		30	8	22	1000.0122		0.6338E-04	4	10	7	3		10	8	3	1001.9611	-0.0004	0.1512E-02
4	30	7	23		30	8	23	1000.0592		0.6524E-04	4	10	7	4		10	8	2	1001.9611	-0.0004	0.1512E-02
4	20	5	15		21	6	15	1000.0990		0.1389E-02	4	9	7	3		9	8	1	1002.0253	-0.0003	0.1185E-02
4	29	7	23		29	8	21	1000.1319		0.8912E-04	4	9	7	2		9	8	2	1002.0253	-0.0003	0.1185E-02
6	15	3	13		16	6	10	1000.1429		0.6361E-04	4	8	7	1		8	8	1	1002.0838	-0.0003	0.6938E-03
4	29	7	22		29	8	22	1000.1500		0.8970E-04	4	8	7	2		8	8	0	1002.0838	-0.0003	0.6938E-03
4	20	5	18		21	6	18	1000.2007	0.0014	0.1365E-02	4	19	5	14		20	6	14	1002.5324	0.0008	0.1764E-02
4	10	6	4		11	7	4	1000.2125	-0.0001	0.1736E-01	4	19	5	15		20	6	15	1002.5927	0.0009	0.1746E-02
4	10	6	5		11	7	5	1000.2125	-0.0001	0.1736E-01	6	14	3	12		15	6	9	1002.6032		0.5605E-04
4	28	7	22		28	8	20	1000.2363		0.1214E-03	4	9	6	4		10	7	4	1002.7051	-0.0001	0.1952E-01
4	28	7	21		28	8	21	1000.2452		0.1217E-03	4	9	6	3		10	7	3	1002.7051	-0.0001	0.1952E-01
4	27	7	21		27	8	19	1000.3389		0.1626E-03	6	14	3	11		15	6	10	1002.8147		0.5815E-04
4	27	7	20		27	8	20	1000.3438		0.1628E-03	4	18	1	17		19	4	15	1003.0270		0.5318E-04
4	26	7	20		26	8	18	1000.4424		0.2147E-03	6	26	2	25		27	5	22	1003.2892		0.4710E-03
4	26	7	19		26	8	19	1000.4452		0.2148E-03	4	11	8	4		10	9	2	1003.4404		0.1360E-03
6	15	3	12		16	6	11	1000.4573		0.6720E-04	4	11	8	3		10	9	1	1003.4404		0.1360E-03
4	25	7	19		25	8	17	1000.5471		0.2793E-03	4	27	4	24		28	5	24	1003.8919		0.8119E-03
4	25	7	18		25	8	18	1000.5487		0.2794E-03	4	29	4	25		30	5	25	1004.4900		0.3367E-03
4	19	1	18		20	4	18	1000.8284		0.5453E-04	4	18	5	13		19	6	13	1004.9792	0.0003	0.2211E-02
4	24	7	18		24	8	16	1000.8527		0.3581E-03	4	18	5	14		19	6	14	1005.0140	0.0006	0.2198E-02
4	24	7	17		24	8	17	1000.8538		0.3582E-03	4	8	6	3		9	7	3	1005.1922	-0.0005	0.2173E-01
4	24	0	24		25	3	22	1000.7388		0.8588E-04	4	8	6	2		9	7	2	1005.1922	-0.0005	0.2173E-01
4	23	7	17		23	8	15	1000.7588		0.4525E-03	4	17	1	16		18	4	14	1005.2997		0.5020E-04
4	23	7	16		23	8	16	1000.7593		0.4525E-03	4	12	8	4		11	9	2	1005.7909		0.2210E-03
4	22	7	18		22	8	14	1000.8648		0.5631E-03	4	12	8	5		11	9	3	1005.7909		0.2210E-03
4	22	7	15		22	8	15	1000.8652		0.5632E-03	6	25	2	24		26	5	21	1006.6366		0.7494E-03
4	21	7	15		21	8	13	1000.9704		0.6901E-03	4	26	4	23		27	5	23	1006.6633	-0.0016	0.1116E-02
4	21	7	14		21	8	14	1000.9706		0.6901E-03	4	28	4	24		29	5	24	1007.1268		0.4402E-03
4	20	7	14		20	8	12	1001.0749		0.8322E-03	4	23	0	23		24	3	21	1007.1422		0.1235E-03
4	20	7	13		20	8	13	1001.0750		0.8322E-03	4	17	5	12		18	6	12	1007.4378	0.0005	0.2733E-02
4	10	8	3		9	9	1	1001.0844		0.5561E-04	4	17	5	13		18	6	13	1007.4573	0.0004	0.2724E-02
4	10	8	2		9	9	0	1001.0844		0.5561E-04	4	7	6	1		8	7	1	1007.6737	-0.0005	0.2402E-01
4	28	4	25		29	5	25	1001.0874		0.5832E-03	4	7	6	2		8	7	2	1007.6737	-0.0005	0.2402E-01
4	19	7	12		19	8	12	1001.1779	-0.0002	0.9870E-03	4	13	8	6		12	9	4	1008.1361		0.2978E-03
4	19	7	13		19	8	11	1001.1779	-0.0002	0.9870E-03	4	13	8	5		12	9	3	1008.1361		0.2978E-03
4	18	7	12		18	8	10	1001.2788	0.0000	0.1150E-02	4	25	4	22		26	5	22	1009.4080	-0.0015	0.1514E-02
4	18	7	11		18	8	11	1001.2788	0.0000	0.1150E-02	4	27	4	23		28	5	23	1009.8220		0.5590E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	24	2	23		25	5	20	1009.8689		0.1150E-02	4	10	5	6		11	6	6	1024.8304	0.0002	0.8350E-02
4	16	5	11		17	6	11	1009.9068	0.0006	0.3333E-02	4	19	4	16		20	5	16	1025.4487	-0.0007	0.7223E-02
4	16	5	12		17	6	12	1009.9171	0.0004	0.3327E-02	4	30	6	24		30	7	24	1025.4888		0.3405E-03
4	6	6	0		7	7	0	1010.1489	-0.0002	0.2639E-01	4	29	6	23		29	7	23	1025.5012		0.4711E-03
4	6	6	1		7	7	1	1010.1489	-0.0002	0.2639E-01	4	28	6	22		28	7	22	1025.5264		0.6427E-03
4	14	8	7		13	9	5	1010.4762		0.3590E-03	4	29	6	24		29	7	22	1025.5547		0.4692E-03
4	14	8	6		13	9	4	1010.4762		0.3590E-03	4	28	6	23		28	7	21	1025.5615		0.6410E-03
4	24	4	21		25	5	21	1012.1240	-0.0013	0.2028E-02	4	27	6	21		27	7	21	1025.5634		0.8645E-03
4	15	5	10		16	6	10	1012.3838	0.0018	0.4011E-02	4	30	6	25		30	7	23	1025.5692		0.3384E-03
4	15	5	11		16	6	11	1012.3891	-0.0036	0.4007E-02	4	27	6	22		27	7	20	1025.5861		0.8631E-03
4	26	4	22		27	5	22	1012.5642		0.6890E-03	4	26	6	20		26	7	20	1025.6108		0.1147E-02
4	15	8	8		14	9	8	1012.8113		0.4013E-03	4	26	6	21		26	7	19	1025.6252		0.1145E-02
4	15	8	7		14	9	5	1012.8113		0.4013E-03	4	25	6	19		25	7	19	1025.6677		0.1499E-02
4	23	4	19		24	5	19	1013.0002	0.0018	0.1704E-02	4	25	6	20		25	7	18	1025.6768		0.1498E-02
4	22	0	22		23	3	20	1013.2315		0.1727E-03	4	24	6	18		24	7	18	1025.7325		0.1932E-02
4	23	4	20		24	5	20	1014.8205	-0.0012	0.2682E-02	4	24	6	19		24	7	17	1025.7382		0.1931E-02
4	14	5	9		15	6	9	1014.8672	0.0018	0.4763E-02	4	23	6	17		23	7	17	1025.8044	0.0022	0.2453E-02
4	14	5	10		15	6	10	1014.8698	-0.0009	0.4761E-02	4	23	6	18		23	7	16	1025.8076	-0.0011	0.2453E-02
4	16	8	8		15	9	8	1015.1416		0.4241E-03	4	22	6	16		22	7	16	1025.8818	0.0016	0.3069E-02
4	16	8	9		15	9	7	1015.1416		0.4241E-03	4	22	6	17		22	7	15	1025.8838	-0.0003	0.3069E-02
4	25	4	21		26	5	21	1015.3403		0.8243E-03	4	21	6	15		21	7	15	1025.9639	0.0011	0.3781E-02
4	22	4	18		23	5	18	1016.0439	0.0009	0.2444E-02	4	21	6	16		21	7	14	1025.9650	0.0000	0.3781E-02
4	13	5	8		14	6	8	1017.3553	0.0008	0.5584E-02	4	20	6	14		20	7	14	1026.0494	0.0010	0.4586E-02
4	13	5	9		14	6	9	1017.3565	-0.0004	0.5583E-02	4	20	6	15		20	7	13	1026.0500	0.0004	0.4586E-02
4	17	8	9		16	9	7	1017.4675		0.4289E-03	4	19	6	13		19	7	13	1026.1373	0.0007	0.5472E-02
4	17	8	10		16	9	8	1017.4675		0.4289E-03	4	19	6	14		19	7	12	1026.1376	0.0003	0.5472E-02
4	22	4	19		23	5	19	1017.4989	-0.0009	0.3502E-02	4	10	7	3		9	8	1	1026.2018		0.1087E-03
4	29	3	27		30	4	27	1017.6322		0.1691E-03	4	10	7	4		9	8	2	1026.2018		0.1087E-03
4	24	4	20		25	5	20	1018.1372		0.9580E-03	4	18	6	12		18	7	12	1026.2266	0.0005	0.6421E-02
4	21	0	21		22	3	19	1019.0101		0.2338E-03	4	18	6	13		18	7	11	1026.2268	0.0004	0.6421E-02
4	21	4	17		22	5	17	1019.0121	0.0006	0.3404E-02	4	17	6	11		17	7	11	1026.3165	0.0004	0.7402E-02
4	18	8	10		17	9	8	1019.7891		0.4181E-03	4	17	6	12		17	7	10	1026.3165	0.0003	0.7402E-02
4	18	8	11		17	9	9	1019.7891		0.4181E-03	4	16	6	11		16	7	9	1026.4060	0.0002	0.8375E-02
4	12	5	7		13	6	7	1019.8463	0.0005	0.6464E-02	4	16	6	10		16	7	10	1026.4060	0.0003	0.8375E-02
4	12	5	8		13	6	8	1019.8468	0.0000	0.6464E-02	4	15	6	10		15	7	8	1026.4943	0.0001	0.9285E-02
4	21	4	18		22	5	18	1020.1616	-0.0008	0.4515E-02	4	15	6	9		15	7	9	1026.4943	0.0002	0.9285E-02
6	23	2	22		24	5	19	1020.9421		0.1083E-02	6	21	2	20		22	5	17	1026.5315		0.1282E-02
4	28	3	26		29	4	26	1021.0847		0.2398E-03	4	14	6	9		14	7	7	1026.5807	0.0001	0.1007E-01
4	20	4	16		21	5	16	1021.9155	0.0003	0.4616E-02	4	14	6	8		14	7	8	1026.5807	0.0001	0.1007E-01
4	19	8	12		18	9	10	1022.1066		0.3951E-03	4	13	6	7		13	7	7	1026.6646	0.0000	0.1064E-01
4	19	8	11		18	9	9	1022.1066		0.3951E-03	4	13	6	8		13	7	6	1026.6646	0.0000	0.1064E-01
4	11	5	6		12	6	6	1022.3385	0.0003	0.7391E-02	4	21	8	14		20	9	12	1026.7308		0.3260E-03
4	11	5	7		12	6	7	1022.3387	0.0001	0.7390E-02	4	21	8	13		20	9	11	1026.7308		0.3260E-03
4	20	4	17		21	5	17	1022.8109	-0.0008	0.5747E-02	4	12	6	6		12	7	6	1026.7450	0.0000	0.1093E-01
6	22	2	21		23	5	18	1023.7434		0.1193E-02	4	12	6	7		12	7	5	1026.7450	0.0000	0.1093E-01
4	20	8	12		19	9	10	1024.4204		0.3633E-03	4	11	6	5		11	7	5	1026.8217	-0.0002	0.1082E-01
4	20	8	13		19	9	11	1024.4204		0.3633E-03	4	11	6	6		11	7	4	1026.8217	-0.0002	0.1082E-01
4	27	3	25		28	4	25	1024.4370		0.3354E-03	4	10	6	5		10	7	3	1026.8937	0.0000	0.1020E-01
4	20	0	20		21	3	18	1024.4836		0.3061E-03	4	10	6	4		10	7	4	1026.8937	0.0000	0.1020E-01
4	19	4	15		20	5	15	1024.7629	0.0000	0.6105E-02	4	9	6	3		9	7	3	1026.9609	-0.0001	0.8967E-02
4	10	5	5		11	6	5	1024.8304	0.0003	0.8350E-02	4	9	6	4		9	7	2	1026.9609	-0.0001	0.8967E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	8	6	2		8	7	2	1027.0227	-0.0001	0.6974E-02	4	25	8	10		24	9	18	1035.9434		0.1714E-03
4	8	6	3		8	7	1	1027.0227	-0.0001	0.6974E-02	4	25	8	17		24	9	15	1035.9434		0.1714E-03
4	7	6	2		7	7	0	1027.0787	-0.0003	0.4080E-02	6	24	2	22		25	5	21	1036.6615		0.8300E-04
4	7	6	1		7	7	1	1027.0787	-0.0003	0.4080E-02	4	27	2	28		28	3	28	1036.8364		0.9916E-03
4	9	5	4		10	6	4	1027.3206	0.0001	0.9328E-02	4	23	3	21		24	4	21	1036.9708	0.0003	0.1120E-02
4	9	5	5		10	6	5	1027.3207	0.0001	0.9328E-02	6	27	3	25		27	6	22	1036.9969		0.6022E-04
4	18	4	14		19	5	14	1027.5820	0.0000	0.7897E-02	6	23	1	23		24	4	20	1037.2057		0.2957E-03
4	28	3	24		27	4	24	1027.6952		0.4628E-03	4	5	5	1		6	6	1	1037.2421	0.0000	0.1331E-01
4	18	4	15		19	5	15	1028.0764	-0.0008	0.8988E-02	4	5	5	0		6	6	0	1037.2421	0.0000	0.1331E-01
4	29	2	28		30	3	28	1028.1382		0.4876E-03	6	28	3	24		26	6	21	1037.3563		0.7338E-04
4	11	7	5		10	8	3	1028.5555		0.1773E-03	6	17	2	16		18	5	13	1037.4391		0.1352E-02
4	11	7	4		10	8	2	1028.5555		0.1773E-03	6	23	2	21		24	5	20	1037.5464		0.1077E-03
4	22	8	14		21	9	12	1029.0378		0.2860E-03	6	25	3	23		25	6	20	1037.6689		0.8684E-04
4	22	8	15		21	9	13	1029.0378		0.2860E-03	4	29	0	29		30	1	29	1037.7213		0.3644E-03
6	20	2	19		21	5	16	1029.2993		0.1345E-02	4	25	3	22		26	4	22	1037.8584		0.6187E-03
4	29	3	26		30	4	26	1029.4972		0.1801E-03	4	15	7	8		14	8	6	1037.9199		0.3492E-03
4	19	0	19		20	3	17	1029.6804		0.3868E-03	4	15	7	9		14	8	7	1037.9199		0.3492E-03
4	8	5	3		9	6	3	1029.8080	0.0002	0.1031E-01	6	24	3	22		24	6	19	1037.9377		0.9974E-04
4	8	5	4		9	6	4	1029.8080	0.0002	0.1031E-01	6	23	3	21		23	6	18	1038.1659		0.1111E-03
4	17	4	13		18	5	13	1030.3187	-0.0002	0.1001E-01	4	26	8	19		25	9	17	1038.2410		0.1393E-03
4	17	4	14		18	5	14	1030.6949	-0.0008	0.1099E-01	4	26	8	18		25	9	16	1038.2411		0.1393E-03
4	25	3	23		26	4	23	1030.8858		0.6300E-03	6	22	3	20		22	6	17	1038.3566		0.1201E-03
4	12	7	6		11	8	4	1030.9039		0.2402E-03	4	14	4	10		15	5	10	1038.3802	-0.0003	0.1820E-01
4	12	7	5		11	8	3	1030.9039		0.2402E-03	6	22	2	20		23	5	19	1038.4718		0.1378E-03
4	23	8	15		22	9	13	1031.3422		0.2458E-03	4	14	4	11		15	5	11	1038.5006	-0.0001	0.1880E-01
4	23	8	16		22	9	14	1031.3422		0.2458E-03	6	21	3	19		21	6	16	1038.5139		0.1258E-03
4	28	3	25		29	4	25	1031.5483		0.2515E-03	6	20	3	18		20	6	15	1038.6418		0.1277E-03
6	19	2	18		20	5	15	1032.0418		0.1379E-02	6	19	3	17		19	6	14	1038.7444		0.1254E-03
6	24	1	24		25	4	21	1032.2646		0.8779E-04	6	18	3	16		18	6	13	1038.8258		0.1192E-03
4	7	5	2		8	6	2	1032.2913	-0.0002	0.1130E-01	6	17	3	15		17	6	12	1038.8899		0.1095E-03
4	7	5	3		8	6	3	1032.2913	-0.0002	0.1130E-01	6	16	3	14		16	6	11	1038.9402		0.9701E-04
4	28	2	27		29	3	27	1032.5526		0.7005E-03	6	15	3	13		15	6	10	1038.9801		0.8266E-04
4	16	4	12		17	5	12	1033.0381	-0.0004	0.1243E-01	6	14	3	12		14	6	9	1039.0122		0.6751E-04
4	13	7	7		12	8	5	1033.2472		0.2914E-03	6	13	3	11		13	6	8	1039.0389		0.5258E-04
4	13	7	6		12	8	4	1033.2472		0.2914E-03	4	17	0	17		18	3	15	1039.1650		0.5488E-03
4	16	4	13		17	5	13	1033.3052	-0.0005	0.1331E-01	6	13	3	10		13	6	7	1039.1788		0.5386E-04
4	27	3	24		28	4	24	1033.5970		0.3461E-03	6	14	3	11		14	6	8	1039.2238		0.7005E-04
4	24	8	17		23	9	15	1033.6439		0.2071E-03	6	15	3	12		15	6	9	1039.2946		0.8736E-04
4	24	8	16		23	9	14	1033.6439		0.2071E-03	6	16	3	13		16	6	10	1039.3944		0.1051E-03
4	24	3	22		25	4	22	1033.9556		0.8459E-03	6	21	2	19		22	5	18	1039.4524		0.1737E-03
4	18	0	18		19	3	18	1034.5504		0.4700E-03	6	17	3	14		17	6	11	1039.5293		0.1227E-03
6	18	2	17		19	5	14	1034.7552		0.1382E-02	4	28	1	28		29	2	28	1039.6558		0.1736E-03
4	6	5	2		7	6	2	1034.7697	0.0000	0.1229E-01	6	18	3	15		18	6	12	1039.7050		0.1396E-03
4	6	5	1		7	6	1	1034.7697	0.0000	0.1229E-01	4	22	3	20		23	4	20	1039.9182	-0.0002	0.1464E-02
4	29	1	29		30	2	29	1035.2872		0.1230E-03	6	19	3	18		19	6	13	1039.9271		0.1553E-03
4	14	7	8		13	8	8	1035.5858		0.3279E-03	6	16	2	15		17	5	12	1040.0928		0.1289E-02
4	14	7	7		13	8	5	1035.5858		0.3279E-03	6	20	3	17		20	6	14	1040.1998		0.1694E-03
4	26	3	23		27	4	23	1035.8851		0.4880E-03	4	24	3	21		25	4	21	1040.2054		0.7717E-03
4	15	4	11		16	5	11	1035.7241	-0.0004	0.1517E-01	4	16	7	9		15	8	7	1040.2500		0.3560E-03
6	25	2	23		26	5	22	1035.8010		0.6314E-04	4	16	7	10		15	8	8	1040.2500		0.3560E-03
4	15	4	12		16	5	12	1035.9072	-0.0004	0.1591E-01	6	20	2	18		21	5	17	1040.5018		0.2156E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	21	3	18		21	6	15	1040.5254		0.1817E-03	6	15	2	13		18	5	12	1047.1470		0.4588E-03
4	27	8	20		28	9	18	1040.5372		0.1114E-03	4	19	7	13		18	8	11	1047.2198		0.3096E-03
4	27	8	19		28	9	17	1040.5374		0.1114E-03	4	19	7	12		18	8	10	1047.2198		0.3096E-03
6	22	3	19		22	6	18	1040.9030		0.1918E-03	4	29	2	27		30	3	27	1047.2981		0.8490E-03
4	26	2	25		27	3	25	1040.9937		0.1383E-02	4	27	0	27		28	1	27	1047.3785		0.7150E-03
4	13	4	9		14	5	9	1041.0098	-0.0004	0.2148E-01	4	24	1	23		24	4	21	1047.4192		0.1050E-03
4	13	4	10		14	5	10	1041.0848	-0.0004	0.2193E-01	4	30	8	23		29	9	21	1047.4207		0.5171E-04
6	22	1	22		23	4	19	1041.2574		0.8240E-03	4	30	8	22		29	9	20	1047.4211		0.5171E-04
6	23	3	20		23	6	17	1041.3287		0.1992E-03	4	15	0	15		16	3	13	1047.8208		0.6584E-03
6	19	2	17		20	5	18	1041.8321		0.2629E-03	6	13	2	12		14	5	9	1047.8871		0.9394E-03
6	24	3	21		24	6	18	1041.7850		0.2031E-03	4	14	1	13		14	4	11	1048.0852		0.5920E-04
4	28	1	27		28	4	25	1041.8489		0.5129E-04	4	23	1	22		23	4	20	1048.2122		0.1158E-03
6	25	3	22		25	6	19	1042.2594		0.2023E-03	4	28	1	26		27	2	26	1048.3167		0.3339E-03
4	28	0	28		29	1	28	1042.5319		0.5134E-03	4	30	0	30		30	3	28	1048.3843		0.6891E-04
4	17	7	10		18	8	8	1042.5783		0.3500E-03	4	19	3	17		20	4	17	1048.4164	-0.0004	0.3012E-02
4	17	7	11		18	8	9	1042.5783		0.3500E-03	4	28	1	27		29	2	27	1048.4476		0.2481E-03
6	15	2	14		16	5	11	1042.7177		0.1197E-02	4	15	1	14		15	4	12	1048.5035		0.7335E-04
6	26	3	23		26	6	20	1042.7258		0.1958E-03	4	10	4	6		11	5	6	1048.7801	0.0000	0.3224E-01
4	21	3	19		22	4	19	1042.8041	-0.0002	0.1887E-02	4	10	4	7		11	5	7	1048.7725	-0.0003	0.3235E-01
4	28	8	21		27	9	19	1042.8322		0.8761E-04	4	9	6	4		8	7	2	1048.7914		0.7173E-03
4	28	8	20		27	9	18	1042.8324		0.8761E-04	4	9	6	3		8	7	1	1048.7914		0.7173E-03
6	18	2	18		19	5	15	1042.8540		0.3142E-03	4	22	1	21		22	4	19	1048.7920		0.1230E-03
4	29	1	28		30	2	28	1042.8940		0.1702E-03	6	14	2	12		15	5	11	1048.8019		0.4865E-03
4	23	3	20		24	4	20	1042.9297		0.8380E-03	4	16	1	15		16	4	13	1048.8669		0.8756E-04
6	27	3	24		27	6	21	1043.1576		0.1825E-03	4	24	2	23		25	3	23	1048.9432	0.0015	0.2573E-02
4	16	0	16		17	3	14	1043.5172		0.6140E-03	4	17	1	16		17	4	14	1049.1568		0.1009E-03
6	28	3	25		28	6	22	1043.5302		0.1630E-03	4	21	1	20		21	4	18	1049.1781		0.1265E-03
4	12	4	8		13	5	8	1043.8148	-0.0003	0.2498E-01	4	18	1	17		18	4	15	1049.3531		0.1123E-03
4	27	1	26		27	4	24	1043.8212		0.6441E-04	4	20	1	19		20	4	17	1049.3842		0.1257E-03
4	12	4	9		13	5	9	1043.8589	0.0000	0.2527E-01	4	19	1	18		19	4	16	1049.4360		0.1209E-03
6	29	3	26		29	6	23	1043.8267		0.1390E-03	4	20	7	14		19	8	12	1049.5374		0.2804E-03
4	27	1	27		28	2	27	1044.0002		0.2421E-03	4	20	7	13		19	8	11	1049.5375		0.2804E-03
4	30	5	26		30	6	24	1044.0389		0.1133E-03	4	19	3	16		20	4	18	1049.5797	0.0008	0.2856E-02
6	17	2	15		18	5	14	1044.1783		0.3688E-03	6	12	2	11		13	5	8	1050.4365		0.7889E-03
4	21	3	18		22	4	18	1044.3892	0.0027	0.1508E-02	6	13	2	11		14	5	10	1050.5899		0.4938E-03
4	18	7	12		17	8	10	1044.8994		0.3337E-03	6	21	1	21		22	4	18	1050.6527		0.3924E-03
4	18	7	11		17	8	9	1044.8994		0.3337E-03	4	28	2	28		29	3	26	1050.9150		0.9232E-03
4	25	2	24		26	3	24	1045.0280	-0.0062R	0.1900E-02	4	20	5	15		20	6	15	1051.0800		0.2439E-02
4	29	8	22		28	9	20	1045.1288		0.6783E-04	4	19	5	14		19	6	14	1051.0841	-0.0002	0.2948E-02
4	29	8	21		28	9	19	1045.1270		0.6783E-04	4	21	5	16		21	6	16	1051.0906		0.1984E-02
4	26	1	25		26	4	23	1045.1354		0.7834E-04	4	18	5	13		18	6	13	1051.1021	0.0010	0.3504E-02
6	14	2	13		15	5	10	1045.3149		0.1078E-02	4	22	5	17		22	6	17	1051.1185	0.0008	0.1588E-02
6	16	2	14		17	5	13	1045.6058		0.4188E-03	4	17	5	12		17	6	12	1051.1320	0.0016	0.4090E-02
4	20	3	18		21	4	18	1045.6348	-0.0005	0.2400E-02	4	18	5	14		18	6	12	1051.1387	-0.0033	0.3484E-02
4	11	4	7		12	5	7	1048.1974	-0.0002	0.2857E-01	4	19	5	15		19	6	13	1051.1444	0.0013	0.2919E-02
4	11	4	8		12	5	8	1048.2218	-0.0002	0.2877E-01	4	10	6	4		9	7	2	1051.1497	-0.0039	0.1172E-02
4	25	1	24		25	4	22	1048.3979		0.9222E-04	4	10	6	5		9	7	3	1051.1497	-0.0039	0.1172E-02
4	22	3	19		23	4	19	1048.3988		0.6533E-03	4	17	5	13		17	6	11	1051.1512	0.0017	0.4077E-02
4	8	6	3		7	7	1	1048.4279		0.2928E-03	4	18	3	16		19	4	16	1051.1545	-0.0016	0.3729E-02
4	8	6	2		7	7	0	1048.4279		0.2928E-03	4	23	5	18		23	6	18	1051.1584		0.1252E-02
4	20	3	17		21	4	17	1047.0614	0.0015	0.2189E-02	4	16	5	11		16	6	11	1051.1721	0.0002	0.4686E-02

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	20	5	18		20	8	14	1051.1814		0.2397E-02
4	18	5	12		18	8	10	1051.1828	0.0000	0.4878E-02
4	24	5	19		24	8	19	1051.2158		0.9719E-03
4	15	5	10		15	8	10	1051.2208	0.0012	0.5284E-02
4	15	5	11		15	8	9	1051.2283	-0.0042R	0.5259E-02
4	21	5	17		21	8	15	1051.2572	0.0007	0.1928E-02
4	14	5	9		14	8	9	1051.2782	0.0017	0.5791E-02
4	14	5	10		14	8	8	1051.2789	-0.0010	0.5788E-02
4	25	5	20		25	8	20	1051.2878		0.7438E-03
4	9	4	5		10	5	5	1051.3043	0.0046	0.3588E-01
4	9	4	8		10	5	8	1051.3101	-0.0011	0.3594E-01
4	13	5	8		13	8	8	1051.3363	0.0010	0.6227E-02
4	13	5	9		13	8	7	1051.3376	-0.0003	0.8225E-02
4	26	5	21		26	8	21	1051.3729		0.5615E-03
4	22	5	18		22	8	18	1051.3842	0.0015	0.1517E-02
4	12	5	7		12	8	7	1051.3994	0.0005	0.8525E-02
4	12	5	8		12	8	8	1051.4000	-0.0001	0.8525E-02
4	11	5	8		11	8	8	1051.4639	0.0004	0.8638E-02
4	11	5	7		11	8	5	1051.4841	0.0002	0.8638E-02
4	27	5	22		27	8	22	1051.4888		0.4183E-03
4	14	8	14		15	3	12	1051.4899		0.8690E-03
4	10	5	5		10	8	5	1051.5282	0.0001	0.6512E-02
4	10	5	6		10	8	4	1051.5283	0.0000	0.6512E-02
4	28	5	23		28	8	23	1051.5732		0.3077E-03
4	23	5	19		23	8	17	1051.5788		0.1184E-02
4	9	5	5		9	8	3	1051.5909	0.0000	0.8089E-02
4	9	5	4		9	8	4	1051.5909	0.0001	0.8089E-02
4	8	5	4		8	8	2	1051.6510	0.0001	0.5310E-02
4	8	5	3		8	8	3	1051.6510	0.0001	0.5310E-02
4	29	5	24		29	8	24	1051.6836		0.2237E-03
4	7	5	2		7	8	2	1051.7070	-0.0001	0.4103E-02
4	7	5	3		7	8	1	1051.7070	-0.0001	0.4103E-02
4	6	5	1		6	8	1	1051.7582	0.0002	0.2379E-02
4	6	5	2		6	8	0	1051.7582	0.0002	0.2379E-02
4	30	5	25		30	8	25	1051.7971		0.1807E-03
4	21	7	15		20	8	13	1051.8531		0.2483E-03
4	21	7	14		20	8	12	1051.8534		0.2483E-03
4	24	5	20		24	8	18	1051.8810		0.8688E-03
4	29	8	29		29	3	27	1051.9449		0.9799E-04
4	18	3	15		19	4	15	1052.0555	0.0002	0.3818E-02
4	25	5	21		25	8	19	1052.2570	0.0017	0.8284E-03
4	28	8	28		27	1	28	1052.2595	-0.0009	0.9847E-03
6	12	2	10		13	5	9	1052.4475		0.4763E-03
4	25	1	25		28	2	25	1052.6008		0.4550E-03
4	23	2	22		24	3	22	1052.7432	0.0004	0.3434E-02
4	28	5	22		26	8	20	1052.7948		0.4392E-03
6	11	2	10		12	5	7	1052.9855		0.8348E-03
4	27	5	23		27	8	21	1053.5018		0.2981E-03
4	11	8	8		10	7	4	1053.5028	-0.0004	0.1594E-02
4	11	8	5		10	7	3	1053.5028	-0.0004	0.1594E-02
4	27	1	28		28	2	28	1053.8301		0.3572E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	8	4	4		9	5	4	1053.8319	0.0013	0.3942E-01
4	8	4	5		9	5	5	1053.8342	-0.0010	0.3945E-01
4	17	3	15		18	4	15	1053.8547	-0.0004	0.4554E-02
4	22	7	18		21	8	14	1054.1678		0.2155E-03
4	22	7	15		21	8	13	1054.1680		0.2155E-03
4	27	2	25		28	3	25	1054.3091	-0.0009	0.1291E-02
4	28	5	24		28	6	22	1054.4009		0.1929E-03
6	11	2	9		12	5	8	1054.4288		0.4331E-03
4	17	3	14		18	4	14	1054.5276	0.0002	0.4470E-02
4	13	8	13		14	3	11	1055.1412		0.6480E-03
6	20	1	20		21	4	17	1055.2375		0.2452E-03
4	28	8	28		28	3	28	1055.3959		0.1372E-03
6	10	2	9		11	5	8	1055.4787		0.4861E-03
4	29	5	25		29	6	23	1055.5032		0.1220E-03
4	12	6	7		11	7	5	1055.8514	0.0005	0.1943E-02
4	12	6	8		11	7	4	1055.8514	0.0005	0.1943E-02
4	7	4	3		8	5	3	1058.3444	0.0007	0.4282E-01
4	7	4	4		8	5	4	1058.3451	-0.0001	0.4283E-01
4	22	2	21		23	3	21	1058.4315	0.0008	0.4518E-02
4	23	7	17		22	8	15	1058.4811		0.1834E-03
4	23	7	18		22	8	14	1058.4818		0.1834E-03
6	10	2	8		11	5	7	1058.5050		0.3880E-03
4	18	3	14		17	4	14	1058.5215	-0.0001	0.5487E-02
6	30	3	27		30	6	24	1058.8074		0.7545E-04
4	24	1	24		25	2	24	1058.8483		0.6128E-03
4	16	3	13		17	4	13	1057.0085	0.0001	0.5424E-02
4	25	8	25		26	1	25	1057.1709	-0.0004	0.1341E-02
4	28	2	24		27	3	24	1057.4910	-0.0008	0.1775E-02
6	9	2	8		10	5	5	1057.9725		0.3508E-03
4	13	6	7		12	7	5	1058.1980	0.0003	0.2201E-02
4	13	6	8		12	7	6	1058.1980	0.0003	0.2201E-02
4	12	8	12		13	3	10	1058.5917		0.5949E-03
6	9	2	7		10	5	6	1058.6881		0.2891E-03
4	27	8	27		27	3	25	1058.7297		0.1891E-03
4	24	7	18		23	8	18	1058.7941		0.1532E-03
4	24	7	17		23	8	15	1058.7950		0.1532E-03
4	6	4	2		7	5	2	1058.8429	0.0001	0.4608E-01
4	6	4	3		7	5	3	1058.8431	-0.0001	0.4608E-01
4	28	1	25		27	2	25	1059.0295		0.5072E-03
4	15	3	13		16	4	13	1059.1595	-0.0002	0.8524E-02
4	15	3	12		16	4	12	1059.5018	0.0000	0.6477E-02
6	19	1	19		20	4	16	1059.8514		0.1702E-03
4	21	2	20		22	3	20	1080.0121	0.0001	0.5858E-02
6	8	2	7		9	5	4	1080.4551		0.2353E-03
4	25	2	23		26	3	23	1080.4749	-0.0011	0.2400E-02
4	14	8	8		13	7	8	1080.5374	0.0002	0.2359E-02
4	14	8	9		13	7	7	1080.5374	0.0002	0.2359E-02
6	8	2	6		9	5	5	1080.9005		0.2071E-03
4	23	1	23		24	2	23	1081.0548		0.8155E-03
4	25	7	19		24	8	17	1081.1071		0.1258E-03
4	25	7	18		24	8	16	1081.1088		0.1258E-03

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	5	4	1		6	5	1	1061.3289	0.0001	0.4918E-01
4	5	4	2		6	5	2	1061.3290	0.0000	0.4918E-01
4	14	3	12		15	4	12	1061.7727	-0.0001	0.7652E-02
4	11	0	11		12	3	9	1061.8699		0.5157E-03
4	26	0	26		26	3	24	1061.9388		0.2562E-03
4	14	3	11		15	4	11	1062.0055	0.0001	0.7617E-02
4	24	0	24		25	1	24	1062.1084	-0.0001	0.1808E-02
4	15	6	9		14	7	7	1062.8759	0.0003	0.2423E-02
4	15	6	10		14	7	8	1062.8759	0.0003	0.2423E-02
6	7	2	8		8	5	3	1062.9268		0.1434E-03
6	7	2	5		8	5	4	1063.1956		0.1326E-03
4	24	2	22		25	3	22	1063.2769	-0.0011	0.3191E-02
4	26	7	20		25	8	18	1063.4205		0.1015E-03
4	26	7	19		25	8	17	1063.4233		0.1016E-03
4	20	2	19		21	3	19	1063.4889	0.0002	0.7487E-02
4	4	4	1		5	5	1	1063.8033	-0.0002	0.5239E-01
4	4	4	0		5	5	0	1063.8033	-0.0002	0.5239E-01
4	25	1	24		26	2	24	1064.0355		0.7105E-03
6	30	2	29		30	5	26	1064.1953		0.1285E-03
4	13	3	11		14	4	11	1064.3843	-0.0001	0.8854E-02
6	18	1	18		19	4	15	1064.3844		0.1272E-03
4	13	3	10		14	4	10	1064.5178	-0.0001	0.8830E-02
4	10	0	10		11	3	8	1064.9655		0.4204E-03
4	25	0	25		25	3	23	1065.0159		0.3408E-03
4	16	6	11		15	7	9	1065.2124	0.0004	0.2401E-02
4	16	6	10		15	7	8	1065.2124	0.0004	0.2401E-02
4	22	1	22		23	2	22	1065.2152		0.1072E-02
6	6	2	5		7	5	2	1065.3688		0.7650E-04
6	6	2	4		7	5	3	1065.5388		0.7318E-04
6	29	2	28		29	5	25	1065.6182		0.2340E-03
4	27	7	21		26	8	19	1065.7348		0.8062E-04
4	27	7	20		26	8	18	1065.7395		0.8071E-04
4	23	2	21		24	3	21	1065.9139	-0.0003	0.4175E-02
4	19	2	18		20	3	18	1066.8660	0.0002	0.9430E-02
6	28	2	27		28	5	24	1066.8951		0.4088E-03
4	12	3	10		13	4	10	1066.9374	0.0001	0.1011E-01
4	12	3	9		13	4	9	1067.0345	0.0000	0.1009E-01
4	23	0	23		24	1	23	1067.0573	0.0004	0.2411E-02
4	17	0	11		16	7	9	1067.5476	0.0001	0.2308E-02
4	17	0	12		16	7	10	1067.5477	0.0000	0.2308E-02
4	9	0	9		10	3	7	1067.9285		0.3207E-03
4	24	0	24		24	3	22	1067.9539		0.4447E-03
6	27	2	26		27	5	23	1068.0326		0.6855E-03
4	28	7	22		27	8	20	1068.0490		0.6296E-04
4	28	7	21		27	8	19	1068.0579		0.6311E-04
4	22	2	20		23	3	20	1068.4060	-0.0005	0.5377E-02
4	7	5	2		6	6	0	1068.6956		0.1969E-03
4	7	5	3		6	6	1	1068.6956		0.1969E-03
6	17	1	17		18	4	14	1068.7977		0.9926E-04
4	24	1	23		25	2	23	1068.8402		0.9809E-03
6	26	2	25		26	5	22	1069.0389		0.1104E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	21	1	21		22	2	21	1069.3257	-0.0004	0.1393E-02
4	11	3	9		12	4	9	1069.4943	-0.0003	0.1139E-01
4	11	3	8		12	4	8	1069.5632	0.0001	0.1138E-01
4	18	6	12		17	7	10	1069.8823	0.0005	0.2160E-02
4	18	6	13		17	7	11	1069.8824	0.0003	0.2160E-02
6	25	2	24		25	5	21	1069.9248		0.1708E-02
4	18	2	17		19	3	17	1070.1479	-0.0001	0.1171E-01
4	30	4	27		30	5	25	1070.6132		0.7562E-03
6	24	2	23		24	5	20	1070.7021		0.2544E-02
4	23	0	23		23	3	21	1070.7455		0.5684E-03
4	8	0	8		9	3	6	1070.7697		0.2272E-02
4	21	2	19		22	3	19	1070.7736	-0.0005	0.6820E-02
4	8	5	3		7	6	1	1071.0668		0.4805E-03
4	8	5	4		7	6	2	1071.0668		0.4805E-03
4	29	4	26		29	5	24	1071.1108		0.1056E-02
4	23	4	19		23	5	19	1071.3835	0.0023	0.3651E-02
4	28	4	25		28	5	23	1071.5518		0.1453E-02
4	27	4	24		27	5	22	1071.9446	-0.0010	0.1790E-02
4	22	4	18		22	5	18	1071.9813	0.0012	0.5063E-02
4	22	0	22		23	1	22	1072.0114	0.0003	0.3182E-02
4	10	3	8		11	4	8	1072.0369	0.0001	0.1266E-01
4	10	3	7		11	4	7	1072.0709	-0.0002	0.1265E-01
4	19	6	13		18	7	11	1072.2174	0.0012	0.1973E-02
4	19	6	14		18	7	12	1072.2177	0.0009	0.1973E-02
4	26	4	23		26	5	21	1072.2965	-0.0018	0.2633E-02
4	21	4	17		21	5	17	1072.5067	0.0007	0.6802E-02
4	25	4	22		25	5	20	1072.6141	-0.0010	0.3469E-02
4	24	4	21		24	5	19	1072.9030	-0.0010	0.4505E-02
4	20	4	18		20	5	16	1072.9696	0.0001	0.8872E-02
4	20	2	18		21	3	18	1073.0392	-0.0002	0.8526E-02
6	16	1	16		17	4	13	1073.0779		0.7904E-04
4	23	4	20		23	5	18	1073.1678	-0.0012	0.5766E-02
4	17	2	16		18	3	16	1073.3391	-0.0001	0.1432E-01
4	19	4	15		19	5	15	1073.3785	0.0006	0.1126E-01
4	20	1	20		21	2	20	1073.3816		0.1786E-02
4	22	0	22		22	3	20	1073.3843		0.7102E-03
4	22	4	19		22	5	17	1073.4127	-0.0010	0.7271E-02
4	9	5	4		8	6	2	1073.4340		0.7849E-03
4	9	5	5		8	6	3	1073.4341		0.7849E-03
4	23	1	22		24	2	22	1073.4384		0.1334E-02
4	7	0	7		8	3	5	1073.5087		0.1480E-03
4	21	4	18		21	5	16	1073.6410	-0.0009	0.9036E-02
4	18	4	14		18	5	14	1073.7405	-0.0001	0.1393E-01
4	20	4	17		20	5	15	1073.8555	-0.0004	0.1106E-01
4	19	4	16		19	5	14	1074.0583	0.0015	0.1333E-01
4	17	4	13		17	5	13	1074.0615	-0.0018	0.1682E-01
4	18	4	15		18	5	13	1074.2513	-0.0005	0.1583E-01
4	16	4	12		16	5	12	1074.3461	-0.0002	0.1984E-01
4	17	4	14		17	5	12	1074.4357	-0.0004	0.1849E-01
4	20	6	14		19	7	12	1074.5538	0.0009	0.1763E-02
4	20	6	15		19	7	13	1074.5544	0.0003	0.1763E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	9	3	7		10	4	7	1074.5688	-0.0001	0.1388E-01
4	9	3	8		10	4	8	1074.5852	-0.0003	0.1388E-01
4	15	4	11		15	5	11	1074.5983	-0.0003	0.2287E-01
4	16	4	13		16	5	11	1074.6121	-0.0003	0.2124E-01
4	15	4	12		15	5	10	1074.7808	-0.0002	0.2399E-01
4	14	4	10		14	5	10	1074.8216	-0.0005	0.2578E-01
4	14	4	11		14	5	9	1074.9416	-0.0004	0.2680E-01
4	13	4	9		13	5	9	1075.0188	-0.0001	0.2833E-01
4	13	4	10		13	5	8	1075.0935	-0.0003	0.2892E-01
4	12	4	8		12	5	8	1075.1918	-0.0001	0.3039E-01
4	19	2	17		20	3	17	1075.2257	-0.0004	0.1051E-01
4	12	4	9		12	5	7	1075.2360	-0.0002	0.3077E-01
4	11	4	7		11	5	7	1075.3434	0.0000	0.3171E-01
4	11	4	8		11	5	8	1075.3678	-0.0001	0.3194E-01
4	10	4	6		10	5	6	1075.4753	0.0000	0.3208E-01
4	10	4	7		10	5	5	1075.4878	-0.0003	0.3220E-01
4	28	1	28		28	2	28	1075.5123		0.6612E-04
4	9	4	5		9	5	5	1075.5898	0.0013	0.3127E-01
4	9	4	6		9	5	4	1075.5953	-0.0014	0.3132E-01
4	8	4	4		8	5	4	1075.6875	0.0014	0.2905E-01
4	8	4	5		8	5	3	1075.6898	-0.0009	0.2907E-01
4	7	4	3		7	5	3	1075.7705	0.0003	0.2517E-01
4	7	4	4		7	5	2	1075.7712	-0.0005	0.2518E-01
4	10	5	5		9	6	3	1075.7988	0.0003	0.1089E-02
4	10	5	6		9	6	4	1075.7987	0.0002	0.1089E-02
4	6	4	2		6	5	2	1075.8401	0.0001	0.1938E-01
4	6	4	3		6	5	1	1075.8403	-0.0001	0.1938E-01
4	21	0	21		21	3	19	1075.8640		0.8681E-03
4	5	4	1		5	5	1	1075.8975	0.0001	0.1121E-01
4	5	4	2		5	5	0	1075.8975	0.0000	0.1121E-01
4	6	0	6		7	3	4	1076.1647		0.8725E-04
4	16	2	15		17	3	15	1076.4448	-0.0002	0.1726E-01
4	21	6	15		20	7	13	1076.6925		0.1544E-02
4	21	6	16		20	7	14	1076.6936		0.1543E-02
4	21	0	21		22	1	21	1076.9550	0.0002	0.4160E-02
4	8	3	6		9	4	6	1077.0850	0.0000	0.1504E-01
4	8	3	5		9	4	5	1077.0942	-0.0001	0.1503E-01
6	15	1	15		16	4	12	1077.2218		0.6329E-04
4	18	2	16		19	3	16	1077.3681	-0.0001	0.1279E-01
4	19	1	19		20	2	19	1077.3787		0.2262E-02
4	30	4	26		30	5	26	1077.6271		0.6681E-03
4	29	4	25		29	5	25	1077.6841		0.8748E-03
4	28	4	24		28	5	24	1077.8268		0.1113E-02
4	22	1	21		23	2	21	1077.8279		0.1786E-02
4	27	4	23		27	5	23	1078.0415		0.1375E-02
4	11	5	6		10	6	4	1078.1617	-0.0011	0.1307E-02
4	11	5	7		10	6	5	1078.1620	-0.0013	0.1307E-02
4	20	0	20		20	3	18	1078.1790		0.1029E-02
4	26	4	22		26	5	22	1078.3138		0.1847E-02
4	25	4	21		25	5	21	1078.6285		0.1912E-02
4	24	4	20		24	5	20	1078.9705		0.2152E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	22	6	16		21	7	14	1079.2344	0.0024	0.1325E-02
4	22	6	17		21	7	15	1079.2363	0.0005	0.1325E-02
6	23	2	22		23	5	19	1079.3254		0.2353E-02
4	17	2	15		18	3	15	1079.4531	-0.0002	0.1636E-01
4	15	2	14		16	3	14	1079.4694	-0.0003	0.2050E-01
4	7	3	5		8	4	5	1079.5923	0.0018	0.1609E-01
4	7	3	4		8	4	4	1079.5968	-0.0024	0.1608E-01
6	22	2	21		22	5	18	1079.6808	-0.0008	0.2502E-02
6	21	2	20		21	5	17	1080.0261	0.0003	0.2591E-02
4	19	0	19		19	3	17	1080.3237		0.1187E-02
6	20	2	19		20	5	18	1080.3534		0.2613E-02
4	27	1	27		27	2	25	1080.4834		0.9812E-04
4	12	5	7		11	6	5	1080.5249		0.1486E-02
4	12	5	8		11	6	6	1080.5254		0.1485E-02
6	19	2	18		19	5	15	1080.6571	-0.0005	0.2570E-02
6	18	2	17		18	5	14	1080.9338	0.0004	0.2461E-02
6	17	2	16		17	5	13	1081.1818		0.2293E-02
6	14	1	14		15	4	11	1081.2292		0.5041E-04
4	18	1	18		19	2	18	1081.3127	-0.0004	0.2826E-02
6	16	2	15		16	5	12	1081.4008		0.2075E-02
4	16	2	14		17	3	14	1081.5375	-0.0005	0.1823E-01
4	23	6	17		22	7	15	1081.5807		0.1117E-02
4	23	6	18		22	7	16	1081.5840		0.1117E-02
6	15	2	14		15	5	11	1081.5918		0.1818E-02
6	14	2	13		14	5	10	1081.7561		0.1537E-02
4	20	0	20		21	1	20	1081.8712	-0.0001	0.5385E-02
6	13	2	12		13	5	9	1081.8960		0.1247E-02
4	21	1	20		22	2	20	1082.0093	0.0007	0.2352E-02
6	12	2	11		12	5	8	1082.0135		0.9663E-03
4	6	3	4		7	4	4	1082.0894	0.0008	0.1701E-01
4	6	3	3		7	4	3	1082.0909	-0.0009	0.1701E-01
6	11	2	10		11	5	7	1082.1115		0.7086E-03
6	10	2	9		10	5	6	1082.1921		0.4863E-03
6	9	2	8		9	5	5	1082.2578		0.3072E-03
4	18	0	18		18	3	16	1082.2942		0.1327E-02
6	8	2	7		8	5	4	1082.3107		0.1741E-03
6	7	2	6		7	5	3	1082.3528		0.8464E-04
4	14	2	13		15	3	13	1082.4188	-0.0003	0.2399E-01
6	7	2	5		7	5	2	1082.6217		0.7827E-04
6	8	2	6		8	5	3	1082.7580		0.1533E-03
4	13	5	8		12	6	6	1082.8894		0.1800E-02
4	13	5	9		12	6	7	1082.8907		0.1599E-02
6	9	2	7		9	5	4	1082.9514		0.2533E-03
6	10	2	8		10	5	5	1083.2203		0.3684E-03
4	30	2	29		30	3	27	1083.2732		0.3501E-03
6	18	3	15		17	6	12	1083.3990		0.5384E-04
6	11	2	9		11	5	6	1083.5746		0.4840E-03
4	15	2	13		16	3	13	1083.6282	-0.0004	0.2136E-01
4	24	6	18		23	7	16	1083.9325		0.9257E-03
4	24	6	19		23	7	17	1083.9380		0.9253E-03
6	12	2	10		12	5	7	1084.0247		0.5845E-03

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	17	0	17		17	3	15	1084.0873		0.1433E-02	4	6	4	3		5	5	1	1090.4087		0.1090E-02
4	5	3	3		6	4	3	1084.5763	0.0001	0.1782E-01	4	11	2	10		12	3	10	1090.8708	0.0000	0.3512E-01
4	5	3	2		6	4	2	1084.5768	-0.0005	0.1782E-01	6	25	1	25		25	4	22	1091.0111		0.5898E-04
6	13	2	11		13	5	8	1084.5788		0.8574E-03	4	27	6	21		26	7	19	1091.0330		0.4783E-03
6	19	3	17		18	6	12	1084.8672		0.5143E-04	4	27	6	22		26	7	20	1091.0555		0.4755E-03
4	17	1	17		18	2	17	1085.1804	-0.0008	0.3486E-02	4	11	0	11		11	3	9	1091.1666		0.8882E-03
6	14	2	12		14	5	9	1085.2428		0.6962E-03	4	27	3	25		27	4	23	1091.4865		0.7717E-03
4	14	5	9		13	6	7	1085.2572		0.1650E-02	6	21	3	18		20	6	15	1091.5063		0.8353E-04
4	14	5	10		13	6	8	1085.2599		0.1649E-02	6	20	2	18		20	5	15	1091.5484		0.4257E-03
4	13	2	12		14	3	12	1085.2983	-0.0002	0.2765E-01	4	18	0	18		19	1	18	1091.5488	0.0002	0.8784E-02
4	26	1	26		26	2	24	1085.3337		0.1447E-03	4	28	2	27		28	3	25	1091.5697		0.8538E-03
4	16	0	16		16	3	14	1085.7010		0.1489E-02	6	22	3	20		21	6	15	1091.7666		0.5802E-04
4	14	2	12		15	3	12	1085.7408	0.0000	0.2472E-01	4	10	0	10		10	3	8	1091.7915		0.6715E-03
4	20	1	19		21	2	19	1085.9858		0.3044E-02	4	9	0	9		9	3	7	1092.2898		0.4712E-03
6	15	2	13		15	5	10	1086.0206		0.7006E-03	4	11	2	9		12	3	9	1092.3143	0.0002	0.3549E-01
6	19	3	16		18	6	13	1086.0499		0.6374E-04	4	17	5	12		16	8	10	1092.3975		0.1490E-02
4	25	6	19		24	7	17	1086.2910		0.7539E-03	4	17	5	13		16	8	11	1092.4169		0.1485E-02
4	25	6	20		24	7	18	1086.3000		0.7534E-03	4	26	3	24		26	4	22	1092.5973		0.1059E-02
4	19	0	19		20	1	19	1086.7421	-0.0001	0.6903E-02	4	8	0	8		8	3	6	1092.6789		0.3034E-03
4	16	2	14		16	5	11	1086.9127		0.6753E-03	4	15	1	15		16	2	15	1092.7024	-0.0002	0.5085E-02
4	30	3	28		30	4	26	1087.0424		0.2673E-03	4	7	4	3		6	5	1	1092.7677	0.0011	0.2635E-02
4	4	3	2		5	4	2	1087.0533	-0.0001	0.1856E-01	4	7	4	4		6	5	2	1092.7686	0.0003	0.2636E-02
4	4	3	1		5	4	1	1087.0536	-0.0002	0.1856E-01	6	21	2	19		21	5	16	1092.9319		0.3580E-03
4	15	0	15		15	3	13	1087.1357		0.1485E-02	4	7	0	7		7	3	5	1092.9703		0.1764E-03
6	20	3	18		19	6	13	1087.1935		0.5546E-04	4	18	1	17		17	4	13	1093.1254		0.5406E-04
4	29	2	28		29	3	26	1087.5822		0.5518E-03	4	8	0	8		8	3	4	1093.1882		0.9007E-04
4	15	5	10		14	6	8	1087.6299		0.1843E-02	4	18	1	17		19	2	17	1093.3474	0.0001	0.4828E-02
4	15	5	11		14	6	9	1087.6353		0.1841E-02	4	28	6	22		27	7	20	1093.4187		0.3698E-03
4	13	2	11		14	3	11	1087.8879	0.0000	0.2826E-01	4	28	6	23		27	7	21	1093.4539		0.3688E-03
6	17	2	15		17	5	12	1087.9170		0.6276E-03	4	25	3	23		25	4	21	1093.5559		0.1426E-02
4	12	2	11		13	3	11	1088.1136	0.0000	0.3140E-01	4	10	2	9		11	3	9	1093.5747	0.0001	0.3870E-01
4	14	0	14		14	3	12	1088.3936		0.1414E-02	6	24	1	24		24	4	21	1093.8221		0.1945E-03
4	26	6	20		25	7	18	1088.6573		0.6041E-03	6	23	3	21		22	6	16	1094.0052		0.5640E-04
4	26	6	21		25	7	19	1088.6718		0.6034E-03	6	22	3	19		21	6	16	1094.3134		0.9290E-04
4	29	3	27		29	4	25	1088.7296		0.3880E-03	4	24	3	22		24	4	20	1094.3802		0.1888E-02
6	20	3	17		19	6	14	1088.7515		0.7371E-04	6	22	2	20		22	5	17	1094.3857		0.2957E-03
4	18	1	16		17	2	16	1088.9779	0.0002	0.4240E-02	4	10	2	8		11	3	8	1094.5988	0.0000	0.3897E-01
4	18	2	16		18	5	13	1089.0291		0.5855E-03	4	24	1	24		24	2	22	1094.5990		0.3082E-03
4	13	0	13		13	3	11	1089.4791		0.1281E-02	4	18	5	13		17	6	11	1094.7960		0.1366E-02
6	21	3	19		20	6	14	1089.4948		0.5771E-04	4	18	5	14		17	6	12	1094.8308		0.1358E-02
4	3	3	0		4	4	0	1089.5208	-0.0004	0.1935E-01	4	23	3	21		23	4	19	1095.0874	0.0001	0.2457E-02
4	3	3	1		4	4	1	1089.5208	-0.0004	0.1935E-01	4	8	4	4		7	5	2	1095.1136	0.0014	0.4283E-02
4	19	1	18		20	2	18	1089.7629	0.0000	0.3889E-02	4	8	4	5		7	5	3	1095.1158	-0.0009	0.4286E-02
4	18	5	11		15	6	9	1090.0093		0.1586E-02	4	27	2	26		27	3	24	1095.2373		0.1296E-02
4	18	5	12		15	6	10	1090.0198		0.1583E-02	4	19	1	18		18	4	14	1095.6320		0.6072E-04
4	25	1	25		25	2	23	1090.0447		0.2119E-03	4	22	3	20		22	4	18	1095.6925	0.0002	0.3145E-02
4	12	2	10		13	3	10	1090.0775	0.0000	0.3188E-01	4	29	6	23		28	7	21	1095.8160		0.2827E-03
4	28	3	26		28	4	24	1090.2040		0.5524E-03	4	29	6	24		28	7	22	1095.8698		0.2816E-03
6	19	2	17		19	5	14	1090.2419		0.4983E-03	6	23	2	21		23	5	18	1095.8937		0.2402E-03
4	12	0	12		12	3	10	1090.4000		0.1099E-02	6	23	1	23		23	4	20	1096.1471		0.6516E-03
4	6	4	2		5	5	0	1090.4084		0.1090E-02	6	24	3	22		23	6	17	1096.2069		0.5306E-04

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	21	3	19		21	4	17	1098.2095	-0.0003	0.3958E-02	4	6	3	4		6	4	2	1099.0955	0.0009	0.1170E-01
4	9	2	8		10	3	8	1098.2317	0.0001	0.4200E-01	4	6	3	3		6	4	3	1099.0970	-0.0008	0.1170E-01
4	17	0	17		10	1	17	1098.2723	0.0000	0.1101E-01	4	5	3	3		5	4	1	1099.1516	0.0002	0.8945E-02
4	14	1	14		15	2	14	1098.3513	-0.0001	0.6010E-02	4	5	3	2		5	4	2	1099.1522	-0.0004	0.8945E-02
4	20	3	18		20	4	18	1098.6510	0.0000	0.4899E-02	4	4	3	2		4	4	0	1099.1986	0.0001	0.5184E-02
4	17	1	16		18	2	16	1098.7473	0.0001	0.5911E-02	4	4	3	1		4	4	1	1099.1987	0.0000	0.5184E-02
4	9	2	7		10	3	7	1098.9283	0.0002	0.4219E-01	4	8	2	6		9	3	6	1099.2979	-0.0001	0.4502E-01
4	19	3	17		19	4	15	1097.0280	-0.0001	0.5984E-02	4	20	5	15		19	6	13	1099.6315		0.1073E-02
6	23	3	20		22	6	17	1097.1667		0.1014E-03	4	20	5	16		19	6	14	1099.7332		0.1055E-02
4	19	5	14		18	6	12	1097.2069		0.1223E-02	4	10	4	6		9	5	4	1099.7607	-0.0001	0.7129E-02
4	19	5	15		18	6	13	1097.2672		0.1211E-02	4	10	4	7		9	5	5	1099.7729	-0.0001	0.7129E-02
4	18	3	16		18	4	14	1097.3503	-0.0003	0.7142E-02	4	13	1	13		14	2	13	1099.9225	0.0001	0.6997E-02
6	24	2	22		24	5	19	1097.4406		0.1922E-03	4	16	1	15		17	2	15	1099.9718	0.0002	0.7097E-02
4	9	4	5		8	5	3	1097.4451	0.0018	0.5816E-02	6	24	3	21		23	6	18	1100.0551		0.1085E-03
4	9	4	6		8	5	4	1097.4508	-0.0038	0.5826E-02	6	29	6	24		30	7	23	1100.1437		0.5074E-04
6	24	8	18		25	9	17	1097.5223		0.5882E-04	4	21	1	20		20	4	16	1100.1924		0.8855E-04
6	24	8	17		25	9	16	1097.5223		0.5882E-04	6	23	8	16		24	9	15	1100.2473		0.7725E-04
6	22	1	22		22	4	19	1097.6232		0.1785E-02	6	23	8	15		24	9	16	1100.2473		0.7725E-04
4	17	3	15		17	4	13	1097.8270	0.0004	0.8410E-02	6	26	2	24		26	5	21	1100.5812		0.1178E-03
4	16	3	14		16	4	12	1097.8647	-0.0003	0.9733E-02	4	16	0	16		17	1	16	1100.8944	-0.0001	0.1369E-01
4	20	1	19		19	4	15	1097.9958		0.6572E-04	6	17	10	8		18	11	7	1101.1300		0.5364E-04
4	15	3	13		15	4	11	1098.0706	0.0002	0.1107E-01	6	17	10	7		18	11	8	1101.1300		0.5364E-04
4	21	3	18		21	4	18	1098.2115	0.0028	0.3187E-02	4	7	2	6		8	3	6	1101.4264	0.0001	0.4728E-01
4	30	6	24		29	7	22	1098.2260		0.2130E-03	4	25	2	24		25	3	22	1101.6292		0.2812E-02
4	14	3	12		14	4	10	1098.2494	-0.0002	0.1236E-01	4	7	2	5		8	3	5	1101.7004	-0.0001	0.4736E-01
4	30	6	25		29	7	23	1098.3066		0.2117E-03	4	24	3	21		24	4	21	1101.7629		0.1785E-02
4	20	3	17		20	4	17	1098.3663	0.0019	0.4463E-02	4	23	3	20		23	4	20	1101.8711		0.1892E-02
4	18	3	15		18	4	15	1098.3818	0.0026	0.6947E-02	4	11	4	7		10	5	5	1102.0588	0.0004	0.8067E-02
4	17	3	14		17	4	14	1098.3844	0.0000	0.8271E-02	4	21	5	16		20	6	14	1102.0710		0.9225E-03
4	19	3	16		19	4	16	1098.3875	-0.0030	0.5679E-02	4	25	3	22		25	4	22	1102.0812		0.1462E-02
4	16	3	13		16	4	13	1098.4054	0.0004	0.9634E-02	4	11	4	8		10	5	6	1102.0831	-0.0004	0.8124E-02
4	13	3	11		13	4	9	1098.4059	-0.0001	0.1353E-01	6	27	2	25		27	5	22	1102.1372		0.9028E-04
4	15	3	12		15	4	12	1098.4458	0.0000	0.1100E-01	4	22	1	21		21	4	17	1102.1974		0.6890E-04
4	14	3	11		14	4	11	1098.5018	0.0001	0.1231E-01	4	21	5	17		20	6	15	1102.2382		0.8968E-03
4	12	3	10		12	4	8	1098.5438	0.0001	0.1452E-01	6	28	6	22		29	7	23	1102.5149		0.6806E-04
4	13	3	10		13	4	10	1098.5703	0.0001	0.1350E-01	4	26	3	23		26	4	23	1102.6332		0.1137E-02
4	26	2	25		26	3	23	1098.5885		0.1929E-02	4	22	3	19		22	4	19	1102.7643		0.1441E-02
4	12	3	9		12	4	9	1098.6469	-0.0001	0.1450E-01	6	28	6	23		29	7	22	1102.7826		0.7096E-04
4	11	3	9		11	4	7	1098.6653	0.0001	0.1524E-01	6	25	3	22		24	6	19	1102.9600		0.1133E-03
4	11	3	8		11	4	8	1098.7274	0.0000	0.1522E-01	6	22	8	14		23	9	15	1102.9645		0.1003E-03
4	10	3	8		10	4	6	1098.7734	0.0001	0.1559E-01	6	22	8	15		23	9	14	1102.9645		0.1003E-03
4	10	3	7		10	4	7	1098.8090	0.0001	0.1558E-01	4	15	1	14		16	2	14	1103.0306	0.0001	0.8352E-02
4	8	2	7		9	3	7	1098.8470	-0.0001	0.4490E-01	4	22	1	22		22	2	20	1103.1740		0.6362E-03
4	9	3	7		9	4	5	1098.8695	0.0002	0.1550E-01	4	27	3	24		27	4	24	1103.3424		0.8617E-03
4	9	3	6		9	4	6	1098.8885	0.0000	0.1550E-01	4	12	1	12		13	2	12	1103.4142	0.0000	0.8021E-02
4	8	3	6		8	4	4	1098.9547	0.0000	0.1488E-01	6	28	2	26		28	5	23	1103.6559		0.6824E-04
4	8	3	5		8	4	5	1098.9842	0.0000	0.1488E-01	4	6	2	5		7	3	5	1103.9744	-0.0001	0.4907E-01
4	23	1	23		23	2	21	1098.9803		0.4447E-03	4	23	1	22		22	4	18	1103.9865		0.6671E-04
6	25	2	23		25	5	20	1099.0092		0.1515E-03	6	16	10	6		17	11	7	1104.0552		0.6523E-04
4	7	3	5		7	4	3	1099.0298	0.0024	0.1364E-01	6	16	10	7		17	11	6	1104.0552		0.6523E-04
4	7	3	4		7	4	4	1099.0341	-0.0020	0.1364E-01	6	9	2	8		8	5	3	1104.1133		0.5741E-04

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	6	2	4		7	3	4	1104.1284	-0.0001	0.4912E-01	6	14	10	4		15	11	5	1109.8588		0.9340E-04
4	28	3	25		28	4	25	1104.1732		0.6424E-03	6	14	10	5		15	11	4	1109.8588		0.9340E-04
4	12	4	8		11	5	8	1104.3376	0.0002	0.8677E-02	4	24	5	20		23	6	18	1110.1311		0.4703E-03
4	24	2	23		24	3	21	1104.3682	0.0013	0.4013E-02	4	10	1	10		11	2	10	1110.1545	-0.0002	0.1004E-01
4	12	4	9		11	5	7	1104.3820	-0.0003	0.8787E-02	6	11	2	9		10	5	8	1110.2900		0.1240E-03
6	21	1	21		21	4	18	1104.4752		0.8447E-03	6	25	6	19		26	7	20	1110.5271		0.1747E-03
4	22	5	17		21	6	15	1104.5285		0.7784E-03	6	25	6	20		26	7	19	1110.6780		0.1803E-03
4	22	5	18		21	6	16	1104.7946		0.7435E-03	6	18	1	18		18	4	15	1110.7104		0.2507E-03
4	29	3	26		29	4	26	1105.1041		0.4725E-03	6	22	7	16		23	8	15	1110.7351		0.7053E-04
6	29	2	27		29	5	24	1105.1147		0.5088E-04	6	22	7	15		23	8	16	1110.7351		0.7053E-04
6	27	6	21		28	7	22	1105.1958		0.9439E-04	4	21	2	20		21	3	18	1110.9039	0.0005	0.1021E-01
4	15	0	15		16	1	15	1105.3989	0.0000	0.1681E-01	4	20	1	20		20	2	18	1110.9443		0.1263E-02
6	27	6	22		28	7	21	1105.4181		0.9803E-04	4	15	4	11		14	5	9	1111.0392	-0.0002	0.8507E-02
4	24	1	23		23	4	19	1105.5356		0.6220E-04	6	19	8	12		20	9	11	1111.0638		0.2042E-03
6	21	8	13		22	9	14	1105.6733		0.1286E-03	6	19	8	11		20	9	12	1111.0638		0.2042E-03
6	21	8	14		22	9	13	1105.6733		0.1286E-03	6	12	2	11		11	5	6	1111.1595		0.2778E-03
6	26	3	23		25	6	20	1105.8572		0.1147E-03	4	15	4	12		14	5	10	1111.2219	-0.0005	0.8924E-02
4	14	1	13		15	2	13	1105.9346	0.0000	0.9633E-02	4	5	3	3		4	4	1	1111.2968		0.6128E-03
4	30	3	27		30	4	27	1106.1183		0.3436E-03	4	5	3	2		4	4	0	1111.2972		0.6128E-03
6	10	2	9		9	5	4	1106.4773		0.1083E-03	4	12	1	11		13	2	11	1111.3271	0.0000	0.1205E-01
4	5	2	4		6	3	4	1106.4958	0.0000	0.5024E-01	4	3	2	2		4	3	2	1111.4753	0.0001	0.5108E-01
6	20	1	20		20	4	17	1106.5425		0.5140E-03	4	3	2	1		4	3	1	1111.4866	-0.0002	0.5108E-01
4	5	2	3		6	3	3	1106.5736	0.0001	0.5027E-01	6	28	3	25		27	6	22	1111.5251		0.1041E-03
4	13	4	9		12	5	7	1106.5956	-0.0002	0.8934E-02	6	16	9	7		17	10	8	1111.7190		0.5469E-04
4	13	4	10		12	5	8	1106.6707	-0.0001	0.9120E-02	6	16	9	8		17	10	7	1111.7190		0.5469E-04
4	23	2	22		23	3	20	1106.8171	0.0012	0.5602E-02	4	25	5	20		24	6	18	1111.9867		0.4216E-03
4	25	1	24		24	4	20	1106.8226		0.5585E-04	4	8	0	8		7	3	4	1112.1240		0.8795E-04
4	11	1	11		12	2	11	1106.8252	0.0000	0.9047E-02	4	20	2	19		20	3	17	1112.5767	0.0001	0.1332E-01
6	15	10	6		16	11	5	1106.9653		0.7848E-04	6	17	1	17		17	4	14	1112.6545		0.1887E-03
6	15	10	5		16	11	6	1106.9653		0.7848E-04	6	13	10	3		14	11	4	1112.7334		0.1101E-03
4	23	5	18		22	6	16	1106.9979		0.6451E-03	6	13	10	4		14	11	3	1112.7334		0.1101E-03
4	21	1	21		21	2	19	1107.1660		0.9014E-03	4	25	5	21		24	6	19	1112.9574		0.3567E-03
4	23	5	19		22	6	17	1107.4186		0.6001E-03	6	12	2	10		11	5	7	1113.1707		0.1684E-03
6	10	2	8		9	5	5	1107.5056		0.8207E-04	6	24	6	18		25	7	19	1113.1785		0.2331E-03
6	26	6	20		27	7	21	1107.8685		0.1292E-03	4	16	4	12		15	5	10	1113.2197	-0.0003	0.7923E-02
6	26	6	21		27	7	20	1108.0500		0.1338E-03	6	24	6	19		25	7	18	1113.3018		0.2400E-03
6	23	7	16		24	8	17	1108.0853		0.5431E-04	6	21	7	14		22	8	15	1113.3785		0.9049E-04
6	23	7	17		24	8	16	1108.0854		0.5431E-04	6	21	7	15		22	8	14	1113.3787		0.9049E-04
6	20	8	13		21	9	12	1108.3733		0.1630E-03	4	9	1	9		10	2	9	1113.4019	-0.0003	0.1094E-01
6	20	8	12		21	9	13	1108.3733		0.1630E-03	6	13	2	12		12	5	7	1113.4730		0.3961E-03
6	19	1	19		19	4	16	1108.6592		0.3465E-03	4	16	4	13		15	5	11	1113.4863	-0.0003	0.8485E-02
4	13	1	12		14	2	12	1108.6957	0.0000	0.1089E-01	4	27	3	24		28	2	26	1113.5513		0.6776E-04
6	27	3	24		26	6	21	1108.7203		0.1117E-03	4	6	3	4		5	4	2	1113.6707	0.0009	0.1462E-02
6	11	2	10		10	5	5	1108.8269		0.1813E-03	4	6	3	3		5	4	1	1113.6724	-0.0008	0.1462E-02
4	14	4	10		13	5	8	1108.8302	-0.0003	0.8862E-02	6	18	8	11		19	9	10	1113.7443		0.2529E-03
4	14	4	11		13	5	9	1108.9503	-0.0003	0.9153E-02	6	18	8	10		19	9	11	1113.7443		0.2529E-03
4	22	2	21		22	3	19	1108.9902		0.7847E-02	4	11	1	10		12	2	10	1113.8439	-0.0001	0.1307E-01
4	4	2	3		5	3	3	1108.9950	-0.0003	0.5084E-01	4	2	2	1		3	3	1	1113.9399	0.0010	0.5154E-01
4	4	2	2		5	3	2	1109.0284	-0.0001	0.5085E-01	4	2	2	0		3	3	0	1113.9423	-0.0012	0.5154E-01
4	24	5	19		23	6	17	1109.4850		0.5257E-03	6	27	5	23		28	6	22	1113.9843		0.5809E-04
4	14	0	14		15	1	14	1109.7720	0.0001	0.2038E-01	6	27	5	22		28	6	23	1113.9852		0.5850E-04

