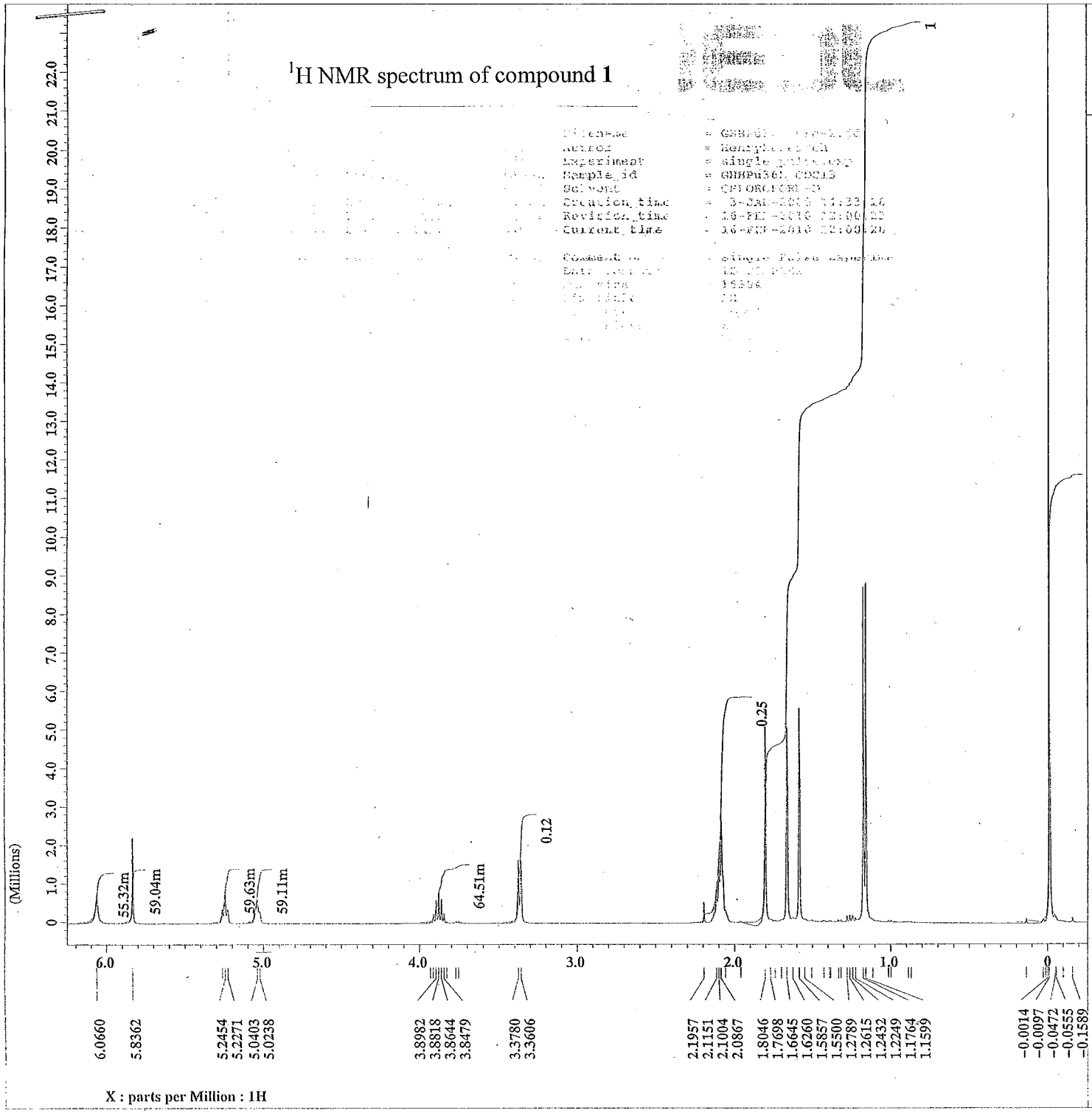
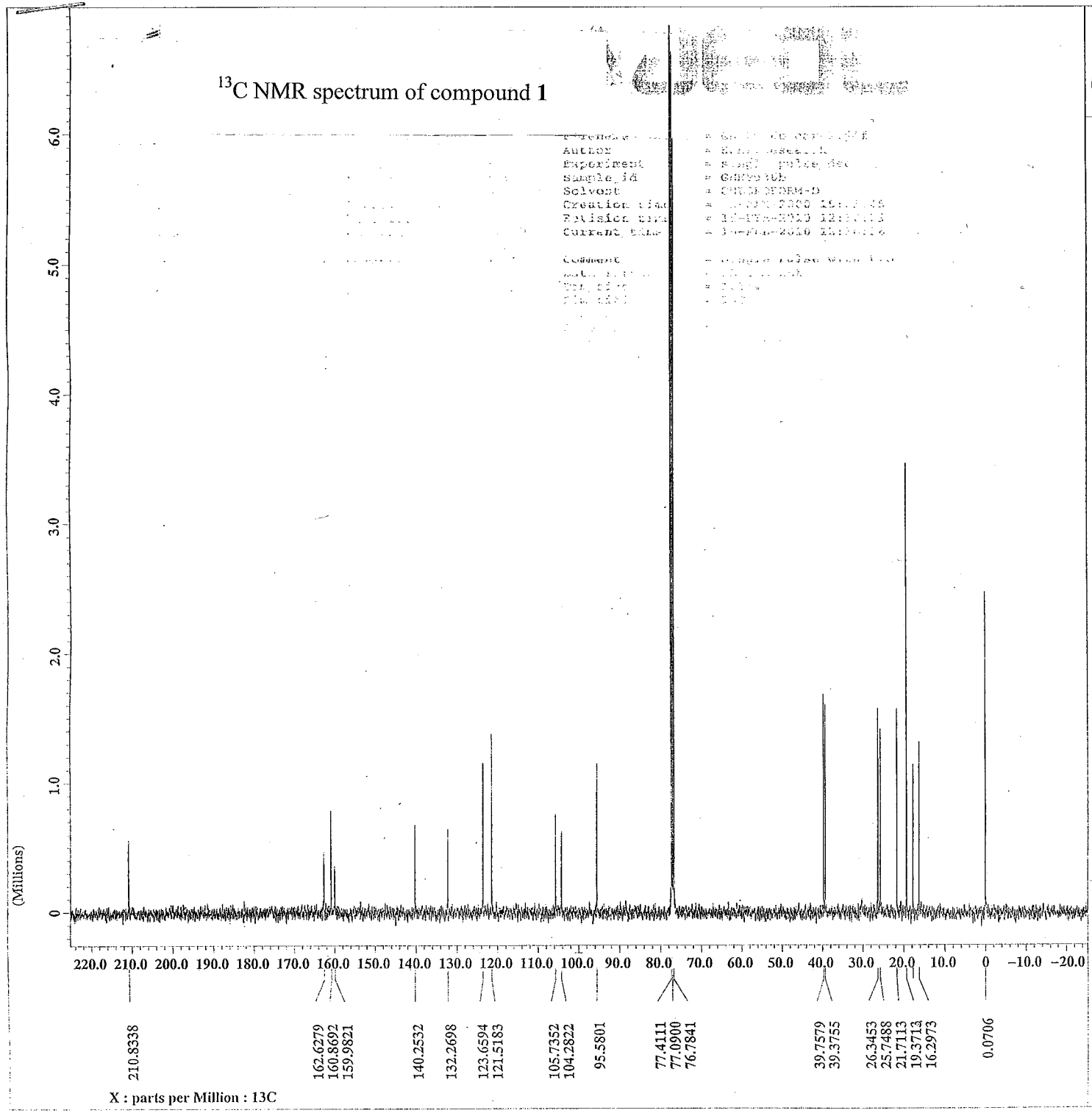
^{1}H NMR spectrum of compound **1**



