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VAPOR PHASE SPECTRA FOR AIR POLLUTION STUDIES

ENVIRONMENTAL CHEMISTRY DIVISION, ENVIRONICS DIRECTORATE
AIR FORCE CIVIL ENGINEERING CENTER (OL-AA)
KIRTLAND AFB, NEW MEXICO 87117

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AIR FORCE CIVIL ENGINEERING CENTER
(AIR FORCE SYSTEMS COMMAND)
TYNDALL AIR FORCE BASE
FLORIDA 32401

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Infrared absorption spectra of the following substances in the vapor phase are presented: acetaldehyde, acetonitrile, acrolein, ammonia, carbon dioxide, carbon monoxide, ethane, ethylene, formaldehyde, formic acid, hydrogen chloride, hydrogen cyanide, hydrogen sulfide, methane, methanol, nitric oxide, nitrogen dioxide, nitrous oxide, ozone, sulfur dioxide, and water. Resolution is 0.5 cm^{-1} and low sample pressure further enhances fine structure of the absorption bands. The frequencies of nearly 3000 absorption lines for these compounds, accurate to

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20. ABSTRACT (Concluded)

0.1 cm^{-1}, are listed in tabular form. A discussion of techniques to minimize noise problems in Fourier transform spectroscopy is included.

PREFACE

This research was performed under Program Element 62601F, Program 1900, Subtask 8W02. The inclusive dates of research were 1 July 1972 to 31 November 1974.

The authors wish to thank Christopher J. Hilleary for assistance in preparation of samples, measurement of spectra and coding of data for computer tabulation. The Project Officer was Edward R. Ricco, 1st Lt, OL-AA.

This report has been reviewed by the Information Officer (IO) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

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SECTION I

INTRODUCTION

Since infrared spectroscopy is an important analytical tool for air pollution studies--both laboratory research and environmental monitoring--there is a need for accurate, high resolution spectra of the many gases and vapors that may occur as atmospheric pollutants. The Environics Branch of the Air Force Weapons Laboratory (now the Environics Directorate of the Air Force Civil Engineering Center), as the lead organization for environmental research in the USAF, has produced this collection of spectra as part of its data base for use in environmental studies. The 22 compounds studied include acetaldehyde, acetronitrile, acetylene, acrolein, ammonia, carbon dioxide, carbon monoxide, ethane, ethylene, formaldehyde, formic acid, hydrogen chloride, hydrogen cyanide, hydrogen sulfide, methane, methanol, nitric oxide, nitrogen dioxide, nitrous oxide, ozone, sulfur dioxide, and water. Knowledge of the infrared absorption frequencies of these substances is of value to users of conventional IR absorption or emission spectroscopy, laser absorption spectroscopy, laser Raman scattering, and other spectroscopic techniques for local monitoring or remote sensing of ambient air and discrete sources.

The spectra in this report have all been taken at the same resolution--0.5 cm^{-1}--at low pressure to enhance the fine structure of the absorption bands. Fourier transform spectroscopic techniques, which are preferable because of high sensitivity and low signal-to-noise ratio to conventional dispersive methods, were employed.

Characteristic regions of the spectrum of each of the compounds studied are presented. In addition, all the absorption frequencies measured are listed in wavenumber sequence, accurate to 0.1 cm^{-1}. The list, in conjunction with the spectra themselves, may be used for identification of unknown absorbing species.

In the next section, experimental procedures are briefly described. The spectral data follows in tabular and graphical form. In Appendix A, a discussion of signal-to-noise ratio optimization in Fourier transform spectroscopy is given as a justification for the particular instrumental parameters used in this work.

SECTION II

EXPERIMENTAL

1. CHEMICALS

All substances studied except ozone were obtained from commercial suppliers. Liquids were dried with $MgSO_4$ before use. No further purification was found to be necessary since absorption bands of contaminants generally did not overlap with bands of the substances of interest and thus were of no concern, or else they could be eliminated by ratioing spectra (see paragraph 4). In a few cases in which absorption lines of contaminants are present in the spectra reproduced here, they have been identified.

Ozone was produced from electrolytic grade (99.98 percent) oxygen by a Matheson laboratory ozone generator, which produced an ozone concentration of 2 to 5 percent. The IR cell was heated and purged with the ozone-oxygen mixture at 1 atm pressure for several hours, then a sample of the gas was trapped in the cell at reduced pressure and spectra were taken. It was not possible to eliminate all impurities, particularly carbon monoxide, even with extensive purging.

2 CELL CONDITIONS

A 1-meter path length gas cell was used for all spectra except ozone, for which a variable path cell set for a path length of 21.75 meters was employed. Ozone was observed at a concentration of a few percent in oxygen; the other substances were released as essentially pure gases or vapors into a previously evacuated cell.

In order to optimize the signal-to-noise ratio over regions of the spectrum with different absorption strengths, several spectra of each substance were taken at various cell pressures so that a different absorption band showed nearly zero transmittance each time. For ozone, total cell pressure was in the range 100 to 200 mm Hg. Cell pressures in the other cases were on the order of 1 to a few mm Hg. The best spectrum for each band was selected for presentation in this report.

The appearance of spectra depends on total pressure. At higher pressures, line broadening occurs. At low pressures, fine structure is enhanced. However, frequencies of absorption maxima were found to be unaffected by varying total pressure between 1 and 760 mm Hg, within the 0.1 cm^{-1} accuracy of this report.

Since instrumental sensitivity was adequate and high resolution capability was available, and since pressure did not affect the accuracy of the results, spectra were recorded at low pressure so as to make fine structure

clear and the identification and measurement of individual lines easy. Band maxima reported here should be accurate for a wide range of pressure conditions.

3. SPECTROMETER

Spectra were taken using a Digilab FTS-20 Fourier Transform Infrared Spectrophotometer. Instrument parameters were set for a resolution of 0.5 cm^{-1}. A discussion of Fourier transform spectroscopy and the reasoning that led to the parameter values chosen for data collection as well as data processing (see paragraph 4) is given in Appendix A.

4. DATA PROCESSING AND DATA PRESENTATION

During data collection, 120 interferometer scans were signal-averaged to form the raw interferogram, which was apodized with a trapezoidal weighting function and then inverse Fourier transformed to yield the spectrum.

Each spectrum was plotted as the ratio of energy transmitted by the analyzed substance to that transmitted by a reference material. This method compensates for permanent interferences (such as atmospheric water vapor and carbon dioxide along the optical path), variation of the source intensity with frequency, and optical characteristics of mirror coatings and cell windows in the instrument, providing a very flat zero-absorbance baseline. It also allows the removal of absorption lines of contaminants from the spectrum, by using a small quantity of the contaminant as a reference. Where there was no problem with impure samples, the reference material was simply the evacuated cell.

The spectral plots reproduced in this report were automatically scale-expanded so that the largest peak fills the full vertical space available. In order to assign absorption frequencies, the spectra were plotted at a scale of 2 cm^{-1} per inch; from these plots the frequencies could be measured with an accuracy of 0.1 cm^{-1}

Absorption frequencies and the identity of corresponding species were punched on cards, then sorted and listed in descending wave number sequence by computer.

5. VACUUM CORRECTION

The frequencies measured and coded on punch cards were for radiation in air. The speed of light in a vacuum is greater than that in air; consequently, the wavelength and frequency ($\sigma \equiv 1/\lambda$) of a given absorption band will be different if measured in a vacuum rather than in air. In order to increase the usefulness of this report, it was decided to list band frequencies in vacuum as well as in air.

The frequency in vacuum, σ_{vac}, is related to the frequency in air, σ_{air}, by the refractive index of the air, n, at the appropriate frequency:

$$\sigma_{vac} = \sigma_{air}/n$$

A vacuum correction factor, σ_{cor}, is defined such that

$$\sigma_{vac} = \sigma_{air} - \sigma_{cor}$$

Using Edlen's formula (Reference 1) for the refractive index of standard air (dry, 0.03 percent CO_2, 15°C, 750 mm Hg), the following equation can be obtained (Reference 2):

$$\sigma_{cor} = \sigma_{air} [2.72415 \times 10^{-4} + \sigma_{air} (8.62123 \times 10^{-11})]$$

where σ_{air} and σ_{cor} are in wave numbers (cm^{-1}). This equation was used to calculate the vacuum correction and generate the σ_{vac} listed in the table of absorption frequencies in Appendix B.

Although the above equation is accurate to $\pm$ 0.0006 cm^{-1} for standard air and frequencies in the range 4000 $cm^{-1} \geq \sigma_{air} > 0$ cm^{-1}, under the normal variations expected in laboratory ambient air conditions the absolute accuracy of this equation may decrease to $\pm$ 0.01 cm^{-1}.

APPENDIX A

SIGNAL-TO-NOISE RATIO OPTIMIZATION IN FOURIER TRANSFORM SPECTROSCOPY

1. INTRODUCTION

In Fourier transform spectroscopy, the light beam is passed through an interferometer and then through the absorbing substance. The signal measured--flux as a function of optical path difference between the two beams of the interferometer--is called the interferogram and is the Fourier transform of the absorption spectrum. Using a minicomputer (an integral part of the Digilab FTS-20) for control and computation, the interferogram is collected, stored, and inverse Fourier transformed; the resulting spectrum can be plotted in a variety of ways.

The advantages of using Fourier transform interferometric techniques for analyzing extremely weak signals have been recognized for many years (Reference 3). The efficiency of the interferometric method is associated with the ability to observe all the spectral frequencies simultaneously [multiplex or Felgett advantage (References 4 and 5)], while at the same time permitting a larger energy throughput obtained by eliminating the narrow slits and reduced apertures required in a grating monochromator [throughput or Jacquinot advantage (References 6 and 7)].

One disadvantage of interferometry, however, is all too frequently ignored. An interferogram is measured in the time (or optical path) domain and evaluated in terms of the frequency (spectral) domain via the mathematical formalism of the Fourier transform. Each portion of an interferogram, regardless of size, contains information about the entire frequency or spectral domain, and it is this characteristic, inherent in the multiplex nature of interferometry, which can cause problems in using FT techniques to observe very weak signals. For example, one incorrect data point in an interferogram can result in incorrect spectral features throughout the entire frequency domain of the transformed signal. The nature of this problem as it relates to the analysis of atmospheric pollutants is discussed in paragraph 2.

2. DISCRETE NOISE PROBLEMS IN INTERFEROMETRY

Instruments for Fourier transform spectroscopy commonly use a Michelson interferometer to modulate the source beam. The frequency resolution is related to the length of the path (retardation) traversed by the interferometer mirror in generating the interferogram (see paragraph 3). Consequently, as one samples portions of the interferogram increasingly removed from the point of zero retardation, the amount of information contained in these regions (called "wings") is indicative of the extent of fine structure to be expected in the transformed spectrum. An example of the above characteristic is shown in Figures A-1 and A-2. The interferogram in Figure A-1 was taken through an evacuated 1-meter cell, whereas the interferogram in

Figure A-2 was taken after filling the cell with 5 mm of H_2O. Note that in Figure A-2 the amount of energy in the "wings" of the interferogram has dramatically increased, with a concomitant decrease in the amount of energy in the region of zero retardation.

Now consider what can happen whan a "glitch" occurs in the interferometer due to some electrical or mechanical disturbance. A "glitch" is defined as any noise-related energy spike which has an intensity at least one order of magnitude larger than the median noise level. Some common sources of glitches include abrupt changes in line voltage, digitizing errors associated with line voltage spikes, scintillation problems within the optical path, externally caused vibrations of the interferometer during scanning, and RF interference from motors or arc lamps. Glitches are much more common than many users of commercial instruments realize. The effect that glitches have on the final spectrum is shown in the examples below.

In Figure A-3, a "perfect" interferogram is displayed (top of figure) and its Fourier transformed spectrum (bottom). The spectrum is displayed in the transmittance mode such that the baseline at the bottom of the figure is at 0.0 percent. Figures A-4, A-5, and A-6 indicate what happens when an artificial glitch is superimposed on the interferogram. In Figure A-4, the glitch is placed in the region of zero retardation and results in a low frequency sine wave throughout the entire range of the transformed spectrum. In Figure A-5, a glitch of comparable intensity has been placed in the wings of the interferogram, resulting in a sine wave of comparable magnitude, but much higher frequency, than that observed in Figure A-4. The dependence of the frequency on the location of the glitch should be qualitatively understood from the previous discussion of Figures A-1 and A-2. That the magnitude of the sine wave is directly proportional to the magnitude of the glitch is shown in Figures A-4 and A-5.

Although the above examples significantly overestimate the magnitude of the usual glitch problem, they do provide a vivid example of how a single incorrect feature in a digitized interferogram can result in the total dissolution of the transformed spectrum. For researchers looking for extremely weak absorption bands associated with pollutants in the parts per billion range, however, a few small glitches can result in spectral features throughout the frequency range that can easily be mistaken for weak absorption bands. The tendency of the transformation operation to produce from these noise elements features similar to real absorption bands compounds the problem of detection. Some useful instrumental procedures available for minimizing glitch problems are described in the following paragraphs. These paragraphs describe the reasons for choosing certain spectrophotometric parameters in recording the spectra contained in this catalog.

3. SPECTRAL RESOLUTION

The resolution inherent in an interferometric spectrometer is proportional to the retardation. The numerical resolution, calculated as the

inverse of the retardation, may be decreased by computational filtering methods involving either the interferogram (apodization) or the transformed spectrum (smoothing). Because of the sampling theorem (Reference 3), which states that the minimum number of points taken per centimeter of retardation must be twice the maximum frequency (σ_{max}) of the spectrum, the number of points digitized (N) and the resolution ($\Delta\sigma$ in wave numbers) are related by the following formula:

$$N = 2\sigma_{max}/\Delta\sigma$$

Consequently, the minimum number of points required to achieve a resolution of 0.5 cm^{-1} over a 4000 cm^{-1} range is 2(4000)/0.5 = 16,000 points. As the number of sampled points increases, however, the signal-to-noise ratio decreases. This fact results from the comparatively large amount of signal observed in the region of zero retardation versus that observed in the wings of the interferogram. The amount of noise inherent in the measurement of each point, however, is invariant to the degree of retardation. For the above reasons, the signal-to-noise ratio decreases by roughly one-half for each two-fold increase in the resolution. Because noise (especially glitch noise) can frequently be mistaken for spectral features, the use of higher resolution than absolutely necessary is clearly disadvantageous.

The amount of resolution necessary to observe pollutants has been discussed in some detail by Hanst, Lefohn and Gay (Reference 8). The amount of resolution necessary to observe a given pollutant is not only dependent upon the nature of that pollutant, but on the nature of the other molecules present which have absorption bands in the region being studied. Virtually all molecules which are sufficiently small to exhibit rotational fine structure will show detailed fine structure at 1 cm^{-1} resolution. In general, therefore, the above resolution would usually be sufficient to assign observed bands uniquely to given molecular species. However, when other absorption bands are interfering with the region of interest, higher resolution may be necessary to separate individual lines. Numerous examples have been discussed by Hanst, et al, who frequently used resolutions as high as 0.125 cm^{-1} to separate individual species (Reference 8). Although the spectrometer is routinely capable of 0.125 cm^{-1} resolution, it is believed that signal-to-noise ratio problems are usually too high at this resolution to permit the observation of very weak signals. An optimum resolution for studying pollutants is 0.5 cm^{-1}. At this resolution, band maxima can easily be measured to an accuracy of 0.1 cm^{-1}.

4. COMPUTATIONAL FILTERING

Computational filtering may be applied to either the interferogram or to the transformed spectrum. In both instances the rationale and result are very similar. The filtering is applied to attenuate the noise in the spectrum, but in the process of reducing the noise, a decrease in the resolution of the spectrum must result. In each instance, the operator must determine the appropriate trade-off point.

When filtering is applied in interferogram space, it is usually called apodization. Apodization is necessary because an interferogram cannot be taken to infinite path lengths, and the truncation process that must necessarily result from terminating a scan produces unwanted spectral features. For example, in an unapodized spectrum, a single, sharp absorption band is represented as a peak at the appropriate wavelength with side lobes on both sides of the peak.

Although apodization is generally considered a desirable procedure since it removes or diminishes the intensity of these side lobes (Reference 3), some investigators have argued that there are certain advantages to not apodizing a high resolution spectrum (Reference 9). Perhaps the best argument for minimizing apodization is the loss of spectral bandwidth inherent in highly apodized spectra. Three general methods of apodizing are commonly used (see Figure A-7). Box-car apodization permits the truncation of the interferogram at the end of the scan, but weights the region near zero retardation to prevent doubly counting this region. Box-car apodization should be considered a minimum procedure. Trapezoidal apodization (center of Figure A-7) permits the use of variable filtering in that the position of the breakpoint in the wings of the interferogram may be varied. Triangular apodization is sufficiently severe to remove virtually all traces of side lobes, but the loss in resolution is equally severe. These three methods of apodization are compared in Figure A-8. The retardation for the interferometer scan was 2.0 cm in each case, and a total of 16,384 data points was collected. The point of zero retardation occurred after 150 points had been collected. Consequently, the first break point appropriate for all three apodization procedures shown in Figure A-7 was at 300 points. The final break point for all three procedures was at the truncation point (i.e., 16,384). The intermediate break point for the trapezoidal function was arbitrarily set at 8000. The resulting spectral bandwidth was computed by digitally measuring the width of each line at half intensity, and the average value is listed for each function in Figure A-8. The AFCEC opinion is that trapezoidal apodization provides the best compromise between side lobe interference and loss of resolution, and this function was applied to all of the interferograms associated with the spectra presented in this catalog.

Filtering can also be performed in spectrum space and, when it is applied, it is primarily for the purpose of improving the signal-to-noise ratio. As in the case of apodization, this technique results in a decrease in resolution. Since there are better methods of improving the signal-to-noise ratio (see paragraph 5), spectral filtering will not be discussed further.

5. SIGNAL AVERAGING

Signal averaging is the most efficient method of improving signal-to-noise ratio. When two or more spectra or interferograms are averaged, the amplitude of the coherent signal increases in proportion to the number of scans, N, while incoherent signals (noise or discrete glitches) increase as

the square root of N. Consequently, the signal-to-noise ratio increases in proportion to the square root of the number of scans.

Since glitches are inherently incoherent, signal averaging has a beneficial effect on discrete spikes as well. All of the spectra presented in this catalog were obtained after averaging 120 interferograms. Although this amount of averaging may appear to approach "overkill," it was determined that this number of scans was necessary to reduce a discrete glitch of maximum foreseeable amplitude to a level such that after transformation it would produce spectral features smaller in magnitude than the side lobes retained as a result of our trapezoidal apodization procedure.

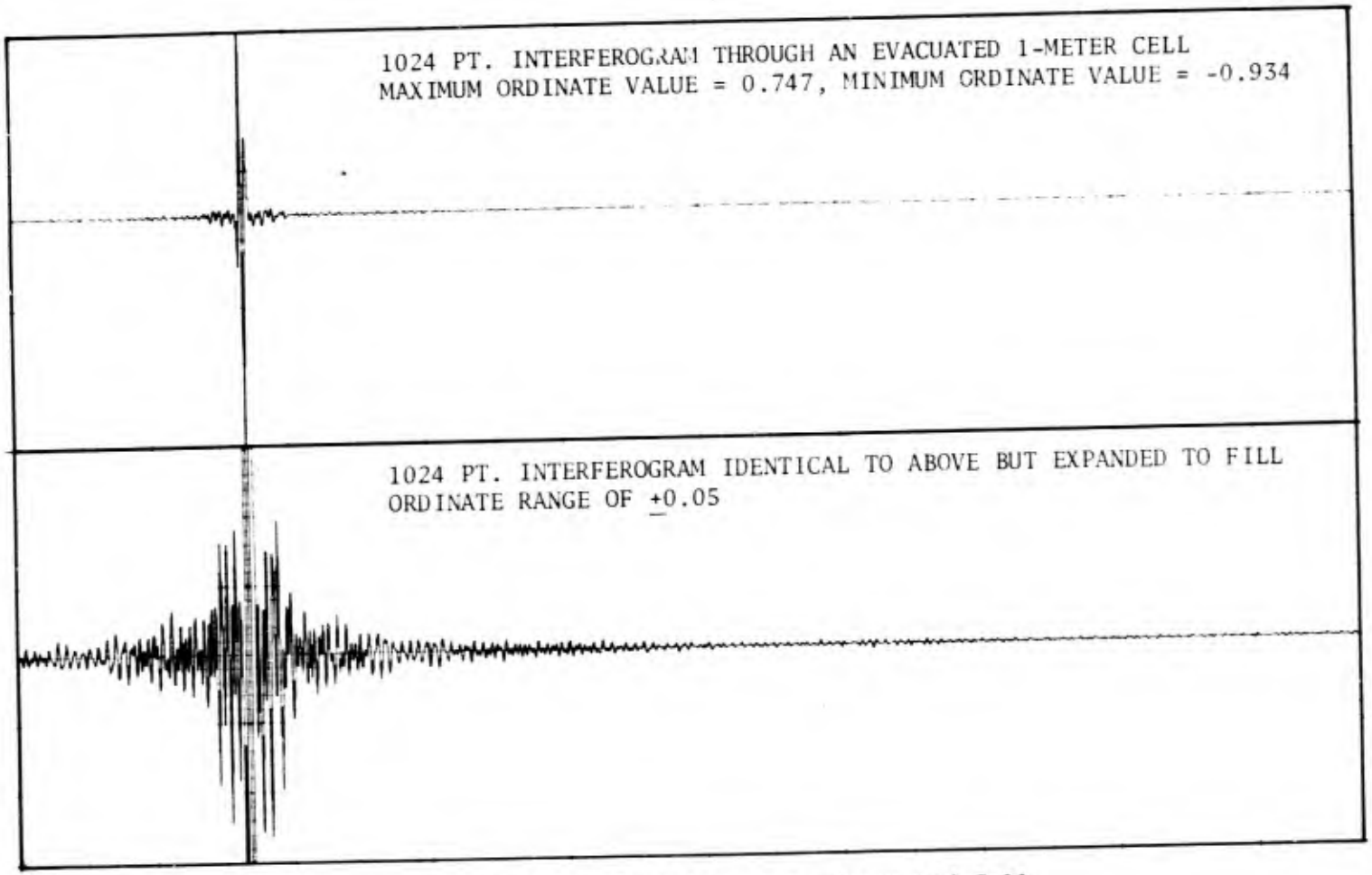


Figure A-1. Interferogram--Evacuated Cell

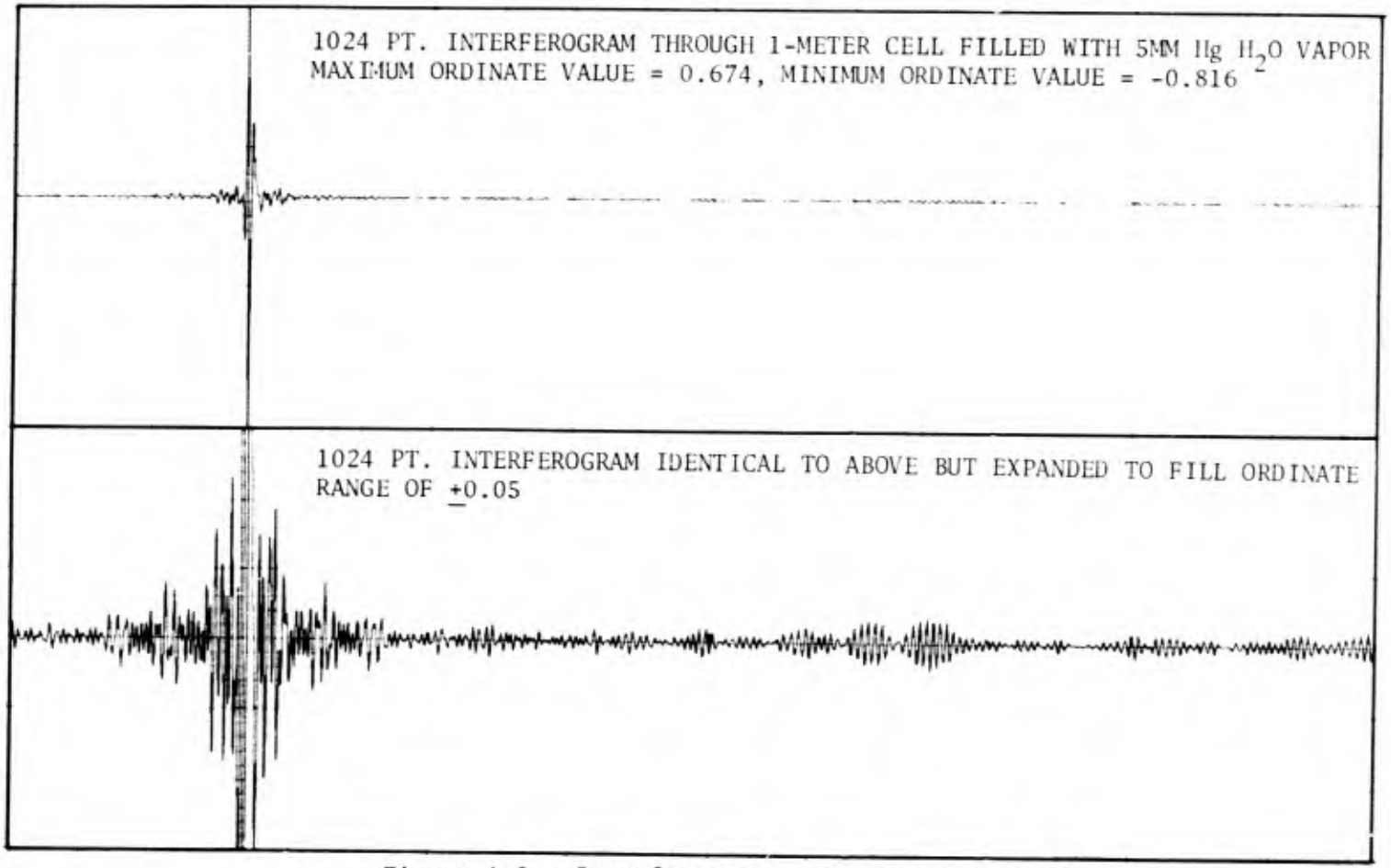


Figure A-2. Interferogram--Water Vapor in Cell

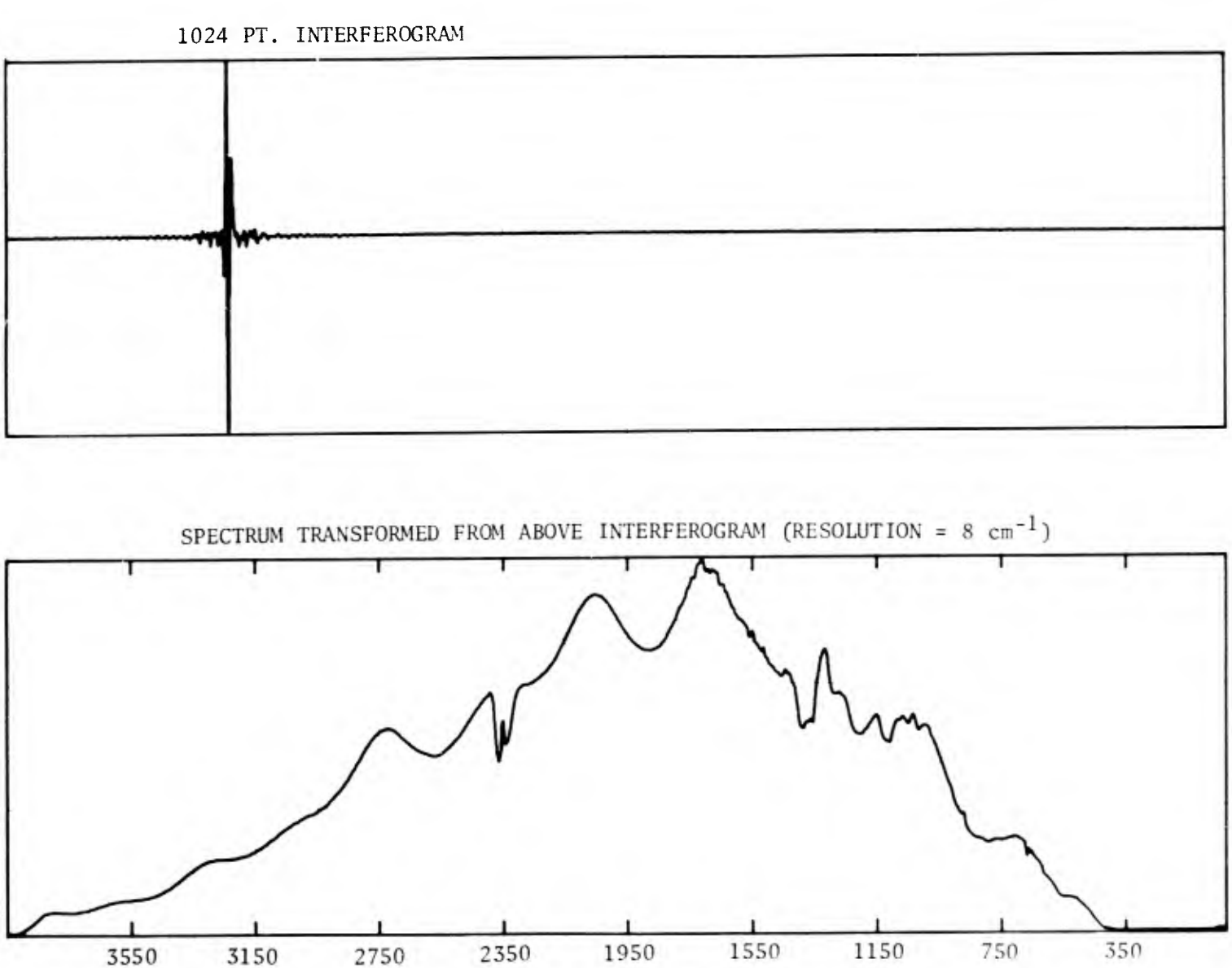


Figure A-3. Interferogram with Transformed Spectrum

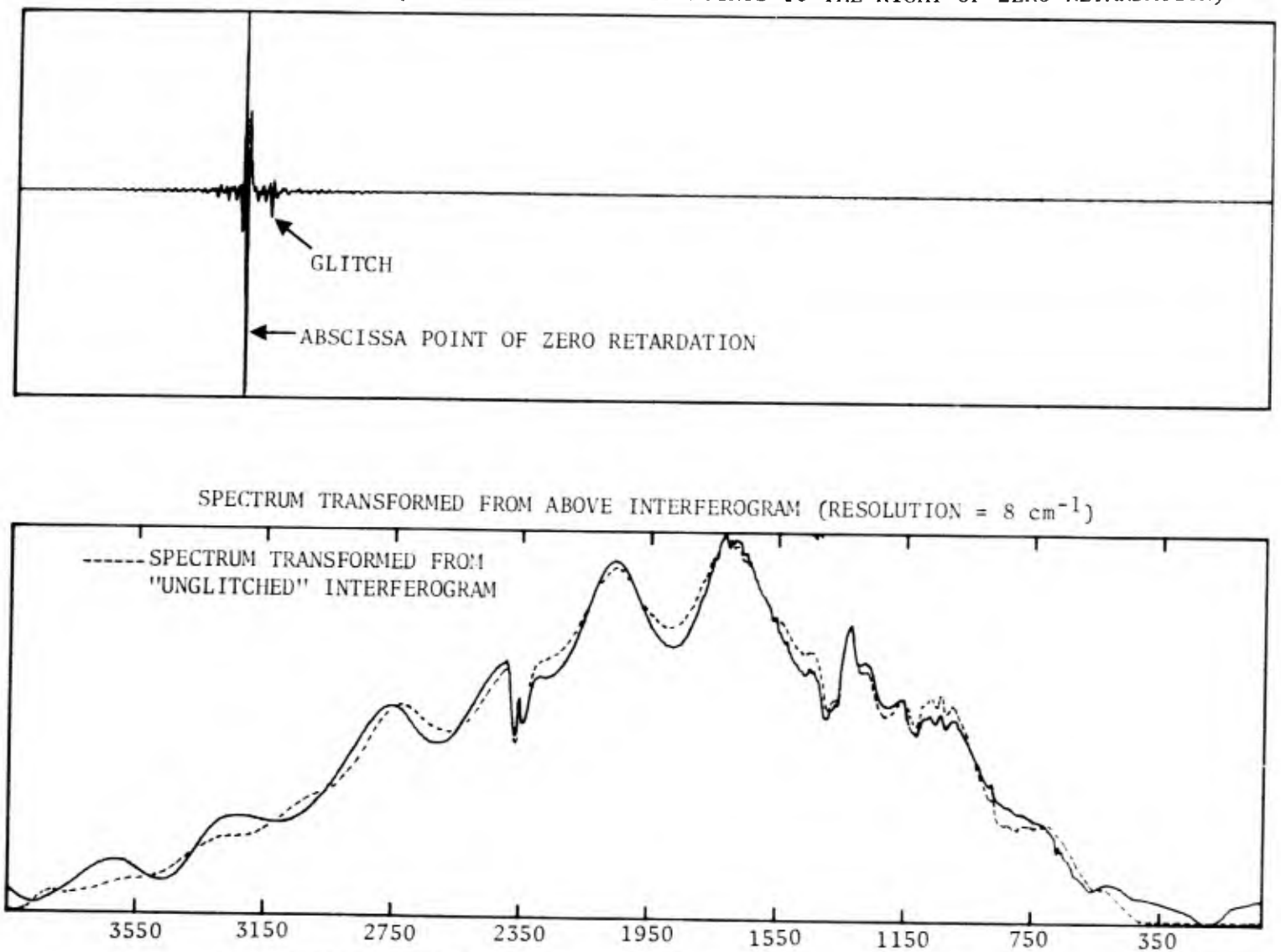


Figure A-4. Effect of Glitch Noise Near Zero Retardation

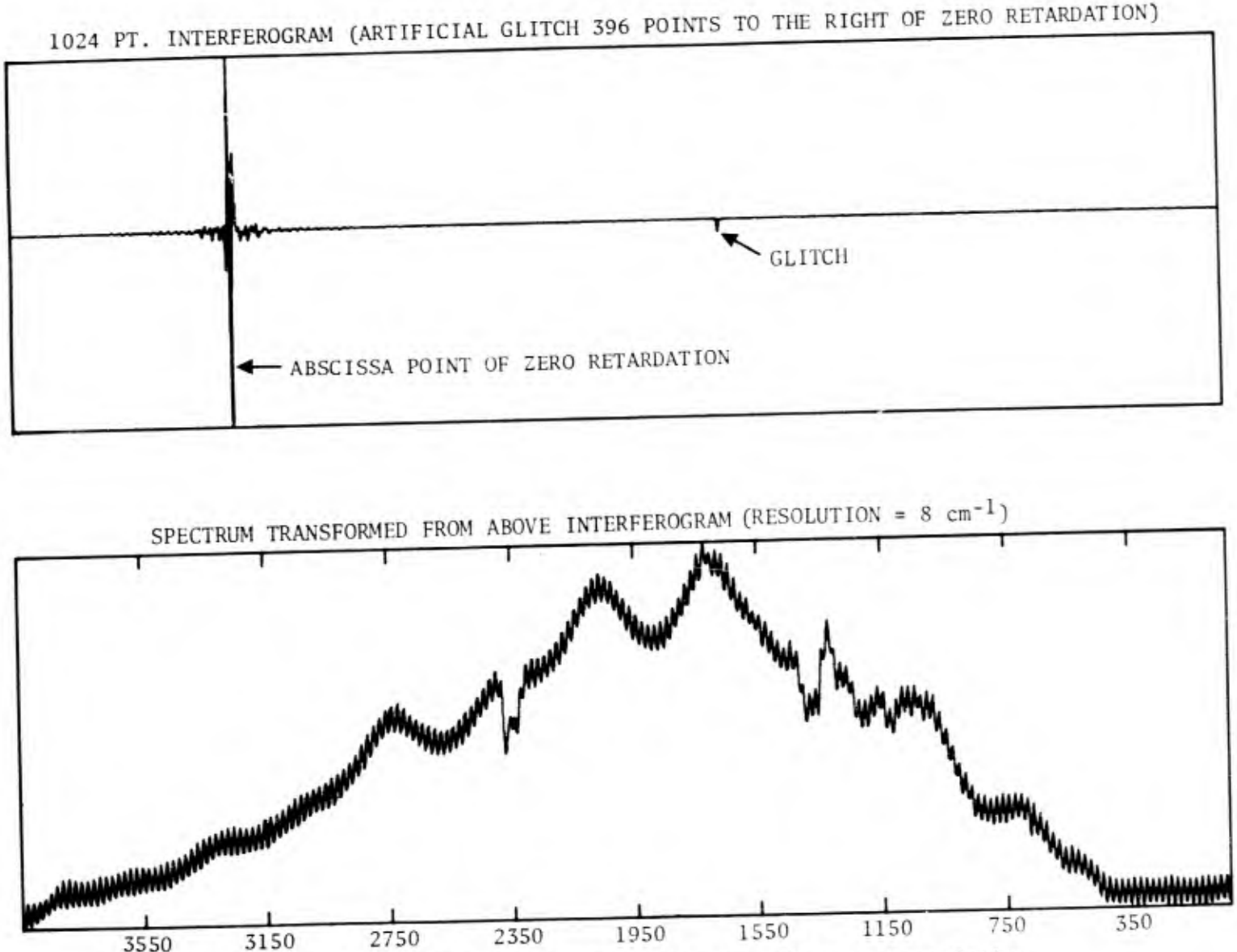


Figure A-5. Effect of Glitch Noise Near Maximum Retardation

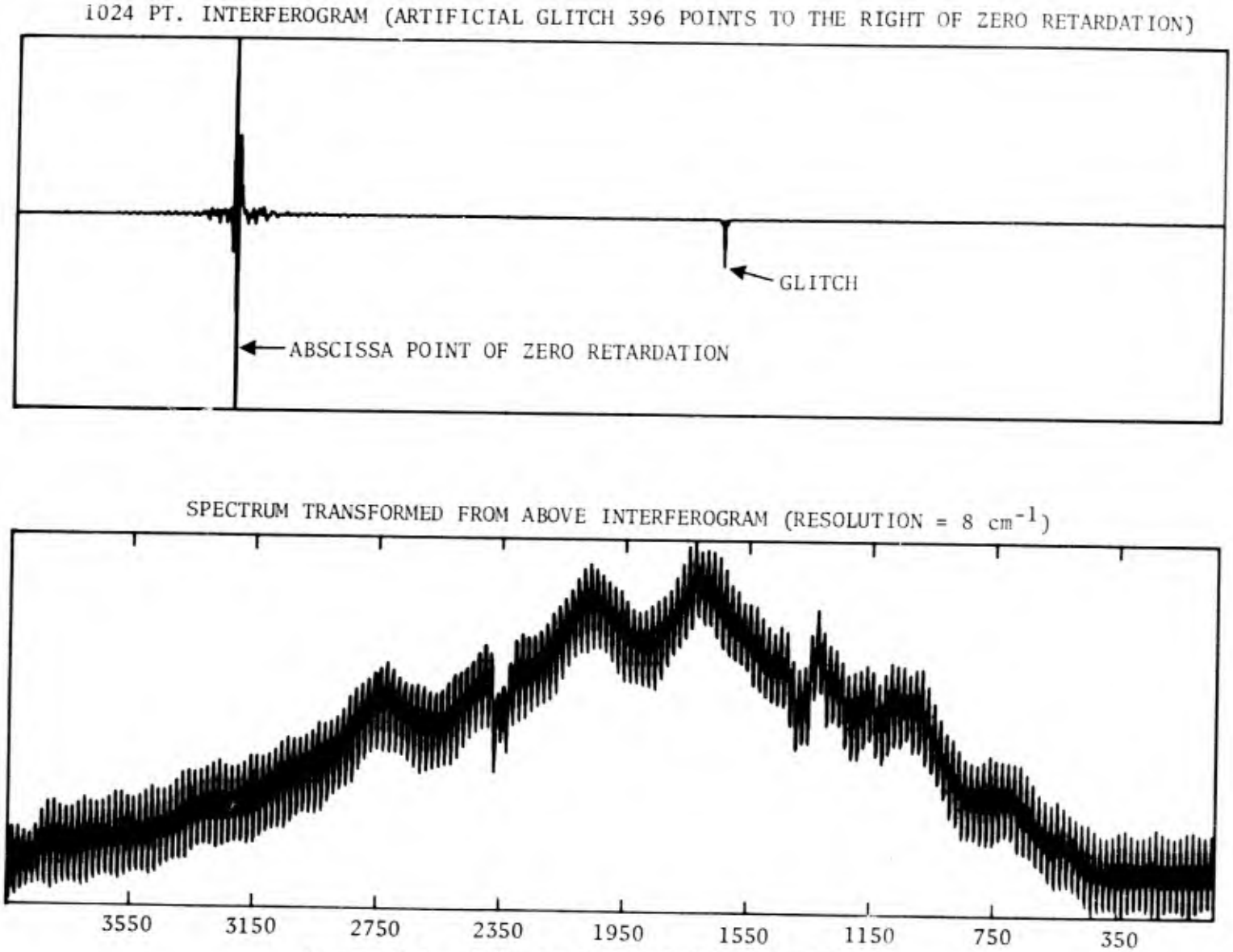


Figure A-6. Effect of Glitch Noise Amplitude

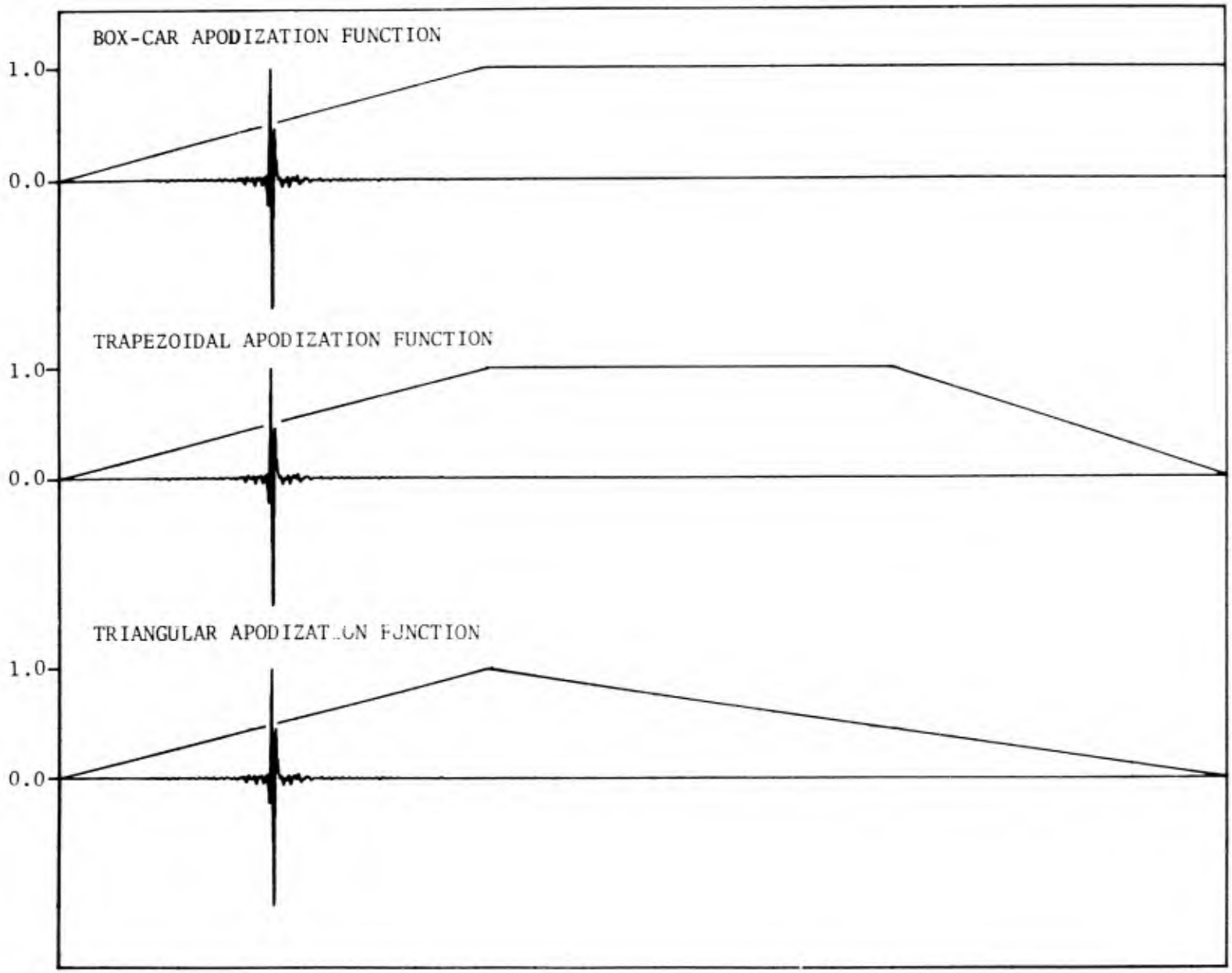


Figure A-7. Apodization Functions

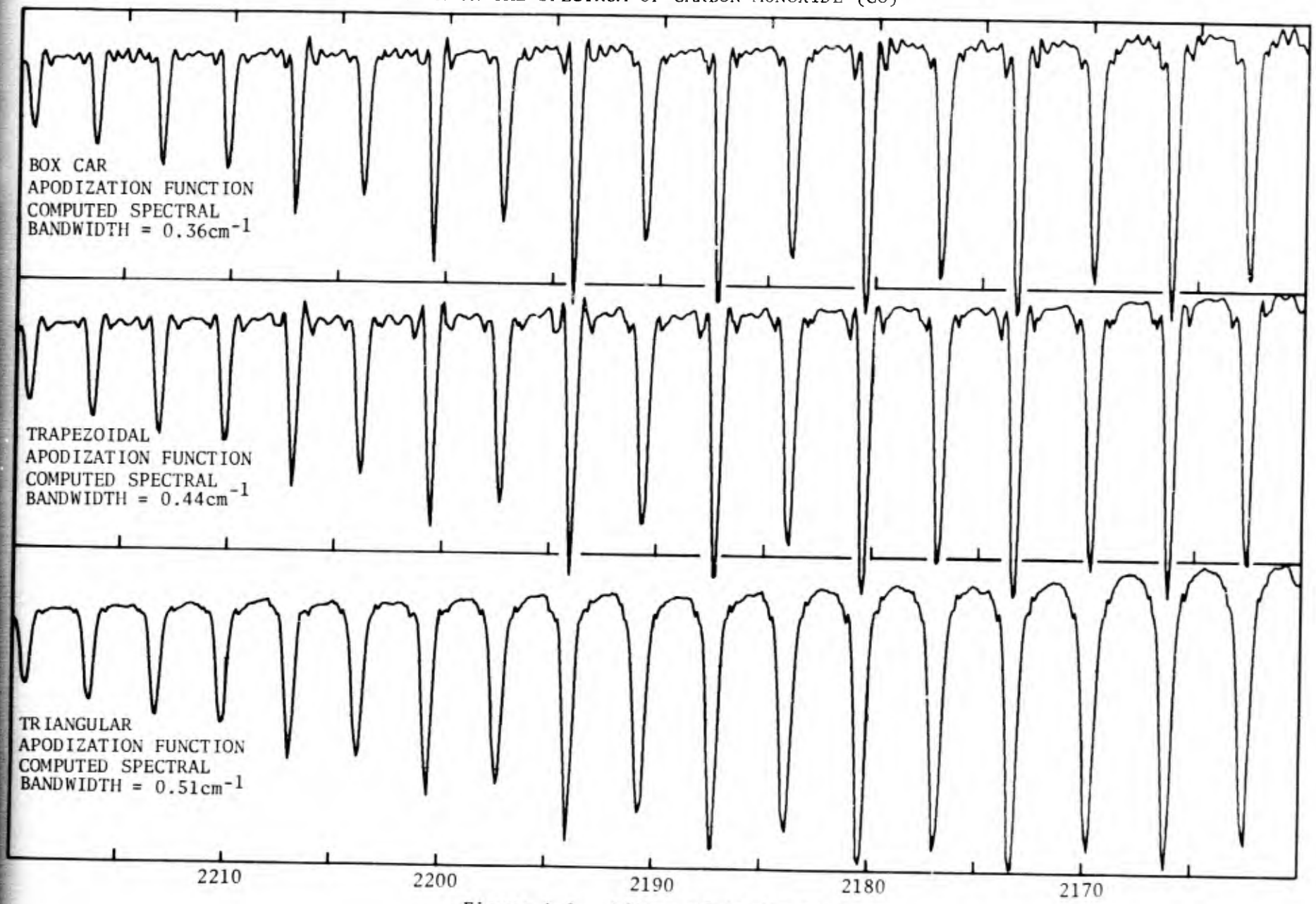


Figure A-8. Effect of Apodization

APPENDIX B

THE SPECTRAL CATALOG

1. LIST OF COMPOUNDS AND MAJOR BANDS

Acetaldehyde (CH_3CHO)	2730.2 cm^{-1}
	1761.8
	1746.5
	1352.8
	1121.4
Acetonitrile (CH_3CN)	3041.5
	1482.7
	1463.9
	1059.3
	1026.2
Acetylene (C_2H_2)	3327.9
	3314.9
	1338.0
	1303.0
	748.2
	729.4
Acrolein (CH_2CHCHO)	2813.0
	2785.4
	1724.5
	993.0
	959.0
Ammonia (NH_3)	3433.0
	3334.5
	1580.0
	1141.0
	966.6
	931.5
Carbon Dioxide (CO_2)	3729.5
	3709.4
	2363.5
	2358.0
	668.3
Carbon Monoxide (CO)	2180.4
	2173.4
	2166.2
	2120.3
	2099.7
Ethane (C_2H_6)	3011.2
	2955.9
	2892.5
	1469.0
	1379.5
	822.5
Ethylene (C_2H_4)	3140.5
	2989.1
	1889.5
	1445.1
	978.8
	949.8
Formaldehyde (H_2CO)	3472.5
	2898.0
	2779.2
	1746.2
	1719.0
Formic Acid (HCOOH)	2948.8
	1793.0
	1777.0
	1105.3
	674.2
Hydrogen Chloride (HCl)	2981.8
	2907.0
	2844.4
	2799.7
Hydrogen Cyanide (HCN)	3335.3
	3288.2
	2806.2
	726.9
	712.8
Hydrogen Sulfide (H_2S)	3862.2
	3747.0
	2689.9
	1365.0
	1257.3

1. LIST OF COMPOUNDS AND MAJOR BANDS (Concluded)

Methane (CH_4)	3077.5
	3017.4
	2989.8
	1333.0
	1306.5
	1298.0
Methanol (CH_3OH)	3017.0
	2982.8
	2845.3
	1052.5
	1033.5
	1006.5
Nitric Oxide (NO)	3745.3
	3682.5
	1894.5
	1876.3
	1861.3
Nitrogen Dioxide (NO_2)	2921.0
	1623.0
	1611.5
	1603.1
	750.3
Nitrous Oxide (N_2O)	3492.5
	2798.9
	2235.4
	2214.9
	589.5
Ozone (O_3)	3056.6
	2785.6
	1056.3
	1039.6
	679.5
Sulfur Dioxide (SO_2)	2499.2
	1374.5
	1362.0
	1342.9
	538.1
Water (H_2O)	3839.0
	3750.5
	3689.5
	1685.3
	1542.5
	1521.7

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3896.7	3895.6	1.063	1	H2S
3893.9	3892.8	1.062	2	H2S
3892.7	3891.6	1.062	3	H2S
3892.4	3891.3	1.062	4	H2O
3887.0	3885.9	1.060	5	H2S
3886.8	3885.7	1.060	6	H2O
3881.3	3880.2	1.059	7	H2O
3879.8	3878.7	1.058	8	H2S
3871.2	3870.1	1.056	9	H2O
3870.3	3869.2	1.056	10	H2O
3866.1	3865.0	1.054	11	H2O
3862.2	3861.1	1.053	12	H2S
3856.8	3855.7	1.052	13	H2S
3855.2	3854.1	1.052	14	H2O
3853.4	3852.3	1.051	15	H2S
3853.1	3852.0	1.051	16	H2O
3852.3	3851.2	1.051	17	H2S
3848.7	3847.7	1.050	18	H2S
3845.8	3844.8	1.049	19	H2S
3844.8	3843.8	1.049	20	H2O
3840.4	3839.4	1.047	21	H2S
3839.0	3838.0	1.047	22	H2O
3837.9	3836.9	1.047	23	H2S
3836.0	3835.0	1.046	24	H2O
3832.8	3831.8	1.045	25	H2O
3832.0	3831.0	1.045	26	H2S
3829.9	3828.9	1.045	27	H2S
3823.0	3822.0	1.043	28	H2S
3822.8	3821.8	1.043	29	H2O
3821.8	3820.8	1.042	30	H2O
3817.2	3816.2	1.041	31	H2O
3814.5	3813.5	1.040	32	H2S
3809.5	3808.5	1.039	33	H2S
3808.0	3807.0	1.039	34	H2O
3804.5	3803.5	1.038	35	H2S
3802.6	3801.6	1.037	36	H2O
3798.7	3797.7	1.036	37	H2S
3797.5	3796.5	1.036	38	H2O
3794.4	3793.4	1.035	39	H2S
3789.7	3788.7	1.034	40	H2S
3789.3	3788.3	1.034	41	NO
3787.5	3786.5	1.033	42	NO
3786.2	3785.2	1.033	43	H2S
3780.6	3779.6	1.031	44	H2O
3780.4	3779.4	1.031	45	NO
3780.0	3779.0	1.031	46	H2S
3778.5	3777.5	1.031	47	NO
3776.6	3775.6	1.030	48	H2S

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3771.3	3770.3	1.029	49	H2S
3771.0	3770.0	1.029	50	NO
3771.0	3770.0	1.029	51	H2O
3767.2	3766.2	1.027	52	H2S
3764.2	3763.2	1.027	53	H2S
3760.9	3759.9	1.026	54	H2O
3758.8	3757.8	1.025	55	NO
3756.8	3755.8	1.025	56	H2S
3756.1	3755.1	1.024	57	NO
3753.5	3752.5	1.024	58	NO
3753.3	3752.3	1.024	59	H2O
3751.0	3750.0	1.023	60	NO
3750.5	3749.5	1.023	61	H2O
3748.0	3747.0	1.022	62	NO
3747.0	3746.0	1.022	63	H2S
3745.7	3744.7	1.022	64	H2O
3745.3	3744.3	1.021	65	NO
3744.5	3743.5	1.021	66	H2S
3743.5	3742.5	1.021	67	CO2
3742.3	3741.3	1.021	68	NO
3739.4	3738.4	1.020	69	NO
3738.8	3737.8	1.020	70	H2S
3738.0	3737.0	1.020	71	CO2
3737.8	3736.8	1.019	72	H2O
3736.9	3735.9	1.019	73	CO2
3736.8	3735.8	1.019	74	H2S
3736.5	3735.5	1.019	75	H2O
3736.3	3735.3	1.019	76	NO
3735.8	3734.8	1.019	77	CO2
3734.5	3733.5	1.019	78	CO2
3733.3	3732.3	1.018	79	CO2
3733.2	3732.2	1.018	80	NO
3733.2	3732.2	1.018	81	H2O
3732.0	3731.0	1.018	82	CO2
3730.8	3729.8	1.018	83	CO2
3730.1	3729.1	1.017	84	NO
3729.5	3728.5	1.017	85	CO2
3728.8	3727.8	1.017	86	H2S
3728.2	3727.2	1.017	87	CO2
3727.6	3726.6	1.017	88	H2O
3726.8	3725.8	1.016	89	CO2
3726.6	3725.6	1.016	90	H2S
3725.3	3724.3	1.016	91	CO2
3725.2	3724.2	1.016	92	NO
3724.5	3723.5	1.016	93	NO
3724.0	3723.0	1.016	94	CO2
3723.3	3722.3	1.015	95	H2O
3722.6	3721.6	1.015	96	CO2
3721.2	3720.2	1.015	97	CO2
3719.7	3718.7	1.015	98	CO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3719.0	3718.0	1.014	99	H2S
3718.1	3717.1	1.014	100	CO2
3716.7	3715.7	1.014	101	CO2
3716.7	3715.7	1.014	102	NO
3716.0	3715.0	1.013	103	H2S
3714.3	3713.3	1.013	104	CO2
3713.2	3712.2	1.013	105	NO
3713.2	3712.2	1.013	106	H2O
3712.7	3711.7	1.013	107	CO2
3711.1	3710.1	1.012	108	CO2
3711.0	3710.0	1.012	109	H2S
3710.5	3709.5	1.012	110	H2O
3709.5	3708.5	1.012	111	NO
3709.4	3708.4	1.012	112	CO2
3707.7	3706.7	1.011	113	CO2
3706.8	3705.8	1.011	114	CO2
3706.0	3705.0	1.011	115	NO
3704.4	3703.4	1.010	116	CO2
3702.8	3701.8	1.010	117	H2O
3702.6	3701.6	1.010	118	CO2
3702.2	3701.2	1.010	119	NO
3701.2	3700.2	1.009	120	H2S
3701.0	3700.0	1.009	121	NO
3700.8	3699.8	1.009	122	CO2
3699.0	3698.0	1.009	123	CO2
3698.5	3697.5	1.009	124	NO
3697.2	3696.2	1.008	125	CO2
3697.2	3696.2	1.008	126	NO
3695.4	3694.4	1.008	127	CO2
3694.5	3693.5	1.008	128	NO
3694.2	3693.2	1.008	129	H2S
3693.5	3692.5	1.007	130	CO2
3693.2	3692.2	1.007	131	NO
3692.3	3691.3	1.007	132	H2O
3691.0	3690.0	1.007	133	CO2
3690.7	3689.7	1.007	134	NO
3689.7	3688.7	1.006	135	CO2
3689.5	3688.5	1.006	136	H2O
3689.2	3688.2	1.006	137	NO
3688.0	3687.0	1.006	138	H2S
3687.0	3686.0	1.006	139	CO2
3686.5	3685.5	1.005	140	NO
3685.8	3684.8	1.005	141	CO2
3685.0	3684.0	1.005	142	H2S
3685.0	3684.0	1.005	143	NO
3683.8	3682.8	1.005	144	CO2
3682.5	3681.5	1.004	145	NO
3681.8	3680.8	1.004	146	CO2
3680.8	3679.8	1.004	147	NO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3679.8	3678.8	1.004	148	CO2
3678.5	3677.5	1.003	149	NO
3677.8	3676.8	1.003	150	CO2
3677.5	3676.5	1.003	151	H2S
3677.0	3676.0	1.003	152	H2O
3676.6	3675.6	1.003	153	NO
3676.0	3675.0	1.003	154	H2O
3675.7	3674.7	1.002	155	CO2
3674.2	3673.2	1.002	156	NO
3673.5	3672.5	1.002	157	CO2
3671.8	3670.8	1.001	158	H2O
3671.6	3670.6	1.001	159	H2S
3671.5	3670.5	1.001	160	CO2
3670.0	3669.0	1.001	161	NO
3669.8	3668.8	1.001	162	H2O
3667.9	3666.9	1.000	163	NO
3665.6	3664.6	1.000	164	NO
3663.5	3662.5	.999	165	NO
3661.2	3660.2	.999	166	NO
3657.3	3656.3	.997	167	H2O
3656.7	3655.7	.997	168	NO
3652.2	3651.2	.996	169	NO
3650.3	3649.3	.996	170	H2O
3647.5	3646.5	.995	171	NO
3641.1	3640.1	.993	172	CO2
3640.0	3639.0	.993	173	CO2
3638.9	3637.9	.992	174	CO2
3637.7	3636.7	.992	175	CO2
3636.6	3635.6	.992	176	CO2
3636.5	3635.5	.992	177	H2S
3635.4	3634.4	.991	178	CO2
3634.1	3633.1	.991	179	CO2
3632.9	3631.9	.991	180	H2S
3632.9	3631.9	.991	181	CO2
3631.6	3630.6	.990	182	CO2
3630.6	3629.6	.990	183	H2O
3630.3	3629.3	.990	184	CO2
3629.5	3628.5	.990	185	H2O
3629.0	3628.0	.990	186	H2S
3629.0	3628.0	.990	187	CO2
3627.8	3626.8	.989	188	CO2
3627.7	3626.7	.989	189	H2S
3627.7	3626.7	.989	190	CO2
3626.3	3625.3	.989	191	CO2
3625.0	3624.0	.989	192	CO2
3623.5	3622.5	.988	193	CO2
3622.2	3621.2	.988	194	CO2
3620.8	3619.8	.988	195	CO2
3620.7	3619.7	.987	196	H2O
3619.2	3618.2	.987	197	CO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3617.7	3616.7	.987	198	CO2
3616.2	3615.2	.986	199	CO2
3613.5	3612.5	.986	200	H2O
3612.3	3611.3	.985	201	CO2
3610.8	3609.8	.985	202	CO2
3610.3	3609.3	.985	203	H2O
3609.2	3608.2	.984	204	CO2
3607.5	3606.5	.984	205	H2S
3607.5	3606.5	.984	206	CO2
3605.8	3604.8	.983	207	CO2
3604.2	3603.2	.983	208	CO2
3602.5	3601.5	.983	209	CO2
3602.3	3601.3	.982	210	HCOOH
3602.0	3601.0	.982	211	H2O
3600.7	3599.7	.982	212	H2S
3600.7	3599.7	.982	213	CO2
3599.0	3598.0	.982	214	CO2
3598.3	3597.3	.981	215	HCOOH
3597.2	3596.2	.981	216	CO2
3595.5	3594.5	.981	217	H2S
3595.5	3594.5	.981	218	CO2
3594.5	3593.5	.980	219	HCOOH
3593.7	3592.7	.980	220	CO2
3591.8	3590.8	.980	221	CO2
3590.5	3589.5	.979	222	HCOOH
3590.0	3589.0	.979	223	CO2
3589.9	3588.9	.979	224	HCOOH
3589.7	3588.7	.979	225	H2O
3588.1	3587.1	.979	226	CO2
3587.5	3586.5	.978	227	H2O
3586.5	3585.5	.978	228	HCOOH
3586.2	3585.2	.978	229	CO2
3585.3	3584.3	.978	230	HCOOH
3584.3	3583.3	.978	231	CO2
3582.4	3581.4	.977	232	CO2
3582.3	3581.3	.977	233	HCOOH
3580.4	3579.4	.976	234	CO2
3578.7	3577.7	.976	235	HCOOH
3578.4	3577.4	.976	236	CO2
3576.8	3575.8	.975	237	HCOOH
3576.5	3575.5	.975	238	CO2
3574.4	3573.4	.975	239	HCOOH
3574.3	3573.3	.975	240	CO2
3572.3	3571.3	.974	241	CO2
3570.7	3569.7	.974	242	HCOOH
3569.2	3568.2	.973	243	H2O
3568.2	3567.2	.973	244	CO2
3567.9	3566.9	.973	245	HCOOH
3567.7	3566.7	.973	246	H2O