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	13	0	13		14	1	13	1114.0031	-0.0001	0.2433E-01	6	11	10	1		12	11	2	1118.4200		0.1484E-03
4	19	2	18		19	3	18	1114.0283	0.0001	0.1699E-01	6	22	8	16		23	7	17	1118.4537		0.3997E-03
4	9	0	9		8	3	5	1114.1667		0.1528E-03	6	22	8	17		23	7	16	1118.5344		0.4098E-03
6	29	3	28		28	6	23	1114.2545		0.9261E-04	4	28	0	26		25	3	22	1118.5400		0.9735E-04
6	15	9	7		16	10	6	1114.4532		0.6553E-04	4	9	1	8		10	2	8	1118.5999	-0.0002	0.1450E-01
6	15	9	6		16	10	7	1114.4532		0.6553E-04	6	19	7	12		20	8	13	1118.6453		0.1437E-03
6	16	1	16		16	4	13	1114.4749		0.1444E-03	6	19	7	13		20	8	12	1118.6453		0.1437E-03
4	19	1	19		19	2	17	1114.4982	0.0005	0.1750E-02	4	14	2	13		14	3	11	1118.6671	-0.0003	0.4132E-01
4	28	5	21		25	6	19	1114.5017		0.3330E-03	6	29	4	25		30	5	26	1118.8760		0.1438E-03
4	18	2	17		18	3	15	1115.2788	0.0000	0.2121E-01	4	27	5	23		26	6	21	1119.0645		0.1842E-03
4	17	4	13		16	5	11	1115.3683	-0.0001	0.7170E-02	6	16	8	9		17	9	8	1119.0732		0.3744E-03
6	12	10	3		13	11	2	1115.5879		0.1284E-03	6	16	8	8		17	9	9	1119.0732		0.3744E-03
6	12	10	2		13	11	3	1115.5879		0.1284E-03	6	25	5	20		26	6	21	1119.1382		0.1084E-03
4	17	4	14		16	5	12	1115.7437	-0.0006	0.7885E-02	6	13	1	13		13	4	10	1119.1583		0.6242E-04
6	14	2	13		13	5	8	1115.7648		0.5328E-03	4	13	2	12		13	3	10	1119.2017	-0.0003	0.4625E-01
6	23	6	17		24	7	18	1115.8208		0.3072E-03	6	25	5	21		26	6	20	1119.2170		0.1031E-03
6	23	6	18		24	7	17	1115.9205		0.3156E-03	6	14	2	12		13	5	9	1119.2516		0.2425E-03
4	26	5	22		25	6	20	1115.9258		0.2611E-03	4	12	0	12		11	3	8	1119.5343		0.4475E-03
6	20	7	14		21	8	13	1116.0156		0.1147E-03	4	19	4	15		18	5	13	1119.5535	0.0000	0.5401E-02
6	20	7	13		21	8	14	1116.0156		0.1147E-03	4	28	5	23		27	6	21	1119.5620		0.1991E-03
4	7	3	5		6	4	3	1116.0359	0.0017	0.2364E-02	4	12	2	11		12	3	9	1119.6431	0.0001	0.5062E-01
4	7	3	4		6	4	2	1116.0402	-0.0026	0.2364E-02	4	7	1	7		8	2	7	1119.6490		0.1230E-01
4	10	0	10		9	3	6	1116.0953		0.2380E-03	4	25	3	22		26	2	24	1119.7188		0.1295E-03
6	13	2	11		12	5	8	1116.1556		0.2094E-03	6	13	9	4		14	10	5	1119.8755		0.9106E-04
6	15	1	15		15	4	12	1116.1654		0.1107E-03	6	13	9	5		14	10	4	1119.8755		0.9106E-04
4	10	1	9		11	2	9	1116.2622	0.0000	0.1390E-01	6	28	4	25		29	5	24	1119.9238		0.1924E-03
4	27	0	27		26	3	23	1116.3246		0.6850E-04	4	11	2	10		11	3	8	1120.0048	0.0000	0.5415E-01
4	17	2	16		17	3	14	1116.3488	0.0000	0.2588E-01	4	19	4	16		18	5	14	1120.2369	-0.0003	0.8404E-02
6	17	8	10		18	9	9	1116.4143		0.3095E-03	6	16	2	15		15	5	10	1120.2744		0.8362E-03
6	17	8	9		18	9	10	1116.4143		0.3095E-03	4	10	2	9		10	3	7	1120.2988	-0.0001	0.5652E-01
4	26	3	23		27	2	25	1116.5273		0.9523E-04	4	25	0	25		24	3	21	1120.4409		0.1387E-03
6	26	5	21		27	6	22	1116.5619		0.8012E-04	4	9	2	8		9	3	6	1120.5355	-0.0002	0.5744E-01
4	8	1	8		9	2	8	1116.5667	-0.0003	0.1171E-01	4	8	2	7		8	3	5	1120.7244	-0.0001	0.5666E-01
6	26	5	22		27	6	21	1116.5851		0.7919E-04	4	9	3	7		8	4	5	1120.7395	-0.0001	0.3947E-02
4	30	5	26		29	6	24	1116.9010		0.7869E-04	4	9	3	6		8	4	4	1120.7583	0.0001	0.3946E-02
4	27	5	22		26	6	20	1117.0276		0.2593E-03	4	29	4	25		30	3	27	1120.7631		0.6936E-04
6	14	9	5		15	10	6	1117.1724		0.7768E-04	4	7	2	6		7	3	4	1120.8734	0.0002	0.5392E-01
6	14	9	6		15	10	5	1117.1724		0.7768E-04	4	8	1	7		9	2	7	1120.8759		0.1483E-01
6	29	4	26		30	5	25	1117.2124		0.1343E-03	4	17	1	17		17	2	15	1120.8981	-0.0003	0.3213E-02
4	16	2	15		16	3	13	1117.2576	0.0000	0.3091E-01	4	6	2	5		6	3	3	1120.9898	-0.0002	0.4902E-01
4	18	4	14		17	5	12	1117.4813	0.0003	0.6311E-02	4	13	0	13		12	3	9	1121.0085		0.5503E-03
6	14	1	14		14	4	11	1117.7255		0.8396E-04	6	21	6	15		22	7	16	1121.0779		0.5134E-03
4	18	1	18		18	2	18	1117.8185	-0.0001	0.2389E-02	4	5	2	4		5	3	2	1121.0787	0.0000	0.4175E-01
4	11	0	11		10	3	7	1117.8907		0.3393E-03	6	21	6	16		22	7	15	1121.1427		0.5256E-03
4	18	4	15		17	5	13	1117.9941	-0.0007	0.7178E-02	4	4	2	3		4	3	1	1121.1458	0.0032	0.3183E-01
4	15	2	14		15	3	12	1118.0245	-0.0001	0.3613E-01	4	6	2	4		6	3	4	1121.1499	-0.0010	0.4907E-01
6	15	2	14		14	5	9	1118.0326		0.6819E-03	4	5	2	3		5	3	3	1121.1588	0.0016	0.4178E-01
4	12	0	12		13	1	12	1118.0852	0.0001	0.2857E-01	4	7	2	5		7	3	5	1121.1622	-0.0017	0.5403E-01
4	8	3	6		7	4	4	1118.3923	-0.0002	0.3213E-02	4	4	2	2		4	3	2	1121.1801	-0.0002	0.3184E-01
4	8	3	5		7	4	3	1118.4017	-0.0006	0.3213E-02	4	3	2	2		3	3	0	1121.1947	0.0004	0.1859E-01
6	11	10	2		12	11	1	1118.4200		0.1484E-03	6	28	4	24		29	5	25	1121.1987		0.2027E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	8	2	8		8	3	8	1121.2053	0.0000	0.5687E-01	6	14	8	7		15	9	6	1124.3568		0.5295E-03
4	3	2	1		3	3	1	1121.2061		0.1859E-01	4	17	2	15		17	3	15	1124.3752	-0.0001	0.2981E-01
6	10	10	1		11	11	0	1121.2279		0.1701E-03	6	28	3	28		29	4	25	1124.5652		0.5319E-04
6	10	10	0		11	11	1	1121.2279		0.1701E-03	4	24	2	22		25	1	24	1124.8447		0.3639E-03
6	18	7	11		19	8	12	1121.2675		0.1778E-03	4	30	5	25		29	6	23	1124.8447		0.1130E-03
6	18	7	12		19	8	11	1121.2675		0.1778E-03	6	18	2	17		17	5	12	1124.8748		0.1127E-02
4	9	2	7		9	3	7	1121.2894	0.0000	0.5781E-01	4	21	4	18		20	5	16	1124.8951	-0.0007	0.4829E-02
4	10	2	8		10	3	8	1121.4248	0.0000	0.5711E-01	4	17	0	17		16	3	13	1124.9003		0.7013E-03
6	24	5	20		25	6	19	1121.5717		0.1293E-03	4	21	0	21		20	3	17	1124.9519		0.4198E-03
4	20	4	16		19	5	14	1121.5793	0.0004	0.4493E-02	4	28	4	24		29	3	26	1125.0421		0.1078E-03
4	11	2	9		11	3	9	1121.6208	-0.0002	0.5503E-01	4	18	2	16		18	3	16	1125.1000	-0.0003	0.2557E-01
6	24	5	19		25	6	20	1121.7133		0.1448E-03	6	11	9	3		12	10	2	1125.2312		0.1215E-03
6	15	8	8		16	9	7	1121.7209		0.4477E-03	6	11	9	2		12	10	3	1125.2312		0.1215E-03
6	15	8	7		16	9	8	1121.7209		0.4477E-03	6	28	4	23		27	5	22	1125.2448		0.3773E-03
4	12	2	10		12	3	10	1121.8859	-0.0001	0.5189E-01	4	18	0	18		17	3	14	1125.3038		0.6572E-03
4	11	0	11		12	1	11	1122.0150	0.0001	0.3294E-01	4	8	1	5		7	2	5	1125.3179	-0.0001	0.1470E-01
4	24	0	24		23	3	20	1122.0277		0.1921E-03	4	20	0	20		19	3	16	1125.3411		0.5073E-03
4	29	5	24		28	6	22	1122.1021		0.1510E-03	4	11	3	9		10	4	7	1125.4034	0.0000	0.4938E-02
4	13	2	11		13	3	11	1122.2258	-0.0001	0.4798E-01	4	19	0	19		18	3	15	1125.4548		0.5895E-03
4	14	0	14		13	3	10	1122.2968		0.6352E-03	4	22	4	18		21	5	16	1125.4608	0.0022	0.2837E-02
4	28	5	24		27	6	22	1122.3958		0.1255E-03	4	11	3	9		10	4	6	1125.4639	-0.0009	0.4933E-02
6	15	2	13		14	5	10	1122.4618		0.2644E-03	4	5	1	5		6	2	5	1125.5674	0.0001	0.1278E-01
4	20	4	17		19	5	15	1122.4709	-0.0006	0.5610E-02	6	18	2	14		15	5	11	1125.7869		0.2744E-03
6	17	2	16		16	5	11	1122.4886		0.9873E-03	4	10	0	10		11	1	10	1125.7928	0.0000	0.3722E-01
6	12	9	4		13	10	3	1122.5620		0.1057E-03	4	23	2	21		24	1	23	1125.8291		0.5848E-03
6	12	9	3		13	10	4	1122.5620		0.1057E-03	4	19	2	17		19	3	17	1125.8890	-0.0002	0.2167E-01
6	27	4	24		28	5	23	1122.5992		0.2715E-03	4	29	5	25		28	6	23	1125.9312		0.8296E-04
4	14	2	12		14	3	12	1122.6445	0.0003	0.4359E-01	6	26	4	22		27	5	23	1125.9664		0.3888E-03
4	6	1	6		7	2	6	1122.6493		0.1268E-01	6	19	6	13		20	7	14	1126.2996		0.8147E-03
4	26	2	24		27	1	26	1122.7595		0.1047E-03	4	15	1	15		15	2	13	1126.3175	-0.0003	0.5499E-02
4	10	3	8		9	4	6	1123.0768	-0.0002	0.4528E-02	6	19	6	14		20	7	13	1126.3413		0.8327E-03
4	7	1	6		8	2	6	1123.1089	0.0005	0.1490E-01	6	16	7	9		17	8	10	1126.4868		0.2628E-03
4	10	3	7		9	4	5	1123.1117	-0.0023	0.4525E-02	6	16	7	10		17	8	9	1126.4868		0.2628E-03
4	15	2	13		15	3	13	1123.1434	-0.0003	0.3896E-01	6	22	1	22		23	2	21	1126.6591		0.1022E-03
4	24	3	21		25	2	23	1123.1840		0.1690E-03	4	20	2	18		20	3	18	1126.7345	-0.0003	0.1815E-01
4	23	0	23		22	3	19	1123.3041		0.2579E-03	6	19	2	18		18	5	13	1126.8322		0.1247E-02
4	15	0	15		14	3	11	1123.3842		0.6919E-03	6	22	5	18		23	6	17	1126.8394		0.2482E-03
4	21	4	17		20	5	15	1123.5513	0.0008	0.3827E-02	6	22	5	17		23	6	18	1126.8563		0.2488E-03
6	27	4	23		28	5	24	1123.5645		0.2825E-03	4	22	4	19		21	5	17	1126.9073	-0.0005	0.4087E-02
4	25	2	23		26	1	25	1123.6252	-0.0004	0.2007E-03	6	13	8	5		14	9	6	1126.9803		0.8194E-03
6	20	6	14		21	7	15	1123.6932		0.6510E-03	6	13	8	6		14	9	5	1126.9803		0.8194E-03
4	16	2	14		16	3	14	1123.7214	-0.0003	0.3432E-01	4	23	3	20		24	2	22	1127.0974		0.2033E-03
4	16	1	16		16	2	14	1123.7319	-0.0004	0.4245E-02	4	22	2	20		23	1	22	1127.1859	0.0001	0.9155E-03
6	20	6	15		21	7	14	1123.7452		0.6658E-03	4	23	4	19		22	5	17	1127.2975	0.0022	0.2146E-02
6	17	7	10		18	8	11	1123.8813		0.2175E-03	4	5	1	4		6	2	4	1127.5208	-0.0001	0.1425E-01
6	17	7	11		18	8	10	1123.8813		0.2175E-03	4	21	2	19		21	3	19	1127.6278	-0.0003	0.1504E-01
6	23	5	19		24	6	18	1124.2500		0.1894E-03	4	12	3	10		11	4	8	1127.7178	0.0008	0.5174E-02
4	16	0	16		15	3	12	1124.2563		0.7142E-03	4	12	3	9		11	4	7	1127.8177	0.0000	0.5166E-02
4	22	0	22		21	3	18	1124.2761		0.3348E-03	6	25	4	22		26	5	21	1127.8656		0.5168E-03
6	23	5	18		24	6	19	1124.2861		0.1910E-03	6	10	9	1		11	10	2	1127.8824		0.1383E-03
6	14	8	6		15	9	7	1124.3568		0.5295E-03	6	10	9	2		11	10	1	1127.8824		0.1383E-03

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V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	27	3	25	28	4	24	1129.0804		0.8167E-04	6	26	2	25	25	5	20	1132.2469		0.0047	0.7421E-03	
6	25	4	21	26	5	22	1128.3979		0.5286E-03	4	14	3	12	13	4	10	1132.3021		0.0047	0.5167E-02	
4	4	1	4	5	2	2	1128.4039	0.0000	0.1259E-01	4	19	2	17	20	1	19	1132.3074		-0.0006	0.2690E-02	
4	22	2	20	22	3	20	1128.6598	-0.0002	0.1233E-01	4	26	2	24	26	3	24	1132.4388		-0.0004	0.5018E-02	
4	14	1	14	14	2	12	1128.6553	0.0000	0.6970E-02	4	14	3	11	13	4	9	1132.5433		0.0002	0.5145E-02	
4	21	2	19	22	1	21	1128.7195	0.0002	0.1367E-02	4	12	1	12	12	2	10	1132.6045		0.0002	0.1040E-01	
6	18	6	13	19	7	13	1128.8969		0.1008E-02	4	18	2	16	17	5	13	1132.7719		-0.0001	0.2628E-03	
6	18	6	13	19	7	12	1128.9305		0.1028E-02	6	8	0	8	9	1	8	1132.9084		-0.0001	0.4437E-01	
6	20	2	19	19	5	14	1128.9631		0.1340E-02	6	23	4	20	24	5	19	1133.0500		0.0003	0.9292E-03	
6	24	2	23	23	5	18	1129.0498		0.1566E-02	6	22	2	21	21	5	16	1133.1603		0.0003	0.1422E-02	
6	15	7	7	8	8	8	1129.0835		0.3140E-03	4	5	2	4	4	3	2	1133.2302		0.0003	0.6525E-02	
6	15	7	8	8	8	9	1129.0835	-0.0008	0.3140E-03	4	5	2	3	4	3	1	1133.3094		0.0001	0.6525E-02	
4	23	4	20	22	5	18	1129.1053		0.3402E-02	6	23	4	19	24	5	20	1133.3274		-0.0005	0.9404E-03	
4	17	2	15	16	5	12	1129.2250		0.2732E-03	4	27	2	25	27	3	25	1133.3835		-0.0005	0.3908E-02	
4	27	4	23	28	3	26	1129.2971		0.1686E-03	3	3	1	12	16	7	12	1133.4474		-0.0006	0.5153E-04	
6	21	5	17	22	6	16	1129.4139		0.3197E-03	4	25	4	22	24	5	20	1133.4460		-0.0006	0.2248E-02	
4	9	0	17	10	1	19	1129.4221	0.0001	0.4113E-01	4	26	4	22	27	3	24	1133.5020		0.0000	0.2643E-03	
4	21	5	16	22	6	17	1129.4230	-0.0003	0.3200E-03	6	27	2	2	26	5	21	1133.6656		0.0000	0.4808E-03	
4	23	2	21	23	3	21	1129.5173		0.1000E-01	4	2	1	1	3	2	2	1133.8326		0.0000	0.1152E-01	
6	12	8	8	13	9	6	1129.5913		0.7169E-03	6	16	6	10	17	7	11	1134.0827		0.0000	0.1467E-02	
6	12	8	8	13	9	5	1129.5913		0.7169E-03	6	16	6	11	17	7	10	1134.0885		0.0000	0.1507E-02	
6	30	3	27	29	6	24	1129.6893		0.6365E-04	4	11	1	11	11	2	9	1134.2327		-0.0001	0.1218E-01	
4	4	1	3	5	2	3	1129.7338	-0.0001	0.1357E-01	4	2	1	1	3	3	1	1134.2446		-0.0001	0.1180E-01	
4	13	3	11	12	4	8	1130.0181	0.0000	0.5245E-02	6	13	7	7	14	8	7	1134.2488		0.0000	0.4328E-03	
4	13	3	10	12	4	9	1130.1764	-0.0001	0.5231E-02	6	13	7	6	14	8	6	1134.2488		-0.0002	0.3008E-02	
4	20	2	18	21	5	20	1130.4288	0.0000	0.1956E-02	4	28	2	26	28	3	28	1134.2892		-0.0002	0.3682E-02	
4	24	4	21	25	5	20	1130.4601	0.0000	0.6979E-03	4	18	2	16	19	1	18	1134.3546		-0.0002	0.5099E-03	
4	24	4	22	24	3	22	1130.4619	-0.0007	0.8029E-02	6	19	5	15	20	6	14	1134.5417		0.0002	0.5100E-03	
6	9	9	1	10	10	0	1130.5149		0.1562E-03	6	15	3	13	14	4	11	1134.5687		0.0002	0.4963E-02	
6	9	9	0	10	10	1	1130.7039		0.1099E-02	4	25	3	23	26	4	22	1134.7098		0.0002	0.1794E-03	
4	25	2	24	24	5	19	1130.7497	-0.0001	0.8625E-02	6	10	8	8	11	9	3	1134.7738		0.0005	0.9318E-03	
4	13	1	13	13	2	11	1130.8533		0.7095E-03	6	10	8	8	11	9	2	1134.7738		0.0005	0.4930E-02	
4	24	4	20	25	5	21	1130.8533	-0.0004	0.2809E-02	6	15	3	12	14	4	10	1134.9222		0.0005	0.2989E-03	
4	4	2	3	3	3	0	1130.8994		0.1940E-03	4	20	3	17	21	2	19	1134.9479		0.0011	0.2750E-03	
4	21	2	20	22	2	20	1131.0446		0.1400E-02	4	29	2	27	29	3	27	1135.1396		0.0000	0.2291E-02	
4	21	2	20	22	2	20	1131.0707		0.1215E-01	4	29	2	27	29	3	27	1135.1396		0.0000	0.1464E-02	
4	24	4	21	23	5	15	1131.1588	0.0002	0.2787E-02	4	6	2	5	5	3	3	1135.5635		0.0000	0.7427E-04	
4	24	4	21	23	5	15	1131.2884	-0.0011	0.1224E-03	4	26	4	23	25	5	21	1135.5748		0.0000	0.1039E-01	
4	26	3	24	27	3	23	1131.4579	-0.0004	0.6381E-02	4	26	4	23	25	5	21	1135.5847		0.0000	0.1785E-02	
4	26	3	24	27	3	23	1131.4702		0.1225E-02	4	22	4	19	23	5	19	1135.6202		0.0000	0.1220E-02	
6	17	6	12	18	7	11	1131.5125		0.1253E-02	4	10	1	10	10	2	8	1135.6460		0.0000	0.1385E-01	
6	17	6	12	18	7	11	1131.6709		0.3707E-03	4	6	2	4	5	3	2	1135.7327		0.0000	0.1040E-01	
6	14	7	7	15	8	7	1131.6709		0.3707E-03	6	27	4	24	28	4	25	1135.8158		0.0000	0.7929E-04	
4	22	3	19	23	2	21	1131.8002	0.0001	0.2083E-03	4	30	2	28	30	3	28	1136.0826		0.0000	0.1726E-02	
4	3	1	2	4	2	2	1131.9710		0.1273E-01	4	30	2	28	30	3	28	1136.0826		0.0000	0.1782E-03	
6	20	5	16	21	6	16	1131.9810		0.4084E-03	4	7	0	7	8	1	7	1136.2595		0.0000	0.4663E-01	
6	11	8	4	12	9	3	1132.1892		0.8218E-03	4	19	2	17	18	5	14	1136.4203		0.0000	0.2454E-03	
6	8	3	3	9	4	4	1132.1892		0.8218E-03	4	1	1	1	2	2	1	1136.4250		-0.0001	0.1091E-01	

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	17	2	15		18	1	17	1138.5603	0.0019	0.4549E-02	4	8	2	6		7	3	4	1140.6523	-0.0001	0.1725E-01
4	1	1	0		2	2	0	1138.5641	-0.0019	0.1100E-01	6	20	4	17		21	5	16	1140.7288	0.0006	0.2019E-02
6	15	6	9		16	7	10	1138.6294		0.1721E-02	6	20	4	16		21	5	17	1140.8210		0.2027E-02
6	15	6	10		16	7	9	1138.6516		0.1782E-02	4	3	1	3		3	2	1	1140.8616	0.0002	0.1010E-01
4	16	3	14		15	4	12	1138.8088	-0.0004	0.4659E-02	6	23	3	21		24	4	20	1140.8853		0.3612E-03
6	12	7	8		13	8	5	1138.8169		0.4997E-03	4	2	1	2		2	2	0	1141.1178	0.0001	0.6096E-02
6	12	7	5		13	8	6	1138.8169		0.4997E-03	4	18	3	16		17	4	14	1141.2073	0.0003	0.3859E-02
4	9	1	9		9	2	7	1138.8595	0.0000	0.1524E-01	4	15	2	13		16	1	15	1141.4065	0.0000	0.6683E-02
6	30	2	29		29	5	24	1137.0610		0.1019E-03	4	26	4	22		25	5	20	1141.5219		0.1129E-02
6	18	5	14		19	6	13	1137.0989		0.6317E-03	4	2	1	1		2	2	1	1141.5439	-0.0001	0.8247E-02
6	18	5	13		19	6	14	1137.0985		0.6318E-03	4	24	4	20		25	3	22	1141.6664		0.6372E-03
6	21	1	21		22	2	20	1137.3083		0.2074E-03	4	22	4	18		23	3	20	1141.6815		0.5437E-04
4	16	3	13		15	4	11	1137.3164	0.0002	0.4610E-02	6	13	6	7		14	7	6	1141.7002		0.1837E-02
4	24	4	20		23	5	18	1137.3177		0.1346E-02	4	3	1	2		3	2	2	1141.7212	0.0002	0.1061E-01
6	9	8	1		10	9	2	1137.3447		0.1048E-02	6	13	6	8		14	7	7	1141.7397		0.2210E-02
6	9	8	2		10	9	1	1137.3447		0.1048E-02	4	29	4	26		28	5	24	1141.8109		0.8180E-03
4	25	4	21		26	3	23	1137.6322		0.4125E-03	6	10	7	4		11	8	3	1141.9226		0.8454E-03
4	27	4	24		28	5	22	1137.6942		0.1397E-02	6	10	7	3		11	8	4	1141.9226		0.6454E-03
3	15	3	13		16	7	10	1137.7020		0.1189E-03	4	4	1	3		4	2	3	1141.9565	0.0001	0.1416E-01
6	24	3	22		25	4	21	1137.8483		0.2572E-03	3	13	3	11		14	7	8	1142.0778		0.6909E-03
4	8	1	8		8	2	6	1137.8898	0.0008	0.1619E-01	4	18	3	15		17	4	13	1142.1541	0.0002	0.3749E-02
4	7	2	6		8	3	4	1137.8950	-0.0046	0.1403E-01	6	16	5	12		17	6	11	1142.1906	0.0008	0.9334E-03
6	26	3	23		27	4	24	1137.9958		0.1245E-03	6	16	5	11		17	6	12	1142.1910		0.9334E-03
3	15	3	12		16	7	9	1138.1536		0.5778E-04	3	13	3	10		14	7	7	1142.2458		0.3177E-03
4	7	2	5		6	3	3	1138.1772	0.0003	0.1405E-01	4	5	1	4		5	2	4	1142.2491	-0.0001	0.1708E-01
6	21	4	18		22	5	17	1138.1792		0.1580E-02	6	24	3	21		25	4	22	1142.3496		0.2744E-03
6	21	4	17		22	5	18	1138.3148	-0.0004	0.1590E-02	4	18	3	15		19	2	17	1142.3761		0.4121E-03
4	19	3	16		20	2	18	1138.7144	0.0007	0.3461E-03	4	9	2	8		8	3	6	1142.4429	0.0002	0.1973E-01
4	7	1	7		7	2	5	1138.7532	0.0001	0.1655E-01	4	5	0	5		6	1	5	1142.5881	0.0002	0.4706E-01
4	16	2	14		17	1	16	1138.9147	-0.0001	0.5610E-02	4	6	1	5		6	2	5	1142.5977	0.0000	0.1941E-01
4	17	3	15		18	4	13	1139.0237	0.0002	0.4283E-02	4	29	5	25		30	4	27	1142.8104		0.6670E-04
6	14	6	8		15	7	9	1139.1810		0.1935E-02	4	7	1	6		7	2	6	1143.0006	0.0003	0.2117E-01
6	14	6	9		15	7	8	1139.2054		0.2057E-02	6	20	1	20		21	2	19	1143.1444		0.2443E-03
6	11	7	5		12	8	4	1139.3749		0.5708E-03	4	9	2	7		8	3	5	1143.1667	0.0001	0.1984E-01
6	11	7	4		12	8	5	1139.3749		0.5708E-03	6	19	4	16		20	5	15	1143.2706	0.0002	0.2544E-02
4	25	4	21		24	5	19	1139.4076		0.1252E-02	6	19	4	15		20	5	16	1143.3322		0.2551E-02
4	6	1	6		6	2	4	1139.4673	0.0002	0.1620E-01	4	19	3	17		18	4	15	1143.3542	0.0003	0.3413E-02
4	6	0	6		7	1	6	1139.4833	0.0000	0.4761E-01	4	29	1	28		30	0	30	1143.4196		0.5893E-04
6	17	5	13		18	6	12	1139.6465		0.7727E-03	4	8	1	7		8	2	7	1143.4559	0.0001	0.2236E-01
6	17	5	12		18	6	13	1139.6475		0.7728E-03	4	27	4	23		26	5	21	1143.6747		0.9852E-03
4	17	3	14		18	4	12	1139.7277	0.0009	0.4209E-02	4	30	4	27		29	5	25	1143.8073		0.6124E-03
4	28	4	25		27	5	23	1139.7712		0.1077E-02	6	22	3	20		23	4	19	1143.8318		0.4972E-03
3	14	3	12		15	7	9	1139.8672		0.2338E-03	4	28	1	27		29	0	29	1143.8347		0.5582E-04
6	8	8	0		9	9	1	1139.9019		0.1170E-02	4	9	1	8		9	2	8	1143.9611	0.0002	0.2301E-01
6	8	8	1		9	9	0	1139.9019		0.1170E-02	6	21	2	19		20	5	16	1143.9860		0.1994E-03
4	5	1	5		5	2	3	1140.0475	0.0001	0.1505E-01	4	14	2	12		15	1	14	1144.0229	0.0000	0.7697E-02
3	14	3	11		15	7	8	1140.1615		0.1123E-03	3	12	3	10		13	7	7	1144.1064		0.6706E-03
6	20	2	18		19	5	15	1140.1620		0.2236E-03	3	12	3	9		13	7	6	1144.1951		0.1257E-02
6	25	3	22		26	4	23	1140.1804		0.1882E-03	4	28	5	24		29	4	26	1144.3601		0.8248E-04
4	8	2	7		7	3	5	1140.1862	0.0000	0.1719E-01	6	12	6	6		13	7	7	1144.4149	0.0007	0.2241E-02
4	4	1	4		4	2	2	1140.5082	0.0002	0.1303E-01	6	12	6	7		13	7	6	1144.4569		0.1656E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	9	7	3		10	8	2	1144.4598		0.7229E-03	4	25	5	20		26	4	22	1148.3286		0.6499E-04
6	9	7	2		10	8	3	1144.4598		0.7229E-03	6	17	4	14		18	5	13	1148.3347	0.0004	0.3882E-02
4	10	1	9		10	2	9	1144.5128	0.0001	0.2318E-01	4	11	2	9		10	3	7	1148.3451	0.0001	0.2301E-01
6	23	3	20		24	4	21	1144.5254		0.3875E-03	6	17	4	13		18	5	14	1148.3601	-0.0001	0.3888E-02
4	19	3	18		18	4	14	1144.5833	0.0006	0.3243E-02	4	3	0	3		4	1	3	1148.4703	0.0001	0.4086E-01
4	10	2	9		9	3	7	1144.6598	-0.0001	0.2157E-01	4	16	1	15		16	2	15	1148.5083	0.0002	0.1679E-01
6	15	5	11		16	6	10	1144.7288	0.0006	0.1113E-02	4	25	2	24		26	1	26	1148.5518		0.1809E-03
6	15	5	10		16	6	11	1144.7290	0.0003	0.1113E-02	4	13	1	12		14	0	14	1148.5529	-0.0005	0.2057E-02
4	11	1	10		11	2	10	1145.1071	0.0001	0.2286E-01	4	12	2	11		11	3	9	1148.9498	-0.0001	0.2311E-01
4	29	2	28		30	1	30	1145.3699		0.2286E-03	6	21	3	18		22	4	19	1148.9564		0.7130E-03
4	20	3	18		19	4	16	1145.4586	0.0000	0.2984E-02	6	19	1	19		20	2	18	1148.9862		0.3293E-03
4	19	1	18		20	0	20	1145.4637		0.1087E-03	4	3	1	2		2	2	0	1149.0083		0.1332E-02
4	21	4	17		22	3	19	1145.5216		0.6095E-04	4	20	4	16		21	3	18	1149.1808		0.6225E-04
4	4	0	4		5	1	4	1145.5815	0.0003	0.4484E-01	4	17	1	16		17	2	16	1149.2166	0.0001	0.1512E-01
6	23	2	22		24	3	21	1145.5869		0.9884E-03	4	21	3	18		20	4	16	1149.2275		0.2025E-02
4	18	1	17		19	0	19	1145.7076		0.2216E-03	4	24	2	23		25	1	25	1149.3390		0.1440E-03
4	10	2	8		9	3	8	1145.7288	0.0002	0.2177E-01	6	22	2	21		23	3	20	1149.3810		0.1442E-02
4	12	1	11		12	2	11	1145.7390	0.0002	0.2216E-01	6	10	6	4		11	7	5	1149.4069		0.3704E-02
6	18	4	15		19	5	14	1145.8057	0.0005	0.3164E-02	6	10	6	5		11	7	4	1149.4072		0.3704E-02
6	18	4	14		19	5	15	1145.8457	0.0001	0.3170E-02	6	20	3	18		21	4	17	1149.4973		0.8886E-03
4	28	4	24		27	5	22	1145.8795		0.8334E-03	6	7	7	1		8	8	0	1149.5020		0.8858E-03
4	17	3	14		18	2	18	1145.9752		0.4752E-03	6	7	7	0		8	8	1	1149.5020		0.8858E-03
4	17	1	16		18	0	18	1146.0369		0.3977E-03	4	16	3	13		17	2	15	1149.5103		0.5380E-03
4	27	5	23		28	4	25	1146.1167		0.9874E-04	4	22	3	20		21	4	18	1149.5149		0.2123E-02
4	28	2	27		29	1	29	1146.1899		0.2303E-03	4	12	1	11		13	0	13	1149.5431	0.0002	0.2753E-02
3	11	3	9		12	7	6	1146.3832		0.1243E-03	4	12	2	10		13	1	12	1149.5710	-0.0001	0.9242E-02
4	13	1	12		13	2	12	1146.4028	0.0001	0.2114E-01	6	13	5	9		14	6	8	1149.7874	0.0003	0.1526E-02
3	11	3	8		12	7	5	1146.4588		0.1704E-03	6	13	5	8		14	6	9	1149.7874	0.0002	0.1526E-02
4	16	1	15		17	0	17	1146.4705	0.0002	0.6543E-03	4	18	1	17		18	2	17	1149.9094	0.0000	0.1343E-01
6	21	3	19		22	4	18	1146.6992		0.6710E-03	4	23	2	22		24	1	24	1150.1414		0.1007E-03
6	22	3	19		23	4	20	1146.7242		0.5320E-03	4	25	5	21		26	4	23	1150.1779		0.1302E-03
4	13	2	11		14	1	13	1146.7498	0.0000	0.8574E-02	4	19	3	17		20	2	19	1150.2290		0.7031E-04
4	11	2	10		10	3	8	1146.8309	-0.0001	0.2289E-01	4	4	1	4		3	2	2	1150.2584		0.2785E-02
6	11	6	5		12	7	6	1146.8955	0.0031	0.3192E-02	4	30	4	26		29	5	24	1150.4928		0.5452E-03
6	11	6	6		12	7	5	1146.8989	-0.0003	0.3146E-02	4	19	1	18		19	2	18	1150.5739	0.0001	0.1178E-01
4	20	3	17		19	4	15	1148.9779	0.0017	0.2685E-02	4	11	1	10		12	0	12	1150.6895	0.0003	0.3540E-02
6	8	7	1		9	8	2	1146.9863		0.8030E-03	6	16	4	13		17	5	12	1150.8582	-0.0004	0.4699E-02
6	8	7	2		9	8	1	1146.9883		0.8030E-03	6	16	4	12		17	5	13	1150.8739	-0.0003	0.4702E-02
4	27	2	26		28	1	28	1146.9889		0.2246E-03	4	22	2	21		23	1	23	1150.9688		0.5653E-04
4	15	1	14		16	0	16	1147.0255		0.1008E-02	4	13	2	12		12	3	10	1151.0100	0.0000	0.2287E-01
4	14	1	13		14	2	13	1147.0913	0.0001	0.1988E-01	4	12	2	10		11	3	8	1151.0201	0.0000	0.2358E-01
6	14	5	10		15	6	9	1147.2611	0.0004	0.1312E-02	6	22	1	22		21	4	17	1151.0286		0.1193E-02
6	14	5	9		15	6	10	1147.2612		0.1312E-02	4	24	5	19		25	4	21	1151.1263		0.8253E-04
4	21	3	19		20	4	17	1147.5144	-0.0005	0.2530E-02	4	20	1	19		20	2	19	1151.1967	0.0002	0.1019E-01
4	14	1	13		15	0	15	1147.7159	0.0002	0.1474E-02	6	20	3	17		21	4	18	1151.2267		0.9357E-03
4	26	2	25		27	1	27	1147.7709		0.2082E-03	4	2	0	2		3	1	2	1151.2800	0.0001	0.3516E-01
4	15	1	14		15	2	14	1147.7963	0.0002	0.1839E-01	4	23	3	21		22	4	19	1151.4531	0.0000	0.1752E-02
6	22	2	20		21	5	17	1147.8802		0.1745E-03	4	4	1	3		3	2	1	1151.6593	0.0000	0.2994E-02
4	26	5	22		27	4	24	1148.0646		0.1148E-03	4	21	1	20		21	2	20	1151.7643	0.0002	0.8691E-02
4	29	4	26		28	5	23	1148.1486		0.6838E-03	6	23	2	21		22	5	18	1151.8311		0.1501E-03
4	3	1	3		2	2	1	1148.1610		0.1270E-02	6	9	6	3		10	7	4	1151.9183		0.4157E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	9	6	4		10	7	3	1151.9183		0.4156E-02	6	20	1	20		19	4	15	1155.1541		0.3189E-03
6	23	1	23		22	4	18	1151.9214		0.4689E-03	4	10	2	8		11	1	10	1155.4261	-0.0001	0.9742E-02
6	24	1	24		23	4	19	1151.9386		0.1431E-03	6	21	1	21		20	4	16	1155.4913		0.5459E-03
4	10	1	9		11	0	11	1151.9912	0.0000	0.4376E-02	4	17	2	16		18	1	18	1155.8927		0.1920E-03
4	19	3	17		20	4	16	1152.2367		0.1155E-02	6	24	2	22		23	5	19	1155.8239		0.1272E-03
4	22	1	21		22	2	21	1152.2639		0.7313E-02	6	18	3	15		19	4	18	1155.8912		0.1524E-02
4	5	1	5		4	2	3	1152.2703		0.4225E-02	6	14	4	11		15	5	10	1155.8898	0.0010	0.6617E-02
4	18	3	16		19	2	18	1152.2924		0.1098E-03	6	14	4	10		15	5	11	1155.8951	-0.0045	0.6618E-02
6	12	5	8		13	6	7	1152.3073	0.0000	0.1754E-02	4	7	1	7		6	2	5	1158.0330	-0.0002	0.6601E-02
6	12	5	7		13	6	8	1152.3073	0.0000	0.1754E-02	4	22	3	19		21	4	17	1158.1697		0.9755E-03
4	24	5	20		25	4	22	1152.4257		0.1462E-03	4	14	3	11		15	2	13	1158.3511		0.6498E-03
4	11	2	9		12	1	11	1152.4894	0.0001	0.9643E-02	4	14	2	12		13	3	10	1158.5479	0.0000	0.2300E-01
6	15	1	15		14	4	10	1152.6421		0.5183E-04	4	0	0	0		1	1	0	1158.5568	0.0000	0.1938E-01
4	30	1	29		30	2	29	1152.6681		0.1084E-02	6	20	2	19		21	3	18	1158.5646		0.2971E-02
4	19	4	15		20	3	17	1152.6750		0.5717E-04	4	18	3	14		17	2	16	1158.5615		0.2233E-03
4	23	1	22		23	2	22	1152.6832	0.0003	0.6067E-02	4	22	5	17		23	4	19	1158.5917		0.1234E-03
4	15	3	12		16	2	14	1152.9724	-0.0004	0.5944E-03	4	7	1	6		8	0	8	1158.7671		0.6497E-02
4	14	2	13		13	3	11	1153.0050	0.0000	0.2207E-01	4	16	2	15		15	3	13	1158.7728	-0.0005	0.3889E-03
4	24	1	23		24	2	23	1153.0115		0.4961E-02	4	16	2	15		17	1	17	1158.7990		0.8937E-03
4	29	1	28		29	2	28	1153.0229		0.1451E-02	4	26	3	24		25	4	22	1158.8201		0.3061E-02
6	21	2	20		22	3	19	1153.0411	-0.0004	0.2097E-02	4	30	2	29		30	1	29	1158.8931		0.5045E-02
4	25	1	24		25	2	24	1153.2395		0.3998E-02	6	7	6	1		8	7	2	1158.9216		0.5045E-02
4	28	1	27		28	2	27	1153.2555		0.1913E-02	6	7	6	2		8	7	1	1158.9216		0.5045E-02
4	24	3	22		23	4	20	1153.3217		0.1423E-02	4	6	1	5		5	2	3	1157.0778	0.0000	0.6499E-02
4	26	1	25		26	2	25	1153.3599		0.3175E-02	4	22	5	18		23	4	20	1157.2054		0.1745E-03
4	27	1	26		27	2	26	1153.3667		0.2483E-02	6	10	5	5		11	6	6	1157.3276	-0.0001	0.2236E-02
6	15	4	12		16	5	11	1153.3765	0.0000	0.5613E-02	6	10	5	6		11	6	5	1157.3276	-0.0001	0.2236E-02
6	16	1	16		15	4	11	1153.3857		0.7202E-04	6	26	8	19		26	9	18	1157.3810		0.5302E-04
6	15	4	11		16	5	12	1153.3859	0.0000	0.5615E-02	6	26	8	18		26	9	17	1157.3810		0.5302E-04
4	9	1	8		10	0	10	1153.4434		0.5202E-02	6	17	3	15		18	4	14	1157.5679		0.1851E-02
6	19	3	16		20	4	17	1153.5358		0.1205E-02	4	23	3	20		22	4	18	1157.6454		0.1344E-02
4	13	2	11		12	3	9	1153.7552	0.0001	0.2358E-01	6	25	8	17		25	9	16	1157.7063		0.6772E-04
4	23	5	18		24	4	20	1153.8777		0.1022E-03	6	25	8	18		25	9	17	1157.7063		0.6772E-04
4	1	0	1		2	1	1	1153.9546	0.0000	0.2791E-01	4	8	1	8		7	2	6	1157.7813	0.0000	0.7411E-02
6	17	1	17		16	4	12	1153.9978		0.9974E-04	4	15	2	14		16	1	16	1157.9898	0.0002	0.6732E-03
4	6	1	6		5	2	4	1154.1956	0.0001	0.5527E-02	6	24	8	16		24	9	15	1158.0244		0.8527E-04
4	5	1	4		4	2	2	1154.3534	-0.0001	0.4753E-02	6	24	8	17		24	9	16	1158.0244		0.8527E-04
4	17	3	15		18	2	17	1154.4109		0.1608E-03	4	29	2	28		29	1	28	1158.0920		0.4052E-02
6	8	6	3		9	7	2	1154.4238		0.4600E-02	6	17	3	14		18	4	15	1158.2589	-0.0003	0.1897E-02
6	8	6	2		9	7	3	1154.4238		0.4600E-02	6	23	8	16		23	9	15	1158.3346		0.1058E-03
6	18	1	18		17	4	13	1154.4828		0.1399E-03	6	23	8	15		23	9	14	1158.3346		0.1058E-03
4	18	2	17		19	1	19	1154.6470		0.7141E-04	6	13	4	10		14	5	9	1158.3981	0.0016	0.7897E-02
6	18	1	18		19	2	17	1154.7048		0.4728E-03	6	13	4	9		14	5	10	1158.4011	-0.0014	0.7898E-02
4	23	5	19		24	4	21	1154.7772		0.1599E-03	4	9	2	7		10	1	9	1158.4220	-0.0002	0.9524E-02
6	11	5	6		12	6	7	1154.8207		0.1992E-02	4	27	3	25		26	4	23	1158.4346		0.8918E-03
6	11	5	7		12	6	6	1154.8207		0.1992E-02	4	17	2	16		16	3	14	1158.5325	-0.0002	0.1735E-01
6	19	1	19		18	4	14	1154.8550		0.2035E-03	4	6	1	5		7	0	7	1158.6178	0.0001	0.6786E-02
6	18	3	18		19	4	15	1154.9233		0.1475E-02	6	22	8	14		22	9	13	1158.6384		0.1294E-03
4	15	2	14		14	3	12	1154.9281	0.0000	0.2081E-01	6	22	8	15		22	9	14	1158.6384		0.1294E-03
4	8	1	7		9	0	9	1155.0388	0.0002	0.5938E-02	4	15	3	13		16	2	15	1158.8010		0.2963E-03
4	25	3	23		24	4	21	1155.1132		0.1137E-02	6	21	8	14		21	9	13	1158.9292		0.1558E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	21	8	13		21	9	12	1158.9292		0.1558E-03	6	12	8	4		12	9	3	1161.0790		0.3213E-03
4	1	0	1		1	1	1	1159.1357	0.0000	0.2957E-01	6	12	8	5		12	9	4	1161.0790		0.3213E-03
4	14	2	13		15	1	15	1159.2087	-0.0003	0.1050E-02	4	8	0	8		8	1	8	1161.2039	0.0001	0.1269E+00
6	20	8	12		20	9	11	1159.2125		0.1846E-03	6	11	8	3		11	9	2	1161.2561		0.2855E-03
6	20	8	13		20	9	12	1159.2125		0.1846E-03	6	11	8	4		11	9	3	1161.2561		0.2855E-03
4	2	0	2		2	1	2	1159.2717	-0.0001	0.4855E-01	4	29	3	27		28	4	25	1161.3564		0.3953E-03
4	21	5	16		22	4	18	1159.2758		0.1456E-03	6	10	8	3		10	9	2	1161.4196		0.2241E-03
4	28	2	27		28	1	27	1159.2930		0.5269E-02	6	10	8	2		10	9	1	1161.4196		0.2241E-03
4	15	2	13		14	3	11	1159.3917	-0.0002	0.2202E-01	4	8	2	6		9	1	8	1161.4368	-0.0002	0.8998E-02
6	6	6	0		7	7	1	1159.4110		0.5498E-02	6	9	8	2		9	9	1	1161.5691		0.1313E-03
6	6	6	1		7	7	0	1159.4110		0.5498E-02	6	9	8	1		9	9	0	1161.5691		0.1313E-03
4	9	1	9		8	2	7	1159.4397	-0.0002	0.7941E-02	4	9	0	9		9	1	9	1161.6324	0.0000	0.1314E+00
4	3	0	3		3	1	3	1159.4717	0.0001	0.6644E-01	4	26	2	25		26	1	25	1161.7386		0.8446E-02
6	19	8	12		19	9	11	1159.4867		0.2150E-03	4	19	2	18		18	3	16	1161.7721	0.0002	0.1337E-01
6	19	8	11		19	9	10	1159.4857		0.2150E-03	4	12	2	11		13	1	13	1161.9019	-0.0003	0.2052E-02
4	13	3	10		14	2	12	1159.6375		0.7008E-03	4	20	5	15		21	4	17	1161.9353		0.1678E-03
4	21	5	17		22	4	19	1159.6881		0.1891E-03	4	10	0	10		10	1	10	1162.0630	-0.0001	0.1331E+00
4	4	0	4		4	1	4	1159.7306	0.0001	0.8283E-01	4	20	5	16		21	4	18	1162.2083		0.2035E-03
6	18	8	10		18	9	9	1159.7485		0.2458E-03	4	18	2	14		15	3	12	1162.2768	-0.0001	0.2070E-01
6	18	8	11		18	9	10	1159.7485		0.2458E-03	6	8	5	4		9	6	3	1162.3208	-0.0004	0.2726E-02
4	7	1	6		6	2	4	1159.8186	-0.0002	0.8157E-02	6	8	5	3		9	6	4	1162.3208	-0.0004	0.2726E-02
6	9	5	4		10	6	5	1159.8276	0.0000	0.2482E-02	4	11	1	11		10	2	9	1162.4833		0.8200E-02
6	9	5	5		10	6	4	1159.8276	0.0000	0.2482E-02	4	11	0	11		11	1	11	1162.4850	-0.0001	0.1320E+00
6	25	2	23		24	5	20	1159.8424		0.1063E-03	4	25	3	22		24	4	20	1162.5059		0.1146E-02
4	24	3	21		23	4	19	1159.8795		0.1332E-02	4	8	1	7		7	2	5	1162.5601	0.0001	0.9659E-02
4	28	3	26		27	4	24	1159.9493		0.5270E-03	4	4	1	3		5	0	5	1162.6398	-0.0001	0.6248E-02
6	19	2	18		20	3	17	1159.9539	0.0002	0.4102E-02	4	30	3	28		29	4	28	1162.6492		0.2919E-03
6	17	8	9		17	9	8	1180.0002		0.2756E-03	6	15	3	13		16	4	12	1162.7555		0.2768E-02
6	17	8	10		17	9	9	1180.0002		0.2756E-03	4	12	3	9		13	2	11	1162.8253		0.7453E-03
4	5	0	5		5	1	5	1180.0420	0.0001	0.9738E-01	4	12	0	12		12	1	12	1162.8890	-0.0002	0.1285E+00
6	16	3	14		17	4	13	1180.1785	-0.0008	0.2282E-02	4	25	2	24		25	1	24	1162.9989		0.1041E-01
4	18	2	17		17	3	15	1180.2010	0.0001	0.1538E-01	6	15	3	12		16	4	13	1163.0905	-0.0005	0.2804E-02
6	18	8	8		18	9	7	1180.2405		0.3024E-03	6	18	2	17		19	3	16	1163.2144	0.0003	0.5515E-02
6	18	8	9		18	9	8	1180.2405		0.3024E-03	4	20	2	19		19	3	17	1163.2401	0.0002	0.1142E-01
6	17	1	17		18	2	16	1180.2452		0.6925E-03	4	13	0	13		13	1	13	1163.2672	0.0000	0.1226E+00
4	6	0	6		6	1	6	1180.3978	0.0001	0.1097E+00	4	11	2	10		12	1	12	1163.3595	-0.0001	0.2634E-02
6	15	8	8		15	9	7	1180.4689		0.3235E-03	4	13	3	11		14	2	13	1163.3704		0.4626E-03
6	15	8	7		15	9	6	1180.4689		0.3235E-03	6	11	4	8		12	5	7	1163.3997	0.0002	0.1001E-01
4	27	2	26		27	1	26	1180.5059		0.6730E-02	6	11	4	7		12	5	8	1163.4005	-0.0006	0.1001E-01
4	13	2	12		14	1	14	1180.5187	-0.0003	0.1514E-02	6	29	2	27		30	3	28	1163.5062		0.6786E-03
4	5	1	4		6	0	6	1180.5791	0.0000	0.6725E-02	4	14	0	14		14	1	14	1163.6139	0.0000	0.1150E+00
6	16	3	13		17	4	14	1180.6637	-0.0001	0.2325E-02	4	2	0	2		1	1	0	1163.8085	0.0001	0.9932E-02
6	14	8	7		14	9	6	1180.6851		0.3361E-03	4	12	1	12		11	2	10	1163.8677	-0.0001	0.7982E-02
6	14	8	6		14	9	5	1180.6851		0.3361E-03	6	26	2	24		25	5	21	1163.8694		0.8761E-04
4	7	0	7		7	1	7	1180.7888	-0.0001	0.1197E+00	4	15	0	15		15	1	15	1163.9258	-0.0001	0.1059E-03
6	13	8	6		13	9	5	1180.8885		0.3367E-03	6	28	2	26		29	3	27	1164.1139		0.9039E-00
6	13	8	5		13	9	4	1180.8885		0.3367E-03	4	16	0	16		16	1	16	1164.2017	0.0001	0.9586E-01
6	12	4	9		13	5	8	1180.9015	0.0006	0.8837E-02	4	24	2	23		24	1	23	1164.2832		0.1262E-01
6	12	4	8		13	5	9	1180.9031	-0.0010	0.8837E-02	4	22	6	16		23	5	18	1164.3229		0.5508E-04
4	10	1	10		9	2	8	1161.0072	-0.0001	0.8197E-02	4	22	6	17		23	5	19	1164.3392		0.5559E-04
4	14	3	12		15	2	14	1161.0653		0.3774E-03	4	17	0	17		17	1	17	1164.4417	0.0000	0.8538E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	7	2	5		8	1	7	1164.4514	-0.0007	0.8188E-02	6	23	7	16		23	8	15	1166.2267		0.8642E-04
4	19	5	14		20	4	16	1164.5754		0.1891E-03	6	23	7	17		23	8	16	1166.2268		0.8642E-04
4	21	2	20		20	3	18	1164.5992	0.0002	0.9572E-02	4	22	1	22		22	0	22	1166.3137	0.0001	0.1239E-01
4	18	0	18		18	1	18	1164.6478	0.0000	0.7484E-01	6	17	2	16		18	3	15	1166.3549	0.0006	0.7224E-02
6	27	2	25		28	3	26	1164.6740		0.1191E-02	4	14	1	14		13	2	12	1166.3624		0.7046E-02
4	19	5	15		20	4	17	1164.7531		0.2173E-03	6	22	7	16		22	8	15	1166.4574		0.1060E-03
4	3	1	2		4	0	4	1164.7894	0.0002	0.5322E-02	6	22	7	15		22	8	14	1166.4574		0.1060E-03
6	7	5	3		8	6	2	1164.8068	-0.0002	0.2967E-02	4	21	1	21		21	0	21	1166.4647	-0.0001	0.1491E-01
6	7	5	2		8	6	3	1164.8068	-0.0002	0.2967E-02	4	9	2	8		10	1	10	1166.5032	-0.0003	0.3751E-02
4	19	0	19		19	1	19	1164.8228	0.0001	0.6460E-01	4	20	1	20		20	0	20	1166.6451	-0.0002	0.1767E-01
4	10	2	9		11	1	11	1164.8931	0.0001	0.3218E-02	6	24	2	22		25	3	23	1166.6603		0.2551E-02
4	20	0	20		20	1	20	1164.9701	0.0000	0.5494E-01	6	21	7	14		21	8	13	1166.6814		0.1280E-03
4	21	0	21		21	1	21	1165.0931	0.0000	0.4606E-01	6	21	7	15		21	8	14	1166.6815		0.1280E-03
4	13	1	13		12	2	11	1165.1605	0.0001	0.7583E-02	4	19	1	19		19	0	19	1166.8585	-0.0001	0.2081E-01
4	17	2	15		18	3	13	1165.1884	0.0004	0.1914E-01	6	20	7	14		20	8	13	1166.8984		0.1523E-03
4	22	0	22		22	1	22	1165.1956	-0.0001	0.3806E-01	6	20	7	13		20	8	12	1166.8984		0.1523E-03
6	26	2	24		27	3	25	1165.2782		0.1551E-02	4	22	2	21		22	1	21	1166.9351	0.0006	0.1759E-01
4	23	0	23		23	1	23	1165.2808	0.0007	0.3103E-01	4	23	2	22		22	3	20	1166.9698	0.0008	0.6386E-02
4	9	1	8		8	2	6	1165.2839		0.1094E-01	4	21	6	15		22	5	17	1166.9806		0.6490E-04
6	14	3	12		15	4	11	1165.3101	-0.0010	0.3302E-02	4	2	6	16		22	5	18	1166.9908		0.6531E-04
4	26	3	23		25	4	21	1165.3231		0.9359E-03	4	21	1	1		3	0	3	1167.0188	0.0001	0.3943E-02
4	24	0	24		24	1	24	1165.3519	0.0004	0.2496E-01	6	19	7	12		19	8	11	1167.1077		0.1782E-03
4	25	0	25		25	1	25	1165.4117	0.0003	0.1981E-01	6	19	7	13		19	8	12	1167.1078		0.1782E-03
4	26	0	26		26	1	26	1165.4626	0.0004	0.1552E-01	4	18	1	18		18	0	18	1167.1080	-0.0002	0.2366E-01
4	27	0	27		27	1	27	1165.5070	0.0008	0.1200E-01	4	18	5	13		19	4	15	1167.1995		0.2085E-03
6	14	3	11		15	4	12	1165.5341	-0.0003	0.3332E-02	6	8	5	2		7	6	1	1167.2858	-0.0001	0.3206E-02
4	28	0	28		28	1	28	1165.5463	0.0009	0.9183E-02	6	8	5	1		7	6	2	1167.2858	-0.0001	0.3206E-02
6	16	1	16		17	2	15	1165.5797		0.1012E-02	6	18	7	11		18	8	10	1167.3091		0.2051E-03
4	29	0	29		29	1	29	1165.5823	0.0008	0.6910E-02	6	18	7	12		18	8	11	1167.3091		0.2051E-03
4	23	2	22		23	1	22	1165.5970		0.1502E-01	4	18	5	14		19	4	16	1167.3130		0.2299E-03
4	30	0	30		30	1	30	1165.6161	0.0013*	0.5146E-02	4	17	1	17		17	0	17	1167.3969	-0.0002	0.2670E-01
4	12	3	10		13	2	12	1165.7117		0.5466E-03	4	6	2	4		7	1	6	1167.4470	0.0001	0.7129E-02
4	30	3	28		30	2	28	1165.7372		0.4335E-03	6	23	2	21		24	3	22	1167.4574	0.0004	0.3220E-02
6	25	7	18		25	8	17	1165.7480		0.5506E-04	4	15	1	15		14	2	13	1167.4742	0.0000	0.6415E-02
6	25	7	19		25	8	18	1165.7484		0.5506E-04	6	17	7	11		17	8	10	1167.5020		0.2318E-03
4	30	1	30		30	0	30	1165.8112		0.1709E-02	6	17	7	10		17	8	9	1167.5020		0.2318E-03
4	29	1	29		29	0	29	1165.8269		0.2292E-02	6	16	7	9		16	8	8	1167.6859		0.2569E-03
4	22	2	21		21	3	19	1165.8442	0.0008	0.7886E-02	6	16	7	10		16	8	9	1167.6859		0.2569E-03
4	28	1	28		28	0	28	1165.8525	0.0004	0.3035E-02	4	16	1	16		16	0	16	1167.7268	-0.0002	0.2961E-01
4	27	1	27		27	0	27	1165.8895		0.3968E-02	6	13	3	11		14	4	10	1167.8448	-0.0004	0.3877E-02
6	10	4	7		11	5	6	1165.8927	-0.0006	0.1120E-01	6	15	7	9		15	8	8	1167.8607		0.2786E-03
6	10	4	6		11	5	7	1165.8931	-0.0010	0.1120E-01	6	15	7	8		15	8	7	1167.8607		0.2786E-03
4	11	3	8		12	2	10	1165.9117		0.7800E-03	6	27	2	25		28	5	22	1167.8868		0.7130E-04
6	25	2	23		26	3	24	1165.9369		0.2000E-02	4	29	3	27		29	2	27	1167.9572		0.5555E-03
4	26	1	26		26	0	26	1165.9395	-0.0001	0.5121E-02	4	10	1	9		9	2	7	1167.9705	0.0005	0.1196E-01
6	24	7	17		24	8	16	1165.9901		0.6947E-04	4	24	2	23		23	3	21	1167.9716		0.5083E-02
6	24	7	18		24	8	17	1165.9904		0.6947E-04	6	13	3	10		14	4	11	1167.9899	-0.0002	0.3901E-02
4	25	1	25		25	0	25	1166.0044	0.0001	0.6520E-02	6	14	7	7		14	8	6	1168.0260		0.2948E-03
4	3	0	3		2	1	1	1166.0336	0.0000	0.1938E-01	6	14	7	8		14	8	7	1168.0260		0.2948E-03
4	24	1	24		24	0	24	1166.0867	-0.0001	0.8191E-02	4	11	3	9		12	2	11	1168.0847		0.6225E-03
4	23	1	23		23	0	23	1166.1888	-0.0001	0.1015E-01	4	15	1	15		15	0	15	1168.0990	-0.0002	0.3224E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	18	2	18		17	3	14	1188.1898	-0.0003	0.1741E-01	4	11	1	10		10	2	8	1170.5985	0.0000	0.1268E-01
4	4	0	4		3	1	2	1188.1548	0.0000	0.2787E-01	4	28	2	27		27	3	25	1170.8442		0.1724E-02
6	13	7	7		13	8	6	1188.1816		0.3030E-03	6	15	1	15		16	2	14	1170.8924		0.1457E-02
6	13	7	6		13	8	5	1188.1816		0.3030E-03	6	8	4	5		9	5	4	1170.8625	-0.0005	0.1352E-01
4	8	2	7		9	1	9	1188.1899	-0.0001	0.4167E-02	6	8	4	4		9	5	5	1170.8625	-0.0005	0.1352E-01
4	27	3	24		28	4	22	1188.2444		0.7443E-03	4	29	2	28		28	3	26	1170.9582		0.1261E-02
4	21	2	20		21	1	20	1188.2915	0.0002	0.2025E-01	4	19	2	17		18	3	15	1171.0199	0.0027	0.1560E-01
6	12	7	5		12	8	4	1188.3270		0.3003E-03	4	9	1	9		9	0	9	1171.0225	0.0002	0.3577E-01
6	12	7	6		12	8	5	1188.3270		0.3003E-03	4	19	2	18		19	1	18	1171.0267	-0.0041	0.2556E-01
6	22	2	20		23	3	21	1188.3365	0.0004	0.4025E-02	4	19	1	19		18	2	17	1171.0801	0.0000	0.3684E-02
6	9	4	6		10	5	5	1188.3804	-0.0004	0.1238E-01	4	30	2	29		29	3	27	1171.1167		0.9084E-03
6	9	4	5		10	5	6	1188.3806	-0.0006	0.1238E-01	4	28	3	25		27	4	23	1171.2227		0.5813E-03
6	11	7	4		11	8	3	1188.4622		0.2837E-03	4	13	4	10		14	3	12	1171.3979		0.9089E-04
6	11	7	5		11	8	4	1188.4622		0.2837E-03	6	19	2	17		20	3	18	1171.5386	0.0010	0.7402E-02
4	16	1	16		15	2	14	1188.4978	-0.0001	0.5730E-02	4	8	1	8		8	0	8	1171.5479	-0.0001	0.3385E-01
4	14	1	14		14	0	14	1188.5125	-0.0001	0.3448E-01	4	20	1	20		19	2	18	1171.7551	0.0001	0.3880E-02
6	10	7	3		10	8	2	1188.5867		0.2497E-03	4	9	3	8		10	2	8	1171.7876		0.8017E-03
6	10	7	4		10	8	3	1188.5867		0.2497E-03	4	6	2	5		7	1	7	1171.7927	-0.0005	0.4382E-02
6	9	7	2		9	8	1	1188.7004		0.1944E-03	6	28	2	28		27	5	23	1171.8752		0.5732E-04
6	9	7	3		9	8	2	1188.7004		0.1944E-03	4	7	1	7		7	0	7	1172.0531	0.0016	0.3129E-01
4	14	4	11		15	3	13	1188.7430		0.6578E-04	4	6	0	6		5	1	4	1172.0582	-0.0016	0.4058E-01
6	8	7	2		8	8	1	1188.8035		0.1131E-03	4	19	6	13		20	5	15	1172.2603		0.8625E-04
6	8	7	1		8	8	0	1188.8035		0.1131E-03	4	19	6	14		20	5	16	1172.2642		0.8646E-04
4	25	2	24		24	3	22	1188.8444		0.3979E-02	6	30	6	24		30	7	23	1172.2780		0.9139E-04
4	10	3	7		11	2	9	1188.8977		0.8008E-03	6	15	2	14		16	3	13	1172.3191	0.0003	0.1150E-01
4	13	1	13		13	0	13	1188.9848	-0.0001	0.3613E-01	4	27	3	25		27	2	25	1172.3287		0.8738E-03
6	21	2	19		22	3	20	1189.3054	0.0004	0.4981E-02	4	21	1	21		20	2	19	1172.3787	0.0010	0.2537E-02
4	1	1	0		2	0	2	1189.3203		0.2145E-02	4	18	2	17		18	1	17	1172.3880	0.0000	0.2808E-01
6	18	2	15		17	3	14	1189.3861	0.0004	0.9226E-02	4	16	5	11		17	4	13	1172.4084		0.2378E-03
4	17	1	17		16	2	15	1189.4346	-0.0004	0.5029E-02	4	16	5	12		17	4	14	1172.4519		0.2486E-03
4	12	1	12		12	0	12	1189.4502	-0.0002	0.3715E-01	4	6	1	6		6	0	6	1172.5255	0.0000	0.2817E-01
4	26	2	25		25	3	23	1189.5837		0.3082E-02	6	29	6	23		29	7	22	1172.5801		0.1239E-03
4	20	6	14		21	5	16	1189.6282		0.7539E-04	6	30	6	25		30	7	24	1172.6613		0.9628E-04
4	20	6	15		21	5	17	1189.6327		0.7588E-04	6	18	2	16		19	3	17	1172.8140	0.0006	0.8890E-02
4	20	2	19		20	1	19	1189.6584	0.0000	0.2293E-01	6	28	6	22		28	7	21	1172.8297		0.1656E-03
6	5	5	1		6	6	0	1189.7574	-0.0002	0.3448E-02	6	11	3	9		12	4	8	1172.8689	-0.0004	0.5099E-02
6	5	5	0		6	6	1	1189.7574	-0.0002	0.3448E-02	6	29	6	24		29	7	23	1172.8811		0.1298E-03
4	17	5	12		18	4	14	1189.8099		0.2250E-03	4	9	3	7		10	2	9	1172.9061		0.7193E-03
4	17	5	13		18	4	15	1189.8809		0.2406E-03	6	11	3	8		12	4	9	1172.9232	0.0000	0.5111E-02
4	7	2	6		8	1	8	1189.9532	0.0013	0.4400E-02	4	22	1	22		21	2	20	1172.9290		0.2060E-02
4	11	1	11		11	0	11	1189.9617	-0.0002	0.3745E-01	4	5	1	5		5	0	5	1172.9535	-0.0001	0.2457E-01
4	28	3	26		28	2	26	1170.1582		0.7017E-03	6	27	6	21		27	7	20	1173.0881		0.2184E-03
4	5	0	5		4	1	3	1170.1650	0.0000	0.3504E-01	6	28	6	23		28	7	22	1173.0977		0.1727E-03
4	27	2	26		26	3	24	1170.1852		0.2317E-02	4	12	1	11		11	2	9	1173.1465	0.0000	0.1301E-01
4	18	1	18		17	2	16	1170.2878	-0.0002	0.4339E-02	6	27	6	22		27	7	21	1173.3105		0.2268E-02
6	12	3	10		13	4	9	1170.3634	-0.0005	0.4481E-02	4	4	2	2		5	1	4	1173.3157	-0.0001	0.4432E-02
6	20	2	18		21	3	19	1170.3708	0.0002	0.8102E-02	4	4	1	4		4	0	4	1173.3267	0.0000	0.2059E-01
4	5	2	3		6	1	5	1170.4069	0.0000	0.5862E-02	6	26	6	20		26	7	19	1173.3359		0.2841E-03
6	12	3	9		13	4	10	1170.4541	-0.0001	0.4498E-02	6	7	4	3		8	5	4	1173.3390	-0.0006	0.1480E-01
4	10	3	8		11	2	10	1170.4844		0.6828E-03	6	7	4	4		8	5	3	1173.3390	-0.0006	0.1480E-01
4	10	1	10		10	0	10	1170.4895	0.0000	0.3698E-01	4	23	1	23		22	2	21	1173.4164		0.1650E-02

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	26	6	21	26	7	20	1173.5197		0.2940E-03	
6	25	6	19	25	7	18	1173.5737		0.3644E-03	
4	3	1	3	3	0	3	1173.6357	-0.0002	0.1631E-01	
4	5	2	4	6	1	6	1173.7075	0.0000	0.4061E-02	
6	25	6	20	25	7	19	1173.7246		0.3761E-03	
4	17	6	18	17	1	16	1173.7268	-0.0002	0.3033E-01	
4	24	6	18	24	7	17	1173.6018		0.4610E-03	
4	7	0	7	6	1	5	1173.6197	0.0000	0.4432E-01	
4	24	1	24	23	2	22	1173.8439	0.0000	0.1304E-02	
4	2	1	2	2	0	2	1173.8748	0.0000	0.1181E-01	
6	20	2	18	19	3	16	1173.8967	-0.0003	0.1376E-01	
6	24	6	19	24	7	18	1173.9250		0.4745E-03	
4	1	1	1	23	7	16	1174.0205	0.0002	0.5749E-03	
4	12	4	18	13	3	11	1174.0380		0.7145E-02	
6	23	2	15	23	7	17	1174.1205	0.0004	0.1239E-03	
6	17	2	15	18	3	16	1174.2007		0.5905E-03	
4	25	1	25	24	2	23	1174.2159		0.1017E-02	
4	29	3	26	28	4	24	1174.2234		0.4473E-03	
6	22	6	17	22	7	15	1174.2300		0.7066E-03	
6	22	6	17	22	7	15	1174.3107		0.7245E-03	
6	21	6	15	21	7	14	1174.4304		0.8558E-03	
4	26	3	24	26	7	15	1174.4576		0.1073E-02	
4	21	6	16	21	7	15	1174.4952		0.8760E-03	
4	26	1	26	25	2	24	1174.5377		0.7829E-03	
4	8	3	5	9	2	7	1174.5885		0.7733E-03	
6	20	6	15	20	7	14	1174.6217		0.1029E-02	
6	19	6	13	19	7	12	1174.6737		0.1044E-02	
6	19	6	14	19	7	13	1174.8457		0.1197E-03	
4	27	1	27	26	2	25	1174.8137		0.5953E-03	
4	18	6	12	19	5	14	1174.8827		0.1224E-02	
4	18	6	13	18	5	15	1174.8861		0.9733E-04	
4	18	6	12	18	5	14	1174.8827		0.9728E-04	
6	15	5	10	16	4	12	1174.9769		0.1361E-02	
4	15	5	10	16	4	12	1174.9963		0.2458E-03	
6	18	6	11	18	7	11	1175.0107		0.1411E-02	
4	15	5	11	16	4	13	1175.0222		0.2530E-03	
4	16	2	15	16	1	15	1175.0359	-0.0002	0.3230E-01	
4	28	1	28	27	2	26	1175.0490		0.4470E-03	
6	17	6	11	17	3	12	1175.1404	0.0006	0.1663E-02	
6	14	2	11	15	7	10	1175.1656		0.1563E-01	
6	17	6	12	17	7	11	1175.1682		0.1599E-02	
4	29	1	29	28	2	27	1175.2478		0.3316E-03	
6	16	6	11	16	7	9	1175.2938		0.1731E-02	
6	8	3	6	9	2	8	1175.3177		0.1777E-02	
6	8	3	6	9	2	8	1175.3451		0.7240E-03	
6	10	3	7	11	4	8	1175.3636	-0.0002	0.5715E-02	
6	10	3	7	11	4	8	1175.3947	-0.0003	0.5722E-02	
4	30	1	30	29	2	28	1175.4146		0.2431E-03	
6	15	6	9	15	7	8	1175.4358		0.1862E-02	
4	8	0	8	7	1	6	1175.4426	-0.0001	0.4823E-01	

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	15	6	10	15	7	9	1175.4580		0.1928E-02	
3	11	3	9	11	7	4	1175.4897		0.8345E-04	
6	14	6	8	14	7	7	1175.5626		0.1904E-02	
3	11	3	8	11	7	5	1175.5649		0.1143E-02	
6	14	6	9	14	2	13	1175.5748		0.2053E-02	
6	14	6	9	14	2	13	1175.5870		0.2023E-01	
4	13	1	12	12	2	10	1175.5931	-0.0001	0.1300E-02	
6	13	6	8	13	7	5	1175.6569		0.5225E-03	
6	13	6	8	13	7	5	1175.6964		0.1622E-02	
4	4	2	3	5	1	6	1175.6969		0.1951E-02	
6	16	2	14	17	7	7	1175.7010	-0.0003	0.3407E-02	
6	12	6	9	12	7	6	1175.7267		0.1244E-01	
6	6	4	3	7	5	3	1175.8096	-0.0005	0.1562E-01	
6	6	4	3	7	5	2	1175.8096	-0.0005	0.1562E-01	
6	11	6	5	11	7	6	1175.9465	0.0012	0.1745E-02	
6	11	6	5	11	7	6	1175.9885		0.2140E-02	
6	11	6	5	11	7	5	1176.0052	0.0025	0.210E-02	
6	13	3	11	13	6	6	1176.0020		0.210E-02	
6	13	3	11	13	6	6	1176.0344		0.6097E-03	
6	10	6	4	10	7	3	1176.0880		0.2062E-02	
6	10	6	4	10	7	3	1176.0880		0.2062E-02	
4	3	2	1	4	1	3	1176.0884	-0.0002	0.2894E-02	
4	9	6	3	9	7	2	1176.1609		0.2894E-02	
6	9	6	3	9	7	2	1176.1742		0.1810E-02	
3	13	3	10	13	7	7	1176.1742		0.1810E-02	
3	13	3	10	13	7	7	1176.2025		0.2803E-03	
6	8	6	3	8	7	7	1176.2488		0.2297E-02	
6	8	6	3	8	7	7	1176.2543		0.1400E-02	
6	8	6	2	8	7	1	1176.2543		0.1400E-02	
4	15	2	14	15	1	14	1176.2543	-0.0002	0.3390E-01	
4	15	2	14	15	1	14	1176.2543		0.3390E-01	
6	7	6	2	7	7	7	1176.3267		0.8106E-03	
6	7	6	2	7	7	7	1176.3267		0.8106E-03	
3	15	3	13	15	7	1	1176.5084		0.1285E-03	
4	11	4	7	12	3	9	1176.5288		0.9583E-04	
4	11	4	7	12	3	9	1176.5342		0.1300E-02	
4	26	3	23	25	2	23	1176.5430		0.1103E-03	
4	14	1	11	14	7	8	1176.5430		0.4903E-02	
4	11	1	4	11	0	0	1176.6067	0.0002	0.1654E-03	
4	11	1	4	11	0	0	1176.6067		0.1654E-03	
4	21	2	19	20	3	17	1176.7165	-0.0003	0.1195E-01	
4	16	3	14	16	7	9	1176.7946		0.8743E-04	
4	9	6	12	8	1	7	1176.9177	0.0000	0.4641E-01	
4	16	3	12	15	7	9	1176.9800		0.6240E-04	
4	16	3	12	15	7	9	1177.1017		0.6240E-04	
4	30	3	27	29	2	26	1177.2167		0.3394E-03	
4	7	3	3	7	4	4	1177.3098		0.7214E-03	
6	15	2	13	16	3	14	1177.3160	0.0004	0.1448E-01	
3	18	3	16	18	7	11	1177.4265		0.5187E-04	
4	17	6	11	18	5	13	1177.4265		0.1076E-03	
4	17	6	11	18	5	13	1177.4951		0.1076E-03	
4	14	2	13	14	1	13	1177.5291		0.3506E-01	
4	14	2	13	14	1	13	1177.5291		0.3506E-01	
4	5	5	9	5	4	11	1177.5741	0.0000	0.2485E-03	

