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INDUSTRIAL STACK EVALUATION USING A GROUND-BASED PASSIVE 3 TO 5 MICRON FOURIER TRANSFORM INFRARED SPECTROMETER

Roger J. Combs
Robert B. Knapp
Robert T. Kroutil

RESEARCH AND TECHNOLOGY DIRECTORATE

Mark J. Thomas

U.S. EPA Region VII
Kansas City, KS 66101

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Aberdeen Proving Ground, MD 21010-5424

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The approach for obtaining absorbance and transmittance spectra using a passive 3 to 5 micron Fourier transform infrared (FT-IR) spectrometer from two industrial stacks is documented. Independent knowledge of the stack plume temperature is key to generation of the single-beam spectral ratio of differences that allows removal of instrumental effects from the absorbance and transmittance spectra. The empirical results are illustrated for two types of industrial stack in the form of summary graphs and tables. Appendixes in this report supply representative spectral data that is acquired with the 3 to 5 micron passive FT-IR spectrometer. Target plume constituents of sulfur dioxide, carbon dioxide, and nitrous oxide are discussed.

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PREFACE

The work described in this report was authorized under Project No. 20150/CB2, Exploratory Development. The work was started in May 2000 and completed in November 2000.

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INDUSTRIAL STACK EVALUATION USING A GROUND-BASED PASSIVE 3 TO 5 MICRON FOURIER TRANSFORM INFRARED SPECTROMETER

1. INTRODUCTION

Vapor detection with a passive 3 to 5 micron Fourier transform infrared (FT-IR) spectrometry depends upon a radiance differential between the target plume and background. For a ground-based FT-IR spectrometer viewing an elevated temperature effluent from an industrial stack against a cold sky background, the radiance differential is significant in the 3 to 5 micron spectral region. A clear sky background furnishes a larger differential than a cloudy sky. During the two days of plume monitoring, the spectral measurements are obtained with a clear sky background.

Obtaining quantitative absorbance spectra from the target stack with a passive FT-IR spectrometer requires a knowledge of the effluent plume temperature and the evaluation the FT-IR spectrometer's spectroradiometric characteristics. Evaluating the FT-IR spectrometer's responsivity and self-emission terms (i.e., gain and offset)[1] demands the use of a controlled blackbody radiation source. This source must fill the sensor field of view (FOV) and furnish at least two radiance values that fall within the linear response range of the sensor. Therefore, the minimum number of spectra, which is four, allows a determination of the plume transmittance. The three types of spectra, for determining plume transmittance, are shown in Figure 1. Both an on stack plume and an adjacent off stack plume single-beam spectra are acquired at the same sensor elevation angle above the horizon to guarantee measurement of a radiometrically accurate atmospheric background.[2] The remaining two single-beam spectra are from a blackbody reference source. These blackbody spectra are used together with the plume temperature for removing the gain and offset terms produced by the sensor in the form of an instrument function.

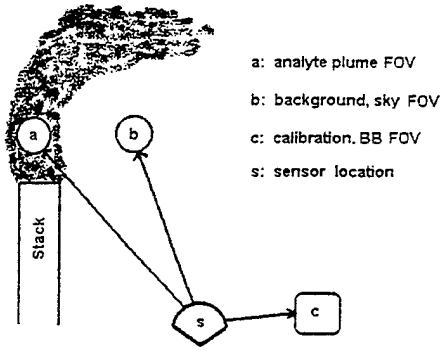

Figure 1. Three Types of Passive Single-Beam Spectra: (a) Analyte Plume, (b) Sky Background, and (c) Blackbody Calibration

This report considers the instrumentation, the radiance equations, the target stacks, and resultant spectral plume evaluations in the 3 to 5 micron spectral region. Accuracy of the resultant spectral plume evaluation depends in large part on a knowledge of the effluent plume stack temperature that is required for removal of self-emission terms present in the sensor's optical train. Calm meteorological conditions with little to no wind offer an optimal environment for a passive ground-based FT-IR spectrometer evaluation of an industrial stack effluent. In this environment, concerns of potential interference from nearby stack effluents or large spatial fluctuations in the target plume are minimized. This study considers two stack types: a coal burning power plant stack emitting sulfur dioxide/carbon dioxide and an acid plant stack with an effluent of nitrous oxide.

2. EXPERIMENT

The FT-IR spectrometer (Midac Corporation, Irvine, CA, Model M2400-S) was used in this study. The spectrometer (Unit Serial Number 218) was equipped with an InSb detector (EG&G Judson, Montgomeryville, PA, Model J10D-M964-R01M-60, Serial Number 23409) that operates at liquid nitrogen temperature in a dewar housing. The spectrometer FOV was limited to 3 milliradians with a Newtonian telescope fore optic having a 25.4 cm diameter front aperture. The sensor was boresighted with a coaxial aligned sighting scope to allow the proper positioning of the sensor FOV for acquiring the three types of passive infrared (IR) spectra depicted in Figure 1. The boresighting was completed by positioning a 1550K silicon carbide IR source with a 2000 cm^2 aperture at a distance similar to that of the target plume.

The number 3 power plant stack was located about 440 ft from the sensor. The acid plant stack was about 1000 ft from the sensor. The power plant stack was 40 m in height and 1.5 m in diameter. The acid plant stack was 22 m in height and 1.2 m in diameter. The reported plume temperature at the power plant stack exit was 170.6 $\pm$ 1.2 °C and the acid plant plume temperature was estimated to be 218 $\pm$ 14 °C (personal communication with Mark J. Thomas, U.S. EPA Region VII, June 2000). With the sensor distances from the stacks and the stack dimensions, the sensor FOV was filled with the effluent plume of each target stack.

Two 12- by 12-in. extended blackbody sources (Graseby Infrared Incorporated, Orlando, FL, Model 140/201, Serial Numbers 455 and 505) were used to assess the sensor responsivity and self emission. These blackbodies were positioned near the sensor to ensure filling the FOV of the Newtonian telescope fore optic of the sensor. The blackbodies possessed a temperature accuracy of $\pm$ 1.5 °C and a surface emissivity of 0.95 $\pm$ 2%. Blackbody temperatures in the linear response region of the FT-IR spectrometer were used.

A thermistor thermometer probe (Cole Palmer, Venon Hills, IL, Model 7002H) monitored the FT-IR spectrometer's internal temperature during the course of the spectral measurements. This probe was positioned near the spectrometer's beamsplitter, which supplied the largest temperature dependent contribution to the sensor's responsivity and self emission.

Interferogram data were acquired using the MIDCOLV software package[3] on an IBM/PC compatible computer (MicroAlliance Incorporated, Vista, CA) with a Pentium 166-MHz processor operating under MS-DOS (MicroSoft Incorporated, Redmond, WA). Either 2048-point or 8192-point interferograms were sampled at every fourth zero-crossing of the FT-IR spectrometer's helium-neon reference laser. The maximum digitized wavenumber was 3950 cm^{-1}, and the transformed spectra had a nominal point spacing of either 4 cm^{-1} or 1.0 cm^{-1} that was dependent upon the number of interferogram points sampled. Fourier transformation (FT) of an average of 100 (coadded) interferograms into an average single-beam spectrum was calculated with the PCIDA package.[4] The fast FT of the interferogram data also included triangular apodization and a Mertz phase correction with a phase array of 128 points. The resultant single-beam spectra were processed with an ARRAY BASIC program written in the Spectra Cal environment (Galactic Industries Corporation, Salem, NH).[5]

3. INFRARED RADIOMETRIC ASSESSMENTS

3.1 Radiometric Equations.

The radiative transfer through a homogenous atmosphere and target vapor plume at a specific wavenumber is described by equation 1.[6]

$$L_X = \tau_A \tau_P * L_{BKG} + (1 - \tau_A \tau_P) * L_P \qquad (1)$$

The L_X represents the apparent (i.e., scene) radiance. The L_{BKG} depicts the background radiance. The L_P denotes the blackbody radiance at the temperature of the stack effluent plume. The τ_A and τ_P represent the atmospheric and plume transmittances, respectively. When τ_A is approximately one, then equation 1 can be rewritten as equation 2.

$$L_X = \tau_P * L_{BKG} + (1 - \tau_P) * L_P \qquad (2)$$

The apparent radiance along with evaluation of spectrometer linearity, responsivity, and self emission allows the determination of τ_P or $-\log(\tau_P)$. The importance of evaluating the three terms becomes obvious when modeling the behavior of the FT-IR spectrometer at a specific wavelength with equation 3.[6,7]

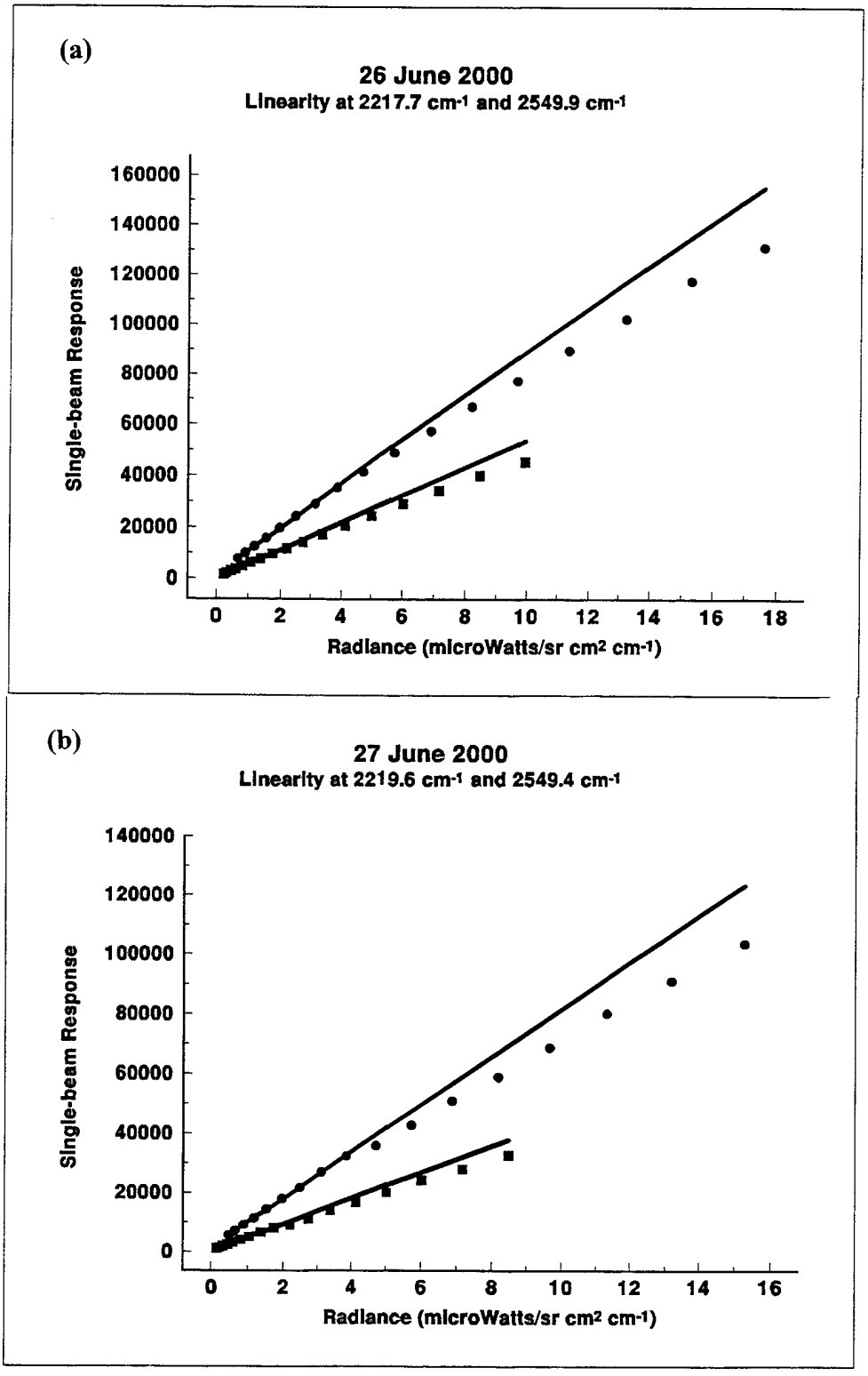

Figure 2. Linearity of Unit 218 for Band Locations Near 2219 cm^{-1} and 2549 cm^{-1} at Internal Spectrometer Temperatures of (a) 40.0 °C and (b) 36.3 °C

$$S_1 = \Re * (L_1 + L_E) \quad (3a)$$

$$S_2 = \Re * (L_2 + L_E) \quad (3b)$$

The $\Re$ and L_E depict responsivity and self emission, respectively. The S and L with two numerical subscripts denote two different input radiances and an associated output single-beam spectrum for each input. This model presumes the sensor has a linear response to an input radiance level.[8] In addition, the model also assumes that the sensor is thermal stable (i.e., constant self emission and responsivity) during the time associated with making spectral measurements.[9] Figure 2 displays the region of sensor linearity for unit 218 using band locations of 2219 cm^{-1} and 2549 cm^{-1} at internal spectrometer temperatures of (a) 40.0 °C and (b) 36.3 °C. This figure plots the single-beam response as a function of input blackbody radiance. The radiance levels on 26 June 2000 are generated with blackbody temperatures ranging from 50 to 210 °C in increments of 10 °C, whereas on 27 June 2000 the temperature ranges from 40 °C to 200 °C in increments of 10 °C. The spectrometer on 26 June 2000 exhibits linearity only over the 50 °C to 110 °C temperature range as shown with the solid least squares lines in Figure 2a. The spectrometer on 27 June 2000 displays linearity over the 40°C to 120 °C blackbody temperature range as shown with the solid least squares lines in Figure 2b. The slightly larger linearity range on the 27 June 2000 is undoubtedly due to the lower internal spectrometer temperature and the lower fore optic temperature associated with the detector saturation threshold. The responsivity, $\Re$, at 2219 cm^{-1} and 2549 cm^{-1}, are the least squares slopes in Figure 2. The responsivities from these slopes are tabulated in Table 1.

Table 1. Responsivity and Self-emission Terms for Unit 218

Date	2219 cm^{-1}		2549 cm^{-1}	
	$\Re * 10^{-9}$	$L_E * 10^6$	$\Re * 10^{-9}$	$L_E * 10^6$
26JUN00	8.67 ± 0.15	0.254 ± 0.034	5.31 ± 0.12	0.111 ± 0.021
27JUN00	7.99 ±0.08	0.242 ± 0.032	4.39 ± 0.05	0.112 ± 0.016

The determination of sensor responsivity permits calculation of the sensor self emission by rearranging equation 3 into equation 4.

$$L_E = S_1/\Re - L_1 \quad (4a)$$

$$L_E = S_2/\Re - L_2 \quad (4b)$$

Thus, the evaluation of the same set of spectral data allows determination of the self emission. These self-emission values are also tabulated in Table 1.

3.2 Transmittance.

Determination of the plume transmittance depends on using the sensor responsivity/emission and equation 3. A predicted response for a blackbody background at the stack plume temperature reduces the number of single-beam spectra to three necessary for calculating the transmittance. When the background and target plume temperatures are equal the apparent radiance of equations 1 and 2 reduces to the blackbody background radiance. In this study, we use equation 2, because calculation of the atmospheric transmission indicates the transmission of the bands considered are found to be $\geq 95\%$. Calculation results are obtained using inputs of the stack plume distance, 50% relative humidity (RH), an urban environment, and temperature of 80 °F to MODTRAN version 3.[10] These atmospheric transmission results are shown in Figure 3. Figure 3 shows the carbon dixoide band to be totally absorbing (i.e., zero transmittance) between 2300 and 2400 cm^{-1}. From about 1800 to 2100 cm^{-1}, there is significant attenuation in atmospheric transmission due to water vapor as also seen in Figure 3. The transmission properties of the remaining spectral regions offer the opportunity for target plume detection.

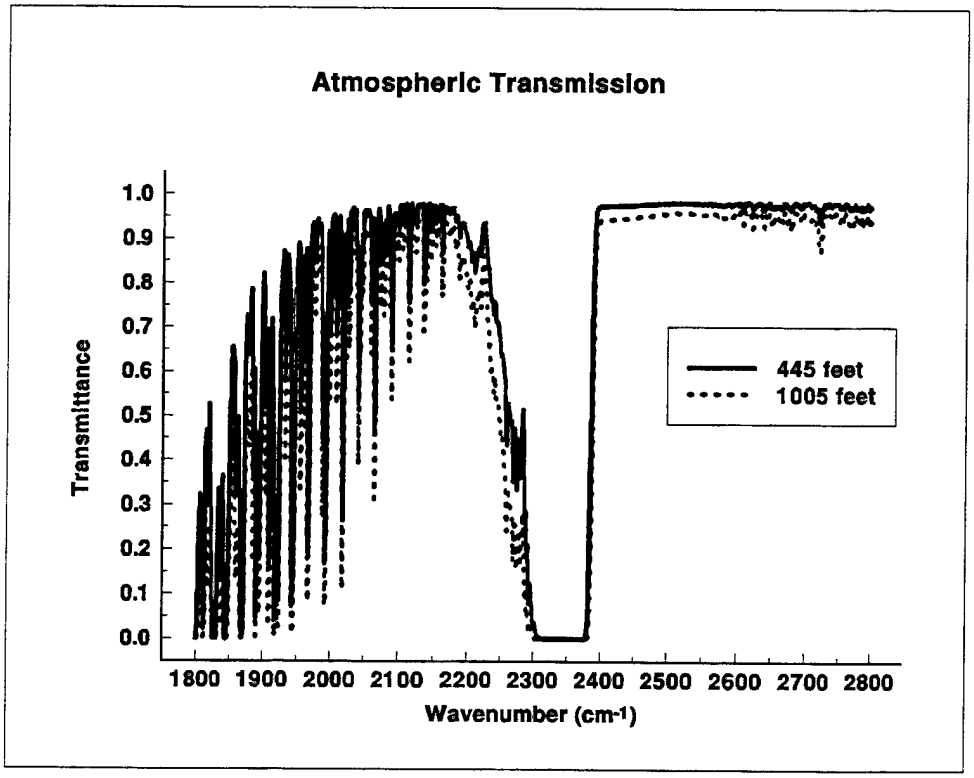

Figure 3. Atmospheric Transmission Calculated Using MODTRAN Over the 1800 cm^{-1} and 2800 cm^{-1} Spectral Region

The plume transmittance is obtained in three steps: first, writing equation 2 for the conditions of $L_{BKG} \neq L_P$ and $L_{BKG} = L_P = L_{BB}$; second, taking the difference between these two resultant equations; and third, solving for τ_P to produce equation 5.[1,6,11]

$$\tau_P = (L_X - L_{BB}) / (L_{BKG} - L_{BB}) \quad (5)$$

Only the scene radiances generated on/off the stack plume and the blackbody radiance at the target plume temperature are necessary for calculating the plume transmittance. Substitution of the radiances into equation 5 with the single-beam spectral response of equation 3 allows the plume transmittance to be written in terms of single-beam spectral units.

$$\tau_P = (S_X - S_{BB}) / (S_{BKG} - S_{BB}) \quad (6)$$

The differences in equation 6 allows removal of the self emission or offset terms, whereas the ratio eliminates the effect of responsivity or gain terms in computing the transmittance.

3.3 Absorbance.

Absorbance, A, is calculated from transmittance with equation 7.

$$A = - \log(\tau_P) \quad (7)$$

The absorbance is also represented by equation 8.

$$A = abc \quad (8)$$

Absorptivity, a, is represented in units of square meters per milligram; pathlength, b, has units of meters; and concentration, c, is in units of milligram per cubic meter.[12] The concentration pathlength product term (i.e., bc), sometimes referred to as CL, is often expressed in units of ppm-m.[13] The use of a spectral IR database of known concentration pathlength permits assessment of the bc term in the open-air monitoring absorbance data. Estimating the target plume pathlength, therefore allows a prediction for the target analyte concentration in the plume.

3.4 Absorbance Computation.

The absorbance results reported in this study are computed with the ARRAY BASIC program RLTAB.ab. This program requires input of blackbody radiances as a function of wavenumber associated with input calibration blackbodies and plume temperatures. These blackbody radiances are calculated

with the ARRAY BASIC program BKBODY.ab. Source code listings of RLTAB.ab and BKBODY.ab programs are located in Appendix A.

Figures 4 through 7 provide an illustrated explanation of the calculations performed by the RLTAB.ab and BKBODY.ab programs. Figure 4a plots the single-beam spectra that are used to compute the FT-IR spectrometer responsivity and self emission. One of the single-beam spectra from Figure 4a is input to the program BKBODY.ab for generation of the associated radiances at blackbody temperatures of 40 and 90 °C, as shown in Figure 4b. These blackbody temperatures are selected, because the values are within the linear response region of the FT-IR spectrometer as shown in Figure 2. Use of a single-beam spectra in generation of the blackbody radiances allow calculation at the appropriate spectral wavenumber locations. The single-beam and radiance spectra input into RLTAB.ab are illustrated in Figures 4a and 4b. These spectra allow the calculation of responsivity and self emission. The resultant responsivity and self emission are shown in Figure 5a. Using the linear model given in equation 3, a single-beam blackbody spectrum associated at the stack plume temperature is computed. The only remaining input needed for calculating the transmittance is the single-beam spectra that are acquired with the spectrometer FOV either over (i.e., ON) or adjacent to (i.e., OFF) the stack effluent plume. These ON and OFF single-beam spectra are plotted in Figure 5b for the acid plant stack. These two single-beam spectra in combination with the stack blackbody single-beam spectrum at 218 °C are used to calculate the transmittance for the acid plant stack effluent plume. The computed single-beam blackbody spectrum at the plume temperature is the top dotted trace in Figure 6. The solid trace in Figure 6 is the ON stack single-beam spectrum and the lower dotted trace is the OFF stack single-beam spectrum. The dotted traces in Figure 6 provide the boundary conditions associated with the plume spectral feature of the nitrous oxide band at 2219.6 cm^{-1}. For an opaque plume, the single-beam band reponse can never exceed the upper blackbody single-beam response at the plume temperature, because the band of the plume under these circumstances has the characteristics of a blackbody at the plume temperature.[14] The three spectra in Figure 6 are used to calculate the transmittance as indicated in equation 6. The final step in the RLTAB.ab program is to convert the transmittance to absorbance as shown in equation 7. Some example transmittance and absorbance spectra of the acid plant stack plume are plotted in Figure 7. These overlaid spectra are composed of six consecutive observations for a period of about 10 min. The largest two spectral features are at 2219.6 cm^{-1} and 2549.4 cm^{-1} are those of nitrous oxide. The weak nitric oxide (i.e., NO) signature in the spectral region from 1800 to 2000 cm^{-1} results from two factors. The first factor, a weak signature occurs, because the absorptivity[13] of nitric oxide is about eight times weaker than nitrous oxide band located at 2219.6 cm^{-1}. The second factor contributing to an attenuated absorbance signal for nitric oxide is the presence of significant atmospheric water vapor in this spectral region from 1800 to 2000 cm^{-1} in Figure 7b.

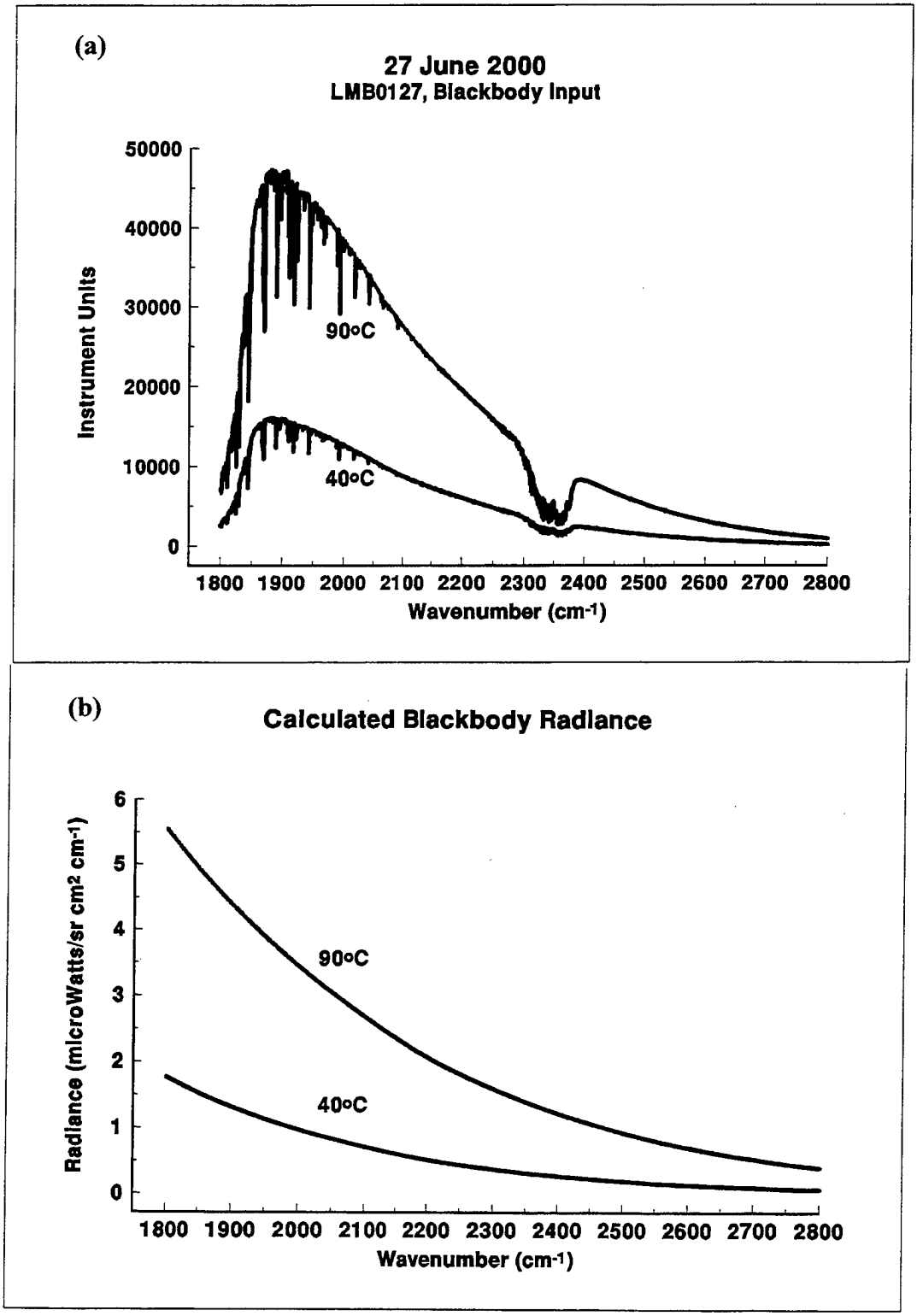

Figure 4. **Computation of $\Re/L_E$ Terms Requires (a) Single-Beam Spectral Response to (b) Controlled Input Blackbody Radiance Levels**

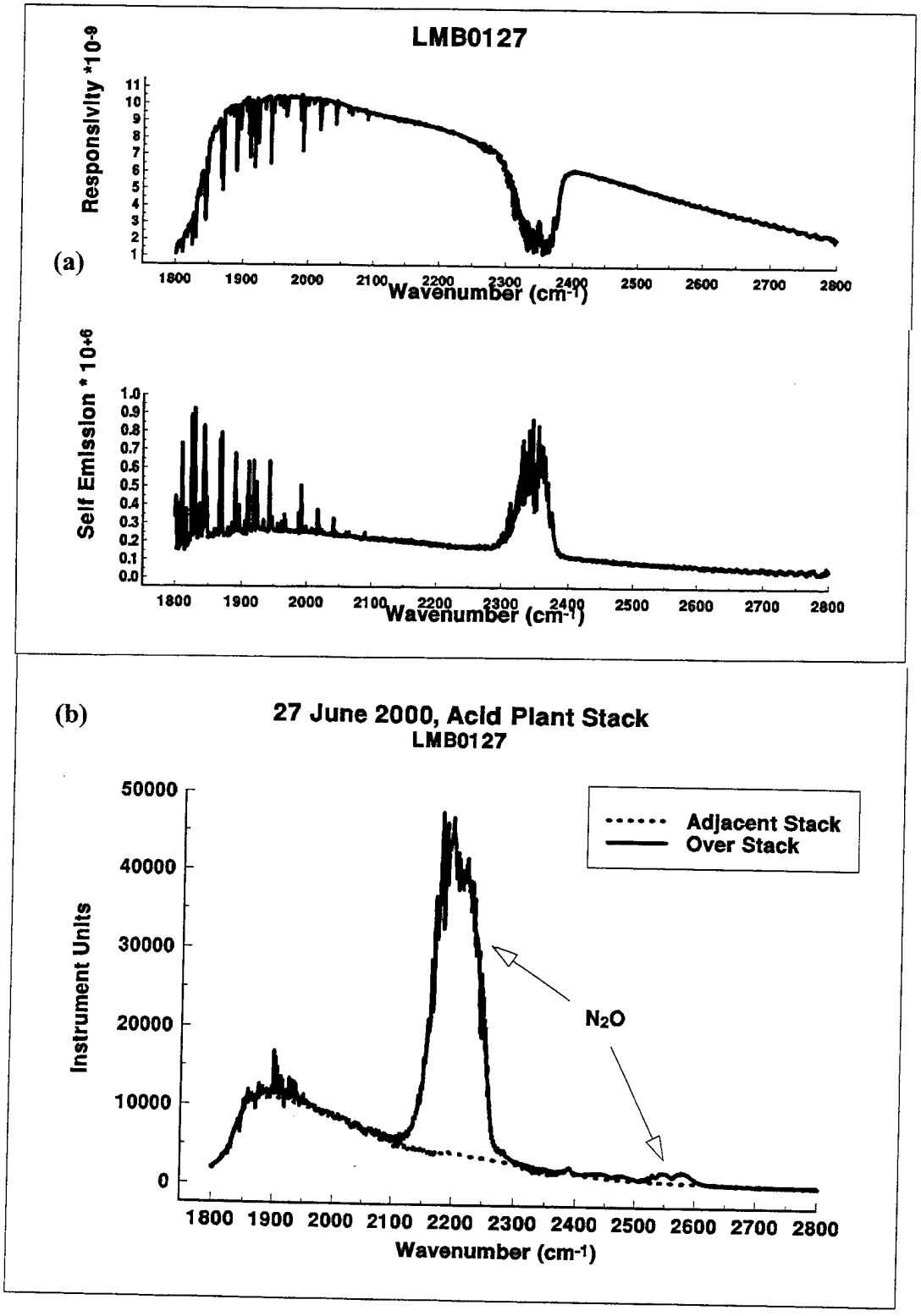

Figure 5. RTLAB.ab Program (a) Calculated $\Re/L_E$ Terms and (b) ON/OFF Stack Plume Single-Beam Spectral Inputs

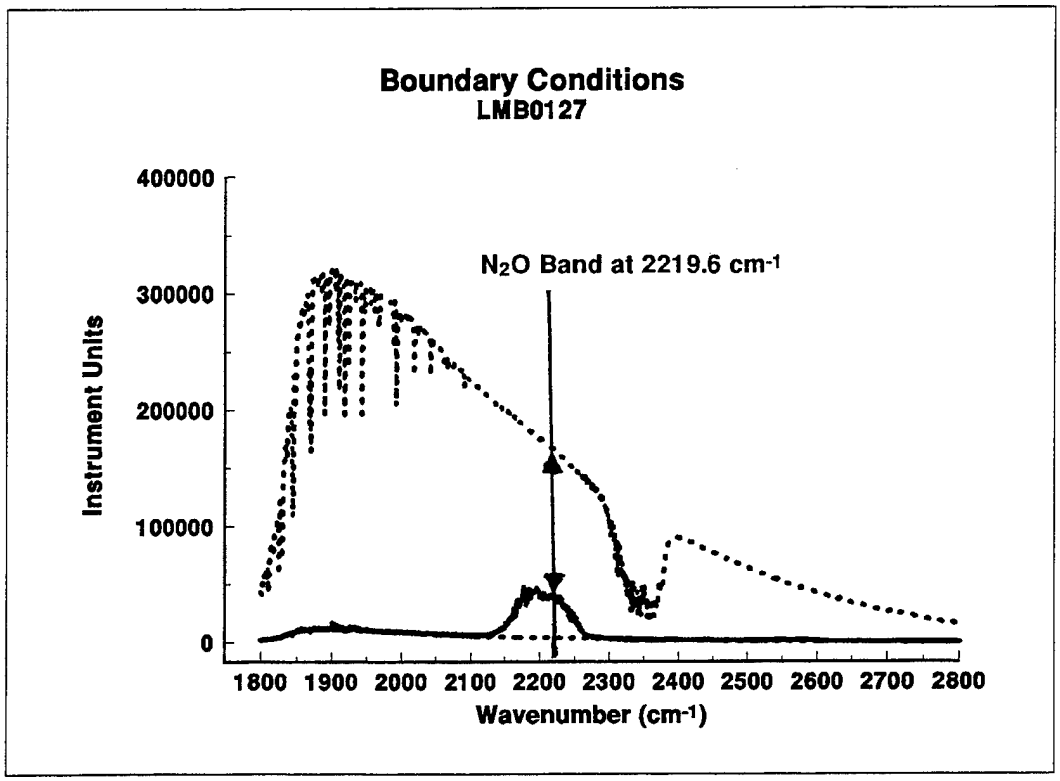

Figure 6. **Boundary Conditions for Nitrous Oxide Band (solid trace) of (1) a Blackbody Response at the Plume Temperature (upper dotted trace) and (2) Adjacent Off-Stack Background (lower dotted trace)**

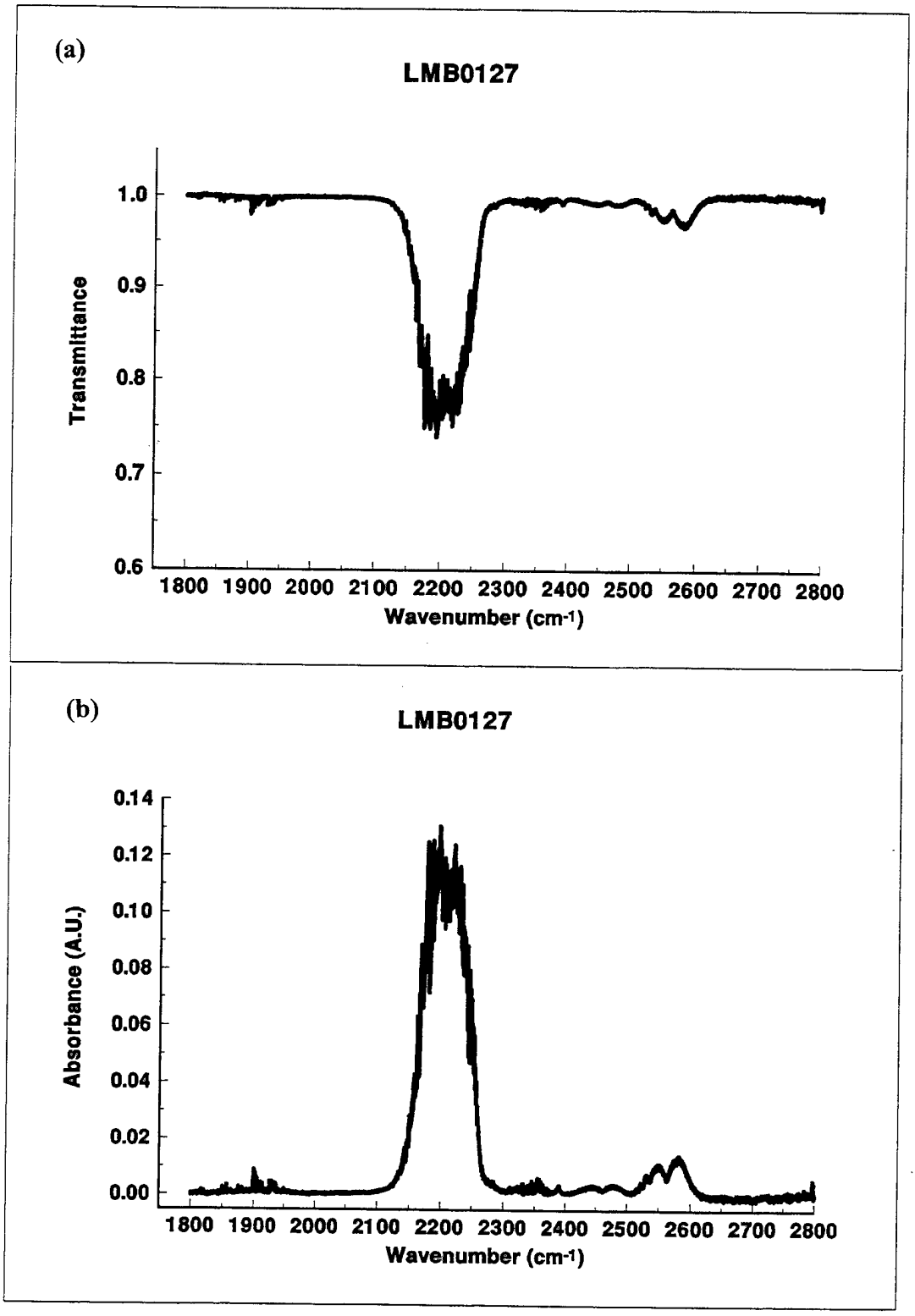

Figure 7. Resultant (a) Transmittance and (b) Absorbance Spectra Calculated with RTLAB.ab for the Acid Plant Stack. Note six consecutive spectra are overlaid in this plot

4. COAL BURNING POWER PLANT STACK

The coal burning power plant has three stacks. Only stack #3 is monitored with the passive 3 to 5 micron FT-IR spectroemeter in this study. Two days of measurements of sulfur dioxide are made on 26 and 27 June 2000. An example of the ON and OFF plume single-beam spectra of stack #3 is shown in Figure 8. The dotted trace is the single-beam background spectrum adjacent to the plume and the solid trace is the single-beam spectrum with the spectrometer viewing the plume. The largest spectral features when viewing the plume are the red and blue spikes associated with carbon dioxide emission near 2250 cm^{-1} and 2400 cm^{-1}, repectively. The next most prominent spectral emission features are from 1800 cm^{-1} and 2200 cm^{-1} and are most likely due to heated water vapor produced in the combustion process. The remaining spectral feature at about 2500 cm^{-1} is associated with sulfur dioxide. Figure 9 displays the transmittance and absorbance spectra for six consecutive measurements over a period of about 10 min on 27 June 2000. The plume stability over this time period is illustrated in Figure 10 for the transmittance and the absorbance of the 2513.7 cm^{-1} sulfur dioxide band. The transmittance is found to be 0.9934 ± 0.0007 and the absorbance is seen to be $(2.87 \pm 0.34) * 10^{-3}$ A.U. The horizontal solid line in Figure 10 represents the average over the time period of monitoring, and the horizontal dotted lines indicate the associated best estimate of the standard deviation for the six observations. The time is reported in seconds from initial spectrometer startup on 27 June 2000. The values for other observational periods for sulfur dioxide over the two days of monitoring are summarized in Table 2 and Appendix B. Representative spectra for conditions closest to the average absorbance value are tabulated in Appendix C.

Table 2. Sulfur Dioxide Transmittance and Absorbance Summary

2514.7 cm^{-1} SPS 4 cm^{-1}		τ	$A * 10^2$	No. Pts.
26JUN00	LMB0010	$.9917 \pm .0048$	0.363 ± 0.021	5
	LMB0013	$.9852 \pm .0045$	0.65 ± 0.20	16
	LMB0014			
2513.7 cm^{-1} SPS 1 cm^{-1}		τ	$A * 10^2$	No. Pts.
27JUN00	LMB0102	$.9942 \pm .0041$	0.25 ± 0.18	6
	LMB0104	$.9892 \pm .0042$	0.47 ± 0.19	6
	LMB0124	$.9934 \pm .0007$	0.288 ± 0.034	6
	LMB0126	$.9951 \pm .0010$	0.213 ± 0.041	5

In Table 2, the largest percentage variation of about 70% in absorbance occurs with file LMB0102. The smallest percentage variation in sulfur dioxide absorbance is seen in file LMB0010 of about 6%. The largest contributor to variation in this type of measurement is usually the influence of meteorological conditions upon the target plume. The absorbance values in Table 2 are converted

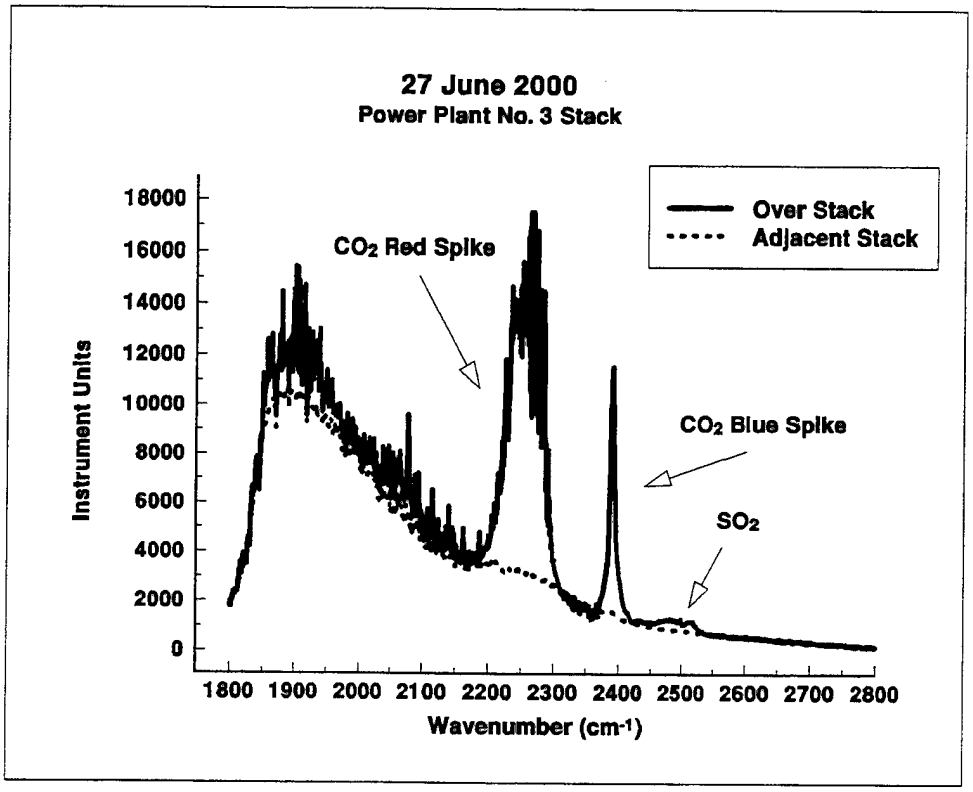

Figure 8. Plume (solid trace) and Background (dotted trace) Single-Beam Spectra for Power Plant No. 3 Stack

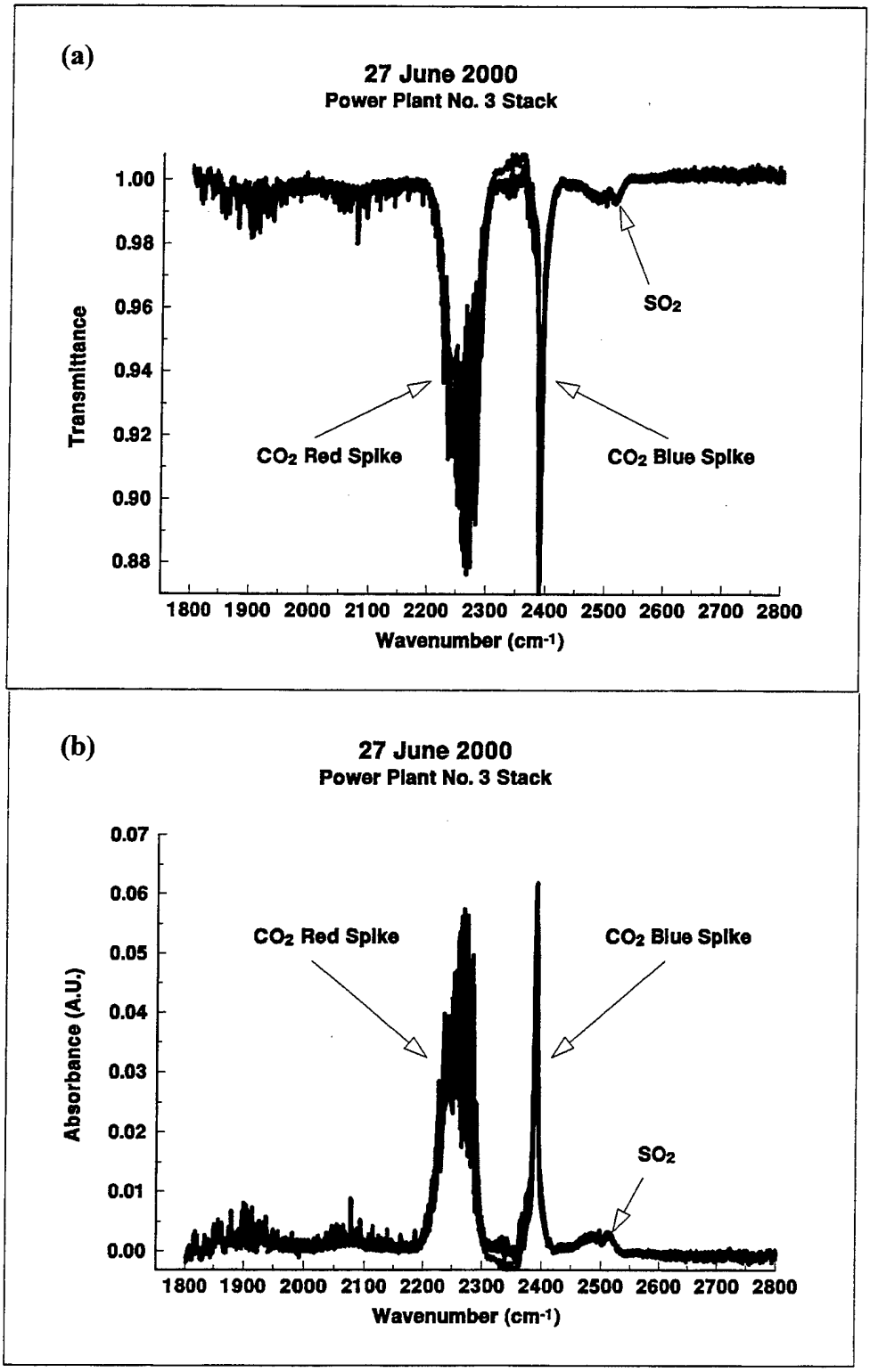

Figure 9. Plume (a) Transmittance and (b) Absorbance Spectra for Six Consecutive Measurements on Power Plant No. 3 Stack

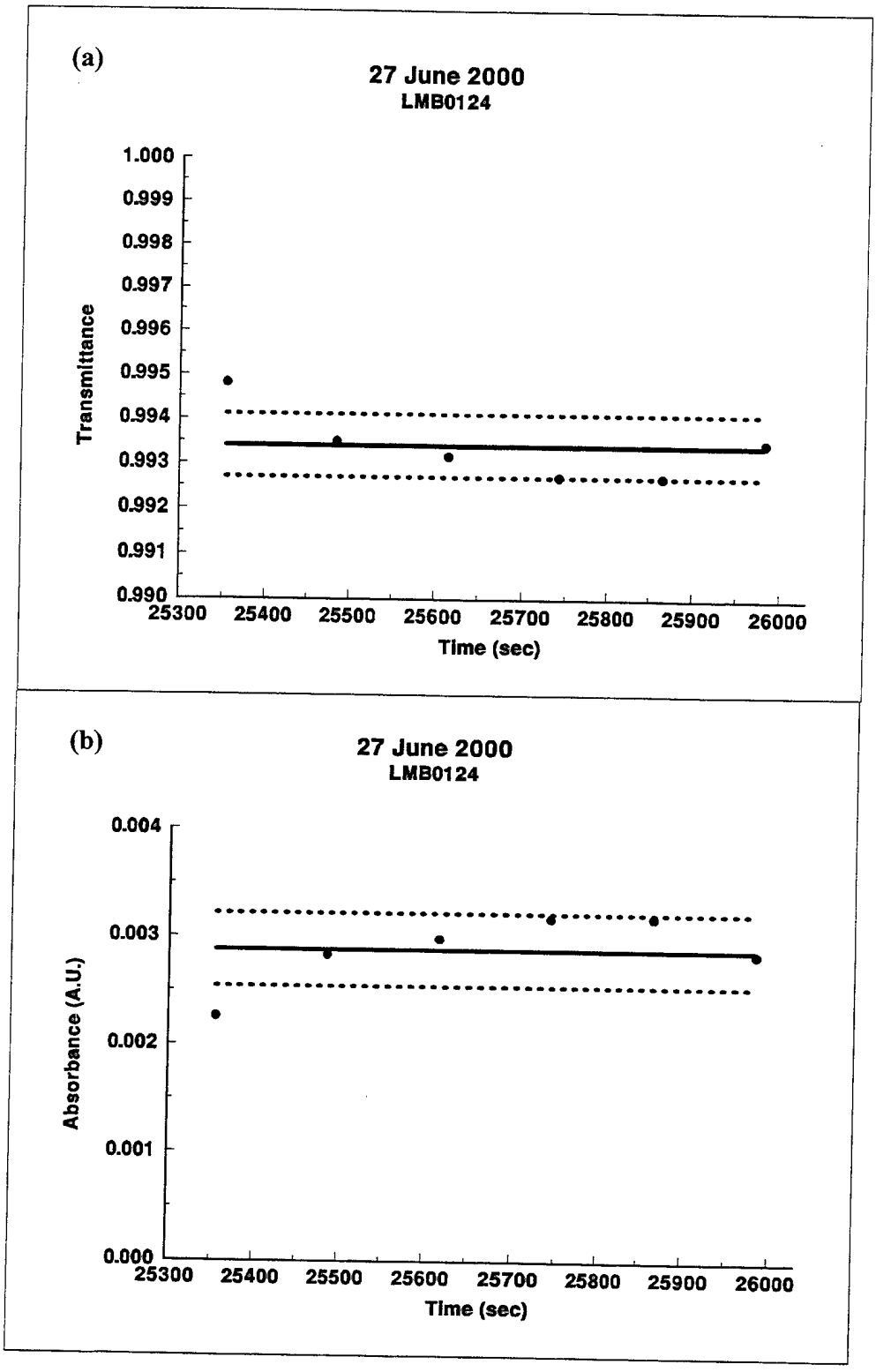

Figure 10. **Sulfur Dioxide (a) Transmittance and (b) Absorbance Values at 2513.7 cm^{-1} for Six Observations**

to pathlength concentration product, bc, values by using the 125 ppm-m sulfur dioxide library absorbance spectrum from the IR database (Infrared Analysis Incorporated, Anaheim, CA).[13] These bc values are tabulated in Table 3. The spectral resolution of the library spectrum is adjusted to match that of the open-air absorbance measurements with the ARRAY BASIC filter function below.

filter #s,0,1,p,1,p,0,1,0 (9)

This filter function reduces the spectral resolution of the source spectrum, #s, by 1/p.[12]

Table 3. Sulfur Dioxide Concentration Estimates

2514.7 cm^{-1} SPS 4 cm^{-1}		bc (ppm-m)	c (ppm)	No. Pts.
26JUN00	LMB0010	212.5 ± 9.7	142 ± 6	5
	LMB0013	385 ± 119	257 ± 79	16
	LMB0014			
2513.7 cm^{-1} SPS 1 cm^{-1}		bc (ppm-m)	c (ppm)	No. Pts.
27JUN00	LMB0102	141 ± 102	95 ± 68	6
	LMB0104	266 ± 107	177 ± 71	6
	LMB0124	163 ± 19	109 ± 13	6
	LMB0126	120 ± 23	80 ± 15	5

Assuming a pathlength, b, to be the stack diameter of 1.5 m, the estimated concentrations are tabulated in Table 3 for the sulfur dioxide observations that are made with the passive 3 to 5 micron FT-IR spectrometer on the #3 power plant stack. These estimated values are significantly lower than those of a previous study using a passive 8 to 12 micron FT-IR spectrometer.[15] This difference is probably due inpart to the fact that the sulfur dioxide band near 2500 cm^{-1} is quite weak in the library absorbance spectrum[13] with a signal to noise of only about 10. Also the temperature of the analyte in the library spectrum is acquired at ambient rather than the plume temperature, which is also a potential source of the differences observed.

5. ACID PLANT STACK

The acid plant has one major stack. An example of the single-beam ON/OFF plume spectra and transmittance/absorbance spectra for the acid plant stack are shown in Figures 6 and 7, respectively. The major constituent observed in the effluent plume of the acid stack is nitrous oxide. The transmittance values for the six overlaid spectra in Figure 7a are plotted in Figures 11a and 11b for the band positions of 2219.6 cm^{-1} and 2549.4 cm^{-1}, respectively, as a function of time.

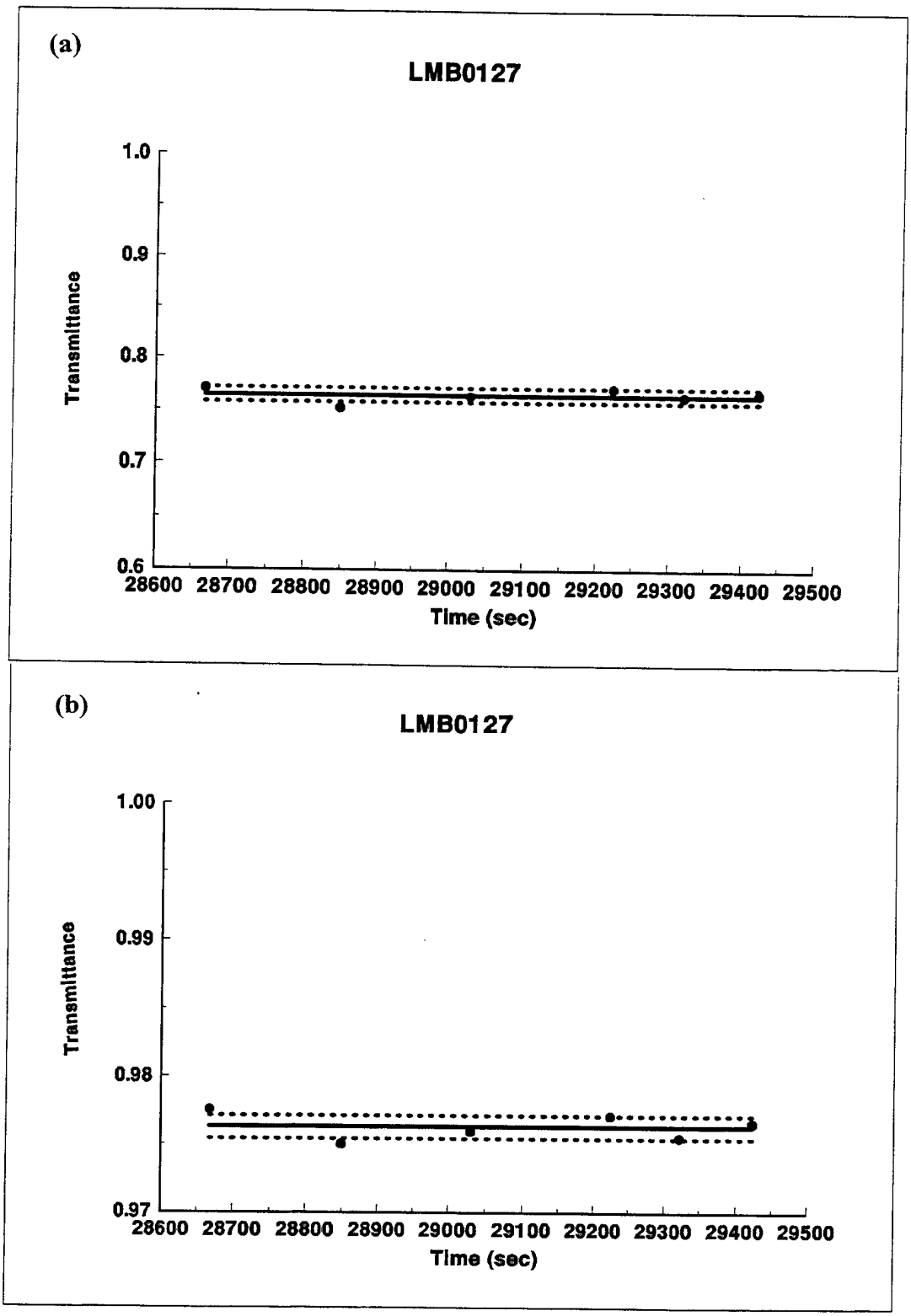

Figure 11. Transmittance Values for Six Consecutive Observations at (a) the 2219.6 cm^{-1} and (b) the 2549.4 cm^{-1} Nitrous Oxide Bands

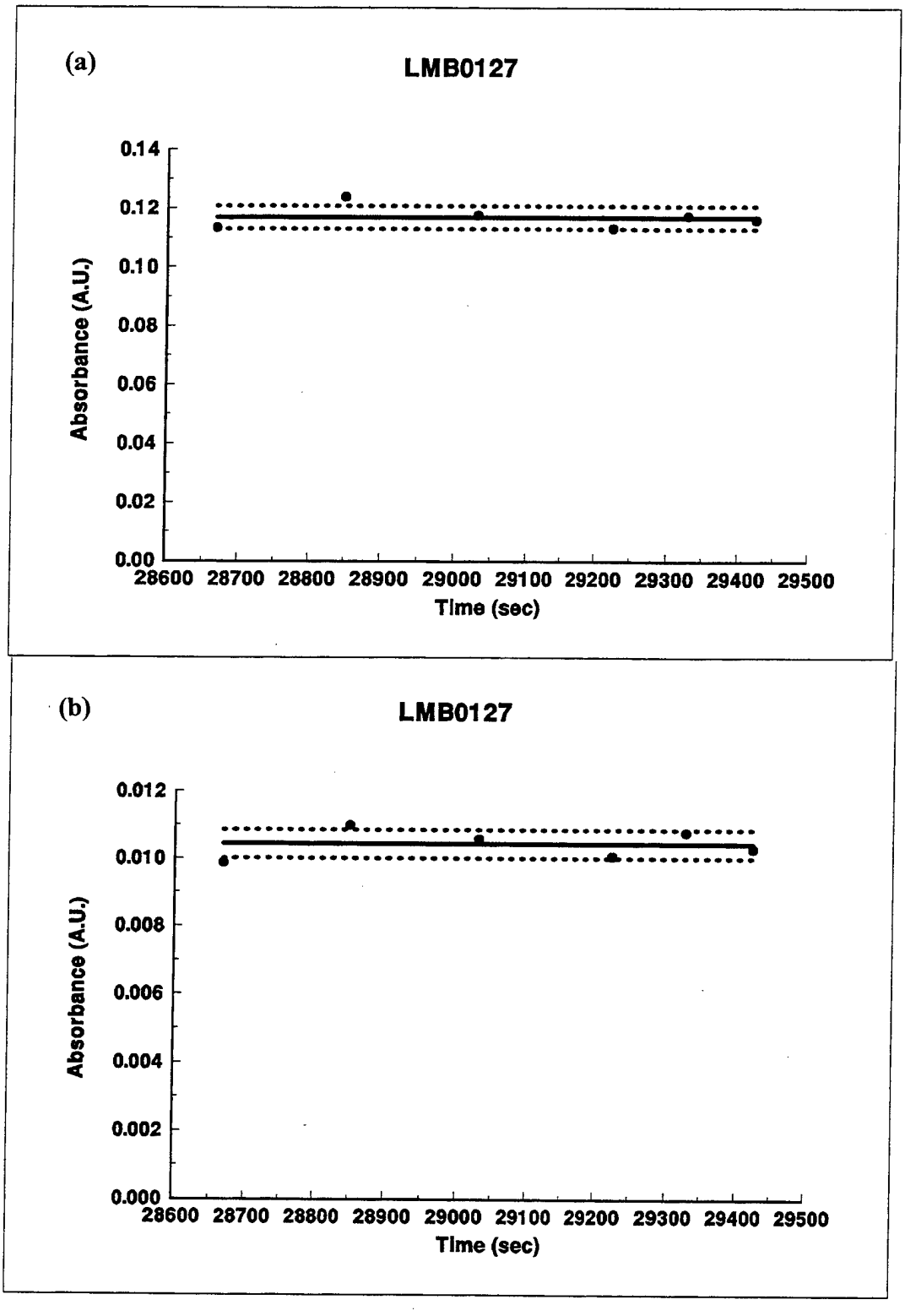

Figure 12. **Absorbance Values for Six Consecutive Observations at (a) the 2219.6 cm^{-1} and (b) the 2549.4 cm^{-1} Nitrous Oxide Bands**

The absorbance values for the six overlaid spectra in Figure 7b are plotted in Figures 12a and 12b at band positions of 2219.6 cm^{-1} and 2549.4 cm^{-1}, respectively. The passive-absorbance spectra, the nitrous oxide library IR-absorbance spectra at 80 ppm-m (Infrared Analysis Incorporated, Anaheim, CA),[13] and equation 8 allow an estimation of the concentration pathlength product. The concentration is subsequently estimated by assuming a pathlength of the 1.2 m stack diameter that is only an approximation valid for meteorological conditions of little to no wind.

The concentration estimates for nitrous oxide are tabulated in Table 4. More detailed estimates are provided in Appendix D. The representative spectral data associated with these detailed estimates are furnished in Appendix E. The results for the stronger nitrous oxide band positioned near 2218 cm^{-1} differs significantly from the weaker band located near 2549 cm^{-1}. However, the difference is a constant factor of about two between the two nitrous oxide bands. Comparison of the estimated concentrations to a previous study[15] shows good agreement with the weaker nitrous oxide band. The emission for this weaker nitrous oxide band is not significantly attentuated by the intervening atmosphere between the sensor and stack's plume. On the other hand, there is some atmospheric obscuration of the stronger nitrous oxide band by both water vapor and carbon dioxide (see Figure 3). Futher attenuation of the 2549 cm^{-1} nitrous oxide band is possible if the plume contains significant quantities of either carbon dioxide or water vapor. To determine if the atmospheric obscuration and the plume contents explain the factor of two difference in the concentration estimate requires additional more refined measurements with the 3 to 5 micron passive FT-IR spectrometer.

Table 4. Nitrous Oxide Concentration Estimates

SPS 4 cm^{-1}	2217.7 cm^{-1}			2549.4 cm^{-1}			
26JUN00	$A*10^3$ (A.U.)	bc (ppm-m)	c (ppm)	$A*10^3$ (A.U.)	bc (ppm-m)	c (ppm)	No. pts.
LMB0009	4.5 ± 1.4	59 ± 18	49 ± 15	.350 ± .088	106 ± 27	88 ± 22	10
LMB0011	7.2 ± 2.7	95 ± 36	79 ± 30	0.63 ± 0.27	191 ± 82	159 ± 68	15
SPS 1 cm^{-1}	2219.6 cm^{-1}			2549.4 cm^{-1}			
27JUN00	$A*10^3$ (A.U.)	bc (ppm-m)	c (ppm)	$A*10^3$ (A.U.)	bc (ppm-m)	c (ppm)	No. pts.
LMB0101	8.63 ± 0.40	114 ± 5	95 ± 4	0.80 ± 0.12	243 ± 36	202 ± 30	10
LMB0103	8.2 ± 1.7	108 ± 22	90 ± 18	0.76 ± 0.18	231 ± 55	192 ± 46	10
LMB0105	10.9	144	120	0.88	268	223	1
LMB0123	7.65 ± 0.80	101 ± 10	84 ± 8	.619 ± .068	188 ± 21	157 ± 18	8
LMB0125	11.26 ± .66	148 ± 9	123 ± 7	1.081 ± .081	328 ± 25	273 ± 21	7
LMB0127	11.69 ± .39	154 ± 5	128 ± 4	1.043 ± .042	317 ± 13	264 ± 11	6

6. CONCLUSIONS

The procedure for obtaining absorbance and transmittance spectra from single-beam passive 3 to 5 micron Fourier transform infrared (FT-IR) spectrometer has been demonstrated. The approach requires an independent knowledge of the plume temperature exiting from the stack. Assessing responsivity and self-emission terms of the spectrometer permits an evaluation of the plume transmittance with the ratio of the differences for three single-beam spectra. The transmittance spectra are converted to absorbance. This absorbance spectrum is subsequently evaluated with spectral data from an infrared (IR) database to find the concentration pathlength product. This evaluation is only as reliable as the accuracy of the quantitative IR database values used. The accuracy of the IR database also includes the evaluated absorptivity temperature dependence. In this study, a commercial IR database (Infrared Analysis Incorporated, Anaheim, CA)[13] is employed, which only includes the ambient temperature absorbance measurements for the target analystes of sulfur dioxide and nitrous oxide. To date, accurate quantitative absorbance measurements near the plume temperatures are unavailable. To determine concentration from active and passive FT-IR measurements, an accurate determination of analyte pathlength is necessary. For passive measurements, this requires an independent determination of the plume dimensions. For this study, those plume dimensions are assumed to be those of the stack diameters that is only a reasonable approximation for conditions of no wind.