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3565.4	3564.4	.972	247	HCOOH
3561.8	3560.8	.971	248	HCOOH
3561.1	3560.1	.971	249	HCOOH
3560.3	3559.3	.971	250	HCOOH
3559.6	3558.6	.971	251	HCOOH
3558.5	3557.5	.970	252	HCOOH
3557.8	3556.8	.970	253	HCOOH
3556.7	3555.7	.970	254	HCOOH
3555.5	3554.5	.970	255	HCOOH
3553.2	3552.2	.969	256	H2O
3553.0	3552.0	.969	257	HCOOH
3552.2	3551.2	.969	258	HCOOH
3551.2	3550.2	.968	259	HCOOH
3550.2	3549.2	.968	260	HCOOH
3549.4	3548.4	.968	261	HCOOH
3548.6	3547.6	.968	262	HCOOH
3547.9	3546.9	.968	263	HCOOH
3547.3	3546.3	.967	264	HCOOH
3546.4	3545.4	.967	265	HCOOH
3546.2	3545.2	.967	266	H2O
3543.0	3542.0	.966	267	HCOOH
3542.1	3541.1	.966	268	HCOOH
3541.5	3540.5	.966	269	HCOOH
3540.8	3539.8	.966	270	HCOOH
3539.9	3538.9	.965	271	HCOOH
3539.2	3538.2	.965	272	HCOOH
3537.5	3536.5	.965	273	H2O
3536.7	3535.7	.965	274	HCOOH
3531.7	3530.7	.963	275	HCOOH
3530.2	3529.2	.963	276	NH3
3528.0	3527.0	.962	277	H2O
3526.8	3525.8	.962	278	HCOOH
3524.3	3523.3	.961	279	HCOOH
3521.8	3520.8	.960	280	HCOOH
3518.2	3517.2	.959	281	NH3
3517.4	3516.4	.959	282	HCOOH
3513.1	3512.1	.958	283	HCOOH
3510.5	3509.5	.957	284	H2O
3510.0	3509.0	.957	285	NH3
3509.3	3508.3	.957	286	H2CO
3508.5	3507.5	.957	287	HCOOH
3505.5	3504.5	.956	288	H2CO
3504.3	3503.3	.956	289	H2O
3503.9	3502.9	.956	290	HCOOH
3503.5	3502.5	.955	291	H2CO
3501.5	3500.5	.955	292	H2CO
3499.5	3498.5	.954	293	H2CO
3498.8	3497.8	.954	294	N2O
3497.5	3496.5	.954	295	H2CO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3495.4	3494.4	.953	296	H2CO
3493.3	3492.3	.953	297	H2CO
3493.1	3492.1	.953	298	N2O
3492.5	3491.5	.952	299	N2O
3492.3	3491.3	.952	300	NH3
3491.8	3490.8	.952	301	N2O
3491.0	3490.0	.952	302	H2CO
3490.0	3489.0	.952	303	NH3
3489.5	3488.5	.952	304	N2O
3488.9	3487.9	.951	305	H2CO
3487.5	3486.5	.951	306	N2O
3485.0	3484.0	.950	307	N2O
3484.2	3483.2	.950	308	N2O
3478.4	3477.5	.949	309	N2O
3474.0	3473.1	.947	310	N2O
3472.7	3471.8	.947	311	NH3
3472.5	3471.6	.947	312	H2CO
3471.0	3470.1	.947	313	N2O
3470.8	3469.9	.947	314	NH3
3466.2	3465.3	.945	315	N2O
3465.1	3464.2	.945	316	N2O
3460.3	3459.4	.944	317	H2CO
3457.7	3456.8	.943	318	N2O
3455.0	3454.1	.942	319	H2CO
3453.7	3452.8	.942	320	NH3
3452.5	3451.6	.942	321	H2CO
3452.2	3451.3	.941	322	N2O
3451.9	3451.0	.941	323	NH3
3449.7	3448.8	.941	324	H2CO
3448.1	3447.2	.940	325	H2O
3447.0	3446.1	.940	326	H2CO
3444.3	3443.4	.939	327	H2CO
3441.5	3440.6	.939	328	H2CO
3438.7	3437.8	.938	329	H2CO
3434.8	3433.9	.937	330	NH3
3433.0	3432.1	.936	331	NH3
3433.0	3432.1	.936	332	H2CO
3430.1	3429.2	.935	333	H2CO
3415.7	3414.8	.932	334	NH3
3414.0	3413.1	.931	335	NH3
3396.6	3395.7	.926	336	NH3
3394.8	3393.9	.926	337	NH3
3384.2	3383.3	.923	338	HCN
3383.5	3382.6	.923	339	N2O
3383.0	3382.1	.923	340	NH3
3379.9	3379.0	.922	341	NH3
3379.4	3378.5	.922	342	HCN
3377.2	3376.3	.921	343	NH3
3376.1	3375.2	.921	344	N2O

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3374.5	3373.6	.920	345	HCN
3369.5	3368.6	.919	346	HCN
3368.4	3367.5	.919	347	NH3
3364.5	3363.6	.918	348	HCN
3359.5	3358.6	.916	349	HCN
3355.9	3355.0	.915	350	NH3
3355.4	3354.5	.915	351	N2O
3354.2	3353.3	.915	352	HCN
3349.1	3348.2	.913	353	N2O
3349.1	3348.2	.913	354	C2H2
3349.0	3348.1	.913	355	HCN
3346.3	3345.4	.913	356	HCN
3345.0	3344.1	.912	357	C2H2
3343.5	3342.6	.912	358	N2O
3340.8	3339.9	.911	359	HCN
3340.7	3339.8	.911	360	C2H2
3337.1	3336.2	.910	361	NH3
3336.5	3335.6	.910	362	C2H2
3336.4	3335.5	.910	363	NH3
3335.8	3334.9	.910	364	NH3
3335.3	3334.4	.910	365	HCN
3335.2	3334.3	.910	366	NH3
3334.5	3333.6	.909	367	NH3
3333.2	3332.3	.909	368	NH3
3332.5	3331.6	.909	369	NH3
3332.5	3331.6	.909	370	HCN
3332.2	3331.3	.909	371	C2H2
3330.2	3329.3	.908	372	NH3
3329.7	3328.8	.908	373	HCN
3327.9	3327.0	.908	374	C2H2
3327.0	3326.1	.907	375	HCN
3323.7	3322.8	.906	376	C2H2
3323.3	3322.4	.906	377	C2H2
3321.1	3320.2	.906	378	HCN
3318.8	3317.9	.905	379	C2H2
3315.3	3314.4	.904	380	HCN
3314.9	3314.0	.904	381	C2H2
3310.5	3309.6	.903	382	HCN
3308.2	3307.3	.902	383	C2H2
3306.5	3305.6	.902	384	HCN
3301.4	3300.5	.900	385	C2H2
3300.5	3299.6	.900	386	HCN
3296.8	3295.9	.899	387	C2H2
3296.3	3295.4	.899	388	NH3
3295.0	3294.1	.899	389	NH3
3294.3	3293.4	.898	390	HCN
3291.3	3290.4	.898	391	HCN
3288.2	3287.3	.897	392	HCN
3287.5	3286.6	.897	393	C2H2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3283.9	3283.0	.896	394	C2H2
3281.9	3281.0	.895	395	HCN
3279.1	3278.2	.894	396	C2H2
3278.7	3277.8	.894	397	HCN
3277.9	3277.0	.894	398	NH3
3276.2	3275.3	.893	399	NH3
3272.3	3271.4	.892	400	HCN
3271.0	3270.1	.892	401	C2H2
3266.2	3265.3	.891	402	C2H2
3265.8	3264.9	.891	403	HCN
3261.3	3260.4	.889	404	C2H2
3259.3	3258.4	.889	405	HCN
3257.7	3256.8	.888	406	NH3
3256.4	3255.5	.888	407	C2H2
3256.1	3255.2	.888	408	HCN
3256.0	3255.1	.888	409	NH3
3252.8	3251.9	.887	410	HCN
3251.5	3250.6	.887	411	C2H2
3249.4	3248.5	.886	412	C2H2
3249.0	3248.1	.886	413	C2H2
3246.0	3245.1	.885	414	HCN
3239.2	3238.3	.883	415	HCN
3239.1	3238.2	.883	416	C2H2
3237.2	3236.3	.883	417	NH3
3235.9	3235.0	.882	418	HCN
3235.0	3234.7	.882	419	NH3
3232.4	3231.5	.881	420	HCN
3231.5	3230.6	.881	421	C2H2
3226.4	3225.5	.880	422	C2H2
3225.5	3224.6	.880	423	HCN
3222.0	3221.1	.879	424	HCN
3218.5	3217.6	.878	425	HCN
3217.0	3216.1	.877	426	NH3
3215.3	3214.4	.877	427	NH3
3196.7	3195.8	.872	428	NH3
3195.0	3194.1	.871	429	NH3
3192.0	3191.1	.870	430	C2H4
3185.4	3184.5	.869	431	C2H4
3178.0	3177.1	.867	432	C2H4
3176.5	3175.6	.866	433	NH3
3170.7	3169.8	.865	434	C2H4
3163.2	3162.3	.863	435	C2H4
3155.8	3154.9	.861	436	C2H4
3148.3	3147.4	.859	437	C2H4
3141.0	3140.1	.857	438	CH4
3140.5	3139.6	.856	439	C2H4
3134.7	3133.8	.855	440	NH3
3133.0	3132.1	.854	441	C2H4
3132.2	3131.3	.854	442	CH4

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3125.5	3124.6	.852	443	C2H4
3123.3	3122.4	.852	444	CH4
3120.2	3119.3	.851	445	C2H4
3116.2	3115.4	.850	446	C2H4
3114.3	3113.5	.849	447	CH4
3105.3	3104.5	.847	448	CH4
3105.0	3104.2	.847	449	C2H4
3100.5	3099.7	.845	450	C2H4
3096.0	3095.2	.844	451	CH4
3095.5	3094.7	.844	452	C2H4
3094.3	3093.5	.844	453	CH3CN
3089.7	3088.9	.843	454	C2H4
3086.9	3086.1	.842	455	CH4
3085.8	3085.0	.841	456	CH3CN
3077.9	3077.1	.839	457	C2H4
3077.5	3076.7	.839	458	CH4
3077.0	3076.2	.839	459	CH3CN
3069.8	3069.0	.837	460	C2H4
3068.1	3067.3	.837	461	CH4
3067.8	3067.0	.837	462	CH3CN
3061.7	3060.9	.835	463	C2H4
3060.2	3059.4	.834	464	HCL
3059.5	3058.7	.834	465	O3
3059.5	3058.7	.834	466	CH3CN
3058.7	3057.9	.834	467	CH4
3058.4	3057.6	.834	468	O3
3057.9	3057.1	.834	469	HCL
3057.6	3056.8	.834	470	O3
3056.6	3055.8	.833	471	O3
3056.0	3055.2	.833	472	O3
3054.2	3053.4	.833	473	O3
3053.5	3052.7	.833	474	C2H4
3053.1	3052.3	.833	475	O3
3052.0	3051.2	.832	476	O3
3050.7	3049.9	.832	477	O3
3050.5	3049.7	.832	478	CH3CN
3050.0	3049.2	.832	479	O3
3049.2	3048.4	.831	480	O3
3049.0	3048.2	.831	481	CH4
3046.2	3045.4	.831	482	O3
3046.0	3045.2	.831	483	HCL
3045.3	3044.5	.830	484	C2H4
3044.5	3043.7	.830	485	O3
3044.0	3043.2	.830	486	O3
3044.0	3043.2	.830	487	C2H6
3043.6	3042.8	.830	488	HCL
3043.1	3042.3	.830	489	O3
3041.5	3040.7	.829	490	CH3CN
3041.1	3040.3	.829	491	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
3039.4	3038.6	.829	492	CH4
3039.2	3038.4	.829	493	O3
3038.3	3037.5	.828	494	O3
3037.8	3037.0	.828	495	O3
3037.3	3036.5	.828	496	C2H4
3037.2	3036.4	.828	497	O3
3036.1	3035.3	.828	498	O3
3035.0	3034.2	.828	499	O3
3035.0	3034.2	.828	500	C2H6
3033.8	3033.0	.827	501	O3
3032.5	3031.7	.827	502	O3
3032.5	3031.7	.827	503	CH3CHO
3032.5	3031.7	.827	504	CH3CN
3031.5	3030.7	.827	505	O3
3031.0	3030.2	.826	506	HCL
3030.2	3029.4	.826	507	O3
3030.0	3029.2	.826	508	C2H6
3029.6	3028.8	.826	509	CH4
3029.3	3028.5	.826	510	O3
3029.1	3028.3	.826	511	C2H4
3029.0	3028.2	.826	512	CH3CHO
3028.7	3027.9	.826	513	HCL
3028.3	3027.5	.826	514	C2H6
3028.0	3027.2	.826	515	O3
3026.8	3026.0	.825	516	O3
3026.4	3025.6	.825	517	CH3CHO
3025.5	3024.7	.825	518	O3
3024.8	3024.0	.825	519	C2H6
3024.7	3023.9	.825	520	O3
3024.2	3023.4	.825	521	CH3OH
3024.1	3023.3	.825	522	O3
3023.4	3022.6	.824	523	O3
3023.3	3022.5	.824	524	CH3CN
3023.0	3022.2	.824	525	CH3CHO
3022.8	3022.0	.824	526	O3
3022.2	3021.4	.824	527	CH4
3021.5	3020.7	.824	528	O3
3021.3	3020.5	.824	529	C2H6
3020.0	3019.2	.823	530	O3
3019.3	3018.5	.823	531	CH4
3018.6	3017.8	.823	532	O3
3018.2	3017.4	.823	533	CH4
3018.0	3017.2	.823	534	C2H6
3017.4	3016.6	.823	535	CH4
3017.2	3016.4	.823	536	O3
3017.0	3016.2	.823	537	CH3OH
3016.7	3015.9	.823	538	C2H4
3016.6	3015.8	.823	539	CH4
3016.1	3015.3	.822	540	C2H4
3015.8	3015.0	.822	541	CH4
3015.6	3014.8	.822	542	O3
3015.3	3014.5	.822	543	HCL
3015.0	3014.2	.822	544	CH4
3014.6	3013.8	.822	545	C2H6
3014.5	3013.7	.822	546	CH4
3014.1	3013.3	.822	547	CH3CN
3014.0	3013.2	.822	548	O3
3013.0	3012.2	.822	549	HCL
3012.5	3011.7	.821	550	O3
3011.4	3010.6	.821	551	CH3OH
3011.2	3010.4	.821	552	C2H6
3010.7	3009.9	.821	553	O3
3009.7	3008.9	.821	554	O3
3009.0	3008.2	.820	555	O3
3007.5	3006.7	.820	556	C2H4
3007.4	3006.6	.820	557	C2H6
3006.5	3005.7	.820	558	CH3OH
3005.0	3004.2	.819	559	CH3CN
3004.8	3004.0	.819	560	C2H6
3004.3	3003.5	.819	561	CH3CHO
3004.0	3003.2	.819	562	C2H4
3002.0	3001.2	.819	563	CH3OH
3001.3	3000.5	.818	564	C2H6
3001.3	3000.5	.818	565	CH3CHO
3000.3	2999.5	.818	566	C2H4
3000.1	2999.3	.818	567	HCOOH
2999.9	2999.1	.818	568	CH4
2999.0	2998.2	.818	569	HCL
2998.0	2997.2	.817	570	CH3CHO
2997.7	2996.9	.817	571	C2H6
2996.7	2995.9	.817	572	HCL
2995.6	2994.8	.817	573	CH3CN
2995.0	2994.2	.817	574	HCOOH
2994.2	2993.4	.816	575	C2H6
2992.5	2991.7	.816	576	CH3CHO
2992.2	2991.4	.816	577	HCOOH
2991.0	2990.2	.816	578	C2H6
2989.8	2989.0	.815	579	CH4
2989.5	2988.7	.815	580	CH3CHO
2989.1	2988.3	.815	581	C2H4
2987.9	2987.1	.815	582	HCOOH
2987.5	2986.7	.815	583	C2H6
2986.6	2985.8	.814	584	CH3CHO
2986.2	2985.4	.814	585	CH3OH
2986.2	2985.4	.814	586	CH3CN
2984.0	2983.2	.814	587	HCOOH
2983.3	2982.5	.813	588	CH3CHO
2982.8	2982.0	.813	589	CH3OH
2981.9	2981.1	.813	590	C2H6

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2981.8	2981.0	.813	591	HCL
2980.5	2979.7	.813	592	CH3CHO
2980.2	2979.4	.813	593	C2H4
2979.7	2978.9	.812	594	HCOOH
2979.7	2978.9	.812	595	CH4
2979.6	2978.8	.812	596	HCL
2978.4	2977.6	.812	597	C2H4
2978.3	2977.5	.812	598	CH3OH
2977.8	2977.0	.812	599	CH3CHO
2977.7	2976.9	.812	600	C2H6
2976.5	2975.7	.812	601	C2H4
2976.4	2975.6	.812	602	CH3OH
2975.7	2974.9	.811	603	HCOOH
2974.5	2973.7	.811	604	C2H4
2974.4	2973.6	.811	605	C2H6
2972.7	2971.9	.811	606	C2H4
2971.4	2970.6	.810	607	HCOOH
2971.2	2970.4	.810	608	C2H6
2970.8	2970.0	.810	609	C2H4
2969.5	2968.7	.810	610	CH4
2969.0	2968.2	.810	611	C2H4
2968.3	2967.5	.809	612	C2H6
2968.0	2967.2	.809	613	CH3OH
2967.5	2966.7	.809	614	CH3CN
2967.1	2966.3	.809	615	HCOOH
2967.0	2966.2	.809	616	C2H4
2965.2	2964.4	.809	617	C2H4
2965.1	2964.3	.809	618	C2H6
2965.0	2964.2	.808	619	CH3CHO
2964.3	2963.5	.808	620	CH3OH
2964.2	2963.4	.808	621	HCL
2963.3	2962.5	.808	622	C2H4
2962.8	2962.0	.808	623	HCOOH
2962.0	2961.2	.808	624	HCL
2961.9	2961.1	.808	625	C2H6
2961.5	2960.7	.808	626	C2H4
2959.6	2958.8	.807	627	C2H4
2959.1	2958.3	.807	628	C2H6
2959.0	2958.2	.807	629	CH4
2958.5	2957.7	.807	630	HCOOH
2956.6	2955.8	.806	631	CH3CHO
2956.5	2955.7	.806	632	CH3OH
2955.9	2955.1	.806	633	C2H6
2955.8	2955.0	.806	634	C2H4
2954.4	2953.6	.806	635	HCOOH
2952.7	2951.9	.805	636	CH3CHO
2950.3	2949.5	.804	637	CH3OH
2949.3	2948.5	.804	638	CH3CHO
2948.8	2948.0	.804	639	HCOOH
2948.7	2947.9	.804	640	CH4
2948.0	2947.2	.804	641	CH3CN
2948.0	2947.2	.804	642	C2H4
2947.5	2946.7	.804	643	CH3OH
2945.9	2945.1	.803	644	CH3CHO
2945.8	2945.0	.803	645	HCL
2944.1	2943.3	.803	646	C2H6
2943.5	2942.7	.803	647	HCL
2943.3	2942.5	.803	648	CH3OH
2942.7	2941.9	.802	649	CH3CHO
2940.6	2939.8	.802	650	C2H6
2939.5	2938.7	.802	651	CH3CHO
2939.0	2938.2	.801	652	CH4
2937.7	2936.9	.801	653	HCOOH
2934.5	2933.7	.800	654	HCOOH
2933.9	2933.1	.800	655	C2H6
2929.8	2929.0	.799	656	CH3OH
2928.5	2927.7	.799	657	NO2
2927.7	2926.9	.798	658	HCOOH
2927.7	2926.9	.798	659	CH4
2927.5	2926.7	.798	660	NO2
2927.0	2926.2	.798	661	H2CO
2926.7	2925.9	.798	662	HCL
2926.6	2925.8	.798	663	C2H6
2926.5	2925.7	.798	664	NO2
2924.5	2923.7	.797	665	HCL
2924.5	2923.7	.797	666	NO2
2923.3	2922.5	.797	667	HCOOH
2923.0	2922.2	.797	668	CH3OH
2922.2	2921.4	.797	669	NO2
2921.6	2920.8	.797	670	NO2
2921.0	2920.2	.796	671	NO2
2919.7	2918.9	.796	672	NO2
2918.8	2918.0	.796	673	HCOOH
2917.8	2917.0	.796	674	CH4
2917.0	2916.2	.795	675	CH3OH
2917.0	2916.2	.795	676	NO2
2915.5	2914.7	.795	677	NO2
2914.6	2913.8	.795	678	C2H6
2914.2	2913.4	.795	679	HCOOH
2914.0	2913.2	.795	680	NO2
2912.7	2911.9	.794	681	H2CO
2912.6	2911.8	.794	682	NO2
2911.9	2911.1	.794	683	NO2
2911.1	2910.3	.794	684	NO2
2909.7	2908.9	.793	685	HCOOH
2909.5	2908.7	.793	686	NO2
2908.3	2907.5	.793	687	C2H6
2907.5	2906.7	.793	688	CH4
2907.0	2906.2	.793	689	HCL
2906.1	2905.3	.792	690	NO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2905.4	2904.6	.792	691	NO2
2905.1	2904.3	.792	692	HCOOH
2905.0	2904.2	.792	693	C2H6
2905.0	2904.2	.792	694	HCL
2904.3	2903.5	.792	695	NO2
2903.5	2902.7	.792	696	C2H6
2903.0	2902.2	.792	697	NO2
2902.2	2901.4	.791	698	C2H6
2901.3	2900.5	.791	699	NO2
2900.6	2899.8	.791	700	HCOOH
2899.4	2898.6	.791	701	NO2
2898.0	2897.2	.790	702	H2CO
2897.5	2896.7	.790	703	NO2
2896.1	2895.3	.790	704	C2H6
2896.0	2895.2	.790	705	HCOOH
2896.0	2895.2	.790	706	CH4
2895.7	2894.9	.790	707	NO2
2894.7	2893.9	.789	708	NO2
2893.8	2893.0	.789	709	NO2
2893.7	2892.9	.789	710	CH3OH
2892.6	2891.8	.789	711	NO2
2892.5	2891.7	.789	712	C2H6
2891.8	2891.0	.789	713	NO2
2889.8	2889.0	.788	714	NO2
2886.9	2886.1	.787	715	NO2
2886.7	2885.9	.787	716	C2H6
2886.0	2885.2	.787	717	CH4
2885.6	2884.8	.787	718	NO2
2883.5	2882.7	.786	719	NO2
2883.3	2882.5	.786	720	H2CO
2882.3	2881.5	.786	721	CH3OH
2881.5	2880.7	.786	722	C2H6
2879.0	2878.2	.785	723	NO2
2878.5	2877.7	.785	724	C2H6
2876.8	2876.0	.784	725	NO2
2876.0	2875.2	.784	726	CH3OH
2874.7	2873.9	.784	727	NO2
2874.0	2873.2	.784	728	C2H6
2873.5	2872.7	.784	729	NO2
2872.3	2871.5	.783	730	NO2
2871.2	2870.4	.783	731	NO2
2870.0	2869.2	.783	732	NO2
2869.0	2868.2	.782	733	C2H6
2867.6	2866.8	.782	734	NO2
2867.5	2866.7	.782	735	CH3OH
2866.0	2865.2	.781	736	HCL
2863.8	2863.0	.781	737	C2H6
2863.8	2863.0	.781	738	HCL
2863.5	2862.7	.781	739	H2CO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2862.0	2861.2	.780	740	C2H6
2846.7	2845.9	.776	741	CH3OH
2845.3	2844.5	.776	742	CH3OH
2844.5	2843.7	.776	743	HCL
2843.9	2843.1	.775	744	CH3OH
2843.8	2843.0	.775	745	CH3CHO
2842.5	2841.7	.775	746	HCL
2840.2	2839.4	.774	747	HCN
2840.1	2839.3	.774	748	CH3CHO
2838.9	2838.1	.774	749	H2CCHCHO
2836.8	2836.0	.774	750	HCN
2835.9	2835.1	.773	751	H2CCHCHO
2833.2	2832.4	.773	752	CH3CHO
2833.0	2832.2	.772	753	H2CCHCHO
2830.2	2829.4	.772	754	H2CCHCHO
2829.3	2828.5	.771	755	HCN
2827.5	2826.7	.771	756	CH3OH
2827.5	2826.7	.771	757	H2CO
2827.4	2826.6	.771	758	H2CCHCHO
2824.5	2823.7	.770	759	H2CCHCHO
2824.2	2823.4	.770	760	CH3CHO
2823.7	2822.9	.770	761	HCN
2822.8	2822.0	.770	762	H2CO
2822.4	2821.6	.770	763	HCL
2821.6	2820.8	.769	764	H2CCHCHO
2820.4	2819.6	.769	765	HCL
2820.4	2819.6	.769	766	H2CO
2818.7	2817.9	.769	767	H2CCHCHO
2818.0	2817.2	.768	768	H2CO
2818.0	2817.2	.768	769	HCN
2815.7	2814.9	.768	770	H2CCHCHO
2815.5	2814.7	.768	771	H2CO
2813.2	2812.4	.767	772	H2CO
2813.0	2812.2	.767	773	H2CCHCHO
2812.2	2811.4	.767	774	HCN
2810.2	2809.4	.766	775	H2CCHCHO
2807.5	2806.7	.766	776	H2CCHCHO
2806.2	2805.4	.765	777	HCN
2806.0	2805.2	.765	778	CH3CHO
2805.8	2805.0	.765	779	H2CO
2802.4	2801.6	.764	780	H2CO
2802.2	2801.4	.764	781	CH3CHO
2801.5	2800.7	.764	782	O3
2799.8	2799.0	.763	783	HCL
2799.7	2798.9	.763	784	O3
2799.7	2798.9	.763	785	CH3CHO
2798.9	2798.1	.763	786	N2O
2798.7	2797.9	.763	787	O3
2798.6	2797.8	.763	788	H2CO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2797.8	2797.0	.763	789	HCL
2797.7	2796.9	.763	790	O3
2796.8	2796.0	.763	791	O3
2795.4	2794.6	.762	792	O3
2794.5	2793.7	.762	793	HCN
2794.1	2793.3	.762	794	O3
2793.5	2792.7	.762	795	O3
2793.0	2792.2	.762	796	CH3CHO
2792.8	2792.0	.761	797	O3
2791.3	2790.5	.761	798	O3
2790.5	2789.7	.761	799	H2CO
2788.3	2787.5	.760	800	HCN
2787.5	2786.7	.760	801	H2CCHCHO
2785.6	2784.8	.760	802	O3
2785.4	2784.6	.759	803	H2CCHCHO
2785.2	2784.4	.759	804	H2CO
2784.9	2784.1	.759	805	N2O
2782.5	2781.7	.759	806	O3
2782.5	2781.7	.759	807	H2CCHCHO
2782.2	2781.4	.759	808	HCN
2781.7	2780.9	.758	809	H2CO
2781.6	2780.8	.758	810	O3
2780.6	2779.8	.758	811	O3
2779.7	2778.9	.758	812	O3
2779.2	2778.4	.758	813	H2CO
2778.7	2777.9	.758	814	O3
2777.8	2777.0	.757	815	O3
2777.5	2776.7	.757	816	H2CO
2776.7	2775.9	.757	817	O3
2776.5	2775.7	.757	818	HCL
2775.9	2775.1	.757	819	HCN
2775.8	2775.0	.757	820	O3
2775.4	2774.6	.757	821	H2CO
2774.7	2773.9	.757	822	O3
2774.6	2773.8	.757	823	HCL
2773.7	2772.9	.756	824	O3
2773.2	2772.4	.756	825	H2CCHCHO
2772.5	2771.7	.756	826	O3
2771.5	2770.7	.756	827	O3
2770.5	2769.7	.755	828	H2CO
2770.3	2769.5	.755	829	O3
2770.3	2769.5	.755	830	H2CCHCHO
2769.5	2768.7	.755	831	HCN
2769.3	2768.5	.755	832	O3
2768.0	2767.2	.755	833	O3
2767.5	2766.7	.755	834	H2CCHCHO
2767.3	2766.5	.755	835	H2CO
2767.0	2766.2	.754	836	O3
2765.6	2764.8	.754	837	H2S
2764.6	2763.8	.754	838	H2CCHCHO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2764.5	2763.7	.754	839	O3
2763.0	2762.2	.753	840	HCN
2762.1	2761.3	.753	841	O3
2760.7	2759.9	.753	842	O3
2759.5	2758.7	.752	843	O3
2757.3	2756.5	.752	844	H2CO
2757.0	2756.2	.752	845	O3
2756.6	2755.8	.752	846	HCN
2756.0	2755.2	.751	847	CH3CHO
2753.0	2752.2	.751	848	CH3CHO
2752.8	2752.0	.751	849	HCL
2752.5	2751.7	.751	850	H2CO
2751.0	2750.2	.750	851	HCL
2749.8	2749.1	.750	852	CH3CHO
2748.3	2747.6	.749	853	H2S
2746.3	2745.6	.749	854	CH3CHO
2744.8	2744.1	.748	855	H2CCHCHO
2743.3	2742.6	.748	856	CH3CHO
2743.3	2742.6	.748	857	H2CO
2742.0	2741.3	.748	858	H2CCHCHO
2740.1	2739.4	.747	859	CH3CHO
2737.2	2736.5	.746	860	CH3CHO
2733.5	2732.8	.745	861	H2CCHCHO
2731.7	2731.0	.745	862	H2CCHCHO
2730.2	2729.5	.744	863	CH3CHO
2729.7	2729.0	.744	864	H2S
2728.5	2727.8	.744	865	HCL
2726.7	2726.0	.743	866	HCL
2725.3	2724.6	.743	867	H2CCHCHO
2719.0	2718.3	.741	868	H2CCHCHO
2715.7	2715.0	.740	869	H2CCHCHO
2714.4	2713.7	.740	870	H2S
2712.8	2712.1	.740	871	H2CCHCHO
2709.7	2709.0	.739	872	H2CCHCHO
2706.7	2706.0	.738	873	H2CCHCHO
2706.0	2705.3	.738	874	H2S
2704.0	2703.3	.737	875	H2CCHCHO
2703.8	2703.1	.737	876	HCL
2703.2	2702.5	.737	877	H2CO
2702.0	2701.3	.737	878	HCL
2698.0	2697.3	.736	879	H2S
2690.3	2689.6	.734	880	CH3CHO
2689.9	2689.2	.733	881	H2S
2684.0	2683.3	.732	882	H2CCHCHO
2683.9	2683.2	.732	883	CH3CHO
2681.7	2681.0	.731	884	H2S
2681.3	2680.6	.731	885	H2CCHCHO
2678.5	2677.8	.730	886	HCL
2678.0	2677.3	.730	887	CH3CHO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2676.7	2676.0	.730	888	HCL
2675.6	2674.9	.730	889	H2CCHCHO
2673.5	2672.8	.729	890	H2S
2672.8	2672.1	.729	891	H2CCHCHO
2670.0	2669.3	.728	892	H2CCHCHO
2664.8	2664.1	.727	893	H2S
2656.2	2655.5	.724	894	H2S
2647.2	2646.5	.722	895	H2S
2637.5	2636.8	.719	896	H2S
2589.0	2588.3	.706	897	N2O
2587.3	2586.6	.705	898	N2O
2582.1	2581.4	.704	899	N2O
2578.7	2578.0	.703	900	N2O
2577.3	2576.6	.703	901	N2O
2575.1	2574.4	.702	902	N2O
2573.6	2572.9	.702	903	N2O
2570.5	2569.8	.701	904	N2O
2569.0	2568.3	.700	905	N2O
2568.2	2567.5	.700	906	N2O
2566.5	2565.8	.700	907	N2O
2564.9	2564.2	.699	908	N2O
2560.7	2560.0	.698	909	N2O
2558.0	2557.3	.697	910	N2O
2555.2	2554.5	.697	911	CO2
2554.5	2553.8	.696	912	N2O
2552.6	2551.9	.696	913	N2O
2550.8	2550.1	.695	914	N2O
2548.9	2548.2	.695	915	N2O
2547.0	2546.3	.694	916	N2O
2546.0	2545.3	.694	917	N2O
2545.0	2544.3	.694	918	N2O
2543.1	2542.4	.693	919	N2O
2541.1	2540.4	.693	920	N2O
2540.0	2539.3	.693	921	N2O
2539.1	2538.4	.692	922	N2O
2537.0	2536.3	.692	923	N2O
2535.0	2534.3	.691	924	N2O
2532.8	2532.1	.691	925	N2O
2530.6	2529.9	.690	926	N2O
2528.5	2527.8	.689	927	N2O
2527.5	2526.8	.689	928	N2O
2526.3	2525.6	.689	929	N2O
2524.1	2523.4	.688	930	N2O
2521.9	2521.2	.688	931	N2O
2521.4	2520.7	.687	932	SO2
2520.6	2519.9	.687	933	SO2
2519.6	2518.9	.687	934	N2O
2519.0	2518.3	.687	935	SO2
2517.9	2517.2	.686	936	SO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2517.0	2516.3	.686	937	SO2
2516.0	2515.3	.686	938	SO2
2515.1	2514.4	.686	939	SO2
2514.0	2513.3	.685	940	SO2
2513.0	2512.3	.685	941	SO2
2511.9	2511.2	.685	942	SO2
2510.8	2510.1	.685	943	SO2
2509.8	2509.1	.684	944	SO2
2508.6	2507.9	.684	945	SO2
2507.5	2506.8	.684	946	SO2
2506.5	2505.8	.683	947	SO2
2505.3	2504.6	.683	948	SO2
2502.5	2501.8	.682	949	SO2
2500.0	2499.3	.682	950	SO2
2499.2	2498.5	.681	951	SO2
2498.0	2497.3	.681	952	SO2
2496.5	2495.8	.681	953	SO2
2495.1	2494.4	.680	954	SO2
2493.7	2493.0	.680	955	SO2
2492.3	2491.6	.680	956	SO2
2490.9	2490.2	.679	957	SO2
2489.5	2488.8	.679	958	SO2
2487.7	2487.0	.678	959	SO2
2487.1	2486.4	.678	960	N2O
2486.3	2485.6	.678	961	SO2
2484.8	2484.1	.677	962	SO2
2483.3	2482.6	.677	963	SO2
2481.7	2481.0	.677	964	SO2
2479.9	2479.2	.676	965	SO2
2479.8	2479.1	.676	966	N2O
2478.2	2477.5	.676	967	SO2
2476.7	2476.0	.675	968	SO2
2475.9	2475.2	.675	969	SO2
2475.1	2474.4	.675	970	SO2
2474.4	2473.7	.675	971	SO2
2473.5	2472.8	.674	972	N2O
2471.4	2470.7	.674	973	SO2
2469.7	2469.0	.673	974	SO2
2468.0	2467.3	.673	975	SO2
2466.3	2465.6	.672	976	SO2
2465.5	2464.8	.672	977	SO2
2452.6	2451.9	.669	978	N2O
2445.5	2444.8	.667	979	N2O
2439.5	2438.8	.665	980	N2O
2394.6	2393.9	.653	981	CO2
2394.1	2393.4	.653	982	CO2
2393.7	2393.0	.653	983	CO2
2392.8	2392.1	.652	984	CO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2392.2	2391.5	.652	985	CO2
2391.7	2391.0	.652	986	CO2
2391.1	2390.4	.652	987	CO2
2390.5	2389.8	.652	988	CO2
2389.9	2389.2	.652	989	CO2
2389.2	2388.5	.651	990	CO2
2388.6	2387.9	.651	991	CO2
2387.9	2387.2	.651	992	CO2
2387.1	2386.4	.651	993	CO2
2386.4	2385.7	.651	994	CO2
2385.6	2384.9	.650	995	CO2
2384.8	2384.1	.650	996	CO2
2384.0	2383.4	.650	997	CO2
2383.1	2382.5	.650	998	CO2
2382.2	2381.6	.649	999	CO2
2381.3	2380.7	.649	1000	CO2
2380.4	2379.8	.649	1001	CO2
2379.5	2378.9	.649	1002	CO2
2378.5	2377.9	.648	1003	CO2
2377.5	2376.9	.648	1004	CO2
2376.4	2375.8	.648	1005	CO2
2375.4	2374.8	.648	1006	CO2
2374.3	2373.7	.647	1007	CO2
2373.2	2372.6	.647	1008	CO2
2372.1	2371.5	.647	1009	CO2
2371.0	2370.4	.646	1010	CO2
2369.7	2369.1	.646	1011	CO2
2368.5	2367.9	.646	1012	CO2
2367.3	2366.7	.645	1013	CO2
2366.0	2365.4	.645	1014	CO2
2364.8	2364.2	.645	1015	CO2
2363.5	2362.9	.644	1016	CO2
2362.1	2361.5	.644	1017	CO2
2360.8	2360.2	.644	1018	CO2
2359.4	2358.8	.643	1019	CO2
2358.0	2357.4	.643	1020	CO2
2356.5	2355.9	.642	1021	CO2
2353.6	2353.0	.642	1022	CO2
2352.1	2351.5	.641	1023	CO2
2350.6	2350.0	.641	1024	CO2
2348.2	2347.6	.640	1025	CO2
2346.6	2346.0	.640	1026	CO2
2345.0	2344.4	.639	1027	CO2
2343.4	2342.8	.639	1028	CO2
2341.7	2341.1	.638	1029	CO2
2340.0	2339.4	.638	1030	CO2
2338.3	2337.7	.638	1031	CO2
2336.6	2336.0	.637	1032	CO2
2334.8	2334.2	.637	1033	CO2
2333.0	2332.4	.636	1034	CO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2331.2	2330.6	.636	1035	CO2
2329.4	2328.8	.635	1036	CO2
2327.5	2326.9	.635	1037	CO2
2325.6	2325.0	.634	1038	CO2
2323.7	2323.1	.634	1039	CO2
2321.8	2321.2	.633	1040	CO2
2319.8	2319.2	.632	1041	CO2
2317.8	2317.2	.632	1042	CO2
2315.8	2315.2	.631	1043	CO2
2313.8	2313.2	.631	1044	CO2
2311.7	2311.1	.630	1045	CO2
2309.6	2309.0	.630	1046	CO2
2307.6	2307.0	.629	1047	CO2
2305.4	2304.8	.629	1048	CO2
2303.3	2302.7	.628	1049	CO2
2301.1	2300.5	.627	1050	CO2
2298.9	2298.3	.627	1051	CO2
2296.6	2296.0	.626	1052	CO2
2294.4	2293.8	.626	1053	CO2
2289.8	2289.2	.624	1054	CO2
2287.5	2286.9	.624	1055	CO2
2282.8	2282.2	.622	1056	CO2
2282.5	2281.9	.622	1057	CO2
2280.9	2280.3	.622	1058	CO2
2279.3	2278.7	.621	1059	CO2
2277.7	2277.1	.621	1060	CO2
2276.0	2275.4	.621	1061	CO2
2274.3	2273.7	.620	1062	CO2
2272.6	2272.0	.620	1063	CO2
2270.9	2270.3	.619	1064	CO2
2270.4	2269.8	.619	1065	CH3CHO
2269.1	2268.5	.619	1066	CO2
2267.3	2266.7	.618	1067	CO2
2265.5	2264.9	.618	1068	CO2
2263.7	2263.1	.617	1069	CO2
2261.9	2261.3	.617	1070	CO2
2261.0	2260.4	.616	1071	CH3CHO
2260.0	2259.4	.616	1072	CO2
2258.1	2257.5	.616	1073	CO2
2257.5	2256.9	.615	1074	N2O
2257.0	2256.4	.615	1075	N2O
2256.5	2255.9	.615	1076	N2O
2256.2	2255.6	.615	1077	CO2
2256.0	2255.4	.615	1078	N2O
2255.4	2254.8	.615	1079	N2O
2254.8	2254.2	.615	1080	N2O
2254.3	2253.7	.615	1081	N2O
2254.3	2253.7	.615	1082	CO2
2253.7	2253.1	.614	1083	N2O

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2253.2	2252.6	.614	1084	N20
2252.7	2252.1	.614	1085	N20
2252.3	2251.7	.614	1086	CO2
2252.2	2251.6	.614	1087	N20
2251.7	2251.1	.614	1088	N20
2251.1	2250.5	.614	1089	N20
2250.5	2249.9	.614	1090	N20
2250.3	2249.7	.614	1091	CO2
2250.2	2249.6	.613	1092	CO
2250.0	2249.4	.613	1093	N20
2249.4	2248.8	.613	1094	N20
2248.7	2248.1	.613	1095	N20
2248.3	2247.7	.613	1096	CO2
2248.1	2247.5	.613	1097	N20
2247.6	2247.0	.613	1098	CO
2247.5	2246.9	.613	1099	N20
2246.9	2246.3	.613	1100	N20
2246.3	2245.7	.612	1101	N20
2245.7	2245.1	.612	1102	N20
2245.0	2244.4	.612	1103	N20
2244.4	2243.8	.612	1104	N20
2243.8	2243.2	.612	1105	N20
2243.1	2242.5	.612	1106	N20
2242.4	2241.8	.611	1107	N20
2242.3	2241.7	.611	1108	CO
2241.7	2241.1	.611	1109	N20
2241.1	2240.5	.611	1110	N20
2240.3	2239.7	.611	1111	N20
2239.7	2239.1	.611	1112	N20
2239.5	2238.9	.611	1113	CO
2239.0	2238.4	.610	1114	N20
2238.3	2237.7	.610	1115	N20
2237.6	2237.0	.610	1116	N20
2236.9	2236.3	.610	1117	N20
2236.8	2236.2	.610	1118	CO
2236.2	2235.6	.610	1119	N20
2235.4	2234.8	.609	1120	N20
2234.6	2234.0	.609	1121	N20
2234.0	2233.4	.609	1122	CO
2233.9	2233.3	.609	1123	N20
2233.2	2232.6	.609	1124	N20
2232.4	2231.8	.609	1125	N20
2231.6	2231.0	.608	1126	N20
2231.1	2230.5	.608	1127	CO
2230.9	2230.3	.608	1128	N20
2230.1	2229.5	.608	1129	N20
2229.3	2228.7	.608	1130	N20
2228.4	2227.8	.608	1131	N20
2228.2	2227.6	.607	1132	CO
2227.6	2227.0	.607	1133	N20

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2226.9	2226.3	.607	1134	N20
2226.1	2225.5	.607	1135	N20
2225.4	2224.8	.607	1136	N20
2225.3	2224.7	.607	1137	CO
2224.8	2224.2	.607	1138	N20
2224.1	2223.5	.606	1139	N20
2223.6	2223.0	.606	1140	N20
2222.8	2222.2	.606	1141	N20
2222.3	2221.7	.606	1142	CO
2221.9	2221.3	.606	1143	N20
2221.0	2220.4	.606	1144	N20
2220.2	2219.6	.605	1145	N20
2219.5	2218.9	.605	1146	CH3CHO
2219.3	2218.7	.605	1147	CO
2219.1	2218.5	.605	1148	N20
2218.3	2217.7	.605	1149	N20
2217.5	2216.9	.605	1150	N20
2216.6	2216.0	.604	1151	N20
2216.3	2215.7	.604	1152	CO
2215.7	2215.1	.604	1153	N20
2214.9	2214.3	.604	1154	N20
2214.0	2213.4	.604	1155	N20
2213.2	2212.6	.603	1156	CO
2212.9	2212.3	.603	1157	N20
2212.0	2211.4	.603	1158	N20
2211.1	2210.5	.603	1159	N20
2210.1	2209.5	.603	1160	N20
2210.1	2209.5	.603	1161	CO
2209.2	2208.6	.602	1162	N20
2208.3	2207.7	.602	1163	N20
2207.3	2206.7	.602	1164	N20
2206.9	2206.3	.602	1165	CO
2206.3	2205.7	.602	1166	N20
2205.3	2204.7	.601	1167	N20
2204.3	2203.7	.601	1168	N20
2203.7	2203.1	.601	1169	CO
2203.4	2202.8	.601	1170	N20
2202.3	2201.7	.600	1171	N20
2201.4	2200.8	.600	1172	N20
2200.5	2199.9	.600	1173	CO
2200.4	2199.8	.600	1174	N20
2199.5	2198.9	.600	1175	N20
2198.3	2197.7	.599	1176	N20
2197.3	2196.7	.599	1177	N20
2197.3	2196.7	.599	1178	CO
2196.2	2195.6	.599	1179	N20
2195.2	2194.6	.598	1180	N20
2194.1	2193.5	.598	1181	N20
2194.0	2193.4	.598	1182	CO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2193.0	2192.4	.598	1183	N2O
2192.0	2191.4	.598	1184	N2O
2191.0	2190.4	.597	1185	N2O
2190.6	2190.0	.597	1186	CO
2190.0	2189.4	.597	1187	N2O
2188.8	2188.2	.597	1188	N2O
2187.8	2187.2	.596	1189	N2O
2187.2	2186.6	.596	1190	CO
2187.1	2186.5	.596	1191	N2O
2185.5	2184.9	.596	1192	N2O
2184.3	2183.7	.595	1193	N2O
2183.8	2183.2	.595	1194	CO
2183.2	2182.6	.595	1195	N2O
2182.1	2181.5	.595	1196	N2O
2181.0	2180.4	.595	1197	N2O
2180.4	2179.8	.594	1198	CO
2180.0	2179.4	.594	1199	N2O
2178.8	2178.2	.594	1200	N2O
2177.7	2177.1	.594	1201	N2O
2176.9	2176.3	.593	1202	CO
2176.7	2176.1	.593	1203	N2O
2175.8	2175.2	.593	1204	N2O
2174.0	2173.4	.593	1205	N2O
2173.5	2172.9	.593	1206	N2O
2173.4	2172.8	.593	1207	CO
2169.8	2169.2	.592	1208	CO
2166.2	2165.6	.591	1209	CO
2162.5	2161.9	.590	1210	CO
2158.8	2158.2	.589	1211	CO
2155.1	2154.5	.588	1212	CO
2150.6	2150.0	.586	1213	CO
2147.6	2147.0	.585	1214	CO
2139.9	2139.3	.583	1215	CO
2137.1	2136.5	.583	1216	CO
2136.0	2135.4	.582	1217	CO
2133.5	2132.9	.582	1218	O3
2132.8	2132.2	.581	1219	O3
2132.1	2131.5	.581	1220	O3
2131.4	2130.8	.581	1221	O3
2130.6	2130.0	.581	1222	O3
2129.8	2129.2	.581	1223	O3
2128.9	2128.3	.580	1224	O3
2128.2	2127.6	.580	1225	O3
2128.2	2127.6	.580	1226	CO
2126.5	2125.9	.580	1227	O3
2124.6	2124.0	.579	1228	O3
2124.2	2123.6	.579	1229	CO
2122.3	2121.7	.579	1230	O3
2121.1	2120.5	.578	1231	O3
2120.2	2119.6	.578	1232	CO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2120.0	2119.4	.578	1233	O3
2118.5	2117.9	.578	1234	O3
2117.2	2116.6	.577	1235	O3
2116.1	2115.5	.577	1236	CO
2115.8	2115.2	.577	1237	O3
2114.4	2113.8	.576	1238	O3
2113.6	2113.0	.576	1239	O3
2112.1	2111.5	.576	1240	CO
2108.6	2108.0	.575	1241	O3
2107.9	2107.3	.575	1242	CO
2107.8	2107.2	.575	1243	O3
2105.9	2105.3	.574	1244	O3
2104.0	2103.4	.574	1245	O3
2103.8	2103.2	.574	1246	CO
2102.0	2101.4	.573	1247	O3
2100.0	2099.4	.573	1248	O3
2099.6	2099.0	.572	1249	CO
2097.8	2097.2	.572	1250	O3
2095.6	2095.0	.571	1251	O3
2095.4	2094.8	.571	1252	CO
2094.5	2093.9	.571	1253	O3
2093.5	2092.9	.571	1254	O3
2092.2	2091.6	.570	1255	O3
2091.2	2090.6	.570	1256	O3
2091.1	2090.5	.570	1257	CO
2089.0	2088.4	.570	1258	O3
2086.8	2086.2	.569	1259	CO
2086.6	2086.0	.569	1260	O3
2084.0	2083.4	.568	1261	O3
2082.5	2081.9	.568	1262	CO
2081.6	2081.0	.567	1263	O3
2079.5	2078.9	.567	1264	CH3OH
2079.0	2078.4	.567	1265	O3
2078.1	2077.5	.567	1266	CO
2078.0	2077.4	.567	1267	O3
2076.4	2075.8	.566	1268	O3
2075.3	2074.7	.566	1269	O3
2073.8	2073.2	.565	1270	CO
2073.7	2073.1	.565	1271	O3
2071.5	2070.9	.565	1272	O3
2071.5	2070.9	.565	1273	CH3OH
2071.0	2070.4	.565	1274	O3
2069.3	2068.7	.564	1275	CO
2068.2	2067.6	.564	1276	O3
2066.2	2065.6	.563	1277	O3
2065.5	2064.9	.563	1278	O3
2065.5	2064.9	.563	1279	H2O
2064.9	2064.3	.563	1280	CO
2064.7	2064.1	.563	1281	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
2063.4	2062.8	.563	1282	O3
2060.4	2059.8	.562	1283	CO
2055.9	2055.3	.560	1284	CO
2054.7	2054.1	.560	1285	CH3OH
2051.4	2050.8	.559	1286	CO
2046.8	2046.2	.558	1287	CO
2042.2	2041.6	.557	1288	CO
2042.0	2041.4	.557	1289	H2O
2037.5	2036.9	.555	1290	CO
2032.8	2032.2	.554	1291	CO
2030.0	2029.4	.553	1292	CH3OH
2028.1	2027.5	.553	1293	CO
2019.0	2018.4	.550	1294	CH3OH
2017.4	2016.9	.550	1295	H2O
2004.5	2003.8	.546	1296	CH3OH
1992.5	1992.0	.543	1297	H2O
1968.0	1967.5	.537	1298	H2O
1950.2	1949.7	.532	1299	NO
1949.0	1948.5	.531	1300	NO
1947.7	1947.2	.531	1301	NO
1946.5	1946.0	.531	1302	NO
1945.3	1944.8	.530	1303	NO
1943.9	1943.4	.530	1304	NO
1943.2	1942.7	.530	1305	H2O
1942.7	1942.2	.530	1306	NO
1941.3	1940.8	.529	1307	NO
1940.2	1939.7	.529	1308	NO
1938.7	1938.2	.529	1309	NO
1937.6	1937.1	.528	1310	NO
1936.0	1935.5	.528	1311	NO
1935.0	1934.5	.528	1312	NO
1933.3	1932.8	.527	1313	NO
1932.3	1931.8	.527	1314	NO
1930.6	1930.1	.526	1315	NO
1930.5	1930.0	.526	1316	C2H4
1929.5	1929.0	.526	1317	NO
1929.0	1928.5	.526	1318	C2H4
1927.8	1927.3	.526	1319	NO
1927.3	1926.8	.525	1320	C2H4
1926.8	1926.3	.525	1321	NO
1925.8	1925.3	.525	1322	C2H4
1925.0	1924.5	.525	1323	NO
1924.2	1923.7	.525	1324	C2H4
1924.1	1923.6	.525	1325	NO
1922.5	1922.0	.524	1326	C2H4
1922.1	1921.6	.524	1327	NO
1921.3	1920.8	.524	1328	NO
1920.9	1920.4	.524	1329	C2H4
1919.3	1918.8	.523	1330	C2H4
1919.2	1918.7	.523	1331	NO
1918.5	1918.0	.523	1332	NO
1918.5	1918.0	.523	1333	H2O
1917.6	1917.1	.523	1334	C2H4
1916.3	1915.8	.522	1335	NO
1916.0	1915.5	.522	1336	C2H4
1915.5	1915.0	.522	1337	NO
1914.3	1913.8	.522	1338	C2H4
1913.3	1912.8	.522	1339	NO
1912.6	1912.1	.521	1340	C2H4
1912.6	1912.1	.521	1341	NO
1911.0	1910.5	.521	1342	C2H4
1910.3	1909.8	.521	1343	NO
1909.7	1909.2	.521	1344	NO
1909.2	1908.7	.520	1345	C2H4
1907.5	1907.0	.520	1346	C2H4
1907.3	1906.8	.520	1347	NO
1906.7	1906.2	.520	1348	NO
1905.8	1905.3	.520	1349	C2H4
1904.2	1903.7	.519	1350	NO
1904.0	1903.5	.519	1351	C2H4
1903.7	1903.2	.519	1352	NO
1902.2	1901.7	.519	1353	C2H4
1901.0	1900.5	.518	1354	NO
1900.5	1900.0	.518	1355	NO
1900.4	1899.9	.518	1356	C2H4
1898.6	1898.1	.518	1357	C2H4
1897.6	1897.1	.517	1358	NO
1896.8	1896.3	.517	1359	C2H4
1895.7	1895.2	.517	1360	H2O
1895.0	1894.5	.517	1361	C2H4
1894.5	1894.0	.516	1362	NO
1891.3	1890.8	.516	1363	NO
1890.1	1889.6	.515	1364	H2O
1889.5	1889.0	.515	1365	C2H4
1888.1	1887.6	.515	1366	NO
1886.4	1885.9	.514	1367	N2O
1884.8	1884.3	.514	1368	NO
1882.2	1881.7	.513	1369	C2H4
1881.5	1881.0	.513	1370	NO
1880.5	1880.0	.513	1371	N2O
1880.3	1879.8	.513	1372	C2H4
1878.5	1878.0	.512	1373	C2H4
1876.7	1876.2	.512	1374	C2H4
1876.3	1875.8	.512	1375	NO
1874.7	1874.2	.511	1376	C2H4
1872.8	1872.3	.511	1377	C2H4
1871.6	1871.1	.510	1378	NO
1870.9	1870.4	.510	1379	C2H4

