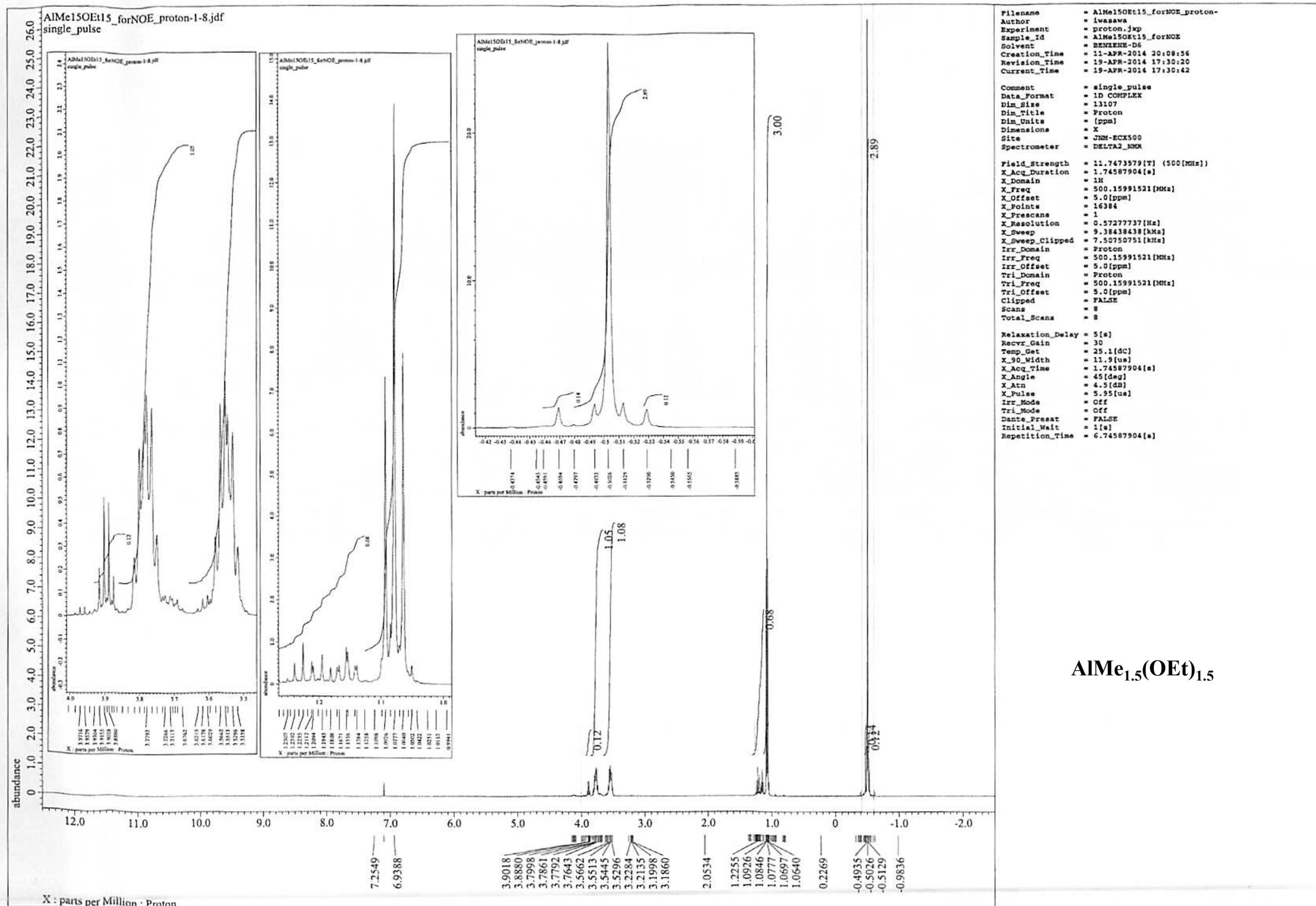
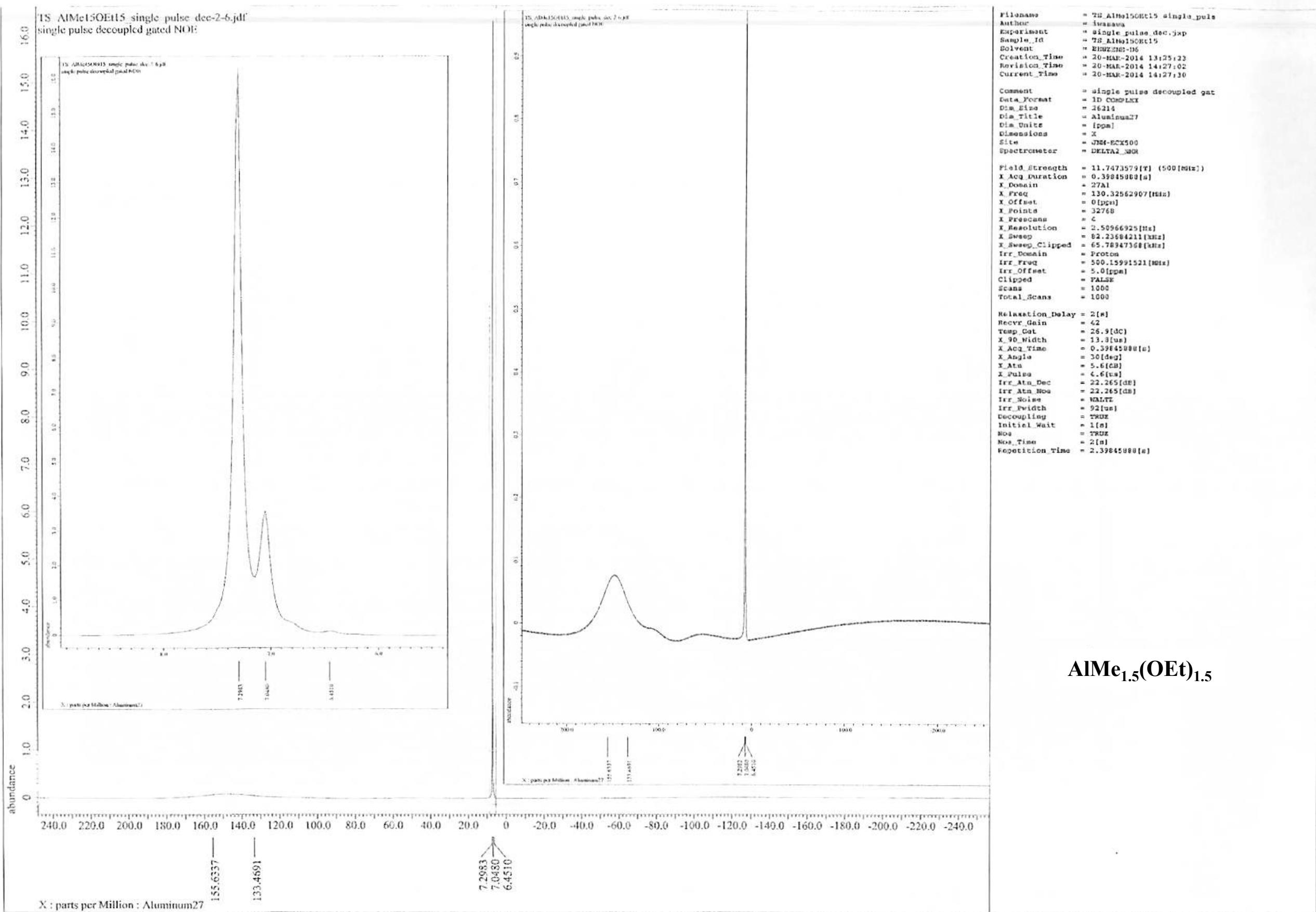


