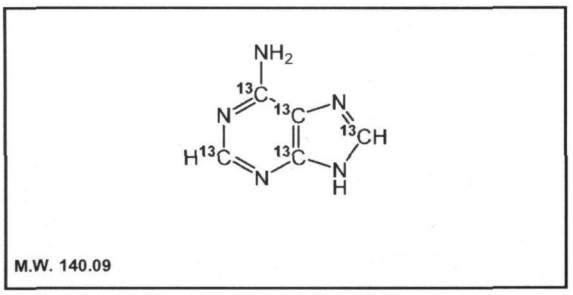
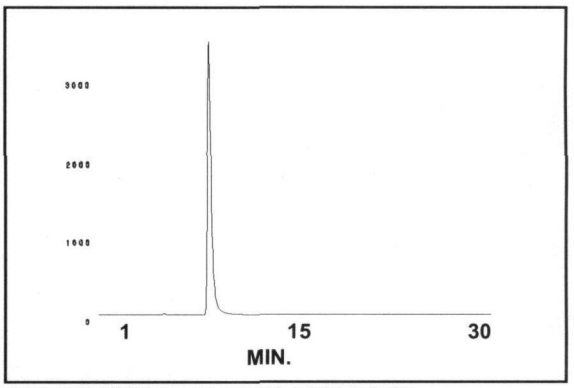
Product Data Sheet

MG-106

Adenine, [$^{13}C_5$]-



M.W. 140.09



HPLC ANALYSIS LOT 307-090-000-A-20030127-PV
File Name: int42042 Date and Time: 7/30/2009 2:51:45 PM
Unit 4 UV

Peak #	Area %	Time	Area
1	0.30	5.08330	20.65636
2	0.07	6.67000	5.10568
3	0.18	7.96670	12.83138
4	99.37	8.50330	6924.43304
5	0.07	18.11330	5.07040
Totals	100.00		6968.09686

Lot #: 307-090-000-A-20030127-PV

Packaged as: Solid

Date of Analysis: July 30, 2009

Chemical Purity @ 261nm: 99.3%

Storage Recommendation: Store at 0-5°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.

Moravek Biochemicals, Inc. 577 Mercury Lane, Brea, California 92821 www.moravek.com info@moravek.com Phone (714) 990-2018 Fax (714) 990-1824

MG-106

Adenine, [$^{13}C_5$]-

Lot 307-090-000-A-20030127-PV

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

Concentrations and volumes:

Adenine, [$^{13}C_5$]- solution concentration was 1.0 mg/mL.

Volume of **Adenine, [$^{13}C_5$]-** injection was 2.0 µL.

Volume of blank injection was 2.0 µL.

