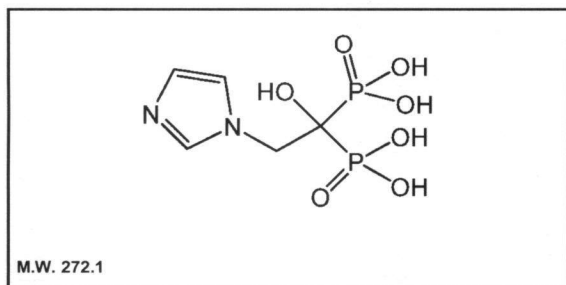




Product Data Sheet

M-1875

Zoledronic acid

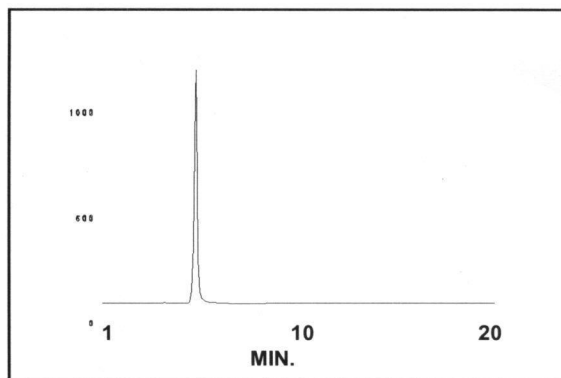


Lot #: 208-260-000-JHJ-20070720-Q

Packaged as: Solid

Date of Analysis: April 27, 2011

Chemical Purity @ 220nm: 99.8%



HPLC ANALYSIS LOT 208-260-000-JHJ-20070720-Q
File Name: int21095 Date and Time: 4/27/2011 9:20:31 AM
Unit 2 UV

Peak #	Area %	Time	Area
1	0.14	3.20000	1.68955
2	99.86	4.80670	1236.22822
Totals	100.00		1237.91777

Storage Recommendation: Store at -20°C.

Product Warranty: Stated on the reverse side of this Product Data Sheet.

Caution: Not For Use In Humans Or Clinical Diagnosis. This product is intended for investigational or manufacturing use only. It is pharmaceutically unrefined and is not intended for use in humans. Responsibility for its use in humans, as a diagnostic reagent, and compliance with federal laws rests solely with the purchaser.

M-1875

Zoledronic acid

208-260-000-JHJ-20070720-Q

A) All chromatograms were run using the HPLC method described on the Product Data Sheet.

Concentrations and volumes:

Zoledronic acid concentration was 1.5 mg/ml.

Volume of **Zoledronic acid** injection was 3 μ l.

Volume of blank injection was 3 μ l.