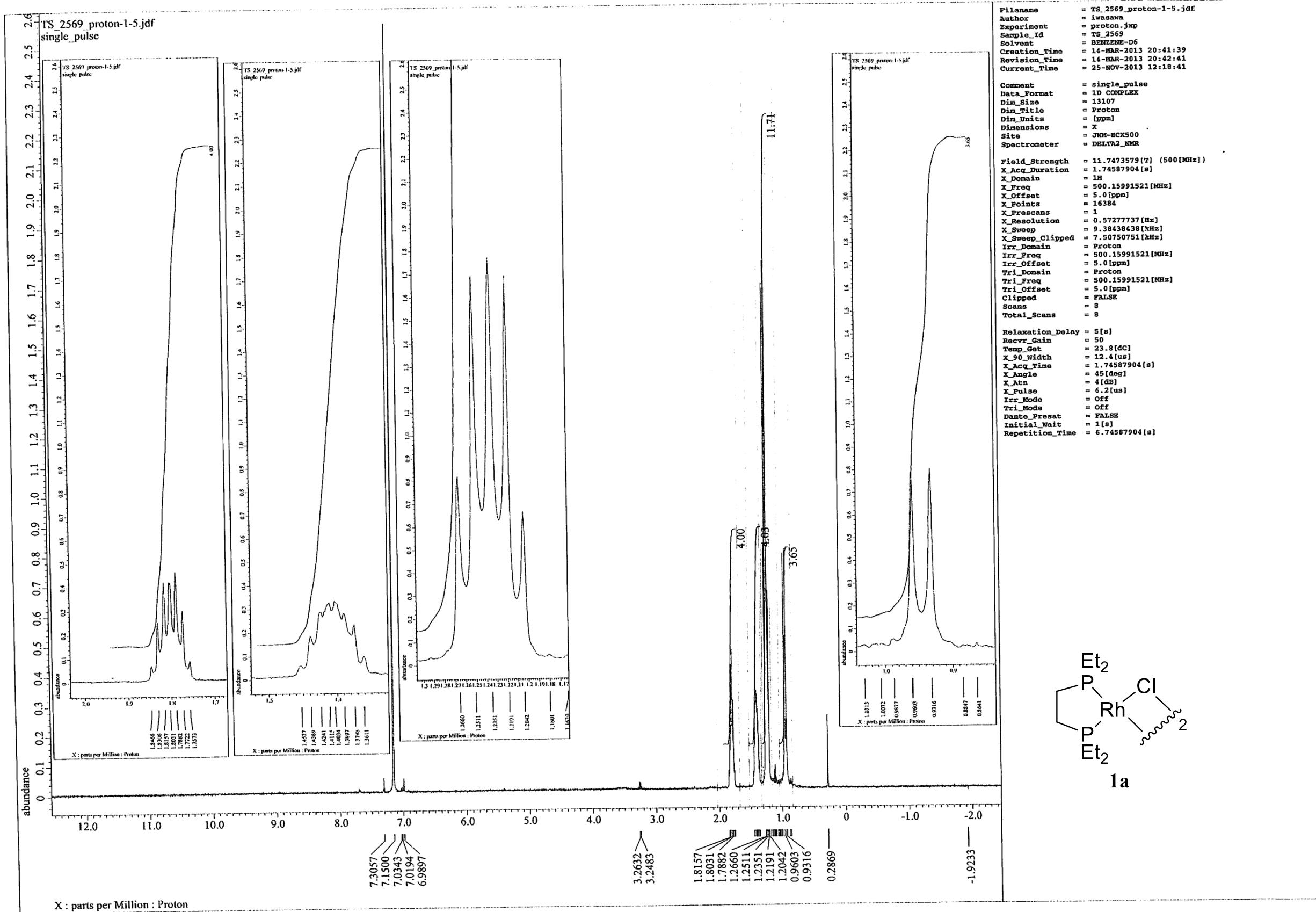
¹H NMR spectra of AlMe_{1.5}(OEt)_{1.5}



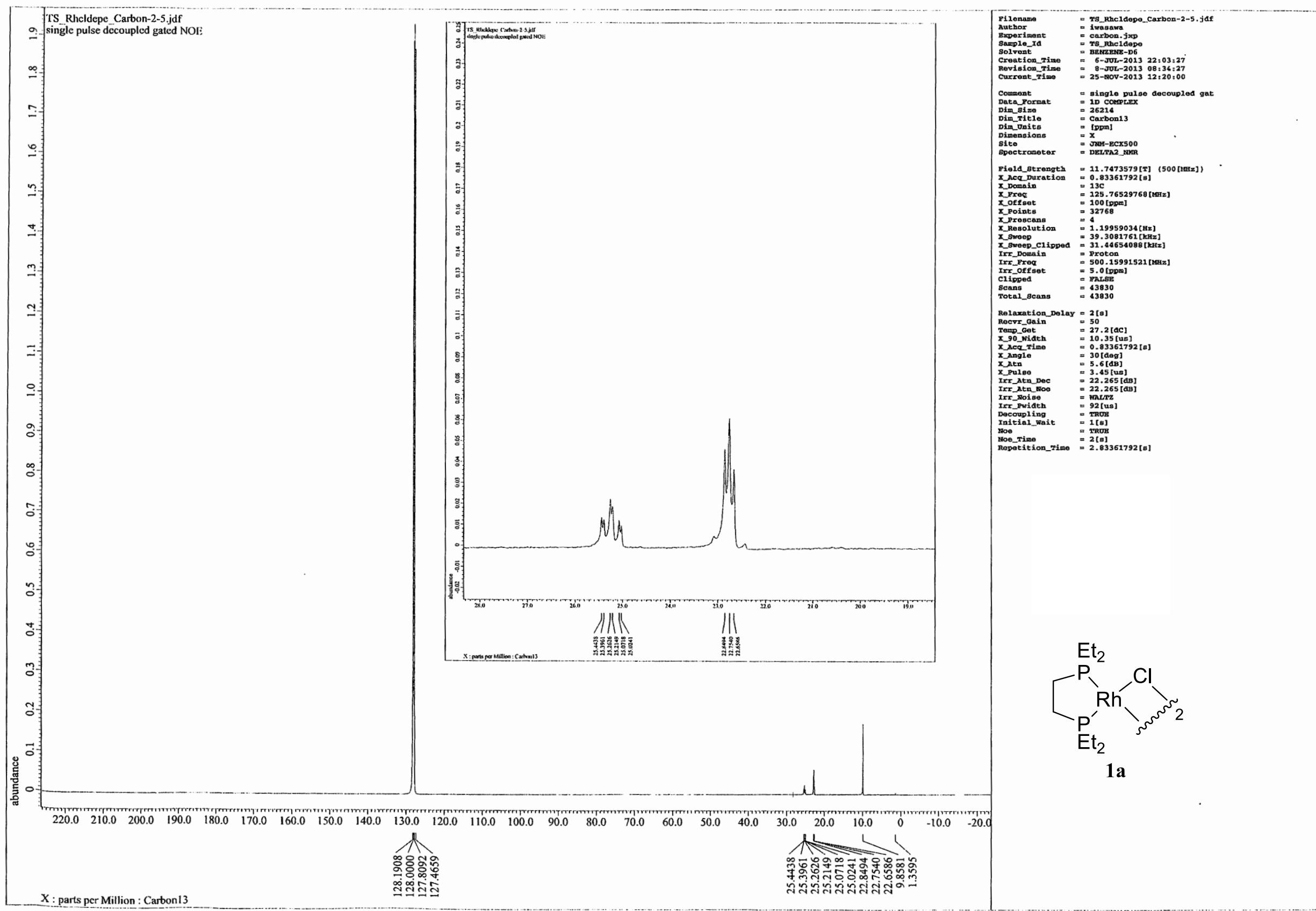
²⁷Al NMR spectra of AlMe_{1.5}(OEt)_{1.5}.