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	14	5	10		15	4	12	1177.5891		0.2530E-03	6	30	5	26		30	6	25	1181.4758		0.6998E-04
4	3	2	2		4	1	4	1177.7801	-0.0002	0.2427E-02	6	30	5	25		30	6	24	1181.5421		0.7046E-04
4	7	3	5		8	2	7	1177.7988		0.6901E-03	6	29	5	25		29	6	24	1181.6481		0.9427E-04
6	9	3	7		10	4	6	1177.8492	-0.0003	0.6310E-02	4	22	0	22		21	1	20	1181.6637	0.0002	0.6597E-02
6	9	3	8		10	4	7	1177.8658	-0.0003	0.6314E-02	6	29	5	24		29	6	23	1181.6833		0.9483E-04
4	14	1	13		13	2	11	1177.9175	-0.0001	0.1284E-01	4	3	1	2		2	0	2	1181.7826	0.0000	0.9720E-02
6	13	2	12		14	3	11	1177.9371	0.0004	0.1688E-01	4	14	0	14		13	1	12	1181.7903	0.0012	0.3080E-01
4	10	0	10		9	1	8	1178.2343	0.0000	0.4507E-01	4	10	2	9		10	1	9	1181.7924	-0.0009	0.3442E-01
6	5	4	1		6	5	2	1178.2743	-0.0004	0.1659E-01	4	9	4	5		10	3	7	1181.8052		0.2247E-03
6	5	4	2		6	5	1	1178.2743	-0.0004	0.1659E-01	6	28	5	24		28	6	23	1181.8134		0.1253E-03
4	30	0	30		29	1	28	1178.3383		0.7312E-03	6	28	5	23		28	6	22	1181.8278		0.1260E-03
4	24	3	22		24	2	22	1178.5480	0.0005	0.1553E-02	4	9	4	6		10	3	8	1181.8480		0.2627E-03
4	29	0	29		28	1	27	1178.6853		0.9992E-03	6	27	5	22		27	6	21	1181.9738		0.1654E-03
4	13	2	12		13	1	12	1178.6952	0.0000	0.3572E-01	6	27	5	23		27	6	22	1181.9791		0.1643E-03
4	2	2	0		3	1	2	1178.9319		0.1339E-02	4	21	0	21		20	1	19	1182.0336	-0.0001	0.8308E-02
6	14	2	12		15	3	13	1179.0446	0.0002	0.1667E-01	4	23	2	21		22	3	19	1182.0760	-0.0004	0.8572E-02
4	28	0	28		27	1	26	1179.0653		0.1350E-02	6	27	1	26		28	2	27	1182.1047		0.1064E-02
4	2	1	1		1	0	1	1179.1547	-0.0001	0.7394E-02	6	28	5	21		28	6	20	1182.1208		0.2143E-03
4	10	4	6		11	3	8	1179.1873		0.1588E-03	4	18	1	15		15	2	13	1182.1235	0.0000	0.1105E-01
4	10	4	7		11	3	9	1179.2845		0.2135E-03	6	28	5	22		28	6	21	1182.1479		0.2118E-03
6	29	1	28		30	2	29	1179.3499		0.5983E-03	4	15	0	15		14	1	13	1182.2460	0.0001	0.2658E-01
4	11	0	11		10	1	9	1179.3843	0.0000	0.4250E-01	6	25	5	20		25	6	19	1182.2870		0.2740E-03
4	22	2	20		21	3	18	1179.4504	-0.0003	0.1021E-01	6	24	5	20		24	6	19	1182.2722		0.3089E-03
4	27	0	27		26	1	25	1179.4749		0.1805E-02	6	29	2	28		30	1	29	1182.3171		0.1549E-02
4	12	2	11		12	1	11	1179.7982	0.0000	0.3585E-01	4	20	0	20		19	1	18	1182.3396	0.0002	0.1036E-01
4	2	2	1		3	1	3	1179.8961	-0.0003	0.1205E-02	4	22	3	20		22	2	20	1182.3480		0.2132E-02
4	26	0	26		25	1	24	1179.9080	0.0003	0.2386E-02	6	25	5	21		25	6	20	1182.3485		0.2609E-03
4	6	3	3		7	2	5	1179.9620		0.6294E-03	6	24	5	19		24	6	18	1182.4121		0.3458E-03
4	16	6	10		17	5	12	1180.0945		0.1170E-03	6	23	5	19		23	6	18	1182.5201		0.4270E-03
4	16	6	11		17	5	13	1180.0953		0.1170E-03	4	16	0	16		15	1	14	1182.5385	0.0001	0.2258E-01
4	15	1	14		14	2	12	1180.1003	-0.0001	0.1197E-01	6	23	5	18		23	6	17	1182.5553		0.4306E-03
4	13	5	8		14	4	10	1180.1422		0.2453E-03	4	5	3	2		6	2	4	1182.5562		0.4995E-03
4	13	5	9		14	4	11	1180.1506		0.2480E-03	4	19	0	19		18	1	17	1182.5618	0.0000	0.1280E-01
6	13	1	13		14	2	12	1180.2236	0.0000	0.2820E-02	4	9	2	8		9	1	8	1182.6746	0.0015	0.3285E-01
4	6	3	4		7	2	6	1180.2567		0.6132E-03	4	17	0	17		16	1	15	1182.6787	-0.0027	0.1891E-01
6	8	3	6		9	4	5	1180.3273	0.0001	0.6868E-02	6	22	5	18		22	6	17	1182.6794		0.5277E-03
6	8	3	5		9	4	6	1180.3358	-0.0004	0.6889E-02	4	18	0	18		17	1	16	1182.6809		0.1564E-01
4	25	0	25		24	1	23	1180.3560		0.3123E-02	4	15	6	9		16	5	11	1182.6840		0.1246E-03
4	12	0	12		11	1	10	1180.3617	0.0000	0.3904E-01	4	15	6	10		16	5	12	1182.6844		0.1247E-03
4	23	3	21		23	2	21	1180.4890	0.0002	0.1832E-02	6	22	5	17		22	6	16	1182.6957		0.5290E-03
6	12	2	11		13	3	10	1180.6442	0.0003	0.1941E-01	4	12	5	7		13	4	9	1182.7009		0.2358E-03
6	4	4	1		5	5	0	1180.7330	-0.0005	0.1758E-01	4	12	5	8		13	4	10	1182.7054		0.2373E-03
6	4	4	0		5	5	1	1180.7330	-0.0005	0.1758E-01	4	5	3	3		6	2	5	1182.7209		0.4925E-03
6	28	1	27		29	2	28	1180.7513		0.8041E-03	6	7	3	5		8	4	4	1182.7987	0.0016	0.7369E-02
4	24	0	24		23	1	22	1180.8076	0.0004	0.4048E-02	6	7	3	4		8	4	5	1182.8025	-0.0021	0.7370E-02
4	11	2	10		11	1	10	1180.8322	-0.0002	0.3542E-01	6	21	5	17		21	6	16	1182.8243		0.6401E-03
6	13	2	11		14	3	12	1180.8831	0.0002	0.1898E-01	6	12	2	10		13	3	11	1182.8265	0.0001	0.2134E-01
6	29	1	29		30	0	30	1181.0867		0.1202E-02	6	21	5	16		21	6	15	1182.8330		0.6407E-03
4	13	0	13		12	1	11	1181.1636	0.0001	0.3504E-01	6	20	5	16		20	6	15	1182.9618		0.7648E-03
4	23	0	23		22	1	21	1181.2490	0.0006	0.5191E-02	6	20	5	15		20	6	14	1182.9667		0.7652E-03
6	29	0	29		30	1	30	1181.2595		0.3581E-02	6	19	5	15		19	6	14	1183.0934	0.0011	0.9002E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	19	5	14		19	6	13	1183.0962	-0.0017	0.9004E-03	6	6	3	4		7	4	3	1185.2642	0.0010	0.7807E-02
6	28	1	28		29	0	29	1183.1003		0.1853E-02	6	6	3	3		7	4	4	1185.2656	-0.0005	0.7808E-02
6	18	5	14		18	6	13	1183.2197	0.0010	0.1043E-02	6	27	0	27		28	1	28	1185.2701		0.6688E-02
6	18	5	13		18	6	12	1183.2212	-0.0008	0.1044E-02	4	5	2	4		5	1	4	1185.3858	0.0000	0.2131E-01
6	28	0	28		29	1	29	1183.2476		0.4911E-02	4	18	1	17		17	2	15	1185.6271	0.0001	0.8724E-02
6	11	2	10		12	3	9	1183.2969	0.0003	0.2214E-01	4	20	3	18		20	2	18	1185.7856	-0.0002	0.2779E-02
6	17	5	13		17	6	12	1183.3406	0.0007	0.1190E-02	4	4	2	3		4	1	3	1185.8199	0.0000	0.1723E-01
6	17	5	12		17	6	11	1183.3414	-0.0002	0.1190E-02	6	24	1	23		25	2	24	1185.8806	-0.0025	0.2240E-02
6	26	1	25		27	2	26	1183.4091		0.1385E-02	6	10	2	9		11	3	8	1185.9041	0.0001	0.2477E-01
6	16	5	12		16	6	11	1183.4561	0.0007	0.1335E-02	4	3	2	2		3	1	2	1186.1843	0.0000	0.1265E-01
6	16	5	11		16	6	10	1183.4565	0.0002	0.1335E-02	4	2	2	1		2	1	1	1186.4580	0.0002	0.7335E-02
4	8	2	7		8	1	7	1183.4753	-0.0001	0.3072E-01	4	30	4	27		30	3	27	1186.8864		0.5723E-03
6	15	5	11		15	6	10	1183.5660	0.0004	0.1471E-02	4	25	2	23		24	3	21	1186.8951	-0.0003	0.5729E-02
6	15	5	10		15	6	9	1183.5662	0.0001	0.1472E-02	4	7	4	3		8	3	5	1186.9427		0.3081E-03
6	14	5	10		14	6	9	1183.6700	0.0003	0.1591E-02	4	2	2	0		2	1	2	1186.9438	0.0002	0.6981E-02
6	14	5	9		14	6	8	1183.6703	0.0001	0.1591E-02	4	7	4	4		8	3	6	1186.9535		0.3194E-03
6	13	5	9		13	6	8	1183.7684	0.0001	0.1684E-02	6	10	2	8		11	3	9	1186.9989	0.0003	0.2598E-01
6	13	5	8		13	6	7	1183.7684	0.0000	0.1684E-02	6	27	2	26		28	1	27	1187.0115		0.2598E-02
6	12	5	8		12	6	7	1183.8604	0.0000	0.1739E-02	6	23	1	22		24	2	23	1187.0585	-0.0022	0.2784E-02
6	12	5	7		12	6	6	1183.8605	0.0000	0.1739E-02	4	19	1	18		18	2	16	1187.0795	0.0001	0.7473E-02
6	11	5	6		11	6	5	1183.9462	0.0000	0.1747E-02	4	3	2	1		3	1	3	1187.1622	0.0003	0.1139E-01
6	11	5	7		11	6	6	1183.9462	0.0000	0.1747E-02	4	5	1	4		4	0	4	1187.1718	0.0001	0.1338E-01
4	17	1	16		16	2	14	1183.9707	0.0001	0.9940E-02	6	26	1	26		27	0	27	1187.2108		0.2948E-02
6	10	5	6		10	6	5	1184.0254	0.0000	0.1694E-02	6	26	0	26		27	1	27	1187.3188	-0.0019	0.6913E-02
6	10	5	5		10	6	4	1184.0254	0.0000	0.1694E-02	4	19	3	17		19	2	17	1187.3485	-0.0005	0.3112E-02
6	9	5	4		9	6	3	1184.0980	0.0001	0.1569E-02	4	4	2	2		4	1	4	1187.4648	0.0001	0.1444E-01
6	9	5	5		9	6	4	1184.0980	0.0001	0.1569E-02	4	3	3	0		4	2	2	1187.6123		0.1552E-03
4	21	3	19		21	2	19	1184.1183	-0.0001	0.2450E-02	4	3	3	1		4	2	3	1187.6478		0.1547E-03
6	8	5	4		8	6	3	1184.1638	-0.0002	0.1356E-02	6	5	3	3		6	4	2	1187.7238	0.0000	0.8181E-02
6	8	5	3		8	6	2	1184.1638	-0.0002	0.1356E-02	6	5	3	2		6	4	3	1187.7242	-0.0005	0.8181E-02
4	7	2	6		7	1	6	1184.1921	0.0001	0.2807E-01	4	10	5	5		11	4	7	1187.7897		0.1974E-03
6	7	5	2		7	6	1	1184.2227	-0.0004	0.1040E-02	4	10	5	6		11	4	8	1187.7908		0.1977E-03
6	7	5	3		7	6	2	1184.2227	-0.0004	0.1040E-02	4	30	1	29		29	2	27	1187.8186		0.3572E-03
6	6	5	2		6	6	1	1184.2744	-0.0007	0.5988E-03	4	13	6	7		14	5	9	1187.8311		0.1318E-03
6	6	5	1		6	6	0	1184.2744	-0.0007	0.5988E-03	4	13	6	8		14	5	10	1187.8312		0.1318E-03
4	8	4	4		9	3	6	1184.3885		0.2800E-03	4	5	2	3		5	1	5	1187.8607	0.0002	0.1629E-01
4	8	4	5		9	3	7	1184.4109		0.3027E-03	6	22	1	21		23	2	22	1188.2086	-0.0019	0.3411E-02
4	4	1	3		3	0	3	1184.4335	-0.0001	0.1175E-01	4	20	1	19		19	2	17	1188.3180	0.0004	0.6254E-02
4	24	2	22		23	3	20	1184.5659	-0.0003	0.7073E-02	4	6	2	4		6	1	6	1188.3615	0.0001	0.1704E-01
6	28	2	27		29	1	28	1184.6206		0.1949E-02	6	9	2	8		10	3	7	1188.4733	0.0000	0.2719E-01
6	12	1	12		13	2	11	1184.6394	0.0000	0.3766E-02	4	18	3	16		18	2	16	1188.7981		0.3443E-02
6	25	1	24		26	2	25	1184.6663		0.1775E-02	6	11	1	11		12	2	10	1188.8271	-0.0003	0.4878E-02
4	6	2	5		6	1	5	1184.8228	-0.0001	0.2492E-01	4	29	1	28		28	2	26	1188.8795		0.5123E-03
6	11	2	9		12	3	10	1184.8678	0.0001	0.2369E-01	4	7	2	5		7	1	7	1188.9803	0.0000	0.1678E-01
4	4	3	1		5	2	3	1185.1030		0.3381E-03	4	29	4	28		29	3	28	1189.0262		0.7495E-03
6	27	1	27		28	0	28	1185.1481		0.2231E-02	4	26	2	24		25	3	22	1189.0400	-0.0003	0.4552E-02
4	4	3	2		5	2	4	1185.1857		0.3338E-03	6	9	2	7		10	3	8	1189.2041	0.0001	0.2805E-01
4	11	5	6		12	4	8	1185.2501		0.2198E-03	6	25	1	25		26	0	26	1189.2546	0.0051R	0.3783E-02
4	11	5	7		12	4	9	1185.2524		0.2205E-03	4	21	1	20		20	2	18	1189.3270	0.0005	0.5117E-02
4	14	6	8		15	5	10	1185.2629		0.1299E-03	6	21	1	20		22	2	21	1189.3406	-0.0018	0.4119E-02
4	14	6	9		15	5	11	1185.2631		0.1299E-03	6	25	0	25		26	1	26	1189.3855	-0.0018	0.1173E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	6	4	2		7	3	4	1189.4722		0.2933E-03	6	20	4	17		20	5	16	1191.7830	-0.0001	0.4761E-02
4	6	4	3		7	3	5	1189.4771		0.2978E-03	6	21	4	17		21	5	16	1191.7942	-0.0002	0.4010E-02
6	28	2	25		27	1	26	1189.4955	0.0056R	0.2809E-02	6	30	4	26		30	5	25	1191.8568		0.4625E-03
4	8	2	6		6	1	8	1189.7321	-0.0001	0.1669E-01	6	20	4	16		20	5	15	1191.8657	-0.0003	0.4780E-02
4	28	1	27		27	2	25	1189.7386		0.7242E-03	6	19	4	16		19	5	15	1191.8862	-0.0002	0.5604E-02
4	6	1	5		5	0	5	1189.9838	0.0001	0.1447E-01	6	19	4	15		19	5	14	1191.9418	-0.0002	0.5619E-02
4	22	1	21		21	2	19	1190.1042		0.4098E-02	4	5	4	1		6	3	3	1191.9807		0.2268E-03
4	17	3	15		17	2	15	1190.1285	-0.0002	0.3761E-02	4	5	4	2		6	3	4	1191.9825		0.2281E-03
6	30	4	27		30	5	26	1190.1635		0.4298E-03	6	18	4	15		18	5	14	1191.9843	-0.0001	0.6498E-02
6	4	3	2		5	4	1	1190.1781	-0.0003	0.8509E-02	6	18	4	14		18	5	13	1192.0208	0.0001	0.6510E-02
6	4	3	1		5	4	2	1190.1782	-0.0004	0.8509E-02	6	17	4	14		17	5	13	1192.0774	0.0002	0.7422E-02
4	9	5	4		10	4	6	1190.3196		0.1690E-03	6	25	2	24		26	1	25	1192.0787		0.3213E-02
4	9	5	5		10	4	7	1190.3202		0.1691E-03	6	17	4	13		17	5	12	1192.1008	0.0001	0.7430E-02
4	27	1	26		26	2	24	1190.3837		0.1008E-02	6	16	4	13		16	5	12	1192.1663	0.0002	0.8343E-02
4	12	6	7		13	5	9	1190.3888	-0.0009	0.1297E-03	6	16	4	12		16	5	11	1192.1808	-0.0001	0.8349E-02
4	12	6	6		13	5	8	1190.3888	-0.0009	0.1297E-03	6	15	4	12		15	5	11	1192.2507	0.0003	0.9223E-02
6	29	4	28		29	5	25	1190.4085		0.5821E-03	6	15	4	11		15	5	10	1192.2595	-0.0002	0.9227E-02
6	20	1	19		21	2	20	1190.4655	-0.0014	0.4908E-02	6	14	4	11		14	5	10	1192.3311	0.0017	0.1002E-01
6	28	4	25		28	5	24	1190.6238		0.7774E-03	6	14	4	10		14	5	9	1192.3361	-0.0035	0.1002E-01
4	9	2	7		9	1	9	1190.6323	0.0000	0.1398E-01	6	13	4	10		13	5	9	1192.4070	0.0015	0.1068E-01
4	23	1	22		22	2	20	1190.6418		0.3212E-02	6	13	4	9		13	5	8	1192.4098	-0.0014	0.1068E-01
4	26	1	25		25	2	23	1190.8037		0.1382E-02	4	15	3	13		15	2	13	1192.4161		0.4327E-02
6	27	4	24		27	5	23	1190.8187	-0.0014	0.1024E-02	6	12	4	9		12	5	8	1192.4766	0.0006	0.1115E-01
4	24	1	23		23	2	21	1190.9373		0.2470E-02	6	12	4	8		12	5	7	1192.4801	-0.0009	0.1115E-01
4	27	2	25		28	3	23	1190.9785	-0.0001	0.3546E-02	6	28	1	28		28	2	27	1192.5212		0.9448E-04
4	25	1	24		24	2	22	1190.9904		0.1864E-02	6	11	4	8		11	5	7	1192.5457	0.0003	0.1136E-01
6	26	4	23		26	5	22	1190.9944	-0.0018	0.1330E-02	6	11	4	7		11	5	6	1192.5465	-0.0005	0.1136E-01
6	8	2	7		9	3	6	1191.0117	0.0001	0.2930E-01	6	10	4	7		10	5	6	1192.6082	0.0001	0.1126E-01
4	28	4	25		28	3	25	1191.0289		0.9700E-03	6	10	4	6		10	5	5	1192.6085	-0.0002	0.1126E-01
6	25	4	22		25	5	21	1191.1538	-0.0008	0.1703E-02	6	3	3	1		4	4	0	1192.6271	-0.0004	0.8845E-02
6	24	1	24		25	0	25	1191.2029		0.4593E-02	6	3	3	0		4	4	1	1192.6271	-0.0004	0.8845E-02
6	24	4	21		24	5	20	1191.2994	-0.0007	0.2151E-02	6	9	4	6		9	5	5	1192.6658	0.0000	0.1079E-01
4	16	3	14		16	2	14	1191.3356	0.0000	0.4059E-02	6	9	4	5		9	5	4	1192.6658	-0.0002	0.1079E-01
6	23	4	20		23	5	19	1191.4333	-0.0004	0.2679E-02	4	28	2	26		27	3	24	1192.6901	-0.0005	0.2707E-02
6	24	0	24		25	1	25	1191.4624	-0.0012	0.1521E-01	6	8	4	5		8	5	4	1192.7180	-0.0003	0.9878E-02
6	8	2	6		9	3	7	1191.4771	0.0009	0.2990E-01	6	8	4	4		8	5	3	1192.7181	-0.0004	0.9878E-02
4	2	2	0		1	1	0	1191.4803	-0.0025	0.1424E-01	6	18	1	17		19	2	16	1192.7377	-0.0009	0.6687E-02
6	22	4	19		22	5	18	1191.5576	-0.0003	0.3291E-02	6	7	4	3		7	5	2	1192.7651	-0.0004	0.8456E-02
6	19	1	18		20	2	19	1191.5941	-0.0005	0.5765E-02	6	7	4	4		7	5	3	1192.7651	-0.0004	0.8456E-02
6	26	4	22		26	5	21	1191.5998		0.1367E-02	6	10	1	10		11	2	9	1192.7953	0.0001	0.6121E-02
6	25	4	21		25	5	20	1191.6060		0.1738E-02	6	6	4	3		6	5	2	1192.8068	-0.0004	0.6439E-02
6	27	4	23		27	5	22	1191.6172	-0.0023	0.1061E-02	6	6	4	2		6	5	1	1192.8068	-0.0004	0.6439E-02
6	24	4	20		24	5	19	1191.6323		0.2184E-02	4	8	5	3		9	4	5	1192.8398		0.1355E-03
4	2	2	1		1	1	1	1191.6392	0.0000	0.1400E-01	4	8	5	4		9	4	6	1192.8400		0.1356E-03
6	28	4	24		28	5	23	1191.6632		0.8141E-03	6	5	4	1		5	5	0	1192.8427	-0.0004	0.3699E-02
6	21	4	18		21	5	17	1191.6738	0.0002	0.3987E-02	6	5	4	2		5	5	1	1192.8427	-0.0004	0.3699E-02
6	23	4	19		23	5	18	1191.6747		0.2710E-02	6	23	1	23		24	0	24	1192.8611	0.0054R	0.4820E-02
6	30	0	30		30	1	29	1191.6920		0.5745E-04	4	7	1	6		6	0	6	1192.8768	0.0001	0.1504E-01
4	10	2	8		10	1	10	1191.6984	0.0001	0.1190E-01	4	27	4	24		27	3	24	1192.8823		0.1240E-02
6	22	4	18		22	5	17	1191.7297	-0.0008	0.3318E-02	4	11	6	5		12	5	7	1192.9362		0.1229E-03
6	29	4	25		29	5	24	1191.7418		0.6172E-03	4	11	6	6		12	5	8	1192.9362		0.1229E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	11	2	9		11	1	11	1192.9395	-0.0001	0.9689E-02	6	29	2	28		29	3	27	1196.5408		0.9199E-03
4	14	3	12		14	2	12	1193.3693	0.0001	0.4555E-02	6	9	1	9		10	2	8	1196.5551	-0.0001	0.7435E-02
6	7	2	6		8	3	5	1193.5250	0.0001	0.3103E-01	4	8	3	6		8	2	6	1196.6680	0.0003	0.4532E-02
6	23	0	23		24	1	24	1193.5424	-0.0010	0.1943E-01	4	4	2	3		3	1	3	1196.8214	0.0001	0.1695E-01
4	3	2	1		2	1	1	1193.7242	0.0001	0.1625E-01	4	7	3	5		7	2	5	1196.9009	0.0001	0.4193E-02
6	7	2	5		8	3	6	1193.8040	0.0001	0.3141E-01	4	15	3	12		16	0	16	1196.9673		0.2511E-03
6	22	1	22		23	0	23	1193.8674	0.0042R	0.3616E-02	4	27	4	23		28	1	27	1197.0204		0.1170E-02
6	17	1	16		18	2	17	1193.9069	-0.0006	0.7657E-02	4	6	3	4		6	2	4	1197.0747	0.0004	0.3726E-02
6	29	0	29		29	1	28	1193.9818		0.1429E-03	4	10	3	7		10	2	9	1197.1483	0.0002	0.4508E-02
4	29	2	27		28	3	25	1194.1569	-0.0004	0.2024E-02	4	9	3	6		9	2	8	1197.1488		0.4507E-02
4	21	3	18		22	0	22	1194.1844		0.2086E-02	4	8	3	5		8	2	7	1197.1687	0.0007	0.4376E-02
4	3	2	2		2	1	2	1194.1960	0.0003	0.1545E-01	4	11	3	8		11	2	10	1197.1749		0.4394E-02
4	13	3	11		13	2	11	1194.1967		0.4735E-02	6	28	3	26		28	4	25	1197.1921		0.4479E-03
4	20	3	17		21	0	21	1194.2668		0.1253E-02	4	5	3	3		5	2	3	1197.2010	0.0004	0.3117E-02
6	27	1	27		27	2	26	1194.3444		0.1786E-03	4	7	3	4		7	2	6	1197.2015		0.4104E-02
4	12	2	10		12	1	12	1194.3749	0.0001	0.7510E-02	4	12	3	9		12	2	11	1197.2371	0.0013	0.4182E-02
4	29	4	25		30	1	29	1194.3831		0.4169E-03	4	6	3	3		6	2	5	1197.2417		0.3681E-02
4	19	3	16		20	0	20	1194.4152		0.8353E-03	4	5	3	2		5	2	4	1197.2844	0.0006	0.3098E-02
4	4	4	0		5	3	2	1194.4714		0.1155E-03	4	4	3	2		4	2	2	1197.2900		0.2344E-02
4	4	4	1		5	3	3	1194.4720		0.1157E-03	4	4	3	1		4	2	3	1197.3257	0.0006	0.2338E-02
4	26	4	23		26	3	23	1194.5884	-0.0008	0.1587E-02	4	13	3	10		13	2	12	1197.3446	0.0000	0.3893E-02
4	18	3	15		19	0	19	1194.7363		0.5978E-03	4	3	3	1		3	2	1	1197.3506		0.1355E-02
6	24	2	23		25	1	24	1194.7659	0.0032	0.3560E-02	4	3	3	0		3	2	2	1197.3625		0.1354E-02
4	12	3	10		12	2	10	1194.9020	0.0000	0.4855E-02	6	28	2	27		28	3	26	1197.4847	0.0073R	0.1325E-02
6	16	1	15		17	2	16	1195.1113	-0.0006	0.8659E-02	4	14	3	11		14	2	13	1197.5078	0.0002	0.3549E-02
4	17	3	14		18	0	18	1195.2646		0.4441E-03	4	24	4	21		24	3	21	1197.5479	-0.0004	0.2415E-02
4	7	5	2		8	4	4	1195.3500		0.9842E-04	4	23	4	19		24	1	23	1197.5601		0.3826E-02
4	7	5	3		8	4	5	1195.3501		0.9843E-04	6	14	1	13		15	2	14	1197.6598	-0.0003	0.1067E-01
4	30	2	28		29	3	28	1195.3624		0.1482E-02	6	21	0	21		22	1	22	1197.6831	-0.0005	0.3027E-01
4	10	6	4		11	5	6	1195.4730		0.1107E-03	4	15	3	12		15	2	14	1197.7382	0.0002	0.3174E-02
4	10	6	5		11	5	7	1195.4731		0.1107E-03	6	27	3	25		27	4	24	1197.8257		0.6057E-03
4	11	3	9		11	2	9	1195.4921	0.0000	0.4907E-02	4	6	5	2		7	4	4	1197.8501		0.6016E-04
6	30	2	29		30	3	28	1195.5325		0.6176E-03	4	6	5	1		7	4	3	1197.8501		0.6016E-04
4	28	4	24		29	1	28	1195.5522		0.7119E-03	6	25	1	25		25	2	24	1197.8528		0.5246E-03
6	22	0	22		23	1	23	1195.6180	-0.0006	0.2444E-01	4	14	2	12		14	1	14	1197.8649	-0.0003	0.3940E-02
6	8	6	2		7	7	1	1195.6593		0.5228E-04	4	5	2	3		4	1	3	1197.9838	0.0002	0.2135E-01
6	8	6	3		7	7	0	1195.6594		0.5227E-04	4	9	6	3		10	5	5	1197.9998		0.9316E-04
6	30	3	28		30	4	27	1195.7721		0.2332E-03	4	9	6	4		10	5	6	1197.9998		0.9316E-04
4	8	1	7		7	0	7	1195.8599	0.0000	0.1507E-01	6	9	6	4		8	7	1	1198.0048		0.1262E-03
4	4	2	2		3	1	2	1195.8890	0.0002	0.1871E-01	6	9	6	3		8	7	2	1198.0048		0.1263E-03
4	10	3	8		10	2	8	1195.9758	0.0003	0.4877E-02	4	16	3	13		16	2	15	1198.0469	0.0003	0.2790E-02
4	16	3	13		17	0	17	1196.0090		0.3343E-03	4	14	3	11		15	0	15	1198.1326		0.1869E-03
4	13	2	11		13	1	13	1196.0139		0.5570E-02	6	27	2	26		27	3	25	1198.3627	0.0062R	0.1846E-02
6	6	2	5		7	3	4	1196.0181	-0.0004	0.3233E-01	6	26	3	24		26	4	23	1198.4061		0.8057E-03
6	26	1	26		26	2	25	1196.1351		0.3144E-03	4	17	3	14		17	2	16	1198.4445	0.0005	0.2420E-02
4	25	4	22		25	3	22	1196.1432	-0.0010	0.1957E-02	6	5	2	4		6	3	3	1198.4950	0.0000	0.3318E-01
6	6	2	4		7	3	5	1196.1727	0.0000	0.3255E-01	6	5	2	3		6	3	4	1198.5720	-0.0001	0.3329E-01
6	28	0	28		28	1	27	1196.3506		0.3016E-03	4	23	3	20		24	0	24	1198.5851		0.1794E-02
6	15	1	14		16	2	15	1196.3597	0.0003	0.9670E-02	4	26	4	22		27	1	26	1198.7705		0.1851E-02
4	9	3	7		9	2	7	1196.3638		0.4756E-02	6	27	0	27		27	1	26	1198.7892		0.5738E-03
6	29	3	27		29	4	26	1196.5068		0.3259E-03	4	23	4	20		23	3	20	1198.8055	-0.0005	0.2945E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	25	3	23		25	4	22	1198.9326		0.1054E-02	6	14	3	12		14	4	11	1201.8063	-0.0003	0.6748E-02
4	18	3	15		18	2	17	1198.9380		0.2085E-02	4	22	4	18		22	3	20	1201.8344	0.0019	0.6038E-02
4	9	1	8		8	0	8	1198.9423		0.1458E-01	6	13	3	11		13	4	10	1201.8975	-0.0001	0.7206E-02
4	22	3	19		23	0	23	1199.0085		0.4718E-02	6	11	1	10		12	2	11	1201.9301	-0.0002	0.1327E-01
6	13	1	12		14	2	13	1199.0179	-0.0004	0.1162E-01	4	28	3	23		27	0	27	1201.9333		0.7676E-04
4	24	3	21		25	0	25	1199.1437		0.5789E-03	6	12	3	10		12	4	9	1201.9757	-0.0003	0.7547E-02
6	26	2	25		26	3	24	1199.1749		0.2487E-02	6	15	3	12		15	4	11	1202.0013		0.6295E-02
6	24	3	22		24	4	21	1199.4056		0.1357E-02	6	16	3	13		16	4	12	1202.0070		0.5722E-02
6	24	1	24		24	2	23	1199.4144		0.8341E-03	4	7	2	5		6	1	5	1202.0106	-0.0004	0.2659E-01
4	13	3	10		14	0	14	1199.4948		0.1345E-03	6	14	3	11		14	4	10	1202.0107		0.6814E-02
4	5	2	4		4	1	4	1199.5150	-0.0001	0.1817E-01	6	17	3	14		17	4	13	1202.0311		0.5123E-02
4	19	3	16		19	2	18	1199.5251		0.1807E-02	6	13	3	10		13	4	9	1202.0314	-0.0003	0.7252E-02
6	29	3	27		30	2	28	1199.5948		0.2605E-03	6	11	3	9		11	4	8	1202.0431	-0.0001	0.7740E-02
6	20	0	20		21	1	21	1199.7311	-0.0005	0.3691E-01	6	12	3	9		12	4	8	1202.0602	-0.0003	0.7577E-02
6	23	3	21		23	4	20	1199.8267		0.1717E-02	6	18	3	15		18	4	14	1202.0771		0.4519E-02
4	22	4	19		22	3	19	1199.9222	-0.0004	0.3548E-02	6	11	3	8		11	4	7	1202.0942	0.0002	0.7759E-02
6	25	2	24		25	3	23	1199.9237		0.3248E-02	6	10	3	8		10	4	7	1202.1016	-0.0005	0.7753E-02
4	15	2	13		15	1	15	1199.9335		0.2650E-02	6	10	3	7		10	4	6	1202.1311	0.0011	0.7764E-02
4	6	2	4		5	1	4	1200.0199	0.0000	0.2402E-01	4	10	1	9		9	0	9	1202.1333		0.1368E-01
6	8	1	8		9	2	7	1200.1201	-0.0001	0.8737E-02	6	19	3	16		19	4	15	1202.1475		0.3928E-02
4	20	3	17		20	2	19	1200.1790		0.1608E-02	6	9	3	7		9	4	6	1202.1527	-0.0007	0.7558E-02
6	22	3	20		22	4	19	1200.1976		0.2138E-02	6	9	3	6		9	4	5	1202.1686	-0.0004	0.7564E-02
4	25	3	22		26	0	26	1200.3247		0.2016E-03	6	8	3	6		8	4	5	1202.1973	0.0000	0.7126E-02
6	10	6	4		9	7	3	1200.3439		0.2024E-03	6	8	3	5		8	4	4	1202.2054	-0.0004	0.7128E-02
6	10	6	5		9	7	2	1200.3444		0.2022E-03	4	16	2	14		16	1	16	1202.2219	-0.0002	0.1688E-02
6	12	1	11		13	2	12	1200.4399	0.0001	0.1250E-01	6	29	3	26		29	4	25	1202.2312		0.3400E-03
6	21	1	21		22	0	22	1200.4481		0.8261E-02	6	7	3	5		7	4	4	1202.2363	0.0025	0.8429E-02
4	22	4	18		23	1	22	1200.4614		0.3996E-02	6	7	3	4		7	4	3	1202.2400	-0.0012	0.6430E-02
4	8	6	2		9	5	4	1200.5164		0.7070E-04	6	20	3	17		20	4	16	1202.2428		0.3365E-02
4	8	6	3		9	5	5	1200.5164		0.7070E-04	6	6	3	4		6	4	3	1202.2701	0.0014	0.5436E-02
6	21	3	19		21	4	18	1200.5216		0.2617E-02	6	6	3	3		6	4	2	1202.2716	-0.0001	0.5437E-02
6	24	2	23		24	3	22	1200.6132		0.4106E-02	4	6	2	5		5	1	5	1202.2767	-0.0007	0.1897E-01
6	23	1	23		23	2	22	1200.6183		0.1221E-02	6	5	3	3		5	4	2	1202.2991	-0.0001	0.4105E-02
4	25	4	21		26	1	25	1200.7823		0.2815E-02	6	5	3	2		5	4	1	1202.2996	-0.0006	0.4105E-02
4	21	3	18		21	2	20	1200.7996		0.1513E-02	6	4	3	2		4	4	1	1202.3232	-0.0003	0.2355E-02
6	20	3	18		20	4	17	1200.8022		0.3151E-02	6	4	3	1		4	4	0	1202.3234	-0.0004	0.2355E-02
4	21	4	18		21	3	18	1200.9063	-0.0002	0.4224E-02	6	21	3	18		21	4	17	1202.3618		0.2840E-02
4	4	2	3		5	3	2	1200.9592	-0.0001	0.3362E-01	4	21	4	17		21	3	19	1202.3756	0.0010	0.7047E-02
6	4	2	2		5	3	3	1200.9919	-0.0003	0.3367E-01	6	20	1	20		21	0	21	1202.4431		0.1140E-01
4	12	3	9		13	0	13	1201.0413		0.9438E-04	6	22	3	19		22	4	18	1202.4985		0.2358E-02
6	19	3	17		19	4	16	1201.0435		0.3732E-02	4	19	4	16		19	3	16	1202.5175	-0.0003	0.5760E-02
6	22	1	22		22	2	21	1201.0951		0.1469E-02	6	28	3	25		28	4	24	1202.6088		0.4851E-03
4	23	4	19		23	3	21	1201.2484	0.0016	0.5047E-02	6	23	3	20		23	4	19	1202.6420		0.1924E-02
6	18	3	16		18	4	15	1201.2495		0.4346E-02	6	11	6	5		10	7	4	1202.6831		0.2636E-03
6	26	0	26		26	1	25	1201.2867		0.1015E-02	6	11	6	6		10	7	3	1202.6865		0.2598E-03
6	17	3	15		17	4	14	1201.4247		0.4977E-02	4	11	3	8		12	0	12	1202.7574		0.6374E-04
6	18	3	14		18	4	13	1201.5732		0.5605E-02	6	24	3	21		24	4	20	1202.7744		0.1538E-02
4	30	5	26		30	4	26	1201.6718		0.2337E-03	6	27	3	24		27	4	23	1202.8220		0.6751E-03
6	15	3	13		15	4	12	1201.6993	-0.0003	0.6204E-02	6	25	3	22		25	4	21	1202.8702		0.1201E-02
6	19	0	19		20	1	20	1201.7565	-0.0004	0.4430E-01	4	20	4	16		20	3	18	1202.8761	0.0007	0.8038E-02
4	20	4	17		20	3	17	1201.7678	-0.0005	0.4965E-02	6	26	3	23		26	4	22	1202.8979		0.9133E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	24	4	20		25	1	24	1203.0342		0.4117E-02	4	9	4	5		9	3	7	1206.1663	-0.0001	0.9127E-02
4	18	4	15		18	3	15	1203.1674	-0.0004	0.6588E-02	4	22	3	19		22	2	21	1206.2362		0.3779E-03
4	19	4	15		19	3	17	1203.3385	0.0004	0.8974E-02	4	8	4	5		8	3	5	1206.2881	0.0003	0.7922E-02
6	3	2	2		4	3	1	1203.4132	0.0000	0.3382E-01	4	8	4	4		8	3	6	1206.2959	-0.0004	0.8057E-02
6	3	2	1		4	3	2	1203.4241	-0.0003	0.3384E-01	4	7	4	4		7	3	4	1206.4006	0.0024R	0.6774E-02
4	21	4	17		22	1	21	1203.4688		0.4060E-02	4	7	4	3		7	3	5	1206.4044	-0.0013	0.6831E-02
6	10	1	9		11	2	10	1203.4918	-0.0001	0.1392E-01	6	24	0	24		24	1	23	1206.4067		0.2722E-02
6	7	1	7		8	2	6	1203.5057	-0.0001	0.9931E-02	4	6	4	3		6	3	3	1206.4921	0.0007	0.5434E-02
6	8	5	3		7	6	2	1203.5796		0.1084E-03	4	6	4	2		6	3	4	1206.4937	-0.0009	0.5454E-02
6	8	5	4		7	6	1	1203.5796		0.1084E-03	4	5	4	2		5	3	2	1206.5654	0.0006	0.3905E-02
4	17	4	14		17	3	14	1203.7290	-0.0003	0.7422E-02	4	5	4	1		5	3	3	1206.5660	0.0000	0.3910E-02
6	18	0	18		19	1	19	1203.7545	-0.0005	0.5232E-01	4	20	4	16		21	1	20	1206.5684		0.4019E-02
4	18	4	14		18	3	16	1203.7649	0.0000	0.9816E-02	4	4	4	1		4	3	1	1206.6228	0.0001	0.2143E-02
6	28	3	26		29	2	27	1203.7928		0.3527E-03	4	4	4	0		4	3	2	1206.6229	-0.0001	0.2144E-02
6	25	0	25		25	1	24	1203.8307	-0.0019	0.1699E-02	6	6	1	6		7	2	5	1206.7277	0.0001	0.1092E-01
4	8	2	6		7	1	6	1203.9709	0.0000	0.2892E-01	6	8	1	7		9	2	8	1206.8409	-0.0001	0.1469E-01
4	17	4	13		17	3	15	1204.1569	-0.0001	0.1053E-01	6	29	0	29		28	3	28	1206.8458		0.1011E-03
4	16	4	13		16	3	13	1204.2136	-0.0003	0.8221E-02	4	4	3	1		3	2	1	1207.0284		0.4616E-02
4	16	4	12		16	3	14	1204.5153	-0.0003	0.1108E-01	4	4	3	2		3	2	2	1207.0402		0.4612E-02
4	15	4	12		15	3	12	1204.6315	-0.0003	0.8938E-02	6	21	1	21		21	2	20	1207.0634		0.1099E-02
4	3	3	0		2	2	0	1204.6477		0.4410E-02	6	18	1	18		19	0	19	1207.0651		0.1749E-01
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6	19	1	19		20	0	20	1204.6870		0.1441E-01	6	13	6	6		12	7	5	1207.2280		0.3219E-03
4	17	2	15		17	1	17	1204.7296		0.1010E-02	6	6	4	3		5	5	0	1207.3752		0.3297E-03
3	12	3	10		11	7	5	1204.7444		0.7602E-04	6	6	4	2		5	5	1	1207.3752		0.3297E-03
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4	15	4	11		15	3	13	1204.8408	-0.0002	0.1144E-01	3	13	3	11		12	7	6	1207.5660		0.1004E-03
4	14	4	11		14	3	11	1204.9915	-0.0002	0.9519E-02	6	16	0	16		17	1	17	1207.6543	-0.0006	0.6945E-01
6	12	6	6		11	7	5	1205.0530		0.2535E-03	6	28	0	28		27	3	25	1207.7018		0.1073E-03
6	12	6	7		11	7	4	1205.0948		0.1871E-03	4	10	2	8		9	1	8	1207.8676	-0.0001	0.3231E-01
4	7	2	6		6	1	6	1205.1064	0.0000	0.1926E-01	4	8	2	7		7	1	7	1208.0043	-0.0001	0.1904E-01
6	9	1	8		10	2	9	1205.1281	0.0003	0.1440E-01	6	27	3	25		28	2	26	1208.0345		0.4727E-03
4	14	4	10		14	3	12	1205.1346	-0.0007	0.1160E-01	6	22	2	21		23	1	22	1208.1609	-0.0007	0.7897E-02
4	13	4	10		13	3	10	1205.3013	-0.0002	0.9910E-02	6	10	5	5		9	6	4	1208.2958		0.2347E-03
4	13	4	9		13	3	11	1205.3976	-0.0002	0.1153E-01	6	10	5	6		9	6	3	1208.2958		0.2347E-03
4	11	1	10		10	0	10	1205.4420		0.1241E-01	6	20	1	20		20	2	19	1208.3551		0.1979E-02
6	23	2	22		24	1	23	1205.5020	-0.0014	0.5802E-02	4	27	4	23		27	3	25	1208.3716		0.1941E-03
4	12	4	9		12	3	9	1205.5674	-0.0002	0.1008E-01	4	28	4	24		28	3	26	1208.4163		0.8972E-04
4	12	4	8		12	3	10	1205.6307	-0.0001	0.1125E-01	4	26	4	22		26	3	24	1208.4498		0.3876E-03
6	17	0	17		18	1	18	1205.7212	-0.0005	0.6079E-01	6	27	0	27		26	3	24	1208.4686		0.1107E-03
4	11	4	8		11	3	8	1205.7950	-0.0002	0.9940E-02	4	25	4	21		25	3	23	1208.6274		0.7192E-03
4	11	4	7		11	3	9	1205.8354	0.0000	0.1074E-01	6	7	1	6		8	2	7	1208.6320	0.0000	0.1477E-01
6	2	2	1		3	3	0	1205.8593	0.0007	0.3415E-01	4	12	1	11		11	0	11	1208.8755		0.1093E-01
6	2	2	0		3	3	1	1205.8613	-0.0015	0.3416E-01	4	24	4	20		24	3	22	1208.8815		0.1248E-02
6	30	0	30		29	3	27	1205.9156		0.9275E-04	6	23	0	23		23	1	22	1208.9980	-0.0009	0.4207E-02
4	9	2	7		8	1	7	1205.9175	-0.0001	0.3088E-01	6	26	0	26		25	3	23	1209.1317		0.1108E-03
6	9	5	5		8	6	2	1205.9410		0.1747E-03	6	23	2	22		23	3	21	1209.1902	-0.0020	0.2040E-02
6	9	5	4		8	6	3	1205.9410		0.1747E-03	4	5	3	2		4	2	2	1209.3888		0.4845E-02
4	10	4	7		10	3	7	1205.9886	0.0001	0.9534E-02	4	5	3	3		4	2	3	1209.4238		0.4833E-02
4	10	4	6		10	3	8	1206.0134	0.0000	0.1003E-01	6	14	6	8		13	7	7	1209.5192		0.3473E-03
4	9	4	6		9	3	6	1206.1519	0.0001	0.8853E-02	6	22	2	21		22	3	20	1209.5338		0.3158E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	17	1	17		18	0	18	1209.5348		0.2067E-01	4	25	5	21		25	4	21	1212.8678		0.8645E-04
6	14	6	9		13	7	6	1209.5437		0.3691E-03	6	8	2	7		8	3	8	1212.9191	-0.0002	0.3748E-01
6	15	0	15		16	1	16	1209.5532	-0.0003	0.7801E-01	4	26	5	22		26	4	22	1212.9666		0.1147E-03
6	25	0	25		24	3	22	1209.6780		0.1073E-03	6	12	5	8		11	6	5	1212.9868		0.3175E-03
4	19	4	15		20	1	19	1209.7570		0.3878E-02	6	12	5	7		11	6	6	1212.9858		0.3175E-03
6	7	4	3		6	5	2	1209.7823		0.7869E-03	6	7	2	6		7	3	5	1212.9868	0.0000	0.3577E-01
6	7	4	4		6	5	1	1209.7823		0.7869E-03	4	18	4	14		19	1	18	1213.0195		0.3647E-02
6	19	1	19		19	2	18	1209.7970		0.2984E-02	6	6	2	5		6	3	4	1213.0396	-0.0001	0.3258E-01
6	5	1	5		6	2	4	1209.8018		0.1182E-01	6	5	2	4		5	3	3	1213.0802	-0.0003	0.2778E-01
4	11	2	9		10	1	9	1209.8387	-0.0002	0.3308E-01	6	4	2	3		4	3	2	1213.1107	-0.0001	0.2119E-01
6	21	2	20		21	3	19	1209.8951	-0.0003	0.4657E-02	6	3	2	2		3	3	1	1213.1327	0.0000	0.1238E-01
6	24	0	24		23	3	21	1210.0948		0.1002E-03	6	4	2	2		4	3	1	1213.1428	-0.0001	0.2122E-01
6	20	2	19		20	3	18	1210.2599	-0.0001	0.6578E-02	6	3	2	1		3	3	0	1213.1436	-0.0008	0.1239E-01
6	23	0	23		22	3	20	1210.3708		0.8995E-04	6	5	2	3		5	3	2	1213.1548	-0.0003	0.2789E-01
4	19	2	17		19	1	19	1210.3981		0.2808E-03	4	27	5	23		27	4	23	1213.1663		0.1369E-03
6	21	0	21		20	3	18	1210.4589		0.6281E-04	6	6	2	4		6	3	3	1213.1877	-0.0002	0.3283E-01
6	22	0	22		21	3	19	1210.4954		0.7713E-04	6	7	2	5		7	3	4	1213.2510	0.0040	0.3629E-01
6	6	1	5		7	2	6	1210.5021	0.0001	0.1463E-01	6	13	0	13		14	1	14	1213.2563	-0.0013	0.9347E-01
6	19	2	18		19	3	17	1210.6171	0.0001	0.8939E-02	6	8	2	6		8	3	5	1213.3544	-0.0001	0.3843E-01
6	11	5	6		10	6	5	1210.6440		0.2832E-03	4	28	5	24		28	4	24	1213.4792		0.1491E-03
6	11	5	7		10	6	4	1210.6440		0.2832E-03	6	9	2	7		9	3	6	1213.5081	0.0000	0.3942E-01
6	18	2	17		18	3	16	1210.9583	0.0004	0.1173E-01	4	18	5	13		18	4	15	1213.5258		0.5840E-04
4	9	2	8		8	1	8	1210.9698	-0.0001	0.1833E-01	4	20	2	18		20	1	20	1213.5258		0.1206E-03
6	21	2	20		22	1	21	1210.9858	-0.0005	0.1041E-01	4	17	5	13		17	4	13	1213.6532		0.8221E-04
6	18	1	18		18	2	17	1211.2668	-0.0001	0.4146E-02	4	17	5	12		17	4	14	1213.6667		0.9753E-04
6	17	2	16		17	3	15	1211.2771	0.0005	0.1491E-01	6	10	2	8		10	3	7	1213.7212	-0.0001	0.3946E-01
6	14	0	14		15	1	15	1211.4193	-0.0002	0.8614E-01	4	16	5	12		16	4	12	1213.7952		0.1365E-03
6	16	2	15		16	3	14	1211.5699	0.0004	0.1839E-01	4	16	5	11		16	4	13	1213.8052		0.1491E-03
6	22	0	22		22	1	21	1211.5863	-0.0011	0.6309E-02	4	29	5	25		29	4	25	1213.9078		0.1497E-03
4	6	3	3		5	2	3	1211.7218		0.5047E-02	4	13	2	11		12	1	11	1213.9103	-0.0002	0.3238E-01
4	6	3	4		5	2	4	1211.8029		0.5018E-02	4	15	5	11		15	4	11	1213.9332		0.2030E-03
6	15	6	9		14	7	8	1211.8174		0.3686E-03	4	15	5	10		15	4	12	1213.9401		0.2125E-03
6	15	2	14		15	3	13	1211.8344	0.0004	0.2207E-01	6	20	2	19		21	1	20	1213.9521	0.0000	0.1331E-01
6	15	6	10		14	7	7	1211.8396		0.3816E-03	6	11	2	9		11	3	8	1214.0020	0.0001	0.3872E-01
4	12	2	10		11	1	10	1211.8477	-0.0001	0.3312E-01	4	10	2	9		9	1	9	1214.0027		0.1720E-01
6	14	2	13		14	3	12	1212.0693	0.0004	0.2578E-01	4	7	3	4		6	2	4	1214.0197		0.5197E-02
6	16	1	16		17	0	17	1212.0784		0.2392E-01	4	14	5	10		14	4	10	1214.0658		0.2790E-03
6	8	4	5		7	5	2	1212.1442	-0.0004	0.1262E-02	4	14	5	9		14	4	11	1214.0703		0.2857E-03
6	8	4	4		7	5	3	1212.1443	-0.0005	0.1262E-02	6	16	6	10		15	7	9	1214.1002		0.3663E-03
6	13	2	12		13	3	11	1212.2750	0.0002	0.2934E-01	6	16	1	16		16	2	15	1214.1162	0.0000	0.7000E-02
6	30	1	29		30	2	28	1212.2903		0.3133E-03	6	16	6	11		15	7	8	1214.1241		0.3760E-03
6	26	3	24		27	2	25	1212.3002		0.6268E-03	6	21	0	21		21	1	20	1214.1512	-0.0009	0.9208E-02
4	13	1	12		12	0	12	1212.4387		0.9352E-02	4	7	3	5		6	2	5	1214.1805		0.5137E-02
6	5	1	4		6	2	5	1212.4521	0.0004	0.1427E-01	4	13	5	9		13	4	9	1214.1923		0.3605E-03
6	12	2	11		12	3	10	1212.4528	-0.0002	0.3254E-01	4	13	5	8		13	4	10	1214.1949		0.3648E-03
6	11	2	10		11	3	9	1212.6036	0.0001	0.3517E-01	4	12	5	8		12	4	8	1214.3118		0.4416E-03
6	17	1	17		17	2	16	1212.7146	0.0003	0.5486E-02	4	12	5	7		12	4	9	1214.3131		0.4442E-03
6	10	2	9		10	3	8	1212.7301	0.0000	0.3701E-01	6	12	2	10		12	3	9	1214.3560	0.0001	0.3738E-01
6	4	1	4		5	2	3	1212.7423	-0.0003	0.1196E-01	4	11	5	7		11	4	7	1214.4233		0.5154E-03
6	9	2	8		9	3	7	1212.8344	-0.0002	0.3784E-01	4	11	5	6		11	4	8	1214.4243		0.5167E-03
4	24	5	20		24	4	20	1212.8503		0.5712E-04	6	30	3	27		30	4	26	1214.4399		0.1398E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	5	3	3		4	4	0	1214.4443		0.2531E-03	6	14	5	10		13	6	7	1217.6512		0.3432E-03
6	5	3	2		4	4	1	1214.4448		0.2531E-03	6	14	5	9		13	6	8	1217.6512		0.3432E-03
6	4	1	3		5	2	4	1214.4823	-0.0001	0.1369E-01	6	13	1	13		13	2	12	1217.9307	0.0000	0.1227E-01
6	29	1	28		29	2	27	1214.5024		0.4980E-03	6	18	2	18		18	3	15	1217.9449	0.0004	0.2341E-01
6	9	4	6		8	5	3	1214.5212	-0.0002	0.1692E-02	4	15	2	13		14	1	13	1218.2535	-0.0001	0.2870E-01
6	9	4	5		8	5	4	1214.5212	-0.0004	0.1692E-02	6	2	1	2		3	2	1	1218.2744		0.1159E-01
4	10	5	6		10	4	6	1214.5273		0.5732E-03	4	9	3	6		8	2	6	1218.4716		0.5301E-02
4	10	5	5		10	4	7	1214.5277		0.5739E-03	6	27	1	26		27	2	25	1218.5878		0.1171E-02
4	9	5	5		9	4	5	1214.6229		0.6058E-03	6	18	6	12		17	7	11	1218.6326		0.3238E-03
4	9	5	4		9	4	6	1214.6230		0.6061E-03	6	10	0	10		11	1	11	1218.6613	-0.0001	0.1076E+00
6	15	1	15		16	0	16	1214.6873	-0.0001	0.2713E-01	6	18	6	13		17	7	10	1218.6864		0.3309E-03
4	8	5	4		8	4	4	1214.7097		0.6031E-03	6	19	2	17		19	3	16	1218.7009	0.0003	0.2077E-01
4	8	5	3		8	4	5	1214.7098		0.6032E-03	4	5	4	1		4	3	1	1218.7167	0.0002	0.9393E-02
6	13	2	11		13	3	10	1214.7864	0.0003	0.3559E-01	4	5	4	2		4	3	2	1218.7169	0.0000	0.9396E-02
4	7	5	2		7	4	4	1214.7876		0.5545E-03	6	2	1	1		3	2	2	1218.7834		0.1206E-01
4	7	5	3		7	4	3	1214.7878		0.5545E-03	4	9	3	7		8	2	7	1218.9438		0.5123E-02
4	6	5	2		6	4	2	1214.8582		0.4484E-03	6	12	1	12		12	2	11	1219.0513	-0.0003	0.1406E-01
4	6	5	1		6	4	3	1214.8582		0.4484E-03	6	19	0	19		19	1	18	1219.1260	-0.0006	0.1827E-01
4	5	5	0		5	4	2	1214.9154		0.2707E-03	6	7	3	5		6	4	2	1219.2424		0.9338E-03
4	5	5	1		5	4	1	1214.9154		0.2707E-03	6	7	3	4		6	4	3	1219.2461		0.9340E-03
6	12	0	12		13	1	13	1215.0899	-0.0002	0.9968E-01	6	11	4	8		10	5	5	1219.2611	0.0002	0.2291E-02
6	14	2	12		14	3	11	1215.2928	0.0001	0.3348E-01	6	11	4	7		10	5	6	1219.2618	-0.0005	0.2291E-02
6	13	5	9		12	6	6	1215.3216		0.3373E-03	6	20	2	18		20	3	17	1219.4588	0.0006	0.1817E-01
6	13	5	8		12	6	7	1215.3217		0.3373E-03	4	16	4	12		17	1	16	1219.7084		0.2974E-02
6	15	1	15		15	2	14	1215.4581	0.0001	0.8688E-02	4	15	1	14		14	0	14	1219.9575		0.6278E-02
6	3	1	3		4	2	2	1215.5627	0.0001	0.1193E-01	6	15	5	11		14	6	8	1219.9750		0.3370E-03
6	15	2	13		15	3	12	1215.8713	0.0001	0.3114E-01	6	15	5	10		14	6	9	1219.9752		0.3370E-03
4	14	2	12		13	1	12	1216.0414	-0.0001	0.3087E-01	4	23	6	18		23	5	18	1220.0250		0.5242E-04
4	14	1	13		13	0	13	1216.1334		0.7773E-02	4	23	6	17		23	5	19	1220.0361		0.5356E-04
4	8	3	5		7	2	5	1216.2728		0.5282E-02	6	13	1	13		14	0	14	1220.0808	0.0000	0.3292E-01
4	17	4	13		18	1	17	1216.3418		0.3339E-02	6	11	1	11		11	2	10	1220.0905	-0.0001	0.1570E-01
4	4	4	0		3	3	0	1216.3423	0.0000	0.9396E-02	6	21	2	19		21	3	18	1220.1971	0.0006	0.1565E-01
4	4	4	1		3	3	1	1216.3424	0.0000	0.9397E-02	6	18	2	17		19	1	18	1220.2128	0.0004	0.2013E-01
6	17	6	11		16	7	10	1216.3715		0.3497E-03	4	22	6	17		22	5	17	1220.2531		0.7797E-04
6	17	6	12		16	7	9	1216.3993		0.3578E-03	4	22	6	16		22	5	18	1220.2604		0.7895E-04
6	16	2	14		16	3	13	1216.5142	0.0002	0.2864E-01	4	12	2	11		11	1	11	1220.2683	0.0000	0.1401E-01
4	8	3	6		7	2	6	1216.5597		0.5174E-02	6	26	1	25		26	2	24	1220.4260		0.1732E-02
6	25	3	23		26	2	24	1216.5702		0.8223E-03	6	9	0	9		10	1	10	1220.4591	-0.0001	0.1088E+00
6	3	1	2		4	2	3	1216.5927	0.0001	0.1293E-01	4	21	6	16		21	5	16	1220.4705		0.1115E-03
6	28	1	27		28	2	26	1216.6080		0.7728E-03	4	21	6	15		21	5	17	1220.4752		0.1123E-03
6	20	0	20		20	1	19	1216.6716	-0.0007	0.1312E-01	4	16	2	14		15	1	14	1220.5587	-0.0001	0.2601E-01
6	14	1	14		14	2	13	1216.7314	0.0000	0.1045E-01	4	10	3	7		9	2	7	1220.6060		0.5254E-02
6	6	3	4		5	4	1	1216.8455		0.5913E-03	4	20	6	15		20	5	16	1220.6772		0.1540E-03
6	6	3	3		5	4	2	1216.8470		0.5913E-03	4	20	6	14		20	5	16	1220.6803		0.1546E-03
6	11	0	11		12	1	12	1216.8684	-0.0004	0.1045E+00	6	24	3	22		25	2	23	1220.8267		0.1067E-02
6	10	4	7		9	5	4	1216.8934	0.0001	0.2041E-02	4	19	6	14		19	5	14	1220.8739		0.2061E-03
6	10	4	6		9	5	5	1216.8937	-0.0002	0.2041E-02	4	19	6	13		19	5	15	1220.8757		0.2068E-03
6	19	2	18		20	1	19	1217.0355	0.0001	0.1658E-01	6	19	6	13		18	7	12	1220.8842		0.2919E-03
4	11	2	10		10	1	10	1217.1024	-0.0002	0.1572E-01	6	1	1	1		2	2	0	1220.8861		0.1115E-01
6	17	2	15		17	3	14	1217.2102	0.0002	0.2605E-01	6	22	2	20		22	3	19	1220.8951	0.0007	0.1326E-01
6	14	1	14		15	0	15	1217.3563	-0.0001	0.3018E-01	6	19	6	14		18	7	11	1220.9258		0.2983E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	10	1	10		10	2	9	1221.0459	0.0003	0.1709E-01	6	26	2	24		26	3	23	1222.8730		0.5628E-02
6	1	1	0		2	2	1	1221.0542		0.1130E-01	4	17	2	15		16	1	15	1222.9667	0.0000	0.2296E-01
4	18	6	13		18	5	13	1221.0601		0.2680E-03	6	29	2	27		29	3	26	1223.0302		0.2353E-02
4	18	6	12		18	5	14	1221.0612		0.2684E-03	6	27	2	25		27	3	24	1223.0750		0.4306E-02
4	6	4	2		5	3	2	1221.0765	0.0005	0.9303E-02	4	15	4	11		16	1	15	1223.1039		0.2570E-02
4	6	4	3		5	3	3	1221.0774	-0.0004	0.9315E-02	6	20	6	14		19	7	13	1223.1262		0.2571E-03
4	17	6	12		17	5	12	1221.2362		0.3389E-03	6	28	2	28		28	3	25	1223.1310		0.3220E-02
4	17	6	11		17	5	13	1221.2368		0.3391E-03	6	20	6	15		19	7	12	1223.1781		0.2628E-03
4	10	3	8		9	2	8	1221.3370		0.4983E-02	6	7	1	7		7	2	6	1223.3975	0.0000	0.1850E-01
4	16	6	11		16	5	11	1221.4022		0.4171E-03	4	7	4	3		6	3	3	1223.4196	0.0013	0.9068E-02
4	16	6	10		16	5	12	1221.4025		0.4172E-03	4	7	4	4		6	3	4	1223.4221	-0.0013	0.9103E-02
6	18	0	18		18	1	17	1221.4935	-0.0004	0.2489E-01	6	17	2	16		18	1	17	1223.4822		0.2389E-01
6	23	2	21		23	3	20	1221.5313	0.0009	0.1103E-01	4	13	2	12		12	1	12	1223.4990	0.0000	0.1216E-01
4	15	6	10		15	5	10	1221.5580		0.4997E-03	6	24	1	23		24	2	22	1223.6313		0.3530E-02
4	15	6	9		15	5	11	1221.5582		0.4998E-03	4	11	3	9		10	2	9	1223.7427		0.4759E-02
6	12	4	9		11	5	6	1221.6246	0.0007	0.2438E-02	6	17	0	17		17	1	16	1223.7543	-0.0006	0.3320E-01
6	12	4	8		11	5	7	1221.6262	-0.0008	0.2438E-02	4	16	1	15		15	0	15	1223.9049		0.4928E-02
6	8	3	6		7	4	3	1221.6349		0.1237E-02	6	13	4	10		12	5	7	1223.9841	0.0014	0.2487E-02
6	8	3	5		7	4	4	1221.6429		0.1237E-02	6	13	4	9		12	5	8	1223.9871	-0.0015	0.2487E-02
4	14	6	9		14	5	9	1221.7039		0.5824E-03	6	6	1	6		6	2	5	1224.0073	0.0000	0.1770E-01
4	14	6	8		14	5	10	1221.7040		0.5825E-03	6	9	3	7		8	4	4	1224.0225		0.1476E-02
4	13	6	7		13	5	9	1221.8398		0.6598E-03	6	9	3	6		8	4	5	1224.0388		0.1477E-02
4	13	6	8		13	5	8	1221.8398		0.6598E-03	6	7	0	7		8	1	8	1224.1161	-0.0002	0.1053E+00
6	9	1	9		9	2	8	1221.9163	0.0000	0.1809E-01	6	5	1	5		5	2	4	1224.5299	0.0000	0.1615E-01
4	12	6	7		12	5	7	1221.9659		0.7247E-03	6	17	5	13		16	6	10	1224.6061		0.2977E-03
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4	11	6	5		11	5	7	1222.0822		0.7691E-03	4	12	3	9		11	2	9	1224.6447		0.4988E-02
4	11	6	6		11	5	8	1222.0822		0.7691E-03	6	4	1	4		4	2	3	1224.9651	0.0001	0.1379E-01
6	24	2	22		24	3	21	1222.0853	0.0008	0.9000E-02	6	23	1	22		23	2	21	1224.9844		0.4859E-02
4	25	1	24		25	2	23	1222.1101		0.2503E-02	6	23	3	21		24	2	22	1225.0529		0.1369E-02
4	10	6	5		10	5	5	1222.1884		0.7835E-03	6	5	2	4		4	3	1	1225.2310	-0.0002	0.4424E-02
4	10	6	4		10	5	6	1222.1884		0.7835E-03	6	5	2	3		4	3	2	1225.3064		0.4436E-02
6	8	0	8		9	1	9	1222.2736	-0.0001	0.1080E+00	6	3	1	3		3	2	2	1225.3130	0.0000	0.1058E-01
4	9	6	3		9	5	5	1222.2850		0.7679E-03	6	21	6	15		20	7	14	1225.3590		0.2216E-03
4	9	6	4		9	5	4	1222.2850		0.7679E-03	6	21	6	16		20	7	13	1225.4238		0.2268E-03
6	16	5	12		15	6	9	1222.2933		0.3210E-03	4	18	2	16		17	1	16	1225.4867	-0.0002	0.1974E-01
4	16	5	11		15	6	10	1222.2937		0.3210E-03	6	2	1	2		2	2	1	1225.5739		0.6341E-02
4	8	6	2		8	5	4	1222.3718		0.6809E-03	6	11	1	11		12	0	12	1225.6729	0.0000	0.3688E-01
4	8	6	3		8	5	3	1222.3718		0.6809E-03	4	8	4	4		7	3	4	1225.7429	0.0007	0.8671E-02
4	7	6	1		7	5	3	1222.4489		0.5401E-03	4	8	4	5		7	3	5	1225.7498	-0.0002	0.8751E-02
4	7	6	2		7	5	2	1222.4489		0.5401E-03	6	16	0	16		16	1	15	1225.8914	-0.0003	0.4333E-01
4	27	5	22		28	2	26	1222.5066		0.6127E-04	6	6	0	6		7	1	7	1225.9973	0.0002	0.1004E+00
4	6	6	1		6	5	1	1222.5164		0.3203E-03	6	2	1	1		2	2	0	1226.0686		0.6591E-02
4	6	6	0		6	5	2	1222.5164		0.3203E-03	4	12	3	10		11	2	10	1226.1652		0.4462E-02
6	25	2	23		25	3	22	1222.5382	0.0012	0.7194E-02	6	22	1	21		22	2	20	1226.1674	-0.0021	0.6528E-02
4	11	3	8		10	2	8	1222.6663		0.5147E-02	6	3	1	2		3	2	1	1226.2955	0.0002	0.1142E-01
6	8	1	8		8	2	7	1222.7002	-0.0001	0.1860E-01	4	26	5	21		27	2	25	1226.3168		0.7407E-04
6	30	2	28		30	3	27	1222.7829		0.1680E-02	6	14	4	11		13	5	8	1226.3396	0.0022	0.2448E-02
6	4	2	3		3	3	0	1222.8301	-0.0003	0.1897E-02	6	14	4	10		13	5	9	1226.3448	-0.0031	0.2449E-02
6	12	1	12		13	0	13	1222.8553	-0.0001	0.3520E-01	6	10	3	8		9	4	5	1226.4043	-0.0001	0.1640E-02
6	4	2	2		3	3	1	1222.8624		0.1899E-02	6	10	3	7		9	4	6	1226.4344	0.0001	0.1642E-02

v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH	v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH
4	14	4	10		15	1	14	1226.5131		0.2148E-02	6	11	1	10		11	2	9	1229.3375	-0.0001	0.3155E-01
4	13	3	10		12	2	10	1226.5349		0.4783E-02	4	10	7	4		10	6	4	1229.3619		0.8302E-04
6	4	1	3		4	2	2	1226.5865	0.0000	0.1565E-01	4	10	7	3		10	6	5	1229.3619		0.8302E-04
6	16	2	15		17	1	16	1226.7632	0.0005	0.2774E-01	4	6	5	1		5	4	1	1229.4315		0.1952E-02
4	14	2	13		13	1	13	1226.7931	0.0000	0.1027E-01	4	6	5	2		5	4	2	1229.4315		0.1952E-02
6	18	5	14		17	6	11	1226.9137		0.2694E-03	4	9	7	3		9	6	3	1229.4557		0.7481E-04
6	18	5	13		17	6	12	1226.9153		0.2694E-03	4	9	7	2		9	6	4	1229.4557		0.7481E-04
6	5	1	4		5	2	3	1226.9323	0.0000	0.1946E-01	4	8	7	2		8	6	2	1229.5400		0.5948E-04
4	5	5	1		4	4	1	1227.0605		0.1918E-02	4	8	7	1		8	6	3	1229.5400		0.5948E-04
4	5	5	0		4	4	0	1227.0605		0.1918E-02	6	17	1	10		17	2	15	1229.6246	0.0003	0.1963E-01
6	21	1	20		21	2	19	1227.1809	-0.0015	0.8556E-02	6	12	1	11		12	2	10	1229.6302	-0.0003	0.3109E-01
6	6	1	5		6	2	4	1227.3201	0.0000	0.2287E-01	6	14	0	14		14	1	13	1229.7395	-0.0004	0.6903E-01
6	22	6	16		21	7	15	1227.5825		0.1873E-03	6	23	6	17		22	7	16	1229.7968		0.1552E-03
6	6	2	5		5	3	2	1227.6224	-0.0001	0.7083E-02	6	13	1	12		13	2	11	1229.8442	-0.0001	0.2987E-01
6	22	6	17		21	7	14	1227.6632		0.1918E-03	6	16	1	15		16	2	14	1229.8654	-0.0007	0.2267E-01
6	7	1	6		7	2	5	1227.7360	0.0001	0.2564E-01	6	23	6	18		22	7	15	1229.8969		0.1593E-03
6	6	2	4		5	3	3	1227.7729	0.0001	0.7117E-02	6	4	0	4		5	1	5	1229.9146	0.0002	0.8478E-01
6	15	0	15		15	1	14	1227.8900	-0.0003	0.5532E-01	4	13	4	9		14	1	13	1229.9216		0.1729E-02
6	5	0	5		6	1	6	1227.9272	0.0000	0.9356E-01	6	14	1	13		14	2	12	1229.9637	-0.0003	0.2796E-01
4	17	1	16		16	0	16	1227.9656		0.3767E-02	6	15	1	14		15	2	13	1229.9749	-0.0005	0.2551E-01
6	20	1	19		20	2	18	1228.0281	-0.0012	0.1094E-01	6	7	2	6		6	3	3	1230.0018	0.0000	0.9604E-02
4	9	4	5		8	3	5	1228.0435	0.0000	0.8121E-02	4	15	3	12		14	2	12	1230.0421		0.4265E-02
4	9	4	6		8	3	6	1228.0592	0.0000	0.8278E-02	6	15	2	14		16	1	15	1230.0974	0.0006	0.3154E-01
4	19	2	17		18	1	17	1228.1271	-0.0001	0.1654E-01	4	15	2	14		14	1	14	1230.1486	-0.0001	0.8430E-02
6	8	1	7		8	2	6	1228.1638	-0.0001	0.2628E-01	4	25	5	20		26	2	24	1230.1890		0.8716E-04
4	14	3	11		13	2	11	1228.3340		0.4540E-02	6	7	2	5		6	3	4	1230.2725	0.0000	0.9681E-02
6	10	1	10		11	0	11	1228.5243	0.0001	0.3781E-01	4	10	4	6		9	3	6	1230.3173	-0.0001	0.7443E-02
6	9	1	8		9	2	7	1228.5857	0.0001	0.3010E-01	4	10	4	7		9	3	7	1230.3496	-0.0001	0.7718E-02
4	16	7	10		16	6	10	1228.5964		0.5483E-04	4	20	2	18		19	1	18	1230.6951	-0.0001	0.1349E-01
4	16	7	9		16	6	11	1228.5964		0.5483E-04	6	16	4	13		15	5	10	1231.0397	0.0000	0.2173E-02
4	13	3	11		12	2	11	1228.6085		0.4185E-02	6	16	4	12		15	5	11	1231.0551	-0.0001	0.2175E-02
6	15	4	12		14	5	9	1228.6915	0.0005	0.2338E-02	4	14	3	12		13	2	12	1231.0764		0.3705E-02
6	15	4	11		14	5	10	1228.7006	0.0000	0.2339E-02	6	12	3	10		11	4	7	1231.1467	-0.0001	0.1739E-02
6	19	1	18		19	2	17	1228.7136	-0.0011	0.1364E-01	6	12	3	9		11	4	8	1231.2344	-0.0004	0.1745E-02
4	15	7	8		15	6	10	1228.7484		0.6361E-04	6	27	1	27		26	2	24	1231.3615		0.6009E-04
4	15	7	9		15	6	9	1228.7484		0.6361E-04	6	9	1	9		10	0	10	1231.3986	0.0001	0.3790E-01
6	11	3	9		10	4	8	1228.7795	0.0000	0.1726E-02	6	13	0	13		13	1	12	1231.4327	-0.0004	0.8408E-01
6	11	3	8		10	4	7	1228.8323	0.0002	0.1730E-02	6	20	5	16		19	6	13	1231.5134		0.2065E-03
4	14	7	8		14	6	8	1228.8905		0.7189E-04	6	20	5	15		19	6	14	1231.5184		0.2066E-03
4	14	7	7		14	6	9	1228.8905		0.7188E-04	4	16	3	13		15	2	13	1231.6620		0.3962E-02
6	10	1	9		10	2	8	1228.9832	0.0000	0.3121E-01	4	12	3	10		12	0	12	1231.7477		0.5072E-04
4	13	7	7		13	6	7	1229.0228		0.7892E-04	4	7	5	2		6	4	2	1231.7937		0.1992E-02
4	13	7	6		13	6	8	1229.0228		0.7892E-04	4	7	5	3		6	4	3	1231.7937		0.1992E-02
4	12	7	5		12	6	7	1229.1455		0.8384E-04	6	3	0	3		4	1	4	1231.9662	0.0003	0.7419E-01
4	12	7	6		12	6	6	1229.1455		0.8384E-04	6	24	6	18		23	7	17	1232.0017		0.1264E-03
6	19	5	15		18	6	12	1229.2162		0.2384E-03	6	24	6	19		23	7	16	1232.1249		0.1299E-03
6	19	5	14		18	6	13	1229.2190		0.2384E-03	4	18	1	17		17	0	17	1232.1259		0.2778E-02
6	22	3	20		23	2	21	1229.2334		0.1735E-02	6	8	2	7		7	3	4	1232.3661	0.0001	0.1182E-01
6	18	1	17		18	2	16	1229.2434	-0.0008	0.1667E-01	4	13	3	11		13	0	13	1232.4126		0.6108E-04
4	11	7	5		11	6	5	1229.2585		0.8559E-04	4	11	4	7		10	3	7	1232.5596	-0.0003	0.6873E-02
4	11	7	4		11	6	6	1229.2585		0.8559E-04	6	3	1	3		2	2	0	1232.5981		0.1265E-02

V	J	K	a	K	c	J Ka Kc -			FREQUENCY	RESIDUAL	STRENGTH	V	J	K	a	K	c	J Ka Kc -			FREQUENCY	RESIDUAL	STRENGTH
						8	5	3										8	5	3			
4	11	4	8	10	3	8	8	1232.6211	0.0002	0.7106E-02	4	11	8	11	7	5	1236.0586	0.0003	0.0484E-04				
6	8	2	6	7	3	5	1232.0816	0.0001	0.1196E-01	0.1597E-02													
6	12	0	12	12	1	11	1232.9664	-0.0002	0.9988E-01	0.1697E-02													
4	17	3	14	18	1	14	1233.1985		0.3633E-02	0.1481E-03													
4	14	3	12	14	0	14	1233.2264		0.7118E-04	0.2845E-02													
4	12	4	8	13	1	12	1233.3157		0.1334E-02	0.1465E-03													
6	21	3	19	22	2	20	1233.3547		0.2173E-02	0.5898E-04													
6	17	4	14	16	5	11	1233.3843	0.0002	0.1971E-02	0.5896E-04													
6	17	4	13	16	6	12	1233.4088	0.0001	0.1973E-02	0.4817E-01													
6	14	2	13	15	1	14	1233.4478	0.0004	0.3614E-01	0.1988E-02													
6	29	4	26	30	3	27	1233.4855		0.4689E-03	0.7953E-04													
6	13	3	11	12	1	8	1233.5035	0.0000	0.1688E-02	0.2054E-02													
4	16	3	15	15	1	15	1233.5629	0.0002	0.6710E-02	0.8207E-04													
6	26	1	26	26	2	23	1233.5728		0.3280E-02	0.2055E-02													
6	3	1	10	12	4	1	1233.5950	-0.0001	0.1368E-02	0.1418E+00													
6	13	3	10	12	4	9	1233.6437	0.0001	0.1697E-02	0.3960E-02													
4	21	2	19	20	1	19	1233.7972	0.0001	0.1072E-01	0.9800E-03													
6	21	5	17	20	6	14	1233.8051		0.1754E-03	0.3636E-01													
6	21	5	16	20	6	15	1233.8140		0.1756E-03	0.8294E-02													
6	2	0	2	3	1	3	1234.0876	0.0000	0.6193E-01	0.0002													
4	24	5	19	26	2	23	1234.1047		0.9980E-04	0.5179E-02													
4	8	5	3	7	4	4	1234.1473		0.2028E-02	0.1492E-01													
4	8	5	4	7	4	4	1234.1473		0.2028E-02	0.2993E-02													
6	25	6	19	24	7	18	1234.1971		0.1011E-03	0.8842E-02													
6	15	3	13	15	6	15	1234.2830	0.0000	0.8064E-04	0.1515E-03													
6	8	1	0	9	1	10	1234.3411	-0.0002	0.1156E+00	0.2444E-02													
6	11	0	11	11	1	10	1234.3479		0.3708E-01	0.2110E-03													
6	25	3	15	24	2	17	1234.6678	0.0000	0.1641E-03	0.2688E-02													
6	4	1	4	2	2	15	1234.6656	0.0000	0.2684E-02	0.1601E+00													
6	9	2	8	8	3	5	1234.7115	0.0002	0.1861E-01	0.1112E-03													
4	12	4	9	11	3	8	1234.7650	0.0001	0.6852E-02	0.1530E-01													
4	12	4	9	11	3	9	1234.8741	0.0000	0.6471E-02	0.1530E-01													
4	16	3	14	16	0	16	1235.3304	0.0001	0.8908E-04	0.1015E-03													
6	6	0	0	3	3	6	1235.4153		0.1388E-01	0.1519E-02													
6	15	8	8	15	7	9	1235.5599		0.5397E-04	0.1200E-03													
4	15	8	8	15	7	9	1235.5599	0.0000	0.1156E-03	0.4955E-02													
6	10	0	10	10	2	22	1235.5604		0.5985E-04	0.3310E-01													
6	25	0	25	24	7	7	1235.6035		0.5985E-04	0.6153E-04													
4	14	8	8	14	7	8	1235.6982	0.0002	0.1746E-02	0.4971E-03													
4	14	8	8	14	7	8	1235.6982	0.0001	0.1746E-02	0.2418E-02													
6	18	4	14	17	6	12	1235.7835		0.0001	0.3666E-02													
6	13	8	8	13	7	7	1235.8271		0.6421E-04	0.2066E-02													
4	13	8	8	13	7	7	1235.8271	-0.0004	0.6421E-04	0.2067E-02													
4	14	3	12	13	4	9	1235.8478		0.1588E-02														
4	12	8	5	12	7	5	1235.9467		0.6621E-04														
4	19	3	16	18	2	16	1236.0309		0.2888E-02														
4	11	8	4	11	7	4	1236.0566		0.6484E-04														