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1869.9	1869.4	.510	1380	H2O
1869.0	1868.5	.510	1381	C2H4
1868.2	1867.7	.509	1382	NO
1867.7	1867.2	.509	1383	NO
1867.0	1866.5	.509	1384	C2H4
1865.0	1864.5	.508	1385	C2H4
1864.8	1864.3	.508	1386	NO
1864.2	1863.7	.508	1387	NO
1863.0	1862.5	.508	1388	C2H4
1861.3	1860.8	.507	1389	NO
1861.0	1860.5	.507	1390	C2H4
1860.6	1860.1	.507	1391	NO
1859.0	1858.5	.507	1392	C2H4
1857.8	1857.3	.506	1393	NO
1857.1	1856.6	.506	1394	NO
1857.0	1856.5	.506	1395	C2H4
1854.9	1854.4	.506	1396	C2H4
1854.2	1853.7	.505	1397	NO
1853.4	1852.9	.505	1398	NO
1850.7	1850.2	.505	1399	NO
1849.8	1849.3	.504	1400	NO
1848.3	1847.8	.504	1401	H2O
1847.1	1846.6	.504	1402	NO
1846.0	1845.5	.503	1403	NO
1844.8	1844.3	.503	1404	H2O
1843.3	1843.0	.503	1405	NO
1842.3	1841.8	.502	1406	NO
1839.8	1839.3	.502	1407	NO
1838.5	1838.0	.501	1408	NO
1836.1	1835.6	.501	1409	NO
1834.7	1834.2	.500	1410	NO
1832.3	1831.8	.500	1411	NO
1830.9	1830.4	.499	1412	NO
1828.6	1828.1	.498	1413	NO
1827.0	1826.5	.498	1414	NO
1825.7	1825.2	.498	1415	H2O
1824.8	1824.3	.497	1416	NO
1823.1	1822.6	.497	1417	NO
1821.0	1820.5	.496	1418	NO
1819.2	1818.7	.496	1419	NO
1817.0	1816.5	.495	1420	NO
1815.2	1814.7	.495	1421	NO
1813.2	1812.7	.494	1422	NO
1811.2	1810.7	.494	1423	NO
1811.1	1810.6	.494	1424	H2O
1809.3	1808.8	.493	1425	HCOOH
1809.2	1808.7	.493	1426	NO
1808.7	1808.2	.493	1427	HCOOH
1808.0	1807.5	.493	1428	HCOOH
1807.6	1807.1	.493	1429	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1807.2	1806.7	.493	1430	NO
1807.0	1806.5	.493	1431	HCOOH
1806.3	1805.8	.492	1432	HCOOH
1805.7	1805.2	.492	1433	HCOOH
1805.2	1804.7	.492	1434	NO
1805.1	1804.6	.492	1435	HCOOH
1804.4	1803.9	.492	1436	HCOOH
1803.5	1803.0	.492	1437	HCOOH
1803.2	1802.7	.492	1438	NO
1803.0	1802.5	.492	1439	HCOOH
1802.4	1801.9	.491	1440	HCOOH
1801.7	1801.2	.491	1441	HCOOH
1801.2	1800.7	.491	1442	NO
1801.0	1800.5	.491	1443	HCOOH
1800.4	1799.9	.491	1444	HCOOH
1800.1	1799.6	.491	1445	H2O
1800.0	1799.5	.491	1446	H2CO
1799.8	1799.3	.491	1447	HCOOH
1799.2	1798.7	.490	1448	HCOOH
1799.0	1798.5	.490	1449	NO
1798.0	1797.5	.490	1450	H2CO
1798.0	1797.5	.490	1451	HCOOH
1797.4	1796.9	.490	1452	HCOOH
1797.2	1796.7	.490	1453	NO
1796.8	1796.3	.490	1454	HCOOH
1796.2	1795.7	.490	1455	HCOOH
1796.0	1795.5	.490	1456	H2CO
1795.6	1795.1	.489	1457	HCOOH
1794.9	1794.4	.489	1458	NO
1794.9	1794.4	.489	1459	HCOOH
1794.3	1793.8	.489	1460	HCOOH
1794.3	1793.8	.489	1461	NH3
1793.9	1793.4	.489	1462	H2CO
1793.6	1793.1	.489	1463	HCOOH
1793.2	1792.7	.489	1464	H2O
1793.1	1792.6	.489	1465	NO
1793.0	1792.5	.489	1466	HCOOH
1792.3	1791.8	.489	1467	HCOOH
1791.8	1791.3	.488	1468	H2CO
1791.6	1791.1	.488	1469	HCOOH
1791.0	1790.5	.488	1470	HCOOH
1790.7	1790.2	.488	1471	NO
1790.2	1789.7	.488	1472	NH3
1789.8	1789.3	.488	1473	HCOOH
1789.7	1789.2	.488	1474	H2CO
1789.1	1788.6	.488	1475	HCOOH
1789.0	1788.5	.488	1476	NO
1788.4	1787.9	.488	1477	HCOOH
1787.7	1787.2	.487	1478	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1787.6	1787.1	.487	1479	H2CO
1787.0	1786.5	.487	1480	HCOOH
1786.2	1785.7	.487	1481	HCOOH
1786.0	1785.5	.487	1482	NO
1785.5	1785.0	.487	1483	H2CO
1785.5	1785.0	.487	1484	H2O
1785.4	1784.9	.487	1485	HCOOH
1784.3	1784.3	.487	1486	NO
1784.7	1784.2	.487	1487	HCOOH
1784.0	1783.5	.486	1488	HCOOH
1783.3	1782.8	.486	1489	H2CO
1783.2	1782.7	.486	1490	HCOOH
1782.5	1782.0	.486	1491	HCOOH
1782.3	1781.8	.486	1492	NO
1781.7	1781.2	.486	1493	HCOOH
1781.2	1780.7	.486	1494	H2CO
1781.2	1780.7	.486	1495	H2O
1781.0	1780.5	.486	1496	HCOOH
1781.7	1780.2	.485	1497	NO
1780.3	1779.8	.485	1498	HCOOH
1780.3	1779.8	.485	1499	NH3
1779.6	1779.1	.485	1500	H2CO
1779.6	1779.1	.485	1501	HCOOH
1778.9	1778.4	.485	1502	H2CO
1778.8	1778.3	.485	1503	HCOOH
1778.0	1777.5	.485	1504	NO
1777.9	1777.4	.485	1505	HCOOH
1777.0	1776.5	.484	1506	HCOOH
1776.7	1776.2	.484	1507	H2CO
1776.5	1776.0	.484	1508	NO
1776.4	1775.9	.484	1509	HCOOH
1775.1	1774.6	.484	1510	HCOOH
1774.5	1774.0	.484	1511	H2CO
1774.4	1773.9	.484	1512	HCOOH
1773.6	1773.1	.483	1513	HCOOH
1773.2	1772.7	.483	1514	H2O
1772.8	1772.3	.483	1515	HCOOH
1772.2	1771.7	.483	1516	H2CO
1772.0	1771.5	.483	1517	HCOOH
1771.5	1771.0	.483	1518	HCOOH
1771.0	1770.5	.483	1519	H2CO
1769.5	1769.0	.482	1520	HCOOH
1768.7	1768.2	.482	1521	HCOOH
1768.7	1768.2	.482	1522	H2O
1768.0	1767.5	.482	1523	HCOOH
1767.7	1767.2	.482	1524	H2CO
1767.2	1766.7	.482	1525	HCOOH
1766.4	1765.9	.482	1526	HCOOH
1766.0	1765.5	.481	1527	NH3
1765.6	1765.1	.481	1528	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1765.4	1764.9	.481	1529	H2CO
1765.0	1764.5	.481	1530	NH3
1764.9	1764.4	.481	1531	HCOOH
1764.1	1763.6	.481	1532	HCOOH
1763.2	1762.7	.481	1533	HCOOH
1763.0	1762.5	.481	1534	H2CO
1762.5	1762.0	.480	1535	HCOOH
1762.3	1761.8	.480	1536	H2O
1761.8	1761.3	.480	1537	CH3CHO
1761.8	1761.3	.480	1538	HCOOH
1761.2	1760.7	.480	1539	NH3
1761.1	1760.6	.480	1540	HCOOH
1760.8	1760.3	.480	1541	H2CO
1760.4	1759.9	.480	1542	HCOOH
1760.3	1759.8	.480	1543	NH3
1759.6	1759.1	.480	1544	HCOOH
1758.9	1758.4	.479	1545	HCOOH
1758.5	1758.0	.479	1546	H2CO
1758.0	1757.5	.479	1547	HCOOH
1757.3	1756.8	.479	1548	HCOOH
1756.5	1756.0	.479	1549	HCOOH
1756.0	1755.5	.479	1550	H2CO
1755.8	1755.3	.479	1551	HCOOH
1755.5	1755.0	.479	1552	NH3
1755.0	1754.5	.478	1553	HCOOH
1754.3	1753.8	.478	1554	HCOOH
1753.7	1753.2	.478	1555	H2CO
1753.5	1753.0	.478	1556	HCOOH
1752.7	1752.2	.478	1557	HCOOH
1752.3	1751.8	.478	1558	NH3
1752.0	1751.5	.478	1559	HCOOH
1752.0	1751.5	.478	1560	H2O
1751.5	1751.0	.477	1561	NH3
1751.3	1750.8	.477	1562	HCOOH
1751.2	1750.7	.477	1563	H2CO
1750.5	1750.0	.477	1564	HCOOH
1749.7	1749.2	.477	1565	HCOOH
1748.9	1748.4	.477	1566	HCOOH
1748.1	1747.6	.477	1567	HCOOH
1747.4	1746.9	.476	1568	HCOOH
1746.5	1746.0	.476	1569	CH3CHO
1746.5	1746.0	.476	1570	HCOOH
1746.2	1745.7	.476	1571	H2CO
1745.7	1745.2	.476	1572	HCOOH
1745.5	1745.0	.476	1573	NH3
1744.9	1744.4	.476	1574	HCOOH
1744.1	1743.6	.475	1575	HCOOH
1743.4	1742.9	.475	1576	HCOOH
1742.7	1742.2	.475	1577	HCOOH
1741.8	1741.3	.475	1578	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1741.7	1741.2	.475	1579	H2CO
1741.0	1740.5	.475	1580	HCOOH
1740.5	1740.0	.474	1581	HCOOH
1740.4	1739.9	.474	1582	H2O
1739.9	1739.4	.474	1583	NH3
1739.4	1738.9	.474	1584	HCOOH
1739.3	1738.8	.474	1585	H2CO
1738.5	1738.0	.474	1586	HCOOH
1737.6	1737.1	.474	1587	HCOOH
1737.0	1736.5	.474	1588	NH3
1736.8	1736.3	.473	1589	HCOOH
1736.7	1736.2	.473	1590	H2CO
1736.0	1735.5	.473	1591	HCOOH
1735.2	1734.7	.473	1592	HCOOH
1735.0	1734.5	.473	1593	H2O
1734.3	1733.8	.473	1594	H2CO
1733.9	1733.4	.473	1595	H2O
1733.8	1733.3	.473	1596	CH3CHO
1732.2	1731.7	.472	1597	NH3
1731.7	1731.2	.472	1598	H2CO
1729.6	1729.1	.471	1599	NH3
1729.2	1728.7	.471	1600	H2CO
1726.7	1726.2	.471	1601	H2CO
1724.5	1724.0	.470	1602	H2COCHCHO
1724.3	1723.8	.470	1603	NH3
1724.0	1723.5	.470	1604	H2CO
1722.2	1721.7	.469	1605	NH3
1719.2	1718.7	.469	1606	H2O
1719.0	1718.5	.469	1607	H2CO
1717.9	1717.4	.468	1608	H2O
1712.7	1712.2	.467	1609	NH3
1711.0	1710.5	.466	1610	H2CO
1707.3	1706.8	.465	1611	NH3
1706.8	1706.3	.465	1612	H2O
1705.0	1704.5	.465	1613	H2O
1703.0	1702.5	.464	1614	H2CO
1701.1	1700.6	.464	1615	H2O
1700.5	1700.0	.464	1616	H2O
1696.4	1695.9	.462	1617	H2O
1693.3	1692.8	.462	1618	NH3
1692.2	1691.7	.461	1619	NH3
1691.5	1691.0	.461	1620	NH3
1685.3	1684.8	.459	1621	H2O
1677.0	1676.5	.457	1622	NH3
1675.8	1675.3	.457	1623	H2O
1672.0	1671.5	.456	1624	H2O
1669.8	1669.3	.455	1625	H2O
1667.8	1667.3	.455	1626	NH3
1663.3	1662.8	.453	1627	H2O

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1657.6	1657.1	.452	1628	NH3
1655.0	1654.5	.451	1629	H2O
1653.8	1653.3	.451	1630	H2O
1652.9	1652.4	.451	1631	H2O
1650.4	1650.0	.450	1632	NO2
1647.0	1646.6	.449	1633	NH3
1646.8	1646.4	.449	1634	NO2
1646.5	1646.1	.449	1635	H2O
1642.0	1641.6	.448	1636	NO2
1639.4	1639.0	.447	1637	NO2
1638.0	1637.6	.447	1638	NO2
1638.0	1637.6	.447	1639	H2O
1636.7	1636.3	.446	1640	NO2
1636.1	1635.7	.446	1641	H2O
1635.4	1635.0	.446	1642	H2O
1635.2	1634.8	.446	1643	NO2
1633.8	1633.4	.445	1644	NO2
1632.4	1632.0	.445	1645	NO2
1631.0	1630.6	.445	1646	NO2
1630.8	1630.4	.445	1647	NH3
1629.6	1629.2	.444	1648	NO2
1626.7	1626.3	.443	1649	NH3
1626.0	1625.6	.443	1650	NH3
1625.2	1624.8	.443	1651	NO2
1624.5	1624.1	.443	1652	NO2
1624.0	1623.6	.443	1653	H2O
1623.7	1623.3	.443	1654	NO2
1623.0	1622.6	.442	1655	NO2
1620.0	1619.6	.442	1656	NH3
1617.2	1616.8	.441	1657	H2O
1616.2	1615.8	.441	1658	NO2
1615.0	1614.6	.440	1659	NO2
1613.8	1613.4	.440	1660	NH3
1613.5	1613.1	.440	1661	NO2
1611.5	1611.1	.439	1662	NO2
1610.7	1610.3	.439	1663	NH3
1609.2	1608.8	.439	1664	NO2
1607.6	1607.2	.438	1665	NO2
1605.9	1605.5	.438	1666	NO2
1604.9	1604.5	.437	1667	NO2
1604.0	1603.6	.437	1668	NO2
1603.1	1602.7	.437	1669	NO2
1602.1	1601.7	.437	1670	NO2
1601.4	1601.0	.437	1671	NO2
1599.5	1599.1	.436	1672	NO2
1598.6	1598.2	.436	1673	NO2
1596.7	1596.3	.435	1674	NO2
1595.4	1595.0	.435	1675	NH3
1592.7	1592.3	.434	1676	NO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1591.8	1591.4	.434	1677	NO2
1589.8	1589.4	.433	1678	NO2
1586.8	1586.4	.433	1679	NO2
1585.8	1585.4	.432	1680	NO2
1584.0	1583.6	.432	1681	NO2
1583.0	1582.6	.432	1682	NO2
1582.0	1581.6	.431	1683	NO2
1581.0	1580.6	.431	1684	NO2
1580.0	1579.6	.431	1685	NH3
1578.4	1578.0	.430	1686	CH3CN
1576.6	1576.2	.430	1687	CH3CN
1576.6	1576.2	.430	1688	H2O
1570.2	1569.8	.428	1689	H2O
1568.5	1568.1	.428	1690	NH3
1567.5	1567.1	.427	1691	CH3CN
1564.5	1564.1	.426	1692	NH3
1561.8	1561.4	.426	1693	NH3
1560.7	1560.3	.425	1694	H2O
1559.0	1558.6	.425	1695	H2O
1558.0	1557.6	.425	1696	H2O
1554.8	1554.4	.424	1697	H2O
1554.7	1554.3	.424	1698	CH3CN
1552.0	1551.6	.423	1699	C2H6
1548.7	1548.3	.422	1700	NH3
1545.6	1545.2	.421	1701	H2O
1544.3	1543.9	.421	1702	NH3
1543.5	1543.1	.421	1703	NH3
1542.5	1542.1	.420	1704	H2O
1541.7	1541.3	.420	1705	H2CO
1541.7	1541.3	.420	1706	CH3CN
1540.7	1540.3	.420	1707	H2O
1539.5	1539.1	.420	1708	H2O
1539.4	1539.0	.420	1709	CH3CN
1536.2	1535.8	.419	1710	H2CO
1534.3	1533.9	.418	1711	CH3CN
1534.3	1533.9	.418	1712	H2O
1534.0	1533.6	.418	1713	H2CO
1533.0	1532.6	.418	1714	NH3
1531.0	1530.6	.417	1715	H2CO
1528.7	1528.3	.417	1716	H2CO
1528.2	1527.8	.417	1717	CH3CN
1526.3	1525.9	.416	1718	H2CO
1526.0	1525.6	.416	1719	HCO
1525.6	1525.2	.416	1720	C2H6
1523.4	1523.0	.415	1721	CH3CN
1523.1	1522.7	.415	1722	H2O
1521.7	1521.3	.415	1723	H2O
1520.5	1520.1	.414	1724	H2O
1520.0	1519.6	.414	1725	NH3
1519.5	1519.1	.414	1726	CH3CN

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1517.2	1516.8	.414	1727	NH3
1516.0	1515.6	.413	1728	H2CO
1515.8	1515.4	.413	1729	NH3
1515.0	1514.6	.413	1730	C2H6
1514.2	1513.8	.413	1731	CH3CN
1509.0	1508.6	.411	1732	CH3CN
1509.0	1508.6	.411	1733	H2O
1507.5	1507.1	.411	1734	H2O
1506.0	1505.6	.411	1735	H2O
1504.6	1504.2	.410	1736	C2H6
1501.5	1501.1	.409	1737	CH3CN
1501.3	1500.9	.409	1738	H2CO
1501.2	1500.8	.409	1739	NH3
1500.3	1499.9	.409	1740	NH3
1499.2	1498.8	.409	1741	CH3CN
1499.2	1498.8	.409	1742	H2O
1496.7	1496.3	.408	1743	H2O
1496.0	1495.6	.408	1744	CH3CN
1494.3	1493.9	.407	1745	C2H6
1494.2	1493.8	.407	1746	C2H4
1493.4	1493.0	.407	1747	H2CO
1491.0	1490.6	.406	1748	C2H4
1488.9	1488.5	.406	1749	H2CO
1488.6	1488.2	.406	1750	CH3CHO
1487.8	1487.4	.406	1751	H2O
1487.7	1487.3	.406	1752	C2H4
1486.0	1485.6	.405	1753	C2H6
1485.3	1484.9	.405	1754	NH3
1484.8	1484.4	.405	1755	CH3CHO
1484.5	1484.1	.405	1756	C2H4
1482.7	1482.3	.404	1757	CH3CN
1482.5	1482.1	.404	1758	C2H4
1481.8	1481.4	.404	1759	H2CO
1481.3	1480.9	.404	1760	CH3CN
1480.9	1480.5	.404	1761	CH3CHO
1479.3	1478.9	.403	1762	CH3CN
1478.3	1477.9	.403	1763	C2H4
1478.2	1477.8	.403	1764	C2H6
1477.0	1476.6	.403	1765	CH3CHO
1476.5	1476.1	.402	1766	C2H4
1475.7	1475.3	.402	1767	CH3CN
1474.9	1474.5	.402	1768	H2CO
1474.0	1473.6	.402	1769	H2O
1473.5	1473.1	.402	1770	C2H6
1473.2	1472.8	.402	1771	CH3CHO
1472.5	1472.1	.401	1772	H2O
1472.2	1471.8	.401	1773	C2H4
1469.3	1468.9	.401	1774	CH3CHO
1469.3	1468.9	.401	1775	NH3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1469.0	1468.6	.400	1776	C2H6
1468.6	1468.2	.400	1777	C2H4
1467.9	1467.5	.400	1778	H2CO
1465.4	1465.0	.399	1779	CH3CHO
1465.3	1464.9	.399	1780	H2O
1465.2	1464.8	.399	1781	C2H4
1463.9	1463.5	.399	1782	CH3CN
1463.8	1463.4	.399	1783	C2H6
1462.2	1461.8	.399	1784	C2H4
1461.3	1460.9	.398	1785	CH3CHO
1461.0	1460.6	.398	1786	H2CO
1460.3	1459.9	.398	1787	C2H4
1458.5	1458.1	.398	1788	C2H4
1457.3	1456.9	.397	1789	CH3CHO
1457.3	1456.9	.397	1790	CH3CN
1457.3	1456.9	.397	1791	H2O
1456.4	1456.0	.397	1792	H2CO
1454.3	1453.9	.396	1793	NH3
1454.1	1453.7	.396	1794	H2CO
1453.3	1452.9	.396	1795	CH3CHO
1452.8	1452.4	.396	1796	C2H6
1452.5	1452.1	.396	1797	C2H4
1449.5	1449.1	.395	1798	CH3CN
1449.4	1449.0	.395	1799	CH3CHO
1448.8	1448.4	.395	1800	C2H4
1447.7	1447.3	.395	1801	C2H4
1446.8	1446.4	.394	1802	C2H4
1445.9	1445.5	.394	1803	C2H4
1445.1	1444.7	.394	1804	C2H4
1444.4	1444.0	.394	1805	C2H4
1444.3	1443.9	.394	1806	CH3CN
1444.0	1443.6	.394	1807	C2H4
1441.0	1440.6	.393	1808	C2H4
1440.1	1439.7	.393	1809	C2H6
1439.2	1438.8	.392	1810	C2H4
1437.5	1437.1	.392	1811	C2H4
1437.2	1436.8	.392	1812	H2O
1437.0	1436.6	.392	1813	NH3
1436.5	1436.1	.392	1814	CH3CHO
1435.8	1435.4	.391	1815	C2H4
1435.2	1434.8	.391	1816	CH3CN
1434.0	1433.6	.391	1817	C2H4
1432.2	1431.8	.390	1818	C2H4
1428.7	1428.3	.389	1819	C2H4
1427.0	1426.6	.389	1820	H2S
1426.9	1426.5	.389	1821	C2H4
1422.4	1422.0	.388	1822	C2H4
1421.2	1420.8	.387	1823	CH3CN
1419.9	1419.5	.387	1824	H2O
1419.7	1419.3	.387	1825	C2H4

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1419.2	1418.8	.387	1826	C2H6
1417.2	1416.8	.386	1827	C2H4
1414.3	1413.9	.386	1828	H2S
1413.8	1413.4	.385	1829	C2H4
1407.3	1406.9	.384	1830	CH3CN
1407.0	1406.6	.384	1831	H2S
1406.3	1405.9	.383	1832	C2H6
1405.2	1404.8	.383	1833	C2H6
1404.8	1404.4	.383	1834	C2H4
1404.1	1403.7	.383	1835	C2H6
1403.3	1402.9	.383	1836	C2H6
1402.1	1401.7	.382	1837	C2H6
1401.0	1400.6	.382	1838	C2H6
1400.5	1400.1	.382	1839	C2H4
1400.5	1400.1	.382	1840	CH3CN
1399.8	1399.4	.382	1841	C2H6
1399.6	1399.2	.382	1842	H2O
1398.8	1398.4	.381	1843	C2H6
1397.8	1397.4	.381	1844	C2H6
1396.7	1396.3	.381	1845	C2H6
1395.6	1395.2	.380	1846	C2H6
1395.5	1395.1	.380	1847	CH3CHO
1394.6	1394.2	.380	1848	C2H6
1393.3	1392.9	.380	1849	C2H6
1392.1	1391.7	.379	1850	C2H6
1392.0	1391.6	.379	1851	H2S
1392.0	1391.6	.379	1852	CH3CN
1391.3	1390.9	.379	1853	C2H2
1390.8	1390.4	.379	1854	C2H6
1389.7	1389.3	.379	1855	H2S
1389.6	1389.2	.379	1856	C2H6
1388.0	1387.6	.378	1857	H2O
1386.5	1386.1	.378	1858	C2H2
1385.8	1385.4	.378	1859	SO2
1384.7	1384.3	.377	1860	SO2
1384.1	1383.7	.377	1861	C2H2
1383.3	1382.9	.377	1862	H2S
1381.7	1381.3	.377	1863	C2H2
1381.6	1381.2	.377	1864	H2S
1381.4	1381.0	.377	1865	SO2
1380.3	1379.9	.376	1866	SO2
1379.5	1379.1	.376	1867	C2H6
1379.2	1378.8	.376	1868	C2H2
1379.2	1378.8	.376	1869	SO2
1378.0	1377.6	.376	1870	SO2
1377.5	1377.1	.375	1871	CH3CN
1377.3	1376.9	.375	1872	H2S
1376.7	1376.3	.375	1873	C2H2
1376.7	1376.3	.375	1874	SO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1375.5	1375.1	.375	1875	C2H6
1374.5	1374.1	.375	1876	SO2
1374.3	1373.9	.375	1877	C2H2
1374.1	1373.7	.375	1878	C2H6
1373.3	1372.9	.374	1879	SO2
1372.7	1372.3	.374	1880	C2H6
1371.9	1371.5	.374	1881	C2H2
1371.8	1371.4	.374	1882	H2CO
1371.5	1371.1	.374	1883	C2H6
1370.8	1370.4	.374	1884	SO2
1370.1	1369.7	.373	1885	C2H6
1369.5	1369.1	.373	1886	C2H2
1368.7	1368.3	.373	1887	C2H6
1368.0	1367.6	.373	1888	SO2
1367.3	1366.9	.373	1889	C2H6
1367.0	1366.6	.373	1890	C2H2
1366.8	1366.4	.373	1891	CH3CHO
1366.5	1366.1	.372	1892	CH4
1365.7	1365.3	.372	1893	C2H6
1365.5	1365.1	.372	1894	SO2
1365.0	1364.6	.372	1895	H2S
1365.0	1364.6	.372	1896	CH3CN
1364.9	1364.5	.372	1897	SO2
1364.5	1364.1	.372	1898	C2H2
1364.2	1363.8	.372	1899	C2H6
1363.5	1363.1	.372	1900	CH4
1362.7	1362.3	.371	1901	C2H6
1362.1	1361.7	.371	1902	C2H2
1362.0	1361.6	.371	1903	SO2
1361.2	1360.8	.371	1904	C2H6
1361.2	1360.8	.371	1905	SO2
1359.6	1359.2	.371	1906	C2H2
1359.5	1359.1	.371	1907	C2H6
1358.5	1358.1	.370	1908	CH4
1358.0	1357.6	.370	1909	C2H6
1357.7	1357.3	.370	1910	SO2
1357.2	1356.8	.370	1911	C2H2
1356.6	1356.2	.370	1912	C2H6
1356.0	1355.6	.370	1913	H2S
1355.8	1355.4	.370	1914	CH4
1355.2	1354.8	.369	1915	CH3CN
1355.1	1354.7	.369	1916	C2H6
1355.0	1354.6	.369	1917	SO2
1354.8	1354.4	.369	1918	C2H2
1353.4	1353.0	.369	1919	CH4
1353.4	1353.0	.369	1920	C2H6
1353.0	1352.6	.369	1921	SO2
1352.8	1352.4	.369	1922	CH3CHO
1352.4	1352.0	.369	1923	C2H2
1352.0	1351.6	.369	1924	C2H6

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1351.6	1351.2	.368	1925	SO2
1351.3	1350.9	.368	1926	CH4
1351.3	1350.9	.368	1927	CH3CN
1350.5	1350.1	.368	1928	C2H6
1350.0	1349.6	.368	1929	C2H2
1350.0	1349.6	.368	1930	SO2
1348.8	1348.4	.368	1931	SO2
1348.4	1348.0	.368	1932	CH4
1347.9	1347.5	.367	1933	H2S
1347.8	1347.4	.367	1934	H2CO
1347.6	1347.2	.367	1935	C2H2
1347.4	1347.0	.367	1936	SO2
1347.0	1346.6	.367	1937	CH4
1346.0	1345.6	.367	1938	SO2
1345.2	1344.8	.367	1939	C2H2
1343.2	1342.8	.366	1940	CH4
1342.9	1342.5	.366	1941	SO2
1342.8	1342.4	.366	1942	C2H2
1342.1	1341.7	.366	1943	CH4
1341.5	1341.1	.366	1944	SO2
1340.8	1340.4	.365	1945	H2O
1340.5	1340.1	.365	1946	C2H2
1339.5	1339.1	.365	1947	SO2
1338.7	1338.3	.365	1948	SO2
1338.0	1337.6	.365	1949	C2H2
1338.0	1337.6	.365	1950	CH4
1337.5	1337.1	.365	1951	SO2
1337.5	1337.1	.365	1952	CH3CN
1337.4	1337.0	.365	1953	CH4
1336.2	1335.8	.364	1954	H2S
1335.7	1335.3	.364	1955	C2H2
1335.5	1335.1	.364	1956	SO2
1334.1	1333.7	.364	1957	SO2
1333.3	1332.9	.363	1958	C2H2
1333.0	1332.6	.363	1959	CH4
1332.0	1331.6	.363	1960	SO2
1330.9	1330.5	.363	1961	C2H2
1330.0	1329.6	.363	1962	H2S
1329.3	1328.9	.362	1963	SO2
1328.6	1328.2	.362	1964	C2H2
1327.5	1327.1	.362	1965	CH4
1326.2	1325.8	.362	1966	C2H2
1324.0	1323.6	.361	1967	H2S
1323.8	1323.4	.361	1968	C2H2
1323.7	1323.3	.361	1969	H2CO
1323.7	1323.3	.361	1970	CH3CN
1322.4	1322.0	.360	1971	CH4
1321.5	1321.1	.360	1972	C2H2
1319.3	1318.9	.360	1973	H2O
1319.2	1318.8	.360	1974	C2H2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1317.2	1316.8	.359	1975	CH4
1316.8	1316.4	.359	1976	C2H2
1315.9	1315.5	.359	1977	H2S
1314.5	1314.1	.358	1978	C2H2
1312.5	1312.1	.358	1979	N2O
1312.2	1311.8	.358	1980	C2H2
1311.7	1311.3	.358	1981	CH4
1311.0	1310.6	.357	1982	N2O
1309.8	1309.4	.357	1983	C2H2
1309.8	1309.4	.357	1984	CH3CN
1309.5	1309.1	.357	1985	N2O
1307.5	1307.1	.356	1986	C2H2
1306.5	1306.1	.356	1987	CH4
1306.5	1306.1	.356	1988	N2O
1305.4	1305.0	.356	1989	CH4
1305.2	1304.8	.356	1990	C2H2
1305.0	1304.6	.356	1991	N2O
1304.0	1303.6	.355	1992	H2S
1304.0	1303.6	.355	1993	CH4
1303.2	1302.8	.355	1994	CH4
1303.0	1302.6	.355	1995	C2H2
1301.8	1301.4	.355	1996	CH4
1300.8	1300.4	.355	1997	H2CO
1300.7	1300.3	.355	1998	C2H2
1298.5	1298.1	.354	1999	C2H2
1297.9	1297.5	.354	2000	CH4
1297.5	1297.1	.354	2001	N2O
1296.0	1295.6	.353	2002	C2H2
1294.3	1293.9	.353	2003	N2O
1293.9	1293.5	.353	2004	C2H2
1293.3	1292.9	.353	2005	H2S
1292.9	1292.5	.352	2006	CH4
1291.8	1291.4	.352	2007	N2O
1291.6	1291.2	.352	2008	C2H2
1291.0	1290.6	.352	2009	N2O
1289.4	1289.0	.351	2010	N2O
1289.3	1288.9	.351	2011	C2H2
1288.1	1287.7	.351	2012	CH4
1287.1	1286.7	.351	2013	C2H2
1287.0	1286.6	.351	2014	H2S
1284.9	1284.5	.350	2015	C2H2
1282.6	1282.3	.350	2016	C2H2
1281.9	1281.6	.349	2017	CH4
1280.4	1280.1	.349	2018	C2H2
1280.2	1279.9	.349	2019	H2S
1278.7	1278.4	.349	2020	H2S
1278.2	1277.9	.348	2021	C2H2
1277.5	1277.2	.348	2022	N2O
1276.3	1276.0	.348	2023	H2S
1275.8	1275.5	.348	2024	C2H2
1275.5	1275.2	.348	2025	CH4
1274.7	1274.4	.347	2026	H2CO
1272.2	1271.9	.347	2027	H2O
1271.8	1271.5	.347	2028	CH4
1271.5	1271.2	.347	2029	N2O
1271.4	1271.1	.347	2030	C2H2
1270.6	1270.3	.346	2031	N2O
1270.5	1270.2	.346	2032	H2S
1269.7	1269.4	.346	2033	N2O
1268.8	1268.5	.346	2034	N2O
1267.2	1266.9	.345	2035	H2S
1266.8	1266.5	.345	2036	C2H2
1266.1	1265.8	.345	2037	N2O
1265.8	1265.5	.345	2038	CH4
1263.7	1263.4	.344	2039	CH4
1263.3	1263.0	.344	2040	N2O
1260.5	1260.2	.344	2041	N2O
1259.7	1259.4	.343	2042	H2CO
1257.3	1257.0	.343	2043	H2S
1257.1	1256.8	.343	2044	CH4
1256.7	1256.4	.343	2045	N2O
1254.0	1253.7	.342	2046	CH4
1253.0	1252.7	.342	2047	H2S
1248.7	1248.4	.340	2048	H2S
1248.1	1247.8	.340	2049	CH4
1244.0	1243.7	.339	2050	H2S
1241.3	1241.0	.338	2051	CH4
1234.9	1234.6	.337	2052	H2S
1233.8	1233.5	.336	2053	CH4
1230.4	1230.1	.335	2054	CH4
1230.3	1230.0	.335	2055	H2CO
1229.6	1229.3	.335	2056	H2S
1225.7	1225.4	.334	2057	H2S
1217.8	1217.5	.332	2058	SO2
1217.2	1216.9	.332	2059	SO2
1216.7	1216.4	.332	2060	SO2
1216.6	1216.3	.332	2061	CH4
1216.3	1216.0	.332	2062	H2S
1215.5	1215.2	.331	2063	SO2
1215.0	1214.7	.331	2064	SO2
1213.5	1213.2	.331	2065	H2CO
1213.0	1212.7	.331	2066	NH3
1210.0	1209.7	.330	2067	SO2
1209.5	1209.2	.330	2068	SO2
1208.9	1208.6	.330	2069	SO2
1208.3	1208.0	.329	2070	SO2
1207.7	1207.4	.329	2071	SO2
1203.9	1203.6	.328	2072	SO2
1203.8	1203.5	.328	2073	H2S

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1203.3	1203.0	.328	2074	SO2
1202.8	1202.5	.328	2075	SO2
1202.5	1202.2	.328	2076	H2CO
1202.2	1201.9	.328	2077	SO2
1201.6	1201.3	.328	2078	SO2
1201.0	1200.7	.327	2079	SO2
1200.4	1200.1	.327	2080	SO2
1197.2	1196.9	.326	2081	SO2
1196.6	1196.3	.326	2082	SO2
1196.5	1196.2	.326	2083	H2S
1196.1	1195.8	.326	2084	N2O
1196.0	1195.7	.326	2085	SO2
1195.5	1195.2	.326	2086	NH3
1195.3	1195.0	.326	2087	SO2
1194.8	1194.5	.326	2088	SO2
1194.2	1193.9	.326	2089	SO2
1193.7	1193.4	.325	2090	SO2
1193.1	1192.8	.325	2091	H2CO
1190.5	1190.2	.325	2092	SO2
1189.8	1189.5	.324	2093	SO2
1189.2	1188.9	.324	2094	SO2
1189.1	1188.8	.324	2095	H2S
1188.6	1188.3	.324	2096	SO2
1187.4	1187.1	.324	2097	SO2
1184.0	1183.7	.323	2098	SO2
1182.5	1182.2	.322	2099	SO2
1182.1	1181.8	.322	2100	N2O
1181.8	1181.5	.322	2101	SO2
1180.5	1180.2	.322	2102	SO2
1177.5	1177.2	.321	2103	NH3
1177.2	1176.9	.321	2104	SO2
1176.2	1175.9	.321	2105	N2O
1175.5	1175.2	.320	2106	H2S
1173.8	1173.5	.320	2107	SO2
1170.5	1170.2	.319	2108	SO2
1167.9	1167.6	.318	2109	SO2
1167.0	1166.7	.318	2110	SO2
1165.5	1165.2	.318	2111	H2CO
1163.8	1163.5	.317	2112	SO2
1161.0	1160.7	.316	2113	N2O
1160.9	1160.6	.316	2114	SO2
1159.3	1159.0	.316	2115	NH3
1158.5	1158.2	.316	2116	H2S
1156.1	1155.8	.315	2117	SO2
1155.3	1155.0	.315	2118	SO2
1154.5	1154.2	.315	2119	SO2
1153.4	1153.1	.314	2120	O3
1152.6	1152.3	.314	2121	O3
1151.8	1151.5	.314	2122	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1151.2	1150.9	.314	2123	O3
1150.4	1150.1	.314	2124	O3
1150.0	1149.7	.313	2125	H2S
1149.6	1149.3	.313	2126	O3
1148.8	1148.5	.313	2127	O3
1148.1	1147.8	.313	2128	N2O
1148.0	1147.7	.313	2129	O3
1147.4	1147.1	.313	2130	SO2
1147.2	1146.9	.313	2131	O3
1143.7	1143.4	.312	2132	O3
1143.5	1143.2	.312	2133	SO2
1142.5	1142.2	.311	2134	N2O
1142.3	1142.0	.311	2135	O3
1141.7	1141.4	.311	2136	O3
1141.0	1140.7	.311	2137	NH3
1140.7	1140.4	.311	2138	O3
1140.4	1140.1	.311	2139	H2S
1140.0	1139.7	.311	2140	SO2
1139.0	1138.7	.310	2141	O3
1137.2	1136.9	.310	2142	O3
1136.4	1136.1	.310	2143	O3
1136.4	1136.1	.310	2144	SO2
1135.6	1135.3	.310	2145	O3
1134.6	1134.3	.309	2146	O3
1134.2	1133.9	.309	2147	HCOOH
1134.0	1133.7	.309	2148	O3
1134.0	1133.7	.309	2149	N2O
1133.8	1133.5	.309	2150	HCOOH
1133.3	1133.0	.309	2151	HCOOH
1133.0	1132.7	.309	2152	O3
1133.0	1132.7	.309	2153	SO2
1132.7	1132.4	.309	2154	HCOOH
1132.0	1131.7	.309	2155	O3
1131.4	1131.1	.308	2156	O3
1131.0	1130.7	.308	2157	HCOOH
1130.8	1130.5	.308	2158	H2S
1130.4	1130.1	.308	2159	O3
1130.3	1130.0	.308	2160	HCOOH
1129.7	1129.4	.308	2161	HCOOH
1129.5	1129.2	.308	2162	O3
1129.5	1129.2	.308	2163	SO2
1129.2	1128.9	.308	2164	O3
1129.2	1128.9	.308	2165	HCOOH
1128.8	1128.5	.308	2166	HCOOH
1128.2	1127.9	.308	2167	CH3CHO
1128.2	1127.9	.308	2168	HCOOH
1128.0	1127.7	.307	2169	O3
1127.6	1127.3	.307	2170	HCOOH
1127.5	1127.2	.307	2171	SO2
1127.4	1127.1	.307	2172	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1127.0	1126.7	.307	2173	HCOOH
1126.4	1126.1	.307	2174	HCOOH
1126.2	1125.9	.307	2175	O3
1126.2	1125.9	.307	2176	SO2
1125.7	1125.4	.307	2177	HCOOH
1125.1	1124.8	.307	2178	HCOOH
1124.5	1124.2	.307	2179	HCOOH
1124.2	1123.9	.306	2180	O3
1124.0	1123.7	.306	2181	CH3CHO
1123.9	1123.6	.306	2182	HCOOH
1123.3	1123.0	.306	2183	HCOOH
1122.8	1122.5	.306	2184	SO2
1122.7	1122.4	.306	2185	O3
1122.7	1122.4	.306	2186	HCOOH
1121.8	1121.5	.306	2187	O3
1121.5	1121.2	.306	2188	H2CO
1121.4	1121.1	.306	2189	CH3CHO
1121.1	1120.8	.306	2190	O3
1121.1	1120.8	.306	2191	H2S
1121.0	1120.7	.306	2192	HCOOH
1120.4	1120.1	.305	2193	HCOOH
1119.5	1119.2	.305	2194	O3
1119.5	1119.2	.305	2195	SO2
1119.1	1118.8	.305	2196	O3
1119.1	1118.8	.305	2197	HCOOH
1118.5	1118.2	.305	2198	HCOOH
1118.2	1117.9	.305	2199	O3
1117.7	1117.4	.305	2200	HCOOH
1117.5	1117.2	.305	2201	SO2
1117.2	1116.9	.305	2202	O3
1116.9	1116.6	.304	2203	HCOOH
1116.3	1116.0	.304	2204	HCOOH
1116.0	1115.7	.304	2205	SO2
1115.5	1115.2	.304	2206	O3
1115.5	1115.2	.304	2207	HCOOH
1114.8	1114.5	.304	2208	HCOOH
1114.3	1114.0	.304	2209	H2CO
1114.1	1113.8	.304	2210	HCOOH
1114.0	1113.7	.304	2211	SO2
1113.7	1113.4	.304	2212	O3
1113.4	1113.1	.303	2213	HCOOH
1112.7	1112.4	.303	2214	HCOOH
1112.0	1111.7	.303	2215	HCOOH
1111.3	1111.0	.303	2216	O3
1111.3	1111.0	.303	2217	H2S
1111.3	1111.0	.303	2218	HCOOH
1110.5	1110.2	.303	2219	HCOOH
1109.7	1109.4	.302	2220	HCOOH
1109.5	1109.2	.302	2221	SO2
1108.9	1108.6	.302	2222	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1108.9	1108.6	.302	2223	HCOOH
1108.1	1107.8	.302	2224	HCOOH
1108.0	1107.7	.302	2225	O3
1107.5	1107.2	.302	2226	CH3CHO
1107.4	1107.1	.302	2227	HCOOH
1105.5	1105.2	.301	2228	O3
1105.3	1105.0	.301	2229	HCOOH
1104.3	1104.0	.301	2230	O3
1103.8	1103.5	.301	2231	NH3
1103.5	1103.2	.301	2232	O3
1103.5	1103.2	.301	2233	CH3CHO
1102.9	1102.6	.301	2234	HCOOH
1102.5	1102.2	.301	2235	O3
1102.2	1101.9	.300	2236	HCOOH
1101.5	1101.2	.300	2237	HCOOH
1101.3	1101.0	.300	2238	O3
1100.8	1100.5	.300	2239	HCOOH
1100.5	1100.2	.300	2240	O3
1099.9	1099.6	.300	2241	HCOOH
1099.2	1098.9	.300	2242	H2CO
1099.2	1098.9	.300	2243	HCOOH
1098.4	1098.1	.299	2244	HCOOH
1095.4	1095.1	.299	2245	HCOOH
1095.1	1094.8	.299	2246	O3
1094.9	1094.6	.298	2247	CH3CN
1094.8	1094.5	.298	2248	CH3CHO
1094.6	1094.3	.298	2249	HCOOH
1093.7	1093.4	.298	2250	HCOOH
1092.0	1091.7	.298	2251	HCOOH
1091.2	1090.9	.297	2252	HCOOH
1090.4	1090.1	.297	2253	HCOOH
1089.5	1089.2	.297	2254	HCOOH
1089.0	1088.7	.297	2255	CH3CN
1088.6	1088.3	.297	2256	HCOOH
1087.9	1087.6	.297	2257	HCOOH
1087.7	1087.4	.296	2258	O3
1087.1	1086.8	.296	2259	HCOOH
1086.3	1086.0	.296	2260	HCOOH
1085.4	1085.1	.296	2261	HCOOH
1085.0	1084.7	.296	2262	NH3
1084.7	1084.4	.296	2263	HCOOH
1084.6	1084.3	.296	2264	O3
1083.9	1083.6	.295	2265	HCOOH
1083.2	1082.9	.295	2266	O3
1083.0	1082.7	.295	2267	HCOOH
1082.2	1081.9	.295	2268	HCOOH
1081.5	1081.2	.295	2269	O3
1081.5	1081.2	.295	2270	HCOOH
1080.5	1080.2	.295	2271	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1079.9	1079.6	.294	2272	HCOOH
1078.7	1078.4	.294	2273	HCOOH
1077.9	1077.6	.294	2274	HCOOH
1077.0	1076.7	.294	2275	O3
1076.8	1076.5	.294	2276	HCOOH
1076.2	1075.9	.293	2277	CH3CN
1076.0	1075.7	.293	2278	HCOOH
1075.8	1075.5	.293	2279	H2CO
1075.2	1074.9	.293	2280	O3
1075.2	1074.9	.293	2281	HCOOH
1074.3	1074.0	.293	2282	HCOOH
1073.6	1073.3	.293	2283	HCOOH
1073.4	1073.1	.293	2284	O3
1072.6	1072.3	.292	2285	O3
1071.5	1071.2	.292	2286	O3
1070.9	1070.6	.292	2287	O3
1070.7	1070.4	.292	2288	CH3CN
1069.1	1068.8	.291	2289	O3
1068.5	1068.2	.291	2290	O3
1067.9	1067.6	.291	2291	O3
1067.0	1066.7	.291	2292	O3
1066.1	1065.8	.291	2293	CH3OH
1066.0	1065.7	.291	2294	O3
1065.9	1065.6	.291	2295	NH3
1065.0	1064.7	.290	2296	CH3CN
1064.6	1064.3	.290	2297	O3
1063.8	1063.5	.290	2298	O3
1062.7	1062.4	.290	2299	O3
1061.9	1061.6	.289	2300	O3
1061.7	1061.4	.289	2301	CH3OH
1061.3	1061.0	.289	2302	O3
1060.6	1060.3	.289	2303	O3
1060.5	1060.2	.289	2304	CH3OH
1059.3	1059.0	.289	2305	CH3CN
1058.5	1058.2	.289	2306	O3
1057.4	1057.1	.288	2307	O3
1056.5	1056.2	.288	2308	CH3OH
1056.3	1056.0	.288	2309	O3
1055.3	1055.0	.288	2310	NH3
1055.2	1054.9	.288	2311	O3
1054.6	1054.3	.287	2312	NH3
1054.5	1054.2	.287	2313	O3
1053.8	1053.5	.287	2314	O3
1053.7	1053.4	.287	2315	CH3CN
1053.5	1053.2	.287	2316	NH3
1053.2	1052.9	.287	2317	O3
1052.5	1052.2	.287	2318	CH3OH
1052.4	1052.1	.287	2319	O3
1051.8	1051.5	.287	2320	NH3
1051.7	1051.4	.287	2321	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1051.5	1051.2	.287	2322	H2CO
1051.0	1050.7	.286	2323	O3
1050.5	1050.2	.286	2324	O3
1049.8	1049.5	.286	2325	O3
1049.6	1049.3	.286	2326	NH3
1049.2	1048.9	.286	2327	O3
1048.3	1048.0	.286	2328	O3
1048.2	1047.9	.286	2329	CH3OH
1048.0	1047.7	.286	2330	CH3CN
1047.7	1047.4	.286	2331	O3
1047.0	1046.7	.285	2332	O3
1046.8	1046.5	.285	2333	CH3OH
1046.7	1046.4	.285	2334	NH3
1046.3	1046.0	.285	2335	O3
1045.3	1045.0	.285	2336	CH3OH
1044.8	1044.5	.285	2337	O3
1044.2	1043.9	.285	2338	C2H4
1042.5	1042.2	.284	2339	CH3CN
1040.9	1040.6	.284	2340	O3
1039.6	1039.3	.283	2341	O3
1038.7	1038.4	.283	2342	O3
1038.0	1037.7	.283	2343	C2H4
1037.8	1037.5	.283	2344	O3
1037.0	1036.7	.283	2345	O3
1037.0	1036.7	.283	2346	CH3CN
1035.0	1034.7	.282	2347	O3
1034.5	1034.2	.282	2348	NH3
1034.2	1033.9	.282	2349	O3
1033.6	1033.3	.282	2350	NH3
1033.5	1033.2	.282	2351	CH3OH
1033.3	1033.0	.282	2352	O3
1032.5	1032.2	.281	2353	NH3
1032.3	1032.0	.281	2354	H2COCHCHO
1032.2	1031.9	.281	2355	O3
1031.7	1031.4	.281	2356	O3
1031.5	1031.2	.281	2357	CH3CN
1031.2	1030.9	.281	2358	O3
1030.7	1030.4	.281	2359	NH3
1030.3	1030.0	.281	2360	O3
1029.7	1029.4	.281	2361	H2COCHCHO
1029.2	1028.9	.281	2362	O3
1028.3	1028.0	.280	2363	O3
1028.2	1027.9	.280	2364	C2H4
1027.8	1027.5	.280	2365	O3
1027.3	1027.0	.280	2366	O3
1027.3	1027.0	.280	2367	NH3
1027.2	1026.9	.280	2368	H2CO
1027.1	1026.8	.280	2369	H2COCHCHO
1026.7	1026.4	.280	2370	O3
1026.3	1026.0	.280	2371	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1026.2	1025.9	.280	2372	CH3CN
1025.7	1025.4	.280	2373	O3
1025.2	1024.9	.279	2374	O3
1024.7	1024.4	.279	2375	O3
1024.7	1024.4	.279	2376	CH3OH
1024.1	1023.8	.279	2377	O3
1023.5	1023.2	.279	2378	O3
1022.4	1022.1	.279	2379	O3
1021.7	1021.4	.278	2380	H2CCHCHO
1021.5	1021.2	.278	2381	O3
1021.0	1020.7	.278	2382	CH3OH
1020.8	1020.5	.278	2383	CH3CN
1020.5	1020.2	.278	2384	O3
1020.4	1020.1	.278	2385	C2H4
1019.4	1019.1	.278	2386	H2CCHCHO
1019.3	1019.0	.278	2387	O3
1018.8	1018.5	.278	2388	O3
1018.2	1017.9	.278	2389	O3
1017.7	1017.4	.277	2390	CH3OH
1016.5	1016.2	.277	2391	H2CCHCHO
1015.8	1015.5	.277	2392	CH3OH
1015.5	1015.2	.277	2393	CH3CN
1014.5	1014.2	.277	2394	O3
1014.0	1013.7	.276	2395	CH3OH
1013.9	1013.6	.276	2396	H2CCHCHO
1013.5	1013.2	.276	2397	NH3
1013.4	1013.1	.276	2398	O3
1012.8	1012.5	.276	2399	O3
1012.8	1012.5	.276	2400	NH3
1012.2	1011.9	.276	2401	O3
1011.6	1011.3	.276	2402	C2H4
1011.5	1011.2	.276	2403	O3
1011.5	1011.2	.276	2404	NH3
1011.1	1010.8	.276	2405	H2CCHCHO
1011.0	1010.7	.276	2406	O3
1010.4	1010.1	.275	2407	O3
1010.3	1010.0	.275	2408	CH3OH
1010.3	1010.0	.275	2409	CH3CN
1009.8	1009.5	.275	2410	O3
1007.8	1007.5	.275	2411	NH3
1007.5	1007.2	.275	2412	O3
1006.7	1006.4	.274	2413	C2H4
1006.5	1006.2	.274	2414	CH3OH
1006.3	1006.0	.274	2415	O3
1005.7	1005.4	.274	2416	O3
1005.5	1005.2	.274	2417	H2CCHCHO
1005.2	1004.9	.274	2418	CH3CN
1005.0	1004.7	.274	2419	O3
1004.5	1004.2	.274	2420	CH3OH
1004.4	1004.1	.274	2421	O3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
1003.3	1003.0	.273	2422	O3
1002.7	1002.4	.273	2423	CH3OH
1002.4	1002.1	.273	2424	O3
1001.0	1000.7	.273	2425	O3
1000.2	999.9	.273	2426	CH3CN
999.8	999.5	.273	2427	O3
998.9	998.6	.272	2428	CH3OH
998.4	998.1	.272	2429	O3
997.6	997.3	.272	2430	C2H4
997.2	996.9	.272	2431	O3
997.0	996.7	.272	2432	NH3
995.9	995.6	.271	2433	O3
994.7	994.4	.271	2434	O3
993.3	993.0	.271	2435	O3
993.0	992.7	.271	2436	CH3OH
993.0	992.7	.271	2437	H2CCHCHO
992.0	991.7	.270	2438	O3
992.0	991.7	.270	2439	NH3
990.5	990.2	.270	2440	O3
988.8	988.5	.270	2441	CH3OH
988.2	987.9	.269	2442	C2H4
987.7	987.4	.269	2443	O3
986.5	986.2	.269	2444	C2H4
986.3	986.0	.269	2445	O3
985.0	984.7	.268	2446	O3
984.7	984.4	.268	2447	CH3OH
984.5	984.2	.268	2448	H2CCHCHO
979.3	979.0	.267	2449	O3
978.8	978.5	.267	2450	C2H4
978.3	978.0	.267	2451	H2CCHCHO
977.7	977.4	.267	2452	O3
976.3	976.0	.266	2453	O3
975.2	974.9	.266	2454	H2CCHCHO
975.0	974.7	.266	2455	O3
973.3	973.0	.265	2456	O3
972.2	971.9	.265	2457	H2CCHCHO
972.2	971.9	.265	2458	NH3
971.8	971.5	.265	2459	O3
970.4	970.1	.265	2460	O3
970.2	969.9	.264	2461	C2H4
968.0	967.7	.264	2462	H2CCHCHO
967.8	967.5	.264	2463	NH3
967.3	967.0	.264	2464	NH3
966.6	966.3	.263	2465	NH3
965.8	965.5	.263	2466	NH3
964.8	964.5	.263	2467	NH3
963.8	963.5	.263	2468	NH3
963.6	963.3	.263	2469	C2H4
962.5	962.2	.262	2470	NH3

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
961.3	961.0	.262	2471	NH3
959.8	959.5	.262	2472	NH3
959.0	958.7	.261	2473	H2CCHCHO
958.2	957.9	.261	2474	NH3
957.7	957.4	.261	2475	C2H4
956.5	956.2	.261	2476	NH3
952.1	951.8	.260	2477	NH3
952.0	951.7	.259	2478	H2CCHCHO
949.8	949.5	.259	2479	C2H4
949.1	948.8	.259	2480	H2CCHCHO
948.5	948.2	.259	2481	NH3
946.4	946.1	.258	2482	H2CCHCHO
945.1	944.8	.258	2483	C2H4
943.7	943.4	.257	2484	C2H4
943.7	943.4	.257	2485	H2CCHCHO
938.0	937.7	.256	2486	C2H4
938.0	937.7	.256	2487	H2CCHCHO
936.1	935.8	.255	2488	NH3
935.5	935.2	.255	2489	H2CCHCHO
934.6	934.3	.255	2490	NH3
933.3	933.0	.254	2491	NH3
933.0	932.7	.254	2492	H2CCHCHO
932.2	931.9	.254	2493	NH3
931.5	931.2	.254	2494	NH3
931.0	930.7	.254	2495	NH3
930.4	930.1	.254	2496	H2CCHCHO
930.1	929.8	.254	2497	NH3
929.8	929.5	.253	2498	C2H4
929.0	928.7	.253	2499	NH3
927.7	927.4	.253	2500	H2CCHCHO
927.6	927.3	.253	2501	NH3
926.0	925.7	.252	2502	NH3
925.6	925.3	.252	2503	H2CCHCHO
923.8	923.5	.252	2504	NH3
923.0	922.7	.252	2505	H2CCHCHO
922.7	922.4	.252	2506	C2H4
921.5	921.2	.251	2507	NH3
919.5	919.2	.251	2508	CH3CHO
915.8	915.6	.250	2509	C2H4
914.3	914.1	.249	2510	CH3CHO
911.6	911.4	.248	2511	CH3CHO
909.2	909.0	.248	2512	C2H4
908.5	908.3	.248	2513	CH3CHO
908.5	908.3	.248	2514	NH3
903.0	902.8	.246	2515	C2H4
896.7	896.5	.244	2516	C2H4
892.3	892.1	.243	2517	NH3
888.2	888.0	.242	2518	NH3
886.6	886.4	.242	2519	C2H4

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
879.1	878.9	.240	2520	NO2
879.0	878.8	.240	2521	C2H4
877.0	876.8	.239	2522	CH3CHO
872.8	872.6	.238	2523	NH3
872.0	871.8	.238	2524	NH3
868.1	867.9	.237	2525	NH3
866.3	866.1	.236	2526	CH3CHO
862.2	862.0	.235	2527	NO2
856.7	856.5	.234	2528	CH3CHO
854.0	853.8	.233	2529	NH3
853.0	852.8	.233	2530	NH3
851.6	851.4	.232	2531	NH3
848.8	848.6	.231	2532	C2H6
848.0	847.8	.231	2533	NH3
846.2	846.0	.231	2534	C2H6
845.5	845.3	.230	2535	CH3CHO
844.0	843.8	.230	2536	NO2
843.5	843.3	.230	2537	C2H6
841.0	840.8	.229	2538	C2H6
838.3	838.1	.229	2539	C2H6
835.7	835.5	.228	2540	C2H6
835.0	834.8	.228	2541	NH3
834.3	834.1	.227	2542	NH3
833.0	832.8	.227	2543	C2H6
832.9	832.7	.227	2544	NH3
830.9	830.7	.226	2545	NH3
830.3	830.1	.226	2546	C2H6
828.0	827.8	.226	2547	NH3
827.7	827.5	.226	2548	C2H6
825.8	825.6	.225	2549	NO2
825.0	824.8	.225	2550	C2H6
822.5	822.3	.224	2551	C2H6
819.8	819.6	.223	2552	C2H6
817.2	817.0	.223	2553	C2H6
816.8	816.6	.223	2554	NH3
814.5	814.3	.222	2555	C2H6
814.5	814.3	.222	2556	NH3
812.5	812.3	.221	2557	NH3
811.9	811.7	.221	2558	C2H6
809.3	809.1	.221	2559	C2H6
808.1	807.9	.220	2560	NO2
806.7	806.5	.220	2561	C2H6
804.2	804.0	.219	2562	C2H6
801.6	801.4	.218	2563	C2H6
799.5	799.3	.218	2564	CH3CHO
799.2	799.0	.218	2565	C2H6
796.7	796.5	.217	2566	C2H6
796.6	796.4	.217	2567	CH3CHO
793.4	793.2	.216	2568	CH3CHO

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
793.0	792.8	.216	2569	O3
792.3	792.1	.216	2570	O3
791.5	791.3	.216	2571	O3
790.9	790.7	.216	2572	NO2
790.8	790.6	.216	2573	O3
790.5	790.3	.215	2574	CH3CHO
790.3	790.1	.215	2575	C2H2
790.1	789.9	.215	2576	O3
789.3	789.1	.215	2577	O3
787.9	787.7	.215	2578	C2H2
787.5	787.3	.215	2579	CH3CHO
786.7	786.5	.214	2580	O3
786.0	785.8	.214	2581	O3
785.6	785.4	.214	2582	C2H2
785.2	785.0	.214	2583	O3
784.5	784.3	.214	2584	O3
784.3	784.1	.214	2585	CH3CHO
783.7	783.5	.214	2586	O3
783.3	783.1	.214	2587	C2H2
782.9	782.7	.213	2588	O3
782.2	782.0	.213	2589	O3
781.4	781.2	.213	2590	O3
781.3	781.1	.213	2591	CH3CHO
780.9	780.7	.213	2592	C2H2
780.4	780.2	.213	2593	O3
779.9	779.7	.213	2594	HCN
779.6	779.4	.213	2595	O3
778.9	778.7	.212	2596	O3
778.6	778.4	.212	2597	C2H2
778.1	777.9	.212	2598	O3
778.1	777.9	.212	2599	CH3CHO
777.4	777.2	.212	2600	O3
776.6	776.4	.212	2601	O3
776.4	776.2	.212	2602	C2H2
775.8	775.6	.211	2603	O3
775.1	774.9	.211	2604	CH3CHO
775.0	774.8	.211	2605	O3
774.1	773.9	.211	2606	O3
774.0	773.8	.211	2607	HCN
774.0	773.8	.211	2608	C2H2
773.4	773.2	.211	2609	O3
772.6	772.4	.211	2610	O3
771.8	771.6	.210	2611	O3
771.6	771.4	.210	2612	C2H2
771.1	770.9	.210	2613	O3
770.4	770.2	.210	2614	O3
769.6	769.4	.210	2615	O3
769.3	769.1	.210	2616	C2H2
768.8	768.6	.210	2617	O3
768.2	768.0	.209	2618	HCN