B) Mass spectrometry - Positive mode

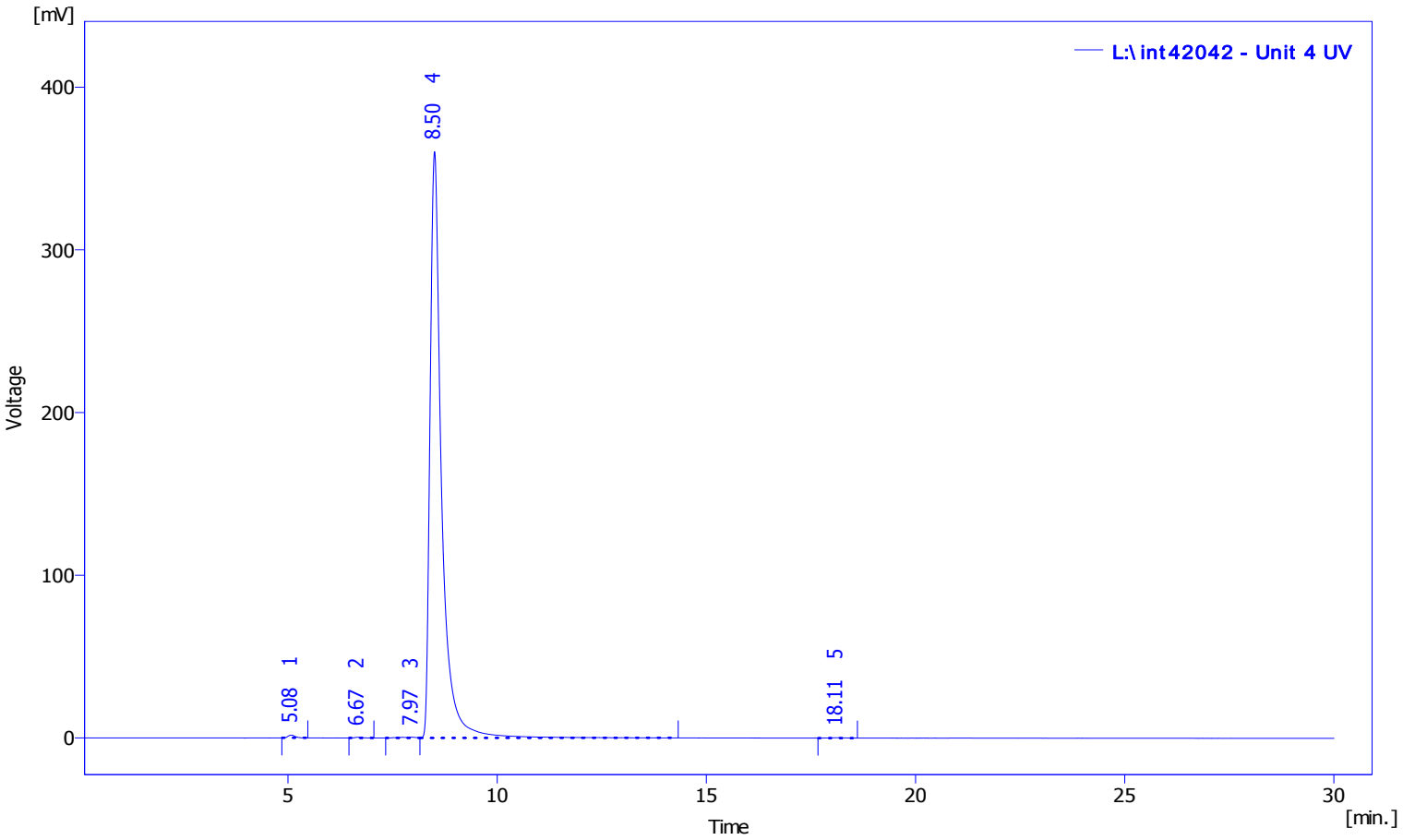
C) NMR

D) UV Spectrum

MG-106
Adenine, [13C5]-
Lot 307-090-000-A-20030127-PV

Chromatogram Info:

File Name	: L:\int42042	File Created	: 2/19/2014 8:48:24 AM
Origin	: Acquired, Acquisition started 7/30/2009 2:21:46 PM	Acquired Date	: 7/30/2009 2:51:45 PM
Project	: Test	By	: Administrator
Method	: Unit4-30minrun	By	: Administrator
Description	: UV trace of Adenine, [13C5]-		
Created	: 8/7/2007 9:44 AM	Modified	: 2/19/2014 8:52 AM
Column	:	Detection	: UV 261nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int42042 - Unit 4 UV)