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	22	1	22		21	2	19	1238.9354		0.1155E-02	4	16	4	12		15	3	12	1243.0703		0.2780E-02
6	6	0	6		6	1	5	1239.0275	0.0003	0.1513E+00	4	17	4	14		18	1	18	1243.0730		0.1455E-03
4	14	4	10		13	3	10	1239.0380		0.4211E-02	6	9	1	9		8	2	6	1243.2391	-0.0001	0.5626E-02
6	5	1	4		4	2	3	1239.1550	0.0000	0.4831E-02	4	9	4	5		10	1	9	1243.2988		0.4376E-03
6	11	2	10		10	3	7	1239.3278	0.0004	0.1570E-01	4	24	2	22		23	1	22	1243.3458		0.4575E-02
4	14	4	11		13	3	11	1239.3293		0.5232E-02	4	21	3	19		21	0	21	1243.4150		0.1054E-03
4	7	6	1		6	5	1	1239.4460		0.3000E-02	6	17	3	14		16	4	13	1243.4279		0.1117E-02
4	7	6	2		6	5	2	1239.4460		0.3000E-02	6	11	2	10		12	1	11	1243.4520	0.0001	0.4287E-01
6	5	0	5		5	1	4	1239.5858	0.0003	0.1427E+00	4	12	5	7		11	4	7	1243.4843		0.2036E-02
4	19	3	17		19	0	19	1239.7087		0.1049E-03	4	12	5	8		11	4	8	1243.4858		0.2039E-02
4	10	4	8		11	1	10	1240.0148		0.6787E-03	6	12	2	10		11	3	9	1243.6626	0.0003	0.1674E-01
4	23	2	21		22	1	21	1240.0208		0.6246E-02	4	16	4	13		15	3	13	1243.7288		0.4095E-02
6	8	1	6		7	0	7	1240.0275	0.0004	0.3254E-01	4	16	4	13		17	1	17	1243.7549		0.1914E-03
6	4	0	4		4	1	3	1240.0377	-0.0001	0.1278E+00	6	13	2	12		12	3	9	1243.8044	0.0003	0.1576E-01
6	12	2	11		13	1	12	1240.1377	0.0002	0.4099E-01	4	19	3	17		18	2	17	1243.9104		0.1639E-02
6	7	1	7		6	2	4	1240.2155	0.0000	0.5602E-02	4	22	3	19		21	2	19	1244.0765		0.1193E-02
6	3	0	3		3	1	2	1240.3904	0.0003	0.1067E+00	4	19	2	18		18	1	18	1244.1257		0.2747E-02
6	20	4	17		19	5	14	1240.3927		0.1287E-02	4	9	6	4		8	5	4	1244.1405		0.2981E-02
6	20	4	16		19	5	15	1240.4812		0.1293E-02	4	9	6	3		8	5	3	1244.1405		0.2981E-02
6	16	3	14		15	4	11	1240.4843		0.1276E-02	4	23	3	20		22	2	20	1244.3010		0.1478E-02
6	24	5	20		23	6	17	1240.5414		0.8645E-04	6	10	1	10		9	2	7	1244.5035	-0.0001	0.5482E-02
4	18	2	17		17	1	17	1240.5554		0.3851E-02	4	15	4	12		16	1	16	1244.5788		0.2406E-03
6	2	0	2		2	1	1	1240.6497	0.0002	0.8043E-01	6	21	1	21		20	2	18	1244.6260		0.8724E-03
4	20	1	19		19	0	19	1240.6784		0.1368E-02	4	17	4	13		16	3	13	1244.9698		0.2190E-02
6	24	5	19		23	6	18	1240.6823		0.9659E-04	6	7	1	6		6	2	5	1245.0157	0.0002	0.8196E-02
6	1	0	1		1	1	0	1240.8201	0.0002	0.4999E-01	6	18	3	16		17	4	13	1245.0217		0.9183E-03
6	11	2	9		10	3	8	1240.8279	-0.0004	0.1626E-01	4	21	1	20		20	0	20	1245.0278		0.9009E-03
6	16	3	13		15	4	12	1240.9508		0.1294E-02	6	22	4	19		21	5	16	1245.0371	-0.0004	0.8749E-03
4	15	4	11		14	3	11	1241.0892		0.3458E-02	6	22	4	18		21	5	17	1245.2242	-0.0007	0.8838E-03
4	11	5	6		10	4	6	1241.1608		0.2061E-02	6	18	3	16		19	2	17	1245.2438		0.3948E-02
4	11	5	7		10	4	7	1241.1615		0.2062E-02	6	26	5	21		25	6	20	1245.2520		0.5954E-04
4	18	3	16		17	2	16	1241.2675		0.2013E-02	6	26	5	22		25	6	19	1245.2767		0.5875E-04
6	19	3	17		20	2	18	1241.3704		0.3280E-02	4	24	3	21		23	2	21	1245.2811		0.1423E-02
4	20	3	18		20	0	20	1241.4865		0.1063E-03	6	20	1	20		19	2	17	1245.4746		0.7731E-03
4	15	4	12		14	3	12	1241.5352		0.4648E-02	4	22	3	20		22	0	22	1245.4878		0.1025E-03
6	12	2	11		11	3	8	1241.5869	0.0002	0.1597E-01	4	14	4	11		15	1	15	1245.5332		0.2866E-03
4	8	6	2		7	5	2	1241.7980		0.2999E-02	6	11	1	11		10	2	8	1245.5819	-0.0001	0.4928E-02
4	8	6	3		7	5	3	1241.7980		0.2999E-02	6	4	1	4		5	0	5	1245.6483	-0.0001	0.2440E-01
6	8	1	8		7	2	5	1241.8043	-0.0001	0.5885E-02	4	13	5	8		12	4	8	1245.8010		0.1990E-02
4	20	4	17		21	1	21	1241.9089		0.5264E-04	4	13	5	9		12	4	9	1245.8044		0.1995E-02
4	22	5	17		23	2	21	1241.9933		0.1205E-03	6	2	0	2		1	1	1	1245.8309	0.0001	0.1749E-01
6	6	1	5		5	2	4	1242.0483	0.0001	0.6568E-02	4	17	4	14		16	3	14	1245.9128		0.3574E-02
6	27	4	24		28	3	25	1242.0743		0.9014E-03	4	21	5	16		22	2	20	1245.9312		0.1269E-03
4	19	4	16		20	1	20	1242.1462		0.7573E-04	6	18	3	15		17	4	14	1245.9340		0.9372E-03
4	18	4	15		19	1	19	1242.5354		0.1065E-03	6	14	2	13		13	3	10	1245.9727	0.0003	0.1512E-01
6	21	4	18		20	5	15	1242.7184	-0.0002	0.1071E-02	6	26	4	23		27	3	24	1246.1825		0.1228E-02
6	17	3	15		16	4	12	1242.7679		0.1097E-02	6	19	1	19		18	2	16	1246.3026		0.8355E-03
6	21	4	17		20	5	16	1242.8483	0.0004	0.1079E-02	6	12	1	12		11	2	9	1246.4587	-0.0001	0.4251E-02
6	5	1	5		6	0	6	1242.8599	-0.0001	0.2890E-01	4	10	6	4		9	5	4	1246.4738		0.2941E-02
6	25	5	20		24	6	19	1242.9675		0.7646E-04	4	10	6	5		9	5	5	1246.4738		0.2941E-02
6	25	5	21		24	6	18	1243.0474		0.7261E-04	4	8	4	4		9	1	8	1246.5275		0.2578E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	13	2	11		12	3	10	1246.5947	0.0002	0.1679E-01	4	24	3	22		24	0	24	1250.0356		0.9125E-04
4	20	3	18		19	2	18	1246.5984		0.1305E-02	4	20	4	16		19	3	16	1250.0383		0.9635E-03
4	7	7	1		6	6	1	1246.6035		0.4540E-03	4	27	3	24		28	2	24	1250.1049		0.7733E-03
4	7	7	0		6	6	0	1246.6035		0.4540E-03	6	23	3	20		24	2	23	1250.1178		0.7476E-03
4	13	4	10		14	1	14	1246.6184		0.3206E-03	6	16	2	15		15	3	12	1250.1251	0.0004	0.1289E-01
4	25	3	22		24	2	22	1246.6736		0.1215E-02	6	25	4	22		26	3	23	1250.1573		0.1652E-02
6	28	3	25		29	2	28	1246.7063		0.6843E-04	6	29	4	25		30	3	28	1250.2133		0.4071E-03
6	10	2	9		11	1	10	1246.7314	0.0002	0.4380E-01	4	19	4	16		18	3	16	1250.2614		0.2634E-02
4	18	4	14		17	3	14	1246.7745		0.1693E-02	4	26	2	24		25	1	24	1250.4080		0.2253E-02
4	26	2	23		24	1	23	1246.8102		0.3258E-02	4	15	5	10		14	4	10	1250.4167		0.1838E-02
6	18	1	18		17	2	15	1246.9845		0.1016E-02	4	15	5	11		14	4	11	1250.4294		0.1853E-02
6	13	1	13		12	2	10	1247.1208	-0.0002	0.3531E-02	4	10	4	7		11	1	11	1250.5830		0.2801E-03
6	27	3	24		28	2	27	1247.1812		0.1202E-03	6	4	0	4		3	1	3	1251.0389	0.0001	0.5278E-01
6	19	3	17		18	4	14	1247.2393		0.7475E-03	6	2	1	2		3	0	3	1251.0485	-0.0003	0.1324E-01
6	23	4	20		22	5	17	1247.3472		0.7008E-03	6	20	3	17		19	4	16	1251.0505		0.6019E-03
6	17	1	17		18	2	14	1247.4686	0.0003	0.1305E-02	4	12	6	7		11	5	7	1251.1119		0.2782E-02
6	14	1	14		13	2	11	1247.5577	0.0001	0.2839E-02	4	12	6	6		11	5	6	1251.1119		0.2782E-02
6	23	4	19		22	5	18	1247.6122		0.7110E-03	6	9	1	8		8	2	7	1251.1859	-0.0001	0.1094E-01
4	23	3	21		23	0	23	1247.6974		0.9764E-04	6	22	3	19		23	2	22	1251.1954		0.1070E-02
6	16	1	16		15	2	13	1247.7314	-0.0001	0.1706E-02	4	9	7	2		8	6	2	1251.2988		0.4482E-03
4	20	2	19		19	1	19	1247.7393		0.1865E-02	4	9	7	3		8	6	3	1251.2988		0.4482E-03
6	26	3	23		27	2	26	1247.7415		0.2024E-03	4	21	2	20		20	1	20	1251.3904		0.1190E-02
6	15	1	15		14	2	12	1247.7621	0.0002	0.2221E-02	4	21	4	17		20	3	17	1251.4634		0.7133E-03
4	12	4	9		13	1	13	1247.8260		0.3339E-03	6	21	3	19		20	4	16	1251.5377		0.4557E-03
6	8	1	7		7	2	6	1248.0555	0.0000	0.9667E-02	6	25	4	22		24	5	19	1251.9327		0.4248E-03
6	15	2	14		14	3	11	1248.0826	0.0004	0.1414E-01	4	28	3	25		27	2	25	1252.0649	0.0003	0.5905E-03
4	18	4	15		17	3	15	1248.0895		0.3087E-02	6	17	2	16		16	3	13	1252.0902		0.1148E-01
4	14	5	9		13	4	9	1248.1118		0.1924E-02	4	22	3	20		21	2	20	1252.1030		0.7896E-03
4	14	5	10		13	4	10	1248.1185		0.1933E-02	4	9	4	6		10	1	10	1252.1195		0.2203E-03
4	26	3	23		25	2	23	1248.3015		0.9855E-03	6	28	4	24		29	3	27	1252.1212		0.5897E-03
6	3	1	3		4	0	4	1248.3812	-0.0001	0.1915E-01	6	21	3	18		22	2	21	1252.4283		0.1483E-02
6	3	0	3		2	1	2	1248.4021	0.0000	0.3520E-01	4	20	4	17		19	3	17	1252.4310		0.2218E-02
6	25	3	22		26	2	25	1248.4048		0.3262E-03	6	25	4	21		24	5	20	1252.4393		0.4365E-03
4	19	4	15		18	3	15	1248.4694		0.1287E-02	4	25	3	23		25	0	25	1252.4940		0.8368E-04
6	19	3	16		18	4	15	1248.4735		0.7833E-03	6	16	3	14		17	2	15	1252.6782		0.5471E-02
4	11	6	5		10	5	5	1248.7975		0.2875E-02	4	16	5	11		15	4	11	1252.7162		0.1734E-02
4	11	6	6		10	5	6	1248.7975		0.2875E-02	4	22	4	18		21	3	18	1252.7261		0.5245E-03
4	8	7	1		7	6	1	1248.9558		0.4523E-03	4	16	5	12		15	4	12	1252.7391		0.1757E-02
4	8	7	2		7	6	2	1248.9558		0.4523E-03	6	15	2	13		14	3	12	1252.7749	0.0003	0.1580E-01
6	17	3	15		18	2	16	1249.0155		0.4684E-02	4	6	4	2		7	1	6	1252.7909		0.5967E-04
4	11	4	8		12	1	12	1249.1497		0.3203E-03	6	8	2	7		9	1	8	1253.1506	-0.0001	0.4216E-01
6	24	3	21		25	2	24	1249.1913		0.5037E-03	4	13	6	7		12	5	7	1253.4170		0.2664E-02
4	21	3	19		20	2	19	1249.3270		0.1015E-02	4	13	6	8		12	5	8	1253.4170		0.2664E-02
4	22	1	21		21	0	21	1249.4030		0.5611E-03	6	22	3	20		21	4	17	1253.6030		0.3408E-03
6	20	3	18		19	4	15	1249.4138		0.5920E-03	4	10	7	3		9	6	3	1253.6323		0.4409E-03
6	14	2	12		13	3	11	1249.6307	0.0003	0.1845E-01	4	10	7	4		9	6	4	1253.6323		0.4409E-03
6	24	4	21		23	5	18	1249.6467		0.5508E-03	6	1	1	1		2	0	2	1253.6423	-0.0002	0.6815E-02
4	7	4	3		8	1	7	1249.6936		0.1349E-03	6	21	3	18		20	4	17	1253.6667		0.4575E-03
4	20	5	15		21	2	19	1249.8420		0.1300E-03	4	19	5	14		20	2	18	1253.7101		0.1293E-03
6	9	2	8		10	1	9	1249.9669	0.0001	0.4361E-01	6	5	0	5		4	1	4	1253.7347	-0.0001	0.6985E-01
6	24	4	20		23	5	19	1250.0157		0.5620E-03	4	8	4	5		9	1	9	1253.7537		0.1532E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	23	1	22		22	0	22	1253.7817		0.3246E-03	6	18	2	18		19	1	19	1257.3131	0.0005	0.3992E-02
4	23	4	19		22	3	19	1253.8070		0.3851E-03	6	11	2	9		12	1	12	1257.3588	0.0001	0.2228E-01
6	20	3	17		21	2	20	1253.8148		0.1993E-02	4	18	5	14		17	4	14	1257.3658		0.1530E-02
6	18	2	17		17	3	14	1253.9877	0.0002	0.9995E-02	6	27	4	23		28	5	22	1257.3689		0.2502E-03
6	24	4	21		25	3	22	1253.9952		0.2194E-02	6	20	2	19		19	3	18	1257.4221	-0.0002	0.7101E-02
4	27	2	25		26	1	25	1254.1288		0.1511E-02	4	24	4	21		24	1	23	1257.4829		0.9796E-03
6	27	4	23		28	3	26	1254.1541		0.8380E-03	4	11	3	8		10	0	10	1257.5098		0.6449E-04
4	29	3	26		28	2	26	1254.1775		0.4394E-03	4	25	4	22		25	1	24	1257.5111		0.7617E-03
6	26	4	23		25	5	20	1254.2025		0.3213E-03	4	18	5	13		19	2	17	1257.5199		0.1249E-03
6	10	1	9		9	2	8	1254.3444	-0.0002	0.1199E-01	6	24	3	22		23	4	19	1257.5222		0.1739E-03
4	21	4	18		20	3	18	1254.6016		0.1841E-02	4	27	5	23		28	2	27	1257.5253		0.7213E-04
6	24	2	23		23	3	20	1254.6871		0.2842E-03	4	28	5	24		29	2	28	1257.5770		0.5639E-04
6	26	4	22		25	5	21	1254.8878		0.3333E-03	4	23	4	20		23	1	22	1257.5854		0.1243E-02
4	23	3	21		22	2	21	1254.9250		0.5684E-03	6	11	1	10		10	2	9	1257.5881	-0.0004	0.1279E-01
6	30	2	29		29	3	26	1254.9764		0.6435E-04	6	23	4	20		24	3	21	1257.6948	0.0038R	0.2873E-02
4	17	5	12		16	4	12	1255.0100		0.1615E-02	4	27	3	25		27	0	27	1257.7347		0.6661E-04
4	17	5	13		16	4	13	1255.0500		0.1648E-02	4	26	4	23		26	1	25	1257.7386		0.5855E-03
4	26	3	24		28	0	26	1255.0635		0.7534E-04	4	24	3	22		23	2	22	1257.7928		0.4080E-03
4	22	2	21		21	1	21	1255.0732		0.7000E-03	4	26	5	22		27	2	26	1257.8101		0.8764E-04
6	19	3	16		20	2	19	1255.3483		0.2605E-02	4	22	4	19		22	1	21	1257.8671		0.1554E-02
6	25	2	24		24	3	21	1255.3486		0.2121E-03	4	28	2	26		27	1	26	1257.9587		0.9807E-03
4	7	4	4		8	1	8	1255.4803		0.9174E-04	4	15	6	9		14	5	9	1257.9991		0.2363E-02
6	29	2	28		28	3	25	1255.5577		0.7927E-04	4	15	6	10		14	5	10	1257.9991		0.2363E-02
6	23	3	21		22	4	18	1255.6010		0.2473E-03	4	9	8	2		8	7	2	1258.0795		0.5342E-03
4	14	6	8		13	5	8	1255.7126		0.2524E-02	4	9	8	1		8	7	1	1258.0795		0.5342E-03
4	14	6	9		13	5	9	1255.7128		0.2524E-02	4	24	1	23		23	0	23	1258.1458		0.1690E-03
4	8	8	1		7	7	1	1255.7365		0.5363E-03	4	27	4	24		27	1	26	1258.1509		0.4456E-03
4	8	8	0		7	7	0	1255.7365		0.5363E-03	4	12	7	6		11	6	6	1258.2709		0.4147E-03
6	19	2	18		18	3	15	1255.7480	0.0001	0.8512E-02	4	12	7	5		11	6	5	1258.2709		0.4147E-03
6	26	2	25		25	3	22	1255.7761		0.1811E-03	4	21	4	18		21	1	20	1258.2939		0.1907E-02
6	15	2	13		16	1	16	1255.8167	0.0003	0.9881E-02	6	10	2	8		11	1	11	1258.3158	0.0000	0.2540E-01
6	14	2	12		15	1	15	1255.8345	0.0001	0.1243E-01	6	19	2	17		20	1	20	1258.3298	0.0002	0.2857E-02
6	28	2	27		27	3	24	1255.8856		0.9885E-04	4	25	5	21		26	2	25	1258.4023		0.1018E-03
4	11	7	4		10	6	4	1255.9563		0.4297E-03	6	25	4	21		26	3	24	1258.5338		0.1600E-02
4	11	7	5		10	6	5	1255.9563		0.4297E-03	6	1	1	0		1	0	1	1258.6648	0.0000	0.2081E-01
6	27	2	26		26	3	23	1255.9576		0.1248E-03	6	28	4	25		27	5	22	1258.6765		0.1732E-03
6	16	2	14		15	3	13	1256.0294	0.0002	0.1491E-01	4	28	4	25		28	1	27	1258.7502		0.3362E-03
6	16	2	14		17	1	17	1256.0555	0.0002	0.7362E-02	4	23	2	22		22	1	22	1258.7811		0.3660E-03
6	13	2	11		14	1	14	1256.1035	0.0003	0.1554E-01	6	17	3	14		18	2	17	1258.8151		0.4114E-02
6	15	3	13		16	2	14	1256.2263		0.6286E-02	6	2	1	1		2	0	2	1258.8250	-0.0001	0.3359E-01
6	7	2	6		8	1	7	1256.2758	-0.0002	0.3935E-01	4	20	4	17		20	1	19	1258.8494		0.2294E-02
6	26	4	22		27	3	25	1256.2985		0.1189E-02	4	23	4	20		22	3	20	1258.9583		0.1210E-02
6	22	3	19		21	4	18	1256.3210		0.3328E-03	6	21	2	20		20	3	17	1258.9829	-0.0003	0.5810E-02
4	30	3	27		29	2	27	1256.4434		0.3189E-03	6	23	3	20		22	4	19	1259.0077		0.2293E-03
6	27	4	24		26	5	21	1256.4519		0.2383E-03	6	3	1	2		3	0	3	1259.0697	-0.0001	0.4480E-01
6	6	0	6		5	1	5	1256.4814	0.0000	0.8601E-01	4	24	5	20		25	2	24	1259.2673		0.1137E-03
6	17	2	15		18	1	18	1256.5542	0.0004	0.5476E-02	6	7	0	7		6	1	6	1259.2693	-0.0003	0.1009E+00
6	12	2	10		13	1	13	1256.6146	0.0002	0.1890E-01	6	6	2	5		7	1	6	1259.3367	-0.0002	0.3516E-01
4	22	4	19		21	3	19	1256.7762		0.1505E-02	6	25	3	23		24	4	20	1259.3573		0.1181E-03
6	18	3	15		19	2	18	1257.0190		0.3316E-02	6	17	2	15		16	3	14	1259.3940	0.0004	0.1384E-01
4	18	5	13		17	4	13	1257.2979		0.1483E-02	6	4	1	3		4	0	4	1259.4050	-0.0002	0.5399E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	9	2	7		10	1	10	1259.4756	-0.0002	0.2792E-01	4	17	6	12		16	5	12	1262.5442		0.2000E-02
4	19	4	16		19	1	18	1259.5157		0.2695E-02	6	15	3	12		16	2	15	1262.7318		0.5881E-02
4	29	4	26		29	1	28	1259.5363		0.2518E-03	4	11	8	4		10	7	4	1262.7379		0.5173E-03
4	19	5	14		18	4	14	1259.5789		0.1342E-02	4	11	8	3		10	7	3	1262.7379		0.5173E-03
6	20	2	18		21	1	21	1259.5999		0.2011E-02	6	9	1	8		9	0	9	1262.7487	-0.0002	0.6408E-01
6	14	3	12		15	2	13	1259.6556		0.7095E-02	6	18	2	16		17	3	15	1262.8671	0.0005	0.1267E-01
4	19	5	15		18	4	15	1259.6908		0.1405E-02	4	14	7	7		13	6	7	1262.8715		0.3738E-03
6	5	1	4		5	0	5	1259.8383	0.0001	0.6083E-01	4	14	7	8		13	6	8	1262.8715		0.3738E-03
6	28	4	24		27	5	23	1259.8827		0.1847E-03	6	22	2	20		23	1	23	1262.8719		0.9515E-03
4	18	4	15		18	1	17	1260.2744		0.3082E-02	4	15	4	12		15	1	14	1262.9136		0.3761E-02
4	16	6	10		15	5	10	1260.2761		0.2187E-02	4	24	4	20		23	3	20	1262.9554		0.2893E-02
4	16	6	11		15	5	11	1260.2762		0.2187E-02	6	13	3	11		14	2	12	1262.9647		0.7852E-02
4	23	5	19		24	2	23	1260.3696		0.1231E-03	6	30	4	27		29	5	24	1263.0292		0.8593E-04
4	12	3	9		11	0	11	1260.3737		0.9912E-04	4	21	5	17		22	2	21	1263.1602		0.1335E-03
6	6	1	5		6	0	6	1260.3784	-0.0002	0.6517E-01	6	2	1	2		1	0	1	1263.1844	0.0000	0.2122E-01
4	10	8	2		9	7	2	1260.4135		0.5282E-03	6	23	4	19		24	3	22	1263.2384	-0.0008	0.2843E-02
4	10	8	3		9	7	3	1260.4135		0.5282E-03	4	25	4	22		24	3	22	1263.3584		0.7420E-03
6	22	2	21		21	3	18	1260.4257		0.4672E-02	4	13	3	10		12	0	12	1263.3805		0.1485E-03
4	28	3	26		28	0	28	1260.4984		0.5788E-04	4	26	3	24		25	2	24	1263.6617		0.1908E-03
4	30	4	27		30	1	29	1260.5082		0.1872E-03	6	10	1	9		10	0	10	1263.8267	-0.0002	0.6000E-01
4	13	7	6		12	6	6	1260.5760		0.3959E-03	4	14	4	11		14	1	13	1263.8534		0.3690E-02
4	13	7	7		12	6	7	1260.5760		0.3959E-03	6	6	2	4		7	1	7	1263.9908	-0.0001	0.2838E-01
4	25	3	23		24	2	23	1260.7056		0.2839E-03	4	25	4	21		24	3	21	1264.0524		0.2239E-02
6	16	3	13		17	2	16	1260.7238		0.4979E-02	4	21	5	18		20	4	16	1264.1143		0.1049E-02
6	8	2	6		9	1	9	1260.8199	0.0000	0.2948E-01	6	13	1	12		12	2	11	1264.2561	-0.0003	0.1363E-01
6	24	4	20		25	3	23	1260.8521	-0.0015	0.2152E-02	4	21	5	17		20	4	17	1264.3988		0.1149E-02
6	29	4	26		28	5	23	1260.8710		0.1233E-03	6	25	3	22		24	4	21	1264.4277		0.8611E-04
6	12	1	11		11	2	10	1260.8934	-0.0003	0.1334E-01	4	9	9	1		8	8	1	1264.5588		0.5936E-04
6	1	1	1		0	0	0	1260.9287		0.1418E-01	4	9	9	0		8	8	0	1264.5588		0.5936E-04
6	7	1	6		7	0	7	1261.0359	-0.0002	0.6702E-01	6	21	4	18		22	3	19	1264.6887	-0.0001	0.4712E-02
6	28	3	24		25	4	21	1261.0959		0.7731E-04	4	13	4	10		13	1	12	1264.7948		0.3433E-02
4	17	4	14		17	1	16	1261.1061		0.3418E-02	4	20	5	16		21	2	20	1264.7964		0.1343E-03
6	21	2	19		22	1	22	1261.1167		0.1393E-02	4	18	6	12		17	5	12	1264.8020		0.1807E-02
4	24	4	21		23	3	21	1261.1511		0.9560E-03	4	18	6	13		17	5	13	1264.8029		0.1807E-02
4	17	5	12		18	2	16	1261.2574		0.1169E-03	6	14	3	11		15	2	14	1264.8267		0.6776E-02
6	22	4	19		23	3	20	1261.2578	-0.0002	0.3708E-02	6	23	2	21		24	1	24	1264.8555		0.6412E-03
4	22	5	18		23	2	22	1261.6766		0.1298E-03	4	16	5	11		17	2	15	1264.9102		0.1058E-03
6	24	3	21		23	4	20	1261.7158		0.1473E-03	6	9	0	9		8	1	8	1264.9257	-0.0003	0.1249E+00
6	23	2	22		22	3	19	1261.7489	-0.0009	0.3700E-02	6	30	4	26		29	5	25	1265.0508		0.9547E-04
6	8	1	7		8	0	8	1261.8221	-0.0002	0.6655E-01	4	26	4	22		25	3	22	1265.0510		0.1720E-02
4	20	5	15		19	4	15	1261.8518		0.1196E-02	4	12	8	5		11	7	5	1265.0530		0.5015E-03
4	29	2	27		28	1	27	1261.8801		0.6138E-03	4	12	8	4		11	7	4	1265.0530		0.5015E-03
4	16	4	13		16	1	15	1261.9919		0.3659E-02	6	11	1	10		11	0	11	1265.0664	-0.0001	0.5478E-01
4	20	5	16		19	4	16	1262.0321		0.1277E-02	4	15	7	9		14	6	9	1265.1573		0.3488E-03
6	8	0	8		7	1	7	1262.0879	-0.0003	0.1139E+00	4	15	7	8		14	6	8	1265.1573		0.3488E-03
6	5	2	4		6	1	5	1262.3282	0.0010	0.2961E-01	6	4	2	3		5	1	4	1265.2465	-0.0002	0.2285E-01
6	7	2	5		8	1	8	1262.3308	-0.0015	0.2973E-01	6	3	1	3		2	0	2	1265.3544	-0.0001	0.2802E-01
6	29	4	25		28	5	24	1262.4417		0.1340E-03	4	26	4	23		25	3	23	1265.5836		0.5651E-02
4	25	1	24		24	0	24	1262.4779		0.7426E-04	6	22	4	18		23	3	21	1265.6805	0.0000	0.3691E-03
4	24	2	23		23	1	23	1262.5068		0.1579E-03	4	12	4	9		12	1	11	1265.7225		0.3007E-02
4	17	6	11		16	5	11	1262.5437		0.2000E-02	6	5	2	3		6	1	6	1265.7836	-0.0002	0.2529E-01

V	J	Ka	Kc	-	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	FREQUENCY	RESIDUAL	STRENGTH	
4	30	2	28	29	1	28	1265.8726	0.3885E-03	14	8	6	13	7	6	1269.6549	0.4558E-03	0.4558E-03	
4	27	4	23	26	3	23	1265.9666	0.1315E-02	28	3	26	27	2	26	1269.6948	0.7608E-04	0.7608E-04	
6	12	3	10	13	2	11	1266.1542	0.8504E-02	17	7	11	16	6	11	1269.7000	0.2931E-03	0.2931E-03	
4	22	5	17	21	4	17	1266.3628	0.9050E-03	17	7	10	16	6	10	1269.7000	0.2931E-03	0.2931E-03	
6	19	5	25	30	4	26	1266.4167	0.1069E-03	3	2	1	4	1	4	1269.7087	0.1408E-01	0.1408E-01	
6	19	2	17	18	3	18	1266.4447	0.1144E-01	4	3	4	4	1	4	1269.7192	0.4379E-03	0.4379E-03	
6	12	1	11	12	0	12	1266.4760	-0.0004	7	4	4	7	1	6	1269.7192	0.4379E-03	0.4379E-03	
4	14	3	11	13	0	13	1266.5500	0.2182E-03	28	5	24	29	4	25	1269.7900	0.3660E-01	0.3660E-01	
4	19	5	15	20	2	19	1266.5658	0.1318E-03	14	1	13	14	0	14	1269.8210	0.3164E-03	0.3164E-03	
4	11	4	8	11	1	10	1266.6228	0.2459E-02	16	3	12	14	0	14	1269.8994	0.3089E-03	0.3089E-03	
4	27	3	25	26	2	25	1266.6591	0.1233E-03	4	25	27	3	25	27	1270.1014	0.1020E-01	0.1020E-01	
4	22	5	18	21	4	18	1266.8022	0.1023E-02	20	2	18	19	3	17	1270.1219	0.2018E-03	0.2018E-03	
4	28	4	24	27	3	24	1266.8173	0.1001E-02	4	6	4	6	1	5	1270.3254	0.1174E-03	0.1174E-03	
4	10	9	2	9	8	2	1266.8925	0.6960E-04	17	5	13	18	2	17	1270.4373	0.1390E+00	0.1390E+00	
6	13	3	10	14	2	13	1266.8925	0.5960E-04	11	0	11	10	1	10	1270.6113	0.1590E-02	0.1590E-02	
4	19	6	13	18	5	14	1267.0522	0.7615E-02	20	4	16	21	3	19	1270.6899	0.6391E-03	0.6391E-03	
4	19	6	14	18	5	14	1267.0522	0.1613E-02	4	24	5	19	23	4	19	1270.8002	0.7066E-02	0.7066E-02
6	24	2	22	25	1	25	1267.0562	0.1613E-02	2	2	1	3	1	2	1270.8488	0.7184E-04	0.7184E-04	
4	13	8	5	12	7	5	1267.3588	0.4809E-03	5	4	2	6	1	4	1270.8525	0.1348E-01	0.1348E-01	
4	16	7	10	15	6	10	1267.3588	0.4809E-03	15	1	14	14	2	13	1271.1315	0.7249E-02	0.7249E-02	
4	16	7	9	15	6	9	1267.4336	0.3217E-03	6	8	1	6	5	6	1271.1827	0.4544E-01	0.4544E-01	
6	4	1	4	3	0	3	1267.4420	0.3442E-01	21	6	16	20	5	16	1271.3934	0.8878E-02	0.8878E-02	
4	10	4	7	10	1	9	1267.4822	0.1860E-02	4	12	9	3	11	8	3	1271.5245	0.1238E-02	0.1238E-02
4	29	4	25	28	3	25	1267.6237	0.1860E-02	12	9	3	11	8	3	1271.5323	0.5817E-04	0.5817E-04	
6	14	1	13	13	2	12	1267.6708	0.1367E-01	4	12	9	4	11	8	4	1271.5323	0.5817E-04	0.5817E-04
6	4	2	2	5	1	5	1267.6938	0.2045E-01	15	1	14	15	0	15	1271.7563	0.3085E-01	0.3085E-01	
6	10	0	10	9	1	9	1267.7708	0.1333E+00	28	5	23	29	4	26	1271.7869	0.1504E-03	0.1504E-03	
4	27	4	24	28	3	24	1267.8302	0.4221E-03	4	24	5	20	23	4	20	1271.7917	0.7838E-03	0.7838E-03
6	20	4	17	21	3	18	1267.9941	0.5894E-02	14	5	9	15	2	13	1271.8174	0.6785E-02	0.6785E-02	
6	13	1	12	13	0	13	1268.0802	0.4269E-01	15	8	7	14	7	7	1271.9197	0.7767E-04	0.7767E-04	
6	21	4	17	22	3	20	1268.0875	0.1514E-01	15	8	8	14	7	8	1271.9415	0.4268E-03	0.4268E-03	
6	21	4	17	22	3	20	1268.1678	0.4708E-02	18	7	12	17	6	12	1271.9565	0.2638E-03	0.2638E-03	
4	30	4	26	29	3	26	1268.2908	0.1286E-02	18	7	11	17	6	11	1271.9565	0.1818E-03	0.1818E-03	
4	18	5	14	19	2	18	1268.4082	0.5732E-03	6	26	2	24	27	1	27	1272.0554	0.9240E-02	0.9240E-02
4	15	5	10	16	2	14	1268.4508	0.1261E-03	10	3	8	11	2	9	1272.1904	0.9240E-02	0.9240E-02	
4	23	5	18	22	4	18	1268.5934	0.7673E-03	4	18	5	12	17	2	16	1272.4004	0.2213E-03	0.2213E-03
6	29	5	24	30	4	27	1268.9905	0.1070E-03	4	25	5	20	24	4	20	1272.5120	0.1060E-03	0.1060E-03
4	8	4	5	8	1	7	1269.0389	0.8006E-03	6	27	5	23	28	4	24	1272.9781	0.5227E-03	0.5227E-03
4	11	9	2	10	8	2	1269.2170	0.5922E-04	6	19	4	15	20	3	18	1273.0627	0.2071E-03	0.2071E-03
4	11	3	9	12	2	10	1269.2170	0.5922E-04	4	5	4	1	5	1	5	1273.2386	0.7265E-02	0.7265E-02
6	12	3	9	13	2	12	1269.2284	0.8988E-02	7	1	7	6	0	6	1273.2679	0.6590E-04	0.6590E-04	
4	23	6	14	19	5	14	1269.2595	0.9009E-03	6	12	0	12	11	11	1273.4365	0.4980E-01	0.4980E-01	
4	20	6	14	19	5	14	1269.2900	0.1422E-02	4	16	3	13	15	0	15	1273.4435	0.4559E-03	0.4559E-03
4	20	6	15	19	5	15	1269.2928	0.1423E-02	4	6	4	2	6	1	6	1273.7053	0.1814E-03	0.1814E-03
6	5	1	5	4	0	4	1269.4526	0.4027E-01	22	6	16	21	5	16	1273.7397	0.1064E-02	0.1064E-02	
6	25	2	23	26	1	26	1269.4608	0.2802E-03	4	13	9	4	12	8	4	1273.8363	0.5647E-04	0.5647E-04
4	14	8	7	13	7	13	1269.6549	0.4558E-03	4	13	9	5	12	8	5	1273.8363	0.5647E-04	0.5647E-04

v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH	v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH
6	10	3	7		11	2	10	1273.8420		0.9172E-02	6	6	2	4		6	1	5	1277.0211	0.0001	0.1237E+00
6	16	1	15		16	0	16	1273.8602	-0.0004	0.2562E-01	4	11	4	7		11	1	11	1277.1541		0.2410E-02
6	21	2	19		20	3	18	1273.8925	0.0008	0.8983E-02	4	26	5	22		25	4	22	1277.1895		0.5657E-03
6	15	2	13		15	1	14	1274.1534	0.0012	0.1191E+00	4	17	3	14		16	0	16	1277.1934		0.6593E-03
6	14	2	12		14	1	13	1274.1547	-0.0001	0.1313E+00	4	27	5	22		26	4	22	1277.1997		0.3308E-03
4	19	7	13		18	6	13	1274.2034		0.2345E-03	6	17	4	14		18	3	15	1277.2505	0.0004	0.1040E-01
4	19	7	12		18	6	12	1274.2034		0.2345E-03	6	26	5	21		27	4	24	1277.3907		0.2841E-03
4	16	8	8		15	7	8	1274.2185		0.3949E-03	6	5	2	3		5	1	4	1277.4420	0.0001	0.1071E+00
4	16	8	9		15	7	9	1274.2185		0.3949E-03	6	21	2	19		21	1	20	1277.5848	0.0009	0.4241E-01
4	7	4	3		7	1	7	1274.2227		0.3890E-03	6	22	2	20		21	3	19	1277.7491	0.0011	0.7822E-02
6	18	4	15		19	3	16	1274.2646	0.0005	0.8781E-02	6	28	2	26		29	1	29	1277.7513		0.7363E-04
6	13	2	11		13	1	12	1274.2799	0.0004	0.1417E+00	6	4	2	2		4	1	3	1277.8171	0.0004	0.8749E-01
6	16	2	14		16	1	15	1274.2925	0.0004	0.1056E+00	6	8	3	6		9	2	7	1277.8217		0.6800E-02
4	25	5	21		24	4	21	1274.4252		0.6717E-03	4	12	4	8		12	1	12	1278.1198		0.3185E-02
6	12	2	10		12	1	11	1274.5111	0.0004	0.1495E+00	6	3	2	1		3	1	2	1278.1331	0.0001	0.6471E-01
6	17	2	15		17	1	16	1274.5874	0.0006	0.9173E-01	4	24	6	18		23	5	18	1278.1499		0.7569E-03
6	27	5	22		28	4	25	1274.5887		0.2083E-03	6	17	1	16		16	2	15	1278.1611	-0.0004	0.1248E-01
6	16	1	15		15	2	14	1274.6310	-0.0005	0.1307E-01	4	24	6	19		23	5	19	1278.1697		0.7805E-03
4	15	5	11		16	2	15	1274.6637		0.9249E-04	6	2	2	0		2	1	1	1278.3793	0.0007	0.3770E-01
4	30	4	27		29	3	27	1274.7299		0.1550E-03	6	17	4	13		18	3	16	1278.3845		0.1042E-01
4	8	4	4		8	1	8	1274.8228		0.7110E-03	4	15	9	6		14	8	6	1278.4218		0.5123E-04
6	27	2	25		28	1	28	1274.8245		0.1185E-03	4	15	9	7		14	8	7	1278.4218		0.5123E-04
6	11	2	9		11	1	10	1274.8293	0.0003	0.1542E+00	6	18	1	17		18	0	18	1278.5330		0.1700E-01
6	9	3	7		10	2	8	1275.0518		0.9195E-02	6	8	3	5		9	2	8	1278.5958		0.8780E-02
6	18	2	16		18	1	17	1275.0521	0.0004	0.7800E-01	6	10	1	10		9	0	9	1278.6684	0.0003	0.5714E-01
6	8	1	8		7	0	7	1275.1042	0.0001	0.5325E-01	4	21	7	15		20	6	15	1278.6687		0.1785E-03
4	26	5	21		25	4	21	1275.1125		0.4197E-03	4	21	7	14		20	6	14	1278.6687		0.1788E-03
6	10	2	8		10	1	9	1275.2147	0.0003	0.1555E+00	4	18	8	11		17	7	11	1278.7435		0.3256E-03
4	13	5	8		14	2	12	1275.2621		0.6243E-04	4	18	8	10		17	7	10	1278.7435		0.3256E-03
4	9	4	5		9	1	9	1275.5092		0.1159E-02	6	22	2	20		22	1	21	1278.8401	0.0005	0.3329E-01
6	9	2	7		9	1	8	1275.6469	0.0001	0.1531E+00	6	2	2	1		2	1	2	1278.8805	0.0008	0.3692E-01
6	19	2	17		19	1	18	1275.6993	0.0001	0.8495E-01	6	14	0	14		13	1	13	1279.0035	0.0001	0.1382E+00
6	18	4	14		19	3	17	1275.8057	0.0002	0.8783E-02	6	3	2	2		3	1	3	1279.0887	0.0003	0.6205E-01
4	23	6	17		22	5	17	1275.9500		0.9032E-03	4	13	5	9		14	2	13	1279.1587		0.6243E-04
4	23	6	18		22	5	18	1275.9825		0.9060E-03	4	13	4	9		13	1	13	1279.1857		0.3954E-02
6	8	2	6		8	1	7	1276.1052	-0.0003	0.1469E+00	4	28	5	23		27	4	23	1279.2264		0.2559E-03
6	17	1	16		17	0	17	1276.1233		0.2099E-01	6	25	5	21		26	4	22	1279.3893		0.3629E-03
4	14	9	6		13	8	6	1276.1346		0.5413E-04	6	4	2	3		4	1	4	1279.3954	0.0003	0.8168E-01
4	14	9	5		13	8	5	1276.1346		0.5413E-04	6	5	2	4		5	1	5	1279.7821	0.0004	0.9875E-01
6	9	3	6		10	2	9	1276.2053		0.9156E-02	4	27	5	23		26	4	23	1280.1143		0.4688E-03
6	13	0	13		12	1	12	1276.2365	-0.0001	0.1414E+00	6	16	4	13		17	3	14	1280.1514	0.0003	0.1210E-01
6	26	5	22		27	4	23	1276.2495		0.2808E-03	6	25	5	20		26	4	23	1280.1880		0.3816E-03
4	10	4	6		10	1	10	1276.2849		0.1731E-02	6	6	2	5		6	1	3	1280.2511	0.0003	0.1076E+00
4	20	7	14		19	6	14	1276.4401		0.2069E-03	6	23	2	21		23	1	22	1280.3112	0.0012	0.2567E-01
4	20	7	13		19	6	13	1276.4401		0.2069E-03	4	25	6	19		24	5	19	1280.3394		0.6282E-03
4	17	8	9		16	7	9	1276.4858		0.3608E-03	4	14	4	10		14	1	14	1280.3551		0.4733E-02
4	17	8	10		16	7	10	1276.4858		0.3608E-03	4	30	5	26		30	2	28	1280.3666		0.4879E-03
6	20	2	18		20	1	19	1276.5403	0.0007	0.5300E-01	4	25	6	20		24	5	20	1280.3700		0.6305E-03
6	7	2	5		7	1	6	1276.5698	-0.0004	0.1370E+00	4	11	1	11		10	0	10	1280.4253	0.0000	0.5750E-01
4	14	5	10		15	2	14	1276.8818		0.7767E-04	6	7	3	5		8	2	6	1280.5120		0.8017E-02
6	9	1	9		8	0	8	1276.8973		0.5672E-01	6	7	2	6		7	1	7	1280.8049	0.0001	0.1143E+00

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	22	7	18		21	6	18	1280.8831		0.1529E-03	6	12	2	11		12	1	12	1284.9417	0.0000	0.9783E-01
4	22	7	15		21	6	15	1280.8834		0.1529E-03	4	5	4	2		4	1	4	1285.0017		0.5507E-04
6	18	4	12		17	3	15	1280.9892	0.0003	0.1213E-01	6	23	5	19		24	4	20	1285.2394		0.8518E-03
4	19	8	12		18	7	12	1280.9913		0.2901E-03	6	19	1	18		18	2	17	1285.2755	-0.0008	0.1087E-01
4	19	8	11		18	7	11	1280.9913		0.2901E-03	4	24	7	18		23	6	18	1285.2849		0.1079E-03
6	7	3	4		8	2	7	1281.0070		0.8008E-02	4	24	7	17		23	6	17	1285.2855		0.1079E-03
6	19	1	18		19	0	19	1281.0739		0.1361E-01	4	19	3	16		18	0	18	1285.3204		0.1487E-02
4	29	2	28		28	1	28	1281.1067		0.7491E-04	4	6	4	2		5	1	4	1285.3636		0.1604E-03
4	18	3	15		17	0	17	1281.1544		0.9707E-03	4	21	8	13		20	7	13	1285.4570		0.2217E-03
4	29	5	24		28	4	24	1281.1806		0.1944E-03	4	21	8	14		20	7	14	1285.4570		0.2217E-03
6	8	2	7		8	1	8	1281.4459	0.0000	0.1171E+00	6	3	2	2		2	1	1	1285.6508	0.0001	0.7826E-01
6	29	3	28		29	2	27	1281.4587		0.7827E-03	6	24	2	22		23	3	21	1285.6888	0.0014	0.5732E-02
4	15	4	11		15	1	15	1281.6309		0.5455E-02	6	5	3	3		6	2	4	1285.7031		0.5288E-02
6	23	2	21		22	3	20	1281.6841	0.0007	0.6734E-02	6	14	4	11		15	3	12	1285.7405	0.0001	0.1541E-01
6	18	1	17		17	2	16	1281.7128	-0.0006	0.1173E-01	6	23	5	18		24	4	21	1285.7539		0.6573E-03
6	15	0	15		14	1	14	1281.7319	0.0001	0.1325E+00	6	14	1	14		13	0	13	1285.7737	0.0003	0.5255E-01
6	24	2	22		24	1	23	1282.0004	0.0013	0.1945E-01	6	25	3	22		25	2	23	1285.8488	-0.0004	0.3821E-02
6	9	2	8		9	1	9	1282.1772	0.0005	0.1184E+00	6	5	3	2		6	2	5	1285.8689		0.5286E-02
6	24	5	20		25	4	21	1282.1827		0.4512E-03	6	26	2	24		26	1	25	1286.0233	0.0019	0.1066E-01
6	12	1	12		11	0	11	1282.1877	0.0002	0.5680E-01	6	13	2	12		13	1	13	1286.0631	0.0004	0.8821E-01
4	28	6	20		25	5	20	1282.5175		0.5114E-03	4	18	4	14		18	1	18	1286.1185		0.6906E-02
6	28	3	25		28	2	26	1282.5827		0.1225E-02	6	14	4	10		15	3	13	1286.1377	0.0005	0.1543E-01
4	28	6	21		25	5	21	1282.5845		0.5165E-03	6	3	2	1		2	1	2	1286.1448	0.0000	0.7482E-01
6	24	5	19		25	4	22	1282.9788		0.5048E-03	6	21	1	20		21	0	21	1286.4796		0.8483E-02
6	15	4	12		16	3	13	1282.9780	0.0001	0.1380E-01	4	29	5	25		28	4	25	1286.5347		0.2971E-03
6	10	2	9		10	1	10	1283.0018	0.0004	0.1125E+00	4	28	6	22		27	5	22	1286.8372		0.3278E-03
4	16	4	12		16	1	16	1283.0158		0.6078E-02	4	28	6	23		27	5	23	1286.9412		0.3342E-03
4	30	5	25		29	4	25	1283.0493		0.1450E-03	6	24	3	21		24	2	22	1286.9420	-0.0002	0.5188E-02
4	23	7	17		22	6	17	1283.0894		0.1293E-03	6	17	0	17		16	1	16	1287.0615	0.0000	0.1150E+00
4	23	7	16		22	6	16	1283.0898		0.1293E-03	4	7	4	3		6	1	5	1287.2528		0.3366E-03
6	6	3	4		7	2	5	1283.1351		0.6837E-02	6	14	2	13		14	1	14	1287.2897	0.0008	0.7785E-01
4	28	5	24		27	4	24	1283.2246		0.3768E-03	4	25	7	19		24	6	19	1287.4698		0.8896E-04
4	20	8	13		19	7	13	1283.2291		0.2552E-03	4	25	7	18		24	6	18	1287.4708		0.8899E-04
4	20	8	12		19	7	12	1283.2291		0.2552E-03	6	15	1	15		14	0	14	1287.6193	0.0001	0.4922E-01
4	5	4	1		4	1	3	1283.3910		0.6105E-04	4	22	8	14		21	7	14	1287.6748		0.1901E-03
6	2	2	1		1	1	0	1283.3973	0.0003	0.6952E-01	4	22	8	15		21	7	15	1287.6748		0.1901E-03
3	24	0	24		25	4	21	1283.4050		0.5289E-04	4	6	4	3		5	1	5	1287.7793		0.1356E-03
6	6	3	3		7	2	6	1283.4330		0.6833E-02	6	4	2	3		3	1	2	1287.8198	0.0003	0.8381E-01
6	15	4	11		16	3	14	1283.5551		0.1383E-01	4	19	4	15		19	1	19	1287.8376		0.7072E-02
6	2	2	0		1	1	1	1283.5805	0.0002	0.6902E-01	6	23	3	20		23	2	21	1288.0436	-0.0003	0.6823E-02
6	27	3	24		27	2	25	1283.6643		0.1858E-02	6	22	5	18		23	4	19	1288.1545		0.8401E-03
6	20	1	19		20	0	20	1283.7289		0.1080E-01	6	4	3	2		5	2	3	1288.2275		0.3461E-02
6	25	2	23		25	1	24	1283.9060	0.0015	0.1451E-01	6	4	3	1		5	2	4	1288.3104		0.3461E-02
6	11	2	10		11	1	11	1283.9221	0.0004	0.1081E+00	6	27	2	25		27	1	26	1288.3435	0.0022	0.7726E-02
6	13	1	13		12	0	12	1283.9866	0.0003	0.5512E-01	6	13	4	10		14	3	11	1288.4481	0.0002	0.1880E-01
6	16	0	16		15	1	15	1284.4182	-0.0001	0.1248E+00	6	22	5	17		23	4	20	1288.5170		0.8424E-03
4	17	4	13		17	1	17	1284.5112		0.6570E-02	6	15	2	14		15	1	15	1288.6244	0.0008	0.6729E-01
4	27	6	21		26	5	21	1284.6838		0.4121E-03	6	13	4	9		14	3	12	1288.7144	0.0001	0.1681E-01
4	30	2	29		29	1	29	1284.7540		0.1158E-03	6	4	2	2		3	1	3	1288.8184	0.0003	0.8022E-01
4	27	6	22		26	5	22	1284.7542		0.4180E-03	6	20	1	19		19	2	18	1288.8389	-0.0012	0.9908E-02
6	26	3	23		26	2	24	1284.7584		0.2715E-02	4	29	6	23		28	5	23	1288.9763		0.2572E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	8	4	4		7	1	6	1289.0618		0.6124E-03	6	29	2	27		29	1	28	1293.5400		0.3910E-02
4	29	6	24		28	5	24	1289.1279		0.2642E-03	4	8	4	5		7	1	7	1293.5680		0.4241E-03
6	22	3	19		22	2	20	1289.1541	-0.0003	0.8728E-02	4	22	4	18		22	1	22	1293.6456		0.6546E-02
6	22	1	21		22	0	22	1289.3071		0.6604E-02	6	11	4	8		12	3	9	1293.7311	0.0000	0.1841E-01
6	18	1	18		15	0	15	1289.5128	0.0005	0.4529E-01	6	20	5	16		21	4	17	1293.8173		0.1316E-02
4	26	7	20		25	6	20	1289.6437		0.7240E-04	6	7	2	6		6	1	5	1293.8350	0.0004	0.1005E+00
4	26	7	19		25	6	19	1289.6455		0.7244E-04	6	11	4	7		12	3	10	1293.8395		0.1842E-01
4	20	3	17		19	0	19	1289.6586		0.2449E-02	6	26	2	24		25	3	23	1293.8683		0.4018E-02
6	18	0	18		17	1	17	1289.6628	0.0000	0.1042E+00	6	20	5	15		21	4	18	1293.9937		0.1317E-02
4	20	4	18		20	1	20	1289.6672		0.7063E-02	4	27	5	23		27	2	25	1294.0085		0.1070E-02
6	25	2	23		24	3	22	1289.7533		0.4825E-02	4	11	4	7		10	1	9	1294.0532		0.2183E-02
4	23	8	15		22	7	15	1289.8824		0.1610E-03	4	21	3	18		20	0	20	1294.0631		0.4468E-02
4	23	8	16		22	7	16	1289.8824		0.1610E-03	4	25	8	17		24	7	17	1294.2665		0.1110E-03
6	5	2	4		4	1	3	1289.9053	0.0003	0.9074E-01	4	25	8	18		24	7	18	1294.2665		0.1110E-03
6	30	3	27		29	4	26	1290.0469		0.2296E-03	6	6	2	4		5	1	5	1294.4749	0.0002	0.8616E-01
6	16	2	15		16	1	16	1290.0704	0.0007	0.5695E-01	6	17	3	14		17	2	15	1294.5328	0.0001	0.2193E-01
6	21	3	18		21	2	19	1290.2686	-0.0002	0.1090E-01	6	20	0	20		19	1	19	1294.7523	-0.0004	0.8133E-01
4	7	4	4		6	1	6	1290.6337		0.2610E-03	4	26	5	22		26	2	24	1294.8270		0.1135E-02
6	3	3	1		4	2	2	1290.7186		0.1553E-02	6	19	2	18		19	1	19	1295.1162	0.0004	0.3033E-01
6	3	3	0		4	2	3	1290.7542		0.1553E-02	6	24	1	23		24	0	24	1295.1190		0.3892E-02
4	9	4	5		8	1	7	1290.7943		0.1006E-02	6	16	3	13		16	2	14	1295.4778	0.0002	0.2507E-01
6	28	2	26		28	1	27	1290.8542	0.0028	0.5528E-02	6	28	6	22		29	5	25	1295.5255		0.2523E-03
6	21	5	17		22	4	18	1291.0095		0.1061E-02	6	19	1	19		18	0	18	1295.5922	0.0000	0.3124E-01
4	30	6	24		29	5	24	1291.0991		0.1991E-03	4	12	4	8		11	1	10	1295.5924		0.2958E-02
6	12	4	9		13	3	10	1291.1093	0.0002	0.1784E-01	6	28	6	23		29	5	24	1295.6558		0.2617E-03
6	21	5	16		22	4	19	1291.2640		0.1062E-02	6	8	2	7		7	1	6	1295.6848	0.0004	0.1029E+00
6	12	4	8		13	3	11	1291.2821	0.0002	0.1785E-01	4	23	4	19		23	1	23	1295.7837		0.6070E-02
4	30	6	25		29	5	25	1291.3173		0.2064E-03	4	25	5	21		25	2	23	1295.8462		0.1157E-02
6	20	3	17		20	2	18	1291.3774	-0.0001	0.1333E-01	6	22	1	21		21	2	20	1295.9222	-0.0018	0.7867E-02
6	17	1	17		16	0	16	1291.4635	0.0004	0.4090E-01	6	10	4	7		11	3	8	1296.3199	0.0000	0.1837E-01
6	5	2	3		4	1	4	1291.5911	0.0003	0.8427E-01	6	15	3	12		15	2	13	1296.3470	0.0001	0.2822E-01
4	21	4	17		21	1	21	1291.6047		0.6884E-02	6	30	2	28		30	1	29	1296.3828		0.2735E-02
6	17	2	16		17	1	17	1291.6315	0.0007	0.4719E-01	6	10	4	6		11	3	9	1296.3853	0.0003	0.1837E-01
4	27	7	21		26	6	21	1291.8062		0.5816E-04	6	22	3	20		23	0	23	1296.4418		0.9876E-04
4	27	7	20		26	6	20	1291.8094		0.5823E-04	4	26	8	18		25	7	18	1296.4429		0.9043E-04
6	6	2	5		5	1	4	1291.9095	0.0002	0.9642E-01	4	26	8	19		25	7	19	1296.4429		0.9044E-04
4	24	8	17		23	7	17	1292.0797		0.1345E-03	6	21	3	19		22	0	22	1296.4945		0.1267E-03
4	24	8	16		23	7	16	1292.0797		0.1345E-03	6	23	3	21		24	0	24	1296.5405		0.7493E-04
6	23	1	22		23	0	23	1292.1927		0.5094E-02	6	19	5	15		20	4	16	1296.5847		0.1603E-02
6	19	0	19		18	1	18	1292.2250	-0.0004	0.9286E-01	4	9	4	6		8	1	8	1296.5881		0.6045E-03
6	21	1	20		20	2	19	1292.3915	-0.0015	0.8898E-02	6	20	3	18		21	0	21	1296.7028		0.1577E-03
4	10	4	6		9	1	8	1292.4582		0.1530E-02	6	19	5	14		20	4	17	1296.7050		0.1604E-02
6	19	3	16		19	2	17	1292.4678	-0.0002	0.1600E-01	6	24	3	22		25	0	25	1296.7864		0.5540E-04
6	29	6	23		30	5	28	1292.5674		0.1793E-03	4	24	5	20		24	2	22	1297.0181		0.1143E-02
6	29	6	24		30	5	25	1292.6978		0.1869E-03	6	20	2	19		20	1	20	1297.0511	0.0002	0.2347E-01
6	30	3	27		30	2	28	1293.1349		0.6705E-03	6	19	3	17		20	0	20	1297.0712		0.1903E-03
4	29	5	25		29	2	27	1293.1353		0.8232E-03	4	13	4	9		12	1	11	1297.0822		0.3834E-02
6	18	2	17		18	1	18	1293.3116	0.0008	0.3826E-01	6	14	3	11		14	2	12	1297.1308	0.0000	0.3125E-01
4	28	5	24		28	2	26	1293.4335		0.9622E-03	6	21	0	21		20	1	20	1297.2501	-0.0005	0.7008E-01
6	18	1	18		17	0	17	1293.4832	0.0004	0.3619E-01	6	9	2	8		8	1	7	1297.4625	0.0002	0.1034E+00
6	18	3	15		18	2	16	1293.5247	-0.0001	0.1888E-01	6	7	2	5		6	1	6	1297.4841	0.0002	0.8566E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	18	3	16		19	0	19	1297.8040		0.2221E-03	4	28	8	21		27	7	21	1300.7635		0.5775E-04
6	13	3	10		13	2	11	1297.8221	0.0003	0.3403E-01	4	28	8	20		27	7	20	1300.7637		0.5775E-04
6	20	1	20		19	0	19	1297.8348	-0.0001	0.2594E-01	6	14	3	12		14	2	13	1300.8124	-0.0001	0.3079E-01
6	24	2	23		24	1	24	1298.0114		0.5481E-02	6	11	2	10		10	1	9	1300.8213	0.0005	0.9925E-01
6	27	2	25		26	3	24	1298.0228		0.3305E-02	6	15	3	13		15	2	14	1300.9919	-0.0001	0.2780E-01
6	25	1	24		25	0	25	1298.0699		0.2948E-02	4	21	5	17		21	2	19	1301.0002		0.9730E-03
6	22	1	22		21	0	21	1298.2341		0.8424E-02	6	26	1	25		26	0	26	1301.0319		0.2207E-02
4	23	5	19		23	2	21	1298.2954		0.1102E-02	6	16	3	14		16	2	15	1301.2148	-0.0002	0.2429E-01
6	17	3	15		18	0	18	1298.3051		0.2499E-03	6	22	2	21		22	1	22	1301.3450	-0.0003	0.1299E-01
6	12	3	9		12	2	10	1298.4187	0.0001	0.3639E-01	4	16	4	12		15	1	14	1301.3524		0.6756E-02
6	27	6	21		26	5	24	1298.4540		0.3497E-03	6	26	6	20		27	5	23	1301.3538		0.4772E-03
4	14	4	10		13	1	12	1298.5315		0.4783E-02	6	8	4	5		9	3	6	1301.4191	-0.0002	0.1602E-01
6	27	6	22		28	5	23	1298.5784		0.3612E-03	6	14	3	12		15	0	15	1301.4371		0.2772E-03
4	27	8	20		26	7	20	1298.6088		0.7273E-04	6	8	4	4		9	3	7	1301.4392	-0.0002	0.1602E-01
4	27	8	19		26	7	19	1298.6088		0.7273E-04	6	26	6	21		27	5	22	1301.4686		0.4913E-03
6	9	4	6		10	3	7	1298.8812	0.0000	0.1780E-01	6	17	3	15		17	2	16	1301.4847	-0.0002	0.2101E-01
6	9	4	5		10	3	8	1298.9185		0.1780E-01	6	23	1	23		22	0	22	1301.7167	0.0053R	0.1205E-01
6	11	3	8		11	2	9	1298.9211	-0.0005	0.3616E-01	6	18	3	16		18	2	17	1301.8057	-0.0003	0.1785E-01
6	21	2	20		21	1	21	1299.1241	0.0000	0.1771E-01	6	17	5	13		18	4	14	1302.0186		0.2252E-02
6	10	2	9		9	1	8	1299.1729	0.0005	0.1022E+00	6	17	5	12		18	4	15	1302.0710		0.2252E-02
6	18	3	14		17	0	17	1299.1770		0.2703E-03	6	19	3	17		19	2	18	1302.1812	0.0001	0.1492E-01
6	18	5	14		19	4	15	1299.3171		0.1918E-02	6	23	0	23		22	1	22	1302.1823	-0.0009	0.4961E-01
6	10	3	7		10	2	8	1299.3334	0.0000	0.3917E-01	6	28	2	26		27	3	25	1302.2054		0.2688E-02
6	18	5	13		19	4	16	1299.3975		0.1919E-02	4	20	5	16		20	2	18	1302.3591		0.8942E-03
6	23	1	22		22	2	21	1299.4204	-0.0019	0.6847E-02	6	12	2	11		11	1	10	1302.4143	0.0003	0.9483E-01
4	22	5	18		22	2	20	1299.6353		0.1044E-02	6	20	3	18		20	2	19	1302.6147	-0.0004	0.1226E-01
6	9	3	6		9	2	7	1299.6628	0.0002	0.3925E-01	6	26	2	25		26	1	26	1302.6987		0.4107E-02
4	10	4	7		9	1	9	1299.6925		0.7719E-03	4	17	4	13		16	1	15	1302.7482		0.7700E-02
6	22	0	22		21	1	21	1299.7245	-0.0007	0.5942E-01	6	13	3	11		14	0	14	1302.8220		0.2607E-03
6	8	3	5		8	2	6	1299.9187	-0.0001	0.3823E-01	6	24	1	23		23	2	22	1302.8762	-0.0024	0.5863E-02
4	15	4	11		14	1	13	1299.9510		0.5770E-02	4	11	4	8		10	1	10	1302.8926		0.8956E-03
6	7	3	4		7	2	5	1300.1111	0.0001	0.3600E-01	6	21	3	19		21	2	20	1303.1097	-0.0007	0.9908E-02
6	15	3	13		16	0	16	1300.2212		0.2801E-03	4	22	3	19		21	0	21	1303.3752		0.1202E-01
6	6	3	3		6	2	4	1300.2510	-0.0002	0.3243E-01	6	22	3	20		22	2	21	1303.6696	-0.0014	0.7884E-02
6	25	2	24		25	1	25	1300.3195		0.4814E-02	4	19	5	15		19	2	17	1303.6851		0.8098E-03
6	21	1	21		20	0	20	1300.3268		0.1980E-01	6	23	2	22		23	1	23	1303.7255	-0.0004	0.9256E-02
6	5	3	2		5	2	3	1300.3490	-0.0002	0.2741E-01	6	7	4	4		8	3	5	1303.9373	0.0052	0.1361E-01
6	8	3	6		8	2	7	1300.4019	0.0008	0.3821E-01	6	9	2	7		8	1	8	1303.9423	0.0003	0.7791E-01
6	9	3	5		7	2	6	1300.4037	-0.0012	0.3599E-01	6	7	4	3		8	3	6	1303.9474	-0.0049	0.1361E-01
6	9	3	7		9	2	8	1300.4128	0.0011	0.3921E-01	6	13	2	12		12	1	11	1303.9595	0.0006	0.8913E-01
6	4	3	1		4	2	2	1300.4148	-0.0009	0.2078E-01	6	27	1	26		27	0	27	1303.9939		0.1636E-02
6	6	3	4		6	2	5	1300.4148	-0.0009	0.3243E-01	4	18	4	14		17	1	16	1304.1516		0.8559E-02
6	5	3	3		5	2	4	1300.4313	0.0000	0.2741E-01	6	25	6	19		26	5	22	1304.2257		0.6411E-03
6	10	3	8		10	2	9	1300.4410	0.0001	0.3910E-01	6	23	3	21		23	2	22	1304.2977	-0.0009	0.6178E-02
6	4	3	2		4	2	3	1300.4502	-0.0001	0.2078E-01	6	25	6	20		26	5	21	1304.3289		0.6581E-03
6	3	3	0		3	2	1	1300.4569	-0.0002	0.1206E-01	6	12	3	10		13	0	13	1304.3701		0.2321E-03
6	3	3	1		3	2	2	1300.4688	-0.0004	0.1206E-01	6	24	1	24		23	0	23	1304.5486		0.1216E-01
6	11	3	9		11	2	10	1300.4906	0.0001	0.3804E-01	6	24	0	24		23	1	23	1304.6302	-0.0010	0.4080E-01
6	12	3	10		12	2	11	1300.5660	0.0000	0.3618E-01	6	16	5	12		17	4	13	1304.6924		0.2590E-02
6	8	2	6		7	1	7	1300.6342	0.0004	0.8282E-01	6	16	5	11		17	4	14	1304.7258		0.2591E-02
6	13	3	11		13	2	12	1300.6718	0.0002	0.3371E-01	4	18	5	14		18	2	16	1304.9564		0.7215E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	24	3	22		24	2	23	1304.9980	-0.0012	0.4789E-02	6	14	5	10		15	4	11	1309.9680		0.3205E-02
6	27	2	26		27	1	27	1305.1400		0.3402E-02	6	23	6	18		24	5	19	1309.9680		0.1127E-02
6	14	2	13		13	1	12	1305.4681	0.0007	0.8241E-01	6	14	5	9		15	4	12	1309.9805		0.3205E-02
4	19	4	15		18	1	17	1305.5787		0.9296E-02	4	13	5	9		13	2	11	1309.9829		0.2837E-03
6	25	3	23		25	2	24	1305.7742		0.3629E-02	4	22	4	18		21	1	20	1310.1136		0.1040E-01
6	11	3	9		12	0	12	1306.0730		0.1943E-03	6	4	3	2		3	2	1	1310.1530	-0.0001	0.3762E-01
4	17	5	13		17	2	15	1306.1549		0.6308E-03	6	4	3	1		3	2	2	1310.1650	-0.0002	0.3762E-01
4	12	4	9		11	1	11	1306.1925		0.9546E-03	6	29	2	28		29	1	29	1310.1780		0.2140E-02
4	24	4	20		24	1	24	1306.2795		0.6386E-02	6	30	2	28		29	3	27	1310.6064		0.1716E-02
6	25	1	24		24	2	23	1306.2814		0.4940E-02	4	12	5	8		12	2	10	1310.6700		0.2119E-03
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6	6	4	3		7	3	4	1306.4388	0.0020	0.1044E-01	6	11	2	9		10	1	10	1311.0995	0.0002	0.6368E-01
6	6	4	2		7	3	5	1306.4434	-0.0026	0.1044E-01	6	28	4	24		28	3	25	1311.1383		0.4519E-02
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6	15	2	14		14	1	13	1306.9445	0.0008	0.7496E-01	6	18	2	17		17	1	16	1311.3448	0.0007	0.5080E-01
6	28	1	27		28	0	28	1306.9482		0.1199E-02	6	4	4	1		5	3	2	1311.4010	0.0001	0.2940E-02
4	20	4	16		19	1	18	1307.0367		0.9871E-02	6	4	4	0		5	3	3	1311.4016	-0.0006	0.2940E-02
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6	25	1	25		24	0	24	1307.0912		0.1056E-01	4	23	4	19		22	1	21	1311.7520		0.1030E-01
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6	27	3	25		27	2	26	1307.5712		0.2018E-02	6	5	3	3		4	2	2	1312.5356	0.0000	0.3860E-01
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6	10	3	8		11	0	11	1307.9193		0.1521E-03	6	13	5	8		14	4	11	1312.5815		0.3432E-02
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4	21	4	17		20	1	19	1308.5452		0.1025E-01	6	30	1	29		30	0	30	1312.8157		0.6228E-03
6	28	3	26		28	2	27	1308.6008		0.1477E-02	6	19	2	18		18	1	17	1312.8552	0.0006	0.4297E-01
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4	14	5	10		14	2	12	1309.1857		0.3637E-03	4	12	5	7		12	2	11	1312.9034		0.2083E-03
6	26	0	26		25	1	25	1309.5275	-0.0016	0.2636E-01	6	27	1	26		26	2	25	1312.9182		0.3336E-02
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6	26	1	25		25	2	24	1309.6300		0.4093E-02	4	14	4	11		13	1	13	1313.1174		0.8723E-03
6	29	4	25		29	3	28	1309.6571		0.3330E-02	4	15	5	10		15	2	14	1313.2328		0.4192E-03
6	29	3	27		29	2	28	1309.7238		0.1068E-02	6	25	4	22		26	1	25	1313.3077		0.9636E-04
6	27	4	24		28	1	27	1309.7977		0.6139E-04	4	16	5	11		16	2	15	1313.4467		0.4882E-03
6	17	2	16		16	1	15	1309.8685	0.0007	0.5890E-01	6	24	2	23		23	1	22	1313.4670		0.9950E-02
6	29	1	28		29	0	29	1309.8895		0.8694E-03	4	17	5	12		17	2	16	1313.7268		0.5435E-03
6	23	6	17		24	5	20	1309.8908		0.1103E-02	6	26	4	22		26	3	23	1313.8914	-0.0008	0.8018E-02
6	9	3	7		10	0	10	1309.8951		0.1104E-03	4	18	5	13		18	2	17	1314.0819		0.5867E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	28	1	28		27	0	27	1314.4105		0.5379E-02	6	10	5	6		11	4	7	1320.2869		0.3454E-02
6	20	2	19		19	1	18	1314.4207	0.0001	0.3557E-01	6	10	5	5		11	4	8	1320.2878		0.3454E-02
6	28	0	28		27	1	27	1314.4791	-0.0027	0.1608E-01	6	19	4	15		19	3	16	1320.4009	0.0003	0.3913E-01
4	19	5	14		19	2	18	1314.5209		0.6125E-03	4	18	4	13		15	1	15	1320.5189		0.6303E-03
6	6	3	4		5	2	3	1314.8949	-0.0002	0.3929E-01	4	26	5	21		26	2	25	1320.6471		0.3420E-03
6	6	3	3		5	2	4	1314.9792	0.0012	0.3929E-01	6	19	6	13		20	5	16	1320.9305		0.2653E-02
6	12	2	10		11	1	11	1314.9811	-0.0007	0.5542E-01	6	18	4	14		18	3	15	1320.9368	0.0002	0.4628E-01
4	20	5	15		20	2	19	1315.0529		0.6188E-03	6	19	6	14		20	5	15	1320.9686		0.2700E-02
6	25	4	21		25	3	22	1315.1351	-0.0006	0.1048E-01	6	26	4	23		26	3	24	1321.1304		0.8142E-02
4	27	4	23		27	1	27	1315.1489		0.1705E-02	6	27	4	24		27	3	25	1321.1469		0.6137E-02
6	12	5	8		13	4	9	1315.1619		0.3569E-02	6	25	4	22		25	3	23	1321.1527	-0.0012	0.1065E-01
6	12	5	7		13	4	10	1315.1659		0.3569E-02	6	28	2	27		27	1	26	1321.1542		0.6490E-02
6	25	2	24		24	1	23	1315.2637		0.9347E-02	6	24	4	21		24	3	22	1321.2104	0.0005	0.1374E-01
6	24	4	21		25	1	24	1315.3632		0.1148E-03	6	28	4	25		28	3	26	1321.2133		0.4560E-02
6	21	6	15		22	5	18	1315.4564		0.1773E-02	6	23	4	20		23	3	21	1321.2981	0.0003	0.1746E-01
6	21	6	18		22	5	17	1315.5120		0.1807E-02	6	29	4	26		29	3	27	1321.3290		0.3342E-02
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6	21	2	20		20	1	19	1316.0647	0.0000	0.2877E-01	6	22	4	19		22	3	20	1321.4106	0.0001	0.2188E-01
6	28	1	27		27	2	26	1316.1447		0.2673E-02	6	30	4	27		30	3	28	1321.5007		0.2415E-02
6	24	4	20		24	3	21	1316.2771	-0.0003	0.1352E-01	6	21	4	18		21	3	19	1321.5427	0.0003	0.2702E-01
4	22	5	17		22	2	21	1316.4294		0.5742E-03	6	20	4	17		20	3	18	1321.6895	0.0003	0.3288E-01
4	15	4	12		14	1	14	1316.7555		0.7606E-03	3	20	3	18		21	5	17	1321.6906		0.5243E-04
6	29	1	29		28	0	28	1316.8868		0.4121E-02	4	24	4	20		23	1	22	1321.7354		0.1291E-01
6	29	0	29		28	1	28	1316.9963		0.1227E-01	6	9	3	7		8	2	6	1321.7357		0.3807E-01
6	26	2	25		25	1	24	1317.1440		0.6530E-02	6	16	4	12		16	3	13	1321.7823	0.0002	0.6169E-01
6	7	3	5		6	2	4	1317.2218	-0.0001	0.3947E-01	6	19	4	16		19	3	17	1321.8461	0.0002	0.3942E-01
4	23	5	18		23	2	22	1317.2903		0.5279E-03	6	18	4	15		18	3	16	1322.0085	0.0004	0.4654E-01
6	23	4	19		23	3	20	1317.3123	-0.0001	0.1720E-01	4	27	5	22		27	2	26	1322.0432		0.2790E-03
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6	23	4	20		24	1	23	1317.6097		0.1322E-03	6	17	4	14		17	3	15	1322.1727	0.0002	0.5410E-01
6	11	5	7		12	4	8	1317.7323		0.3585E-02	6	9	3	6		8	2	7	1322.2430	0.0001	0.3805E-01
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6	22	2	21		21	1	20	1317.8131	-0.0005	0.2267E-01	6	16	4	13		16	3	14	1322.3353	0.0003	0.6189E-01
4	25	3	22		24	0	24	1318.1613		0.6715E-03	6	14	4	10		14	3	11	1322.3861	0.0001	0.7685E-01
6	20	6	14		21	5	17	1318.2045		0.2190E-02	6	30	1	29		29	2	28	1322.4192		0.1633E-02
6	22	4	18		22	3	19	1318.2393	0.0001	0.2159E-01	6	15	4	12		15	3	13	1322.4932	0.0001	0.6962E-01
6	20	6	15		21	5	16	1318.2508		0.2230E-02	6	13	4	9		13	3	10	1322.6176	0.0003	0.8345E-01
4	24	5	19		24	2	23	1318.2760		0.4707E-03	6	21	4	18		22	1	21	1322.6335		0.1580E-03
4	28	4	24		28	1	28	1318.5668		0.1024E-02	6	14	4	11		14	3	12	1322.6440	0.0001	0.7696E-01
6	21	4	17		21	3	18	1319.0596	0.0001	0.2672E-01	6	13	4	10		13	3	11	1322.7860	0.0000	0.8353E-01
6	13	2	11		12	1	12	1319.0837	0.0003	0.4711E-01	6	12	4	8		12	3	9	1322.8116	-0.0001	0.8883E-01
6	27	2	26		26	1	25	1319.1078		0.7553E-02	6	9	5	5		10	4	6	1322.8267		0.3157E-02
6	29	1	28		28	2	27	1319.3104		0.2107E-02	6	9	5	4		10	4	7	1322.8271		0.3157E-02
4	25	5	20		25	2	24	1319.3931		0.4072E-03	6	12	4	9		12	3	10	1322.9178	0.0001	0.8889E-01
6	30	1	30		29	0	29	1319.4093		0.3105E-02	6	11	4	7		11	3	8	1322.9738	0.0003	0.9252E-01
6	8	3	6		7	2	5	1319.5059	-0.0001	0.3907E-01	6	11	4	8		11	3	9	1323.0378	0.0001	0.9256E-01
6	30	0	30		29	1	29	1319.5530		0.9228E-02	6	10	4	6		10	3	7	1323.1093	0.0002	0.9405E-01
6	23	2	22		22	1	21	1319.6937	-0.0010	0.1737E-01	6	10	4	7		10	3	8	1323.1461	-0.0002	0.9408E-01
6	20	4	16		20	3	17	1319.7780	0.0003	0.3258E-01	6	27	7	21		28	6	22	1323.1636		0.5644E-04
6	8	3	5		7	2	6	1319.8104	-0.0001	0.3906E-01	6	27	7	20		28	6	23	1323.1663		0.5644E-04
6	22	4	19		23	1	22	1320.0377		0.1470E-03	6	9	4	6		9	3	6	1323.2224	0.0000	0.9295E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	9	4	6		9	3	7	1323.2423	-0.0001	0.9296E-01	6	6	5	1		7	4	4	1330.3683		0.1320E-02
6	29	2	28		28	1	27	1323.2811		0.5416E-02	6	6	5	2		7	4	3	1330.3683		0.1320E-02
6	8	4	4		8	3	6	1323.3165	0.0000	0.8874E-01	3	16	3	14		17	5	13	1330.4839		0.1524E-03
6	8	4	5		8	3	6	1323.3264	0.0000	0.8874E-01	4	27	3	24		26	0	26	1330.7107		0.1273E-03
6	7	4	3		7	3	4	1323.3944	0.0009	0.8097E-01	3	16	3	13		17	5	12	1331.1444		0.8076E-04
6	7	4	4		7	3	5	1323.3990	-0.0036	0.8098E-01	6	18	4	15		19	1	18	1331.2631		0.1593E-03
6	14	2	12		13	1	13	1323.4168	0.0007	0.3915E-01	6	15	6	9		16	5	12	1331.6260		0.4544E-02
6	6	4	2		6	3	3	1323.4586	0.0007	0.6917E-01	6	14	3	12		13	2	11	1331.6385	0.0000	0.2625E-01
6	6	4	3		6	3	4	1323.4604	-0.0011	0.6917E-01	6	15	6	10		16	5	11	1331.6478		0.4680E-02
6	5	4	1		5	3	2	1323.5107	-0.0001	0.5269E-01	6	24	7	18		25	6	19	1331.6525		0.1372E-03
6	5	4	2		5	3	3	1323.5114	-0.0007	0.5269E-01	6	24	7	17		25	6	20	1331.6533		0.1372E-03
6	4	4	0		4	3	1	1323.5522	-0.0004	0.3044E-01	4	28	4	24		27	1	26	1332.0857		0.2810E-02
6	4	4	1		4	3	2	1323.5525	-0.0006	0.3044E-01	6	13	3	10		12	2	11	1332.2340	0.0002	0.2896E-01
4	28	5	23		28	2	27	1323.5854		0.2212E-03	4	19	4	16		18	1	18	1332.6147		0.2850E-03
6	18	6	12		19	5	15	1323.6353		0.3151E-02	3	15	3	13		16	5	12	1332.6985		0.2376E-03
6	18	6	13		19	5	14	1323.6667		0.3207E-02	6	16	2	14		15	1	15	1332.8195	0.0006	0.2544E-01
3	19	3	17		20	5	16	1323.8889		0.6529E-04	6	5	5	1		6	4	2	1332.8553		0.5690E-03
6	10	3	8		9	2	7	1323.8986	0.0000	0.3649E-01	6	5	5	0		6	4	3	1332.8553		0.5690E-03
4	25	4	21		24	1	23	1323.9675		0.9284E-02	3	15	3	12		16	5	11	1333.1498		0.1009E-03
4	26	3	23		25	0	25	1324.2614		0.2838E-03	6	4	4	0		3	3	1	1333.2719	-0.0004	0.1308E+00
4	17	4	14		16	1	16	1324.4133		0.5003E-03	6	4	4	1		3	3	0	1333.2719	-0.0003	0.1308E+00
6	10	3	7		9	2	8	1324.6946	-0.0001	0.3645E-01	6	15	3	13		14	2	12	1333.2960	-0.0002	0.2326E-01
4	29	5	24		29	2	28	1325.2781		0.1706E-03	6	6	3	3		6	0	6	1333.3092		0.6205E-04
6	8	5	4		9	4	5	1325.3525		0.2688E-02	6	7	3	4		7	0	7	1333.4109		0.1217E-03
6	8	5	3		9	4	6	1325.3528		0.2688E-02	6	8	3	5		8	0	8	1333.5769		0.2098E-03
6	20	4	17		21	1	20	1325.3817		0.1640E-03	6	9	3	6		9	0	9	1333.8258		0.3267E-03
6	30	2	29		29	1	28	1325.4865		0.4393E-02	6	10	3	7		10	0	10	1334.1769		0.4670E-03
6	11	3	9		10	2	8	1325.9821	-0.0001	0.3442E-01	4	9	5	4		8	2	6	1334.2061		0.6104E-04
6	26	7	20		27	6	21	1326.0108		0.7709E-04	6	14	6	8		15	5	11	1334.2449		0.4724E-02
6	26	7	19		27	6	22	1326.0125		0.7709E-04	6	14	6	9		15	5	10	1334.2692		0.4983E-02
3	18	3	16		19	5	15	1326.0837		0.6292E-04	6	17	4	14		18	1	17	1334.3577		0.1490E-03
4	30	4	26		30	1	30	1326.1960		0.3356E-03	4	30	6	25		30	3	27	1334.3962		0.9029E-04
6	17	6	11		18	5	14	1326.3195		0.3659E-02	6	23	7	17		24	6	18	1334.4478		0.1786E-03
6	17	6	12		18	5	13	1326.3459		0.3729E-02	6	23	7	16		24	6	19	1334.4480		0.1786E-03
4	26	4	22		25	1	24	1326.4189		0.6452E-02	6	11	3	8		11	0	11	1334.6500		0.6195E-03
4	30	5	25		30	2	29	1327.1243		0.1281E-03	4	9	5	5		8	2	7	1334.6973		0.6123E-04
6	11	3	8		10	2	9	1327.1718	0.0001	0.3434E-01	6	16	3	14		15	2	13	1334.8300	-0.0002	0.2031E-01
6	7	5	2		8	4	5	1327.8656		0.2060E-02	6	14	3	11		13	2	12	1334.8376	0.0002	0.2590E-01
6	7	5	3		8	4	4	1327.8656		0.2060E-02	3	14	3	12		15	5	11	1334.9312		0.4578E-03
6	12	3	10		11	2	9	1327.9735	0.0001	0.3195E-01	3	14	3	11		15	5	10	1335.2252		0.1981E-03
6	15	2	13		14	1	14	1327.9952	0.0005	0.3187E-01	6	12	3	9		12	0	12	1335.2644		0.7888E-03
6	19	4	16		20	1	19	1328.2646		0.1645E-03	4	29	4	25		28	1	27	1335.3470		0.1765E-02
3	17	3	15		18	5	14	1328.2806		0.1091E-03	6	5	4	2		4	3	1	1335.6621	-0.0003	0.1300E+00
4	18	4	15		17	1	17	1328.4438		0.3831E-03	6	5	4	1		4	3	2	1335.6624	-0.0005	0.1300E+00
6	25	7	19		26	6	20	1328.8402		0.1037E-03	6	13	3	10		13	0	13	1336.0381		0.8975E-03
6	25	7	18		26	6	21	1328.8414		0.1037E-03	6	17	3	15		16	2	14	1336.2388	-0.0001	0.1748E-01
6	16	6	10		17	5	13	1328.9832		0.4143E-02	4	10	5	5		9	2	7	1336.3247		0.9557E-04
6	16	6	11		17	5	12	1329.0062		0.4235E-02	4	29	6	24		29	3	26	1336.3431		0.1038E-03
4	27	4	23		26	1	25	1329.1168		0.4331E-02	6	13	6	7		14	5	10	1336.8235		0.4117E-02
6	12	3	9		11	2	10	1329.6819	0.0000	0.3181E-01	6	13	6	8		14	5	9	1336.8630		0.4879E-02
6	13	3	11		12	2	10	1329.8621	0.0001	0.2919E-01	4	20	4	17		19	1	19	1336.9301		0.2074E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	14	3	11		14	0	14	1336.9879		0.9900E-03	6	23	3	21		22	2	20	1342.2563	-0.0010	0.5434E-02
4	10	5	6		9	2	8	1337.0909		0.9607E-04	6	26	5	21		26	4	22	1342.2927		0.2062E-02
3	13	3	11		14	5	10	1337.2010		0.1331E-02	6	28	5	24		28	4	25	1342.4189		0.1172E-02
6	22	7	16		23	6	17	1337.2256		0.2286E-03	6	20	7	14		21	6	15	1342.7310		0.3550E-03
6	22	7	15		23	6	18	1337.2260		0.2287E-03	6	20	7	13		21	6	16	1342.7311		0.3550E-03
3	13	3	10		14	5	9	1337.3691		0.5695E-03	6	8	4	5		7	3	4	1342.7736	0.0016	0.1248E+00
4	28	3	25		27	0	27	1337.4711		0.5894E-04	6	8	4	4		7	3	5	1342.7781	-0.0030	0.1248E+00
6	15	3	12		14	2	13	1337.5037	0.0001	0.2275E-01	6	27	5	23		27	4	24	1342.8079		0.1567E-02
6	18	3	16		17	2	15	1337.5234	-0.0004	0.1465E-01	6	18	3	15		18	0	18	1342.8142		0.8888E-03
6	16	4	13		17	1	16	1337.5284		0.1345E-03	6	25	5	20		25	4	21	1342.8779		0.2691E-02
6	17	2	15		16	1	16	1337.8947	0.0007	0.1996E-01	6	24	3	22		23	2	21	1342.9238	-0.0008	0.4293E-02
6	6	4	3		5	3	2	1338.0432	0.0002	0.1292E+00	4	25	6	20		25	3	22	1343.0659		0.1600E-03
6	6	4	2		5	3	3	1338.0438	-0.0004	0.1292E+00	6	17	3	14		16	2	15	1343.0895	0.0000	0.1658E-01
6	15	3	12		15	0	15	1338.1284		0.1038E-02	6	26	5	22		26	4	23	1343.1978		0.2060E-02
4	28	6	23		28	3	25	1338.1968		0.1180E-03	6	18	2	16		17	1	17	1343.2216	0.0008	0.1541E-01
4	11	5	6		10	2	8	1338.3632		0.1390E-03	6	24	5	19		24	4	20	1343.4015		0.3463E-02
6	19	3	17		18	2	16	1338.6869	-0.0004	0.1244E-01	6	25	3	23		24	2	22	1343.5249		0.3357E-02
4	30	4	26		29	1	28	1338.9183		0.1074E-02	6	25	5	21		25	4	22	1343.6121		0.2592E-02
6	30	5	25		30	4	26	1339.1747		0.6179E-03	6	24	5	20		24	4	21	1343.7400		0.3081E-02
3	12	3	10		13	5	9	1339.2819		0.1434E-02	6	23	5	18		23	4	19	1343.8705		0.4395E-02
3	12	3	9		13	5	8	1339.3705		0.2573E-02	4	14	5	9		13	2	11	1343.9026		0.3081E-03
6	16	3	13		16	0	16	1339.4727		0.1031E-02	3	10	3	8		11	5	7	1343.9034		0.8056E-04
4	11	5	7		10	2	9	1339.5009		0.1402E-03	6	14	4	11		15	1	14	1344.0226		0.9784E-04
6	12	6	6		13	5	9	1339.5905		0.4097E-02	6	26	3	24		25	2	23	1344.0743		0.2598E-02
6	12	6	7		13	5	8	1339.6323		0.2958E-02	6	23	5	19		23	4	20	1344.1808	-0.0001	0.4363E-02
6	20	3	18		19	2	17	1339.7343	-0.0008	0.1030E-01	6	22	5	17		22	4	18	1344.2913	0.0004	0.5496E-02
4	27	6	22		27	3	24	1339.9423		0.1325E-03	4	13	5	9		12	2	11	1344.3948		0.2525E-03
6	21	7	15		22	6	16	1339.9866		0.2876E-03	4	24	6	19		24	3	21	1344.4312		0.1716E-03
6	21	7	14		22	6	17	1339.9868		0.2876E-03	6	22	5	18		22	4	19	1344.5203	0.0000	0.5491E-02
6	29	5	24		29	4	25	1340.0879		0.8526E-03	6	27	3	25		26	2	24	1344.5883		0.1992E-02
6	16	3	13		15	2	14	1340.2435	0.0000	0.1961E-01	6	10	6	4		11	5	7	1344.6674		0.4879E-02
4	12	5	7		11	2	9	1340.3110		0.1903E-03	6	10	6	5		11	5	6	1344.6677		0.4871E-02
6	7	4	4		6	3	3	1340.4141	0.0004	0.1276E+00	6	21	5	16		21	4	17	1344.6694		0.6775E-02
6	7	4	3		6	3	4	1340.4160	-0.0014	0.1276E+00	6	19	3	16		19	0	19	1344.8281		0.7727E-03
6	21	3	19		20	2	18	1340.6724	-0.0008	0.8420E-02	6	21	5	17		21	4	18	1344.8319	0.0001	0.6776E-02
6	15	4	12		16	1	15	1340.7563		0.1170E-03	6	24	0	24		24	4	21	1344.9823		0.3962E-03
6	28	5	23		28	4	24	1340.9063		0.1160E-02	3	20	5	15		20	4	16	1345.0096	0.0002	0.8229E-02
6	17	3	14		17	0	17	1341.0315		0.9791E-03	6	28	3	26		27	2	25	1345.0839		0.1513E-02
4	21	4	18		20	1	20	1341.3928		0.1485E-03	6	9	4	6		8	3	5	1345.1195	-0.0001	0.1205E+00
6	22	3	20		21	2	19	1341.5098	-0.0008	0.6803E-02	6	20	5	16		20	4	17	1345.1221		0.8232E-02
3	25	0	25		25	4	22	1341.5629		0.1140E-03	6	9	4	5		8	3	6	1345.1298	-0.0003	0.1206E+00
4	26	6	21		26	3	23	1341.5680		0.1467E-03	6	19	5	14		19	4	15	1345.3164	0.0003	0.9844E-02
3	11	3	9		12	5	8	1341.6042		0.2780E-03	6	19	5	15		19	4	16	1345.3925	0.0004	0.9847E-02
6	30	5	26		30	4	27	1341.6307		0.6283E-03	6	19	7	13		20	6	14	1345.4587		0.4299E-03
6	27	5	22		27	4	23	1341.6382		0.1557E-02	6	19	7	12		20	6	15	1345.4587		0.4299E-03
3	11	3	8		12	5	7	1341.6794		0.3639E-03	4	15	5	10		14	2	12	1345.5367		0.3685E-03
4	12	5	8		11	2	10	1341.9332		0.1928E-03	6	29	3	27		28	2	26	1345.5802		0.1139E-02
6	29	5	25		29	4	26	1342.0237		0.8638E-03	6	18	5	13		18	4	14	1345.5933	0.0004	0.1160E-01
6	11	6	5		12	5	8	1342.1165		0.5103E-02	6	18	5	14		18	4	15	1345.6433	0.0003	0.1160E-01
6	11	6	6		12	5	7	1342.1198		0.5017E-02	4	23	6	18		23	3	20	1345.6827		0.1806E-03
4	13	5	8		12	2	10	1342.1595		0.2476E-03											