B) Mass spectrometry – Negative mode

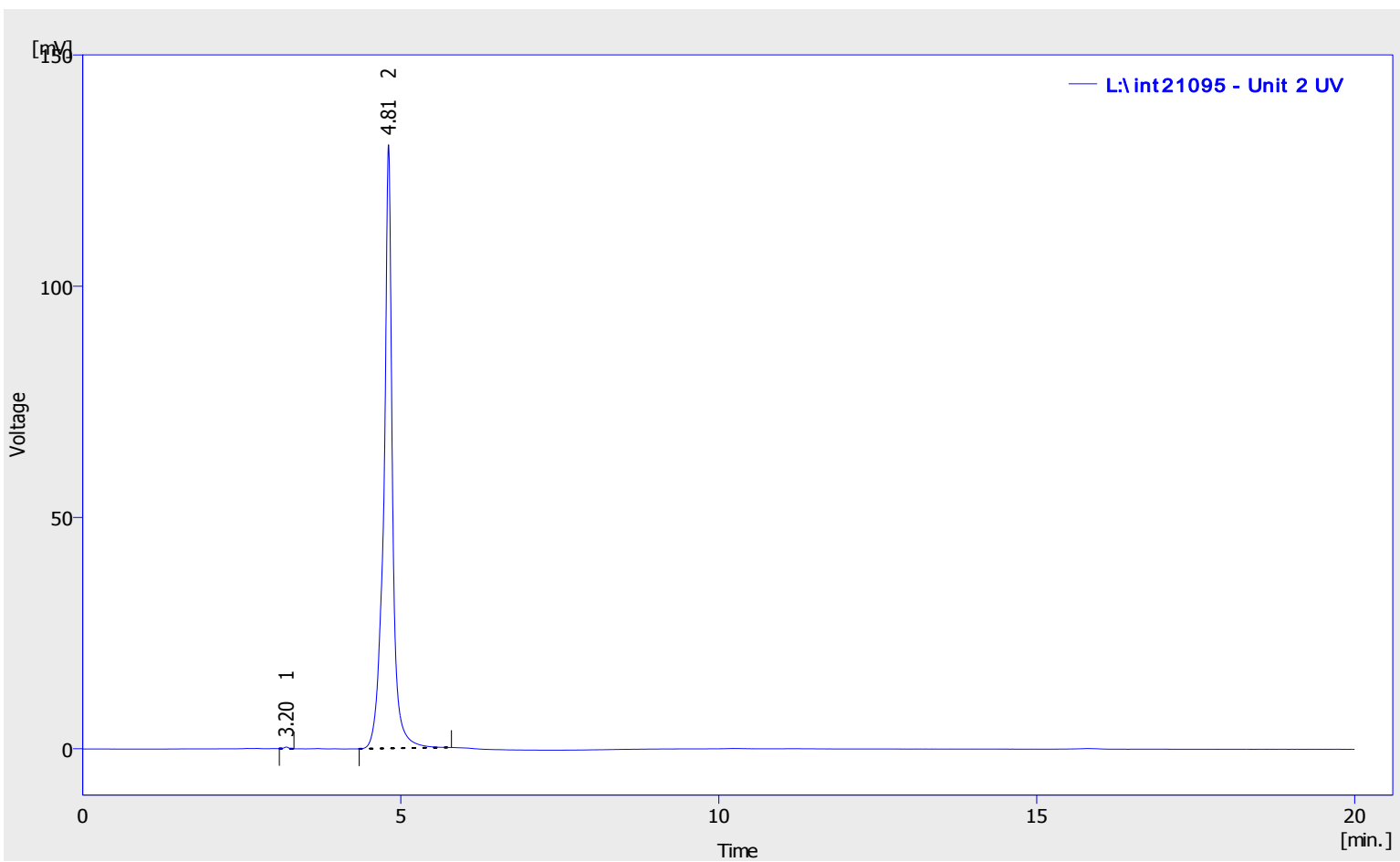
C) NMR

D) UV spectrum

M-1875
Zoledronic acid
208-260-000-JHJ-20070720-Q

Chromatogram Info:

File Name	: L:\int21095	File Created	: 4/27/2011 9:20:46 AM
Origin	: Acquired	Acquired Date	: 4/27/2011 9:20:31 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of Zoledronic acid	Modified	: 4/27/2011 3:55 PM
Created	: 8/8/2007 9:12 AM		
Column	: Supelco Discovery C18 4.6 x 250mm	Detection	: 220nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