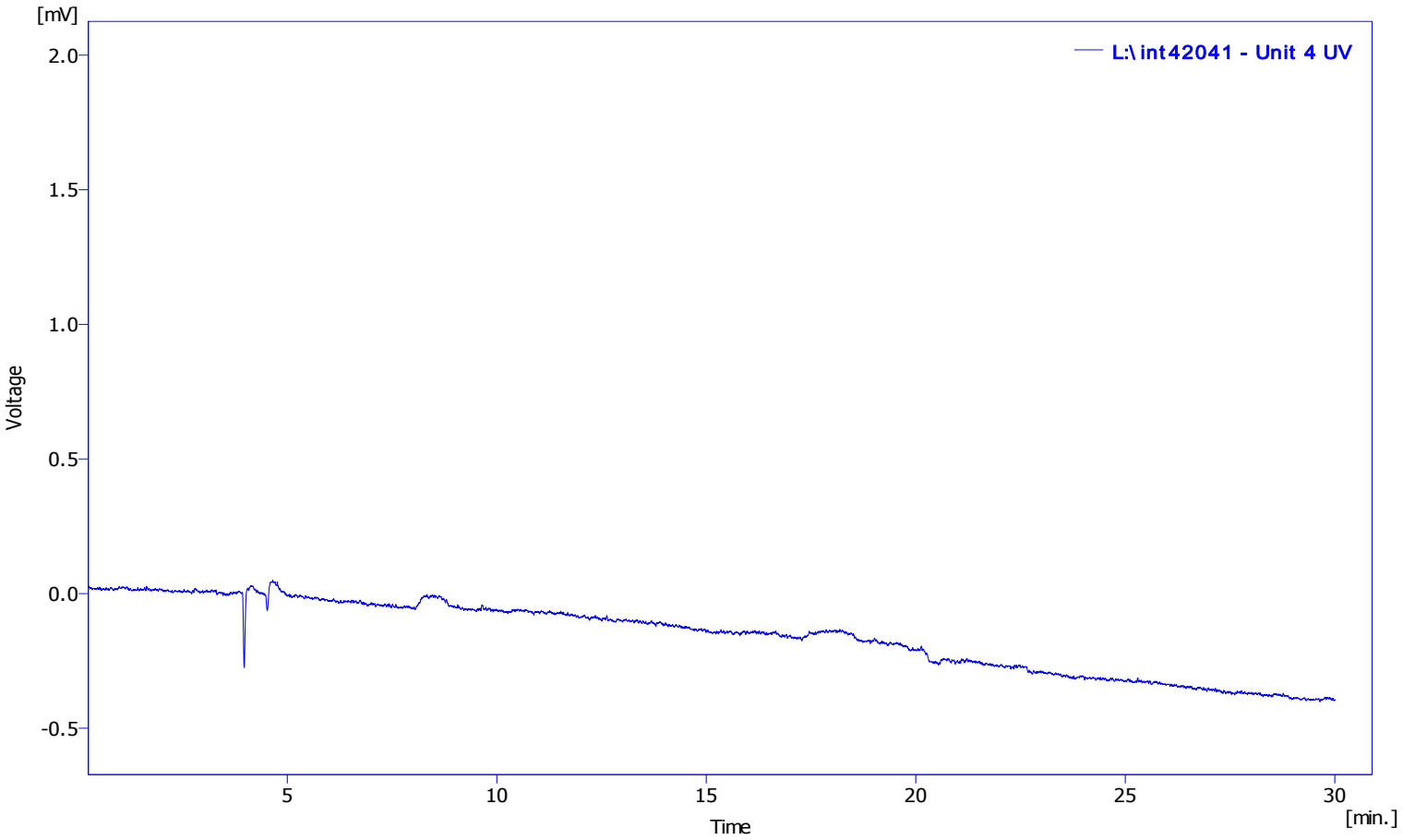
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		5.08	20.656	1.73	0.30	0.48	4108.41	82168.13	1.21		
2		6.67	5.106	0.43	0.07	0.12	8203.46	164069.27	1.57		5.2
3		7.97	12.831	0.48	0.18	0.13	1788.97	35779.34	0.67		2.5
4		8.50	6924.433	360.43	99.37	99.22	5633.14	112662.84	1.72		0.9
5		18.11	5.070	0.20	0.07	0.06	12157.19	243143.72	1.07		17.4
		Total	6968.097	363.27	100.00	100.00					

MG-106
Adenine, [13C5]-
Lot 307-090-000-A-20030127-PV

Chromatogram Info:

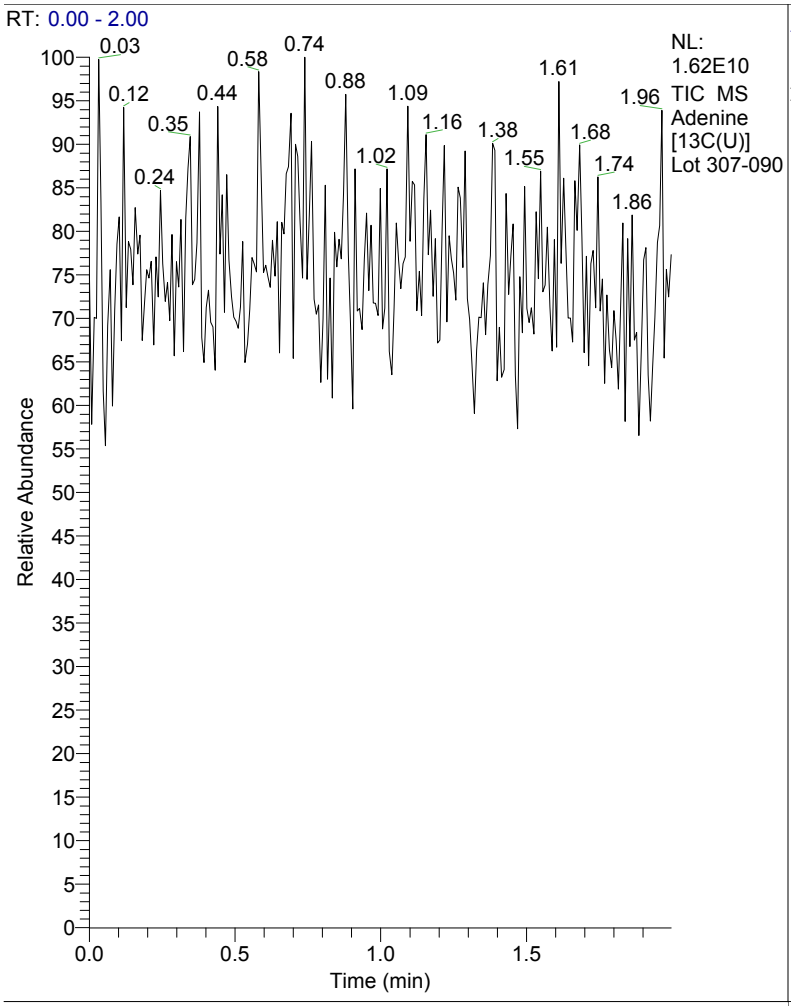
File Name	: L:\int42041	File Created	: 2/19/2014 8:48:24 AM
Origin	: Acquired, Acquisition started 7/30/2009 1:47:28 PM	Acquired Date	: 7/30/2009 2:17:26 PM
Project	: Test	By	: Administrator

Method	: Unit4-30minrun	By	: Administrator
Description	: UV trace of blank injection		
Created	: 8/7/2007 9:44 AM	Modified	: 2/19/2014 8:53 AM
Column	:	Detection	: UV 261
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int42041 - Unit 4 UV)

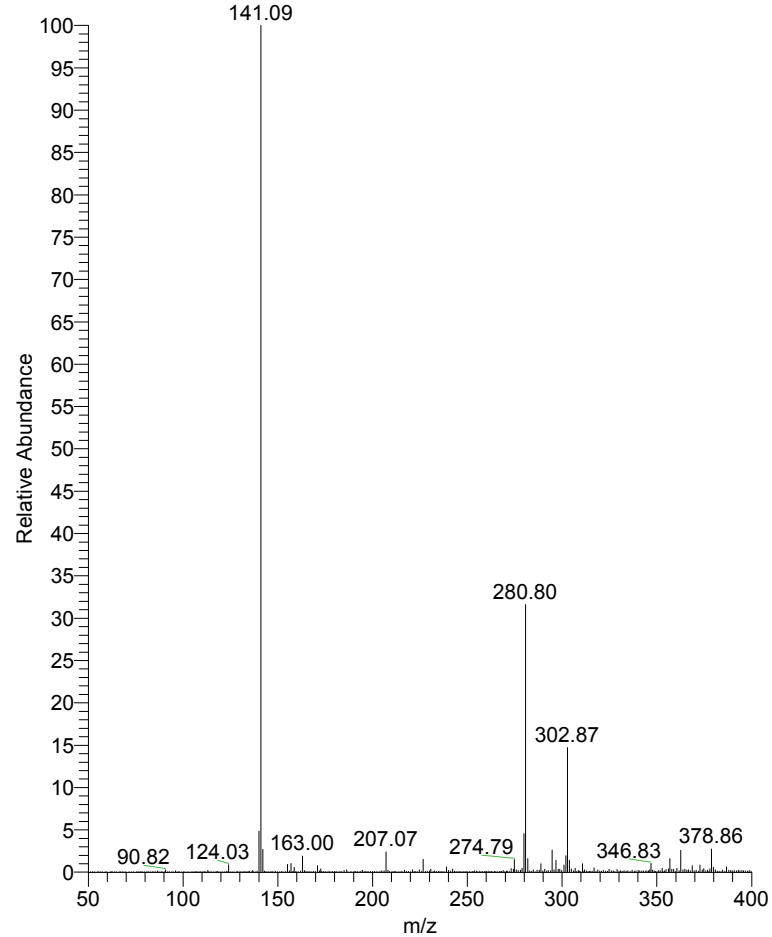
Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
No peak to report										