A power plant and acid plant stack were monitored with a ground-based passive 3 to 5 micron FT-IR spectrometer. Effluents in the coal burning power plant stack included the analytes of heated carbon dioxide and sulfur dioxide. For the acid plant stack, the plume was found to contain nitrous oxide in the stack emission.

Results on monitoring the two stack types with the passive 3 to 5 micron FT-IR spectrometer encompass two days. Evaluating the power plant stack results for sulfur dioxide using the 3 to 5 micron spectral region yields significantly lower concentration estimates than the previous 8 to 12 micron spectral assessments.[15] On the other hand nitrous oxide estimated concentrations from the acid plant stack for the 2549 cm^{-1} band are quite similar to the results of the previous 8 to 12 micron spectral study.[15] For sulfur dioxde the difference is undoubtedly due in part to the low signal-to-noise library IR-absorbance spectrum that used in the concentration estimates.

Refinement of future ground-based FT-IR evaluations of industrial stacks, to remove various assumptions, should include an independent determination of plume temperature near the location viewed by the passive spectrometer and assessment of plume dimensions at the time of the passive measurements. In addition, acquiring a more representative library IR-absorbance spectrum of the target analyte bands at the appropriate plume temperature would remove any uncertainties ascribed to the temperature dependence of the target analyte absorptivities.

Blank

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APPENDIX A

ARRAY BASIC PROGRAM LISTINGS

Program Name	Required Inputs	Calculated Outputs
RLTAB.ab	Single-beam Blackbody Responses and Planck Function Responses	$\Re$, L_E, τ, and A
BKBODY.ab	Single-beam Blackbody Response and Blackbody Temperatures	L_{BB}

```
'Program: RLTAB.ab
'Description: Calculates the responsivity, self emission,
'          transmittance, and absorbance.
'Inputs: Blackbody curves and single-beam spectra.
'Author: Roger J. Combs
'Date:  June 1998
'
free
dim bbnam(15),avnam(15),bsnam(15),snnam(15),sonam(15)
menufile $bbnam,"Select First BK001.SPC file: "
loadspc $bbnam
menufile $avnam,"Select First AVE001.SPC file: "
loadspc $avnam
string bbnam,0
string avnam,0
string bsnam,0
string snnam,0
string sonam,0
menufile $bbnam,"Select Second BK002.SPC file: "
loadspc $bbnam
menufile $avnam,"Select Second AVE002.SPC file: "
loadspc $avnam
menufile $bsnam,"Select BLKSTK.SPC file: "
loadspc $bsnam
menufile $snnam, "Select STKON.SPC file: "
loadspc $snnam
menufile $sonam, "Select STKOFF.SPC file: "
loadspc $sonam
npt=npts(#s)
ept=npt-1
mfreq=freq(#s(#ept)): print mfreq
newspc R(npt),LE1(npt),T(npt),AB(npt)
setfile #4
setffp 0,mfreq
#s=abs((#10-#8)/(#11-#9))          'R : System response
setfile #3
setffp 0,mfreq
setfile #2
setffp 0,mfreq
setfile #1
setffp 0,mfreq
setleft 1800,2800
gosub 100
setfile #2
gosub 100
```

```
setfile #3
gosub 100
setfile #4
gosub 100
setfile #5
gosub 100
setfile #6
gosub 100
setfile #7
gosub 100
setfile #8
gosub 100
setfile #9
gosub 100
setfile #10
gosub 100
setfile #11
gosub 100
setfile #3
#s=(#10/#4)-#11                'Le : System Self Emission
setfile #7
#s=(#s+#3)*#4                          'SB : Response to stk BB
setfile #2
#s=(#6-#7)/(#5-#7)             'T  : Transmittance
setfile #1
#s=inverse(#2): #s=log(#s)     'A  : Absorbance
end

100 #s=#s(getleft(),getright())
   return

□
```

```
'PROGRAM:  BKBODY.AB                    10 JAN 93
'       BKBODY.AB calculates the blackbody curve from the Plank
'       equation. See P.R.Grittiths and J.A.deHaseth, "Fourier
'       Transform Infrared Spectroscopy", John Wiley & Sons, NY
'       p.248 equation 7.4 (1986). The program requires input
'       of an infrared spectrum.

free
dim snam(15)
menufile $snam,"Select input infrared spectrum: "
loadspc $snam
npt=npts(#s)
ept=npt-1
mfreq=freq(#s(#ept))
res=mfreq/ept
newspc HTBB(npt),LTBB(npt)
dim wary(npt),cary(npt),xary(npt),bary(npt)
c1=1.191*(10^-12)
c2=1.439
input "Enter High Blk Body Temperature (K): ";temp
gosub 100
HTBB=bary
setfile #2
setffp 0,mfreq
input "Enter Low Blk Body Temperature (K): ";temp
gosub 100
LTBB=bary
setfile #1
setffp 0,mfreq
end

100     fillbeg res
        fillinc mfreq/npts(#3)
        wary=fill(wary)
        cary=wary*squared(wary)
        cary=cary*c1
        xary=wary*c2
        xary=xary/temp
        xary=exp(xary)-1
        bary=cary/xary
        return
```

□

APPENDIX B

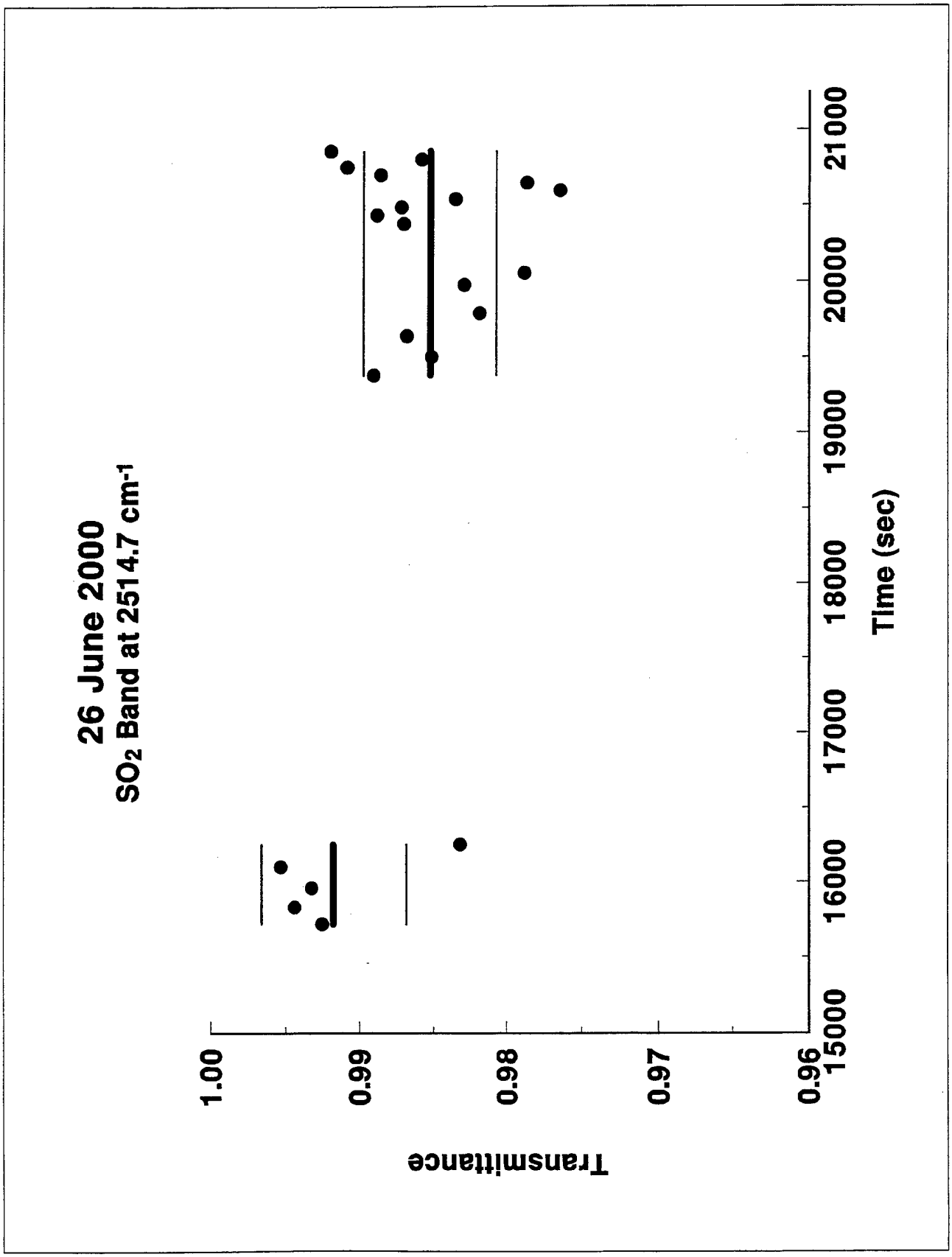
SULFUR DIOXIDE ABSORBANCES

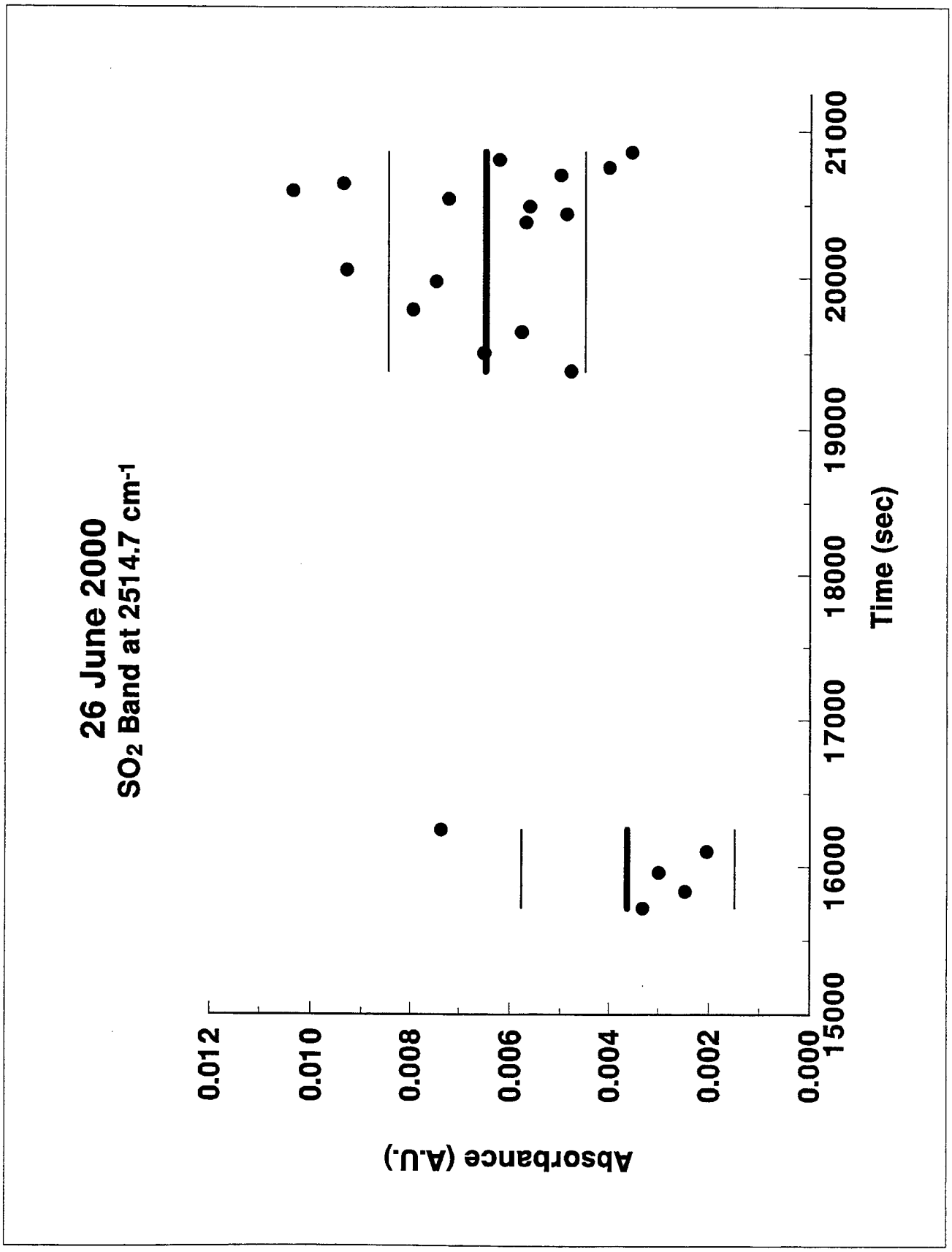
Tabulations of A and τ at one sulfur dioxide band are provided for the power plant stack No. 3. The tables include the time of day (TOD) and initial operation time (IOT) of the spectrometer for that day. For the statistically significant number of observations, an average and BESD are supplied. Following each day's worth of tabulated data, plots for A and τ are provided as a function of IOT for the sulfur dioxide band. The information appears in the order presented in the summary below.

Date	Filename	SPS (cm^{-1})	No. Pts.
26JUN00	LMB0010	4	5
26JUN00	LMB0013	4	16
27JUN00	LMB0102	1	6
27JUN00	LMB0104	1	5
27JUN00	LMB0124	1	6
27JUN00	LMB0126	1	5

Date: 26 June 2000
Source: Power Plant Stack #3
SPS: 4 cm^{-1}

			2514.7 cm^{-1}	
Filename	TOD Hr:Mn:Sc	IOT (sec)	A*10^2 (A.U.)	τ
LMB0010	13:21:59	15719	0.3303	0.99242
	13:23:54	15834	0.2458	0.99435
	13:26:02	15962	0.2978	0.99316
	13:28:25	16105	0.2039	0.99531
	13:30:53	16253	0.7362	0.98319
		AVE	0.3628	0.99169
		BESD	0.2142	0.00488
LMB0013	14:23:06	19386	0.4792	0.98902
	14:25:05	19505	0.6513	0.98511
	14:27:24	19644	0.5784	0.98676
	14:29:50	19790	0.7949	0.98186
	14:32:57	19977	0.7476	0.98293
	14:34:16	20056	0.9304	0.97880
	14:39:39	20379	0.5695	0.98697
	14:40:36	20436	0.4887	0.98881
	14:41:29	20489	0.5625	0.98713
	14:42:22	20542	0.7222	0.98350
	14:43:15	20595	1.0362	0.97642
	14:44:07	20647	0.9373	0.97864
	14:45:02	20702	0.5006	0.98853
	14:45:54	20754	0.4013	0.99080
	14:46:47	20807	0.6217	0.98578
	14:47:40	20860	0.3547	0.99186
		AVE	0.6485	0.98518
		BESD	0.1988	0.00451


26 June 2000
SO2 Band at 2514.7 cm-1
Transmittance
1.00
0.99
0.98
0.97
0.96
15000
16000
17000
18000
19000
20000
21000
Time (sec)

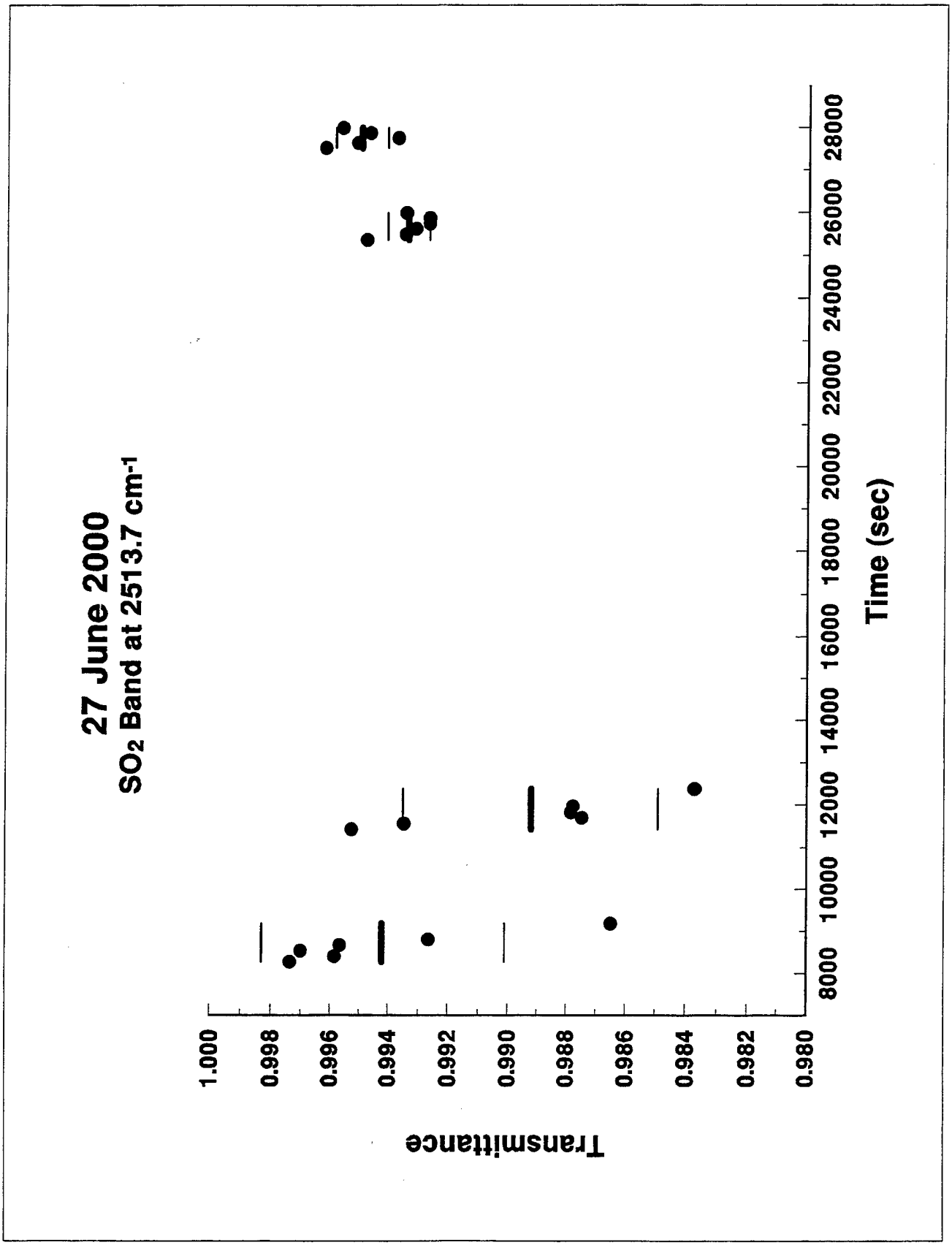

26 June 2000
SO2 Band at 2514.7 cm-1
Absorbance (A.U.)
0.012
0.010
0.008
0.006
0.004
0.002
0.000
15000
16000
17000
18000
19000
20000
21000
Time (sec)

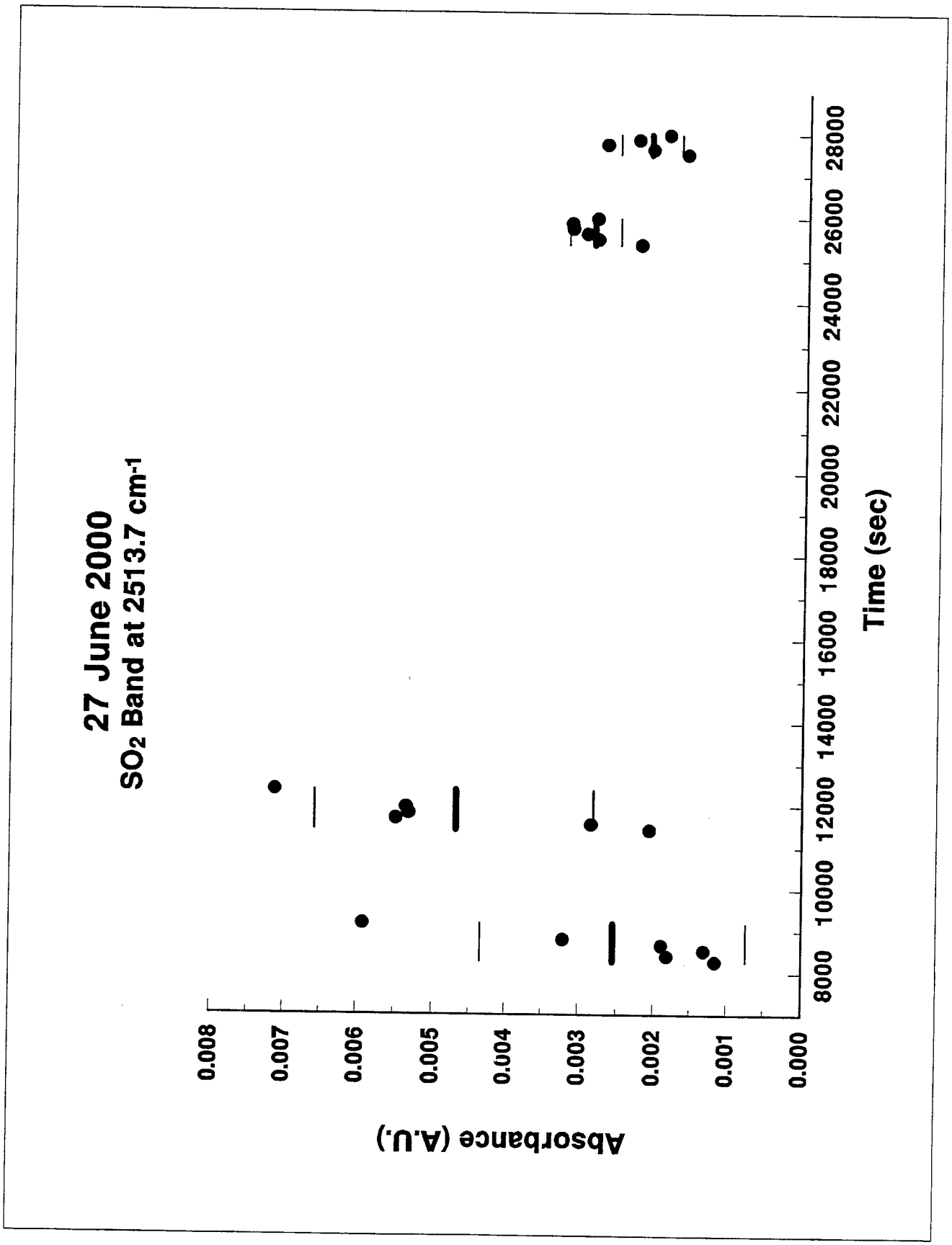
Date: 27 June 2000
Source: Power Plant Stack #3
SPS: 1 cm^{-1}

			2513.7 cm^{-1}	
Filename	**TOD Hr:Mn:Sc**	**IOT (sec)**	**A*10^2 (A.U.)**	**τ**
LMB0102	09:22:47	8267	0.1151	0.99735
	09:25:02	8402	0.1808	0.99584
	09:27:15	8535	0.1305	0.99699
	09:29:21	8661	0.1885	0.99566
	09:31:38	8798	0.3204	0.99264
	09:37:59	9179	0.5909	0.98648
		AVE	0.2544	0.99416
		BESD	0.1800	0.00411
LMB0104	10:15:18	11418	0.2059	0.99527
	10:17:33	11553	0.2841	0.99347
	10:19:53	11693	0.5477	0.98746
	10:22:04	11824	0.5313	0.98784
	10:24:26	11966	0.5345	0.98776
		AVE	0.4693	0.98925
		BESD	0.1882	0.00430
LMB0124	14:07:34	25354	0.2257	0.99481
	14:09:45	25485	0.2832	0.99349
	14:11:56	25616	0.2979	0.99316
	14:14:02	25742	0.3173	0.99271
	14:16:05	25865	0.3180	0.99270
	14:18:03	25983	0.2843	0.99347
		AVE	0.2877	0.99339
		BESD	0.0340	0.00070

Date: 27 June 2000
Source: Power Plant Stack #3
SPS: 1 cm^{-1}

			2513.7 cm^{-1}	
Filename	TOD Hr:Mn:Sc	IOT (sec)	A*10^2 (A.U.)	τ
LMB0126	14:43:39	27519	0.1636	0.99624
	14:45:38	27638	0.2112	0.99514
	14:47:33	27753	0.2723	0.99375
	14:49:27	27867	0.2304	0.99470
	14:51:24	27984	0.1885	0.99556
		AVE	0.2132	0.99510
		BESD	0.0414	0.00099


27 June 2000
SO2 Band at 2513.7 cm-1
Transmittance
1.000
0.998
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
8000
10000
12000
14000
16000
18000
20000
22000
24000
26000
28000
Time (sec)

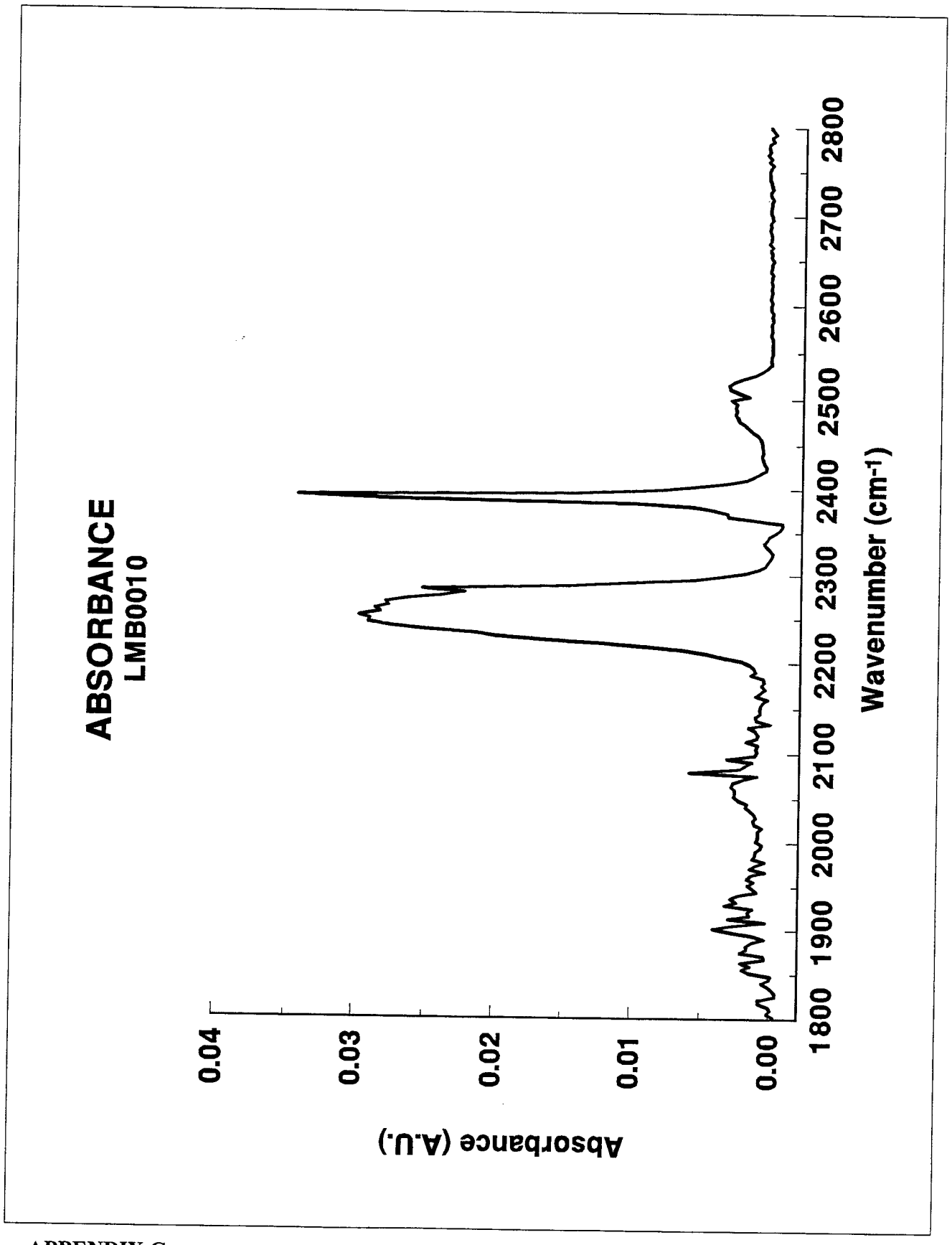

27 June 2000
SO2 Band at 2513.7 cm-1
Absorbance (A.U.)
0.000
0.001
0.002
0.003
0.004
0.005
0.006
0.007
0.008
8000
10000
12000
14000
16000
18000
20000
22000
24000
26000
28000
Time (sec)

APPENDIX C

SULFUR DIOXIDE SPECTRA

Representative absorbance, single-beam blackbody, and single-beam on/off stack No. 3 plume spectra are furnished in the form of plots and spectral listings. The order of appearance of these files is sumarized in the table below.

Date	TOD	Filename	SPS (cm^{-1})
26JUN00	13:21:59	LMB0010	4
26JUN00	14:25:05	LMB0013	4
27JUN00	14:09:45	LMB0124	1


ABSORBANCE
LMB0010
Absorbance (A.U.)
0.04
0.03
0.02
0.01
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0010 Type: Absorbance
Subfile: 0398

WN	ABS	WN	ABS
1801.18	-0.0003596	1982.46	0.0012382
1805.04	0.0000786	1986.32	0.001069
1808.9	-0.0001209	1990.17	0.0010514
1812.75	-0.0000112	1994.03	0.0006994
1816.61	0.0007111	1997.89	0.0006113
1820.47	0.000748	2001.74	0.000991
1824.32	-0.0004504	2005.6	0.0008952
1828.18	-0.000481	2009.46	0.0008662
1832.04	-0.0002613	2013.31	0.0008784
1835.9	0.0000796	2017.17	0.0006036
1839.75	0.0004774	2021.03	0.0011291
1843.61	-0.0000359	2024.89	0.0012433
1847.47	-0.0001301	2028.74	0.0010518
1851.32	0.0014282	2032.6	0.0011841
1855.18	0.0018825	2036.46	0.0014508
1859.04	0.0013874	2040.31	0.0017543
1862.89	0.0020052	2044.17	0.0017288
1866.75	0.0003511	2048.03	0.0023221
1870.61	0.0004011	2051.88	0.0026243
1874.46	0.0020294	2055.74	0.0025881
1878.32	0.0016124	2059.6	0.0025998
1882.18	0.0016391	2063.46	0.0028534
1886.04	0.001254	2067.31	0.0027152
1889.89	0.0003637	2071.17	0.0020144
1893.75	0.0012498	2075.03	0.0009938
1897.61	0.0027471	2078.88	0.0058051
1901.46	0.004029	2082.74	0.0022534
1905.32	0.0026913	2086.6	0.0018457
1909.18	0.0003082	2090.45	0.0013713
1913.03	0.0029446	2094.31	0.0031142
1916.89	0.0014597	2098.17	0.0011518
1920.75	0.001545	2102.02	0.0010337
1924.61	0.0012542	2105.88	0.0010873
1928.46	0.003203	2109.74	0.0009604
1932.32	0.0023913	2113.6	0.0017493
1936.18	0.0028082	2117.45	0.0010015
1940.03	0.0022831	2121.31	0.0009626
1943.89	0.000932	2125.17	0.0011548
1947.75	0.0012355	2129.02	0.0016047
1951.6	0.0015445	2132.88	0.0000635
1955.46	0.0011765	2136.74	0.0010349
1959.32	0.0016083	2140.59	0.0011319
1963.17	0.0013668	2144.45	0.0008048
1967.03	0.0003445	2148.31	0.0008273
1970.89	0.0014226	2152.16	0.000798
1974.75	0.0010192	2156.02	0.000644
1978.6	0.0003931	2159.88	0.0002795

Filename: LMB0010 Type: Absorbance
Subfile: 0398

WN	ABS
2163.74	0.0011006
2167.59	0.0007514
2171.45	0.0004779
2175.31	0.0007008
2179.16	0.0005415
2183.02	0.0005921
2186.88	0.0014618
2190.73	0.0011744
2194.59	0.0013246
2198.45	0.0015852
2202.31	0.0022016
2206.16	0.0034886
2210.02	0.0046693
2213.88	0.0061866
2217.73	0.0086564
2221.59	0.0121241
2225.45	0.0161305
2229.3	0.0198454
2233.16	0.0214562
2237.02	0.0252521
2240.87	0.0274904
2244.73	0.0289938
2248.59	0.0289451
2252.45	0.0296867
2256.3	0.028198
2260.16	0.0285311
2264.02	0.027634
2267.87	0.0277685
2271.73	0.0262396
2275.59	0.0238014
2279.44	0.0222314
2283.3	0.0251976
2287.16	0.0148132
2291.01	0.0101445
2294.87	0.0056248
2298.73	0.0035941
2302.59	0.0019691
2306.44	0.0010922
2310.3	0.0005669
2314.16	0.0004047
2318.01	0.0002224
2321.87	0.0000811
2325.73	7.55E-06
2329.58	0.0002264
2333.44	0.0004743
2337.3	0.0006122
2341.15	0.0004152

WN	ABS
2345.01	0.0002829
2348.87	-0.000163
2352.73	-0.000485
2356.58	-0.000666
2360.44	-0.000658
2364.3	0.0011853
2368.15	0.0032486
2372.01	0.0033391
2375.87	0.0042924
2379.72	0.0057596
2383.58	0.0100289
2387.44	0.0272312
2391.29	0.0342543
2395.15	0.0142736
2399.01	0.0081216
2402.87	0.0054946
2406.72	0.0034145
2410.58	0.0019773
2414.44	0.0014488
2418.29	0.0009557
2422.15	0.0005541
2426.01	0.0005319
2429.86	0.0007159
2433.72	0.0007833
2437.58	0.0008786
2441.43	0.0007847
2445.29	0.0008222
2449.15	0.0008638
2453.01	0.0008901
2456.86	0.0009852
2460.72	0.0011846
2464.58	0.0015464
2468.43	0.0018519
2472.29	0.0021504
2476.15	0.0025028
2480	0.0026344
2483.86	0.0028119
2487.72	0.0027283
2491.58	0.0028317
2495.43	0.0027351
2499.29	0.0030989
2503.15	0.0018697
2507	0.0025759
2510.86	0.0032028
2514.72	0.0033039
2518.57	0.0029603
2522.43	0.0022347

Filename: LMB0010 Type: Absorbance
Subfile: 0398

WN	ABS
2526.29	0.0013827
2530.14	0.0008658
2534	0.0004926
2537.86	0.0002516
2541.72	0.000286
2545.57	0.0002598
2549.43	0.0001792
2553.29	0.000217
2557.14	0.0002159
2561	0.0001939
2564.86	0.0002157
2568.71	0.0003214
2572.57	0.0002406
2576.43	0.0002694
2580.28	0.0002756
2584.14	0.0001659
2588	0.0002375
2591.86	0.0001883
2595.71	0.0003416
2599.57	0.0003387
2603.43	0.000267
2607.28	0.0003678
2611.14	0.0003216
2615	0.0002772
2618.85	0.0003229
2622.71	0.0002536
2626.57	0.0003183
2630.42	0.0002978
2634.28	0.0002424
2638.14	0.0003928
2642	0.0003063
2645.85	0.0003037
2649.71	0.0001721
2653.57	0.0003545
2657.42	0.0003023
2661.28	0.0004122
2665.14	0.0002896
2668.99	0.0004914
2672.85	0.0003584
2676.71	0.0003523
2680.56	0.0003957
2684.42	0.0004867
2688.28	0.0004127
2692.14	0.0004289
2695.99	0.0002795
2699.85	0.0003244
2703.71	0.0004254
2707.56	0.0004257
2711.42	0.0003691
2715.28	0.0003665
2719.13	0.0002738
2722.99	0.0004353
2726.85	0.0004579
2730.71	0.0002977
2734.56	0.0003633
2738.42	0.0004346
2742.28	0.000539
2746.13	0.0005189
2749.99	0.0005603
2753.85	0.0004738
2757.7	0.0002948
2761.56	0.0005739
2765.42	0.0004307
2769.27	0.0006684
2773.13	0.0005289
2776.99	0.0006043
2780.85	0.0005808
2784.7	0.0002914
2788.56	0.0003879
2792.42	0.0000849
2796.27	0.000296
2800.13	0.0004554

Filename: LMB0010 Type: 40 deg C BB
Subfile: 1910

WN	INT
1801.18	2466.87
1805.04	3172.28
1808.9	3372.1
1812.75	3790.95
1816.61	4235.65
1820.47	4873.95
1824.32	4869.74
1828.18	6135.93
1832.04	7830.04
1835.9	8823.3
1839.75	10310.4
1843.61	8670.76
1847.47	11926.5
1851.32	13592.3
1855.18	14065.6
1859.04	14108.5
1862.89	14580.4
1866.75	13316.8
1870.61	13698.7
1874.46	15212.3
1878.32	15384.4
1882.18	15677.3
1886.04	15559.7
1889.89	13701
1893.75	15180.2
1897.61	15696.5
1901.46	15485.7
1905.32	15248.9
1909.18	14064.9
1913.03	14954.4
1916.89	13727.1
1920.75	14975.1
1924.61	14403.8
1928.46	14499
1932.32	14365.8
1936.18	14497.9
1940.03	14502.3
1943.89	13528.3
1947.75	14061.2
1951.6	14178.8
1955.46	13897.9
1959.32	14034.9
1963.17	13939.9
1967.03	12836.6
1970.89	13750.7
1974.75	13508.3
1978.6	13311.1

WN	INT
1982.46	13098.8
1986.32	12921.1
1990.17	12601.3
1994.03	12490.4
1997.89	12443.7
2001.74	12444.6
2005.6	12344.4
2009.46	12208.6
2013.31	12154
2017.17	11428.4
2021.03	11800.5
2024.89	11635.5
2028.74	11478
2032.6	11314
2036.46	11162.9
2040.31	10897.5
2044.17	10905.2
2048.03	10762.5
2051.88	10613.2
2055.74	10427.7
2059.6	10234
2063.46	10063.6
2067.31	9988.43
2071.17	9839.89
2075.03	9706.99
2078.88	9567.25
2082.74	9470.59
2086.6	9331.92
2090.45	9104.72
2094.31	9083.29
2098.17	8938.66
2102.02	8819.37
2105.88	8709.14
2109.74	8583.39
2113.6	8472.83
2117.45	8387.33
2121.31	8254.69
2125.17	8172.65
2129.02	8048.05
2132.88	7966.84
2136.74	7828.36
2140.59	7753.33
2144.45	7655.9
2148.31	7547.04
2152.16	7466.84
2156.02	7340.19
2159.88	7262.53

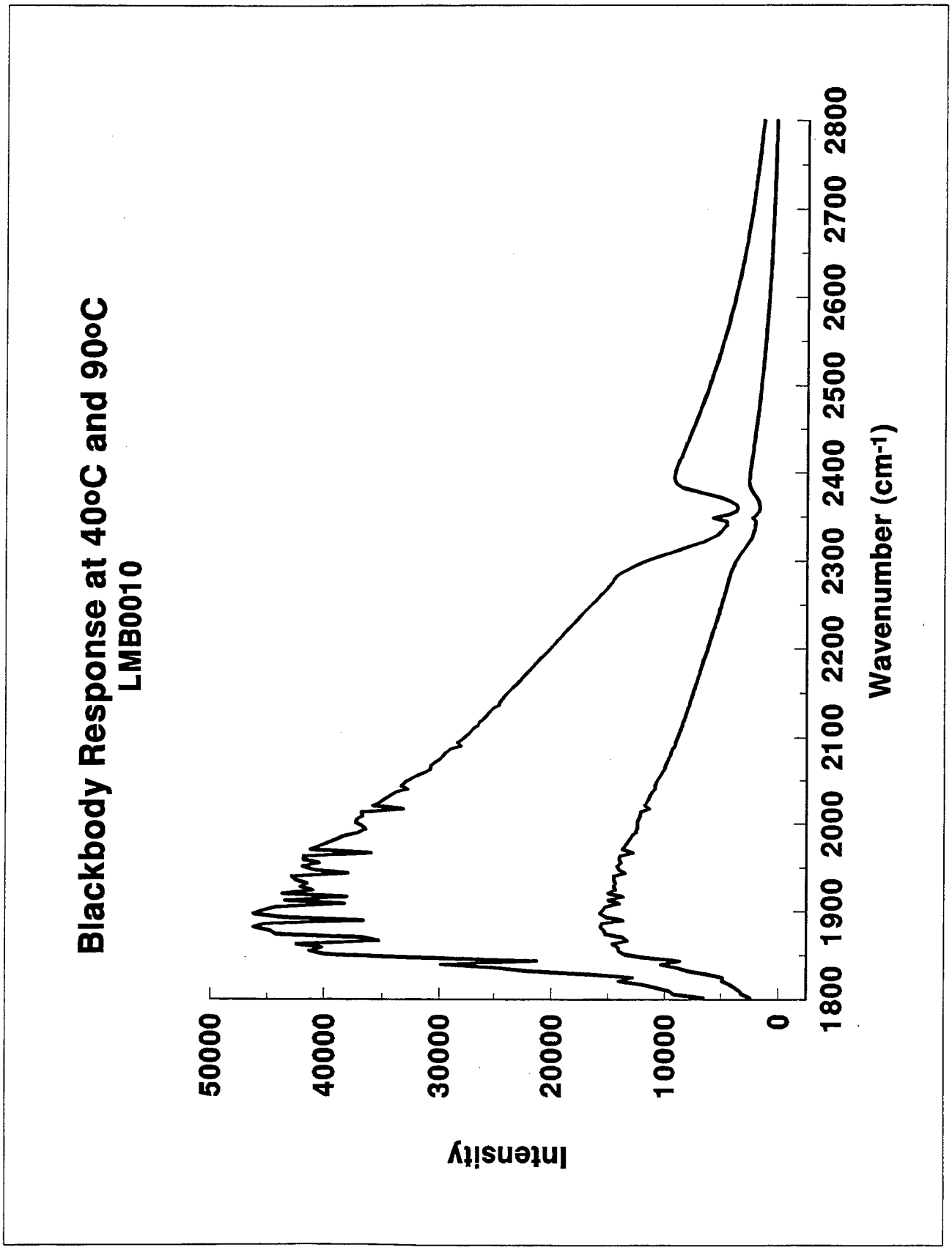
Filename: LMB0010 Type: 40 deg C BB
Subfile: 1910

WN	INT	WN	INT
2163.74	7135.6	2345.01	2080.9
2167.59	7056.72	2348.87	2314.34
2171.45	6934.39	2352.73	1990.14
2175.31	6858.24	2356.58	1793.49
2179.16	6757.13	2360.44	1709.04
2183.02	6659.93	2364.3	1760.9
2186.88	6571.56	2368.15	1831.39
2190.73	6464.63	2372.01	1998.59
2194.59	6370.61	2375.87	2229.23
2198.45	6268.67	2379.72	2423.71
2202.31	6185.01	2383.58	2552.07
2206.16	6072.81	2387.44	2641.63
2210.02	5991.45	2391.29	2644.12
2213.88	5907.83	2395.15	2612.27
2217.73	5806.04	2399.01	2596.08
2221.59	5699.76	2402.87	2584.6
2225.45	5616.77	2406.72	2521.71
2229.3	5536.5	2410.58	2471.56
2233.16	5417.35	2414.44	2439.43
2237.02	5345.52	2418.29	2398.17
2240.87	5220.86	2422.15	2339.92
2244.73	5174.23	2426.01	2298.02
2248.59	5048.93	2429.86	2282.64
2252.45	4992.72	2433.72	2241.23
2256.3	4886.38	2437.58	2184.33
2260.16	4798.4	2441.43	2148.86
2264.02	4716.64	2445.29	2124.46
2267.87	4628.92	2449.15	2077.16
2271.73	4567.12	2453.01	2030.07
2275.59	4468.26	2456.86	1987.3
2279.44	4432.69	2460.72	1970.57
2283.3	4327.45	2464.58	1929.53
2287.16	4228.09	2468.43	1887.87
2291.01	4112.2	2472.29	1848.99
2294.87	3957.88	2476.15	1821.08
2298.73	3842.02	2480	1796.07
2302.59	3666.79	2483.86	1764.04
2306.44	3473.64	2487.72	1714.43
2310.3	3280.02	2491.58	1682.1
2314.16	3050.5	2495.43	1651.73
2318.01	2853.72	2499.29	1625.73
2321.87	2633.02	2503.15	1607.9
2325.73	2458.81	2507	1569.98
2329.58	2327.77	2510.86	1527.63
2333.44	2228.16	2514.72	1503
2337.3	2131.59	2518.57	1483.37
2341.15	2103.67	2522.43	1456.75

Filename: LMB0010 Type: 40 deg C BB
Subfile: 1910

WN	INT
2526.29	1423.57
2530.14	1400.91
2534	1360.29
2537.86	1339.21
2541.72	1319.85
2545.57	1294.28
2549.43	1269.91
2553.29	1245.57
2557.14	1216.37
2561	1188.98
2564.86	1173.83
2568.71	1148.06
2572.57	1128.46
2576.43	1108.68
2580.28	1077.55
2584.14	1068.16
2588	1035.16
2591.86	1016.25
2595.71	994.148
2599.57	982.407
2603.43	964.421
2607.28	942.707
2611.14	929.21
2615	912.556
2618.85	892.718
2622.71	876.903
2626.57	850.83
2630.42	829.993
2634.28	812.494
2638.14	797.724
2642	778.478
2645.85	764.953
2649.71	754.383
2653.57	739.937
2657.42	724.869
2661.28	705.438
2665.14	701.998
2668.99	686.613
2672.85	672.284
2676.71	654.703
2680.56	646.146
2684.42	631.58
2688.28	624.419
2692.14	604.963
2695.99	584.874
2699.85	574.021
2703.71	565.371

WN	INT
2707.56	554.97
2711.42	548.585
2715.28	530.761
2719.13	516.689
2722.99	509.072
2726.85	499.906
2730.71	492.333
2734.56	472.341
2738.42	468.279
2742.28	458.191
2746.13	450.821
2749.99	443.859
2753.85	426.103
2757.7	423.888
2761.56	400.715
2765.42	399.346
2769.27	395.833
2773.13	379.448
2776.99	367.129
2780.85	374.291
2784.7	362.011
2788.56	353.322
2792.42	341.977
2796.27	335.056
2800.13	338.237


Blackbody Response at 40°C and 90°C
LMB0010
Intensity
50000
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0010 Type: 90 deg C BB
Subfile: 1800

WN	INT
1801.18	6514.47
1805.04	9200.98
1808.9	9544.58
1812.75	10657.4
1816.61	12040.4
1820.47	14042.7
1824.32	12835.9
1828.18	16662.3
1832.04	22019.1
1835.9	24653.2
1839.75	29797.1
1843.61	21338.4
1847.47	32335.8
1851.32	39797.9
1855.18	41229.7
1859.04	40203.5
1862.89	42344.8
1866.75	35322
1870.61	36741.8
1874.46	44208.1
1878.32	44708
1882.18	46168.9
1886.04	45228.5
1889.89	36664.7
1893.75	43568.6
1897.61	46207.5
1901.46	45427.2
1905.32	44238.5
1909.18	38290.9
1913.03	43376.5
1916.89	38106
1920.75	43592.5
1924.61	40989.5
1928.46	42026.9
1932.32	41524.5
1936.18	42462.4
1940.03	42798.3
1943.89	37994.1
1947.75	40857.2
1951.6	41827.9
1955.46	40436.9
1959.32	41765.9
1963.17	41753
1967.03	36008.2
1970.89	41154.7
1974.75	40375.7
1978.6	39661.7

WN	INT
1982.46	38971.2
1986.32	38346.5
1990.17	37077
1994.03	36495.5
1997.89	36818.9
2001.74	37295.4
2005.6	37206.9
2009.46	36767.9
2013.31	36795.3
2017.17	33209.7
2021.03	35829.4
2024.89	35262.8
2028.74	34837.3
2032.6	34369.9
2036.46	33913.4
2040.31	32865.9
2044.17	33368.2
2048.03	33066.5
2051.88	32560.4
2055.74	32041.7
2059.6	31312.9
2063.46	30835.7
2067.31	30767.6
2071.17	30420.8
2075.03	29981.8
2078.88	29703
2082.74	29466.3
2086.6	29071.2
2090.45	28137.5
2094.31	28382.5
2098.17	27989.1
2102.02	27637.7
2105.88	27266.8
2109.74	26977.8
2113.6	26575.1
2117.45	26399.5
2121.31	26040.2
2125.17	25734.5
2129.02	25449.1
2132.88	25176.5
2136.74	24650.2
2140.59	24538.6
2144.45	24273.6
2148.31	24005.7
2152.16	23712.9
2156.02	23432.2
2159.88	23121.5

Filename: LMB0010 Type: 90 deg C BB
Subfile: 1800

WN	INT	WN	INT
2163.74	22797.8	2345.01	4597.09
2167.59	22546.2	2348.87	5760.25
2171.45	22263.2	2352.73	4400.15
2175.31	22014.6	2356.58	3756.02
2179.16	21758.6	2360.44	3633.89
2183.02	21468.4	2364.3	3779.56
2186.88	21158.8	2368.15	4320.8
2190.73	20898.5	2372.01	5105.55
2194.59	20593.7	2375.87	6236.73
2198.45	20305.5	2379.72	7438.95
2202.31	20046.4	2383.58	8492.83
2206.16	19754.4	2387.44	9004.17
2210.02	19500.6	2391.29	9185.92
2213.88	19257.9	2395.15	9241.61
2217.73	18971.5	2399.01	9197.11
2221.59	18715.5	2402.87	9142.2
2225.45	18415.8	2406.72	9022.3
2229.3	18108.8	2410.58	8900.58
2233.16	17842.3	2414.44	8782.91
2237.02	17552.6	2418.29	8611.78
2240.87	17285.2	2422.15	8495.3
2244.73	16994.9	2426.01	8366.4
2248.59	16716.2	2429.86	8228.06
2252.45	16425.4	2433.72	8127
2256.3	16075.9	2437.58	7983.29
2260.16	15819.5	2441.43	7889.87
2264.02	15506.1	2445.29	7746.25
2267.87	15229.2	2449.15	7622.43
2271.73	15004.4	2453.01	7495.97
2275.59	14729.1	2456.86	7360.13
2279.44	14555.3	2460.72	7255.88
2283.3	14325.3	2464.58	7142.88
2287.16	13853.3	2468.43	7014.84
2291.01	13262.6	2472.29	6914.88
2294.87	12629.7	2476.15	6822.88
2298.73	11985.8	2480	6690.86
2302.59	11204.3	2483.86	6583.69
2306.44	10321	2487.72	6480.31
2310.3	9326.37	2491.58	6342.55
2314.16	8465.17	2495.43	6239.34
2318.01	7536.17	2499.29	6153.51
2321.87	6578.19	2503.15	6042.1
2325.73	5987.26	2507	5956.09
2329.58	5405.56	2510.86	5865.92
2333.44	5090.47	2514.72	5757.46
2337.3	4816.69	2518.57	5662.68
2341.15	4560.5	2522.43	5563.26

Filename: LMB0010 Type: 90 deg C BB
Subfile: 1800

WN	INT
2526.29	5460.49
2530.14	5354.94
2534	5289.24
2537.86	5185.3
2541.72	5108.89
2545.57	5018.34
2549.43	4945.82
2553.29	4848.43
2557.14	4751.73
2561	4661.48
2564.86	4584.09
2568.71	4511.81
2572.57	4430.71
2576.43	4363.29
2580.28	4286.07
2584.14	4218.56
2588	4120.71
2591.86	4040.5
2595.71	3974.43
2599.57	3918.9
2603.43	3855.17
2607.28	3778.98
2611.14	3718.69
2615	3657.98
2618.85	3601.52
2622.71	3528.72
2626.57	3454.58
2630.42	3387.09
2634.28	3332.41
2638.14	3278.27
2642	3222.48
2645.85	3182.79
2649.71	3104.47
2653.57	3051.7
2657.42	2985.28
2661.28	2938
2665.14	2876.26
2668.99	2834.93
2672.85	2787.64
2676.71	2724.15
2680.56	2681.86
2684.42	2638.27
2688.28	2575.36
2692.14	2528.01
2695.99	2484.31
2699.85	2433.84
2703.71	2399.66

WN	INT
2707.56	2351.52
2711.42	2303.3
2715.28	2257.53
2719.13	2231.87
2722.99	2172.5
2726.85	2123.7
2730.71	2091.63
2734.56	2055.46
2738.42	2017.08
2742.28	1977.42
2746.13	1940.18
2749.99	1895.58
2753.85	1869.5
2757.7	1831.08
2761.56	1794.78
2765.42	1753.83
2769.27	1727.8
2773.13	1704.21
2776.99	1665.98
2780.85	1636.15
2784.7	1609.19
2788.56	1568.99
2792.42	1524.27
2796.27	1503.02
2800.13	1474.62

Filename: LMB0010 Type: OFF STACK
Subfile: 1300

WN	INT	WN	INT
1801.18	1957.77	1982.46	8689.8
1805.04	2277.06	1986.32	8750.32
1808.9	2459.81	1990.17	8763.81
1812.75	2741.2	1994.03	8724.98
1816.61	3025.44	1997.89	8511.98
1820.47	3419.58	2001.74	8143.04
1824.32	3755.12	2005.6	7995.42
1828.18	4567.98	2009.46	8278.94
1832.04	5519.67	2013.31	7945.58
1835.9	6296.64	2017.17	8096.9
1839.75	7107.65	2021.03	7873.14
1843.61	6902.52	2024.89	7685.39
1847.47	8685.78	2028.74	7408.01
1851.32	9217.18	2032.6	7215.99
1855.18	9522.12	2036.46	7186.71
1859.04	9832.72	2040.31	7260.27
1862.89	10025.6	2044.17	7172.67
1866.75	9991.4	2048.03	6866.39
1870.61	10093.1	2051.88	6648.38
1874.46	10406.7	2055.74	6522.7
1878.32	10507.3	2059.6	6747.46
1882.18	10555.7	2063.46	6560.18
1886.04	10727.3	2067.31	6517.76
1889.89	10210.5	2071.17	6082.07
1893.75	10594	2075.03	6255.92
1897.61	10671	2078.88	6220.65
1901.46	10568.2	2082.74	5914.65
1905.32	10529.2	2086.6	5864.26
1909.18	10395.6	2090.45	5932.29
1913.03	10344.9	2094.31	5536.52
1916.89	9995.85	2098.17	5451.86
1920.75	10416.6	2102.02	5406.15
1924.61	10203.9	2105.88	5452.43
1928.46	10003.4	2109.74	5131.49
1932.32	10026.3	2113.6	5229.93
1936.18	9867.76	2117.45	5075.86
1940.03	9970.72	2121.31	5088.29
1943.89	9752.21	2125.17	4969.72
1947.75	9791.07	2129.02	4846.39
1951.6	9587.1	2132.88	4659.21
1955.46	9724.87	2136.74	4983.77
1959.32	9404.79	2140.59	4708.06
1963.17	9380.17	2144.45	4694.53
1967.03	9312.73	2148.31	4634.41
1970.89	9127.87	2152.16	4582.29
1974.75	8919.17	2156.02	4364.81
1978.6	8678.83	2159.88	4345.15

Filename: LMB0010 Type: OFF STACK
Subfile: 1300

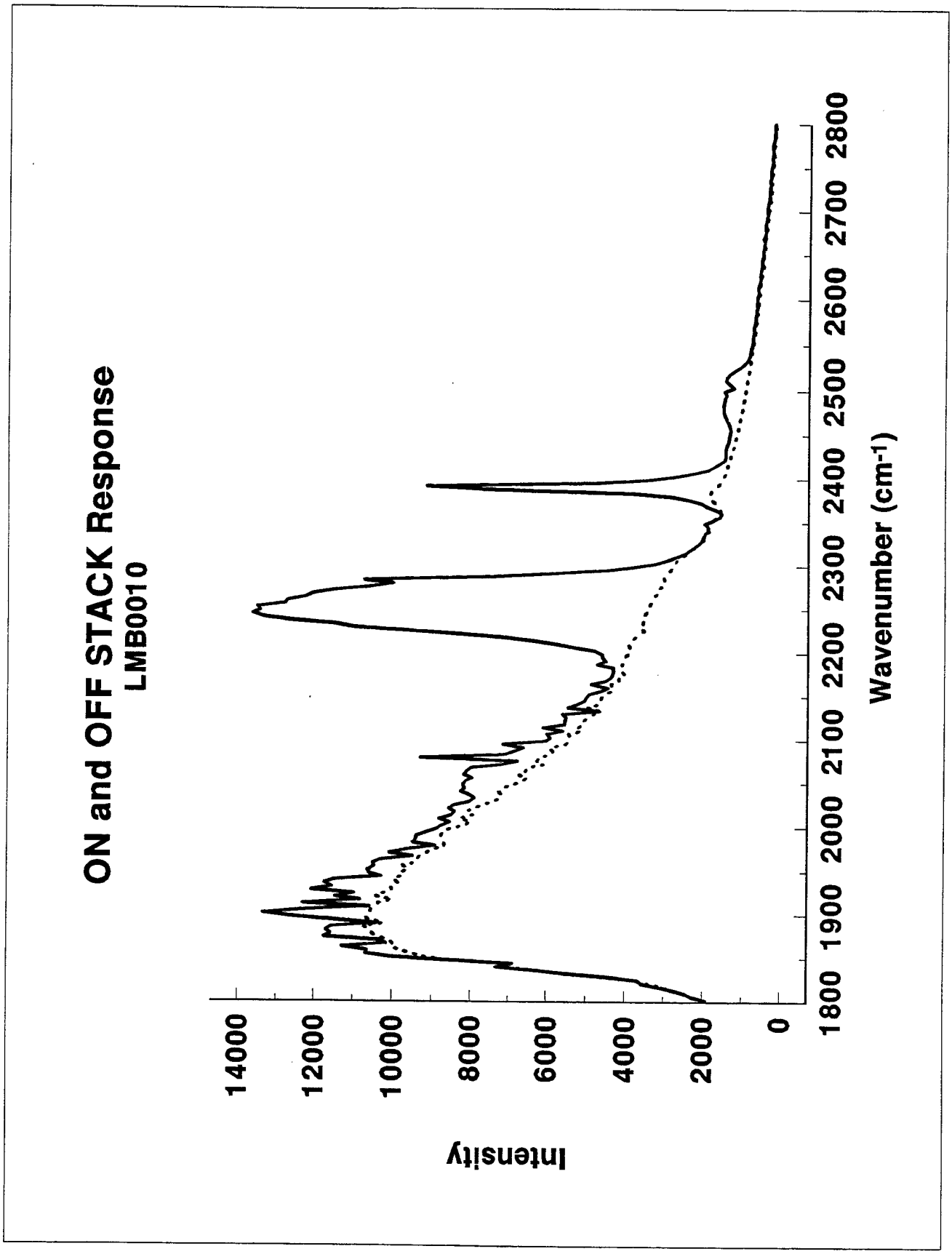
WN	INT
2163.74	4388.7
2167.59	4196.06
2171.45	4191.8
2175.31	4040.74
2179.16	4101.67
2183.02	4087.34
2186.88	4109.93
2190.73	4036.62
2194.59	4056.54
2198.45	3964.09
2202.31	3899.68
2206.16	3903.7
2210.02	3945
2213.88	3896.41
2217.73	3769.14
2221.59	3664.8
2225.45	3550.7
2229.3	3661.23
2233.16	3574.36
2237.02	3566.33
2240.87	3581.57
2244.73	3520.76
2248.59	3450.79
2252.45	3452.93
2256.3	3385.75
2260.16	3331.49
2264.02	3304.07
2267.87	3208.52
2271.73	3236.33
2275.59	3108.91
2279.44	3126.84
2283.3	3021.1
2287.16	3046.35
2291.01	2951.49
2294.87	2876.17
2298.73	2819.78
2302.59	2754.31
2306.44	2709.63
2310.3	2608.96
2314.16	2421.52
2318.01	2337.64
2321.87	2227.9
2325.73	2133.05
2329.58	2032.39
2333.44	1969.76
2337.3	1914.65
2341.15	1866.41

WN	INT
2345.01	1887.01
2348.87	1986.26
2352.73	1789.49
2356.58	1651.58
2360.44	1601.2
2364.3	1590.96
2368.15	1626.59
2372.01	1705.29
2375.87	1784.76
2379.72	1838.02
2383.58	1844.18
2387.44	1805.37
2391.29	1692.68
2395.15	1607.23
2399.01	1564.81
2402.87	1511.23
2406.72	1467.84
2410.58	1447.56
2414.44	1413.06
2418.29	1394.57
2422.15	1361.54
2426.01	1334.36
2429.86	1306.12
2433.72	1293.51
2437.58	1254.31
2441.43	1239.21
2445.29	1208.87
2449.15	1190.58
2453.01	1166.21
2456.86	1143.91
2460.72	1128.3
2464.58	1104.91
2468.43	1089.93
2472.29	1077.63
2476.15	1050.53
2480	1035.47
2483.86	1015.52
2487.72	1009.25
2491.58	982.796
2495.43	969.862
2499.29	954.87
2503.15	941.674
2507	923.607
2510.86	917.914
2514.72	899.088
2518.57	879.049
2522.43	865.2

Filename: LMB0010 Type: OFF STACK
Subfile: 1300

WN	INT
2526.29	856.611
2530.14	836.542
2534	824.21
2537.86	821.12
2541.72	801.812
2545.57	779.693
2549.43	759.956
2553.29	749.224
2557.14	741.659
2561	730.202
2564.86	708.834
2568.71	704.616
2572.57	692.571
2576.43	670.199
2580.28	664.25
2584.14	660.84
2588	646.554
2591.86	629.863
2595.71	628.939
2599.57	621.889
2603.43	628.19
2607.28	581.578
2611.14	600.284
2615	603.692
2618.85	569.797
2622.71	549.896
2626.57	548.598
2630.42	550.522
2634.28	537.484
2638.14	499.638
2642	506.215
2645.85	507.338
2649.71	493.392
2653.57	481.857
2657.42	468.111
2661.28	457.261
2665.14	445.454
2668.99	457.449
2672.85	433.421
2676.71	415.111
2680.56	416.774
2684.42	415.915
2688.28	407.474
2692.14	391.324
2695.99	379.252
2699.85	380.421
2703.71	372.661

WN	INT
2707.56	365.448
2711.42	343.442
2715.28	334.995
2719.13	330.619
2722.99	312.62
2726.85	309.805
2730.71	307.336
2734.56	318.93
2738.42	292.964
2742.28	291.044
2746.13	286.564
2749.99	278.041
2753.85	260.201
2757.7	258.945
2761.56	259.076
2765.42	248.759
2769.27	230.852
2773.13	244.335
2776.99	237.612
2780.85	222.745
2784.7	223.303
2788.56	212.919
2792.42	216.809
2796.27	203.884
2800.13	193.27


ON and OFF STACK Response
LMB0010
Intensity
14000
12000
10000
8000
6000
4000
2000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0010 Type: ON STACK
Subfile: 0308