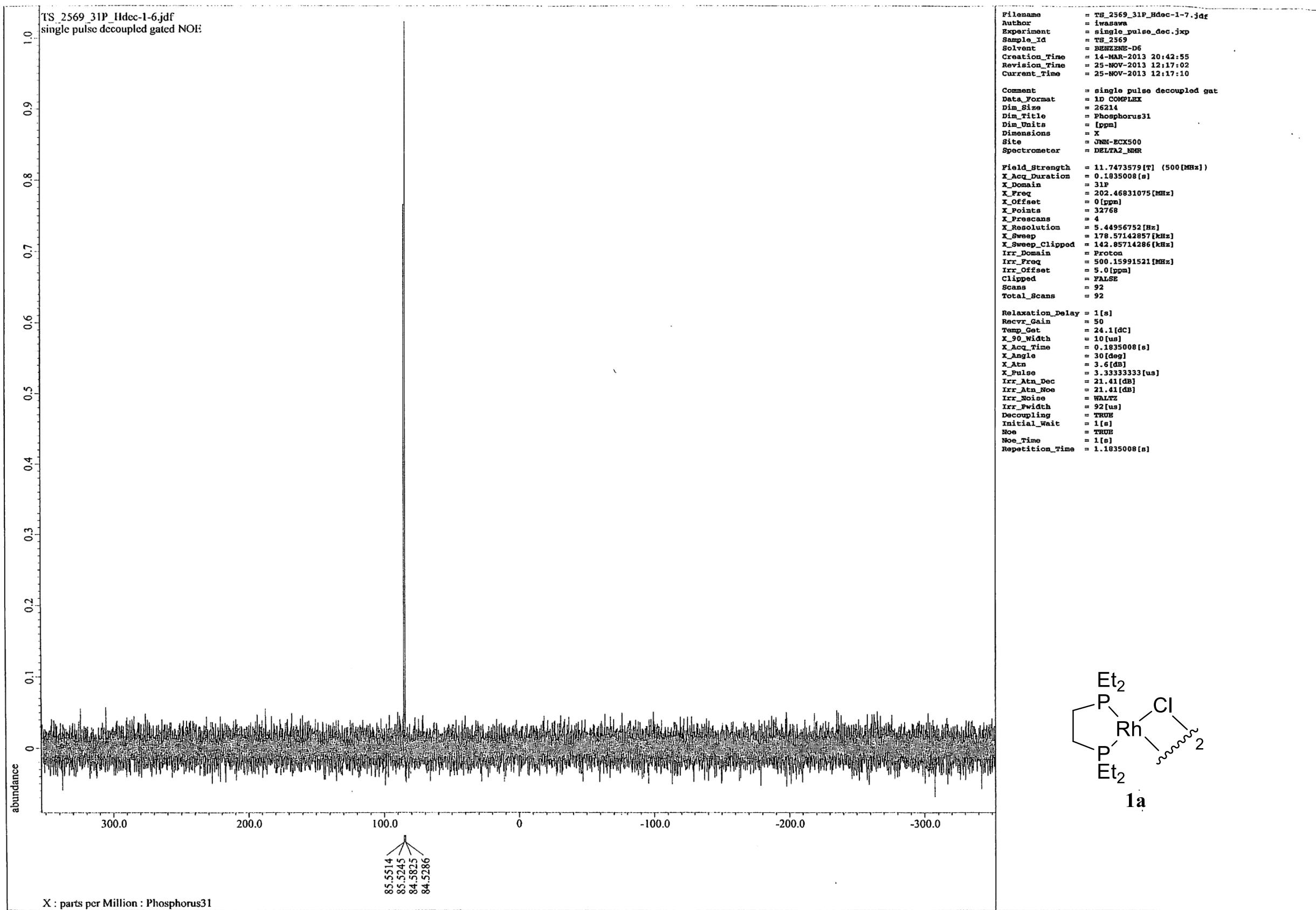
¹H NMR spectra of **1a**.



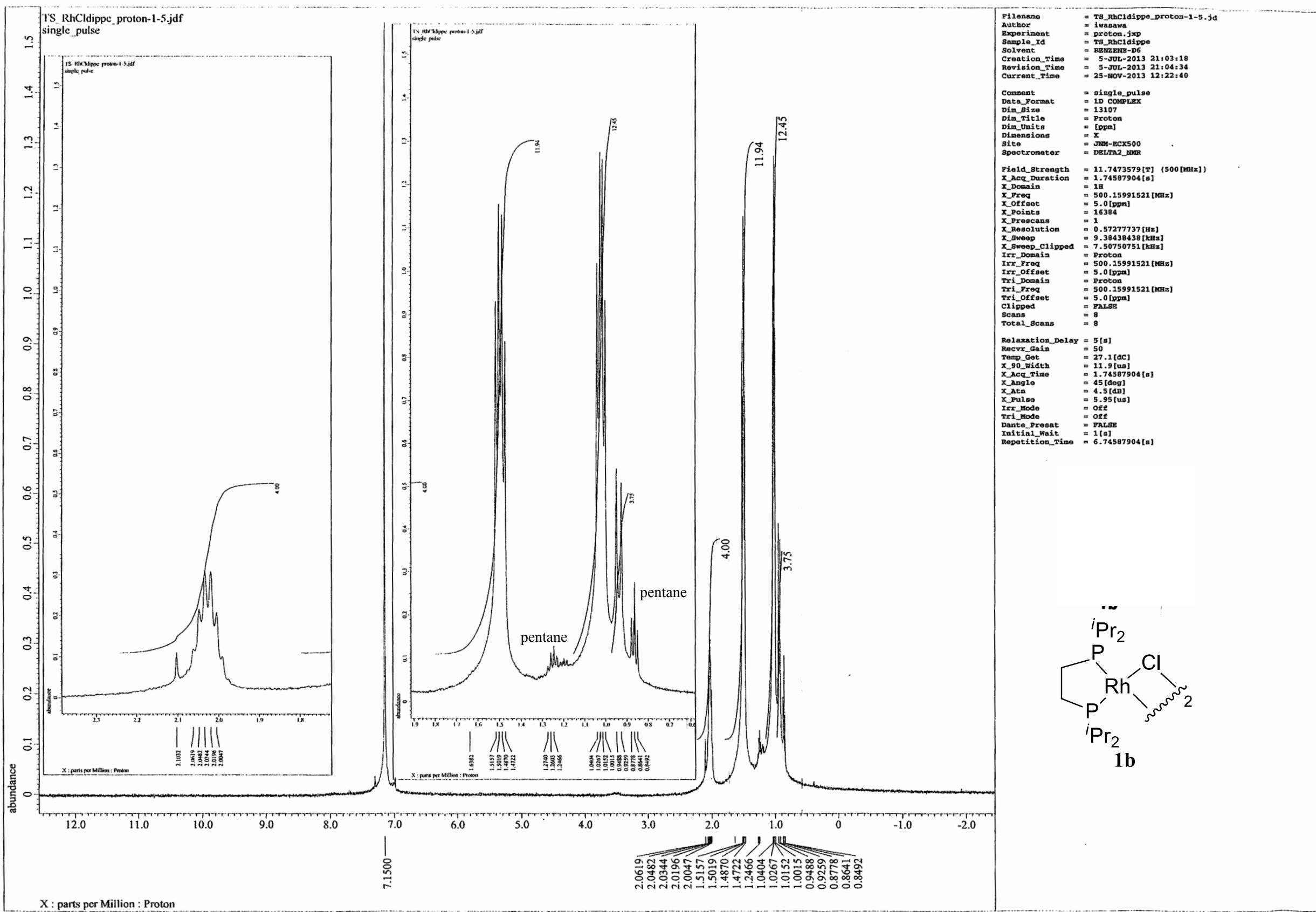
¹³C NMR spectra of **1a**.



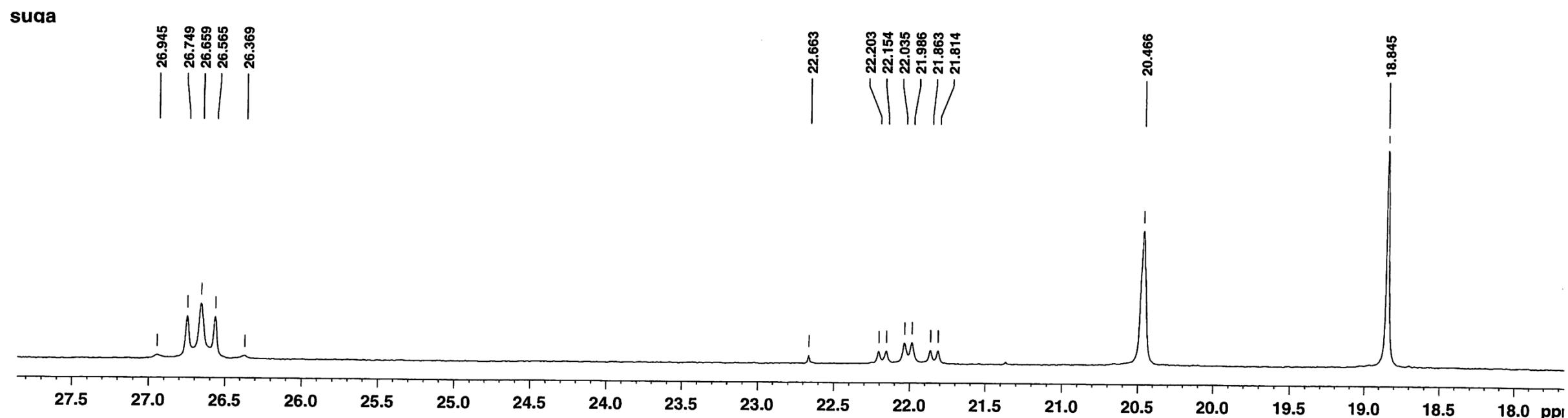
³¹P NMR spectra of **1a**.