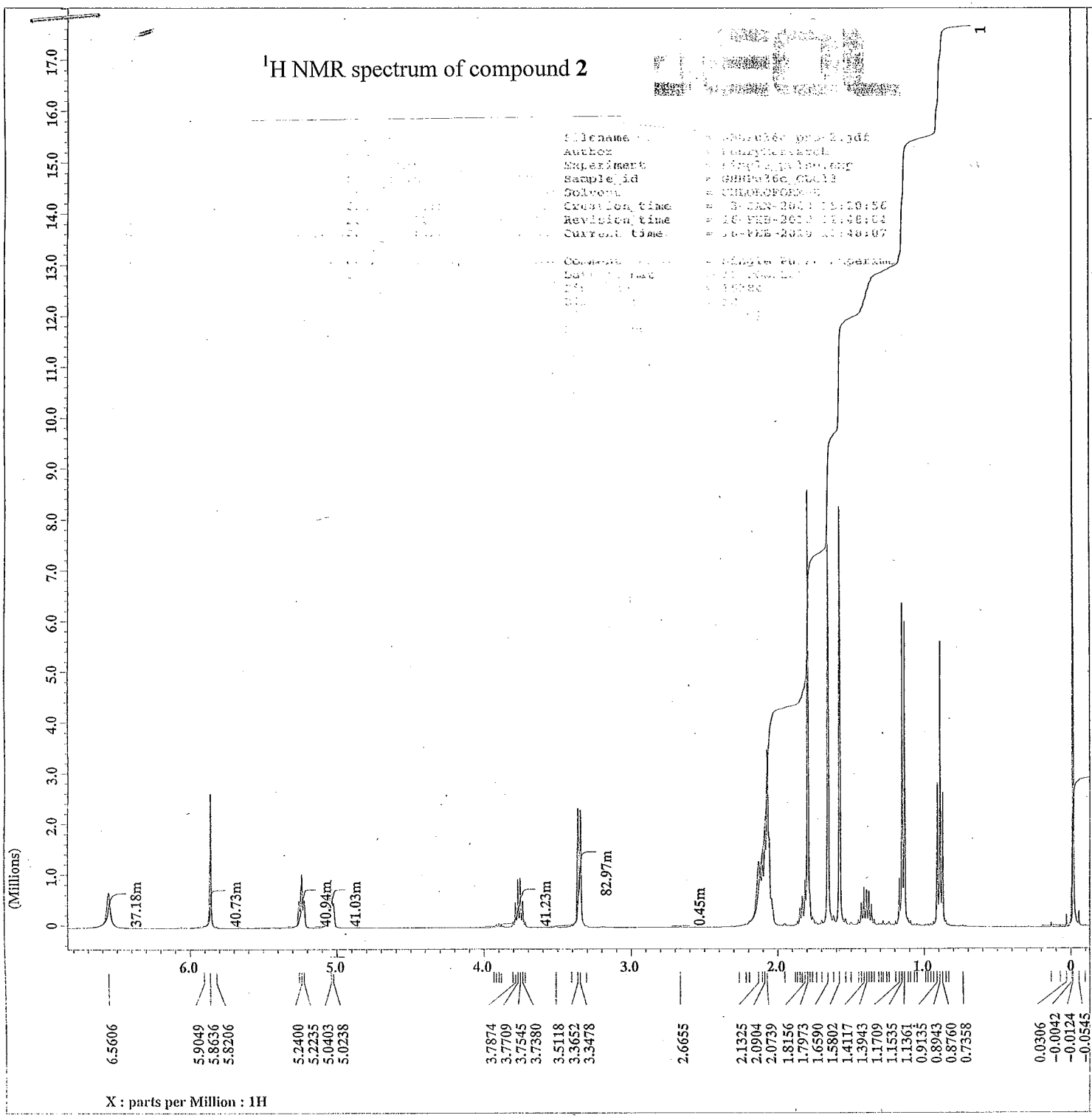
Filename	= GHHPu36b_pro-2.jdf
Author	= HenryResearch
Experiment	= single_pulse.exp
Sample_id	= GHHPu36b_CDCl3
Solvent	= CHLOROFORM-D
Creation_time	= 3-JAN-2000 14:33:18
Revision_time	= 16-FEB-2010 12:00:23
Current_time	= 16-FEB-2010 12:00:28
Comment	= Single Pulse Experime
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 2.7312128[s]
X_domain	= 1H
X_freq	= 399.78219838[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 0
X_resolution	= 0.36613771[Hz]
X_sweep	= 5.99880024[kHz]
Clipped	= FALSE
Mod_return	= 1
Scans	= 14
Total_scans	= 14
X_90_width	= 11.2[us]
X_acq_time	= 2.7312128[s]
X_angle	= 45[deg]
X_pulse	= 5.6[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 13
Relaxation_delay	= 4[s]
Temp_get	= 22.8[dC]
Unblank_time	= 2[us]

^{13}C NMR spectrum of compound **1**



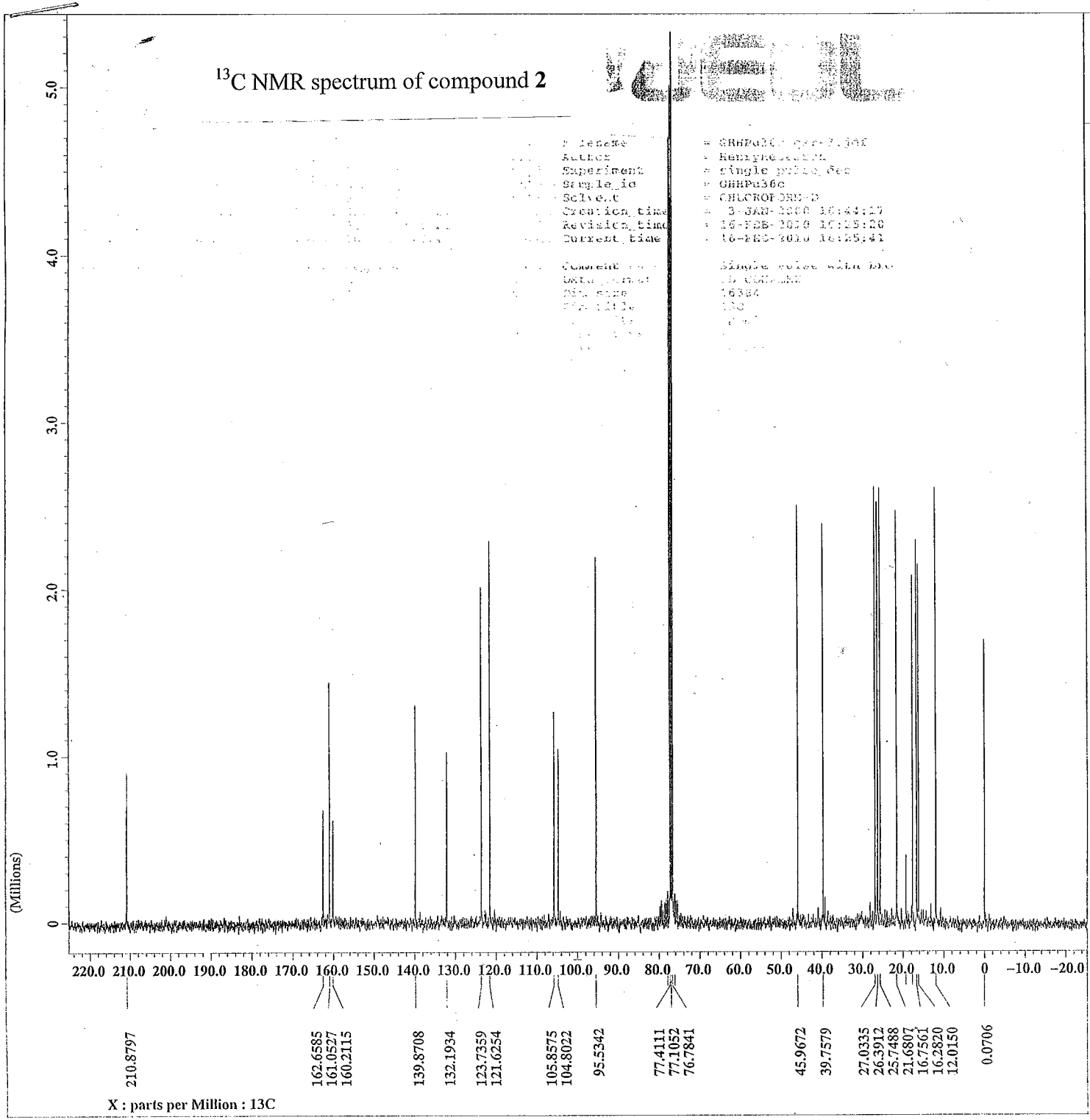
Filename	= GHHPu36b_car-2.jdf
Author	= HenryResearch
Experiment	= single_pulse_dec
Sample_id	= GHHPu36b
Solvent	= CHLOROFORM-D
Creation_time	= 3-JAN-2000 15:03:45
Revision_time	= 16-FEB-2010 12:30:29
Current_time	= 16-FEB-2010 12:30:36
Comment	= Single Pulse with Bro
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 0.6504448[s]
X_domain	= 13C
X_freq	= 100.52530333[MHz]
X_offset	= 100[ppm]
X_points	= 16384
X_prescans	= 4
X_resolution	= 1.53740948[Hz]
X_sweep	= 25.18891688[kHz]
Irr_domain	= 1H
Irr_freq	= 399.78219838[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 1079
Total_scans	= 1079
X_90_width	= 11.6[us]
X_acq_time	= 0.6504448[s]
X_angle	= 30[deg]
X_pulse	= 3.86666667[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 29
Relaxation_delay	= 1[s]
Temp_get	= 24.7[dC]
Unblank_time	= 2[us]