WN	INT	WN	INT
1801.18	1927.07	1982.46	9474.59
1805.04	2287.11	1986.32	9418.03
1808.9	2443.94	1990.17	9397.59
1812.75	2739.55	1994.03	9139.99
1816.61	3144.19	1997.89	8881.62
1820.47	3566.83	2001.74	8756.37
1824.32	3677.89	2005.6	8551.63
1828.18	4458.56	2009.46	8811.57
1832.04	5439.19	2013.31	8489.76
1835.9	6324.08	2017.17	8428.08
1839.75	7310.69	2021.03	8558.96
1843.61	6892.58	2024.89	8430.51
1847.47	8627.46	2028.74	8033.75
1851.32	10040.8	2032.6	7913.63
1855.18	10650.4	2036.46	8032.35
1859.04	10634.2	2040.31	8249.66
1862.89	11261.1	2044.17	8172.93
1866.75	10163.5	2048.03	8204.76
1870.61	10299.8	2051.88	8141.8
1874.46	11725	2055.74	7977.88
1878.32	11570.4	2059.6	8175.63
1882.18	11683.1	2063.46	8109.86
1886.04	11569.2	2067.31	7997.6
1889.89	10400.1	2071.17	7175.35
1893.75	11401.8	2075.03	6789.1
1897.61	12582.5	2078.88	9305.22
1901.46	13323.7	2082.74	7113.62
1905.32	12319.5	2086.6	6837.11
1909.18	10567.7	2090.45	6631.32
1913.03	12276.6	2094.31	7150.53
1916.89	10820.5	2098.17	6044.32
1920.75	11444.9	2102.02	5933.11
1924.61	10982	2105.88	6000.46
1928.46	12063.9	2109.74	5613.44
1932.32	11549.7	2113.6	6095.2
1936.18	11715.8	2117.45	5570.98
1940.03	11495.9	2121.31	5559.56
1943.89	10292.7	2125.17	5529.85
1947.75	10578.5	2129.02	5619.77
1951.6	10606.3	2132.88	4689.68
1955.46	10472.1	2136.74	5468.83
1959.32	10475.9	2140.59	5239.63
1963.17	10296.1	2144.45	5070
1967.03	9505.74	2148.31	5017.84
1970.89	10073.5	2152.16	4948.6
1974.75	9585.98	2156.02	4658.82
1978.6	8932.19	2159.88	4471.41

Filename: LMB0010 Type: ON STACK
Subfile: 0308

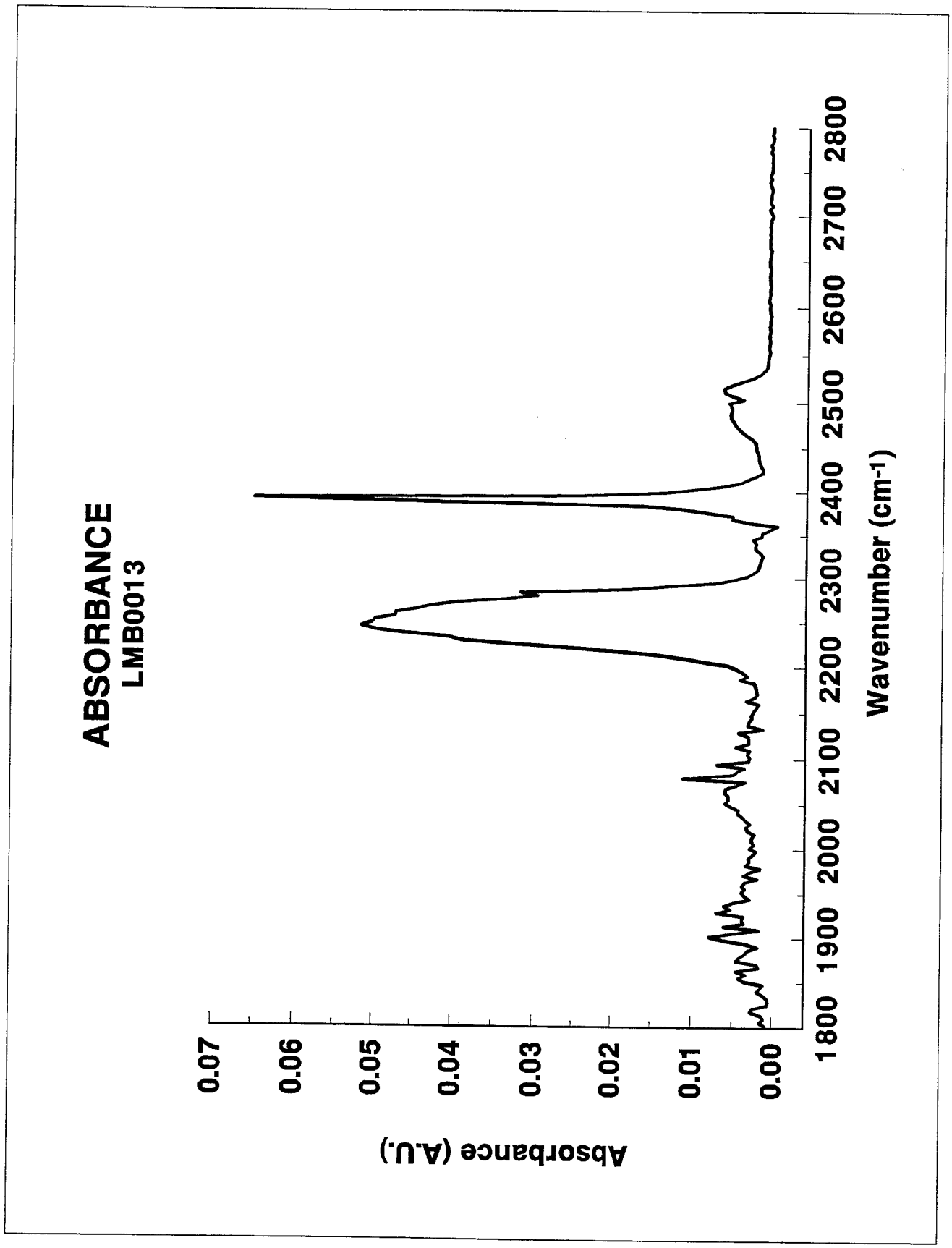
WN	INT
2163.74	4880.28
2167.59	4529.45
2171.45	4402.31
2175.31	4347.03
2179.16	4336.58
2183.02	4341.63
2186.88	4729.46
2190.73	4530.89
2194.59	4607.36
2198.45	4616.65
2202.31	4797.02
2206.16	5309
2210.02	5804.75
2213.88	6335.11
2217.73	7136.8
2221.59	8325.35
2225.45	9642.52
2229.3	11009.4
2233.16	11436.7
2237.02	12646.4
2240.87	13350.9
2244.73	13635.5
2248.59	13448.9
2252.45	13524.1
2256.3	12795.1
2260.16	12735.6
2264.02	12258.4
2267.87	12078.7
2271.73	11527.2
2275.59	10550.2
2279.44	10017.1
2283.3	10734.9
2287.16	7476.46
2291.01	5861.75
2294.87	4418.27
2298.73	3750.45
2302.59	3228.56
2306.44	2949.47
2310.3	2719.32
2314.16	2492.36
2318.01	2371.41
2321.87	2238.31
2325.73	2133.92
2329.58	2055.2
2333.44	2014.31
2337.3	1968.71
2341.15	1900.11

WN	INT
2345.01	1910.59
2348.87	1967.57
2352.73	1750.48
2356.58	1607.81
2360.44	1558.67
2364.3	1671.51
2368.15	1899.04
2372.01	2056.21
2375.87	2368.62
2379.72	2820.5
2383.58	3867.83
2387.44	7599.88
2391.29	9159.45
2395.15	4845.12
2399.01	3419.09
2402.87	2766.08
2406.72	2245.24
2410.58	1894.96
2414.44	1737.87
2418.29	1605.27
2422.15	1483
2426.01	1449.7
2429.86	1458.76
2433.72	1459.35
2437.58	1438.17
2441.43	1402.33
2445.29	1376.85
2449.15	1365.2
2453.01	1344.14
2456.86	1338.13
2460.72	1358.77
2464.58	1402.56
2468.43	1441.47
2472.29	1482.12
2476.15	1516.8
2480	1517.38
2483.86	1523.62
2487.72	1498.23
2491.58	1480.77
2495.43	1444.97
2499.29	1487.7
2503.15	1258.08
2507	1355.84
2510.86	1450.72
2514.72	1439.9
2518.57	1356.95
2522.43	1221.19

Filename: LMB0010 Type: ON STACK
Subfile: 0308

WN	INT
2526.29	1074.06
2530.14	970.457
2534	900.196
2537.86	859.253
2541.72	844.655
2545.57	818.082
2549.43	786.192
2553.29	780.467
2557.14	772.264
2561	757.287
2564.86	738.524
2568.71	748.393
2572.57	724.86
2576.43	705.956
2580.28	700.422
2584.14	682.297
2588	676.727
2591.86	653.404
2595.71	671.139
2599.57	663.265
2603.43	660.396
2607.28	625.278
2611.14	637.985
2615	635.777
2618.85	606.812
2622.71	578.46
2626.57	583.909
2630.42	583.075
2634.28	563.68
2638.14	541.586
2642	538.547
2645.85	539.156
2649.71	510.988
2653.57	517.627
2657.42	498.048
2661.28	497.695
2665.14	473.226
2668.99	504.138
2672.85	467.084
2676.71	447.599
2680.56	452.791
2684.42	459.718
2688.28	443.717
2692.14	428.588
2695.99	403.329
2699.85	407.869
2703.71	408.273

WN	INT
2707.56	400.478
2711.42	373.231
2715.28	364.201
2719.13	352.361
2722.99	346.274
2726.85	344.477
2730.71	329.623
2734.56	345.914
2738.42	324.675
2742.28	329.75
2746.13	323.223
2749.99	316.764
2753.85	292.88
2757.7	278.843
2761.56	297.545
2765.42	276.926
2769.27	273.997
2773.13	278.385
2776.99	275.881
2780.85	258.634
2784.7	241.165
2788.56	236.178
2792.42	221.778
2796.27	221.057
2800.13	219.077


ABSORBANCE
LMB0013
Absorbance (A.U.)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0013 Type: Absorbance
Subfile: 0580

WN	ABS	WN	ABS
1801.18	0.0008486	1982.46	0.0033835
1805.04	0.0015284	1986.32	0.0029922
1808.9	0.0010633	1990.17	0.0030461
1812.75	0.0013132	1994.03	0.0026124
1816.61	0.0026169	1997.89	0.0021628
1820.47	0.0024872	2001.74	0.0029071
1824.32	0.0005873	2005.6	0.0024915
1828.18	0.0004707	2009.46	0.0027104
1832.04	0.0005992	2013.31	0.0027093
1835.9	0.0011778	2017.17	0.002414
1839.75	0.0018328	2021.03	0.0032075
1843.61	0.0014561	2024.89	0.0033832
1847.47	0.0011383	2028.74	0.0029814
1851.32	0.0035358	2032.6	0.0034409
1855.18	0.0041336	2036.46	0.0038539
1859.04	0.003339	2040.31	0.0044187
1862.89	0.004458	2044.17	0.0044054
1866.75	0.0017651	2048.03	0.0053378
1870.61	0.0019472	2051.88	0.0059481
1874.46	0.0044868	2055.74	0.005664
1878.32	0.0040699	2059.6	0.0056906
1882.18	0.0034584	2063.46	0.0060743
1886.04	0.0031248	2067.31	0.005966
1889.89	0.001873	2071.17	0.0047049
1893.75	0.0033439	2075.03	0.0035679
1897.61	0.0060413	2078.88	0.0111416
1901.46	0.0078302	2082.74	0.005052
1905.32	0.0052769	2086.6	0.0045811
1909.18	0.0017756	2090.45	0.0036984
1913.03	0.0060187	2094.31	0.006988
1916.89	0.0036213	2098.17	0.0031276
1920.75	0.0038654	2102.02	0.0030384
1924.61	0.0036961	2105.88	0.0032533
1928.46	0.0069142	2109.74	0.0030548
1932.32	0.00533	2113.6	0.0046491
1936.18	0.0060248	2117.45	0.0031108
1940.03	0.0049309	2121.31	0.0031207
1943.89	0.0029392	2125.17	0.0031801
1947.75	0.0035278	2129.02	0.0043597
1951.6	0.0039159	2132.88	0.0013641
1955.46	0.0035338	2136.74	0.0032082
1959.32	0.0038545	2140.59	0.0030989
1963.17	0.0034826	2144.45	0.0027692
1967.03	0.0020013	2148.31	0.0028026
1970.89	0.0036099	2152.16	0.0025206
1974.75	0.0029518	2156.02	0.0022208
1978.6	0.0016295	2159.88	0.0019629

Filename: LMB0013 Type: Absorbance
Subfile: 0580

WN	ABS
2163.74	0.0034047
2167.59	0.0024224
2171.45	0.0021204
2175.31	0.0022114
2179.16	0.0023147
2183.02	0.0024825
2186.88	0.0041757
2190.73	0.0033887
2194.59	0.0039395
2198.45	0.004755
2202.31	0.0058553
2206.16	0.0086905
2210.02	0.0112886
2213.88	0.0148159
2217.73	0.0197969
2221.59	0.0261649
2225.45	0.032634
2229.3	0.0389951
2233.16	0.0406817
2237.02	0.0463672
2240.87	0.0498036
2244.73	0.0515211
2248.59	0.0501941
2252.45	0.0498258
2256.3	0.0472324
2260.16	0.0471349
2264.02	0.0443476
2267.87	0.0428341
2271.73	0.0393338
2275.59	0.0334398
2279.44	0.0296079
2283.3	0.0315914
2287.16	0.017844
2291.01	0.0123427
2294.87	0.0071196
2298.73	0.0049985
2302.59	0.0034396
2306.44	0.0026457
2310.3	0.002143
2314.16	0.0019586
2318.01	0.0018462
2321.87	0.0017289
2325.73	0.0015286
2329.58	0.0018677
2333.44	0.0024245
2337.3	0.0024366
2341.15	0.002411

WN	ABS
2345.01	0.002711
2348.87	0.0017
2352.73	0.0015986
2356.58	0.0005886
2360.44	-0.000299
2364.3	0.0029797
2368.15	0.0053682
2372.01	0.0053688
2375.87	0.0083857
2379.72	0.0113451
2383.58	0.0162603
2387.44	0.0433291
2391.29	0.0649272
2395.15	0.0245125
2399.01	0.0135292
2402.87	0.0096831
2406.72	0.0064605
2410.58	0.00426
2414.44	0.0035428
2418.29	0.0024152
2422.15	0.0016274
2426.01	0.0015841
2429.86	0.0018347
2433.72	0.0020398
2437.58	0.002156
2441.43	0.0021433
2445.29	0.0023359
2449.15	0.0025065
2453.01	0.0024731
2456.86	0.0026304
2460.72	0.0030575
2464.58	0.0036588
2468.43	0.0042955
2472.29	0.0047993
2476.15	0.0051687
2480	0.0054171
2483.86	0.0056939
2487.72	0.0057215
2491.58	0.0055808
2495.43	0.0055977
2499.29	0.0058412
2503.15	0.0041605
2507	0.0054806
2510.86	0.0064419
2514.72	0.0065135
2518.57	0.0056223
2522.43	0.0042373

Filename: LMB0013 Type: Absorbance
Subfile: 0580

WN	ABS
2526.29	0.0029247
2530.14	0.0020081
2534	0.0015078
2537.86	0.001131
2541.72	0.0010864
2545.57	0.0010698
2549.43	0.0009979
2553.29	0.0008517
2557.14	0.0009388
2561	0.0009003
2564.86	0.0008725
2568.71	0.0009192
2572.57	0.0009338
2576.43	0.0008031
2580.28	0.0009179
2584.14	0.0008215
2588	0.0008465
2591.86	0.0007391
2595.71	0.0008936
2599.57	0.0009155
2603.43	0.000829
2607.28	0.0010419
2611.14	0.0009553
2615	0.0008988
2618.85	0.0009213
2622.71	0.0007979
2626.57	0.0008887
2630.42	0.0009095
2634.28	0.0009082
2638.14	0.0008685
2642	0.0008491
2645.85	0.0009815
2649.71	0.0009985
2653.57	0.0008811
2657.42	0.0008988
2661.28	0.0007557
2665.14	0.0009592
2668.99	0.0009137
2672.85	0.0009532
2676.71	0.0008668
2680.56	0.0009376
2684.42	0.0008877
2688.28	0.0009428
2692.14	0.0008443
2695.99	0.0008345
2699.85	0.0005348
2703.71	0.0008205
2707.56	0.0009769
2711.42	0.0006418
2715.28	0.0009192
2719.13	0.0008636
2722.99	0.0008373
2726.85	0.0007379
2730.71	0.0006772
2734.56	0.0008749
2738.42	0.0009745
2742.28	0.0008196
2746.13	0.000962
2749.99	0.0007684
2753.85	0.0007067
2757.7	0.0006814
2761.56	0.0007209
2765.42	0.000724
2769.27	0.0006754
2773.13	0.0008753
2776.99	0.0007427
2780.85	0.0008864
2784.7	0.0006636
2788.56	0.0005433
2792.42	0.0007096
2796.27	0.000584
2800.13	0.0005967

Filename: LMB0014 Type: 40 deg C BB
Subfile: 2250

WN	INT
1801.18	2562.67
1805.04	3329.03
1808.9	3521.57
1812.75	3915.69
1816.61	4388.79
1820.47	5085.62
1824.32	5085.79
1828.18	6406.63
1832.04	8133.89
1835.9	9209.26
1839.75	10794.7
1843.61	9067.27
1847.47	12490.1
1851.32	14301.7
1855.18	14804.1
1859.04	14842.2
1862.89	15358.9
1866.75	14042
1870.61	14399.6
1874.46	16049.1
1878.32	16223.7
1882.18	16554.8
1886.04	16428.8
1889.89	14427.8
1893.75	16058
1897.61	16565.4
1901.46	16347.8
1905.32	16084.6
1909.18	14837.3
1913.03	15787.8
1916.89	14518.3
1920.75	15847.3
1924.61	15179.9
1928.46	15307.6
1932.32	15174.8
1936.18	15321.7
1940.03	15342.9
1943.89	14267.7
1947.75	14850.6
1951.6	14970.8
1955.46	14679.5
1959.32	14845.3
1963.17	14739.2
1967.03	13560.1
1970.89	14519.1
1974.75	14271.5
1978.6	14085.4

WN	INT
1982.46	13844.5
1986.32	13651.9
1990.17	13329.5
1994.03	13180.4
1997.89	13159.3
2001.74	13158.3
2005.6	13059.9
2009.46	12926.9
2013.31	12839.6
2017.17	12082.1
2021.03	12506.3
2024.89	12303.4
2028.74	12142.6
2032.6	11967.1
2036.46	11808.9
2040.31	11535.5
2044.17	11526.5
2048.03	11406.8
2051.88	11219.8
2055.74	11043.3
2059.6	10824.8
2063.46	10653.6
2067.31	10571.6
2071.17	10411.3
2075.03	10263.3
2078.88	10134.1
2082.74	10019.2
2086.6	9881.19
2090.45	9645.64
2094.31	9602.34
2098.17	9478.5
2102.02	9335.78
2105.88	9224.27
2109.74	9108.65
2113.6	8980.17
2117.45	8880.53
2121.31	8769.15
2125.17	8649.58
2129.02	8539.57
2132.88	8440.93
2136.74	8300.84
2140.59	8210.11
2144.45	8109.37
2148.31	8010.82
2152.16	7906
2156.02	7787.09
2159.88	7689.16

Filename: LMB0014 Type: 40 deg C BB
Subfile: 2250

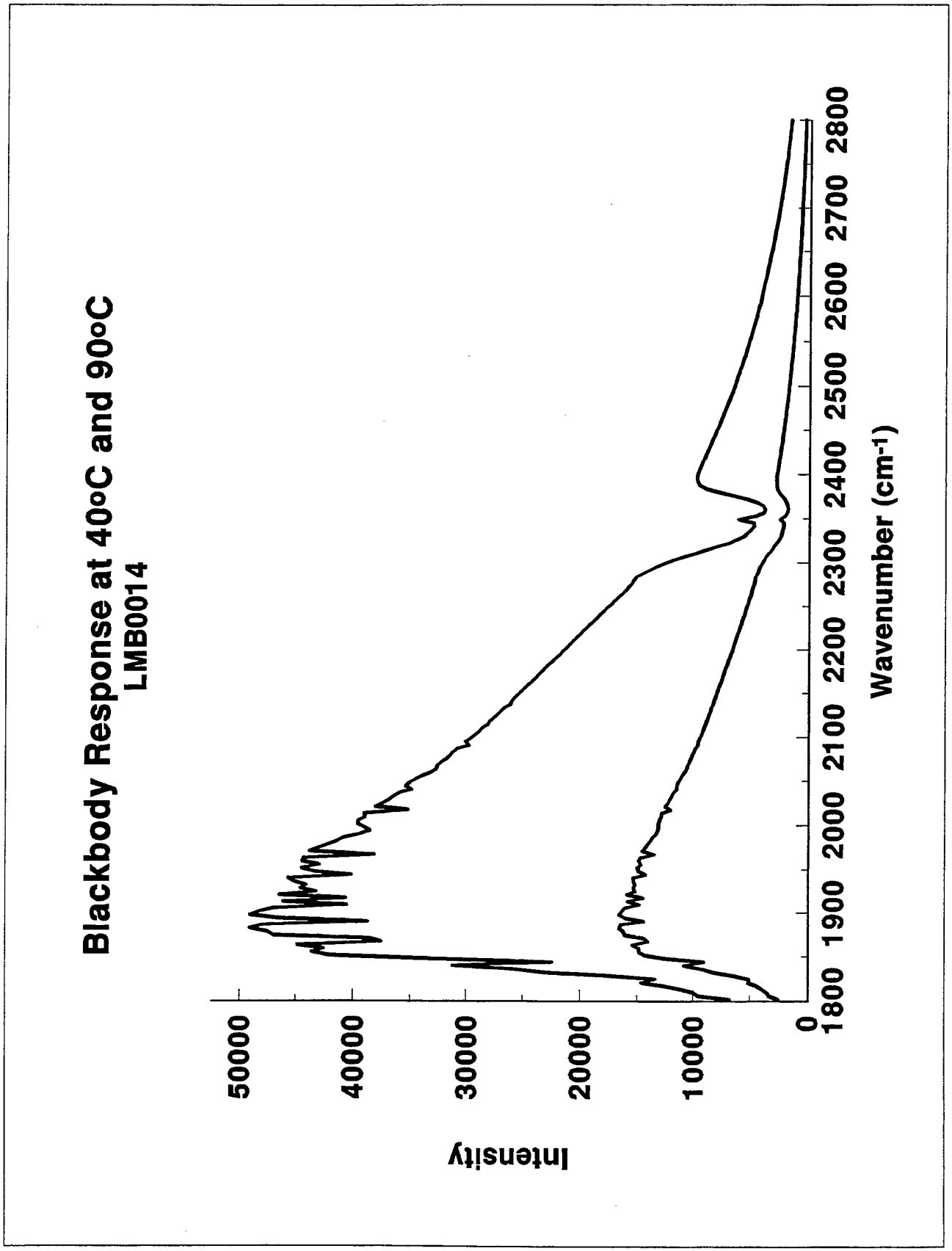
WN	INT
2163.74	7565.96
2167.59	7472.34
2171.45	7367.93
2175.31	7276.69
2179.16	7174.57
2183.02	7062.63
2186.88	6971.44
2190.73	6851.56
2194.59	6768.27
2198.45	6641.41
2202.31	6547.87
2206.16	6459.71
2210.02	6352.9
2213.88	6274.2
2217.73	6168
2221.59	6047.42
2225.45	5972.14
2229.3	5842.24
2233.16	5771.18
2237.02	5672.49
2240.87	5545.65
2244.73	5489.8
2248.59	5385.1
2252.45	5276.37
2256.3	5201.15
2260.16	5106.41
2264.02	4994.62
2267.87	4932.36
2271.73	4847.34
2275.59	4762.14
2279.44	4696.65
2283.3	4635.44
2287.16	4479.21
2291.01	4356.26
2294.87	4241.33
2298.73	4062.38
2302.59	3894.98
2306.44	3716.24
2310.3	3481.94
2314.16	3231.19
2318.01	3024.78
2321.87	2788.99
2325.73	2602.76
2329.58	2437.07
2333.44	2357.92
2337.3	2263.18
2341.15	2189.44

WN	INT
2345.01	2194.42
2348.87	2470.87
2352.73	2087.27
2356.58	1895.33
2360.44	1816.95
2364.3	1851.36
2368.15	1955.56
2372.01	2116.91
2375.87	2339.82
2379.72	2587.69
2383.58	2756
2387.44	2798.67
2391.29	2801.91
2395.15	2798.58
2399.01	2788.89
2402.87	2750.83
2406.72	2692.46
2410.58	2649.36
2414.44	2604.11
2418.29	2564.84
2422.15	2520.62
2426.01	2472.61
2429.86	2425.92
2433.72	2374.82
2437.58	2336.22
2441.43	2312.08
2445.29	2273.39
2449.15	2222.07
2453.01	2181.05
2456.86	2127.87
2460.72	2107.77
2464.58	2066.48
2468.43	2032.08
2472.29	1998
2476.15	1959.2
2480	1919.27
2483.86	1888.07
2487.72	1860.75
2491.58	1834.93
2495.43	1793
2499.29	1757.92
2503.15	1720.73
2507	1683.16
2510.86	1652.16
2514.72	1626.29
2518.57	1589.82
2522.43	1577.01

Filename: LMB0014 Type: 40 deg C BB
Subfile: 2250

WN	INT
2526.29	1549.72
2530.14	1517.69
2534	1490.24
2537.86	1449.65
2541.72	1415.05
2545.57	1397.29
2549.43	1368.47
2553.29	1349.67
2557.14	1325.61
2561	1300.82
2564.86	1278.12
2568.71	1249.88
2572.57	1230.94
2576.43	1207.61
2580.28	1182.89
2584.14	1147.64
2588	1130.55
2591.86	1106.34
2595.71	1081
2599.57	1071.3
2603.43	1041.89
2607.28	1019.21
2611.14	1011.16
2615	985.741
2618.85	973.089
2622.71	952.68
2626.57	933.956
2630.42	917.391
2634.28	898.816
2638.14	888.685
2642	870.04
2645.85	853.998
2649.71	829.017
2653.57	814.929
2657.42	797.625
2661.28	779.219
2665.14	771.234
2668.99	750.614
2672.85	740.165
2676.71	731.126
2680.56	715.571
2684.42	698.888
2688.28	681.56
2692.14	668.729
2695.99	649.691
2699.85	650.613
2703.71	625.077

WN	INT
2707.56	623.506
2711.42	612.936
2715.28	595.306
2719.13	578.35
2722.99	572.601
2726.85	562.74
2730.71	544.071
2734.56	536.732
2738.42	528.92
2742.28	519.818
2746.13	507.61
2749.99	495.148
2753.85	490.498
2757.7	484.617
2761.56	467.863
2765.42	460.314
2769.27	449.501
2773.13	444.844
2776.99	444.086
2780.85	423.711
2784.7	424.782
2788.56	402.007
2792.42	399.436
2796.27	395.111
2800.13	391.065


Blackbody Response at 40°C and 90°C
LMB0014
Intensity
50000
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0014 Type: 90 deg C BB
Subfile: 2050

WN	INT
1801.18	6774.87
1805.04	9592.39
1808.9	9940.14
1812.75	11017.9
1816.61	12524.5
1820.47	14618.3
1824.32	13412.1
1828.18	17506.9
1832.04	22897.6
1835.9	25811.9
1839.75	31197.9
1843.61	22442.1
1847.47	34082.6
1851.32	42032
1855.18	43547.5
1859.04	42541.1
1862.89	44824.1
1866.75	37593.4
1870.61	38619.3
1874.46	46934
1878.32	47493.7
1882.18	49043.1
1886.04	47896.9
1889.89	38771.1
1893.75	46471.7
1897.61	49007.6
1901.46	48195.5
1905.32	46894.3
1909.18	40573.9
1913.03	46060.2
1916.89	40662.4
1920.75	46379.8
1924.61	43228.5
1928.46	44543.8
1932.32	44116.3
1936.18	45170.1
1940.03	45603.7
1943.89	40182.4
1947.75	43329.6
1951.6	44433
1955.46	42969.3
1959.32	44393.6
1963.17	44286.7
1967.03	38186.9
1970.89	43736.8
1974.75	42871.5
1978.6	42093.1

WN	INT
1982.46	41362.7
1986.32	40783
1990.17	39420.7
1994.03	38590.2
1997.89	39074
2001.74	39602.7
2005.6	39539.9
2009.46	39019.1
2013.31	39028.8
2017.17	35226.8
2021.03	38046.5
2024.89	37411.5
2028.74	36926
2032.6	36466.7
2036.46	35998.2
2040.31	34922.3
2044.17	35387
2048.03	35073.7
2051.88	34539.9
2055.74	33956.2
2059.6	33200.6
2063.46	32762.3
2067.31	32605.7
2071.17	32262.5
2075.03	31813.3
2078.88	31519.5
2082.74	31245.5
2086.6	30842.3
2090.45	29834.6
2094.31	30069.9
2098.17	29689.3
2102.02	29319.4
2105.88	28911.8
2109.74	28619.5
2113.6	28163.2
2117.45	27975
2121.31	27633.6
2125.17	27253.3
2129.02	26970.4
2132.88	26702.8
2136.74	26131
2140.59	26018.7
2144.45	25742.3
2148.31	25427.3
2152.16	25128.3
2156.02	24815.2
2159.88	24530

Filename: LMB0014 Type: 90 deg C BB
Subfile: 2050

WN	INT	WN	INT
2163.74	24178.4	2345.01	4794.03
2167.59	23850.8	2348.87	6085.65
2171.45	23618.7	2352.73	4600.9
2175.31	23300.3	2356.58	3942.9
2179.16	23070.6	2360.44	3790.49
2183.02	22745.1	2364.3	3960.54
2186.88	22401.9	2368.15	4481.77
2190.73	22130.3	2372.01	5369.21
2194.59	21780.4	2375.87	6532.06
2198.45	21542.5	2379.72	7828.13
2202.31	21201.4	2383.58	8959.86
2206.16	20945.3	2387.44	9525.73
2210.02	20645	2391.29	9718.34
2213.88	20392.6	2395.15	9766.44
2217.73	20075.7	2399.01	9743.11
2221.59	19805.4	2402.87	9675.6
2225.45	19501.5	2406.72	9545.67
2229.3	19187.6	2410.58	9410
2233.16	18893.8	2414.44	9277.92
2237.02	18563.1	2418.29	9121.76
2240.87	18296.4	2422.15	8972.51
2244.73	17982.3	2426.01	8848
2248.59	17714.6	2429.86	8717.57
2252.45	17364	2433.72	8595.06
2256.3	17058.1	2437.58	8473.97
2260.16	16711.8	2441.43	8340.72
2264.02	16412.9	2445.29	8194.88
2267.87	16120	2449.15	8076.2
2271.73	15868.5	2453.01	7930.86
2275.59	15594.1	2456.86	7798.67
2279.44	15396.3	2460.72	7684.41
2283.3	15176.4	2464.58	7561.03
2287.16	14648.2	2468.43	7445.96
2291.01	14045.5	2472.29	7333.42
2294.87	13364	2476.15	7219.67
2298.73	12686.4	2480	7103.8
2302.59	11874.9	2483.86	6977.39
2306.44	10924.3	2487.72	6853.82
2310.3	9860.44	2491.58	6740.47
2314.16	8911.44	2495.43	6630.95
2318.01	7968.54	2499.29	6527.01
2321.87	6931.32	2503.15	6414.88
2325.73	6317.98	2507	6320.17
2329.58	5657.71	2510.86	6235.4
2333.44	5334.78	2514.72	6113.06
2337.3	5021.08	2518.57	6011.94
2341.15	4792.29	2522.43	5900.86

Filename: LMB0014 Type: 90 deg C BB
Subfile: 2050

WN	INT
2526.29	5800.07
2530.14	5709.33
2534	5596.59
2537.86	5521.81
2541.72	5447.22
2545.57	5346.33
2549.43	5242.95
2553.29	5141.84
2557.14	5051.69
2561	4971.85
2564.86	4883.73
2568.71	4803.06
2572.57	4722.25
2576.43	4634.76
2580.28	4566.35
2584.14	4491.7
2588	4400.03
2591.86	4316.84
2595.71	4233.39
2599.57	4168.22
2603.43	4112.09
2607.28	4039.85
2611.14	3975.4
2615	3906.39
2618.85	3835.5
2622.71	3757.34
2626.57	3688.78
2630.42	3635.33
2634.28	3558.12
2638.14	3510.63
2642	3448.29
2645.85	3395.83
2649.71	3330.51
2653.57	3258.82
2657.42	3201.58
2661.28	3150.29
2665.14	3095.68
2668.99	3042.98
2672.85	2997.67
2676.71	2943.44
2680.56	2874.11
2684.42	2836.64
2688.28	2782.23
2692.14	2724.35
2695.99	2674.72
2699.85	2612.25
2703.71	2582.23

WN	INT
2707.56	2539.06
2711.42	2494.34
2715.28	2456.54
2719.13	2394.74
2722.99	2347.17
2726.85	2310.11
2730.71	2261.27
2734.56	2234.56
2738.42	2189.5
2742.28	2159.13
2746.13	2113.05
2749.99	2077.9
2753.85	2046.04
2757.7	1989.7
2761.56	1961.25
2765.42	1925.32
2769.27	1893.62
2773.13	1846.95
2776.99	1825.57
2780.85	1802.14
2784.7	1761.9
2788.56	1725.12
2792.42	1684.15
2796.27	1658.97
2800.13	1636.78

Filename: LMB0013 Type: OFF STACK
Subfile: 0001

WN	INT	WN	INT
1801.18	1814.74	1982.46	8676.76
1805.04	2123.2	1986.32	8675.45
1808.9	2321.08	1990.17	8696.58
1812.75	2608.35	1994.03	8664.84
1816.61	2883.48	1997.89	8428.85
1820.47	3304.77	2001.74	8098.6
1824.32	3610.63	2005.6	8033.43
1828.18	4443.08	2009.46	8202.28
1832.04	5425.94	2013.31	7911.65
1835.9	6200.47	2017.17	8045.8
1839.75	7030.61	2021.03	7813.26
1843.61	6787.63	2024.89	7631.44
1847.47	8600.53	2028.74	7432.22
1851.32	9194.09	2032.6	7267.83
1855.18	9471.65	2036.46	7197.16
1859.04	9807.21	2040.31	7240.13
1862.89	10003.7	2044.17	7154.15
1866.75	9928.81	2048.03	6874.15
1870.61	10029.7	2051.88	6706.4
1874.46	10400.5	2055.74	6607.72
1878.32	10507.5	2059.6	6710.06
1882.18	10538.2	2063.46	6533.8
1886.04	10727.7	2067.31	6479.08
1889.89	10156.8	2071.17	6175.5
1893.75	10608.9	2075.03	6235.77
1897.61	10670.9	2078.88	6190.97
1901.46	10533.2	2082.74	5959.57
1905.32	10526.5	2086.6	5886.19
1909.18	10330.8	2090.45	5953.99
1913.03	10324.2	2094.31	5619.13
1916.89	9949.26	2098.17	5581.87
1920.75	10405.2	2102.02	5512.67
1924.61	10156.8	2105.88	5510.55
1928.46	9966.7	2109.74	5302.44
1932.32	9978.53	2113.6	5353.44
1936.18	9822.21	2117.45	5177.49
1940.03	9947.85	2121.31	5162.43
1943.89	9683.97	2125.17	5140.19
1947.75	9754.13	2129.02	4978.09
1951.6	9528.56	2132.88	4870.3
1955.46	9668.85	2136.74	5053.2
1959.32	9370.46	2140.59	4863.06
1963.17	9305.49	2144.45	4785.26
1967.03	9237.49	2148.31	4715.17
1970.89	9089.67	2152.16	4694.19
1974.75	8853.71	2156.02	4571.99
1978.6	8662.3	2159.88	4466.56

Filename: LMB0013 Type: OFF STACK
Subfile: 0001

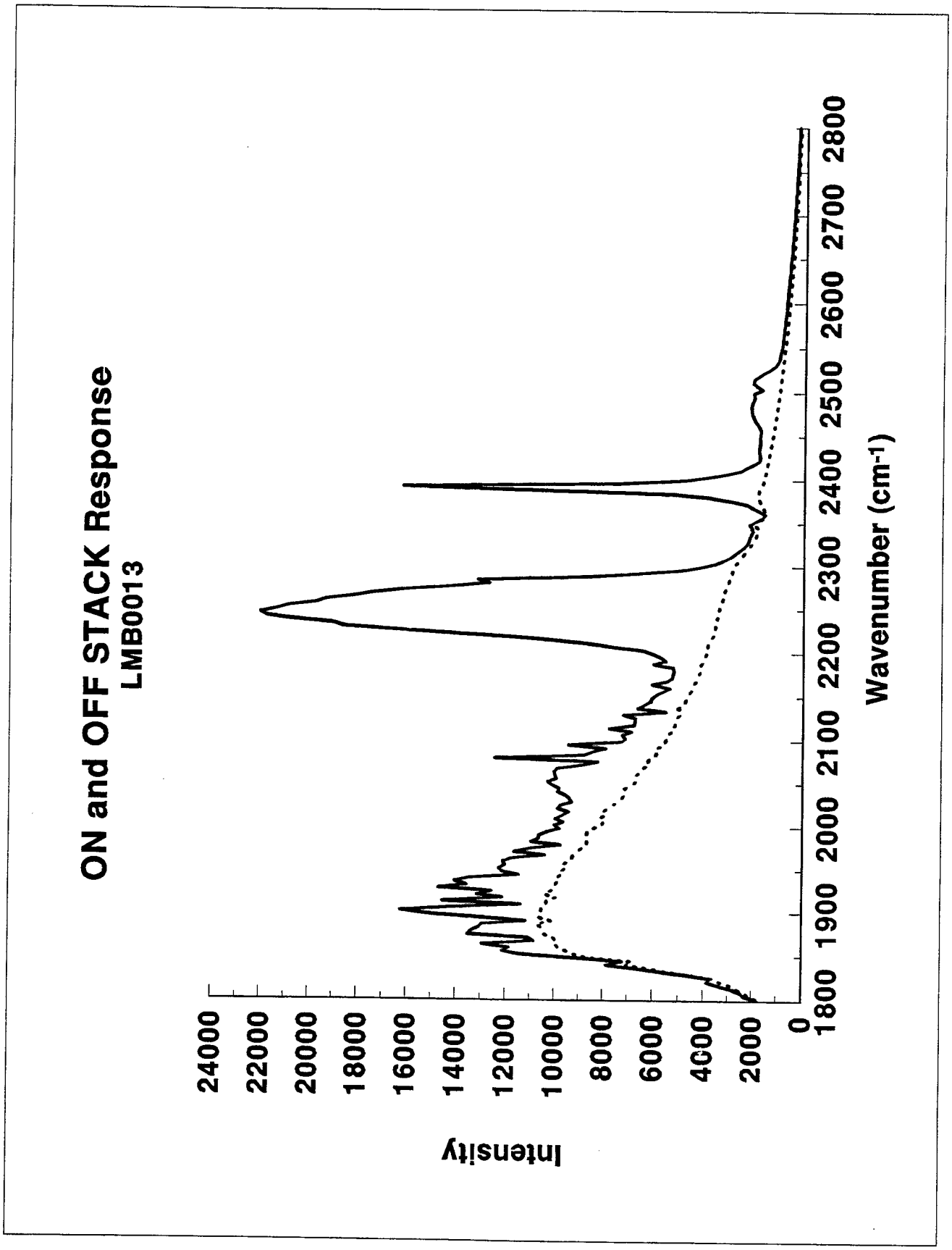
WN	INT
2163.74	4465.96
2167.59	4368.47
2171.45	4317.53
2175.31	4253.86
2179.16	4173.8
2183.02	4140.68
2186.88	4145.82
2190.73	4062.22
2194.59	4028.58
2198.45	3957.53
2202.31	3930.25
2206.16	3907.04
2210.02	3884.07
2213.88	3798.65
2217.73	3721.62
2221.59	3643.14
2225.45	3595.74
2229.3	3588.93
2233.16	3555.46
2237.02	3552.28
2240.87	3498.73
2244.73	3473.81
2248.59	3430.93
2252.45	3414.62
2256.3	3345.32
2260.16	3302.24
2264.02	3283.49
2267.87	3231.61
2271.73	3201.64
2275.59	3137.52
2279.44	3104.07
2283.3	3035.79
2287.16	3013.11
2291.01	2941.86
2294.87	2894.47
2298.73	2831.51
2302.59	2763.83
2306.44	2675.94
2310.3	2573.96
2314.16	2449.18
2318.01	2343.6
2321.87	2223.98
2325.73	2134.57
2329.58	2035.34
2333.44	1973.74
2337.3	1914.13
2341.15	1875.37

WN	INT
2345.01	1881.19
2348.87	1992.29
2352.73	1790.05
2356.58	1656.38
2360.44	1598.76
2364.3	1595.85
2368.15	1638.35
2372.01	1714.6
2375.87	1800.97
2379.72	1850.72
2383.58	1867.85
2387.44	1831.33
2391.29	1737.79
2395.15	1682.89
2399.01	1653.22
2402.87	1603.8
2406.72	1570.77
2410.58	1542.58
2414.44	1514.35
2418.29	1496.9
2422.15	1461.51
2426.01	1434.96
2429.86	1414.94
2433.72	1389.76
2437.58	1364.54
2441.43	1328.8
2445.29	1302.67
2449.15	1278.54
2453.01	1263.57
2456.86	1235.42
2460.72	1207.02
2464.58	1190.01
2468.43	1166.91
2472.29	1146.05
2476.15	1132.65
2480	1112.77
2483.86	1089.8
2487.72	1066.22
2491.58	1052.41
2495.43	1027.07
2499.29	1009.97
2503.15	987.612
2507	975.087
2510.86	964.168
2514.72	946.575
2518.57	917.562
2522.43	909.575

Filename: LMB0013 Type: OFF STACK
Subfile: 0001

WN	INT
2526.29	888.702
2530.14	868.705
2534	862.542
2537.86	845.379
2541.72	828.141
2545.57	816.757
2549.43	789.281
2553.29	781.332
2557.14	765.814
2561	752.819
2564.86	741.49
2568.71	717.917
2572.57	707.959
2576.43	700.4
2580.28	682.056
2584.14	675.532
2588	657.36
2591.86	646.733
2595.71	635.706
2599.57	627.547
2603.43	617.175
2607.28	586.164
2611.14	591.546
2615	581.927
2618.85	565.223
2622.71	556.6
2626.57	547.493
2630.42	532.38
2634.28	528.667
2638.14	511.964
2642	508.969
2645.85	493.952
2649.71	485.124
2653.57	472.187
2657.42	465.463
2661.28	461.784
2665.14	442.616
2668.99	442.957
2672.85	426.606
2676.71	423.211
2680.56	408.522
2684.42	406.127
2688.28	393.991
2692.14	392.57
2695.99	382.138
2699.85	389.134
2703.71	379.382

WN	INT
2707.56	361.414
2711.42	365.585
2715.28	347.899
2719.13	344.806
2722.99	337.317
2726.85	331.809
2730.71	329.306
2734.56	321.164
2738.42	294.839
2742.28	299.248
2746.13	288.207
2749.99	294.049
2753.85	280.595
2757.7	273.204
2761.56	278.196
2765.42	268.981
2769.27	268.1
2773.13	258.736
2776.99	259.848
2780.85	243.361
2784.7	244.037
2788.56	237.063
2792.42	222.799
2796.27	223.366
2800.13	223.99


ON and OFF STACK Response
LMB0013
Intensity
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0013 Type: ON STACK
Subfile: 0580

WN	INT	WN	INT
1801.18	1890.46	1982.46	10955.7
1805.04	2326.76	1986.32	10668.9
1808.9	2466.65	1990.17	10653.2
1812.75	2807.76	1994.03	10305.1
1816.61	3339.46	1997.89	9819.53
1820.47	3814.29	2001.74	10012.1
1824.32	3716.18	2005.6	9681.38
1828.18	4556.23	2009.46	9972.54
1832.04	5618.15	2013.31	9694.57
1835.9	6626.3	2017.17	9452.94
1839.75	7847.12	2021.03	9882.84
1843.61	7213.75	2024.89	9784.34
1847.47	9140.7	2028.74	9312.48
1851.32	11350.5	2032.6	9419.07
1855.18	12091.5	2036.46	9582.28
1859.04	11853.9	2040.31	9889.18
1862.89	12915.9	2044.17	9857.29
1866.75	10855.4	2048.03	10132.1
1870.61	11084.7	2051.88	10293.3
1874.46	13501.7	2055.74	9975.56
1878.32	13365.8	2059.6	10022
1882.18	13072.1	2063.46	10037.3
1886.04	12952	2067.31	9919.85
1889.89	11192.3	2071.17	8880.91
1893.75	12922.8	2075.03	8267.07
1897.61	15131.3	2078.88	12449.9
1901.46	16215	2082.74	8807.07
1905.32	14252.5	2086.6	8445.51
1909.18	11385.1	2090.45	7951.23
1913.03	14522.5	2094.31	9446.58
1916.89	12142.4	2098.17	7286.16
1920.75	13147.9	2102.02	7154.99
1924.61	12574.3	2105.88	7247.77
1928.46	14679.4	2109.74	6925.51
1932.32	13591.6	2113.6	7784.24
1936.18	14046.1	2117.45	6805.26
1940.03	13466	2121.31	6780.55
1943.89	11489.4	2125.17	6771.15
1947.75	12141.9	2129.02	7198.28
1951.6	12279.6	2132.88	5563.4
1955.46	12059.4	2136.74	6644.68
1959.32	12103.7	2140.59	6404.38
1963.17	11783.5	2144.45	6154.03
1967.03	10429.2	2148.31	6087.94
1970.89	11645.8	2152.16	5919.2
1974.75	10908.4	2156.02	5643.16
1978.6	9778.77	2159.88	5406.49

Filename: LMB0013 Type: ON STACK
Subfile: 0580

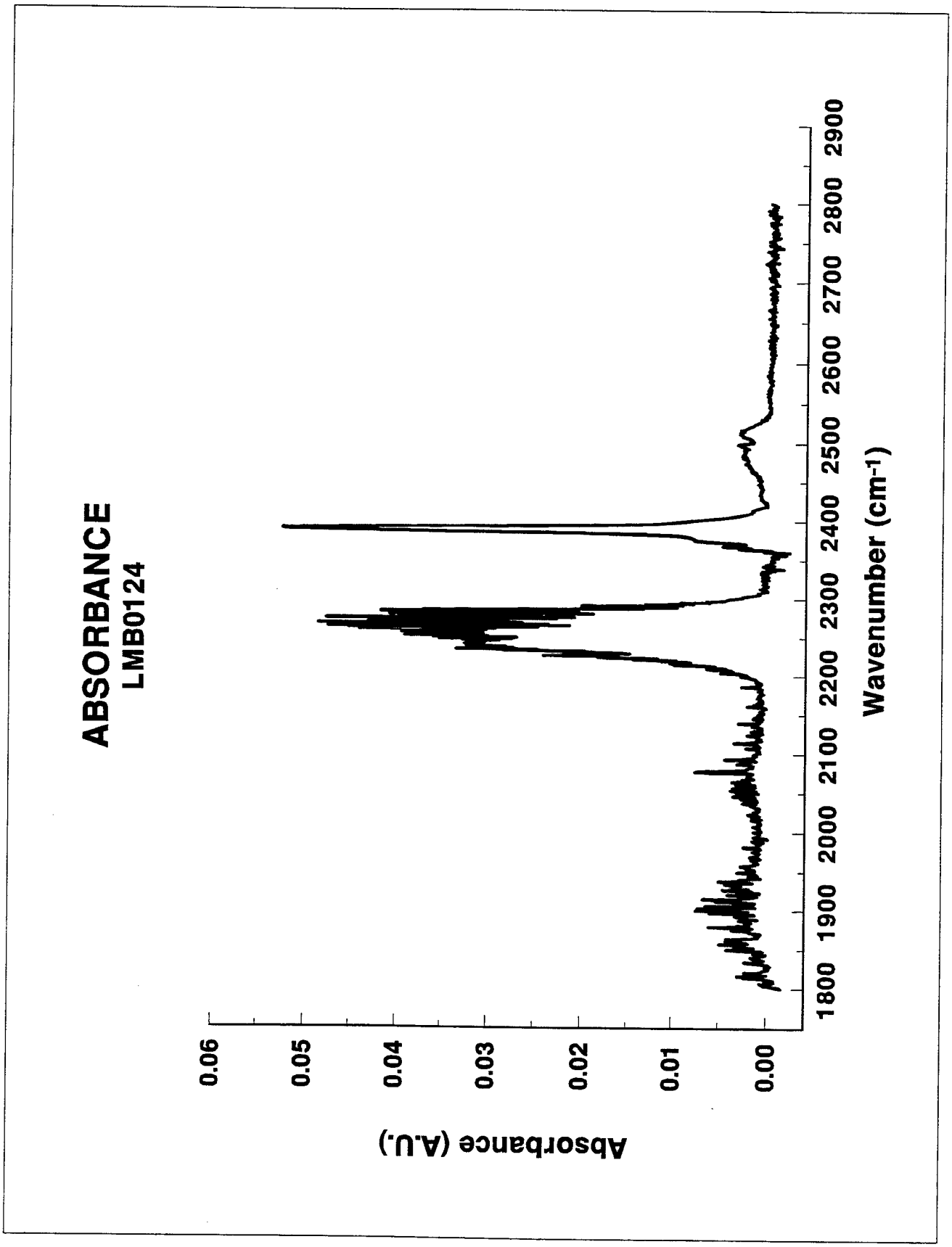
WN	INT
2163.74	6076.06
2167.59	5503.15
2171.45	5306.43
2175.31	5274.09
2179.16	5236.52
2183.02	5268.32
2186.88	6014.15
2190.73	5569.75
2194.59	5755.13
2198.45	6030.49
2202.31	6445.26
2206.16	7596.44
2210.02	8612.63
2213.88	9925.9
2217.73	11767.5
2221.59	14120
2225.45	16394.5
2229.3	18607.5
2233.16	18983.4
2237.02	20765.6
2240.87	21771.2
2244.73	22020.1
2248.59	21345.7
2252.45	20908.2
2256.3	19716.8
2260.16	19346.9
2264.02	18226.1
2267.87	17446.4
2271.73	16152
2275.59	14067.7
2279.44	12736.5
2283.3	13174
2287.16	8640.4
2291.01	6687
2294.87	4947.74
2298.73	4201.67
2302.59	3640.69
2306.44	3287.87
2310.3	3014.24
2314.16	2808.68
2318.01	2639.56
2321.87	2457
2325.73	2319.87
2329.58	2232.17
2333.44	2210.63
2337.3	2135.39
2341.15	2082.61

WN	INT
2345.01	2114.62
2348.87	2196.92
2352.73	1924.19
2356.58	1696.79
2360.44	1578.9
2364.3	1807.49
2368.15	2095.44
2372.01	2305.03
2375.87	2990
2379.72	3863.15
2383.58	5275.3
2387.44	11410.8
2391.29	16199.7
2395.15	7462.65
2399.01	4888.79
2402.87	3928.12
2406.72	3116.2
2410.58	2553.82
2414.44	2348.01
2418.29	2057.88
2422.15	1835.08
2426.01	1795.47
2429.86	1828.23
2433.72	1845.41
2437.58	1841.3
2441.43	1796.05
2445.29	1804.47
2449.15	1812.46
2453.01	1782.73
2456.86	1781.68
2460.72	1833.43
2464.58	1930.48
2468.43	2025.76
2472.29	2094.39
2476.15	2142.46
2480	2159.01
2483.86	2172.7
2487.72	2137.57
2491.58	2082.77
2495.43	2049.7
2499.29	2065.1
2503.15	1731.28
2507	1944.42
2510.86	2092.73
2514.72	2067.48
2518.57	1875.45
2522.43	1619.09

Filename: LMB0013 Type: ON STACK
Subfile: 0580

WN	INT
2526.29	1372.53
2530.14	1197.77
2534	1105.53
2537.86	1026.78
2541.72	1001.25
2545.57	984.31
2549.43	943.183
2553.29	910.358
2557.14	906.024
2561	885.749
2564.86	868.452
2568.71	850.185
2572.57	840.447
2576.43	812.627
2580.28	809.124
2584.14	788.283
2588	771.371
2591.86	744.824
2595.71	752.528
2599.57	745.522
2603.43	723.435
2607.28	718.017
2611.14	710.593
2615	692.661
2618.85	676.866
2622.71	651.684
2626.57	651.856
2630.42	638.117
2634.28	632.323
2638.14	610.064
2642	603.585
2645.85	602.15
2649.71	593.8
2653.57	566.234
2657.42	560.148
2661.28	540.576
2665.14	541.003
2668.99	535.678
2672.85	522.221
2676.71	508.718
2680.56	499.087
2684.42	491.323
2688.28	483.214
2692.14	471.022
2695.99	458.795
2699.85	436.904
2703.71	452.709

WN	INT
2707.56	447.191
2711.42	421.138
2715.28	426.862
2719.13	417.454
2722.99	406.383
2726.85	391.958
2730.71	383.729
2734.56	390.916
2738.42	371.136
2742.28	362.809
2746.13	361.521
2749.99	351.972
2753.85	333.153
2757.7	322.426
2761.56	330.009
2765.42	320.219
2769.27	315.371
2773.13	318.431
2776.99	309.944
2780.85	303.21
2784.7	287.67
2788.56	272.527
2792.42	267.95
2796.27	260.052
2800.13	261.062


ABSORBANCE
LMB0124
Absorbance (A.U.)
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900
Wavenumber (cm-1)

Filename: LMB0124 Type: Absorbance
Subfile: 0130

WN	ABS
1800.22	-0.0015926
1801.18	-0.0014564
1802.15	-0.0009306
1803.11	-0.0005605
1804.08	0.0002646
1805.04	-0.0004498
1806	0.0004996
1806.97	0.0005941
1807.93	-0.0007868
1808.9	0.0001216
1809.86	-0.0005354
1810.83	-0.0007563
1811.79	-0.0003179
1812.75	0.0001223
1813.72	0.0010557
1814.68	0.0022851
1815.65	0.0016595
1816.61	0.0028972
1817.58	-0.0000524
1818.54	0.0022015
1819.5	0.0008629
1820.47	0.002199
1821.43	0.0006304
1822.4	0.00037
1823.36	0.0003479
1824.32	-0.0002371
1825.29	-0.0001501
1826.25	-0.0002878
1827.22	0.0000678
1828.18	-0.0001181
1829.15	-0.000414
1830.11	-0.0003084
1831.07	-0.0001086
1832.04	0.0005978
1833	0.0011489
1833.97	0.0021833
1834.93	0.0004265
1835.9	0.0011252
1836.86	0.0002173
1837.82	0.0006752
1838.79	0.0014427
1839.75	0.0015732
1840.72	0.0012398
1841.68	0.0006991
1842.65	0.0001926
1843.61	0.000075
1844.57	0.0012903

WN	ABS
1845.54	0.0004785
1846.5	0.0006664
1847.47	0.000354
1848.43	0.0005767
1849.39	0.0028101
1850.36	0.0040472
1851.32	0.0021301
1852.29	0.0012811
1853.25	0.0032035
1854.22	0.0029477
1855.18	0.0022481
1856.14	0.0025561
1857.11	0.0047883
1858.07	0.0019214
1859.04	0.0022082
1860	0.0028182
1860.97	0.0041406
1861.93	0.0030443
1862.89	0.0025524
1863.86	0.0040961
1864.82	0.0018589
1865.79	0.0008733
1866.75	0.0008615
1867.72	0.0008716
1868.68	0.0006698
1869.64	0.0012531
1870.61	0.0006186
1871.57	0.0014645
1872.54	0.001813
1873.5	0.0017322
1874.46	0.0019949
1875.43	0.003546
1876.39	0.0021009
1877.36	0.0014745
1878.32	0.0016315
1879.29	0.0059105
1880.25	0.0020931
1881.21	0.0029962
1882.18	0.0017571
1883.14	0.0019199
1884.11	0.0016924
1885.07	0.0015711
1886.04	0.0022995
1887	0.0020891
1887.96	0.0027614
1888.93	0.0009748
1889.89	0.0018193

WN	ABS
1890.86	0.0021732
1891.82	0.0026385
1892.79	0.0031157
1893.75	0.0032632
1894.71	0.0012208
1895.68	0.0012891
1896.64	0.0030979
1897.61	0.0058824
1898.57	0.0025084
1899.54	0.0019089
1900.5	0.0073556
1901.46	0.0030889
1902.43	0.0027342
1903.39	0.0071573
1904.36	0.0011895
1905.32	0.0021078
1906.28	0.0063301
1907.25	0.0025118
1908.21	0.0013389
1909.18	0.0023977
1910.14	0.0012087
1911.11	0.0021323
1912.07	0.0052008
1913.03	0.0039993
1914	0.002618
1914.96	0.0065911
1915.93	0.003292
1916.89	0.0013859
1917.86	0.0011807
1918.82	0.0009806
1919.78	0.0020107
1920.75	0.0040259
1921.71	0.0016565
1922.68	0.0007518
1923.64	0.0008865
1924.61	0.0030581
1925.57	0.001561
1926.53	0.0043841
1927.5	0.0044691
1928.46	0.0018887
1929.43	0.0033821
1930.39	0.0035052
1931.35	0.0028094
1932.32	0.0030205
1933.28	0.0025921
1934.25	0.0042377
1935.21	0.003192

Filename: LMB0124 Type: Absorbance
Subfile: 0130

WN	ABS
1936.18	0.00149
1937.14	0.0034708
1938.1	0.0049138
1939.07	0.0020131
1940.03	0.002805
1941	0.0025803
1941.96	0.0006463
1942.93	0.0010207
1943.89	0.0017824
1944.85	0.0018507
1945.82	0.000951
1946.78	0.0010443
1947.75	0.0013831
1948.71	0.0018454
1949.68	0.0029449
1950.64	0.0019906
1951.6	0.001266
1952.57	0.001284
1953.53	0.0015795
1954.5	0.002119
1955.46	0.0017916
1956.42	0.0019564
1957.39	0.0026476
1958.35	0.0014776
1959.32	0.0011867
1960.28	0.0013863
1961.25	0.0008826
1962.21	0.0011843
1963.17	0.0011002
1964.14	0.0011202
1965.1	0.0015322
1966.07	0.0008103
1967.03	0.000667
1968	0.0010455
1968.96	0.0016884
1969.92	0.0016542
1970.89	0.0009565
1971.85	0.0008828
1972.82	0.0008756
1973.78	0.0007416
1974.75	0.0009184
1975.71	0.0014345
1976.67	0.0008886
1977.64	0.0007957
1978.6	0.000701
1979.57	0.0006525
1980.53	0.0007275

WN	ABS
1981.49	0.0023856
1982.46	0.0012
1983.42	0.0008228
1984.39	0.0010361
1985.35	0.0006334
1986.32	0.0009405
1987.28	0.0011994
1988.24	0.0003386
1989.21	0.0014873
1990.17	0.0013531
1991.14	0.0011653
1992.1	-5.32E-05
1993.07	0.0003166
1994.03	0.001345
1994.99	0.0011054
1995.96	0.0009024
1996.92	0.0008864
1997.89	0.0007063
1998.85	0.0006792
1999.82	0.0008886
2000.78	0.0013647
2001.74	0.0006205
2002.71	0.0006449
2003.67	0.0007652
2004.64	0.0007786
2005.6	0.0009838
2006.56	0.0007356
2007.53	0.0013949
2008.49	0.0011594
2009.46	0.0009075
2010.42	0.0006654
2011.39	0.0006353
2012.35	0.0009427
2013.31	0.0007227
2014.28	0.0009875
2015.24	0.0012565
2016.21	0.001574
2017.17	0.0006008
2018.14	0.0013129
2019.1	0.0010503
2020.06	0.0015732
2021.03	0.0008174
2021.99	0.0010286
2022.96	0.0018921
2023.92	0.0012911
2024.89	0.0010126
2025.85	0.0014241

WN	ABS
2026.81	0.0010981
2027.78	0.0008481
2028.74	0.0008136
2029.71	0.0010153
2030.67	0.0009341
2031.64	0.0008136
2032.6	0.001281
2033.56	0.0013256
2034.53	0.001703
2035.49	0.0016239
2036.46	0.0011496
2037.42	0.0024762
2038.38	0.0019185
2039.35	0.001058
2040.31	0.0023027
2041.28	0.0011038
2042.24	0.0022122
2043.21	0.0026873
2044.17	0.0018217
2045.13	0.0012451
2046.1	0.0034737
2047.06	0.002055
2048.03	0.0017139
2048.99	0.0031607
2049.96	0.0009192
2050.92	0.0029798
2051.88	0.0032804
2052.85	0.0011275
2053.81	0.0037024
2054.78	0.002056
2055.74	0.0017127
2056.7	0.0035073
2057.67	0.0012569
2058.63	0.0027169
2059.6	0.0029703
2060.56	0.0012718
2061.53	0.0032467
2062.49	0.0022826
2063.45	0.0017676
2064.42	0.0035841
2065.38	0.0027669
2066.35	0.0025065
2067.31	0.0025368
2068.27	0.0014232
2069.24	0.0021212
2070.2	0.0020609
2071.17	0.0017305

Filename: LMB0124 Type: Absorbance
Subfile: 0130

WN	ABS
2072.13	0.0020276
2073.09	0.001904
2074.06	0.0020342
2075.02	0.001522
2075.99	0.0019988
2076.95	0.0075165
2077.92	0.0070937
2078.88	0.0040585
2079.84	0.0022353
2080.81	0.0020416
2081.77	0.002147
2082.74	0.0015155
2083.7	0.0015722
2084.66	0.0014848
2085.63	0.001675
2086.59	0.001793
2087.56	0.003075
2088.52	0.0017709
2089.48	0.0026482
2090.45	0.0021657
2091.41	0.0011835
2092.38	0.0015128
2093.34	0.0043592
2094.31	0.002036
2095.27	0.0020238
2096.23	0.0013284
2097.2	0.0013883
2098.16	0.0011118
2099.13	0.0014302
2100.09	0.0013652
2101.05	0.0011142
2102.02	0.0007541
2102.98	0.0010699
2103.95	0.0010916
2104.91	0.0008336
2105.87	0.0011644
2106.84	0.0008645
2107.8	0.0021754
2108.77	0.0011973
2109.73	0.000783
2110.69	0.00097
2111.66	0.0013383
2112.62	0.0009983
2113.59	0.0016174
2114.55	0.003371
2115.52	0.0017317
2116.48	0.0015826
2117.44	0.0006552
2118.41	0.0008603
2119.37	0.0011016
2120.34	0.000717
2121.3	0.0010523
2122.26	0.0010126
2123.23	0.001
2124.19	0.0020544
2125.16	0.0006928
2126.12	0.0006381
2127.08	0.0005191
2128.05	0.0005801
2129.01	0.001678
2129.98	0.0014678
2130.94	0.0005766
2131.91	0.0007984
2132.87	0.0005838
2133.83	0.0006659
2134.8	0.0007491
2135.76	0.0015659
2136.73	0.0015609
2137.69	0.0010735
2138.65	0.0010006
2139.62	0.0029331
2140.58	0.000797
2141.55	0.000817
2142.51	0.0006845
2143.47	0.0006239
2144.44	0.0009738
2145.4	0.0014624
2146.37	0.0005194
2147.33	0.0012781
2148.3	0.0009169
2149.26	0.0006434
2150.22	0.0005885
2151.19	0.0009538
2152.15	0.0006161
2153.12	0.0004187
2154.08	0.0004559
2155.04	0.0007658
2156.01	0.0005931
2156.97	0.0005144
2157.94	0.0003618
2158.9	0.000142
2159.86	0.000245
2160.83	0.0008159
2161.79	0.0020221
2162.76	0.0008144
2163.72	0.0014092
2164.69	0.0005869
2165.65	0.0011123
2166.61	0.0005054
2167.58	0.0009213
2168.54	0.0004849
2169.51	0.0006555
2170.47	0.0005824
2171.43	0.0007777
2172.4	0.0010123
2173.36	0.0007769
2174.33	0.0007326
2175.29	0.0008932
2176.25	0.0008659
2177.22	0.0004287
2178.18	0.0005354
2179.15	0.0006942
2180.11	0.0007789
2181.08	0.0009761
2182.04	0.0006028
2183	0.0007797
2183.97	0.0005788
2184.93	0.0009978
2185.9	0.000876
2186.86	0.0026534
2187.82	0.0007569
2188.79	0.0008977
2189.75	0.0011581
2190.72	0.0006571
2191.68	0.0006989
2192.64	0.0009332
2193.61	0.001226
2194.57	0.0010894
2195.54	0.0011462
2196.5	0.0012976
2197.46	0.0016057
2198.43	0.0019061
2199.39	0.0019117
2200.36	0.0027819
2201.32	0.0021046
2202.29	0.002444
2203.25	0.0026307
2204.21	0.0030056
2205.18	0.0048603
2206.14	0.0035304
2207.11	0.0036982