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
767.9	767.7	.209	2619	O3
767.2	767.0	.209	2620	O3
766.4	766.2	.209	2621	O3
765.6	765.4	.209	2622	O3
764.8	764.6	.208	2623	O3
764.7	764.5	.208	2624	C2H2
764.3	764.1	.208	2625	CH3CHO
764.1	763.9	.208	2626	O3
763.4	763.2	.208	2627	O3
762.6	762.4	.208	2628	O3
762.3	762.1	.208	2629	HCN
762.3	762.1	.208	2630	C2H2
761.9	761.6	.208	2631	O3
761.0	760.8	.207	2632	O3
760.1	759.9	.207	2633	O3
759.9	759.7	.207	2634	C2H2
759.4	759.2	.207	2635	O3
758.6	758.4	.207	2636	O3
758.2	758.0	.207	2637	NO2
757.8	757.6	.207	2638	O3
757.6	757.4	.207	2639	C2H2
757.2	757.0	.206	2640	O3
756.5	756.3	.206	2641	HCN
756.4	756.2	.206	2642	O3
755.6	755.4	.206	2643	O3
755.5	755.3	.206	2644	NO2
755.3	755.1	.206	2645	C2H2
754.9	754.7	.206	2646	O3
754.9	754.7	.206	2647	NO2
754.1	753.9	.206	2648	O3
753.3	753.1	.205	2649	O3
753.3	753.1	.205	2650	CH3CHO
752.9	752.7	.205	2651	C2H2
752.5	752.3	.205	2652	O3
751.7	751.5	.205	2653	O3
751.0	750.8	.205	2654	NO2
750.8	750.6	.205	2655	O3
750.5	750.3	.205	2656	CH3CHO
750.5	750.3	.205	2657	HCN
750.5	750.3	.205	2658	C2H2
750.3	750.1	.205	2659	O3
750.3	750.1	.205	2660	NO2
749.6	749.4	.204	2661	O3
748.8	748.6	.204	2662	O3
748.2	748.0	.204	2663	C2H2
748.1	747.9	.204	2664	O3
748.0	747.8	.204	2665	NO2
747.2	747.0	.204	2666	O3
747.0	746.8	.204	2667	CH3CHO
746.9	746.7	.204	2668	NO2

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
746.5	746.3	.203	2669	O3
745.8	745.6	.203	2670	O3
745.8	745.6	.203	2671	C2H2
744.9	744.7	.203	2672	O3
744.5	744.3	.203	2673	HCN
743.8	743.6	.203	2674	CH3CHO
743.7	743.5	.203	2675	O3
743.5	743.3	.203	2676	C2H2
741.5	741.3	.202	2677	O3
741.1	740.9	.202	2678	C2H2
740.5	740.3	.202	2679	CH3CHO
740.4	740.2	.202	2680	O3
739.5	739.3	.202	2681	O3
738.8	738.6	.201	2682	O3
738.8	738.6	.201	2683	C2H2
738.7	738.5	.201	2684	HCN
737.5	737.3	.201	2685	CH3CHO
737.0	736.8	.201	2686	O3
736.4	736.2	.201	2687	C2H2
735.3	735.1	.200	2688	O3
734.2	734.0	.200	2689	CH3CHO
733.6	733.4	.200	2690	O3
732.9	732.7	.200	2691	O3
732.8	732.6	.200	2692	HCN
731.7	731.5	.199	2693	O3
731.0	730.8	.199	2694	CH3CHO
730.3	730.1	.199	2695	O3
729.4	729.2	.199	2696	C2H2
728.8	728.6	.199	2697	O3
727.5	727.3	.198	2698	O3
726.9	726.7	.198	2699	HCN
726.5	726.3	.198	2700	O3
725.5	725.3	.198	2701	O3
724.6	724.4	.198	2702	C2H2
723.6	723.4	.197	2703	O3
723.0	722.8	.197	2704	O3
722.3	722.1	.197	2705	C2H2
721.8	721.6	.197	2706	O3
721.0	720.8	.197	2707	HCN
720.2	720.0	.196	2708	O3
720.1	719.9	.196	2709	C2H2
719.4	719.2	.196	2710	O3
718.8	718.6	.196	2711	O3
718.2	718.0	.196	2712	O3
717.5	717.3	.196	2713	C2H2
717.3	717.1	.196	2714	O3
716.6	716.4	.195	2715	C2H2
715.9	715.7	.195	2716	O3
715.3	715.1	.195	2717	C2H2
715.0	714.8	.195	2718	HCN

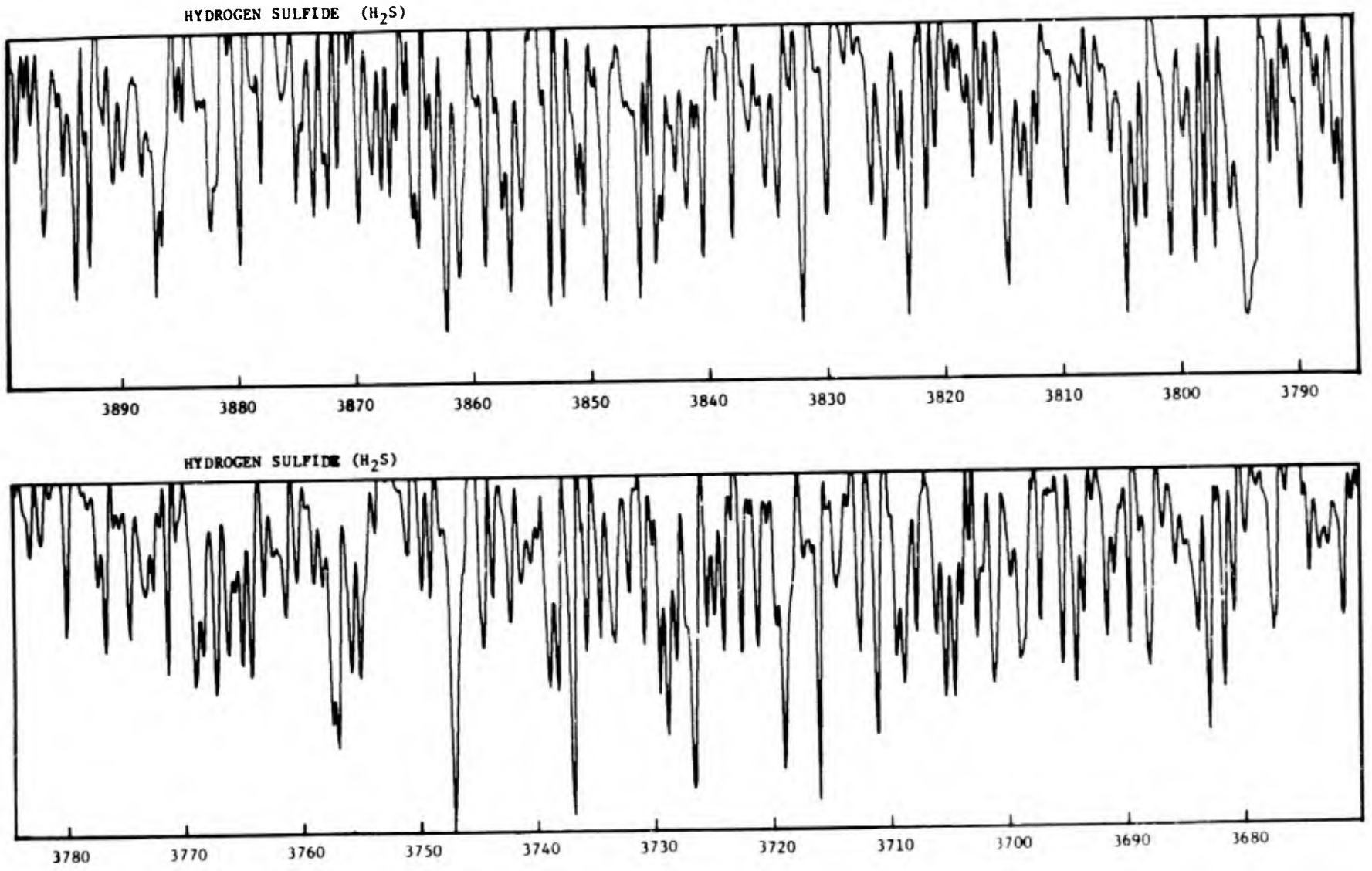
WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
714.3	714.1	.195	2719	O3
713.5	713.3	.194	2720	NO2
712.9	712.7	.194	2721	C2H2
712.8	712.6	.194	2722	HCN
712.6	712.4	.194	2723	O3
711.8	711.6	.194	2724	O3
710.7	710.5	.194	2725	O3
710.5	710.3	.194	2726	C2H2
709.0	708.8	.193	2727	O3
708.1	707.9	.193	2728	C2H2
708.0	707.8	.193	2729	O3
707.2	707.0	.193	2730	O3
706.4	706.2	.193	2731	O3
706.3	706.1	.193	2732	HCN
705.8	705.6	.192	2733	C2H2
705.7	705.5	.192	2734	O3
705.1	704.9	.192	2735	O3
704.4	704.2	.192	2736	O3
703.4	703.2	.192	2737	C2H2
703.3	703.1	.192	2738	O3
702.0	701.8	.191	2739	O3
701.5	701.3	.191	2740	O3
701.1	700.9	.191	2741	C2H2
700.8	700.6	.191	2742	O3
700.3	700.1	.191	2743	NO2
700.3	700.1	.191	2744	CO2
699.8	699.6	.191	2745	O3
699.5	699.3	.191	2746	HCN
698.7	698.5	.190	2747	C2H2
698.6	698.4	.190	2748	O3
698.6	698.4	.190	2749	CO2
697.8	697.6	.190	2750	O3
696.9	696.7	.190	2751	CO2
696.8	696.6	.190	2752	O3
696.3	696.1	.190	2753	C2H2
696.1	695.9	.190	2754	O3
695.3	695.1	.190	2755	O3
695.3	695.1	.190	2756	CO2
694.5	694.3	.189	2757	HCN
694.1	693.9	.189	2758	O3
694.0	693.8	.189	2759	HCOOH
693.9	693.7	.189	2760	C2H2
693.7	693.5	.189	2761	CO2
693.4	693.2	.189	2762	HCOOH
692.8	692.6	.189	2763	O3
692.6	692.4	.189	2764	HCOOH
692.1	691.9	.189	2765	O3
692.1	691.9	.189	2766	CO2
692.0	691.8	.189	2767	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
691.6	691.4	.189	2768	C2H2
691.4	691.2	.188	2769	O3
691.6	690.4	.188	2770	O3
690.5	690.3	.188	2771	CO2
689.2	689.0	.188	2772	C2H2
688.9	688.7	.188	2773	CO2
688.8	688.6	.188	2774	O3
688.5	688.3	.188	2775	HCN
688.2	688.0	.188	2776	NO2
688.0	687.8	.188	2777	O3
687.3	687.1	.187	2778	O3
687.3	687.1	.187	2779	CO2
686.9	686.7	.187	2780	C2H2
685.7	685.5	.187	2781	O3
685.7	685.5	.187	2782	CO2
684.0	683.8	.186	2783	CO2
683.5	683.3	.186	2784	O3
682.8	682.6	.186	2785	O3
682.6	682.4	.186	2786	HCN
682.5	682.3	.186	2787	CO2
681.2	681.0	.186	2788	O3
680.9	680.7	.186	2789	CO2
680.3	680.1	.185	2790	O3
679.5	679.3	.185	2791	O3
679.3	679.1	.185	2792	CO2
677.9	677.7	.185	2793	O3
677.7	677.5	.185	2794	CO2
677.1	676.9	.185	2795	O3
676.8	676.6	.184	2796	NO2
676.7	676.5	.184	2797	HCN
676.3	676.1	.184	2798	O3
676.1	675.9	.184	2799	CO2
675.3	675.1	.184	2800	O3
674.5	674.3	.184	2801	CO2
674.2	674.0	.184	2802	HCOOH
673.5	673.3	.184	2803	O3
673.2	673.0	.183	2804	O3
673.0	672.8	.183	2805	CO2
673.0	672.8	.183	2806	HCOOH
671.4	671.2	.183	2807	CO2
670.8	670.6	.183	2808	HCN
670.5	670.3	.183	2809	HCOOH
669.8	669.6	.183	2810	CO2
668.6	668.4	.182	2811	HCOOH
668.3	668.1	.182	2812	CO2
666.8	666.6	.182	2813	HCOOH
666.3	666.1	.182	2814	NO2
665.9	665.7	.182	2815	CO2
665.1	664.9	.181	2816	O3
664.9	664.7	.181	2817	HCN

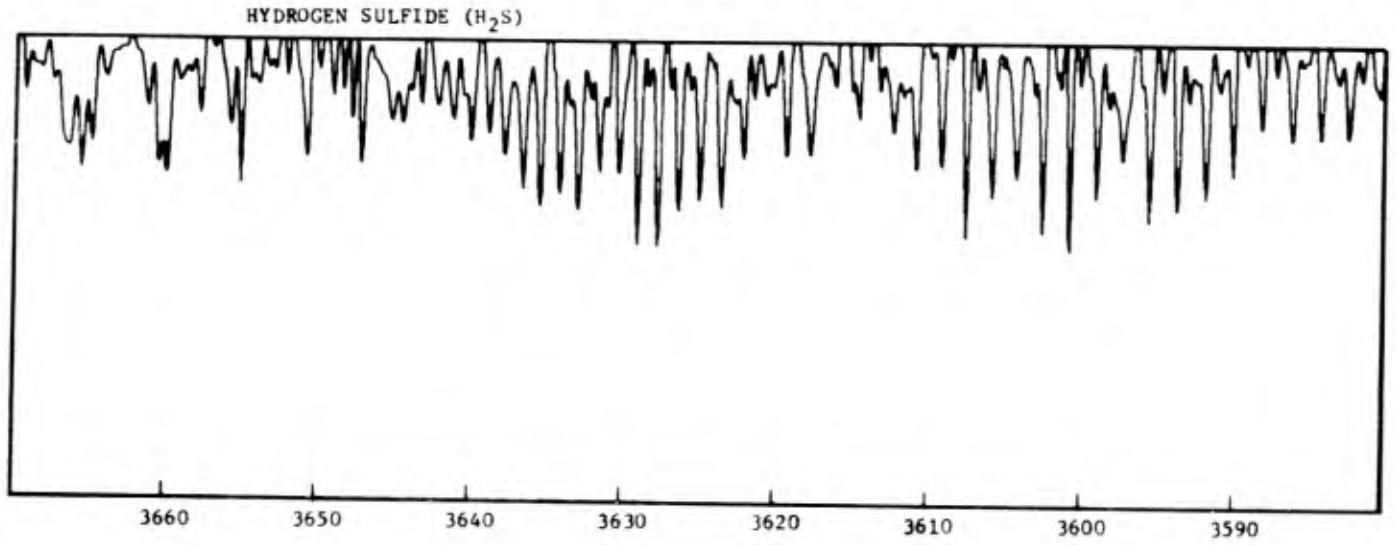
WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
664.4	664.2	.181	2818	CO2
664.2	664.0	.181	2819	O3
663.2	663.0	.181	2820	HCOOH
662.8	662.6	.181	2821	CO2
662.1	661.9	.180	2822	O3
661.3	661.1	.180	2823	CO2
659.7	659.5	.180	2824	CO2
659.7	659.5	.180	2825	HCOOH
659.0	658.8	.180	2826	HCN
658.2	658.0	.179	2827	CO2
656.6	656.4	.179	2828	O3
656.6	656.4	.179	2829	CO2
656.0	655.8	.179	2830	HCOOH
655.1	654.9	.179	2831	CO2
653.6	653.4	.178	2832	CO2
653.0	652.8	.178	2833	HCN
652.4	652.2	.178	2834	HCOOH
652.1	651.9	.178	2835	O3
652.0	651.8	.178	2836	CO2
651.4	651.2	.178	2837	O3
650.5	650.3	.177	2838	O3
650.5	650.3	.177	2839	CO2
649.5	649.3	.177	2840	O3
649.0	648.8	.177	2841	CO2
648.8	648.6	.177	2842	HCOOH
648.7	648.5	.177	2843	O3
647.6	647.4	.177	2844	O3
647.5	647.3	.176	2845	CO2
647.2	647.0	.176	2846	HCN
646.9	646.7	.176	2847	O3
646.0	645.8	.176	2848	O3
646.0	645.8	.176	2849	CO2
645.5	645.3	.176	2850	HCOOH
645.1	644.9	.176	2851	O3
644.5	644.3	.176	2852	CO2
644.1	643.9	.176	2853	O3
643.2	643.0	.175	2854	O3
643.0	642.8	.175	2855	CO2
642.4	642.2	.175	2856	O3
642.0	641.8	.175	2857	HCOOH
641.4	641.2	.175	2858	O3
641.4	641.2	.175	2859	CO2
640.6	640.4	.175	2860	O3
639.9	639.7	.174	2861	CO2
639.7	639.5	.174	2862	O3
638.8	638.6	.174	2863	HCOOH
638.7	638.5	.174	2864	O3
638.4	638.2	.174	2865	CO2
637.9	637.7	.174	2866	O3
637.4	637.2	.174	2867	HCOOH

WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
637.0	636.8	.174	2868	O3
637.0	636.8	.174	2869	CO2
636.1	635.9	.173	2870	O3
636.0	635.8	.173	2871	HCOOH
635.5	635.3	.173	2872	CO2
635.3	635.1	.173	2873	O3
631.5	631.3	.172	2874	H2CCHCHO
611.8	611.6	.167	2875	H2CCHCHO
606.0	605.8	.165	2876	H2CCHCHO
596.5	596.3	.163	2877	SO2
593.2	593.0	.162	2878	H2CCHCHO
592.3	592.1	.161	2879	SO2
589.5	589.3	.161	2880	N2O
589.1	588.9	.161	2881	H2CCHCHO
587.9	587.7	.160	2882	SO2
585.9	585.7	.160	2883	H2CCHCHO
583.5	583.3	.159	2884	SO2
579.5	579.3	.158	2885	N2O
579.2	579.0	.158	2886	SO2
577.5	577.3	.157	2887	H2CCHCHO
574.9	574.7	.157	2888	SO2
571.4	571.2	.156	2889	SO2
570.7	570.5	.156	2890	SO2
566.4	566.2	.154	2891	SO2
564.3	564.1	.154	2892	H2CCHCHO
562.2	562.0	.153	2893	SO2
558.0	557.8	.152	2894	SO2
557.5	557.3	.152	2895	H2CCHCHO
554.0	553.8	.151	2896	SO2
549.8	549.7	.150	2897	SO2
545.8	545.7	.149	2898	SO2
543.8	543.7	.148	2899	SO2
542.0	541.9	.148	2900	SO2
538.8	538.7	.147	2901	SO2
538.1	538.0	.147	2902	SO2
534.2	534.1	.146	2903	SO2
530.5	530.4	.145	2904	SO2
527.2	527.1	.144	2905	SO2
525.8	525.7	.143	2906	CH3CHO
523.5	523.4	.143	2907	SO2
522.5	522.4	.142	2908	SO2
519.3	519.2	.142	2909	CH3CHO
509.8	509.7	.139	2910	CH3CHO
509.5	509.4	.139	2911	SO2
506.6	506.5	.138	2912	SO2
503.5	503.4	.137	2913	SO2
502.4	502.3	.137	2914	SO2
500.4	500.3	.136	2915	SO2

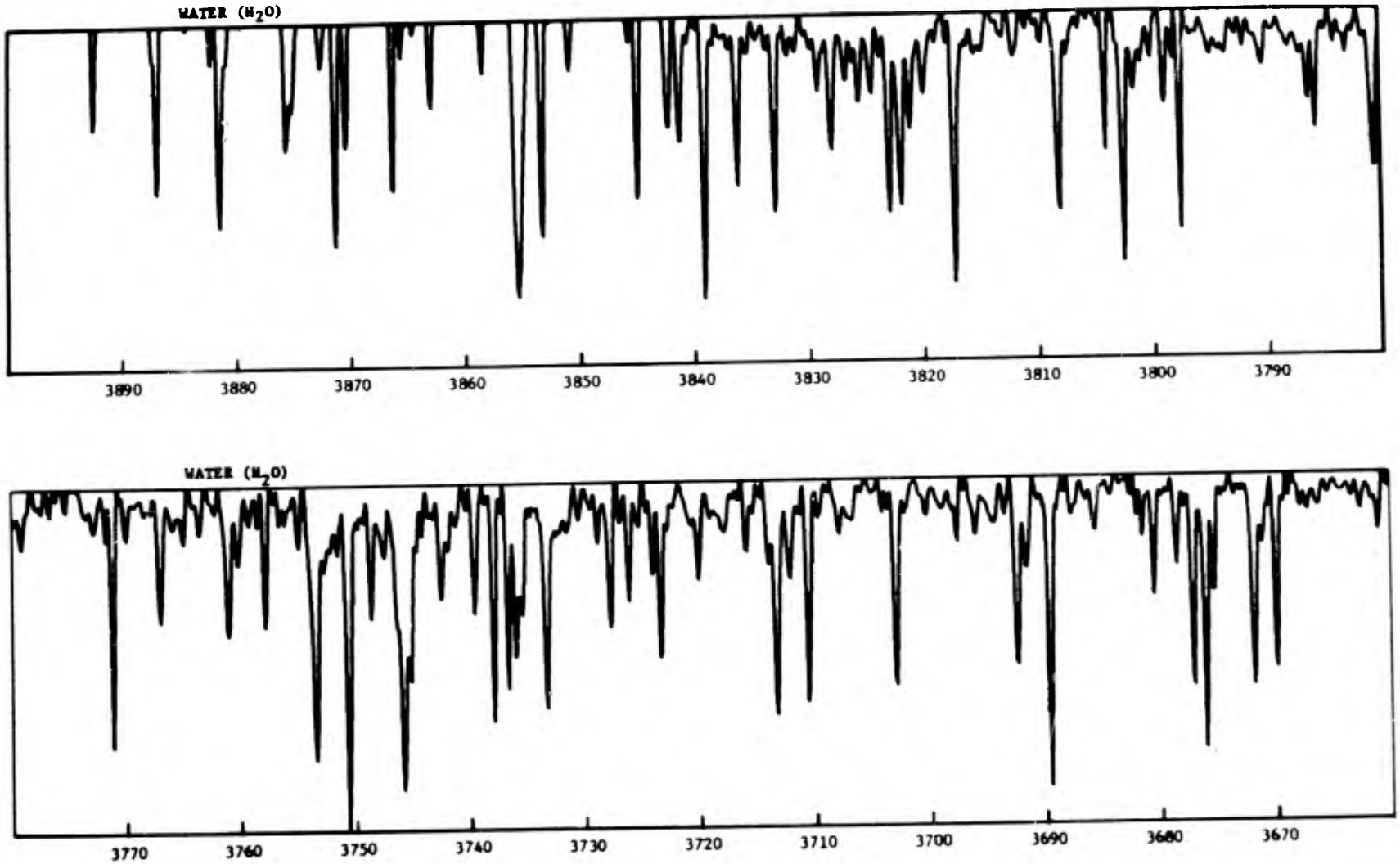
WAVENUMBERS IN -AIR-	-VAC-	VAC COR	BAND NR	COMPOUND
497.5	497.4	.136	2916	SO2
494.5	494.4	.135	2917	SO2
491.7	491.6	.134	2918	SO2
490.5	490.4	.134	2919	SO2
488.8	488.7	.133	2920	SO2
488.4	488.3	.133	2921	CH3CHO
486.2	486.1	.133	2922	SO2
483.7	483.6	.132	2923	SO2
482.6	482.5	.132	2924	CH3CHO
481.3	481.2	.131	2925	SO2
478.9	478.8	.131	2926	SO2
477.0	476.9	.130	2927	CH3CHO
476.8	476.7	.130	2928	SO2
474.3	474.2	.129	2929	SO2
472.4	472.3	.129	2930	SO2
470.4	470.3	.128	2931	SO2
468.4	468.3	.128	2932	SO2
463.9	463.8	.126	2933	SO2


HYDROGEN SULFIDE (H_2S)
3890
3880
3870
3860
3850
3840
3830
3820
3810
3800
3790
HYDROGEN SULFIDE (H_2S)
3780
3770
3760
3750
3740
3730
3720
3710
3700
3690
3680

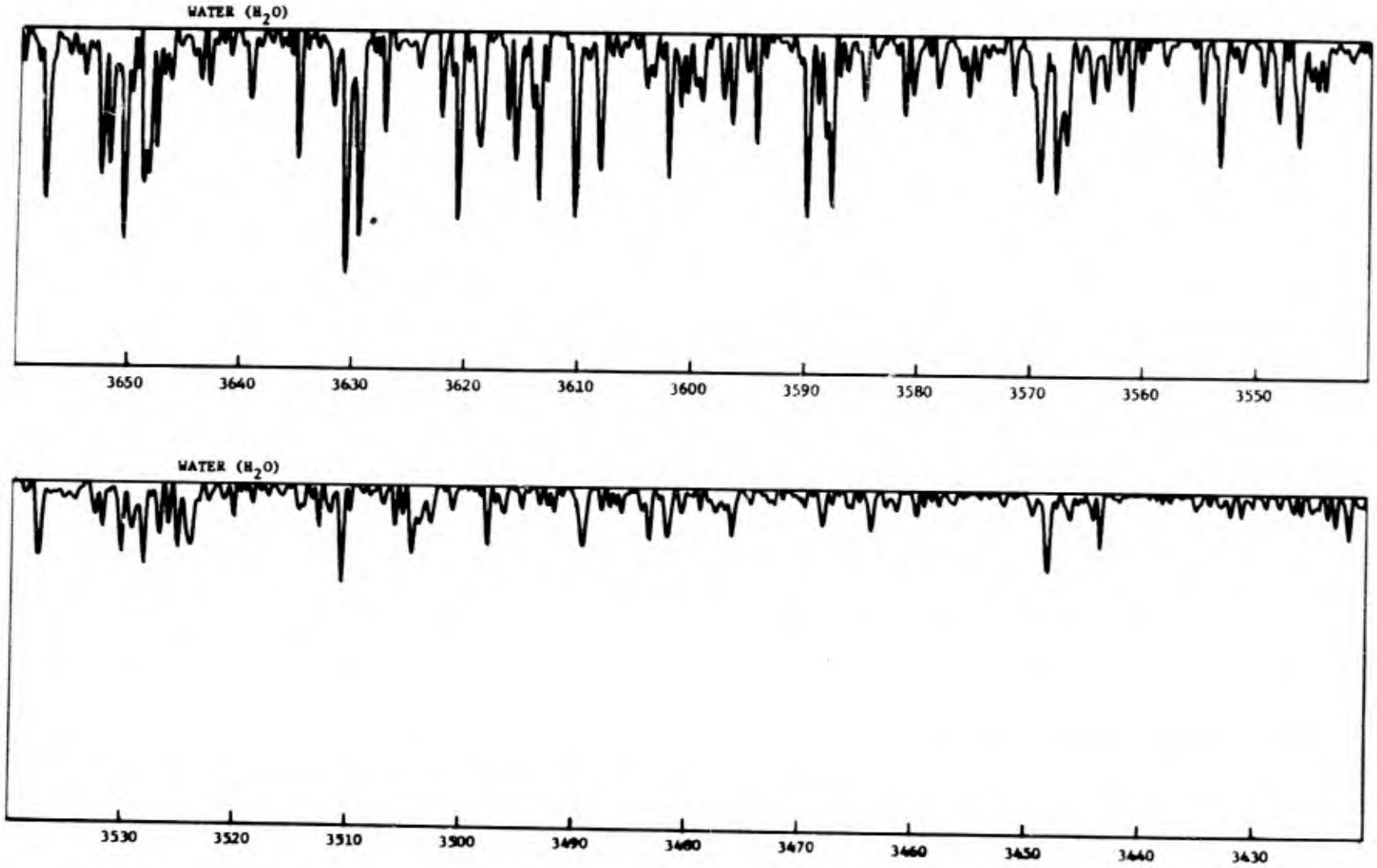
Spectrum 1


HYDROGEN SULFIDE (H_2S)
3660
3650
3640
3630
3620
3610
3600
3590

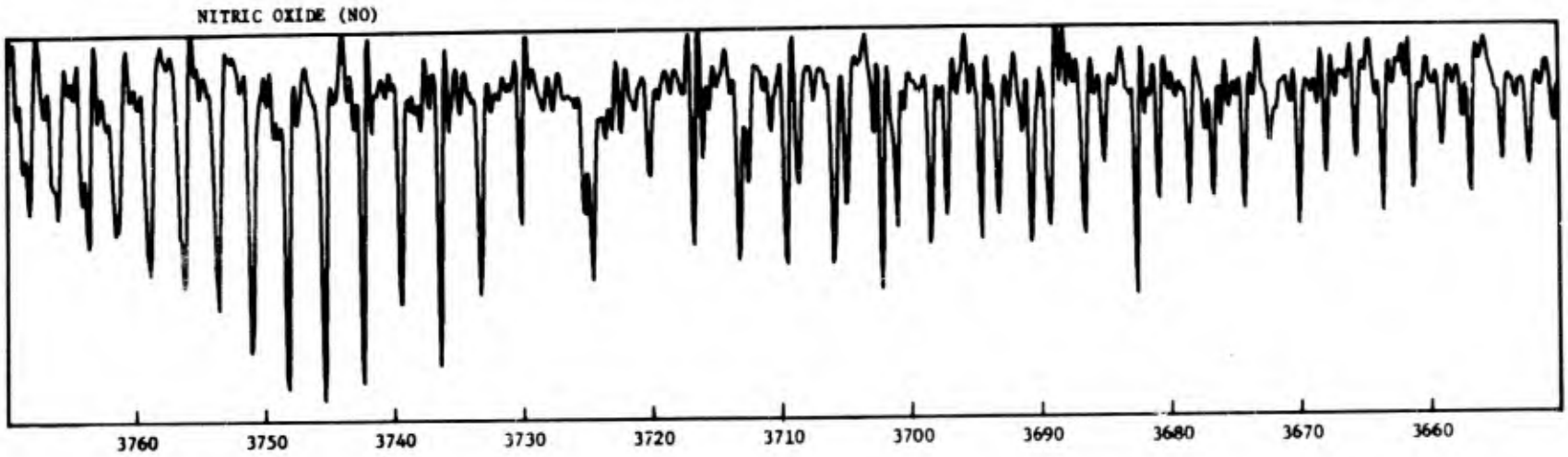
Spectrum 2


WATER (H_2O)
3890
3880
3870
3860
3850
3840
3830
3820
3810
3800
3790
WATER (H_2O)
3770
3760
3750
3740
3730
3720
3710
3700
3690
3680
3670

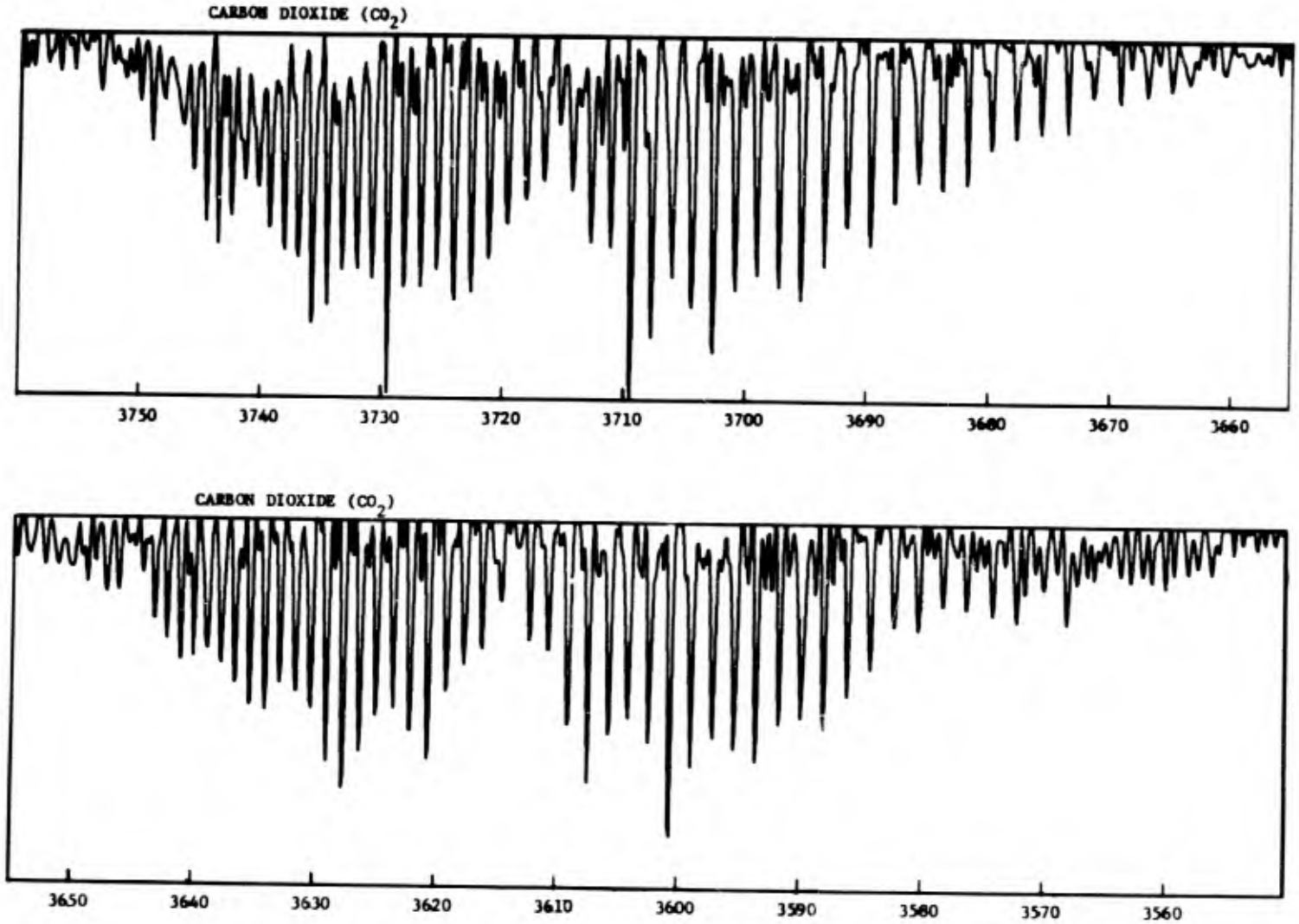
Spectrum 3


WATER (H_2O)
3650
3640
3630
3620
3610
3600
3590
3580
3570
3560
3550
WATER (H_2O)
3530
3520
3510
3500
3490
3480
3470
3460
3450
3440
3430

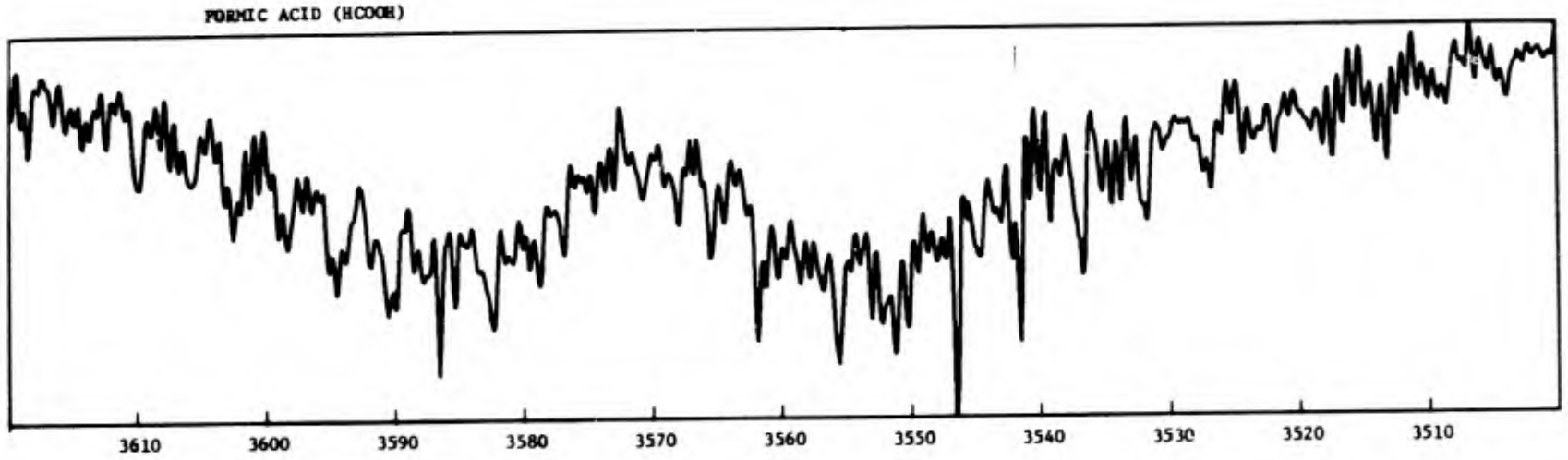
Spectrum 4


NITRIC OXIDE (NO)
3760
3750
3740
3730
3720
3710
3700
3690
3680
3670
3660

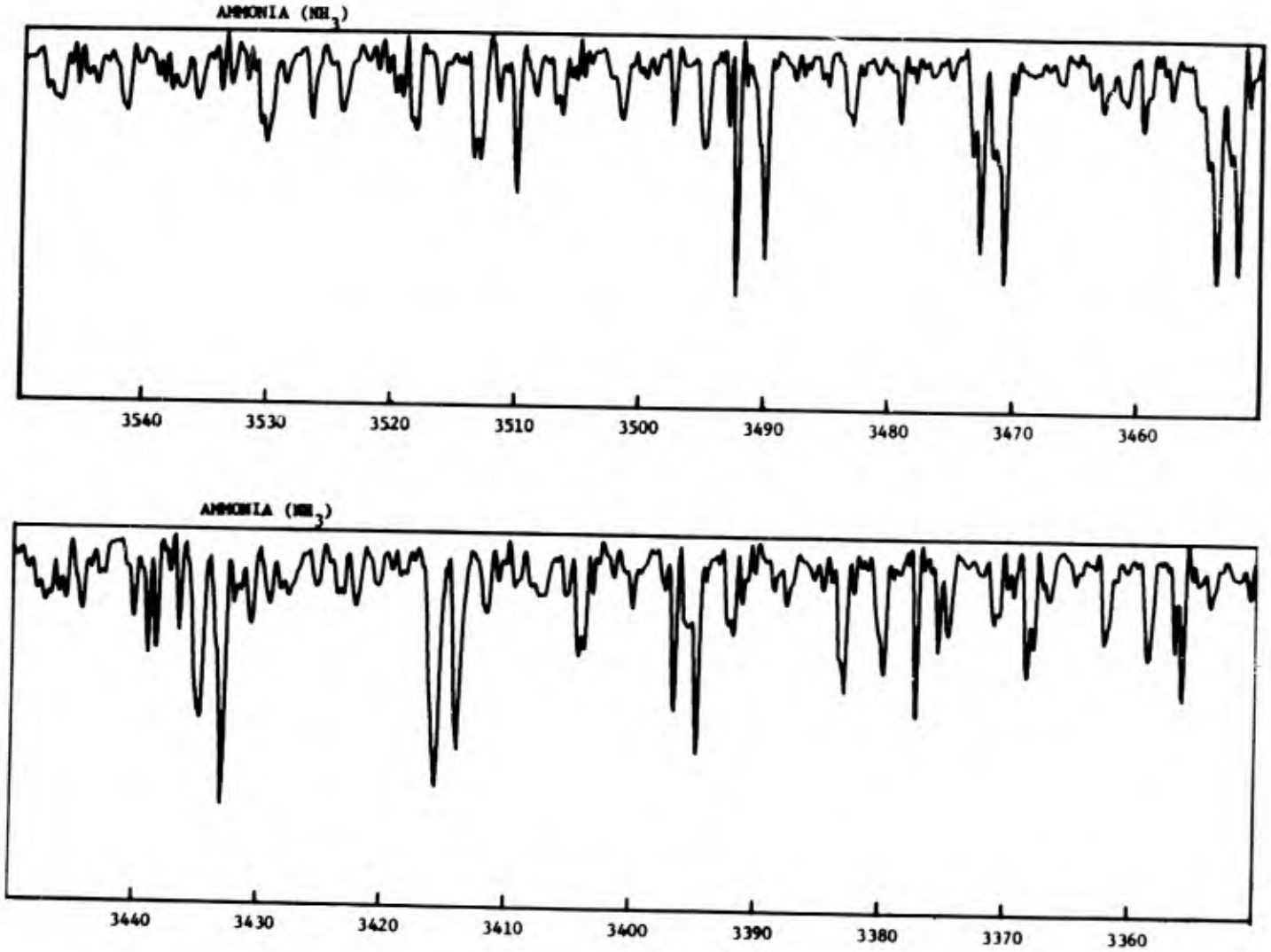
Spectrum 5


CARBON DIOXIDE (CO_2)
3750
3740
3730
3720
3710
3700
3690
3680
3670
3660
CARBON DIOXIDE (CO_2)
3650
3640
3630
3620
3610
3600
3590
3580
3570
3560