^{1}H NMR spectrum of compound **2**



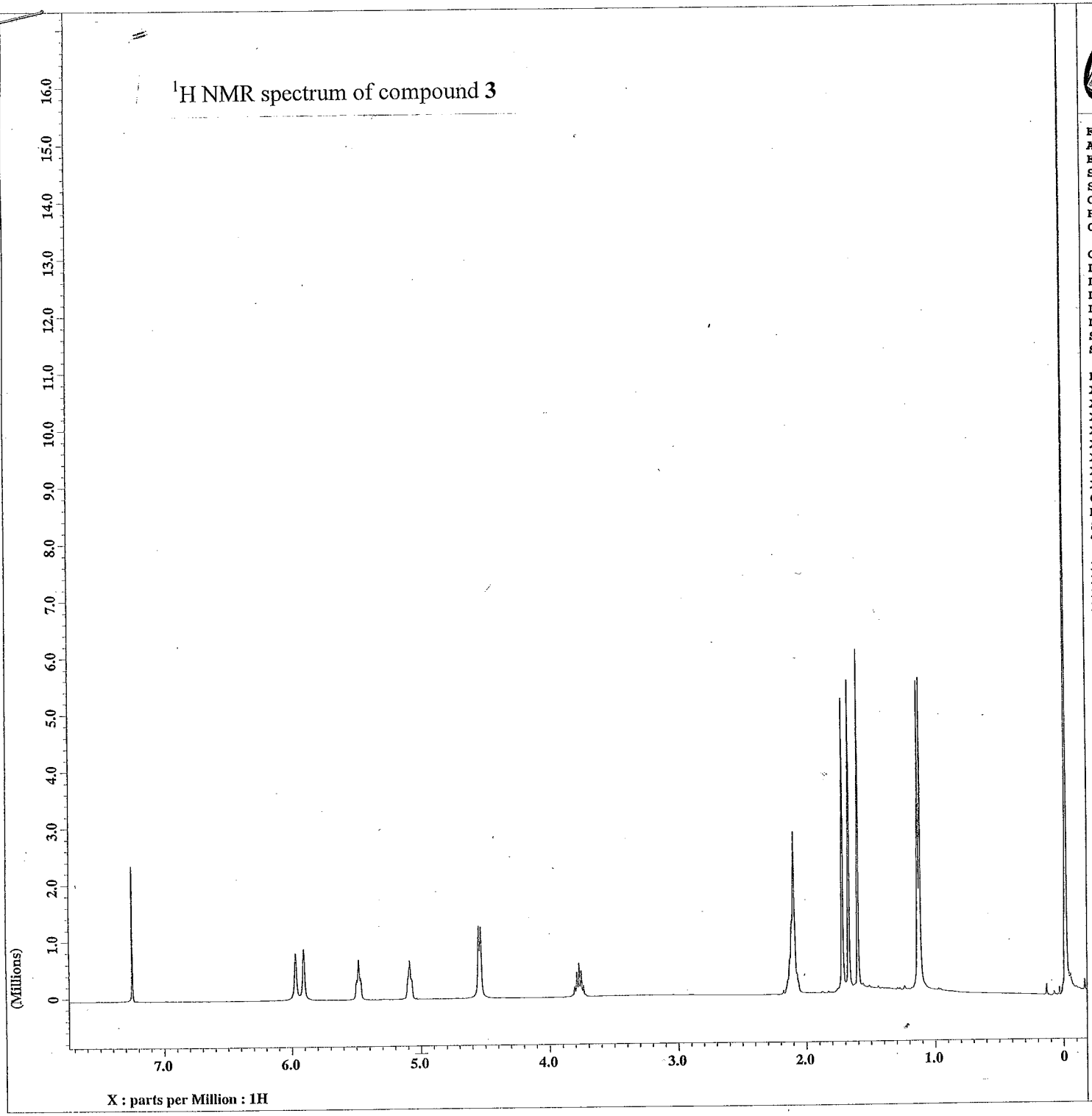
Filename	= GHHPu36c_pro-2.jdf
Author	= HenryResearch
Experiment	= single_pulse.exp
Sample_id	= GHHPu36c_CDCl3
Solvent	= CHLOROFORM-D
Creation_time	= 3-JAN-2000 15:20:56
Revision_time	= 16-FEB-2010 12:48:04
Current_time	= 16-FEB-2010 12:48:07
Comment	= Single Pulse Experime
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 2.7312128[s]
X_domain	= 1H
X_freq	= 399.78219838[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 0
X_resolution	= 0.36613771[Hz]
X_sweep	= 5.99880024[kHz]
Clipped	= FALSE
Mod_return	= 1
Scans	= 11
Total_scans	= 11
X_90_width	= 11.2[us]
X_acq_time	= 2.7312128[s]
X_angle	= 45[deg]
X_pulse	= 5.6[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 12
Relaxation_delay	= 4[s]
Temp_get	= 23[dC]
Unblank_time	= 2[us]

^{13}C NMR spectrum of compound **2**



Filename	= GHHPu36c_car-3.jdf
Author	= HenryResearch
Experiment	= single_pulse_dec
Sample_id	= GHHPu36c
Solvent	= CHLOROFORM-D
Creation_time	= 3-JAN-2000 16:44:17
Revision_time	= 16-FEB-2010 16:25:20
Current_time	= 16-FEB-2010 16:25:41
Comment	= Single Pulse with Bro
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 0.6504448[s]
X_domain	= 13C
X_freq	= 100.52530333[MHz]
X_offset	= 100[ppm]
X_points	= 16384
X_prescans	= 4
X_resolution	= 1.53740948[Hz]
X_sweep	= 25.18891688[kHz]
Irr_domain	= 1H
Irr_freq	= 399.78219838[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 3000
Total_scans	= 3000
X_90_width	= 11.6[us]
X_acq_time	= 0.6504448[s]
X_angle	= 30[deg]
X_pulse	= 3.86666667[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 29
Relaxation_delay	= 1[s]
Temp_get	= 24.8[dC]
Unblank_time	= 2[us]