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	17	5	12		17	4	13	1345.8433	0.0002	0.1344E-01	4	15	5	11		14	2	13	1349.4355		0.3836E-03
6	17	5	13		17	4	14	1345.8754	0.0003	0.1345E-01	4	26	6	20		26	3	24	1349.4454		0.1433E-03
6	18	3	15		17	2	16	1345.9940	0.0001	0.1374E-01	4	25	6	19		25	3	23	1349.5591		0.1583E-03
4	22	4	19		21	1	21	1348.0052		0.1063E-03	6	21	3	18		21	0	21	1349.5673		0.5146E-03
6	16	5	11		16	4	12	1348.0691	0.0004	0.1533E-01	4	30	6	24		30	3	28	1349.5708		0.7860E-04
6	16	5	12		16	4	13	1348.0892	0.0004	0.1533E-01	4	24	6	18		24	3	22	1349.7136		0.1711E-03
6	30	3	28		29	2	27	1348.0970		0.8496E-03	6	8	6	3		9	5	4	1349.7479		0.3257E-02
6	15	5	10		15	4	11	1348.2731	0.0003	0.1718E-01	6	8	6	2		9	5	5	1349.7479		0.3257E-02
6	15	5	11		15	4	12	1348.2852	0.0002	0.1718E-01	6	11	4	8		10	3	7	1349.7618	0.0001	0.1082E+00
6	14	5	9		14	4	10	1348.4572	0.0005	0.1890E-01	4	18	5	13		17	2	15	1349.7996		0.5138E-03
6	14	5	10		14	4	11	1348.4644	0.0003	0.1890E-01	6	11	4	7		10	3	8	1349.7998	0.0000	0.1082E+00
6	13	5	8		13	4	9	1348.6230	0.0016	0.2038E-01	4	23	6	17		23	3	21	1349.9008		0.1811E-03
6	13	5	9		13	4	10	1348.6270	-0.0023	0.2038E-01	4	18	6	13		18	3	15	1349.9760		0.1673E-03
4	22	6	17		22	3	19	1348.7625		0.1864E-03	6	26	8	19		27	7	20	1349.9828		0.8019E-04
6	12	5	7		12	4	8	1348.7720	0.0011	0.2151E-01	6	26	8	18		27	7	21	1349.9829		0.8019E-04
6	12	5	8		12	4	9	1348.7740	-0.0010	0.2151E-01	4	22	6	16		22	3	20	1350.1133		0.1874E-03
4	14	5	10		13	2	12	1348.8920		0.3170E-03	6	7	3	5		6	0	6	1350.2800		0.8023E-04
6	11	5	6		11	4	7	1348.9055	0.0006	0.2218E-01	4	21	6	15		21	3	19	1350.3441		0.1894E-03
6	11	5	7		11	4	8	1348.9065	-0.0004	0.2218E-01	4	17	6	12		17	3	14	1350.5294		0.1520E-03
6	10	5	6		10	4	6	1347.0244	0.0004	0.2218E-01	4	20	6	14		20	3	18	1350.5868		0.1869E-03
6	10	5	6		10	4	7	1347.0249	-0.0001	0.2218E-01	6	12	4	9		13	1	12	1350.6028		0.6020E-04
4	16	5	11		15	2	13	1347.0618		0.4253E-03	4	23	4	20		22	1	22	1350.7695		0.7437E-04
6	20	3	17		20	0	20	1347.0782		0.6439E-03	4	19	6	13		19	3	17	1350.8357		0.1797E-03
6	27	8	20		28	7	21	1347.0880		0.5796E-04	6	17	7	11		18	6	12	1350.8651		0.5912E-03
6	27	8	19		28	7	22	1347.0880		0.5796E-04	6	17	7	10		18	6	13	1350.8651		0.5912E-03
6	9	5	4		9	4	5	1347.1298	0.0000	0.2143E-01	4	16	6	11		16	3	13	1351.0037		0.1338E-03
6	9	5	5		9	4	6	1347.1300	-0.0002	0.2143E-01	4	19	5	14		18	2	16	1351.0266		0.5398E-03
6	9	6	3		10	5	6	1347.2130		0.4219E-02	4	18	6	12		18	3	16	1351.0856		0.1681E-03
6	9	6	4		10	5	5	1347.2130		0.4218E-02	4	17	6	11		17	3	15	1351.3322		0.1526E-03
6	8	5	3		8	4	4	1347.2225	0.0000	0.1977E-01	4	15	6	10		15	3	12	1351.4087		0.1136E-03
6	8	5	4		8	4	5	1347.2227	-0.0001	0.1977E-01	4	16	6	10		16	3	14	1351.5717		0.1342E-03
6	7	5	2		7	4	3	1347.3031	-0.0001	0.1705E-01	4	14	6	9		14	3	11	1351.7539		0.9264E-04
6	7	5	3		7	4	4	1347.3032	-0.0001	0.1705E-01	4	15	6	9		15	3	13	1351.8008		0.1138E-03
6	13	4	10		14	1	13	1347.3101		0.7852E-04	4	14	6	8		14	3	12	1352.0172		0.9279E-04
6	6	5	1		6	4	2	1347.3724	-0.0002	0.1306E-01	4	16	5	12		15	2	14	1352.0317		0.4492E-03
6	6	5	2		6	4	3	1347.3724	-0.0002	0.1306E-01	4	13	6	8		13	3	10	1352.0477		0.7217E-04
6	5	5	0		5	4	1	1347.4308	-0.0001	0.7540E-02	6	12	4	9		11	3	8	1352.0519	0.0003	0.1004E+00
6	5	5	1		5	4	2	1347.4308	-0.0001	0.7540E-02	6	12	4	8		11	3	9	1352.1182	0.0001	0.1005E+00
6	10	4	7		9	3	6	1347.4500	-0.0002	0.1150E+00	4	20	5	15		19	2	17	1352.1722		0.5514E-03
6	10	4	6		9	3	7	1347.4705	-0.0001	0.1150E+00	6	20	3	17		19	2	18	1352.1884	0.0000	0.8839E-02
4	21	6	16		21	3	18	1347.7357		0.1883E-03	4	13	6	7		13	3	11	1352.2190		0.7225E-04
6	18	7	12		19	6	13	1348.1700		0.5098E-03	6	7	6	1		8	5	4	1352.2708		0.2092E-02
6	18	7	11		19	6	14	1348.1700		0.5098E-03	6	7	6	2		8	5	3	1352.2708		0.2092E-02
4	17	5	12		16	2	14	1348.4808		0.4747E-03	6	22	3	19		22	0	22	1352.2939		0.3942E-03
4	20	6	15		20	3	17	1348.5895		0.1857E-03	6	12	6	7		12	3	9	1352.2972		0.5330E-04
6	19	2	17		18	1	18	1348.7983	0.0007	0.1173E-01	4	12	6	6		12	3	10	1352.4049		0.5334E-04
6	19	3	16		18	2	17	1349.0298	0.0000	0.1115E-01	6	8	3	6		7	0	7	1352.8057		0.1422E-03
4	19	6	14		19	3	16	1349.3329		0.1787E-03	6	25	8	18		26	7	19	1352.8616		0.1092E-03
4	28	6	22		28	3	26	1349.3741		0.1105E-03	6	25	8	17		26	7	20	1352.8616		0.1092E-03
4	27	6	21		27	3	25	1349.3809		0.1271E-03	4	21	5	16		20	2	18	1353.2488		0.5479E-03
4	29	6	23		29	3	27	1349.4343		0.9414E-04	6	16	7	9		17	6	12	1353.5441		0.6691E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	16	7	10		17	6	11	1353.5441		0.6691E-03	6	23	3	20		22	2	21	1362.4796		0.3768E-02
4	22	5	17		21	2	19	1354.2697		0.5300E-03	4	22	5	18		22	0	22	1362.7751		0.5399E-04
6	13	4	10		12	3	9	1354.3156	0.0001	0.9190E-01	6	17	4	14		16	3	13	1362.9858	0.0005	0.5591E-01
6	13	4	9		12	3	10	1354.4260	0.0003	0.9197E-01	4	20	5	16		19	2	18	1363.1699		0.6490E-03
6	20	2	18		19	1	19	1354.6210	0.0009	0.8813E-02	6	17	4	13		16	3	14	1363.5779	0.0002	0.5612E-01
4	17	5	13		16	2	15	1354.6914		0.5110E-03	6	12	3	10		11	0	11	1363.7025		0.6006E-03
6	6	6	1		7	5	2	1354.7813		0.8984E-03	6	12	7	5		13	6	8	1364.1025		0.7999E-03
6	6	6	0		7	5	3	1354.7813		0.8984E-03	6	12	7	6		13	6	7	1364.1025		0.7999E-03
4	23	5	18		22	2	20	1355.2490		0.4993E-03	6	21	8	14		22	7	15	1364.2136		0.3152E-03
6	23	3	20		23	0	23	1355.2520		0.2891E-03	6	21	8	13		22	7	16	1364.2136		0.3152E-03
6	9	3	7		8	0	8	1355.3940		0.2283E-03	6	7	5	3		6	4	2	1364.3092	-0.0001	0.4046E-01
6	21	3	18		20	2	19	1355.4792	0.0001	0.6839E-02	6	7	5	2		6	4	3	1364.3093	-0.0001	0.4046E-01
4	24	4	21		23	1	23	1355.6864		0.5255E-04	6	30	6	24		30	5	25	1364.8320		0.1194E-02
6	24	8	17		25	7	18	1355.7242		0.1461E-03	6	18	4	15		17	3	14	1365.0181	0.0004	0.4763E-01
6	24	8	16		25	7	19	1355.7242		0.1461E-03	6	26	3	23		26	0	26	1365.3643		0.8577E-04
4	24	5	19		23	2	21	1356.2018		0.4583E-03	6	30	6	25		30	5	26	1365.4058		0.1289E-02
6	15	7	8		16	6	11	1356.2072		0.7370E-03	6	29	6	23		29	5	24	1365.4332		0.1653E-02
6	15	7	9		16	6	10	1356.2072		0.7370E-03	4	23	5	19		23	0	23	1365.5038		0.5412E-04
6	14	4	11		13	3	10	1356.5474	0.0003	0.8293E-01	6	18	4	14		17	3	15	1365.8588	0.0002	0.4787E-01
6	14	4	10		13	3	11	1356.7240	0.0001	0.8303E-01	6	29	6	24		29	5	25	1365.8918		0.1769E-02
4	25	5	20		24	2	22	1357.1438		0.4100E-03	6	28	6	22		28	5	23	1365.9900		0.2255E-02
4	18	5	14		17	2	16	1357.4257		0.5683E-03	6	24	3	21		23	2	22	1366.1869		0.2666E-02
6	10	3	8		9	0	9	1358.0615		0.3377E-03	4	21	5	17		20	2	19	1366.2111		0.6734E-03
4	26	5	21		25	2	23	1358.0909		0.3577E-03	6	28	6	23		28	5	24	1366.3558		0.2398E-02
6	24	3	21		24	0	24	1358.4297		0.2026E-03	6	27	6	21		27	5	22	1366.5066		0.3033E-02
6	23	8	16		24	7	17	1358.5706		0.1923E-03	6	8	5	3		7	4	4	1366.6602	0.0001	0.3910E-01
6	23	8	15		24	7	18	1358.5706		0.1923E-03	6	8	5	4		7	4	3	1366.6602	0.0001	0.3910E-01
6	15	4	12		14	3	11	1358.7415	0.0002	0.7377E-01	6	11	7	4		12	6	7	1366.7037		0.7467E-03
6	14	7	8		15	6	9	1358.8545		0.7871E-03	6	11	7	5		12	6	6	1366.7037		0.7467E-03
6	14	7	7		15	6	10	1358.8545		0.7871E-03	6	13	3	11		12	0	12	1366.7078		0.7319E-03
6	22	3	19		21	2	20	1358.9091	-0.0001	0.5152E-02	6	27	6	22		27	5	23	1366.7979		0.3201E-02
6	15	4	11		14	3	12	1359.0138	0.0004	0.7390E-01	6	19	4	16		18	3	15	1366.9771	0.0004	0.3998E-01
4	27	5	22		26	2	24	1359.0602		0.3044E-03	6	22	2	20		21	1	21	1366.9783		0.4816E-02
6	5	5	0		4	4	1	1359.5759	-0.0003	0.4262E-01	6	26	6	20		26	5	21	1366.9869		0.4020E-02
6	5	5	1		4	4	0	1359.5759	-0.0003	0.4262E-01	6	20	8	12		21	7	15	1367.0103		0.3919E-03
4	28	5	23		27	2	25	1360.0687		0.2529E-03	6	20	8	13		21	7	14	1367.0103		0.3919E-03
4	19	5	15		18	2	17	1360.2471		0.6129E-03	6	26	6	21		26	5	22	1367.2183		0.4220E-02
4	21	5	17		21	0	21	1360.2991		0.5206E-04	6	25	6	19		25	5	20	1367.4338	-0.0008	0.5252E-02
6	21	2	19		20	1	20	1360.6837	0.0009	0.6548E-02	6	25	6	20		25	5	21	1367.6172	-0.0003	0.5488E-02
6	11	3	9		10	0	10	1360.8254		0.4649E-03	6	24	6	18		24	5	19	1367.8500	-0.0011	0.6763E-02
6	16	4	13		15	3	12	1360.8904	0.0004	0.6469E-01	6	24	6	19		24	5	20	1367.9950	-0.0005	0.7037E-02
4	29	5	24		28	2	26	1361.1346		0.2050E-03	6	19	4	15		18	3	16	1368.1447	0.0003	0.4026E-01
6	16	4	12		15	3	13	1361.2975	0.0002	0.6486E-01	6	23	6	17		23	5	18	1368.2379	-0.0011	0.8581E-02
6	22	8	14		23	7	17	1361.4003		0.2485E-03	6	23	6	18		23	5	19	1368.3522	-0.0004	0.8897E-02
6	22	8	15		23	7	16	1361.4003		0.2485E-03	4	24	5	20		24	0	24	1368.5057		0.5237E-04
6	13	7	6		14	6	9	1361.4862		0.8109E-03	6	22	6	18		22	5	17	1368.5992	-0.0011	0.1073E-01
6	13	7	7		14	6	8	1361.4862		0.8109E-03	6	22	6	17		22	5	18	1368.6892	-0.0006	0.1109E-01
6	25	3	22		25	0	25	1361.8085		0.1352E-03	6	20	4	17		19	3	16	1368.8517	0.0002	0.3308E-01
6	6	5	1		5	4	2	1361.9478	0.0000	0.4157E-01	6	21	6	15		21	5	18	1368.9358	-0.0010	0.1321E-01
6	6	5	2		5	4	1	1361.9478	0.0000	0.4157E-01	6	9	5	4		8	4	5	1368.9998	-0.0001	0.3744E-01
4	30	5	25		29	2	27	1362.2789		0.1624E-03	6	9	5	5		8	4	4	1368.9998	0.0000	0.3744E-01

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
0	21	6	18	21	6	18	21	1369.0085	0.0010	0.1362E-01	6	7	6	2	7	6	5	3	1371.6966	0.0008	0.2686E-01
0	27	3	24	27	0	27	1369.0704	-0.0011	0.5163E-04	0.1600E-01	6	6	0	1	6	5	2	1371.7783	0.0006	0.1497E-01	
0	20	6	14	20	5	15	1369.2491	0.0000	0.1600E-01	0.6471E-03	6	6	0	0	6	5	1	1371.7783	0.0006	0.1497E-01	
0	10	7	3	11	6	6	1369.2896	-0.0006	0.8471E-03	0.6471E-03	6	9	7	2	10	6	5	11	1371.7908	0.0000	0.1887E-02
0	20	6	15	20	5	16	1369.3903	-0.0006	0.1647E-01	0.6848E-03	6	9	3	3	10	6	4	1371.8606	0.0000	0.5027E-03	
0	19	6	13	19	5	14	1369.5402	-0.0010	0.1908E-01	0.6848E-03	6	15	3	12	15	5	12	1372.0212	0.0000	0.1420E-02	
0	19	6	14	19	5	15	1369.5841	-0.0004	0.1961E-01	0.1961E-01	6	18	3	10	18	5	13	1372.0212	0.0000	0.1420E-02	
0	19	8	12	20	7	13	1369.7900	-0.0010	0.4770E-03	0.4770E-03	6	22	4	19	21	3	18	1372.2689	0.0003	0.1170E-02	
0	18	6	12	18	5	13	1369.8103	-0.0010	0.2236E-01	0.2236E-01	6	16	3	13	16	5	14	1372.4524	0.0000	0.2167E-01	
0	18	6	13	18	5	14	1369.8453	-0.0005	0.2297E-01	0.2297E-01	6	19	3	17	19	5	14	1372.4987	0.0000	0.9877E-03	
0	14	3	12	13	0	13	1369.8545	-0.0008	0.8455E-03	0.8455E-03	6	18	8	11	19	7	12	1372.5530	0.0000	0.5675E-03	
0	25	3	22	24	2	23	1370.0200	-0.0008	0.1817E-02	0.1817E-02	6	23	5	19	22	2	21	1372.7314	0.0000	0.6822E-03	
0	17	6	11	17	5	12	1370.0886	-0.0008	0.2672E-01	0.2672E-01	6	20	3	18	20	5	16	1372.7314	0.0000	0.8222E-03	
0	16	6	10	16	5	11	1370.0986	-0.0008	0.2644E-01	0.2644E-01	6	21	4	17	20	3	18	1372.7314	0.0000	0.8222E-03	
0	20	4	16	19	3	17	1370.2900	-0.0009	0.2894E-01	0.2894E-01	6	21	3	19	21	5	18	1372.9629	0.0000	0.8087E-03	
0	15	6	10	15	5	11	1370.3142	-0.0004	0.2984E-01	0.2984E-01	6	17	3	14	17	5	13	1372.9629	0.0000	0.2728E-01	
0	20	4	16	19	3	17	1370.4412	-0.0003	0.3338E-01	0.3338E-01	6	21	3	19	21	5	18	1372.9629	0.0000	0.7365E-03	
0	15	6	10	15	5	11	1370.4996	-0.0007	0.3166E-01	0.3166E-01	6	15	3	13	14	5	14	1373.1532	0.0000	0.9296E-03	
0	21	4	18	20	5	17	1370.5220	-0.0005	0.3293E-01	0.3293E-01	6	22	3	20	22	5	17	1373.1762	0.0000	0.5708E-03	
0	10	3	8	11	5	5	1370.6187	0.0003	0.2349E-03	0.2349E-03	6	30	3	28	30	5	25	1373.3344	0.0005	0.1159E-03	
0	10	3	7	10	5	6	1370.6305	-0.0009	0.2697E-01	0.2697E-01	6	23	3	21	23	5	18	1373.3647	0.0005	0.4782E-03	
0	14	6	8	14	5	9	1370.6656	-0.0009	0.3288E-01	0.3288E-01	6	24	2	22	24	5	19	1373.4954	0.0000	0.3512E-02	
0	11	3	9	11	5	6	1370.7104	-0.0004	0.3614E-01	0.3614E-01	6	29	3	27	29	5	24	1373.5238	0.0000	0.3987E-03	
0	11	3	8	11	5	6	1370.7502	-0.0004	0.1300E-02	0.1300E-02	6	18	3	15	18	5	14	1373.5585	0.0005	0.1450E-03	
0	13	3	8	13	5	7	1370.8254	-0.0011	0.1838E-02	0.1838E-02	6	11	5	7	10	4	6	1373.6429	0.0005	0.5667E-03	
0	13	3	7	13	5	7	1370.8322	-0.0008	0.2832E-01	0.2832E-01	6	25	6	6	25	5	20	1373.6436	0.0000	0.3320E-01	
0	13	3	8	13	5	7	1370.8589	-0.0006	0.8912E-02	0.8912E-02	6	25	3	23	25	5	20	1373.6440	0.0000	0.3320E-01	
0	12	3	9	12	5	8	1370.8718	-0.0006	0.3443E-01	0.3443E-01	6	26	3	24	26	5	23	1373.6804	0.0000	0.1802E-03	
0	12	3	8	12	5	7	1371.1675	0.0010	0.1719E-01	0.1719E-01	6	27	3	25	27	5	22	1373.7167	0.0001	0.2719E-03	
0	12	6	0	12	5	8	1371.2094	0.0011	0.3288E-01	0.3288E-01	6	26	3	26	26	5	23	1373.7321	0.0001	0.2222E-03	
0	13	3	11	13	5	8	1371.2698	0.0022	0.4102E-01	0.4102E-01	6	23	4	23	22	3	19	1373.8567	0.0001	0.1716E-01	
0	11	6	6	11	5	7	1371.2625	-0.0012	0.1177E-01	0.1177E-01	6	19	3	18	19	5	15	1374.2581	0.0000	0.4415E-03	
0	10	5	6	10	4	5	1371.2625	-0.0012	0.4048E-01	0.4048E-01	6	8	7	2	9	6	3	1374.4167	0.0000	0.3247E-03	
0	10	5	5	10	4	4	1371.3276	-0.0000	0.3547E-01	0.3547E-01	6	22	4	18	21	3	19	1374.4167	0.0000	0.3247E-03	
0	14	3	10	14	5	9	1371.3279	-0.0002	0.4630E-02	0.4630E-02	6	24	4	21	23	3	20	1375.2843	-0.0001	0.1340E-01	
0	3	3	12	3	5	9	1371.3719	0.0006	0.5652E-02	0.5652E-02	6	20	3	17	20	5	16	1375.2990	0.0008	0.2197E-01	
0	6	6	4	6	5	6	1371.3827	0.0002	0.4112E-01	0.4112E-01	6	17	8	10	18	7	11	1375.2990	0.0008	0.6586E-03	
0	10	6	5	10	5	6	1371.3831	0.0004	0.4109E-01	0.4109E-01	6	12	5	8	11	4	7	1375.2990	0.0008	0.6586E-03	
0	6	6	3	6	5	4	1371.4982	0.0004	0.3851E-01	0.3851E-01	6	17	8	9	18	7	12	1375.9452	0.0008	0.6586E-03	
0	9	6	4	9	5	5	1371.4983	0.0004	0.3851E-01	0.3851E-01	6	21	3	18	21	5	17	1376.0057	0.0003	0.3070E-01	
0	15	6	13	15	5	10	1371.5721	0.0005	0.2690E-02	0.2690E-02	6	23	4	19	23	3	22	1376.0922	0.0005	0.2712E-03	
0	8	6	3	8	5	4	1371.6034	0.0005	0.3353E-01	0.3353E-01	6	22	4	18	22	1	21	1376.1841	0.0005	0.7794E-03	
0	8	6	2	8	5	4	1371.6034	0.0005	0.3353E-01	0.3353E-01	6	24	4	20	24	1	23	1376.1923	0.0005	0.8279E-03	
0	14	3	11	14	5	10	1371.6664	0.0008	0.2370E-02	0.2370E-02	6	24	5	20	24	2	22	1376.1923	0.0008	0.7098E-03	
0	7	6	1	7	5	2	1371.6968	0.0008	0.2586E-01	0.2586E-01	6	4	4	17	4	2	20	1376.2629	0.0008	0.6639E-03	
0	21	6	18	21	5	17	1371.6968	0.0008	0.2586E-01	0.2586E-01	6	21	4	17	21	1	20	1376.4471	0.0008	0.8507E-03	

v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH	v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH
6	25	4	21		25	1	24	1376.5029		0.6251E-03	4	13	6	7		12	3	9	1383.7484		0.8599E-04
6	25	4	22		24	3	21	1376.5778	-0.0001	0.1031E-01	6	11	4	7		11	1	10	1383.8011		0.1694E-03
6	18	3	14		15	0	15	1376.6115		0.9783E-03	4	13	6	8		12	3	10	1383.8560		0.8809E-04
6	20	4	16		20	1	19	1376.8596		0.8460E-03	6	18	3	16		17	0	17	1384.0221		0.9514E-03
6	7	7	1		8	6	2	1376.9583		0.1399E-03	4	26	5	22		25	2	24	1384.0311		0.5748E-03
6	7	7	0		8	6	3	1376.9583		0.1399E-03	3	27	3	24		27	5	23	1384.5197		0.5701E-04
6	26	4	22		26	1	25	1377.0417		0.5323E-03	6	10	4	6		10	1	9	1384.6029		0.1140E-03
3	22	3	19		22	5	18	1377.0731		0.2118E-03	6	26	4	22		25	3	23	1384.8886	-0.0006	0.7956E-02
6	19	4	15		19	1	18	1377.3993		0.8143E-03	6	16	5	12		15	4	11	1385.0002	0.0003	0.1973E-01
6	23	4	19		22	3	20	1377.4651	-0.0001	0.1743E-01	6	16	5	11		15	4	12	1385.0129	0.0004	0.1974E-01
6	26	4	23		25	3	22	1377.7316	-0.0002	0.7628E-02	6	9	4	5		9	1	8	1385.3613		0.7178E-04
6	27	4	23		27	1	26	1377.8235		0.4384E-03	4	14	6	8		13	3	10	1385.9205		0.1088E-03
6	27	3	24		26	2	25	1377.9946		0.7480E-03	4	14	6	9		13	3	11	1386.0919		0.1090E-03
6	16	8	8		17	7	11	1378.0278		0.7433E-03	6	13	8	6		14	7	7	1386.1106		0.8642E-03
6	16	8	9		17	7	10	1378.0278		0.7433E-03	6	13	8	5		14	7	8	1386.1106		0.8642E-03
6	18	4	14		18	1	17	1378.0438		0.7586E-03	6	29	3	26		28	2	27	1386.2667		0.2612E-03
6	13	5	9		12	4	8	1378.2332	0.0012	0.2803E-01	6	6	6	0		5	5	1	1386.3468	0.0005	0.1075E+00
6	13	5	8		12	4	9	1378.2354	-0.0009	0.2803E-01	6	6	6	1		5	5	0	1386.3468	0.0005	0.1075E+00
3	23	3	20		23	5	19	1378.2792		0.1647E-03	6	25	2	23		24	1	24	1387.1515		0.1827E-02
6	27	4	24		26	3	23	1378.7438	-0.0003	0.5864E-02	6	17	5	13		16	4	12	1387.2188	0.0004	0.1710E-01
6	17	4	13		17	1	18	1378.7712		0.6839E-03	6	17	5	12		16	4	13	1387.2401	0.0005	0.1710E-01
6	28	4	24		28	1	27	1378.8616		0.3493E-03	6	27	4	23		26	3	24	1387.5028	-0.0010	0.5937E-02
6	16	4	12		16	1	15	1379.5605		0.5962E-03	6	19	3	17		18	0	18	1387.9764		0.8884E-03
6	28	4	25		27	3	24	1379.6143	-0.0004	0.4336E-02	4	15	6	9		14	3	11	1388.0491		0.1320E-03
3	24	3	21		24	5	20	1379.6279		0.1273E-03	4	15	6	10		14	3	12	1388.3124		0.1324E-03
6	24	4	20		23	3	21	1379.8804	-0.0003	0.1363E-01	4	27	5	23		26	2	25	1388.3387		0.5047E-03
6	25	5	21		24	2	23	1380.0175		0.6284E-03	6	7	6	1		6	5	2	1388.6940	0.0003	0.1034E+00
6	29	4	25		29	1	28	1380.1672		0.2692E-03	6	7	6	2		6	5	1	1388.6940	0.0003	0.1034E+00
6	24	2	22		23	1	23	1380.2239		0.2541E-02	6	12	8	5		13	7	6	1388.7699		0.8238E-03
6	17	3	15		16	0	16	1380.2336		0.9828E-03	6	12	8	4		13	7	7	1388.7699		0.8238E-03
6	29	4	26		28	3	25	1380.3461		0.3167E-02	6	18	5	14		17	4	13	1389.4156	0.0004	0.1462E-01
6	15	4	11		15	1	14	1380.3923		0.5021E-03	6	18	5	13		17	4	14	1389.4501	0.0004	0.1462E-01
6	14	5	10		13	4	9	1380.5059	0.0019	0.2527E-01	6	30	7	23		30	6	24	1389.8013		0.2715E-03
6	14	5	9		13	4	10	1380.5099	-0.0022	0.2527E-01	3	8	3	6		7	5	3	1389.8116		0.7788E-04
6	15	8	7		16	7	10	1380.7394		0.8130E-03	6	30	7	24		30	6	25	1389.8152		0.2716E-03
6	15	8	8		16	7	9	1380.7394		0.8130E-03	3	8	3	5		7	5	2	1389.8239		0.7927E-04
6	30	4	27		29	3	26	1380.9446		0.2265E-02	4	16	6	10		15	3	12	1390.1268		0.1543E-03
3	25	3	22		25	5	21	1381.1200		0.9791E-04	6	28	4	24		27	3	25	1390.2128	-0.0015	0.4359E-02
6	14	4	10		14	1	13	1381.2480		0.4076E-03	6	29	7	22		29	6	23	1390.2701		0.3722E-03
4	12	6	6		11	3	8	1381.5392		0.6481E-04	6	29	7	23		29	6	24	1390.2791		0.3722E-03
4	12	6	7		11	3	9	1381.6040		0.6486E-04	4	30	5	26		29	2	28	1390.4954		0.1478E-03
6	30	4	26		30	1	29	1381.7498		0.2007E-03	4	16	6	11		15	3	13	1390.5189		0.1550E-03
6	28	3	25		27	2	26	1382.0994		0.4493E-03	6	28	7	21		28	6	22	1390.7213		0.5033E-03
6	13	4	9		13	1	12	1382.1111		0.3182E-03	6	28	7	22		28	6	23	1390.7271		0.5033E-03
6	25	4	21		24	3	22	1382.3502	-0.0006	0.1049E-01	6	8	6	2		7	5	3	1391.0295	0.0005	0.9897E-01
3	26	3	23		26	5	22	1382.7526		0.7490E-04	6	8	6	3		7	5	2	1391.0295	0.0005	0.9897E-01
6	15	5	11		14	4	10	1382.7820	0.0004	0.2248E-01	6	27	7	20		27	6	21	1391.1549		0.6718E-03
6	15	5	10		14	4	11	1382.7894	0.0001	0.2248E-01	6	27	7	21		27	6	22	1391.1584		0.6717E-03
6	12	4	8		12	1	11	1382.9667		0.2379E-03	6	11	8	3		12	7	6	1391.4117		0.7281E-03
6	14	8	6		15	7	9	1383.4337		0.8570E-03	6	11	8	4		12	7	5	1391.4117		0.7281E-03
6	14	8	7		15	7	8	1383.4337		0.8570E-03	6	26	7	19		26	6	20	1391.5712		0.8842E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	26	7	20		26	6	21	1391.6734		0.8842E-03	6	12	7	6		12	6	7	1395.6556	0.0006	0.7957E-02
6	19	5	15		18	4	14	1391.6883	0.0004	0.1233E-01	6	10	6	4		9	5	5	1395.6680	0.0009	0.8784E-01
6	19	5	14		18	4	15	1391.6428	0.0005	0.1234E-01	6	10	6	5		9	5	4	1395.6685	0.0005	0.8774E-01
6	25	7	18		25	6	19	1391.9702		0.1148E-02	6	11	7	5		11	6	6	1395.8291	0.0007	0.7862E-02
6	25	7	19		25	6	20	1391.9716		0.1148E-02	6	11	7	4		11	6	5	1395.8291	0.0007	0.7862E-02
6	20	3	18		19	0	19	1392.0945		0.8027E-03	6	21	5	17		20	4	16	1395.8481	0.0003	0.8426E-02
4	17	6	11		16	3	13	1392.1451		0.1744E-03	4	19	6	13		18	3	15	1395.9666		0.2036E-03
3	9	3	7		8	5	4	1392.3508		0.2548E-03	6	30	4	26		29	3	27	1395.9733		0.2232E-02
6	24	7	17		24	6	18	1392.3522		0.1470E-02	6	21	5	16		20	4	17	1395.9742	0.0000	0.8440E-02
6	24	7	18		24	6	19	1392.3530		0.1470E-02	6	10	7	4		10	6	5	1395.9875	0.0008	0.7405E-02
3	9	3	6		8	5	3	1392.3752		0.2685E-03	6	10	7	3		10	6	4	1395.9875	0.0008	0.7405E-02
4	17	6	12		16	3	14	1392.7133		0.1756E-03	6	9	7	2		9	6	3	1396.1310	0.0010	0.6499E-02
6	23	7	16		23	6	17	1392.7172		0.1856E-02	6	9	7	3		9	6	4	1396.1310	0.0010	0.6499E-02
6	23	7	17		23	6	18	1392.7177		0.1856E-02	6	8	7	1		8	6	2	1396.2598	0.0010	0.5049E-02
4	28	5	24		27	2	26	1392.9701		0.4233E-03	6	8	7	2		8	6	3	1396.2598	0.0010	0.5049E-02
6	29	4	25		28	3	28	1393.0313		0.3147E-02	6	21	3	19		20	0	20	1396.3732		0.7037E-03
6	22	7	15		22	6	16	1393.0653		0.2310E-02	6	7	7	0		7	6	1	1396.3740	0.0011	0.2936E-02
6	22	7	16		22	6	17	1393.0656		0.2310E-02	6	7	7	1		7	6	2	1396.3740	0.0011	0.2936E-02
6	9	6	3		8	5	4	1393.3538	0.0007	0.9391E-01	6	13	4	10		13	1	13	1396.5741		0.1541E-03
6	9	6	4		8	5	3	1393.3538	0.0006	0.9389E-01	6	9	8	2		10	7	3	1396.6422		0.3780E-03
6	21	7	14		21	6	15	1393.3969	0.0001	0.2832E-02	6	9	8	1		10	7	4	1396.6422		0.3780E-03
6	21	7	15		21	6	16	1393.3970	-0.0001	0.2832E-02	4	19	6	14		18	3	16	1397.0767		0.2085E-03
6	10	4	7		10	1	10	1393.4176		0.7312E-04	3	11	3	9		10	5	6	1397.4656		0.3305E-02
6	20	7	13		20	6	14	1393.7118	-0.0001	0.3420E-02	3	11	3	8		10	5	5	1397.5409		0.4485E-02
6	20	7	14		20	6	15	1393.7119	-0.0002	0.3420E-02	4	20	6	14		19	3	16	1397.7491		0.2111E-03
6	20	5	16		19	4	15	1393.7336	0.0004	0.1026E-01	6	14	4	11		14	1	14	1397.8645		0.1776E-03
6	20	5	15		19	4	16	1393.8174	0.0004	0.1027E-01	6	22	5	18		21	4	17	1397.9258	0.0002	0.6820E-02
6	19	7	12		19	6	13	1394.0104	-0.0001	0.4064E-02	4	29	5	26		28	2	27	1397.9434		0.3384E-03
6	19	7	13		19	6	14	1394.0105	-0.0002	0.4064E-02	6	11	6	5		10	5	6	1397.9778	0.0022	0.7934E-01
6	10	8	2		11	7	5	1394.0358		0.5759E-03	6	11	6	6		10	5	5	1397.9812	-0.0012	0.7816E-01
6	10	8	3		11	7	4	1394.0359		0.5759E-03	6	22	5	17		21	4	18	1398.1136	0.0004	0.6843E-02
4	18	6	12		17	3	14	1394.0952		0.1912E-03	6	8	8	1		9	7	2	1399.2307		0.1650E-03
6	26	2	24		25	1	25	1394.2642		0.1305E-02	6	8	8	0		9	7	3	1399.2307		0.1650E-03
6	18	7	11		18	6	12	1394.2928	-0.0001	0.4751E-02	4	20	6	15		19	3	17	1399.2528		0.2152E-03
6	18	7	12		18	6	13	1394.2928	-0.0002	0.4751E-02	6	15	4	12		15	1	15	1399.2833		0.1959E-03
6	11	4	8		11	1	11	1394.3563		0.9957E-04	4	21	6	15		20	3	17	1399.4319		0.2133E-03
6	17	7	10		17	6	11	1394.5592	-0.0001	0.5459E-02	6	23	5	19		22	4	18	1399.9551	-0.0002	0.5422E-02
6	17	7	11		17	6	12	1394.5592	-0.0002	0.5459E-02	3	12	3	10		11	5	7	1400.0049		0.1804E-01
6	16	7	9		16	6	10	1394.8096	-0.0001	0.6157E-02	3	12	3	9		11	5	6	1400.0936		0.3345E-01
6	16	7	10		16	6	11	1394.8096	-0.0001	0.6157E-02	6	23	5	18		22	4	19	1400.2362	0.0003	0.5474E-02
4	18	6	13		17	3	15	1394.8982		0.1931E-03	6	12	6	6		11	5	7	1400.3135	0.0010	0.5812E-01
3	10	3	8		9	5	5	1394.9041		0.8421E-03	6	12	6	7		11	5	6	1400.3553	0.0010	0.4270E-01
3	10	3	7		9	5	4	1394.9489		0.9430E-03	6	22	3	20		21	0	21	1400.6085		0.6002E-03
6	15	7	8		15	6	9	1395.0444	0.0000	0.6808E-02	6	16	4	13		16	1	16	1400.8357		0.2076E-03
6	15	7	9		15	6	10	1395.0444	0.0000	0.6808E-02	4	22	6	18		21	3	18	1401.0051		0.2103E-03
6	14	7	7		14	6	8	1395.2635	0.0001	0.7363E-02	4	21	6	18		20	3	18	1401.4310		0.2188E-03
6	14	7	8		14	6	9	1395.2635	0.0001	0.7363E-02	6	27	2	25		26	1	26	1401.5468		0.9278E-03
6	12	4	9		12	1	12	1395.4066		0.1273E-03	6	24	5	20		23	4	19	1401.8566	-0.0015	0.3859E-02
6	13	7	7		13	6	8	1395.4673	0.0005	0.7767E-02	3	25	0	25		24	4	20	1401.9877		0.1638E-03
6	13	7	6		13	6	7	1395.4673	0.0005	0.7767E-02	6	16	9	8		17	8	9	1402.3239		0.5651E-04
6	12	7	5		12	6	6	1395.6556	0.0008	0.7957E-02	6	16	9	7		17	8	10	1402.3239		0.5651E-04

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	24	5	19		23	4	20	1402.3429	0.0000	0.4321E-02	6	13	9	5		14	8	6	1410.6606		0.6586E-04
6	13	6	7		12	5	8	1402.4093	-0.0012	0.5094E-01	3	16	3	14		15	5	11	1410.6650		0.2093E-02
6	13	6	8		12	5	7	1402.4489	-0.0008	0.6104E-01	6	21	4	18		21	1	21	1410.7719		0.1655E-03
4	23	6	17		22	3	19	1402.4595		0.2026E-03	6	29	5	25		28	4	24	1411.1429		0.1066E-02
6	17	4	14		17	1	17	1402.5271		0.2119E-03	6	11	4	8		10	1	9	1411.2555		0.1517E-03
3	13	3	11		12	5	8	1402.7869		0.1841E-01	3	16	3	13		15	5	10	1411.3260		0.9312E-03
3	13	3	10		12	5	7	1402.9551		0.8315E-02	3	20	1	20		20	3	17	1411.3387		0.5240E-04
3	24	0	24		23	4	19	1403.0789		0.4470E-03	6	17	6	11		16	5	12	1411.3680	-0.0007	0.4065E-01
6	30	3	27		29	2	28	1403.2638		0.2586E-03	6	17	6	12		16	5	11	1411.3955	-0.0004	0.4153E-01
4	22	6	17		21	3	19	1403.6165		0.2175E-03	4	26	6	21		25	3	23	1412.5632		0.1728E-03
4	24	6	18		23	3	20	1403.7875		0.1908E-03	6	29	5	24		28	4	25	1412.7148		0.1083E-02
6	25	5	21		24	4	20	1404.0367		0.3186E-02	6	30	5	26		29	4	25	1412.7280		0.7735E-03
6	18	4	15		18	1	18	1404.3621		0.2089E-03	6	12	4	9		11	1	10	1412.8793		0.2154E-03
6	25	5	20		24	4	21	1404.4353		0.3386E-02	6	22	4	19		22	1	22	1413.2219		0.1446E-03
6	14	6	8		13	5	9	1404.6946	-0.0007	0.5605E-01	3	17	3	15		16	5	12	1413.3293		0.1486E-02
6	14	6	9		13	5	8	1404.7191	-0.0005	0.5943E-01	6	7	7	0		6	6	1	1413.3625	0.0013	0.2647E-01
4	25	6	19		24	3	21	1404.9841		0.1759E-03	6	7	7	1		6	6	0	1413.3625	0.0013	0.2647E-01
6	15	9	6		16	8	9	1405.1232		0.6253E-04	6	12	9	4		13	8	5	1413.3978		0.6076E-04
6	15	9	7		16	8	8	1405.1232		0.6253E-04	6	12	9	3		13	8	6	1413.3978		0.6076E-04
3	14	3	12		13	5	9	1405.3809		0.6341E-02	6	30	8	22		30	7	23	1413.4674		0.4498E-03
6	23	3	21		22	0	22	1405.3962		0.4993E-03	6	30	8	23		30	7	24	1413.4678		0.4498E-03
3	14	3	11		13	5	8	1405.6750		0.2959E-02	6	18	6	12		17	5	13	1413.5530	-0.0008	0.3492E-01
4	23	6	18		22	3	20	1405.8154		0.2116E-03	6	18	6	13		17	5	12	1413.5861	-0.0005	0.3562E-01
6	26	5	22		25	4	21	1405.8876		0.2542E-02	6	29	8	21		29	7	22	1413.9877		0.6156E-03
4	26	6	20		25	3	22	1406.0466		0.1589E-03	6	29	8	22		29	7	23	1413.9879		0.6156E-03
6	19	4	16		19	1	19	1406.3453		0.1993E-03	3	19	1	19		19	3	18	1414.1595		0.6274E-04
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6	15	6	9		14	5	10	1406.9407	-0.0009	0.5215E-01	6	13	4	10		12	1	11	1414.4706		0.2922E-03
6	15	6	10		14	5	9	1406.9628	-0.0004	0.5390E-01	6	28	8	20		28	7	21	1414.4921		0.8314E-03
4	27	6	21		26	3	23	1406.9757		0.1406E-03	6	28	8	21		28	7	22	1414.4922		0.8314E-03
6	27	5	23		26	4	22	1407.7100		0.1935E-02	6	30	5	25		29	4	26	1414.7816		0.7887E-03
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6	9	4	6		8	1	7	1407.8704		0.6358E-04	6	27	8	19		27	7	20	1414.9803		0.1108E-02
6	14	9	6		15	8	7	1407.9023		0.6606E-04	6	27	8	20		27	7	21	1414.9803		0.1108E-02
6	14	9	5		15	8	8	1407.9023		0.6606E-04	6	25	3	23		24	0	24	1415.0126		0.3234E-03
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4	24	6	19		23	3	21	1408.0345		0.2017E-03	6	26	8	19		26	7	20	1415.4524		0.1456E-02
4	29	6	23		28	3	25	1408.4513		0.1042E-03	6	8	7	1		7	6	2	1415.6757	0.0011	0.2520E-01
3	15	3	12		14	5	9	1408.4648		0.1531E-02	6	8	7	2		7	6	1	1415.6757	0.0011	0.2520E-01
6	20	4	17		20	1	20	1408.4806		0.1843E-03	6	19	6	13		18	5	14	1415.7188	-0.0008	0.2956E-01
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6	28	2	26		27	1	27	1408.9828		0.6565E-03	6	23	4	20		23	1	23	1415.8334		0.1229E-03
4	30	6	24		29	3	26	1409.0144		0.8723E-04	6	25	8	17		25	7	18	1415.9082		0.1687E-02
6	16	6	10		15	5	11	1409.1642	-0.0008	0.4654E-01	6	25	8	18		25	7	19	1415.9082		0.1687E-02
6	18	6	11		15	5	10	1409.1877	-0.0004	0.4771E-01	3	18	3	16		17	5	13	1416.0018		0.1120E-02
6	28	5	24		27	4	23	1409.4664		0.1447E-02	6	14	4	11		13	1	12	1416.0409		0.3804E-03
6	10	4	7		9	1	8	1409.5889		0.1013E-03	6	11	9	2		12	8	5	1416.1133		0.5006E-04
6	24	3	22		23	0	23	1410.1322		0.4060E-03	6	11	9	3		12	8	4	1416.1133		0.5006E-04
4	25	6	20		24	3	22	1410.2810		0.1884E-03	6	24	8	16		24	7	17	1416.3475	0.0029	0.2412E-02
6	28	5	23		27	4	24	1410.6514		0.1467E-02	6	24	8	17		24	7	18	1416.3477	0.0029	0.2412E-02
6	13	9	4		14	8	7	1410.6606		0.6586E-04	6	29	2	27		28	1	28	1416.5547		0.4626E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	18	1	18		18	3	15	1416.7275		0.7314E-04	6	9	8	1		9	7	2	1420.8981	0.0003	0.7782E-02
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6	23	8	16		23	7	17	1416.7704	0.0017	0.3038E-02	6	8	8	0		8	7	1	1421.0612	0.0005	0.4553E-02
6	18	4	6		9	1	9	1416.8132		0.7174E-04	3	16	1	16		16	3	13	1421.1675		0.9127E-04
6	22	8	15		22	7	16	1417.1766	0.0007	0.3771E-02	3	20	3	18		19	5	15	1421.3508		0.6983E-03
6	22	8	14		22	7	15	1417.1766	0.0007	0.3771E-02	6	25	4	22		25	1	25	1421.5485		0.8238E-04
4	28	6	23		27	3	25	1417.2712		0.1379E-03	6	22	6	16		21	5	17	1422.0938	-0.0010	0.1650E-01
3	18	3	15		17	5	12	1417.2993		0.4166E-03	6	22	6	17		21	5	16	1422.1686	-0.0004	0.1686E-01
6	21	8	13		21	7	14	1417.5660	0.0002	0.4609E-02	4	30	6	25		29	3	27	1422.2397		0.1030E-03
6	21	8	14		21	7	15	1417.5660	0.0002	0.4609E-02	6	18	4	15		17	1	16	1422.3953		0.7707E-03
6	15	4	12		14	1	13	1417.6034		0.4772E-03	6	26	6	21		27	3	24	1422.4063		0.5337E-04
6	20	6	14		19	5	15	1417.8646	-0.0010	0.2467E-01	6	11	7	4		10	6	5	1422.5269	0.0008	0.2079E-01
6	20	6	15		19	5	14	1417.9144	-0.0006	0.2517E-01	6	11	7	5		10	6	4	1422.5269	0.0008	0.2079E-01
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6	9	7	3		8	6	2	1417.9740	0.0010	0.2384E-01	3	20	3	17		19	5	14	1423.6801		0.2002E-03
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6	17	8	9		17	7	10	1418.9546	-0.0012	0.8715E-02	3	14	1	14		14	3	11	1424.7803		0.1008E-03
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3	17	1	17		17	3	14	1419.0585		0.8290E-04	6	12	7	5		11	6	6	1424.7813	0.0005	0.1912E-01
6	16	4	13		15	1	14	1419.1725		0.5782E-03	6	27	3	25		26	0	26	1425.1940		0.1944E-03
6	16	8	9		16	7	10	1419.2589	-0.0010	0.9751E-02	6	20	4	17		19	1	18	1425.8501		0.9085E-03
6	16	8	8		16	7	9	1419.2589	-0.0010	0.9751E-02	6	24	6	18		23	5	19	1426.2334	-0.0006	0.1045E-01
6	15	8	7		15	7	8	1419.5458	-0.0010	0.1067E-01	3	13	1	13		13	3	10	1426.3127		0.1009E-03
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4	29	6	24		28	3	26	1419.7174		0.1201E-03	6	28	6	22		29	3	27	1426.4480		0.2896E-03
6	14	8	7		14	7	8	1419.8152	-0.0011	0.1139E-01	6	25	6	20		26	3	23	1426.6208		0.7954E-04
6	14	8	6		14	7	7	1419.8152	-0.0011	0.1139E-01	3	22	3	20		21	5	17	1426.6697		0.4604E-03
6	21	6	15		20	5	16	1419.9899	-0.0011	0.2031E-01	6	13	4	9		12	1	12	1426.9149		0.1629E-03
6	26	3	24		25	0	25	1420.0342		0.2529E-03	6	13	7	7		12	6	6	1427.0204	0.0005	0.1739E-01
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6	11	4	7		10	1	10	1420.0714		0.9976E-04	6	21	4	18		20	1	19	1427.7123		0.9429E-03
6	10	7	4		9	6	3	1420.2579	0.0009	0.2238E-01	6	27	4	24		27	1	27	1427.9261		0.5020E-04
6	10	7	3		9	6	4	1420.2579	0.0009	0.2238E-01	6	25	6	19		24	5	20	1428.2671		0.8156E-02
6	12	8	4		12	7	5	1420.3015	-0.0006	0.1179E-01	6	25	6	20		24	5	19	1428.3962	-0.0002	0.8378E-02
6	12	8	5		12	7	6	1420.3015	-0.0006	0.1179E-01	3	11	1	11		11	3	8	1428.8955		0.9035E-04
3	19	3	16		18	5	13	1420.4331		0.2883E-03	6	27	6	21		28	3	26	1429.0435		0.3604E-03
6	11	8	4		11	7	5	1420.5182	-0.0003	0.1122E-01	6	14	7	8		13	6	7	1429.2445	0.0003	0.1583E-01
6	11	8	3		11	7	4	1420.5182	-0.0003	0.1122E-01	6	14	7	7		13	6	8	1429.2445	0.0003	0.1583E-01
6	10	8	2		10	7	3	1420.7170	0.0000	0.9937E-02	3	23	3	21		22	5	18	1429.3022		0.3770E-03
6	10	8	3		10	7	4	1420.7170	0.0000	0.9937E-02	6	22	4	19		21	1	20	1429.6899		0.9498E-03
6	17	4	14		16	1	15	1420.7642		0.6782E-03	3	10	1	10		10	3	7	1429.9694		0.8035E-04
6	9	8	2		9	7	3	1420.8981	0.0003	0.7782E-02	6	26	6	20		25	5	21	1430.2751	-0.0003	0.6278E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	26	6	21		25	5	20	1430.4263	0.0000	0.6464E-02	3	27	0	27		28	0	28	1435.2347		0.5096E-02
6	28	3	26		27	0	27	1430.4900		0.1473E-03	3	27	1	27		28	1	28	1435.2789	0.0008	0.1534E-01
6	14	4	10		13	1	13	1430.5121		0.1937E-03	3	28	5	23		29	5	24	1435.2872		0.3567E-02
3	22	3	19		21	5	18	1430.5525		0.9505E-04	3	28	5	24		29	5	25	1435.2971		0.3569E-02
3	29	0	29		30	0	30	1430.6012		0.2852E-02	3	27	2	25		28	2	26	1435.3842		0.3390E-02
3	25	11	14		26	11	15	1430.6107		0.5353E-04	3	27	1	26		28	1	27	1435.4385	-0.0010	0.1199E-01
3	25	11	15		26	11	16	1430.6107		0.5353E-04	3	27	2	26		28	2	27	1435.6259	0.0033	0.3912E-02
3	29	1	29		30	1	30	1430.6354	0.0011	0.8569E-02	3	27	3	24		28	3	25	1435.7753	0.0000	0.8698E-02
6	24	6	19		25	3	22	1430.6908		0.1173E-03	6	17	7	11		18	6	10	1435.8247	0.0000	0.1055E-01
3	9	1	9		9	3	6	1430.9122		0.6808E-04	6	17	7	10		18	6	11	1435.8247	0.0000	0.1055E-01
3	29	1	28		30	1	29	1431.0327	-0.0012	0.6528E-02	6	29	3	27		28	0	28	1435.9204		0.1101E-03
3	29	2	27		30	2	28	1431.1321		0.1803E-02	6	29	6	23		28	5	24	1436.1332		0.2639E-02
3	29	2	28		30	2	29	1431.1953		0.2130E-02	3	27	3	25		28	3	26	1436.2689	-0.0012	0.8771E-02
6	15	7	8		14	6	9	1431.4534	0.0002	0.1388E-01	6	29	6	24		28	5	23	1436.3562		0.2744E-02
6	15	7	9		14	6	8	1431.4534	0.0002	0.1388E-01	6	30	9	21		30	8	22	1436.3615		0.7109E-04
3	29	3	26		30	3	27	1431.4963	-0.0005	0.4622E-02	6	30	9	22		30	8	23	1436.3616		0.7109E-04
6	26	6	20		27	3	25	1431.6838		0.4473E-03	3	29	7	22		30	7	23	1436.3848		0.1004E-02
3	8	1	8		8	3	5	1431.7336		0.5450E-04	3	29	7	23		30	7	24	1436.3849		0.1004E-02
6	23	4	20		22	1	21	1431.8016		0.9285E-03	3	27	4	23		28	4	24	1436.4111		0.2273E-02
3	24	3	22		23	5	19	1431.9072		0.3093E-03	3	27	4	24		28	4	25	1436.4899		0.2286E-02
3	29	3	27		30	3	28	1432.0227	-0.0031	0.4707E-02	6	25	4	22		24	1	23	1436.4927		0.8113E-03
3	29	4	25		30	4	26	1432.0472		0.1220E-02	3	28	6	22		29	6	23	1436.5959		0.7729E-03
6	27	6	21		26	5	22	1432.1410		0.1232E-02	3	28	6	23		29	6	24	1436.5966		0.7729E-03
6	27	6	22		26	5	21	1432.2563	0.0001	0.4767E-02	6	29	9	20		29	8	21	1436.9755		0.9707E-04
3	28	0	28		29	0	29	1432.4312	0.0004	0.4922E-02	6	29	9	21		29	8	22	1436.9755		0.9707E-04
3	28	1	28		29	1	29	1432.9204		0.3638E-02	3	26	3	24		25	5	21	1437.0049		0.2083E-03
3	28	1	29		29	1	29	1432.9578	0.0007	0.1154E-01	6	24	6	18		25	3	23	1437.0699		0.6840E-03
3	29	5	24		30	5	25	1433.1453		0.2606E-02	3	23	11	13		24	11	14	1437.2584		0.9402E-04
3	29	5	25		30	5	26	1433.1573		0.2608E-02	3	23	11	12		24	11	13	1437.2584		0.9402E-04
3	28	1	27		29	1	28	1433.2372	-0.0010	0.8902E-02	3	7	1	6		7	3	5	1437.2678		0.5290E-04
3	28	2	28		29	2	27	1433.2539		0.2488E-02	3	27	5	22		28	5	23	1437.4374	-0.0015	0.4818E-02
3	28	2	27		29	2	28	1433.4064		0.2909E-02	3	27	5	23		28	5	24	1437.4453	0.0034	0.4820E-02
3	28	3	25		29	3	26	1433.6273	-0.0001	0.6384E-02	3	26	2	24		27	2	25	1437.5240		0.4560E-02
6	16	7	9		15	6	10	1433.6469	0.0001	0.1217E-01	3	26	0	26		27	0	27	1437.5397		0.6660E-02
6	16	7	10		15	6	9	1433.6469	0.0001	0.1217E-01	6	28	9	19		28	8	20	1437.5753		0.1308E-03
3	24	11	14		25	11	15	1433.9333		0.7142E-04	6	28	9	20		28	8	21	1437.5753		0.1308E-03
3	24	11	13		25	11	14	1433.9333		0.7142E-04	3	26	1	26		27	1	27	1437.5984	0.0005	0.2016E-01
6	24	4	21		23	1	22	1434.0642		0.8809E-03	3	26	1	25		27	1	26	1437.6368	-0.0007	0.1597E-01
3	28	3	26		29	3	27	1434.1384	-0.0019	0.6469E-02	3	26	2	25		27	2	26	1437.8503	0.0027	0.5192E-02
3	23	3	20		22	5	17	1434.1930		0.6453E-04	3	26	3	23		27	3	24	1437.9407	0.0002	0.1168E-01
6	28	6	22		27	5	23	1434.2094		0.3571E-02	3	8	1	7		8	3	6	1437.9615		0.7620E-04
3	28	4	24		29	4	25	1434.2251		0.1677E-02	6	18	7	11		17	6	12	1437.9869	0.0001	0.9022E-02
6	15	4	11		14	1	14	1434.2343		0.2209E-03	6	18	7	12		17	6	11	1437.9869	0.0001	0.9022E-02
3	28	4	25		29	4	26	1434.3120		0.1689E-02	6	30	6	24		29	5	25	1438.0261		0.1923E-02
6	25	6	19		26	3	24	1434.3617		0.5538E-03	6	16	4	12		15	1	15	1438.0875		0.2426E-03
6	28	6	23		27	5	22	1434.4084		0.3700E-02	6	27	9	18		27	8	19	1438.1606		0.1738E-03
3	25	3	23		24	5	20	1434.4774		0.2539E-03	6	27	9	19		27	8	20	1438.1606		0.1738E-03
3	29	6	23		30	6	24	1434.4987		0.5658E-03	6	30	6	25		29	5	24	1438.2718		0.2009E-02
3	29	6	24		30	6	25	1434.4996		0.5658E-03	6	22	6	17		23	3	20	1438.3894		0.2472E-03
6	23	6	18		24	3	21	1434.6136		0.1712E-03	3	26	3	24		27	3	25	1438.4138	-0.0006	0.1173E-01
3	11	0	11		12	2	10	1435.0663		0.5708E-04	3	28	7	22		29	7	23	1438.4146		0.1368E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
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3	10	0	10		11	2	9	1438.4647		0.6175E-04	3	12	1	11		12	3	10	1441.1414		0.1988E-03
3	26	4	22		27	4	23	1438.6053		0.3039E-02	6	21	9	12		21	8	13	1441.3459		0.7087E-03
3	26	4	23		27	4	24	1438.6752		0.3051E-02	6	21	9	13		21	8	14	1441.3459		0.7087E-03
3	9	1	8		9	3	7	1438.6937		0.1033E-03	6	30	3	28		29	0	29	1441.4843		0.8130E-04
3	27	6	21		28	6	22	1438.7020		0.1042E-02	4	25	10	16		26	7	20	1441.5620		0.8574E-04
3	27	6	22		28	6	23	1438.7024		0.1042E-02	4	25	10	15		26	7	19	1441.5620		0.8574E-04
6	26	9	18		26	8	19	1438.7312		0.2278E-03	3	9	0	9		10	2	8	1441.6410		0.6302E-04
6	26	9	17		26	8	18	1438.7312		0.2278E-03	3	25	5	20		26	5	21	1441.7633	0.0006	0.8438E-02
4	28	10	16		27	7	20	1438.7733		0.5354E-04	3	25	5	21		26	5	22	1441.7682	-0.0043	0.8439E-02
4	28	10	17		27	7	21	1438.7734		0.5354E-04	6	20	9	12		20	8	13	1441.8184		0.8484E-03
3	29	8	22		30	8	23	1438.8217		0.1881E-03	6	20	9	11		20	8	12	1441.8184		0.8484E-03
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6	26	4	23		25	1	24	1439.0995		0.7256E-03	6	25	5	21		26	0	26	1441.8555		0.4198E-03
6	25	9	16		25	8	17	1439.2864		0.2945E-03	6	27	4	24		26	1	25	1441.8940		0.6305E-03
6	25	9	17		25	8	18	1439.2864		0.2945E-03	3	28	3	28		27	5	23	1441.8998		0.1396E-03
3	10	1	9		10	3	8	1439.4749		0.1336E-03	3	13	1	12		13	3	11	1442.0021		0.2310E-03
3	27	3	25		26	5	22	1439.4817		0.1707E-03	6	21	6	16		22	3	19	1442.0215		0.3538E-03
3	26	5	21		27	5	22	1439.5961	-0.0035	0.6420E-02	3	24	1	23		25	1	24	1442.0271	-0.0003	0.2728E-01
3	26	5	22		27	5	23	1439.6023	-0.0098R	0.8421E-02	6	17	4	13		16	1	16	1442.0784		0.2572E-03
3	25	2	23		26	2	24	1439.6752	0.0029	0.6055E-02	3	24	1	24		25	1	25	1442.2324	0.0004	0.3353E-01
6	23	6	17		24	3	22	1439.8016		0.8438E-03	6	20	7	14		19	0	13	1442.2635	0.0002	0.6359E-02
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6	24	9	16		24	8	17	1439.8259		0.3752E-03	6	19	9	10		19	8	11	1442.2727		0.9981E-03
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3	27	7	20		28	7	21	1440.4541		0.1836E-02	3	27	8	19		28	8	20	1442.7188		0.3439E-03
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6	8	8	0		7	7	1	1440.4662	0.0007	0.5227E-01	6	9	8	2		8	7	1	1442.7286	0.0005	0.4940E-01
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3	22	11	11		23	11	12	1440.5868		0.1220E-03	3	14	1	13		14	3	12	1442.8632		0.2609E-03
3	22	11	12		23	11	13	1440.5868		0.1220E-03	3	29	9	21		30	9	22	1442.8651		0.2837E-03
3	30	1	30		30	1	29	1440.6890		0.6367E-04	3	29	9	20		30	9	21	1442.8651		0.2837E-03
3	28	8	20		29	8	21	1440.7666		0.2561E-03	3	25	6	19		26	6	20	1442.9417		0.1816E-02
3	28	8	21		29	8	22	1440.7666		0.2561E-03	3	25	6	20		26	6	21	1442.9418		0.1816E-02
3	26	4	21		26	4	22	1440.8077	-0.0015	0.4007E-02	3	24	4	20		25	4	21	1443.0183	-0.0016	0.5209E-02
3	26	6	20		27	6	21	1440.8171		0.1385E-02	3	24	4	21		25	4	22	1443.0699	-0.0015	0.5220E-02
3	26	6	21		27	6	22	1440.8174		0.1385E-02	6	17	9	8		17	8	9	1443.1255		0.1305E-02
6	22	9	14		22	8	15	1440.8561		0.5824E-03	6	17	9	9		17	8	10	1443.1255		0.1305E-02
6	22	9	13		22	8	14	1440.8561		0.5824E-03	3	29	1	29		29	1	28	1443.3575		0.8444E-04
3	25	4	22		26	4	23	1440.8684		0.4018E-02	6	16	9	7		16	8	8	1443.5229		0.1444E-02
6	23	5	19		24	0	24	1440.8946		0.1069E-03	6	16	9	8		16	8	9	1443.5229		0.1444E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	15	1	14		15	3	13	1443.7094		0.2868E-03	3	18	1	17		18	3	16	1445.9921		0.3272E-03
6	15	9	6		15	8	7	1443.9006		0.1558E-02	3	28	1	28		28	1	27	1446.0608		0.1111E-03
6	15	9	7		15	8	8	1443.9005		0.1558E-02	3	28	1	27		28	3	26	1446.1013		0.1051E-03
3	21	11	11		22	11	12	1443.9193		0.1581E-03	3	23	5	18		24	5	19	1446.1248	0.0006	0.1398E-01
3	21	11	10		22	11	11	1443.9193		0.1581E-03	3	23	5	19		24	5	20	1446.1274	-0.0022	0.1398E-01
3	24	5	19		25	5	20	1443.9395	0.0006	0.1094E-01	3	22	2	20		23	2	21	1446.2075	0.0017	0.1307E-01
3	24	5	20		25	5	21	1443.9432	-0.0031	0.1094E-01	6	18	4	14		17	1	17	1446.2133		0.2638E-03
3	23	2	21		24	2	22	1444.0157	0.0020	0.1025E-01	3	22	1	21		23	1	22	1446.4163	0.0000	0.4434E-01
3	23	1	22		24	1	23	1444.2209	-0.0002	0.3500E-01	3	26	0	26		26	2	25	1446.4640		0.5328E-04
3	29	3	27		28	5	24	1444.2513		0.1140E-03	3	27	9	19		28	9	20	1446.4713		0.5176E-03
6	14	9	5		14	8	6	1444.2574		0.1632E-02	3	27	9	18		28	9	19	1446.4713		0.5176E-03
6	14	9	6		14	8	7	1444.2574		0.1632E-02	6	22	7	16		21	6	15	1446.4756	0.0006	0.4259E-02
3	30	1	29		30	3	28	1444.2620		0.6432E-04	6	22	7	15		21	6	16	1446.4757	0.0005	0.4259E-02
4	24	10	15		25	7	19	1444.3293		0.1470E-03	3	30	3	28		29	5	25	1446.5283		0.9287E-04
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6	21	7	15		20	6	14	1444.3777	0.0002	0.5237E-02	3	24	7	18		25	7	19	1446.6406		0.4043E-02
6	21	7	14		20	6	15	1444.3777	0.0001	0.5237E-02	3	24	7	17		25	7	18	1446.6406		0.4043E-02
3	16	1	15		16	3	14	1444.5243		0.3072E-03	3	25	8	17		26	8	18	1446.6475		0.5948E-03
3	23	3	20		24	3	21	1444.5408		0.2602E-01	3	25	8	18		26	8	19	1446.6475		0.5948E-03
3	23	1	23		24	1	24	1444.5468		0.4244E-01	3	22	3	19		23	3	20	1446.7733	0.0004	0.3301E-01
3	23	0	23		24	0	24	1444.5486		0.1408E-01	3	27	1	26		27	3	25	1446.7897		0.1305E-03
3	23	2	22		24	2	23	1444.5492		0.1123E-01	3	22	2	21		23	2	22	1446.7906	0.0009	0.1415E-01
3	25	7	18		26	7	19	1444.5659		0.3162E-02	3	22	0	22		23	0	23	1446.8351	-0.0022	0.1770E-01
3	25	7	19		26	7	20	1444.5659		0.3162E-02	3	22	1	22		23	1	23	1446.8594	0.0002	0.5302E-01
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3	26	8	19		27	8	20	1444.6787		0.4556E-03	6	11	8	3		10	7	4	1447.1993	-0.0001	0.4306E-01
3	26	8	18		27	8	19	1444.6787		0.4556E-03	3	23	6	17		24	6	18	1447.2197	0.0019	0.2995E-02
6	28	4	25		27	1	26	1444.8828		0.5327E-03	3	23	6	18		24	6	19	1447.2198	0.0018	0.2995E-02
6	12	9	3		12	8	4	1444.9080		0.1584E-02	3	20	11	10		21	11	11	1447.2571		0.1967E-03
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3	23	3	21		24	3	22	1444.9283	0.0002	0.2586E-01	3	26	1	25		26	3	24	1447.3162		0.1587E-03
6	10	8	3		9	7	2	1444.9729	0.0000	0.4633E-01	3	7	0	7		8	2	6	1447.4447		0.5437E-04
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3	24	6	18		25	6	19	1445.0757	0.0021	0.2349E-02	3	22	4	19		23	4	20	1447.4994	-0.0012	0.8450E-02
3	24	6	19		25	6	20	1445.0759	0.0019	0.2349E-02	3	21	1	20		21	3	19	1447.5236		0.2991E-03
6	11	9	3		11	8	4	1445.2004		0.1418E-02	3	25	1	24		25	3	23	1447.6777		0.1888E-03
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3	23	4	19		24	4	20	1445.2371	-0.0013	0.6679E-02	3	24	1	23		24	3	22	1447.8744		0.2195E-03
3	29	1	28		29	3	27	1445.2563		0.8300E-04	3	23	1	22		23	3	21	1447.9093		0.2493E-03
3	23	4	20		24	4	21	1445.2802	-0.0014	0.6688E-02	6	29	4	26		28	1	27	1448.0695		0.4380E-03
3	17	1	16		17	3	15	1445.2911		0.3210E-03	6	20	6	14		21	3	19	1448.0734		0.1598E-02
6	21	6	15		22	3	20	1445.3094		0.1286E-02	3	28	9	17		27	9	18	1448.2805		0.6845E-03
6	10	9	1		10	8	2	1445.4705		0.1119E-02	3	26	9	18		27	9	19	1448.2805		0.6845E-03
6	10	9	2		10	8	3	1445.4705		0.1119E-02	3	22	5	17		23	5	18	1448.3191	0.0002	0.1762E-01
6	20	6	15		21	3	18	1445.5159		0.5027E-03	3	22	5	18		23	5	19	1448.3210	-0.0018	0.1762E-01
6	9	9	0		9	8	1	1445.7177		0.6591E-03	3	25	0	25		25	2	24	1448.4045		0.5872E-04
6	9	9	1		9	8	2	1445.7177		0.6591E-03	3	21	2	19		22	2	20	1448.4149	0.0014	0.1643E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	23	7	17		22	6	16	1448.5571	0.0005	0.3419E-02	3	28	10	19		29	10	20	1451.6333		0.5528E-04
6	23	7	16		22	6	17	1448.5573	0.0004	0.3419E-02	3	24	9	15		25	9	16	1451.9147		0.1146E-02
3	21	1	20		22	1	21	1448.6145	-0.0001	0.5544E-01	3	24	9	16		25	9	17	1451.9147		0.1146E-02
3	24	8	16		25	8	17	1448.6255		0.7654E-03	3	20	4	16		21	4	17	1451.9427	-0.0011	0.1292E-01
3	24	8	17		25	8	18	1448.6255		0.7654E-03	3	20	4	17		21	4	18	1451.9651	-0.0011	0.1292E-01
3	23	7	16		24	7	17	1448.7316		0.5043E-02	6	18	6	13		19	3	16	1452.1259		0.1010E-02
3	23	7	17		24	7	18	1448.7316		0.5043E-02	3	23	0	23		23	2	22	1452.3058		0.1267E-03
3	27	1	27		27	1	26	1448.7979		0.1449E-03	4	21	10	12		22	7	16	1452.4259		0.2548E-02
6	19	6	14		20	3	17	1448.8809		0.7116E-03	4	21	10	11		22	7	15	1452.4259		0.2548E-02
3	21	3	18		22	3	19	1449.0206	0.0004	0.4126E-01	3	22	8	14		23	8	15	1452.6129		0.1212E-02
3	21	2	20		22	2	21	1449.0367	0.0007	0.1780E-01	3	22	8	15		23	8	16	1452.6129		0.1212E-02
3	21	0	21		22	0	22	1449.1281	-0.0019	0.2189E-01	6	25	7	19		24	6	18	1452.6705		0.2121E-02
3	21	1	21		22	1	22	1449.1705	0.0001	0.6540E-01	6	25	7	18		24	6	19	1452.6707		0.2121E-02
3	21	3	19		22	3	20	1449.3365	0.0003	0.4079E-01	3	20	5	15		21	5	16	1452.7360	0.0000	0.2680E-01
3	22	6	16		23	6	17	1449.3738	0.0018	0.3764E-02	3	20	5	16		21	5	17	1452.7371	-0.0010	0.2680E-01
3	22	6	17		23	6	18	1449.3739	0.0018	0.3764E-02	3	19	2	17		20	2	18	1452.8809	0.0009	0.2487E-01
6	12	8	4		11	7	5	1449.4080	-0.0006	0.3961E-01	3	19	1	18		20	1	19	1453.0278	0.0002	0.8329E-01
6	12	8	5		11	7	4	1449.4080	-0.0006	0.3961E-01	3	21	7	14		22	7	15	1453.0302		0.5688E-02
3	21	4	17		22	4	18	1449.6993	-0.0013	0.1052E-01	3	21	7	15		22	7	16	1453.0302		0.5688E-02
3	21	4	18		22	4	19	1449.7275	-0.0014	0.1053E-01	3	27	10	17		28	10	18	1453.2784		0.7388E-04
4	22	10	12		23	7	16	1449.7854		0.6933E-03	3	27	10	18		28	10	19	1453.2784		0.7388E-04
4	22	10	13		23	7	17	1449.7854		0.6933E-03	3	19	2	18		20	2	19	1453.5447	0.0002	0.2612E-01
3	25	9	16		26	9	17	1450.0946		0.8922E-03	3	19	3	16		20	3	17	1453.5547	0.0002	0.6161E-01
3	25	9	17		26	9	18	1450.0946		0.8922E-03	6	18	6	12		19	3	17	1453.5952		0.2563E-02
6	19	4	15		18	1	18	1450.4983		0.2624E-03	3	19	0	19		20	0	20	1453.7085	-0.0012	0.3208E-01
3	21	5	16		22	5	17	1450.5228	0.0000	0.2189E-01	3	20	6	14		21	6	15	1453.7133	0.0018	0.5687E-02
3	21	5	17		22	5	18	1450.5242	-0.0014	0.2189E-01	3	20	6	15		21	6	16	1453.7134	0.0018	0.5687E-02
3	24	0	24		24	2	23	1450.5547		0.1192E-03	3	23	9	15		24	9	16	1453.7415		0.1449E-02
3	19	11	8		20	11	9	1450.6014		0.2438E-03	3	23	9	14		24	9	15	1453.7415		0.1449E-02
3	19	11	9		20	11	10	1450.6014		0.2438E-03	6	14	8	6		13	7	7	1453.7719	-0.0010	0.3242E-01
3	23	8	16		24	8	17	1450.6136		0.9705E-03	6	14	8	7		13	7	6	1453.7719	-0.0010	0.3242E-01
3	23	8	15		24	8	16	1450.6136		0.9705E-03	3	19	1	19		20	1	20	1453.7885	0.0001	0.9564E-01
6	24	7	18		23	6	17	1450.6221	0.0008	0.2710E-02	3	19	3	17		20	3	18	1453.7954	0.0003	0.6070E-01
6	24	7	17		23	6	18	1450.6223	0.0006	0.2710E-02	3	18	11	7		19	11	8	1453.9543		0.2967E-03
3	20	2	18		21	2	19	1450.6392	0.0012	0.2036E-01	3	18	11	8		19	11	9	1453.9543		0.2967E-03
3	20	1	19		21	1	20	1450.8177	0.0000	0.6842E-01	3	22	0	22		22	2	21	1454.0627		0.1510E-03
6	19	6	13		20	3	18	1450.8370		0.2005E-02	3	19	4	15		20	4	16	1454.1947	-0.0011	0.1563E-01
3	22	7	16		23	7	17	1450.8479		0.5981E-02	3	19	4	16		20	4	17	1454.2118	-0.0010	0.1563E-01
3	22	7	15		23	7	16	1450.8479		0.5981E-02	3	25	1	25		25	1	24	1454.3615		0.2405E-03
3	20	3	17		21	3	18	1451.2816	0.0005	0.5081E-01	3	21	8	14		22	8	15	1454.6238		0.1490E-02
3	20	2	19		21	2	20	1451.2878		0.2159E-01	3	21	8	13		22	8	14	1454.6238		0.1490E-02
3	20	0	20		21	0	21	1451.4198	-0.0015	0.2667E-01	6	26	7	20		25	6	19	1454.7021		0.1638E-02
6	30	4	27		29	1	28	1451.4547		0.3509E-03	6	26	7	19		25	6	20	1454.7026		0.1638E-02
3	20	1	20		21	1	21	1451.4801	0.0000	0.7982E-01	3	20	7	13		21	7	14	1454.8408		0.7982E-02
3	21	6	15		22	6	16	1451.5383	0.0017	0.4661E-02	3	20	7	14		21	7	15	1454.8408		0.7982E-02
3	21	6	16		22	6	17	1451.5385	0.0016	0.4661E-02	3	26	10	17		27	10	18	1454.9172		0.9734E-04
3	20	3	18		21	3	19	1451.5596	0.0002	0.5014E-01	3	26	10	18		27	10	17	1454.9172		0.9734E-04
3	26	1	26		26	1	25	1451.5683		0.1875E-03	6	20	4	16		19	1	19	1454.9403		0.2534E-03
6	13	8	5		12	7	6	1451.5988	-0.0006	0.3604E-01	3	19	5	14		20	5	15	1454.9589	0.0000	0.3232E-01
6	13	8	6		12	7	5	1451.5988	-0.0006	0.3604E-01	3	19	5	15		20	5	16	1454.9596	-0.0007	0.3232E-01
3	28	10	18		29	10	19	1451.6333		0.5528E-04	3	18	2	18		19	2	17	1455.1409	0.0006	0.2992E-01