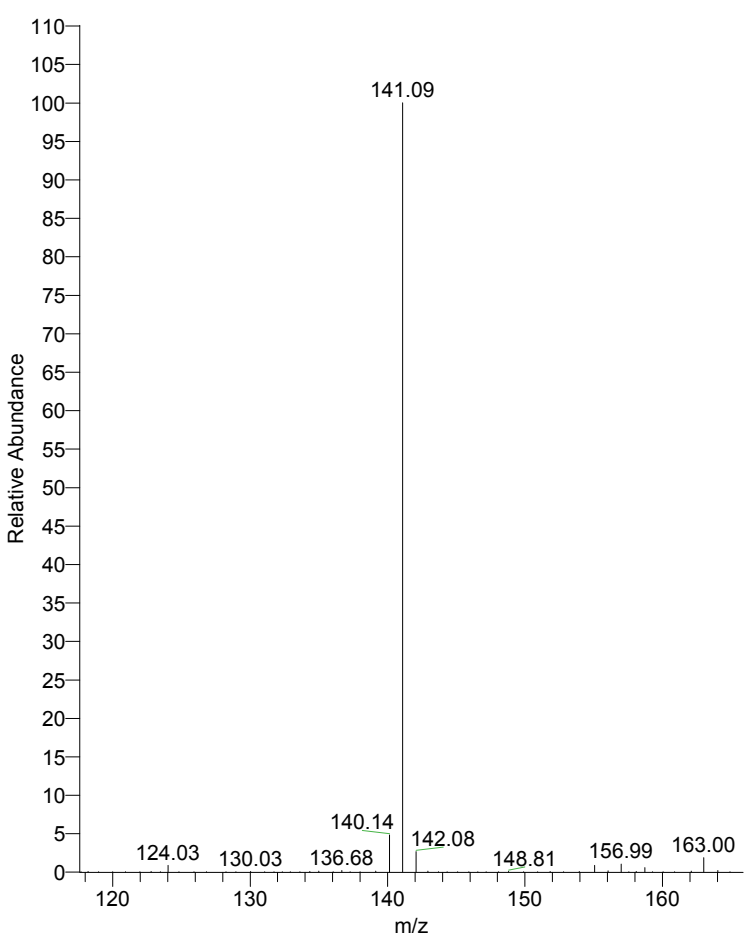
Adenine [13C(U)] Lot 307-090#1-255 RT:
T: + c NSI Full ms [50.00-400.00]
m/z= 135.90-146.39

m/z	Intensity	Relative
136.04	1790139.2	0.03
136.68	9102112.2	0.17
137.28	560615.1	0.01
138.00	570384.9	0.01
139.13	5617545.5	0.10
140.14	263056141.7	4.82
141.09	5458998253.9	100.00
142.08	144811264.8	2.65
142.94	5380538.4	0.10
143.70	449582.7	0.01
144.34	410962.0	0.01
145.10	826224.3	0.02
145.92	291999.8	0.01