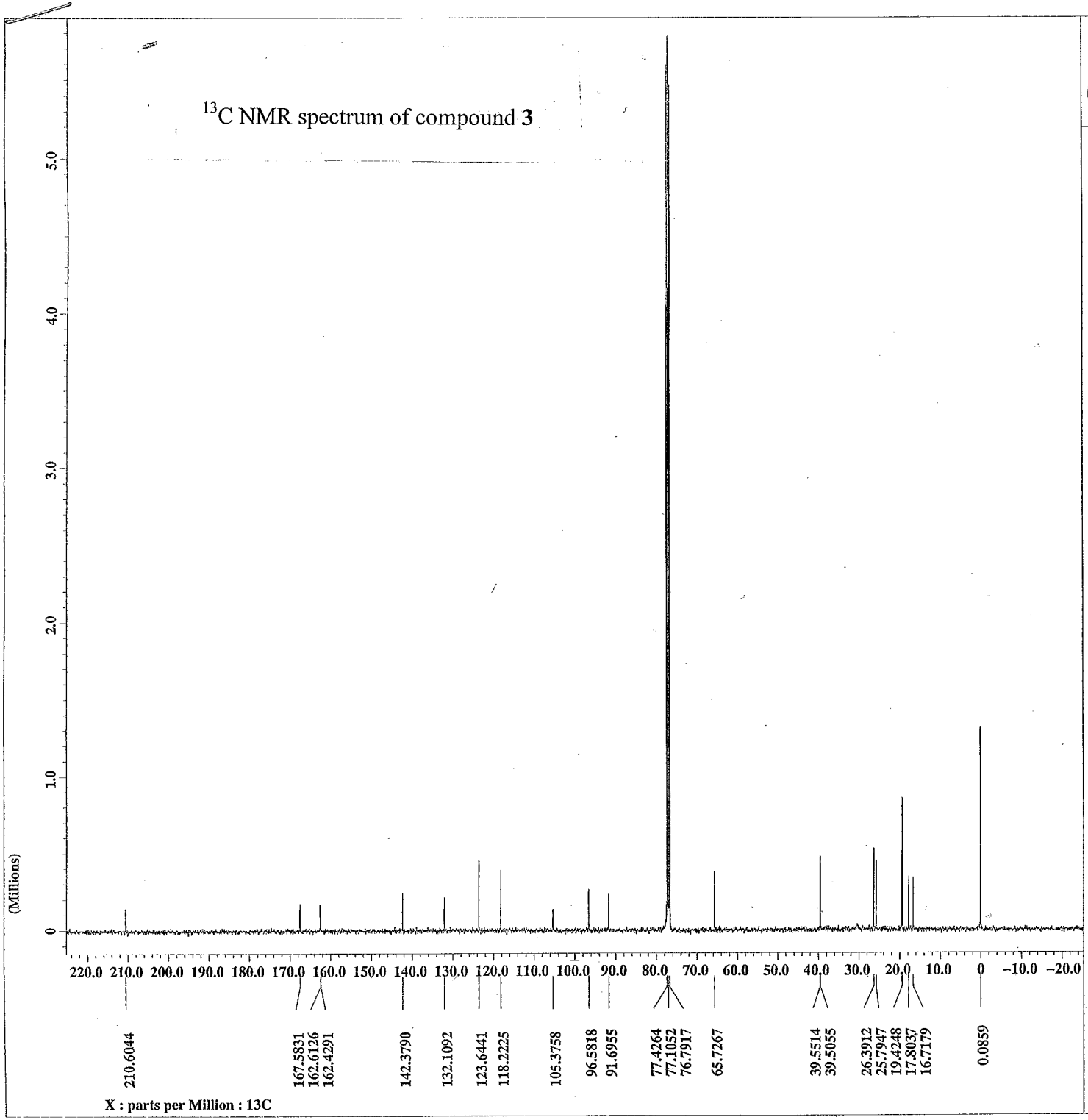
^{1}H NMR spectrum of compound **3**



JEOL

Filename	= GHHDen54A-Pro-2.jdf
Author	= HenryResearch
Experiment	= single_pulse.exp
Sample_id	= GHHDen54A_CDCl3
Solvent	= CHLOROFORM-D
Creation_time	= 21-JUL-2008 04:20:58
Revision_time	= 12-AUG-2008 10:04:31
Current_time	= 12-AUG-2008 10:04:48
Comment	= Single Pulse Experime
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 2.7312128[s]
X_domain	= 1H
X_freq	= 399.78219838[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 0
X_resolution	= 0.36613771[Hz]
X_sweep	= 5.99880024[kHz]
Clipped	= FALSE
Mod_return	= 1
Scans	= 43
Total_scans	= 43
X_90_width	= 10.9[us]
X_acq_time	= 2.7312128[s]
X_angle	= 45[deg]
X_pulse	= 5.45[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 15
Relaxation_delay	= 4[s]
Temp_get	= 18.6[dC]
Unblank_time	= 2[us]

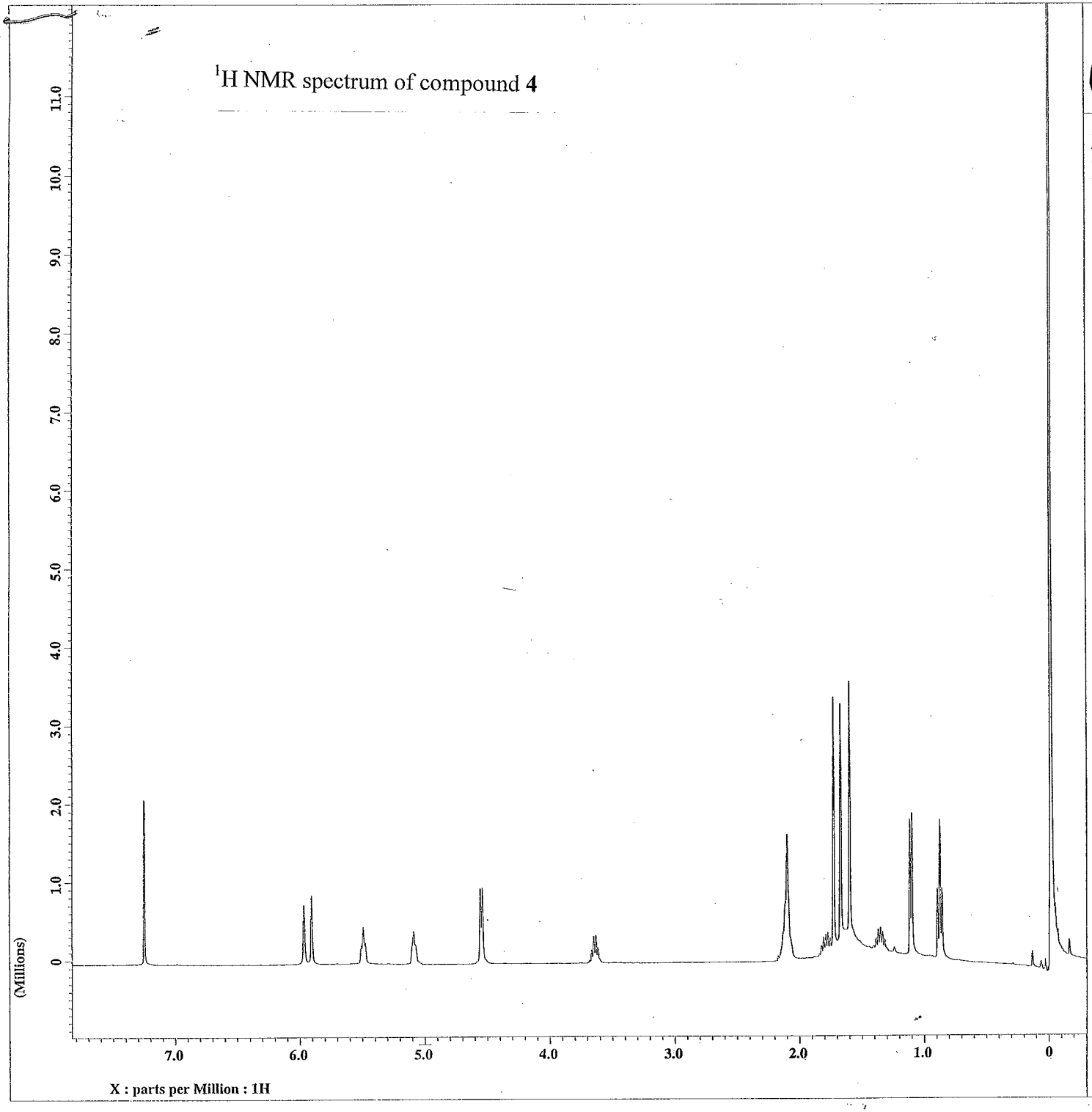
^{13}C NMR spectrum of compound **3**



JEOL

Filename	= GHHDen54A_car-2.jdf
Author	= HenryResearch
Experiment	= single_pulse_dec
Sample_id	= GHHDen54a
Solvent	= CHLOROFORM-D
Creation_time	= 21-JUL-2008 07:18:41
Revision_time	= 12-AUG-2008 13:02:22
Current_time	= 12-AUG-2008 13:03:14
Comment	= Single Pulse with Bro
Data_format	= 1D COMPLEX
Dim_size	= 32768
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 1.3008896[s]
X_domain	= 13C
X_freq	= 100.52530333[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 0.76870474[Hz]
X_sweep	= 25.18891688[kHz]
Irr_domain	= 1H
Irr_freq	= 399.78219838[MHz]
Irr_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 4560
Total_scans	= 4560
X_90_width	= 11.1[us]
X_acq_time	= 1.3008896[s]
X_angle	= 30[deg]
X_pulse	= 3.7[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 29
Relaxation_delay	= 1[s]
Temp_get	= 20.7[dC]
Unblank_time	= 2[us]