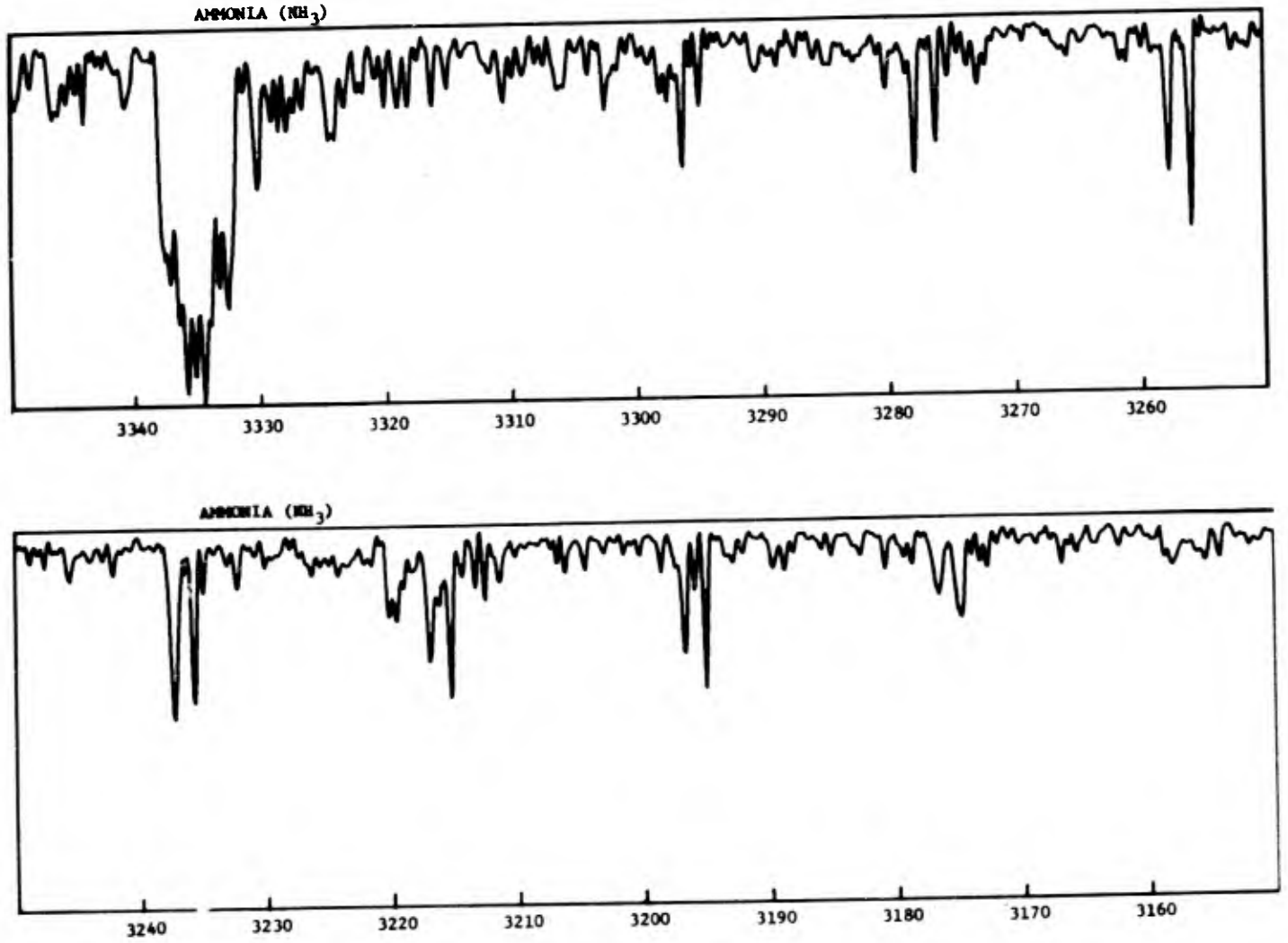
Spectrum 6


FORMIC ACID (HCOOH)
3610
3600
3590
3580
3570
3560
3550
3540
3530
3520
3510

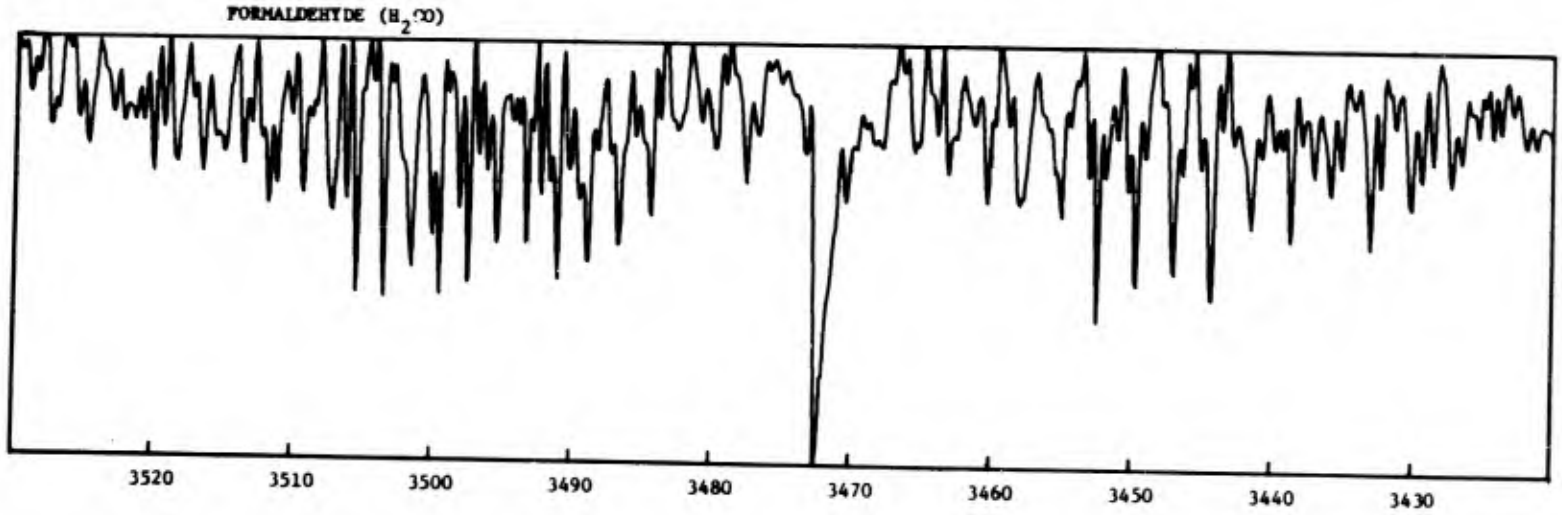
Spectrum 7


AMMONIA (NH_3)
3540
3530
3520
3510
3500
3490
3480
3470
3460
AMMONIA (NH_3)
3440
3430
3420
3410
3400
3390
3380
3370
3360

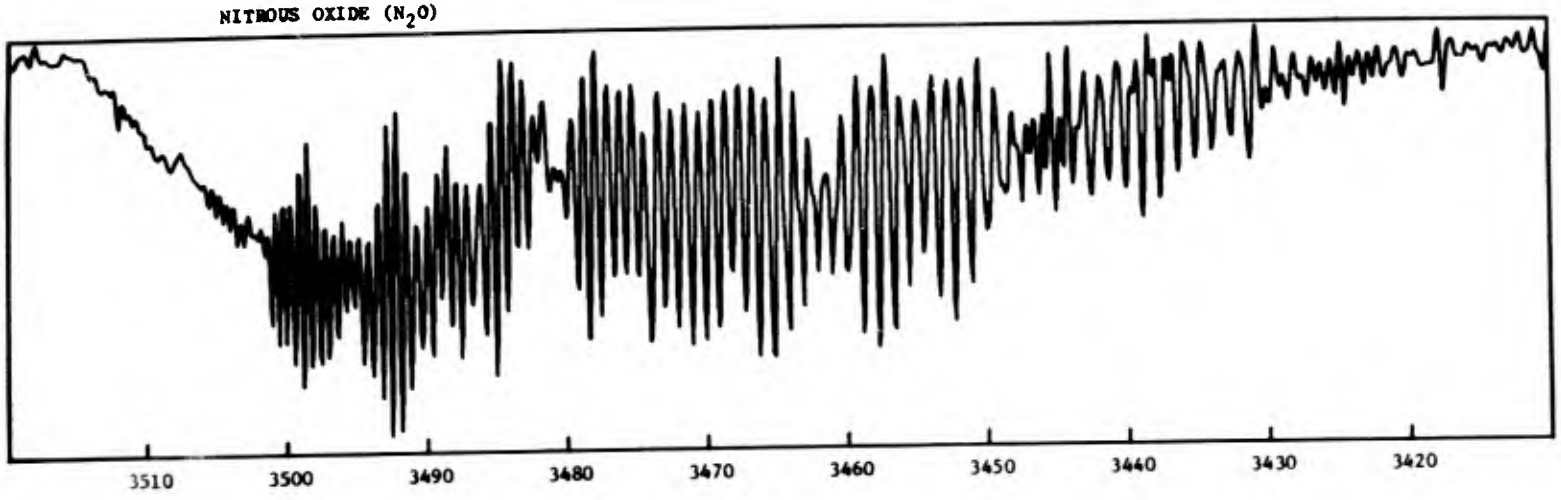
Spectrum 8

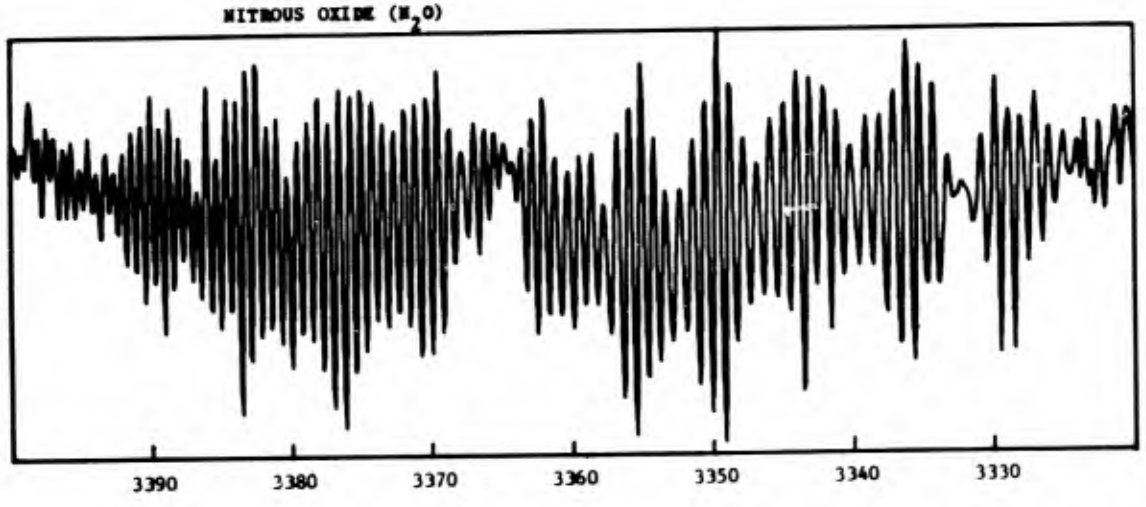

AMMONIA (NH_3)
3340
3330
3320
3310
3300
3290
3280
3270
3260
AMMONIA (NH_3)
3240
3230
3220
3210
3200
3190
3180
3170
3160

Spectrum 9

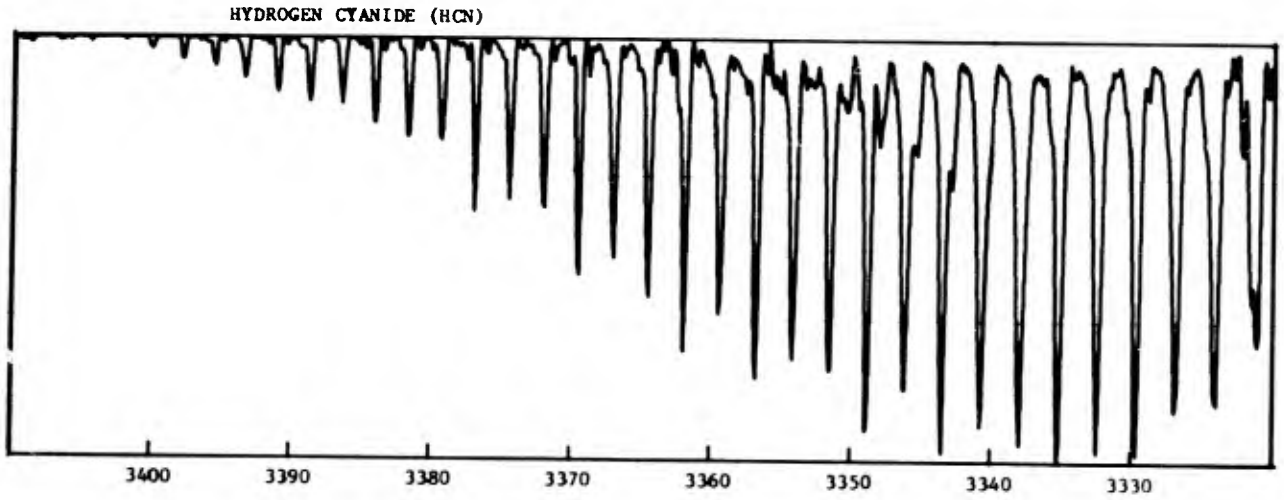

FORMALDEHYDE (H_2CO)
3520
3510
3500
3490
3480
3470
3460
3450
3440
3430

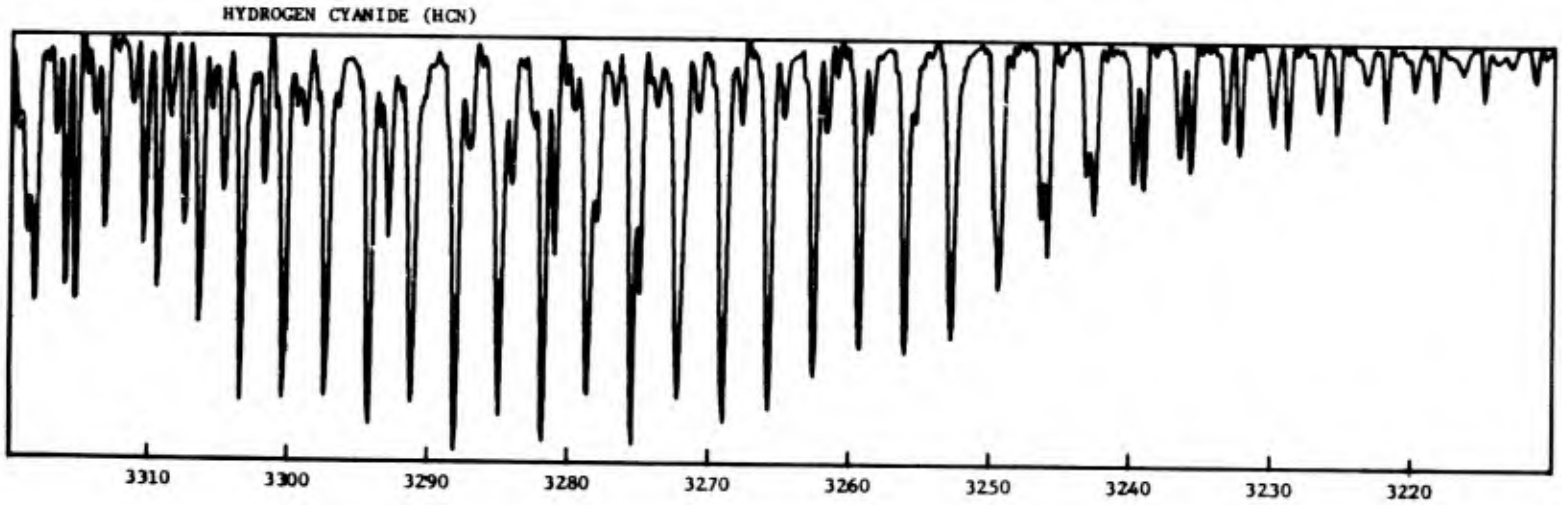
Spectrum 10


NITROUS OXIDE (N_2O)
3510
3500
3490
3480
3470
3460
3450
3440
3430
3420

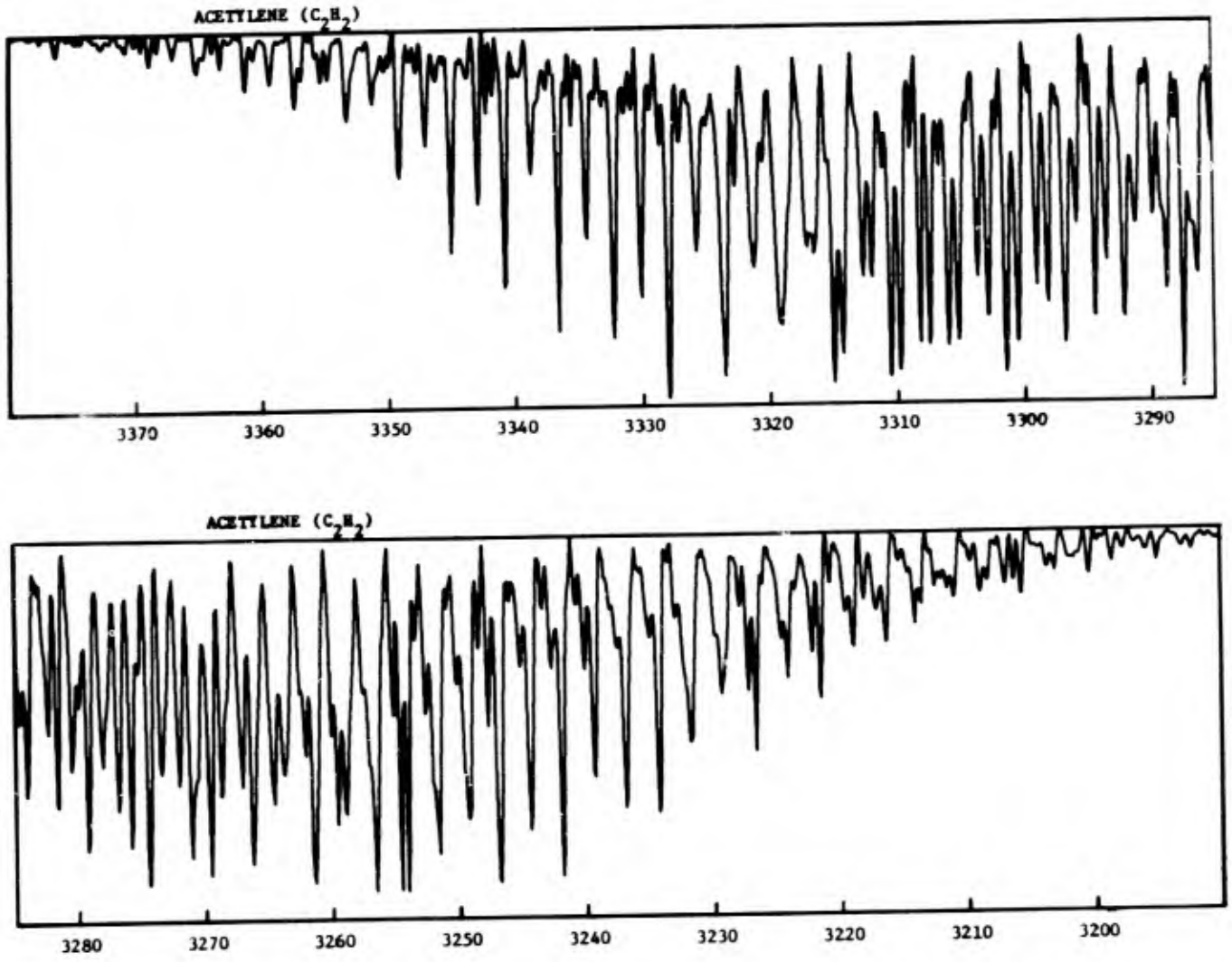

NITROUS OXIDE (N_2O)
3390
3380
3370
3360
3350
3340
3330

Spectrum 11

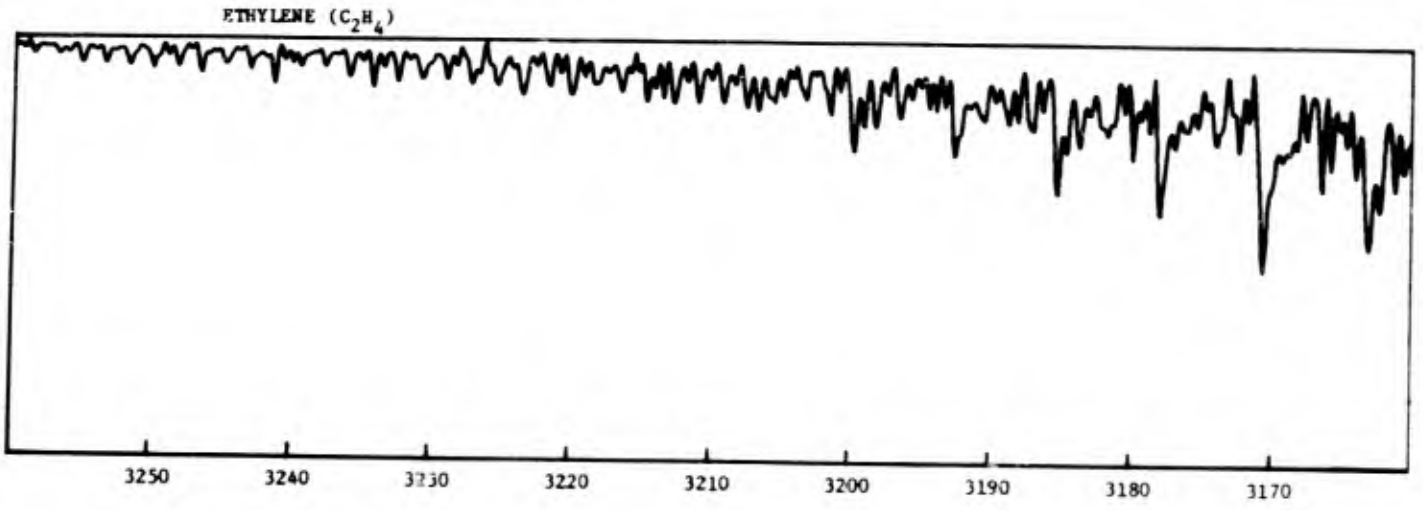

HYDROGEN CYANIDE (HCN)
3400
3390
3380
3370
3360
3350
3340
3330

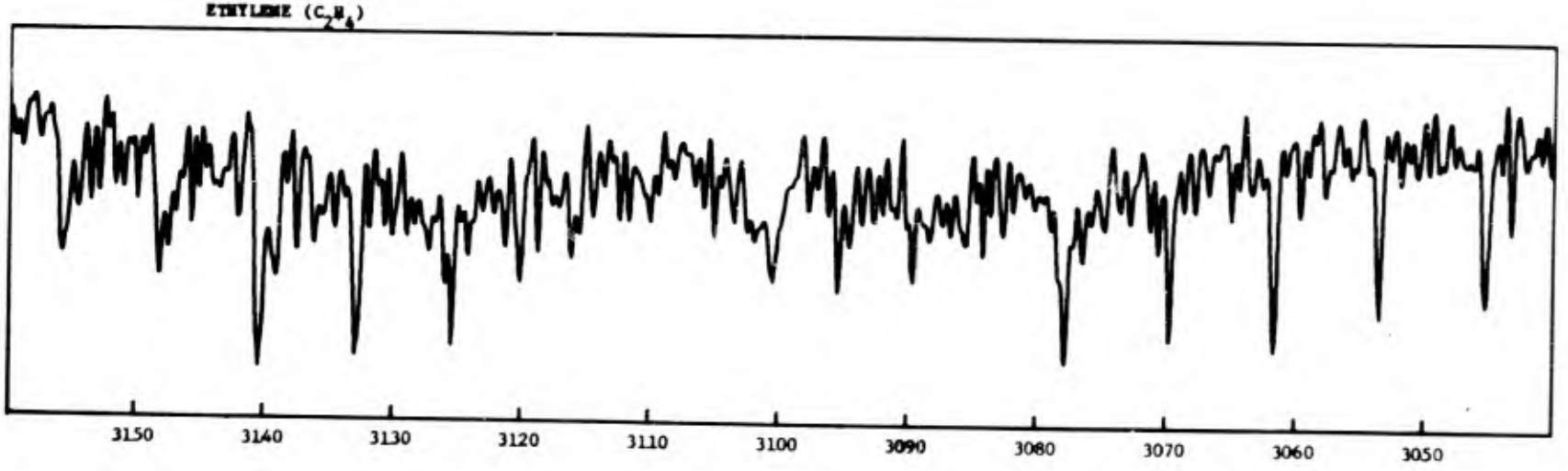

HYDROGEN CYANIDE (HCN)
3310
3300
3290
3280
3270
3260
3250
3240
3230
3220

Spectrum 12

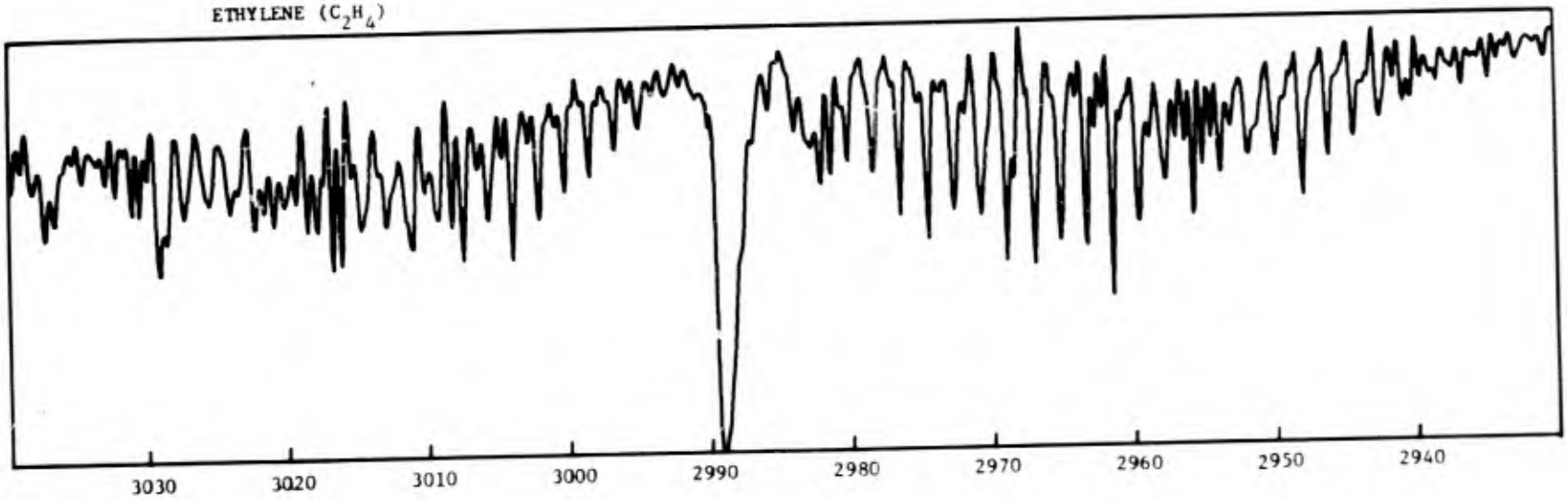

ACETYLENE (C_2H_2)
3370
3360
3350
3340
3330
3320
3310
3300
3290
ACETYLENE (C_2H_2)
3280
3270
3260
3250
3240
3230
3220
3210
3200

Spectrum 13

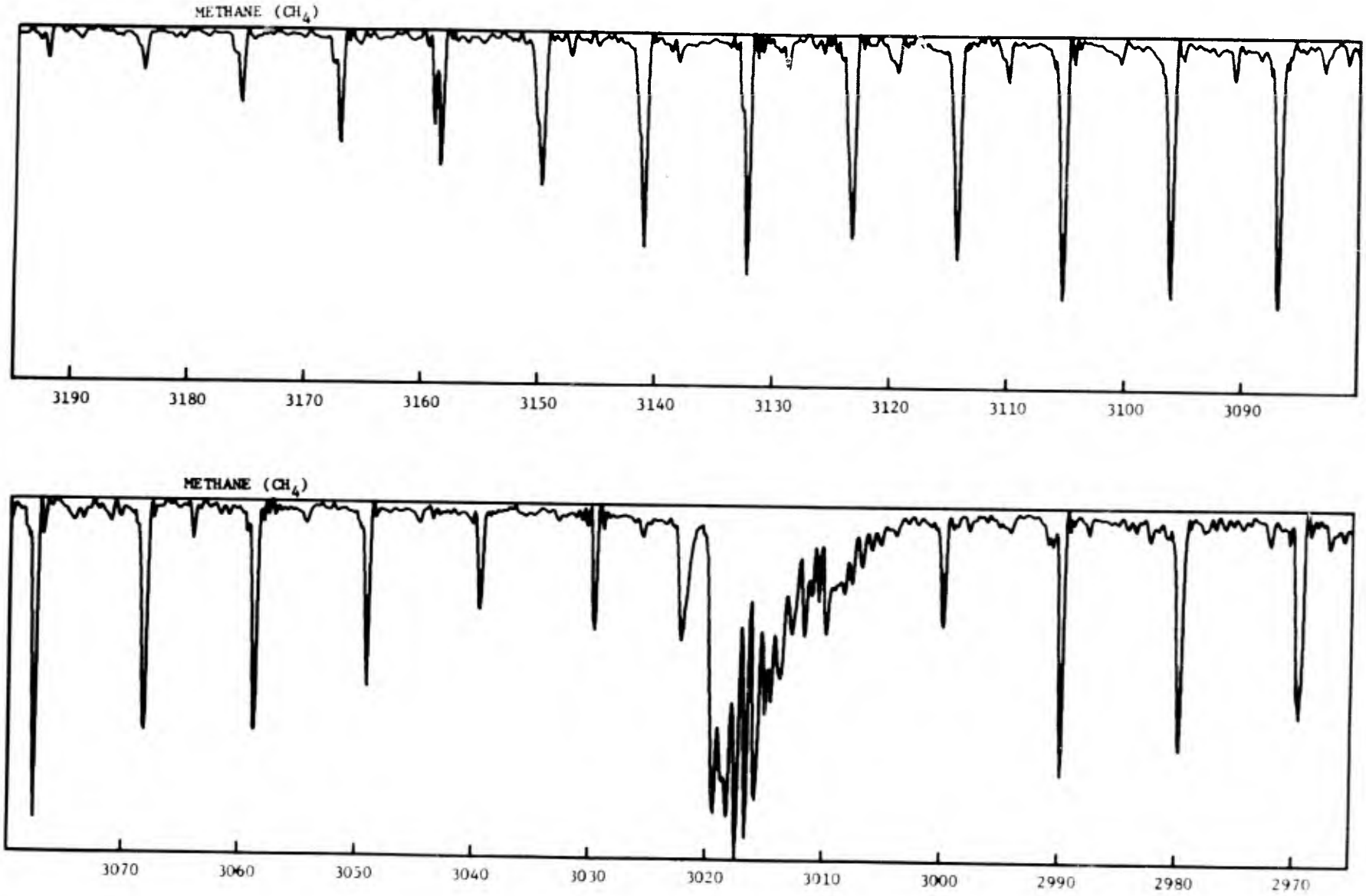

ETHYLENE (C_2H_4)
3250
3240
3230
3220
3210
3200
3190
3180
3170


ETHYLENE (C_2H_4)
3150
3140
3130
3120
3110
3100
3090
3080
3070
3060
3050

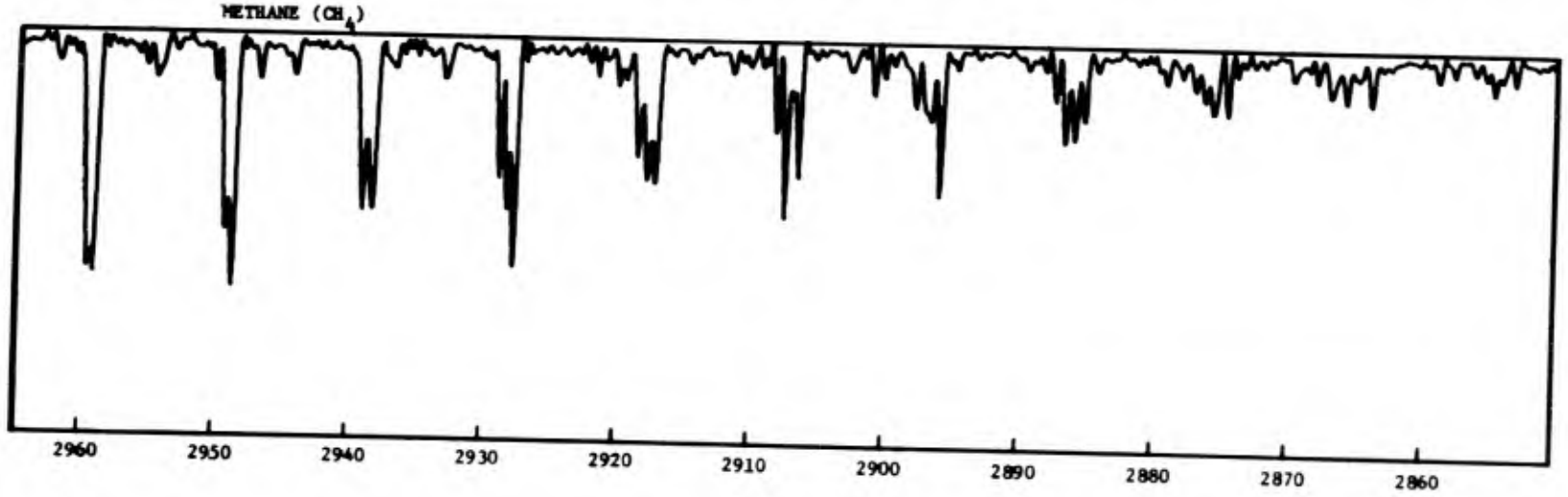
Spectrum 14


ETHYLENE (C_2H_4)
3030
3020
3010
3000
2990
2980
2970
2960
2950
2940

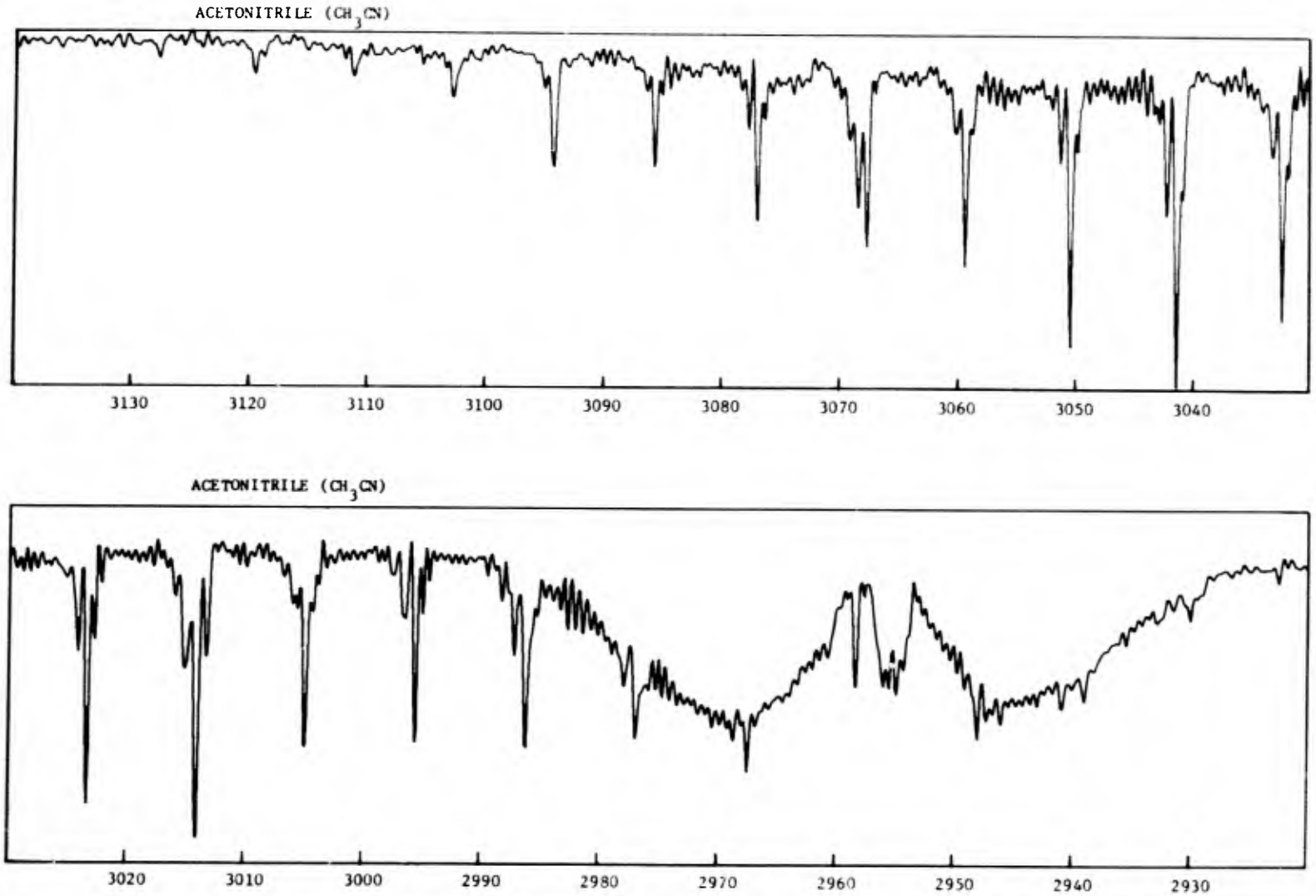
Spectrum 15


METHANE (CH_4)
3190
3180
3170
3160
3150
3140
3130
3120
3110
3100
3090
METHANE (CH_4)
3070
3060
3050
3040
3030
3020
3010
3000
2990
2980
2970

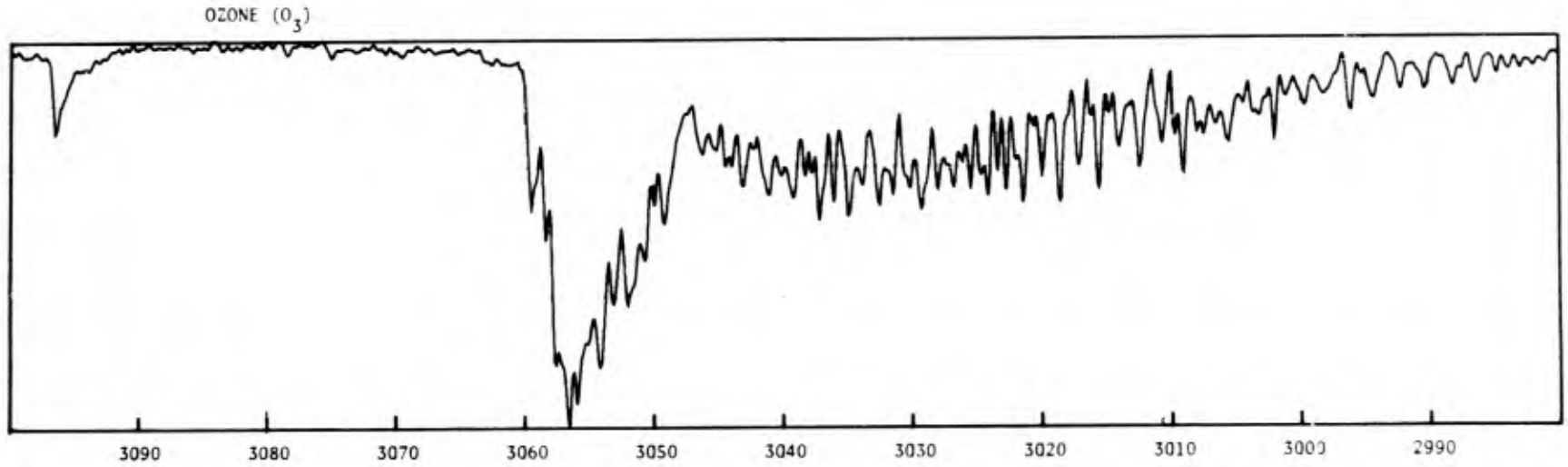
Spectrum 16


METHANE (CH_4)
2960
2950
2940
2930
2920
2910
2900
2890
2880
2870
2860

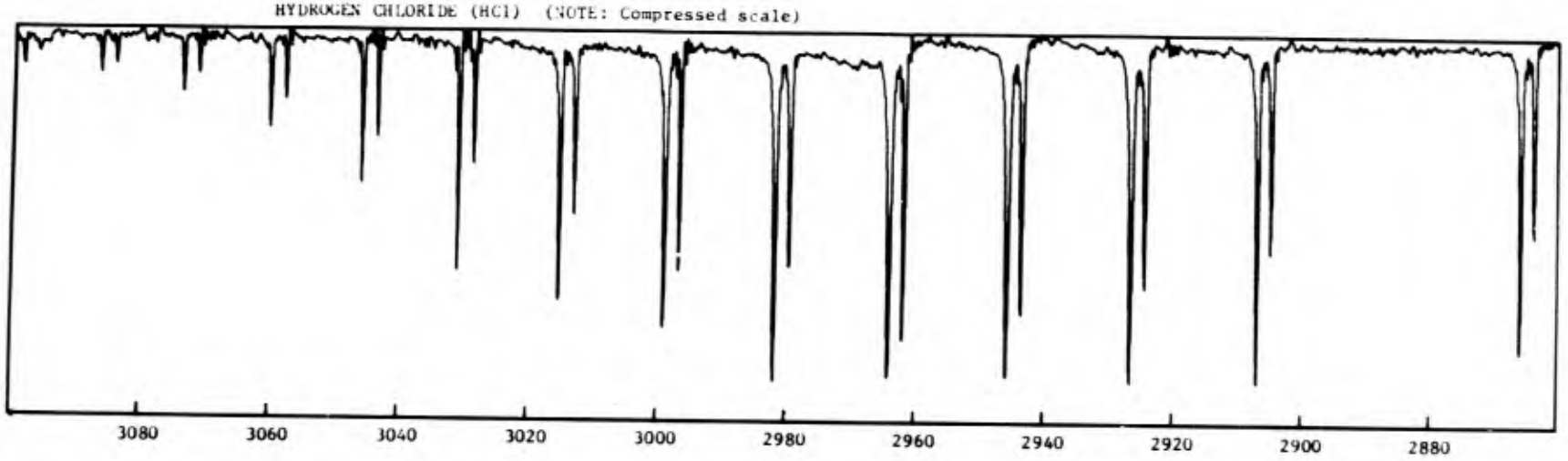
Spectrum 17

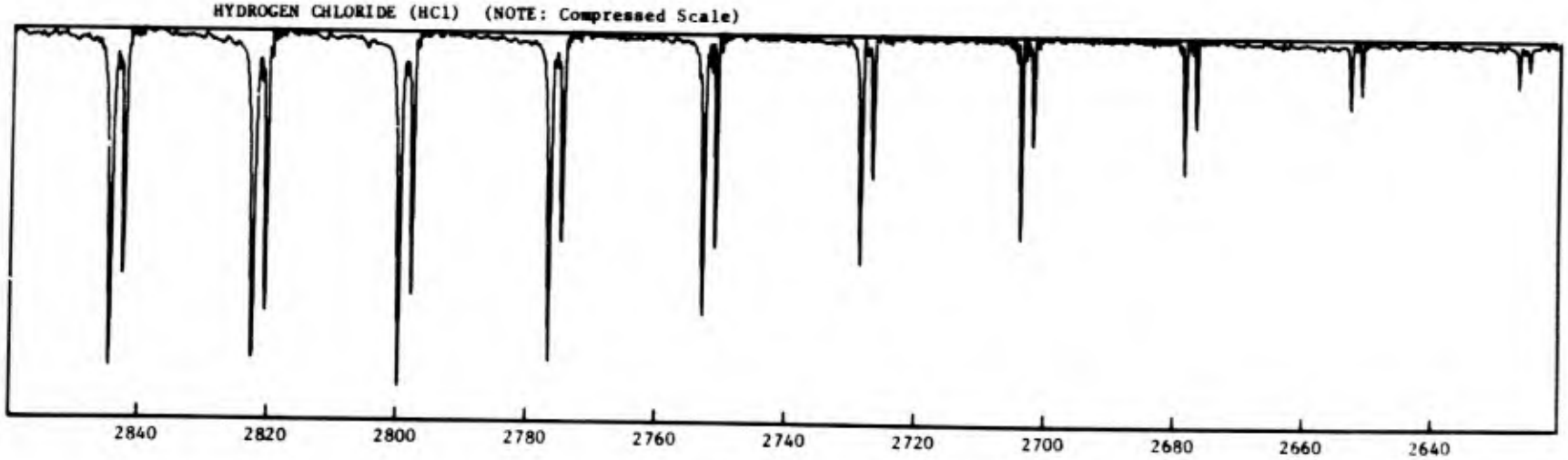

ACETONITRILE (CH_3CN)
3130
3120
3110
3100
3090
3080
3070
3060
3050
3040
ACETONITRILE (CH_3CN)
3020
3010
3000
2990
2980
2970
2960
2950
2940
2930

Spectrum 18

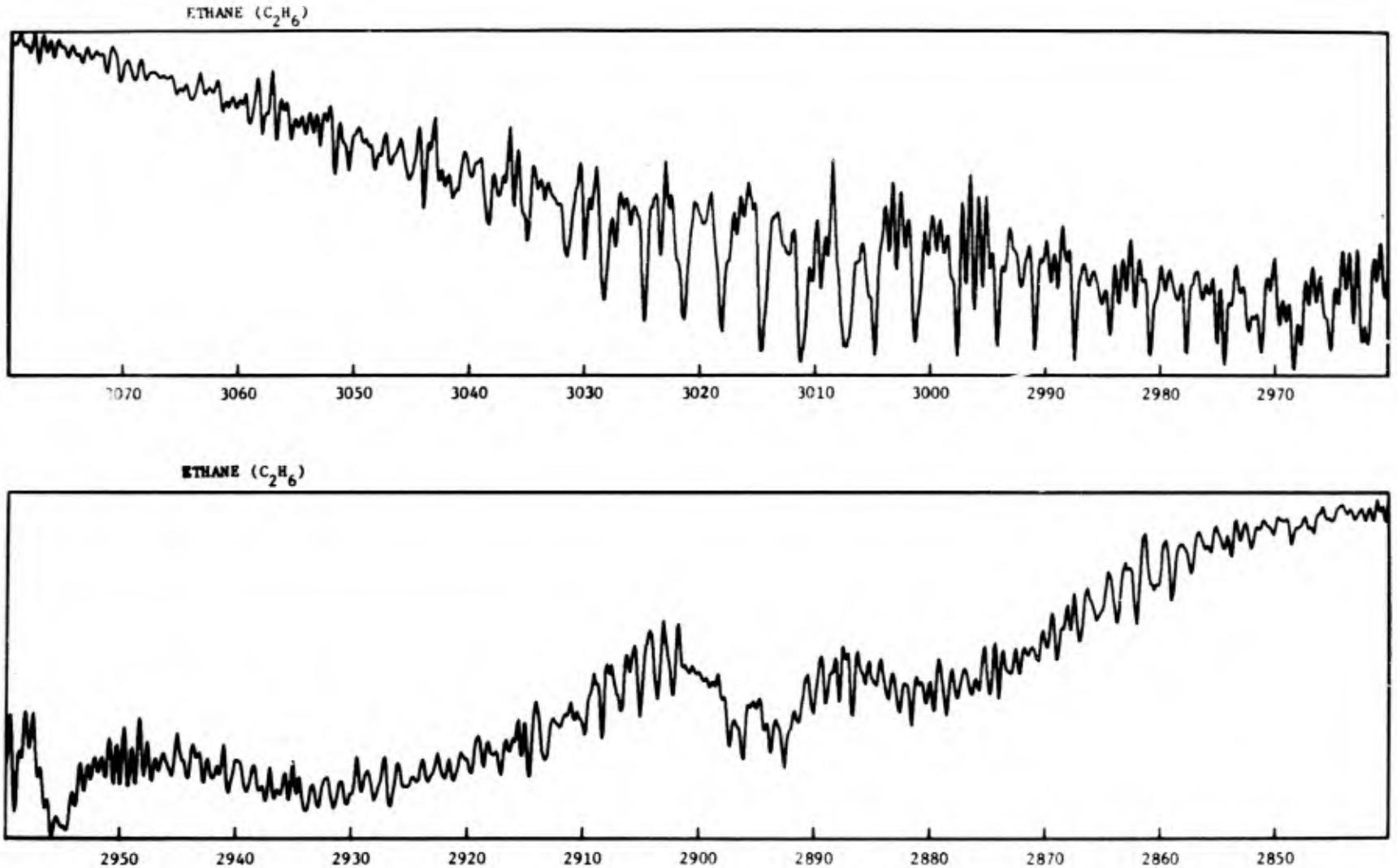

OZONE (O_3)
3090
3080
3070
3060
3050
3040
3030
3020
3010
3000
2990

Spectrum 19

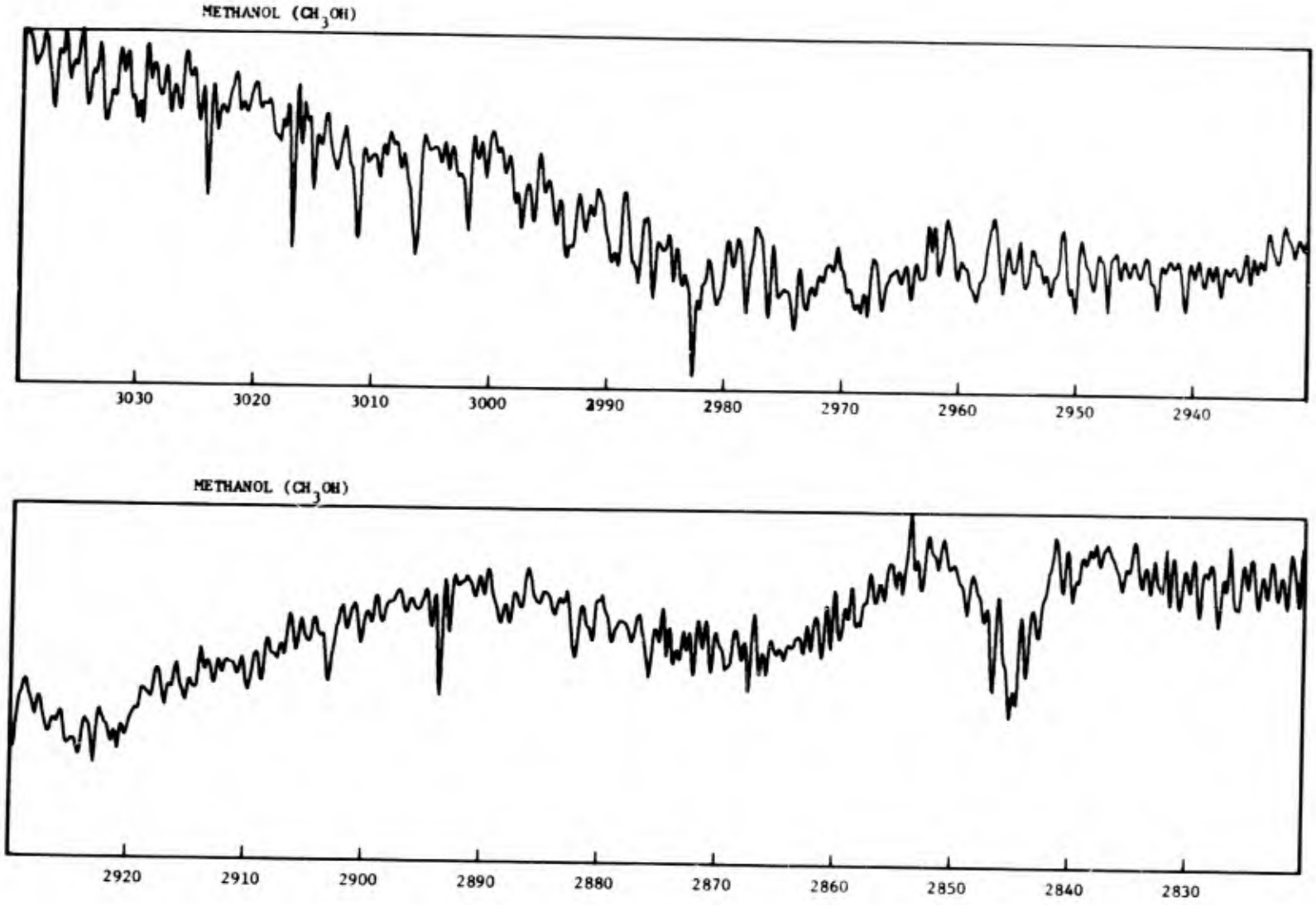

HYDROGEN CHLORIDE (HCl) (NOTE: Compressed scale)
3080
3060
3040
3020
3000
2980
2960
2940
2920
2900
2880


HYDROGEN CHLORIDE (HCl) (NOTE: Compressed Scale)
2840
2820
2800
2780
2760
2740
2720
2700
2680
2660
2640

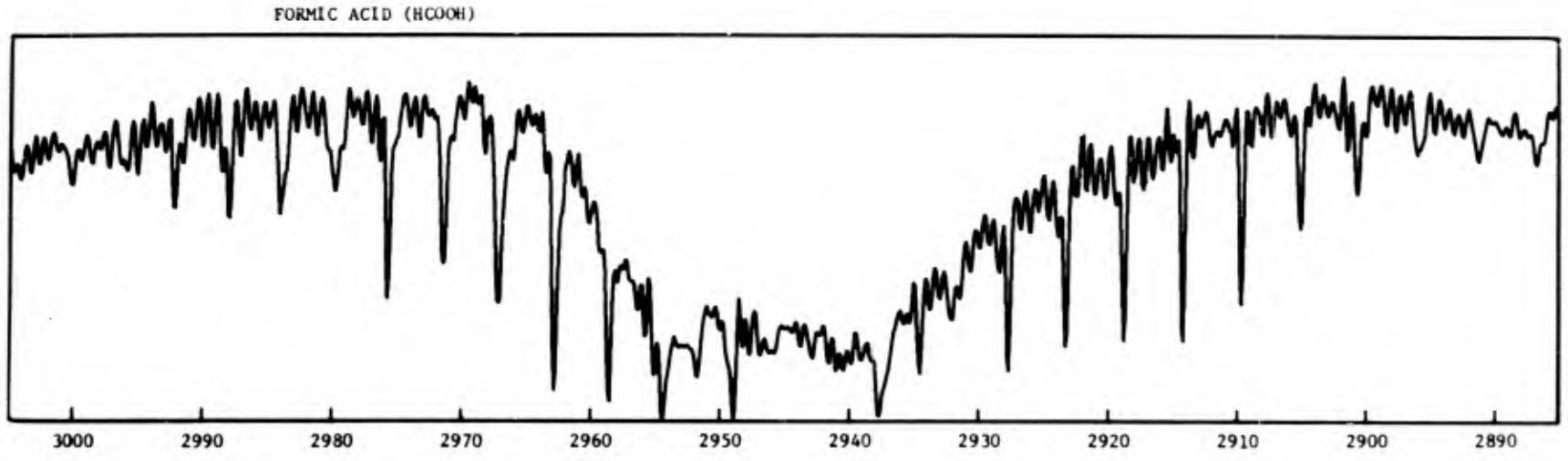
Spectrum 20


ETHANE (C_2H_6)
3070
3060
3050
3040
3030
3020
3010
3000
2990
2980
2970
ETHANE (C_2H_6)
2950
2940
2930
2920
2910
2900
2890
2880
2870
2860
2850

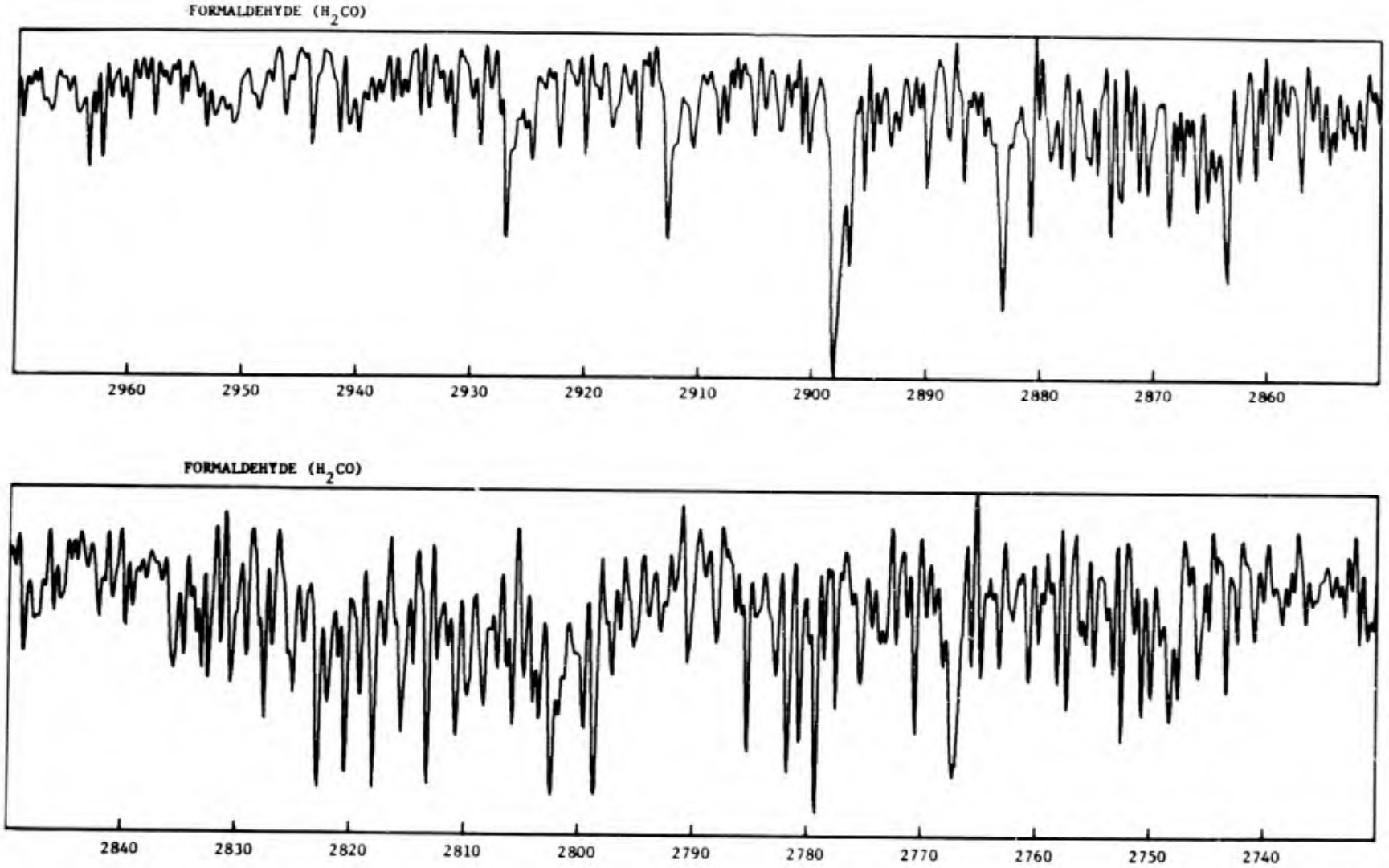
Spectrum 21


METHANOL (CH_3OH)
3030
3020
3010
3000
2990
2980
2970
2960
2950
2940
METHANOL (CH_3OH)
2920
2910
2900
2890
2880
2870
2860
2850
2840
2830

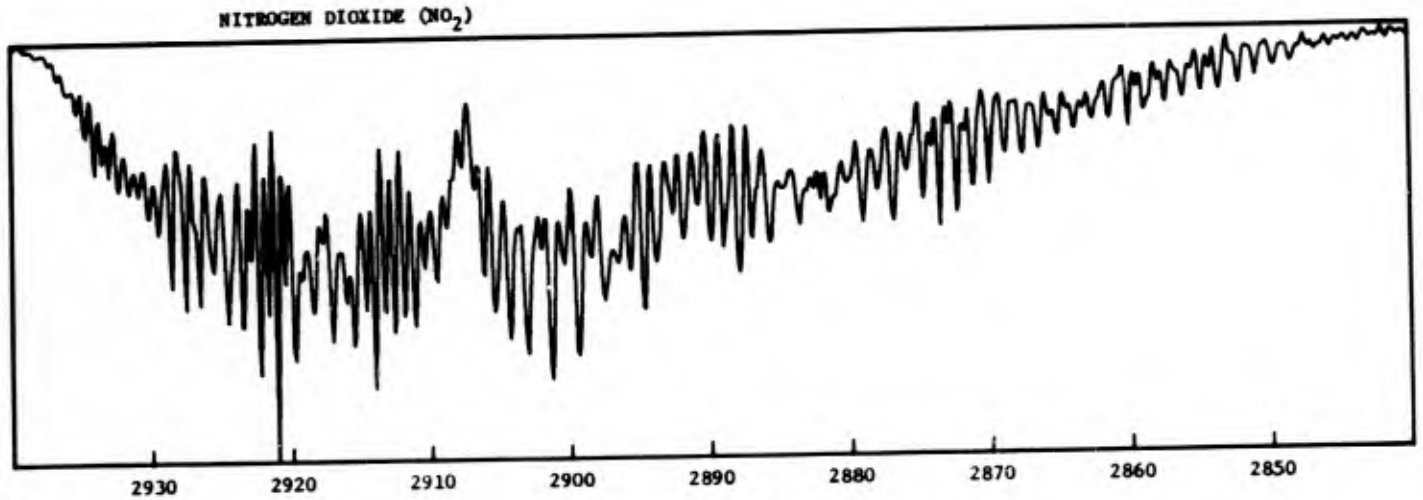
Spectrum 22


FORMIC ACID (HCOOH)
3000
2990
2980
2970
2960
2950
2940
2930
2920
2910
2900
2890

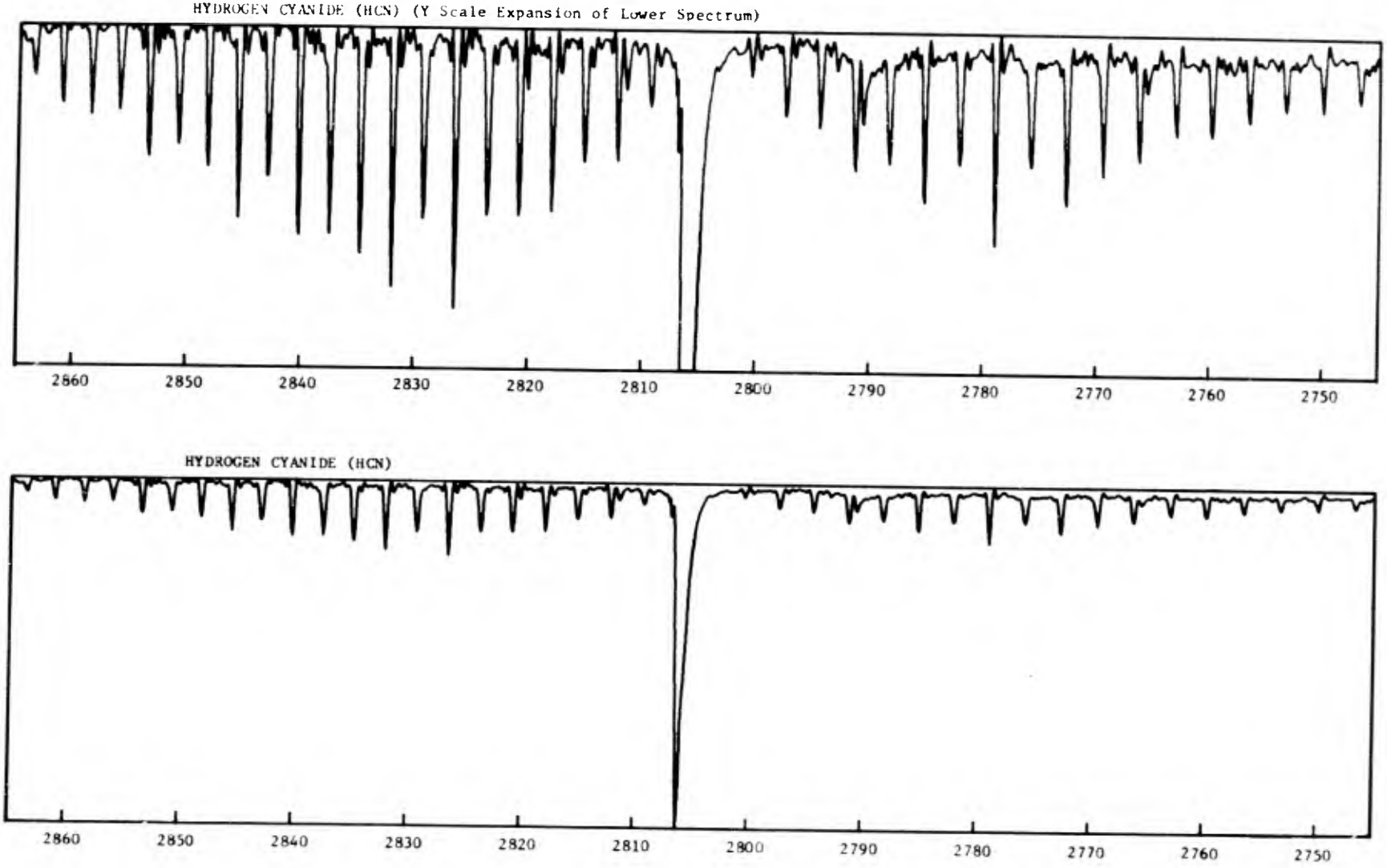
Spectrum 23


FORMALDEHYDE (H_2CO)
2960
2950
2940
2930
2920
2910
2900
2890
2880
2870
2860
FORMALDEHYDE (H_2CO)
2840
2830
2820
2810
2800
2790
2780
2770
2760
2750
2740

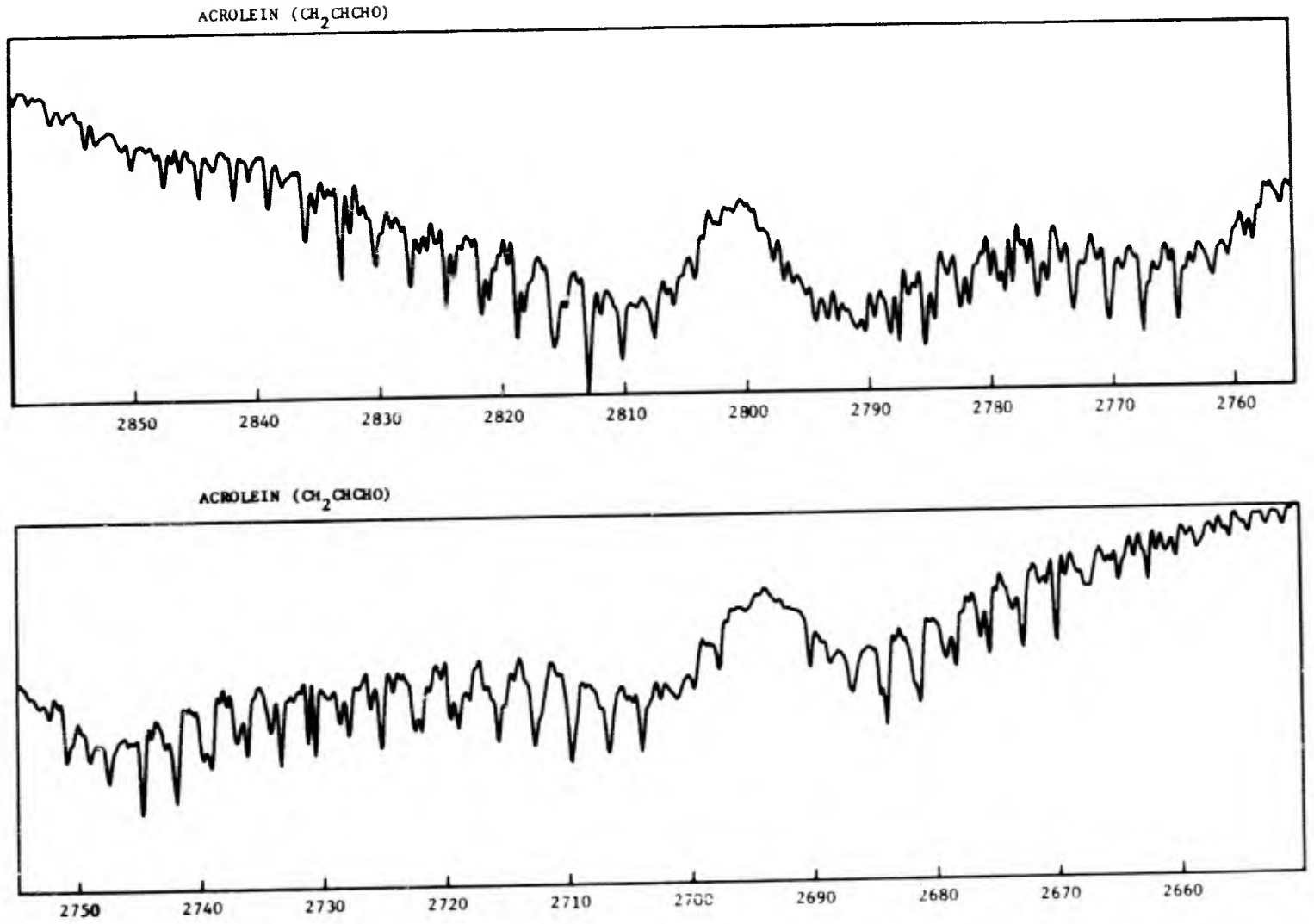
Spectrum 24


NITROGEN DIOXIDE (NO_2)
2930
2920
2910
2900
2890
2880
2870
2860
2850

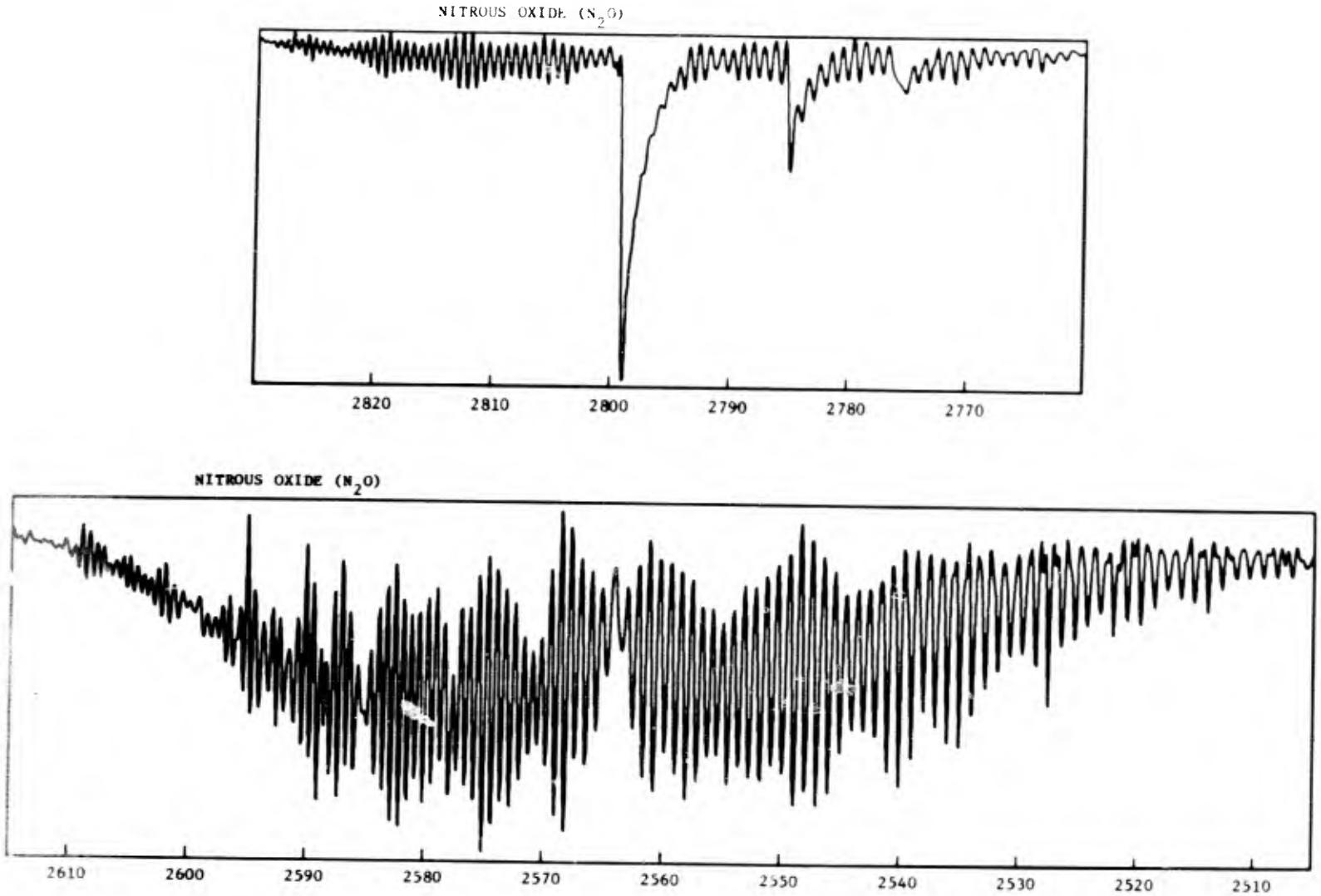
Spectrum 25


HYDROGEN CYANIDE (HCN) (Y Scale Expansion of Lower Spectrum)
2860
2850
2840
2830
2820
2810
2800
2790
2780
2770
2760
2750
HYDROGEN CYANIDE (HCN)
2860
2850
2840
2830
2820
2810
2800
2790
2780
2770
2760
2750

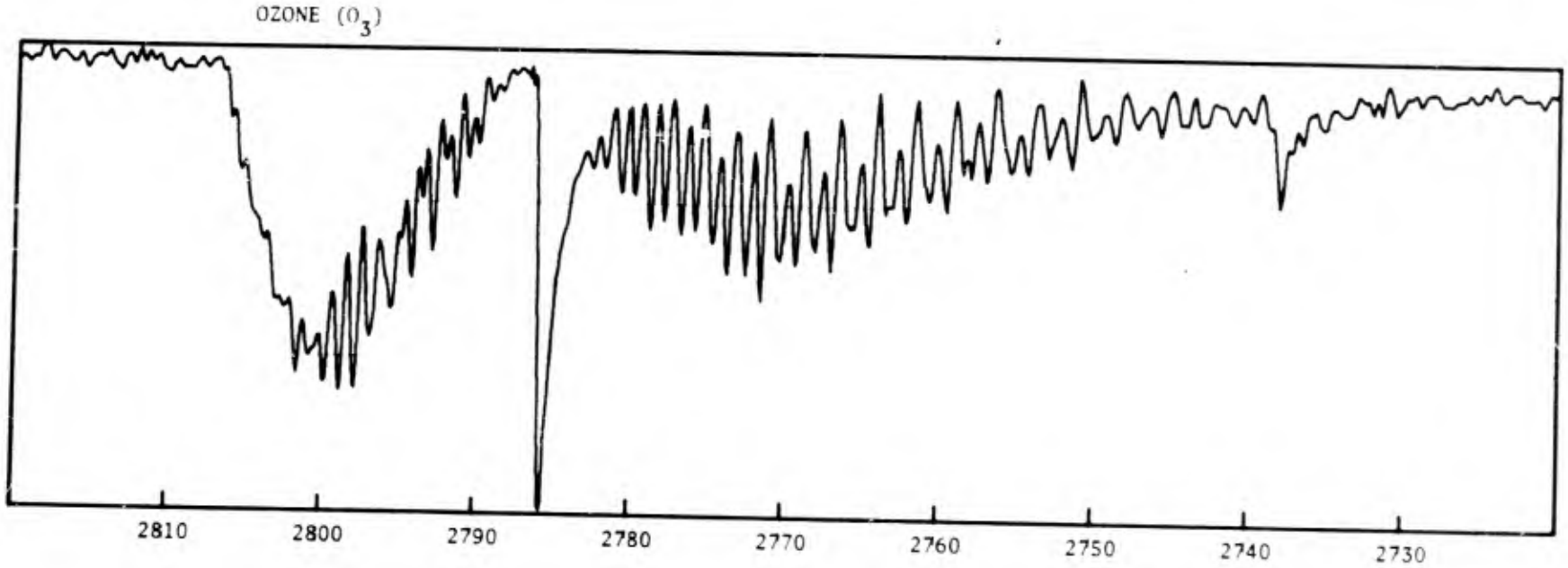
Spectrum 26


ACROLEIN (CH_2CHCHO)
2850
2840
2830
2820
2810
2800
2790
2780
2770
2760
ACROLEIN (CH_2CHCHO)
2750
2740
2730
2720
2710
2700
2690
2680
2670
2660