Filename: LMB0124 Type: Absorbance
Subfile: 0130

WN	ABS
2208.07	0.0037748
2209.03	0.0044168
2210	0.0062989
2210.96	0.0044231
2211.93	0.0063089
2212.89	0.0054652
2213.85	0.0067071
2214.82	0.0098966
2215.78	0.0085245
2216.75	0.0103181
2217.71	0.0080723
2218.68	0.0086524
2219.64	0.0111799
2220.6	0.0096659
2221.57	0.0143259
2222.53	0.0117062
2223.5	0.0144423
2224.46	0.0182699
2225.42	0.0160192
2226.39	0.0240409
2227.35	0.0163508
2228.32	0.0219435
2229.28	0.0148007
2230.24	0.0173811
2231.21	0.0202234
2232.17	0.0196906
2233.14	0.0282497
2234.1	0.0247415
2235.07	0.0334198
2236.03	0.0272474
2236.99	0.032094
2237.96	0.0280933
2238.92	0.0310744
2239.89	0.0324032
2240.85	0.0308747
2241.81	0.0325429
2242.78	0.0303893
2243.74	0.0322529
2244.71	0.031633
2245.67	0.0288128
2246.63	0.0327789
2247.6	0.0274445
2248.56	0.0352716
2249.53	0.0269511
2250.49	0.0359278
2251.46	0.0300221
2252.42	0.0390431

WN	ABS
2253.38	0.0309923
2254.35	0.0378813
2255.31	0.030519
2256.28	0.0393924
2257.24	0.0318315
2258.2	0.036887
2259.17	0.0302233
2260.13	0.0440228
2261.1	0.0292395
2262.06	0.045132
2263.02	0.0247068
2263.99	0.0473898
2264.95	0.0214093
2265.92	0.0436378
2266.88	0.0236099
2267.85	0.0484548
2268.81	0.0263314
2269.77	0.0430729
2270.74	0.0340213
2271.7	0.0289468
2272.67	0.0427812
2273.63	0.0227362
2274.59	0.0475985
2275.56	0.0208399
2276.52	0.0396995
2277.49	0.0258012
2278.45	0.030483
2279.41	0.0407717
2280.38	0.0187855
2281.34	0.0392097
2282.31	0.0202988
2283.27	0.0416774
2284.24	0.0301086
2285.2	0.0370481
2286.16	0.0234179
2287.13	0.0132972
2288.09	0.0201073
2289.06	0.0095907
2290.02	0.0151637
2290.98	0.0199763
2291.95	0.0089704
2292.91	0.0130503
2293.88	0.0077939
2294.84	0.0092155
2295.8	0.0060667
2296.77	0.0064066
2297.73	0.0045454

WN	ABS
2298.7	0.0043045
2299.66	0.0042288
2300.62	0.0032895
2301.59	0.0026305
2302.55	0.0027109
2303.52	0.0020485
2304.48	0.0017405
2305.45	0.001139
2306.41	0.0009094
2307.37	0.0010505
2308.34	0.0007604
2309.3	0.0004918
2310.27	0.0000972
2311.23	0.0001128
2312.19	0.0003149
2313.16	0.0008024
2314.12	0.0003272
2315.09	0.0005508
2316.05	0.0001809
2317.01	0.0000311
2317.98	0.0003731
2318.94	0.0003543
2319.91	0.0005464
2320.87	0.0003391
2321.84	0.0001994
2322.8	0.0004651
2323.76	0.0003375
2324.73	0.0006006
2325.69	-3.19E-05
2326.66	0.0004112
2327.62	0.0002277
2328.58	0.0005816
2329.55	-0.000029
2330.51	0.00055
2331.48	0.000347
2332.44	0.0006649
2333.4	0.0001376
2334.37	0.0006985
2335.33	-0.00018
2336.3	0.0006136
2337.26	-0.000677
2338.23	0.0001155
2339.19	-0.001603
2340.15	-0.000166
2341.12	0.0002582
2342.08	-0.00052
2343.05	0.0005238

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Subfile: 0130

WN	ABS
2344.01	-0.000601
2344.97	0.0002141
2345.94	-0.0003345
2346.9	-0.0002672
2347.87	-0.0003401
2348.83	-0.000649
2349.79	-0.000332
2350.76	-0.0003275
2351.72	-0.0004806
2352.69	-0.0004557
2353.65	-0.0010297
2354.61	-0.0006556
2355.58	-0.0003904
2356.54	-0.0014759
2357.51	-0.0019075
2358.47	-0.000544
2359.44	-0.0012602
2360.4	-0.0022738
2361.36	0.0004131
2362.33	-0.0004631
2363.29	-0.0000593
2364.26	0.0021398
2365.22	0.0030183
2366.18	0.0018925
2367.15	0.0028725
2368.11	0.0046956
2369.08	0.0038099
2370.04	0.0027912
2371.01	0.00238
2371.97	0.0031203
2372.93	0.0043805
2373.9	0.0060644
2374.86	0.0073286
2375.83	0.007688
2376.79	0.0077151
2377.75	0.0079179
2378.72	0.0080862
2379.68	0.0083806
2380.65	0.0089743
2381.61	0.0096383
2382.57	0.0109838
2383.54	0.013654
2384.5	0.0181459
2385.47	0.0246461
2386.43	0.0328301
2387.39	0.040518
2388.36	0.0470147

WN	ABS
2389.32	0.051493
2390.29	0.0523755
2391.25	0.0484555
2392.22	0.040207
2393.18	0.0298964
2394.14	0.0215528
2395.11	0.0160908
2396.07	0.0127502
2397.04	0.0114858
2398	0.0102857
2398.96	0.0094538
2399.93	0.008446
2400.89	0.0077723
2401.86	0.006818
2402.82	0.0062957
2403.78	0.0054093
2404.75	0.004741
2405.71	0.0041597
2406.68	0.0036254
2407.64	0.0029985
2408.61	0.0026728
2409.57	0.0021732
2410.53	0.0020058
2411.5	0.0018035
2412.46	0.0017604
2413.43	0.0015699
2414.39	0.0017056
2415.35	0.0014459
2416.32	0.0013104
2417.28	0.0009721
2418.25	0.0007503
2419.21	0.0004738
2420.17	0.0001717
2421.14	0.0001976
2422.1	0.0001573
2423.07	0.0002821
2424.03	0.0003466
2425	0.0002642
2425.96	0.0004787
2426.92	0.0005559
2427.89	0.0006163
2428.85	0.0006954
2429.82	0.0008478
2430.78	0.0007986
2431.74	0.0007811
2432.71	0.0007579
2433.67	0.0008428

WN	ABS
2434.64	0.000932
2435.6	0.0008671
2436.56	0.0008391
2437.53	0.0008525
2438.49	0.0007211
2439.46	0.0007252
2440.42	0.000803
2441.39	0.0007196
2442.35	0.000654
2443.31	0.0007856
2444.28	0.0007797
2445.24	0.0009355
2446.21	0.0007468
2447.17	0.0008014
2448.13	0.0010436
2449.1	0.0008998
2450.06	0.0009572
2451.03	0.000896
2451.99	0.0009175
2452.95	0.0007568
2453.92	0.0010789
2454.88	0.0009255
2455.85	0.0009787
2456.81	0.0009209
2457.78	0.0012148
2458.74	0.0010588
2459.7	0.0012872
2460.67	0.0012814
2461.63	0.0014809
2462.6	0.0013832
2463.56	0.0017801
2464.52	0.0015801
2465.49	0.001821
2466.45	0.0017955
2467.42	0.0018113
2468.38	0.0018869
2469.34	0.0019434
2470.31	0.0020843
2471.27	0.0019535
2472.24	0.0020809
2473.2	0.0020892
2474.16	0.0024265
2475.13	0.0022216
2476.09	0.0022153
2477.06	0.0022285
2478.02	0.0021879
2478.99	0.0022456

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Subfile: 0130

WN	ABS
2479.95	0.0023617
2480.91	0.0026382
2481.88	0.0023244
2482.84	0.0024604
2483.81	0.0027249
2484.77	0.0024974
2485.73	0.002664
2486.7	0.0025191
2487.66	0.0024986
2488.63	0.0025477
2489.59	0.0024078
2490.55	0.0026003
2491.52	0.002601
2492.48	0.0022482
2493.45	0.0021109
2494.41	0.0025721
2495.38	0.0024556
2496.34	0.0027826
2497.3	0.0029235
2498.27	0.003186
2499.23	0.0029449
2500.2	0.001904
2501.16	0.0016845
2502.12	0.0016598
2503.09	0.0018927
2504.05	0.001812
2505.02	0.0019536
2505.98	0.0019995
2506.94	0.0022312
2507.91	0.0025048
2508.87	0.0026731
2509.84	0.0027411
2510.8	0.0027905
2511.77	0.0029559
2512.73	0.0028325
2513.69	0.0028328
2514.66	0.0029513
2515.62	0.0026145
2516.59	0.0029004
2517.55	0.0024838
2518.51	0.0024114
2519.48	0.0022126
2520.44	0.0021355
2521.41	0.0018425
2522.37	0.0016773
2523.33	0.0016201
2524.3	0.0014626

WN	ABS
2525.26	0.0012232
2526.23	0.001074
2527.19	0.0008991
2528.16	0.0008184
2529.12	0.0006227
2530.08	0.0007983
2531.05	0.0003049
2532.01	0.0004063
2532.98	0.0002522
2533.94	0.0003014
2534.9	0.0000671
2535.87	0.0001558
2536.83	-5.07E-06
2537.8	0.0000413
2538.76	-0.000118
2539.72	-6.41E-06
2540.69	-0.000151
2541.65	-9.83E-05
2542.62	-0.00015
2543.58	-0.000114
2544.54	-0.000164
2545.51	-0.000159
2546.47	0.0000242
2547.44	-2.83E-05
2548.4	-5.19E-05
2549.37	-5.44E-05
2550.33	-6.05E-05
2551.29	1.55E-07
2552.26	-9.36E-05
2553.22	0.0000561
2554.19	-1.77E-05
2555.15	0.0000498
2556.11	-6.15E-05
2557.08	-6.16E-05
2558.04	8.12E-06
2559.01	0.0000767
2559.97	0.000152
2560.94	-0.000026
2561.9	0.0000203
2562.86	0.0001414
2563.83	-0.000099
2564.79	-9.61E-05
2565.76	0.0000719
2566.72	0.0001188
2567.68	-0.000132
2568.65	0.0000254
2569.61	-1.97E-05

WN	ABS
2570.58	-6.47E-05
2571.54	-8.02E-05
2572.5	-0.000122
2573.47	-0.000246
2574.43	-0.000291
2575.4	-0.000264
2576.36	-0.000128
2577.32	-0.000203
2578.29	-3.01E-05
2579.25	-0.000296
2580.22	-0.000118
2581.18	-8.93E-05
2582.15	-3.15E-06
2583.11	0.0000992
2584.07	-0.000142
2585.04	0.0001587
2586	-0.000162
2586.97	-0.000161
2587.93	-1.92E-05
2588.89	-3.99E-05
2589.86	-0.000245
2590.82	0.0000216
2591.79	-0.000129
2592.75	-7.11E-05
2593.71	-0.000124
2594.68	-0.000152
2595.64	-8.24E-05
2596.61	-0.000135
2597.57	-0.000236
2598.54	-0.000208
2599.5	-0.000181
2600.46	-0.000271
2601.43	-0.000299
2602.39	-0.000372
2603.36	-0.000298
2604.32	-0.000214
2605.28	-0.000264
2606.25	-0.000144
2607.21	-0.000417
2608.18	-0.000239
2609.14	-0.000318
2610.1	-0.000357
2611.07	-0.000516
2612.03	-0.00012
2613	-0.000233
2613.96	-8.69E-05
2614.93	-0.000469

Filename: LMB0124 Type: Absorbance
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WN	ABS
2615.89	-0.0003199
2616.85	-0.0004202
2617.82	-0.0001775
2618.78	-0.0000818
2619.75	0.0000164
2620.71	-0.0004075
2621.67	-0.000147
2622.64	-0.0000074
2623.6	-0.0001386
2624.57	-0.0004529
2625.53	-0.0001386
2626.49	-0.000274
2627.46	-0.0002331
2628.42	0.0000806
2629.39	-0.000563
2630.35	-0.0001307
2631.31	-0.0001404
2632.28	-0.000679
2633.24	-0.0001959
2634.21	-0.0000526
2635.17	-0.0004742
2636.14	-0.0003342
2637.1	-0.0002171
2638.06	-0.0003048
2639.03	-0.000116
2639.99	-0.0003064
2640.96	-0.000382
2641.92	-0.0002822
2642.88	-0.0003927
2643.85	-0.0003852
2644.81	-0.0003586
2645.78	-0.0004074
2646.74	-0.0007167
2647.7	-0.000733
2648.67	-0.0001237
2649.63	-0.0001107
2650.6	-0.0003904
2651.56	-0.0004182
2652.53	-0.0003388
2653.49	-0.0004659
2654.45	-0.000372
2655.42	0.0000659
2656.38	-0.0001747
2657.35	-0.0003258
2658.31	-0.0002405
2659.27	-0.0004743
2660.24	-0.0003192

WN	ABS
2661.2	-0.000246
2662.17	-0.000217
2663.13	-0.00016
2664.09	-0.000622
2665.06	-0.000428
2666.02	0.0001009
2666.99	8.28E-07
2667.95	-0.000482
2668.92	-0.000409
2669.88	-0.000395
2670.84	-0.000431
2671.81	-0.000408
2672.77	-0.000435
2673.74	-0.000343
2674.7	-0.000226
2675.66	-0.000359
2676.63	-0.000559
2677.59	-0.000297
2678.56	-0.000438
2679.52	-0.000664
2680.48	-9.99E-05
2681.45	-0.000183
2682.41	-0.00045
2683.38	-0.000613
2684.34	-0.000375
2685.31	-0.000244
2686.27	-7.54E-05
2687.23	-0.000109
2688.2	-0.000653
2689.16	-0.000622
2690.13	-0.000405
2691.09	-0.00026
2692.05	-0.000448
2693.02	-0.000166
2693.98	0.0000378
2694.95	-0.000402
2695.91	-0.000187
2696.87	-0.00091
2697.84	-0.000658
2698.8	-0.000579
2699.77	-0.000626
2700.73	-0.000476
2701.7	-0.000554
2702.66	-7.12E-05
2703.62	-0.00051
2704.59	-3.97E-05
2705.55	-0.000406

WN	ABS
2706.52	0.0000909
2707.48	-0.000277
2708.44	-0.0004
2709.41	-0.000738
2710.37	-0.000172
2711.34	-0.000784
2712.3	-0.000645
2713.26	-0.000611
2714.23	-0.000041
2715.19	-0.000393
2716.16	-0.000243
2717.12	-0.000436
2718.09	0.0000294
2719.05	-5.51E-05
2720.01	-0.000306
2720.98	0.0000818
2721.94	0.0000136
2722.91	-0.000337
2723.87	0.000425
2724.83	-0.000851
2725.8	0.0001591
2726.76	-2.06E-05
2727.73	-4.51E-05
2728.69	-0.000369
2729.65	-0.000271
2730.62	-0.000535
2731.58	-0.00042
2732.55	-0.000667
2733.51	-0.000609
2734.47	-0.000197
2735.44	-0.000106
2736.4	-0.000692
2737.37	-0.000503
2738.33	-5.09E-05
2739.3	0.0002288
2740.26	-0.000213
2741.22	-0.000567
2742.19	-0.000298
2743.15	-0.001307
2744.12	-0.000347
2745.08	-0.00053
2746.04	-0.000876
2747.01	0.0000614
2747.97	-0.000522
2748.94	-0.000435
2749.9	-0.000137
2750.86	-0.000337

Filename: LMB0124
Subfile: 0130

Type: Absorbance

WN	ABS
2751.83	0.0000596
2752.79	-0.0003305
2753.76	-0.0002373
2754.72	-0.0005592
2755.69	-0.0008336
2756.65	-0.0009242
2757.61	-0.0003212
2758.58	-0.0003071
2759.54	-0.0005497
2760.51	-0.000635
2761.47	-0.0007622
2762.43	-0.0002048
2763.4	-0.0007909
2764.36	-0.0003376
2765.33	-0.000346
2766.29	-0.0006375
2767.25	-0.0006629
2768.22	-0.0006022
2769.18	-0.0005377
2770.15	-0.0003191
2771.11	-0.0002658
2772.08	-0.000589
2773.04	-0.0000555
2774	-0.0005159
2774.97	-0.0009375
2775.93	-4.60E-06
2776.9	-0.0002983
2777.86	-0.000667
2778.82	-0.0006775
2779.79	-0.0006692
2780.75	-0.000514
2781.72	-0.0007969
2782.68	-0.0002333
2783.64	-0.0009971
2784.61	-0.0005908
2785.57	-0.0003946
2786.54	0.0001388
2787.5	0.0001172
2788.47	-0.0005076
2789.43	-0.0001971
2790.39	-0.0004389
2791.36	0.0002122
2792.32	-0.000372
2793.29	-0.0005105
2794.25	-0.0002325
2795.21	-0.0002876
2796.18	-0.0004016
2797.14	-0.0006556
2798.11	-0.0004423
2799.07	-0.0003082
2800.03	-0.0000882

Filename LMB0106 Type: 40 deg C BB
Subfile: 0001

WN	INT
1800.22	2540.54
1801.18	2498.72
1802.15	2728.34
1803.11	3045.82
1804.08	3174.21
1805.04	3164.92
1806	3361.76
1806.97	3417.47
1807.93	3177.02
1808.9	3542.59
1809.86	3567.89
1810.83	2979.36
1811.79	3844.6
1812.75	3903.19
1813.72	4185.59
1814.68	4267.65
1815.65	4425.16
1816.61	4556.59
1817.58	4310.62
1818.54	4888.89
1819.5	5038.2
1820.47	5199.65
1821.43	5289.61
1822.4	5398.24
1823.36	5623.72
1824.32	5612.2
1825.29	4157.99
1826.25	6368.14
1827.22	6575.86
1828.18	6605.83
1829.15	5289.03
1830.11	5139.02
1831.07	7776.85
1832.04	8196.09
1833	8341.36
1833.97	8865.92
1834.93	9018.29
1835.9	9245.69
1836.86	9080.06
1837.82	9910.18
1838.79	10398.2
1839.75	10650.4
1840.72	10844.1
1841.68	10931.2
1842.65	10752.3
1843.61	9581.06
1844.57	7352.43

WN	INT
1845.54	11100.2
1846.5	12339.9
1847.47	11666.1
1848.43	12732.7
1849.39	13361.4
1850.36	13610.4
1851.32	13790.3
1852.29	13823.3
1853.25	14159.1
1854.22	14288.4
1855.18	14469.2
1856.14	14545.7
1857.11	14726.2
1858.07	14754.5
1859.04	14695.9
1860	14892.8
1860.97	14940.4
1861.93	14882.2
1862.89	15249.5
1863.86	15256.3
1864.82	15383.7
1865.79	15184
1866.75	13266.8
1867.72	12386.4
1868.68	14087.1
1869.64	10952.1
1870.61	14784.5
1871.57	15746.5
1872.54	15828.6
1873.5	15878.5
1874.46	15867.2
1875.43	15897.9
1876.39	15861
1877.36	15944.7
1878.32	15941.8
1879.29	15673
1880.25	15961.4
1881.21	15977
1882.18	15993.4
1883.14	15994.6
1884.11	15848.3
1885.07	15510.2
1886.04	15983.7
1887	15989.8
1887.96	15917.6
1888.93	15411.7
1889.89	12332.6

WN	INT
1890.86	15741.5
1891.82	15886
1892.79	15846.4
1893.75	15770.3
1894.71	15515.3
1895.68	14704.5
1896.64	15847.7
1897.61	15769
1898.57	15941
1899.54	15907.6
1900.5	15889.4
1901.46	15841.7
1902.43	15838.2
1903.39	15824.9
1904.36	15382.2
1905.32	15898.5
1906.28	15829.3
1907.25	15737.6
1908.21	14200.4
1909.18	15470.2
1910.14	13132.7
1911.11	15523.5
1912.07	15534.2
1913.03	15516
1914	15429.9
1914.96	15337.2
1915.93	15261.8
1916.89	14823.5
1917.86	11839.7
1918.82	15052
1919.78	15415.7
1920.75	15376.1
1921.71	15194
1922.68	13423.5
1923.64	13757.4
1924.61	15033.4
1925.57	15062.6
1926.53	15060.1
1927.5	15061.3
1928.46	15045.8
1929.43	15034.5
1930.39	15009.2
1931.35	14992.6
1932.32	14910
1933.28	14592.5
1934.25	14944.8
1935.21	14929.4

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WN	INT
1936.18	14921.8
1937.14	14900.6
1938.1	14876.7
1939.07	14873.6
1940.03	14833.2
1941	14773.2
1941.96	14039.5
1942.93	11675.2
1943.89	14548
1944.85	14530.2
1945.82	14151.3
1946.78	14034.1
1947.75	14516
1948.71	14508.2
1949.68	14474.4
1950.64	14468.4
1951.6	14440.1
1952.57	14437
1953.53	14385.9
1954.5	14298.2
1955.46	14002.2
1956.42	14197.6
1957.39	14213.7
1958.35	14228.5
1959.32	14148.5
1960.28	14141.3
1961.25	13743.8
1962.21	14085.5
1963.17	14012.6
1964.14	13984.8
1965.1	13855.7
1966.07	13249.3
1967.03	13482.2
1968	13341.4
1968.96	13850.9
1969.92	13812
1970.89	13777.4
1971.85	13750.4
1972.82	13689.9
1973.78	13653.8
1974.75	13599.6
1975.71	13604.7
1976.67	13516.9
1977.64	13520.9
1978.6	13482.3
1979.57	13447.3
1980.53	13391.5

WN	INT
1981.49	13365
1982.46	13316.9
1983.42	13316.4
1984.39	13251.8
1985.35	13244.8
1986.32	13154.8
1987.28	13044.2
1988.24	12346
1989.21	13162.3
1990.17	13136.7
1991.14	12960.5
1992.1	10885.5
1993.07	12452.7
1994.03	12888.3
1994.99	12828.9
1995.96	12819.8
1996.92	12755.9
1997.89	12744.8
1998.85	12487.5
1999.82	12692.6
2000.78	12629.6
2001.74	12596
2002.71	12565.9
2003.67	12506
2004.64	12482.1
2005.6	12417
2006.56	12400.2
2007.53	12259.5
2008.49	12354.2
2009.46	12209.3
2010.42	12272.4
2011.39	12223.2
2012.35	12208.9
2013.31	12145.7
2014.28	12122.3
2015.24	12072.2
2016.21	11988.4
2017.17	11004.1
2018.14	11583.4
2019.1	11658.8
2020.06	11880.1
2021.03	11849.6
2021.99	11780.7
2022.96	11622.5
2023.92	11746.9
2024.89	11691.1
2025.85	11675.9

WN	INT
2026.81	11509.2
2027.78	11605.1
2028.74	11526.4
2029.71	11502.1
2030.67	11463.3
2031.64	11412
2032.6	11384
2033.56	11336.7
2034.53	11314.7
2035.49	11265.9
2036.46	11230.8
2037.42	11164.9
2038.38	11151.1
2039.35	11093.6
2040.31	10999.2
2041.28	10450.4
2042.24	11051.6
2043.21	10981.5
2044.17	10768.8
2045.13	10884.1
2046.1	10853.5
2047.06	10787.1
2048.03	10773.2
2048.99	10706.7
2049.96	10665.6
2050.92	10619.2
2051.88	10586.4
2052.85	10567.9
2053.81	10507.1
2054.78	10485.3
2055.74	10434.1
2056.7	10425.3
2057.67	10358.5
2058.63	10325
2059.6	10282.9
2060.56	10121.6
2061.53	10226.9
2062.49	10172.1
2063.45	10139.5
2064.42	10028.5
2065.38	9824.88
2066.35	9928.08
2067.31	9972.11
2068.27	9927.9
2069.24	9900.48
2070.2	9866.37
2071.17	9833.9

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WN	INT
2072.13	9773.22
2073.09	9726.68
2074.06	9679.37
2075.02	9684.72
2075.99	9671.14
2076.95	9619.39
2077.92	9567.44
2078.88	9516.92
2079.84	9512.11
2080.81	9481.84
2081.77	9443.01
2082.74	9389.69
2083.7	9382.33
2084.66	9321.01
2085.63	9309.98
2086.59	9255.19
2087.56	9178.77
2088.52	9221.1
2089.48	9171.65
2090.45	8954.03
2091.41	9085.27
2092.38	9064.79
2093.34	9043.26
2094.31	8984.73
2095.27	8947.35
2096.23	8916.63
2097.2	8879.61
2098.16	8867.92
2099.13	8815.76
2100.09	8808.13
2101.05	8795.33
2102.02	8735.23
2102.98	8732.85
2103.95	8680.7
2104.91	8660.25
2105.87	8647.35
2106.84	8568.07
2107.8	8575.09
2108.77	8537.25
2109.73	8490.92
2110.69	8505.96
2111.66	8433.89
2112.62	8433.12
2113.59	8400.15
2114.55	8307.2
2115.52	8314.72
2116.48	8296.45

WN	INT
2117.44	8271.7
2118.41	8296.87
2119.37	8205.7
2120.34	8189.43
2121.3	8179.52
2122.26	8126.28
2123.23	8144.11
2124.19	8080.48
2125.16	8049.24
2126.12	8052.29
2127.08	7991.42
2128.05	7979.17
2129.01	7960.58
2129.98	7892.16
2130.94	7897.12
2131.91	7879.84
2132.87	7816.24
2133.83	7827.12
2134.8	7770.21
2135.76	7723.87
2136.73	7752.75
2137.69	7695.11
2138.65	7676.41
2139.62	7645.26
2140.58	7597.13
2141.55	7609.53
2142.51	7595.16
2143.47	7532.62
2144.44	7530.38
2145.4	7503.86
2146.37	7453.04
2147.33	7460.71
2148.3	7420.75
2149.26	7366.9
2150.22	7399.96
2151.19	7347.29
2152.15	7312.24
2153.12	7309.67
2154.08	7248
2155.04	7220.59
2156.01	7231.52
2156.97	7169.52
2157.94	7154.69
2158.9	7153.98
2159.86	7092.85
2160.83	7080.71
2161.79	7052.21

WN	INT
2162.76	7014.19
2163.72	7015.69
2164.69	7002.24
2165.65	6951.79
2166.61	6958.32
2167.58	6932.43
2168.54	6859.2
2169.51	6858.73
2170.47	6840.89
2171.43	6783.6
2172.4	6783.03
2173.36	6753.62
2174.33	6723.2
2175.29	6704.65
2176.25	6701.11
2177.22	6625.44
2178.18	6638.15
2179.15	6625.45
2180.11	6578.18
2181.08	6542.71
2182.04	6561.95
2183	6504.2
2183.97	6476.31
2184.93	6462.54
2185.9	6427.58
2186.86	6406.81
2187.82	6387.97
2188.79	6365
2189.75	6319.48
2190.72	6324.28
2191.68	6252.32
2192.64	6275.43
2193.61	6233.26
2194.57	6225.53
2195.54	6180.13
2196.5	6170.09
2197.46	6158.25
2198.43	6109.18
2199.39	6093.13
2200.36	6093.93
2201.32	6019.09
2202.29	6002.93
2203.25	6014.62
2204.21	5977.72
2205.18	5913.53
2206.14	5929.94
2207.11	5928.94

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WN	INT
2208.07	5864.7
2209.03	5850.79
2210	5839.57
2210.96	5813.17
2211.93	5756.12
2212.89	5760.94
2213.85	5735.11
2214.82	5696.65
2215.78	5695.4
2216.75	5675.73
2217.71	5632.94
2218.68	5568.31
2219.64	5597.18
2220.6	5588.95
2221.57	5531.95
2222.53	5509.23
2223.5	5506.01
2224.46	5454.03
2225.42	5431.15
2226.39	5409.91
2227.35	5393.57
2228.32	5356.81
2229.28	5330.53
2230.24	5343.45
2231.21	5332.58
2232.17	5270.5
2233.14	5240.06
2234.1	5248.94
2235.07	5205.63
2236.03	5187.83
2236.99	5166.97
2237.96	5151.2
2238.92	5109.52
2239.89	5101.93
2240.85	5094.66
2241.81	5061.78
2242.78	5016.42
2243.74	4977.73
2244.71	4981.48
2245.67	4936.57
2246.63	4913.41
2247.6	4892.5
2248.56	4905.81
2249.53	4850.43
2250.49	4839.38
2251.46	4804.02
2252.42	4811.07

WN	INT
2253.38	4750.53
2254.35	4747.82
2255.31	4705.93
2256.28	4723.68
2257.24	4669.53
2258.2	4685.02
2259.17	4630.62
2260.13	4657.23
2261.1	4569.86
2262.06	4588.89
2263.02	4521.05
2263.99	4566.45
2264.95	4469.76
2265.92	4528.6
2266.88	4437.53
2267.85	4498.93
2268.81	4395.25
2269.77	4420.58
2270.74	4371.71
2271.7	4369.36
2272.67	4371.41
2273.63	4284.94
2274.59	4342.72
2275.56	4254.01
2276.52	4282.5
2277.49	4212.15
2278.45	4225.13
2279.41	4238.26
2280.38	4193.02
2281.34	4189.44
2282.31	4142.23
2283.27	4149.29
2284.24	4112.15
2285.2	4091.81
2286.16	4049.36
2287.13	4004.59
2288.09	4044.97
2289.06	3928.91
2290.02	3919.69
2290.98	3983.83
2291.95	3833.76
2292.91	3860.24
2293.88	3788.59
2294.84	3801.91
2295.8	3688.6
2296.77	3755.9
2297.73	3718.49

WN	INT
2298.7	3542.71
2299.66	3602.93
2300.62	3435.99
2301.59	3547.81
2302.55	3304.69
2303.52	3478.53
2304.48	3382.43
2305.45	3437.26
2306.41	3356.23
2307.37	3199.27
2308.34	3288.15
2309.3	2897.6
2310.27	3176.81
2311.23	2665.56
2312.19	3077.45
2313.16	2591.27
2314.12	3003.19
2315.09	2561.8
2316.05	2911.04
2317.01	2547.3
2317.98	2802.76
2318.94	2450.96
2319.91	2655.2
2320.87	2345.03
2321.84	2573.17
2322.8	2252.49
2323.76	2483.02
2324.73	2135.97
2325.69	2435.97
2326.66	2071.89
2327.62	2383.29
2328.58	1902.62
2329.55	2373.03
2330.51	1751.35
2331.48	2387.11
2332.44	1650.92
2333.4	2325.15
2334.37	1658.99
2335.33	2230.32
2336.3	1756
2337.26	1985.92
2338.23	1973.98
2339.19	1688.34
2340.15	2151.16
2341.12	1559.29
2342.08	2132.82
2343.05	1655.58

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WN	INT
2344.01	1927.03
2344.97	1988.76
2345.94	1704.36
2346.9	2169.28
2347.87	1907.3
2348.83	2182.23
2349.79	1985.65
2350.76	2138.8
2351.72	1695.82
2352.69	1792.03
2353.65	1931.57
2354.61	1438.04
2355.58	1687.86
2356.54	1811.15
2357.51	1336.6
2358.47	1576.8
2359.44	1781.58
2360.4	1408.17
2361.36	1405.07
2362.33	1747.77
2363.29	1644.69
2364.26	1353.04
2365.22	1527.09
2366.18	1823.68
2367.15	1778.41
2368.11	1521.75
2369.08	1487.26
2370.04	1733.46
2371.01	1963.53
2371.97	2011.25
2372.93	1907.82
2373.9	1827.29
2374.86	1831.9
2375.83	1879.68
2376.79	1975.89
2377.75	2071.92
2378.72	2173.11
2379.68	2262.56
2380.65	2295.91
2381.61	2337.62
2382.57	2369.57
2383.54	2431.14
2384.5	2412.51
2385.47	2439.95
2386.43	2465.12
2387.39	2450.99
2388.36	2437.88

WN	INT
2389.32	2466.42
2390.29	2465.13
2391.25	2464.98
2392.22	2468.03
2393.18	2452.03
2394.14	2458.38
2395.11	2448.51
2396.07	2411.1
2397.04	2420.9
2398	2409.39
2398.96	2414.05
2399.93	2390.61
2400.89	2385.79
2401.86	2367.99
2402.82	2350.95
2403.78	2365.59
2404.75	2362.76
2405.71	2342.93
2406.68	2347.78
2407.64	2334.67
2408.61	2318.18
2409.57	2308.24
2410.53	2306.86
2411.5	2284.07
2412.46	2281.24
2413.43	2265.35
2414.39	2264.48
2415.35	2265.53
2416.32	2252.77
2417.28	2240.58
2418.25	2230.25
2419.21	2207.97
2420.17	2224.76
2421.14	2189.67
2422.1	2179.75
2423.07	2153.95
2424.03	2160.12
2425	2154.94
2425.96	2133.08
2426.92	2126.15
2427.89	2122.92
2428.85	2104.04
2429.82	2096.61
2430.78	2093.44
2431.74	2089.89
2432.71	2063.86
2433.67	2059.99

WN	INT
2434.64	2047.56
2435.6	2043.71
2436.56	2038.93
2437.53	2007.46
2438.49	2011.2
2439.46	2015.03
2440.42	1990.3
2441.39	1989.27
2442.35	1974.81
2443.31	1959.84
2444.28	1938.33
2445.24	1948.86
2446.21	1938.02
2447.17	1932.81
2448.13	1927.3
2449.1	1899.34
2450.06	1893.81
2451.03	1892.85
2451.99	1882.84
2452.95	1880.54
2453.92	1870
2454.88	1849.91
2455.85	1845.71
2456.81	1856.98
2457.78	1828.43
2458.74	1828.39
2459.7	1815.63
2460.67	1807.14
2461.63	1805.94
2462.6	1780.28
2463.56	1771.34
2464.52	1765.1
2465.49	1747.47
2466.45	1745.87
2467.42	1733.63
2468.38	1718.53
2469.34	1740.49
2470.31	1707.07
2471.27	1710.91
2472.24	1701.79
2473.2	1663.85
2474.16	1686.21
2475.13	1660.49
2476.09	1659.14
2477.06	1647.95
2478.02	1640.11
2478.99	1632.03

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WN	INT
2479.95	1623.94
2480.91	1623.18
2481.88	1623.51
2482.84	1597.76
2483.81	1609.92
2484.77	1589.57
2485.73	1594.78
2486.7	1586.39
2487.66	1578.83
2488.63	1566.85
2489.59	1572.56
2490.55	1543.61
2491.52	1534.79
2492.48	1531.32
2493.45	1518.27
2494.41	1523.36
2495.38	1514.28
2496.34	1485.65
2497.3	1484.75
2498.27	1489.49
2499.23	1465.22
2500.2	1464.66
2501.16	1460.71
2502.12	1444.52
2503.09	1444.9
2504.05	1431.56
2505.02	1437.63
2505.98	1427.45
2506.94	1415.15
2507.91	1398.81
2508.87	1403
2509.84	1403.36
2510.8	1393.48
2511.77	1374.79
2512.73	1374.96
2513.69	1371.46
2514.66	1360.18
2515.62	1349.41
2516.59	1342.68
2517.55	1338.24
2518.51	1342.61
2519.48	1319.2
2520.44	1320.88
2521.41	1303.74
2522.37	1308.06
2523.33	1310.59
2524.3	1305.74

WN	INT
2525.26	1287.06
2526.23	1280.21
2527.19	1272.32
2528.16	1257.3
2529.12	1255.29
2530.08	1254.23
2531.05	1246.34
2532.01	1244.27
2532.98	1234.96
2533.94	1225.81
2534.9	1227.79
2535.87	1211.57
2536.83	1212.15
2537.8	1199.53
2538.76	1197.91
2539.72	1191.23
2540.69	1182.55
2541.65	1166.1
2542.62	1158.17
2543.58	1150.72
2544.54	1170.25
2545.51	1150.97
2546.47	1127.14
2547.44	1132.13
2548.4	1126.47
2549.37	1136.69
2550.33	1102.27
2551.29	1119.04
2552.26	1100.18
2553.22	1102.32
2554.19	1112.58
2555.15	1103.88
2556.11	1074.56
2557.08	1083.86
2558.04	1091.32
2559.01	1072.31
2559.97	1078.11
2560.94	1069.38
2561.9	1067.02
2562.86	1058.18
2563.83	1061.53
2564.79	1042.51
2565.76	1037.92
2566.72	1024.37
2567.68	1007.71
2568.65	1015.95
2569.61	1012.47

WN	INT
2570.58	1006.47
2571.54	997.682
2572.5	980.471
2573.47	990.842
2574.43	976.011
2575.4	978.266
2576.36	959.947
2577.32	966.066
2578.29	952.406
2579.25	956.256
2580.22	953.864
2581.18	967.577
2582.15	952.302
2583.11	937.703
2584.07	918.253
2585.04	931.169
2586	921.755
2586.97	923.011
2587.93	912.088
2588.89	919.685
2589.86	915.462
2590.82	909.842
2591.79	907.512
2592.75	891.515
2593.71	878.756
2594.68	884.629
2595.64	877.17
2596.61	875.187
2597.57	876.213
2598.54	869.069
2599.5	867.379
2600.46	861.004
2601.43	846.654
2602.39	835.209
2603.36	826.802
2604.32	829.48
2605.28	815.768
2606.25	825.131
2607.21	812.43
2608.18	813.665
2609.14	814.367
2610.1	811.94
2611.07	782.065
2612.03	792.838
2613	772.794
2613.96	800.919
2614.93	780.32

Filename LMB0106 Type: 40 deg C BB
Subfile: 0001

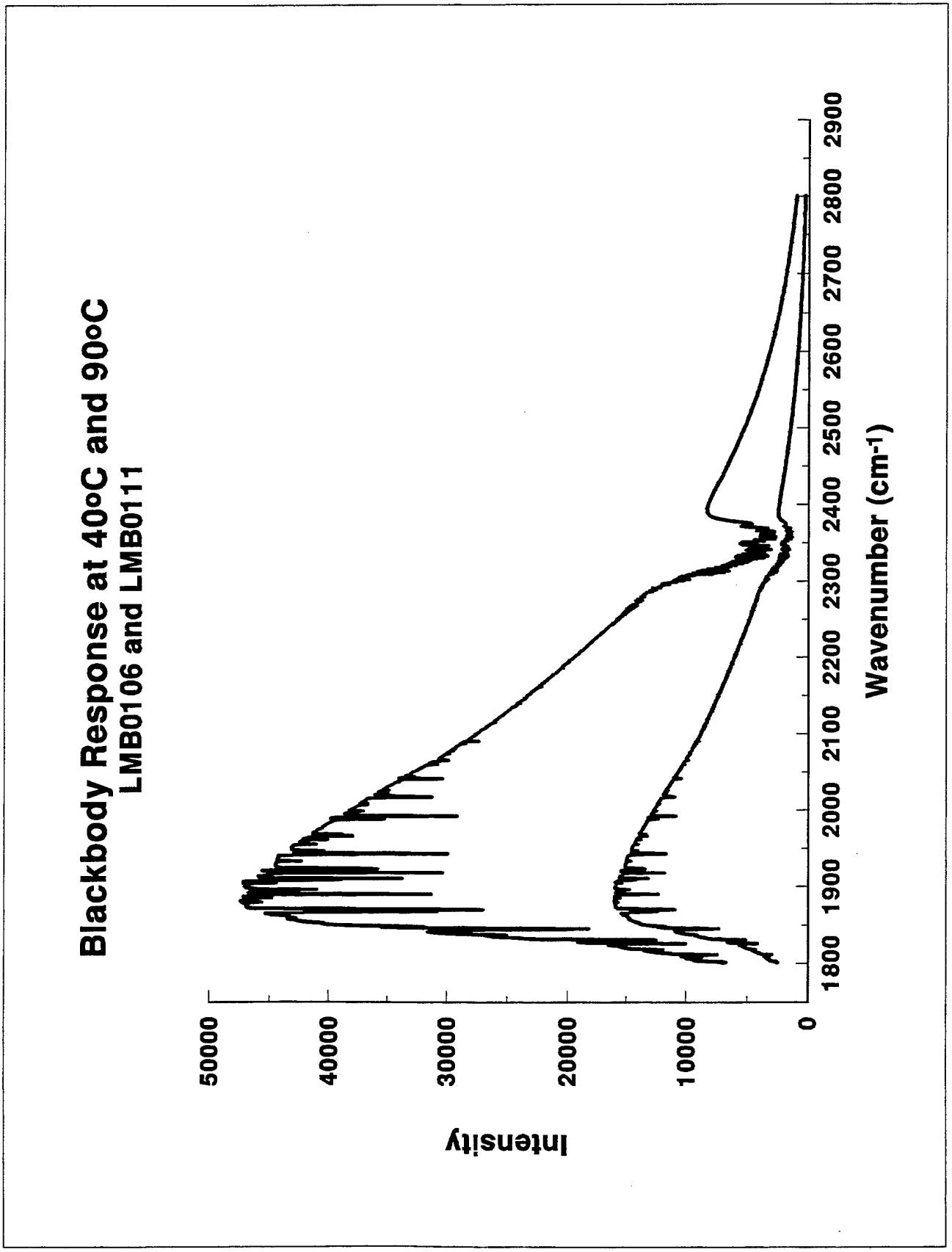
WN	INT
2615.89	786.734
2616.85	772.924
2617.82	775.049
2618.78	770.27
2619.75	765.556
2620.71	759.441
2621.67	744.966
2622.64	743.403
2623.6	742.37
2624.57	733.443
2625.53	748.559
2626.49	718.069
2627.46	733.695
2628.42	737.61
2629.39	729.37
2630.35	723.349
2631.31	707.996
2632.28	709.6
2633.24	696.41
2634.21	705.949
2635.17	698.6
2636.14	694.364
2637.1	707.496
2638.06	700.123
2639.03	679.658
2639.99	688.55
2640.96	682.109
2641.92	672.211
2642.88	646.455
2643.85	660.928
2644.81	642.323
2645.78	653.571
2646.74	644.152
2647.7	648.629
2648.67	648.928
2649.63	656.989
2650.6	643.444
2651.56	641.506
2652.53	629.432
2653.49	626.646
2654.45	611.773
2655.42	621.01
2656.38	601.4
2657.35	608.199
2658.31	614.333
2659.27	615.561
2660.24	628.771

WN	INT
2661.2	606.882
2662.17	601.016
2663.13	602.042
2664.09	602.792
2665.06	581.834
2666.02	590.393
2666.99	582.901
2667.95	575.194
2668.92	567.748
2669.88	565.076
2670.84	581.502
2671.81	563.639
2672.77	573.572
2673.74	571.592
2674.7	556.209
2675.66	563.967
2676.63	539.508
2677.59	523.327
2678.56	524.497
2679.52	525.376
2680.48	520.786
2681.45	524.85
2682.41	516.352
2683.38	520.672
2684.34	526.35
2685.31	527.42
2686.27	513.846
2687.23	510.166
2688.2	506.57
2689.16	511.287
2690.13	509.776
2691.09	508.878
2692.05	490.032
2693.02	488.012
2693.98	482.908
2694.95	499.585
2695.91	499.1
2696.87	478.568
2697.84	505.872
2698.8	488.396
2699.77	489.316
2700.73	489.98
2701.7	471.374
2702.66	477.159
2703.62	451.307
2704.59	453.712
2705.55	453.448

WN	INT
2706.52	442.017
2707.48	454.645
2708.44	433.91
2709.41	451.129
2710.37	461.386
2711.34	459.559
2712.3	443.879
2713.26	439.473
2714.23	436.439
2715.19	423.125
2716.16	439.16
2717.12	413.704
2718.09	406.195
2719.05	393.324
2720.01	404.936
2720.98	391.638
2721.94	410.615
2722.91	405.738
2723.87	417.284
2724.83	415.575
2725.8	423.169
2726.76	418.901
2727.73	414.003
2728.69	409.466
2729.65	392.2
2730.62	402.07
2731.58	385.986
2732.55	377.426
2733.51	369.009
2734.47	377.43
2735.44	377.36
2736.4	368.637
2737.37	375.694
2738.33	378.805
2739.3	393.011
2740.26	381.495
2741.22	381.303
2742.19	385.178
2743.15	371.906
2744.12	369.966
2745.08	371.999
2746.04	360.971
2747.01	353.449
2747.97	346.406
2748.94	331.949
2749.9	340.425
2750.86	340.846

Filename LMB0106 Type: 40 deg C BB
Subfile: 0001

WN	INT
2751.83	328.92
2752.79	330.169
2753.76	333.475
2754.72	342.064
2755.69	340.151
2756.65	337.137
2757.61	341.597
2758.58	342.685
2759.54	333.007
2760.51	327.176
2761.47	329.318
2762.43	316.528
2763.4	314.221
2764.36	308.27
2765.33	303.911
2766.29	311.833
2767.25	293.453
2768.22	300.143
2769.18	309.247
2770.15	310.8
2771.11	302.651
2772.08	293.473
2773.04	310.711
2774	319.182
2774.97	314.92
2775.93	310.768
2776.9	315.964
2777.86	306.719
2778.82	291.742
2779.79	286.553
2780.75	276.136
2781.72	259.861
2782.68	262.077
2783.64	260.236
2784.61	267.381
2785.57	266.21
2786.54	258.362
2787.5	259.998
2788.47	266.239
2789.43	247.323
2790.39	268.931
2791.36	259.618
2792.32	255.231
2793.29	263.539
2794.25	269.76
2795.21	251.799
2796.18	262.478
2797.14	279.539
2798.11	247.24
2799.07	265.299
2800.03	263.69


Blackbody Response at 40°C and 90°C
LMB0106 and LMB0111
Intensity
50000
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900
Wavenumber (cm-1)

Filename LMB0111 Type: 90 deg C BB
Subfile: 0001

WN	INT
1800.22	7081.69
1801.18	6752.04
1802.15	7620.37
1803.11	9003.25
1804.08	9392.16
1805.04	9095.86
1806	9954.01
1806.97	10071.6
1807.93	8683.47
1808.9	10398
1809.86	10268.6
1810.83	7467.4
1811.79	11051
1812.75	11241.3
1813.72	12312.9
1814.68	12693.3
1815.65	13086.8
1816.61	13443.7
1817.58	11919.4
1818.54	14481.1
1819.5	14892.2
1820.47	15282.8
1821.43	15493.9
1822.4	15657.1
1823.36	16498.9
1824.32	16038.9
1825.29	10042.2
1826.25	18093.4
1827.22	19120.6
1828.18	18870.6
1829.15	12662
1830.11	12488.3
1831.07	21843.6
1832.04	23772.4
1833	23982.4
1833.97	26004.7
1834.93	26257.9
1835.9	26732.5
1836.86	25017.9
1837.82	28744.1
1838.79	30387.3
1839.75	31154
1840.72	31573.5
1841.68	31315.5
1842.65	30090.2
1843.61	23442.2
1844.57	18204.2

WN	INT
1845.54	29723.4
1846.5	35521
1847.47	31860.8
1848.43	36755.7
1849.39	39356.5
1850.36	39994.1
1851.32	40473.9
1852.29	40418.3
1853.25	41699
1854.22	42047.6
1855.18	42603.5
1856.14	42738.6
1857.11	43445.5
1858.07	43212.3
1859.04	42714.5
1860	43423.3
1860.97	43569.7
1861.93	43301
1862.89	44866.2
1863.86	44851.5
1864.82	45343
1865.79	44371
1866.75	35011
1867.72	30817.6
1868.68	37535.3
1869.64	26998.8
1870.61	41361.6
1871.57	46318.6
1872.54	46782.5
1873.5	46802.3
1874.46	46907.3
1875.43	46883.6
1876.39	46746.3
1877.36	47043.8
1878.32	47007.2
1879.29	45640.5
1880.25	47298.6
1881.21	47320.2
1882.18	47238.8
1883.14	47164.1
1884.11	46414.4
1885.07	44786.1
1886.04	47081
1887	47125.9
1887.96	46790.4
1888.93	43908
1889.89	31320.5

WN	INT
1890.86	46026.9
1891.82	46692.7
1892.79	46649.8
1893.75	46177
1894.71	44719.2
1895.68	41013.6
1896.64	46567
1897.61	46275
1898.57	46900.3
1899.54	47012.7
1900.5	46951.8
1901.46	46675.5
1902.43	47008.6
1903.39	46878
1904.36	44438.7
1905.32	47137
1906.28	47114
1907.25	46813.8
1908.21	38965.2
1909.18	45468.9
1910.14	33769.6
1911.11	45715.1
1912.07	45786.8
1913.03	45867.9
1914	45659.2
1914.96	45153.9
1915.93	45050.1
1916.89	43397
1917.86	30397
1918.82	43116.5
1919.78	45301.9
1920.75	45541.3
1921.71	44752.6
1922.68	35838.4
1923.64	37921.9
1924.61	43976.9
1925.57	44355.6
1926.53	44471.3
1927.5	44457.8
1928.46	44468.4
1929.43	44437.8
1930.39	44435
1931.35	44398.8
1932.32	44188
1933.28	42291.7
1934.25	44335.4
1935.21	44301.2

Filename LMB0111 Type: 90 deg C BB
Subfile: 0001

WN	INT
1936.18	44300.7
1937.14	44298.3
1938.1	44247.1
1939.07	44183.8
1940.03	44209.8
1941	44026
1941.96	40111.7
1942.93	29932.6
1943.89	42946.5
1944.85	42886.3
1945.82	41167.2
1946.78	40434.7
1947.75	42984.5
1948.71	43102.6
1949.68	42989.2
1950.64	43132.8
1951.6	43053.7
1952.57	43055.9
1953.53	42975.4
1954.5	42723
1955.46	41073.7
1956.42	42167.7
1957.39	42281.1
1958.35	42384.5
1959.32	42329.2
1960.28	42122.5
1961.25	40112.2
1962.21	42121.9
1963.17	41919.1
1964.14	41727.2
1965.1	41242.3
1966.07	38008.9
1967.03	39547.7
1968	38862.2
1968.96	41313.2
1969.92	41301.3
1970.89	41264.5
1971.85	41116.9
1972.82	41046
1973.78	40980.8
1974.75	40854.7
1975.71	40739.3
1976.67	40522.5
1977.64	40545.8
1978.6	40431
1979.57	40390.4
1980.53	40255.4

WN	INT
1981.49	40155.8
1982.46	40090.7
1983.42	39936.3
1984.39	39842.8
1985.35	39689.1
1986.32	39613.6
1987.28	39063.5
1988.24	35298.2
1989.21	39818
1990.17	39695.9
1991.14	39087.6
1992.1	29156.1
1993.07	36368.9
1994.03	38596.8
1994.99	38644.7
1995.96	38597.4
1996.92	38440.5
1997.89	38218.9
1998.85	37126.7
1999.82	38281.7
2000.78	38113.3
2001.74	38034.2
2002.71	37930.8
2003.67	37790.8
2004.64	37681.6
2005.6	37538.2
2006.56	37422.2
2007.53	36741.9
2008.49	37359.5
2009.46	36729.1
2010.42	37194.3
2011.39	37068.2
2012.35	36987
2013.31	36895.3
2014.28	36802
2015.24	36758.4
2016.21	36445.2
2017.17	31279.4
2018.14	34223.6
2019.1	34759.3
2020.06	36084.2
2021.03	35957.1
2021.99	35770.9
2022.96	35003.7
2023.92	35775.6
2024.89	35642.7
2025.85	35493.8

WN	INT
2026.81	34913.9
2027.78	35302.3
2028.74	35189.9
2029.71	35144.2
2030.67	35006.7
2031.64	34907.6
2032.6	34779
2033.56	34687.8
2034.53	34495.9
2035.49	34445.6
2036.46	34320.7
2037.42	33991.6
2038.38	34087
2039.35	33966.2
2040.31	33605.5
2041.28	30403.4
2042.24	34002.2
2043.21	33729.9
2044.17	32713
2045.13	33429
2046.1	33197.7
2047.06	33092.2
2048.03	33035.4
2048.99	32917.7
2049.96	32842.8
2050.92	32706.2
2051.88	32544.1
2052.85	32430.6
2053.81	32373.4
2054.78	32225.8
2055.74	32105
2056.7	32004.9
2057.67	31884
2058.63	31778.5
2059.6	31638
2060.56	30811
2061.53	31479.2
2062.49	31397.4
2063.45	31239.6
2064.42	30799.6
2065.38	29902.9
2066.35	30397.5
2067.31	30658.6
2068.27	30612.2
2069.24	30547.4
2070.2	30445.6
2071.17	30346.9

Filename LMB0111 Type: 90 deg C BB
Subfile: 0001

WN	INT
2072.13	30253.5
2073.09	30134.2
2074.06	29806.6
2075.02	30010.7
2075.99	29892.6
2076.95	29770.9
2077.92	29717.3
2078.88	29455.8
2079.84	29483
2080.81	29389.8
2081.77	29248.4
2082.74	29265.6
2083.7	29137
2084.66	29071
2085.63	28938
2086.59	28892.2
2087.56	28420.9
2088.52	28683.9
2089.48	28575.1
2090.45	27341.9
2091.41	28245.9
2092.38	28187.3
2093.34	28091.9
2094.31	28045.2
2095.27	27954.6
2096.23	27849.5
2097.2	27707.3
2098.16	27651.5
2099.13	27615.3
2100.09	27475.9
2101.05	27402.7
2102.02	27327.8
2102.98	27213.5
2103.95	27162.4
2104.91	27086.5
2105.87	26940.3
2106.84	26864.6
2107.8	26734.4
2108.77	26712.1
2109.73	26634.9
2110.69	26518.3
2111.66	26469.4
2112.62	26364.8
2113.59	26298.4
2114.55	26066.9
2115.52	25958.7
2116.48	25998.2

WN	INT
2117.44	25948.3
2118.41	25857.8
2119.37	25785.5
2120.34	25724.9
2121.3	25609.1
2122.26	25543.2
2123.23	25434.7
2124.19	25346.7
2125.16	25266.8
2126.12	25208.7
2127.08	25161.5
2128.05	25058.1
2129.01	24968.2
2129.98	24927.1
2130.94	24829.9
2131.91	24723.3
2132.87	24674.1
2133.83	24561
2134.8	24485.8
2135.76	24313.1
2136.73	24255.7
2137.69	24231.7
2138.65	24193.4
2139.62	23936.6
2140.58	24048.4
2141.55	23937.1
2142.51	23865.7
2143.47	23819.9
2144.44	23715.9
2145.4	23545.9
2146.37	23607.3
2147.33	23438.6
2148.3	23418.4
2149.26	23377.5
2150.22	23280.7
2151.19	23216.8
2152.15	23138.3
2153.12	23040.9
2154.08	23026.4
2155.04	22918
2156.01	22825.1
2156.97	22770.3
2157.94	22707.4
2158.9	22589.6
2159.86	22550.2
2160.83	22460.4
2161.79	22184.4

WN	INT
2162.76	22348.7
2163.72	22214.3
2164.69	22164.5
2165.65	22119.1
2166.61	22015.2
2167.58	21923.5
2168.54	21934.3
2169.51	21800
2170.47	21694.3
2171.43	21666.4
2172.4	21569.8
2173.36	21503.7
2174.33	21439.9
2175.29	21345.3
2176.25	21282
2177.22	21242.9
2178.18	21127.7
2179.15	21027.8
2180.11	20966.1
2181.08	20886.9
2182.04	20826.5
2183	20781.4
2183.97	20692
2184.93	20597.7
2185.9	20531.4
2186.86	20398.9
2187.82	20429.6
2188.79	20366.7
2189.75	20285.6
2190.72	20223.6
2191.68	20133.6
2192.64	20065.2
2193.61	19982.6
2194.57	19871.2
2195.54	19880.4
2196.5	19786.4
2197.46	19688.8
2198.43	19615.1
2199.39	19534
2200.36	19452
2201.32	19409.6
2202.29	19348.1
2203.25	19268.5
2204.21	19194.1
2205.18	19064.6
2206.14	19030.8
2207.11	18969.8

Filename LMB0111 Type: 90 deg C BB
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WN	INT
2208.07	18913.5
2209.03	18828.3
2210	18742.7
2210.96	18660.1
2211.93	18601.5
2212.89	18514.7
2213.85	18443.9
2214.82	18394.6
2215.78	18338.2
2216.75	18263.4
2217.71	18212.6
2218.68	18158.1
2219.64	18042.4
2220.6	17950.9
2221.57	17923.5
2222.53	17879.6
2223.5	17788.6
2224.46	17708.6
2225.42	17647.6
2226.39	17564.4
2227.35	17509
2228.32	17436.2
2229.28	17340.1
2230.24	17268.2
2231.21	17191
2232.17	17178.9
2233.14	17061.7
2234.1	16983.9
2235.07	16885.1
2236.03	16848.6
2236.99	16771.9
2237.96	16707.9
2238.92	16635.8
2239.89	16559.5
2240.85	16512.2
2241.81	16413.6
2242.78	16362.6
2243.74	16185.9
2244.71	16185.9
2245.67	16024.6
2246.63	16008.6
2247.6	15861.4
2248.56	15915.6
2249.53	15731.6
2250.49	15801.1
2251.46	15600.1
2252.42	15627.5

WN	INT
2253.38	15482
2254.35	15485.6
2255.31	15322.5
2256.28	15354.1
2257.24	15133.8
2258.2	15198.4
2259.17	14956
2260.13	15114.3
2261.1	14822.4
2262.06	14997.6
2263.02	14590
2263.99	14944.8
2264.95	14396.5
2265.92	14821.1
2266.88	14217.7
2267.85	14666
2268.81	14127.2
2269.77	14420.3
2270.74	14112.7
2271.7	14115
2272.67	14183.9
2273.63	13826.4
2274.59	14195.1
2275.56	13670.1
2276.52	14039.6
2277.49	13685.8
2278.45	13701.2
2279.41	13761.1
2280.38	13501.6
2281.34	13617.9
2282.31	13453.3
2283.27	13486.3
2284.24	13349.8
2285.2	13313
2286.16	13141.1
2287.13	12802.6
2288.09	13044.4
2289.06	12487.1
2290.02	12634.9
2290.98	12802.3
2291.95	12169.2
2292.91	12292.3
2293.88	12068.6
2294.84	12063.3
2295.8	11423.8
2296.77	12026.5
2297.73	11726.9

WN	INT
2298.7	10860.8
2299.66	11145.1
2300.62	10235
2301.59	11033.9
2302.55	9740.88
2303.52	10733.1
2304.48	10239.1
2305.45	10564
2306.41	10385.1
2307.37	9332.26
2308.34	9955.25
2309.3	7857.73
2310.27	9458.16
2311.23	6919.28
2312.19	9111.45
2313.16	6556.59
2314.12	8719.78
2315.09	6707.74
2316.05	8242.11
2317.01	6783.4
2317.98	7633.77
2318.94	6405.89
2319.91	7107.7
2320.87	5939.52
2321.84	6733.16
2322.8	5402.11
2323.76	6459.25
2324.73	5006.18
2325.69	6250.13
2326.66	4752.64
2327.62	5902.5
2328.58	4287.5
2329.55	5922.82
2330.51	3617.53
2331.48	5985.18
2332.44	3356.9
2333.4	5796.82
2334.37	3473.07
2335.33	5387.15
2336.3	3677.28
2337.26	4546.23
2338.23	4553.08
2339.19	3546.87
2340.15	5141.2
2341.12	3074.18
2342.08	4949.04
2343.05	3429.24

Filename LMB0111 Type: 90 deg C BB
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WN	INT
2344.01	4265.11
2344.97	4512.48
2345.94	3267.52
2346.9	5391.02
2347.87	4330.07
2348.83	5607.83
2349.79	4510.46
2350.76	5444.76
2351.72	3613.28
2352.69	3936.78
2353.65	4444.89
2354.61	2780.99
2355.58	3620.65
2356.54	3974.83
2357.51	2699.07
2358.47	3317.42
2359.44	3943.49
2360.4	2852.5
2361.36	2852.73
2362.33	3931.82
2363.29	3676.37
2364.26	2808.76
2365.22	3229.38
2366.18	4268.6
2367.15	4266.96
2368.11	3506.13
2369.08	3341.8
2370.04	4187.35
2371.01	5129.63
2371.97	5508.91
2372.93	5211.1
2373.9	4813.82
2374.86	4664.28
2375.83	4923.72
2376.79	5372.26
2377.75	5919.8
2378.72	6407.34
2379.68	6824.47
2380.65	7143.18
2381.61	7386.87
2382.57	7655.5
2383.54	7831.39
2384.5	7970.92
2385.47	8071.45
2386.43	8135.2
2387.39	8214.61
2388.36	8250.03

WN	INT
2389.32	8289.73
2390.29	8301.75
2391.25	8304.3
2392.22	8286.28
2393.18	8318.75
2394.14	8312.05
2395.11	8332.92
2396.07	8309.94
2397.04	8279.19
2398	8271.65
2398.96	8256.79
2399.93	8242.63
2400.89	8220.95
2401.86	8216.13
2402.82	8190.64
2403.78	8143.85
2404.75	8144.4
2405.71	8118.72
2406.68	8098.99
2407.64	8066.34
2408.61	8029.12
2409.57	8007.51
2410.53	7960.34
2411.5	7963.61
2412.46	7911.26
2413.43	7881.56
2414.39	7850.61
2415.35	7830.02
2416.32	7794.4
2417.28	7765.51
2418.25	7748.47
2419.21	7719.87
2420.17	7652.3
2421.14	7640.73
2422.1	7621.78
2423.07	7596.51
2424.03	7543.01
2425	7525.44
2425.96	7491.7
2426.92	7433.94
2427.89	7420.71
2428.85	7392.16
2429.82	7367.07
2430.78	7309.67
2431.74	7283.89
2432.71	7238.92
2433.67	7204.49

WN	INT
2434.64	7171.04
2435.6	7143.84
2436.56	7123.76
2437.53	7079.96
2438.49	7032.6
2439.46	7004.25
2440.42	6990.91
2441.39	6986.78
2442.35	6946.73
2443.31	6907.4
2444.28	6889.2
2445.24	6844.31
2446.21	6813.73
2447.17	6797.63
2448.13	6772.9
2449.1	6746.7
2450.06	6713.48
2451.03	6674.75
2451.99	6650.75
2452.95	6629.65
2453.92	6605.37
2454.88	6591.22
2455.85	6541.91
2456.81	6502.57
2457.78	6490.06
2458.74	6439.72
2459.7	6445.73
2460.67	6383.9
2461.63	6384.09
2462.6	6337.37
2463.56	6314.61
2464.52	6272.73
2465.49	6238.67
2466.45	6222.19
2467.42	6187.94
2468.38	6170.6
2469.34	6109.13
2470.31	6094.88
2471.27	6055.83
2472.24	6034.47
2473.2	6014.12
2474.16	5993.54
2475.13	5958
2476.09	5932.76
2477.06	5877.18
2478.02	5915.32
2478.99	5850.49