¹H NMR spectra of **1b**.



¹³C NMR spectra of **1b**.



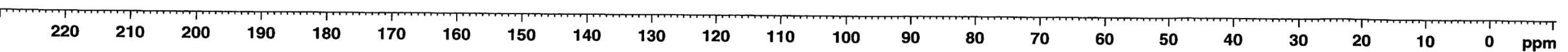
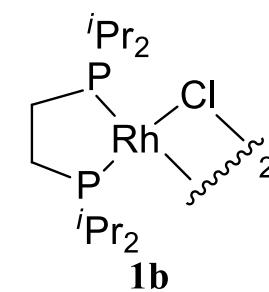
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ADDRESS FREQUENCY INTE

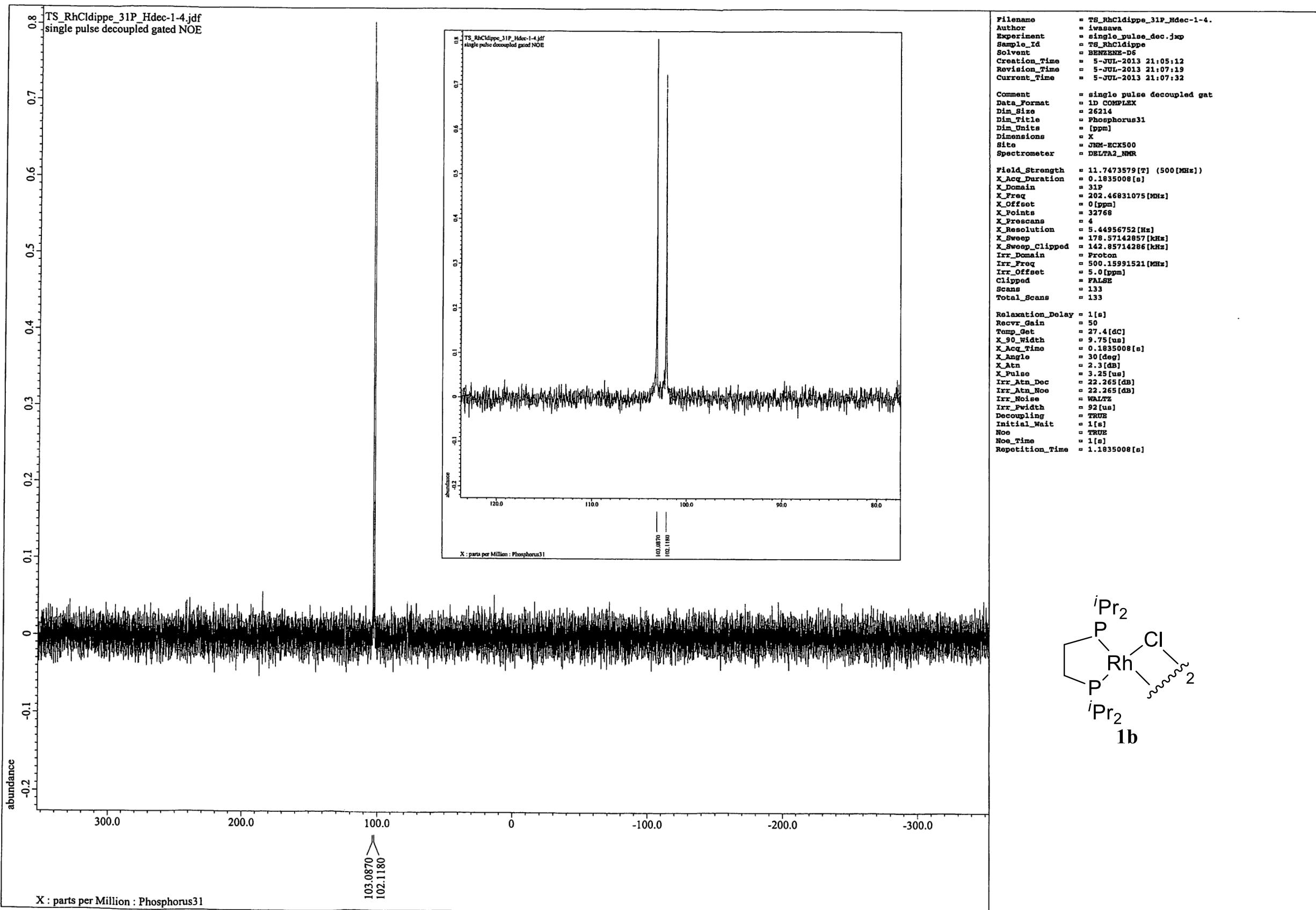
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5	27767.3	16121.368
6	27792.6	16109.650
7	27819.7	16097.126
8	27844.6	16085.612
9	27872.1	16072.922
10	27964.9	16030.011
11	28462.0	15800.164
12	53280.8	4324.259
13	55304.4	3388.551
14	55357.8	3363.858
15	55382.1	3352.613
16	55407.7	3340.792
17	55460.9	3316.175
18	56468.9	2850.081
19	56594.1	2792.223
20	56607.6	2785.990
21	56639.9	2771.020
22	56653.2	2764.879
23	56686.5	2749.485
24	56699.9	2743.293
25	57066.5	2573.783
26	57507.4	2369.902
27	58768.0	1787.007
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128.508
128.381
128.292
128.194
128.101
128.001
127.909
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127.467
125.640

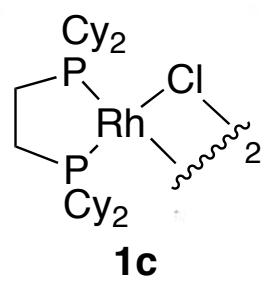
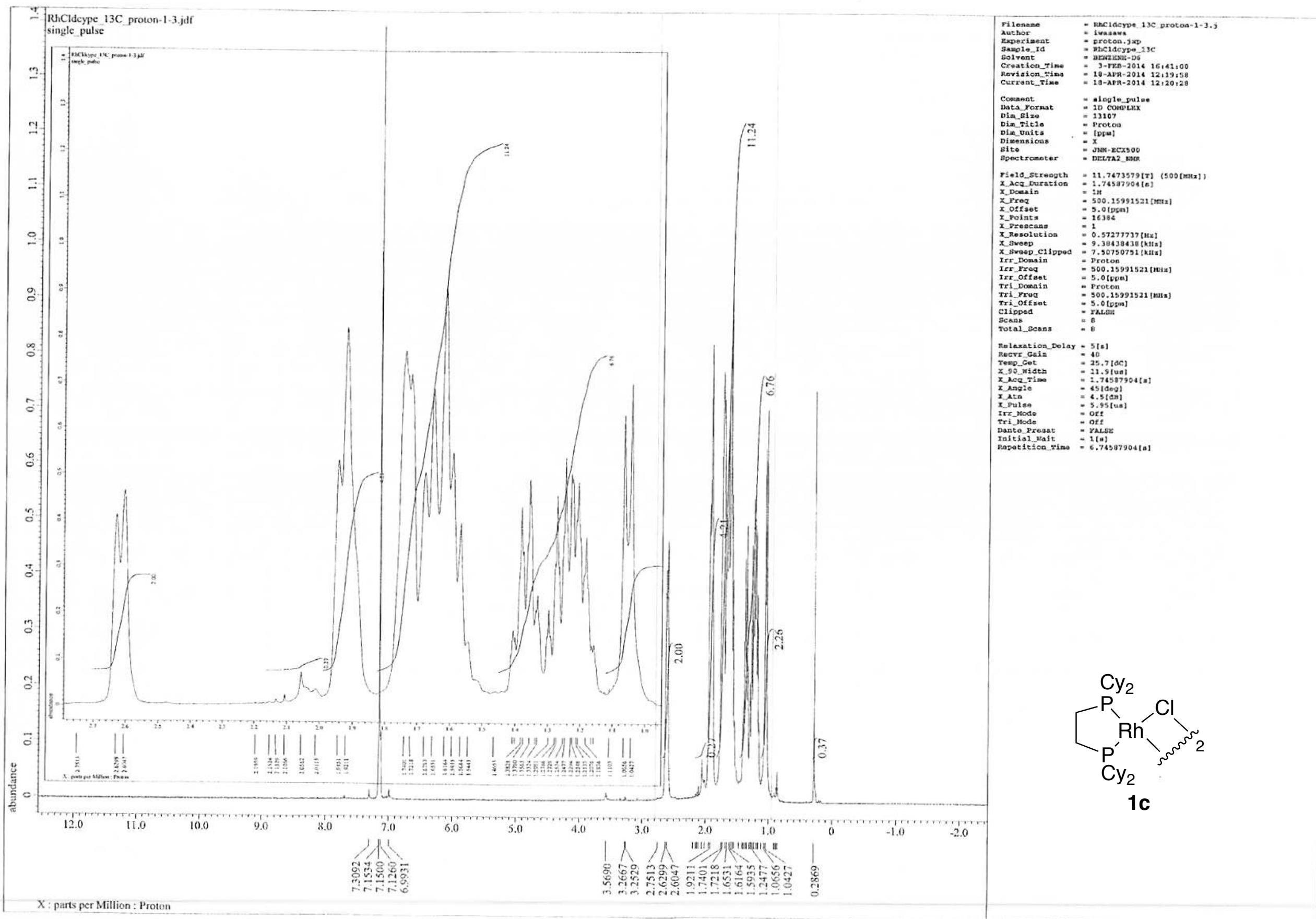
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20.466
18.845
14.210