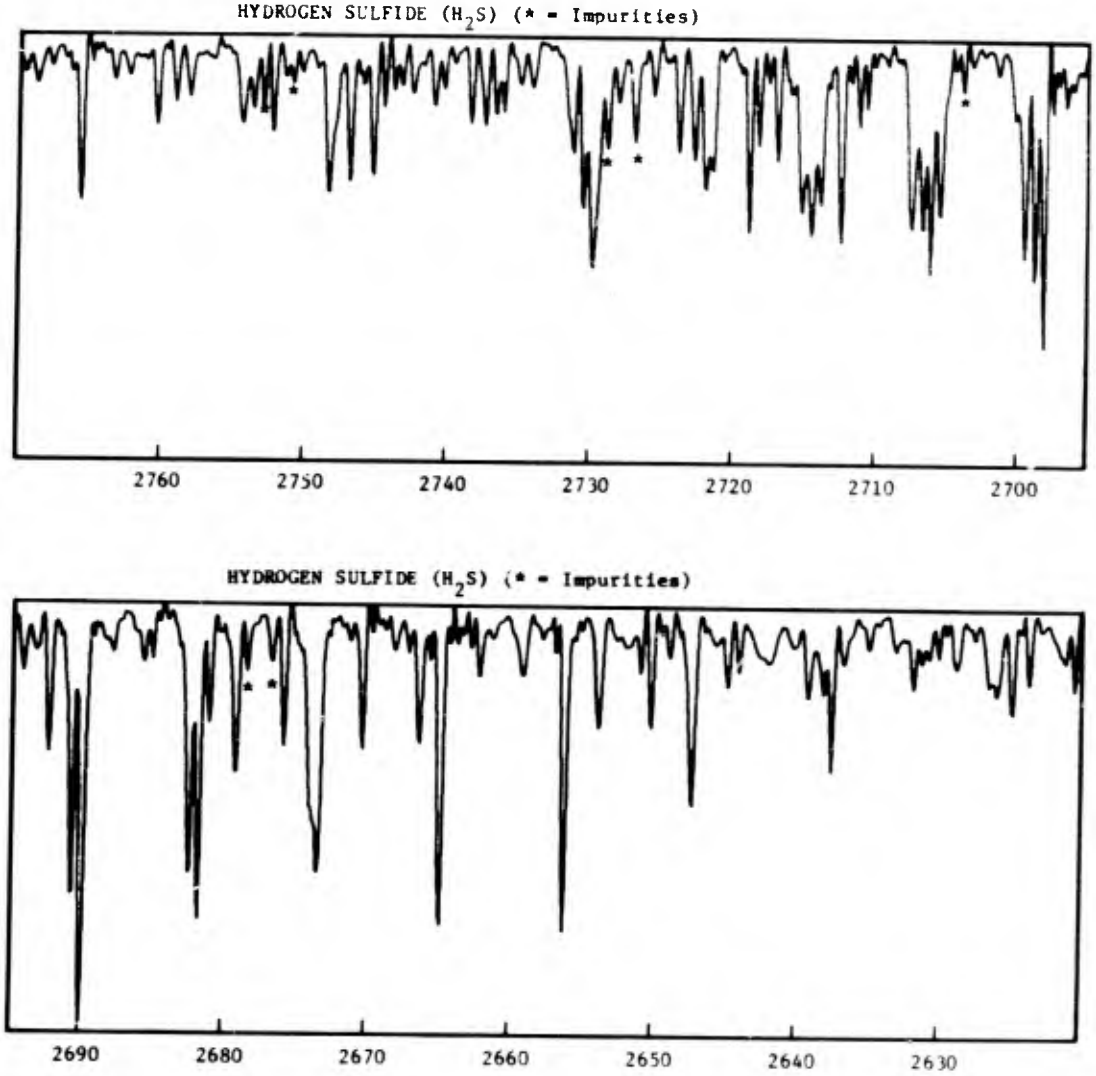
Spectrum 27


NITROUS OXIDE (N_2O)
2820
2810
2800
2790
2780
2770
NITROUS OXIDE (N_2O)
2610
2600
2590
2580
2570
2560
2550
2540
2530
2520
2510

Spectrum 28

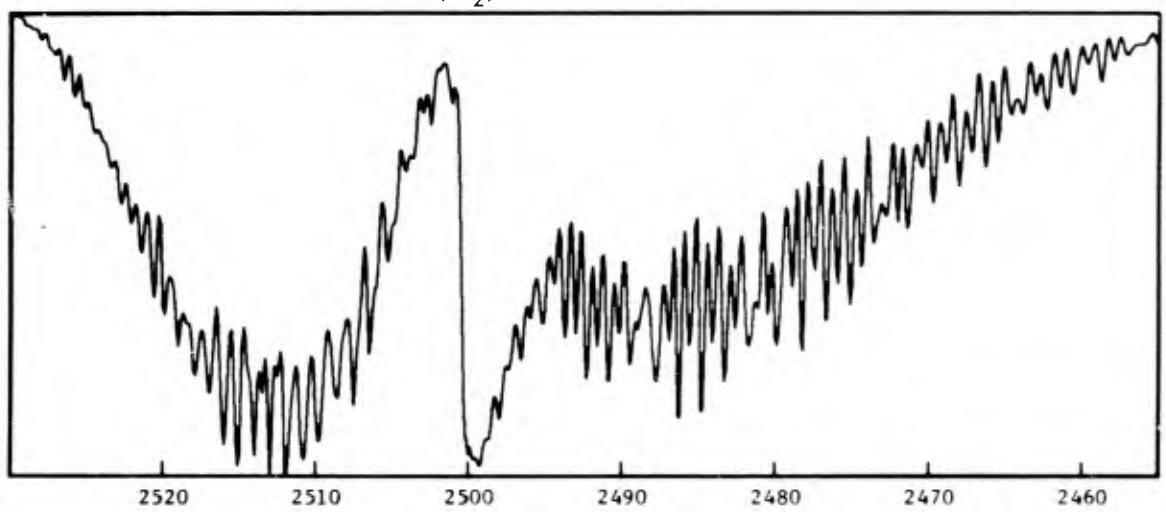


Spectrum 29

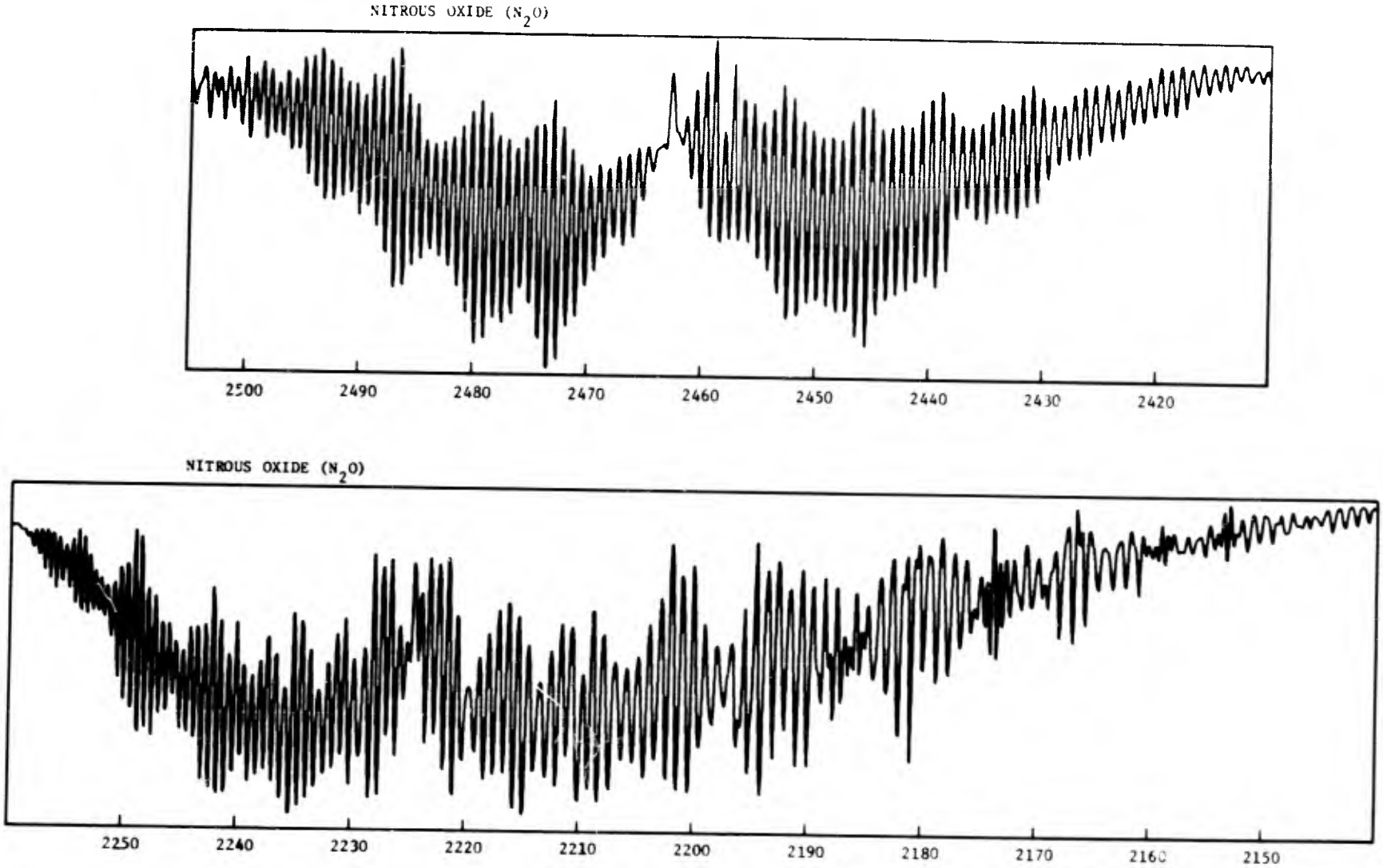

HYDROGEN SULFIDE (H_2S) (* = Impurities)
2760
2750
2740
2730
2720
2710
2700
HYDROGEN SULFIDE (H_2S) (* = Impurities)
2690
2680
2670
2660
2650
2640
2630

Spectrum 30

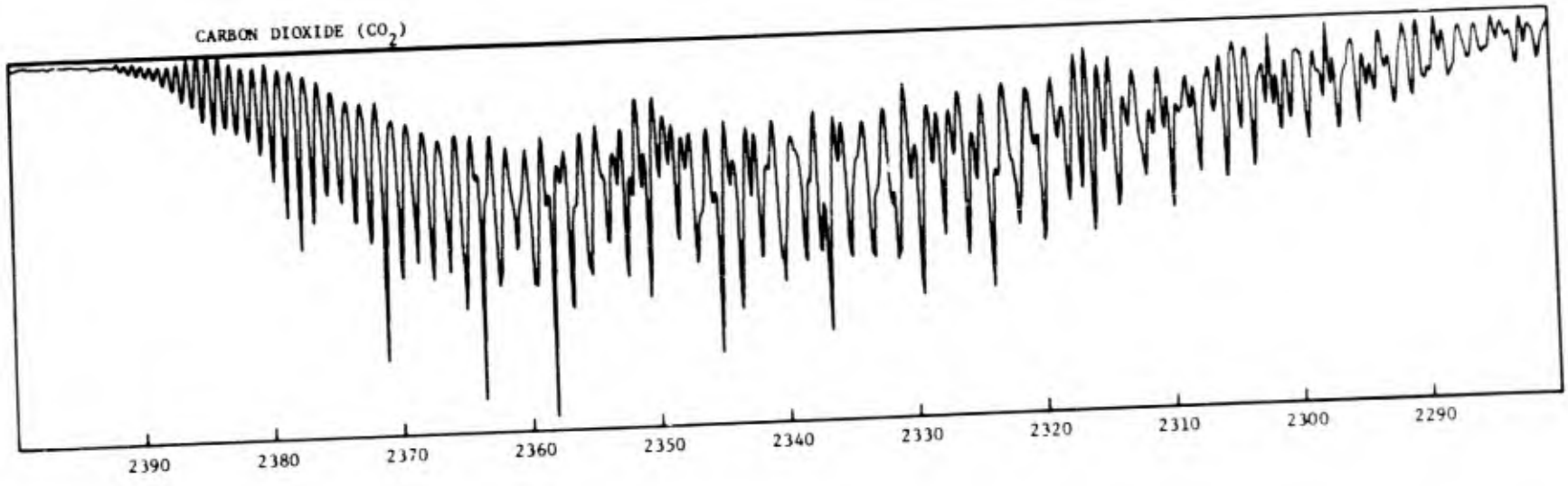
SULFUR DIOXIDE (SO_2)



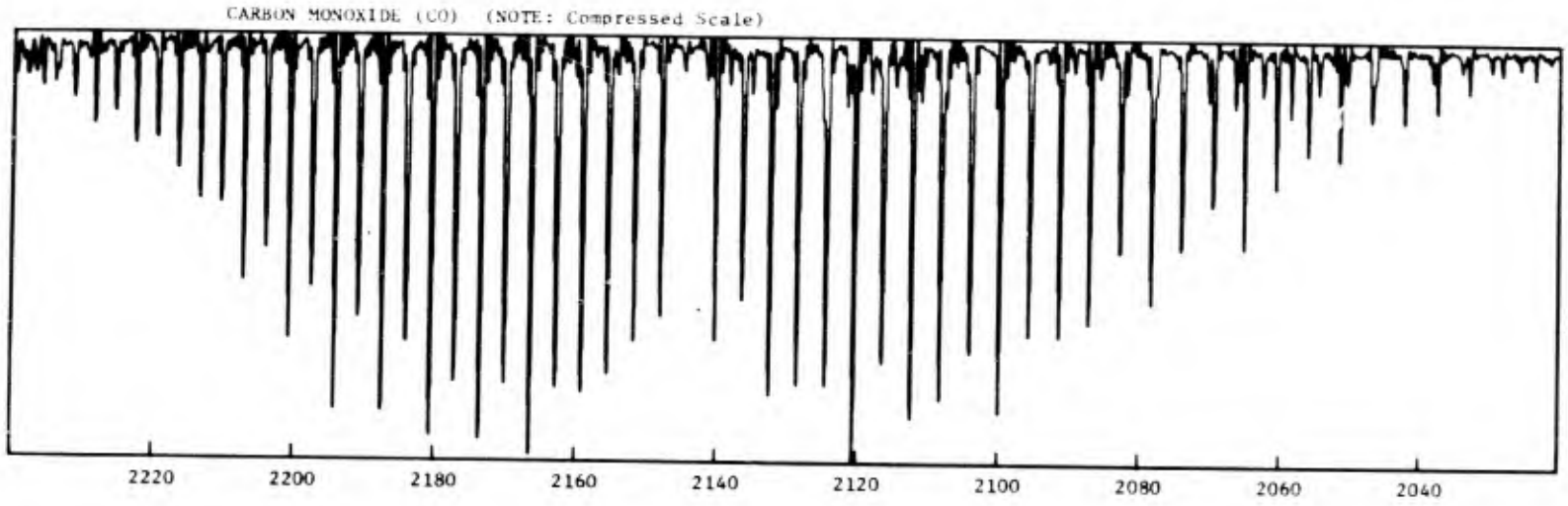
Spectrum 31


NITROUS OXIDE (N_2O)
2500
2490
2480
2470
2460
2450
2440
2430
2420
NITROUS OXIDE (N_2O)
2250
2240
2230
2220
2210
2200
2190
2180
2170
2160
2150

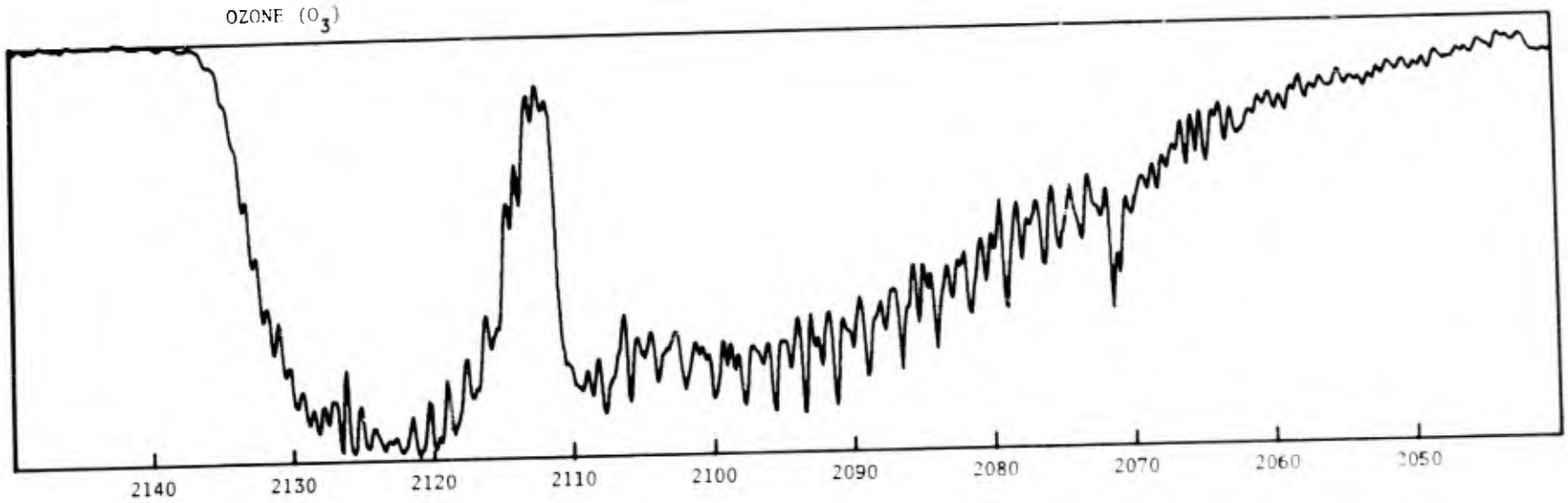
Spectrum 32


CARBON DIOXIDE (CO_2)
2390
2380
2370
2360
2350
2340
2330
2320
2310
2300
2290

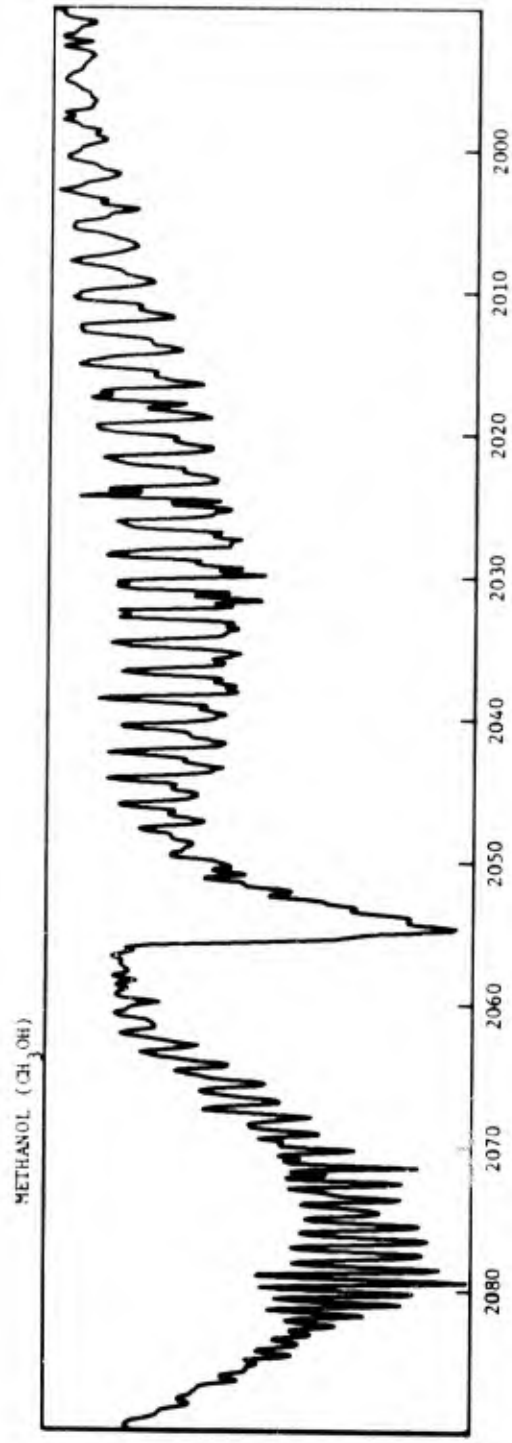
Spectrum 33


CARBON MONOXIDE (CO) (NOTE: Compressed Scale)
2220
2200
2180
2160
2140
2120
2100
2080
2060
2040

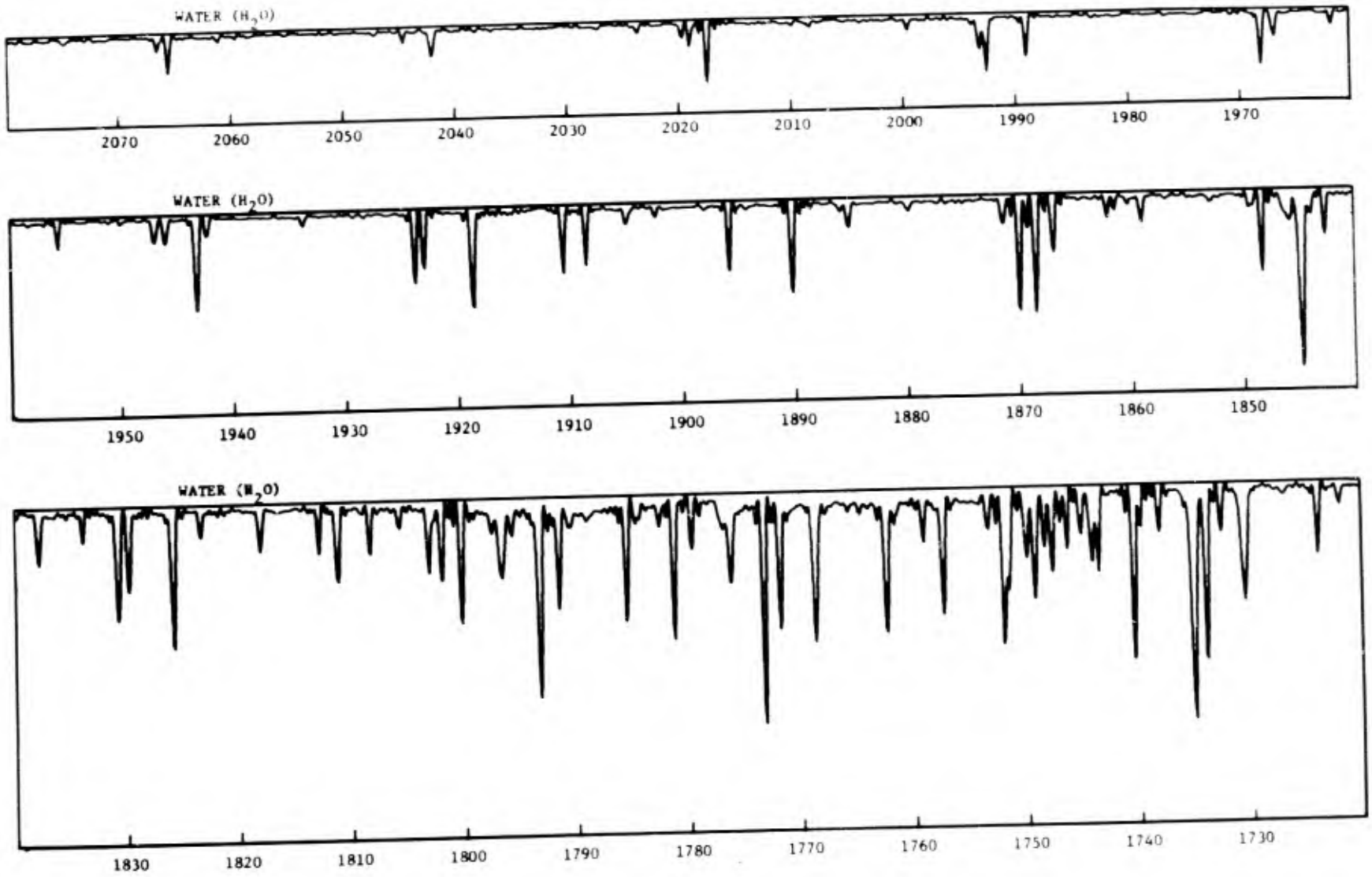
Spectrum 34



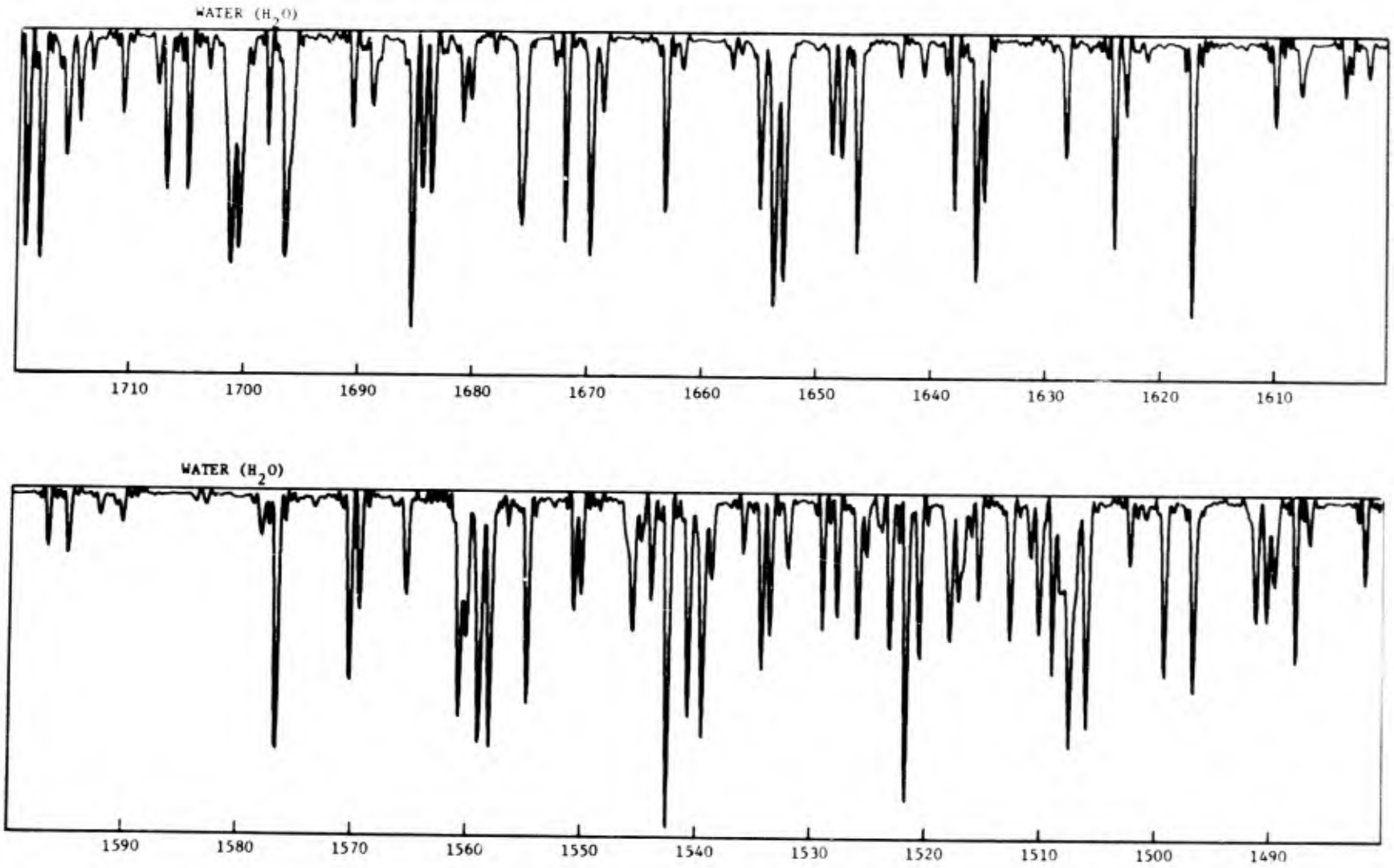
Spectrum 35



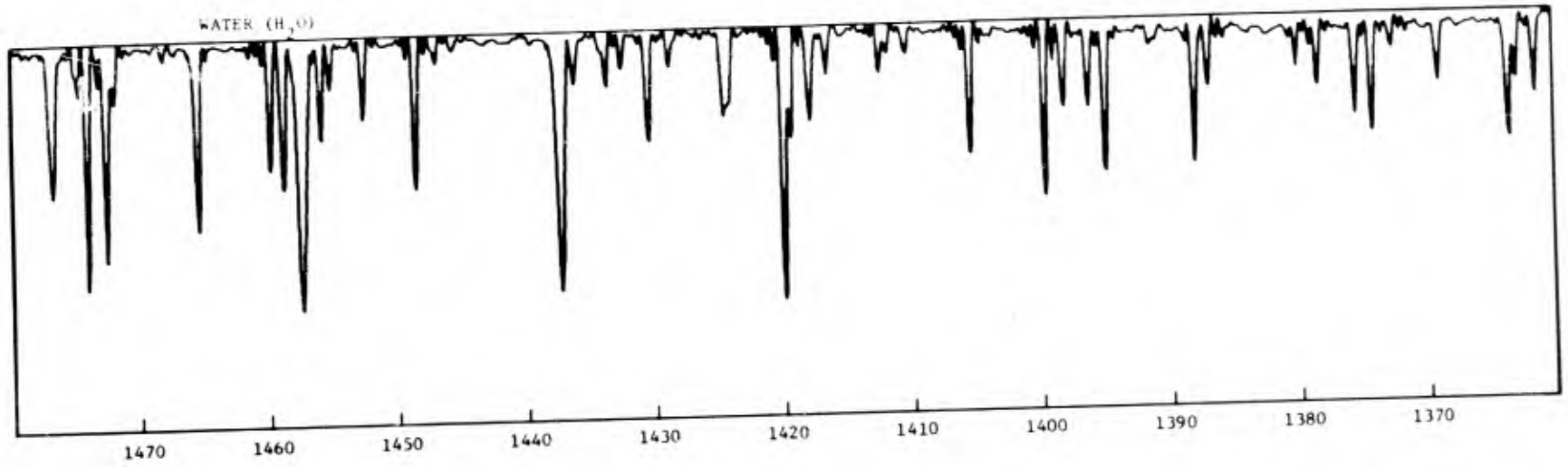
Spectrum 56

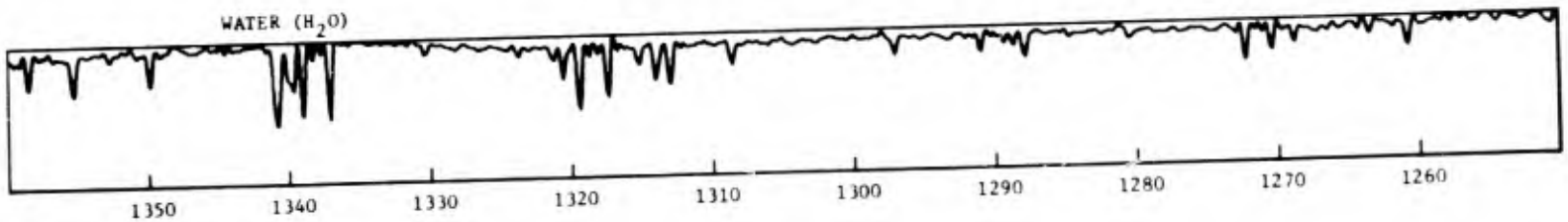

WATER (H_2O)
2070
2060
2050
2040
2030
2020
2010
2000
1990
1980
1970
WATER (H_2O)
1950
1940
1930
1920
1910
1900
1890
1880
1870
1860
1850
WATER (H_2O)
1830
1820
1810
1800
1790
1780
1770
1760
1750
1740
1730

Spectrum 37

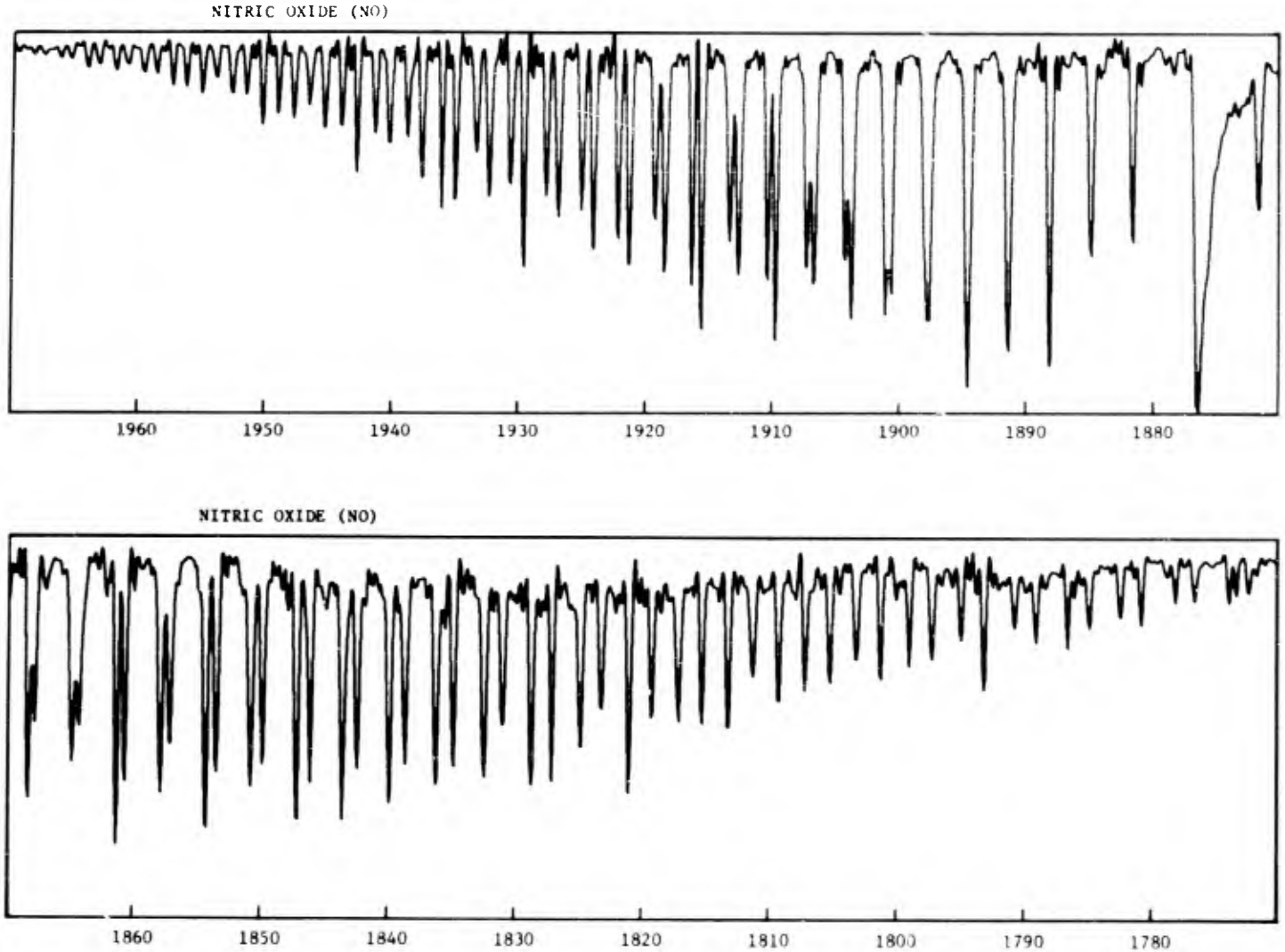

WATER (H_2O)
1710
1700
1690
1680
1670
1660
1650
1640
1630
1620
1610
WATER (H_2O)
1590
1580
1570
1560
1550
1540
1530
1520
1510
1500
1490

Spectrum 38

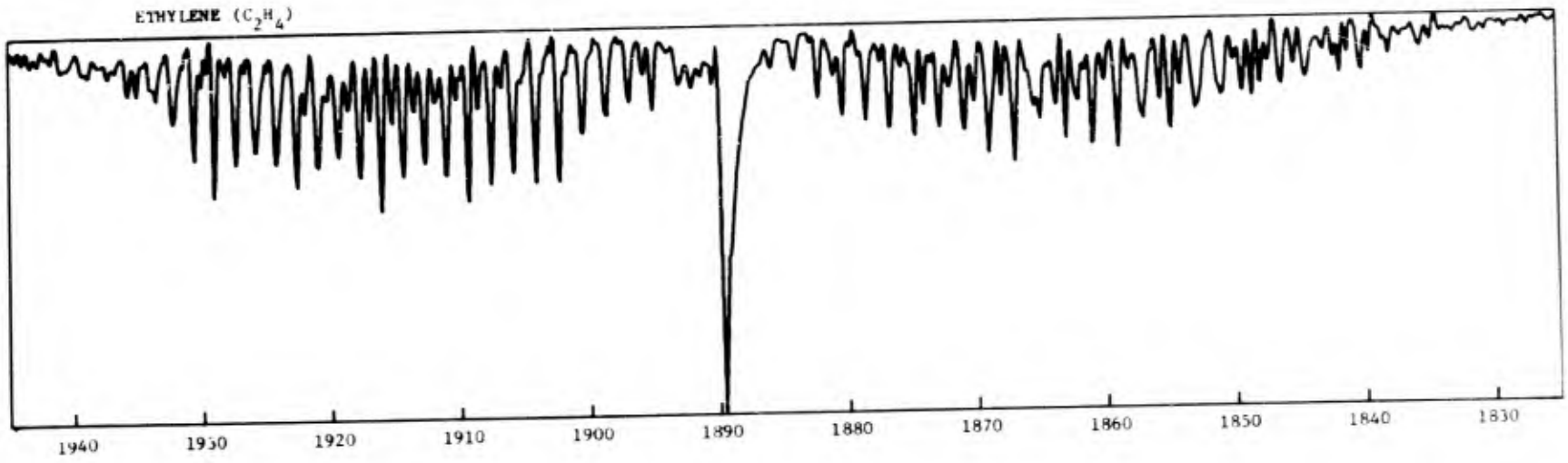

WATER (H_2O)
1470
1460
1450
1440
1430
1420
1410
1400
1390
1380
1370


WATER (H_2O)
1350
1340
1330
1320
1310
1300
1290
1280
1270
1260

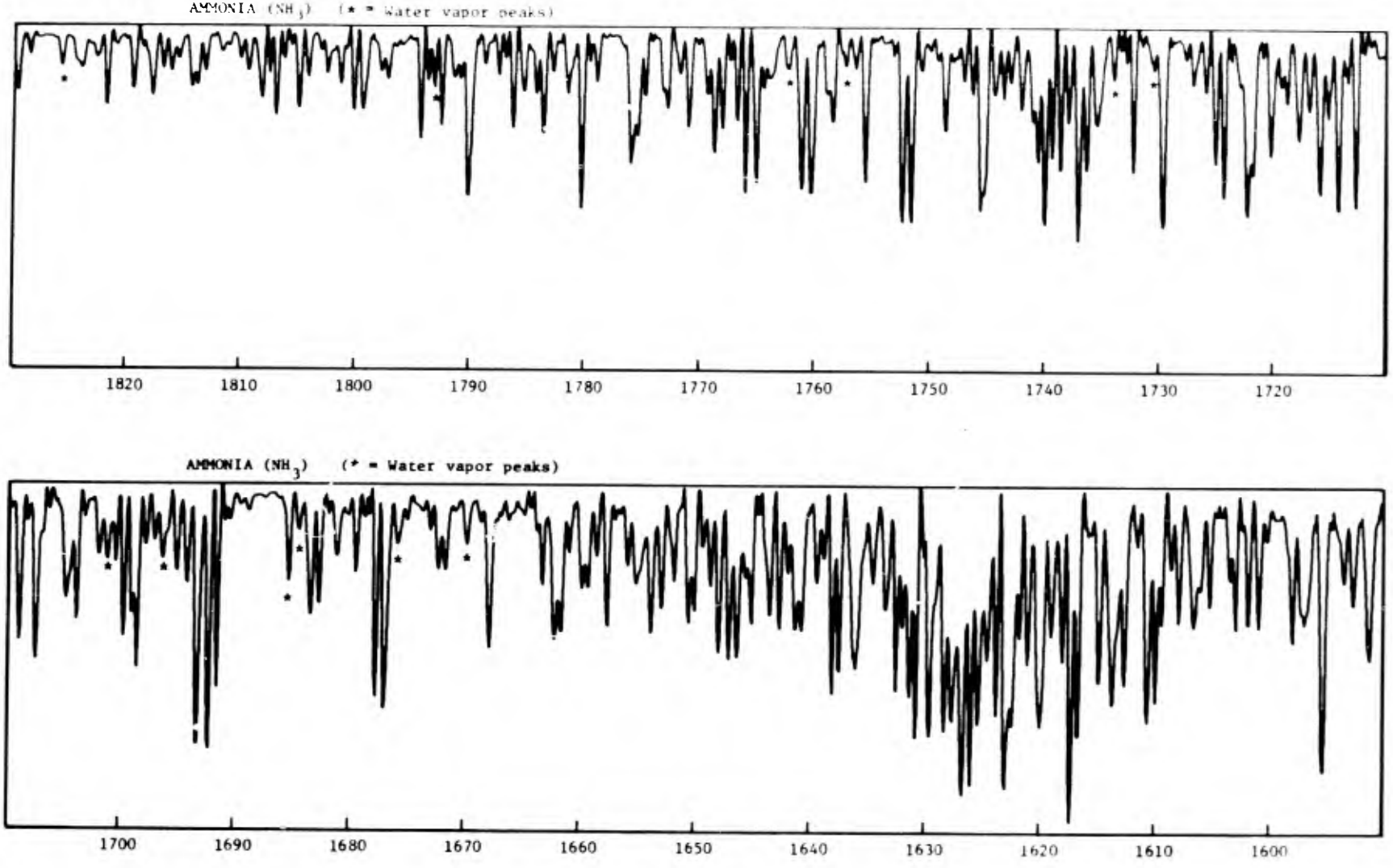
Spectrum 39


NITRIC OXIDE (NO)
1960
1950
1940
1930
1920
1910
1900
1890
1880
NITRIC OXIDE (NO)
1860
1850
1840
1830
1820
1810
1800
1790
1780

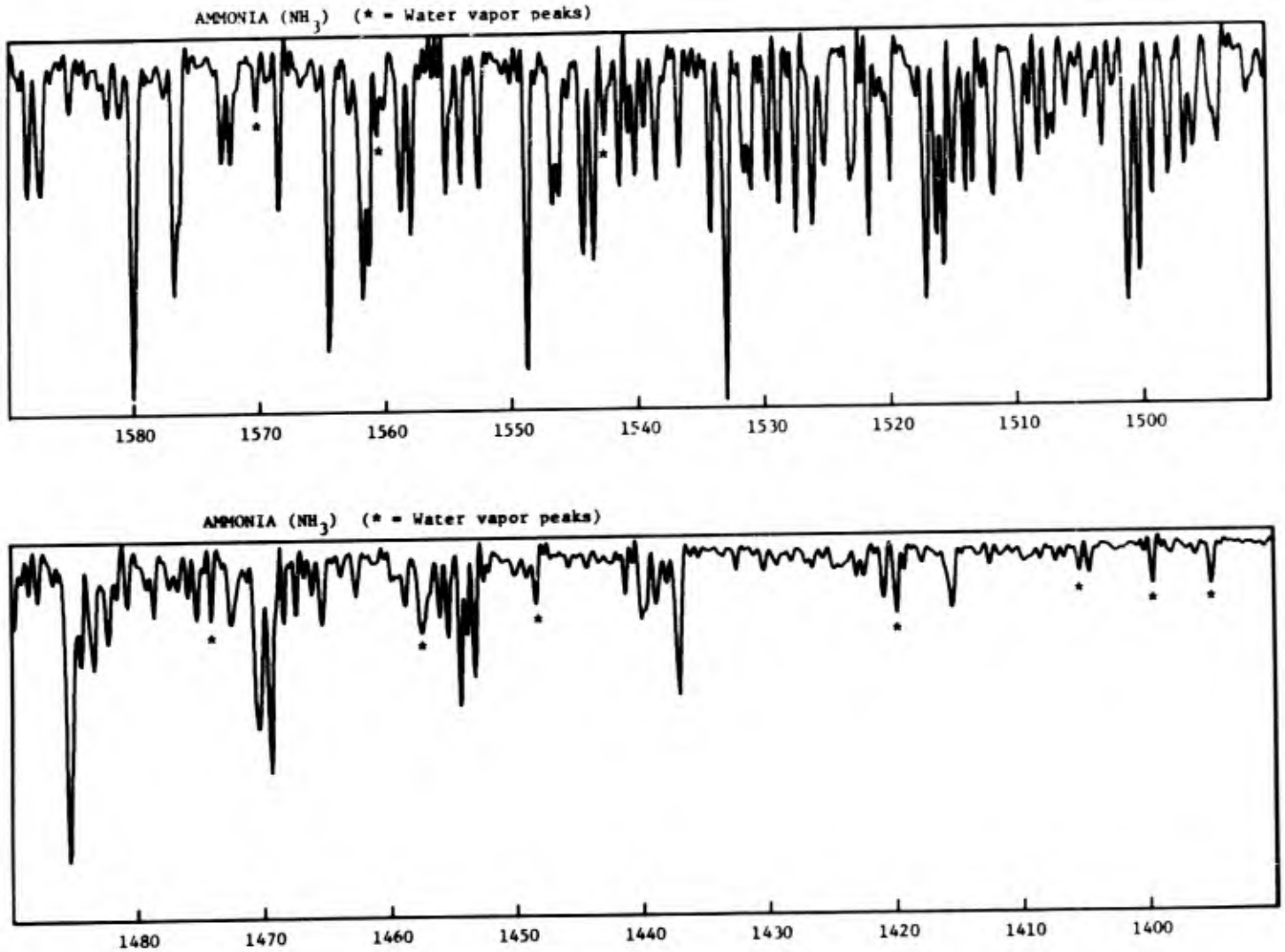
Spectrum 40


ETHYLENE (C_2H_4)
1940
1930
1920
1910
1900
1890
1880
1870
1860
1850
1840
1830

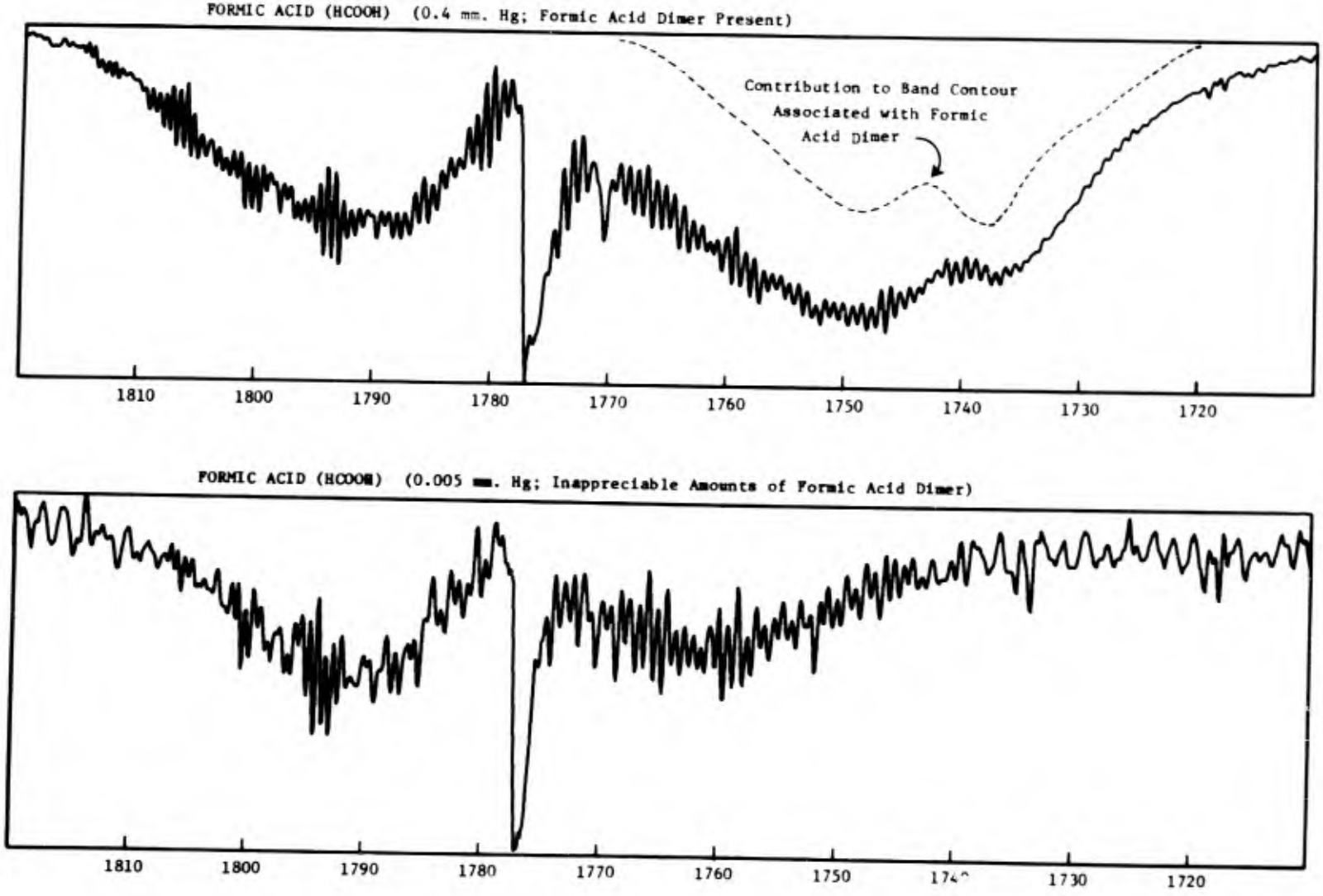
Spectrum 41


AMMONIA (NH_3) (* = Water vapor peaks)
1820
1810
1800
1790
1780
1770
1760
1750
1740
1730
1720
AMMONIA (NH_3) (* = Water vapor peaks)
1700
1690
1680
1670
1660
1650
1640
1630
1620
1610
1600

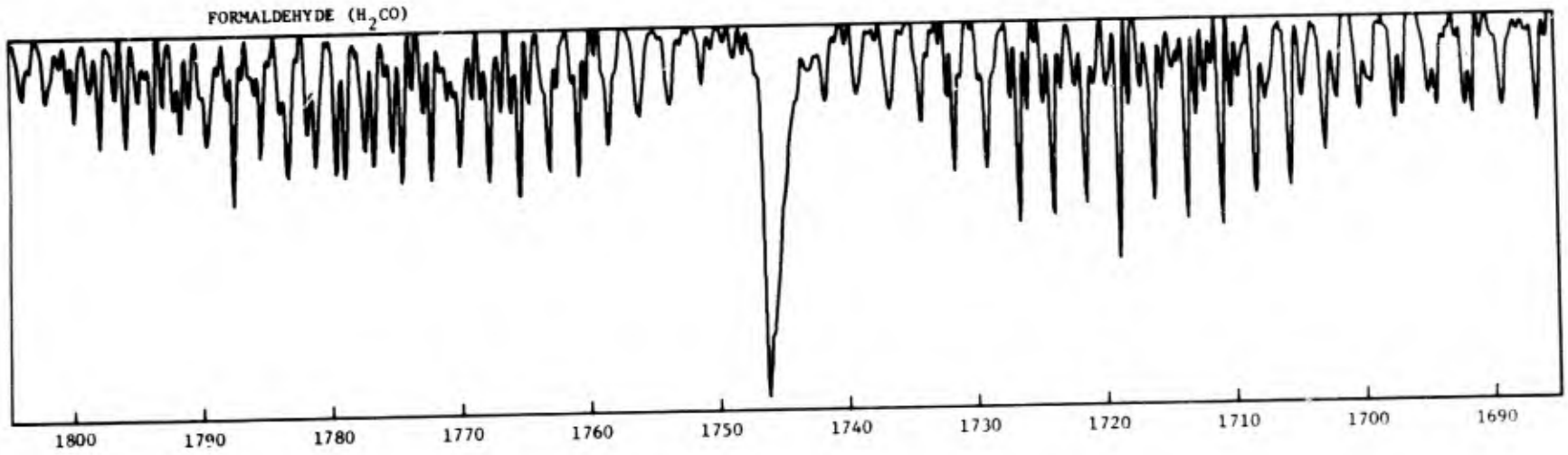
Spectrum 42


AMMONIA (NH_3) (* = Water vapor peaks)
1580
1570
1560
1550
1540
1530
1520
1510
1500
AMMONIA (NH_3) (* = Water vapor peaks)
1480
1470
1460
1450
1440
1430
1420
1410
1400

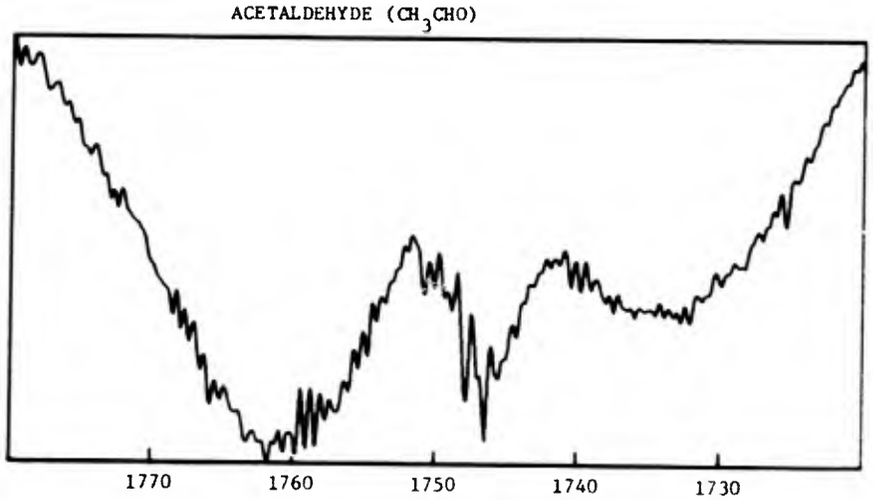
Spectrum 43


FORMIC ACID (HCOOH) (0.4 mm. Hg; Formic Acid Dimer Present)
Contribution to Band Contour
Associated with Formic
Acid Dimer
1810
1800
1790
1780
1770
1760
1750
1740
1730
1720
FORMIC ACID (HCOOH) (0.005 mm. Hg; Inappreciable Amounts of Formic Acid Dimer)
1810
1800
1790
1780
1770
1760
1750
1730
1720