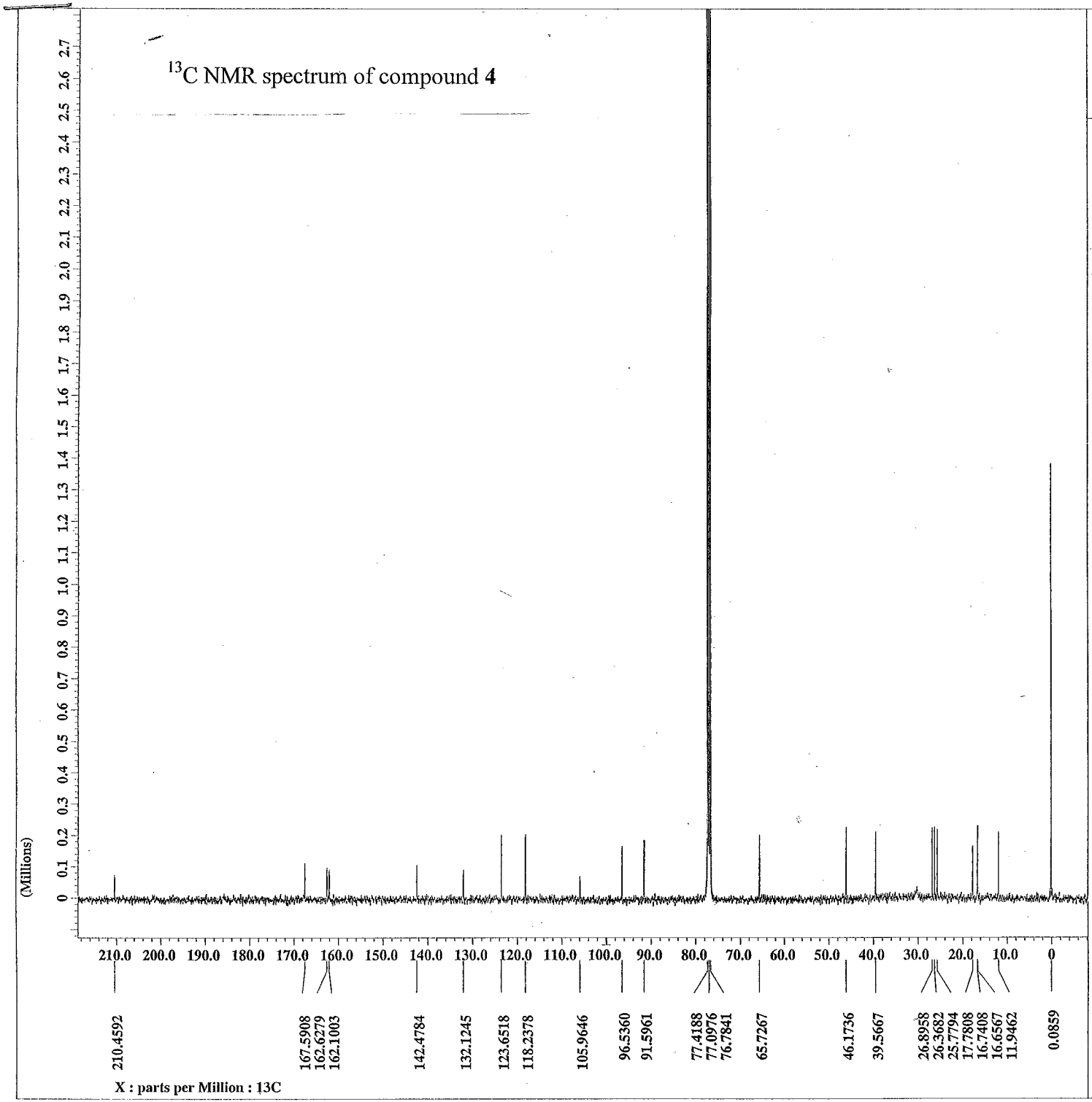
^{1}H NMR spectrum of compound **4**



JEOL

Filename	= GHHDen54b-2.jdf
Author	= HenryResearch
Experiment	= single_pulse.exp
Sample_id	= S#474047
Solvent	= CHLOROFORM-D
Creation_time	= 21-JUL-2008 07:31:17
Revision_time	= 12-AUG-2008 13:14:50
Current_time	= 12-AUG-2008 13:15:03
Comment	= Single Pulse Experime
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 2.7312128[s]
X_domain	= 1H
X_freq	= 399.78219838[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 0
X_resolution	= 0.36613771[Hz]
X_sweep	= 5.99880024[kHz]
Clipped	= FALSE
Mod_return	= 1
Scans	= 39
Total_scans	= 39
X_90_width	= 10.9[us]
X_acq_time	= 2.7312128[s]
X_angle	= 45[deg]
X_pulse	= 5.45[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 16
Relaxation_delay	= 4[s]
Temp_get	= 19.3[dC]
Unblank_time	= 2[us]

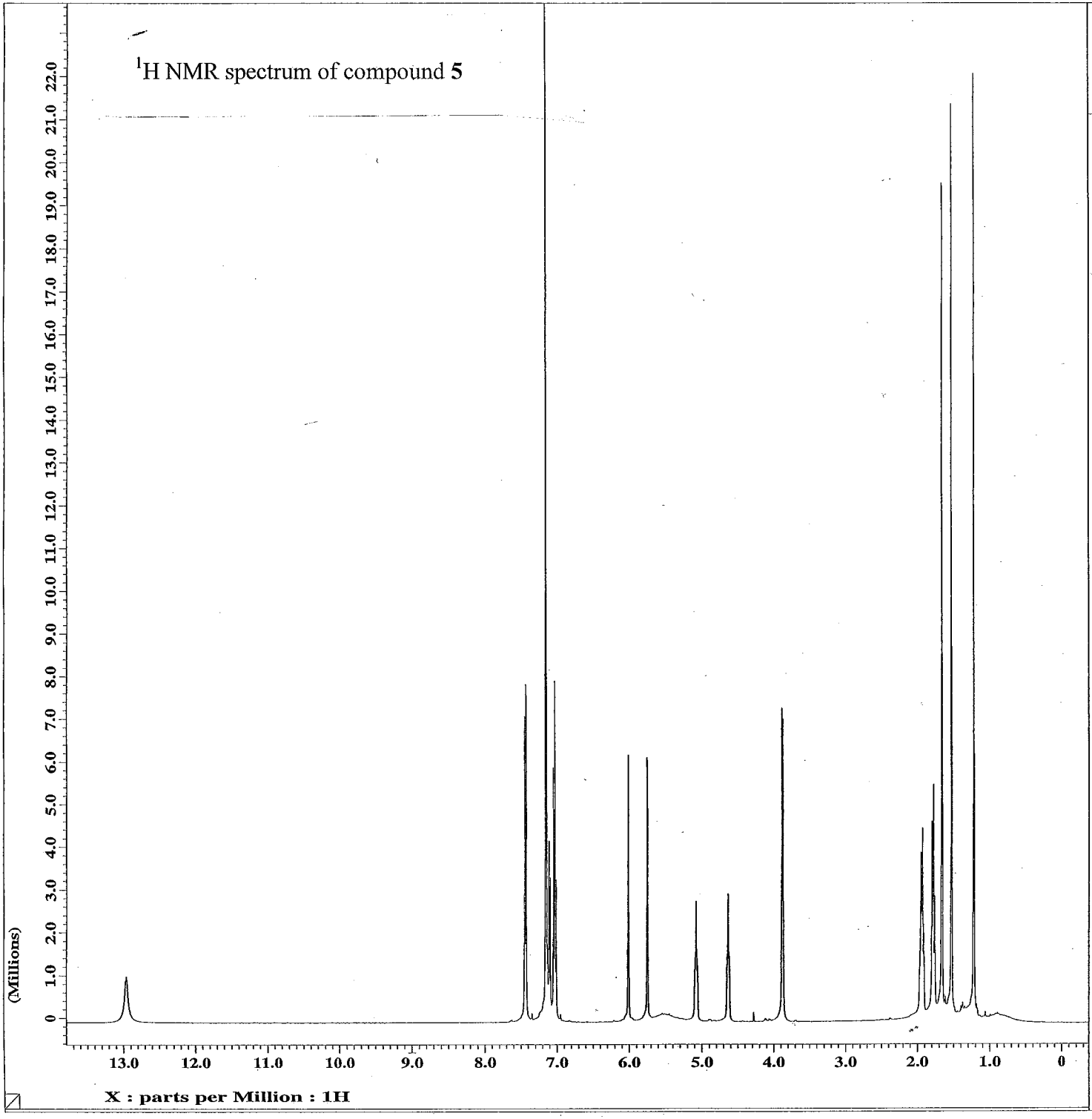
^{13}C NMR spectrum of compound **4**



JEOL

Filename	= GHHDen54b_car-2.jdf
Author	= HenryResearch
Experiment	= single_pulse_dec
Sample_id	= GHHDen54b
Solvent	= CHLOROFORM-D
Creation_time	= 21-JUL-2008 12:43:06
Revision_time	= 12-AUG-2008 18:26:43
Current_time	= 12-AUG-2008 18:27:13
Comment	= Single Pulse with Bro
Data_format	= 1D COMPLEX
Dim_size	= 32768
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 1.3008896[s]
X_domain	= 13C
X_freq	= 100.52530333[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 0.76870474[Hz]
X_sweep	= 25.18891688[kHz]
Irr_domain	= 1H
Irr_freq	= 399.78219838[MHz]
Irr_offset	= 5[ppm]
Clipped	= TRUE
Mod_return	= 1
Scans	= 8108
Total_scans	= 8108
X_90_width	= 11.1[us]
X_acq_time	= 1.3008896[s]
X_angle	= 30[deg]
X_pulse	= 3.7[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 29
Relaxation_delay	= 1[s]
Temp_get	= 21.1[dC]
Unblank_time	= 2[us]