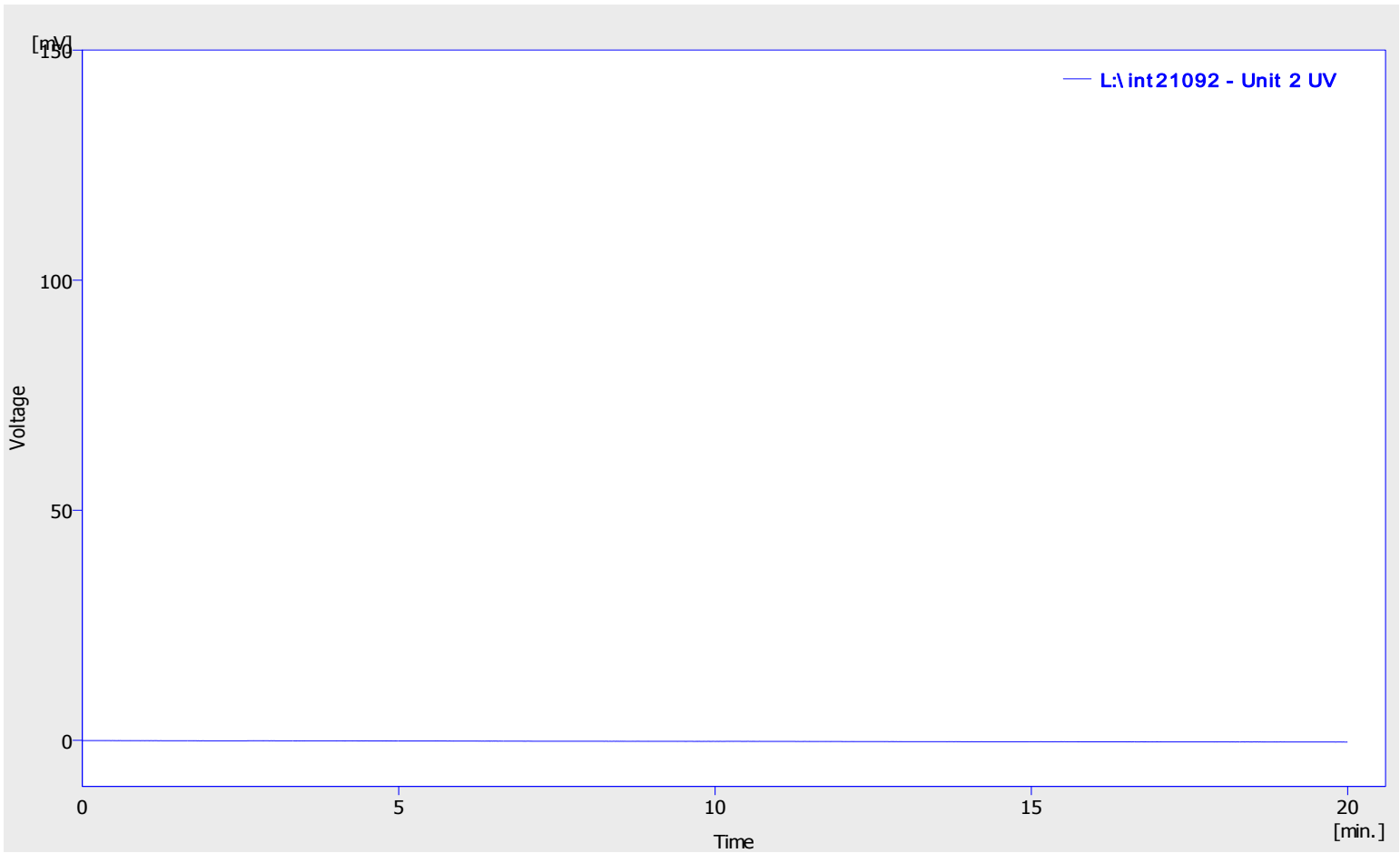
Result Table (Uncal - L:\int21095 - Unit 2 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	3.200	1.690	0.351	0.14	0.3	0.07
2	4.807	1236.228	130.505	99.86	99.7	0.12
	Total	1237.918	130.856	100.00	100.0	

M-1875
Zoledronic acid
208-260-000-JHJ-20070720-Q

Chromatogram Info:

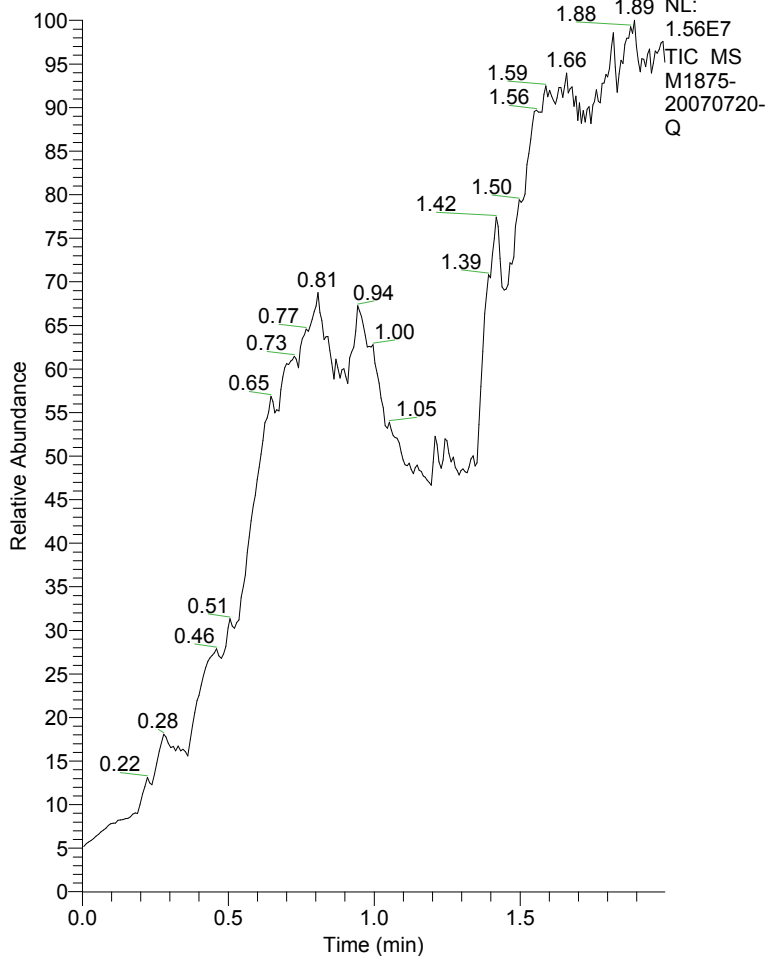
File Name	: L:\int21092	File Created	: 4/26/2011 12:31:28 PM
Origin	: Acquired	Acquired Date	: 4/26/2011 12:30:45 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of blank injection		
Created	: 8/8/2007 9:12 AM	Modified	: 4/27/2011 3:58 PM