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WN	INT
2479.95	5835.45
2480.91	5815.22
2481.88	5780.64
2482.84	5747.72
2483.81	5741.88
2484.77	5694.67
2485.73	5674.68
2486.7	5670.16
2487.66	5626.63
2488.63	5601.14
2489.59	5574.93
2490.55	5549.11
2491.52	5528.05
2492.48	5514.22
2493.45	5505.44
2494.41	5456.21
2495.38	5419.02
2496.34	5395.7
2497.3	5386.28
2498.27	5335.79
2499.23	5330.38
2500.2	5296.95
2501.16	5284.72
2502.12	5252.28
2503.09	5197.46
2504.05	5185.72
2505.02	5144.35
2505.98	5120.81
2506.94	5113.9
2507.91	5069.26
2508.87	5062.17
2509.84	5029.76
2510.8	5002.99
2511.77	4984.84
2512.73	4973.86
2513.69	4953.25
2514.66	4933.37
2515.62	4914.37
2516.59	4865.92
2517.55	4835.48
2518.51	4819.94
2519.48	4816.11
2520.44	4784.2
2521.41	4767.79
2522.37	4752.82
2523.33	4730.27
2524.3	4707.07

WN	INT
2525.26	4685.42
2526.23	4656.96
2527.19	4634.88
2528.16	4602.65
2529.12	4602.87
2530.08	4573.79
2531.05	4559.83
2532.01	4526.62
2532.98	4506.08
2533.94	4464.42
2534.9	4444.84
2535.87	4455.8
2536.83	4405.25
2537.8	4382.99
2538.76	4357.98
2539.72	4334
2540.69	4315.02
2541.65	4290.21
2542.62	4255.54
2543.58	4264.4
2544.54	4241.82
2545.51	4208.75
2546.47	4195.68
2547.44	4171
2548.4	4150.17
2549.37	4121.35
2550.33	4102.25
2551.29	4102.14
2552.26	4080.57
2553.22	4067.05
2554.19	4065.46
2555.15	4011.66
2556.11	4007.41
2557.08	3966.15
2558.04	3951.31
2559.01	3939.67
2559.97	3934.05
2560.94	3924.87
2561.9	3894.78
2562.86	3866.59
2563.83	3835.03
2564.79	3841.95
2565.76	3803.44
2566.72	3809.65
2567.68	3798.35
2568.65	3766.83
2569.61	3733.55

WN	INT
2570.58	3722.7
2571.54	3700.77
2572.5	3673.4
2573.47	3645.22
2574.43	3619.47
2575.4	3616.28
2576.36	3593.54
2577.32	3606.43
2578.29	3584.36
2579.25	3554.85
2580.22	3518.55
2581.18	3504.17
2582.15	3471.46
2583.11	3474.56
2584.07	3443.35
2585.04	3438.12
2586	3432.61
2586.97	3414.97
2587.93	3393.72
2588.89	3375.62
2589.86	3344.76
2590.82	3338.94
2591.79	3312.92
2592.75	3312.96
2593.71	3303.72
2594.68	3305.39
2595.64	3279.79
2596.61	3254.08
2597.57	3237.88
2598.54	3204.18
2599.5	3185.34
2600.46	3175.7
2601.43	3157.11
2602.39	3138.36
2603.36	3128.72
2604.32	3115.63
2605.28	3123.11
2606.25	3101.1
2607.21	3061.29
2608.18	3036.62
2609.14	3024.83
2610.1	3009.81
2611.07	2999.46
2612.03	2975.91
2613	2970.13
2613.96	2956.75
2614.93	2936.88

Filename LMB0111 Type: 90 deg C BB
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WN	INT
2615.89	2927.75
2616.85	2919.46
2617.82	2879.36
2618.78	2847.67
2619.75	2852.99
2620.71	2829.53
2621.67	2834.63
2622.64	2818.36
2623.6	2804.87
2624.57	2817.13
2625.53	2780.68
2626.49	2778.96
2627.46	2752.74
2628.42	2719.74
2629.39	2725.51
2630.35	2690.52
2631.31	2696.62
2632.28	2680.41
2633.24	2682.77
2634.21	2665.07
2635.17	2655.6
2636.14	2626.81
2637.1	2609.19
2638.06	2617.87
2639.03	2565.03
2639.99	2560.41
2640.96	2529.46
2641.92	2519.8
2642.88	2518.09
2643.85	2529.37
2644.81	2504.57
2645.78	2490.73
2646.74	2487.84
2647.7	2448.56
2648.67	2458.73
2649.63	2422.89
2650.6	2395.01
2651.56	2385.7
2652.53	2381.48
2653.49	2364.61
2654.45	2372.57
2655.42	2356.86
2656.38	2344.68
2657.35	2343.67
2658.31	2343.54
2659.27	2316.13
2660.24	2298.12

WN	INT
2661.2	2285.68
2662.17	2257.6
2663.13	2248.07
2664.09	2250.16
2665.06	2246.3
2666.02	2236.56
2666.99	2232.75
2667.95	2201.22
2668.92	2212.25
2669.88	2187.86
2670.84	2190.56
2671.81	2155.54
2672.77	2145.16
2673.74	2128.11
2674.7	2099.95
2675.66	2090.43
2676.63	2076.86
2677.59	2083.96
2678.56	2070.05
2679.52	2067.21
2680.48	2064.24
2681.45	2055.34
2682.41	2028.34
2683.38	2021.77
2684.34	1991.04
2685.31	1979.27
2686.27	1964.67
2687.23	1951.26
2688.2	1941.44
2689.16	1946.25
2690.13	1936.06
2691.09	1925.42
2692.05	1907.4
2693.02	1917.75
2693.98	1913.34
2694.95	1911.54
2695.91	1888.54
2696.87	1865.55
2697.84	1845.3
2698.8	1839.89
2699.77	1827.56
2700.73	1812.69
2701.7	1801.82
2702.66	1804.13
2703.62	1798.1
2704.59	1803.24
2705.55	1775.32

WN	INT
2706.52	1773.84
2707.48	1753.63
2708.44	1765.05
2709.41	1742.3
2710.37	1711.19
2711.34	1708.18
2712.3	1713.65
2713.26	1667.24
2714.23	1670.85
2715.19	1640.99
2716.16	1667.38
2717.12	1649.44
2718.09	1634.23
2719.05	1632.41
2720.01	1632.28
2720.98	1605.67
2721.94	1609.75
2722.91	1592.19
2723.87	1589.92
2724.83	1568.49
2725.8	1586.87
2726.76	1552.83
2727.73	1545.54
2728.69	1533.72
2729.65	1540.68
2730.62	1534.72
2731.58	1526.93
2732.55	1512.96
2733.51	1507.82
2734.47	1494.99
2735.44	1496.46
2736.4	1492.64
2737.37	1465.88
2738.33	1455.9
2739.3	1456.34
2740.26	1411.03
2741.22	1436.88
2742.19	1427.5
2743.15	1421.22
2744.12	1398.96
2745.08	1403.06
2746.04	1380.81
2747.01	1393.12
2747.97	1377.42
2748.94	1358
2749.9	1361.93
2750.86	1357.39

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WN	INT
2751.83	1331.45
2752.79	1341.39
2753.76	1329.35
2754.72	1295.84
2755.69	1288.82
2756.65	1283.93
2757.61	1273.53
2758.58	1268.44
2759.54	1244.84
2760.51	1247.49
2761.47	1263.43
2762.43	1246.84
2763.4	1239.43
2764.36	1248.26
2765.33	1241.04
2766.29	1233.1
2767.25	1232.4
2768.22	1235.18
2769.18	1207.36
2770.15	1178.18
2771.11	1174.28
2772.08	1181.82
2773.04	1160.98
2774	1174.96
2774.97	1141.17
2775.93	1132.47
2776.9	1138.87
2777.86	1127.44
2778.82	1139.56
2779.79	1123.85
2780.75	1112.9
2781.72	1112.86
2782.68	1112.29
2783.64	1100.98
2784.61	1105.48
2785.57	1091.3
2786.54	1086.45
2787.5	1081.5
2788.47	1071.99
2789.43	1067.12
2790.39	1040.47
2791.36	1029.05
2792.32	1036.36
2793.29	1024.92
2794.25	1016.84
2795.21	1031.53
2796.18	986.545

WN	INT
2797.14	965.628
2798.11	987.668
2799.07	970.975
2800.03	981.2

Filename LMB012.4 Type: OFF STACK
Subfile: 0760

WN	INT
1800.22	1957.62
1801.18	1903.45
1802.15	1996.7
1803.11	2112.94
1804.08	2151.24
1805.04	2196.7
1806	2258.74
1806.97	2288.28
1807.93	2365.85
1808.9	2416.46
1809.86	2481.8
1810.83	2425.88
1811.79	2631.9
1812.75	2717.4
1813.72	2777.6
1814.68	2860.03
1815.65	2930.53
1816.61	3037.76
1817.58	3101.56
1818.54	3239.72
1819.5	3327.86
1820.47	3443.64
1821.43	3581.15
1822.4	3731.35
1823.36	3842.12
1824.32	3956.48
1825.29	3506.9
1826.25	4385.73
1827.22	4474.72
1828.18	4620.37
1829.15	4496.15
1830.11	4246.62
1831.07	5383.25
1832.04	5495.78
1833	5652.59
1833.97	5847.47
1834.93	6091.26
1835.9	6284.56
1836.86	6469.02
1837.82	6748.67
1838.79	6912.55
1839.75	7098.26
1840.72	7312.27
1841.68	7500.28
1842.65	7743.81
1843.61	7815.54
1844.57	6299.6

WN	INT
1845.54	8143.24
1846.5	8334.89
1847.47	8414.66
1848.43	8733.81
1849.39	8831.85
1850.36	8889.28
1851.32	9010.98
1852.29	9208.7
1853.25	9206.05
1854.22	9341.29
1855.18	9396.81
1856.14	9569.1
1857.11	9563.74
1858.07	9754.78
1859.04	9861.82
1860	9929.48
1860.97	9972.83
1861.93	10026.2
1862.89	10048.6
1863.86	10106.3
1864.82	10155
1865.79	10248.2
1866.75	10159.5
1867.72	9829.74
1868.68	10554.1
1869.64	9083.46
1870.61	10359.3
1871.57	10393.8
1872.54	10370.1
1873.5	10352.5
1874.46	10347.7
1875.43	10310.4
1876.39	10393.2
1877.36	10314.6
1878.32	10296
1879.29	10484.7
1880.25	10348.9
1881.21	10303.6
1882.18	10320.2
1883.14	10392.5
1884.11	10556.8
1885.07	10627.2
1886.04	10508.7
1887	10503.7
1887.96	10584.1
1888.93	10663.9
1889.89	9857.61

WN	INT
1890.86	10504.8
1891.82	10445.2
1892.79	10479.3
1893.75	10510.9
1894.71	10527.2
1895.68	10533.1
1896.64	10463.4
1897.61	10463.5
1898.57	10336.3
1899.54	10232.6
1900.5	10223.6
1901.46	10352.4
1902.43	10340
1903.39	10318.4
1904.36	10517.3
1905.32	10342.3
1906.28	10334.2
1907.25	10428
1908.21	10407.6
1909.18	10432.5
1910.14	10205.2
1911.11	10353.5
1912.07	10225.1
1913.03	10179.4
1914	10181.2
1914.96	10187.2
1915.93	10171.6
1916.89	10113.7
1917.86	9213.86
1918.82	10476.5
1919.78	10309.9
1920.75	10202.9
1921.71	10182.4
1922.68	10068
1923.64	10071.2
1924.61	10038.7
1925.57	9949.9
1926.53	9868.56
1927.5	9791.56
1928.46	9690.04
1929.43	9609.58
1930.39	9573.45
1931.35	9582.72
1932.32	9822.83
1933.28	9955.11
1934.25	9621.93
1935.21	9559.69

Filename LMB0124 Type: OFF STACK
Subfile: 0760

WN	INT
1936.18	9515.47
1937.14	9634.33
1938.1	9621.69
1939.07	9676.29
1940.03	9676.76
1941	9748.49
1941.96	9802.94
1942.93	9281.95
1943.89	9660.94
1944.85	9634.87
1945.82	9688.7
1946.78	9652.69
1947.75	9441.24
1948.71	9322.14
1949.68	9381.36
1950.64	9177.31
1951.6	9153.81
1952.57	9019
1953.53	9095.6
1954.5	9345.01
1955.46	9404.77
1956.42	9337.78
1957.39	9189.1
1958.35	8924.89
1959.32	8847.21
1960.28	8972.78
1961.25	9261.09
1962.21	8982.97
1963.17	8792.59
1964.14	8836.53
1965.1	8945.26
1966.07	9055.85
1967.03	9025.52
1968	9044.75
1968.96	8878.99
1969.92	8714.98
1970.89	8459.07
1971.85	8282.93
1972.82	8193.38
1973.78	8049.11
1974.75	8060.1
1975.71	8343.1
1976.67	8471.57
1977.64	8156.31
1978.6	7783.96
1979.57	7786.21
1980.53	8022.74

WN	INT
1981.49	8069.08
1982.46	7908.01
1983.42	7915.27
1984.39	8135.27
1985.35	8010.45
1986.32	8191.21
1987.28	8385.15
1988.24	8470.96
1989.21	8445.6
1990.17	8346.35
1991.14	8426.94
1992.1	8068.36
1993.07	8382.18
1994.03	8225.54
1994.99	8023.92
1995.96	7866.67
1996.92	7781.4
1997.89	7862.71
1998.85	8221.97
1999.82	7959.8
2000.78	7604.35
2001.74	7270.86
2002.71	7226.61
2003.67	7256.58
2004.64	7101.38
2005.6	7429.44
2006.56	7276.83
2007.53	7910.93
2008.49	7679.77
2009.46	7873
2010.42	7251.58
2011.39	7179.78
2012.35	7160.18
2013.31	7149.37
2014.28	7306.94
2015.24	7494.46
2016.21	7659.72
2017.17	7624.55
2018.14	7620.05
2019.1	7587.63
2020.06	7343.64
2021.03	7099.58
2021.99	7077.11
2022.96	7482.58
2023.92	7058.91
2024.89	6691
2025.85	6891.07

WN	INT
2026.81	7351.41
2027.78	6739.59
2028.74	6350.74
2029.71	6289.32
2030.67	6171.8
2031.64	6046.49
2032.6	6145.26
2033.56	6258.42
2034.53	6511.78
2035.49	6197.56
2036.46	6146.55
2037.42	6822.87
2038.38	6405.74
2039.35	6339.61
2040.31	6700.82
2041.28	6880.23
2042.24	6704.82
2043.21	6590.6
2044.17	6788.53
2045.13	6216.92
2046.1	6314.88
2047.06	6335.22
2048.03	5834.2
2048.99	5979.86
2049.96	5620.44
2050.92	5844.9
2051.88	5848.62
2052.85	5650.9
2053.81	5942.97
2054.78	5635.2
2055.74	5511.44
2056.7	5758
2057.67	5424.41
2058.63	5790.17
2059.6	5949.12
2060.56	6348.81
2061.53	5966.19
2062.49	5751.49
2063.45	5886.29
2064.42	6169.41
2065.38	6223.88
2066.35	6167.93
2067.31	5787.78
2068.27	5412.23
2069.24	5474.78
2070.2	5193.13
2071.17	5138.15

Filename LMB012 4 Type: OFF STACK
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WN	INT
2072.13	5478.95
2073.09	5541.43
2074.06	5910.71
2075.02	5466.76
2075.99	5153.71
2076.95	5617.09
2077.92	5639.42
2078.88	5696.56
2079.84	5157.58
2080.81	4976.99
2081.77	5464.34
2082.74	4885.2
2083.7	4791.16
2084.66	4653.38
2085.63	4872.73
2086.59	5035.93
2087.56	5540.21
2088.52	5011.46
2089.48	5411.56
2090.45	5583.02
2091.41	5031.4
2092.38	4837.17
2093.34	4988.15
2094.31	4644.32
2095.27	4909.21
2096.23	4466.74
2097.2	4977.31
2098.16	4475
2099.13	4537.75
2100.09	4796
2101.05	4642.98
2102.02	4319.04
2102.98	4420.48
2103.95	4227.26
2104.91	4159.48
2105.87	4703.37
2106.84	4581.91
2107.8	4699.63
2108.77	4215.96
2109.73	4098.79
2110.69	4124.92
2111.66	4418.81
2112.62	4053.94
2113.59	4241.2
2114.55	4918.09
2115.52	4840.75
2116.48	4532.26

WN	INT
2117.44	4022.74
2118.41	3988.49
2119.37	4156.15
2120.34	3959.08
2121.3	4468.59
2122.26	4083.32
2123.23	4081.83
2124.19	4322.04
2125.16	4384.59
2126.12	3869.95
2127.08	3873.52
2128.05	3955.2
2129.01	3941.51
2129.98	3982.19
2130.94	3769.41
2131.91	3988.52
2132.87	3767.85
2133.83	3723.68
2134.8	3783.56
2135.76	4310.24
2136.73	4357.05
2137.69	4282.37
2138.65	4105.58
2139.62	4527.34
2140.58	3747.21
2141.55	3814.36
2142.51	3862.88
2143.47	3666.23
2144.44	3809.26
2145.4	4314.79
2146.37	3776.73
2147.33	4157.99
2148.3	3927.35
2149.26	3589.56
2150.22	3446.74
2151.19	3851.55
2152.15	3729.47
2153.12	3773.45
2154.08	3477.2
2155.04	3657.38
2156.01	3488.3
2156.97	3753.83
2157.94	3632.01
2158.9	3506.94
2159.86	3480.97
2160.83	3645.27
2161.79	4081.3

WN	INT
2162.76	3666.4
2163.72	3709.01
2164.69	3310.63
2165.65	3536.87
2166.61	3333.03
2167.58	3529.76
2168.54	3341.15
2169.51	3497.48
2170.47	3305.34
2171.43	3675.72
2172.4	3503.43
2173.36	3301.7
2174.33	3293.25
2175.29	3452.21
2176.25	3592.05
2177.22	3466.01
2178.18	3426.94
2179.15	3484.54
2180.11	3495.17
2181.08	3521.62
2182.04	3392.72
2183	3476.62
2183.97	3442.75
2184.93	3622.95
2185.9	3485.02
2186.86	3726.58
2187.82	3431.35
2188.79	3354.87
2189.75	3550.27
2190.72	3550.34
2191.68	3582.04
2192.64	3610.05
2193.61	3694.71
2194.57	3727.16
2195.54	3634.97
2196.5	3573.12
2197.46	3522.24
2198.43	3527.56
2199.39	3441.76
2200.36	3586.8
2201.32	3434.44
2202.29	3505.24
2203.25	3558.27
2204.21	3519.88
2205.18	3622.65
2206.14	3526.22
2207.11	3538.7

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WN	INT
2208.07	3516.07
2209.03	3636.65
2210	3617.43
2210.96	3546.73
2211.93	3589.49
2212.89	3546.23
2213.85	3513.36
2214.82	3506.19
2215.78	3457.67
2216.75	3423.17
2217.71	3429.35
2218.68	3430.19
2219.64	3331.17
2220.6	3377.78
2221.57	3340.13
2222.53	3242.69
2223.5	3162.92
2224.46	3230.82
2225.42	3291.69
2226.39	3299.91
2227.35	3394.36
2228.32	3408.24
2229.28	3334.78
2230.24	3302.82
2231.21	3326.49
2232.17	3294.2
2233.14	3320.79
2234.1	3245.08
2235.07	3325.67
2236.03	3315.88
2236.99	3363.54
2237.96	3364.04
2238.92	3326.19
2239.89	3332.98
2240.85	3306.98
2241.81	3314.8
2242.78	3262.06
2243.74	3323.38
2244.71	3251.86
2245.67	3273.38
2246.63	3217.05
2247.6	3212.94
2248.56	3224.11
2249.53	3261.86
2250.49	3195.85
2251.46	3228.39
2252.42	3228.22

WN	INT
2253.38	3246.25
2254.35	3193.17
2255.31	3185.85
2256.28	3098.41
2257.24	3137.33
2258.2	3104.19
2259.17	3134.56
2260.13	3055.83
2261.1	3071.63
2262.06	3066.2
2263.02	3118.36
2263.99	3080.68
2264.95	3129.83
2265.92	3044.7
2266.88	3052.25
2267.85	3010.87
2268.81	3059.01
2269.77	3038.87
2270.74	3030.62
2271.7	3031.03
2272.67	2995.37
2273.63	2982.16
2274.59	2929.53
2275.56	2935.59
2276.52	2923.55
2277.49	2945.7
2278.45	2956.55
2279.41	2922.29
2280.38	2940.62
2281.34	2885.5
2282.31	2880.33
2283.27	2814.95
2284.24	2834.42
2285.2	2825
2286.16	2851.14
2287.13	2871.1
2288.09	2814.46
2289.06	2805.26
2290.02	2763
2290.98	2715.94
2291.95	2743.04
2292.91	2700.23
2293.88	2698.38
2294.84	2707.34
2295.8	2698.97
2296.77	2699.47
2297.73	2696.96

WN	INT
2298.7	2650.44
2299.66	2659.9
2300.62	2642.56
2301.59	2651.5
2302.55	2578.21
2303.52	2619.37
2304.48	2613.18
2305.45	2635.39
2306.41	2572.19
2307.37	2501.92
2308.34	2499.36
2309.3	2460.87
2310.27	2485.36
2311.23	2320.8
2312.19	2372.58
2313.16	2172.37
2314.12	2362.89
2315.09	2154.07
2316.05	2350.88
2317.01	2138.52
2317.98	2298.91
2318.94	2083.08
2319.91	2256.03
2320.87	2060.79
2321.84	2226.96
2322.8	1999.88
2323.76	2178.2
2324.73	1939.64
2325.69	2183.41
2326.66	1889.56
2327.62	2146.02
2328.58	1767.8
2329.55	2155.62
2330.51	1688.72
2331.48	2146.28
2332.44	1647.11
2333.4	2106.11
2334.37	1657.04
2335.33	2010.02
2336.3	1740.44
2337.26	1843.48
2338.23	1915.29
2339.19	1649.3
2340.15	1985.61
2341.12	1533.04
2342.08	1951.01
2343.05	1670.04

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WN	INT
2344.01	1762.77
2344.97	1874.5
2345.94	1682.12
2346.9	1937.04
2347.87	1835.16
2348.83	1907.04
2349.79	1826.12
2350.76	1863.45
2351.72	1676.93
2352.69	1657.76
2353.65	1827.98
2354.61	1440.11
2355.58	1596.99
2356.54	1758.65
2357.51	1375.55
2358.47	1496.1
2359.44	1730.46
2360.4	1410.13
2361.36	1351.49
2362.33	1701.42
2363.29	1609.2
2364.26	1325.2
2365.22	1413.87
2366.18	1703.88
2367.15	1654.77
2368.11	1438.18
2369.08	1395.64
2370.04	1530.52
2371.01	1697.57
2371.97	1729.56
2372.93	1650.1
2373.9	1596.95
2374.86	1583.56
2375.83	1613.82
2376.79	1653.78
2377.75	1681.81
2378.72	1699.6
2379.68	1713.07
2380.65	1718.08
2381.61	1725.45
2382.57	1720.78
2383.54	1719.2
2384.5	1709.63
2385.47	1695.61
2386.43	1689.06
2387.39	1672.44
2388.36	1663

WN	INT
2389.32	1634.88
2390.29	1585.8
2391.25	1550.98
2392.22	1517.01
2393.18	1478.53
2394.14	1453.09
2395.11	1419.13
2396.07	1411.06
2397.04	1387.28
2398	1374.5
2398.96	1359.71
2399.93	1361.03
2400.89	1345.98
2401.86	1331.46
2402.82	1298.15
2403.78	1309.65
2404.75	1294.88
2405.71	1268.39
2406.68	1267.07
2407.64	1258.3
2408.61	1242.28
2409.57	1237.98
2410.53	1248.51
2411.5	1226.37
2412.46	1224.52
2413.43	1223.87
2414.39	1210.37
2415.35	1191.23
2416.32	1185.73
2417.28	1178.43
2418.25	1166.79
2419.21	1178.73
2420.17	1174.82
2421.14	1166.58
2422.1	1149.44
2423.07	1145.65
2424.03	1132.81
2425	1149.09
2425.96	1127.63
2426.92	1121.22
2427.89	1123.34
2428.85	1104.77
2429.82	1096.75
2430.78	1103.15
2431.74	1105.53
2432.71	1088.6
2433.67	1095.54

WN	INT
2434.64	1075.25
2435.6	1055.83
2436.56	1069.41
2437.53	1058.65
2438.49	1062.24
2439.46	1044.64
2440.42	1046.82
2441.39	1037.99
2442.35	1032.79
2443.31	1019.73
2444.28	1025.59
2445.24	1004.13
2446.21	1003.85
2447.17	1011.26
2448.13	994.004
2449.1	998.076
2450.06	1004.42
2451.03	1006.76
2451.99	986.631
2452.95	987.315
2453.92	968.033
2454.88	966.466
2455.85	969.759
2456.81	963.725
2457.78	938.474
2458.74	947.825
2459.7	943.212
2460.67	944.385
2461.63	936.966
2462.6	944.239
2463.56	920.36
2464.52	918.918
2465.49	925.327
2466.45	915.054
2467.42	918.817
2468.38	912.982
2469.34	918.179
2470.31	905.37
2471.27	909.496
2472.24	912.516
2473.2	909.185
2474.16	882.921
2475.13	895.782
2476.09	894.93
2477.06	894.117
2478.02	896.235
2478.99	903.431

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WN	INT
2479.95	875.989
2480.91	884.488
2481.88	889.61
2482.84	885.099
2483.81	876.044
2484.77	859.993
2485.73	869.989
2486.7	855.788
2487.66	855.994
2488.63	870.216
2489.59	860.23
2490.55	840.833
2491.52	847.812
2492.48	843.348
2493.45	861.815
2494.41	823.212
2495.38	847.418
2496.34	842.934
2497.3	838.779
2498.27	846.473
2499.23	829.623
2500.2	817.857
2501.16	829.006
2502.12	827.206
2503.09	814.381
2504.05	820.565
2505.02	812.662
2505.98	828.606
2506.94	813.702
2507.91	817.7
2508.87	806.662
2509.84	800.491
2510.8	807.785
2511.77	784.327
2512.73	800.126
2513.69	805.749
2514.66	788.735
2515.62	802.003
2516.59	787.673
2517.55	793.852
2518.51	788.919
2519.48	789.184
2520.44	776.27
2521.41	788.656
2522.37	785.977
2523.33	760.537
2524.3	748.527

WN	INT
2525.26	763.894
2526.23	758.522
2527.19	750.584
2528.16	756.164
2529.12	745.42
2530.08	724.894
2531.05	747.187
2532.01	740.864
2532.98	737.304
2533.94	722.569
2534.9	734.136
2535.87	729.543
2536.83	731.354
2537.8	727.784
2538.76	730.283
2539.72	722.908
2540.69	730.666
2541.65	718.533
2542.62	713.713
2543.58	706.991
2544.54	707.948
2545.51	698.175
2546.47	682.813
2547.44	685.439
2548.4	680.114
2549.37	668.588
2550.33	676.563
2551.29	679.395
2552.26	665.268
2553.22	656.479
2554.19	673.708
2555.15	669.161
2556.11	657.938
2557.08	663.542
2558.04	670.303
2559.01	647.952
2559.97	643.253
2560.94	657.228
2561.9	648.886
2562.86	643.813
2563.83	634.797
2564.79	654.124
2565.76	636.506
2566.72	651.945
2567.68	639.157
2568.65	633.355
2569.61	628.206

WN	INT
2570.58	628.267
2571.54	620.786
2572.5	621.087
2573.47	624.449
2574.43	619.735
2575.4	623.387
2576.36	600.376
2577.32	601.336
2578.29	589.162
2579.25	608.727
2580.22	616.007
2581.18	596.486
2582.15	577.943
2583.11	591.686
2584.07	599.428
2585.04	584.343
2586	595.951
2586.97	600.857
2587.93	604.185
2588.89	598.426
2589.86	601.029
2590.82	575.991
2591.79	601.908
2592.75	595.91
2593.71	571.307
2594.68	610.431
2595.64	597.853
2596.61	582.315
2597.57	599.538
2598.54	598.852
2599.5	589.995
2600.46	585.844
2601.43	590.954
2602.39	610.686
2603.36	606.268
2604.32	588.699
2605.28	569.921
2606.25	565.495
2607.21	560.876
2608.18	550.673
2609.14	574.759
2610.1	598.311
2611.07	598.454
2612.03	559.895
2613	566.266
2613.96	550.622
2614.93	590.458

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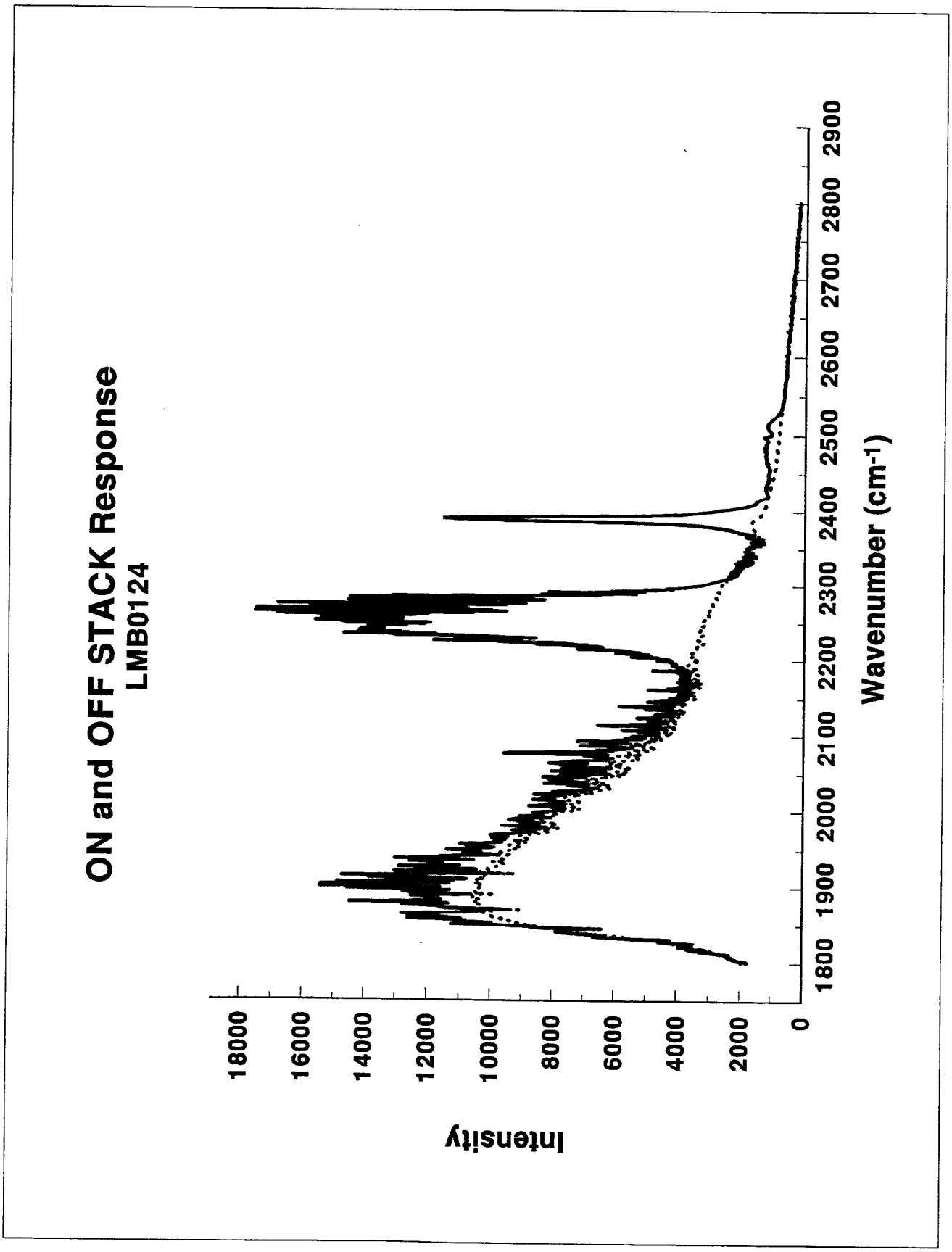
WN	INT
2615.89	572.905
2616.85	585.371
2617.82	570.019
2618.78	557.343
2619.75	531.619
2620.71	578.488
2621.67	519.909
2622.64	501.932
2623.6	526.382
2624.57	543.105
2625.53	520.91
2626.49	545.83
2627.46	543.716
2628.42	496.289
2629.39	554.465
2630.35	535.358
2631.31	535.017
2632.28	559.733
2633.24	533.9
2634.21	521.921
2635.17	508.489
2636.14	517.952
2637.1	489.678
2638.06	492.794
2639.03	488.57
2639.99	507.775
2640.96	526.296
2641.92	472.561
2642.88	484.312
2643.85	506.288
2644.81	484.508
2645.78	497.086
2646.74	515.589
2647.7	516.267
2648.67	479.141
2649.63	443.967
2650.6	495.477
2651.56	471.969
2652.53	488.266
2653.49	496.199
2654.45	494.086
2655.42	439.51
2656.38	470.004
2657.35	443.803
2658.31	472.066
2659.27	443.084
2660.24	431.127

WN	INT
2661.2	460.562
2662.17	471.164
2663.13	421.77
2664.09	471.49
2665.06	469.099
2666.02	415.53
2666.99	450.591
2667.95	479.353
2668.92	470.492
2669.88	447.066
2670.84	455.28
2671.81	456.347
2672.77	407.745
2673.74	454.673
2674.7	427.05
2675.66	438.24
2676.63	411.18
2677.59	403.917
2678.56	426.822
2679.52	456.512
2680.48	387.996
2681.45	417.209
2682.41	428.176
2683.38	425.943
2684.34	437.873
2685.31	435.96
2686.27	413.609
2687.23	420.64
2688.2	433.02
2689.16	432.326
2690.13	404.093
2691.09	408.316
2692.05	403.156
2693.02	366.494
2693.98	405.569
2694.95	363.648
2695.91	378.669
2696.87	413.322
2697.84	406.794
2698.8	400.105
2699.77	404.052
2700.73	398.075
2701.7	391.222
2702.66	382.078
2703.62	397.179
2704.59	377.454
2705.55	395.21

WN	INT
2706.52	356.128
2707.48	369.7
2708.44	357.487
2709.41	374.71
2710.37	356.772
2711.34	344.189
2712.3	358.315
2713.26	358.436
2714.23	331.428
2715.19	327.818
2716.16	315.001
2717.12	338.828
2718.09	322.718
2719.05	313.956
2720.01	322.859
2720.98	317.273
2721.94	300.84
2722.91	321.563
2723.87	288.417
2724.83	340.29
2725.8	301.273
2726.76	289.939
2727.73	329.138
2728.69	338.954
2729.65	311.427
2730.62	319.032
2731.58	327.103
2732.55	316.783
2733.51	330.609
2734.47	311.622
2735.44	317.646
2736.4	335.793
2737.37	318.041
2738.33	301.75
2739.3	281.982
2740.26	312.121
2741.22	321.493
2742.19	289.449
2743.15	325.906
2744.12	297.438
2745.08	310.906
2746.04	333.33
2747.01	295.512
2747.97	313.936
2748.94	313.827
2749.9	292.684
2750.86	291.948

Filename LMB012 4 Type: OFF STACK
Subfile: 0760

WN	INT
2751.83	279.536
2752.79	293.847
2753.76	272.628
2754.72	303.364
2755.69	304.632
2756.65	270.662
2757.61	264.522
2758.58	284.2
2759.54	288.136
2760.51	292.131
2761.47	289.157
2762.43	272.626
2763.4	285.969
2764.36	243.534
2765.33	266.836
2766.29	266.83
2767.25	240.929
2768.22	250.805
2769.18	257.277
2770.15	247.762
2771.11	245.752
2772.08	245.214
2773.04	245.839
2774	264.327
2774.97	275.543
2775.93	248.565
2776.9	248.116
2777.86	242.232
2778.82	254.437
2779.79	232.479
2780.75	241.307
2781.72	242.318
2782.68	225.035
2783.64	229.701
2784.61	227.773
2785.57	212.269
2786.54	205.832
2787.5	208.601
2788.47	204.157
2789.43	211.673
2790.39	215.842
2791.36	194.142
2792.32	217.589
2793.29	226.186
2794.25	223.259
2795.21	220.436
2796.18	201.406
2797.14	204.686
2798.11	187.927
2799.07	206.14
2800.03	195.198


ON and OFF STACK Response
LMB0124
Intensity
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900
Wavenumber (cm-1)

Filename LMB0124 Type: ON STACK
Subfile: 0130

WN	INT
1800.22	1805.12
1801.18	1772.59
1802.15	1900.41
1803.11	2042.24
1804.08	2186.11
1805.04	2140.1
1806	2328.64
1806.97	2372.26
1807.93	2273.82
1808.9	2434.21
1809.86	2405.37
1810.83	2353.81
1811.79	2583
1812.75	2736.55
1813.72	2960.83
1814.68	3270.61
1815.65	3237.69
1816.61	3587.5
1817.58	3093.01
1818.54	3691.71
1819.5	3510.3
1820.47	3919.06
1821.43	3719.35
1822.4	3812.94
1823.36	3923.52
1824.32	3903.25
1825.29	3487.96
1826.25	4312.86
1827.22	4493.1
1828.18	4589.07
1829.15	4430.51
1830.11	4197.78
1831.07	5350.14
1832.04	5697.65
1833	6042.16
1833.97	6658.65
1834.93	6251.02
1835.9	6711.99
1836.86	6544.35
1837.82	7025.46
1838.79	7540.56
1839.75	7801.09
1840.72	7872.71
1841.68	7811.42
1842.65	7825.13
1843.61	7838.21
1844.57	6603.51

WN	INT
1845.54	8338.3
1846.5	8673.63
1847.47	8571.4
1848.43	9037.92
1849.39	10433.6
1850.36	11230.4
1851.32	10260.9
1852.29	9958.86
1853.25	11146.9
1854.22	11143
1855.18	10792
1856.14	11158.7
1857.11	12592.8
1858.07	10963.5
1859.04	11229.8
1860	11707.6
1860.97	12592.3
1861.93	11941.3
1862.89	11725
1863.86	12791.6
1864.82	11392.9
1865.79	10815.5
1866.75	10575.7
1867.72	10186.7
1868.68	10903.9
1869.64	9529.81
1870.61	10726.7
1871.57	11394.9
1872.54	11625.6
1873.5	11552.2
1874.46	11735.1
1875.43	12770.2
1876.39	11848.9
1877.36	11345.4
1878.32	11436
1879.29	14448.8
1880.25	11825.3
1881.21	12417.4
1882.18	11558.7
1883.14	11743
1884.11	11724.7
1885.07	11665.9
1886.04	12125
1887	11975.5
1887.96	12512.4
1888.93	11293.6
1889.89	10637.6

WN	INT
1890.86	11998
1891.82	12290.4
1892.79	12658.1
1893.75	12764.5
1894.71	11339.3
1895.68	11305.3
1896.64	12630.8
1897.61	14540
1898.57	12110
1899.54	11590.9
1900.5	15421.7
1901.46	12530.6
1902.43	12291.1
1903.39	15385.4
1904.36	11310.6
1905.32	11854.7
1906.28	14863.1
1907.25	12221.5
1908.21	11169.7
1909.18	12087.5
1910.14	10778.9
1911.11	11838
1912.07	13844.9
1913.03	12978.2
1914	12009.9
1914.96	14710.7
1915.93	12438.7
1916.89	11031.4
1917.86	9720.98
1918.82	11115.5
1919.78	11705.6
1920.75	13019.3
1921.71	11321.8
1922.68	10460
1923.64	10570.1
1924.61	12100.5
1925.57	11017.8
1926.53	12873.2
1927.5	12855.9
1928.46	10991.4
1929.43	11936.8
1930.39	11988.9
1931.35	11520.3
1932.32	11896
1933.28	11639.4
1934.25	12544.4
1935.21	11764.3

Filename LMB0124 Type: ON STACK
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WN	INT
1936.18	10547.7
1937.14	12035.7
1938.1	13015.3
1939.07	11069.3
1940.03	11621.5
1941	11531.1
1941.96	10201.7
1942.93	9721.85
1943.89	10860.3
1944.85	10879.3
1945.82	10298.7
1946.78	10307.7
1947.75	10378.1
1948.71	10578.5
1949.68	11379.2
1950.64	10538.2
1951.6	10019.2
1952.57	9897.89
1953.53	10175.7
1954.5	10784.4
1955.46	10564.7
1956.42	10647.7
1957.39	10968.9
1958.35	9924.4
1959.32	9651.53
1960.28	9905.95
1961.25	9820.94
1962.21	9782.99
1963.17	9533.34
1964.14	9586.85
1965.1	9958.02
1966.07	9540.36
1967.03	9445.94
1968	9689.93
1968.96	10001.6
1969.92	9817.29
1970.89	9097.9
1971.85	8870.84
1972.82	8776.79
1973.78	8543.45
1974.75	8670.89
1975.71	9292.16
1976.67	9057.17
1977.64	8682.08
1978.6	8246.84
1979.57	8217.28
1980.53	8501.86

WN	INT
1981.49	9633.67
1982.46	8696.54
1983.42	8453.55
1984.39	8812.03
1985.35	8422.66
1986.32	8803.29
1987.28	9152.51
1988.24	8662.22
1989.21	9421.43
1990.17	9231.99
1991.14	9177.59
1992.1	8044.36
1993.07	8569.31
1994.03	9080.55
1994.99	8730.6
1995.96	8443.65
1996.92	8346.64
1997.89	8309.79
1998.85	8637.42
1999.82	8525.24
2000.78	8470.32
2001.74	7664.95
2002.71	7635.39
2003.67	7740.27
2004.64	7592.56
2005.6	8047.66
2006.56	7738.04
2007.53	8764.43
2008.49	8405.76
2009.46	8430.27
2010.42	7668.36
2011.39	7576.85
2012.35	7747.99
2013.31	7599.87
2014.28	7920.67
2015.24	8275.34
2016.21	8628.5
2017.17	7931.42
2018.14	8369.34
2019.1	8200.01
2020.06	8305.89
2021.03	7598.8
2021.99	7702.56
2022.96	8601.73
2023.92	7846.19
2024.89	7307.9
2025.85	7753.49

WN	INT
2026.81	8004.35
2027.78	7251.98
2028.74	6842.59
2029.71	6902.96
2030.67	6734.78
2031.64	6536.46
2032.6	6913.25
2033.56	7051.81
2034.53	7523.01
2035.49	7163.63
2036.46	6828.82
2037.42	8270.73
2038.38	7536.19
2039.35	6962.51
2040.31	8037.72
2041.28	7446.57
2042.24	8010.86
2043.21	8164.04
2044.17	7818.23
2045.13	6942.7
2046.1	8317.42
2047.06	7520.35
2048.03	6823.85
2048.99	7797.72
2049.96	6150.76
2050.92	7552.73
2051.88	7718.48
2052.85	6293.44
2053.81	8045.62
2054.78	6800.7
2055.74	6480.79
2056.7	7730.22
2057.67	6132.64
2058.63	7312.17
2059.6	7605.06
2060.56	7036.42
2061.53	7769.42
2062.49	7020.97
2063.45	6864.35
2064.42	8116.4
2065.38	7678.52
2066.35	7513.37
2067.31	7167.21
2068.27	6188.73
2069.24	6629.66
2070.2	6313.66
2071.17	6077.3

Filename LMB0124 Type: ON STACK
Subfile: 0130

WN	INT
2072.13	6576.22
2073.09	6568.75
2074.06	6992.22
2075.02	6286.53
2075.99	6226.47
2076.95	9606.49
2077.92	9407.77
2078.88	7838.55
2079.84	6345.34
2080.81	6060.32
2081.77	6595.98
2082.74	5689.88
2083.7	5621.87
2084.66	5438.68
2085.63	5752.89
2086.59	5978.26
2087.56	7119.25
2088.52	5935.54
2089.48	6786.27
2090.45	6648.94
2091.41	5641.03
2092.38	5615.84
2093.34	7216.09
2094.31	5690.5
2095.27	5945.68
2096.23	5146.84
2097.2	5682.97
2098.16	5040.73
2099.13	5266.03
2100.09	5486.14
2101.05	5205.42
2102.02	4700.35
2102.98	4958.28
2103.95	4776.78
2104.91	4578.4
2105.87	5283.18
2106.84	5013.03
2107.8	5775.22
2108.77	4810.81
2109.73	4487.81
2110.69	4603.64
2111.66	5079.26
2112.62	4545.26
2113.59	5035
2114.55	6552.01
2115.52	5677.29
2116.48	5301.06

WN	INT
2117.44	4341.93
2118.41	4405.27
2119.37	4690
2120.34	4306.44
2121.3	4974.3
2122.26	4570.79
2123.23	4560.23
2124.19	5301.67
2125.16	4714.66
2126.12	4173.97
2127.08	4121.21
2128.05	4230.58
2129.01	4734.47
2129.98	4677.28
2130.94	4041.65
2131.91	4363.27
2132.87	4042.64
2133.83	4035.13
2134.8	4133.63
2135.76	5034.36
2136.73	5075.68
2137.69	4778.34
2138.65	4568.08
2139.62	5859.96
2140.58	4115.39
2141.55	4189.18
2142.51	4176.04
2143.47	3952.42
2144.44	4253.03
2145.4	4973.78
2146.37	4013.45
2147.33	4733.07
2148.3	4341.35
2149.26	3881.04
2150.22	3711.7
2151.19	4279.85
2152.15	4005.84
2153.12	3960.33
2154.08	3681.69
2155.04	3998.89
2156.01	3751.54
2156.97	3982.1
2157.94	3792.36
2158.9	3569.55
2159.86	3589.14
2160.83	4003.35
2161.79	4952.07

WN	INT
2162.76	4023.23
2163.72	4321
2164.69	3565.88
2165.65	4020.17
2166.61	3551.64
2167.58	3926.22
2168.54	3551.39
2169.51	3779.09
2170.47	3554.56
2171.43	4008.64
2172.4	3934.6
2173.36	3632.47
2174.33	3604.73
2175.29	3829.92
2176.25	3956.71
2177.22	3647.33
2178.18	3651.61
2179.15	3774.24
2180.11	3820.01
2181.08	3927.57
2182.04	3642.58
2183	3800
2183.97	3682.08
2184.93	4032.89
2185.9	3844.67
2186.86	4804.57
2187.82	3741.33
2188.79	3721.88
2189.75	4022.12
2190.72	3817.17
2191.68	3865.56
2192.64	3986.34
2193.61	4187.51
2194.57	4162.13
2195.54	4094.9
2196.5	4091.16
2197.46	4159.71
2198.43	4283.06
2199.39	4196.79
2200.36	4677.71
2201.32	4263.45
2202.29	4464.67
2203.25	4584.35
2204.21	4689.39
2205.18	5500.31
2206.14	4889.09
2207.11	4960.65

Filename LMB0124 Type: ON STACK
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WN	INT
2208.07	4969.07
2209.03	5326.37
2210	6010.45
2210.96	5225.36
2211.93	5978.86
2212.89	5605.76
2213.85	6030.68
2214.82	7206.3
2215.78	6639.63
2216.75	7253.71
2217.71	6433.57
2218.68	6652.04
2219.64	7441.7
2220.6	6916.05
2221.57	8572.29
2222.53	7529.2
2223.5	8404.71
2224.46	9818.47
2225.42	9066.67
2226.39	11850.1
2227.35	9243.04
2228.32	11188.3
2229.28	8601.2
2230.24	9432.98
2231.21	10401.2
2232.17	10219.8
2233.14	13093.8
2234.1	11788.3
2235.07	14698.9
2236.03	12646.4
2236.99	14245.6
2237.96	12900.6
2238.92	13820.1
2239.89	14202.7
2240.85	13655.9
2241.81	14146.3
2242.78	13405.5
2243.74	13938.6
2244.71	13680.8
2245.67	12708.8
2246.63	13921
2247.6	12134.4
2248.56	14639.8
2249.53	11967.5
2250.49	14781.3
2251.46	12832.5
2252.42	15624.8

WN	INT
2253.38	13102.5
2254.35	15167.5
2255.31	12811
2256.28	15432.7
2257.24	13036.5
2258.2	14576.2
2259.17	12440.1
2260.13	16589.2
2261.1	12036.5
2262.06	16875
2263.02	10604.9
2263.99	17521.7
2264.95	9558.38
2265.92	16311.5
2266.88	10034.4
2267.85	17509.9
2268.81	10793.9
2269.77	15806.3
2270.74	12963.3
2271.7	11542
2272.67	15475.9
2273.63	9584.17
2274.59	16822.5
2275.56	8931.85
2276.52	14517.7
2277.49	10381.6
2278.45	11704.7
2279.41	14557.6
2280.38	8316.77
2281.34	14002.4
2282.31	8691.18
2283.27	14507.6
2284.24	11306.2
2285.2	13157
2286.16	9393.74
2287.13	6510.16
2288.09	8407.42
2289.06	5374.03
2290.02	6876.47
2290.98	8177.97
2291.95	5090.59
2292.91	6143.49
2293.88	4730.72
2294.84	5103.2
2295.8	4181.84
2296.77	4374.54
2297.73	3851.14

WN	INT
2298.7	3649.93
2299.66	3673.04
2300.62	3353.94
2301.59	3279
2302.55	3134.34
2303.52	3093.99
2304.48	2994.61
2305.45	2895.24
2306.41	2777.03
2307.37	2708.54
2308.34	2662.2
2309.3	2539.14
2310.27	2505.02
2311.23	2336.23
2312.19	2433.85
2313.16	2274.9
2314.12	2423.3
2315.09	2227.77
2316.05	2382.06
2317.01	2142.79
2317.98	2357.25
2318.94	2128.45
2319.91	2334.82
2320.87	2100.28
2321.84	2253.87
2322.8	2047.42
2323.76	2221.79
2324.73	1995.61
2325.69	2179.45
2326.66	1925.42
2327.62	2172.12
2328.58	1812.95
2329.55	2152.24
2330.51	1722.14
2331.48	2187.08
2332.44	1684.01
2333.4	2121.74
2334.37	1698.32
2335.33	1991.33
2336.3	1778.95
2337.26	1786.53
2338.23	1925.06
2339.19	1551.41
2340.15	1969.25
2341.12	1545.89
2342.08	1902.66
2343.05	1700.53

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WN	INT
2344.01	1716.3
2344.97	1892.34
2345.94	1664.87
2346.9	1908.49
2347.87	1807.9
2348.83	1833.15
2349.79	1798.28
2350.76	1827.4
2351.72	1646.38
2352.69	1625.21
2353.65	1741.8
2354.61	1410.87
2355.58	1571.83
2356.54	1652.11
2357.51	1289.04
2358.47	1464.43
2359.44	1639.35
2360.4	1300.28
2361.36	1371.5
2362.33	1667.54
2363.29	1605.16
2364.26	1429.36
2365.22	1586.21
2366.18	1859.23
2367.15	1894.71
2368.11	1750.38
2369.08	1632.94
2370.04	1761.54
2371.01	1952.1
2371.97	2098.11
2372.93	2138.36
2373.9	2207.38
2374.86	2283.24
2375.83	2402.98
2376.79	2538.56
2377.75	2711.64
2378.72	2858.5
2379.68	3008.51
2380.65	3192.19
2381.61	3374.96
2382.57	3687.47
2383.54	4212.89
2384.5	5104.89
2385.47	6338.91
2386.43	7865.95
2387.39	9359.79
2388.36	10598.6

WN	INT
2389.32	11405.3
2390.29	11550.1
2391.25	10826.1
2392.22	9267.54
2393.18	7363.93
2394.14	5732.23
2395.11	4654.12
2396.07	3991.82
2397.04	3702.51
2398	3453.83
2398.96	3268.42
2399.93	3071.88
2400.89	2918.62
2401.86	2716.66
2402.82	2577.51
2403.78	2399.51
2404.75	2252.3
2405.71	2108.93
2406.68	1997.66
2407.64	1861.46
2408.61	1778.65
2409.57	1673.8
2410.53	1647.94
2411.5	1587.53
2412.46	1574.31
2413.43	1535.34
2414.39	1547.26
2415.35	1476.11
2416.32	1443.11
2417.28	1369.02
2418.25	1313.87
2419.21	1271.59
2420.17	1208.02
2421.14	1204.97
2422.1	1179.98
2423.07	1200.42
2424.03	1199.45
2425	1199.8
2425.96	1219.38
2426.92	1226.86
2427.89	1240.31
2428.85	1236.61
2429.82	1257.06
2430.78	1252.74
2431.74	1251.32
2432.71	1229.66
2433.67	1251.59

WN	INT
2434.64	1247.28
2435.6	1215.34
2436.56	1223.42
2437.53	1214.82
2438.49	1193.15
2439.46	1175.62
2440.42	1192.23
2441.39	1168.34
2442.35	1150.76
2443.31	1160.85
2444.28	1165.8
2445.24	1170.69
2446.21	1136.41
2447.17	1153.28
2448.13	1178.36
2449.1	1157.18
2450.06	1172.81
2451.03	1163.32
2451.99	1146.63
2452.95	1118.9
2453.92	1155.19
2454.88	1127.35
2455.85	1138.4
2456.81	1120.9
2457.78	1146.61
2458.74	1127.47
2459.7	1162.58
2460.67	1160.43
2461.63	1186.91
2462.6	1176.74
2463.56	1218.86
2464.52	1182.08
2465.49	1227.62
2466.45	1212.42
2467.42	1217.54
2468.38	1224.2
2469.34	1233.09
2470.31	1244.7
2471.27	1224.79
2472.24	1247.6
2473.2	1247.08
2474.16	1272
2475.13	1251.38
2476.09	1247.87
2477.06	1245.76
2478.02	1245.45
2478.99	1257.35

Filename LMB0124 Type: ON STACK
Subfile: 0130

WN	INT
2479.95	1247.95
2480.91	1298.27
2481.88	1251.6
2482.84	1267.76
2483.81	1298.38
2484.77	1244.98
2485.73	1278.41
2486.7	1242.78
2487.66	1236.78
2488.63	1257.35
2489.59	1223.7
2490.55	1233.86
2491.52	1239.99
2492.48	1181.9
2493.45	1180.19
2494.41	1206.29
2495.38	1210.74
2496.34	1255.23
2497.3	1271.33
2498.27	1311.5
2499.23	1261.97
2500.2	1095.66
2501.16	1074.48
2502.12	1068.21
2503.09	1085.48
2504.05	1080.37
2505.02	1089.52
2505.98	1111.07
2506.94	1129.54
2507.91	1169.65
2508.87	1181.47
2509.84	1181.76
2510.8	1194.34
2511.77	1194.15
2512.73	1191.92
2513.69	1196.02
2514.66	1194.69
2515.62	1161.11
2516.59	1181.69
2517.55	1129.2
2518.51	1113
2519.48	1088.41
2520.44	1062.66
2521.41	1035.99
2522.37	1010.14
2523.33	975.806
2524.3	942.065

WN	INT
2525.26	925.695
2526.23	899.842
2527.19	868.521
2528.16	863.036
2529.12	826.897
2530.08	828.573
2531.05	786.751
2532.01	793.137
2532.98	769.673
2533.94	760.901
2534.9	742.635
2535.87	749.43
2536.83	730.718
2537.8	732.968
2538.76	715.579
2539.72	722.108
2540.69	711.967
2541.65	706.386
2542.62	695.347
2543.58	692.911
2544.54	687.921
2545.51	678.927
2546.47	685.76
2547.44	682.01
2548.4	673.864
2549.37	662.113
2550.33	669.333
2551.29	679.409
2552.26	654.132
2553.22	663.132
2554.19	671.616
2555.15	674.952
2556.11	650.709
2557.08	656.418
2558.04	671.232
2559.01	656.793
2559.97	660.699
2560.94	654.233
2561.9	651.204
2562.86	659.82
2563.83	623.717
2564.79	643.266
2565.76	644.538
2566.72	665.316
2567.68	624.313
2568.65	636.182
2569.61	626.034

WN	INT
2570.58	621.132
2571.54	611.978
2572.5	607.717
2573.47	597.92
2574.43	588.383
2575.4	595.037
2576.36	586.659
2577.32	579.486
2578.29	585.925
2579.25	577.327
2580.22	603.584
2581.18	587.202
2582.15	577.612
2583.11	602.006
2584.07	584.736
2585.04	600.683
2586	579.279
2586.97	584.325
2587.93	602.216
2588.89	594.384
2589.86	576.487
2590.82	578.164
2591.79	589.084
2592.75	588.791
2593.71	558.892
2594.68	595.164
2595.64	589.651
2596.61	568.998
2597.57	576.381
2598.54	578.71
2599.5	572.554
2600.46	559.771
2601.43	562.198
2602.39	575.027
2603.36	577.72
2604.32	568.315
2605.28	544.483
2606.25	551.782
2607.21	521.58
2608.18	528.381
2609.14	545.292
2610.1	565.402
2611.07	550.445
2612.03	548.897
2613	544.733
2613.96	542.727
2614.93	547.924

Filename LMB0124 Type: ON STACK
Subfile: 0130

WN	INT
2615.89	544.032
2616.85	547.334
2617.82	554.246
2618.78	550.159
2619.75	533.066
2620.71	542.794
2621.67	506.889
2622.64	501.283
2623.6	514.242
2624.57	503.028
2625.53	508.926
2626.49	521.819
2627.46	523.678
2628.42	503.106
2629.39	506.534
2630.35	524.376
2631.31	523.087
2632.28	502.541
2633.24	517.256
2634.21	517.506
2635.17	468.678
2636.14	490.236
2637.1	471.927
2638.06	467.646
2639.03	479.16
2639.99	483.068
2640.96	495.891
2641.92	450.055
2642.88	452.591
2643.85	475.201
2644.81	455.636
2645.78	464.694
2646.74	458.389
2647.7	459.088
2648.67	469.425
2649.63	435.462
2650.6	465.753
2651.56	440.219
2652.53	462.425
2653.49	460.932
2654.45	465.545
2655.42	444.513
2656.38	456.706
2657.35	419.067
2658.31	453.869
2659.27	407.721
2660.24	407.723

WN	INT
2661.2	442.455
2662.17	455.363
2663.13	410.198
2664.09	426.415
2665.06	437.791
2666.02	422.861
2666.99	450.65
2667.95	444.809
2668.92	440.842
2669.88	418.745
2670.84	424.577
2671.81	427.612
2672.77	377.412
2673.74	430.976
2674.7	411.553
2675.66	413.874
2676.63	372.946
2677.59	383.313
2678.56	396.704
2679.52	410.957
2680.48	381.111
2681.45	404.677
2682.41	397.788
2683.38	384.77
2684.34	413.265
2685.31	420.129
2686.27	408.7
2687.23	413.61
2688.2	390.96
2689.16	392.236
2690.13	378.111
2691.09	391.726
2692.05	374.566
2693.02	355.797
2693.98	408.008
2694.95	337.946
2695.91	366.916
2696.87	356.175
2697.84	366.827
2698.8	364.61
2699.77	366.005
2700.73	369.464
2701.7	357.72
2702.66	377.775
2703.62	365.903
2704.59	375.009
2705.55	370.761

WN	INT
2706.52	361.658
2707.48	353.243
2708.44	333.142
2709.41	331.086
2710.37	346.891
2711.34	299.182
2712.3	320.693
2713.26	323.977
2714.23	329.098
2715.19	305.786
2716.16	301.205
2717.12	313.995
2718.09	324.382
2719.05	310.8
2720.01	305.47
2720.98	321.867
2721.94	301.596
2722.91	303.008
2723.87	311.572
2724.83	294.683
2725.8	309.893
2726.76	288.851
2727.73	326.76
2728.69	319.644
2729.65	296.894
2730.62	290.74
2731.58	304.756
2732.55	281.351
2733.51	298.195
2734.47	301.309
2735.44	312.091
2736.4	299.353
2737.37	292.316
2738.33	299.172
2739.3	293.446
2740.26	301.814
2741.22	293.312
2742.19	274.758
2743.15	261.165
2744.12	280.568
2745.08	285.086
2746.04	291.107
2747.01	298.534
2747.97	288.437
2748.94	292.682
2749.9	286.034
2750.86	275.691

Filename LMB0124
Subfile: 0130

Type: ON STACK

WN	INT
2751.83	282.38
2752.79	277.951
2753.76	261.367
2754.72	277.938
2755.69	266.894
2756.65	228.799
2757.61	250.185
2758.58	270.587
2759.54	264.127
2760.51	264.124
2761.47	254.993
2762.43	263.481
2763.4	250.818
2764.36	228.253
2765.33	251.232
2766.29	238.524
2767.25	210.895
2768.22	223.612
2769.18	233.93
2770.15	234.363
2771.11	234.528
2772.08	219.855
2773.04	243.549
2774	242.884
2774.97	237.903
2775.93	248.382
2776.9	236.152
2777.86	215.528
2778.82	226.44
2779.79	205.114
2780.75	220.309
2781.72	209.126
2782.68	215.334
2783.64	188.656
2784.61	203.505
2785.57	196.289
2786.54	211.478
2787.5	213.336
2788.47	184.015
2789.43	203.722
2790.39	199.142
2791.36	202.199
2792.32	203.251
2793.29	206.985
2794.25	214.665
2795.21	209.343
2796.18	186.982
2797.14	182.323
2798.11	171.655
2799.07	195.325
2800.03	192.044

APPENDIX D

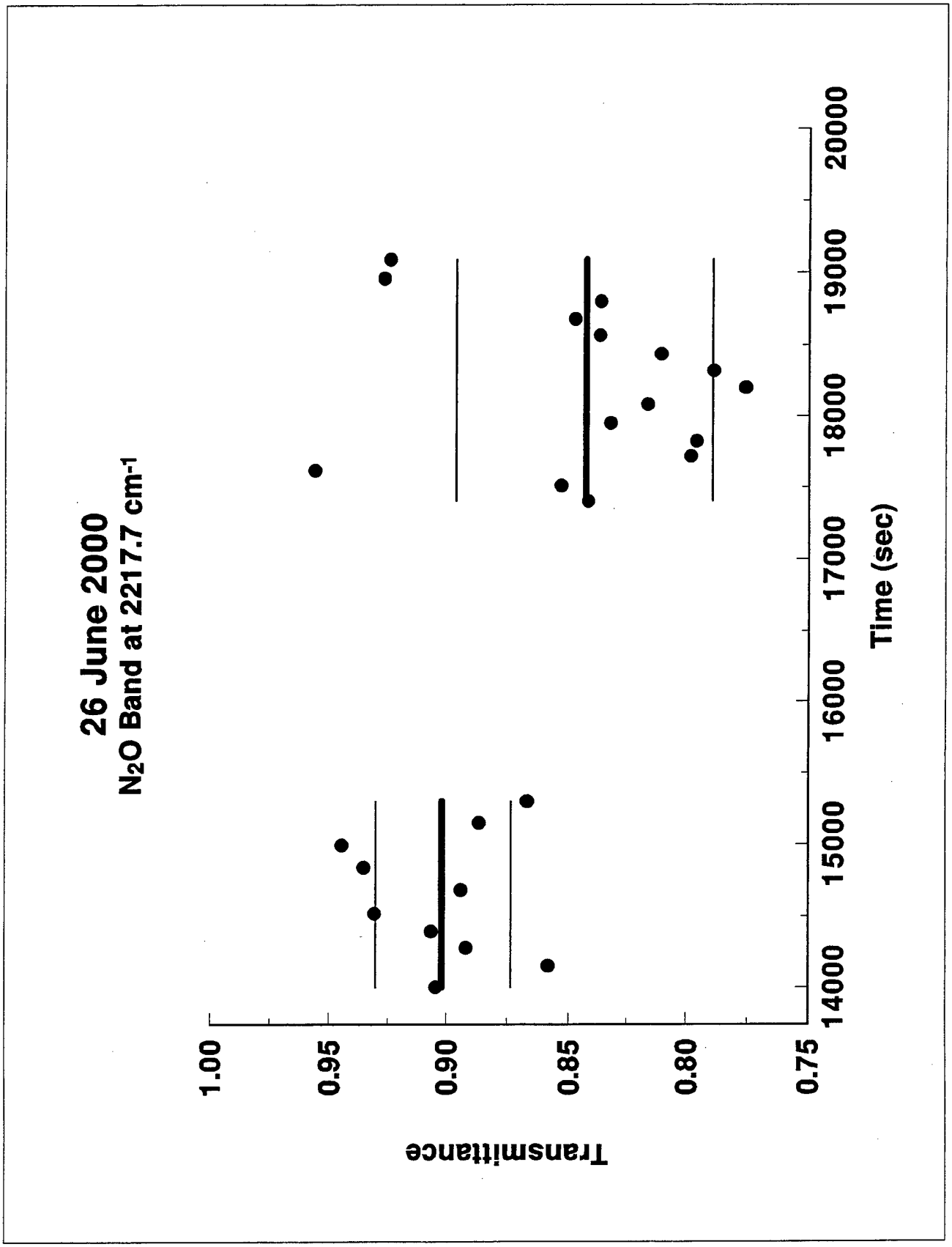
NITROUS OXIDE ABSORBANCES

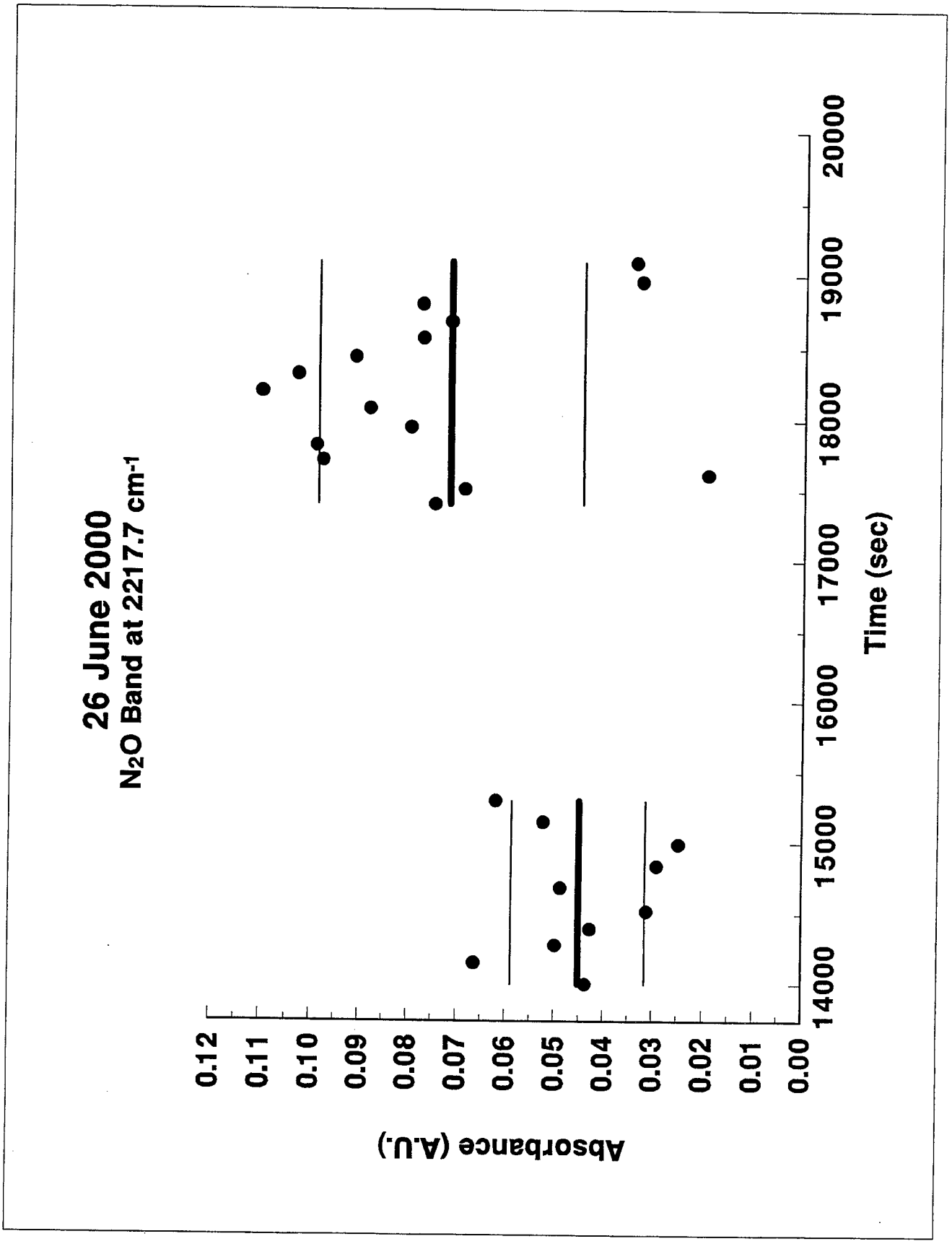
Tabulations of A and τ at two nitrous oxide bands are furnished for the acid plant stack plume evaluations. The tables include TOD and IOT. Following the tables for a particular day, a set of plots of A and τ as a function of IOT for each nitrous oxide band is supplied. For a statistically significant number of observations the average and BESD are computed. The information appears in the order that is indicated by the summary table below.