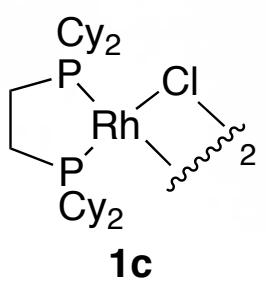
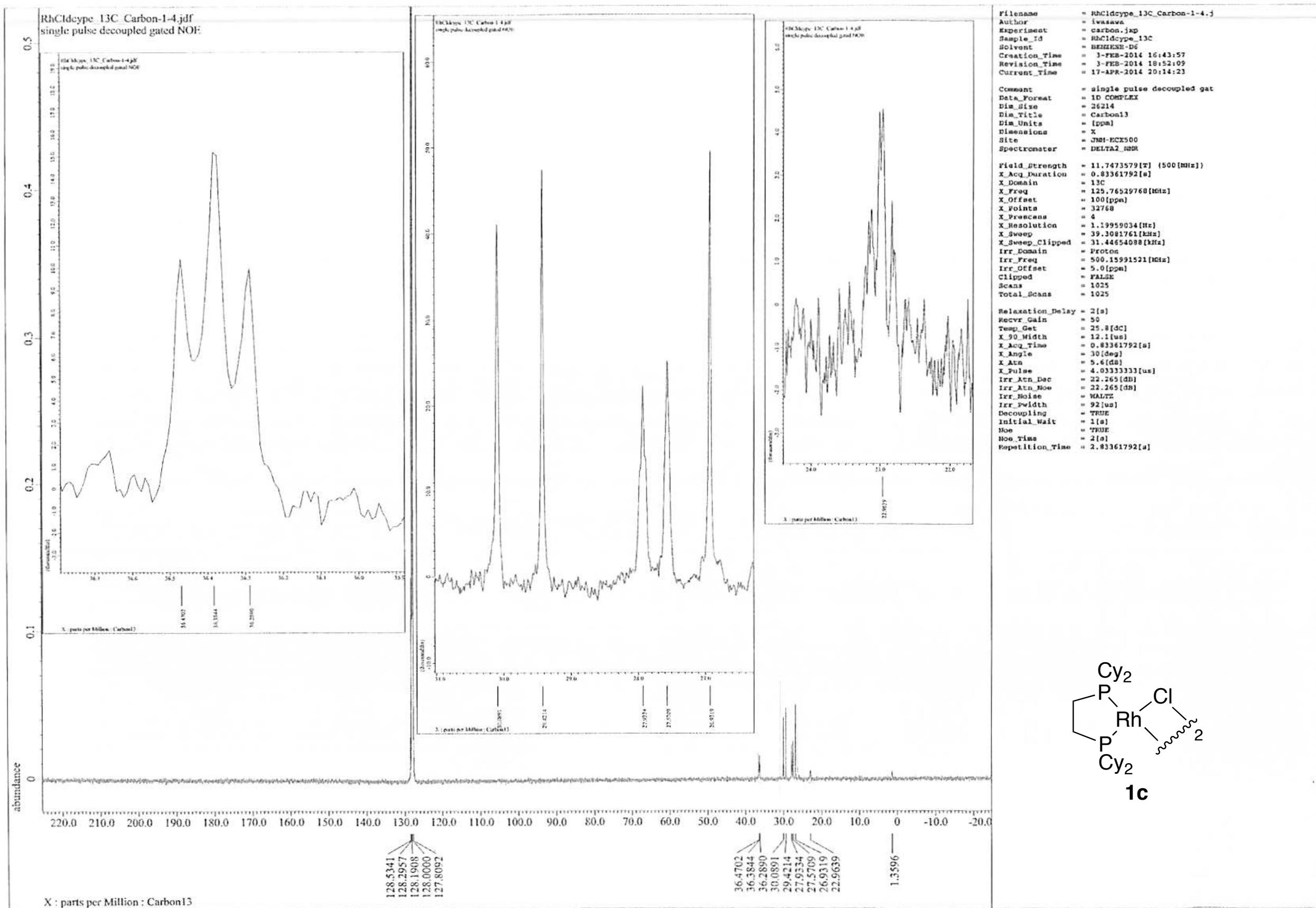
³¹P NMR spectra of **1b**.



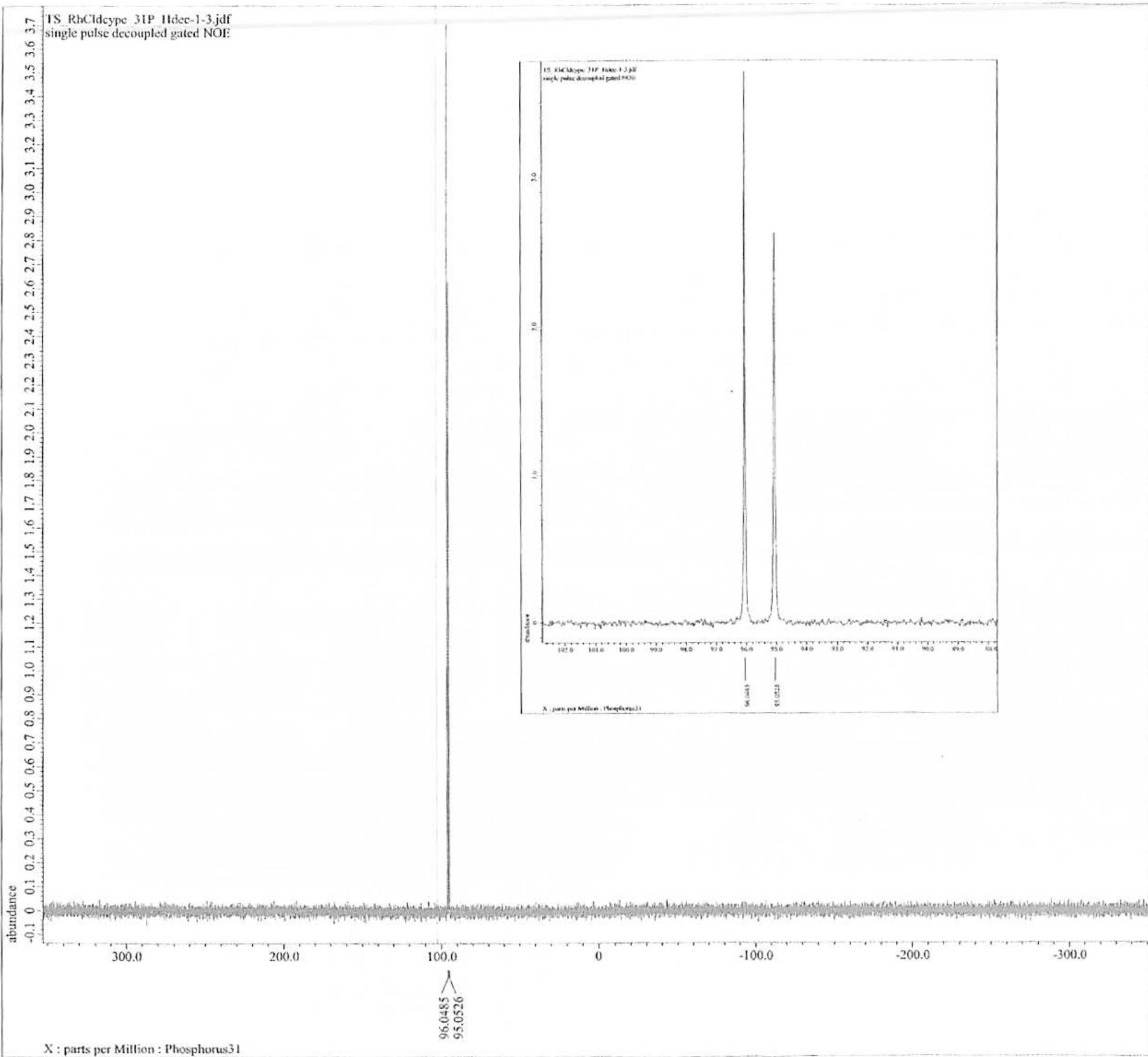
¹H NMR spectra of **1c**.