^{1}H NMR spectrum of compound **5**

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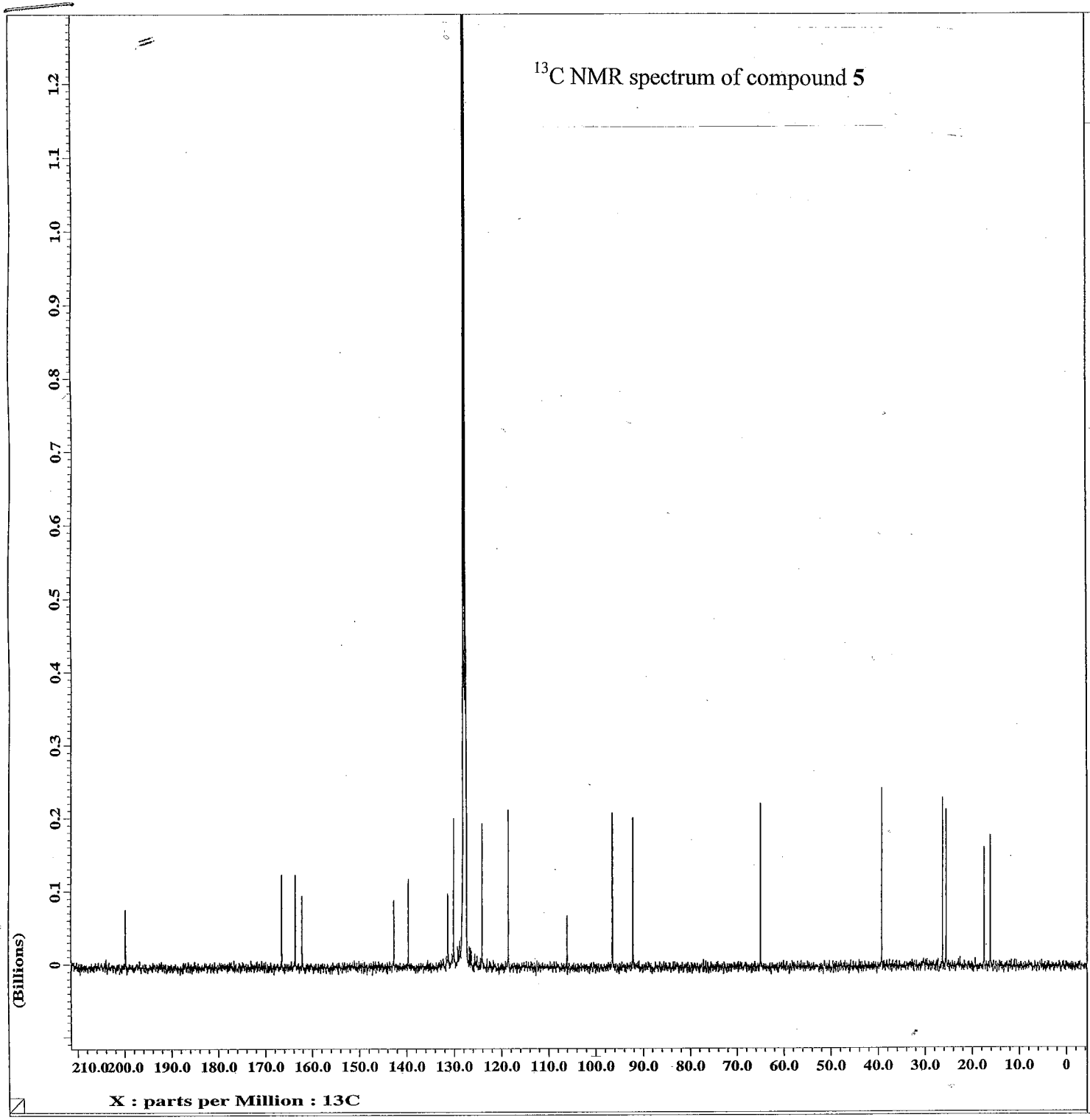
---- ACQUISITION PARAMETERS ----
Derived from: GHHD10cben.1
File Name          = GHHD10cben.3
Author             = henry
Sample ID          = S#503414
Content            = Single Pulse Experime
Creation Date      = 10-AUG-2005 14:06:32

Revision Date      = 10-AUG-2005 14:02:17
Spec Site          = Eclipse+ 400

Spec Type          = DELTA_NMR
Data Format        = 1D COMPLEX
Dimensions         = X
Dim Title          = 1H
Dim Size           = 16384
Dim Units          = [ppm]
Field_strength     = 9.389766[T] (400[MHz]
X_acq_duration     = 1.8612224[s]
X_domain           = 1H
X_freq             = 399.78219838[MHz]
X_offset           = 9[ppm]
X_points           = 16384
X_prescans         = 0
X_resolution       = 0.53728131[Hz]
X_sweep            = 8.8028169[kHz]
Mod_return         = 1
Scans              = 8
Total_scans        = 8

X_90_width         = 10.9[us]
X_acq_time         = 1.8612224[s]
X_angle            = 45[deg]
X_pulse            = 5.45[us]
Initial_wait       = 1[s]
Phase_preset       = 3[us]
Relaxation_delay   = 4[s]
Unblank_time       = 2[us]
```

^{13}C NMR spectrum of compound **5**



JEOL

```
---- ACQUISITION PARAMETERS ----
Derived from: GHHD10cbencar.1
File Name          = GHHD10cbencar.2
Author             = henry
Sample ID          = S#504547
Content            = Single Pulse with Bro
Creation Date      = 10-AUG-2005 14:49:56

Revision Date      = 10-AUG-2005 14:44:25
Spec Site          = Eclipse+ 400

Spec Type          = DELTA_NMR
Data Format        = 1D COMPLEX
Dimensions         = X
Dim Title          = 13C
Dim Size           = 32768
Dim Units          = [ppm]
Field_strength     = 9.389766[T] (400[MHz]
X_acq_duration     = 1.3008896[s]
X_domain           = 13C
X_freq             = 100.52530333[MHz]
X_offset           = 100[ppm]
X_points           = 32768
X_prescans         = 4
X_resolution       = 0.76870474[Hz]
X_sweep            = 25.18891688[kHz]
Irr_domain         = 1H
Irr_freq           = 399.78219838[MHz]
Irr_offset         = 5[ppm]
Mod_return         = 1
Scans              = 1000
Total_scans        = 1000