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	18	1	17	19	1	18	18	1456.2467	0.0002	0.9999E-01	3	17	0	17	18	0	18	1456.2740	-0.0252R	0.2142E-02	
4	20	10	10	18	3	15	17	1455.4337	0.0016	0.1455E-02	6	16	6	11	17	3	14	1458.2994	-0.0010	0.9406E-03	
4	20	10	11	21	7	16	18	1455.4337	0.0016	0.2025E-02	3	17	1	17	18	3	16	1459.3051	0.0004	0.2170E-02	
3	22	9	14	23	9	16	19	1455.5760	0.0002	0.1605E-02	6	29	10	20	29	9	21	1458.4026	0.0000	0.8472E-01	
3	21	0	21	23	9	14	19	1455.5760	0.0002	0.1805E-02	3	29	10	20	29	9	21	1458.4769	0.0000	0.1324E+00	
3	18	2	17	19	2	20	19	1455.8074	0.0002	0.1703E-03	6	19	8	12	20	8	13	1458.4769	-0.0252R	0.1066E-03	
3	18	3	15	19	3	16	18	1455.8988	0.0002	0.3110E-01	3	19	8	11	20	8	12	1458.6833	-0.0252R	0.2142E-02	
3	20	13	7	21	13	8	28	1455.8988	0.0002	0.7355E-01	6	28	7	22	27	6	21	1458.7166	-0.0252R	0.2142E-02	
3	19	6	13	20	6	14	17	1455.8990	0.0016	0.5012E-04	3	17	4	13	18	4	14	1458.7239	-0.0010	0.9406E-03	
3	15	8	14	14	7	7	19	1455.8992	0.0016	0.6831E-02	3	19	13	7	20	13	7	1458.7334	-0.0008	0.2185E-01	
6	15	8	8	14	7	8	18	1455.9272	-0.0011	0.2882E-01	3	19	13	6	19	12	8	1458.7823	-0.0008	0.5847E-04	
3	18	0	18	14	7	7	19	1455.9272	-0.0011	0.3808E-01	3	19	0	19	20	13	7	1458.8185	-0.0008	0.5847E-04	
3	18	1	18	19	0	19	18	1456.0438	0.0004	0.7232E-01	3	18	12	7	19	12	8	1459.0187	0.0004	0.2406E-03	
3	18	4	14	19	4	15	18	1456.0438	0.0004	0.1133E+00	6	18	12	6	19	12	7	1459.0187	0.0004	0.5789E-04	
3	18	4	15	19	4	16	17	1456.4679	-0.0010	0.3380E-02	3	18	7	12	19	7	13	1459.0784	-0.0100*	0.4713E-02	
3	25	10	15	26	10	16	28	1456.5492	-0.0010	0.1862E-01	6	28	10	18	28	9	20	1459.2133	-0.0100*	0.1388E-01	
3	25	10	16	26	10	17	28	1456.5492	-0.0010	0.1264E-03	6	28	10	18	28	9	20	1459.2238	-0.0100*	0.1388E-01	
3	20	8	12	21	8	13	20	1456.6470	0.0000	0.1802E-02	3	20	9	11	21	9	12	1459.2238	-0.0100*	0.1424E-03	
3	27	7	21	26	6	20	27	1456.7173	0.0000	0.1802E-02	3	20	9	12	21	9	13	1459.2725	-0.0002	0.2861E-02	
3	19	7	13	20	7	14	18	1457.0480	-0.0241*	0.1249E-02	3	17	5	13	18	5	14	1459.4340	-0.0002	0.4483E-01	
3	19	7	12	20	7	13	18	1457.0480	-0.0241*	0.1145E-01	6	21	4	17	20	1	20	1459.4340	-0.0005	0.4483E-01	
3	24	1	24	24	1	23	17	1457.1766	0.0000	0.3063E-03	3	16	1	16	17	2	16	1459.5460	0.0004	0.4134E-01	
3	18	5	14	19	5	14	24	1457.1919	-0.0005	0.3837E-01	3	23	10	14	24	10	15	1459.7919	0.0002	0.1380E+00	
3	17	11	7	18	11	7	27	1457.3180	0.0000	0.3837E-01	6	27	10	17	27	9	18	1459.9606	0.0000	0.1877E-03	
3	20	0	20	20	2	19	23	1457.3180	0.0000	0.3538E-03	3	23	10	13	24	10	14	1459.9606	0.0000	0.1877E-03	
3	21	9	13	22	9	14	23	1457.3318	0.0000	0.2087E-03	6	23	1	23	23	1	22	1460.0024	-0.0010	0.3873E-03	
3	21	9	12	22	9	13	17	1457.4193	0.0002	0.2210E-02	3	17	8	10	18	7	9	1460.1857	-0.0010	0.2196E-01	
3	17	2	15	18	2	16	18	1457.4193	0.0002	0.3545E-01	3	18	0	18	18	6	13	1460.1949	0.0013	0.2724E-03	
3	17	1	16	18	1	17	17	1457.4761	0.0003	0.1183E+00	3	17	6	12	18	6	12	1460.3037	0.0013	0.9386E-02	
6	30	10	21	30	9	22	16	1457.7205	0.0003	0.7867E-04	3	16	2	15	17	2	16	1460.3037	0.0013	0.9386E-02	
6	30	10	20	30	9	21	16	1457.7205	0.0003	0.7867E-04	3	16	3	13	17	3	14	1460.3529	0.0000	0.4245E-01	
4	19	10	10	20	7	14	17	1458.0409	0.0002	0.5106E-03	3	16	3	13	17	3	14	1460.4377	0.0002	0.9971E-01	
4	19	10	9	20	7	13	16	1458.0409	0.0002	0.5106E-03	3	16	3	14	17	3	15	1460.5507	-0.0004	0.5145E-01	
6	16	8	8	15	7	9	26	1458.0653	-0.0009	0.2531E-01	6	26	10	16	26	9	18	1460.5793	-0.0004	0.9733E-01	
6	16	8	9	15	7	8	26	1458.0653	-0.0009	0.2531E-01	6	26	10	16	26	9	18	1460.6868	-0.0004	0.2439E-03	
3	17	2	16	18	2	17	18	1458.0767	0.0001	0.3684E-01	4	18	10	16	19	7	17	1460.6868	0.0001	0.2439E-03	
3	18	6	13	19	6	13	18	1458.0959	0.0015	0.8074E-02	4	18	10	9	19	7	13	1460.6870	0.0015	0.1633E-03	
3	17	3	14	18	3	15	17	1458.0959	0.0015	0.8074E-02	3	16	11	6	17	11	7	1460.6956	0.0015	0.1633E-03	
3	24	10	14	25	10	15	29	1458.1335	0.0001	0.8638E-01	6	29	7	23	28	6	22	1460.6956	0.0001	0.4120E-03	
3	24	10	15	25	10	16	29	1458.1742	0.0001	0.1618E-03	6	29	7	23	28	6	22	1460.6974	0.0001	0.4120E-03	
3	24	10	16	25	10	16	29	1458.1742	0.0001	0.1618E-03	6	29	7	22	28	6	23	1460.6980	0.0001	0.6991E-03	

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	16	1	16		17	1	17	1460.7087	0.0000	0.1526E+00	6	22	10	13		22	9	14	1463.4742		0.5989E-03
3	18	8	10		19	8	11	1460.7336		0.2503E-02	6	22	10	12		22	9	13	1463.4742		0.5989E-03
3	18	8	11		19	8	12	1460.7336		0.2503E-02	3	16	7	10		17	7	11	1463.5503	-0.0009*	0.1838E-01
3	16	4	12		17	4	13	1461.0013	-0.0003	0.2523E-01	3	16	7	9		17	7	10	1463.5503	-0.0009*	0.1838E-01
3	16	4	13		17	4	14	1461.0081	-0.0007	0.2523E-01	3	15	0	15		15	2	14	1463.5948		0.3449E-03
3	19	9	11		20	9	12	1461.1364		0.3148E-02	3	10	1	9		9	3	6	1463.7788		0.5394E-04
3	19	9	10		20	9	11	1461.1364		0.3148E-02	3	15	5	10		16	5	11	1463.9485	-0.0001	0.5817E-01
6	15	6	10		16	3	13	1461.2493		0.3480E-02	3	15	5	11		16	5	12	1463.9488	-0.0002	0.5817E-01
3	17	7	11		18	7	12	1461.3777	-0.0039*	0.1617E-01	3	15	11	6		16	11	6	1464.0909		0.4657E-03
3	17	7	10		18	7	11	1461.3777	-0.0039*	0.1617E-01	3	15	11	4		16	11	5	1464.0909		0.4657E-03
3	22	10	13		23	10	14	1461.4016		0.2519E-03	6	14	6	9		15	3	12	1464.1199		0.6534E-02
3	22	10	12		23	10	13	1461.4016		0.2519E-03	6	28	12	17		29	11	18	1464.1287		0.5516E-04
6	25	10	15		25	9	16	1461.4019		0.3123E-03	6	28	12	16		29	11	19	1464.1287		0.5516E-04
6	25	10	16		25	9	17	1461.4019		0.3123E-03	6	21	10	11		21	9	12	1464.1381		0.7205E-03
3	17	0	17		17	2	16	1461.4539		0.3020E-03	6	21	10	12		21	9	13	1464.1381		0.7205E-03
3	18	13	5		19	13	6	1461.6471		0.6615E-04	3	14	1	13		15	1	14	1464.2416	0.0001	0.1793E+00
3	18	13	6		19	13	7	1461.6471		0.6615E-04	6	22	4	18		21	1	21	1464.3223		0.2179E-03
3	16	5	11		17	5	12	1461.6862	-0.0002	0.5152E-01	3	14	2	12		15	2	13	1464.3683		0.5354E-01
3	16	5	12		17	5	13	1461.6864	-0.0003	0.5152E-01	6	19	8	12		18	7	11	1464.3746		0.1592E-01
6	15	6	9		16	3	14	1461.7950		0.7280E-02	6	19	8	11		18	7	12	1464.3746		0.1592E-01
3	15	1	14		16	1	15	1461.9724	0.0002	0.1586E+00	3	14	0	14		14	2	13	1464.4702		0.3534E-03
3	15	2	13		16	2	14	1462.0338	0.0002	0.4744E-01	6	14	6	8		15	3	13	1464.4875		0.1376E-01
3	17	12	5		18	12	6	1462.0388		0.6580E-04	3	17	13	5		18	13	6	1464.4924		0.7203E-04
3	17	12	6		18	12	7	1462.0388		0.6580E-04	3	17	13	4		18	13	5	1464.4924		0.7203E-04
6	24	10	14		24	9	15	1462.1053		0.3941E-03	3	20	10	11		21	10	12	1464.5944		0.3670E-03
6	24	10	15		24	9	16	1462.1053		0.3941E-03	3	20	10	10		21	10	11	1464.5944		0.3670E-03
6	18	8	10		17	7	11	1462.2888	-0.0008	0.1882E-01	3	15	6	10		16	6	11	1464.7534	0.0011	0.1202E-01
6	18	8	11		17	7	10	1462.2888	-0.0008	0.1882E-01	3	15	6	9		16	6	10	1464.7534	0.0011	0.1202E-01
3	16	6	10		17	6	11	1462.5228	0.0012	0.1072E-01	6	20	10	10		20	9	11	1464.7874		0.8517E-03
3	16	6	11		17	6	12	1462.5228	0.0012	0.1072E-01	6	20	10	11		20	9	12	1464.7874		0.8517E-03
3	16	0	16		16	2	15	1462.5885		0.3270E-03	3	16	8	9		17	8	10	1464.8785	-0.0066R	0.3219E-02
3	15	2	14		16	2	15	1462.6366	0.0000	0.4843E-01	3	16	8	8		17	8	9	1464.8785	-0.0066R	0.3219E-02
6	30	7	24		29	6	23	1462.6628		0.5126E-03	3	17	9	9		18	9	10	1464.9021		0.4147E-02
6	30	7	23		29	6	24	1462.6633		0.5129E-03	3	17	9	8		18	9	9	1464.9021		0.4147E-02
3	15	3	12		16	3	13	1462.7513	0.0003	0.1127E+00	3	14	2	13		15	2	14	1464.9281	-0.0001	0.5439E-01
6	23	10	13		23	9	14	1462.7983		0.4897E-03	3	16	12	4		17	12	5	1465.0396		0.7203E-04
6	23	10	14		23	9	15	1462.7983		0.4897E-03	3	16	12	5		17	12	6	1465.0396		0.7203E-04
3	17	8	9		18	8	10	1462.7983	-0.0108R	0.2688E-02	3	14	3	11		15	3	12	1465.0759	0.0003	0.1238E+00
3	17	8	10		18	8	11	1462.7983	-0.0108R	0.2688E-02	3	14	0	14		15	0	15	1465.0950	-0.0003	0.6563E-01
3	15	0	15		16	0	16	1462.8240	-0.0004	0.5854E-01	3	14	3	12		15	3	13	1465.1737	0.0007	0.1167E+00
3	22	1	22		22	1	21	1462.8276		0.4863E-03	3	13	0	13		13	2	12	1465.2150		0.3506E-03
3	15	3	13		16	3	14	1462.8676	0.0005	0.1090E+00	3	14	1	14		15	1	15	1465.3221	-0.0002	0.1937E+00
3	21	10	12		22	10	13	1463.0027		0.3068E-03	6	19	10	9		19	9	10	1465.4207		0.9882E-03
3	21	10	11		22	10	12	1463.0027		0.3068E-03	6	19	10	10		19	9	11	1465.4207		0.9882E-03
3	18	9	9		19	9	10	1463.0125		0.3651E-02	3	14	4	10		15	4	11	1465.5822	0.0008	0.3196E-01
3	18	9	10		19	9	11	1463.0125		0.3651E-02	3	14	4	11		15	4	12	1465.5853	-0.0023	0.3196E-01
3	15	1	15		16	1	16	1463.0153	-0.0002	0.1732E+00	3	21	1	21		21	1	20	1465.6385		0.6070E-03
3	15	4	11		16	4	12	1463.2874	0.0010	0.2864E-01	3	15	7	9		16	7	10	1465.7340	0.0006*	0.2044E-01
3	15	4	12		16	4	13	1463.2921	-0.0037	0.2864E-01	3	15	7	8		16	7	9	1465.7340	0.0006*	0.2044E-01
4	17	10	8		18	7	12	1463.3317		0.7918E-04	6	27	12	15		28	11	18	1465.7793		0.7242E-04
4	17	10	7		18	7	11	1463.3317		0.7918E-04	6	27	12	16		28	11	17	1465.7793		0.7242E-04

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	12	0	12		12	2	11	1465.8326		0.3358E-03	3	14	7	7		15	7	8	1467.9304	0.0013*	0.2221E-01
6	18	10	8		18	9	9	1466.0374		0.1124E-02	3	15	12	3		16	12	4	1468.0198		0.7504E-04
6	18	10	9		18	9	10	1466.0374		0.1124E-02	3	15	12	4		16	12	5	1468.0198		0.7504E-04
3	19	10	10		20	10	11	1466.1753		0.4308E-03	6	14	10	5		14	9	6	1468.3110		0.1444E-02
3	19	10	9		20	10	10	1466.1753		0.4308E-03	6	14	10	4		14	9	5	1468.3110		0.1444E-02
3	14	5	10		15	5	11	1466.2209	-0.0001	0.6448E-01	3	20	1	20		20	1	19	1468.4207		0.7534E-03
3	14	5	9		15	5	10	1466.2209	0.0000	0.6448E-01	6	21	8	14		20	7	13	1468.4948	0.0008	0.1097E-01
3	11	0	11		11	2	10	1466.3296		0.3095E-03	6	21	8	13		20	7	14	1468.4948	0.0008	0.1097E-01
6	20	8	13		19	7	12	1466.4432	-0.0002	0.1330E-01	3	13	5	9		14	5	10	1468.5033	0.0000	0.7006E-01
6	20	8	12		19	7	13	1466.4432	-0.0002	0.1330E-01	3	13	5	8		14	5	9	1468.5033	0.0000	0.7006E-01
3	13	1	12		14	1	13	1466.5261	0.0000	0.1994E+00	3	15	9	6		16	9	7	1468.7273		0.4977E-02
6	17	10	8		17	9	9	1466.6360		0.1249E-02	3	15	9	7		16	9	8	1468.7273		0.4977E-02
6	17	10	7		17	9	8	1466.6360		0.1249E-02	6	13	10	3		13	9	4	1468.8242		0.1394E-02
3	10	0	10		10	2	9	1466.7153		0.2734E-03	6	13	10	4		13	9	5	1468.8242		0.1394E-02
3	13	2	11		14	2	12	1466.7197	0.0000	0.5938E-01	3	12	1	11		13	1	12	1468.8264	0.0000	0.2181E+00
3	16	9	8		17	9	9	1466.8065		0.4604E-02	6	25	12	14		26	11	15	1469.0605		0.1187E-03
3	16	9	7		17	9	8	1466.8065		0.4604E-02	6	25	12	13		26	11	16	1469.0605		0.1187E-03
6	13	6	8		14	3	11	1466.9130		0.1774E-01	3	12	2	10		13	2	11	1469.0661	-0.0001	0.8467E-01
3	15	8	7		16	8	8	1466.9746	-0.0036	0.3533E-02	3	14	8	6		15	8	7	1469.0673		0.3778E-02
3	15	8	8		16	8	9	1466.9746	-0.0036	0.3533E-02	3	14	8	7		15	8	8	1469.0673		0.3778E-02
3	14	6	9		15	6	10	1466.9955	0.0010	0.1321E-01	3	13	6	8		14	6	9	1469.2494	0.0008	0.1419E-01
3	14	6	8		15	6	9	1466.9955	0.0010	0.1321E-01	3	13	6	7		14	6	8	1469.2494	0.0008	0.1419E-01
3	9	0	9		9	2	8	1467.0022		0.2304E-03	3	28	2	27		28	2	26	1469.2629		0.5184E-04
3	11	1	10		10	3	7	1467.0187		0.7205E-04	6	23	4	19		22	1	22	1469.2764		0.1945E-03
6	13	6	7		14	3	12	1467.1366		0.3688E-01	3	17	10	7		18	10	8	1469.2992		0.5567E-03
3	8	0	8		8	2	7	1467.2042		0.1842E-03	3	17	10	8		18	10	9	1469.2992		0.5567E-03
6	16	10	7		16	9	8	1467.2155		0.1354E-02	6	12	10	3		12	9	4	1469.3121		0.1251E-02
6	16	10	6		16	9	7	1467.2155		0.1354E-02	6	12	10	2		12	9	3	1469.3121		0.1251E-02
3	13	2	12		14	2	13	1467.2278	0.0000	0.6007E-01	3	12	2	11		13	2	12	1469.5361	0.0000	0.6520E-01
3	16	13	4		17	13	5	1467.3177		0.7458E-04	3	12	3	9		13	3	10	1469.5782	-0.0010	0.8784E-01
3	16	13	3		17	13	4	1467.3177		0.7458E-04	3	12	0	12		13	0	13	1469.6367	0.0000	0.7671E-01
3	7	0	7		7	2	6	1467.3364		0.1384E-03	3	12	3	10		13	3	11	1469.6609	-0.0011	0.1192E+00
3	13	0	13		14	0	14	1467.3652	-0.0002	0.7245E-01	6	10	9	1		9	8	2	1469.7112		0.9732E-02
3	8	0	8		8	2	5	1467.4139		0.9663E-04	6	10	9	2		9	8	1	1469.7112		0.9732E-02
3	13	3	10		14	3	11	1467.4191	0.0007	0.1259E+00	6	11	10	2		11	9	3	1469.7729		0.9911E-03
6	26	12	14		27	11	17	1467.4233		0.9353E-04	6	11	10	1		11	9	2	1469.7729		0.9911E-03
6	26	12	15		27	11	16	1467.4233		0.9353E-04	6	12	6	7		13	3	10	1469.8401		0.6746E-01
3	5	0	5		5	2	4	1467.4512		0.6134E-04	3	12	1	12		13	1	13	1469.9391	-0.0001	0.2309E+00
3	14	11	3		15	11	4	1467.5106		0.5059E-03	6	12	6	6		13	3	11	1469.9695		0.3614E-01
3	14	11	4		15	11	5	1467.5106		0.5059E-03	3	15	13	2		16	13	3	1470.1226		0.7171E-04
3	13	3	11		14	3	12	1467.5142	0.0009	0.1048E+00	3	15	13	3		16	13	4	1470.1226		0.7171E-04
6	9	9	1		8	8	0	1467.5348		0.1032E-01	3	13	7	7		14	7	8	1470.1403	0.0013*	0.2352E-01
6	9	9	0		8	8	1	1467.5348		0.1032E-01	3	13	7	6		14	7	7	1470.1403	0.0013*	0.2352E-01
3	13	1	13		14	1	14	1467.6299	-0.0002	0.2132E+00	3	12	4	8		13	4	9	1470.1979	0.0003	0.3756E-01
3	18	10	9		19	10	10	1467.7443		0.4953E-03	3	12	4	9		13	4	10	1470.1992	-0.0010	0.3756E-01
3	18	10	8		19	10	9	1467.7443		0.4953E-03	6	10	10	1		10	9	2	1470.2050		0.5854E-03
6	15	10	5		15	9	6	1467.7742		0.1425E-02	6	10	10	0		10	9	1	1470.2050		0.5854E-03
6	15	10	6		15	9	7	1467.7742		0.1425E-02	3	12	1	11		11	3	8	1470.2756		0.9172E-04
3	13	4	9		14	4	10	1467.8856	0.0006	0.3500E-01	6	22	8	14		21	7	15	1470.5291	0.0012	0.8938E-02
3	13	4	10		14	4	11	1467.8877	-0.0014	0.3500E-01	6	22	8	15		21	7	14	1470.5291	0.0012	0.8938E-02
3	14	7	8		15	7	9	1467.9304	0.0013*	0.2221E-01	3	14	9	6		15	9	7	1470.6661		0.5217E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	14	9	5		15	9	6	1470.8661		0.5217E-02	3	14	10	5		15	10	6	1473.8484		0.6639E-03
6	24	12	12		25	11	15	1470.8906		0.1480E-03	3	14	10	4		15	10	5	1473.8484		0.6639E-03
6	24	12	13		25	11	14	1470.8906		0.1480E-03	3	10	2	8		11	2	9	1473.8555	0.0000	0.7231E-01
3	12	5	7		13	5	8	1470.7959	0.0000	0.7446E-01	3	13	12	2		14	12	3	1473.9124		0.6201E-04
3	12	5	8		13	5	9	1470.7959	0.0000	0.7446E-01	3	13	12	1		14	12	2	1473.9124		0.6201E-04
3	16	10	6		17	10	7	1470.8376		0.6098E-03	6	22	12	11		23	11	12	1473.9268		0.2167E-03
3	16	10	7		17	10	8	1470.8376		0.6098E-03	6	22	12	10		23	11	13	1473.9268		0.2167E-03
3	13	11	3		14	11	4	1470.9834		0.5176E-03	6	12	9	4		11	8	3	1473.9951		0.8402E-02
3	13	11	2		14	11	3	1470.9834		0.5176E-03	6	12	9	3		11	8	4	1473.9951		0.8402E-02
3	14	12	3		15	12	4	1470.9779		0.7285E-04	3	10	2	9		11	2	10	1474.1799	0.0000	0.7258E-01
3	14	12	2		15	12	3	1470.9779		0.7285E-04	3	10	0	10		11	0	11	1474.1937	0.0001	0.8816E-01
3	11	1	10		12	1	11	1471.1429	-0.0001	0.2342E+00	3	10	3	7		11	3	8	1474.3754	-0.0005	0.1691E+00
3	19	1	19		19	1	18	1471.1680		0.9307E-03	3	10	3	8		11	3	9	1474.3954	-0.0003	0.1693E+00
3	13	8	5		14	8	6	1471.2173	-0.0004	0.3919E-02	6	24	4	20		23	1	23	1474.4158		0.1896E-03
3	13	8	6		14	8	7	1471.2173	-0.0004	0.3919E-02	3	12	11	2		13	11	3	1474.4636		0.4767E-03
3	11	2	9		12	2	10	1471.4656	-0.0001	0.6909E-01	3	12	11	1		13	11	2	1474.4636		0.4767E-03
3	12	6	7		13	6	8	1471.5150	0.0007	0.1488E-01	6	24	8	16		23	7	17	1474.5475		0.5707E-02
3	12	6	6		13	6	7	1471.5150	0.0007	0.1488E-01	6	24	8	17		23	7	16	1474.5475		0.5707E-02
3	11	2	10		12	2	11	1471.8534	0.0002	0.6948E-01	3	10	1	10		11	1	11	1474.5636	0.0000	0.2568E+00
6	11	9	2		10	8	3	1471.8645		0.9089E-02	3	11	7	4		12	7	5	1474.8022	0.0013*	0.2394E-01
6	11	9	3		10	8	2	1471.8645		0.9089E-02	3	11	7	5		12	7	6	1474.8022	0.0013*	0.2394E-01
3	11	0	11		12	0	12	1471.9120	0.0000	0.8405E-01	3	12	9	3		13	9	4	1474.6042		0.5051E-02
3	11	3	8		12	3	9	1472.0109	-0.0005	0.1568E+00	3	12	9	4		13	9	5	1474.6042		0.5051E-02
3	11	3	9		12	3	10	1472.0432	-0.0005	0.1568E+00	3	10	4	6		11	4	7	1474.8488	0.0000	0.4046E-01
3	27	2	26		27	2	25	1472.1089		0.6993E-04	3	10	4	7		11	4	8	1474.8492	-0.0004	0.4046E-01
3	11	1	11		12	1	12	1472.2502	-0.0001	0.2457E+00	3	26	2	25		26	2	24	1474.8674		0.9437E-04
6	23	12	12		24	11	13	1472.3129		0.1809E-03	6	10	6	5		11	3	8	1475.0950		0.1696E-02
6	23	12	11		24	11	14	1472.3129		0.1809E-03	6	10	6	4		11	3	9	1475.1594		0.1509E-02
3	15	10	5		16	10	6	1472.3557		0.6481E-03	3	13	10	4		14	10	5	1475.3083		0.6480E-03
3	15	10	6		16	10	7	1472.3557		0.6481E-03	3	13	10	3		14	10	4	1475.3083		0.6480E-03
3	12	7	5		13	7	6	1472.3640	0.0012*	0.2417E-01	3	10	5	5		11	5	6	1475.4117	-0.0001	0.7775E-01
3	12	7	6		13	7	7	1472.3640	0.0012*	0.2417E-01	3	10	5	6		11	5	7	1475.4117	-0.0001	0.7775E-01
6	11	6	6		12	3	9	1472.4512		0.8624E-02	6	21	12	10		22	11	11	1475.5315		0.2538E-03
3	11	4	7		12	4	8	1472.5189	0.0001	0.3948E-01	6	21	12	9		22	11	12	1475.5315		0.2538E-03
3	11	4	8		12	4	9	1472.5197	-0.0007	0.3948E-01	3	11	8	4		12	8	5	1475.5319	0.0002	0.3726E-02
6	23	8	15		22	7	16	1472.5468		0.7188E-02	3	11	8	3		12	8	4	1475.5319	0.0002	0.3726E-02
6	23	8	16		22	7	15	1472.5468		0.7188E-02	3	9	1	8		10	1	9	1475.8263	0.0000	0.2544E+00
6	11	6	5		12	3	10	1472.5554		0.6317E-02	3	10	6	5		11	6	6	1476.0823	0.0003	0.1486E-01
3	13	9	4		14	9	5	1472.6245		0.5264E-02	3	10	6	4		11	6	5	1476.0823	0.0003	0.1486E-01
3	13	9	5		14	9	6	1472.6245		0.5264E-02	6	13	9	5		12	8	4	1476.1036		0.7679E-02
3	14	13	2		15	13	3	1472.9084		0.6073E-04	6	13	9	4		12	8	5	1476.1036		0.7679E-02
3	14	13	1		15	13	2	1472.9084		0.6073E-04	3	9	2	7		10	2	8	1476.2534	0.0000	0.7401E-01
3	11	5	6		12	5	7	1473.0988	-0.0001	0.7720E-01	3	17	1	17		17	1	16	1476.4355		0.1402E-02
3	11	5	7		12	5	8	1473.0988	-0.0001	0.7720E-01	3	9	0	9		10	0	10	1476.4845	0.0001	0.9067E-01
3	12	8	4		13	8	5	1473.3654	0.0001	0.3917E-02	3	9	2	8		10	2	9	1476.5159	0.0001	0.7418E-01
3	12	8	5		13	8	6	1473.3654	0.0001	0.3917E-02	6	25	8	17		24	7	18	1476.5315		0.4474E-02
3	10	1	9		11	1	10	1473.4783	0.0001	0.2466E+00	6	25	8	18		24	7	17	1476.5315		0.4474E-02
3	13	1	12		12	3	9	1473.5315		0.1119E-03	3	11	9	3		12	9	4	1476.6073		0.4502E-02
3	11	6	5		12	6	6	1473.7926	0.0004	0.1514E-01	3	11	9	2		12	9	3	1476.6073		0.4502E-02
3	11	6	6		12	6	7	1473.7926	0.0004	0.1514E-01	3	12	10	2		13	10	3	1476.7236		0.5896E-03
3	18	1	18		18	1	17	1473.8348		0.1145E-02	3	12	10	3		13	10	4	1476.7236		0.5896E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	9	3	6		10	3	7	1476.7352	-0.0002	0.1724E+00	3	8	5	3		9	5	4	1480.0887	0.0000	0.7005E-01
3	9	3	7		10	3	8	1476.7480	-0.0002	0.1725E+00	6	15	9	6		14	8	7	1480.2556		0.6191E-02
3	14	1	13		13	3	10	1476.7665		0.1315E-03	6	15	9	7		14	8	6	1480.2556		0.6191E-02
3	10	7	3		11	7	4	1476.8550	0.0006*	0.2259E-01	6	18	12	7		19	11	8	1480.2792		0.3454E-03
3	10	7	4		11	7	5	1476.8550	0.0006*	0.2259E-01	6	18	12	6		19	11	9	1480.2792		0.3454E-03
3	9	1	9		10	1	10	1476.8798	0.0001	0.2627E+00	6	8	6	3		9	3	6	1480.3044		0.1171E-03
6	20	12	8		21	11	11	1477.1261		0.2898E-03	6	8	6	2		9	3	7	1480.3245		0.1149E-03
6	20	12	9		21	11	10	1477.1261		0.2898E-03	6	27	8	20		26	7	19	1480.4500		0.2646E-02
3	9	4	5		10	4	6	1477.1875	-0.0002	0.4030E-01	6	27	8	19		26	7	20	1480.4500		0.2646E-02
3	9	4	6		10	4	7	1477.1877	-0.0004	0.4030E-01	3	7	1	6		8	1	7	1480.5770	0.0000	0.2522E+00
3	25	2	24		25	2	23	1477.5232		0.1289E-03	6	17	5	13		16	2	14	1480.6895		0.5485E-04
6	9	6	4		10	3	7	1477.7137		0.4399E-03	3	9	9	0		10	9	1	1480.6910		0.2069E-02
3	10	8	2		11	8	3	1477.7177	0.0000	0.3296E-02	3	9	9	1		10	9	2	1480.6910		0.2069E-02
3	10	8	3		11	8	4	1477.7177	0.0000	0.3296E-02	3	8	6	2		9	6	3	1480.6981	-0.0002	0.1212E-01
3	9	5	4		10	5	5	1477.7351	-0.0001	0.7556E-01	3	8	6	3		9	6	4	1480.6981	-0.0002	0.1212E-01
3	9	5	5		10	5	6	1477.7351	-0.0001	0.7556E-01	3	7	2	5		8	2	6	1481.0647	0.0000	0.7169E-01
6	9	6	3		10	3	8	1477.7509		0.4196E-03	3	7	0	7		8	0	8	1481.1030	0.0001	0.8972E-01
3	11	11	0		12	11	1	1478.0363		0.3349E-03	3	7	2	6		8	2	7	1481.2166	0.0000	0.7174E-01
3	11	11	1		12	11	2	1478.0363		0.3349E-03	3	15	1	15		15	1	14	1481.3521		0.2085E-02
3	11	10	1		12	10	2	1478.0743		0.4759E-03	3	8	7	2		9	7	3	1481.4058	-0.0003*	0.1542E-01
3	11	10	2		12	10	3	1478.0743		0.4759E-03	3	8	7	1		9	7	2	1481.4058	-0.0003*	0.1542E-01
6	14	9	6		13	8	5	1478.1902		0.6937E-02	3	7	3	4		8	3	5	1481.4680	0.0016	0.1618E+00
6	14	9	5		13	8	6	1478.1902		0.6937E-02	3	7	3	5		8	3	6	1481.4725	-0.0029	0.1618E+00
3	8	1	7		9	1	8	1478.1932	0.0002	0.2566E+00	3	7	1	7		8	1	8	1481.5219	0.0000	0.2571E+00
3	9	6	4		10	6	5	1478.3842	0.0001	0.1390E-01	6	17	12	6		18	11	7	1481.8337		0.3664E-03
3	9	6	3		10	6	4	1478.3842	0.0001	0.1390E-01	6	17	12	5		18	11	8	1481.8337		0.3664E-03
6	26	8	18		25	7	19	1478.4990		0.3463E-02	3	7	4	4		8	4	5	1481.8915	0.0000	0.3558E-01
6	26	8	19		25	7	18	1478.4990		0.3463E-02	3	7	4	3		8	4	4	1481.8915	0.0000	0.3558E-01
3	10	9	2		11	9	3	1478.6356		0.3537E-02	6	18	5	14		17	2	15	1481.9174		0.6132E-04
3	10	9	1		11	9	2	1478.6356		0.3537E-02	3	8	8	0		9	8	1	1482.1490		0.1501E-02
3	8	2	6		9	2	7	1478.6572	-0.0001	0.7389E-01	3	8	8	1		9	8	2	1482.1490		0.1501E-02
6	19	12	7		20	11	10	1478.7092		0.3217E-03	6	16	9	7		15	8	8	1482.3003		0.5457E-02
6	19	12	8		20	11	9	1478.7092		0.3217E-03	6	16	9	8		15	8	7	1482.3003		0.5457E-02
3	8	0	8		9	0	9	1478.7869	0.0000	0.9128E-01	6	28	8	20		27	7	21	1482.3845		0.1996E-02
3	8	2	7		9	2	8	1478.8615	0.0000	0.7399E-01	6	28	8	21		27	7	20	1482.3845		0.1996E-02
3	16	1	16		16	1	15	1478.9458		0.1713E-02	3	7	5	2		8	5	3	1482.4126	-0.0001	0.6061E-01
3	8	3	5		9	3	6	1479.0988	0.0001	0.1700E+00	3	7	5	3		8	5	4	1482.4126	-0.0001	0.6061E-01
3	8	3	6		9	3	7	1479.1068	-0.0003	0.1700E+00	3	23	2	22		23	2	21	1482.4751		0.2268E-03
3	9	7	2		10	7	3	1479.1228	0.0002*	0.1985E-01	3	6	1	5		7	1	6	1482.9775	0.0001	0.2407E+00
3	9	7	3		10	7	4	1479.1228	0.0002*	0.1985E-01	3	7	6	2		8	6	3	1483.0245	-0.0003	0.9357E-02
3	8	1	8		9	1	9	1479.1991	-0.0003	0.2631E+00	3	7	6	1		8	6	2	1483.0245	-0.0003	0.9357E-02
3	10	10	0		11	10	1	1479.3230		0.2900E-03	6	19	5	15		18	2	16	1483.0358		0.6683E-04
3	10	10	1		11	10	2	1479.3230		0.2900E-03	3	16	1	15		15	3	12	1483.0795		0.1630E-03
3	8	4	4		9	4	5	1479.5352	-0.0001	0.3875E-01	6	18	12	4		17	11	7	1483.3699		0.3494E-03
3	8	4	5		9	4	6	1479.5352	-0.0002	0.3875E-01	6	18	12	5		17	11	8	1483.3699		0.3494E-03
6	25	4	21		24	1	24	1479.7484		0.1445E-03	3	8	0	6		7	0	7	1483.4341	0.0000	0.8582E-01
3	9	8	1		10	8	2	1479.9232	-0.0004	0.2575E-02	3	6	2	4		7	2	5	1483.4748	0.0000	0.6720E-01
3	9	8	2		10	8	3	1479.9232	-0.0004	0.2575E-02	3	6	2	5		7	2	6	1483.5817	0.0000	0.6722E-01
3	15	1	14		14	3	11	1479.9576		0.1490E-03	3	14	1	14		14	1	13	1483.6422		0.2533E-02
3	24	2	23		24	2	22	1480.0829		0.1700E-03	3	7	7	0		8	7	1	1483.7042	-0.0006*	0.8949E-02
3	8	5	4		9	5	5	1480.0887	0.0000	0.7005E-01	3	7	7	1		8	7	2	1483.7042	-0.0006*	0.8949E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	6	3	3		7	3	4	1483.8438		0.1468E+00	3	4	2	2		5	2	3	1488.2990		0.5065E-01
3	6	3	4		7	3	5	1483.8461		0.1468E+00	6	19	9	11		18	8	10	1488.3145	0.0001	0.3463E-02
3	6	1	6		7	1	7	1483.8481		0.2441E+00	6	19	9	10		18	8	11	1488.3145		0.3463E-02
6	20	5	16		19	2	17	1484.0542		0.7120E-04	3	9	0	9		8	2	6	1488.3251		0.1084E-03
3	7	0	7		6	2	4	1484.1544		0.5685E-04	3	4	2	3		5	2	4	1488.3409	0.0000	0.5065E-01
3	6	4	3		7	4	4	1484.2568	0.0000	0.3054E-01	3	4	1	4		5	1	5	1488.5123	0.0001	0.1964E+00
3	6	4	2		7	4	3	1484.2568	0.0000	0.3054E-01	3	4	3	1		5	3	2	1488.6166	0.0005	0.9476E-01
6	29	8	22		28	7	21	1484.3027		0.1487E-02	3	4	3	2		5	3	3	1488.6169	0.0000	0.9476E-01
6	29	8	21		28	7	22	1484.3029		0.1487E-02	3	20	2	19		20	2	18	1488.8508		0.5238E-03
6	17	9	9		16	8	8	1484.3246		0.4750E-02	6	26	5	22		25	2	23	1488.8660		0.6015E-04
6	17	9	8		16	8	9	1484.3246		0.4750E-02	3	18	1	17		17	3	14	1489.0017		0.1760E-03
3	22	2	21		22	2	20	1484.7493		0.3012E-03	3	4	4	1		5	4	2	1489.0142	0.0002	0.1342E-01
3	6	5	1		7	5	2	1484.7670	-0.0002	0.4651E-01	3	4	4	0		5	4	1	1489.0142	0.0002	0.1342E-01
3	6	5	2		7	5	3	1484.7670	-0.0002	0.4651E-01	6	12	12	0		13	11	3	1489.2115		0.8628E-04
6	15	12	3		16	11	6	1484.8835		0.3198E-03	6	12	12	1		13	11	2	1489.2115		0.8628E-04
6	15	12	4		16	11	5	1484.8835		0.3198E-03	6	18	5	13		17	2	16	1489.5103		0.5998E-04
6	21	5	17		20	2	18	1484.9827		0.7435E-04	6	27	5	23		26	2	24	1489.5704		0.5722E-04
6	26	4	22		25	1	25	1485.2823		0.1205E-03	3	30	3	28		30	3	27	1489.6073		0.1287E-03
3	6	6	1		7	6	2	1485.3632	-0.0004	0.5411E-02	3	11	1	11		11	1	10	1489.7229	0.0001	0.4491E-02
3	6	6	0		7	6	1	1485.3632	-0.0004	0.5411E-02	3	10	0	10		9	2	7	1490.1729		0.1324E-03
3	5	1	4		6	1	5	1485.3949	0.0001	0.2218E+00	3	3	1	2		4	1	3	1490.2784	0.0001	0.1612E+00
3	5	0	5		6	0	6	1485.7813	-0.0001	0.7949E-01	6	20	9	11		19	8	12	1490.2808		0.2901E-02
6	13	1	13		13	1	12	1485.8063		0.3069E-02	6	20	9	12		19	8	11	1490.2808		0.2901E-02
6	22	5	18		21	2	19	1485.8325		0.7639E-04	6	28	5	24		27	2	25	1490.3087		0.5259E-04
3	5	2	3		6	2	4	1485.8861	0.0000	0.6024E-01	3	3	0	3		4	0	4	1490.5234	0.0001	0.5973E-01
3	5	2	4		6	2	5	1485.9585	0.0001	0.6024E-01	3	19	2	18		19	2	17	1490.6642		0.6856E-03
3	17	1	16		16	3	13	1486.1042		0.1723E-03	3	3	2	1		4	2	2	1490.7131	0.0002	0.3817E-01
3	5	1	6		6	1	6	1486.1783	0.0000	0.2239E+00	3	3	2	2		4	2	3	1490.7350	0.0002	0.3817E-01
6	30	8	23		29	7	22	1486.2048		0.1094E-02	3	3	1	3		4	1	4	1490.8499	0.0001	0.1617E+00
6	30	8	22		29	7	23	1486.2050		0.1094E-02	3	3	3	0		4	3	1	1491.0140	0.0003	0.5485E-01
3	5	3	2		6	3	3	1486.2264	0.0007	0.1249E+00	3	3	3	1		4	3	2	1491.0142	0.0002	0.5485E-01
3	5	3	3		6	3	4	1486.2275	-0.0004	0.1249E+00	6	27	4	23		26	1	26	1491.0267		0.9850E-04
3	8	0	8		7	2	5	1486.3083		0.8200E-04	3	10	1	10		10	1	9	1491.4629	-0.0002	0.5430E-02
6	18	9	10		17	8	9	1486.3291		0.4082E-02	3	29	3	27		29	3	26	1491.4666		0.1839E-03
6	18	9	9		17	8	10	1486.3291		0.4082E-02	3	19	1	18		18	3	15	1491.7404		0.1734E-03
6	14	12	2		15	11	5	1486.3685		0.2643E-03	3	11	0	11		10	2	8	1491.8209		0.1506E-03
6	14	12	3		15	11	4	1486.3685		0.2643E-03	6	19	5	14		18	2	17	1492.1989		0.6449E-04
6	23	5	19		22	2	20	1486.8106		0.7794E-04	6	21	9	12		20	8	13	1492.2288		0.2398E-02
3	5	4	1		6	4	2	1486.8310	0.0002	0.2330E-01	6	21	9	13		20	8	12	1492.2288		0.2398E-02
3	5	4	2		6	4	3	1486.8310	0.0002	0.2330E-01	3	18	2	17		18	2	16	1492.3131		0.8924E-03
6	21	2	20		21	2	19	1486.8770		0.3982E-03	3	2	1	1		3	1	2	1492.7441	0.0000	0.1196E+00
6	17	5	12		16	2	15	1486.8816		0.5417E-04	3	2	0	2		3	0	3	1492.9175	0.0000	0.4673E-01
3	5	5	1		6	5	2	1487.1317	0.0000	0.2682E-01	3	9	1	9		9	1	8	1493.0511	-0.0002	0.6574E-02
3	5	5	0		6	5	1	1487.1317	0.0000	0.2682E-01	3	2	2	0		3	2	1	1493.1293	0.0002	0.2211E-01
6	24	5	20		23	2	21	1487.2582		0.8080E-04	3	2	2	1		3	2	2	1493.1385	0.0002	0.2211E-01
6	13	12	1		14	11	4	1487.8160		0.1835E-03	3	28	3	26		28	3	25	1493.1555		0.2610E-03
6	13	12	2		14	11	3	1487.8160		0.1835E-03	3	2	1	2		3	1	3	1493.1910	-0.0001	0.1198E+00
3	4	1	3		5	1	4	1487.8286	-0.0002	0.1952E+00	3	12	0	12		11	2	9	1493.2401		0.1603E-03
3	12	1	12		12	1	11	1487.8354		0.3714E-02	3	17	2	16		17	2	15	1493.7944		0.1155E-02
3	4	0	4		5	0	5	1488.1444	0.0001	0.0774E-01	6	22	9	13		21	8	14	1494.1589		0.1957E-02
6	25	5	21		24	2	22	1488.2043		0.5617E-04	6	22	9	14		21	8	13	1494.1589		0.1957E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	20	1	19		19	3	16	1494.2876		0.1647E-03	6	25	9	16		24	8	17	1499.8464		0.9843E-03
3	13	0	13		12	2	10	1494.4053		0.1606E-03	6	25	9	17		24	8	16	1499.8464		0.9843E-03
6	10	10	0		9	9	1	1494.4294	-0.0230*	0.1673E-01	3	18	11	7		18	11	8	1499.8805		0.1426E-03
6	10	10	1		9	9	0	1494.4294	-0.0230*	0.1673E-01	3	18	11	8		18	11	7	1499.8805		0.1426E-03
3	8	1	8		8	1	7	1494.4844	-0.0002	0.7985E-02	6	16	6	10		16	3	13	1499.8915		0.2509E-03
3	27	3	25		27	3	24	1494.6698		0.3680E-03	3	9	2	8		9	2	7	1499.9735		0.7290E-02
6	20	5	15		19	2	18	1494.9552		0.6745E-04	3	1	1	1		1	1	0	1500.0721	0.0000	0.7047E-01
3	16	2	15		16	2	14	1495.1071		0.1485E-02	3	8	2	7		8	2	6	1500.1843		0.9007E-02
3	1	1	0		2	1	1	1495.2253	0.0001	0.6941E-01	3	21	3	19		21	3	18	1500.2283		0.2400E-02
3	14	0	14		13	2	11	1495.2964		0.1519E-03	6	13	10	4		12	9	3	1500.3119	-0.0163*	0.1379E-01
3	19	0	19		18	2	16	1495.3242		0.5640E-04	6	13	10	3		12	9	4	1500.3119	-0.0163*	0.1379E-01
3	1	0	1		2	0	2	1495.3252	-0.0001	0.3211E-01	3	7	2	6		7	2	5	1500.3208		0.1115E-01
3	1	1	1		2	1	2	1495.5354	0.0001	0.6940E-01	6	15	6	9		15	3	12	1500.3503		0.5073E-03
3	7	1	7		7	1	6	1495.7607	-0.0003	0.9754E-02	3	6	2	5		6	2	4	1500.3997		0.1390E-01
3	15	0	15		14	2	12	1495.8988		0.1363E-03	3	1	1	0		1	1	1	1500.4065	0.0000	0.7036E-01
3	18	0	18		17	2	15	1495.9127		0.7475E-04	3	2	2	1		2	2	0	1500.4237		0.4526E-01
3	26	3	24		26	3	23	1496.0085		0.5148E-03	3	2	2	0		2	2	1	1500.4287		0.4525E-01
6	23	9	14		22	8	15	1496.0717		0.1577E-02	3	5	2	4		5	2	3	1500.4366		0.1755E-01
6	23	9	15		22	8	14	1496.0717		0.1577E-02	3	3	2	2		3	2	1	1500.4377		0.3070E-01
3	16	0	16		15	2	13	1496.2037		0.1165E-03	3	4	2	3		4	2	2	1500.4453		0.2271E-01
3	17	0	17		16	2	14	1496.2078		0.9527E-04	3	3	2	1		3	2	2	1500.4633		0.3070E-01
3	15	2	14		15	2	13	1496.2517		0.1898E-02	3	23	1	22		22	3	19	1500.4679		0.1119E-03
6	11	10	2		10	9	1	1496.4188	-0.0212*	0.1589E-01	6	16	6	11		16	3	14	1500.4833		0.8463E-04
6	11	10	1		10	9	2	1496.4188	-0.0212*	0.1589E-01	3	4	2	2		4	2	3	1500.5216		0.2270E-01
3	21	1	20		20	3	17	1496.6115		0.1506E-03	3	5	2	3		5	2	4	1500.6144		0.1753E-01
3	6	1	6		6	1	5	1496.6784	0.0002	0.1203E-01	3	20	3	18		20	3	17	1500.6475		0.3169E-02
6	28	4	24		27	1	27	1496.9901		0.7900E-04	6	22	5	17		21	2	20	1500.7018		0.6829E-04
3	25	3	23		25	3	22	1497.1732		0.7139E-03	3	3	3	1		3	3	0	1500.7335	0.0003	0.1894E+00
3	14	2	13		14	2	12	1497.2321		0.2410E-02	3	3	3	0		3	3	1	1500.7336	0.0002	0.1694E+00
3	0	0	0		1	0	1	1497.7449	0.0001	0.1636E-01	6	14	6	8		14	3	11	1500.7358		0.1233E-02
6	21	5	16		20	2	19	1497.7867		0.6872E-04	3	6	2	4		6	2	5	1500.7543		0.1386E-01
3	5	1	5		5	1	4	1497.8368	0.0000	0.1508E-01	3	2	1	1		2	1	2	1500.7559	-0.0003	0.3822E-01
6	24	9	16		23	8	15	1497.9673		0.1254E-02	6	15	6	10		15	3	13	1500.7645		0.2017E-03
3	24	9	15		23	8	16	1497.9673		0.1254E-02	3	4	3	2		4	3	1	1500.7677	0.0001	0.1254E+00
3	13	2	12		13	2	11	1498.0540		0.3040E-02	3	4	3	1		4	3	2	1500.7681	-0.0002	0.1254E+00
3	24	3	22		24	3	21	1498.1687		0.9810E-03	3	5	3	3		5	3	2	1500.8104	0.0008	0.9706E-01
6	12	10	2		11	9	3	1498.3792	-0.0190*	0.1490E-01	3	5	3	2		5	3	3	1500.8118	-0.0006	0.9706E-01
6	12	10	3		11	9	2	1498.3792	-0.0190*	0.1490E-01	3	17	11	6		17	11	7	1500.8311		0.2431E-03
3	4	1	4		4	1	3	1498.6354	0.0000	0.1940E-01	3	17	11	7		17	11	6	1500.8311		0.2431E-03
3	22	1	21		21	3	18	1498.6809		0.1324E-03	3	6	3	4		6	3	3	1500.8613	0.0019	0.7700E-01
6	18	6	12		18	3	15	1498.7262		0.7377E-04	3	6	3	3		6	3	4	1500.8654	-0.0022	0.7700E-01
3	12	2	11		12	2	10	1498.7264		0.3812E-02	3	7	3	5		7	3	4	1500.9196	0.0001	0.6196E-01
3	19	11	9		19	11	8	1498.9399		0.8061E-04	3	7	3	4		7	3	5	1500.9296	0.0001	0.6195E-01
3	19	11	8		19	11	9	1498.9399		0.8061E-04	3	7	2	5		7	2	6	1500.9564		0.1110E-01
3	23	3	21		23	3	20	1499.0024		0.1335E-02	3	19	3	17		19	3	16	1500.9576		0.4142E-02
3	11	2	10		11	2	9	1499.2609		0.4751E-02	3	8	3	6		8	3	5	1500.9838	-0.0001	0.5022E-01
3	3	1	3		3	1	2	1499.2740	0.0000	0.2613E-01	3	8	3	5		8	3	6	1501.0061	-0.0001	0.5021E-01
6	17	6	11		17	3	14	1499.3533		0.1343E-03	6	14	6	9		14	3	12	1501.0236		0.5262E-03
3	10	2	9		10	2	8	1499.6713		0.5895E-02	6	13	6	7		13	3	10	1501.0400		0.4401E-02
3	22	3	20		22	3	19	1499.6847		0.1799E-02	3	9	3	7		9	3	6	1501.0519	0.0000	0.4078E-01
3	2	1	2		2	1	1	1499.7531	0.0001	0.3841E-01	3	9	3	6		9	3	7	1501.0983	-0.0002	0.4078E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	10	3	8		10	3	7	1501.1196	-0.0002	0.3295E-01	3	8	5	3		8	5	4	1501.9242	0.0002	0.7383E-01
3	4	4	0		4	4	1	1501.1593	0.0001	0.5604E-01	3	8	5	4		8	5	3	1501.9242	0.0002	0.7383E-01
3	4	4	1		4	4	0	1501.1593	0.0001	0.5604E-01	3	13	4	10		13	4	9	1501.9292		0.8040E-02
3	18	3	16		18	3	15	1501.1747		0.5357E-02	3	13	4	9		13	4	10	1501.9384	-0.0005	0.8039E-02
3	11	3	9		11	3	8	1501.1775	-0.0008	0.2589E-01	3	24	1	23		23	3	20	1501.9482		0.9079E-04
3	12	3	10		12	3	9	1501.1904	-0.0012	0.1648E-01	3	4	1	3		4	1	4	1501.9777	0.0009	0.1909E-01
3	10	3	7		10	3	8	1501.2015		0.3289E-01	3	14	3	11		14	3	12	1501.9795		0.1359E-01
3	5	4	2		5	4	1	1501.2083		0.4340E-01	3	9	5	5		9	5	4	1502.0203	-0.0001	0.6031E-01
3	5	4	1		5	4	2	1501.2083		0.4340E-01	3	9	5	4		9	5	5	1502.0203	-0.0001	0.6031E-01
3	8	2	6		8	2	7	1501.2373		0.8944E-02	6	9	6	3		9	3	6	1502.0548		0.1279E-03
6	13	6	8		13	3	11	1501.2509		0.1900E-02	3	14	4	11		14	4	10	1502.0620	-0.0005	0.6469E-02
3	6	4	2		6	4	3	1501.2629	0.0000	0.3447E-01	6	9	6	4		9	3	7	1502.0750		0.1333E-03
3	6	4	3		6	4	2	1501.2629	0.0001	0.3447E-01	3	14	4	10		14	4	11	1502.0784	-0.0005	0.6469E-02
3	3	1	2		3	1	3	1501.2798	0.0001	0.2588E-01	3	10	2	8		10	2	9	1502.1061		0.5801E-02
3	17	3	15		17	3	14	1501.3145		0.6854E-02	3	10	5	6		10	5	5	1502.1271	-0.0001	0.4931E-01
3	11	3	8		11	3	9	1501.3176	-0.0009	0.2546E-01	3	10	5	5		10	5	6	1502.1272	-0.0001	0.4931E-01
3	7	4	4		7	4	3	1501.3290	0.0001	0.2777E-01	3	15	4	12		15	4	11	1502.2031		0.5174E-02
3	7	4	3		7	4	4	1501.3291	0.0001	0.2777E-01	6	14	10	5		13	9	4	1502.2192		0.1259E-01
3	12	3	9		12	3	10	1501.3886	-0.0008	0.1197E-01	6	14	10	4		13	9	5	1502.2192		0.1259E-01
3	16	3	14		16	3	13	1501.3923		0.8684E-02	3	15	4	11		15	4	12	1502.2313	-0.0004	0.5172E-02
3	8	4	5		8	4	4	1501.4049	0.0000	0.2256E-01	3	11	5	7		11	5	6	1502.2448	0.0000	0.4027E-01
3	8	4	4		8	4	5	1501.4052	-0.0002	0.2256E-01	3	11	5	6		11	5	7	1502.2448	0.0000	0.4027E-01
3	13	3	11		13	3	10	1501.4176		0.1328E-01	3	15	3	12		15	3	13	1502.2665		0.1101E-01
3	14	3	12		14	3	11	1501.4220		0.1294E-01	3	16	4	13		16	4	12	1502.3514		0.4109E-02
3	15	3	13		15	3	12	1501.4229		0.1077E-01	3	6	6	0		6	6	1	1502.3518	-0.0003	0.3463E-01
3	9	4	6		9	4	5	1501.4904	0.0001	0.1839E-01	3	6	6	1		6	6	0	1502.3518	-0.0003	0.3463E-01
3	9	4	5		9	4	6	1501.4908	-0.0004	0.1839E-01	3	12	5	8		12	5	7	1502.3730	0.0001	0.3280E-01
6	12	6	8		12	3	9	1501.4989		0.5455E-02	3	12	5	7		12	5	8	1502.3730	0.0000	0.3280E-01
3	10	4	7		10	4	6	1501.5857	0.0004	0.1501E-01	3	16	4	12		16	4	13	1502.3982		0.4107E-02
3	10	4	8		10	4	7	1501.5889	-0.0008	0.1501E-01	3	7	6	1		7	6	2	1502.4403	-0.0001	0.2799E-01
3	9	2	7		9	2	8	1501.6146		0.7211E-02	3	7	6	2		7	6	1	1502.4403	-0.0001	0.2799E-01
6	12	6	7		12	3	10	1501.6484		0.9921E-02	3	17	4	14		17	4	13	1502.5058		0.3239E-02
6	11	6	5		11	3	8	1501.6897		0.1188E-02	3	13	5	9		13	5	8	1502.5120	0.0000	0.2661E-01
3	11	4	8		11	4	7	1501.6907	0.0022R	0.1223E-01	3	13	5	8		13	5	9	1502.5122	-0.0001	0.2661E-01
3	11	4	7		11	4	8	1501.6931	-0.0003	0.1223E-01	3	8	6	2		8	6	3	1502.5413	0.0001	0.2282E-01
3	5	5	1		5	5	0	1501.7001	-0.0003	0.1415E+00	3	8	6	3		8	6	2	1502.5413	0.0001	0.2282E-01
3	5	5	0		5	5	1	1501.7001	-0.0003	0.1415E+00	3	17	4	13		17	4	14	1502.5808		0.3237E-02
6	26	9	18		25	8	17	1501.7094		0.7628E-03	3	1	0	1		0	0	0	1502.6116	0.0001	0.1638E-01
6	26	9	17		25	8	18	1501.7094		0.7628E-03	3	16	3	13		16	3	14	1502.6215		0.8752E-02
3	13	3	10		13	3	11	1501.7571		0.1573E-01	3	9	6	3		9	6	4	1502.6545	0.0004	0.1869E-01
6	11	6	6		11	3	9	1501.7579		0.1589E-02	3	9	6	4		9	6	3	1502.6545	0.0004	0.1869E-01
3	6	5	1		6	5	2	1501.7642	0.0000	0.1125E+00	3	14	5	10		14	5	9	1502.6617	0.0001	0.2148E-01
3	6	5	2		6	5	1	1501.7642	0.0000	0.1125E+00	3	14	5	9		14	5	10	1502.6620	-0.0002	0.2148E-01
3	18	11	5		18	11	6	1501.7946		0.4028E-03	3	18	4	15		18	4	14	1502.6638		0.2532E-02
3	16	11	8		16	11	5	1501.7946		0.4028E-03	3	11	2	9		11	2	10	1502.7288		0.4846E-02
3	12	4	9		12	4	8	1501.8053	0.0012	0.9938E-02	3	15	11	5		15	11	4	1502.7758		0.6530E-03
3	12	4	8		12	4	9	1501.8101	-0.0038	0.9937E-02	3	15	11	4		15	11	5	1502.7758		0.6530E-03
3	7	5	3		7	5	2	1501.8387	0.0001	0.9076E-01	3	10	6	4		10	6	5	1502.7802	0.0003	0.1532E-01
3	7	5	2		7	5	3	1501.8387	0.0001	0.9076E-01	3	10	6	5		10	6	4	1502.7802	0.0003	0.1532E-01
6	10	6	4		10	3	7	1501.8835		0.3592E-03	3	18	4	14		18	4	15	1502.7813		0.2530E-02
6	10	6	5		10	3	8	1501.9211		0.3993E-03	3	15	5	11		15	5	10	1502.8221	0.0002	0.1723E-01

v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH	v	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	STRENGTH
3	15	5	10		15	5	11	1502.8228	-0.0003	0.1723E-01	3	11	7	4		11	7	5	1503.7086	0.0010*	0.3078E-01
3	19	4	18		19	4	15	1502.8234		0.1963E-02	3	11	7	5		11	7	4	1503.7086	0.0010*	0.3078E-01
3	5	1	4		5	1	5	1502.8488	0.0000	0.1472E-01	3	14	11	4		14	11	3	1503.7804		0.1042E-02
3	11	6	6		11	6	5	1502.9181	0.0005	0.1255E-01	3	14	11	3		14	11	4	1503.7804		0.1042E-02
3	11	6	5		11	6	6	1502.9181	0.0005	0.1255E-01	3	20	5	16		20	5	15	1503.7817		0.5134E-02
3	30	4	27		30	4	26	1502.9449		0.6082E-04	3	16	6	10		16	6	11	1503.7885		0.4351E-02
3	20	4	17		20	4	16	1502.9812		0.1508E-02	3	16	6	11		16	6	10	1503.7885		0.4351E-02
3	16	5	12		16	5	11	1502.9933	0.0003	0.1373E-01	3	20	5	15		20	5	16	1503.7900		0.5134E-02
3	16	5	11		16	5	12	1502.9941	-0.0006	0.1373E-01	3	22	4	18		22	4	19	1503.8297		0.8616E-03
3	19	4	15		19	4	16	1503.0024		0.1981E-02	3	6	1	5		6	1	6	1503.8921		0.1163E-01
3	17	3	14		17	3	15	1503.0558		0.6868E-02	3	12	7	5		12	7	6	1503.8956	0.0011*	0.2523E-01
3	12	6	7		12	6	6	1503.0682	0.0007	0.1025E-01	3	12	7	6		12	7	5	1503.8956	0.0011*	0.2523E-01
3	12	6	6		12	6	7	1503.0682	0.0007	0.1025E-01	3	26	1	25		25	3	22	1503.9174		0.5297E-04
3	25	1	24		24	3	21	1503.1027		0.7074E-04	3	8	8	1		8	8	0	1503.9682	-0.0007	0.1310E-01
3	7	7	0		7	7	1	1503.1093	-0.0008*	0.6758E-01	3	8	8	0		8	8	1	1503.9682	-0.0007	0.1310E-01
3	7	7	1		7	7	0	1503.1093	-0.0008*	0.6758E-01	3	17	6	12		17	6	11	1503.9978	0.0022	0.3456E-02
3	21	4	18		21	4	17	1503.1331		0.1148E-02	3	17	6	11		17	6	12	1503.9978	0.0022	0.3456E-02
3	17	5	13		17	5	12	1503.1749	0.0006	0.1087E-01	3	21	5	17		21	5	16	1504.0037	-0.0037	0.3930E-02
3	17	5	12		17	5	13	1503.1766	-0.0011	0.1087E-01	3	21	5	16		21	5	17	1504.0175		0.3930E-02
6	29	4	25		28	1	28	1503.1816		0.6228E-04	3	13	7	7		13	7	6	1504.0969		0.2063E-01
3	13	6	8		13	6	7	1503.2303		0.8341E-02	3	13	7	6		13	7	7	1504.0969		0.2063E-01
3	13	6	7		13	6	8	1503.2303		0.8341E-02	6	15	10	6		14	9	6	1504.1025		0.1133E-01
3	8	7	2		8	7	1	1503.2363	-0.0004*	0.5528E-01	6	15	10	5		14	9	6	1504.1025		0.1133E-01
3	8	7	1		8	7	2	1503.2363	-0.0004*	0.5528E-01	3	9	8	1		9	8	2	1504.1639	-0.0002	0.1084E-01
3	29	4	26		29	4	25	1503.2384		0.8832E-04	3	9	8	2		9	8	1	1504.1639	-0.0002	0.1084E-01
3	20	4	16		20	4	17	1503.2477		0.1505E-02	3	23	4	19		23	4	20	1504.1785		0.6418E-03
3	22	4	19		22	4	18	1503.2737		0.8652E-03	3	19	3	16		19	3	17	1504.2181		0.4087E-02
3	18	5	14		18	5	13	1503.3689	0.0010	0.8535E-02	3	18	6	13		18	6	12	1504.2188	0.0008	0.2725E-02
3	18	5	13		18	5	14	1503.3700	-0.0020	0.8535E-02	3	18	6	12		18	6	13	1504.2188	0.0007	0.2725E-02
3	9	7	2		9	7	3	1503.3787	0.0001*	0.4543E-01	3	22	5	18		22	5	17	1504.2349		0.2981E-02
3	9	7	3		9	7	2	1503.3787	0.0001*	0.4543E-01	3	22	5	17		22	5	18	1504.2565		0.2980E-02
3	23	4	20		23	4	19	1503.3969		0.6455E-03	3	14	7	8		14	7	7	1504.3120	0.0014*	0.1678E-01
3	14	6	9		14	6	8	1503.4045	0.0012	0.6754E-02	3	14	7	7		14	7	8	1504.3120	0.0014*	0.1678E-01
3	14	6	8		14	6	9	1503.4045	0.0012	0.6754E-02	3	10	8	2		10	8	3	1504.3817	0.0003	0.8982E-02
3	28	4	25		28	4	24	1503.4313		0.1267E-03	3	10	8	3		10	8	2	1504.3817	0.0003	0.8982E-02
3	24	4	21		24	4	20	1503.4948		0.4766E-03	3	13	2	11		13	2	12	1504.4268		0.2922E-02
3	12	2	10		12	2	11	1503.4980		0.3898E-02	3	19	6	14		19	6	13	1504.4508	0.0014	0.2132E-02
3	21	4	17		21	4	16	1503.5217		0.1145E-02	3	19	6	13		19	6	14	1504.4508	0.0013	0.2132E-02
3	10	7	4		10	7	3	1503.5363	0.0006*	0.3739E-01	3	23	5	19		23	5	18	1504.4747		0.2239E-02
3	10	7	3		10	7	4	1503.5363	0.0006*	0.3739E-01	3	23	5	18		23	5	19	1504.5081		0.2239E-02
3	27	4	24		27	4	23	1503.5394		0.1795E-03	3	15	7	9		15	7	8	1504.5404	0.0008*	0.1357E-01
6	27	9	19		26	8	18	1503.5584		0.5836E-03	3	15	7	8		15	7	9	1504.5404	0.0008*	0.1357E-01
6	27	9	18		26	8	19	1503.5584		0.5836E-03	3	24	4	20		24	4	21	1504.5757		0.4728E-03
3	25	4	22		25	4	21	1503.5583		0.3481E-03	3	11	8	3		11	8	4	1504.6191	0.0003	0.7441E-02
3	19	5	15		19	5	14	1503.5693	0.0014	0.6648E-02	3	11	8	4		11	8	3	1504.6191	0.0003	0.7441E-02
3	19	5	14		19	5	15	1503.5743	-0.0037	0.6648E-02	3	20	6	15		20	6	14	1504.6941		0.1653E-02
3	28	4	23		28	4	22	1503.5773		0.2514E-03	3	20	6	14		20	6	15	1504.6943		0.1653E-02
3	18	3	15		18	3	16	1503.5829		0.5328E-02	3	24	5	20		24	5	19	1504.7222		0.1686E-02
3	15	6	9		15	6	10	1503.5908	0.0012	0.5439E-02	3	24	5	19		24	5	20	1504.7728		0.1686E-02
3	15	6	10		15	6	9	1503.5908	0.0012	0.5439E-02	3	16	7	9		16	7	10	1504.7814	-0.0007*	0.1089E-01
6	23	5	18		22	2	21	1503.7083		0.6626E-04	3	16	7	10		16	7	9	1504.7814	-0.0007*	0.1089E-01