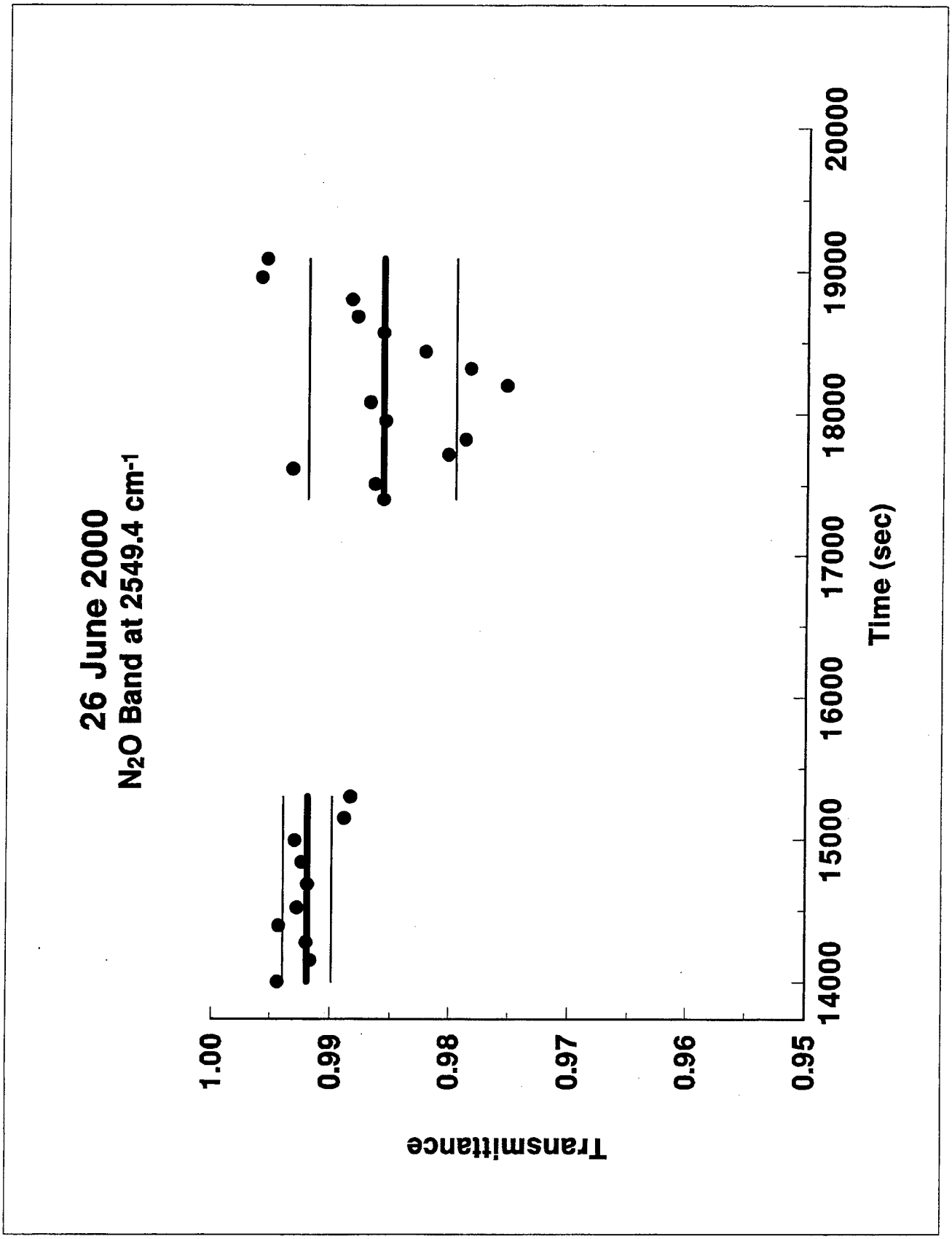
Date	Filename	SPS (cm^{-1})	No. Pts.
26JUN00	LMB0009	4	10
26JUN00	LMB0011	4	15
27JUN00	LMB0103	1	10
27JUN00	LMB0105	1	1
27JUN00	LMB0123	1	8
27JUN00	LMB0125	1	7
27JUN00	LMB0127	1	6

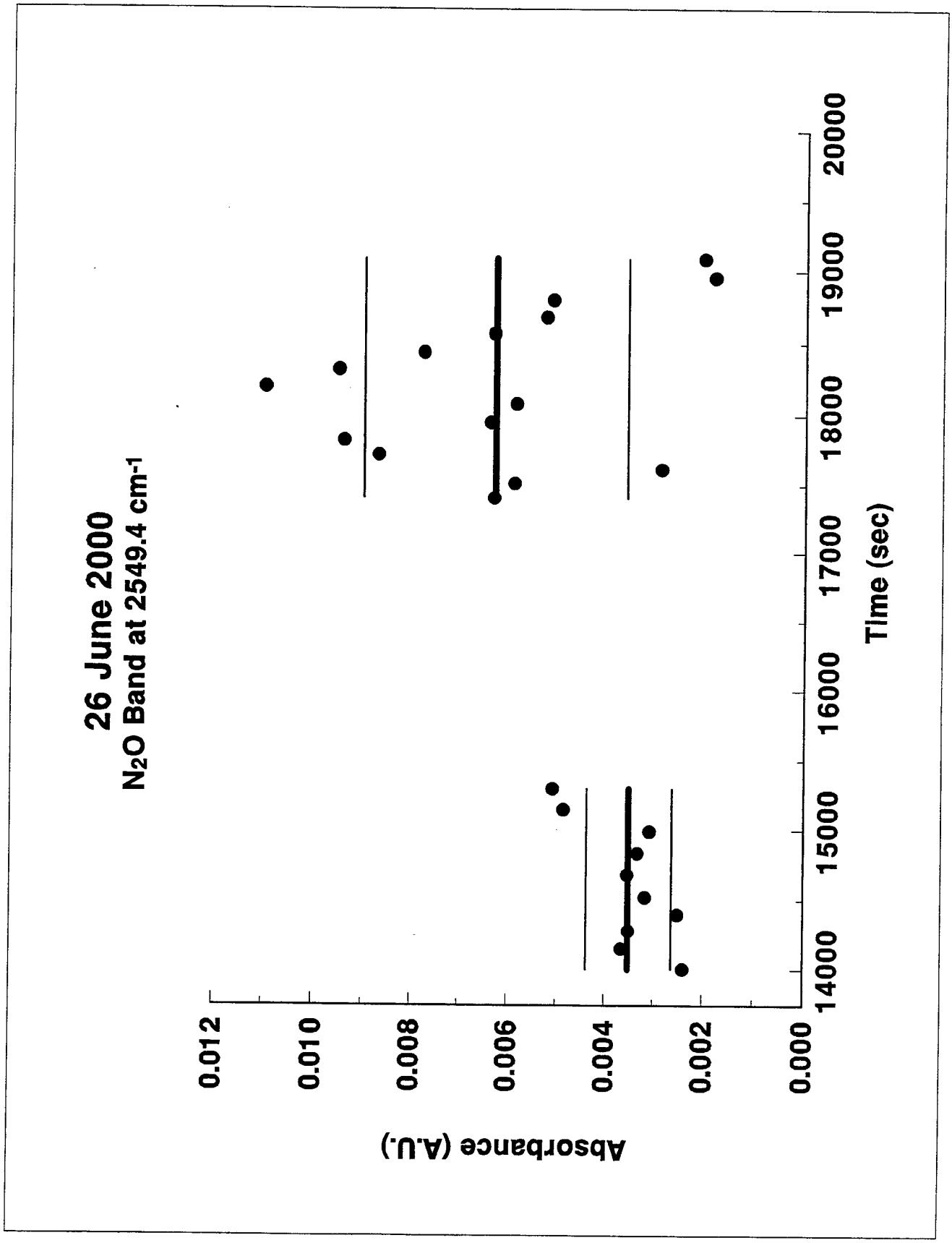
Date: 26 June 2000
Source: Acid Plant Stack
SPS: 4 cm^{-1}

			2217.7 cm^{-1}		2549.4 cm^{-1}	
Filename	TOD Hr:Mn:Sc	IOT (sec)	$A*10^2$ (A.U.)	τ	$A*10^2$ (A.U.)	τ
LMB0009	12:53:23	14003	4.3692	0.9429	0.2382	0.99453
	12:55:52	14152	6.6332	0.85835	0.3644	0.99164
	12:57:59	14279	4.9782	0.89169	0.3500	0.99197
	12:59:54	14394	4.2700	0.90635	0.2497	0.99427
	13:02:02	14522	3.1139	0.9308	0.3154	0.99276
	13:04:43	14683	4.8744	0.89383	0.3529	0.99190
	13:07:17	14837	2.9068	0.93525	0.3322	0.99237
	13:09:54	14992	2.4715	0.94467	0.3069	0.99295
	13:12:28	15148	5.2319	0.88650	0.4855	0.98888
	13:14:58	15298	6.2082	0.86679	0.5084	0.98836
		AVE	4.5057	0.90185	0.3504	0.99196
		BESD	1.3750	0.02855	0.0879	0.00200
LMB0011	13:50:40	17404	7.4820	0.84174	0.6306	0.98578
	13:51:51	17511	6.8897	0.85330	0.5891	0.98650
	13:53:36	17616	1.9449	0.95620	0.2869	0.99331
	13:55:18	17718	9.7886	0.79820	0.8693	0.98027
	13:57:02	17822	9.9200	0.79579	0.9396	0.97877
	13:59:11	17951	7.9818	0.83211	0.6388	0.98566
	14:01:21	18081	8.8226	0.81615	0.5859	0.98694
	14:03:17	18197	11.018	0.77590	1.0978	0.97527
	14:05:18	18318	10.306	0.78875	0.9505	0.97836
	14:07:15	18435	9.1230	0.81053	0.7763	0.98227
	14:09:26	18566	7.7422	0.83671	0.6316	0.98586
	14:11:20	18680	7.1807	0.84760	0.5257	0.98802
	14:13:20	18800	7.7628	0.83631	0.5125	0.98850
	14:15:39	18959	3.2929	0.92698	0.1814	0.99603
	14:18:10	19090	3.4157	0.92436	0.2026	0.99555
		AVE	7.1784	0.84271	0.6279	0.98581
		BESD	2.7033	0.05363	0.2707	0.00615


26 June 2000
N2O Band at 2217.7 cm-1
Transmittance
1.00
0.95
0.90
0.85
0.80
0.75
14000
15000
16000
17000
18000
19000
20000
Time (sec)


26 June 2000
N2O Band at 2217.7 cm-1
Absorbance (A.U.)
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
14000
15000
16000
17000
18000
19000
20000
Time (sec)


26 June 2000
N2O Band at 2549.4 cm-1
Transmittance
1.00
0.99
0.98
0.97
0.96
0.95
14000
15000
16000
17000
18000
19000
20000
Time (sec)

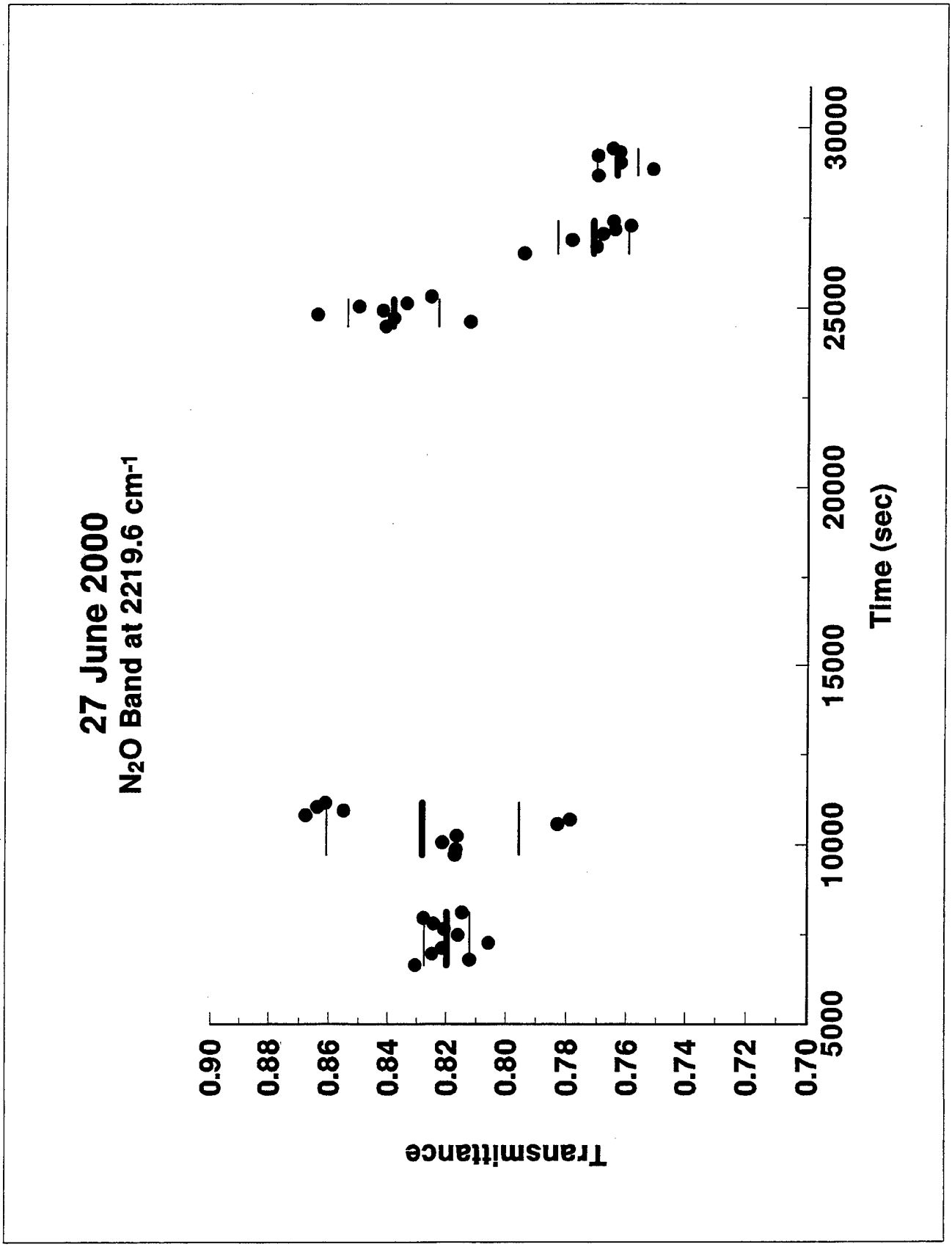

26 June 2000
N2O Band at 2549.4 cm-1
Absorbance (A.U.)
0.012
0.010
0.008
0.006
0.004
0.002
0.000
14000
15000
16000
17000
18000
19000
20000
Time (sec)

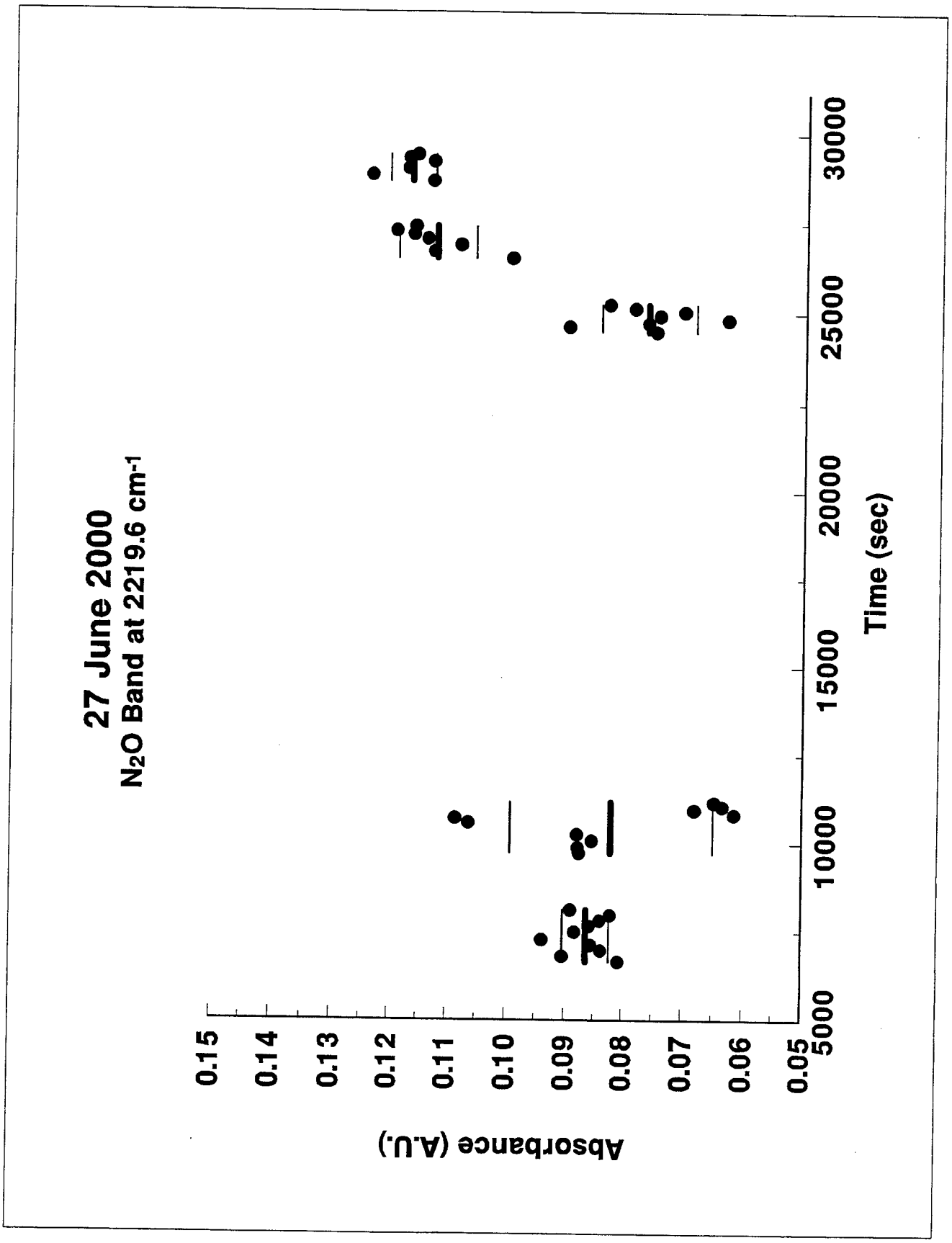
Date: 27 June 2000
Source: Acid Plant Stack
SPS: 1 cm^{-1}

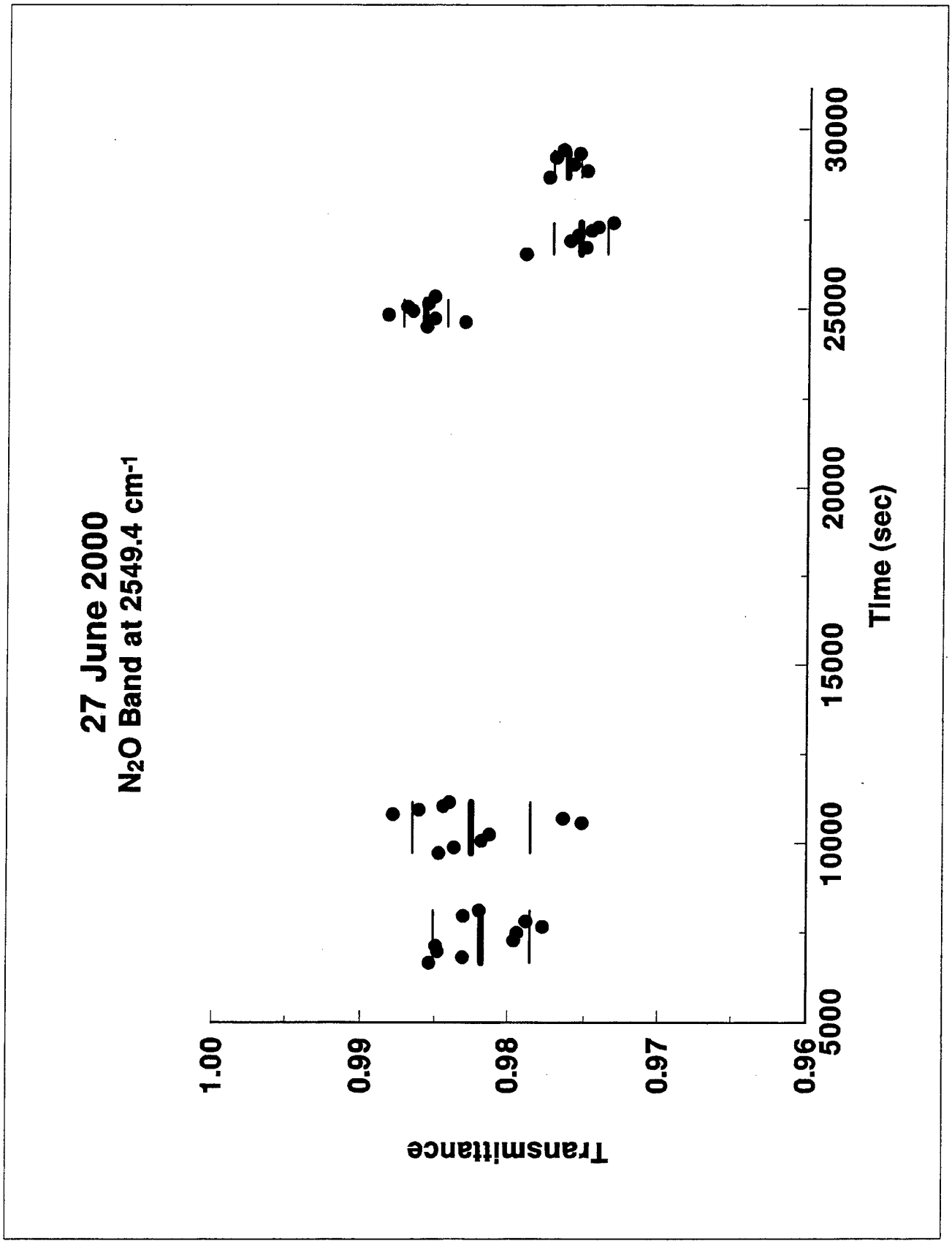
			2219.6 cm^{-1}		2549.4 cm^{-1}	
Filename	**TOD Hr:Mn:Sc**	**IOT (sec)**	**A*10^2 (A.U.)**	**τ**	**A*10^2 (A.U.)**	**τ**
LMB0103	09:46:59	9719	8.7634	0.81727	0.6678	0.98474
	09:49:41	9881	8.7862	0.81684	0.7146	0.98368
	09:52:43	10063	8.5464	0.82136	0.7970	0.98181
	09:55:45	10245	8.8038	0.81651	0.8219	0.98125
	10:01:14	10574	10.632	0.78285	1.0932	0.97514
	10:03:13	10693	10.857	0.77880	1.0385	0.97637
	10:05:17	10817	6.1553	0.86785	0.5313	0.98784
	10:07:20	10940	6.8054	0.85496	0.6080	0.98609
	10:09:00	11040	6.3499	0.86397	0.6809	0.98444
	10:10:52	11152	6.4874	0.86124	0.7004	0.98400
		AVE	8.2187	0.82817	0.7654	0.98254
		BESD	1.7191	0.03264	0.1793	0.00405
LMB0105	10:36:14	12674	10.869	0.77858	0.8854	0.97981
LMB0123	13:53:12	24492	7.5111	0.84117	0.6246	0.98572
	13:55:15	24615	9.0163	0.81252	0.7411	0.98308
	13:56:54	24714	7.6508	0.83847	0.6484	0.98518
	13:58:39	24819	6.3287	0.86439	0.5099	0.98832
	14:00:31	24931	7.4581	0.84220	0.5824	0.98667
	14:02:17	25037	7.0448	0.85026	0.5665	0.98703
	14:03:54	25134	7.8751	0.83415	0.6292	0.98561
	14:05:32	25232	8.3193	0.82567	0.6475	0.98520
		AVE	7.6505	0.83860	0.6187	0.98585
		BESD	0.8048	0.01553	0.6837	0.00156

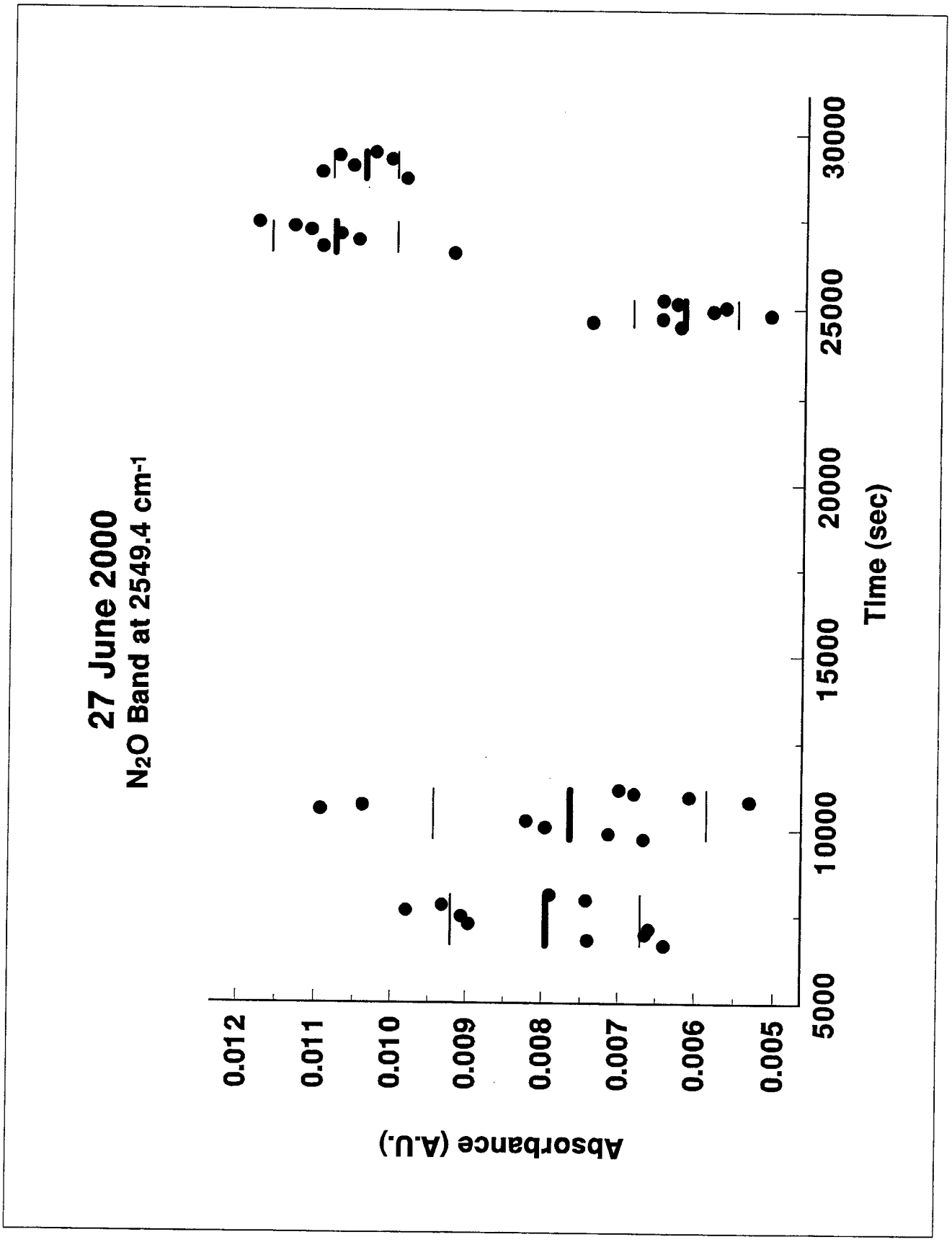
Date: 27 June 2000
Source: Acid Plant Stack
SPS: 1 cm^{-1}

			2219.6 cm^{-1}		2549.4 cm^{-1}	
Filename	TOD Hr:Mn:Sc	IOT (sec)	$A*10^2$ (A.U.)	τ	$A*10^2$ (A.U.)	τ
LMB0125	14:26:54	26514	9.9882	0.79454	0.9221	0.97899
	14:29:55	26695	11.310	0.77071	1.0965	0.97506
	14:33:01	26881	10.855	0.77882	1.0501	0.97610
	14:35:53	27053	11.424	0.76869	1.0734	0.97558
	14:37:50	27170	11.657	0.76459	1.1116	0.97472
	14:39:33	27273	11.960	0.75926	1.1325	0.97426
	14:41:39	27399	11.632	0.76502	1.1782	0.97323
		AVE	11.261	0.77166	1.0806	0.97542
		BESD	0.658	0.01178	0.0812	0.00183
LMB0127	15:02:48	28668	11.336	0.77025	0.9875	0.97751
	15:05:49	28849	12.393	0.75172	1.0983	0.97502
	15:08:50	29030	11.761	0.76275	1.0583	0.97592
	15:12:04	29224	11.327	0.77041	1.0074	0.97706
	15:13:47	29327	11.742	0.76308	1.0766	0.97551
	15:15:23	29423	11.608	0.76544	1.0290	0.97658
		AVE	11.694	0.76394	1.0428	0.97627
		BESD	0.391	0.00686	0.0042	0.00094


27 June 2000
N2O Band at 2219.6 cm-1
Transmittance
0.90
0.88
0.86
0.84
0.82
0.80
0.78
0.76
0.74
0.72
0.70
5000
10000
15000
20000
25000
30000
Time (sec)


27 June 2000
N2O Band at 2219.6 cm-1
Absorbance (A.U.)
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
5000
10000
15000
20000
25000
30000
Time (sec)


27 June 2000
N2O Band at 2549.4 cm-1
Transmittance
1.00
0.99
0.98
0.97
0.96
5000
10000
15000
20000
25000
30000
Time (sec)

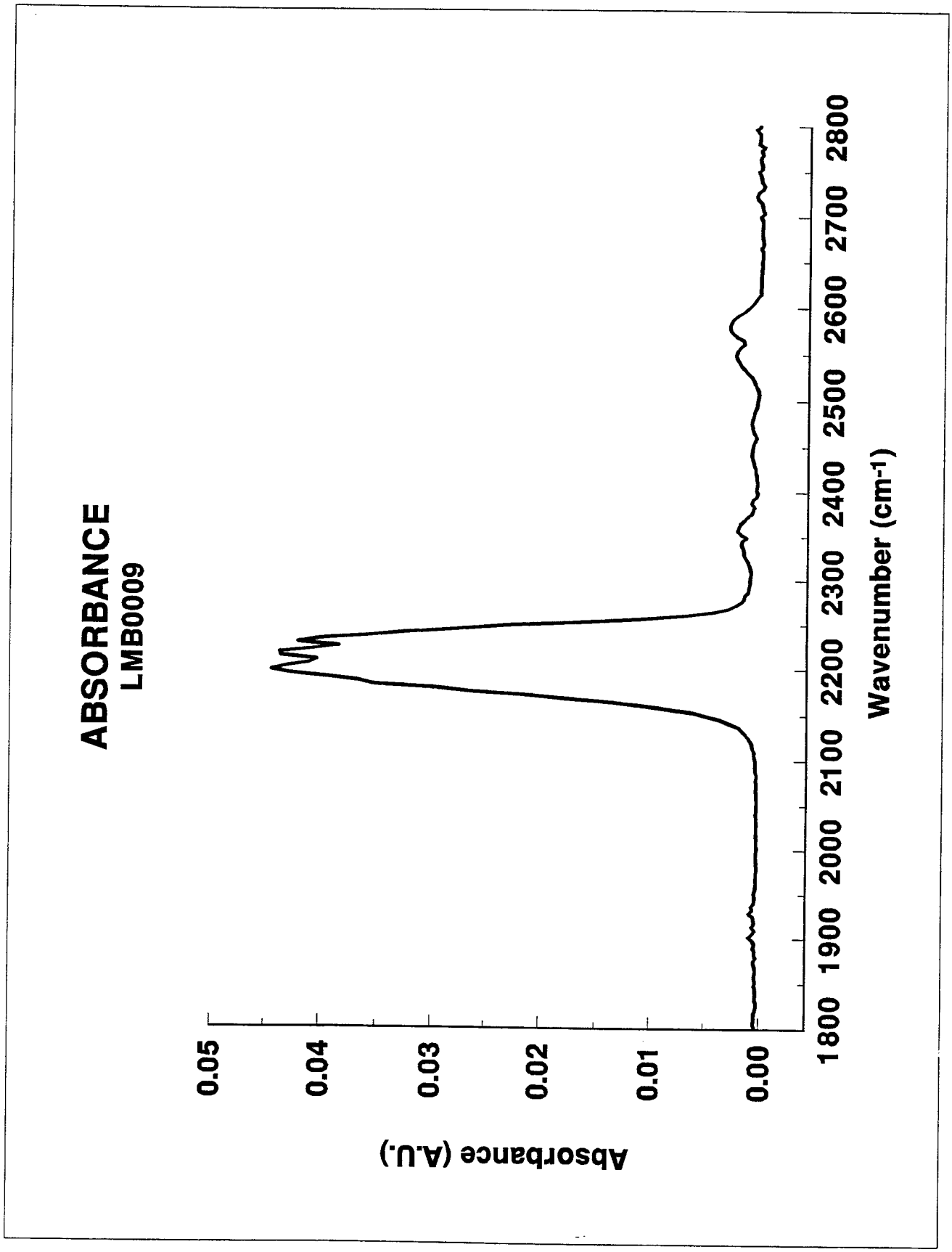

27 June 2000
N2O Band at 2549.4 cm-1
Absorbance (A.U.)
0.012
0.011
0.010
0.009
0.008
0.007
0.006
0.005
5000
10000
15000
20000
25000
30000
Time (sec)

APPENDIX E

NITROUS OXIDE SPECTRA

Representative spectra of absorbance, single-beam blackbody, and single-beam on/off stack are furnished in the form of plots and spectral listings. The order of appearance of these files is summarized in the table below.

Date	TOD	Filename	SPS (cm^{-1})
26JUN00	12:53:23	LMB0009	4
26JUN00	13:50:04	LMB0011	4
27JUN00	14:29:55	LMB0125	1


ABSORBANCE
LMB0009
Absorbance (A.U.)
0.05
0.04
0.03
0.02
0.01
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0009 Type: Absorbance
Subfile: 0490

WN	ABS	WN	ABS
1801.18	0.000385	1982.46	0.0002995
1805.04	0.0004473	1986.32	0.0003048
1808.9	0.000421	1990.17	0.0003097
1812.75	0.0004213	1994.03	0.0003184
1816.61	0.0004283	1997.89	0.0003218
1820.47	0.0002925	2001.74	0.0002723
1824.32	0.0002791	2005.6	0.0003265
1828.18	0.0002187	2009.46	0.000312
1832.04	0.0003535	2013.31	0.0003042
1835.9	0.0002983	2017.17	0.0003447
1839.75	0.0003009	2021.03	0.0003287
1843.61	0.0002985	2024.89	0.0003278
1847.47	0.0003879	2028.74	0.0002956
1851.32	0.0003231	2032.6	0.00031
1855.18	0.0003712	2036.46	0.000311
1859.04	0.0003666	2040.31	0.0003714
1862.89	0.0003341	2044.17	0.0003296
1866.75	0.0003531	2048.03	0.0003524
1870.61	0.0004423	2051.88	0.0003245
1874.46	0.0004887	2055.74	0.0003246
1878.32	0.0002951	2059.6	0.000349
1882.18	0.0003957	2063.46	0.0003387
1886.04	0.0003781	2067.31	0.0003728
1889.89	0.0005228	2071.17	0.0003451
1893.75	0.0004204	2075.03	0.0003598
1897.61	0.0005405	2078.88	0.0003963
1901.46	0.0009252	2082.74	0.0003329
1905.32	0.000663	2086.6	0.0003983
1909.18	0.0004304	2090.45	0.0004626
1913.03	0.0006422	2094.31	0.0004539
1916.89	0.0004675	2098.17	0.0004276
1920.75	0.0004798	2102.02	0.0005071
1924.61	0.0005457	2105.88	0.0005553
1928.46	0.0009066	2109.74	0.0005358
1932.32	0.0006226	2113.6	0.0006945
1936.18	0.0006887	2117.45	0.0007482
1940.03	0.0004804	2121.31	0.0009076
1943.89	0.0004364	2125.17	0.0010981
1947.75	0.000435	2129.02	0.0013462
1951.6	0.0004721	2132.88	0.0016832
1955.46	0.0003688	2136.74	0.0019725
1959.32	0.0003459	2140.59	0.0027989
1963.17	0.0003263	2144.45	0.0036229
1967.03	0.0003392	2148.31	0.0046993
1970.89	0.0003219	2152.16	0.005958
1974.75	0.0003136	2156.02	0.0082351
1978.6	0.0002685	2159.88	0.0107888

Filename: LMB0009 Type: Absorbance
Subfile: 0490

WN	ABS
2163.74	0.0135914
2167.59	0.0177589
2171.45	0.0210256
2175.31	0.0266204
2179.16	0.0295428
2183.02	0.0352567
2186.88	0.0366782
2190.73	0.0392494
2194.59	0.0428789
2198.45	0.0444306
2202.31	0.043006
2206.16	0.0409776
2210.02	0.0403584
2213.88	0.0436035
2217.73	0.0436924
2221.59	0.0405417
2225.45	0.0383741
2229.3	0.0420339
2233.16	0.0400032
2237.02	0.0356893
2240.87	0.0324835
2244.73	0.0273808
2248.59	0.0231653
2252.45	0.0166776
2256.3	0.0107239
2260.16	0.0068824
2264.02	0.0042254
2267.87	0.002974
2271.73	0.0022739
2275.59	0.0017813
2279.44	0.0015267
2283.3	0.0014664
2287.16	0.0011469
2291.01	0.0011133
2294.87	0.0010284
2298.73	0.0010016
2302.59	0.0010076
2306.44	0.0009609
2310.3	0.0009082
2314.16	0.0009899
2318.01	0.0011038
2321.87	0.0012205
2325.73	0.0014068
2329.58	0.0016023
2333.44	0.0015902
2337.3	0.0016693
2341.15	0.0017839

WN	ABS
2345.01	0.0017476
2348.87	0.0013554
2352.73	0.0018481
2356.58	0.0021447
2360.44	0.0020458
2364.3	0.0019117
2368.15	0.001582
2372.01	0.0013145
2375.87	0.0009056
2379.72	0.000794
2383.58	0.0006863
2387.44	0.0008981
2391.29	0.0008103
2395.15	0.0004728
2399.01	0.0003793
2402.87	0.0004751
2406.72	0.0004315
2410.58	0.0004011
2414.44	0.0004559
2418.29	0.0004671
2422.15	0.0005546
2426.01	0.000572
2429.86	0.0006989
2433.72	0.0007581
2437.58	0.0008605
2441.43	0.0009196
2445.29	0.0008914
2449.15	0.0008417
2453.01	0.000773
2456.86	0.0006431
2460.72	0.0005102
2464.58	0.0006692
2468.43	0.0008106
2472.29	0.0008978
2476.15	0.0009477
2480	0.0008916
2483.86	0.0007982
2487.72	0.0007253
2491.58	0.0005902
2495.43	0.0004547
2499.29	0.0004526
2503.15	0.0003686
2507	0.0003526
2510.86	0.0003516
2514.72	0.0005223
2518.57	0.0006878
2522.43	0.0007858

Filename: LMB0009 Type: Absorbance
Subfile: 0490

WN	ABS
2526.29	0.000989
2530.14	0.0013201
2534	0.0015883
2537.86	0.0019233
2541.72	0.0020838
2545.57	0.0023113
2549.43	0.0023822
2553.29	0.002254
2557.14	0.0020247
2561	0.0016886
2564.86	0.0017398
2568.71	0.0023061
2572.57	0.0027207
2576.43	0.0029458
2580.28	0.0029677
2584.14	0.0028176
2588	0.002617
2591.86	0.0022034
2595.71	0.0016597
2599.57	0.0012851
2603.43	0.0009829
2607.28	0.0007371
2611.14	0.0005222
2615	0.0002262
2618.85	0.0002815
2622.71	0.0002035
2626.57	0.0002256
2630.42	0.0002095
2634.28	0.0002394
2638.14	0.0001775
2642	0.00019
2645.85	0.0001295
2649.71	0.0001802
2653.57	0.0001051
2657.42	0.0001056
2661.28	0.000105
2665.14	0.000238
2668.99	0.0000553
2672.85	0.0000811
2676.71	0.0001361
2680.56	0.0001476
2684.42	0.0001552
2688.28	0.000133
2692.14	0.0001037
2695.99	0.0001248
2699.85	0.0002751
2703.71	-0.0000143

WN	ABS
2707.56	0.0000999
2711.42	0.0001817
2715.28	0.0002071
2719.13	0.0005283
2722.99	0.0006494
2726.85	0.0005255
2730.71	0.0001442
2734.56	0.0000101
2738.42	0.0002158
2742.28	0.0002565
2746.13	0.000341
2749.99	0.0004984
2753.85	0.0002049
2757.7	0.000222
2761.56	0.0003187
2765.42	0.0003624
2769.27	0.0001514
2773.13	0.0002665
2776.99	0.0000373
2780.85	0.0004784
2784.7	0.0004434
2788.56	0.0004035
2792.42	0.0004429
2796.27	0.000734
2800.13	0.0003749

Filename: LMB0008 Type: 40 deg C BB
Subfile: 0130

WN	INT
1801.18	2324.78
1805.04	2967.27
1808.9	3136.83
1812.75	3530.16
1816.61	3939.82
1820.47	4511.37
1824.32	4529.54
1828.18	5685.06
1832.04	7194.11
1835.9	8110.43
1839.75	9424.16
1843.61	7978.88
1847.47	10877.2
1851.32	12369.3
1855.18	12783
1859.04	12802.2
1862.89	13201.9
1866.75	12101.2
1870.61	12364.3
1874.46	13719.4
1878.32	13865.7
1882.18	14104.6
1886.04	13988
1889.89	12343.1
1893.75	13641.5
1897.61	14045.2
1901.46	13861.8
1905.32	13632.3
1909.18	12595
1913.03	13349.3
1916.89	12296.4
1920.75	13370.1
1924.61	12823.5
1928.46	12924.1
1932.32	12785
1936.18	12882.3
1940.03	12897.8
1943.89	12009.2
1947.75	12467.7
1951.6	12559.7
1955.46	12303.1
1959.32	12423.6
1963.17	12330.4
1967.03	11359.4
1970.89	12123.8
1974.75	11916.9
1978.6	11754.2

WN	INT
1982.46	11546.9
1986.32	11373.2
1990.17	11097.8
1994.03	10996.9
1997.89	10947
2001.74	10925.8
2005.6	10834.8
2009.46	10716.2
2013.31	10652.7
2017.17	10021.8
2021.03	10335.5
2024.89	10186.1
2028.74	10031.6
2032.6	9894.82
2036.46	9747.06
2040.31	9522.91
2044.17	9515.35
2048.03	9390.04
2051.88	9252.41
2055.74	9092.59
2059.6	8916.04
2063.46	8755.65
2067.31	8685.58
2071.17	8555.12
2075.03	8424.11
2078.88	8318.46
2082.74	8209.66
2086.6	8092.72
2090.45	7891.08
2094.31	7846.1
2098.17	7727.2
2102.02	7625.54
2105.88	7525.38
2109.74	7411.79
2113.6	7315.03
2117.45	7235.41
2121.31	7114.93
2125.17	7043.66
2129.02	6926.46
2132.88	6847.16
2136.74	6725.26
2140.59	6649.13
2144.45	6578.85
2148.31	6485.6
2152.16	6404.53
2156.02	6296.3
2159.88	6213.91

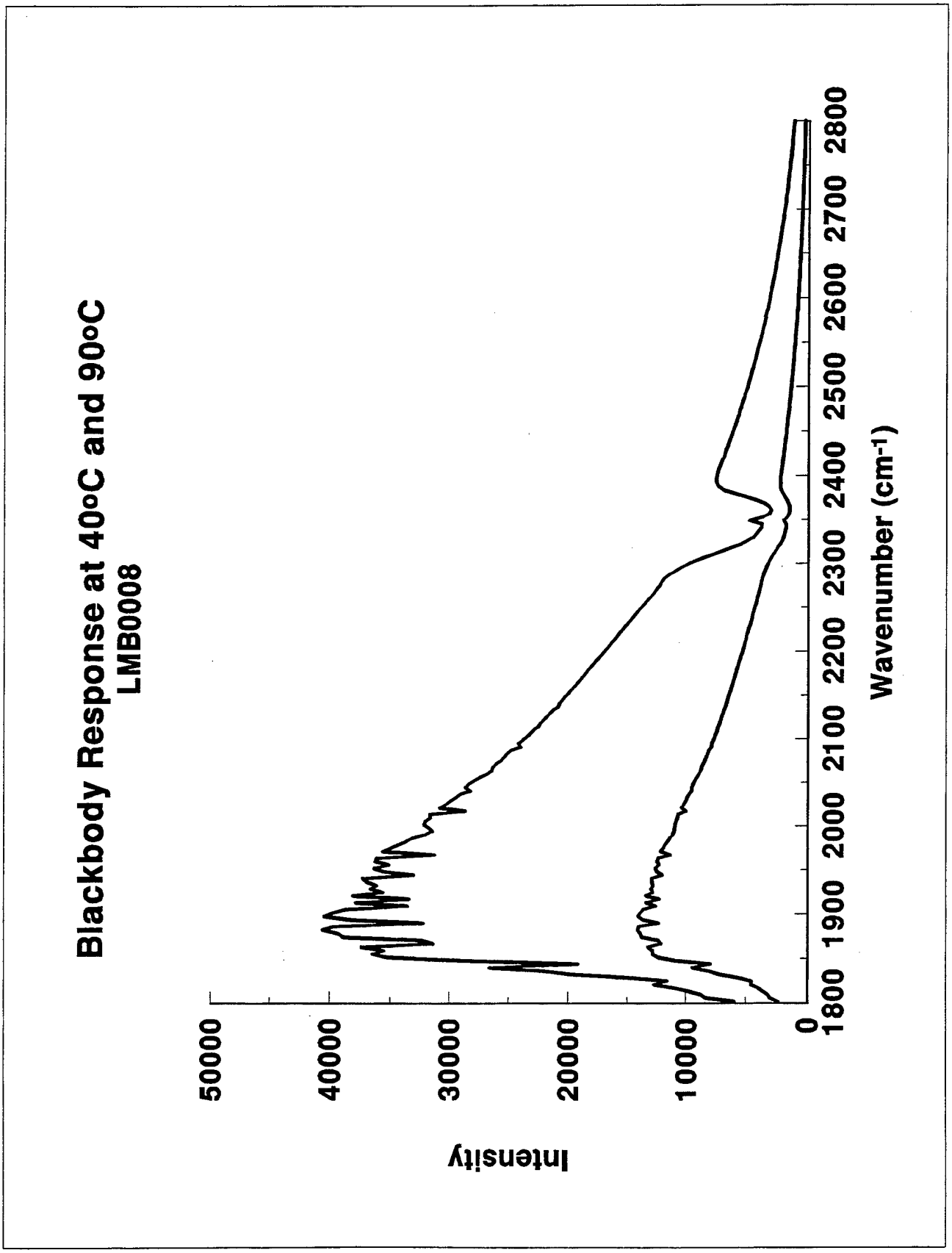
Filename: LMB0008 Type: 40 deg C BB
Subfile: 0130

WN	INT	WN	INT
2163.74	6108.67	2345.01	1727.21
2167.59	6037.72	2348.87	1916.93
2171.45	5951.08	2352.73	1640.9
2175.31	5859.54	2356.58	1496.62
2179.16	5791.31	2360.44	1425.6
2183.02	5688.32	2364.3	1425.61
2186.88	5604.38	2368.15	1530.02
2190.73	5509.84	2372.01	1655.42
2194.59	5441.56	2375.87	1827.16
2198.45	5342.33	2379.72	2001.32
2202.31	5263.78	2383.58	2139.75
2206.16	5171.5	2387.44	2178.46
2210.02	5101.65	2391.29	2168.74
2213.88	5012.7	2395.15	2178.27
2217.73	4955.23	2399.01	2164.78
2221.59	4855.87	2402.87	2116.26
2225.45	4773.58	2406.72	2086.07
2229.3	4670.24	2410.58	2047.35
2233.16	4613.5	2414.44	2016.97
2237.02	4518.44	2418.29	1985.26
2240.87	4454.98	2422.15	1941.3
2244.73	4371.6	2426.01	1904.38
2248.59	4298.78	2429.86	1871.49
2252.45	4215.07	2433.72	1844.25
2256.3	4121.93	2437.58	1802.47
2260.16	4070.56	2441.43	1777.9
2264.02	3968.95	2445.29	1742.51
2267.87	3922.59	2449.15	1698.86
2271.73	3839.8	2453.01	1676.75
2275.59	3788.97	2456.86	1634.74
2279.44	3723.26	2460.72	1616.29
2283.3	3652.99	2464.58	1581.04
2287.16	3566.48	2468.43	1550.78
2291.01	3440.74	2472.29	1521.75
2294.87	3335.59	2476.15	1492.05
2298.73	3224.34	2480	1456.63
2302.59	3073.66	2483.86	1435.71
2306.44	2921.75	2487.72	1407.29
2310.3	2743.31	2491.58	1379.72
2314.16	2556.14	2495.43	1348.71
2318.01	2398.3	2499.29	1326.17
2321.87	2183.67	2503.15	1308.95
2325.73	2042.78	2507	1279.01
2329.58	1927.87	2510.86	1249.13
2333.44	1841.84	2514.72	1222.13
2337.3	1777.73	2518.57	1200.19
2341.15	1730.42	2522.43	1175.09

Filename: LMB0008 Type: 40 deg C BB
Subfile: 0130

WN	INT
2526.29	1158.27
2530.14	1138.71
2534	1117.57
2537.86	1101.55
2541.72	1077.9
2545.57	1056.13
2549.43	1027.17
2553.29	1010.16
2557.14	997.476
2561	972.363
2564.86	946.524
2568.71	924.668
2572.57	902.898
2576.43	885.677
2580.28	869.922
2584.14	849.793
2588	830.277
2591.86	814.761
2595.71	795.918
2599.57	779.882
2603.43	767.891
2607.28	756.518
2611.14	743.916
2615	728.441
2618.85	708.951
2622.71	688.786
2626.57	679.719
2630.42	672.567
2634.28	649.751
2638.14	646.977
2642	638.647
2645.85	625.232
2649.71	605.454
2653.57	591.682
2657.42	579.108
2661.28	566.73
2665.14	561.057
2668.99	544.892
2672.85	536.12
2676.71	523.462
2680.56	505.89
2684.42	494.711
2688.28	482.41
2692.14	468.856
2695.99	468.676
2699.85	455.716
2703.71	447.981

WN	INT
2707.56	442.9
2711.42	431.012
2715.28	418.37
2719.13	411.168
2722.99	396.511
2726.85	394.153
2730.71	382.952
2734.56	387.553
2738.42	370.107
2742.28	358.734
2746.13	348.575
2749.99	347.865
2753.85	341.189
2757.7	326.215
2761.56	323.564
2765.42	317.23
2769.27	310.854
2773.13	311.735
2776.99	291.637
2780.85	294.676
2784.7	281.443
2788.56	278.665
2792.42	268.815
2796.27	272.045
2800.13	257.744


Blackbody Response at 40°C and 90°C
LMB0008
Intensity
50000
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0008 Type: 90 deg C BB
Subfile: 0260

WN	INT
1801.18	5966.18
1805.04	8390.05
1808.9	8714.56
1812.75	9663.85
1816.61	10924.4
1820.47	12671.9
1824.32	11602.8
1828.18	15042.5
1832.04	19659.7
1835.9	22059.7
1839.75	26523
1843.61	19170.9
1847.47	28760.9
1851.32	35213.1
1855.18	36451.7
1859.04	35569
1862.89	37367.8
1866.75	31391.5
1870.61	32315.1
1874.46	38909.6
1878.32	39312.5
1882.18	40540.6
1886.04	39668.9
1889.89	32244.4
1893.75	38292.2
1897.61	40401.3
1901.46	39750.7
1905.32	38691.3
1909.18	33580.3
1913.03	37864.7
1916.89	33446.7
1920.75	38073.3
1924.61	35674.2
1928.46	36634.6
1932.32	36199.2
1936.18	36951.2
1940.03	37296.6
1943.89	33050.8
1947.75	35493.1
1951.6	36321.8
1955.46	35143.3
1959.32	36228.9
1963.17	36153.8
1967.03	31292.3
1970.89	35598.3
1974.75	34927.6
1978.6	34296.3

WN	INT
1982.46	33684.1
1986.32	33165.4
1990.17	32080.4
1994.03	31465.6
1997.89	31775.7
2001.74	32141.1
2005.6	32049.7
2009.46	31641.5
2013.31	31652.1
2017.17	28644.7
2021.03	30792.6
2024.89	30290.3
2028.74	29904.9
2032.6	29486.8
2036.46	29081.8
2040.31	28231.2
2044.17	28588.4
2048.03	28315.4
2051.88	27870.7
2055.74	27394.2
2059.6	26760.3
2063.46	26376.1
2067.31	26260.3
2071.17	25989.2
2075.03	25587.1
2078.88	25327.7
2082.74	25097.2
2086.6	24758.3
2090.45	23955.7
2094.31	24123.1
2098.17	23795.5
2102.02	23481.6
2105.88	23153.4
2109.74	22898.8
2113.6	22531.5
2117.45	22354.2
2121.31	22071.5
2125.17	21790.6
2129.02	21520.5
2132.88	21278.2
2136.74	20847.1
2140.59	20741.8
2144.45	20498.8
2148.31	20262.1
2152.16	19998.9
2156.02	19753.4
2159.88	19479.4

Filename: LMB0008 Type: 90 deg C BB
Subfile: 0260

WN	INT	WN	INT
2163.74	19209.4	2345.01	3731.52
2167.59	18962.9	2348.87	4689.1
2171.45	18735.6	2352.73	3568.77
2175.31	18509.7	2356.58	3071.4
2179.16	18291.1	2360.44	2948.26
2183.02	18027.7	2364.3	3090.9
2186.88	17772.6	2368.15	3477.65
2190.73	17514.3	2372.01	4145.68
2194.59	17260.6	2375.87	5028.61
2198.45	17044.8	2379.72	6021.25
2202.31	16792.6	2383.58	6891.46
2206.16	16544.9	2387.44	7325.82
2210.02	16331.2	2391.29	7473.78
2213.88	16097.7	2395.15	7521.16
2217.73	15857.8	2399.01	7484
2221.59	15631.5	2402.87	7421.3
2225.45	15379.7	2406.72	7338.26
2229.3	15131.5	2410.58	7214.49
2233.16	14884.3	2414.44	7120.32
2237.02	14621.1	2418.29	6990.15
2240.87	14399.5	2422.15	6859.57
2244.73	14163.4	2426.01	6771.03
2248.59	13922	2429.86	6672.22
2252.45	13656.7	2433.72	6566.44
2256.3	13389.9	2437.58	6472.95
2260.16	13129.5	2441.43	6365.74
2264.02	12872	2445.29	6255.47
2267.87	12657.1	2449.15	6170.49
2271.73	12434	2453.01	6045.88
2275.59	12220.9	2456.86	5932.78
2279.44	12052.9	2460.72	5841.59
2283.3	11862	2464.58	5746.16
2287.16	11479.7	2468.43	5650.91
2291.01	10984.5	2472.29	5576.61
2294.87	10461.5	2476.15	5479.23
2298.73	9917.61	2480	5383.08
2302.59	9284.54	2483.86	5285.37
2306.44	8541.91	2487.72	5189.04
2310.3	7714.92	2491.58	5099.08
2314.16	6954.4	2495.43	5001.65
2318.01	6226.67	2499.29	4920.61
2321.87	5418	2503.15	4844.04
2325.73	4936.26	2507	4762.91
2329.58	4418.02	2510.86	4676.67
2333.44	4155.8	2514.72	4608.93
2337.3	3918.72	2518.57	4529.37
2341.15	3729.66	2522.43	4432.83

Filename: LMB0008 Type: 90 deg C BB
Subfile: 0260

WN	INT
2526.29	4348.03
2530.14	4269.92
2534	4196.43
2537.86	4134.09
2541.72	4076.35
2545.57	4004.75
2549.43	3920.09
2553.29	3851.61
2557.14	3785.01
2561	3709.72
2564.86	3644.72
2568.71	3566.22
2572.57	3500.52
2576.43	3455.51
2580.28	3404.95
2584.14	3347.31
2588	3258.81
2591.86	3190.06
2595.71	3124.85
2599.57	3071.87
2603.43	3039.52
2607.28	2980.07
2611.14	2935.86
2615	2879.56
2618.85	2819.72
2622.71	2755.53
2626.57	2705.95
2630.42	2644.29
2634.28	2600.14
2638.14	2566.05
2642	2528.27
2645.85	2479.38
2649.71	2435.05
2653.57	2387.98
2657.42	2335.66
2661.28	2290.44
2665.14	2243.69
2668.99	2208
2672.85	2160.12
2676.71	2123.35
2680.56	2086.5
2684.42	2044.83
2688.28	1997
2692.14	1949.93
2695.99	1922.17
2699.85	1881.68
2703.71	1847.38

WN	INT
2707.56	1800.05
2711.42	1777.95
2715.28	1753.23
2719.13	1695.75
2722.99	1671.14
2726.85	1635.61
2730.71	1603.97
2734.56	1575.57
2738.42	1549.8
2742.28	1524.34
2746.13	1491.04
2749.99	1458.56
2753.85	1430.6
2757.7	1404
2761.56	1369.39
2765.42	1358.1
2769.27	1325.41
2773.13	1294.29
2776.99	1274.26
2780.85	1263.89
2784.7	1234.98
2788.56	1212.97
2792.42	1178.12
2796.27	1159
2800.13	1135.26