¹³C NMR spectra of 1c



³¹P NMR spectra of **1c**.



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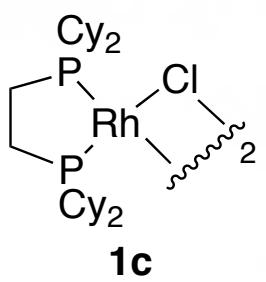
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author = ivasanvi
Experiment = single_pulse_dec.jdp
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Revision_Time = 17-JAN-2014 22:23:57
Current_Time = 18-APR-2014 12:18:32

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Spectrometer = DRIFTA2_NMR

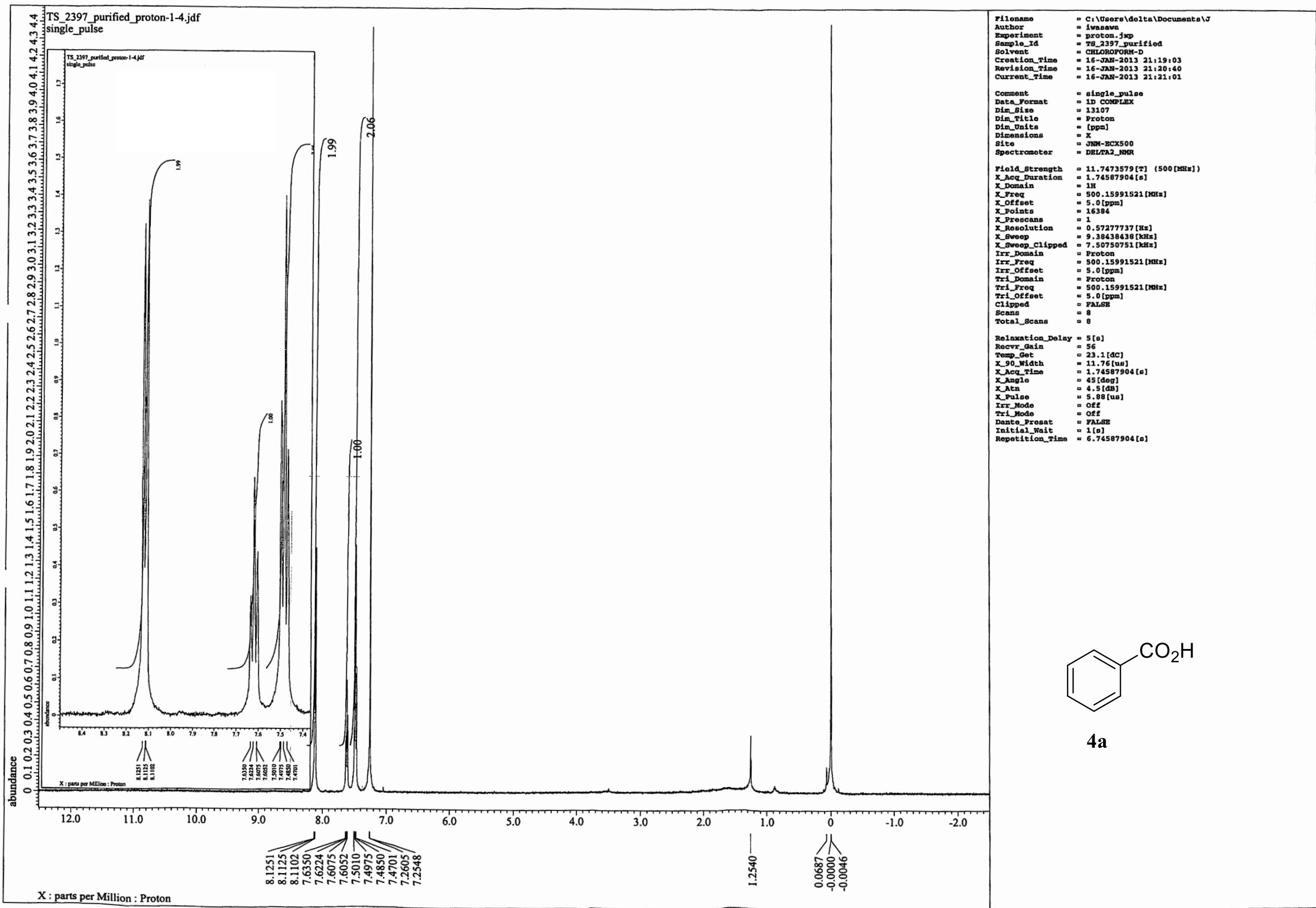
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X_Offset = 0[ppm]
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X_Prescans = 4
X_Resolution = 5.44956752[Hz]
X_Sweep = 178.57142057[kHz]
X_Sweep_Clipped = 142.85714286[kHz]
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Irr_Freq = 500.15991521[MHz]
Irr_Offset = 5.0[ppm]
Clipped = FALSE
Scans = 126
Total_Scans = 126