V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	V	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	13	11	3	13	11	2	1504.8176		0.1048E-02	3	15	8	8	15	8	7	1505.7520	-0.0032	0.3386E-02		
3	13	11	2	13	11	4	1504.8176		0.1648E-02	3	28	5	24	28	5	23	1505.7615		0.4603E-03		
3	12	8	5	12	8	3	1504.8764	0.0004	0.0152E-02	3	20	7	14	20	7	13	1505.7693		0.3334E-02		
3	18	12	6	18	12	6	1504.9026		0.7117E-04	3	24	6	19	24	6	18	1505.7693		0.3334E-02		
3	18	12	7	18	12	7	1504.9026		0.7117E-04	3	24	6	19	24	6	18	1505.7748		0.5467E-03		
3	9	9	1	9	9	0	1504.9155	0.0005	0.2056E-01	4	21	10	12	21	7	14	1505.7762		0.5467E-03		
3	9	9	0	9	9	1	1504.9155	0.0005	0.2056E-01	4	21	10	11	21	7	15	1505.7784		0.9676E-03		
3	2	1	6	2	1	1	1504.9342	0.0001	0.6967E-01	3	21	3	18	21	3	19	1505.8746	-0.0065*	0.9676E-03		
3	21	6	16	21	6	15	1504.9484		0.1271E-02	3	12	11	1	12	11	2	1505.9019		0.2321E-02		
3	26	5	21	26	5	20	1504.9487		0.1227E-02	3	10	10	1	10	10	0	1505.9019		0.2604E-02		
3	20	3	17	20	3	18	1504.9763		0.1227E-02	3	10	10	1	10	10	0	1505.9491		0.3240E-02		
3	25	4	21	25	4	22	1505.0305		0.3443E-03	3	16	10	0	15	10	1	1505.9491		0.3240E-02		
3	17	7	11	17	7	10	1505.0334	-0.0036*	0.8668E-02	6	18	10	7	15	9	6	1505.9633	-0.0065*	0.3240E-02		
3	25	5	20	25	5	21	1505.0516	-0.0036*	0.8668E-02	3	28	5	23	28	5	24	1505.9633	-0.0065*	0.1005E-01		
3	2	0	2	2	0	1	1505.0516	-0.0036*	0.1228E-02	3	29	5	26	29	5	24	1505.9872		0.4596E-03		
3	13	8	5	13	8	6	1505.0533	0.0001	0.3219E-01	3	25	6	19	25	6	19	1506.0706		0.3249E-03		
3	13	8	6	13	8	5	1505.1501	-0.0002	0.5067E-02	3	25	6	19	25	6	20	1506.0730		0.4047E-03		
3	13	8	5	13	8	6	1505.1501	-0.0002	0.5067E-02	3	16	8	8	16	8	8	1506.0776	-0.0064R	0.2743E-02		
3	13	8	6	13	8	5	1505.2134	0.0002	0.9323E-02	3	16	8	8	16	8	8	1506.0776	-0.0064R	0.2743E-02		
3	22	6	17	22	6	16	1505.2139	0.0002	0.5067E-02	3	12	9	3	12	9	4	1506.0920	0.0009	0.1219E-01		
3	26	5	22	26	5	21	1505.2355	0.0002	0.9686E-03	3	12	9	3	12	9	4	1506.0920	0.0009	0.1219E-01		
3	23	10	14	23	10	13	1505.2732	0.0010	0.8943E-03	3	18	12	5	18	12	5	1506.1016	0.0009	0.1479E-03		
3	10	9	2	10	9	1	1505.2814	0.0010	0.1729E-01	3	30	5	28	30	5	26	1506.1564		0.1761E-03		
3	18	7	12	18	7	11	1505.2935	0.0001	0.8521E-04	4	27	4	23	27	4	24	1506.1564		0.1479E-03		
3	18	7	11	18	7	11	1505.2935	0.0001	0.1729E-01	3	30	5	28	30	5	26	1506.2791		0.2268E-03		
3	26	5	21	26	5	22	1505.3457	0.0001	0.8945E-01	4	20	10	11	20	7	13	1506.3622		0.3242E-03		
3	28	9	19	28	9	20	1505.3881	0.0014	0.6806E-02	4	20	10	10	20	7	14	1506.3622		0.9004E-03		
3	14	8	7	14	8	7	1505.4425	-0.0014	0.4407E-03	3	26	6	21	26	6	20	1506.3762		0.2968E-03		
3	23	6	18	23	6	17	1505.4889	-0.0014	0.4154E-02	3	26	6	21	26	6	21	1506.3762		0.2968E-03		
3	23	6	17	23	6	18	1505.4889	-0.0014	0.4154E-02	3	26	6	21	26	6	20	1506.3762		0.2968E-03		
3	23	6	17	23	6	18	1505.4889	-0.0014	0.4154E-02	3	26	6	21	26	6	21	1506.3762		0.2968E-03		
3	27	5	23	27	5	22	1505.4980	0.0009	0.7312E-03	3	26	6	21	26	6	21	1506.3762	0.0009	0.2968E-03		
3	17	12	6	17	12	5	1505.5121	0.0009	0.6451E-03	3	13	9	4	13	9	4	1506.5326	0.0009	0.1018E-01		
3	14	2	12	14	2	13	1505.5250	0.0242*	0.1034E-03	4	19	10	10	19	7	12	1506.5454	0.0009	0.1018E-01		
3	19	7	12	19	7	13	1505.5524	0.0242*	0.2291E-02	3	20	13	8	19	7	13	1506.5454	0.0009	0.2657E-03		
3	19	7	13	19	7	12	1505.5524	0.0242*	0.5176E-02	3	20	13	8	20	13	8	1506.5515	0.0009	0.6334E-04		
3	28	4	22	28	4	23	1505.5535	0.0242*	0.8176E-02	3	22	7	16	22	7	15	1506.6241	0.0242*	0.2271E-02		
4	22	10	12	22	10	11	1505.5616	0.0242*	0.2477E-03	3	15	12	3	15	12	4	1506.6241	0.0242*	0.2271E-02		
4	22	10	13	22	10	12	1505.5616	0.0242*	0.2477E-03	3	15	12	3	15	12	4	1506.6899	0.0242*	0.2085E-03		
3	27	5	22	27	5	22	1505.6569	0.0007	0.2345E-03	3	15	12	3	15	12	3	1506.6899	0.0007	0.2085E-03		
3	11	9	2	11	9	3	1505.6743	0.0007	0.6443E-03	3	27	6	22	27	6	21	1506.6910	0.0007	0.2152E-03		
3	11	9	2	11	9	3	1505.6743	0.0007	0.6443E-03	3	27	6	22	27	6	21	1506.6910	0.0007	0.2152E-03		
3	15	8	7	15	8	8	1505.7520	-0.0032	0.1453E-01	4	30	5	25	30	5	28	1506.7167	-0.0032	0.2261E-03		
3	15	8	7	15	8	8	1505.7520	-0.0032	0.3386E-02	4	18	10	8	18	7	12	1506.7672	-0.0032	0.1038E-03		

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
4	18	10	9		18	7	11	1506.7672		0.1038E-03	3	17	13	4		17	13	5	1507.9236		0.1754E-03
3	18	8	11		18	8	10	1506.7753		0.1760E-02	3	17	13	5		17	13	4	1507.9236		0.1754E-03
3	18	8	10		18	8	11	1506.7753		0.1760E-02	3	21	8	13		21	8	14	1507.9266		0.8499E-03
3	15	2	13		15	2	14	1506.7996		0.1782E-02	3	21	8	14		21	8	13	1507.9266		0.8499E-03
6	24	5	19		23	2	22	1506.8141		0.6283E-04	3	16	9	8		16	9	7	1507.9738	0.0004	0.5714E-02
3	28	4	24		28	4	25	1506.8521		0.1235E-03	3	16	9	7		16	9	8	1507.9738	0.0004	0.5714E-02
3	22	3	19		22	3	20	1506.9260		0.1717E-02	3	26	7	20		26	7	19	1507.9738		0.7714E-03
3	23	7	17		23	7	18	1506.9315		0.1815E-02	3	26	7	19		26	7	20	1507.9739		0.7714E-03
3	23	7	16		23	7	17	1506.9315		0.1815E-02	3	9	1	8		9	1	9	1508.0366	0.0002	0.6114E-02
4	17	10	7		17	7	11	1506.9874		0.5162E-04	3	23	3	20		23	3	21	1508.1439		0.1255E-02
4	17	10	8		17	7	10	1506.9874		0.5162E-04	3	12	10	3		12	10	2	1508.1875		0.2396E-02
3	14	9	5		14	9	6	1506.9943	0.0012	0.8452E-02	3	12	10	2		12	10	3	1508.1875		0.2396E-02
3	14	9	6		14	9	5	1506.9943	0.0012	0.8452E-02	3	12	12	0		12	12	1	1508.2322		0.5407E-03
3	28	6	23		28	6	22	1507.0149		0.1545E-03	3	12	12	1		12	12	0	1508.2322		0.5407E-03
3	28	6	22		28	6	23	1507.0238		0.1545E-03	3	16	2	14		16	2	15	1508.2540		0.1374E-02
3	19	13	7		19	13	6	1507.0288		0.9013E-04	3	22	8	15		22	8	14	1508.3352		0.8546E-03
3	19	13	6		19	13	7	1507.0288		0.9013E-04	3	22	8	14		22	8	15	1508.3352		0.8546E-03
3	11	11	1		11	11	0	1507.0580		0.4185E-02	3	16	13	3		16	13	4	1508.3402		0.2401E-03
3	11	11	0		11	11	1	1507.0580		0.4185E-02	3	16	13	4		16	13	3	1508.3402		0.2401E-03
3	11	10	1		11	10	2	1507.1196		0.2787E-02	3	27	7	21		27	7	20	1508.3464		0.5641E-03
3	11	10	2		11	10	1	1507.1196		0.2787E-02	3	27	7	20		27	7	21	1508.3466		0.5641E-03
3	19	8	12		19	8	11	1507.1459		0.1393E-02	3	17	9	9		17	9	8	1508.4880	0.0009	0.4645E-02
3	19	8	11		19	8	12	1507.1459		0.1393E-02	3	17	9	8		17	9	9	1508.4880	0.0009	0.4645E-02
6	29	9	21		28	8	20	1507.2047		0.3286E-03	3	30	4	26		30	4	27	1508.5768		0.5833E-04
6	29	9	20		28	8	21	1507.2047		0.3286E-03	3	28	7	22		28	7	21	1508.7294		0.4078E-03
3	14	12	2		14	12	3	1507.2155		0.2900E-03	3	28	7	21		28	7	22	1508.7296		0.4078E-03
3	14	12	3		14	12	2	1507.2155		0.2900E-03	3	15	13	2		15	13	3	1508.7356		0.3249E-03
3	24	7	17		24	7	18	1507.2640		0.1389E-02	3	15	13	3		15	13	2	1508.7356		0.3249E-03
3	24	7	18		24	7	17	1507.2640		0.1389E-02	3	23	8	15		23	8	16	1508.7551		0.4994E-03
3	3	1	3		2	1	2	1507.2859	0.0000	0.1205E+00	3	23	8	16		23	8	15	1508.7551		0.4994E-03
3	29	6	24		29	6	23	1507.3472		0.1097E-03	6	30	9	21		29	8	22	1509.0067		0.2419E-03
3	29	6	23		29	6	24	1507.3607		0.1097E-03	6	30	9	22		29	8	21	1509.0067		0.2419E-03
3	15	9	7		15	9	6	1507.4752	0.0012	0.6975E-02	3	18	9	9		18	9	10	1509.0167	0.0003	0.3743E-02
3	15	9	6		15	9	7	1507.4752	0.0012	0.6975E-02	3	18	9	10		18	9	9	1509.0167	0.0003	0.3743E-02
3	18	13	6		18	13	5	1507.4883		0.1266E-03	3	14	13	1		14	13	2	1509.1094		0.4347E-03
3	18	13	5		18	13	6	1507.4883		0.1266E-03	3	14	13	2		14	13	1	1509.1094		0.4347E-03
3	3	0	3		2	0	2	1507.4987	-0.0001	0.4691E-01	3	29	7	23		29	7	22	1509.1219		0.2915E-03
3	20	8	12		20	8	13	1507.5298		0.1093E-02	3	29	7	22		29	7	23	1509.1223		0.2915E-03
3	20	8	13		20	8	12	1507.5298		0.1093E-02	3	24	8	16		24	8	17	1509.1855		0.3771E-03
3	25	7	19		25	7	18	1507.6125		0.1042E-02	3	24	8	17		24	8	16	1509.1855		0.3771E-03
3	25	7	18		25	7	19	1507.6125		0.1042E-02	3	13	10	4		13	10	3	1509.1906		0.2047E-02
3	29	4	25		29	4	26	1507.6541		0.8548E-04	3	13	10	3		13	10	4	1509.1906		0.2047E-02
3	30	6	25		30	6	24	1507.6874		0.7712E-04	3	13	13	0		13	13	1	1509.4609		0.5756E-03
3	30	6	24		30	6	25	1507.7074		0.7710E-04	3	13	13	1		13	13	0	1509.4609		0.5756E-03
3	13	12	1		13	12	2	1507.7368		0.3984E-03	3	30	7	24		30	7	23	1509.5234		0.2061E-03
3	13	12	2		13	12	1	1507.7368		0.3984E-03	3	30	7	23		30	7	24	1509.5240		0.2061E-03
3	3	2	2		2	2	1	1507.7372	0.0001	0.2215E-01	3	24	3	21		24	3	22	1509.5389		0.9082E-03
3	3	2	1		2	2	0	1507.7485	0.0001	0.2215E-01	3	19	9	10		19	9	11	1509.5583	-0.0003	0.2989E-02
6	17	10	8		16	9	7	1507.8031	-0.0022*	0.8800E-02	3	19	9	11		19	9	10	1509.5583	-0.0003	0.2989E-02
6	17	10	7		16	9	8	1507.8031	-0.0022*	0.8800E-02	3	18	10	9		17	9	8	1509.6233	0.0018*	0.7596E-02
3	3	1	2		2	1	1	1507.8418	0.0001	0.1198E+00	6	18	10	8		17	9	9	1509.6233	0.0018*	0.7596E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	25	8	18		25	8	17	1509.6255		0.2819E-03	3	17	10	8		17	10	7	1512.8495		0.9973E-03
3	25	8	17		25	8	18	1509.6255		0.2819E-03	3	17	10	7		17	10	8	1512.8495		0.9973E-03
3	4	1	4		3	1	3	1509.6388	0.0000	0.1629E+00	3	26	3	23		26	3	24	1512.8885		0.4557E-03
3	10	1	9		10	1	10	1509.7485	0.0004	0.4970E-02	3	5	3	3		4	3	2	1512.9619	0.0004	0.9467E-01
3	17	2	16		17	2	16	1509.8890		0.1052E-02	3	5	3	2		4	3	1	1512.9625	-0.0002	0.9466E-01
3	4	0	4		3	0	3	1509.9381	0.0001	0.8004E-01	3	5	1	4		4	1	3	1512.9719	0.0000	0.1955E+00
6	25	5	20		24	2	23	1510.0277		0.5830E-04	3	25	9	17		25	9	16	1513.0107		0.8283E-03
3	26	8	18		26	8	19	1510.0743		0.2086E-03	3	25	9	16		25	9	17	1513.0107		0.8283E-03
3	26	8	19		26	8	18	1510.0743		0.2086E-03	6	20	10	10		19	9	11	1513.2094	0.0147*	0.5430E-02
3	20	9	11		20	9	12	1510.1116		0.2364E-02	6	20	10	11		19	9	10	1513.2094	0.0147*	0.5430E-02
3	20	9	12		20	9	11	1510.1116		0.2364E-02	3	5	4	1		4	4	0	1513.3514	0.0001	0.1332E-01
3	14	10	5		14	10	4	1510.1484		0.1735E-02	3	5	4	2		4	4	1	1513.3514	0.0001	0.1332E-01
3	14	10	4		14	10	5	1510.1484		0.1735E-02	6	26	5	21		25	2	24	1513.3572		0.5296E-04
3	4	2	3		3	2	2	1510.1958	0.0002	0.3827E-01	3	26	9	18		26	9	17	1513.6099		0.4668E-03
3	4	2	2		3	2	1	1510.2244	0.0001	0.3826E-01	3	26	9	17		26	9	18	1513.6099		0.4668E-03
3	4	1	3		3	1	2	1510.4019	0.0001	0.1614E+00	3	12	1	11		12	1	12	1513.6302		0.3277E-02
3	4	3	2		3	3	1	1510.4873	0.0002	0.5461E-01	3	19	2	17		19	2	18	1513.6917		0.6023E-03
3	4	3	1		3	3	0	1510.4875	0.0000	0.5461E-01	3	18	10	8		18	10	9	1513.7103		0.8122E-03
3	27	8	19		27	8	20	1510.5315		0.1526E-03	3	18	10	9		18	10	8	1513.7103		0.8122E-03
3	27	8	20		27	8	19	1510.5315		0.1526E-03	3	27	9	19		27	9	18	1514.2134		0.3429E-03
3	21	9	13		21	9	12	1510.6752		0.1852E-02	3	27	9	18		27	9	19	1514.2134		0.3429E-03
3	21	9	12		21	9	13	1510.6752		0.1852E-02	3	6	1	6		5	1	5	1514.3323	0.0000	0.2265E+00
3	14	14	1		14	14	0	1510.7323		0.6215E-04	3	19	10	9		19	10	10	1514.5563		0.6543E-03
3	14	14	0		14	14	1	1510.7323		0.6215E-04	3	19	10	10		19	10	9	1514.5563		0.6543E-03
3	28	8	21		28	8	20	1510.9958		0.1105E-03	3	6	0	6		5	0	5	1514.8000	0.0001	0.8014E-01
3	28	8	20		28	8	21	1510.9958		0.1105E-03	3	28	9	20		28	9	19	1514.8203		0.2491E-03
3	15	10	5		15	10	6	1511.0729		0.1457E-02	3	28	9	19		28	9	20	1514.8203		0.2491E-03
3	15	10	6		15	10	5	1511.0729		0.1457E-02	3	27	3	24		27	3	25	1514.8499		0.3176E-03
3	25	3	22		25	3	23	1511.1189		0.6484E-03	6	21	10	12		20	9	11	1514.9773	0.0216*	0.4498E-02
3	22	9	13		22	9	14	1511.2480		0.1436E-02	6	21	10	11		20	9	12	1514.9773	0.0216*	0.4498E-02
3	22	9	14		22	9	13	1511.2480		0.1436E-02	3	6	2	5		5	2	4	1515.1279	0.0000	0.6049E-01
6	19	10	10		18	9	9	1511.4249	0.0086*	0.6467E-02	3	6	2	4		5	2	3	1515.2344	0.0000	0.6041E-01
6	19	10	9		18	9	10	1511.4249	0.0086*	0.6467E-02	3	20	10	10		20	10	11	1515.3896		0.5213E-03
3	29	8	22		29	8	21	1511.4667		0.7916E-04	3	20	10	11		20	10	10	1515.3896		0.5213E-03
3	29	8	21		29	8	22	1511.4667		0.7916E-04	3	29	9	20		29	9	21	1515.4301		0.1789E-03
3	11	1	10		11	1	11	1511.6132	0.0004	0.4039E-02	3	29	9	21		29	9	20	1515.4301		0.1789E-03
3	18	2	16		18	2	17	1511.7028		0.7989E-03	3	6	3	4		5	3	3	1515.4465	0.0010	0.1247E+00
3	23	9	14		23	9	15	1511.8289		0.1102E-02	3	6	3	3		5	3	2	1515.4481	-0.0007	0.1247E+00
3	23	9	15		23	9	14	1511.8289		0.1102E-02	3	6	1	5		5	1	4	1515.5505	0.0001	0.2222E+00
3	30	8	22		30	8	23	1511.9434		0.5806E-04	3	13	1	12		13	1	13	1515.7902		0.2653E-02
3	30	8	23		30	8	22	1511.9434		0.5806E-04	3	6	4	3		5	4	2	1515.8383	0.0001	0.2309E-01
3	16	10	6		16	10	7	1511.9716		0.1212E-02	3	6	4	2		5	4	1	1515.8383	0.0001	0.2309E-01
3	16	10	7		16	10	6	1511.9716		0.1212E-02	3	20	2	18		20	2	19	1515.8499		0.4509E-03
3	5	1	5		4	1	4	1511.9858	0.0001	0.1903E+00	3	30	9	21		30	9	22	1516.0418		0.1271E-03
3	15	15	0		15	15	1	1512.0338		0.5523E-04	3	30	9	22		30	9	21	1516.0418		0.1271E-03
3	15	15	1		15	15	0	1512.0338		0.5523E-04	3	21	10	11		21	10	12	1516.2118		0.4107E-03
3	5	0	5		4	0	4	1512.3739	0.0001	0.7121E-01	3	21	10	12		21	10	11	1516.2118		0.4107E-03
3	24	9	15		24	9	16	1512.4167		0.8368E-03	3	6	5	1		5	5	0	1516.3326	-0.0001	0.2625E-01
3	24	9	16		24	9	15	1512.4167		0.8368E-03	3	6	5	2		5	5	1	1516.3326	-0.0001	0.2625E-01
3	5	2	4		4	2	3	1512.6593	0.0000	0.5082E-01	3	7	1	7		6	1	6	1516.6750	-0.0001	0.2475E+00
3	5	2	3		4	2	2	1512.7188	0.0001	0.5078E-01	6	22	10	12		21	9	13	1516.7300	0.0286*	0.3675E-02

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	22	10	13		21	9	12	1516.7300	0.0286+	0.3675E-02	6	8	6	3		7	3	4	1521.6588		0.7386E-04
3	28	3	25		28	3	28	1517.0015		0.2190E-03	6	8	6	2		7	3	5	1521.6635		0.7196E-04
3	22	10	12		22	10	13	1517.0237		0.3200E-03	6	13	12	2		13	11	3	1521.6702		0.1368E-02
3	22	10	13		22	10	12	1517.0237		0.3200E-03	6	13	12	1		13	11	2	1521.6702		0.1368E-02
3	7	0	7		6	0	6	1517.2128	-0.0001	0.8668E-01	3	28	10	18		28	10	19	1521.7162		0.5625E-04
3	7	2	6		6	2	5	1517.6003	0.0000	0.6754E-01	3	28	10	19		28	10	18	1521.7162		0.5625E-04
3	7	2	5		6	2	4	1517.7744	0.0001	0.6740E-01	3	30	3	27		30	3	28	1521.8588		0.1010E-03
3	23	10	13		23	10	14	1517.8262		0.2465E-03	6	12	11	2		11	10	1	1521.8627		0.2734E-02
3	23	10	14		23	10	13	1517.8262		0.2465E-03	6	12	11	1		11	10	2	1521.8627		0.2734E-02
3	7	3	5		6	3	4	1517.9410	0.0018	0.1466E+00	6	25	10	16		24	9	15	1521.9039		0.1850E-02
3	7	3	4		6	3	3	1517.9448	-0.0022R	0.1466E+00	6	25	10	15		24	9	16	1521.9039		0.1850E-02
3	14	1	13		14	1	14	1518.0836		0.2142E-02	3	8	6	2		7	6	1	1521.9569	0.0001	0.8880E-02
3	7	1	6		6	1	5	1518.1362	-0.0001	0.2413E+00	3	8	6	3		7	6	2	1521.9569	0.0001	0.8880E-02
3	21	2	19		21	2	20	1518.1699		0.3352E-03	3	9	0	9		8	0	8	1521.9833	0.0000	0.9249E-01
3	7	4	4		6	4	3	1518.3351	0.0001	0.3021E-01	3	9	2	8		8	2	7	1522.5537	0.0001	0.7446E-01
3	7	4	3		6	4	2	1518.3352	0.0001	0.3021E-01	6	14	12	2		14	11	3	1522.6383		0.1505E-02
6	23	10	14		22	9	13	1518.4681	0.0363+	0.2963E-02	6	14	12	3		14	11	4	1522.6383		0.1505E-02
6	23	10	13		22	9	14	1518.4681	0.0363+	0.2963E-02	3	8	7	1		7	7	0	1522.6414	-0.0001+	0.8107E-02
3	24	10	15		24	10	14	1518.6200		0.1877E-03	3	8	7	2		7	7	1	1522.6414	-0.0001+	0.8107E-02
3	24	10	14		24	10	15	1518.6200		0.1877E-03	3	9	2	7		8	2	6	1522.9375	0.0001	0.7409E-01
3	7	5	3		6	5	2	1518.8361	0.0000	0.4536E-01	3	9	3	7		8	3	6	1522.9592	-0.0001	0.1694E+00
3	7	5	2		6	5	1	1518.8361	0.0000	0.4536E-01	3	9	3	6		8	3	5	1522.9735	-0.0001	0.1694E+00
3	8	1	8		7	1	7	1519.0134	0.0001	0.2612E+00	3	16	1	15		16	1	16	1523.0248		0.1380E-02
3	29	3	28		29	3	27	1519.3398		0.1494E-03	6	13	11	3		12	10	2	1523.2231		0.2592E-02
3	25	10	16		25	10	15	1519.4055		0.1413E-03	6	13	11	2		12	10	3	1523.2231		0.2592E-02
3	25	10	15		25	10	16	1519.4055		0.1413E-03	3	23	2	21		23	2	22	1523.2606		0.1816E-03
3	7	6	2		6	6	1	1519.4290	0.0000	0.5158E-02	3	9	1	8		8	1	7	1523.3219	0.0001	0.2575E+00
3	7	6	1		6	6	0	1519.4290	0.0000	0.5158E-02	3	9	4	6		8	4	5	1523.3604	0.0000	0.3823E-01
3	8	0	8		7	0	7	1519.6082	0.0001	0.9075E-01	3	9	4	5		8	4	4	1523.3606	-0.0002	0.3823E-01
3	8	2	7		7	2	6	1520.0760	0.0001	0.7214E-01	6	15	12	3		15	11	4	1523.5684		0.1484E-02
3	26	10	16		26	10	17	1520.1833		0.1062E-03	6	15	12	4		15	11	5	1523.5684		0.1484E-02
3	26	10	17		26	10	16	1520.1833		0.1062E-03	6	26	10	17		25	9	16	1523.6029		0.1433E-02
6	24	10	15		23	9	14	1520.1926	0.0449+	0.2357E-02	6	26	10	16		25	9	17	1523.6029		0.1433E-02
6	24	10	14		23	9	15	1520.1926	0.0449+	0.2357E-02	3	10	1	10		9	1	9	1523.6732	0.0000	0.2680E+00
3	8	2	6		7	2	5	1520.3414	0.0000	0.7190E-01	3	9	5	4		8	5	3	1523.8759	0.0000	0.6785E-01
3	8	3	6		7	3	5	1520.4456	0.0003	0.1613E+00	3	9	5	5		8	5	4	1523.8759	0.0000	0.6785E-01
3	8	3	5		7	3	4	1520.4531	-0.0001	0.1613E+00	6	9	6	4		8	3	5	1523.9521		0.3260E-03
3	15	1	14		15	1	15	1520.4994		0.1723E-02	6	9	6	3		8	3	6	1523.9622		0.3088E-03
6	11	11	1		10	10	0	1520.5620		0.2811E-02	3	10	0	10		9	0	9	1524.3358	0.0001	0.9205E-01
6	11	11	0		10	10	1	1520.5620		0.2811E-02	6	16	12	4		16	11	5	1524.4691		0.1376E-02
3	22	2	20		22	2	21	1520.6436		0.2475E-03	6	16	12	5		16	11	6	1524.4691		0.1376E-02
6	12	12	0		12	11	1	1520.6498		0.9475E-03	3	9	6	3		8	6	2	1524.4978	0.0002	0.1140E-01
6	12	12	1		12	11	2	1520.6498		0.9475E-03	3	9	6	4		8	6	3	1524.4978	0.0002	0.1140E-01
3	8	1	7		7	1	6	1520.7273	0.0000	0.2530E+00	6	14	11	3		13	10	4	1524.6237		0.2404E-02
3	8	4	5		7	4	4	1520.8425	0.0000	0.3515E-01	6	14	11	4		13	10	3	1524.6237		0.2404E-02
3	8	4	4		7	4	3	1520.8427	-0.0001	0.3515E-01	3	10	2	9		9	2	8	1525.0325	0.0001	0.7471E-01
3	27	10	18		27	10	17	1520.9534		0.7735E-04	3	9	7	2		8	7	1	1525.2092	0.0003+	0.1380E-01
3	27	10	17		27	10	18	1520.9534		0.7735E-04	3	9	7	3		8	7	2	1525.2092	0.0003+	0.1380E-01
3	9	1	9		8	1	8	1521.3484		0.2679E+00	6	27	10	18		26	9	17	1525.2900		0.1096E-02
3	8	5	3		7	5	2	1521.3503		0.5890E-01	6	27	10	17		26	9	18	1525.2900		0.1096E-02
3	8	5	4		7	5	3	1521.3503		0.5890E-01	6	17	12	5		17	11	6	1525.3467		0.1225E-02

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v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	17	12	6		17	11	7	1525.3467		0.1225E-02	3	11	5	7		10	5	6	1528.9601	0.0001	0.7479E-01
3	10	3	8		9	3	7	1525.4806	-0.0004	0.1713E+00	3	11	5	6		10	5	5	1528.9601	0.0000	0.7479E-01
3	10	3	7		9	3	6	1525.5052		0.1710E+00	6	17	11	7		18	10	6	1528.9648		0.1715E-02
3	10	2	8		9	2	7	1525.5637	0.0000	0.7418E-01	6	17	11	6		18	10	7	1528.9648		0.1715E-02
3	17	1	16		17	1	17	1525.6455		0.1101E-02	3	12	0	12		11	0	11	1528.9890	0.0000	0.8571E-01
3	10	4	7		9	4	6	1525.8892	0.0001	0.3970E-01	6	22	12	11		22	11	12	1529.4980		0.4778E-03
3	10	4	6		9	4	5	1525.8898	-0.0004	0.3970E-01	6	22	12	10		22	11	11	1529.4980		0.4778E-03
3	10	1	9		9	1	8	1525.9177	0.0000	0.2555E+00	3	10	9	1		9	9	0	1529.5059		0.1232E-02
3	9	8	1		8	8	0	1525.9811		0.1219E-02	3	10	9	2		9	9	1	1529.5059		0.1232E-02
3	9	8	2		8	8	1	1525.9811		0.1219E-02	3	11	6	6		10	6	5	1529.6158	0.0006	0.1379E-01
3	11	1	11		10	1	10	1525.9930	-0.0001	0.2623E+00	3	11	6	5		10	6	4	1529.6158	0.0006	0.1379E-01
3	24	2	22		24	2	23	1526.0100		0.1325E-03	3	12	2	11		11	2	10	1529.9896	0.0000	0.7011E-01
6	15	11	4		14	10	5	1526.0520		0.2186E-02	6	30	10	20		29	9	21	1530.2854		0.4529E-03
6	15	11	5		14	10	4	1526.0520		0.2186E-02	6	30	10	21		29	9	20	1530.2854		0.4529E-03
6	18	12	6		18	11	7	1526.2053		0.1059E-02	6	23	12	11		23	11	12	1530.2933		0.3752E-03
6	18	12	7		18	11	8	1526.2053		0.1059E-02	6	23	12	12		23	11	13	1530.2933		0.3752E-03
6	10	6	5		9	3	6	1526.2249		0.1433E-02	3	11	7	5		10	7	4	1530.3898	0.0012*	0.1976E-01
6	10	6	4		9	3	7	1526.2446		0.1260E-02	3	11	7	4		10	7	3	1530.3898	0.0012*	0.1976E-01
3	10	5	6		9	5	5	1526.4124	-0.0001	0.7293E-01	6	18	11	7		17	10	8	1530.4397		0.1482E-02
3	10	5	5		9	5	4	1526.4124	-0.0001	0.7293E-01	6	18	11	8		17	10	7	1530.4397		0.1482E-02
3	11	0	11		10	0	10	1526.6644	0.0001	0.8969E-01	3	12	3	10		11	3	9	1530.4969	-0.0011	0.1278E+00
6	28	10	19		27	9	18	1526.9659		0.8269E-03	3	12	3	9		11	3	8	1530.5209	-0.0011	0.9494E-01
6	28	10	18		27	9	19	1526.9659		0.8269E-03	3	13	1	13		12	1	12	1530.6101	0.0001	0.2371E+00
6	19	12	7		19	11	8	1527.0477		0.8929E-03	6	12	6	7		11	3	8	1530.7827		0.6920E-01
6	19	12	8		19	11	9	1527.0477		0.8929E-03	6	12	6	6		11	3	9	1530.8055		0.3643E-01
3	10	6	4		9	6	3	1527.0505	0.0003	0.1299E-01	3	12	2	10		11	2	9	1530.9055	-0.0001	0.6919E-01
3	10	6	5		9	6	4	1527.0505	0.0003	0.1299E-01	3	12	4	9		11	4	8	1530.9795	0.0005	0.3877E-01
6	16	11	5		15	10	6	1527.5007		0.1953E-02	3	12	4	8		11	4	7	1530.9812	-0.0012	0.3877E-01
6	16	11	6		15	10	5	1527.5007		0.1953E-02	6	24	12	12		24	11	13	1531.0795		0.2904E-03
3	11	2	10		10	2	9	1527.5115	-0.0001	0.7318E-01	6	24	12	13		24	11	14	1531.0795		0.2904E-03
3	10	7	3		9	7	2	1527.7921	0.0006*	0.1756E-01	3	12	1	11		11	1	10	1531.1030	0.0001	0.2355E+00
3	10	7	4		9	7	3	1527.7921	0.0006*	0.1756E-01	3	19	1	18		19	1	19	1531.1085		0.6911E-03
6	20	12	8		20	11	9	1527.8763		0.7377E-03	3	13	0	13		12	0	12	1531.2510	0.0000	0.8044E-01
6	20	12	9		20	11	10	1527.8763		0.7377E-03	3	11	8	4		10	8	3	1531.2832		0.2585E-02
3	11	3	9		10	3	8	1528.0035	-0.0004	0.1646E+00	3	11	8	3		10	8	2	1531.2832		0.2585E-02
3	11	3	8		10	3	7	1528.0417	-0.0006	0.1622E+00	3	12	5	7		11	5	6	1531.5190	-0.0002	0.7401E-01
3	11	2	9		10	2	8	1528.2202	0.0001	0.7245E-01	3	12	5	8		11	5	7	1531.5190	-0.0002	0.7401E-01
3	12	1	12		11	1	11	1528.3055	0.0000	0.2517E+00	3	28	2	24		28	2	25	1531.8545		0.6915E-04
3	18	1	17		18	1	18	1528.3458		0.8748E-03	6	25	12	14		25	11	15	1531.8569		0.2217E-03
3	11	4	8		10	4	7	1528.4288	0.0002	0.3980E-01	6	25	12	13		25	11	14	1531.8569		0.2217E-03
3	11	4	7		10	4	6	1528.4296	-0.0007	0.3980E-01	6	19	11	9		18	10	8	1531.9235		0.1262E-02
6	11	6	6		10	3	7	1528.4821		0.8129E-02	6	19	11	8		18	10	9	1531.9235		0.1262E-02
3	11	1	10		10	1	9	1528.5123	0.0001	0.2478E+00	3	12	6	6		11	6	5	1532.1936	0.0007	0.1397E-01
6	11	6	5		10	3	8	1528.5157		0.5857E-02	3	12	6	7		11	6	6	1532.1936	0.0007	0.1397E-01
3	10	8	3		9	8	2	1528.6224		0.2047E-02	3	11	9	3		10	9	2	1532.3201		0.2019E-02
3	10	8	2		9	8	1	1528.6224		0.2047E-02	3	11	9	2		10	9	1	1532.3201		0.2019E-02
6	29	10	20		28	9	19	1528.6309		0.6159E-03	3	13	2	12		12	2	11	1532.4659	0.0000	0.6585E-01
6	29	10	19		28	9	20	1528.6309		0.6159E-03	6	26	12	16		26	11	16	1532.6262		0.1669E-03
6	21	12	10		21	11	11	1528.6926		0.5985E-03	6	28	12	14		28	11	15	1532.6262		0.1669E-03
6	21	12	9		21	11	10	1528.6926		0.5985E-03	6	13	6	8		12	3	9	1532.7803		0.2072E-01
3	25	2	23		25	2	24	1528.8792		0.9599E-04	6	13	6	7		12	3	10	1532.8483		0.4405E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	14	1	14		13	1	13	1532.9063	0.0001	0.2194E+00	3	14	1	13		13	1	12	1536.2600	0.0000	0.2009E+00
3	12	7	5		11	7	4	1533.0020	0.0015*	0.2070E-01	3	13	2	12		13	0	13	1536.2699		0.2235E-03
3	12	7	6		11	7	5	1533.0020	0.0015*	0.2070E-01	3	14	2	12		13	2	11	1536.3512	0.0002	0.5943E-01
3	13	3	11		12	3	10	1533.2260	0.0011	0.1109E+00	6	22	11	12		21	10	11	1536.4073		0.7132E-03
3	13	3	10		12	3	9	1533.2865	0.0005	0.1340E+00	6	22	11	11		21	10	12	1536.4073		0.7132E-03
6	27	12	16		27	11	17	1533.3876		0.1240E-03	3	13	8	6		12	8	5	1536.6602		0.2925E-02
6	27	12	15		27	11	16	1533.3876		0.1240E-03	3	13	8	5		12	8	4	1536.6602		0.2925E-02
6	20	11	9		19	10	10	1533.4137		0.1058E-02	3	14	5	10		13	5	9	1536.6707	0.0001	0.6672E-01
6	20	11	10		19	10	9	1533.4137		0.1058E-02	3	14	5	9		13	5	8	1536.6707	0.0000	0.6672E-01
3	6	2	5		6	0	6	1533.4579		0.8183E-04	3	21	1	20		21	1	21	1536.7527		0.4242E-03
3	14	0	14		13	0	13	1533.5125	-0.0003	0.7424E-01	6	15	0	10		14	3	11	1537.0128		0.4865E-02
3	13	4	10		12	4	9	1533.5415	0.0009	0.3688E-01	3	14	2	13		14	0	14	1537.0894		0.2248E-03
3	13	4	9		12	4	8	1533.5446	-0.0021	0.3688E-01	6	15	0	9		14	3	12	1537.2539		0.9508E-02
3	13	2	11		12	2	10	1533.6171	0.0000	0.6474E-01	3	14	6	8		13	6	7	1537.3856	0.0011	0.1293E-01
3	7	2	6		7	0	7	1533.6208		0.8832E-04	3	14	6	9		13	6	8	1537.3856	0.0011	0.1293E-01
3	13	1	12		12	1	11	1533.6866	0.0000	0.2195E+00	3	15	2	14		14	2	13	1537.4084	0.0001	0.5504E-01
3	8	2	7		8	0	8	1533.8425		0.1175E-03	3	16	1	16		15	1	15	1537.4728	-0.0002	0.1791E+00
3	20	1	19		20	1	20	1533.9166		0.5431E-03	3	14	11	4		13	11	3	1537.6346		0.2136E-02
3	12	8	5		11	8	4	1533.9626		0.2839E-02	3	14	11	3		13	11	2	1537.6346		0.2136E-02
3	12	8	4		11	8	3	1533.9626		0.2839E-02	6	23	11	12		22	10	13	1537.9084		0.5734E-03
3	13	5	9		12	5	8	1534.0892	0.0001	0.7114E-01	6	23	11	13		22	10	12	1537.9084		0.5734E-03
3	13	5	8		12	5	7	1534.0892	0.0000	0.7114E-01	3	16	0	16		15	0	15	1537.9851	-0.0006	0.6030E-01
3	9	2	8		9	0	9	1534.1364		0.1471E-03	3	13	9	5		12	9	4	1538.0204		0.2663E-02
6	28	12	17		28	11	18	1534.1414		0.9095E-04	3	13	9	4		12	9	3	1538.0204		0.2663E-02
6	28	12	16		28	11	17	1534.1414		0.9095E-04	3	15	2	14		15	0	15	1538.0332		0.2186E-03
3	10	2	9		10	0	10	1534.5148		0.1746E-03	3	14	7	8		13	7	7	1538.2686	0.0015*	0.1988E-01
3	13	6	8		12	6	7	1534.7834	0.0009	0.1364E-01	3	14	7	7		13	7	6	1538.2686	0.0015*	0.1988E-01
3	13	6	7		12	6	6	1534.7834	0.0009	0.1364E-01	3	15	3	13		14	3	12	1538.3264	0.0003	0.1205E+00
6	29	12	17		29	11	18	1534.8878		0.6584E-04	3	15	3	12		14	3	11	1538.5148	0.0001	0.1248E+00
6	29	12	18		29	11	19	1534.8878		0.6584E-04	3	15	4	12		14	4	11	1538.6993	-0.0006	0.3126E-01
6	21	11	10		20	10	11	1534.9087		0.8749E-03	3	15	4	11		14	4	10	1538.7080	-0.0007	0.3126E-01
6	21	11	11		20	10	10	1534.9087		0.8749E-03	3	15	1	14		14	1	13	1538.8195	0.0001	0.1808E+00
3	12	11	2		11	11	1	1534.9235		0.1203E-02	6	16	0	11		15	3	12	1539.0385		0.3326E-02
3	12	11	1		11	11	0	1534.9235		0.1203E-02	3	15	11	4		14	11	3	1539.0457		0.2214E-02
6	14	6	9		13	3	10	1534.9268		0.8343E-02	3	15	11	5		14	11	4	1539.0457		0.2214E-02
3	14	2	13		13	2	12	1534.9391	0.0000	0.6073E-01	3	16	2	15		16	0	16	1539.1018		0.2060E-03
3	11	2	10		11	0	11	1534.9899		0.1977E-03	3	15	2	13		14	2	12	1539.1035	0.0002	0.5357E-01
6	14	6	8		13	3	11	1535.0737		0.1674E-01	3	13	12	1		12	12	0	1539.1475		0.8245E-04
3	12	9	4		11	9	3	1535.1589		0.2467E-02	3	13	12	2		12	12	1	1539.1475		0.8245E-04
3	12	9	3		11	9	2	1535.1589		0.2467E-02	3	15	5	11		14	5	10	1539.2634	0.0001	0.6121E-01
3	15	1	15		14	1	14	1535.1938	-0.0002	0.1998E+00	3	15	5	10		14	5	9	1539.2635	-0.0001	0.6121E-01
3	12	2	11		12	0	12	1535.5721		0.2144E-03	3	14	8	7		13	8	6	1539.3752		0.2870E-02
3	13	7	7		12	7	6	1535.6285	0.0017*	0.2066E-01	3	14	8	6		13	8	5	1539.3752		0.2870E-02
3	13	7	6		12	7	5	1535.6285	0.0017*	0.2066E-01	6	16	6	10		15	3	13	1539.4067		0.6586E-02
3	15	0	15		14	0	14	1535.7560		0.6742E-01	6	24	11	14		23	10	13	1539.4110		0.4548E-03
3	14	3	12		13	3	11	1535.7599		0.1265E+00	6	24	11	13		23	10	14	1539.4110		0.4548E-03
3	14	3	11		13	3	10	1535.8828	0.0005	0.1347E+00	3	22	1	21		22	1	22	1539.6003		0.3292E-03
3	14	4	11		13	4	10	1536.1147	0.0007	0.3428E-01	3	17	1	17		16	1	16	1539.7428	-0.0001	0.1581E+00
3	14	4	10		13	4	9	1536.1199	-0.0045	0.3428E-01	3	16	2	15		15	2	14	1539.8727	0.0002	0.4906E-01
3	13	11	3		12	11	2	1536.2559		0.1840E-02	3	15	6	9		14	6	8	1539.9996	0.0014	0.1196E-01
3	13	11	2		12	11	1	1536.2559		0.1840E-02	3	15	6	10		14	6	9	1539.9996	0.0014	0.1196E-01

V	J	Ka	Kc	-	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	FREQUENCY	RESIDUAL	STRENGTH
3	17	0	17	16	0	16	1540.2028	-0.0007	0.5313E-01	1543.9023	0.0000	0.2461E-01					
3	17	2	16	17	0	17	1540.2931		0.1888E-03	1543.9218		0.2095E-03					
3	16	11	5	15	11	4	1540.4794		0.2154E-02	1543.9218		0.2095E-03					
3	16	11	5	15	11	5	1540.4794		0.2154E-02	1543.9241		0.2480E-01					
3	14	9	6	13	9	5	1540.9025		0.2678E-02	1544.2194		0.5820E-04					
3	14	9	5	13	9	4	1540.9025		0.2678E-02	1544.2194		0.5820E-04					
3	16	3	14	15	3	13	1540.9075	0.0002	0.1094E+00	1544.2570	0.0000	0.1180E+00					
6	25	11	16	24	10	14	1540.9146		0.3559E-03	1544.4829	0.0002	0.4860E-01					
6	25	11	14	24	10	15	1540.9220		0.3559E-03	1544.4835	-0.0004	0.4860E-01					
3	15	7	8	14	7	7	1540.9220	0.0009*	0.1857E-01	1544.5514	-0.0012	0.1254E-03					
3	15	7	8	14	7	8	1540.9220	0.0009*	0.1857E-01	1544.6138	0.0000	0.3953E-01					
6	17	6	12	16	3	13	1540.9969		0.2456E-02	1544.6429	0.0000	0.4130E-01					
3	14	12	2	13	12	2	1541.0398		0.1387E-03	1544.6613	0.0000	0.9341E-04					
3	16	3	13	15	3	12	1541.1768	0.0001	0.1387E-03	1544.6613	0.0000	0.9341E-04					
3	16	3	13	15	3	12	1541.1768	0.0001	0.1387E-03	1544.6750	0.0000	0.9341E-04					
3	16	4	13	15	4	12	1541.2952	-0.0007	0.1122E+00	1544.7517	0.0000	0.1498E-02					
3	16	4	12	15	4	11	1541.3092	-0.0006	0.2798E-01	1544.7517	0.0000	0.1498E-02					
3	16	1	15	15	1	14	1541.3616	-0.0004	0.2798E-01	1544.7517	0.0000	0.1498E-02					
6	17	6	11	16	3	14	1541.5372	0.0004	0.1609E+00	1544.7823	0.0002	0.3719E-01					
3	18	2	17	18	0	18	1541.6027		0.5037E-02	1544.8549		0.2490E-02					
3	18	5	12	15	5	11	1541.6676		0.1686E-03	1544.8549		0.2490E-02					
3	18	5	11	15	5	10	1541.6676		0.1686E-03	1544.8549		0.2490E-02					
3	18	5	11	15	5	10	1541.6676		0.1686E-03	1544.8549		0.2490E-02					
3	18	2	14	16	2	13	1541.8691		0.5505E-01	1544.8661		0.1591E-02					
3	17	11	7	16	11	6	1541.9301		0.4746E-01	1544.9386		0.1131E-03					
3	17	11	6	16	11	5	1541.9301		0.2007E-02	1544.9386		0.1131E-03					
3	18	1	18	17	1	17	1542.0042	-0.0001	0.2007E-02	1545.1213		0.1115E-03					
3	15	8	7	14	8	7	1542.1071		0.1375E+00	1545.1213		0.1115E-03					
3	15	8	7	14	8	6	1542.1071		0.2713E-02	1545.1312		0.1115E-03					
3	17	2	16	16	2	15	1542.3311	0.0002	0.213E-02	1545.1312	0.0015	0.9592E-02					
3	18	0	18	17	0	17	1542.4114	-0.0006	0.4304E-01	1545.2633	0.0015	0.9592E-02					
6	26	11	15	25	10	16	1542.4183		0.4615E-01	1545.2633		0.9592E-02					
6	28	11	16	25	10	15	1542.4183		0.2749E-03	1545.4244		0.1940E-03					
3	23	1	22	23	1	23	1542.4446		0.2749E-03	1545.4244		0.1576E-03					
3	16	6	10	15	6	9	1542.6256	0.0014	0.2537E-03	1545.5977	0.0005	0.1172E-03					
3	16	6	11	15	6	10	1542.6256	0.0014	0.1082E-01	1545.5977		0.1172E-03					
6	18	6	13	17	3	14	1542.8793		0.1082E-01	1545.7430		0.3370E-02					
3	14	13	1	13	13	0	1542.9016		0.1860E-02	1545.7430		0.1145E-03					
3	14	13	2	13	13	1	1542.9016		0.6844E-04	1545.7430		0.1145E-03					
3	15	12	3	14	12	2	1542.9073		0.6844E-04	1546.0989		0.1145E-03					
3	15	12	4	14	12	3	1542.9073		0.1685E-03	1546.0989		0.1145E-03					
3	19	2	18	19	0	19	1543.0245		0.1685E-03	1546.1757		0.8378E-01					
3	18	11	7	17	11	6	1543.3934		0.1470E-03	1546.2645	-0.0035*	0.1503E-01					
3	18	11	8	17	11	7	1543.3934		0.1810E-02	1546.2645	-0.0035*	0.1503E-01					
3	17	3	15	16	3	14	1543.4984	0.0004	0.1810E-02	1546.3457		0.1368E-02					
3	17	3	15	16	3	14	1543.4984	0.0004	0.9671E-01	1546.3457		0.1368E-02					
3	16	7	9	15	7	8	1543.5878	-0.0006*	0.1690E-01	1546.3734	0.0001	0.1156E-02					
6	18	6	12	17	3	15	1543.6464	-0.0006*	0.1690E-01	1546.3788	0.0001	0.1156E-02					
3	15	9	6	14	9	5	1543.8035		0.4061E-02	1546.5013	0.0001	0.9978E-01					
3	15	9	6	14	9	5	1543.8035		0.2562E-02	1546.5206	-0.0008	0.2129E-01					
3	17	3	14	16	3	13	1543.8688	0.0001	0.2562E-02	1546.5535	-0.0009	0.2129E-01					
3	17	1	16	16	1	15	1543.8688	0.0001	0.9879E-01	1546.5742	0.0003	0.1843E-03					
3	17	1	16	16	1	15	1543.8688	0.0001	0.1395E+00	1546.5742	0.0003	0.1843E-03					
3	17	1	16	16	1	15	1543.8688	0.0001	0.1395E+00	1546.5925	0.0003	0.8539E-01					

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
6	18	13	5		18	12	6	1546.5933		0.1064E-03	3	17	9	8		16	9	7	1549.6552		0.2122E-02
6	18	13	6		18	12	7	1546.5933		0.1064E-03	3	20	2	19		19	2	18	1549.6614	0.0004	0.2657E-01
3	18	9	8		15	9	7	1546.7216		0.2366E-02	6	12	12	1		11	11	0	1549.6715		0.2410E-02
3	18	9	7		15	9	6	1546.7216		0.2366E-02	6	12	12	0		11	11	1	1549.6715		0.2410E-02
3	20	0	20		19	0	19	1546.8116	-0.0018	0.3339E-01	3	23	2	22		23	0	23	1549.6835		0.6949E-04
6	29	11	19		28	10	18	1546.9260		0.1171E-03	3	19	5	15		18	5	14	1549.7478	0.0007	0.3598E-01
6	29	11	18		28	10	19	1546.9260		0.1171E-03	3	19	5	14		18	5	13	1549.7495	-0.0009	0.3598E-01
3	18	13	3		15	13	2	1546.9532		0.1389E-03	6	23	5	19		22	0	22	1549.7504		0.1965E-03
3	18	13	4		15	13	3	1546.9532		0.1389E-03	6	21	6	15		20	3	18	1549.8964		0.2409E-02
3	18	5	14		17	5	13	1547.1097	0.0004	0.4216E-01	3	19	12	8		18	12	7	1550.1584		0.1629E-03
6	19	13	7		19	12	8	1547.1097		0.9512E-04	3	19	12	7		18	12	6	1550.1584		0.1629E-03
6	19	13	6		19	12	7	1547.1097		0.9512E-04	3	19	12	7		18	12	6	1550.1973	0.0011	0.2994E-01
3	18	5	13		17	5	12	1547.1107	-0.0008	0.4216E-01	3	18	8	10		17	8	9	1550.3959		0.1951E-02
3	19	2	18		18	2	17	1547.2261	0.0004	0.3166E-01	3	18	8	11		17	8	10	1550.3959		0.1951E-02
3	18	2	16		17	2	15	1547.4205	0.0007	0.3547E-01	4	18	10	8		17	7	10	1550.4229		0.1302E-03
3	17	8	9		16	8	8	1547.6180		0.2229E-02	4	18	10	9		17	7	11	1550.4229		0.1302E-03
3	17	8	10		16	8	9	1547.6180		0.2229E-02	3	19	6	14		18	6	13	1550.5736	0.0017	0.7141E-02
6	20	13	7		20	12	6	1547.6368		0.8252E-04	3	19	6	13		18	6	12	1550.5736	0.0017	0.7141E-02
6	20	13	8		20	12	9	1547.6368		0.8252E-04	6	23	6	18		22	3	19	1550.7756		0.5670E-03
6	20	6	14		19	3	17	1547.8246		0.2839E-02	3	23	11	13		22	11	12	1550.8101		0.7765E-03
3	21	11	11		20	11	10	1547.8306		0.1153E-02	3	23	11	12		22	11	11	1550.8101		0.7765E-03
3	21	11	10		20	11	9	1547.8306		0.1153E-02	3	7	2	5		6	0	6	1550.8326		0.7417E-04
3	22	2	21		22	0	22	1547.8892		0.8610E-04	3	26	1	25		26	1	26	1550.8401		0.1106E-03
3	18	6	13		17	6	12	1547.9127	0.0018	0.8349E-02	3	18	13	5		17	13	4	1550.9175		0.1509E-03
3	18	6	12		17	6	11	1547.9127	0.0017	0.8349E-02	3	18	13	6		17	13	5	1550.9175		0.1509E-03
6	21	6	16		20	3	17	1547.9633		0.9129E-03	3	22	1	22		21	1	21	1550.9658	0.0002	0.6854E-01
3	25	1	24		25	1	25	1548.0735		0.1471E-03	3	22	0	22		21	0	21	1551.2018	-0.0022	0.2284E-01
3	6	2	4		5	0	5	1548.1404		0.5001E-04	3	20	1	19		19	1	18	1551.2861	0.0000	0.8445E-01
6	21	13	8		21	12	9	1548.1736		0.6976E-04	3	20	3	18		19	3	17	1551.3108	0.0005	0.5971E-01
6	21	13	9		21	12	10	1548.1736		0.6976E-04	3	24	2	23		24	0	24	1551.5507		0.5519E-04
3	18	12	7		17	12	6	1548.3760		0.1766E-03	3	19	7	13		18	7	12	1551.6324	-0.0237*	0.1088E-01
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6	30	11	19		29	10	20	1548.4261		0.8587E-04	3	20	4	17		19	4	16	1551.7889	-0.0010	0.1520E-01
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3	19	3	17		18	3	16	1548.7015	0.0005	0.7131E-01	3	20	12	8		19	12	7	1551.9224		0.1456E-03
6	22	13	10		22	12	11	1548.7188		0.5767E-04	3	20	12	9		19	12	8	1551.9224		0.1456E-03
6	22	13	9		22	12	10	1548.7188		0.5767E-04	6	22	6	16		21	3	19	1551.9628		0.2048E-02
3	21	1	21		20	1	20	1548.7375	0.0002	0.8325E-01	6	24	6	19		23	3	20	1551.9799		0.4448E-03
3	19	1	18		18	1	17	1548.8475	0.0001	0.1013E+00	3	21	2	20		20	2	19	1552.0876	0.0008	0.2198E-01
3	17	13	4		16	13	3	1548.9460		0.1503E-03	3	20	3	17		19	3	16	1552.1392	0.0003	0.6069E-01
3	17	13	5		16	13	4	1548.9460		0.1503E-03	3	24	11	13		23	11	12	1552.3026		0.8221E-03
3	18	7	12		17	7	11	1548.9491	-0.0097*	0.1304E-01	3	24	11	14		23	11	13	1552.3026		0.8221E-03
3	18	7	11		17	7	10	1548.9491	-0.0097*	0.1304E-01	3	20	5	16		19	5	15	1552.3972	0.0009	0.3022E-01
3	21	0	21		20	0	20	1549.0067	-0.0018	0.2781E-01	3	20	5	15		19	5	14	1552.3999	-0.0017	0.3022E-01
3	19	4	16		18	4	15	1549.1497	-0.0009	0.1813E-01	3	18	9	10		17	9	9	1552.6025		0.1858E-02
3	19	4	15		18	4	14	1549.1982	-0.0010	0.1812E-01	3	18	9	9		17	9	8	1552.6025		0.1858E-02
3	22	11	11		21	11	10	1549.3191		0.9540E-03	4	19	10	9		18	7	11	1552.6255		0.4095E-03
3	22	11	12		21	11	11	1549.3191		0.9540E-03	4	19	10	10		18	7	12	1552.6255		0.4095E-03
3	19	3	16		18	3	15	1549.3490	0.0003	0.7256E-01	3	19	13	7		18	13	6	1552.8679		0.1440E-03
6	22	6	17		21	3	18	1549.4340		0.7203E-03	3	19	13	6		18	13	5	1552.8679		0.1440E-03
3	17	9	9		16	9	8	1549.6552		0.2122E-02	3	20	2	18		19	2	17	1552.9894	0.0012	0.2489E-01

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	18	3	14		18	1	15	1559.1707		0.1336E-03	3	23	7	18		22	7	15	1582.7078		0.4827E-02
3	24	2	23		23	2	22	1559.3077	0.0013	0.1147E-01	3	23	7	17		22	7	18	1582.7078		0.4827E-02
6	25	5	21		24	0	24	1559.6921		0.4778E-03	3	25	1	24		24	1	23	1583.0178	-0.0004	0.2786E-01
3	15	3	13		15	1	14	1559.7050		0.1210E-03	3	11	2	9		10	0	10	1583.0838		0.1701E-03
3	10	2	8		9	0	9	1559.7268		0.1525E-03	3	24	5	20		23	5	19	1583.1058	-0.0011	0.1294E-01
3	23	4	20		22	4	19	1559.7625	-0.0012	0.8194E-02	3	24	5	19		23	5	18	1583.1201	-0.0005	0.1294E-01
3	29	11	18		28	11	17	1559.7635		0.1850E-03	4	24	10	14		23	7	16	1583.1527		0.1881E-03
3	29	11	19		28	11	18	1559.7635		0.1650E-03	4	24	10	15		23	7	17	1583.1527		0.1881E-03
3	26	1	26		25	1	25	1559.8071	0.0007	0.2786E-01	6	18	12	4		15	11	5	1583.1539		0.5044E-03
6	15	12	3		14	11	4	1559.8381		0.1850E-03	6	18	12	5		15	11	4	1583.1539		0.5044E-03
6	15	12	4		14	11	3	1559.8381		0.7442E-03	3	24	3	21		23	3	20	1583.6129	0.0006	0.2551E-01
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3	27	3	25		27	1	26	1559.9384		0.8605E-04	3	24	6	19		23	6	18	1584.0449		0.2580E-02
3	23	4	19		22	4	18	1559.9528	-0.0012	0.8179E-02	3	24	6	18		23	6	17	1584.0453		0.2580E-02
3	22	7	15		21	7	14	1559.9787		0.5869E-02	3	26	2	25		25	2	24	1584.0714		0.6952E-02
3	22	7	16		21	7	15	1559.9787		0.5869E-02	3	25	13	13		24	13	12	1584.1545		0.5835E-04
6	26	6	20		25	3	23	1580.2740		0.1037E-02	3	25	13	12		24	13	11	1584.1545		0.5835E-04
3	14	3	12		14	1	13	1580.2839		0.1039E-03	3	28	1	28		27	1	27	1584.1893	0.0009	0.1628E-01
3	23	5	19		22	5	18	1580.4122	-0.0008	0.1835E-01	3	28	0	28		27	0	27	1584.2305		0.5429E-02
3	23	5	18		22	5	17	1580.4219	-0.0009	0.1835E-01	3	25	3	23		24	3	22	1584.3884	-0.0001	0.1958E-01
3	23	13	11		22	13	10	1580.4689		0.8844E-04	3	23	8	15		22	8	14	1584.4774		0.7824E-03
3	23	13	10		22	13	9	1580.4689		0.8844E-04	3	23	8	16		22	8	15	1584.4774		0.7824E-03
3	25	12	13		24	12	12	1580.4987		0.5915E-04	3	22	9	14		21	9	13	1584.5038		0.8984E-03
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3	23	3	20		22	3	19	1580.7026	0.0006	0.3239E-01	6	28	6	22		27	3	25	1584.5398		0.7114E-03
3	24	1	23		23	1	22	1580.7281	-0.0001	0.3588E-01	6	28	6	22		25	0	25	1584.8258		0.8368E-04
3	28	3	26		28	1	27	1580.8788		0.5344E-04	3	25	4	22		24	4	21	1585.1157		0.5057E-02
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4	23	10	14		22	7	16	1581.0498		0.3374E-03	3	26	1	25		25	1	24	1585.2853	-0.0005	0.2147E-01
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3	30	11	19		29	11	18	1581.2517		0.1215E-03	3	24	7	18		23	7	17	1585.4639		0.3900E-02
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3	23	6	18		22	6	17	1581.3290		0.3259E-02	3	25	5	21		24	5	20	1585.8094	-0.0020	0.1010E-01
3	23	6	17		22	6	16	1581.3293		0.3259E-02	3	25	5	20		24	5	19	1585.8308	-0.0007	0.1010E-01
3	12	3	10		12	1	11	1581.3455		0.6408E-04	3	29	1	29		28	1	28	1586.3721	0.0011	0.1226E-01
3	21	9	12		20	9	11	1581.5144		0.1108E-02	3	29	0	29		28	0	28	1586.4015		0.4092E-02
3	21	9	13		20	9	12	1581.5144		0.1108E-02	3	27	2	26		26	2	25	1586.4393		0.5307E-02
3	22	8	14		21	8	13	1581.6379		0.9508E-03	6	17	12	6		16	11	5	1586.4459		0.3399E-03
3	22	8	15		21	8	14	1581.6379		0.9508E-03	6	17	12	5		16	11	6	1586.4459		0.3399E-03
3	25	2	24		24	2	23	1581.6945	0.0019	0.8988E-02	3	25	3	22		24	3	21	1586.5438	0.0006	0.1981E-01
3	24	3	22		23	3	21	1581.7720	0.0002	0.2520E-01	3	25	2	23		24	2	22	1586.6300	0.0030	0.7958E-02
3	27	1	27		26	1	26	1582.0011	0.0009	0.2135E-01	3	12	2	10		11	0	11	1586.6345		0.1788E-03
3	11	3	9		11	1	10	1582.0049		0.8695E-04	6	29	6	23		28	3	26	1586.7227		0.5829E-03
3	27	0	27		26	0	26	1582.0540		0.7110E-02	3	25	6	20		24	6	19	1586.7711		0.2014E-02
3	24	13	11		23	13	10	1582.3210		0.7171E-04	3	25	6	19		24	6	18	1586.7719		0.2014E-02
3	24	13	12		23	13	11	1582.3210		0.7171E-04	3	26	3	24		25	3	23	1587.0038	-0.0004	0.1500E-01
6	27	6	21		26	3	24	1582.3922		0.8619E-03	4	28	10	16		25	7	18	1587.2898		0.7901E-04
3	24	4	21		23	4	20	1582.4382	-0.0013	0.6482E-02	4	28	10	17		25	7	19	1587.2898		0.7901E-04
3	10	3	8		10	1	9	1582.8132		0.5509E-04	3	24	8	17		23	8	16	1587.3269		0.6023E-03
3	24	4	20		23	4	19	1582.8923	-0.0012	0.6468E-02	3	24	8	16		23	8	15	1587.3269		0.6023E-03

v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH	v	J	Ka	Kc	-	J	Ka	Kc	FREQUENCY	RESIDUAL	STRENGTH
3	23	9	15		22	9	14	1567.5007		0.7187E-03	4	30	7	24		29	2	28	1571.7874		0.7082E-04
3	23	9	14		22	9	13	1567.5007		0.7187E-03	3	27	2	25		26	2	24	1571.9377		0.4678E-02
3	27	1	26		26	1	25	1567.5349	-0.0007	0.1636E-01	3	29	1	28		28	1	27	1571.9967	-0.0007	0.9139E-02
3	26	4	23		25	4	22	1567.8000		0.3892E-02	3	28	3	26		27	3	25	1572.2300	-0.0017	0.8442E-02
3	25	7	19		24	7	18	1568.2358		0.3071E-02	3	27	6	22		26	6	21	1572.2539		0.1177E-02
3	25	7	18		24	7	17	1568.2358		0.3071E-02	3	27	6	21		26	6	20	1572.2557		0.1177E-02
3	26	4	22		25	4	21	1568.2434		0.3874E-02	3	27	3	24		26	3	23	1572.4447	0.0005	0.1144E-01
6	15	14	2		15	13	3	1568.4384		0.7475E-04	6	19	12	7		18	11	8	1572.9738		0.1502E-03
6	15	14	1		15	13	2	1568.4384		0.7475E-04	6	19	12	8		18	11	7	1572.9738		0.1502E-03
3	26	5	22		25	5	21	1568.5237		0.7775E-02	3	26	8	19		25	8	18	1573.0525		0.3599E-03
3	30	1	30		29	1	29	1568.5500		0.9125E-02	3	26	8	18		25	8	17	1573.0525		0.3599E-03
3	28	5	21		25	5	20	1568.5538		0.7774E-02	3	28	4	25		27	4	24	1573.1765		0.2213E-02
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6	16	14	2		16	13	3	1568.7267		0.8953E-04	3	25	9	16		24	9	15	1573.5128		0.4401E-03
6	16	14	3		16	13	4	1568.7267		0.8953E-04	3	30	2	29		29	2	28	1573.5236		0.2126E-02
3	28	2	27		27	2	26	1568.7996		0.3996E-02	3	27	7	21		26	7	20	1573.8160		0.1807E-02
6	30	6	24		29	3	27	1568.9486		0.4741E-03	3	27	7	20		26	7	19	1573.8160		0.1807E-02
6	17	14	3		17	13	4	1569.0308		0.9443E-04	3	28	4	24		27	4	23	1573.9015		0.2197E-02
6	17	14	4		17	13	5	1569.0308		0.9443E-04	3	28	5	24		27	5	23	1573.9810		0.4424E-02
3	26	2	24		25	2	23	1569.2983		0.6076E-02	3	28	5	23		27	5	22	1574.0399		0.4422E-02
4	27	10	17		26	7	19	1569.3258		0.5489E-04	3	30	1	29		29	1	28	1574.2159	-0.0010*	0.8710E-02
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6	18	14	4		18	13	5	1569.3483		0.9247E-04	3	14	2	12		13	0	13	1574.5673		0.1679E-03
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3	26	3	23		25	3	22	1569.4897	0.0006	0.1516E-01	3	28	6	23		27	6	22	1575.0098		0.8815E-03
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3	27	3	25		26	3	24	1569.6177	-0.0010	0.1134E-01	6	13	13	1		12	12	0	1575.6299		0.3865E-03
6	19	14	6		19	13	7	1569.6783		0.8606E-04	6	13	13	0		12	12	1	1575.6299		0.3865E-03
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6	18	12	6		17	11	7	1569.7181		0.2272E-03	3	27	8	19		26	8	18	1575.9272		0.2724E-03
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3	28	1	27		27	1	26	1569.7708	-0.0004	0.1230E-01	6	20	12	8		19	11	9	1576.2148		0.9813E-04
6	20	14	6		20	13	7	1570.0204		0.7708E-04	6	20	12	9		19	11	8	1576.2148		0.9813E-04
6	20	14	7		20	13	6	1570.0204		0.7708E-04	3	26	9	17		25	9	16	1576.5261		0.3372E-03
3	25	8	17		24	8	16	1570.1855		0.4688E-03	3	26	9	18		25	9	17	1576.5261		0.3372E-03
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6	21	14	7		21	13	8	1570.3738		0.6693E-04	3	29	5	25		28	5	24	1576.7230		0.3270E-02
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3	24	9	15		23	9	14	1570.5042		0.5685E-03	3	29	2	27		28	2	26	1577.1176		0.2498E-02
3	24	9	16		23	9	15	1570.5042		0.5685E-03	3	30	3	28		29	3	27	1577.4508		0.4487E-02
6	22	14	9		22	13	10	1570.7379		0.5682E-04	3	29	6	24		28	6	23	1577.7751		0.6515E-03
6	22	14	8		22	13	9	1570.7379		0.5682E-04	3	29	6	23		28	6	22	1577.7791		0.6514E-03
3	26	7	20		25	7	19	1571.0204		0.2375E-02	3	29	3	26		28	3	25	1578.3569	-0.0006	0.6251E-02
3	26	7	19		25	7	18	1571.0204		0.2375E-02	6	14	13	1		13	12	2	1578.4857		0.3037E-03
3	27	4	23		26	4	22	1571.0583		0.2938E-02	6	14	13	2		13	12	1	1578.4857		0.3037E-03
3	29	2	28		28	2	27	1571.1559		0.2962E-02	3	30	4	27		29	4	26	1578.5518		0.1194E-02
3	27	5	23		26	5	22	1571.2477		0.5904E-02	3	28	8	21		27	8	20	1578.8086		0.2034E-03
3	27	5	22		26	5	21	1571.2900		0.5902E-02	3	28	8	20		27	8	19	1578.8086		0.2034E-03

PURE ROTATION TRANSITIONS

V	J	K _a	K _c	-	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	UNCERT	V	J	K _a	K _c	-	J	K _a	K _c	FREQUENCY	RESIDUAL	UNCERT		
4	3	1	2	2	3	1	3	1	3	1	3	223788.0981	0.1519	0.3000	6	3	3	3	2	2	1	2	210657.6697	-0.2597	0.3000		
4	3	2	2	2	3	2	2	1	3	2	2	217491.5144	-0.0444	0.3000	6	3	1	4	2	2	1	2	225662.1628	-0.1428	0.3000		
4	3	2	1	4	3	1	4	1	4	4	1	217784.4378	-0.0678	0.3000	6	4	1	4	3	3	1	3	280807.2488	-0.4788	0.4000		
4	4	0	4	3	0	3	3	1	3	4	1	289288.9691	-0.2091	0.4000	6	4	1	3	3	3	1	2	300675.4787	-0.1487	0.4000		
4	4	1	4	4	1	3	3	1	4	4	2	281353.5487	0.0013	0.4000	6	4	2	2	2	2	2	1	218055.9890	0.2010	0.3000		
4	4	1	3	3	1	2	2	1	3	3	2	298292.3200	-0.1700	0.4000	6	3	2	1	2	2	1	0	218314.2174	0.1726	0.3000		
4	4	2	3	3	2	2	2	1	3	2	1	289916.1300	-0.3100	0.4000	6	2	1	1	2	2	1	2	14900.0891	0.2009	0.2000		
4	4	2	2	2	2	1	2	1	2	3	1	290597.6138	-0.1238	0.4000	6	3	1	2	3	1	3	3	29810.5822	0.6178	0.2000		
4	4	3	1	2	3	1	3	4	4	4	2	12707.7965	0.0335	0.1000	6	4	1	3	4	4	1	4	49878.8121	0.3479	0.2000		
4	4	3	1	2	3	1	3	4	4	4	2	26414.6502	-0.0902	0.1000	6	4	2	0	2	2	2	1	64.5714	0.0004	0.0200		
4	4	4	1	4	1	4	1	4	4	7	2	42353.4216	0.0984	0.4000	6	7	2	5	7	2	2	6	8081.7772	-0.0172	0.2000		
4	4	4	1	3	4	1	4	5	1	6	5	63516.6398	-0.0398	0.4000	6	6	2	6	8	2	7	8	13351.0379	-0.1379	0.2000		
4	4	2	0	2	2	1	1	2	2	1	68.2665	0.0007	0.0200	6	0	2	0	2	0	2	0	8	20784.4711	-0.2411	0.2000		
4	4	7	2	6	7	2	6	7	2	6	8519.0896	0.2104	0.2000	6	10	2	8	10	2	8	9	9	30825.8350	-0.6950	0.2000		
4	4	8	2	8	8	2	8	8	2	8	14114.6641	0.1159	0.2000	6	4	3	3	4	3	3	1	2	3	0.5258	0.0012	0.0200	
4	4	9	2	7	9	2	7	9	2	7	21999.7010	0.1990	0.2000	6	3	1	2	5	3	2	5	3	2	3	3.6807	0.0043	0.0200
4	4	10	2	6	10	2	6	10	2	6	32844.6785	0.0615	0.2000	6	6	6	3	6	6	3	4	4	4	44.1579	0.0261	0.0200	
4	4	4	3	1	4	3	2	4	3	2	4.3262	0.0038	0.0200	6	7	4	4	7	4	4	4	4	4	0.5920	0.0025	0.0200	
4	4	5	3	2	5	3	3	3	3	3	17.2994	0.0090	0.0200	6	5	3	2	5	3	3	3	3	3	14.7225	0.0093	0.0200	
4	4	6	3	1	6	3	4	6	3	4	4.3262	0.0272	0.0200	6	6	6	3	6	6	3	4	4	4	44.1579	0.0261	0.0200	
4	4	4	4	1	4	4	4	4	4	4	51.8688	0.0200	0.0200	6	7	4	4	7	4	4	4	4	4	0.5920	0.0025	0.0200	
4	4	4	4	2	4	4	4	4	4	4	0.1569	0.0091	0.0200	6	8	4	4	8	4	4	4	6	6	1.7764	-0.0758R	0.0200	
4	4	4	4	3	4	4	4	4	4	4	1.3888	0.0039	0.0200	6	9	4	4	9	4	4	4	6	4	4.6192	-0.0018	0.0200	
4	4	6	4	2	6	4	2	6	4	2	6.7778	0.0077	0.0200	6	10	4	6	10	4	6	10	4	7	10.7781	-0.0071	0.0200	
4	4	7	4	4	7	4	4	7	4	4	24.0430	0.0233	0.0200	6	11	4	7	11	4	7	11	4	8	23.0920	-0.0177	0.0200	
4	4	8	4	4	8	4	4	8	4	4	69.0402	0.0583	0.0200	6	0	0	0	0	0	0	0	0	0	73062.3763	0.2537	0.0200	
4	4	0	0	0	0	0	0	0	0	0	72492.3501	0.2099	0.1000	3	1	0	1	2	1	2	1	2	211341.6477	-0.2577	0.3000		
4	4	1	0	1	1	0	1	1	1	1	144910.5482	0.1538	0.2000	3	3	1	2	3	1	3	1	3	226916.8371	0.1029	0.3000		
4	4	2	0	2	2	0	2	2	2	2	217204.5658	0.0244	0.3000	3	4	1	4	4	1	4	3	1	3	281688.3437	0.3537	0.4000	
4	4	3	0	3	3	0	3	3	3	3	140752.0653	-0.0353	0.3000	3	2	1	1	2	1	2	1	2	2	15578.4870	-0.0670	0.4000	
4	4	1	1	1	1	1	1	1	1	1	149224.5047	-0.0047	0.2000	3	3	3	3	3	3	3	3	3	3	31153.6584	0.7836R	0.2000	
4	4	2	1	2	2	1	2	2	2	2	211081.2444	0.0356	0.3000	3	7	2	5	7	2	5	7	2	6	10171.3691	0.1609	0.2000	
6	6	0	0	0	0	0	0	0	0	0	72727.3225	-0.0725	0.1000	3	8	2	6	8	2	6	8	2	7	16842.9227	-0.3427	0.2000	
6	6	1	0	1	1	0	1	1	1	1	145389.9284	-0.0684	0.2000	3	9	3	7	9	3	7	9	3	8	26233.1981	-0.7981R	0.2000	
6	6	2	0	2	2	0	2	2	2	2	217923.1474	-0.3874	0.3000	3	3	3	3	3	3	3	3	3	3	0.7977	0.0043	0.0200	
6	6	3	0	3	3	0	3	3	3	3	290262.6282	-0.4182	0.4000	3	4	4	4	4	4	4	4	4	4	5.5813	0.0015	0.0200	
6	6	4	0	4	4	0	4	4	4	4	140463.6127	-0.41627	0.2000	3	5	5	3	5	5	3	1	2	22.3094	0.0036	0.0200		
6	6	2	1	2	2	1	2	2	2	2	150400.8977	-0.0577	0.2000	3	6	6	3	6	6	3	6	3	4	66.8811	0.0114	0.0200	
6	6	1	1	1	1	1	1	1	1	1					3	7	7	4	7	7	4	7	1	1.0586	0.0029	0.0200	

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OF POOR QUALITY

Table 4: Energies of all the states up to $J = 30$ in the ground and excited states v_3 , v_4 , and v_6 .