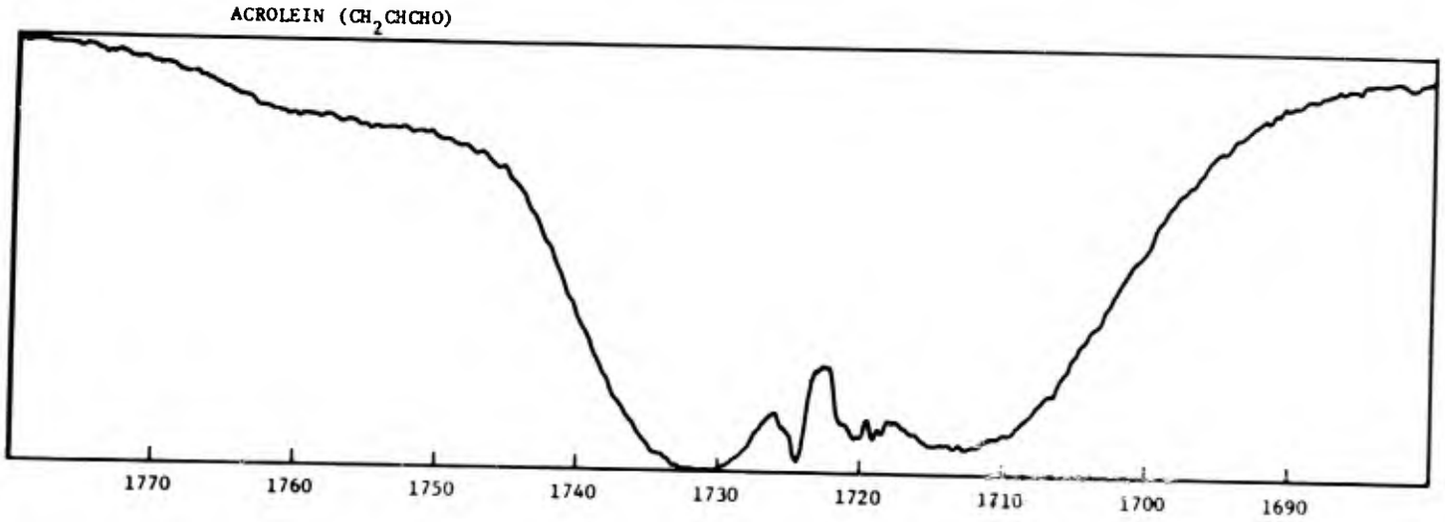
Spectrum 44


FORMALDEHYDE (H_2CO)
1800
1790
1780
1770
1760
1750
1740
1730
1720
1710
1700
1690

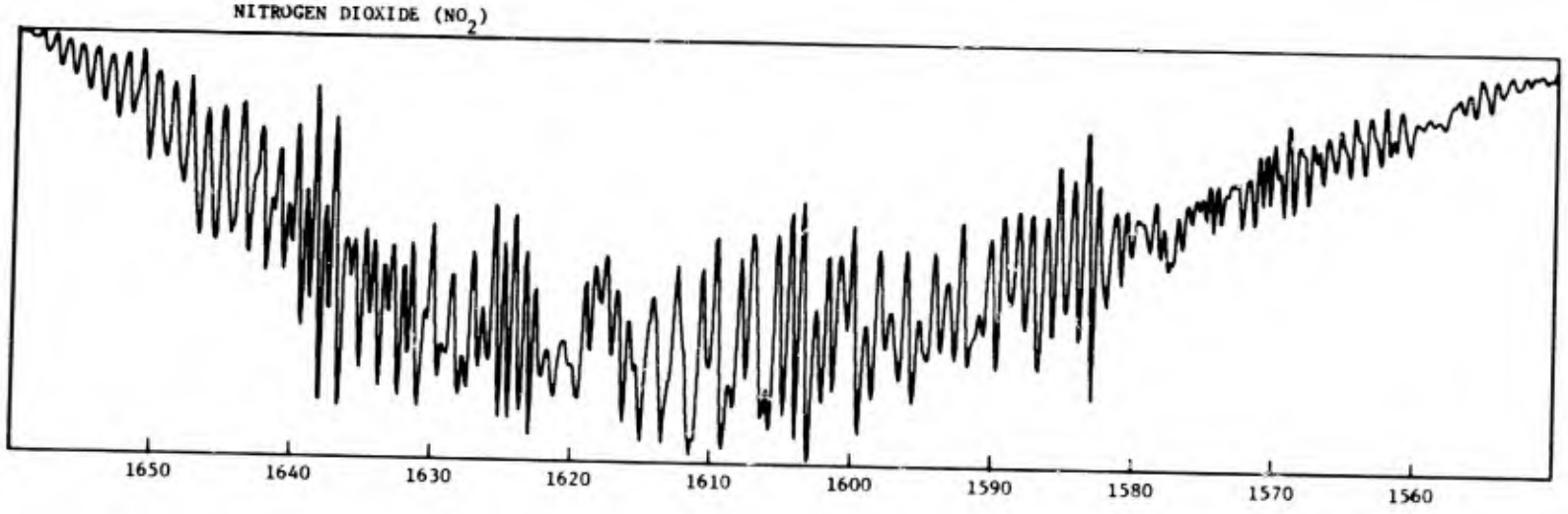
Spectrum 45



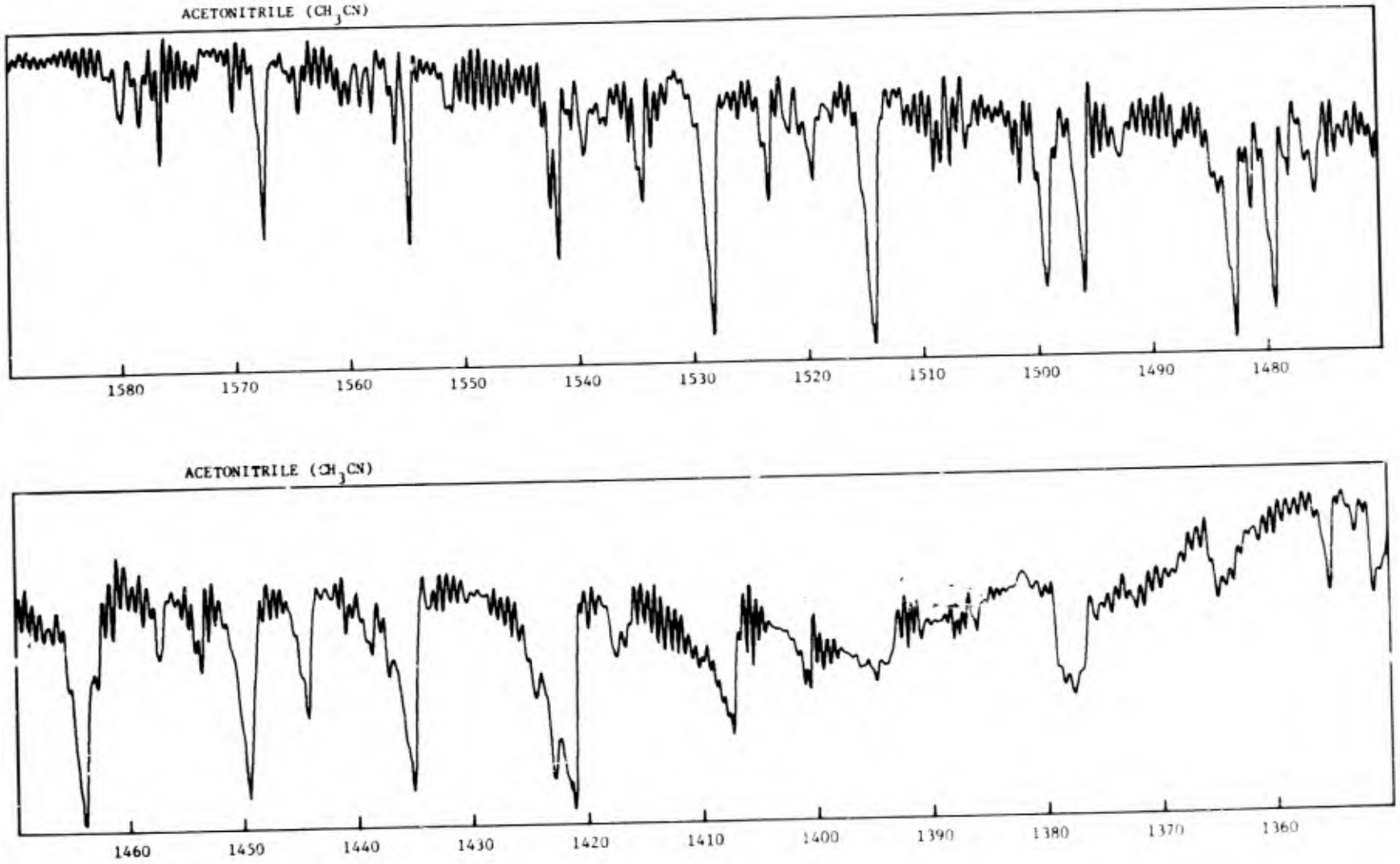
Spectrum 46


ACROLEIN (CH_2CHCHO)
1770
1760
1750
1740
1730
1720
1710
1700
1690

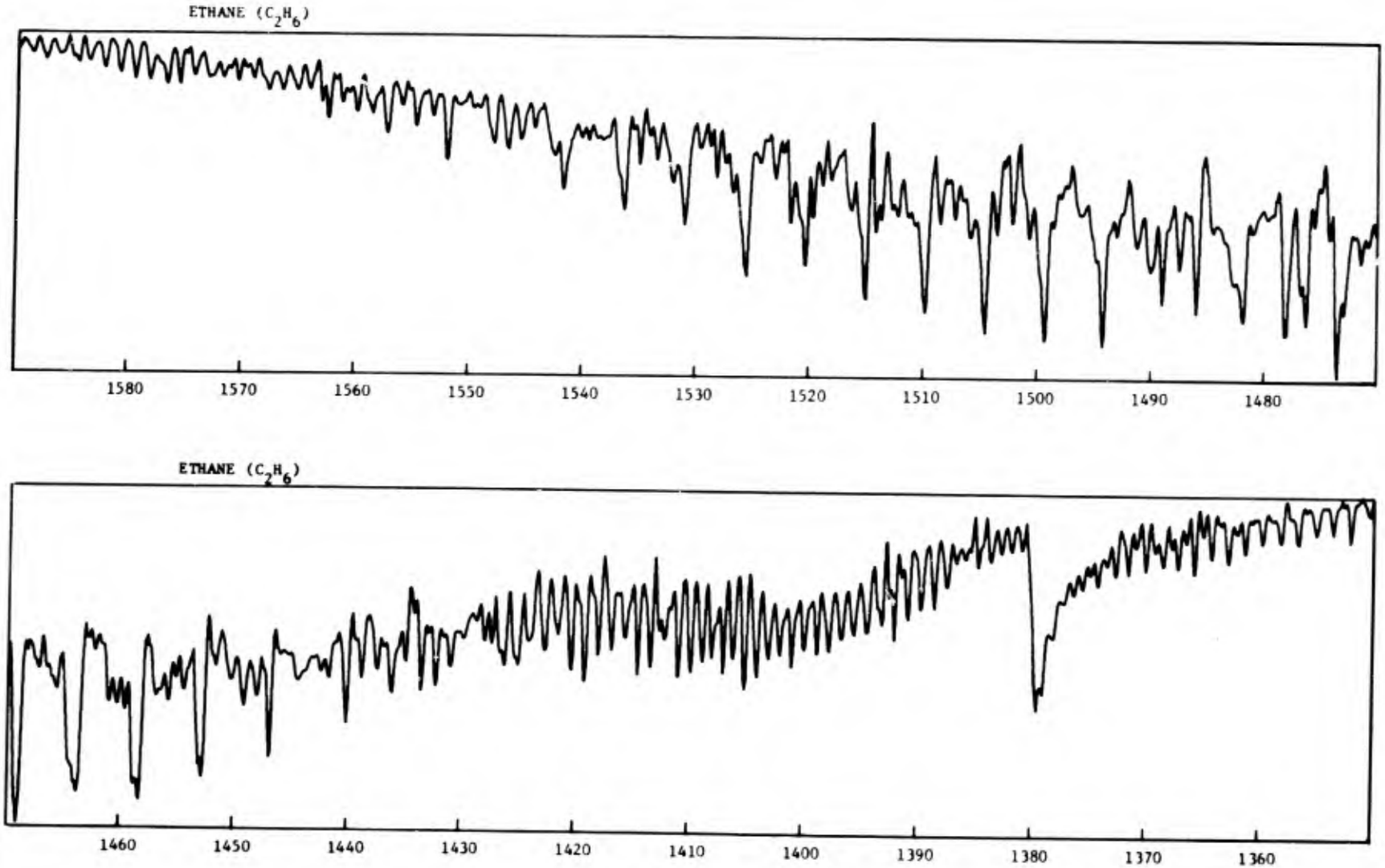
Spectrum 47


NITROGEN DIOXIDE (NO_2)
1650
1640
1630
1620
1610
1600
1590
1580
1570
1560

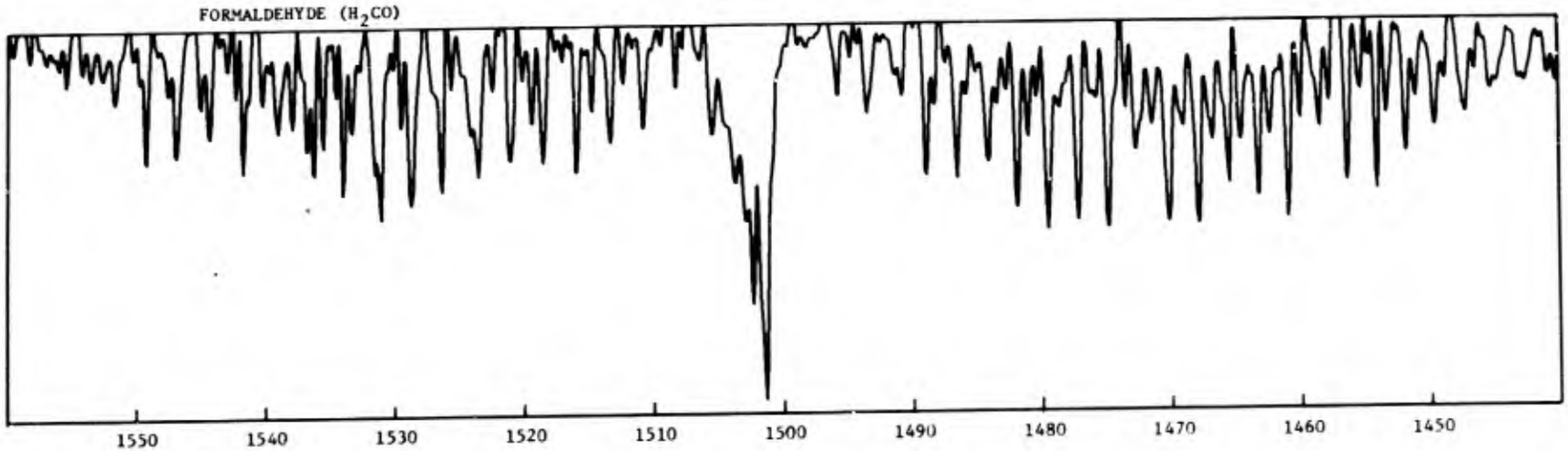
Spectrum 48


ACETONITRILE (CH_3CN)
1580
1570
1560
1550
1540
1530
1520
1510
1500
1490
1480
ACETONITRILE (CH_3CN)
1460
1450
1440
1430
1420
1410
1400
1390
1380
1370
1360

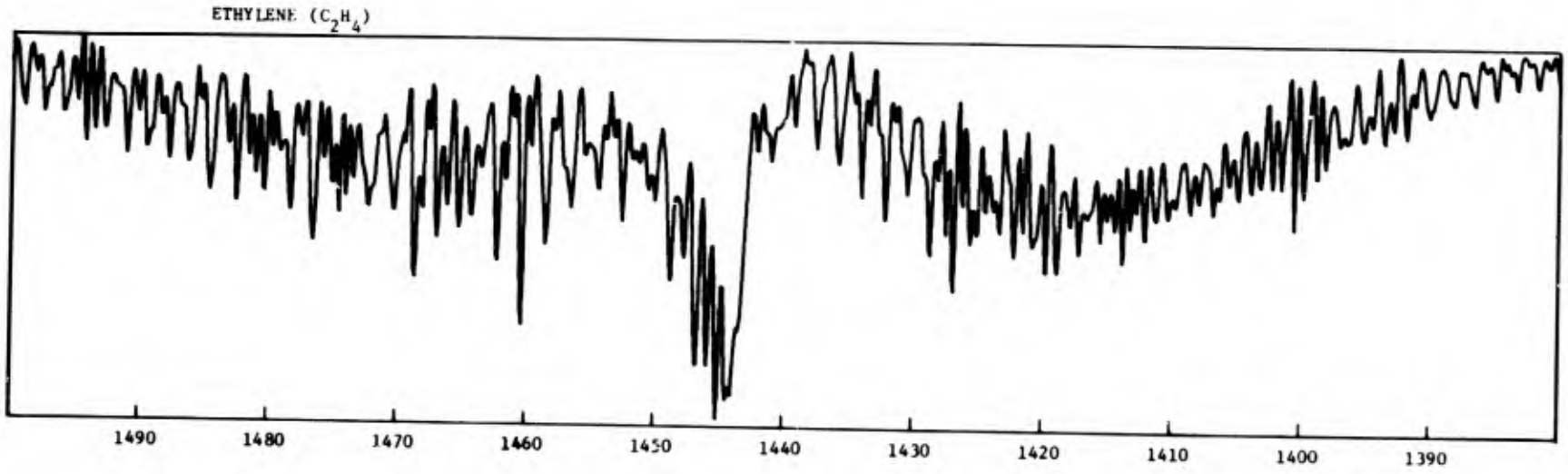
Spectrum 49


ETHANE (C_2H_6)
1580
1570
1560
1550
1540
1530
1520
1510
1500
1490
1480
ETHANE (C_2H_6)
1460
1450
1440
1430
1420
1410
1400
1390
1380
1370
1360

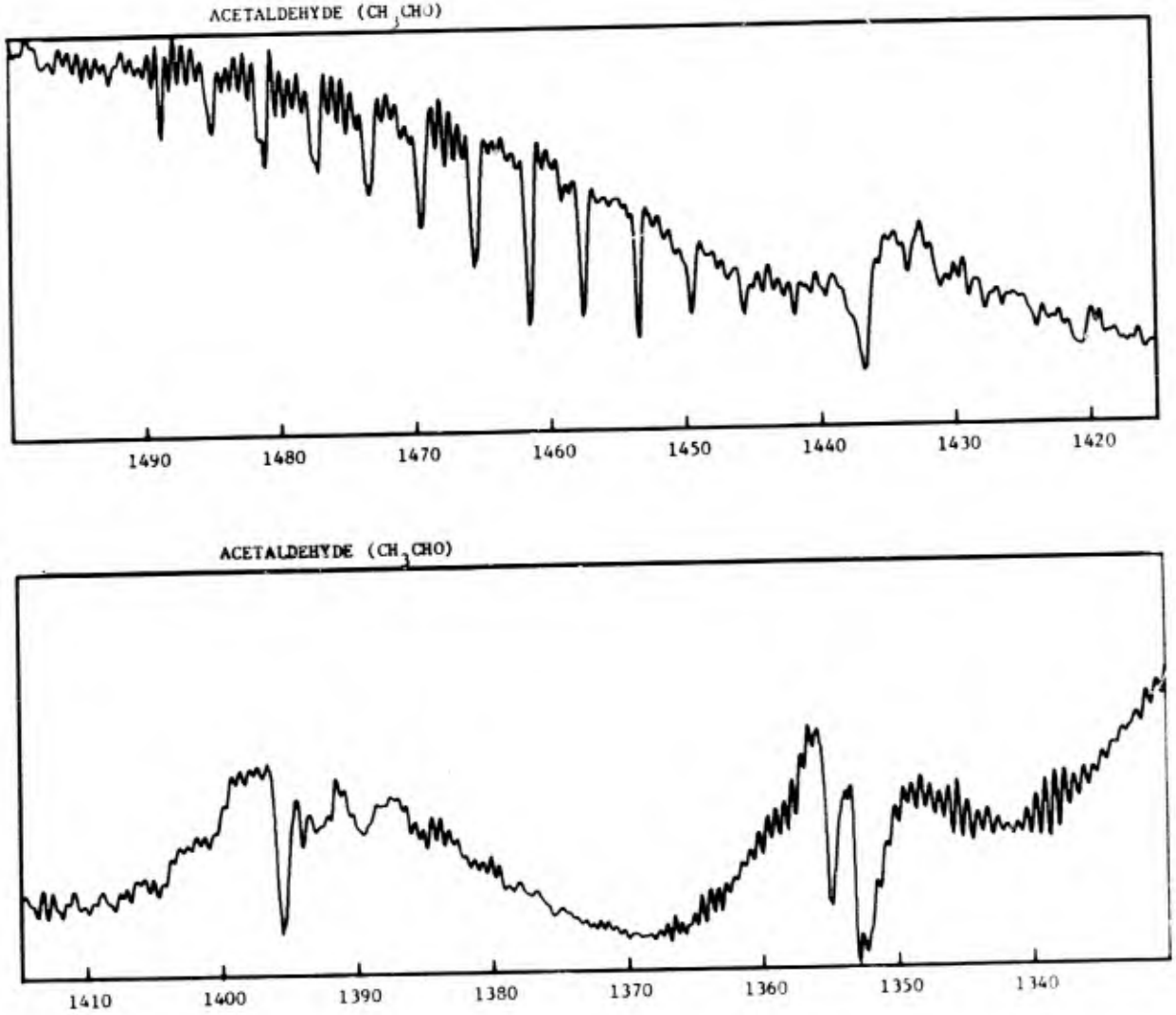
Spectrum 50


FORMALDEHYDE (H_2CO)
1550
1540
1530
1520
1510
1500
1490
1480
1470
1460
1450

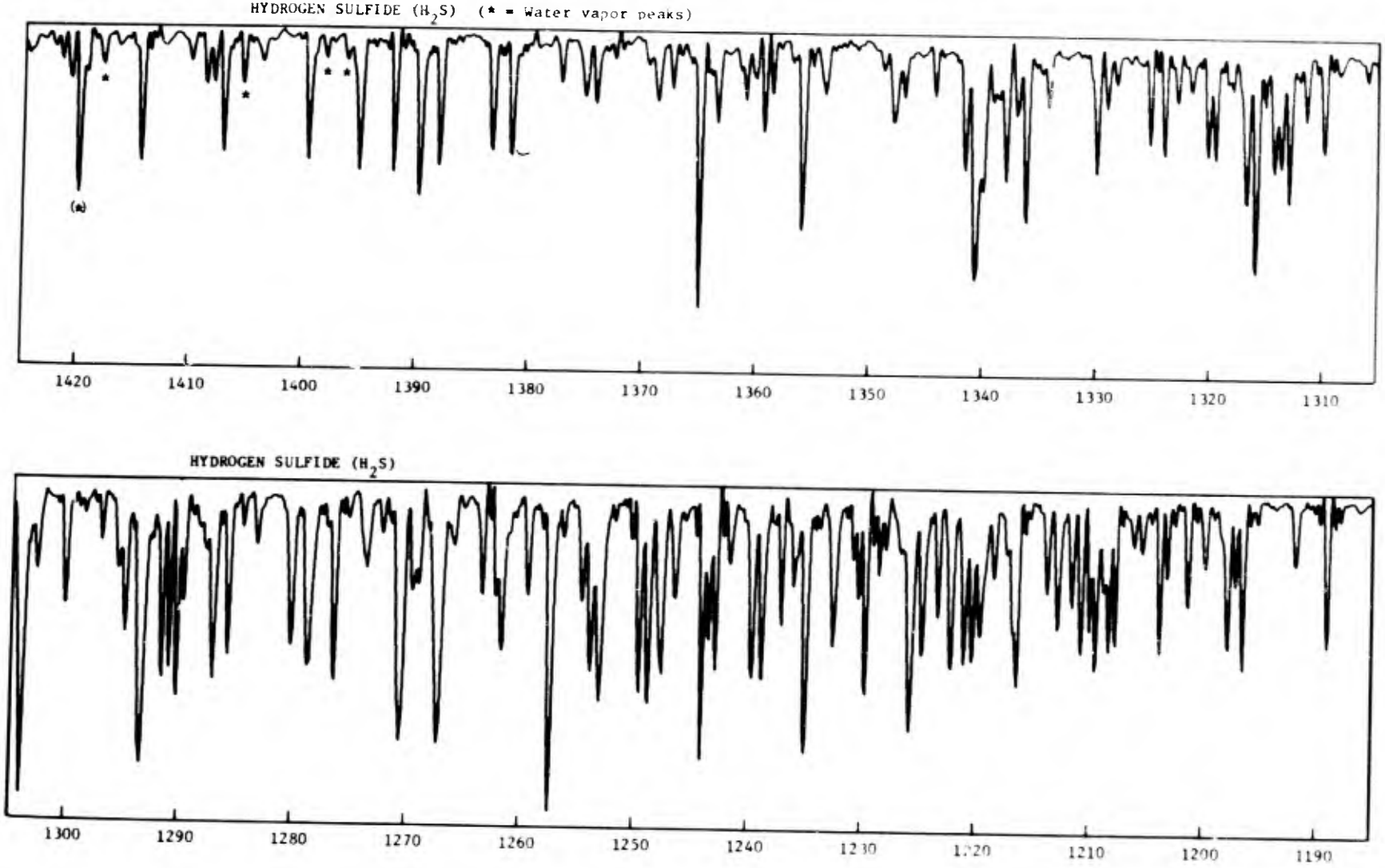
Spectrum 51


ETHYLENE (C_2H_4)
1490
1480
1470
1460
1450
1440
1430
1420
1410
1400
1390

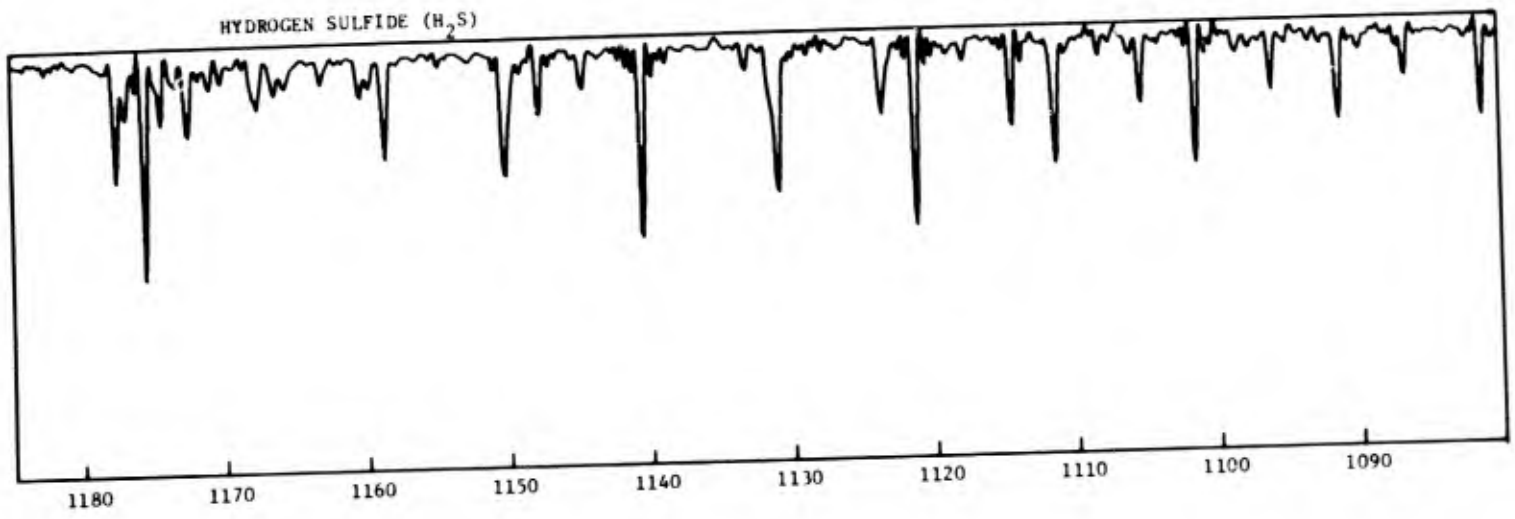
Spectrum 52


ACETALDEHYDE (CH_3CHO)
1490
1480
1470
1460
1450
1440
1430
1420
ACETALDEHYDE (CH_3CHO)
1410
1400
1390
1380
1370
1360
1350
1340

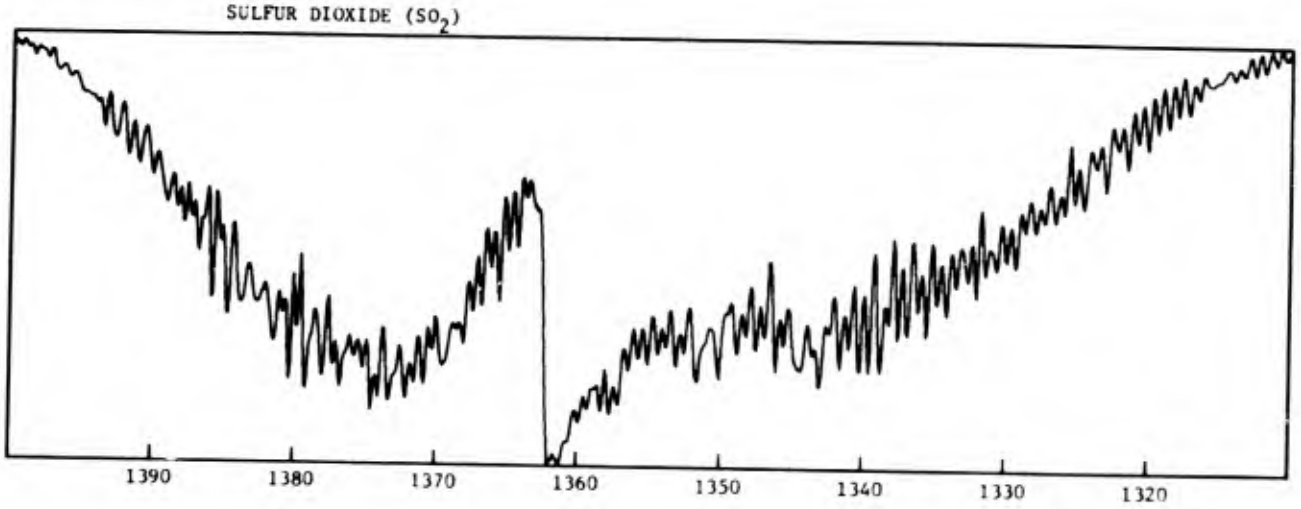
Spectrum 53


HYDROGEN SULFIDE (H_2S) (* = Water vapor peaks)
(a)
1420
1410
1400
1390
1380
1370
1360
1350
1340
1330
1320
1310
HYDROGEN SULFIDE (H_2S)
1300
1290
1280
1270
1260
1250
1240
1230
1220
1210
1200
1190

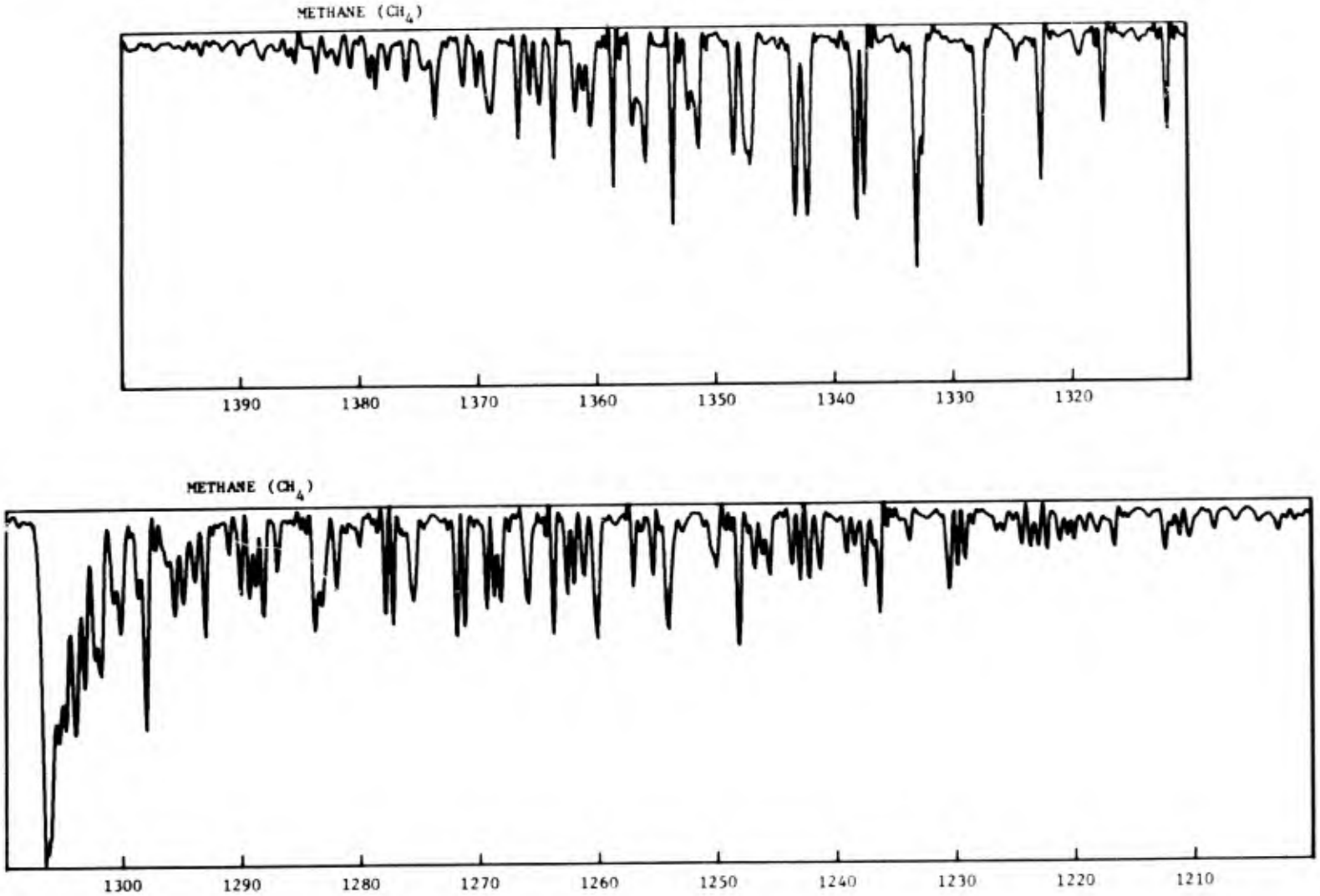
Spectrum 54


HYDROGEN SULFIDE (H_2S)
1180
1170
1160
1150
1140
1130
1120
1110
1100
1090

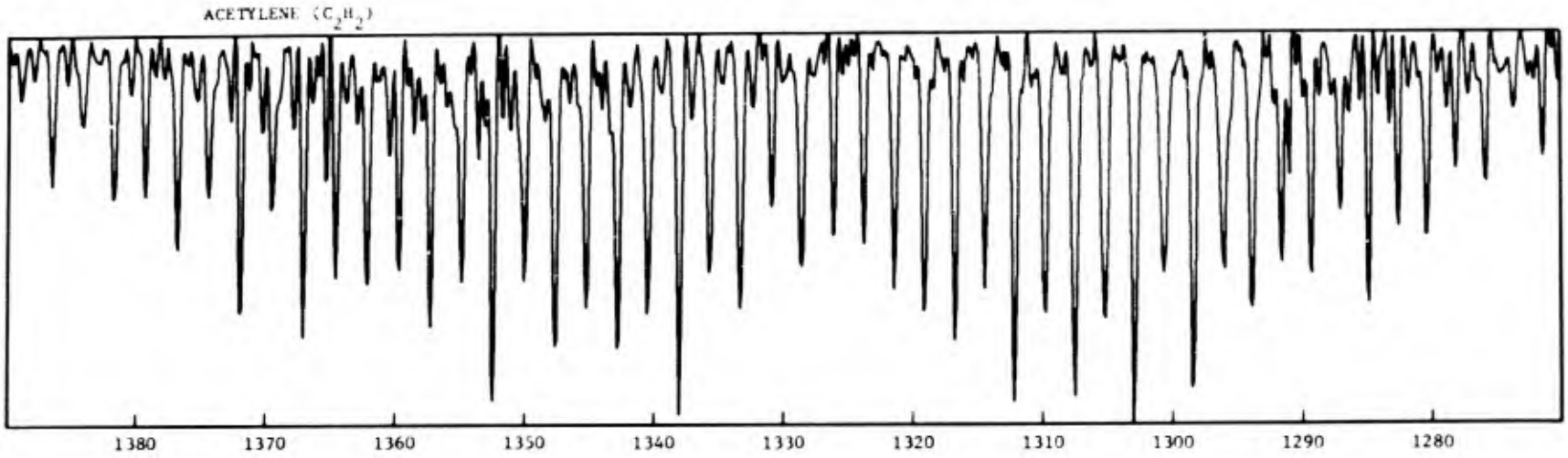
Spectrum 55



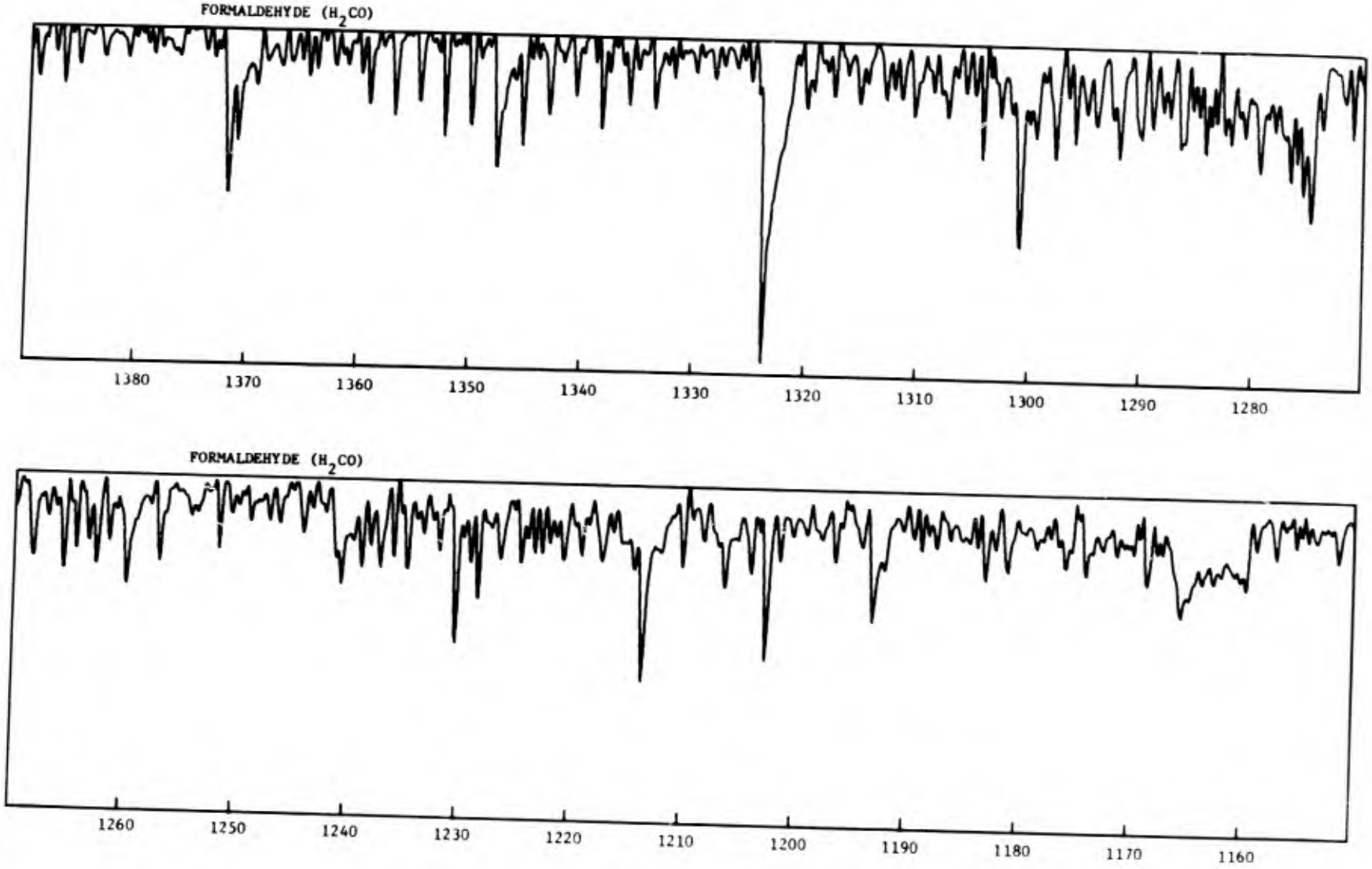
Spectrum 56


METHANE (CH_4)
1390
1380
1370
1360
1350
1340
1330
1320
METHANE (CH_4)
1300
1290
1280
1270
1260
1250
1240
1230
1220
1210

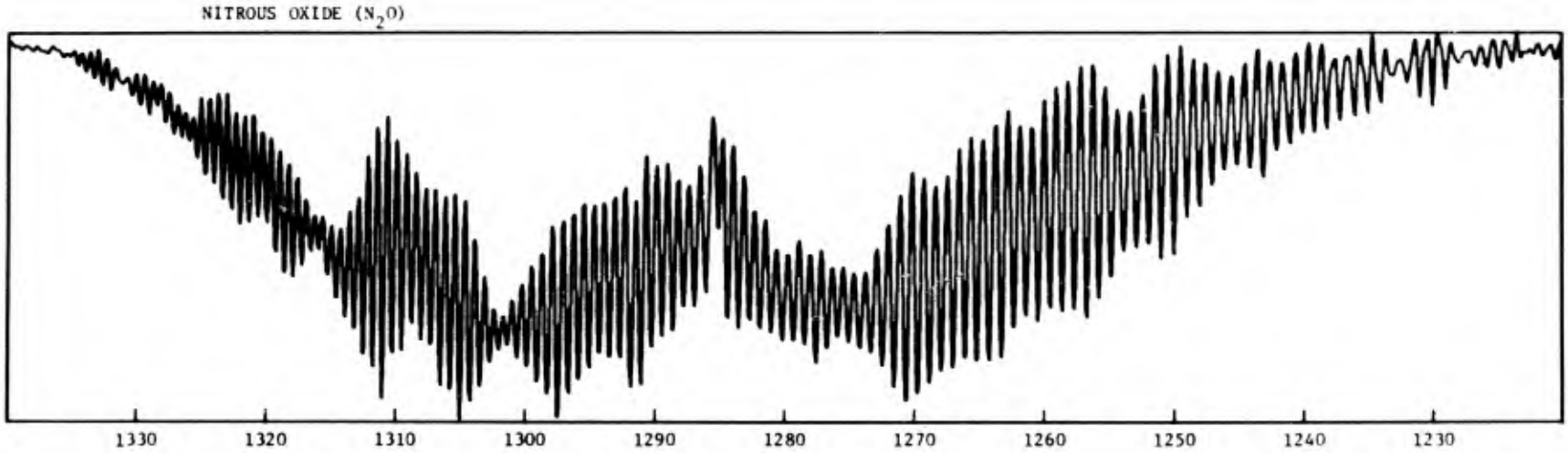
Spectrum 57


ACETYLENE (C_2H_2)
1380
1370
1360
1350
1340
1330
1320
1310
1300
1290
1280

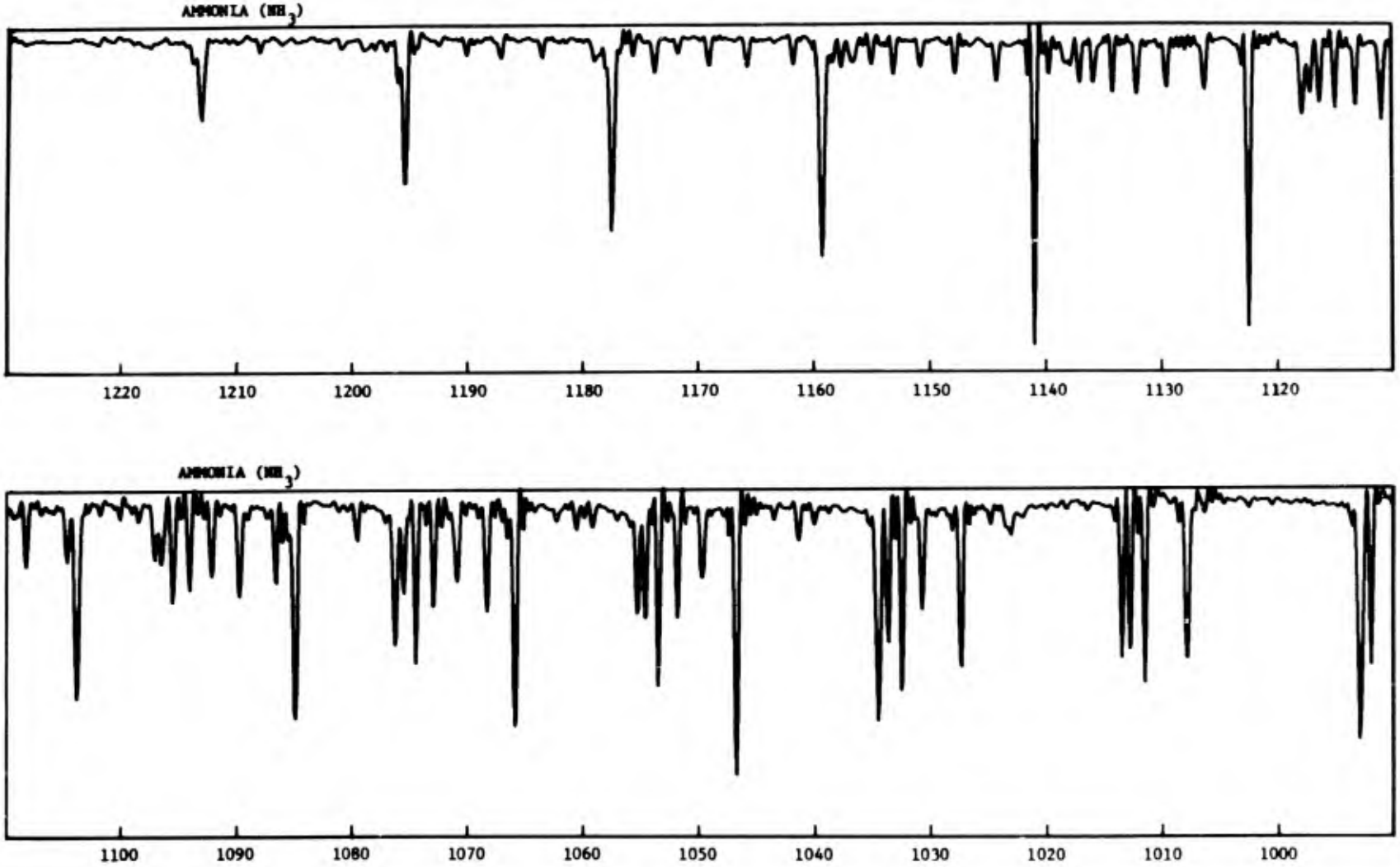
Spectrum 58


FORMALDEHYDE (H_2CO)
1380
1370
1360
1350
1340
1330
1320
1310
1300
1290
1280
FORMALDEHYDE (H_2CO)
1260
1250
1240
1230
1220
1210
1200
1190
1180
1170
1160

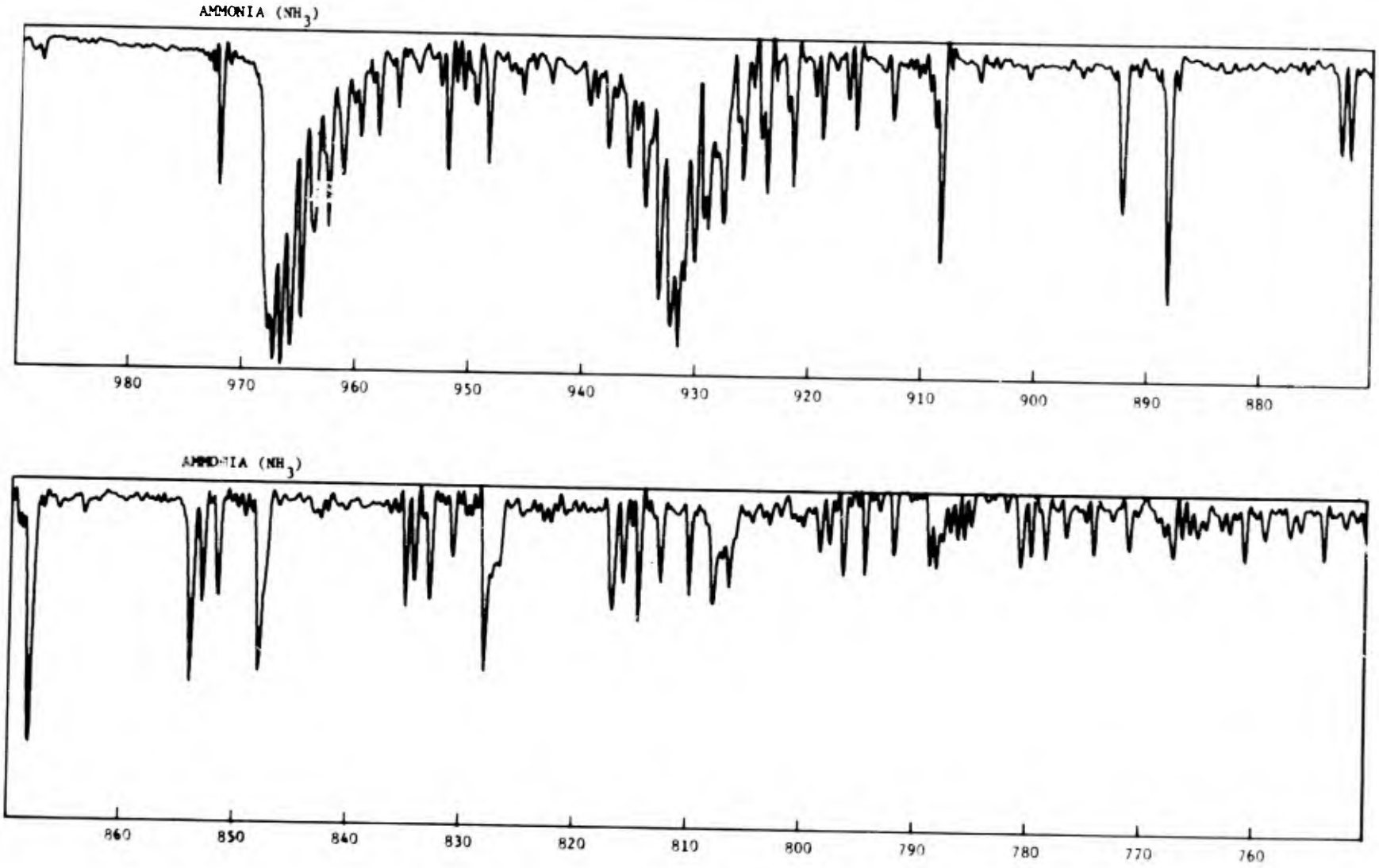
Spectrum 59


NITROUS OXIDE (N_2O)
1330
1320
1310
1300
1290
1280
1270
1260
1250
1240
1230

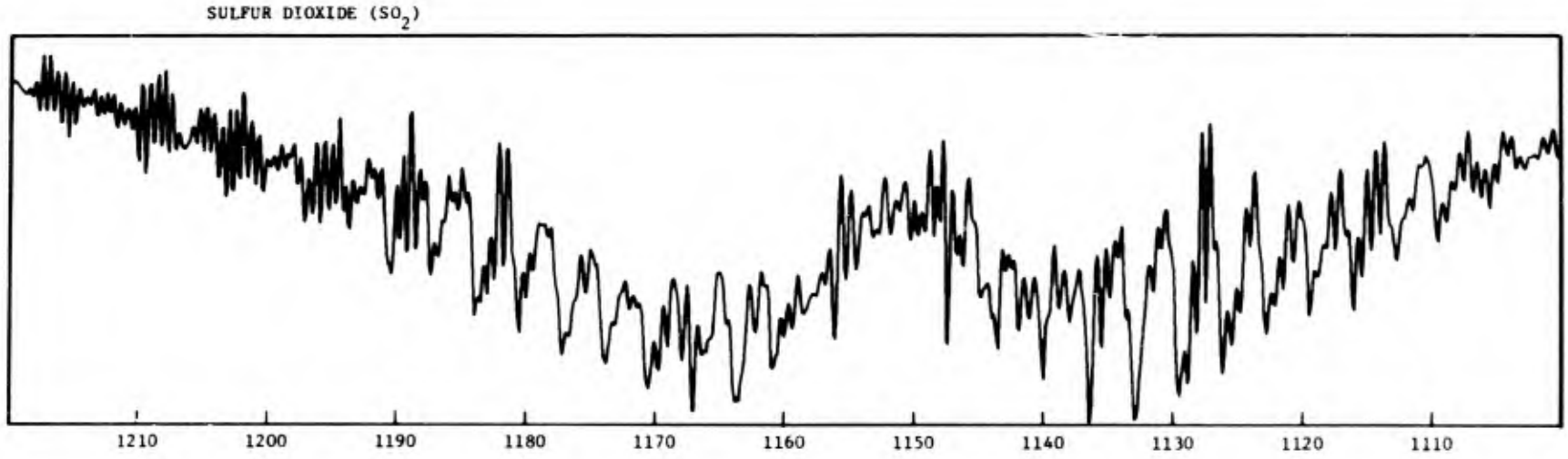
Spectrum 60


AMMONIA (NH_3)
1220
1210
1200
1190
1180
1170
1160
1150
1140
1130
1120
AMMONIA (NH_3)
1100
1090
1080
1070
1060
1050
1040
1030
1020
1010
1000

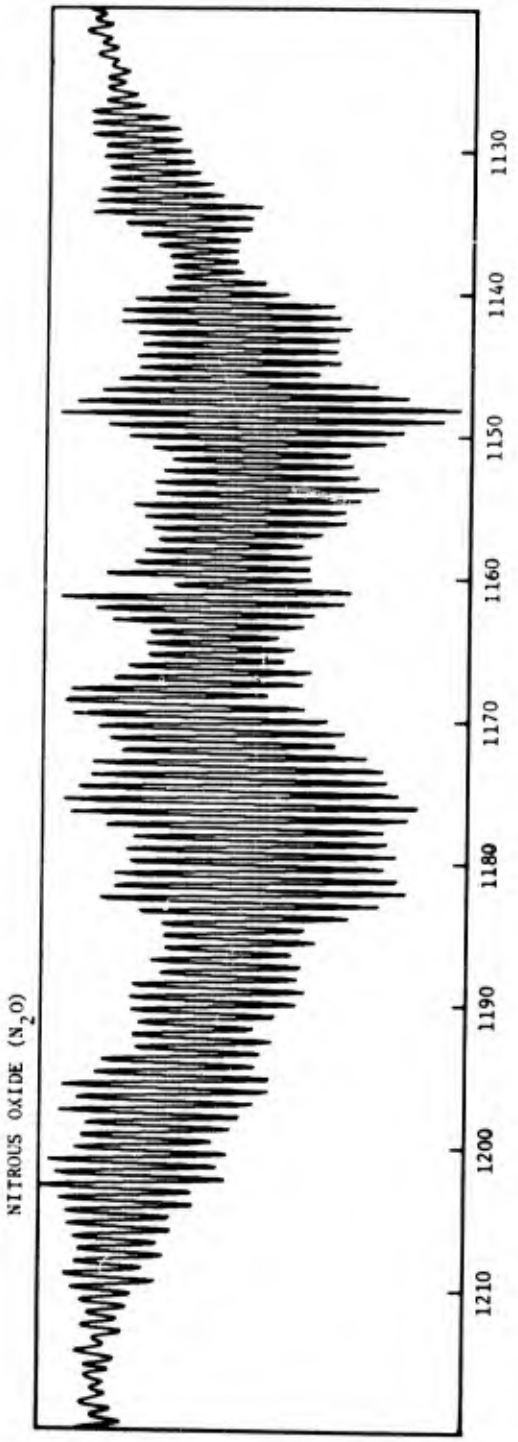
Spectrum 61


AMMONIA (NH_3)
980
970
960
950
940
930
920
910
900
890
880
AMMONIA (NH_3)
860
850
840
830
820
810
800
790
780
770
760

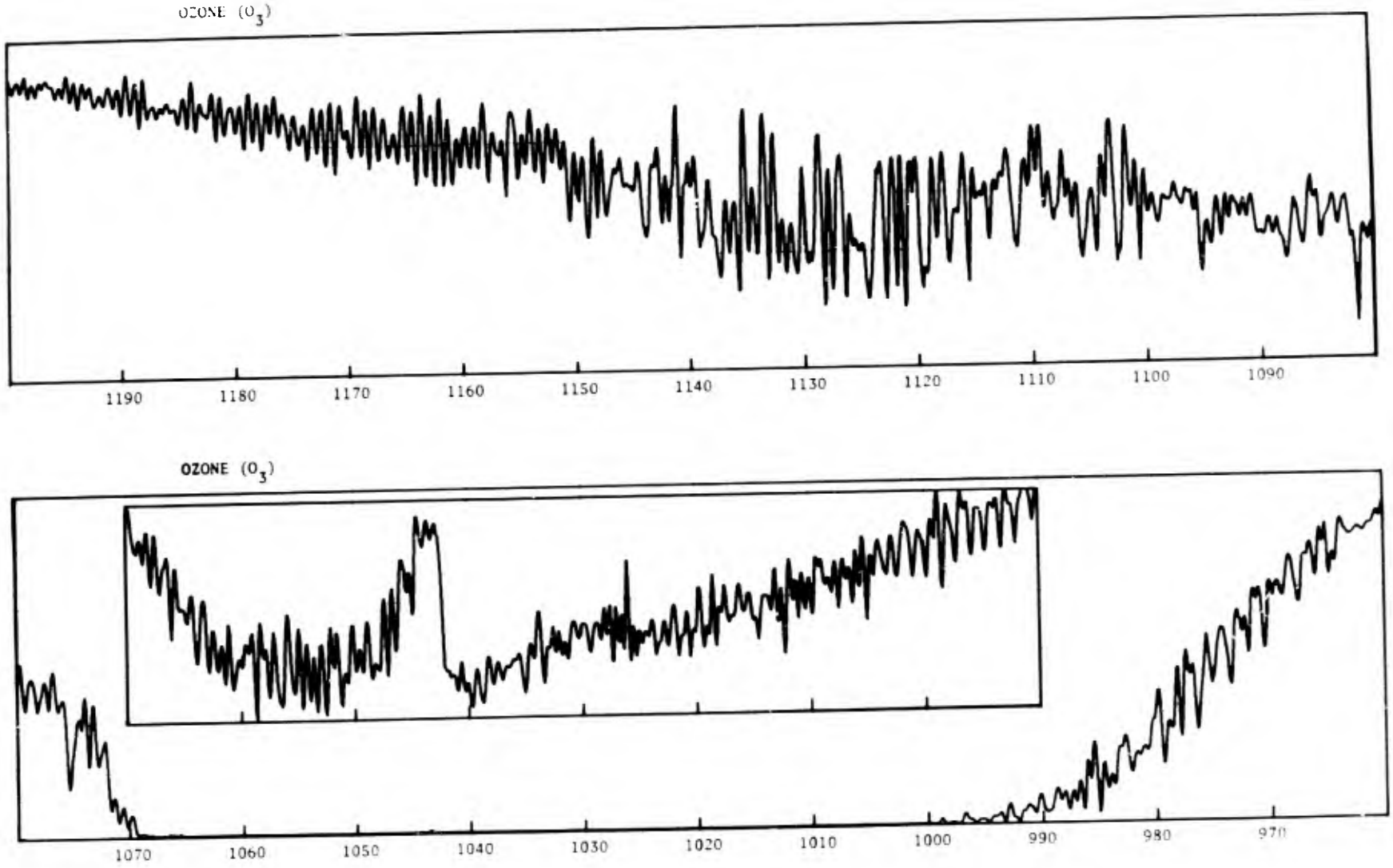
Spectrum 62


SULFUR DIOXIDE (SO_2)
1210
1200
1190
1180
1170
1160
1150
1140
1130
1120
1110

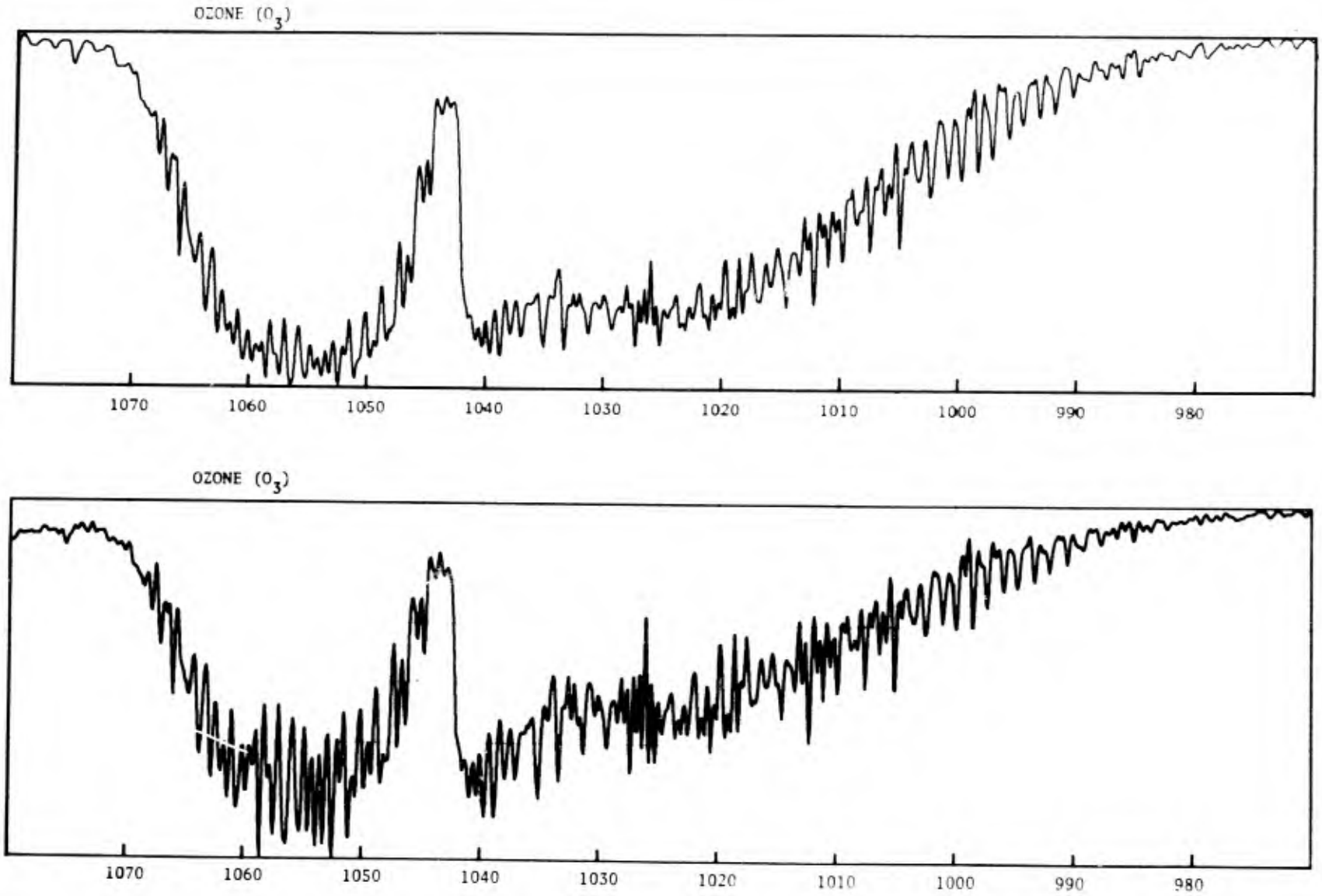
Spectrum 63


NITROUS OXIDE (N_2O)
1130
1140
1150
1160
1170
1180
1190
1200
1210

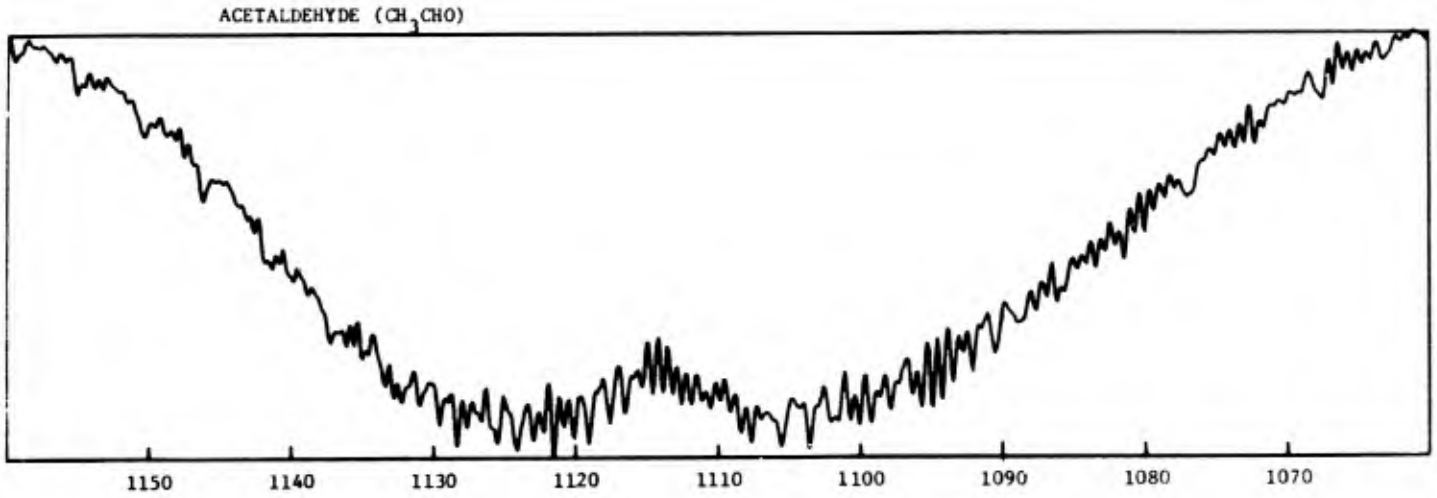
Spectrum 64


OZONE (O_3)
1190
1180
1170
1160
1150
1140
1130
1120
1110
1100
1090
OZONE (O_3)
1070
1060
1050
1040
1030
1020
1010
1000
990
980
970