Column	: Supelco Discovery C18 4.6 x 250mm	Detection	: 220nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int21092 - Unit 2 UV)

Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
No peak to report					

RT: 0.00 - 2.00



M1875-20070720-Q#1-286 RT: 0.01-2.00 AV:

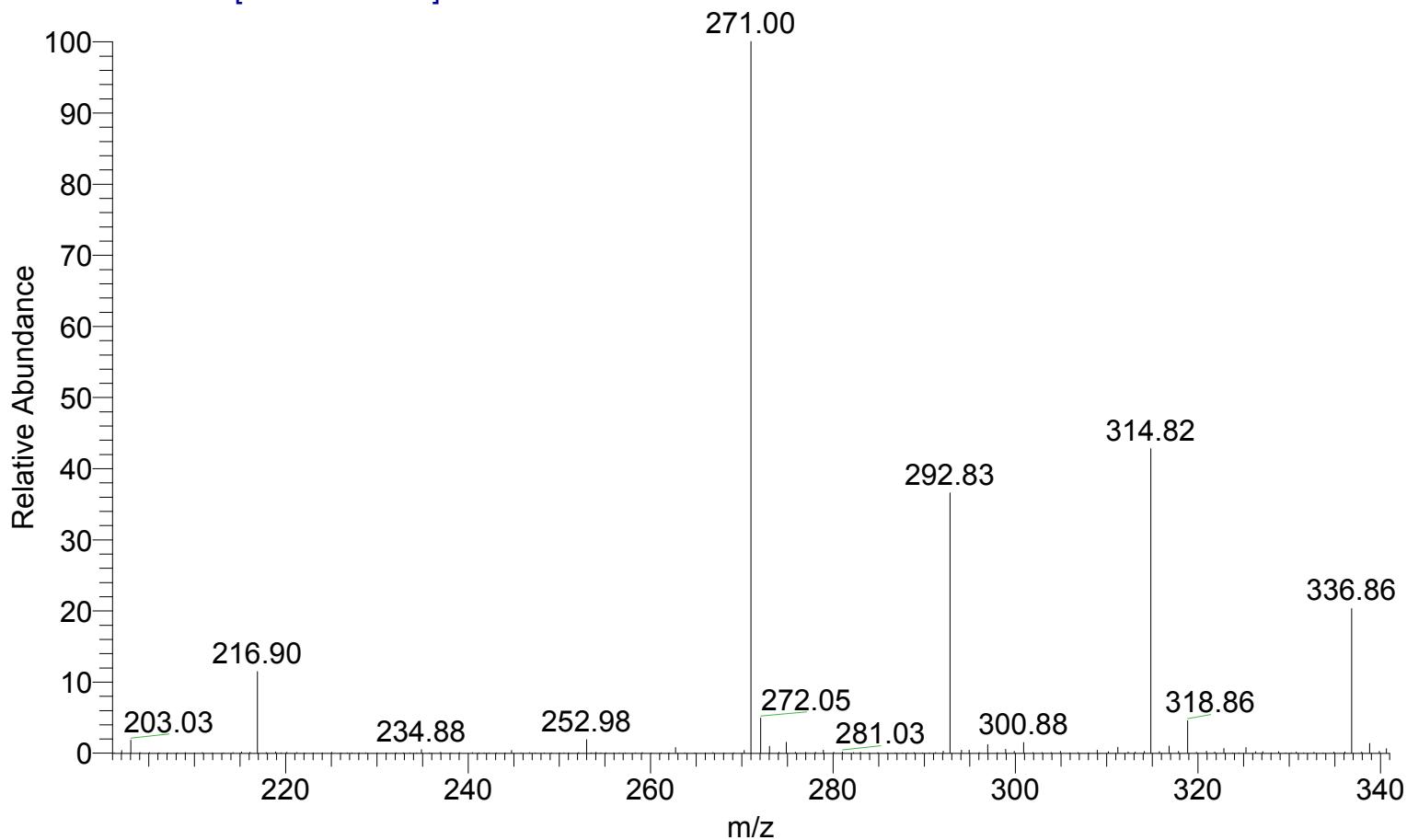
T: - c NSI Full ms [201.00-341.00]