Filename: LMB0009 Type: OFF STACK
Subfile: 0200

WN	INT	WN	INT
1801.18	1729.61	1982.46	7776.33
1805.04	1996.84	1986.32	7755.76
1808.9	2181.66	1990.17	7665.29
1812.75	2436.88	1994.03	7627.65
1816.61	2698.45	1997.89	7489.67
1820.47	3073.3	2001.74	7298.08
1824.32	3350.32	2005.6	7211.18
1828.18	4090.52	2009.46	7257.62
1832.04	4951.85	2013.31	7075.35
1835.9	5652.52	2017.17	7037.94
1839.75	6388.13	2021.03	6957.04
1843.61	6197.05	2024.89	6796.57
1847.47	7772.87	2028.74	6626.12
1851.32	8315	2032.6	6452.9
1855.18	8594.96	2036.46	6421.03
1859.04	8821.69	2040.31	6421.89
1862.89	9024.62	2044.17	6342.64
1866.75	8926.26	2048.03	6135.44
1870.61	8990.28	2051.88	5964.76
1874.46	9357.18	2055.74	5844.52
1878.32	9434.25	2059.6	5916.78
1882.18	9500.86	2063.46	5809.12
1886.04	9576.08	2067.31	5764.28
1889.89	9051.82	2071.17	5474.22
1893.75	9430.44	2075.03	5510.57
1897.61	9527.5	2078.88	5456.87
1901.46	9433.12	2082.74	5225.51
1905.32	9367.23	2086.6	5202.73
1909.18	9162.75	2090.45	5220.74
1913.03	9193.48	2094.31	4939.66
1916.89	8829.37	2098.17	4891.8
1920.75	9200.39	2102.02	4750.58
1924.61	9004.83	2105.88	4796.29
1928.46	8916.2	2109.74	4482.63
1932.32	8881.78	2113.6	4615.74
1936.18	8804.97	2117.45	4401.76
1940.03	8824.24	2121.31	4441.7
1943.89	8570.69	2125.17	4405.54
1947.75	8638.18	2129.02	4211.7
1951.6	8529.29	2132.88	3993.36
1955.46	8519.88	2136.74	4346.22
1959.32	8381.92	2140.59	4136.15
1963.17	8327.46	2144.45	4025.58
1967.03	8138.52	2148.31	4015.91
1970.89	8135.88	2152.16	4006.42
1974.75	7972.19	2156.02	3849.93
1978.6	7819.53	2159.88	3711.88

Filename: LMB0009 Type: OFF STACK
Subfile: 0200

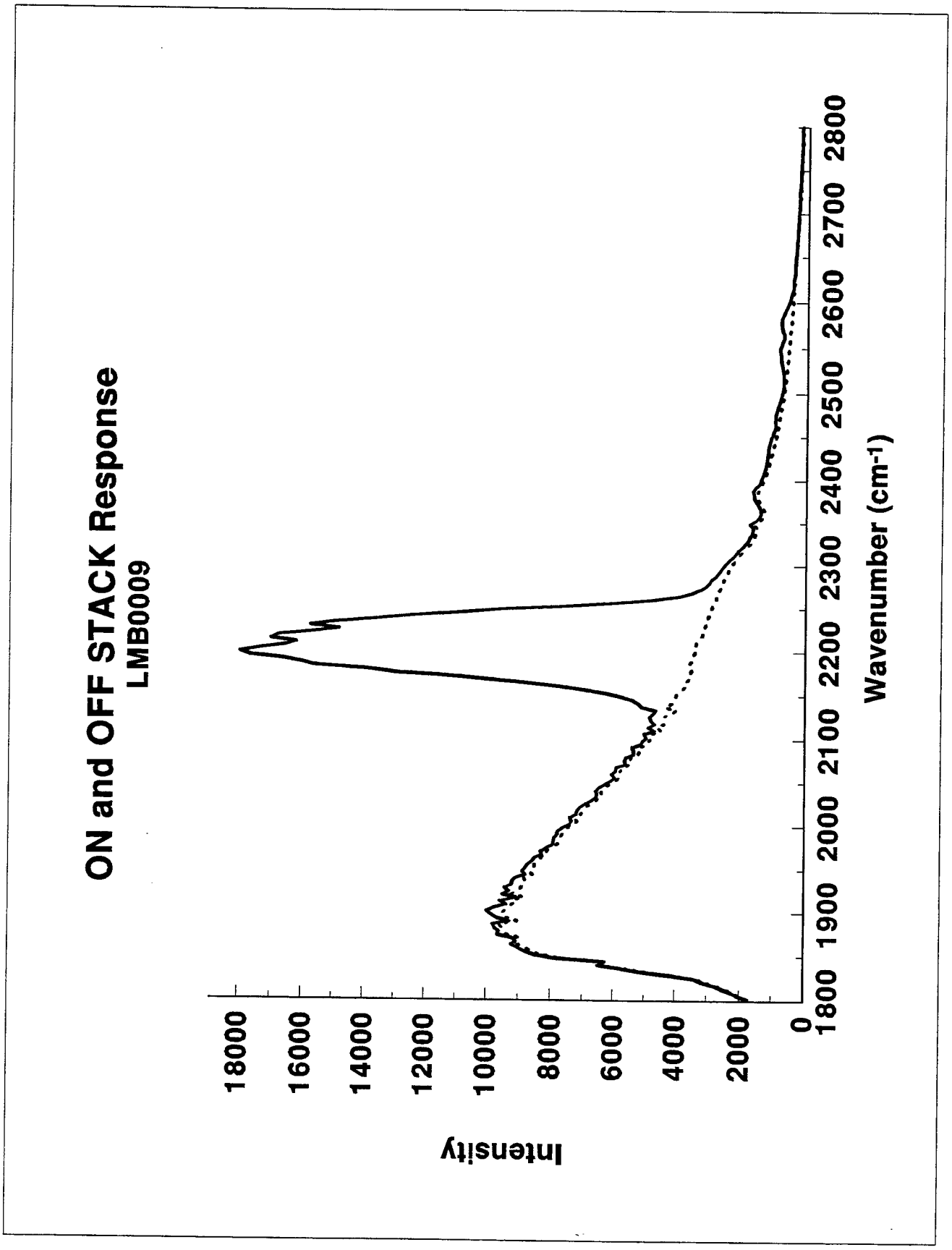
WN	INT
2163.74	3766.15
2167.59	3620.99
2171.45	3664.67
2175.31	3566.05
2179.16	3536.62
2183.02	3550.35
2186.88	3589.22
2190.73	3525.39
2194.59	3519.71
2198.45	3447.73
2202.31	3420.04
2206.16	3424.03
2210.02	3398.83
2213.88	3314.32
2217.73	3238.51
2221.59	3180.43
2225.45	3133.35
2229.3	3125.06
2233.16	3079.82
2237.02	3073.75
2240.87	3015.86
2244.73	2976.42
2248.59	2934.46
2252.45	2903.82
2256.3	2827.57
2260.16	2791.01
2264.02	2768.84
2267.87	2730.23
2271.73	2685.2
2275.59	2631.57
2279.44	2592.37
2283.3	2547.78
2287.16	2513.74
2291.01	2447.17
2294.87	2408
2298.73	2357.41
2302.59	2286.11
2306.44	2216.26
2310.3	2132.08
2314.16	2040.01
2318.01	1954.44
2321.87	1853.96
2325.73	1764.17
2329.58	1685.19
2333.44	1636.79
2337.3	1588.37
2341.15	1554.03

WN	INT
2345.01	1561.17
2348.87	1639.65
2352.73	1470.81
2356.58	1369.08
2360.44	1323
2364.3	1323.91
2368.15	1352.43
2372.01	1412.68
2375.87	1487.61
2379.72	1531.15
2383.58	1537.12
2387.44	1515.59
2391.29	1459.72
2395.15	1408.84
2399.01	1366.24
2402.87	1318.16
2406.72	1276.05
2410.58	1246.14
2414.44	1206.15
2418.29	1186.74
2422.15	1151.99
2426.01	1134.46
2429.86	1101.82
2433.72	1081.79
2437.58	1054.04
2441.43	1023.94
2445.29	1001.94
2449.15	981.764
2453.01	945.285
2456.86	933.346
2460.72	911.972
2464.58	889.954
2468.43	877.728
2472.29	854.785
2476.15	839.372
2480	824.919
2483.86	806.778
2487.72	785.027
2491.58	762.261
2495.43	753.072
2499.29	734.714
2503.15	720.514
2507	703.648
2510.86	698.489
2514.72	677.227
2518.57	665.121
2522.43	648.412

Filename: LMB0009 Type: OFF STACK
Subfile: 0200

WN	INT
2526.29	644.442
2530.14	631.214
2534	630.613
2537.86	604.553
2541.72	595.252
2545.57	588.903
2549.43	589.254
2553.29	564.138
2557.14	559.358
2561	546.119
2564.86	547.303
2568.71	529.878
2572.57	521.522
2576.43	508.583
2580.28	506.956
2584.14	500.759
2588	482.562
2591.86	474.233
2595.71	471.213
2599.57	457.879
2603.43	444.953
2607.28	456.725
2611.14	433.051
2615	429.986
2618.85	420.367
2622.71	426.356
2626.57	407.7
2630.42	397.434
2634.28	392.621
2638.14	395.838
2642	379.408
2645.85	372.191
2649.71	365.22
2653.57	361.156
2657.42	353.018
2661.28	345.921
2665.14	338.108
2668.99	335.521
2672.85	331.389
2676.71	322.031
2680.56	312.777
2684.42	305.983
2688.28	307.074
2692.14	292.46
2695.99	292.805
2699.85	284.275
2703.71	287.028

WN	INT
2707.56	280.428
2711.42	267.612
2715.28	261.519
2719.13	245.968
2722.99	247.639
2726.85	242.491
2730.71	249.449
2734.56	251.659
2738.42	238.274
2742.28	229.509
2746.13	222.013
2749.99	212.126
2753.85	220.515
2757.7	216.331
2761.56	204.902
2765.42	199.226
2769.27	202.433
2773.13	197.892
2776.99	201.317
2780.85	182.249
2784.7	178.537
2788.56	181.732
2792.42	178.732
2796.27	174.712
2800.13	167.03


ON and OFF STACK Response
LMB0009
Intensity
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0009 Type: ON STACK
Subfile: 0490

WN	INT	WN	INT
1801.18	1759.27	1982.46	7938.91
1805.04	2048.42	1986.32	7919.12
1808.9	2231.7	1990.17	7825.61
1812.75	2492.17	1994.03	7788.94
1816.61	2762.63	1997.89	7656.1
1820.47	3124.68	2001.74	7442.04
1824.32	3392.91	2005.6	7384.37
1828.18	4134.82	2009.46	7421.27
1832.04	5047.6	2013.31	7236.07
1835.9	5743.19	2017.17	7199.82
1839.75	6500.58	2021.03	7127.22
1843.61	6270.16	2024.89	6963.95
1847.47	7925.39	2028.74	6775.85
1851.32	8477.84	2032.6	6608.24
1855.18	8789.36	2036.46	6575.27
1859.04	9006.91	2040.31	6600.58
1862.89	9204.3	2044.17	6504.86
1866.75	9078.2	2048.03	6308.13
1870.61	9187.79	2051.88	6121.82
1874.46	9633.69	2055.74	5999.42
1878.32	9603.54	2059.6	6079.56
1882.18	9737.38	2063.46	5965.63
1886.04	9796.22	2067.31	5936.59
1889.89	9288.26	2071.17	5633.12
1893.75	9666.82	2075.03	5674.07
1897.61	9853.45	2078.88	5635.93
1901.46	9982.57	2082.74	5375.46
1905.32	9749.59	2086.6	5380.24
1909.18	9371.22	2090.45	5420.01
1913.03	9558.15	2094.31	5138.59
1916.89	9059	2098.17	5077.4
1920.75	9476.7	2102.02	4968.55
1924.61	9296.35	2105.88	5032.14
1928.46	9420.17	2109.74	4709.19
1932.32	9224.71	2113.6	4904.83
1936.18	9196.19	2117.45	4712.45
1940.03	9101.77	2121.31	4815.39
1943.89	8788.72	2125.17	4852.67
1947.75	8876.8	2129.02	4756.12
1951.6	8797.51	2132.88	4669.01
1955.46	8721.82	2136.74	5121.42
1959.32	8580.02	2140.59	5237.32
1963.17	8515.08	2144.45	5437.28
1967.03	8302.14	2148.31	5831.21
1970.89	8319.42	2152.16	6281.09
1974.75	8148.07	2156.02	6965.6
1978.6	7967.58	2159.88	7739.12

Filename: LMB0009 Type: ON STACK
Subfile: 0490

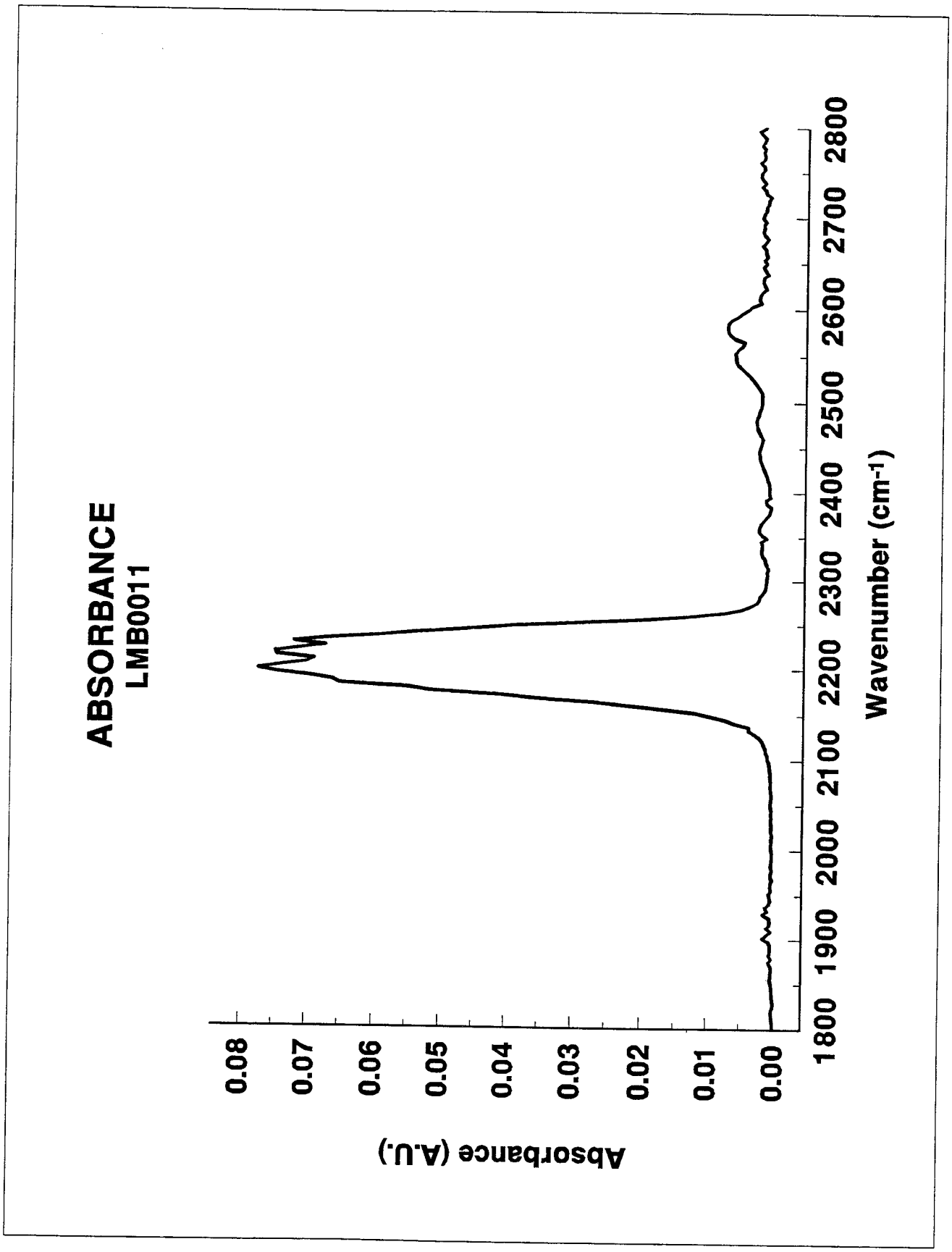
WN	INT
2163.74	8772.85
2167.59	10069.7
2171.45	11208
2175.31	12988.7
2179.16	13868
2183.02	15675.7
2186.88	16041.6
2190.73	16675.8
2194.59	17649.5
2198.45	17965.8
2202.31	17329.9
2206.16	16566
2210.02	16227.6
2213.88	16992.6
2217.73	16766.7
2221.59	15670.5
2225.45	14836
2229.3	15751.3
2233.16	14945
2237.02	13566.8
2240.87	12483.7
2244.73	10905
2248.59	9580.32
2252.45	7647.73
2256.3	5852.54
2260.16	4703.54
2264.02	3929.65
2267.87	3535.71
2271.73	3293.6
2275.59	3101.07
2279.44	2991.3
2283.3	2926.67
2287.16	2800.42
2291.01	2713.32
2294.87	2641.02
2298.73	2571.29
2302.59	2486.37
2306.44	2389.65
2310.3	2277.53
2314.16	2180.66
2318.01	2091.37
2321.87	1982.16
2325.73	1896.73
2329.58	1815.55
2333.44	1757.33
2337.3	1705.84
2341.15	1671.63

WN	INT
2345.01	1677.01
2348.87	1764.55
2352.73	1589.47
2356.58	1481.85
2360.44	1427.27
2364.3	1430.81
2368.15	1456.49
2372.01	1523.69
2375.87	1586.37
2379.72	1640.34
2383.58	1649.16
2387.44	1674.91
2391.29	1608.43
2395.15	1496.62
2399.01	1436.64
2402.87	1406.38
2406.72	1355.66
2410.58	1319.2
2414.44	1288.46
2418.29	1269.74
2422.15	1249.14
2426.01	1233.93
2429.86	1222.11
2433.72	1210.58
2437.58	1199.07
2441.43	1176.74
2445.29	1148.12
2449.15	1118.98
2453.01	1068.91
2456.86	1034.84
2460.72	991.427
2464.58	993.008
2468.43	1000.98
2472.29	990.259
2476.15	980.455
2480	956.058
2483.86	922.309
2487.72	888.532
2491.58	845.389
2495.43	816.201
2499.29	796.752
2503.15	770.378
2507	750.816
2510.86	744.916
2514.72	745.582
2518.57	753.899
2522.43	747.993

Filename: LMB0009 Type: ON STACK
Subfile: 0490

WN	INT
2526.29	767.534
2530.14	793.006
2534	822.568
2537.86	834.278
2541.72	842.101
2545.57	858.959
2549.43	863.146
2553.29	819.68
2557.14	785.385
2561	731.919
2564.86	736.562
2568.71	776.167
2572.57	808.073
2576.43	816.489
2580.28	813.941
2584.14	788.888
2588	743.794
2591.86	690.207
2595.71	631.335
2599.57	580.382
2603.43	538.178
2607.28	525.384
2611.14	481.203
2615	450.529
2618.85	445.535
2622.71	444.23
2626.57	427.195
2630.42	415.122
2634.28	412.668
2638.14	410.52
2642	394.937
2645.85	382.614
2649.71	379.579
2653.57	369.407
2657.42	361.157
2661.28	353.89
2665.14	355.787
2668.99	339.596
2672.85	337.241
2676.71	331.745
2680.56	323.221
2684.42	316.785
2688.28	316.154
2692.14	299.409
2695.99	301.038
2699.85	302.137
2703.71	286.108

WN	INT
2707.56	286.643
2711.42	278.877
2715.28	274.281
2719.13	277.408
2722.99	286.09
2726.85	272.92
2730.71	257.69
2734.56	252.228
2738.42	250.269
2742.28	243.649
2746.13	240.502
2749.99	238.492
2753.85	231.185
2757.7	227.803
2761.56	220.944
2765.42	217.443
2769.27	209.875
2773.13	210.631
2776.99	203.108
2780.85	204.957
2784.7	199.306
2788.56	200.314
2792.42	198.648
2796.27	207.028
2800.13	183.418


ABSORBANCE
LMB0011
Absorbance (A.U.)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0011 Type: Absorbance
Subfile: 0570

WN	ABS	WN	ABS
1801.18	1.08E-06	1982.46	0.0004307
1805.04	-0.0000289	1986.32	0.0004022
1808.9	0.0000705	1990.17	0.0003361
1812.75	0.0001061	1994.03	0.0003511
1816.61	0.0001928	1997.89	0.0003604
1820.47	0.0002322	2001.74	0.0004298
1824.32	-0.0000267	2005.6	0.0004606
1828.18	-0.000068	2009.46	0.0003949
1832.04	0.0000472	2013.31	0.000429
1835.9	0.0000815	2017.17	0.000343
1839.75	0.0001081	2021.03	0.0004655
1843.61	0.000186	2024.89	0.0004291
1847.47	0.0002191	2028.74	0.0004367
1851.32	0.0003188	2032.6	0.0005255
1855.18	0.000455	2036.46	0.000477
1859.04	0.0003359	2040.31	0.0005096
1862.89	0.0003614	2044.17	0.000486
1866.75	0.0002418	2048.03	0.0005705
1870.61	0.0003335	2051.88	0.0006064
1874.46	0.0006512	2055.74	0.0005775
1878.32	0.000303	2059.6	0.0004676
1882.18	0.0005654	2063.46	0.0005401
1886.04	0.0004662	2067.31	0.0006029
1889.89	0.000498	2071.17	0.0006781
1893.75	0.0004691	2075.03	0.0006077
1897.61	0.0006979	2078.88	0.0006514
1901.46	0.0015284	2082.74	0.0006975
1905.32	0.0009959	2086.6	0.0007017
1909.18	0.0003914	2090.45	0.0007681
1913.03	0.0009832	2094.31	0.0008487
1916.89	0.0005728	2098.17	0.0009417
1920.75	0.0005613	2102.02	0.0011468
1924.61	0.0006733	2105.88	0.0011324
1928.46	0.0015396	2109.74	0.0014015
1932.32	0.000984	2113.6	0.0014561
1936.18	0.001243	2117.45	0.0017237
1940.03	0.0007617	2121.31	0.0018859
1943.89	0.0005002	2125.17	0.0023015
1947.75	0.0006262	2129.02	0.0030431
1951.6	0.0007054	2132.88	0.0039433
1955.46	0.0004051	2136.74	0.0040032
1959.32	0.0005178	2140.59	0.0059685
1963.17	0.0004718	2144.45	0.007578
1967.03	0.0003119	2148.31	0.0097127
1970.89	0.0004718	2152.16	0.0121959
1974.75	0.000425	2156.02	0.0169484
1978.6	0.0003645	2159.88	0.0221658

Filename: LMB0011 Type: Absorbance
Subfile: 0570

WN	ABS
2163.74	0.0271887
2167.59	0.035359
2171.45	0.0408873
2175.31	0.0516373
2179.16	0.0550668
2183.02	0.0650839
2186.88	0.0661234
2190.73	0.0692015
2194.59	0.0746607
2198.45	0.0773628
2202.31	0.0738716
2206.16	0.0700714
2210.02	0.0689491
2213.88	0.0745697
2217.73	0.0748208
2221.59	0.0707598
2225.45	0.067209
2229.3	0.0719427
2233.16	0.0666244
2237.02	0.0590078
2240.87	0.0534239
2244.73	0.0456822
2248.59	0.0390314
2252.45	0.0290803
2256.3	0.0192593
2260.16	0.012542
2264.02	0.0075758
2267.87	0.0051221
2271.73	0.0038205
2275.59	0.0028828
2279.44	0.0025251
2283.3	0.0024276
2287.16	0.0019603
2291.01	0.0016356
2294.87	0.0015502
2298.73	0.0015154
2302.59	0.0014463
2306.44	0.0013789
2310.3	0.0014214
2314.16	0.0012401
2318.01	0.0015092
2321.87	0.0016907
2325.73	0.0018191
2329.58	0.0021575
2333.44	0.0022364
2337.3	0.0022144
2341.15	0.0021845

WN	ABS
2345.01	0.0022411
2348.87	0.0015923
2352.73	0.0021984
2356.58	0.0026316
2360.44	0.0025988
2364.3	0.0024017
2368.15	0.0020058
2372.01	0.0015761
2375.87	0.001158
2379.72	0.0010267
2383.58	0.0008959
2387.44	0.0015352
2391.29	0.0016161
2395.15	0.0010501
2399.01	0.0011458
2402.87	0.001145
2406.72	0.001136
2410.58	0.0012405
2414.44	0.0013958
2418.29	0.0015405
2422.15	0.001753
2426.01	0.0019738
2429.86	0.0021489
2433.72	0.0024039
2437.58	0.0025562
2441.43	0.002617
2445.29	0.0027047
2449.15	0.0025955
2453.01	0.0024499
2456.86	0.002309
2460.72	0.0021882
2464.58	0.0024601
2468.43	0.0027615
2472.29	0.0030232
2476.15	0.0030476
2480	0.0031233
2483.86	0.0029894
2487.72	0.0028455
2491.58	0.0026796
2495.43	0.0024512
2499.29	0.002402
2503.15	0.0023842
2507	0.002325
2510.86	0.0023527
2514.72	0.0026422
2518.57	0.0029845
2522.43	0.0034662

Filename: LMB0011 Type: Absorbance
Subfile: 0570

WN	ABS
2526.29	0.0039095
2530.14	0.0043791
2534	0.0048974
2537.86	0.0054693
2541.72	0.0060258
2545.57	0.006216
2549.43	0.006306
2553.29	0.0063105
2557.14	0.0059104
2561	0.0053081
2564.86	0.0050365
2568.71	0.0064148
2572.57	0.0071575
2576.43	0.0074751
2580.28	0.0075196
2584.14	0.0075476
2588	0.0070798
2591.86	0.0060457
2595.71	0.0053726
2599.57	0.004448
2603.43	0.0039733
2607.28	0.0025986
2611.14	0.0029081
2615	0.0027954
2618.85	0.002489
2622.71	0.001852
2626.57	0.0021649
2630.42	0.0023794
2634.28	0.0022732
2638.14	0.0016971
2642	0.0020087
2645.85	0.0022846
2649.71	0.0018954
2653.57	0.0021669
2657.42	0.00183
2661.28	0.0019649
2665.14	0.0020135
2668.99	0.0024529
2672.85	0.0020166
2676.71	0.0017384
2680.56	0.0021822
2684.42	0.0024142
2688.28	0.0022348
2692.14	0.0023141
2695.99	0.002089
2699.85	0.0024877
2703.71	0.0023244
2707.56	0.0020037
2711.42	0.0019761
2715.28	0.0016618
2719.13	0.0016209
2722.99	0.0013415
2726.85	0.0019839
2730.71	0.0021202
2734.56	0.0025923
2738.42	0.002168
2742.28	0.0025822
2746.13	0.0028185
2749.99	0.0027201
2753.85	0.0023562
2757.7	0.0024023
2761.56	0.0028651
2765.42	0.0024026
2769.27	0.0023111
2773.13	0.0024166
2776.99	0.0023094
2780.85	0.0026343
2784.7	0.0023867
2788.56	0.0021542
2792.42	0.0026222
2796.27	0.0030122
2800.13	0.0022303

Filename: LMB0011 Type: OFF STACK
Subfile: 0400

WN	INT
1801.18	2019.02
1805.04	2340.22
1808.9	2533.99
1812.75	2832.8
1816.61	3122.49
1820.47	3525.79
1824.32	3910.17
1828.18	4749.12
1832.04	5710.27
1835.9	6525.73
1839.75	7367.76
1843.61	7223.16
1847.47	9020.61
1851.32	9583.01
1855.18	9913.6
1859.04	10228.1
1862.89	10443.5
1866.75	10447.2
1870.61	10529
1874.46	10860.5
1878.32	10954.3
1882.18	11027.6
1886.04	11164.3
1889.89	10676.8
1893.75	11019.6
1897.61	11126.8
1901.46	11042
1905.32	10975.7
1909.18	10839.7
1913.03	10805.5
1916.89	10440.6
1920.75	10848
1924.61	10648.8
1928.46	10499.1
1932.32	10497.6
1936.18	10372.3
1940.03	10425.6
1943.89	10210.8
1947.75	10255
1951.6	10108.2
1955.46	10150.1
1959.32	9926.45
1963.17	9909.03
1967.03	9758.19
1970.89	9657.37
1974.75	9505.81
1978.6	9294.96

WN	INT
1982.46	9253.06
1986.32	9271.88
1990.17	9212.37
1994.03	9172.82
1997.89	9012.42
2001.74	8736.12
2005.6	8587.69
2009.46	8764.66
2013.31	8487.3
2017.17	8521.35
2021.03	8392.9
2024.89	8209.97
2028.74	7986.58
2032.6	7787.73
2036.46	7746.55
2040.31	7758.25
2044.17	7664.11
2048.03	7457.56
2051.88	7212.62
2055.74	7106.44
2059.6	7209.95
2063.46	7031.43
2067.31	7030.44
2071.17	6646.85
2075.03	6763.04
2078.88	6698.26
2082.74	6408.85
2086.6	6346.86
2090.45	6398.48
2094.31	6051.26
2098.17	5961.61
2102.02	5921.12
2105.88	5921.34
2109.74	5613.14
2113.6	5689.98
2117.45	5555.45
2121.31	5537.59
2125.17	5422.69
2129.02	5311.45
2132.88	5106.31
2136.74	5369.41
2140.59	5163.47
2144.45	5103.36
2148.31	5056.6
2152.16	4993.01
2156.02	4799.68
2159.88	4743.37

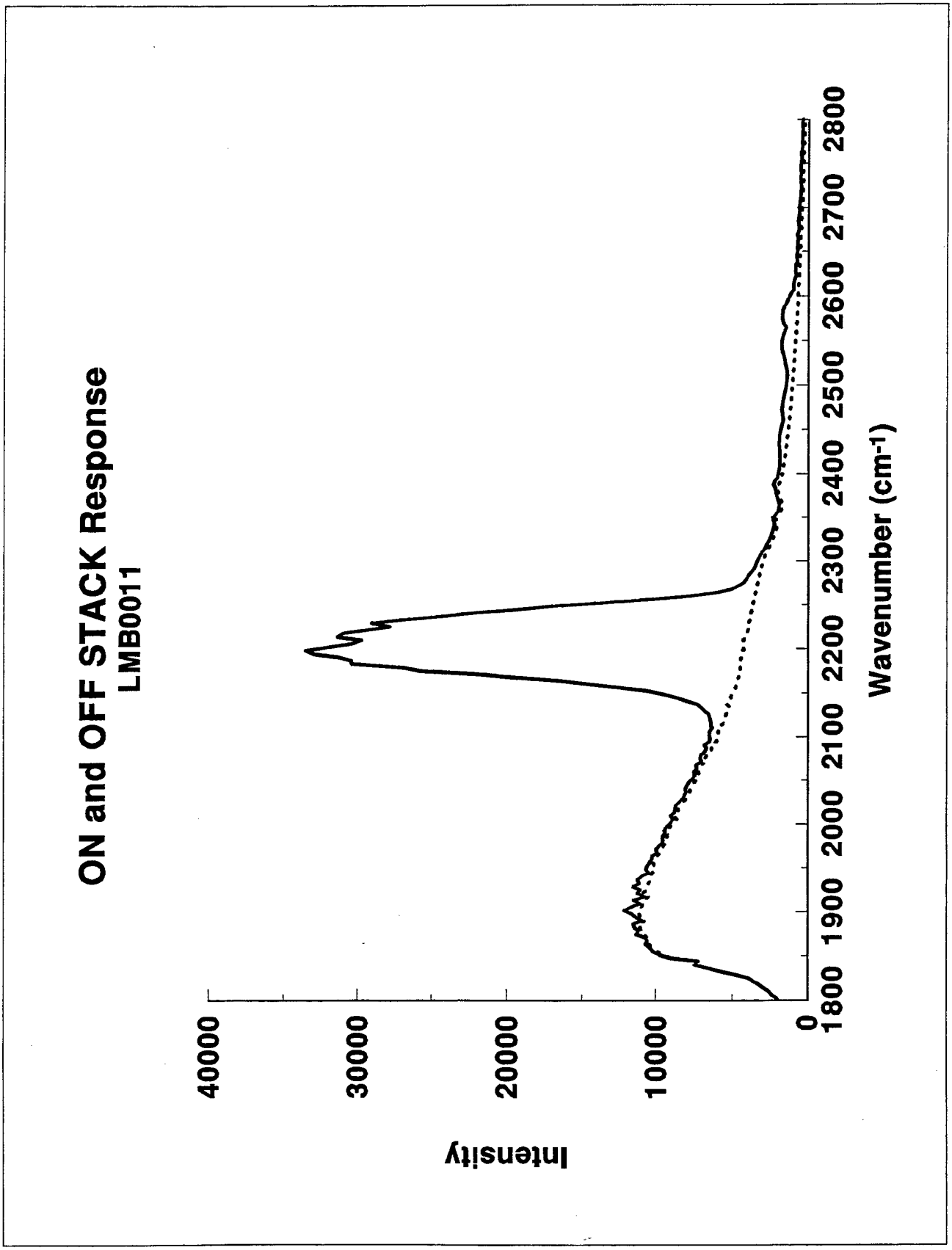
Filename: LMB0011 Type: OFF STACK
Subfile: 0400

WN	INT	WN	INT
2163.74	4758.41	2345.01	2060.79
2167.59	4601.73	2348.87	2151.01
2171.45	4582.03	2352.73	1960.27
2175.31	4462.27	2356.58	1824.24
2179.16	4484.42	2360.44	1759.53
2183.02	4462.02	2364.3	1757.18
2186.88	4467.17	2368.15	1778.89
2190.73	4411.87	2372.01	1859.78
2194.59	4409.4	2375.87	1942.85
2198.45	4297.1	2379.72	1985.25
2202.31	4248.53	2383.58	1996.44
2206.16	4245.84	2387.44	1952.62
2210.02	4264.29	2391.29	1863.47
2213.88	4200.69	2395.15	1798.82
2217.73	4056.51	2399.01	1735.65
2221.59	3976.87	2402.87	1687.25
2225.45	3880.77	2406.72	1648.36
2229.3	3939.22	2410.58	1612.99
2233.16	3837.79	2414.44	1568.25
2237.02	3825.13	2418.29	1540.45
2240.87	3791.53	2422.15	1511.27
2244.73	3733.08	2426.01	1476.3
2248.59	3678.99	2429.86	1456.03
2252.45	3653.64	2433.72	1423.77
2256.3	3577.6	2437.58	1388.63
2260.16	3517.46	2441.43	1364.68
2264.02	3487.46	2445.29	1331.2
2267.87	3421.15	2449.15	1308.65
2271.73	3398.74	2453.01	1280.11
2275.59	3316.62	2456.86	1249.76
2279.44	3283.51	2460.72	1230.4
2283.3	3212.84	2464.58	1209.44
2287.16	3192.75	2468.43	1189.6
2291.01	3120.98	2472.29	1166.84
2294.87	3060.86	2476.15	1148.93
2298.73	2992.14	2480	1129.88
2302.59	2927.93	2483.86	1105.02
2306.44	2855.19	2487.72	1087.46
2310.3	2760.57	2491.58	1072.19
2314.16	2630.57	2495.43	1059.19
2318.01	2515.88	2499.29	1038.67
2321.87	2403.84	2503.15	1016.92
2325.73	2310.05	2507	1004.63
2329.58	2214.01	2510.86	988.261
2333.44	2152.7	2514.72	965.109
2337.3	2094.96	2518.57	952.868
2341.15	2050.01	2522.43	930.605

Filename: LMB0011 Type: OFF STACK
Subfile: 0400

WN	INT
2526.29	927.422
2530.14	901.99
2534	883.661
2537.86	879.685
2541.72	852.012
2545.57	835.871
2549.43	818.191
2553.29	800.342
2557.14	793.963
2561	785.855
2564.86	768.721
2568.71	751.809
2572.57	732.238
2576.43	723.008
2580.28	706.424
2584.14	698.669
2588	690.349
2591.86	671.053
2595.71	672.468
2599.57	669.975
2603.43	657.45
2607.28	631.915
2611.14	641.735
2615	620.377
2618.85	606.877
2622.71	583.1
2626.57	594.285
2630.42	571.991
2634.28	573.536
2638.14	548.742
2642	535.943
2645.85	533.854
2649.71	515.766
2653.57	508.538
2657.42	494.024
2661.28	486.038
2665.14	474.889
2668.99	483.414
2672.85	456.082
2676.71	448.46
2680.56	433.859
2684.42	441.93
2688.28	438.68
2692.14	410.621
2695.99	404.41
2699.85	400.377
2703.71	396.875

WN	INT
2707.56	372.349
2711.42	371.94
2715.28	358.413
2719.13	350.165
2722.99	352.012
2726.85	341.314
2730.71	331.84
2734.56	340.033
2738.42	314.954
2742.28	313.925
2746.13	313.931
2749.99	299.144
2753.85	290.518
2757.7	276.532
2761.56	290.891
2765.42	274.725
2769.27	260.749
2773.13	262.499
2776.99	248.465
2780.85	250.447
2784.7	235.999
2788.56	227.897
2792.42	231.29
2796.27	227.238
2800.13	209.352


ON and OFF STACK Response
LMB0011
Intensity
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Wavenumber (cm-1)

Filename: LMB0011 Type: ON STACK
Subfile: 0570

WN	INT
1801.18	2019.1
1805.04	2336.52
1808.9	2543.23
1812.75	2848.33
1816.61	3154.67
1820.47	3571.49
1824.32	3905.6
1828.18	4733.67
1832.04	5724.79
1835.9	6553.78
1839.75	7413.71
1843.61	7274.49
1847.47	9118.64
1851.32	9766.84
1855.18	10186.3
1859.04	10422.1
1862.89	10666.4
1866.75	10565.5
1870.61	10700.5
1874.46	11283.5
1878.32	11154.2
1882.18	11416.4
1886.04	11477.1
1889.89	10935.8
1893.75	11322.6
1897.61	11612.9
1901.46	12088.7
1905.32	11638.5
1909.18	11057.9
1913.03	11451
1916.89	10764
1920.75	11221.4
1924.61	11066.1
1928.46	11489.7
1932.32	11124.3
1936.18	11190.3
1940.03	10934.5
1943.89	10500.5
1947.75	10653.8
1951.6	10573.3
1955.46	10407.3
1959.32	10271.1
1963.17	10224.9
1967.03	9932.61
1970.89	9970.81
1974.75	9783.53
1978.6	9529.4

WN	INT
1982.46	9525.78
1986.32	9522.81
1990.17	9414.85
1994.03	9380.88
1997.89	9230.01
2001.74	9001.69
2005.6	8873.43
2009.46	9007.18
2013.31	8752.73
2017.17	8709.25
2021.03	8675.33
2024.89	8466.86
2028.74	8246
2032.6	8096.91
2036.46	8024.27
2040.31	8045.5
2044.17	7945.16
2048.03	7786.26
2051.88	7557.74
2055.74	7431.13
2059.6	7466.99
2063.46	7325
2067.31	7359.14
2071.17	7014.57
2075.03	7088.52
2078.88	7045.77
2082.74	6779.87
2086.6	6716.44
2090.45	6789.5
2094.31	6491.27
2098.17	6445.04
2102.02	6504.29
2105.88	6490.89
2109.74	6314.54
2113.6	6408.91
2117.45	6405.03
2121.31	6457.92
2125.17	6535.14
2129.02	6772.42
2132.88	6984.19
2136.74	7235.69
2140.59	7944.59
2144.45	8603.91
2148.31	9503.03
2152.16	10506.9
2156.02	12376.5
2159.88	14483.6

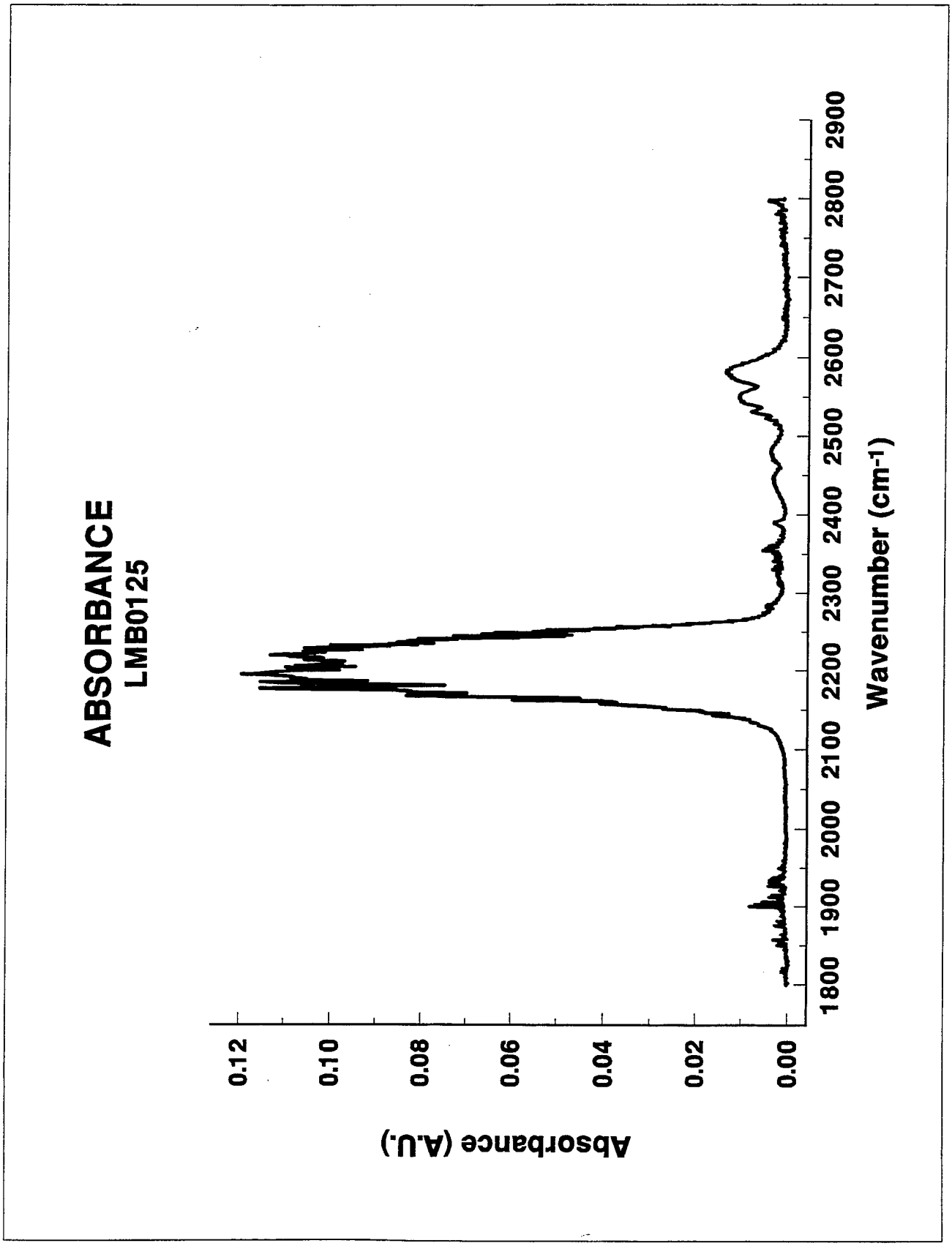
Filename: LMB0011 Type: ON STACK
Subfile: 0570

WN	INT	WN	INT
2163.74	16521.9	2345.01	2246.21
2167.59	19648.7	2348.87	2332.68
2171.45	21742.5	2352.73	2135.73
2175.31	25709.2	2356.58	1995.43
2179.16	26885.8	2360.44	1925.8
2183.02	30383.6	2364.3	1919.22
2186.88	30455.5	2368.15	1946.65
2190.73	31315.1	2372.01	2025.2
2194.59	32920.8	2375.87	2100.52
2198.45	33467.3	2379.72	2161
2202.31	31951.1	2383.58	2178.82
2206.16	30366.3	2387.44	2288.54
2210.02	29747	2391.29	2228.53
2213.88	31354.8	2395.15	2040.21
2217.73	31016.9	2399.01	1998.91
2221.59	29381.7	2402.87	1949.59
2225.45	27788.3	2406.72	1907.22
2229.3	29010.7	2410.58	1893.47
2233.16	26997.5	2414.44	1880.69
2237.02	24214.1	2418.29	1879.32
2240.87	22202.8	2422.15	1894.39
2244.73	19349.5	2426.01	1902.94
2248.59	16987.8	2429.86	1912.67
2252.45	13512.9	2433.72	1931.02
2256.3	10061.7	2437.58	1921.72
2260.16	7722.35	2441.43	1906.77
2264.02	5996.06	2445.29	1881.78
2267.87	5097.8	2449.15	1831.56
2271.73	4635.87	2453.01	1768.33
2275.59	4238.4	2456.86	1703.68
2279.44	4083.11	2460.72	1655.14
2283.3	3974.61	2464.58	1681.83
2287.16	3787.09	2468.43	1712.64
2291.01	3594.18	2472.29	1734.32
2294.87	3487.21	2476.15	1715.64
2298.73	3384.89	2480	1700.2
2302.59	3275.9	2483.86	1644.46
2306.44	3157.44	2487.72	1596.85
2310.3	3036.49	2491.58	1542.95
2314.16	2846.8	2495.43	1484.6
2318.01	2744.05	2499.29	1451.56
2321.87	2619.67	2503.15	1419.75
2325.73	2518.17	2507	1394.44
2329.58	2429.88	2510.86	1379.63
2333.44	2361.34	2514.72	1397.53
2337.3	2289.23	2518.57	1434.17
2341.15	2226.07	2522.43	1481.46

Filename: LMB0011 Type: ON STACK
Subfile: 0570

WN	INT
2526.29	1539.78
2530.14	1575.91
2534	1634.48
2537.86	1702.69
2541.72	1748.01
2545.57	1747.2
2549.43	1733.79
2553.29	1701.51
2557.14	1625.22
2561	1522.03
2564.86	1457.39
2568.71	1618.54
2572.57	1684.22
2576.43	1705.82
2580.28	1684.26
2584.14	1665.74
2588	1582.09
2591.86	1420.99
2595.71	1331.77
2599.57	1210.18
2603.43	1134.39
2607.28	939.572
2611.14	981.277
2615	942.824
2618.85	891.217
2622.71	791.153
2626.57	833.67
2630.42	831.24
2634.28	818.409
2638.14	729.504
2642	747.378
2645.85	772.474
2649.71	709.004
2653.57	726.522
2657.42	674.744
2661.28	678.288
2665.14	667.466
2668.99	715.789
2672.85	645.027
2676.71	608.39
2680.56	631.972
2684.42	658.575
2688.28	634.374
2692.14	611.108
2695.99	583.786
2699.85	610.152
2703.71	590.885

WN	INT
2707.56	536.867
2711.42	530.965
2715.28	490.525
2719.13	478.588
2722.99	455.471
2726.85	491.113
2730.71	490.063
2734.56	531.944
2738.42	472.723
2742.28	498.762
2746.13	512.33
2749.99	486.526
2753.85	452.487
2757.7	438.18
2761.56	482.204
2765.42	431.33
2769.27	409.49
2773.13	417.618
2776.99	394.352
2780.85	412.683
2784.7	381.854
2788.56	356.712
2792.42	384.176
2796.27	401.255
2800.13	335.393


ABSORBANCE
LMB0125
Absorbance (A.U.)
0.12
0.10
0.08
0.06
0.04
0.02
0.00
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900
Wavenumber (cm-1)

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Subfile: 0400

WN	ABS
1800.22	0.0001106
1801.18	0.0001937
1802.15	-0.0001518
1803.11	0.0000689
1804.08	0.0001283
1805.04	0.0002891
1806	0.000256
1806.97	0.0002876
1807.93	0.0000449
1808.9	0.0000727
1809.86	0.0002965
1810.83	0.0002787
1811.79	0.0002022
1812.75	0.0001451
1813.72	0.0002036
1814.68	0.0005515
1815.65	0.000228
1816.61	0.001134
1817.58	0.000096
1818.54	0.000909
1819.5	-0.0000105
1820.47	0.000842
1821.43	-0.0000894
1822.4	-0.0000285
1823.36	-0.0001269
1824.32	-0.0000251
1825.29	-0.0002706
1826.25	-0.0000911
1827.22	-0.0000208
1828.18	0.0000281
1829.15	-0.0001995
1830.11	-0.0002715
1831.07	-0.0000213
1832.04	0.0001108
1833	0.0000148
1833.97	0.0002357
1834.93	-0.0000756
1835.9	0.0002931
1836.86	0.0000528
1837.82	0.0001708
1838.79	0.0001957
1839.75	0.0002706
1840.72	0.0001531
1841.68	0.0001132
1842.65	0.000144
1843.61	0.0000152
1844.57	0.0006073

WN	ABS
1845.54	0.0002653
1846.5	0.0001858
1847.47	0.0001633
1848.43	0.0002048
1849.39	0.0005482
1850.36	0.0020141
1851.32	0.0003541
1852.29	0.0002195
1853.25	0.0016575
1854.22	0.0016962
1855.18	0.0008142
1856.14	0.0010828
1857.11	0.0028571
1858.07	0.0000179
1859.04	0.0002942
1860	0.0009062
1860.97	0.0009479
1861.93	0.0004139
1862.89	0.0004558
1863.86	0.0012031
1864.82	0.0004258
1865.79	0.0003165
1866.75	0.0003787
1867.72	0.0003546
1868.68	0.0003603
1869.64	0.0005109
1870.61	0.0003784
1871.57	0.0003231
1872.54	0.0004666
1873.5	0.0005625
1874.46	0.0008786
1875.43	0.0025408
1876.39	0.0010005
1877.36	0.0004433
1878.32	0.0005616
1879.29	0.0006846
1880.25	0.0017813
1881.21	0.002014
1882.18	0.0006124
1883.14	0.0006343
1884.11	0.0005834
1885.07	0.0005325
1886.04	0.0007485
1887	0.000706
1887.96	0.0012043
1888.93	0.0007341
1889.89	0.0011298

WN	ABS
1890.86	0.0008349
1891.82	0.0008089
1892.79	0.000879
1893.75	0.0011681
1894.71	0.0006196
1895.68	0.000769
1896.64	0.0014917
1897.61	0.0017329
1898.57	0.0008091
1899.54	0.0009048
1900.5	0.0079951
1901.46	0.0007354
1902.43	0.0008016
1903.39	0.0068233
1904.36	0.0007529
1905.32	0.0009164
1906.28	0.0052332
1907.25	0.0012824
1908.21	0.001025
1909.18	0.0010311
1910.14	0.0009963
1911.11	0.0009084
1912.07	0.0038015
1913.03	0.0030656
1914	0.0010111
1914.96	0.0032266
1915.93	0.001427
1916.89	0.0005431
1917.86	0.0006928
1918.82	0.0005934
1919.78	0.0006465
1920.75	0.0015414
1921.71	0.0005213
1922.68	0.000576
1923.64	0.0004682
1924.61	0.0010813
1925.57	0.0003845
1926.53	0.0040196
1927.5	0.0037113
1928.46	0.0008571
1929.43	0.0035596
1930.39	0.0038259
1931.35	0.0023996
1932.32	0.0019269
1933.28	0.0016487
1934.25	0.0037102
1935.21	0.0016057

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WN	ABS	WN	ABS	WN	ABS
1936.18	0.0008381	1981.49	0.0006018	2026.81	0.0002961
1937.14	0.0031739	1982.46	0.0003454	2027.78	0.0002821
1938.1	0.0024174	1983.42	0.0002522	2028.74	0.0004111
1939.07	0.0005856	1984.39	0.0003241	2029.71	0.0003638
1940.03	0.0015812	1985.35	0.0002268	2030.67	0.0004122
1941	0.0011301	1986.32	0.0002595	2031.64	0.0004077
1941.96	0.0007976	1987.28	0.0002544	2032.6	0.0004214
1942.93	0.0009307	1988.24	0.0001376	2033.56	0.0005053
1943.89	0.0006469	1989.21	0.0002349	2034.53	0.0005773
1944.85	0.0008167	1990.17	0.0002727	2035.49	0.0004623
1945.82	0.0005462	1991.14	0.0002254	2036.46	0.0005471
1946.78	0.0005925	1992.1	0.0001867	2037.42	0.0006017
1947.75	0.0006374	1993.07	0.000187	2038.38	0.0004971
1948.71	0.0013589	1994.03	0.0002993	2039.35	0.0005329
1949.68	0.0017827	1994.99	0.0003315	2040.31	0.0005886
1950.64	0.0009433	1995.96	0.0003226	2041.28	0.0004909
1951.6	0.0004942	1996.92	0.0003749	2042.24	0.0005816
1952.57	0.0006259	1997.89	0.0003228	2043.21	0.0005279
1953.53	0.0010253	1998.85	0.0003106	2044.17	0.0004526
1954.5	0.0008769	1999.82	0.000389	2045.13	0.0004324
1955.46	0.0005203	2000.78	0.0005009	2046.1	0.0004844
1956.42	0.0005728	2001.74	0.0003245	2047.06	0.0005587
1957.39	0.0004875	2002.71	0.0003439	2048.03	0.0004115
1958.35	0.000654	2003.67	0.0003845	2048.99	0.0004346
1959.32	0.0008272	2004.64	0.0003938	2049.96	0.0004018
1960.28	0.0006589	2005.6	0.00046	2050.92	0.0004788
1961.25	0.0003384	2006.56	0.0004208	2051.88	0.0004961
1962.21	0.0004764	2007.53	0.0004387	2052.85	0.0004159
1963.17	0.0004788	2008.49	0.0004575	2053.81	0.0004742
1964.14	0.000399	2009.46	0.0003897	2054.78	0.0003521
1965.1	0.0005288	2010.42	0.0003695	2055.74	0.0003515
1966.07	0.0004225	2011.39	0.0003565	2056.7	0.0003585
1967.03	0.0003158	2012.35	0.0004592	2057.67	0.0004074
1968	0.0003594	2013.31	0.000333	2058.63	0.0004398
1968.96	0.0005028	2014.28	0.000361	2059.6	0.0004394
1969.92	0.0005901	2015.24	0.0003946	2060.56	0.0004112
1970.89	0.0003884	2016.21	0.0003641	2061.53	0.0005093
1971.85	0.0004114	2017.17	0.0002807	2062.49	0.0004661
1972.82	0.0003881	2018.14	0.0003436	2063.45	0.0004916
1973.78	0.0003946	2019.1	0.000307	2064.42	0.0005956
1974.75	0.000381	2020.06	0.0003622	2065.38	0.0006
1975.71	0.0005077	2021.03	0.0003372	2066.35	0.0006497
1976.67	0.0002901	2021.99	0.0003381	2067.31	0.000592
1977.64	0.0003085	2022.96	0.0004017	2068.27	0.0005847
1978.6	0.0002666	2023.92	0.0003571	2069.24	0.0005798
1979.57	0.0002869	2024.89	0.0003645	2070.2	0.0006528
1980.53	0.0002549	2025.85	0.0004664	2071.17	0.0006195

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WN	ABS
2072.13	0.0006872
2073.09	0.0006991
2074.06	0.0006747
2075.02	0.0006673
2075.99	0.0007007
2076.95	0.0008094
2077.92	0.0007876
2078.88	0.0007608
2079.84	0.0006848
2080.81	0.0006065
2081.77	0.0006793
2082.74	0.0006015
2083.7	0.0006416
2084.66	0.000632
2085.63	0.0006311
2086.59	0.0006784
2087.56	0.0007676
2088.52	0.0006541
2089.48	0.0008035
2090.45	0.0007131
2091.41	0.0006981
2092.38	0.0007954
2093.34	0.0009063
2094.31	0.0008115
2095.27	0.0009553
2096.23	0.0008908
2097.2	0.0009826
2098.16	0.0009642
2099.13	0.0010812
2100.09	0.0012046
2101.05	0.0011327
2102.02	0.0012372
2102.98	0.001334
2103.95	0.001399
2104.91	0.001463
2105.87	0.0015152
2106.84	0.0014988
2107.8	0.0016444
2108.77	0.0016041
2109.73	0.0017322
2110.69	0.0018235
2111.66	0.0018416
2112.62	0.001932
2113.59	0.0020029
2114.55	0.0021425
2115.52	0.0020766
2116.48	0.0022409

WN	ABS
2117.44	0.0022866
2118.41	0.0025648
2119.37	0.0025272
2120.34	0.002662
2121.3	0.0028821
2122.26	0.0030739
2123.23	0.003312
2124.19	0.0036598
2125.16	0.0034197
2126.12	0.0036994
2127.08	0.0042029
2128.05	0.0046644
2129.01	0.0051133
2129.98	0.0056248
2130.94	0.0062714
2131.91	0.0062103
2132.87	0.0063294
2133.83	0.0069135
2134.8	0.0079411
2135.76	0.0080905
2136.73	0.0082159
2137.69	0.0081473
2138.65	0.009762
2139.62	0.0092213
2140.58	0.0114131
2141.55	0.0119168
2142.51	0.0141021
2143.47	0.0162509
2144.44	0.0148777
2145.4	0.0127642
2146.37	0.0179089
2147.33	0.017941
2148.3	0.0191922
2149.26	0.0186268
2150.22	0.0231893
2151.19	0.027192
2152.15	0.0272297
2153.12	0.0265468
2154.08	0.0287794
2155.04	0.0311279
2156.01	0.0344638
2156.97	0.0367603
2157.94	0.0406251
2158.9	0.0409665
2159.86	0.0373925
2160.83	0.0406194
2161.79	0.0402425

WN	ABS
2162.76	0.0596892
2163.72	0.0536266
2164.69	0.0449571
2165.65	0.0452549
2166.61	0.0633823
2167.58	0.0799328
2168.54	0.0832607
2169.51	0.0736624
2170.47	0.0698938
2171.43	0.0698503
2172.4	0.0797031
2173.36	0.0832182
2174.33	0.0822749
2175.29	0.0860995
2176.25	0.100647
2177.22	0.115412
2178.18	0.110842
2179.15	0.0943683
2180.11	0.0839988
2181.08	0.0748116
2182.04	0.0840406
2183	0.0959996
2183.97	0.110999
2184.93	0.112402
2185.9	0.115323
2186.86	0.091867
2187.82	0.105303
2188.79	0.106102
2189.75	0.105184
2190.72	0.108652
2191.68	0.10771
2192.64	0.108419
2193.61	0.111926
2194.57	0.11269
2195.54	0.119587
2196.5	0.115119
2197.46	0.113941
2198.43	0.110906
2199.39	0.108456
2200.36	0.0981015
2201.32	0.103783
2202.29	0.105207
2203.25	0.106885
2204.21	0.109748
2205.18	0.094649
2206.14	0.107635
2207.11	0.105465

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WN	ABS	WN	ABS	WN	ABS
2208.07	0.102682	2253.38	0.0377979	2298.7	0.0017801
2209.03	0.0974234	2254.35	0.0422312	2299.66	0.0014692
2210	0.100669	2255.31	0.032687	2300.62	0.0015936
2210.96	0.101198	2256.28	0.0374392	2301.59	0.001361
2211.93	0.0970177	2257.24	0.0257229	2302.55	0.0015724
2212.89	0.104535	2258.2	0.0294693	2303.52	0.0014391
2213.85	0.105663	2259.17	0.0213528	2304.48	0.0014657
2214.82	0.103426	2260.13	0.0219348	2305.45	0.0012896
2215.78	0.101509	2261.1	0.016874	2306.41	0.0012166
2216.75	0.102243	2262.06	0.0166793	2307.37	0.0014734
2217.71	0.108795	2263.02	0.0120137	2308.34	0.0014432
2218.68	0.105777	2263.99	0.0129141	2309.3	0.001882
2219.64	0.113109	2264.95	0.008989	2310.27	0.0014018
2220.6	0.109334	2265.92	0.0097076	2311.23	0.0022507
2221.57	0.103408	2266.88	0.0074644	2312.19	0.0014528
2222.53	0.103749	2267.85	0.0078759	2313.16	0.0022613
2223.5	0.101043	2268.81	0.0063613	2314.12	0.001496
2224.46	0.105852	2269.77	0.006406	2315.09	0.002194
2225.42	0.105063	2270.74	0.0057476	2316.05	0.0018023
2226.39	0.0930776	2271.7	0.00523	2317.01	0.0020982
2227.35	0.100269	2272.67	0.0054113	2317.98	0.0020099
2228.32	0.105612	2273.63	0.0048114	2318.94	0.0022047
2229.28	0.105133	2274.59	0.0053606	2319.91	0.0020251
2230.24	0.0953226	2275.56	0.0041254	2320.87	0.0023288
2231.21	0.0869917	2276.52	0.0045762	2321.84	0.0022069
2232.17	0.0999888	2277.49	0.0042367	2322.8	0.0026445
2233.14	0.08088	2278.45	0.0039027	2323.76	0.0022674
2234.1	0.0871181	2279.41	0.0043745	2324.73	0.0026486
2235.07	0.0772273	2280.38	0.0034893	2325.69	0.0019179
2236.03	0.0852509	2281.34	0.0046531	2326.66	0.0023595
2236.99	0.0774936	2282.31	0.0038974	2327.62	0.0019676
2237.96	0.0830263	2283.27	0.004686	2328.58	0.002663
2238.92	0.0807387	2284.24	0.0035977	2329.55	0.00194
2239.89	0.0720429	2285.2	0.0042436	2330.51	0.0034253
2240.85	0.0807445	2286.16	0.0033574	2331.48	0.0014903
2241.81	0.058399	2287.13	0.0027665	2332.44	0.003025
2242.78	0.0717639	2288.09	0.0030947	2333.4	0.0014946
2243.74	0.0485158	2289.06	0.0025956	2334.37	0.0028263
2244.71	0.0727516	2290.02	0.0026254	2335.33	0.0016219
2245.67	0.0468358	2290.98	0.0026126	2336.3	0.0023821
2246.63	0.0666074	2291.95	0.0022542	2337.26	0.0016521
2247.6	0.0484092	2292.91	0.0023588	2338.23	0.0016793
2248.56	0.0636951	2293.88	0.0021755	2339.19	0.0022507
2249.53	0.0480596	2294.84	0.0019888	2340.15	0.0016612
2250.49	0.0551873	2295.8	0.0019874	2341.12	0.0032861
2251.46	0.043248	2296.77	0.0017574	2342.08	0.0019981
2252.42	0.0523012	2297.73	0.0016554	2343.05	0.002869

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WN	ABS
2344.01	0.002159
2344.97	0.0019866
2345.94	0.0029035
2346.9	0.0018131
2347.87	0.0026157
2348.83	0.0020249
2349.79	0.0031104
2350.76	0.0021371
2351.72	0.0034987
2352.69	0.0026139
2353.65	0.0024456
2354.61	0.0054971
2355.58	0.0035086
2356.54	0.0033884
2357.51	0.0048537
2358.47	0.002628
2359.44	0.0024001
2360.4	0.0041765
2361.36	0.0039791
2362.33	0.0023313
2363.29	0.0020765
2364.26	0.002589
2365.22	0.0022598
2366.18	0.0015288
2367.15	0.001929
2368.11	0.0022022
2369.08	0.0018188
2370.04	0.0013022
2371.01	0.0012378
2371.97	0.0012488
2372.93	0.0012961
2373.9	0.0017406
2374.86	0.0015673
2375.83	0.0013594
2376.79	0.0011663
2377.75	0.0014298
2378.72	0.0013269
2379.68	0.0012321
2380.65	0.0011318
2381.61	0.0013367
2382.57	0.0013596
2383.54	0.0014292
2384.5	0.0015367
2385.47	0.0018429
2386.43	0.0021539
2387.39	0.0024666
2388.36	0.0028651

WN	ABS
2389.32	0.0031189
2390.29	0.0031767
2391.25	0.0026548
2392.22	0.002169
2393.18	0.0017673
2394.14	0.0014078
2395.11	0.0011368
2396.07	0.0011103
2397.04	0.0011359
2398	0.0010772
2398.96	0.0010295
2399.93	0.0010337
2400.89	0.0009057
2401.86	0.0007792
2402.82	0.0008684
2403.78	0.0008399
2404.75	0.0009887
2405.71	0.0008588
2406.68	0.0007612
2407.64	0.0007742
2408.61	0.0010106
2409.57	0.0009754
2410.53	0.0012128
2411.5	0.0010808
2412.46	0.0010061
2413.43	0.0011386
2414.39	0.0012853
2415.35	0.001397
2416.32	0.0014093
2417.28	0.0014723
2418.25	0.0014769
2419.21	0.0014734
2420.17	0.0016835
2421.14	0.0017279
2422.1	0.0018737
2423.07	0.001916
2424.03	0.0020639
2425	0.0020977
2425.96	0.0021402
2426.92	0.002167
2427.89	0.0023336
2428.85	0.0024502
2429.82	0.0025351
2430.78	0.0026204
2431.74	0.0026912
2432.71	0.0027597
2433.67	0.002765