X_90_width         = 11.1[us]
X_acq_time         = 1.3008896[s]
X_angle            = 30[deg]
X_pulse            = 3.7[us]
Initial_wait       = 1[s]
Phase_preset       = 3[us]
Relaxation_delay   = 1[s]
Unblank_time       = 2[us]
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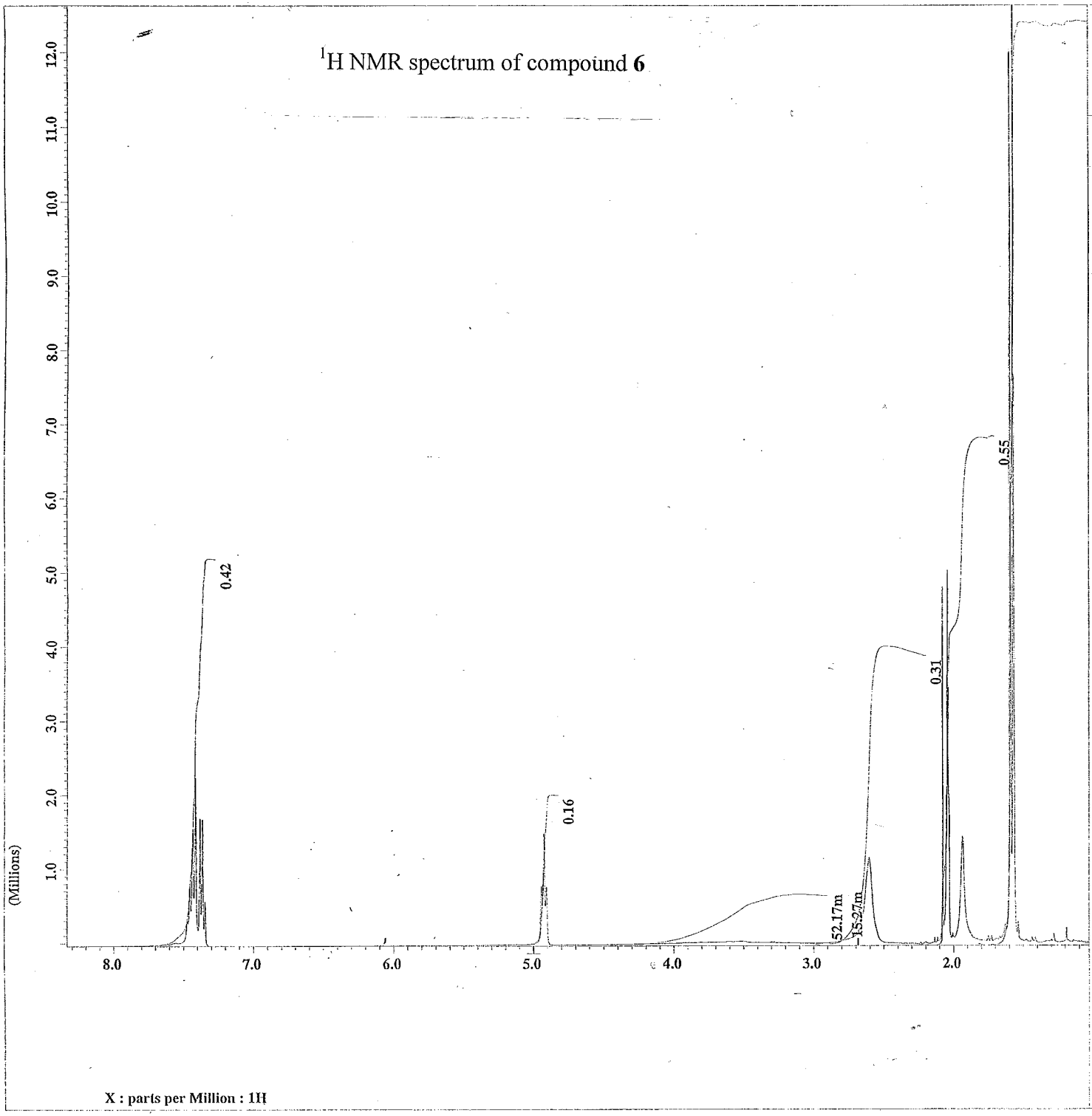
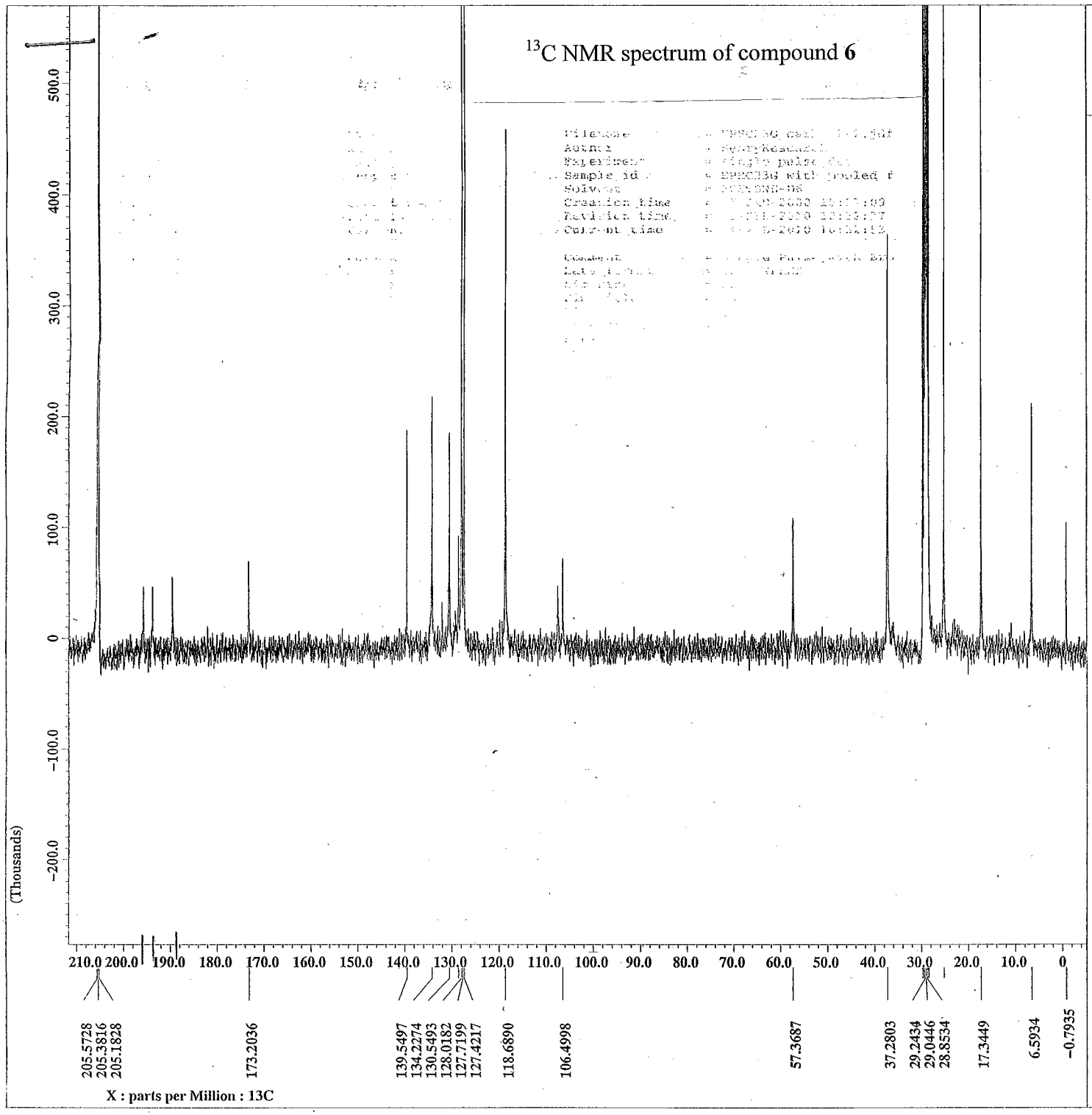
^{1}H NMR spectrum of compound **6**



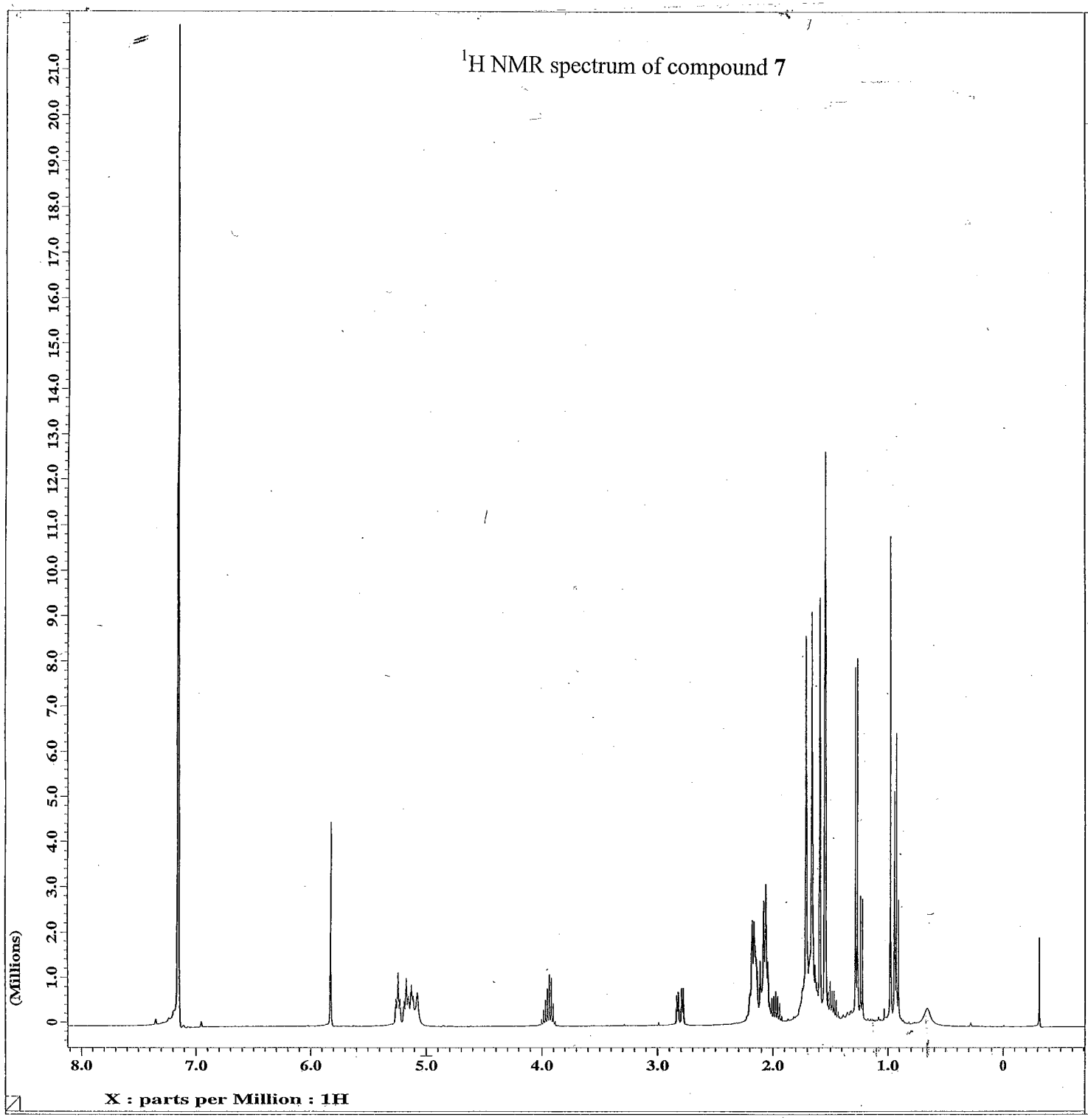
Filename	= MLHE38a_pro-2.jdf
Author	= HenryResearch
Experiment	= single_pulse.exp
Sample_id	= Acetone-d6
Solvent	= ACETONE-D6
Creation_time	= 16-JAN-2000 14:11:51
Revision_time	= 3-AUG-2010 11:51:23
Current_time	= 3-AUG-2010 11:52:18
Comment	= Single Pulse Experime
Data_format	= 1D COMPLEX
Dim_size	= 16384
Dim_title	= 1H
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 2.7312128[s]
X_domain	= 1H
X_freq	= 399.78219838[MHz]
X_offset	= 5[ppm]
X_points	= 16384
X_prescans	= 0
X_resolution	= 0.36613771[Hz]
X_sweep	= 5.99880024[kHz]
Clipped	= FALSE
Mod_return	= 1
Scans	= 18
Total_scans	= 18
X_90_width	= 11.2[us]
X_acq_time	= 2.7312128[s]
X_angle	= 45[deg]
X_pulse	= 5.6[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 16
Relaxation_delay	= 4[s]
Temp_get	= 21.9[dC]
Unblank_time	= 2[us]