All energies are given in terms of cm^{-1} .

J	Ka	Kc	GROUND STATE	v4	v6	v3
0	0	0	0.00000	1167.25675	1249.09438	1500.17452
1	0	1	2.42961	1169.67483	1251.52030	1502.61162
1	1	1	10.53904	1176.46542	1260.92873	1510.77234
1	1	0	10.70014	1176.60672	1261.09447	1510.94557
2	0	2	7.28640	1174.50873	1256.36999	1507.48302
2	1	2	15.23694	1181.16042	1265.61409	1515.47329
2	1	1	15.72023	1181.58431	1266.11130	1515.99293
2	2	1	40.04025	1202.17832	1294.09746	1540.46632
2	2	0	40.04262	1202.18059	1294.09962	1540.46904
3	0	3	14.56551	1181.75389	1263.63912	1514.78316
3	1	3	22.28220	1188.20134	1272.64087	1522.52289
3	1	2	23.24869	1189.04908	1273.63525	1523.56206
3	2	2	47.32781	1209.43305	1301.37103	1547.77752
3	2	1	47.33967	1209.44443	1301.38180	1547.79112
3	3	1	88.23825	1244.69031	1347.79661	1588.97185
3	3	0	88.23827	1244.69033	1347.79663	1588.97188
4	0	4	24.25967	1191.40354	1273.32124	1524.50368
4	1	4	31.67293	1197.58628	1282.00759	1531.91900
4	1	3	33.28352	1198.99904	1283.66470	1533.65063
4	2	3	57.04246	1219.10361	1311.06838	1557.52338
4	2	2	57.07801	1219.13773	1311.10066	1557.56415
4	3	2	97.95765	1254.36809	1357.49274	1598.72559
4	3	1	97.95781	1254.36823	1357.49286	1598.72578
4	4	1	155.16944	1304.58065	1421.51019	1656.32878
4	4	0	155.16944	1304.58065	1421.51020	1656.32878
5	0	5	36.35924	1203.44867	1285.40777	1536.63359
5	1	5	43.40667	1209.31281	1293.71232	1543.65883
5	1	4	45.82197	1211.43150	1296.19748	1546.25547
5	2	4	69.18238	1231.18793	1323.18885	1569.70185
5	2	3	69.26522	1231.26740	1323.26406	1569.79679
5	3	3	110.10857	1266.46626	1369.61376	1610.91965
5	3	2	110.10918	1266.46683	1369.61425	1610.92039
5	4	2	167.31462	1316.67463	1433.61997	1668.52097
5	4	1	167.31462	1316.67459	1433.61997	1668.52097
5	5	1	240.77719	1382.23009	1514.74543	1742.47736
5	5	0	240.77719	1382.23009	1514.74543	1742.47736
6	0	6	50.85236	1217.87823	1299.88811	1551.15932
6	1	6	57.48042	1223.37796	1307.75271	1557.73900
6	1	5	60.86053	1226.34299	1311.23078	1561.37252

J	Ka	Kc	GROUND STATE	v4	v6	v3
6	2	5	83.74534	1245.68342	1337.73161	1584.31035
6	2	4	83.91061	1245.84193	1337.88164	1584.49968
6	3	4	124.69197	1280.98535	1384.16016	1625.55510
6	3	3	124.69380	1280.98708	1384.16163	1625.55733
6	4	3	181.88994	1331.18598	1448.15242	1683.15286
6	4	2	181.88995	1331.18575	1448.15243	1683.15287
6	5	2	255.34563	1396.74621	1529.26238	1757.10980
6	5	1	255.34563	1396.74621	1529.26238	1757.10980
6	6	1	344.98797	1477.86196	1627.12400	1847.33986
6	6	0	344.98797	1477.86196	1627.12400	1847.33986
7	0	7	67.72516	1234.67932	1316.74976	1568.06511
7	1	7	73.89072	1239.77828	1324.12607	1574.15558
7	1	6	78.39485	1243.72925	1328.76109	1578.99678
7	2	6	100.72863	1262.58699	1354.69562	1601.34581
7	2	5	101.02500	1262.87115	1354.96453	1601.68509
7	3	5	141.70894	1297.92590	1401.13242	1642.63305
7	3	4	141.71351	1297.93022	1401.13610	1642.63862
7	4	4	198.89602	1348.11414	1465.10796	1700.22513
7	4	3	198.89605	1348.11334	1465.10798	1700.22516
7	5	3	272.34279	1413.68366	1546.19924	1774.18164
7	5	2	272.34279	1413.68366	1546.19924	1774.18164
7	6	2	361.97658	1494.79172	1644.03968	1864.41689
7	6	1	361.97658	1494.79172	1644.03968	1864.41689
7	7	1	467.71298	1591.59157	1758.35062	1970.82226
7	7	0	467.71298	1591.59157	1758.35062	1970.82226
8	0	8	86.96208	1253.83752	1335.97863	1587.33338
8	1	8	92.63367	1258.50996	1342.82939	1592.90419
8	1	7	98.41973	1263.58508	1348.78419	1599.12221
8	2	7	120.12912	1281.89504	1374.07965	1620.80465
8	2	6	120.62035	1282.36585	1374.52499	1621.36647
8	3	6	161.16055	1317.28836	1420.53095	1662.15445
8	3	5	161.17059	1317.29785	1420.53904	1662.16667
8	4	5	218.33356	1367.45876	1484.48703	1719.73856
8	4	4	218.33365	1367.45646	1484.48709	1719.73866
8	5	4	291.76895	1433.04339	1565.55619	1793.69320
8	5	3	291.76895	1433.04338	1565.55619	1793.69320
8	6	3	381.39235	1514.14081	1663.37238	1883.93356
8	6	2	381.39235	1514.14081	1663.37237	1883.93356
8	7	2	487.11802	1610.93246	1777.65220	1990.35438
8	7	1	487.11802	1610.93246	1777.65220	1990.35438
8	8	1	608.84866	1723.44941	1908.17927	2112.81486
8	8	0	608.84866	1723.44941	1908.17927	2112.81486
9	0	9	108.54640	1275.33743	1357.55932	1608.94544
9	1	9	113.70501	1279.56882	1363.85944	1613.98008
9	1	8	120.92896	1285.90433	1371.29502	1621.74164

J	Ka	Kc	GROUND STATE	v4	v6	v3
9	2	8	141.94322	1303.60348	1395.88227	1642.68282
9	2	7	142.70927	1304.33731	1396.57590	1643.55786
9	3	7	183.04785	1339.07308	1442.35608	1684.11983
9	3	6	183.06789	1339.09201	1442.37223	1684.14417
9	4	6	240.20335	1389.21977	1506.29015	1741.69404
9	4	5	240.20356	1389.21411	1506.29031	1741.69431
9	5	5	313.62447	1454.82646	1587.33345	1815.64483
9	5	4	313.62447	1454.82643	1587.33345	1815.64483
9	6	4	403.23538	1535.90951	1685.12278	1905.88990
9	6	3	403.23538	1535.90951	1685.12273	1905.88990
9	7	3	508.94852	1632.69115	1799.36642	2012.32728
9	7	2	508.94852	1632.69115	1799.36642	2012.32728
9	8	2	630.66584	1745.19761	1929.84664	2134.82978
9	8	1	630.66584	1745.19761	1929.84664	2134.82978
9	9	1	768.27747	1873.40747	2076.38351	2273.19297
9	9	0	768.27747	1873.40747	2076.38351	2273.19297
10	0	10	132.46090	1299.16327	1381.47573	1632.88225
10	1	10	137.10021	1302.95045	1387.21288	1637.37822
10	1	9	145.91531	1310.67974	1396.28761	1646.84670
10	2	9	166.16692	1327.70772	1420.10186	1666.97576
10	2	8	167.30437	1328.79663	1421.13010	1668.27303
10	3	8	207.37176	1363.28023	1466.60792	1708.52850
10	3	7	207.40889	1363.31527	1466.63786	1708.57328
10	4	7	264.50627	1413.39753	1530.51790	1766.09253
10	4	6	264.50676	1413.38520	1530.51826	1766.09317
10	5	6	337.90971	1479.03413	1611.53124	1840.03690
10	5	5	337.90971	1479.03404	1611.53125	1840.03691
10	6	5	427.50576	1560.09819	1709.29287	1930.28595
10	6	4	427.50576	1560.09819	1709.29247	1930.28595
10	7	4	533.20441	1656.86769	1823.49328	2036.74067
10	7	3	533.20441	1656.86769	1823.49328	2036.74067
10	8	3	654.90655	1769.36195	1953.92149	2159.28832
10	8	2	654.90655	1769.36195	1953.92149	2159.28832
10	9	2	792.50186	1897.55842	2100.37710	2297.78332
10	9	1	792.50186	1897.55842	2100.37710	2297.78332
10	10	1	945.86859	2041.39390	2262.70691	2451.81772
10	10	0	945.86859	2041.39390	2262.70691	2451.81772
11	0	11	158.68854	1325.29963	1407.71157	1659.12532
11	1	11	162.81454	1328.65025	1412.88628	1663.09337
11	1	10	173.37040	1337.90290	1423.75503	1674.42767
11	2	10	192.79579	1354.20269	1446.73664	1693.67846
11	2	9	194.41751	1355.75402	1448.19976	1695.52458
11	3	9	234.13302	1389.90970	1493.28639	1735.37532
11	3	8	234.19782	1389.97074	1493.33861	1735.45066
11	4	8	291.24326	1439.99290	1557.17088	1792.93508
11	4	7	291.24432	1439.96856	1557.17165	1792.93645
11	5	7	364.62509	1505.66779	1638.14984	1866.86986

J	Ka	Kc	GROUND STATE	v4	v6	v3
11	5	6	364.62510	1505.66757	1638.14985	1866.86987
11	6	6	454.20362	1586.70723	1735.89095	1957.12173
11	6	5	454.20362	1586.70723	1735.88754	1957.12173
11	7	5	559.88561	1683.46214	1850.03276	2063.59427
11	7	4	559.88561	1683.46214	1850.03276	2063.59427
11	8	4	681.57061	1795.94233	1980.40382	2186.18975
11	8	3	681.57061	1795.94233	1980.40382	2186.18975
11	9	3	819.14766	1924.12366	2126.77111	2324.82197
11	9	2	819.14766	1924.12366	2126.77111	2324.82197
11	10	2	972.49469	2067.94250	2288.92072	2479.61433
11	10	1	972.49469	2067.94250	2288.92072	2479.61433
11	11	1	1141.47892	2227.30167	2466.43063	2648.53695
11	11	0	1141.47892	2227.30167	2466.43063	2648.53695
12	0	12	187.21332	1353.73217	1436.25108	1687.65763
12	1	12	190.84312	1356.66353	1440.87633	1691.12017
12	1	11	203.28459	1367.56406	1453.68926	1704.47341
12	2	11	221.82499	1383.08284	1475.78474	1722.78547
12	2	10	224.05898	1385.21803	1477.79570	1725.32304
12	3	10	263.33209	1418.96106	1522.39105	1764.63008
12	3	9	263.43968	1419.06216	1522.47773	1764.71877
12	4	9	320.41535	1469.00713	1586.24975	1822.22281
12	4	8	320.41747	1468.96288	1586.25129	1822.22553
12	5	8	393.77108	1534.72907	1667.18953	1896.14416
12	5	7	393.77110	1534.72852	1667.18956	1896.14419
12	6	7	483.32906	1615.73706	1764.98055	1986.39728
12	6	6	483.32906	1615.73706	1764.93861	1986.39728
12	7	6	588.99204	1712.47459	1878.98484	2092.88770
12	7	5	588.99204	1712.47459	1878.98484	2092.88770
12	8	5	710.65781	1824.93865	2009.29361	2215.53328
12	8	4	710.65781	1824.93865	2009.29361	2215.53328
12	9	4	848.21459	1953.10297	2155.56580	2354.30663
12	9	3	848.21459	1953.10297	2155.56580	2354.30663
12	10	3	1001.53987	2096.90342	2317.52677	2509.72740
12	10	2	1001.53987	2096.90342	2317.52677	2509.72740
12	11	2	1170.50063	2256.24215	2494.35741	2676.40247
12	11	1	1170.50063	2256.24215	2494.35741	2676.40247
12	12	1	1354.95398	2430.99366	2691.15044	2863.18627
12	12	0	1354.95398	2430.99366	2691.15044	2863.18627
13	0	13	218.02090	1384.44825	1467.07970	1718.46435
13	1	13	221.18103	1386.98557	1471.17998	1721.45328
13	1	12	235.64696	1399.65209	1486.08111	1736.97128
13	2	12	253.24928	1414.34215	1507.24419	1754.29089
13	2	11	256.23685	1417.19496	1509.92686	1757.67610
13	3	11	294.96911	1450.43350	1553.92115	1796.55806
13	3	10	295.14044	1450.59392	1554.05905	1796.72621
13	4	10	352.02360	1500.44178	1617.75520	1853.95684
13	4	9	352.02759	1500.36673	1617.75811	1853.96198

J	Ka	Kc	GROUND STATE	v4	v6	v3
13	5	9	425.34818	1566.21981	1698.65062	1927.86031
13	5	8	425.34823	1566.21855	1698.65067	1927.86038
13	6	8	514.88222	1647.18815	1796.22007	2018.11263
13	6	7	514.88222	1647.18815	1796.18047	2018.11263
13	7	7	620.52362	1743.90510	1910.34952	2124.62054
13	7	6	620.52362	1743.90510	1910.34952	2124.62054
13	8	6	742.16793	1856.35076	2040.59086	2247.31807
13	8	5	742.16793	1856.35076	2040.59086	2247.31807
13	9	5	879.70231	1984.49607	2186.76142	2386.23500
13	9	4	879.70231	1984.49607	2186.76142	2386.23500
13	10	4	1033.00373	2128.27640	2348.52657	2542.19424
13	10	3	1033.00373	2128.27640	2348.52657	2542.19424
13	11	3	1201.93885	2287.59259	2524.76311	2706.75651
13	11	2	1201.93885	2287.59259	2524.76311	2706.75651
13	12	2	1386.36461	2462.31992	2723.60911	2894.10144
13	12	1	1386.36461	2462.31992	2723.60911	2894.10144
13	13	1	1586.12914	2652.30496	2930.58398	3095.59012
13	13	0	1586.12914	2652.30496	2930.58398	3095.59012
14	0	14	251.09912	1417.43734	1500.18464	1751.53331
14	1	14	253.82337	1419.61169	1503.79462	1754.08738
14	1	13	270.44513	1434.15437	1520.92015	1771.90700
14	2	13	287.06305	1447.97417	1541.11308	1788.18845
14	2	12	290.95637	1451.68835	1544.59986	1792.58814
14	3	12	329.04378	1484.32571	1587.87547	1830.72907
14	3	11	329.30703	1484.57094	1588.08703	1831.02333
14	4	11	386.06912	1534.29852	1651.68792	1888.13835
14	4	10	386.07629	1534.17847	1651.69315	1888.14756
14	5	10	459.35692	1600.14215	1732.53342	1962.01885
14	5	9	459.35702	1600.13946	1732.53354	1962.01899
14	6	9	548.86323	1681.06100	1830.06733	2052.26782
14	6	8	548.86323	1681.06100	1830.04286	2052.26782
14	7	8	654.48025	1777.75376	1944.12680	2158.79230
14	7	7	654.48025	1777.75376	1944.12680	2158.79230
14	8	7	776.10070	1890.17852	2074.29554	2281.54321
14	8	6	776.10070	1890.17852	2074.29554	2281.54321
14	9	6	913.61047	2018.30270	2220.35820	2420.60485
14	9	5	913.61047	2018.30270	2220.35820	2420.60485
14	10	5	1066.88585	2162.06122	2381.92155	2577.03426
14	10	4	1066.88585	2162.06122	2381.92155	2577.03426
14	11	4	1235.79311	2321.35255	2557.62738	2739.57355
14	11	3	1235.79311	2321.35255	2557.62738	2739.57355
14	12	3	1420.18895	2496.05363	2758.43145	2927.40445
14	12	2	1420.18895	2496.05363	2758.43145	2927.40445
14	13	2	1619.92137	2686.01050	2964.85033	3129.03078
14	13	1	1619.92137	2686.01050	2964.85033	3129.03078
14	14	1	1834.83072	2891.04372	3188.08200	3345.56306
14	14	0	1834.83072	2891.04372	3188.08200	3345.56306

J	Ka	Kc	GROUND STATE	v4	v6	v3
15	0	15	286.43829	1452.69117	1535.55532	1786.85520
15	1	15	288.76529	1454.53731	1538.71847	1789.01731
15	1	14	307.66530	1471.05667	1558.19463	1809.26470
15	2	14	323.26034	1483.97196	1577.38968	1824.47149
15	2	13	328.21975	1488.69881	1581.81871	1830.05995
15	3	13	365.55536	1520.63590	1624.25237	1867.37025
15	3	12	365.94740	1520.99853	1624.56677	1867.82191
15	4	12	422.55301	1570.57891	1688.04859	1924.76848
15	4	11	422.56535	1570.39623	1688.05761	1924.78431
15	5	11	495.79788	1636.49859	1768.83829	1998.62034
15	5	10	495.79808	1636.49315	1768.83853	1998.62062
15	6	10	585.27226	1717.35618	1866.31987	2088.86289
15	6	9	585.27225	1717.35616	1866.29770	2088.86289
15	7	9	690.86182	1814.02066	1980.31667	2195.40230
15	7	8	690.86182	1814.02066	1980.31666	2195.40230
15	8	8	812.45588	1926.42179	2110.40764	2318.20779
15	8	7	812.45588	1926.42179	2110.40764	2318.20779
15	9	7	949.93871	2054.52255	2256.35638	2457.41400
15	9	6	949.93871	2054.52255	2256.35638	2457.41400
15	10	6	1103.18578	2198.25775	2417.71299	2614.25874
15	10	5	1103.18578	2198.25775	2417.71299	2614.25874
15	11	5	1272.06290	2357.52159	2592.93791	2774.83870
15	11	4	1272.06290	2357.52159	2592.93791	2774.83870
15	12	4	1456.42648	2532.19427	2795.63122	2963.09641
15	12	3	1456.42648	2532.19427	2795.63122	2963.09641
15	13	3	1656.12432	2722.12078	3001.54786	3164.85999
15	13	2	1656.12432	2722.12078	3001.54786	3164.85999
15	14	2	1870.99667	2927.12177	3224.56074	3381.42855
15	14	1	1870.99667	2927.12177	3224.56074	3381.42855
15	15	1	2100.87743	3146.99081	3463.08018	3612.91108
15	15	0	2100.87743	3146.99081	3463.08018	3612.91108
16	0	16	324.03117	1490.20373	1573.18357	1824.42346
16	1	16	326.00209	1491.75801	1575.95115	1826.23808
16	1	15	347.29223	1510.34324	1597.89142	1849.02692
16	2	15	361.83488	1522.32821	1616.07255	1863.13306
16	2	14	368.02606	1528.22403	1621.58477	1870.08887
16	3	14	404.50258	1559.36169	1663.04972	1906.46291
16	3	13	405.07056	1559.88179	1663.50386	1907.12416
16	4	13	461.47634	1609.28424	1726.83788	1963.84829
16	4	12	461.49685	1609.01778	1726.85288	1963.87456
16	5	12	534.67167	1675.29212	1807.56557	2037.66539
16	5	11	534.67207	1675.28163	1807.56603	2037.66593
16	6	11	624.10945	1756.07427	1904.98594	2127.89787
16	6	10	624.10946	1756.07423	1904.96208	2127.89788
16	7	10	729.66822	1852.70588	2018.91913	2234.44964
16	7	9	729.66822	1852.70588	2018.91913	2234.44964
16	8	9	851.23317	1965.08040	2148.92713	2357.31083
16	8	8	851.23317	1965.08040	2148.92713	2357.31083
16	9	8	988.68662	2093.15528	2294.75619	2496.66033

J	Ka	Kc	GROUND STATE	v4	v6	v3
16	9	7	988.68662	2093.15528	2294.75619	2496.66033
16	10	7	1141.90304	2236.86606	2455.90206	2653.87470
16	10	6	1141.90304	2236.86606	2455.90206	2653.87470
16	11	6	1310.74767	2396.09922	2630.68657	2812.54236
16	11	5	1310.74767	2396.09922	2630.68657	2812.54236
16	12	5	1495.07659	2570.74131	2835.21682	3001.17826
16	12	4	1495.07659	2570.74131	2835.21682	3001.17826
16	13	4	1694.73737	2760.63521	3040.67433	3203.07761
16	13	3	1694.73737	2760.63521	3040.67433	3203.07761
16	14	3	1909.57010	2965.60168	3263.46408	3419.68233
16	14	2	1909.57010	2965.60168	3263.46408	3419.68233
16	15	2	2139.40858	3185.43451	3501.85277	3651.15704
16	15	1	2139.40858	3185.43451	3501.85277	3651.15704
16	16	1	2384.08169	3419.89884	3755.39886	3897.43304
16	16	0	2384.08169	3419.89884	3755.39886	3897.43304
17	0	17	363.87272	1529.97093	1613.06366	1864.23388
17	1	17	365.52925	1531.26956	1615.49471	1865.74496
17	1	16	389.30929	1551.99677	1639.99606	1891.17477
17	2	16	402.78008	1563.03516	1657.16077	1904.16590
17	2	15	410.37145	1570.25894	1663.89672	1912.66910
17	3	15	445.88361	1600.50010	1704.26491	1948.00104
17	3	14	446.68644	1601.22462	1704.90430	1948.93941
17	4	14	502.84016	1650.41546	1768.05637	2005.37880
17	4	13	502.87315	1650.04045	1768.08055	2005.42099
17	5	13	575.97895	1716.52636	1848.71562	2079.15463
17	5	12	575.97967	1716.50693	1848.71647	2079.15560
17	6	12	665.37499	1797.21592	1946.06761	2169.37281
17	6	11	665.37500	1797.21584	1946.03980	2169.37282
17	7	11	770.89934	1893.80952	2059.93422	2275.93277
17	7	10	770.89934	1893.80953	2059.93421	2275.93277
17	8	10	892.43226	2006.15416	2189.85399	2398.85131
17	8	9	892.43226	2006.15416	2189.85399	2398.85131
17	9	9	1029.85376	2134.20054	2335.55781	2538.34179
17	9	8	1029.85376	2134.20054	2335.55781	2538.34179
17	10	8	1183.03710	2277.88681	2496.48978	2695.88669
17	10	7	1183.03710	2277.88681	2496.48978	2695.88669
17	11	7	1351.84684	2437.08493	2670.86764	2852.67786
17	11	6	1351.84684	2437.08493	2670.86764	2852.67786
17	12	6	1536.13865	2611.69417	2877.19360	3041.65080
17	12	5	1536.13865	2611.69417	2877.19360	3041.65080
17	13	5	1735.75985	2801.55319	3082.22753	3243.68347
17	13	4	1735.75985	2801.55319	3082.22753	3243.68347
17	14	4	1950.55033	3006.48280	3304.79073	3460.32387
17	14	3	1950.55033	3006.48280	3304.79073	3460.32387
17	15	3	2180.34376	3226.27704	3543.04291	3691.78919
17	15	2	2180.34376	3226.27704	3543.04291	3691.78919
17	16	2	2424.96894	3460.70142	3796.48902	3938.02986
17	16	1	2424.96894	3460.70142	3796.48902	3938.02986
17	17	1	2684.25127	3709.49075	4064.92223	4198.92223

J	Ka	Kc	GROUND STATE	v4	v6	v3
17	17	0	2684.25127	3709.49075	4064.92223	4198.92223
18	0	18	405.95983	1571.99028	1655.19212	1906.28421
18	1	18	407.34245	1573.06792	1657.35598	1907.53346
18	1	17	433.69863	1595.99858	1684.49279	1935.68814
18	2	17	446.08914	1606.08466	1700.65423	1947.56253
18	2	16	455.24939	1614.79606	1708.75076	1957.79203
18	3	16	489.69600	1644.04750	1747.89491	1991.98057
18	3	15	490.80579	1645.02720	1748.77412	1993.27897
18	4	15	546.64539	1693.97311	1811.70459	2049.36082
18	4	14	546.69701	1693.46097	1811.74246	2049.42670
18	5	14	619.72039	1760.20585	1892.28877	2123.08869
18	5	13	619.72167	1760.17108	1892.29032	2123.09041
18	6	13	709.06904	1840.78184	1989.56576	2213.28773
18	6	12	709.06906	1840.78167	1989.53202	2213.28776
18	7	12	814.55503	1937.33167	2103.36193	2319.84850
18	7	11	814.55503	1937.33170	2103.36193	2319.84850
18	8	11	936.05282	2049.64288	2233.18818	2442.82820
18	8	10	936.05282	2049.64288	2233.18818	2442.82820
18	9	10	1073.43967	2177.65796	2378.76144	2582.45640
18	9	9	1073.43967	2177.65796	2378.76144	2582.45640
18	10	9	1226.58740	2321.32224	2539.47706	2740.29772
18	10	8	1226.58740	2321.32224	2539.47706	2740.29772
18	11	8	1395.35979	2480.47818	2713.47686	2895.24030
18	11	7	1395.35979	2480.47818	2713.47686	2895.24030
18	12	7	1579.61200	2655.05223	2921.56509	3084.51469
18	12	6	1579.61200	2655.05223	2921.56509	3084.51469
18	13	6	1779.19105	2844.87404	3126.20535	3286.67736
18	13	5	1779.19105	2844.87404	3126.20535	3286.67736
18	14	5	1993.93662	3049.76444	3348.53936	3503.35255
18	14	4	1993.93662	3049.76444	3348.53936	3503.35255
18	15	4	2223.68222	3269.51769	3586.64958	3734.80675
18	15	3	2223.68222	3269.51769	3586.64958	3734.80675
18	16	3	2468.25653	3503.89968	3839.99068	3981.00940
18	16	2	2468.25653	3503.89968	3839.99068	3981.00940
18	17	2	2727.48488	3752.64579	4108.33573	4241.84489
18	17	1	2727.48488	3752.64579	4108.33573	4241.84489
18	18	1	3001.19086	4391.57188	4015.45844	4517.16804
18	18	0	3001.19086	4391.57188	4015.45844	4517.16804
19	0	19	450.29082	1616.26049	1699.56750	1950.57363
19	1	19	451.43762	1617.14932	1701.55208	1951.59940
19	1	18	480.44143	1642.32891	1731.36470	1982.54613
19	2	18	491.75504	1651.46819	1746.55387	1993.31532
19	2	17	502.65110	1661.82578	1756.14079	2005.44675
19	3	17	535.93673	1689.99962	1793.93630	2038.39753
19	3	16	537.43987	1691.28029	1795.11897	2040.15485
19	4	16	592.89285	1739.95731	1857.78292	2095.79502
19	4	15	592.97157	1739.27525	1857.84078	2095.89528

J	Ka	Kc	GROUND STATE	v4	v6	v3
19	5	15	665.89670	1806.33627	1938.28528	2169.46825
19	5	14	665.89888	1806.27600	1938.28807	2169.47117
19	6	14	755.19181	1886.77279	2035.48089	2259.64268
19	6	13	755.19185	1886.77246	2035.43917	2259.64273
19	7	13	860.63516	1983.27244	2149.20232	2366.18762
19	7	12	860.63516	1983.27250	2149.20231	2366.18762
19	8	12	982.09452	2095.54635	2278.92966	2489.24042
19	8	11	982.09452	2095.54635	2278.92966	2489.24042
19	9	11	1119.44387	2223.52712	2424.36723	2629.00224
19	9	10	1119.44387	2223.52712	2424.36723	2629.00224
19	10	10	1272.55337	2367.18056	2584.86466	2787.10977
19	10	9	1272.55337	2367.18056	2584.86466	2787.10977
19	11	9	1441.28585	2526.27837	2758.51091	2940.22592
19	11	8	1441.28585	2526.27837	2758.51091	2940.22592
19	12	8	1625.49592	2700.81484	2968.33362	3129.77044
19	12	7	1625.49592	2700.81484	2968.33362	3129.77044
19	13	7	1825.03021	2890.59707	3172.60572	3332.05902
19	13	6	1825.03021	2890.59707	3172.60572	3332.05902
19	14	6	2039.72817	3095.44586	3394.70858	3548.76775
19	14	5	2039.72817	3095.44586	3394.70858	3548.76775
19	15	5	2269.42314	3315.15570	3632.67171	3780.20892
19	15	4	2269.42314	3315.15570	3632.67171	3780.20892
19	16	4	2513.94366	3549.49286	3885.90290	4026.37073
19	16	3	2513.94366	3549.49286	3885.90290	4026.37073
19	17	3	2773.11494	3798.19329	4154.15527	4287.14574
19	17	2	2773.11494	3798.19329	4154.15527	4287.14574
19	18	2	3046.76050	4437.30654	4060.96017	4562.39254
19	18	1	3046.76050	4437.30654	4060.96017	4562.39254
19	19	1	3334.70386	4735.30500	4337.46185	4851.95773
19	19	0	3334.70386	4735.30500	4337.46185	4851.95773
20	0	20	496.86505	1662.78106	1746.18998	1997.10243
20	1	20	497.81093	1663.51022	1748.12570	1997.93892
20	1	19	529.51831	1690.96726	1780.59396	2031.72756
20	2	19	539.77060	1699.17684	1794.86207	2041.41651
20	2	18	552.56585	1711.33664	1806.05871	2055.62042
20	3	18	584.60212	1738.35152	1842.38537	2087.24753
20	3	17	586.60007	1739.94952	1843.94340	2089.57899
20	4	17	641.58313	1788.36776	1906.29160	2144.68177
20	4	16	641.70051	1787.47822	1906.37799	2144.83091
20	5	16	714.50861	1854.92500	1986.70531	2218.29394
20	5	15	714.51223	1854.82340	1986.71025	2218.29878
20	6	15	803.74348	1935.18959	2083.81334	2308.43769
20	6	14	803.74355	1935.18898	2083.76137	2308.43779
20	7	14	909.13958	2031.63193	2197.45542	2414.90897
20	7	13	909.13959	2031.63204	2197.45540	2414.90897
20	8	13	1030.55697	2143.86435	2327.07838	2538.08687
20	8	12	1030.55697	2143.86436	2327.07838	2538.08687
20	9	12	1167.86584	2271.80759	2472.37532	2677.97746
20	9	11	1167.86584	2271.80759	2472.37532	2677.97746

J	Ka	Kc	GROUND STATE	v4	v6	v3
20	10	11	1320.93439	2415.50187	2632.65320	2836.32414
20	10	10	1320.93439	2415.50187	2632.65320	2836.32414
20	11	10	1489.62434	2574.48492	2805.96710	2987.63165
20	11	9	1489.62434	2574.48492	2805.96710	2987.63165
20	12	9	1673.78966	2748.98131	3017.50068	3177.41841
20	12	8	1673.78966	2748.98131	3017.50068	3177.41841
20	13	8	1873.27656	2938.72155	3221.42662	3379.82813
20	13	7	1873.27656	2938.72155	3221.42662	3379.82813
20	14	7	2087.92418	3143.52630	3443.29697	3596.56880
20	14	6	2087.92418	3143.52630	3443.29697	3596.56880
20	15	6	2317.56568	3363.19027	3681.10817	3827.99483
20	15	5	2317.56568	3363.19027	3681.10817	3827.99483
20	16	5	2562.02944	3597.48015	3934.22467	4074.11290
20	16	4	2562.02944	3597.48015	3934.22467	4074.11290
20	17	4	2821.14056	3846.13244	4202.37992	4334.82372
20	17	3	2821.14056	3846.13244	4202.37992	4334.82372
20	18	3	3094.72245	4485.44205	4108.85113	4609.98978
20	18	2	3094.72245	4485.44205	4108.85113	4609.98978
20	19	2	3382.59856	4783.35396	4385.30553	4899.45950
20	19	1	3382.59856	4783.35396	4385.30553	4899.45950
20	20	1	3684.59422	5096.11653	4675.12893	5203.07827
20	20	0	3684.59422	5096.11653	4675.12893	5203.07827
21	0	21	545.68256	1711.55199	1795.06107	2045.87181
21	1	21	546.45881	1712.14731	1797.19185	2046.54843
21	1	20	580.90983	1741.89291	1832.16219	2083.21157
21	2	20	590.12854	1749.20135	1845.58301	2091.85830
21	2	19	604.98127	1763.31557	1858.49463	2108.29851
21	3	19	635.68790	1789.09760	1893.23826	2138.52570
21	3	18	638.29739	1790.92818	1895.24988	2141.56257
21	4	18	692.71664	1839.20375	1957.23064	2196.02113
21	4	17	692.88804	1838.06355	1957.35699	2196.23838
21	5	17	765.55685	1905.98166	2037.54863	2269.56645
21	5	16	765.56270	1905.81471	2037.55748	2269.57426
21	6	16	854.72427	1986.03315	2134.56343	2359.67280
21	6	15	854.72439	1986.03206	2134.49860	2359.67297
21	7	15	960.06814	2082.41023	2248.12130	2466.45096
21	7	14	960.06814	2082.41043	2248.12127	2466.45096
21	8	14	1081.43980	2194.59665	2377.63429	2589.36640
21	8	13	1081.43980	2194.59665	2377.63429	2589.36640
21	9	13	1218.70503	2322.49892	2522.78581	2729.38026
21	9	12	1218.70503	2322.49892	2522.78581	2729.38026
21	10	12	1371.72979	2465.84664	2682.84322	2887.94161
21	10	11	1371.72979	2465.84664	2682.84322	2887.94161
21	11	11	1540.37452	2625.09717	2855.84317	3037.45495
21	11	10	1540.37452	2625.09717	2855.84317	3037.45495
21	12	10	1724.49243	2799.55093	3069.06719	3227.45883
21	12	9	1724.49243	2799.55093	3069.06719	3227.45883
21	13	9	1923.92924	2989.24668	3272.66609	3429.98434
21	13	8	1923.92924	2989.24668	3272.66609	3429.98434

J	Ka	Kc	GROUND STATE	v4	v6	v3
21	14	8	2138.52377	3194.00494	3494.30306	3646.75496
21	14	7	2138.52377	3194.00494	3494.30306	3646.75496
21	15	7	2368.10894	3413.62057	3731.95778	3878.16359
21	15	6	2368.10894	3413.62057	3731.95778	3878.16359
21	16	6	2612.51297	3647.86067	3984.95494	4124.23488
21	16	5	2612.51297	3647.86067	3984.95494	4124.23488
21	17	5	2871.56081	3896.46237	4253.00867	4384.87776
21	17	4	2871.56081	3896.46237	4253.00867	4384.87776
21	18	4	3145.07577	4535.97743	4159.13045	4659.95861
21	18	3	3145.07577	4535.97743	4159.13045	4659.95861
21	19	3	3432.88122	4833.79859	4435.53525	4949.32774
21	19	2	3432.88122	4833.79859	4435.53525	4949.32774
21	20	2	3734.80239	5146.46935	4725.31127	5252.83136
21	20	1	3734.80239	5146.46935	4725.31127	5252.83136
21	21	1	4050.66840	5474.04130	5028.05708	5570.31837
21	21	0	4050.66840	5474.04130	5028.05708	5570.31837
22	0	22	596.74375	1762.57355	1846.18334	2096.88436
22	1	22	597.37793	1763.05753	1843.91668	2097.42465
22	1	21	634.59703	1795.08549	1886.05088	2136.97837
22	2	21	642.82153	1801.53210	1898.72302	2144.63291
22	2	20	659.88354	1817.74799	1913.43712	2163.46510
22	3	20	689.18919	1842.23160	1946.49107	2192.22662
22	3	19	692.54188	1849.05782	1949.03764	2196.11526
22	4	19	746.29347	1892.46417	2010.59984	2249.81280
22	4	18	746.53906	1891.02353	2010.78115	2250.12326
22	5	18	819.04215	1959.51885	2090.81384	2323.28639
22	5	17	819.05142	1959.25093	2090.83040	2323.29871
22	6	17	908.13439	2039.30447	2187.73140	2413.34803
22	6	16	908.13461	2039.30256	2187.65072	2413.34833
22	7	16	1013.42067	2135.60746	2301.20005	2520.04489
22	7	15	1013.42067	2135.60780	2301.19999	2520.04490
22	8	15	1134.74258	2247.74298	2430.59733	2643.07786
22	8	14	1134.74258	2247.74299	2430.59733	2643.07786
22	9	14	1271.96087	2375.60061	2575.59876	2783.20889
22	9	13	1271.96087	2375.60061	2575.59876	2783.20889
22	10	13	1424.93889	2518.98241	2735.43508	2941.96259
22	10	12	1424.93889	2518.98241	2735.43508	2941.96259
22	11	12	1593.53562	2678.11448	2908.13715	3089.69363
22	11	11	1593.53562	2678.11448	2908.13715	3089.69363
22	12	11	1777.60340	2852.52292	3123.03365	3279.89180
22	12	10	1777.60340	2852.52292	3123.03365	3279.89180
22	13	10	1976.98738	3042.17165	3326.32219	3482.52722
22	13	9	1976.98738	3042.17165	3326.32219	3482.52722
22	14	9	2191.52603	3246.88091	3547.72535	3699.32548
22	14	8	2191.52603	3246.88091	3547.72535	3699.32548
22	15	8	2421.05199	3466.44570	3785.21931	3930.71424
22	15	7	2421.05199	3466.44570	3785.21931	3930.71424
22	16	7	2665.39328	3700.63354	4038.09261	4176.73562
22	16	6	2665.39328	3700.63354	4038.09261	4176.73562

J	K _a	K _c	GROUND STATE	v4	v6	v3
22	17	6	2924.37471	3949.18216	4306.04048	4437.30671
22	17	5	2924.37471	3949.18216	4306.04048	4437.30671
22	18	5	3197.81948	4588.91167	4211.79721	4712.29783
22	18	4	3197.81948	4588.91167	4211.79721	4712.29783
22	19	4	3485.55083	4886.63789	4488.15008	5001.56119
22	19	3	3485.55083	4886.63789	4488.15008	5001.56119
22	20	3	3787.39394	5199.21255	4777.87655	5304.94382
22	20	2	3787.39394	5199.21255	4777.87655	5304.94382
22	21	2	4103.17783	5526.68433	5080.57668	5622.29489
22	21	1	4103.17783	5526.68433	5080.57668	5622.29489
22	22	1	4432.73746	5869.15493	5395.81652	5953.47056
22	22	0	4432.73746	5869.15493	5395.81652	5953.47056
23	0	23	650.04919	1815.84604	1899.56015	2150.14809
23	1	23	650.56521	1816.23802	1898.46054	2150.56457
23	1	22	690.56206	1850.52553	1942.24199	2193.00987
23	2	22	697.84224	1856.15912	1954.29080	2199.73268
23	2	21	717.25758	1874.61789	1970.87335	2221.10291
23	3	21	745.10053	1897.74662	2002.13998	2248.34437
23	3	20	749.34196	1904.18455	2005.30122	2253.24449
23	4	20	802.31338	1948.14748	2066.39867	2306.05603
23	4	19	802.65917	1946.34893	2066.65435	2306.49188
23	5	19	874.96527	2015.55304	2146.49423	2379.45436
23	5	18	874.97962	2015.13254	2146.52974	2379.47339
23	6	18	963.97408	2095.00468	2243.31750	2469.46342
23	6	17	963.97444	2095.00140	2243.21754	2469.46392
23	7	17	1069.19699	2191.22369	2356.69176	2576.12854
23	7	16	1069.19700	2191.22426	2356.69165	2576.12854
23	8	16	1190.46489	2303.30309	2485.96743	2699.22007
23	8	15	1190.46489	2303.30310	2485.96743	2699.22007
23	9	15	1327.63277	2431.11215	2630.81423	2839.46165
23	9	14	1327.63277	2431.11216	2630.81423	2839.46165
23	10	14	1480.56097	2574.47021	2790.42908	2998.38718
23	10	13	1480.56097	2574.47021	2790.42908	2998.38718
23	11	13	1649.10683	2733.53613	2962.84729	3144.34573
23	11	12	1649.10683	2733.53613	2962.84729	3144.34573
23	12	12	1833.12169	2907.89649	3179.40023	3334.71730
23	12	11	1833.12169	2907.89649	3179.40023	3334.71730
23	13	11	2032.45006	3097.49561	3382.39304	3537.45632
23	13	10	2032.45006	3097.49561	3382.39304	3537.45632
23	14	10	2246.93000	3302.15331	3603.56231	3754.27955
23	14	9	2246.93000	3302.15331	3603.56231	3754.27955
23	15	9	2476.39383	3521.66473	3840.89149	3985.64579
23	15	8	2476.39383	3521.66473	3840.89149	3985.64579
23	16	8	2720.66937	3755.79779	4093.63652	4231.61400
23	16	7	2720.66937	3755.79779	4093.63652	4231.61400
23	17	7	2979.58125	4004.29087	4361.47426	4492.10938
23	17	6	2979.58125	4004.29087	4361.47426	4492.10938
23	18	6	3252.95253	4644.24370	4266.85045	4767.00619
23	18	5	3252.95253	4644.24370	4266.85045	4767.00619

J	Ka	Kc	GROUND STATE	v4	v6	v3
23	19	5	3540.60636	4941.87081	4543.14907	5056.15854
23	19	4	3540.60636	4941.87081	4543.14907	5056.15854
23	20	4	3842.36780	5254.34510	4832.82382	5359.41430
23	20	3	3842.36780	5254.34510	4832.82382	5359.41430
23	21	3	4158.06582	5581.71221	5135.47632	5676.62287
23	21	2	4158.06582	5581.71221	5135.47632	5676.62287
23	22	2	4487.53530	5924.07127	5450.67434	6007.64026
23	22	1	4487.53530	5924.07127	5450.67434	6007.64026
23	23	1	4830.61920	6281.57284	5777.95589	6352.33335
23	23	0	4830.61920	6281.57284	5777.95589	6352.33335
24	0	24	705.59944	1871.36974	1955.19550	2205.73812
24	1	24	706.01779	1871.68615	1954.59786	2205.96544
24	1	23	748.78878	1908.19495	2000.71847	2251.29030
24	2	23	755.18340	1913.07208	2004.02913	2257.15011
24	2	22	777.08712	1933.90786	2030.78918	2281.19348
24	3	22	803.41591	1955.63513	2060.18142	2306.87255
24	3	21	808.70384	1962.53868	2064.02919	2312.95487
24	4	21	860.77575	2006.25169	2124.62631	2364.74954
24	4	20	861.25478	2012.29746	2124.98102	2365.35146
24	5	20	933.32689	2074.10523	2204.51584	2438.07091
24	5	19	933.34868	2073.45945	2204.65633	2438.09971
24	6	19	1022.24356	2153.13503	2301.32193	2528.01898
24	6	18	1022.24416	2153.12955	2301.19876	2528.01981
24	7	18	1127.39692	2249.25900	2414.59659	2634.66095
24	7	17	1127.39693	2249.25996	2414.59638	2634.66097
24	8	17	1248.60628	2361.27669	2543.74452	2757.79180
24	8	16	1248.60628	2361.27671	2543.74452	2757.79180
24	9	16	1385.72007	2489.03302	2688.43221	2898.13688
24	9	15	1385.72007	2489.03302	2688.43221	2898.13688
24	10	15	1538.59527	2632.34970	2847.82539	3057.21528
24	10	14	1538.59527	2632.34970	2847.82539	3057.21528
24	11	14	1707.08731	2791.36142	3019.97202	3201.40946
24	11	13	1707.08731	2791.36142	3019.97202	3201.40946
24	12	13	1891.04638	2965.67081	3238.16682	3391.93518
24	12	12	1891.04638	2965.67081	3238.16682	3391.93518
24	13	12	2090.31632	3155.21766	3440.87680	3594.77110
24	13	11	2090.31632	3155.21766	3440.87680	3594.77110
24	14	11	2304.73467	3359.82121	3661.81235	3811.61630
24	14	10	2304.73467	3359.82121	3661.81235	3811.61630
24	15	10	2534.13344	3579.27671	3898.97299	4042.95719
24	15	9	2534.13344	3579.27671	3898.97299	4042.95719
24	16	9	2778.34018	3813.35245	4151.58546	4288.86886
24	16	8	2778.34018	3813.35245	4151.58546	4288.86886
24	17	8	3037.17936	4061.78747	4419.30884	4549.28452
24	17	7	3037.17936	4061.78747	4419.30884	4549.28452
24	18	7	3310.47386	4701.97241	4324.28917	4824.08236
24	18	6	3310.47386	4701.97241	4324.28917	4824.08236
24	19	6	3598.04671	4999.49627	4600.53121	5113.11841
24	19	5	3598.04671	4999.49627	4600.53121	5113.11841

J	Ka	Kc	GROUND STATE	v4	v6	v3
24	20	5	3899.72289	5311.86591	4890.15209	5416.24138
24	20	4	3899.72289	5311.86591	4890.15209	5416.24138
24	21	4	4215.33127	5639.12385	5192.75502	5733.30085
24	21	3	4215.33127	5639.12385	5192.75502	5733.30085
24	22	3	4544.70665	5981.36658	5507.90959	6064.15268
24	22	2	4544.70665	5981.36658	5507.90959	6064.15268
24	23	2	4887.69196	6338.74222	5835.15575	6408.66333
24	23	1	4887.69196	6338.74222	5835.15575	6408.66333
24	24	1	5244.14047	6711.44729	6174.01028	6766.71361
24	24	0	5244.14047	6711.44729	6174.01028	6766.71361
25	0	25	763.39496	1929.14479	2013.09395	2263.24248
25	1	25	763.73302	1929.39944	2012.69068	2263.62474
25	1	24	809.26321	1968.07742	2061.46489	2311.80659
25	2	24	814.83786	1972.26026	2064.05254	2316.87794
25	2	23	839.35473	1995.59906	2093.16929	2343.71714
25	3	23	864.12883	2015.88902	2120.61212	2367.80435
25	3	22	870.63106	2023.76076	2125.20348	2375.24773
25	4	22	921.67950	2066.77435	2185.28154	2425.89154
25	4	21	922.33312	2072.75629	2185.76620	2426.71006
25	5	21	994.12769	2135.20097	2265.29161	2499.13648
25	5	20	994.16018	2134.23096	2265.21110	2499.17930
25	6	20	1082.94307	2213.69695	2361.74490	2589.01473
25	6	19	1082.94406	2213.68799	2361.59401	2589.01608
25	7	19	1188.02026	2309.71341	2474.91470	2695.63280
25	7	18	1188.02028	2309.71504	2474.91433	2695.63283
25	8	18	1309.16627	2421.66350	2603.92851	2818.79182
25	8	17	1309.16627	2421.66352	2603.92850	2818.79182
25	9	17	1446.22214	2549.36264	2748.45268	2959.23294
25	9	16	1446.22214	2549.36264	2748.45268	2959.23294
25	10	16	1599.04100	2692.62890	2907.62406	3118.44659
25	10	15	1599.04100	2692.62890	2907.62406	3118.44659
25	11	15	1767.47616	2851.58961	3079.50982	3260.88317
25	11	14	1767.47616	2851.58961	3079.50982	3260.88317
25	12	14	1951.37654	3025.84501	3299.33314	3451.54518
25	12	13	1951.37654	3025.84501	3299.33314	3451.54518
25	13	13	2150.58515	3215.33684	3501.77161	3654.47098
25	13	12	2150.58515	3215.33684	3501.77161	3654.47098
25	14	12	2364.93900	3419.88362	3722.47387	3871.33484
25	14	11	2364.93900	3419.88362	3722.47387	3871.33484
25	15	11	2594.26973	3639.28059	3959.46242	4102.64734
25	15	10	2594.26973	3639.28059	3959.46242	4102.64734
25	16	10	2838.40462	3873.29647	4211.93817	4348.49899
25	16	9	2838.40462	3873.29647	4211.93817	4348.49899
25	17	9	3097.16791	4121.67093	4479.54305	4608.83083
25	17	8	3097.16791	4121.67093	4479.54305	4608.83083
25	18	8	3370.38232	4762.09664	4384.11232	4883.52499
25	18	7	3370.38232	4762.09664	4384.11232	4883.52499
25	19	7	3657.87075	5059.51312	4660.29546	5172.43939
25	19	6	3657.87075	5059.51312	4660.29546	5172.43939

J	Ka	Kc	GROUND STATE	v4	v6	v3
25	20	6	3959.45806	5371.77385	4949.86031	5475.42357
25	20	5	3959.45806	5371.77385	4949.86031	5475.42357
25	21	5	4274.97302	5698.91815	5252.41176	5792.32729
25	21	4	4274.97302	5698.91815	5252.41176	5792.32729
25	22	4	4604.25037	6041.03972	5567.52127	6123.00625
25	22	3	4604.25037	6041.03972	5567.52127	6123.00625
25	23	3	4947.13296	6398.28421	5894.73080	6467.32640
25	23	2	4947.13296	6398.28421	5894.73080	6467.32640
25	24	2	5303.47404	6770.84585	6233.55923	6825.16792
25	24	1	5303.47404	6770.84585	6233.55923	6825.16792
25	25	1	5673.13953	7158.96264	6583.51111	7196.42892
25	25	0	5673.13953	7158.96264	6583.51111	7196.42892
26	0	26	823.43606	1989.17117	2073.26055	2323.26260
26	1	26	823.70842	1989.37559	2072.93371	2323.54016
26	1	25	871.97381	2030.15850	2124.46794	2374.54853
26	2	25	876.79861	2033.71258	2126.40721	2378.90932
26	2	24	904.04187	2059.67119	2157.99717	2408.65311
26	3	24	927.23231	2078.49962	2183.42918	2431.13264
26	3	23	935.12407	2087.65630	2188.80031	2440.12092
26	4	23	985.02307	2129.71247	2248.36274	2489.47960
26	4	22	985.90230	2135.68214	2249.01551	2490.57662
26	5	22	1057.36825	2198.86897	2328.22082	2562.65143
26	5	21	1057.41591	2197.44577	2328.19510	2562.71403
26	6	21	1146.07287	2276.69212	2424.58655	2652.45067
26	6	20	1146.07444	2276.67773	2424.40283	2652.45282
26	7	20	1251.06682	2372.58685	2537.64632	2759.04071
26	7	19	1251.06686	2372.58963	2537.64567	2759.04075
26	8	19	1372.14437	2484.46320	2666.51931	2882.21885
26	8	18	1372.14437	2484.46325	2666.51930	2882.21885
26	9	18	1509.13827	2612.10041	2810.87558	3022.74824
26	9	17	1509.13827	2612.10041	2810.87558	3022.74824
26	10	17	1661.89733	2755.30980	2969.82509	3182.08065
26	10	16	1661.89733	2755.30980	2969.82509	3182.08065
26	11	16	1830.27247	2914.21991	3141.45930	3322.76529
26	11	15	1830.27247	2914.21991	3141.45930	3322.76529
26	12	15	2014.11115	3088.41818	3362.89871	3513.54693
26	12	14	2014.11115	3088.41818	3362.89871	3513.54693
26	13	14	2213.25549	3277.85220	3565.07568	3716.55531
26	13	13	2213.25549	3277.85220	3565.07568	3716.55531
26	14	13	2427.54191	3482.33950	3785.54522	3933.43422
26	14	12	2427.54191	3482.33950	3785.54522	3933.43422
26	15	12	2656.80160	3701.67533	4022.35837	4164.71511
26	15	11	2656.80160	3701.67533	4022.35837	4164.71511
26	16	11	2900.86154	3935.62876	4274.69334	4410.50311
26	16	10	2900.86154	3935.62876	4274.69334	4410.50311
26	17	10	3159.54574	4183.94015	4542.17563	4670.74695
26	17	9	3159.54574	4183.94015	4542.17563	4670.74695
26	18	9	3432.67675	4824.61517	4446.31878	4945.33264
26	18	8	3432.67675	4824.61517	4446.31878	4945.33264

J	Ka	Kc	GROUND STATE	v4	v6	v3
26	19	8	3720.07729	5121.92016	4722.44072	5234.11999
26	19	7	3720.07729	5121.92016	4722.44072	5234.11999
26	20	7	4021.57212	5434.06776	5011.94741	5536.95933
26	20	6	4021.57212	5434.06776	5011.94741	5536.95933
26	21	6	4336.98988	5761.09395	5314.44548	5853.70061
26	21	5	4336.98988	5761.09395	5314.44548	5853.70061
26	22	5	4666.16524	6103.08956	5629.50833	6184.19930
26	22	4	4666.16524	6103.08956	5629.50833	6184.19930
26	23	4	5008.94100	6460.19766	5956.68002	6528.32087
26	23	3	5008.94100	6460.19766	5956.68002	6528.32087
26	24	3	5365.17033	6832.61013	6295.48162	6885.94479
26	24	2	5365.17033	6832.61013	6295.48162	6885.94479
26	25	2	5734.71917	7220.56284	6645.41984	7256.96828
26	25	1	5734.71917	7220.56284	6645.41984	7256.96828
26	26	1	6117.46859	7624.32962	7005.99745	7641.31013
26	26	0	6117.46859	7624.32962	7005.99745	7641.31013
27	0	27	885.72284	2051.44870	2135.70083	2385.49007
27	1	27	885.94168	2051.61240	2135.40333	2385.70958
27	1	26	936.91163	2094.42558	2189.71682	2439.50875
27	2	26	941.05886	2097.41754	2191.08170	2443.23792
27	2	25	971.12896	2126.10261	2225.25515	2475.97960
27	3	25	992.71897	2143.45773	2248.63014	2496.85002
27	3	24	1002.18016	2154.14677	2254.79326	2507.56884
27	4	24	1050.80436	2195.06254	2313.86788	2555.51066
27	4	23	1051.97124	2201.09066	2314.73516	2556.96078
27	5	23	1123.04910	2265.13746	2393.61231	2628.61597
27	5	22	1123.11792	2263.10207	2393.60953	2628.70605
27	6	22	1211.63320	2342.12248	2489.84702	2718.32679
27	6	21	1211.63566	2342.09979	2489.62460	2718.33014
27	7	21	1316.53638	2437.87905	2602.79175	2824.88292
27	7	20	1316.53644	2437.88390	2602.79061	2824.88300
27	8	20	1437.54006	2549.67547	2731.51683	2948.07159
27	8	19	1437.54006	2549.67556	2731.51682	2948.07159
27	9	19	1574.46775	2677.24573	2875.70079	3088.68119
27	9	18	1574.46775	2677.24573	2875.70079	3088.68119
27	10	18	1727.16341	2820.39273	3034.42835	3248.11687
27	10	17	1727.16341	2820.39274	3034.42835	3248.11687
27	11	17	1895.47527	2979.25155	3205.81910	3387.05429
27	11	16	1895.47527	2979.25155	3205.81910	3387.05429
27	12	16	2079.24918	3153.38938	3428.86291	3577.93997
27	12	15	2079.24918	3153.38938	3428.86291	3577.93997
27	13	15	2278.32626	3342.76269	3630.78720	3781.02339
27	13	14	2278.32626	3342.76269	3630.78720	3781.02339
27	14	14	2492.54224	3547.18778	3851.02472	3997.91344
27	14	13	2492.54224	3547.18778	3851.02472	3997.91344
27	15	13	2721.72785	3766.45982	4087.65935	4229.15932
27	15	12	2721.72785	3766.45982	4087.65935	4229.15932
27	16	12	2965.70974	4000.34820	4339.84961	4474.87993
27	16	11	2965.70974	4000.34820	4339.84961	4474.87993

J	Ka	Kc	GROUND STATE	v4	v6	v3
27	17	11	3224.31164	4248.59399	4607.20527	4735.03149
27	17	10	3224.31164	4248.59399	4607.20527	4735.03149
27	18	10	3497.35591	4889.52675	4510.90743	5009.50384
27	18	9	3497.35591	4889.52675	4510.90743	5009.50384
27	19	9	3784.66510	5186.71616	4786.96585	5298.15866
27	19	8	3784.66510	5186.71616	4786.96585	5298.15866
27	20	8	4086.06382	5498.74640	5076.41225	5600.84706
27	20	7	4086.06382	5498.74640	5076.41225	5600.84706
27	21	7	4401.38061	5825.65001	5378.85504	5917.41915
27	21	6	4401.38061	5825.65001	5378.85504	5917.41915
27	22	6	4730.45003	6167.51489	5693.86966	6247.73014
27	22	5	4730.45003	6167.51489	5693.86966	6247.73014
27	23	5	5073.11481	6524.48139	6021.00235	6591.64498
27	23	4	5073.11481	6524.48139	6021.00235	6591.64498
27	24	4	5429.22808	6896.73893	6359.77640	6949.04240
27	24	3	5429.22808	6896.73893	6359.77640	6949.04240
27	25	3	5798.65575	7284.52121	6709.70080	7319.81870
27	25	2	5798.65575	7284.52121	6709.70080	7319.81870
27	26	2	6181.27891	7688.10016	7070.28053	7703.89159
27	26	1	6181.27891	7688.10016	7070.28053	7703.89159
27	27	1	6576.99635	8107.77945	7441.02763	8101.20401
27	27	0	6576.99635	8107.77945	7441.02763	8101.20401
28	0	28	950.25522	2115.97700	2200.42081	2449.95341
28	1	28	950.43062	2116.10782	2200.13334	2450.13105
28	1	27	1004.07017	2160.86766	2257.20346	2506.68243
28	2	27	1007.61208	2163.36323	2258.06584	2509.85841
28	2	26	1040.59546	2194.87033	2294.92448	2545.67398
28	3	26	1060.58107	2210.75366	2316.21289	2564.94898
28	3	25	1071.79348	2223.19396	2323.15834	2577.58261
28	4	25	1119.02072	2262.82045	2381.79447	2623.98095
28	4	24	1120.54961	2268.99742	2382.93180	2625.87277
28	5	24	1191.17061	2334.02900	2461.43770	2697.03011
28	5	23	1191.26857	2331.19766	2461.45581	2697.15788
28	6	23	1279.62431	2409.99035	2557.52642	2786.64307
28	6	22	1279.62809	2409.95519	2557.25859	2786.64819
28	7	22	1384.42873	2505.58910	2670.35134	2893.15826
28	7	21	1384.42883	2505.59800	2670.34941	2893.15839
28	8	21	1505.35280	2617.30000	2798.92097	3016.34870
28	8	20	1505.35280	2617.30016	2798.92095	3016.34870
28	9	20	1642.20982	2744.79794	2942.92819	3157.03021
28	9	19	1642.20982	2744.79795	2942.92819	3157.03021
28	10	19	1794.83834	2887.87741	3101.43364	3316.55456
28	10	18	1794.83834	2887.87741	3101.43364	3316.55456
28	11	18	1963.08356	3046.68372	3272.58789	3453.74871
28	11	17	1963.08356	3046.68372	3272.58789	3453.74871
28	12	17	2146.78956	3220.75763	3497.22502	3644.72372
28	12	16	2146.78956	3220.75763	3497.22502	3644.72372
28	13	16	2345.79632	3410.06727	3698.90437	3847.87446
28	13	15	2345.79632	3410.06727	3698.90437	3847.87446

J	Ka	Kc	GROUND STATE	v4	v6	v3
28	14	15	2559.93883	3614.42736	3918.91066	4064.77146
28	14	14	2559.93883	3614.42736	3918.91066	4064.77146
28	15	14	2789.04730	3833.63289	4155.36384	4295.97872
28	15	13	2789.04730	3833.63289	4155.36384	4295.97872
28	16	13	3032.94798	4067.45362	4407.40556	4541.62807
28	16	12	3032.94798	4067.45362	4407.40556	4541.62807
28	17	12	3291.46436	4315.63126	4674.63064	4801.68298
28	17	11	3291.46436	4315.63126	4674.63064	4801.68298
28	18	11	3564.41853	4956.83005	4577.87706	5076.03705
28	18	10	3564.41853	4956.83005	4577.87706	5076.03705
28	19	10	3851.63289	5253.89984	4853.86966	5364.55380
28	19	9	3851.63289	5253.89984	4853.86966	5364.55380
28	20	9	4152.93187	5565.80850	5143.25364	5667.08511
28	20	8	4152.93187	5565.80850	5143.25364	5667.08511
28	21	8	4468.14390	5892.58510	5445.63930	5983.48120
28	21	7	4468.14390	5892.58510	5445.63930	5983.48120
28	22	7	4797.10344	6234.31445	5760.60414	6313.59699
28	22	6	4797.10344	6234.31445	5760.60414	6313.59699
28	23	6	5139.65311	6591.13413	6087.69666	6657.29689
28	23	5	5139.65311	6591.13413	6087.69666	6657.29689
28	24	5	5495.64600	6963.23102	6426.44249	7014.45886
28	24	4	5495.64600	6963.23102	6426.44249	7014.45886
28	25	4	5864.94797	7350.83651	6776.35296	7384.97824
28	25	3	5864.94797	7350.83651	6776.35296	7384.97824
28	26	3	6247.44015	7754.22055	7136.93530	7768.77160
28	26	2	6247.44015	7754.22055	7136.93530	7768.77160
28	27	2	6643.02136	8173.68523	7507.70374	8165.78062
28	27	1	6643.02136	8173.68523	7507.70374	8165.78062
28	28	1	7051.61075	8609.55882	7888.19019	8575.97596
28	28	0	7051.61075	8609.55882	7888.19019	8575.97596
29	0	29	1017.03292	2182.75551	2267.42696	2516.65674
29	1	29	1017.17318	2182.85988	2267.14219	2516.80280
29	1	28	1073.44516	2229.47499	2326.92251	2576.06689
29	2	28	1076.45198	2231.53736	2327.35127	2578.76799
29	2	27	1112.42005	2265.95031	2366.98535	2617.71301
29	3	27	1130.81056	2280.37729	2386.17570	2635.42193
29	3	26	1143.95525	2294.77302	2393.87883	2650.15042
29	4	26	1189.66889	2332.98151	2452.13958	2694.88603
29	4	25	1191.64761	2339.41720	2453.61240	2697.32303
29	5	25	1261.73301	2405.55542	2531.69264	2767.89368
29	5	24	1261.87059	2401.73010	2531.73553	2768.07243
29	6	24	1350.04645	2480.29852	2627.62481	2857.39945
29	6	23	1350.05217	2480.24487	2627.30384	2857.40717
29	7	23	1454.74363	2575.71400	2740.32558	2963.86576
29	7	22	1454.74379	2575.73211	2740.32236	2963.86598
29	8	22	1575.58203	2687.33642	2868.73162	3087.04881
29	8	21	1575.58204	2687.33672	2868.73158	3087.04882
29	9	21	1712.36372	2814.75638	3012.55759	3227.79374
29	9	20	1712.36372	2814.75639	3012.55759	3227.79374

J	Ka	Kc	GROUND STATE	v4	v6	v3
29	10	20	1864.92118	2957.76326	3170.84069	3387.39290
29	10	19	1864.92118	2957.76326	3170.84069	3387.39290
29	11	19	2033.09630	3116.51560	3341.76438	3522.84711
29	11	18	2033.09630	3116.51560	3341.76438	3522.84711
29	12	18	2216.73116	3290.52192	3567.98417	3713.89754
29	12	17	2216.73116	3290.52192	3567.98417	3713.89754
29	13	17	2415.66449	3479.76483	3769.42541	3917.10768
29	13	16	2415.66449	3479.76483	3769.42541	3917.10768
29	14	16	2629.73044	3684.05706	3989.20130	4134.00718
29	14	15	2629.73044	3684.05706	3989.20130	4134.00718
29	15	15	2858.75866	3903.19337	4225.47026	4365.17204
29	15	14	2858.75866	3903.19337	4225.47026	4365.17204
29	16	14	3102.57499	4136.94378	4477.35974	4610.74612
29	16	13	3102.57499	4136.94378	4477.35974	4610.74612
29	17	13	3361.00258	4385.05072	4744.45032	4870.69991
29	17	12	3361.00258	4385.05072	4744.45032	4870.69991
29	18	12	3633.86330	5026.52372	4647.22643	5144.93069
29	18	11	3633.86330	5026.52372	4647.22643	5144.93069
29	19	11	3920.97933	5323.46984	4923.15090	5433.30377
29	19	10	3920.97933	5323.46984	4923.15090	5433.30377
29	20	10	4222.17495	5635.25275	5212.47036	5735.67176
29	20	9	4222.17495	5635.25275	5212.47036	5735.67176
29	21	9	4537.27843	5961.89789	5514.79702	6051.88497
29	21	8	4537.27843	5961.89789	5514.79702	6051.88497
29	22	8	4866.12411	6303.48695	5829.71056	6381.79802
29	22	7	4866.12411	6303.48695	5829.71056	6381.79802
29	23	7	5208.55454	6660.15461	6156.76179	6725.27472
29	23	6	5208.55454	6660.15461	6156.76179	6725.27472
29	24	6	5564.42272	7032.08511	6495.47876	7082.19222
29	24	5	5564.42272	7032.08511	6495.47876	7082.19222
29	25	5	5933.59448	7419.50745	6845.37521	7452.44486
29	25	4	5933.59448	7419.50745	6845.37521	7452.44486
29	26	4	6315.95094	7822.68953	7205.96072	7835.94807
29	26	3	6315.95094	7822.68953	7205.96072	7835.94807
29	27	3	6711.39098	8241.93172	7576.75174	8232.64219
29	27	2	6711.39098	8241.93172	7576.75174	8232.64219
29	28	2	7119.83384	8677.56101	7957.28228	8642.49648
29	28	1	7119.83384	8677.56101	7957.28228	8642.49648
29	29	1	7541.22178	9129.92658	8347.11345	9065.51293
29	29	0	7541.22178	9129.92658	8347.11345	9065.51293
30	0	30	1086.05546	2251.78353	2336.72622	2585.60096
30	1	30	1086.16738	2251.86666	2336.44231	2585.72321
30	1	29	1145.03417	2300.23873	2398.87119	2647.66117
30	2	29	1147.57260	2301.92727	2398.93167	2649.97560
30	2	28	1186.58084	2339.31770	2441.41704	2692.07326
30	3	28	1203.39915	2352.31809	2458.51712	2708.26140
30	3	27	1218.65404	2368.86334	2479.71581	2725.25793
30	4	27	1262.74500	2405.54037	2524.89987	2768.22073
30	4	26	1265.27578	2412.36347	2526.78390	2771.32184

J	Ka	Kc	GROUND STATE	v4	v6	v3
30	5	26	1334.73637	2466.94746	2604.37570	2841.20623
30	5	25	1334.92711	2474.69695	2604.45055	2841.45308
30	6	25	1422.89985	2553.05040	2700.14224	2930.59585
30	6	24	1422.90839	2552.96972	2699.75916	2930.60731
30	7	24	1527.48085	2648.23946	2812.71511	3037.00457
30	7	23	1527.48110	2648.28641	2812.70978	3037.00492
30	8	23	1648.22718	2759.78440	2940.94867	3160.17051
30	8	22	1648.22719	2759.78493	2940.94860	3160.17051
30	9	22	1784.92862	2887.12035	3084.58878	3300.97023
30	9	21	1784.92862	2887.12036	3084.58878	3300.97023
30	10	21	1937.41098	3030.04955	3242.64913	3460.63102
30	10	20	1937.41098	3030.04956	3242.64913	3460.63102
30	11	20	2105.51241	3188.74635	3413.34728	3594.34804
30	11	19	2105.51241	3188.74635	3413.34728	3594.34804
30	12	19	2289.07282	3362.68120	3641.13942	3785.46069
30	12	18	2289.07282	3362.68120	3641.13942	3785.46069
30	13	18	2487.92953	3551.85422	3842.34852	3988.72219
30	13	17	2487.92953	3551.85422	3842.34852	3988.72219
30	14	17	2701.91580	3756.07569	4061.89486	4205.61947
30	14	16	2701.91580	3756.07569	4061.89486	4205.61947
30	15	16	2930.86064	3975.13999	4297.97701	4436.73794
30	15	15	2930.86064	3975.13999	4297.97701	4436.73794
30	16	15	3174.58942	4208.81743	4549.71063	4682.23263
30	16	14	3174.58942	4208.81743	4549.71063	4682.23263
30	17	14	3432.92496	4456.85108	4816.66287	4942.08073
30	17	13	3432.92496	4456.85108	4816.66287	4942.08073
30	18	13	3705.68884	4718.95425	5098.60634	5216.18311
30	18	12	3705.68884	4718.95425	5098.60634	5216.18311
30	19	12	3992.70304	5395.42479	4994.80830	5504.40685
30	19	11	3992.70304	5395.42479	4994.80830	5504.40685
30	20	11	4293.79165	5707.07777	5284.06113	5806.60524
30	20	10	4293.79165	5707.07777	5284.06113	5806.60524
30	21	10	4608.78279	6033.58705	5586.32696	6122.62864
30	21	9	4608.78279	6033.58705	5586.32696	6122.62864
30	22	9	4937.51066	6375.03105	5901.18769	6452.33132
30	22	8	4937.51066	6375.03105	5901.18769	6452.33132
30	23	8	5279.81770	6731.54149	6228.19653	6795.57649
30	23	7	5279.81770	6731.54149	6228.19653	6795.57649
30	24	7	5635.55684	7103.29987	6566.88403	7152.24044
30	24	6	5635.55684	7103.29987	6566.88403	7152.24044
30	25	6	6004.59387	7490.53271	6916.76641	7522.21648
30	25	5	6004.59387	7490.53271	6916.76641	7522.21648
30	26	5	6386.80988	7893.50575	7277.35569	7905.41882
30	26	4	6386.80988	7893.50575	7277.35569	7905.41882
30	27	4	6782.10379	8312.51759	7648.17058	8301.78647
30	27	3	6782.10379	8312.51759	7648.17058	8301.78647
30	28	3	7190.39494	8747.89382	8028.74727	8711.28723
30	28	2	7190.39494	8747.89382	8028.74727	8711.28723
30	29	2	7611.62574	9199.98265	8418.64888	9133.92157
30	29	1	7611.62574	9199.98265	8418.64888	9133.92157
30	30	1	8045.76436	9669.15257	8817.47305	9569.72639

J	Ka	Kc	GROUND STATE	v4	v6	v3
30	30	0	8045.76436	9669.15257	8817.47305	9569.72639

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16. Abstract This document presents the results of a complete high resolution study of the three vibration-rotation bands ν_3 , ν_4 , and ν_6 using both TDLs and FT-IR spectroscopy. The results are given in terms of a table of over 8000 predicted transition frequencies and strengths. A plot of the predicted and calculated spectra is also shown. Over 3000 transitions were assigned and used in the simultaneous analysis of the three bands. The simultaneous fit permitted a rigorous study of Coriolis and other type interactions among the bands yielding improved molecular constants. Line intensities of 28 transitions measured by a TDL and 20 transitions from the FTS data were used, along with the eigenvectors from the frequency fitting, in a least squares analysis to evaluate the band strengths.					
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