WN	ABS
2434.64	0.0029302
2435.6	0.0029762
2436.56	0.003016
2437.53	0.0031146
2438.49	0.0032241
2439.46	0.0032047
2440.42	0.003299
2441.39	0.0033236
2442.35	0.0031806
2443.31	0.0033404
2444.28	0.0033045
2445.24	0.0034768
2446.21	0.003361
2447.17	0.0033461
2448.13	0.0033944
2449.1	0.0034353
2450.06	0.0032295
2451.03	0.0030105
2451.99	0.0030158
2452.95	0.0030381
2453.92	0.0028992
2454.88	0.0026626
2455.85	0.0025657
2456.81	0.0024551
2457.78	0.0026313
2458.74	0.0024019
2459.7	0.0019891
2460.67	0.0021545
2461.63	0.0021616
2462.6	0.0022701
2463.56	0.002292
2464.52	0.0023817
2465.49	0.0025722
2466.45	0.0030333
2467.42	0.0028929
2468.38	0.0029587
2469.34	0.0035474
2470.31	0.0032964
2471.27	0.0033948
2472.24	0.0035204
2473.2	0.0035126
2474.16	0.0038002
2475.13	0.0037123
2476.09	0.003605
2477.06	0.0039617
2478.02	0.003907
2478.99	0.0039816

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WN	ABS	WN	ABS	WN	ABS
2479.95	0.0039138	2525.26	0.0040571	2570.58	0.0108299
2480.91	0.0039616	2526.23	0.0044186	2571.54	0.0114955
2481.88	0.0038798	2527.19	0.0051444	2572.5	0.0118259
2482.84	0.0039298	2528.16	0.0062074	2573.47	0.0118385
2483.81	0.0037635	2529.12	0.0069745	2574.43	0.0126369
2484.77	0.0037062	2530.08	0.0076549	2575.4	0.0126986
2485.73	0.0035062	2531.05	0.0081057	2576.36	0.0124706
2486.7	0.0035167	2532.01	0.0078172	2577.32	0.0131824
2487.66	0.0035382	2532.98	0.0073122	2578.29	0.012726
2488.63	0.0032531	2533.94	0.0068677	2579.25	0.0131797
2489.59	0.0030997	2534.9	0.0064397	2580.22	0.0135417
2490.55	0.0030956	2535.87	0.0060919	2581.18	0.0137343
2491.52	0.0030687	2536.83	0.0062297	2582.15	0.0132503
2492.48	0.00299	2537.8	0.0070002	2583.11	0.0137187
2493.45	0.0024908	2538.76	0.0076182	2584.07	0.0136229
2494.41	0.0026377	2539.72	0.0080238	2585.04	0.0129184
2495.38	0.0025386	2540.69	0.0088325	2586	0.0126801
2496.34	0.0024785	2541.65	0.0095438	2586.97	0.0128872
2497.3	0.0021482	2542.62	0.0098784	2587.93	0.0124974
2498.27	0.0022608	2543.58	0.0098918	2588.89	0.0118573
2499.23	0.0023296	2544.54	0.0104552	2589.86	0.0116842
2500.2	0.0021791	2545.51	0.0105423	2590.82	0.0104637
2501.16	0.0018047	2546.47	0.0106291	2591.79	0.0102179
2502.12	0.0018351	2547.44	0.0106012	2592.75	0.0102797
2503.09	0.001872	2548.4	0.0107889	2593.71	0.0091942
2504.05	0.0018779	2549.37	0.0109656	2594.68	0.0087276
2505.02	0.0018829	2550.33	0.0106588	2595.64	0.0085701
2505.98	0.0018895	2551.29	0.0107942	2596.61	0.0076043
2506.94	0.0016845	2552.26	0.010761	2597.57	0.0070536
2507.91	0.0018592	2553.22	0.0106617	2598.54	0.0069508
2508.87	0.0019109	2554.19	0.0103228	2599.5	0.0066461
2509.84	0.0023263	2555.15	0.0103498	2600.46	0.0060125
2510.8	0.0022044	2556.11	0.0098346	2601.43	0.0059885
2511.77	0.0020787	2557.08	0.0093162	2602.39	0.0056733
2512.73	0.0019772	2558.04	0.0089731	2603.36	0.0048012
2513.69	0.0021334	2559.01	0.0085609	2604.32	0.0051316
2514.66	0.002629	2559.97	0.008375	2605.28	0.0043476
2515.62	0.003254	2560.94	0.0074685	2606.25	0.0038033
2516.59	0.0032337	2561.9	0.007378	2607.21	0.0037614
2517.55	0.0029226	2562.86	0.0069507	2608.18	0.0035789
2518.51	0.0027575	2563.83	0.0069233	2609.14	0.0032864
2519.48	0.002855	2564.79	0.0073761	2610.1	0.0034663
2520.44	0.0039268	2565.76	0.0082072	2611.07	0.0030759
2521.41	0.0045447	2566.72	0.0083867	2612.03	0.0024027
2522.37	0.0050254	2567.68	0.0090257	2613	0.0025465
2523.33	0.0050426	2568.65	0.0100521	2613.96	0.0027027
2524.3	0.00438	2569.61	0.0105208	2614.93	0.0022386

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WN	ABS
2615.89	0.0021393
2616.85	0.0022932
2617.82	0.0020166
2618.78	0.001854
2619.75	0.0017052
2620.71	0.0018429
2621.67	0.0011373
2622.64	0.0013205
2623.6	0.0014364
2624.57	0.0012458
2625.53	0.0012041
2626.49	0.0014276
2627.46	0.0009481
2628.42	0.0009715
2629.39	0.001033
2630.35	0.000925
2631.31	0.0009629
2632.28	0.0009784
2633.24	0.0010925
2634.21	0.001029
2635.17	0.0006689
2636.14	0.0008967
2637.1	0.0009266
2638.06	0.0006433
2639.03	0.0007911
2639.99	0.0010256
2640.96	0.0006651
2641.92	0.0008476
2642.88	0.0009043
2643.85	0.0006107
2644.81	0.0009856
2645.78	0.0009705
2646.74	0.0006417
2647.7	0.0015551
2648.67	0.0011711
2649.63	0.0008745
2650.6	0.0015557
2651.56	0.0005586
2652.53	0.0011514
2653.49	0.0012428
2654.45	0.0007329
2655.42	0.0011232
2656.38	0.0012495
2657.35	0.0007185
2658.31	0.0010928
2659.27	0.0007999
2660.24	0.0006633

WN	ABS
2661.2	0.0012302
2662.17	0.000885
2663.13	0.0007301
2664.09	0.0010583
2665.06	0.0005247
2666.02	0.0006198
2666.99	0.0009204
2667.95	0.0006435
2668.92	0.0008355
2669.88	0.0005669
2670.84	0.0006848
2671.81	0.0005955
2672.77	0.0001941
2673.74	0.0005171
2674.7	0.0005254
2675.66	0.0008462
2676.63	0.0005058
2677.59	0.0009853
2678.56	0.0008801
2679.52	0.0006037
2680.48	0.0008168
2681.45	0.0007833
2682.41	0.0010789
2683.38	0.0009808
2684.34	0.0005356
2685.31	0.0013029
2686.27	0.0008079
2687.23	0.0011779
2688.2	0.0010191
2689.16	0.0007385
2690.13	0.0010865
2691.09	0.0006896
2692.05	0.0009924
2693.02	0.0009291
2693.98	0.001242
2694.95	0.0009495
2695.91	0.0006645
2696.87	0.0011369
2697.84	0.0008359
2698.8	0.0005135
2699.77	0.0009102
2700.73	0.0003794
2701.7	0.0010354
2702.66	0.0007041
2703.62	0.0006518
2704.59	0.001047
2705.55	0.000709

WN	ABS
2706.52	0.0009558
2707.48	0.0007319
2708.44	0.0008332
2709.41	0.0010964
2710.37	0.0006655
2711.34	0.001077
2712.3	0.0006541
2713.26	0.0011797
2714.23	0.0011006
2715.19	0.0009453
2716.16	0.0014912
2717.12	0.0008969
2718.09	0.0013604
2719.05	0.0010488
2720.01	0.001062
2720.98	0.0009726
2721.94	0.0015052
2722.91	0.0010012
2723.87	0.0014709
2724.83	0.0013412
2725.8	0.0013597
2726.76	0.0009751
2727.73	0.0010279
2728.69	0.0015646
2729.65	0.0011145
2730.62	0.001127
2731.58	0.0008136
2732.55	0.0009509
2733.51	0.001128
2734.47	0.001153
2735.44	0.0009275
2736.4	0.0009195
2737.37	0.0013324
2738.33	0.0013076
2739.3	0.0010748
2740.26	0.0021248
2741.22	0.0010751
2742.19	0.0009913
2743.15	0.0018548
2744.12	0.0013917
2745.08	0.0017192
2746.04	0.0016639
2747.01	0.0016697
2747.97	0.0014442
2748.94	0.0018362
2749.9	0.001937
2750.86	0.0014669

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WN	ABS
2751.83	0.0020069
2752.79	0.0015665
2753.76	0.0015198
2754.72	0.0017394
2755.69	0.0019869
2756.65	0.0009707
2757.61	0.0013653
2758.58	0.0015171
2759.54	0.0014767
2760.51	0.0022006
2761.47	0.0011648
2762.43	0.0016388
2763.4	0.0010797
2764.36	0.0012459
2765.33	0.0013752
2766.29	0.00133
2767.25	0.0014437
2768.22	0.0011166
2769.18	0.0022676
2770.15	0.001443
2771.11	0.0017609
2772.08	0.0014641
2773.04	0.0020576
2774	0.0018469
2774.97	0.0016359
2775.93	0.0020821
2776.9	0.0013484
2777.86	0.0020097
2778.82	0.0015053
2779.79	0.0015814
2780.75	0.0031177
2781.72	0.0022456
2782.68	0.0025807
2783.64	0.0026121
2784.61	0.002226
2785.57	0.0010823
2786.54	0.0019405
2787.5	0.0017193
2788.47	0.0018702
2789.43	0.0017695
2790.39	0.0021199
2791.36	0.0025107
2792.32	0.0019103
2793.29	0.0027799
2794.25	0.0027012
2795.21	0.0032693
2796.18	0.0039184
2797.14	0.0046493
2798.11	0.004615
2799.07	0.0014332
2800.03	0.0014237

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Subfile: 0001

WN	INT
1800.22	1937.67
1801.18	1890.15
1802.15	2005.07
1803.11	2125.14
1804.08	2138.19
1805.04	2184.48
1806	2237.05
1806.97	2296.18
1807.93	2363.54
1808.9	2441.18
1809.86	2469.13
1810.83	2409.73
1811.79	2618.74
1812.75	2728.03
1813.72	2804.48
1814.68	2883.77
1815.65	2976.52
1816.61	3068.08
1817.58	3099.21
1818.54	3251.87
1819.5	3356.91
1820.47	3476.92
1821.43	3591.99
1822.4	3742.56
1823.36	3895.47
1824.32	3983.69
1825.29	3529.86
1826.25	4381.81
1827.22	4492.06
1828.18	4624.96
1829.15	4503.43
1830.11	4265.42
1831.07	5415.26
1832.04	5532.54
1833	5708.04
1833.97	5931.14
1834.93	6150.36
1835.9	6358.73
1836.86	6529.29
1837.82	6830.45
1838.79	6999.78
1839.75	7197.99
1840.72	7405.39
1841.68	7604.63
1842.65	7815.1
1843.61	7890.48
1844.57	6345.4

WN	INT
1845.54	8212.57
1846.5	8419.5
1847.47	8494.69
1848.43	8838.58
1849.39	8967.21
1850.36	9065.25
1851.32	9199.15
1852.29	9373.37
1853.25	9418.83
1854.22	9534.2
1855.18	9602.05
1856.14	9728.37
1857.11	9799.27
1858.07	9928.49
1859.04	10016.5
1860	10090.5
1860.97	10143.8
1861.93	10192.9
1862.89	10241.8
1863.86	10298
1864.82	10355.1
1865.79	10409.2
1866.75	10264.9
1867.72	9944.29
1868.68	10666.8
1869.64	9194.06
1870.61	10470.7
1871.57	10566.9
1872.54	10576.8
1873.5	10571.5
1874.46	10584.7
1875.43	10569
1876.39	10634.9
1877.36	10589.9
1878.32	10568.8
1879.29	10660.8
1880.25	10634.9
1881.21	10598.5
1882.18	10622.1
1883.14	10663.7
1884.11	10739.3
1885.07	10774.6
1886.04	10732.5
1887	10720.1
1887.96	10773.2
1888.93	10795
1889.89	9991.59

WN	INT
1890.86	10689.4
1891.82	10681.6
1892.79	10678.6
1893.75	10682.1
1894.71	10690.3
1895.68	10693.3
1896.64	10699
1897.61	10706.3
1898.57	10630.2
1899.54	10579.1
1900.5	10560.9
1901.46	10627.6
1902.43	10601
1903.39	10589.8
1904.36	10653.2
1905.32	10574.6
1906.28	10555.6
1907.25	10600.4
1908.21	10548.3
1909.18	10591.3
1910.14	10344.5
1911.11	10537.9
1912.07	10474.4
1913.03	10418
1914	10410.4
1914.96	10393.2
1915.93	10390.6
1916.89	10253.4
1917.86	9352.8
1918.82	10648.5
1919.78	10495
1920.75	10415.7
1921.71	10380.4
1922.68	10221.1
1923.64	10256.4
1924.61	10275.2
1925.57	10219.8
1926.53	10156.2
1927.5	10123.4
1928.46	10058.2
1929.43	10016.1
1930.39	9964.71
1931.35	9974.17
1932.32	10082.3
1933.28	10125
1934.25	9977.2
1935.21	9941.89

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WN	INT
1936.18	9883.41
1937.14	9942.87
1938.1	9934.01
1939.07	9947.93
1940.03	9946.92
1941	9986.64
1941.96	9955.62
1942.93	9446.25
1943.89	9892.48
1944.85	9868.2
1945.82	9892.66
1946.78	9884.85
1947.75	9756.81
1948.71	9682.98
1949.68	9718.33
1950.64	9601.76
1951.6	9570.28
1952.57	9501.01
1953.53	9526.87
1954.5	9636.13
1955.46	9650.98
1956.42	9603.67
1957.39	9527.01
1958.35	9381.62
1959.32	9330.41
1960.28	9369.54
1961.25	9522.12
1962.21	9358.11
1963.17	9258.35
1964.14	9269.98
1965.1	9287.58
1966.07	9295.96
1967.03	9282.45
1968	9325.98
1968.96	9239.01
1969.92	9127.9
1970.89	9010.21
1971.85	8931.06
1972.82	8851.12
1973.78	8759.89
1974.75	8735.04
1975.71	8874.53
1976.67	8928.75
1977.64	8761.11
1978.6	8553.18
1979.57	8528.39
1980.53	8661.75

WN	INT
1981.49	8673.94
1982.46	8572.72
1983.42	8577.21
1984.39	8671.23
1985.35	8615.93
1986.32	8679.28
1987.28	8772.9
1988.24	8747.42
1989.21	8776.91
1990.17	8709.65
1991.14	8721.76
1992.1	8329.29
1993.07	8667.74
1994.03	8583.21
1994.99	8478.15
1995.96	8389.16
1996.92	8333.77
1997.89	8376.67
1998.85	8535.91
1999.82	8377.95
2000.78	8181.48
2001.74	8000.84
2002.71	7941.89
2003.67	7954.2
2004.64	7836.69
2005.6	8027.92
2006.56	7938.81
2007.53	8264.46
2008.49	8137.94
2009.46	8192.64
2010.42	7863.49
2011.39	7814.96
2012.35	7772.43
2013.31	7784.46
2014.28	7840.02
2015.24	7919.9
2016.21	7990.98
2017.17	7915.54
2018.14	7912.44
2019.1	7906.97
2020.06	7841.22
2021.03	7672.87
2021.99	7612.32
2022.96	7799.06
2023.92	7596.58
2024.89	7362.14
2025.85	7458.83

WN	INT
2026.81	7687.6
2027.78	7367.34
2028.74	7054.57
2029.71	7000.91
2030.67	6874.9
2031.64	6749.88
2032.6	6864.3
2033.56	6952.93
2034.53	7103.54
2035.49	6917.23
2036.46	6826.52
2037.42	7242.12
2038.38	7037.87
2039.35	6969.5
2040.31	7170.41
2041.28	7194.91
2042.24	7137.35
2043.21	7068.44
2044.17	7141.81
2045.13	6844.84
2046.1	6899.6
2047.06	6893.06
2048.03	6521.29
2048.99	6637.98
2049.96	6323.14
2050.92	6493.72
2051.88	6491.42
2052.85	6297.5
2053.81	6530.7
2054.78	6324.25
2055.74	6175.4
2056.7	6377.64
2057.67	6102.09
2058.63	6398.44
2059.6	6481.86
2060.56	6683.4
2061.53	6451.33
2062.49	6364.82
2063.45	6394.65
2064.42	6533.67
2065.38	6568.23
2066.35	6532.75
2067.31	6352.64
2068.27	6048.33
2069.24	6079.38
2070.2	5821.56
2071.17	5773.85

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WN	INT
2072.13	6083.21
2073.09	6111.35
2074.06	6306.41
2075.02	6032.56
2075.99	5777.31
2076.95	6067.5
2077.92	6075.36
2078.88	6133.89
2079.84	5766.01
2080.81	5594.75
2081.77	5934.46
2082.74	5483.71
2083.7	5382.36
2084.66	5232.44
2085.63	5491.5
2086.59	5621.24
2087.56	5881.64
2088.52	5612.62
2089.48	5829.89
2090.45	5910.57
2091.41	5589.65
2092.38	5426.7
2093.34	5514.1
2094.31	5266.05
2095.27	5472.86
2096.23	5040.12
2097.2	5459.38
2098.16	5100.98
2099.13	5143.92
2100.09	5351.2
2101.05	5211.02
2102.02	4816.76
2102.98	4981.64
2103.95	4720.78
2104.91	4673.84
2105.87	5222.36
2106.84	5117.41
2107.8	5158.35
2108.77	4726.35
2109.73	4546.93
2110.69	4604
2111.66	4925.14
2112.62	4548.2
2113.59	4821.71
2114.55	5241.99
2115.52	5224.71
2116.48	5025.59

WN	INT
2117.44	4503.64
2118.41	4437.28
2119.37	4661.37
2120.34	4413.6
2121.3	4908.61
2122.26	4626.37
2123.23	4616.17
2124.19	4830.63
2125.16	4851.42
2126.12	4360.79
2127.08	4325.21
2128.05	4434.14
2129.01	4444.41
2129.98	4442.12
2130.94	4153.02
2131.91	4435.08
2132.87	4138.4
2133.83	4138.01
2134.8	4211.8
2135.76	4690.33
2136.73	4729.66
2137.69	4711.2
2138.65	4600.45
2139.62	4829.35
2140.58	4227.32
2141.55	4234.72
2142.51	4301.29
2143.47	4043.15
2144.44	4244.21
2145.4	4673.76
2146.37	4229.39
2147.33	4544.87
2148.3	4395.17
2149.26	4030.43
2150.22	3853.02
2151.19	4307.11
2152.15	4206.8
2153.12	4199.43
2154.08	3886.72
2155.04	4145.4
2156.01	3922.99
2156.97	4216.46
2157.94	4052.57
2158.9	3887.03
2159.86	3891.65
2160.83	4098.75
2161.79	4397.81

WN	INT
2162.76	4112.99
2163.72	4118.64
2164.69	3684.56
2165.65	3987.71
2166.61	3731.64
2167.58	3951.21
2168.54	3733.17
2169.51	3917.77
2170.47	3704.4
2171.43	4077.57
2172.4	3953.44
2173.36	3759.89
2174.33	3718.91
2175.29	3891.12
2176.25	4013.7
2177.22	3862.03
2178.18	3833.47
2179.15	3908.28
2180.11	3896.05
2181.08	3899.28
2182.04	3795.53
2183	3901.89
2183.97	3866.88
2184.93	4005.28
2185.9	3869.11
2186.86	4045.97
2187.82	3868.77
2188.79	3803.04
2189.75	3943.6
2190.72	3910.58
2191.68	3933.17
2192.64	3939.33
2193.61	3992.65
2194.57	4013.71
2195.54	3941.51
2196.5	3906.77
2197.46	3849.86
2198.43	3857.2
2199.39	3797.29
2200.36	3903.81
2201.32	3791.74
2202.29	3836.41
2203.25	3873.93
2204.21	3829.72
2205.18	3894.87
2206.14	3844.26
2207.11	3850.82

Filename LMB0125 Type: OFF STACK
Subfile: 0001

WN	INT
2208.07	3816.15
2209.03	3884.21
2210	3871.57
2210.96	3805.71
2211.93	3833.13
2212.89	3808.92
2213.85	3774.2
2214.82	3741.48
2215.78	3706.21
2216.75	3670.81
2217.71	3653.93
2218.68	3666.56
2219.64	3612.09
2220.6	3619.72
2221.57	3615.65
2222.53	3541.95
2223.5	3491.58
2224.46	3535.08
2225.42	3546.07
2226.39	3563.61
2227.35	3598.62
2228.32	3586.47
2229.28	3544.3
2230.24	3513.3
2231.21	3523.68
2232.17	3490.38
2233.14	3503.71
2234.1	3466.61
2235.07	3515.83
2236.03	3499.49
2236.99	3521.89
2237.96	3505.16
2238.92	3470.61
2239.89	3461.21
2240.85	3442.92
2241.81	3422.2
2242.78	3401.32
2243.74	3434.72
2244.71	3376.56
2245.67	3383.77
2246.63	3362.72
2247.6	3359.76
2248.56	3362.96
2249.53	3364.76
2250.49	3305.42
2251.46	3342.9
2252.42	3319.77

WN	INT
2253.38	3327.33
2254.35	3260.76
2255.31	3261.6
2256.28	3221.16
2257.24	3213.17
2258.2	3217.9
2259.17	3220.95
2260.13	3198.33
2261.1	3184.71
2262.06	3167.75
2263.02	3204.44
2263.99	3162.83
2264.95	3176.48
2265.92	3121.84
2266.88	3133.06
2267.85	3121.66
2268.81	3137.8
2269.77	3120.4
2270.74	3098.41
2271.7	3113.25
2272.67	3071.94
2273.63	3042.68
2274.59	3021.91
2275.56	3036.34
2276.52	3023.15
2277.49	3029.15
2278.45	3006.59
2279.41	2987.24
2280.38	2988.02
2281.34	2944.46
2282.31	2934.31
2283.27	2918.27
2284.24	2924.05
2285.2	2914.76
2286.16	2909.79
2287.13	2912.02
2288.09	2865.22
2289.06	2853.19
2290.02	2819.51
2290.98	2804.85
2291.95	2817.94
2292.91	2793.64
2293.88	2785.69
2294.84	2803.13
2295.8	2750.4
2296.77	2758.61
2297.73	2744.09

WN	INT
2298.7	2712.51
2299.66	2714.19
2300.62	2676.58
2301.59	2688.79
2302.55	2629.78
2303.52	2645.51
2304.48	2599.82
2305.45	2647.35
2306.41	2599.68
2307.37	2567.56
2308.34	2546.99
2309.3	2490.76
2310.27	2512.05
2311.23	2343.36
2312.19	2436.55
2313.16	2241.39
2314.12	2421.58
2315.09	2206.28
2316.05	2384.32
2317.01	2189.62
2317.98	2367.11
2318.94	2138.85
2319.91	2318.34
2320.87	2085.03
2321.84	2270.61
2322.8	2041.02
2323.76	2237.68
2324.73	1983.31
2325.69	2212.68
2326.66	1921.17
2327.62	2186.26
2328.58	1791.21
2329.55	2176.34
2330.51	1700.75
2331.48	2199.84
2332.44	1674.57
2333.4	2146.07
2334.37	1655.52
2335.33	2026.18
2336.3	1753.04
2337.26	1581.3
2338.23	1934.19
2339.19	1667.24
2340.15	2017.92
2341.12	1572.94
2342.08	1978.96
2343.05	1695.79

Filename LMB0125 Type: OFF STACK
Subfile: 0001

WN	INT
2344.01	1817.27
2344.97	1945.22
2345.94	1724.7
2346.9	1971.21
2347.87	1839.6
2348.83	1916.22
2349.79	1828.29
2350.76	1896.96
2351.72	1717.6
2352.69	1706.75
2353.65	1876.04
2354.61	1470.97
2355.58	1619.54
2356.54	1762.13
2357.51	1398.72
2358.47	1555.22
2359.44	1788
2360.4	1431.06
2361.36	1370.87
2362.33	1710.52
2363.29	1645.34
2364.26	1358.24
2365.22	1466.26
2366.18	1736.08
2367.15	1675.84
2368.11	1459.49
2369.08	1429.26
2370.04	1596.31
2371.01	1741.98
2371.97	1773.38
2372.93	1717.38
2373.9	1627.5
2374.86	1624.64
2375.83	1668.23
2376.79	1718.33
2377.75	1741.21
2378.72	1771.51
2379.68	1778.7
2380.65	1792.22
2381.61	1769.98
2382.57	1764.32
2383.54	1786.15
2384.5	1787.09
2385.47	1778.6
2386.43	1759.96
2387.39	1741.32
2388.36	1740.16

WN	INT
2389.32	1742.55
2390.29	1697.15
2391.25	1662.25
2392.22	1628.05
2393.18	1598.71
2394.14	1610.19
2395.11	1594.54
2396.07	1588.35
2397.04	1537.09
2398	1516.06
2398.96	1499.03
2399.93	1507.26
2400.89	1509.95
2401.86	1496.34
2402.82	1460.15
2403.78	1437.35
2404.75	1418.5
2405.71	1437.17
2406.68	1425.65
2407.64	1412.62
2408.61	1381.45
2409.57	1373.02
2410.53	1376.17
2411.5	1377.29
2412.46	1374.31
2413.43	1344.24
2414.39	1336.21
2415.35	1335.6
2416.32	1328.64
2417.28	1320.11
2418.25	1313.09
2419.21	1316.61
2420.17	1308.53
2421.14	1306.61
2422.1	1294.86
2423.07	1265.08
2424.03	1246.87
2425	1260.72
2425.96	1268.16
2426.92	1244.92
2427.89	1219.94
2428.85	1209.81
2429.82	1206.58
2430.78	1216.49
2431.74	1208
2432.71	1178.08
2433.67	1178.75

WN	INT
2434.64	1180.92
2435.6	1172.08
2436.56	1154.16
2437.53	1148.28
2438.49	1136.53
2439.46	1137.6
2440.42	1136.59
2441.39	1122.94
2442.35	1124.62
2443.31	1114.78
2444.28	1118.6
2445.24	1103.32
2446.21	1098.3
2447.17	1088.21
2448.13	1070.46
2449.1	1070.74
2450.06	1063.99
2451.03	1055.67
2451.99	1058.63
2452.95	1038.81
2453.92	1054.47
2454.88	1024.08
2455.85	1016.92
2456.81	1017.74
2457.78	1003.26
2458.74	997.79
2459.7	1001.73
2460.67	990.803
2461.63	981.417
2462.6	978.895
2463.56	971.075
2464.52	974.697
2465.49	974.452
2466.45	940.97
2467.42	960.462
2468.38	965.963
2469.34	917.6
2470.31	955.348
2471.27	951.536
2472.24	939.342
2473.2	935.58
2474.16	915.023
2475.13	918.488
2476.09	923.61
2477.06	902.23
2478.02	909.397
2478.99	905.08

Filename LMB0125 Type: OFF STACK
Subfile: 0001

WN	INT	WN	INT	WN	INT
2479.95	882.516	2525.26	730.341	2570.58	599.138
2480.91	887.611	2526.23	705.741	2571.54	582.383
2481.88	908.771	2527.19	716.574	2572.5	585.426
2482.84	867.56	2528.16	720.643	2573.47	607.367
2483.81	871.445	2529.12	703.302	2574.43	557.097
2484.77	875.297	2530.08	702.726	2575.4	566.842
2485.73	878.137	2531.05	722.85	2576.36	597.523
2486.7	876.394	2532.01	726.726	2577.32	571.903
2487.66	848.214	2532.98	701.217	2578.29	583.141
2488.63	867.263	2533.94	695.007	2579.25	571.523
2489.59	863.531	2534.9	704.058	2580.22	573.33
2490.55	849.574	2535.87	696.691	2581.18	562.515
2491.52	836.652	2536.83	708.591	2582.15	575.658
2492.48	832.138	2537.8	693.664	2583.11	547.653
2493.45	860.81	2538.76	686.765	2584.07	554.703
2494.41	833.391	2539.72	704.076	2585.04	574.814
2495.38	828.579	2540.69	677.286	2586	561.32
2496.34	823.978	2541.65	674.977	2586.97	560.564
2497.3	830.725	2542.62	678.696	2587.93	551.814
2498.27	819.821	2543.58	669.931	2588.89	543.301
2499.23	800.462	2544.54	659.771	2589.86	544.165
2500.2	791.744	2545.51	669.828	2590.82	566.422
2501.16	814.937	2546.47	655.827	2591.79	571.032
2502.12	811.482	2547.44	650.411	2592.75	538.257
2503.09	791.381	2548.4	661.661	2593.71	551.133
2504.05	791.363	2549.37	640.25	2594.68	553.181
2505.02	795.753	2550.33	649.242	2595.64	541.686
2505.98	794.856	2551.29	659.056	2596.61	541.51
2506.94	791.983	2552.26	654.523	2597.57	563.589
2507.91	755.744	2553.22	638.25	2598.54	539.993
2508.87	785.974	2554.19	639.796	2599.5	534.239
2509.84	781.816	2555.15	633.046	2600.46	533.973
2510.8	765.782	2556.11	634.406	2601.43	521.63
2511.77	756.236	2557.08	628.316	2602.39	526.585
2512.73	768.255	2558.04	642.239	2603.36	548.307
2513.69	784.676	2559.01	638.145	2604.32	528.668
2514.66	771.286	2559.97	608.717	2605.28	507.854
2515.62	747.54	2560.94	630.159	2606.25	524.792
2516.59	770.414	2561.9	618.075	2607.21	516.461
2517.55	765.942	2562.86	621.833	2608.18	517.158
2518.51	750.096	2563.83	600.537	2609.14	530.613
2519.48	738.865	2564.79	627.303	2610.1	530.868
2520.44	747.351	2565.76	607.977	2611.07	526.764
2521.41	768.501	2566.72	615.315	2612.03	540.367
2522.37	738.053	2567.68	613.598	2613	522.854
2523.33	723.766	2568.65	591.762	2613.96	513.758
2524.3	748.92	2569.61	586.417	2614.93	532.801

Filename LMB0125 Type: OFF STACK
Subfile: 0001

WN	INT
2615.89	543.374
2616.85	521.933
2617.82	511.945
2618.78	521.477
2619.75	505.364
2620.71	507.481
2621.67	511.715
2622.64	460.736
2623.6	496.27
2624.57	489.832
2625.53	466.161
2626.49	497.635
2627.46	497.421
2628.42	465.179
2629.39	464.624
2630.35	481.563
2631.31	482.419
2632.28	493.415
2633.24	473.468
2634.21	480.881
2635.17	484.134
2636.14	465.628
2637.1	442.375
2638.06	468.687
2639.03	444.425
2639.99	461.508
2640.96	482.623
2641.92	444.091
2642.88	445.561
2643.85	480.166
2644.81	446.612
2645.78	453.399
2646.74	490.447
2647.7	429.765
2648.67	441.33
2649.63	444.335
2650.6	424.758
2651.56	429.632
2652.53	431.361
2653.49	427.173
2654.45	444.427
2655.42	425.334
2656.38	404.272
2657.35	407.933
2658.31	424.2
2659.27	401.091
2660.24	424.963

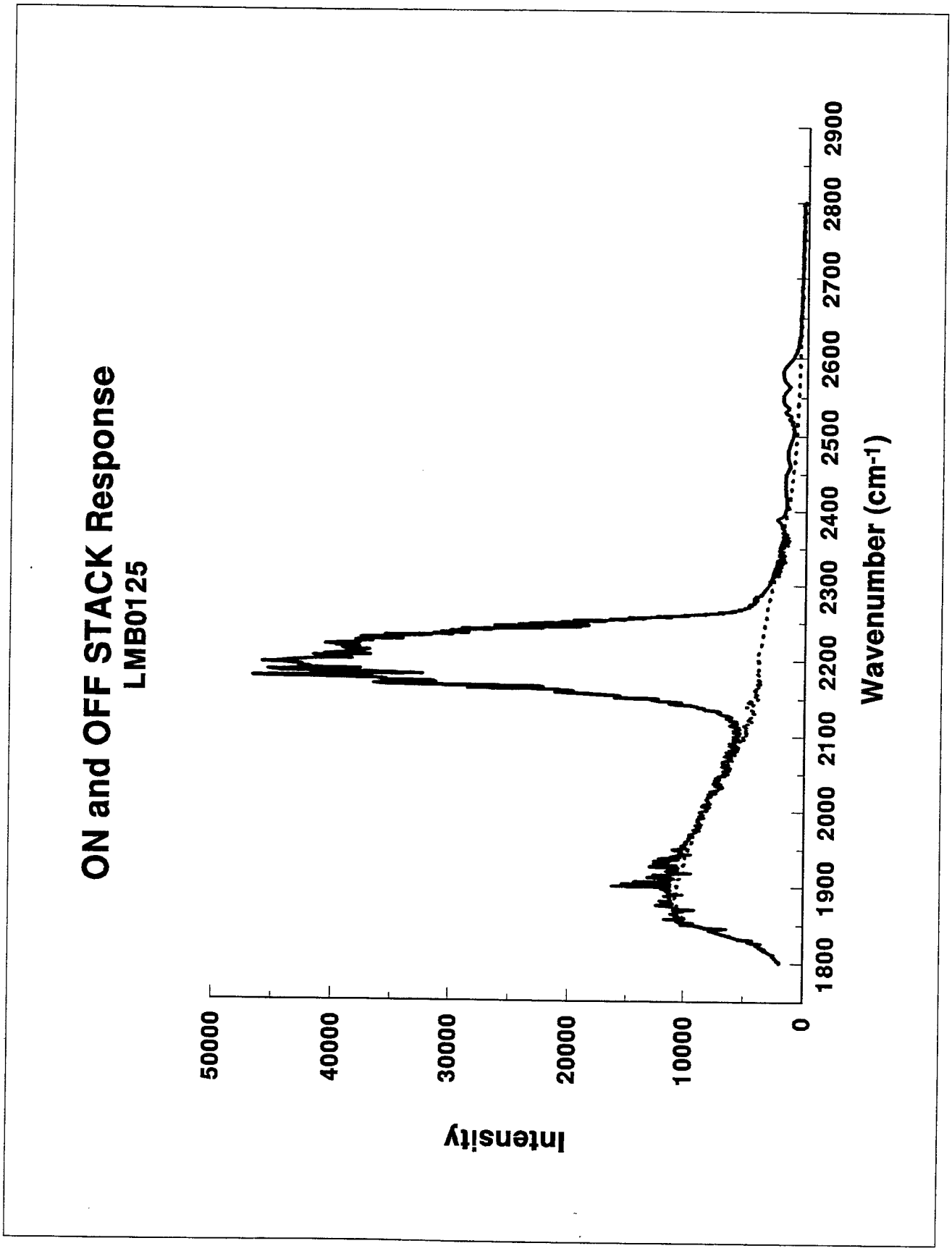
WN	INT
2661.2	406.906
2662.17	423.396
2663.13	406.428
2664.09	394.636
2665.06	411.404
2666.02	398.616
2666.99	389.827
2667.95	423.247
2668.92	414.75
2669.88	406.294
2670.84	411.829
2671.81	413.21
2672.77	406.673
2673.74	427.798
2674.7	395.777
2675.66	385.761
2676.63	379.043
2677.59	358.327
2678.56	387.401
2679.52	407.907
2680.48	363.686
2681.45	392.725
2682.41	380.465
2683.38	388.149
2684.34	424.781
2685.31	382.106
2686.27	390.257
2687.23	374.932
2688.2	371.249
2689.16	395.192
2690.13	345.04
2691.09	397.819
2692.05	370.534
2693.02	341.028
2693.98	359.696
2694.95	318.011
2695.91	344.39
2696.87	346.021
2697.84	347.32
2698.8	368.611
2699.77	347.421
2700.73	374.86
2701.7	347.422
2702.66	341.498
2703.62	357.128
2704.59	326.122
2705.55	362.026

WN	INT
2706.52	340.087
2707.48	333.506
2708.44	323.674
2709.41	317.166
2710.37	329.324
2711.34	300.519
2712.3	329.418
2713.26	325.987
2714.23	328.882
2715.19	308.553
2716.16	299.563
2717.12	308.199
2718.09	299.203
2719.05	302.388
2720.01	288.876
2720.98	300.621
2721.94	287.672
2722.91	305.592
2723.87	280.612
2724.83	298.05
2725.8	286.041
2726.76	283.123
2727.73	302.314
2728.69	309.145
2729.65	281.638
2730.62	287.322
2731.58	312.533
2732.55	290.168
2733.51	303.926
2734.47	315.357
2735.44	309.248
2736.4	300.757
2737.37	283.46
2738.33	274.759
2739.3	269.883
2740.26	270.837
2741.22	291.619
2742.19	287.036
2743.15	292.168
2744.12	272.191
2745.08	282.263
2746.04	288.823
2747.01	277.739
2747.97	287.24
2748.94	294.462
2749.9	274.055
2750.86	263.16

Filename LMB0125 Type: OFF STACK
Subfile: 0001

WN	INT
2751.83	268.875
2752.79	247.13
2753.76	266.901
2754.72	278.502
2755.69	257.981
2756.65	274.951
2757.61	245.411
2758.58	276.92
2759.54	262.252
2760.51	265.599
2761.47	261.388
2762.43	250.257
2763.4	273.768
2764.36	239.54
2765.33	261.5
2766.29	236.92
2767.25	238.405
2768.22	230.884
2769.18	219.171
2770.15	243.899
2771.11	220.19
2772.08	229.636
2773.04	214.259
2774	242.431
2774.97	241.8
2775.93	234.047
2776.9	231.928
2777.86	217.798
2778.82	264.412
2779.79	203.563
2780.75	214.031
2781.72	213.447
2782.68	224.208
2783.64	218.225
2784.61	215.154
2785.57	233.432
2786.54	205.62
2787.5	210.891
2788.47	212.269
2789.43	203.958
2790.39	210.578
2791.36	208.232
2792.32	204.455
2793.29	211.222
2794.25	204.861
2795.21	211.105
2796.18	172.513

WN	INT
2797.14	201.894
2798.11	179.109
2799.07	200.676
2800.03	185.117


ON and OFF STACK Response
LMB0125
Intensity
50000
40000
30000
20000
10000
0
1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900
Wavenumber (cm-1)

Filename LMB0125 Type: ON STACK
Subfile: 0400

WN	INT
1800.22	1948.24
1801.18	1907.53
1802.15	1989.38
1803.11	2133.82
1804.08	2155.11
1805.04	2220.85
1806	2272.89
1806.97	2336.84
1807.93	2368.79
1808.9	2451.79
1809.86	2511.42
1810.83	2436.27
1811.79	2649.83
1812.75	2750.74
1813.72	2839.84
1814.68	2983.04
1815.65	3018.79
1816.61	3283.61
1817.58	3114.85
1818.54	3438.76
1819.5	3354.69
1820.47	3659.18
1821.43	3572.36
1822.4	3736.27
1823.36	3865.78
1824.32	3978.06
1825.29	3495.73
1826.25	4358.74
1827.22	4486.42
1828.18	4632.4
1829.15	4471.81
1830.11	4222.43
1831.07	5408.74
1832.04	5569.98
1833	5713.07
1833.97	6018.89
1834.93	6122
1835.9	6470.16
1836.86	6547.6
1837.82	6900.5
1838.79	7085.08
1839.75	7319.04
1840.72	7474.65
1841.68	7655.04
1842.65	7875.91
1843.61	7895.07
1844.57	6488.51

WN	INT
1845.54	8320.68
1846.5	8513.98
1847.47	8567.02
1848.43	8946.57
1849.39	9280.37
1850.36	10232.2
1851.32	9407.25
1852.29	9501.97
1853.25	10424
1854.22	10571.6
1855.18	10107.8
1856.14	10402.5
1857.11	11609.2
1858.07	9939.83
1859.04	10199.1
1860	10663.2
1860.97	10745.3
1861.93	10453.9
1862.89	10541.7
1863.86	11088.9
1864.82	10638.9
1865.79	10614.8
1866.75	10447.8
1867.72	10089.5
1868.68	10855
1869.64	9376.07
1870.61	10695.4
1871.57	10788
1872.54	10900.2
1873.5	10961.4
1874.46	11196.1
1875.43	12332.1
1876.39	11328.4
1877.36	10899.9
1878.32	10961.3
1879.29	11122.5
1880.25	11890.8
1881.21	12019.6
1882.18	11053.9
1883.14	11110.2
1884.11	11142.2
1885.07	11126.9
1886.04	11259.2
1887	11218
1887.96	11615.2
1888.93	11269.1
1889.89	10476

WN	INT
1890.86	11263.6
1891.82	11248.1
1892.79	11294.5
1893.75	11490.3
1894.71	11102.6
1895.68	11153.9
1896.64	11743.8
1897.61	11912
1898.57	11202.9
1899.54	11223
1900.5	16200.7
1901.46	11147.1
1902.43	11173.8
1903.39	15417.9
1904.36	11155.3
1905.32	11232.6
1906.28	14301.8
1907.25	11516.8
1908.21	11131.7
1909.18	11303.7
1910.14	10817.1
1911.11	11170.9
1912.07	13122.4
1913.03	12564
1914	11117.4
1914.96	12614.7
1915.93	11374.8
1916.89	10613.1
1917.86	9650.3
1918.82	11035.1
1919.78	10944.2
1920.75	11496.3
1921.71	10739.2
1922.68	10521.3
1923.64	10519.8
1924.61	11005.3
1925.57	10483
1926.53	12909.6
1927.5	12667.5
1928.46	10648.8
1929.43	12461.7
1930.39	12596.7
1931.35	11627.7
1932.32	11405.4
1933.28	11196.9
1934.25	12534.4
1935.21	11051.5

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WN	INT
1936.18	10463.8
1937.14	12137.3
1938.1	11606.6
1939.07	10353.4
1940.03	11043.7
1941	10768
1941.96	10447.4
1942.93	9847.03
1943.89	10328
1944.85	10417.6
1945.82	10242.8
1946.78	10256.4
1947.75	10188.5
1948.71	10607.4
1949.68	10928
1950.64	10246.5
1951.6	9907.97
1952.57	9929.13
1953.53	10227.4
1954.5	10232
1955.46	9988.04
1956.42	9987.48
1957.39	9855.16
1958.35	9823.72
1959.32	9890.4
1960.28	9812.89
1961.25	9736.7
1962.21	9679.83
1963.17	9580.44
1964.14	9537.05
1965.1	9637.15
1966.07	9548.47
1967.03	9481.37
1968	9547.69
1968.96	9573.36
1969.92	9521.08
1970.89	9269.33
1971.85	9204.6
1972.82	9109.3
1973.78	9022.36
1974.75	8987.97
1975.71	9210.23
1976.67	9119.79
1977.64	8964.65
1978.6	8728.86
1979.57	8717.5
1980.53	8829.31

WN	INT
1981.49	9068.63
1982.46	8799.44
1983.42	8741.95
1984.39	8882.75
1985.35	8763.27
1986.32	8848.02
1987.28	8935.63
1988.24	8825.07
1989.21	8931.14
1990.17	8888.12
1991.14	8866.98
1992.1	8413.3
1993.07	8778.15
1994.03	8773.54
1994.99	8689.92
1995.96	8595.17
1996.92	8572.46
1997.89	8580.69
1998.85	8725.74
1999.82	8625.29
2000.78	8498.93
2001.74	8206.52
2002.71	8159.47
2003.67	8196.76
2004.64	8084.58
2005.6	8316.53
2006.56	8202.06
2007.53	8532.84
2008.49	8424.18
2009.46	8431.86
2010.42	8094.48
2011.39	8037.3
2012.35	8058.3
2013.31	7991.68
2014.28	8064.15
2015.24	8165.01
2016.21	8215.14
2017.17	8058.78
2018.14	8108.56
2019.1	8085.92
2020.06	8062.65
2021.03	7878.51
2021.99	7817.66
2022.96	8036.81
2023.92	7814.2
2024.89	7583.84
2025.85	7741.01

WN	INT
2026.81	7863.62
2027.78	7537.48
2028.74	7302.56
2029.71	7220.37
2030.67	7122.81
2031.64	6994.84
2032.6	7116.49
2033.56	7254.84
2034.53	7446.02
2035.49	7191.87
2036.46	7150.63
2037.42	7594.17
2038.38	7330.59
2039.35	7282.65
2040.31	7512.22
2041.28	7446.57
2042.24	7480.8
2043.21	7377.77
2044.17	7397.69
2045.13	7096.52
2046.1	7179.17
2047.06	7215.14
2048.03	6758.66
2048.99	6888.1
2049.96	6554.48
2050.92	6768.26
2051.88	6774.38
2052.85	6534.14
2053.81	6800.43
2054.78	6523.67
2055.74	6374.14
2056.7	6579.46
2057.67	6331.28
2058.63	6644.89
2059.6	6727.03
2060.56	6905.65
2061.53	6734.57
2062.49	6623.91
2063.45	6666.47
2064.42	6857.86
2065.38	6884.02
2066.35	6881.72
2067.31	6674.5
2068.27	6366.8
2069.24	6394.83
2070.2	6176.14
2071.17	6109.58

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WN	INT
2072.13	6454.78
2073.09	6488.16
2074.06	6665.08
2075.02	6391.5
2075.99	6152.96
2076.95	6499.59
2077.92	6496
2078.88	6536.21
2079.84	6129.62
2080.81	5916.25
2081.77	6292.38
2082.74	5802.61
2083.7	5720.85
2084.66	5566.22
2085.63	5822.61
2086.59	5977.34
2087.56	6276.28
2088.52	5953.49
2089.48	6247.15
2090.45	6261.61
2091.41	5948.54
2092.38	5835.36
2093.34	5978.06
2094.31	5682.48
2095.27	5961.52
2096.23	5495.22
2097.2	5958.01
2098.16	5590.29
2099.13	5693.16
2100.09	5958.74
2101.05	5781.35
2102.02	5440.56
2102.98	5650.25
2103.95	5423.18
2104.91	5406.86
2105.87	5974.68
2106.84	5862.46
2107.8	5970.13
2108.77	5521.07
2109.73	5404.79
2110.69	5501.06
2111.66	5831.32
2112.62	5495.77
2113.59	5801.6
2114.55	6280.31
2115.52	6225.65
2116.48	6110.79

WN	INT
2117.44	5612.87
2118.41	5674.63
2119.37	5881.1
2120.34	5697.4
2121.3	6287.78
2122.26	6098.73
2123.23	6192.36
2124.19	6568.31
2125.16	6471.92
2126.12	6112.75
2127.08	6317.38
2128.05	6632.84
2129.01	6845.22
2129.98	7086.98
2130.94	7088.94
2131.91	7325.65
2132.87	7092.23
2133.83	7341.79
2134.8	7884.05
2135.76	8396.56
2136.73	8476.37
2137.69	8436.72
2138.65	9056.47
2139.62	8982.47
2140.58	9422.82
2141.55	9620.87
2142.51	10639.9
2143.47	11350.1
2144.44	10901.7
2145.4	10340.8
2146.37	12210.8
2147.33	12448.4
2148.3	12859.7
2149.26	12277.2
2150.22	14004.2
2151.19	16126.9
2152.15	16024.1
2153.12	15671
2154.08	16354.3
2155.04	17517.6
2156.01	18606
2156.97	19828
2157.94	21205.1
2158.9	21077.8
2159.86	19675.7
2160.83	21092
2161.79	20958.4

WN	INT
2162.76	28511
2163.72	26013.4
2164.69	22233.3
2165.65	22639.3
2166.61	29198.9
2167.58	35327.8
2168.54	36526.6
2169.51	32982.1
2170.47	31289.8
2171.43	31659.2
2172.4	34928.8
2173.36	35951
2174.33	35535.5
2175.29	36869.2
2176.25	41798.6
2177.22	46647.7
2178.18	44819.2
2179.15	39245.4
2180.11	35703.5
2181.08	32451.3
2182.04	35414.8
2183	39571.4
2183.97	44293.8
2184.93	44650.4
2185.9	45403.5
2186.86	37726.3
2187.82	42102.8
2188.79	42226
2189.75	41968.8
2190.72	42894.9
2191.68	42581.1
2192.64	42593.6
2193.61	43639.1
2194.57	43626.6
2195.54	45866.4
2196.5	44257.8
2197.46	43634.3
2198.43	42660.8
2199.39	41706.2
2200.36	38384.5
2201.32	40165.5
2202.29	40545.2
2203.25	40872.6
2204.21	41626.2
2205.18	36880.5
2206.14	40726.1
2207.11	39940

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WN	INT
2208.07	39105.2
2209.03	37390.7
2210	38203.5
2210.96	38185.7
2211.93	36952.2
2212.89	38984.2
2213.85	39192.5
2214.82	38493.9
2215.78	37775.1
2216.75	37842.2
2217.71	39754.1
2218.68	38922.5
2219.64	40633.4
2220.6	39343.2
2221.57	37722
2222.53	37729.1
2223.5	36690
2224.46	38059
2225.42	37758.1
2226.39	34141.3
2227.35	36190.1
2228.32	37634.5
2229.28	37293.6
2230.24	34265.5
2231.21	31712.8
2232.17	35580.7
2233.14	29841.7
2234.1	31466.8
2235.07	28500.5
2236.03	30813.4
2236.99	28460.9
2237.96	29973.3
2238.92	29228.1
2239.89	26551.5
2240.85	29006
2241.81	22285.8
2242.78	26240.8
2243.74	19099
2244.71	26255.2
2245.67	18399.6
2246.63	24277.3
2247.6	18710.9
2248.56	23307.8
2249.53	18510.6
2250.49	20704.8
2251.46	16961
2252.42	19668.3

WN	INT
2253.38	15248.6
2254.35	16538.2
2255.31	13539.6
2256.28	14959.7
2257.24	11264.1
2258.2	12453.1
2259.17	9858.02
2260.13	10105.9
2261.1	8427.55
2262.06	8435.12
2263.02	6895.68
2263.99	7253.17
2264.95	5913.32
2265.92	6187.82
2266.88	5380.31
2267.85	5587.84
2268.81	5048.47
2269.77	5099.12
2270.74	4830.64
2271.7	4692.3
2272.67	4718.39
2273.63	4468.12
2274.59	4662.59
2275.56	4245.34
2276.52	4413.25
2277.49	4279.9
2278.45	4160.76
2279.41	4287.92
2280.38	4003.9
2281.34	4316.21
2282.31	4070.7
2283.27	4288.53
2284.24	3966.78
2285.2	4142.54
2286.16	3869.16
2287.13	3678.08
2288.09	3742.62
2289.06	3553.73
2290.02	3541.7
2290.98	3533.02
2291.95	3412.05
2292.91	3423.18
2293.88	3356.23
2294.84	3324.06
2295.8	3238.22
2296.77	3220.33
2297.73	3165.66

WN	INT
2298.7	3126.8
2299.66	3067.14
2300.62	3021.76
2301.59	3013.82
2302.55	2952.58
2303.52	2979.09
2304.48	2921.17
2305.45	2941.48
2306.41	2873.53
2307.37	2856.99
2308.34	2855.63
2309.3	2789.65
2310.27	2794.87
2311.23	2650.16
2312.19	2718.58
2313.16	2529.47
2314.12	2697.08
2315.09	2498.97
2316.05	2694.19
2317.01	2476.11
2317.98	2680.51
2318.94	2420.23
2319.91	2609.56
2320.87	2355.46
2321.84	2567.49
2322.8	2310.34
2323.76	2529.46
2324.73	2229.29
2325.69	2449.88
2326.66	2126.3
2327.62	2411.12
2328.58	1997.32
2329.55	2400.34
2330.51	1908.07
2331.48	2374.6
2332.44	1841.82
2333.4	2315.46
2334.37	1822.19
2335.33	2193.73
2336.3	1902.14
2337.26	2019.72
2338.23	2075.79
2339.19	1803.98
2340.15	2180.92
2341.12	1735.52
2342.08	2163.99
2343.05	1862.17

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WN	INT
2344.01	1983.41
2344.97	2110.06
2345.94	1873.58
2346.9	2164.23
2347.87	2048.49
2348.83	2146.01
2349.79	2088.06
2350.76	2131.31
2351.72	1938.65
2352.69	1892.48
2353.65	2079.64
2354.61	1714.06
2355.58	1844.47
2356.54	2005.34
2357.51	1616.87
2358.47	1707.25
2359.44	1960.46
2360.4	1631.13
2361.36	1562.65
2362.33	1880.43
2363.29	1786.11
2364.26	1484
2365.22	1595.13
2366.18	1861.51
2367.15	1837.06
2368.11	1606.23
2369.08	1542.67
2370.04	1704.08
2371.01	1874.4
2371.97	1921.09
2372.93	1862.17
2373.9	1803.45
2374.86	1775.12
2375.83	1808.63
2376.79	1852.92
2377.75	1928.37
2378.72	1962.94
2379.68	1970.55
2380.65	1979.62
2381.61	2000.81
2382.57	2010.34
2383.54	2050.64
2384.5	2079.89
2385.47	2134.64
2386.43	2179.33
2387.39	2229.7
2388.36	2312.32

WN	INT
2389.32	2367.1
2390.29	2335.55
2391.25	2197
2392.22	2064.17
2393.18	1957.52
2394.14	1895.73
2395.11	1826.61
2396.07	1815.68
2397.04	1768.4
2398	1735.81
2398.96	1708.58
2399.93	1718.09
2400.89	1694.33
2401.86	1655.47
2402.82	1637.41
2403.78	1607.23
2404.75	1618.74
2405.71	1611.04
2406.68	1579.27
2407.64	1568.49
2408.61	1584.33
2409.57	1568.61
2410.53	1617.54
2411.5	1593.54
2412.46	1574.06
2413.43	1569.93
2414.39	1589.82
2415.35	1610.41
2416.32	1604.95
2417.28	1608.13
2418.25	1601.87
2419.21	1604.53
2420.17	1632.84
2421.14	1641.01
2422.1	1657.14
2423.07	1635.9
2424.03	1642.38
2425	1662.02
2425.96	1676.85
2426.92	1655.28
2427.89	1661.41
2428.85	1672.78
2429.82	1684.34
2430.78	1705.61
2431.74	1708.62
2432.71	1690
2433.67	1689.06

WN	INT
2434.64	1719.78
2435.6	1717.42
2436.56	1705.68
2437.53	1716.7
2438.49	1719.59
2439.46	1714.01
2440.42	1731.55
2441.39	1722.56
2442.35	1696.01
2443.31	1712.31
2444.28	1710.45
2445.24	1719.72
2446.21	1692.34
2447.17	1678.86
2448.13	1667.86
2449.1	1675.82
2450.06	1630.22
2451.03	1580.04
2451.99	1582.75
2452.95	1565.32
2453.92	1555.78
2454.88	1485.65
2455.85	1457.94
2456.81	1435.71
2457.78	1452.97
2458.74	1404.4
2459.7	1340.16
2460.67	1353.46
2461.63	1345.72
2462.6	1359.91
2463.56	1354.93
2464.52	1370.7
2465.49	1400.77
2466.45	1442.44
2467.42	1436.67
2468.38	1452.98
2469.34	1491.37
2470.31	1490.92
2471.27	1498.21
2472.24	1505.09
2473.2	1502.54
2474.16	1523.1
2475.13	1511.49
2476.09	1496.8
2477.06	1526.03
2478.02	1531.64
2478.99	1531.32

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WN	INT
2479.95	1497.78
2480.91	1507.99
2481.88	1511.72
2482.84	1477.87
2483.81	1454.08
2484.77	1445.69
2485.73	1415.08
2486.7	1415.84
2487.66	1386.85
2488.63	1361.23
2489.59	1331.05
2490.55	1317.14
2491.52	1299.17
2492.48	1282.08
2493.45	1236.33
2494.41	1226.16
2495.38	1204.24
2496.34	1191.45
2497.3	1148.89
2498.27	1150.3
2499.23	1142.88
2500.2	1109.72
2501.16	1077.95
2502.12	1077.94
2503.09	1059.62
2504.05	1060.73
2505.02	1062.69
2505.98	1061.96
2506.94	1030.68
2507.91	1017.44
2508.87	1054.23
2509.84	1105.65
2510.8	1071.55
2511.77	1044.86
2512.73	1042.16
2513.69	1078.94
2514.66	1133.16
2515.62	1194.57
2516.59	1209.68
2517.55	1160.52
2518.51	1120.79
2519.48	1125.02
2520.44	1273.16
2521.41	1376.86
2522.37	1407.66
2523.33	1391.57
2524.3	1326.53

WN	INT
2525.26	1265.56
2526.23	1285.41
2527.19	1388.45
2528.16	1526.67
2529.12	1609.76
2530.08	1689.43
2531.05	1765.6
2532.01	1724.08
2532.98	1632.58
2533.94	1562.29
2534.9	1512.91
2535.87	1469.12
2536.83	1486.53
2537.8	1565.22
2538.76	1628.58
2539.72	1690.61
2540.69	1760.01
2541.65	1841.54
2542.62	1876.22
2543.58	1876.38
2544.54	1918.82
2545.51	1933.98
2546.47	1935.57
2547.44	1915.92
2548.4	1943.61
2549.37	1928.17
2550.33	1907.96
2551.29	1927.71
2552.26	1918.93
2553.22	1886.12
2554.19	1844.91
2555.15	1823.97
2556.11	1776.69
2557.08	1693.76
2558.04	1661.71
2559.01	1614.29
2559.97	1561.58
2560.94	1480.86
2561.9	1451.33
2562.86	1402.37
2563.83	1369.49
2564.79	1453.65
2565.76	1516.58
2566.72	1550.57
2567.68	1621.85
2568.65	1699.14
2569.61	1733.4

WN	INT
2570.58	1777.87
2571.54	1827.89
2572.5	1862.03
2573.47	1867.94
2574.43	1898.14
2575.4	1912.53
2576.36	1916.94
2577.32	1971.21
2578.29	1930.87
2579.25	1950.69
2580.22	1972.54
2581.18	1967.86
2582.15	1923.3
2583.11	1953.53
2584.07	1944.88
2585.04	1885.67
2586	1851.56
2586.97	1862.97
2587.93	1811.22
2588.89	1728.25
2589.86	1700.35
2590.82	1603.42
2591.79	1574.87
2592.75	1556.04
2593.71	1464.14
2594.68	1419.65
2595.64	1387.15
2596.61	1285.78
2597.57	1249.69
2598.54	1209.46
2599.5	1170.52
2600.46	1109.63
2601.43	1094.43
2602.39	1067.98
2603.36	1006.76
2604.32	1015.84
2605.28	925.2
2606.25	885.438
2607.21	869.194
2608.18	849.3
2609.14	834.174
2610.1	849.425
2611.07	812.132
2612.03	760.193
2613	757.507
2613.96	758.523
2614.93	735.682

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WN	INT
2615.89	736.037
2616.85	729.164
2617.82	690.893
2618.78	684.011
2619.75	655.769
2620.71	668.779
2621.67	612.31
2622.64	576.943
2623.6	621.895
2624.57	600.012
2625.53	570.236
2626.49	622.639
2627.46	578.913
2628.42	547.314
2629.39	552.622
2630.35	559.251
2631.31	564.194
2632.28	575.821
2633.24	566.29
2634.21	567.201
2635.17	540.248
2636.14	539.984
2637.1	518.128
2638.06	521.741
2639.03	508.623
2639.99	544.171
2640.96	535.554
2641.92	511.66
2642.88	518.589
2643.85	529.43
2644.81	525.921
2645.78	530.526
2646.74	541.62
2647.7	551.055
2648.67	533.252
2649.63	511.42
2650.6	543.155
2651.56	472.048
2652.53	519.159
2653.49	521.256
2654.45	500.669
2655.42	510.414
2656.38	499.391
2657.35	462.475
2658.31	506.865
2659.27	460.719
2660.24	473.536

WN	INT
2661.2	497.514
2662.17	487.759
2663.13	459.28
2664.09	471.37
2665.06	449.853
2666.02	443.605
2666.99	456.816
2667.95	469.406
2668.92	475.397
2669.88	446.967
2670.84	460.592
2671.81	455.178
2672.77	420.205
2673.74	463.489
2674.7	431.801
2675.66	443.197
2676.63	413.64
2677.59	426.768
2678.56	447.95
2679.52	449.361
2680.48	419.947
2681.45	446.231
2682.41	453.32
2683.38	453.965
2684.34	459.865
2685.31	466.832
2686.27	442.797
2687.23	451.079
2688.2	436.924
2689.16	442.813
2690.13	414.825
2691.09	441.784
2692.05	433.898
2693.02	400.981
2693.98	439.847
2694.95	378.699
2695.91	386.199
2696.87	417.392
2697.84	398.118
2698.8	400.09
2699.77	402.743
2700.73	397.663
2701.7	410.043
2702.66	384.045
2703.62	397.075
2704.59	390.522
2705.55	404.746

WN	INT
2706.52	398.166
2707.48	376.966
2708.44	374.388
2709.41	381.999
2710.37	367.477
2711.34	362.286
2712.3	367.549
2713.26	392.511
2714.23	391.326
2715.19	361.536
2716.16	383.961
2717.12	359.28
2718.09	376.229
2719.05	362.343
2720.01	349.124
2720.98	355.201
2721.94	371.238
2722.91	360.616
2723.87	360.67
2724.83	369.839
2725.8	359.62
2726.76	334.611
2727.73	356.465
2728.69	391.022
2729.65	341.322
2730.62	346.908
2731.58	355.839
2732.55	340.611
2733.51	363.917
2734.47	375.579
2735.44	357.831
2736.4	349.173
2737.37	351.615
2738.33	340.935
2739.3	323.695
2740.26	373.765
2741.22	345.067
2742.19	335.771
2743.15	383.87
2744.12	339.825
2745.08	365.987
2746.04	368.984
2747.01	359.823
2747.97	357.675
2748.94	383.534
2749.9	367.801
2750.86	333.95

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WN	INT
2751.83	364.336
2752.79	322.472
2753.76	338.907
2754.72	357.469
2755.69	347.844
2756.65	318.814
2757.61	306.271
2758.58	344.042
2759.54	326.686
2760.51	362.464
2761.47	313.55
2762.43	323.366
2763.4	321.678
2764.36	295.831
2765.33	323.404
2766.29	295.931
2767.25	303.674
2768.22	281.254
2769.18	317.5
2770.15	304.375
2771.11	294.45
2772.08	292.571
2773.04	299.098
2774	319.078
2774.97	307.416
2775.93	317.152
2776.9	285.941
2777.86	298.12
2778.82	326.429
2779.79	268.163
2780.75	341.042
2781.72	306.794
2782.68	331.139
2783.64	325.365
2784.61	306.345
2785.57	277.133
2786.54	284.34
2787.5	280.146
2788.47	286.237
2789.43	275.185
2790.39	291.011
2791.36	303.234
2792.32	277.948
2793.29	315.468
2794.25	304.436
2795.21	336.714
2796.18	312.801
2797.14	359.544
2798.11	347.979
2799.07	250.886
2800.03	235.917