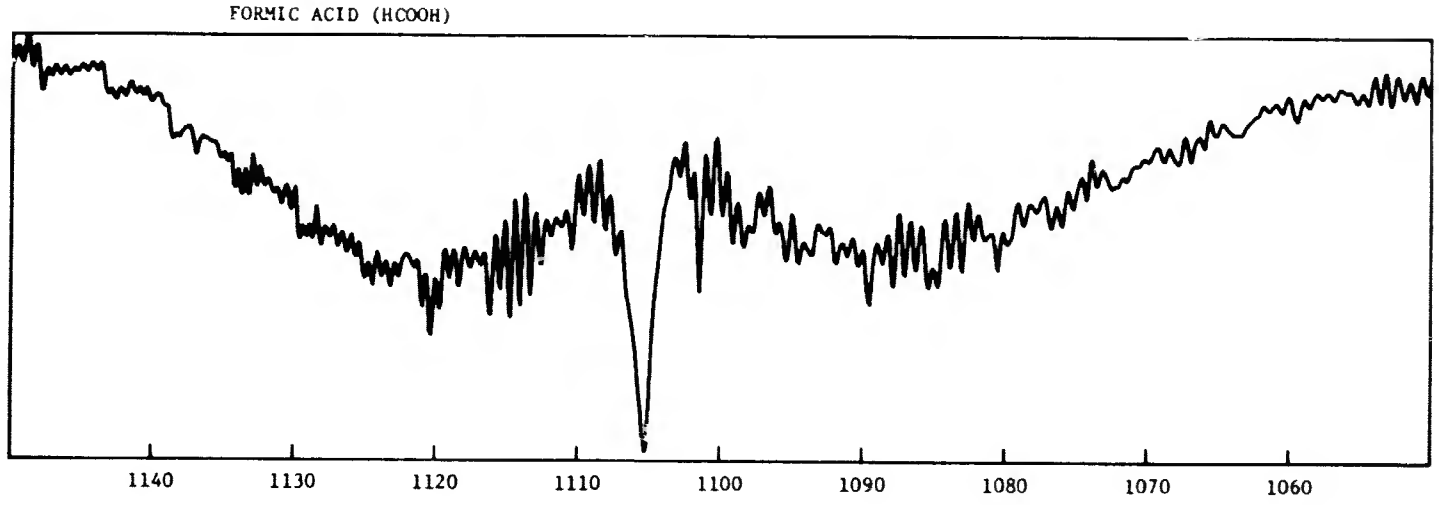
Spectrum 65


OZONE (O_3)
1070
1060
1050
1040
1030
1020
1010
1000
990
980
OZONE (O_3)
1070
1060
1050
1040
1030
1020
1010
1000
990
980

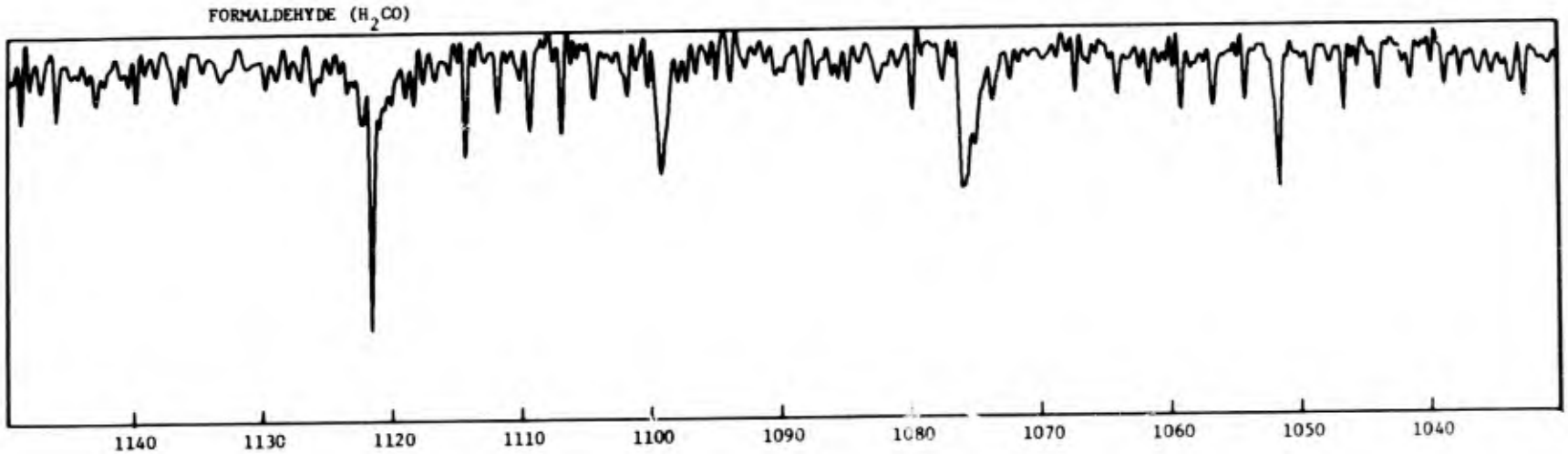
Spectrum 66


ACETALDEHYDE (CH_3CHO)
1150
1140
1130
1120
1110
1100
1090
1080
1070

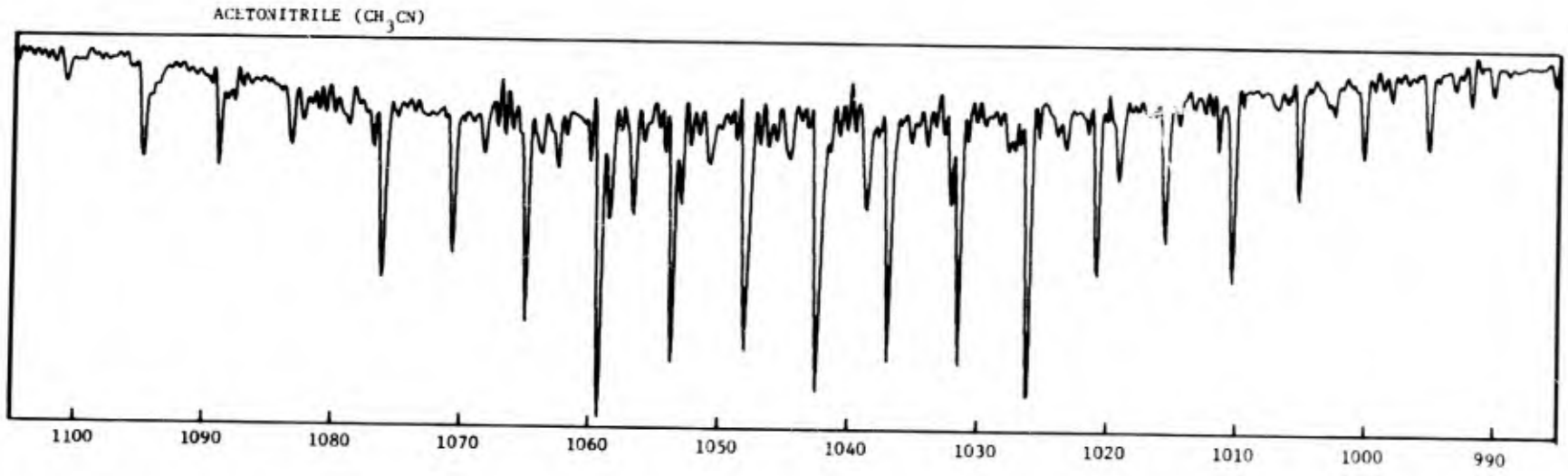
Spectrum 67


FORMIC ACID (HCOOH)
1140
1130
1120
1110
1100
1090
1080
1070
1060

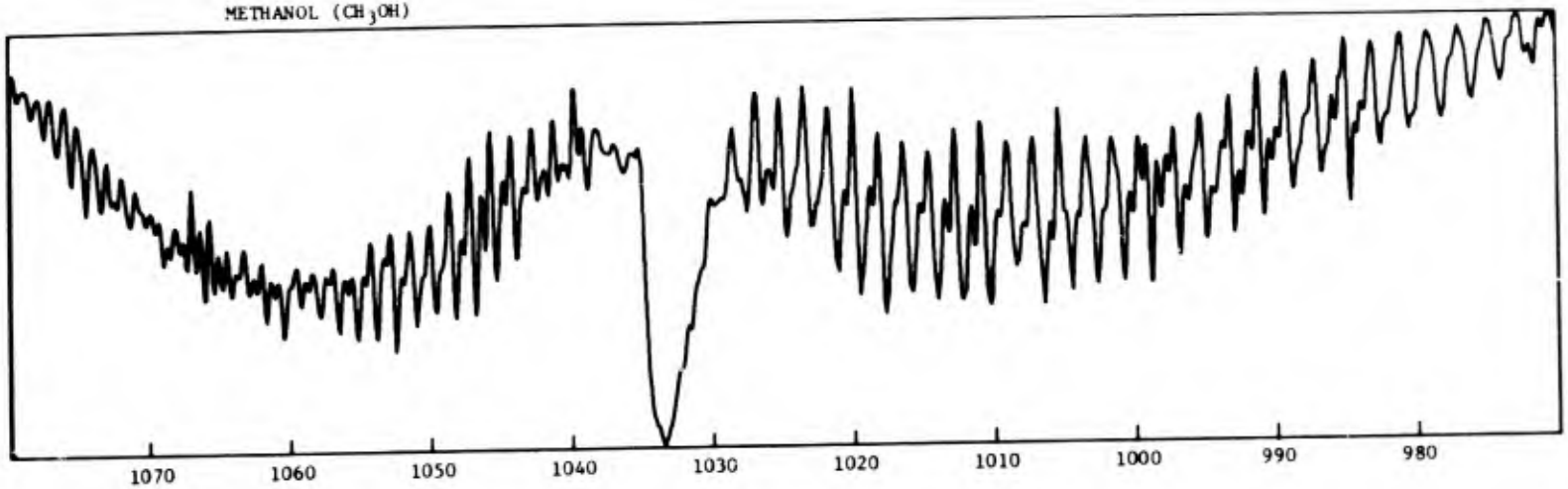
Spectrum 68


FORMALDEHYDE (H_2CO)
1140
1130
1120
1110
1100
1090
1080
1070
1060
1050
1040

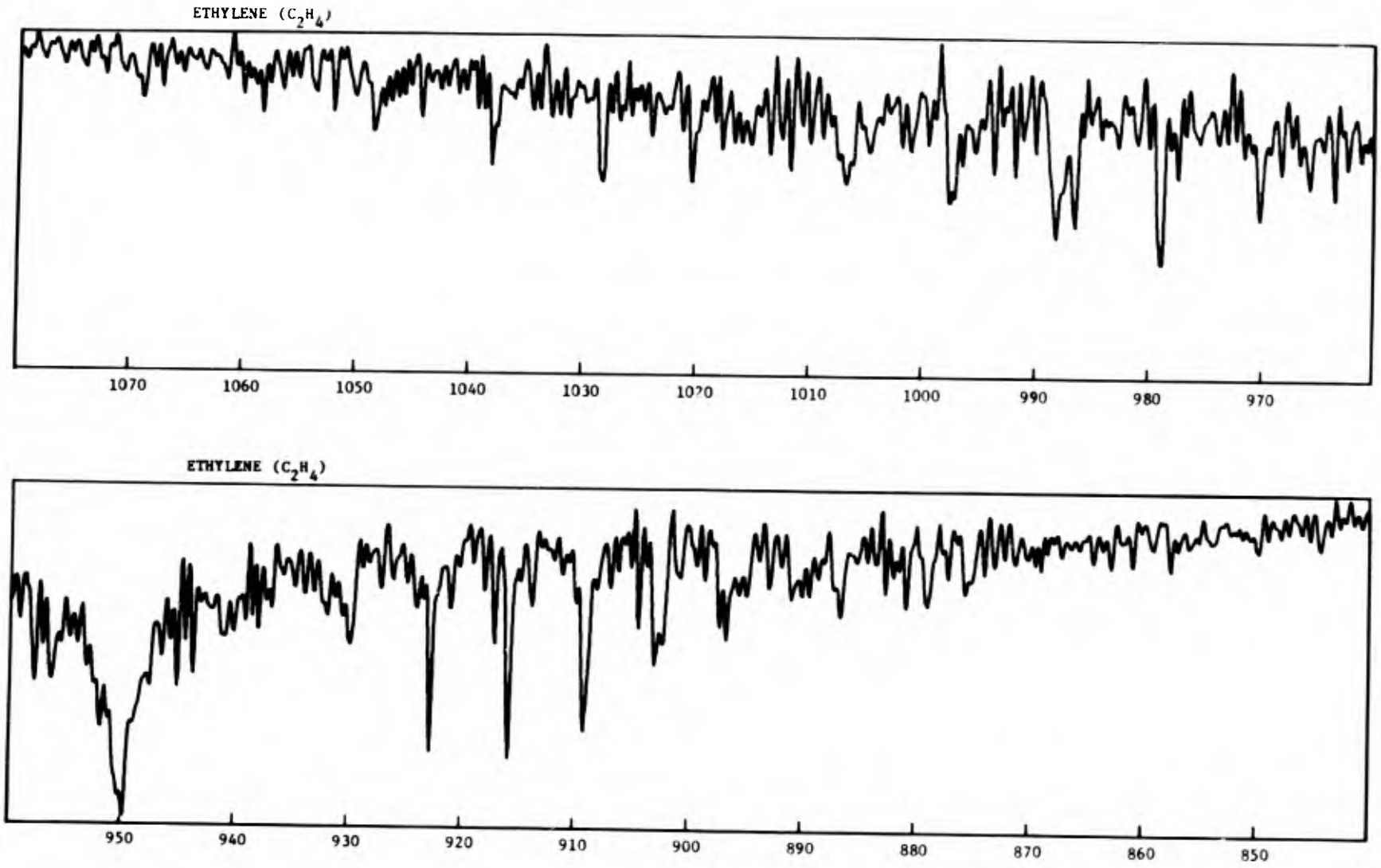
Spectrum 69


ACETONITRILE (CH_3CN)
1100
1090
1080
1070
1060
1050
1040
1030
1020
1010
1000
990

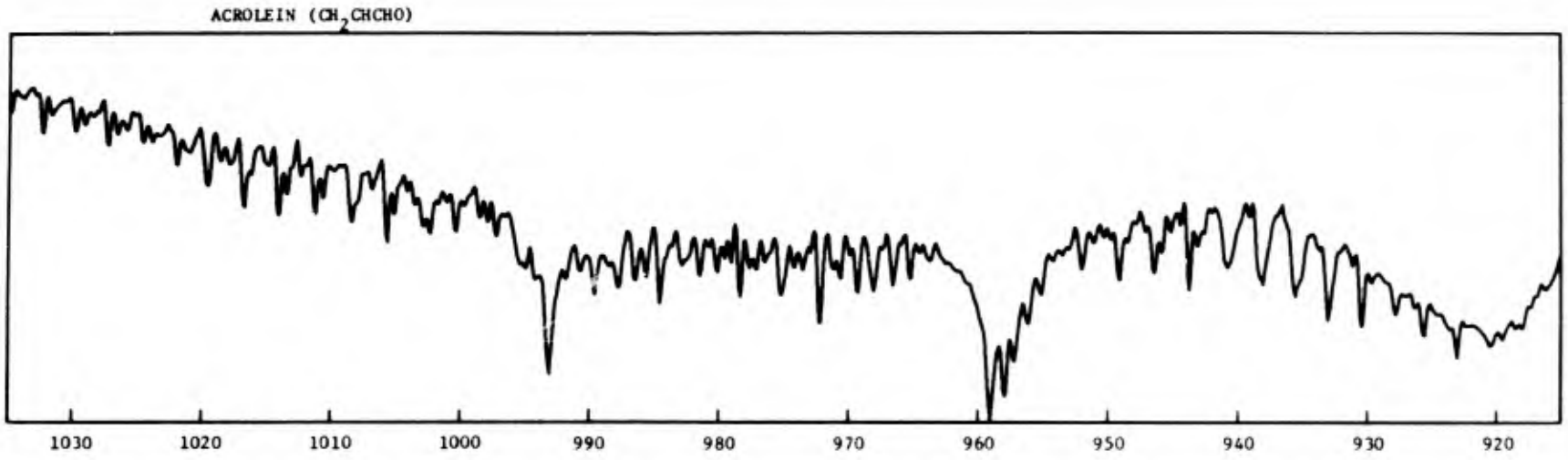
Spectrum 70


METHANOL (CH_3OH)
1070
1060
1050
1040
1030
1020
1010
1000
990
980

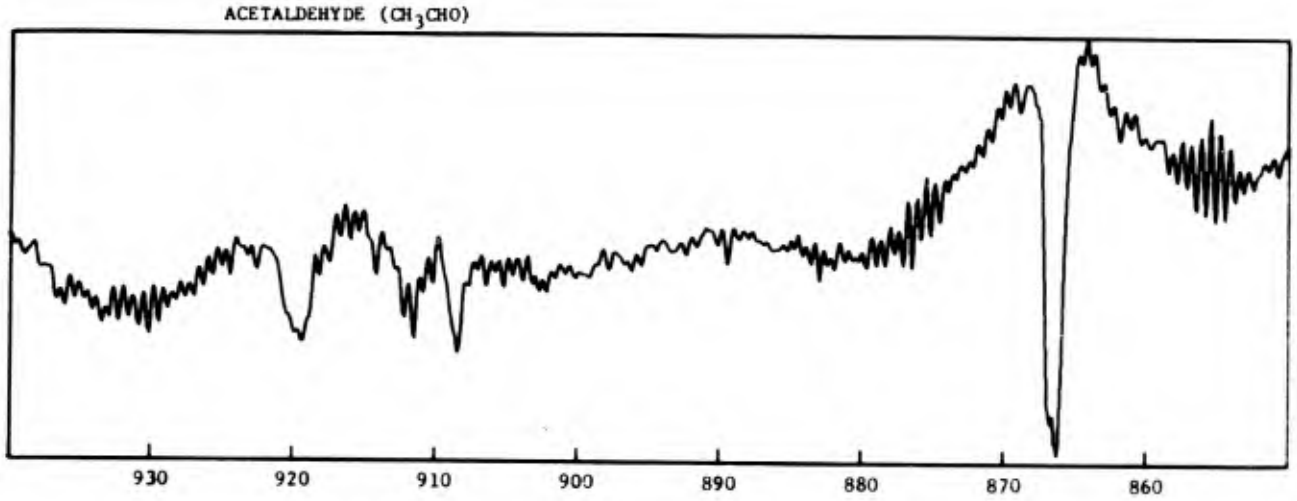
Spectrum 71


ETHYLENE (C_2H_4)
1070
1060
1050
1040
1030
1020
1010
1000
990
980
970
ETHYLENE (C_2H_4)
950
940
930
920
910
900
890
880
870
860
850

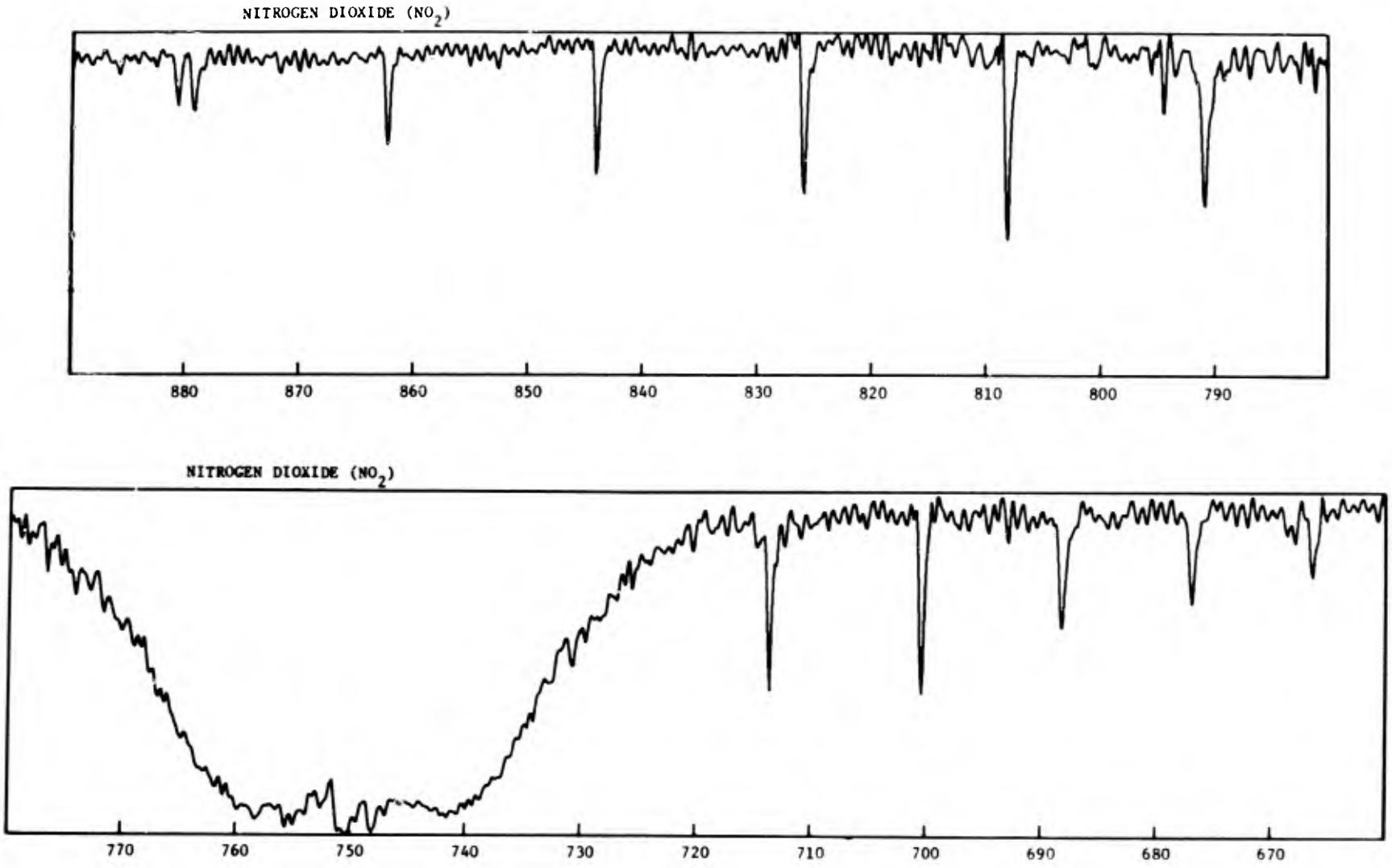
Spectrum 72


ACROLEIN (CH_2CHCHO)
1030
1020
1010
1000
990
980
970
960
950
940
930
920

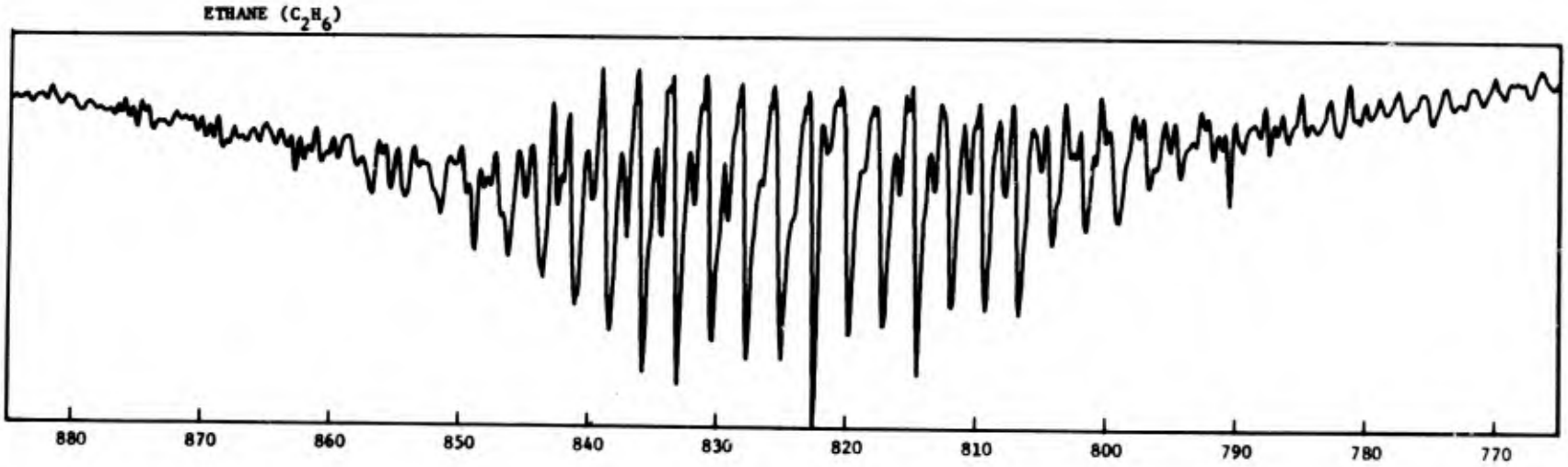
Spectrum 73



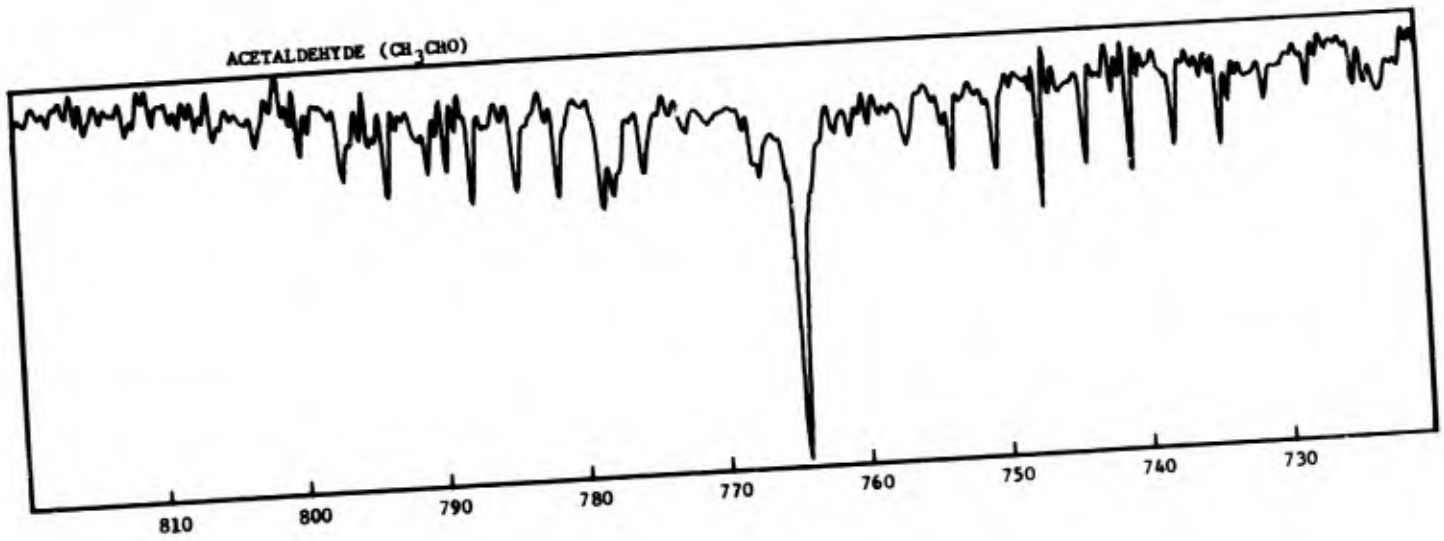
Spectrum 74


NITROGEN DIOXIDE (NO_2)
880
870
860
850
840
830
820
810
800
790
NITROGEN DIOXIDE (NO_2)
770
760
750
740
730
720
710
700
690
680
670

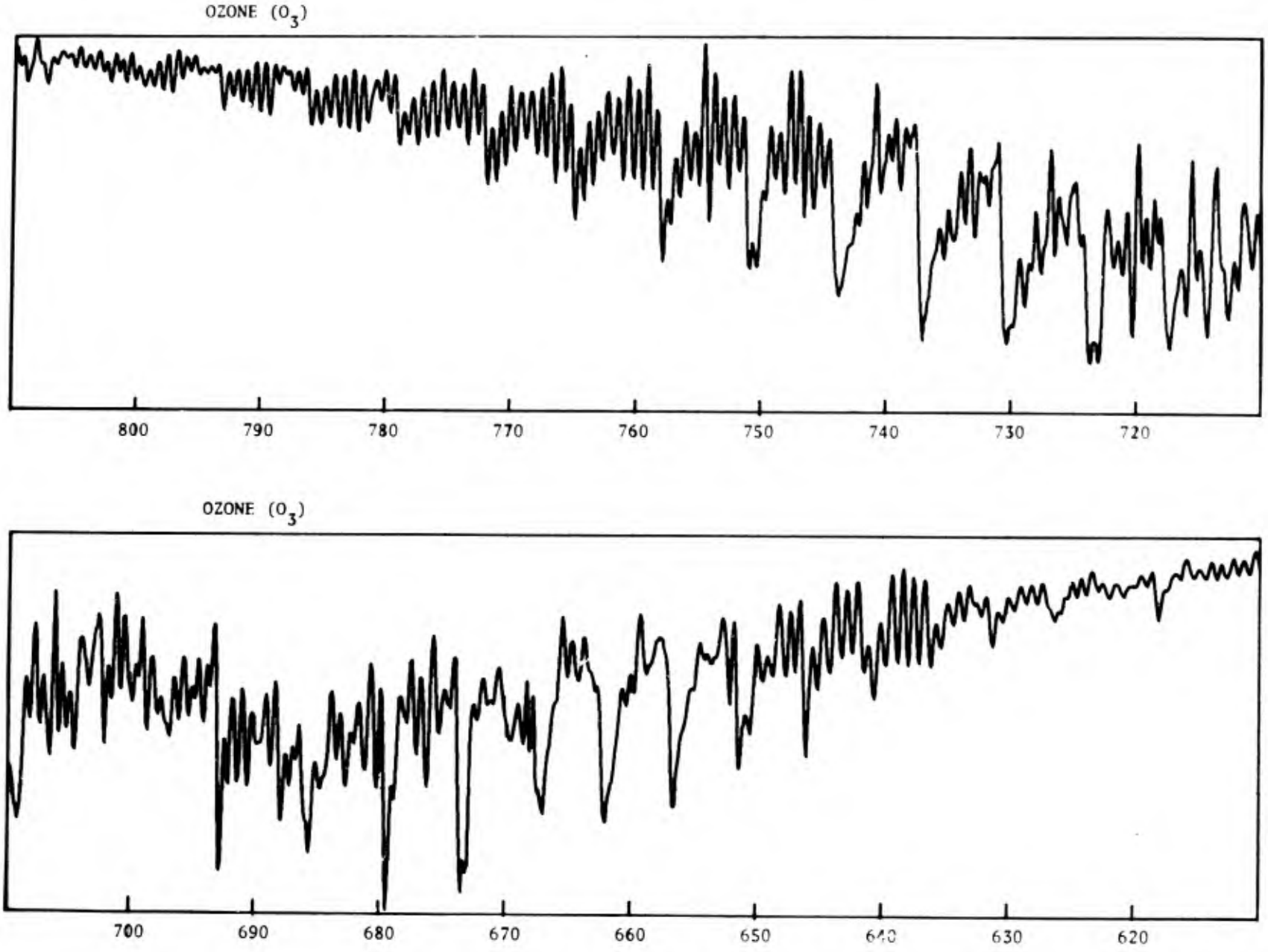
Spectrum 75



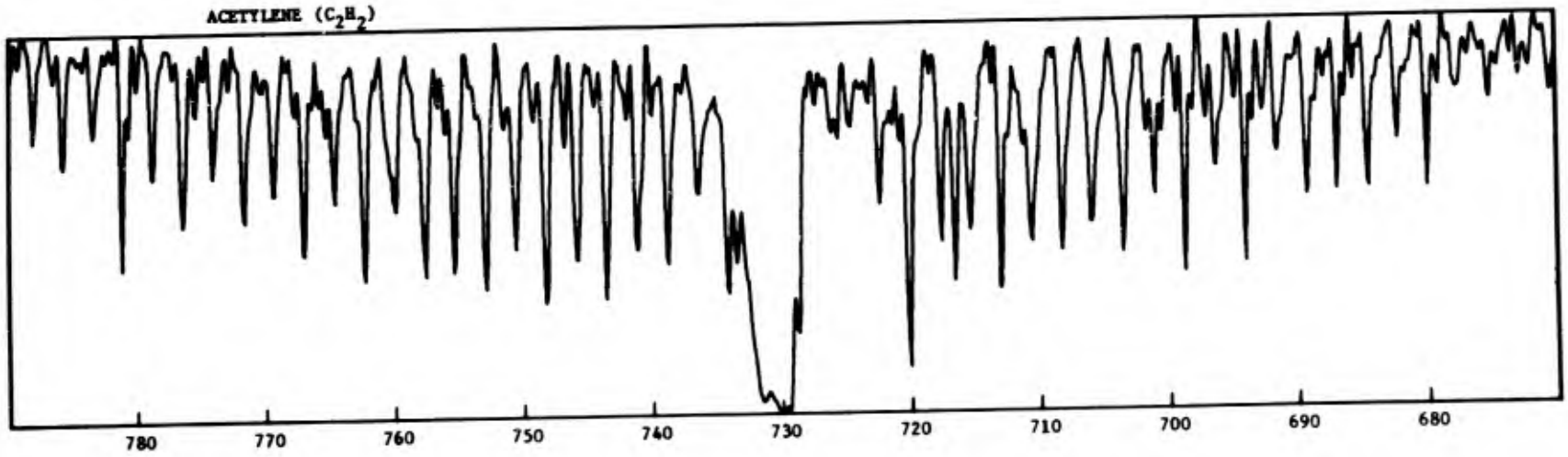
Spectrum 76



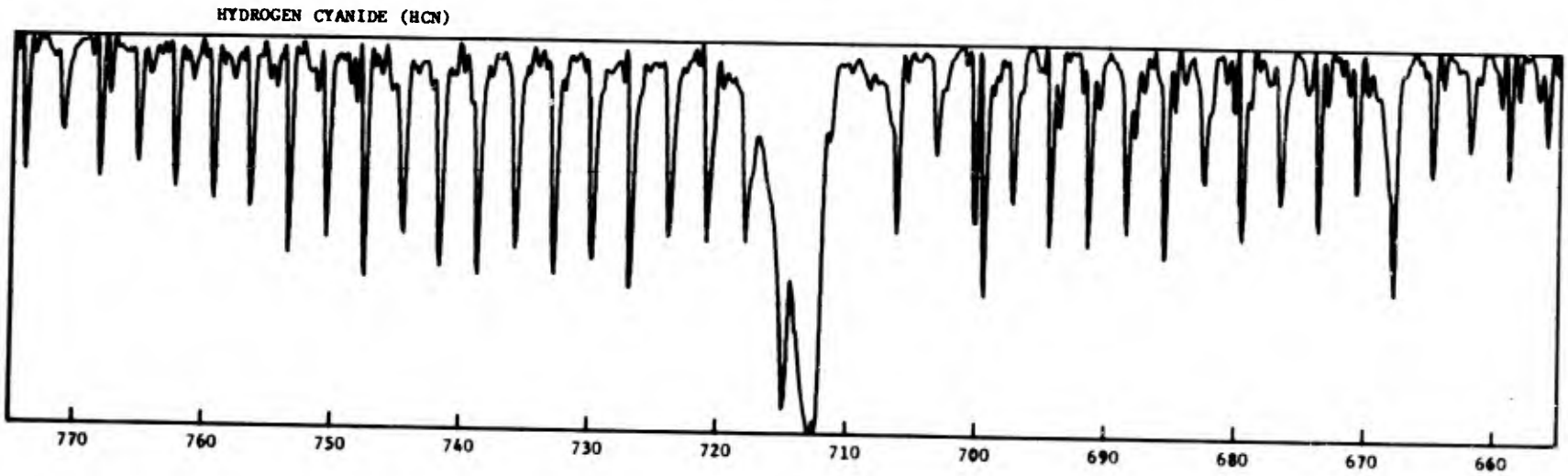
Spectrum 77


OZONE (O_3)
800
790
780
770
760
750
740
730
720
OZONE (O_3)
700
690
680
670
660
650
640
630
620

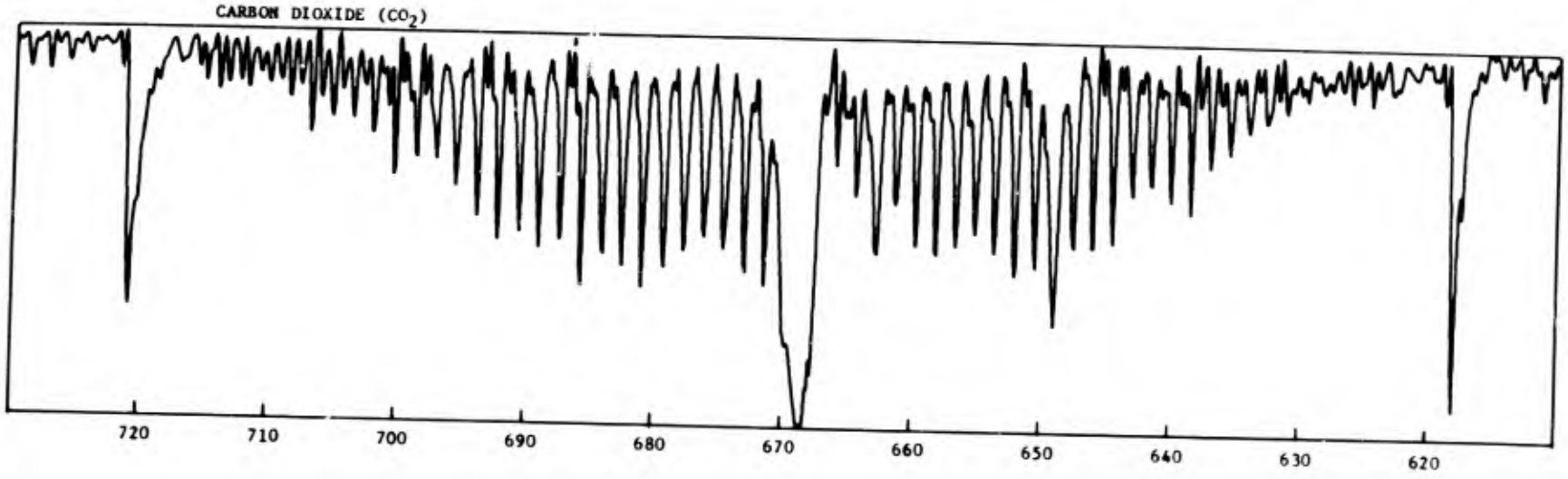
Spectrum 78



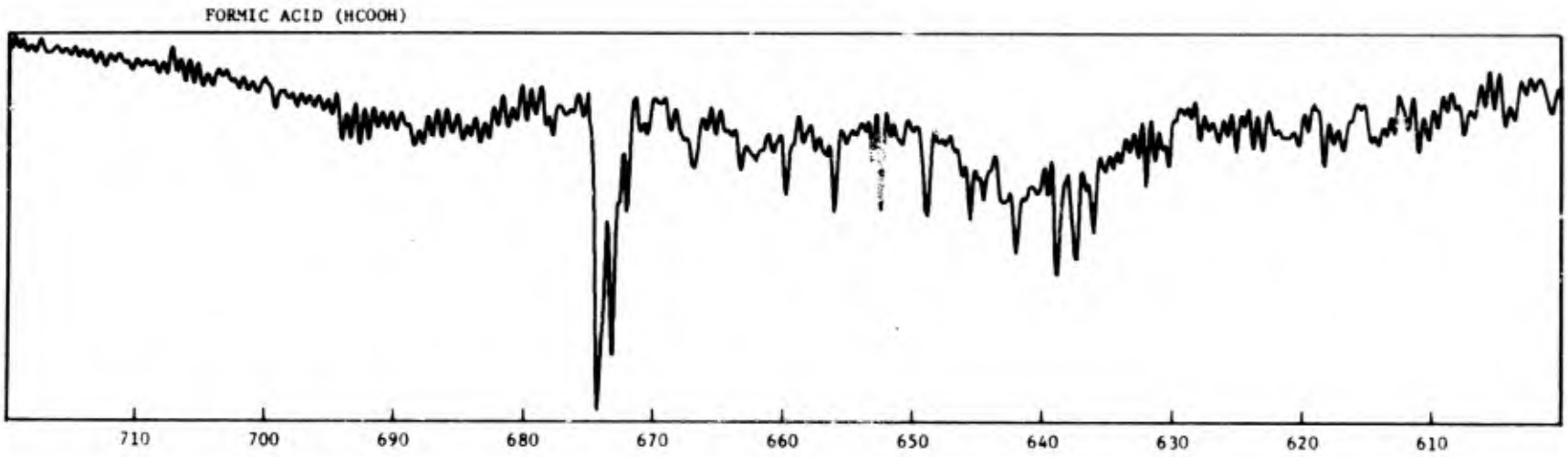
Spectrum 79


HYDROGEN CYANIDE (HCN)
770
760
750
740
730
720
710
700
690
680
670
660

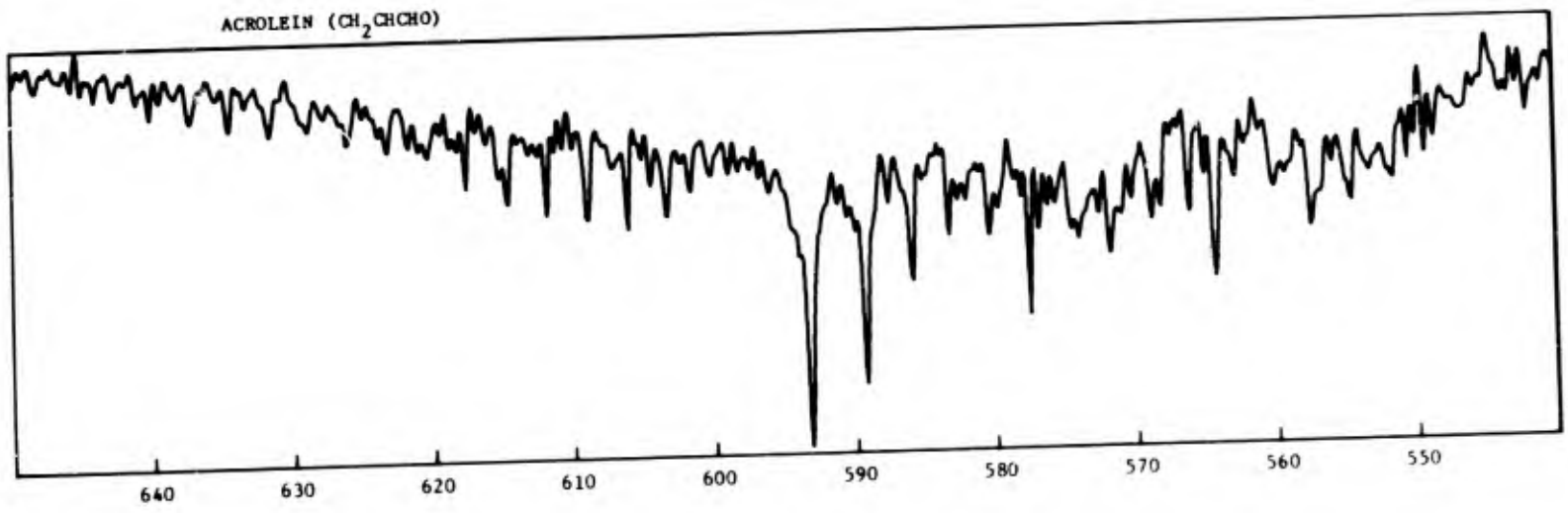
Spectrum 80



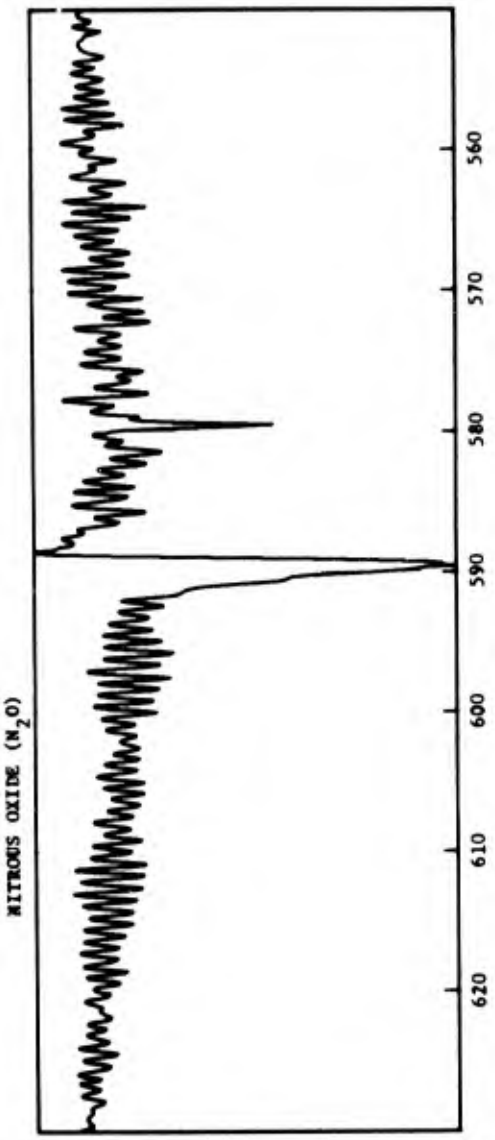
Spectrum 81



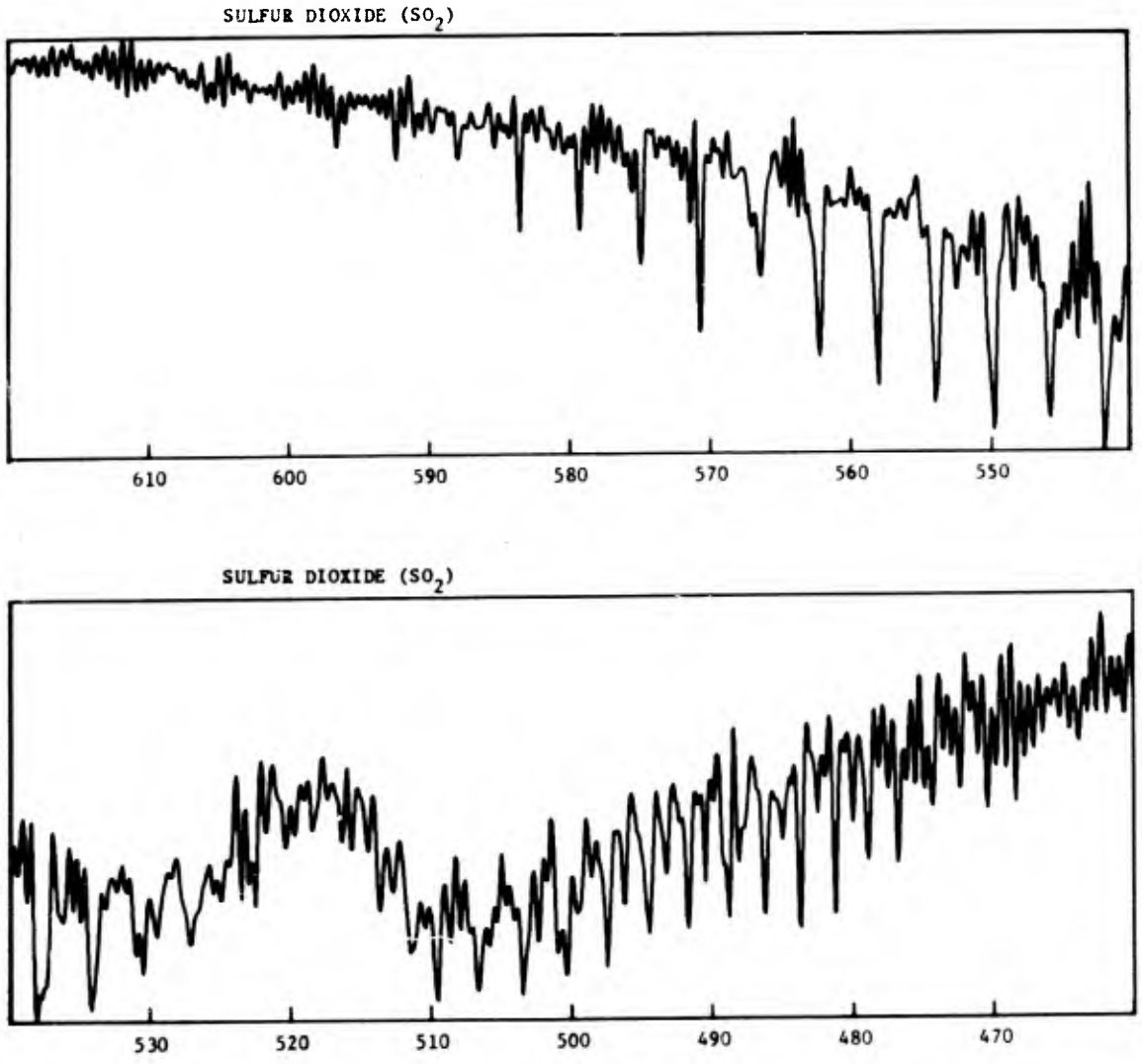
Spectrum 82



Spectrum 83



Spectrum 84


SULFUR DIOXIDE (SO_2)
610
600
590
580
570
560
550
SULFUR DIOXIDE (SO_2)
530
520
510
500
490
480
470

Spectrum 85

REFERENCES

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INDEX OF SPECTRA BY DECREASING UPPER BOUND OF SPECTRAL SEGMENT PLOTTED

COMPOUND	RANGE (cm^{-1})	SPECTRUM NO.
Hydrogen Sulfide (H_2S)	3900-3670	1
	3670-3580	2
Water (H_2O)	3900-3660	3
	3660-3420	4
Nitric Oxide (NO)	3770-3650	5
Carbon Dioxide (CO_2)	3760-3550	6
Formic Acid (HCOOH)	3620-3500	7
Ammonia (NH_3)	3550-3350	8
	3550-3150	9
Formaldehyde (H_2CO)	3530-3420	10
Nitrous Oxide (N_2O)	3520-3320	11
Hydrogen Cyanide (HCN)	3410-3210	12
Acetylene (C_2H_2)	3380-3190	13
Ethylene (C_2H_4)	3260-3040	14
	3040-2930	15
Methane (CH_4)	3195-2965	16
	2965-2850	17
Acetonitrile (CH_3CN)	3140-2920	18
Ozone (O_3)	3100-2980	19
Hydrogen Chloride (HCL)	3100-2620	20
Ethane (C_2H_6)	3080-2840	21
Methanol (CH_3OH)	3040-2820	22
Formic Acid (HCOOH)	3005-2885	23
Formaldehyde (H_2CO)	2970-2730	24
Nitrogen Dioxide (NO_2)	2940-2840	25
Hydrogen Cyanide (HCN)	2865-2745	26
Acrolein (CH_2CHCHO)	2860-2650	27
Nitrous Oxide (N_2O)	2830-2505	28
Ozone (O_3)	2820-2720	29
Hydrogen Sulfide (H_2S)	2770-2620	30
Sulfur Dioxide (SO_2)	2530-2455	31
Nitrous Oxide (N_2O)	2505-2140	32
Carbon Dioxide (CO_2)	2400-2280	33
Carbon Monoxide (CO)	2240-2020	34
Ozone (O_3)	2150-2040	35

COMPOUND	RANGE(cm^{-1})	SPECTRUM NO.
Methanol (CH_3OH)	2090-1990	36
Water (H_2O)	2080-1720	37
	1720-1480	38
	1480-1250	39
Nitric Oxide (NO)	1970-1770	40
Ethylene (C_2H_4)	1945-1825	41
Ammonia (NH_3)	1830-1590	42
	1590-1390	43
Formic Acid (HCOOH)	1820-1710	44
Formaldehyde (H_2CO)	1805-1685	45
Acetaldehyde (CH_3CHO)	1780-1720	46
Acrolein (CH_2CHCHO)	1780-1680	47
Nitrogen Dioxide (NO_2)	1660-1550	48
Acetonitrile (CH_3CN)	1590-1350	49
Ethane (C_2H_6)	1590-1350	50
Formaldehyde (H_2CO)	1560-1440	51
Ethylene (C_2H_4)	1500-1380	52
Acetaldehyde (CH_3CHO)	1500-1330	53
Hydrogen Sulfide (H_2S)	1425-1185	54
	1185-1080	55
Sulfur Dioxide (SO_2)	1400-1310	56
Methane (CH_4)	1400-1200	57
Acetylene (C_2H_2)	1390-1270	58
Formaldehyde (H_2CO)	1390-1150	59
Nitrous Oxide (N_2O)	1340-1220	60
Ammonia (NH_3)	1230-990	61
	990-750	62
Sulfur Dioxide (SO_2)	1220-1100	63
Nitrous Oxide (N_2O)	1220-1120	64
Ozone (O_3)	1200-960	65
	1080-970	66
Acetaldehyde (CH_3CHO)	1160-1060	67
Formic Acid (HCOOH)	1150-1050	68
Formaldehyde (H_2CHO)	1150-1030	69
Acetonitrile (CH_3CN)	1105-985	70

COMPOUND	RANGE (cm^{-1})	SPECTRUM NO.
Methanol (CH_3OH)	1080-970	71
Ethylene (C_2H_4)	1080-840	72
Acrolein (CH_2CHCHO)	1035-915	73
Acetaldehyde (CH_3CHO)	940-850	74
Nitrogen Dioxide (NO_2)	890-660	75
Ethane (C_2H_6)	885-765	76
Acetaldehyde (CH_3CHO)	820-720	77
Ozone (O_3)	810-610	78
Acetylene (C_2H_2)	790-670	79
Hydrogen Cyanide (HCN)	775-655	80
Carbon Dioxide (CO_2)	730-610	81
Formic Acid (HCOOH)	720-600	82
Acrolein (CH_2CHCHO)	650-540	83
Nitrous Oxide (N_2O)	630-550	84
Sulfur Dioxide (SO_2)	620-460	85

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INDEX OF SPECTRA BY COMPOUND

COMPOUND	RANGE(cm^{-1})	SPECTRUM NO.
Acetaldehyde (CH_3CHO)	1780-1720	46
	1500-1330	53
	1160-1060	67
	940-850	74
	820-720	77
Acetonitrile (CH_3CN)	3140-2920	18
	1590-1350	49
	1105-985	70
Acetylene (C_2H_2)	3380-3190	13
	1390-1270	58
	790-670	79
Acrolein (CH_2CHCHO)	2860-2650	27
	1780-1680	47
	1035-915	73
	650-540	83
Ammonia (NH_3)	3550-3350	8
	3350-3150	9
	1830-1590	42
	1590-1390	43
	1230-990	61
	990-750	62
Carbon Dioxide (CO_2)	3760-3550	6
	2400-2280	33
	730-610	81
Carbon Monoxide (CO)	2240-2020	34
Ethane (C_2H_6)	3080-2840	21
	1590-1350	50
	885-765	76
Ethylene (C_2H_4)	3260-3040	14
	3040-2930	15
	1945-1825	41
	1500-1380	52
	1080-840	72
Formaldehyde (H_2CO)	3530-3420	10
	2970-2730	24
	1805-1685	45
	1560-1440	51
	1390-1150	59
	1150-1030	69

COMPOUND	RANGE(cm^{-1})	SPECTRUM NO.
Formic Acid (HCOOH)	3620-3500	7
	3005-2885	23
	1820-1710	44
	1150-1050	68
	720-600	82
Hydrogen Chloride (HCL)	3100-2620	20
Hydrogen Cyanide (HCN)	3410-3210	12
	2865-2745	26
	775-655	80
Hydrogen Sulfide (H_2S)	3900-3670	1
	3670-3580	2
	2770-2620	30
	1425-1185	54
	1185-1080	55
Methane (CH_4)	3195-2965	16
	2965-2850	17
	1400-1200	57
Methanol (CH_3OH)	3040-2820	22
	2090-1990	36
	1080-970	71
Nitric Oxide (NO)	3770-3650	5
	1970-1770	40
Nitrogen Dioxide (NO_2)	2940-2840	25
	1660-1550	48
	890-660	75
Nitrous Oxide (N_2O)	3520-3320	11
	2830-2505	28
	2505-2140	32
	1340-1220	60
	1220-1120	64
	630-550	84
Ozone (O_3)	3100-2980	19
	2820-2720	29
	2150-2040	35
	1200-960	65
	1080-970	66
	810-610	78

COMPOUND	RANGE(cm^{-1})	SPECTRUM NO.
Sulfur Dioxide (SO_2)	2530-2455	31
	1400-1310	56
	1220-1100	63
	620-460	85
Water (H_2O)	3900-3660	3
	3660-3420	4
	2080-1720	37
	1720-1480	38
	1480-1250	39

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