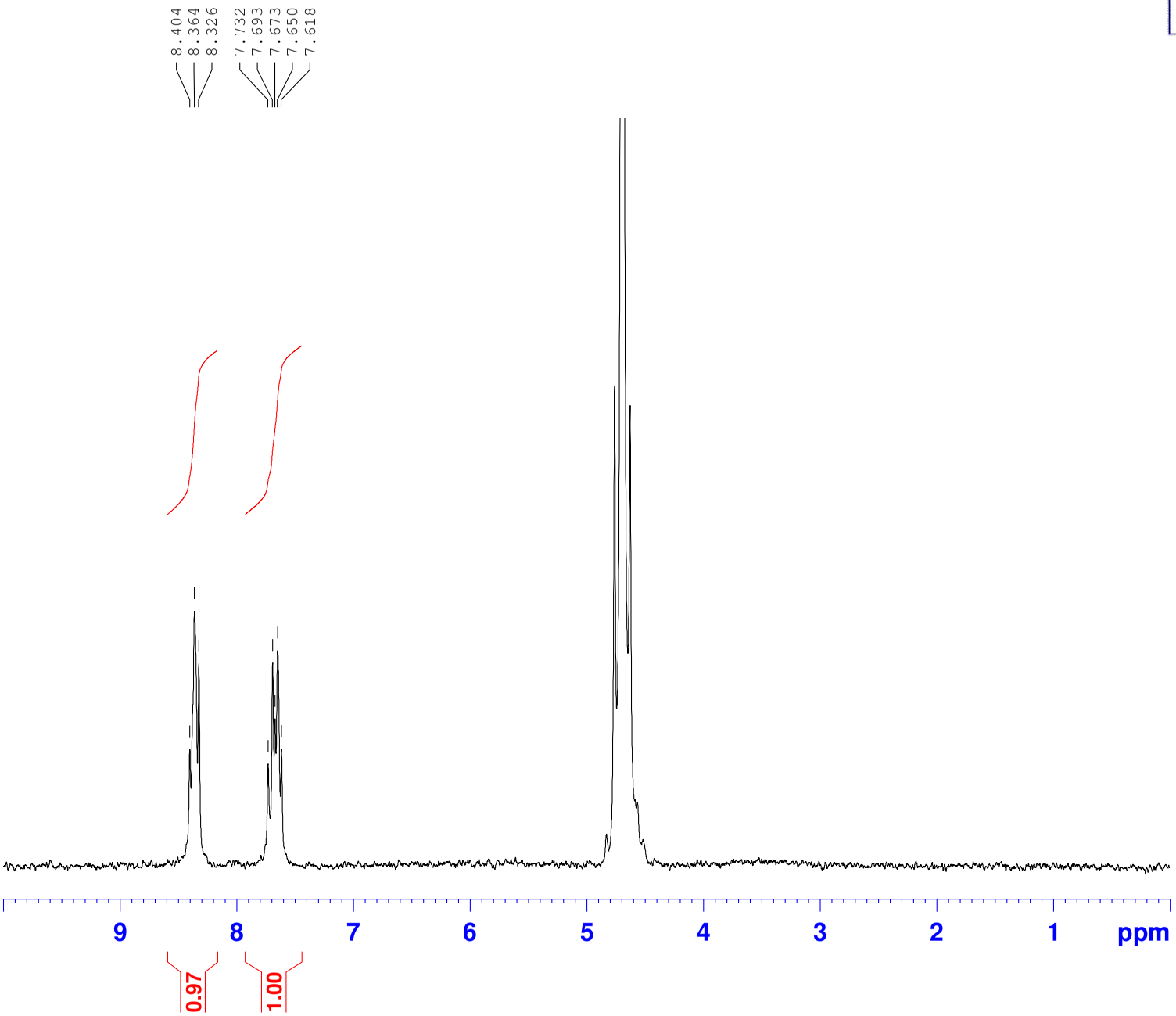
Adenine [13C(U)] Lot 307-090 #1-255 RT: 0.00-2.00 AV: 255 NL: 5.46E9
T: + c NSI Full ms [50.00-400.00]



Adenine [13C(U)] Lot 307-090 #1-255 RT: 0.00-2.00 AV: 255 NL: 5.46E9
T: + c NSI Full ms [50.00-400.00]



MG106 1H NMR in D2O
Batch 20030127-PV

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Current Data Parameters
NAME                  MG106
EXPNO                     1
PROCNO                    1

F2 - Acquisition Parameter
Date_              20090205
Time                 13.04
INSTRUM              spect
PROBHD    5 mm DUX 3H-1H
PULPROG               zg30
TD                   65536
SOLVENT                D2O
NS                       933
DS                         2
SWH               6172.839 Hz
FIDRES            0.094190 Hz
AQ                5.3084660 se
RG                       362
DW                  81.000 us
DE                   6.00 us
TE                   300.0 K
D1              1.00000000 se
TD0                        1

======== CHANNEL f1 ======
NUC1                      1H
P1                   10.25 us
PL1                   0.00 dB
SFO1          300.1318534 MH

F2 - Processing parameters
SI                     32768
SF            300.1300000 MH
WDW                       EM
SSB                        0
LB                   1.80 Hz
GB                         0
PC                    1.00
```