^{13}C NMR spectrum of compound **6**



Filename	= EPHC23G_carbon2-2.jdf
Author	= HenryResearch
Experiment	= single_pulse_dec
Sample_id	= EPHC23G with pooled f
Solvent	= ACETONE-D6
Creation_time	= 5-JAN-2000 18:17:09
Revision_time	= 4-FEB-2010 10:32:37
Current_time	= 4-FEB-2010 10:32:53
Comment	= Single Pulse with Bro
Data_format	= 1D COMPLEX
Dim_size	= 32768
Dim_title	= 13C
Dim_units	= [ppm]
Dimensions	= X
Site	= Eclipse+ 400
Spectrometer	= DELTA_NMR
Field_strength	= 9.389766[T] (400[MHz]
X_acq_duration	= 1.3008896[s]
X_domain	= 13C
X_freq	= 100.52530333[MHz]
X_offset	= 100[ppm]
X_points	= 32768
X_prescans	= 4
X_resolution	= 0.76870474[Hz]
X_sweep	= 25.18891688[kHz]
Irr_domain	= 1H
Irr_freq	= 399.78219838[MHz]
Irr_offset	= 5[ppm]
Clipped	= FALSE
Mod_return	= 1
Scans	= 4772
Total_scans	= 4772
X_90_width	= 11.6[us]
X_acq_time	= 1.3008896[s]
X_angle	= 30[deg]
X_pulse	= 3.86666667[us]
Initial_wait	= 1[s]
Phase_preset	= 3[us]
Recvr_gain	= 28
Relaxation_delay	= 1[s]
Temp_get	= 23.4[dC]
Unblank_time	= 2[us]

^{1}H NMR spectrum of compound 7



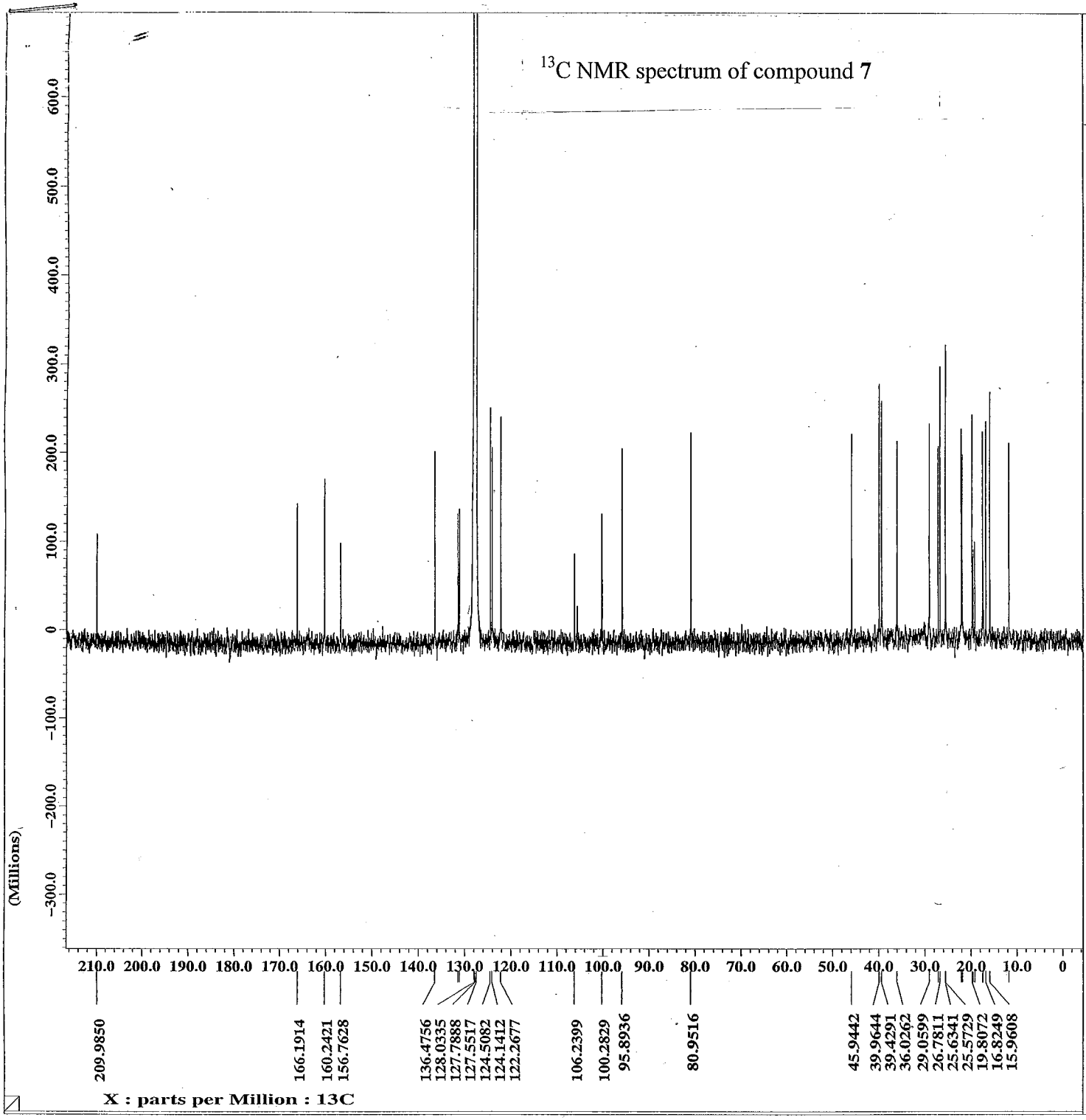

```
---- ACQUISITION PARAMETERS ----
Derived from: SR39bC6D6-proton.1
File Name          = SR39bC6D6-proton.2
Author             = henry
Sample ID          = SR39b
Content            = Single Pulse Experime
Creation Date      = 29-JUL-2005 14:12:33

Revision Date      = 29-JUL-2005 14:04:49
Spec Site          = Eclipse+ 400

Spec Type          = DELTA_NMR
Data Format        = 1D COMPLEX
Dimensions         = X
Dim Title          = 1H
Dim Size           = 16384
Dim Units          = [ppm]
Field_strength     = 9.389766[T] (400[MHz]
X_acq_duration     = 2.7312128[s]
X_domain           = 1H
X_freq             = 399.78219838[MHz]
X_offset           = 5[ppm]
X_points           = 16384
X_prescans         = 0
X_resolution       = 0.36613771[Hz]
X_sweep            = 5.99880024[kHz]
Mod_return         = 1
Scans              = 8
Total_scans        = 8

X_90_width         = 10.9[us]
X_acq_time         = 2.7312128[s]
X_angle            = 45[deg]
X_pulse            = 5.45[us]
Initial_wait       = 1[s]
Phase_preset       = 3[us]
Relaxation_delay   = 4[s]
Unblank_time       = 2[us]
```

^{13}C NMR spectrum of compound 7




```
----- ACQUISITION PARAMETERS ----
Derived from: SR39bC6D6-carbon.1
File Name          = SR39bC6D6-carbon.2
Author             = henry
Sample ID          = SR39b
Content            = Single Pulse with Bro
Creation Date      = 29-JUL-2005 16:08:29

Revision Date      = 29-JUL-2005 16:00:46
Spec Site          = Eclipse+ 400

Spec Type          = DELTA_NMR
Data Format        = 1D COMPLEX
Dimensions         = X
Dim Title          = 13C
Dim Size           = 32768
Dim Units          = [ppm]
Field_strength     = 9.389766[T] (400[MHz]
X_acq_duration     = 1.3008896[s]
X_domain           = 13C
X_freq             = 100.52530333[MHz]
X_offset           = 100[ppm]
X_points           = 32768
X_prescans         = 4
X_resolution       = 0.76870474[Hz]
X_sweep            = 25.18891688[kHz]
Irr_domain         = 1H
Irr_freq           = 399.78219838[MHz]
Irr_offset         = 5[ppm]
Mod_return         = 1
Scans              = 3000
Total_scans        = 3000

X_90_width         = 11.1[us]
X_acq_time         = 1.3008896[s]
X_angle            = 30[deg]
X_pulse            = 3.7[us]
Initial_wait       = 1[s]
Phase_preset       = 3[us]
Relaxation_delay   = 1[s]
Unblank_time       = 2[us]
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