Relaxation_Delay = 1[s]
Recvr_Gain = 50
Temp_Get = 24.2[dC]
X_90_Width = 10.85[us]
X_Acq_Time = 0.1835008[s]
X_Angle = 30[deg]
X_Atn = 2.3[dB]
X_Pulse = 3.61666667[us]
Irr_Atn_Dec = 22.265[dB]
Irr_Atn_Noe = 22.265[dB]
Irr_Noise = WALTZ
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Nose = TRUE
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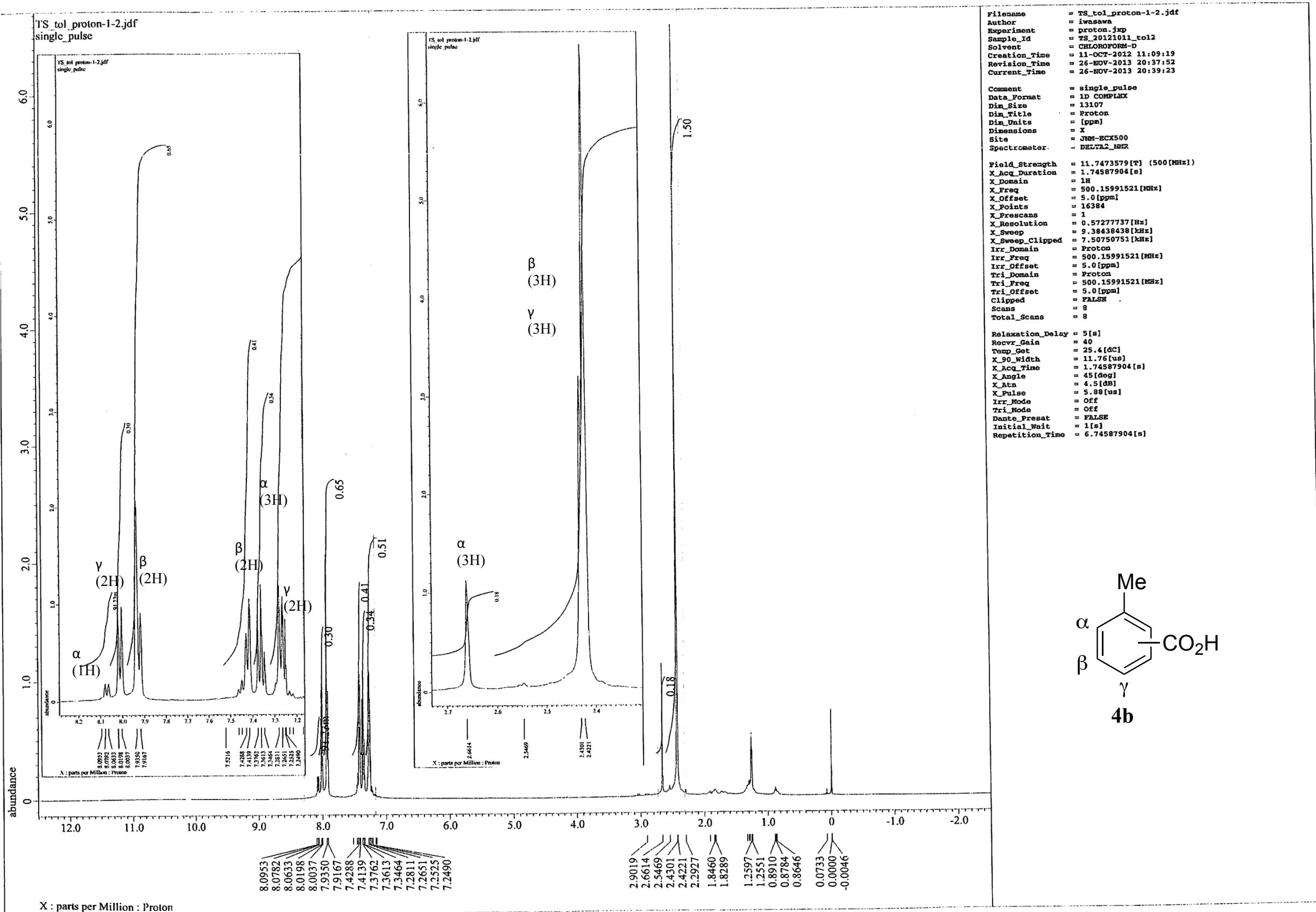
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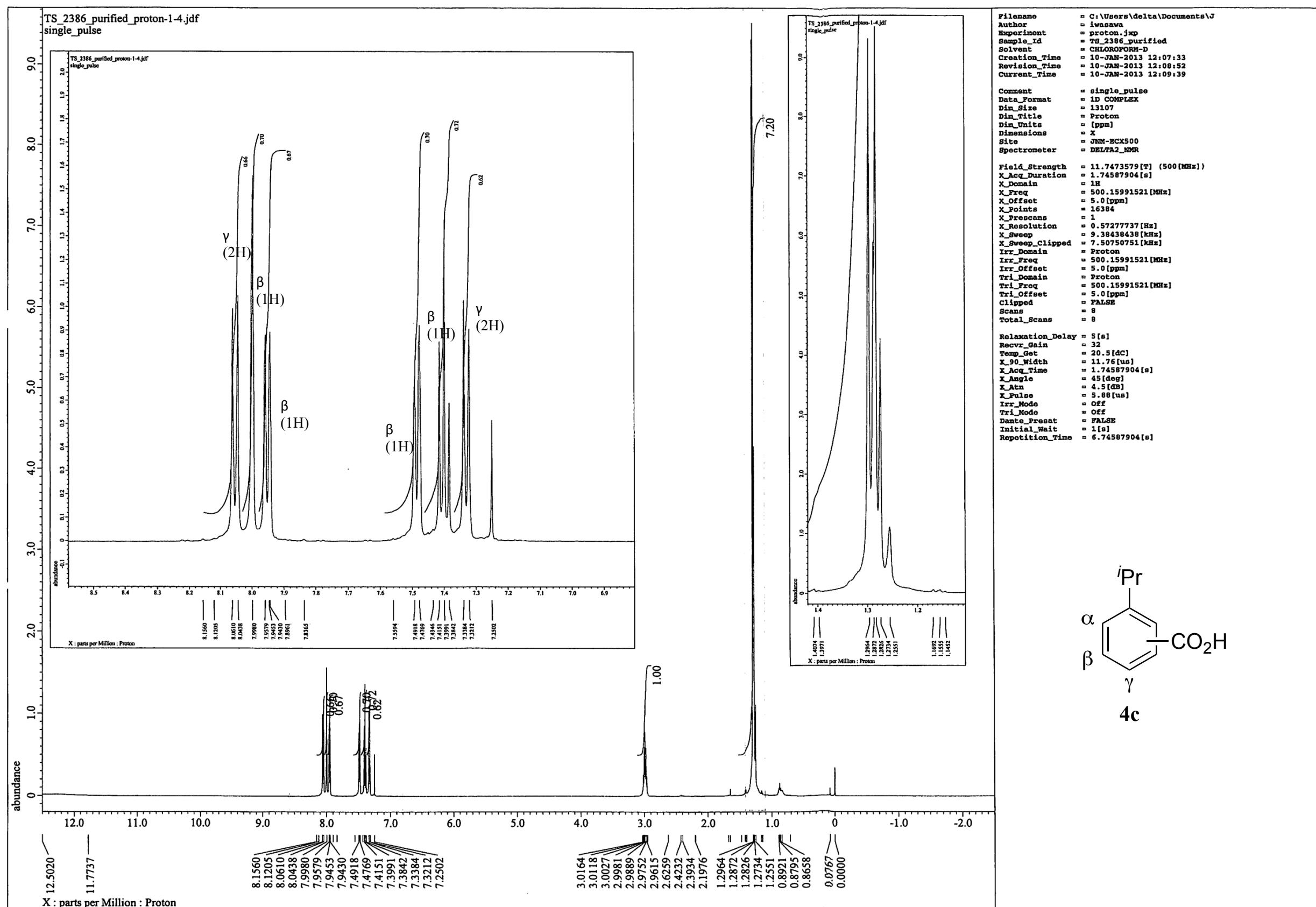
¹H NMR spectra of **4a**.



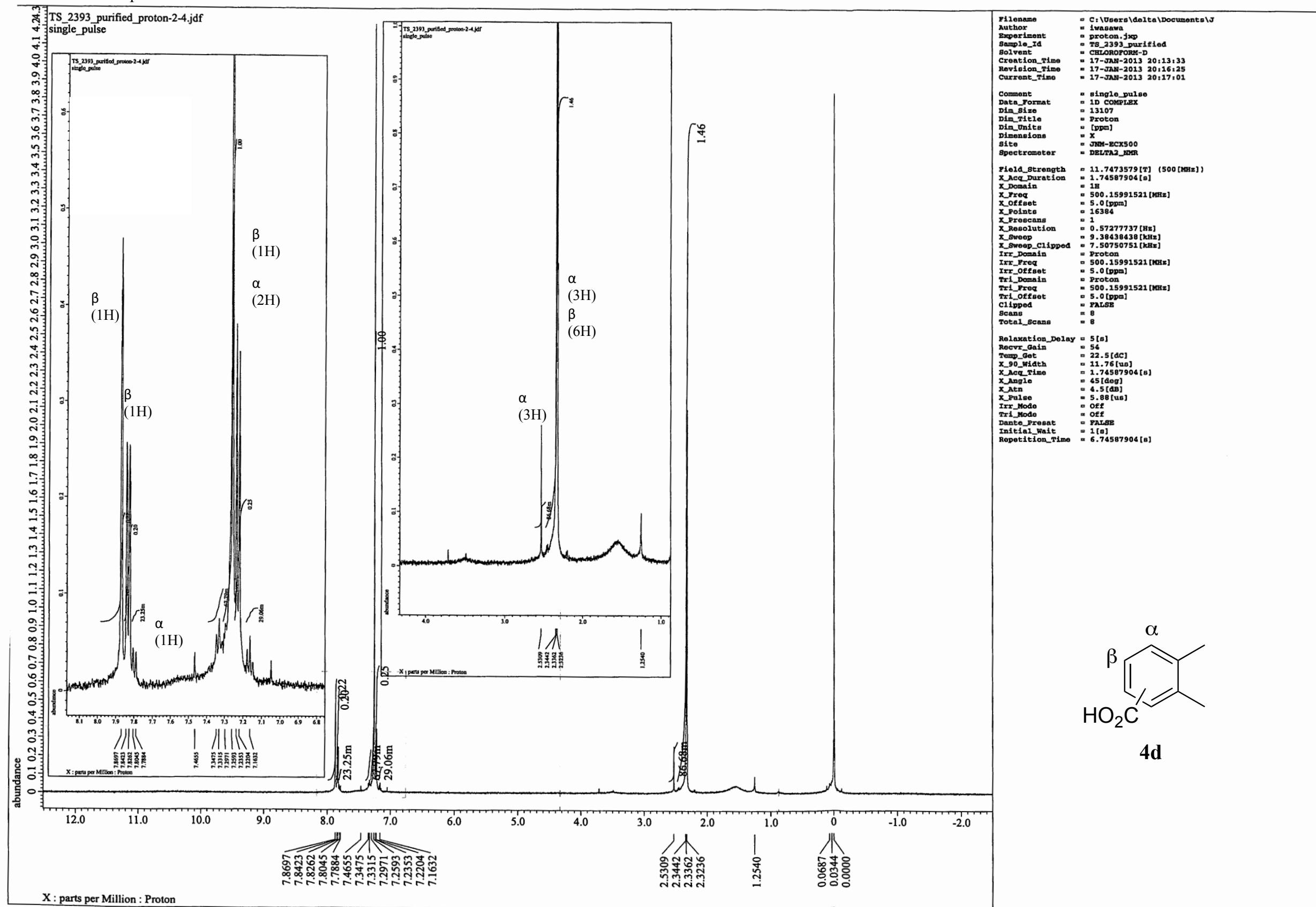
¹H NMR spectra of **4b**.