m/z= 262.90-339.97

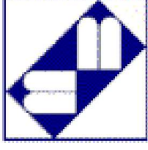
m/z	Intensity	Relative
271.00	3621597.9	100.00
272.05	177598.0	4.90
273.04	33110.3	0.91
274.88	54223.8	1.50
278.93	13598.5	0.38
292.83	1324613.0	36.58
294.08	14685.8	0.41
294.92	13625.5	0.38
296.96	42134.3	1.16
298.92	19062.2	0.53
300.88	52828.0	1.46
308.97	13750.8	0.38
311.23	28749.1	0.79
314.82	1548867.0	42.77
316.84	35197.1	0.97
318.86	164208.3	4.53
322.84	23521.1	0.65
325.28	27368.2	0.76
336.86	735568.4	20.31
338.82	48057.2	1.33

M1875-20070720-Q #1-286 RT: 0.01-2.00 AV: 286 NL: 3.62E6

T: - c NSI Full ms [201.00-341.00]

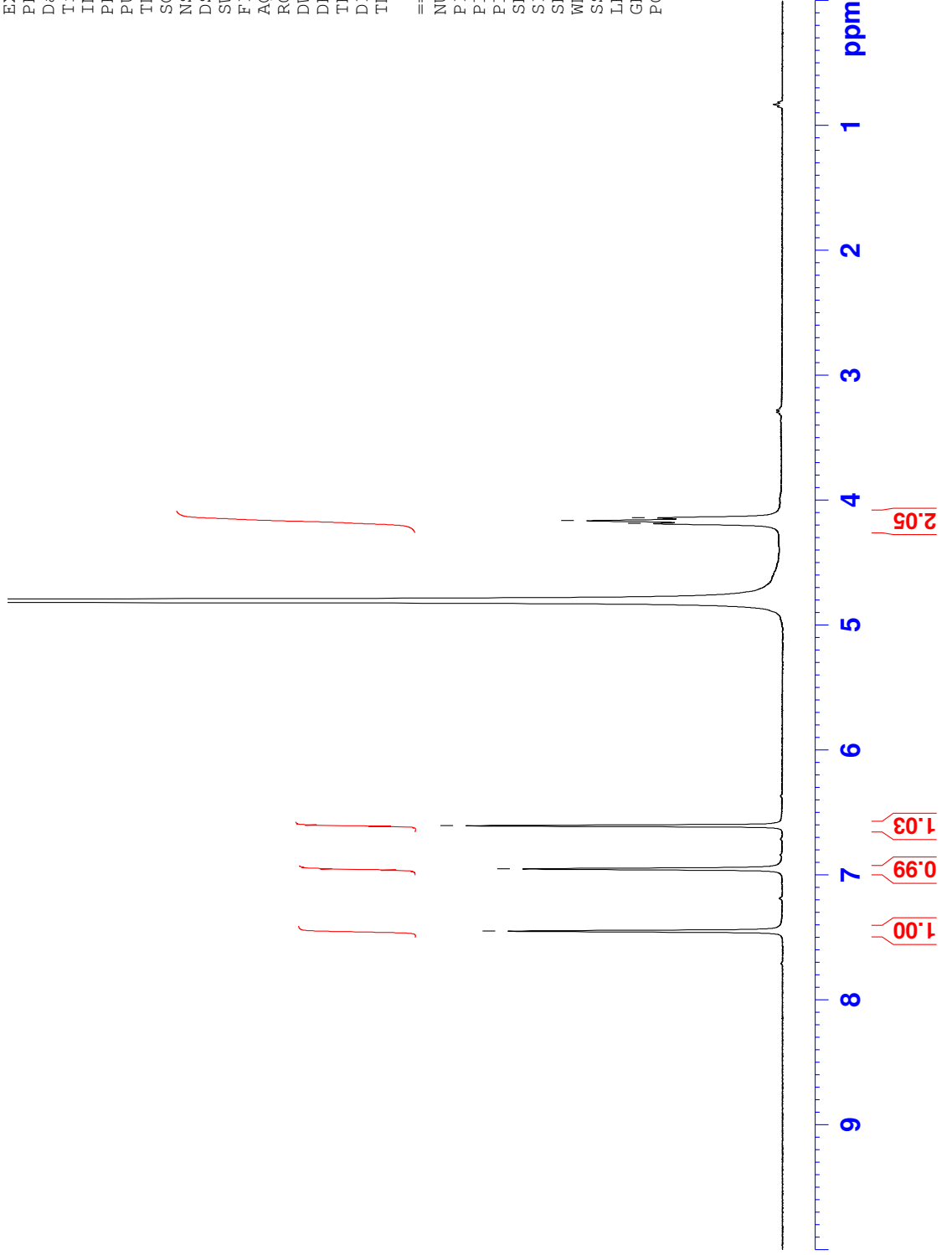


M1875 1H NMR in 0.1N NaOD
Batch 20070720-Q

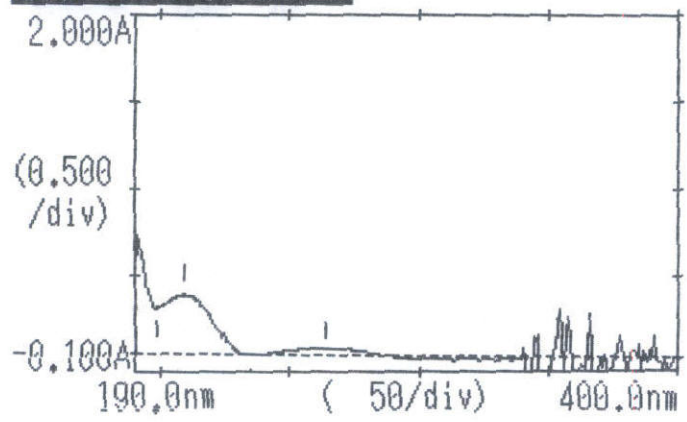


7.449
6.606
6.952
4.186
4.164
4.141

NAME M1875-20070720-Q
EXPNO 1
PROCNO 1
Date_ 20110427
Time 11.16
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 512
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 362
DW 60.400 usec
DE 6.50 usec
TE 294.9 K
D1 1.00000000 sec
TD0 1
===== CHANNEL f1 =====
NUC1 1H
P1 14.50 usec
PL1 -0.70 dB
PL1W 10.03411102 W
SF01 400.1324710 MHz
SI 32768
SF 400.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



Peak/Valley Detect



Date: 2011/04/27 13:10:04
Measure mode: Abs
Scan range / nm: 400.0 - 190.0
Scan pitch / nm: 1.0
Scan speed: Fast
Slit width / nm: 1.0

Peak
264.00 0.037
209.00 0.392
Valley
235.00 -0.005
198.00 0.314