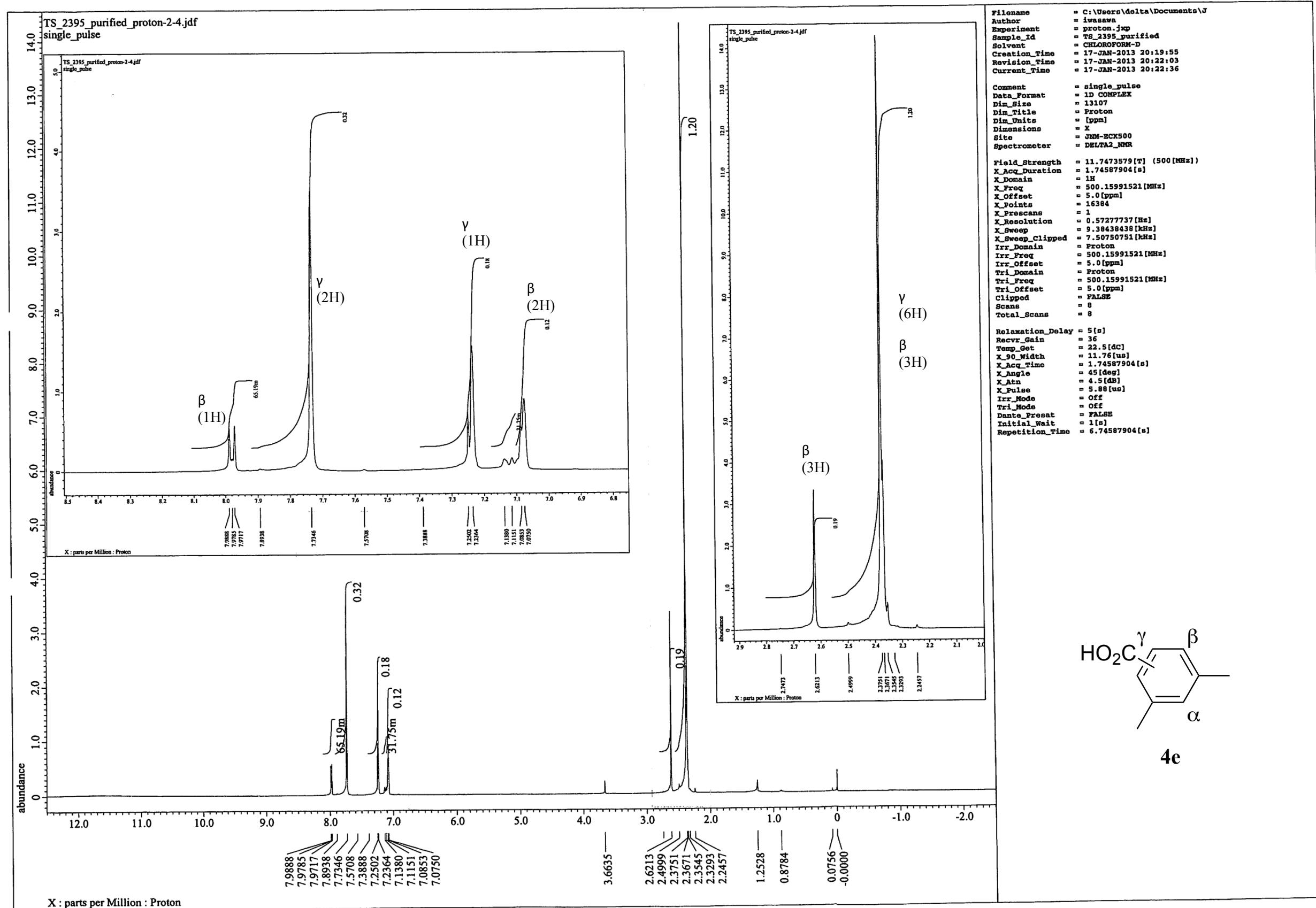
¹H NMR spectra of **4c**.



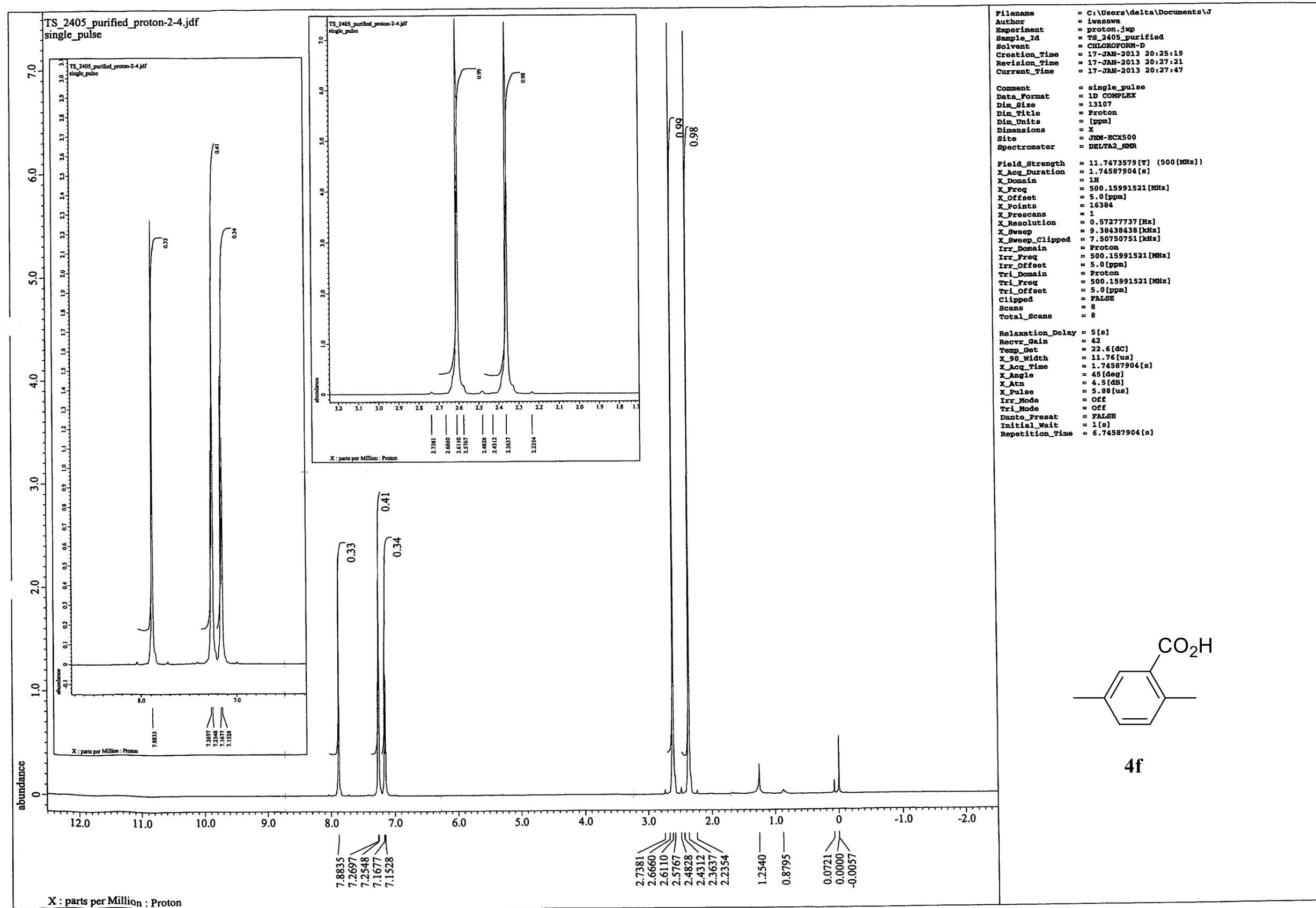
¹H NMR spectra of **4d**.



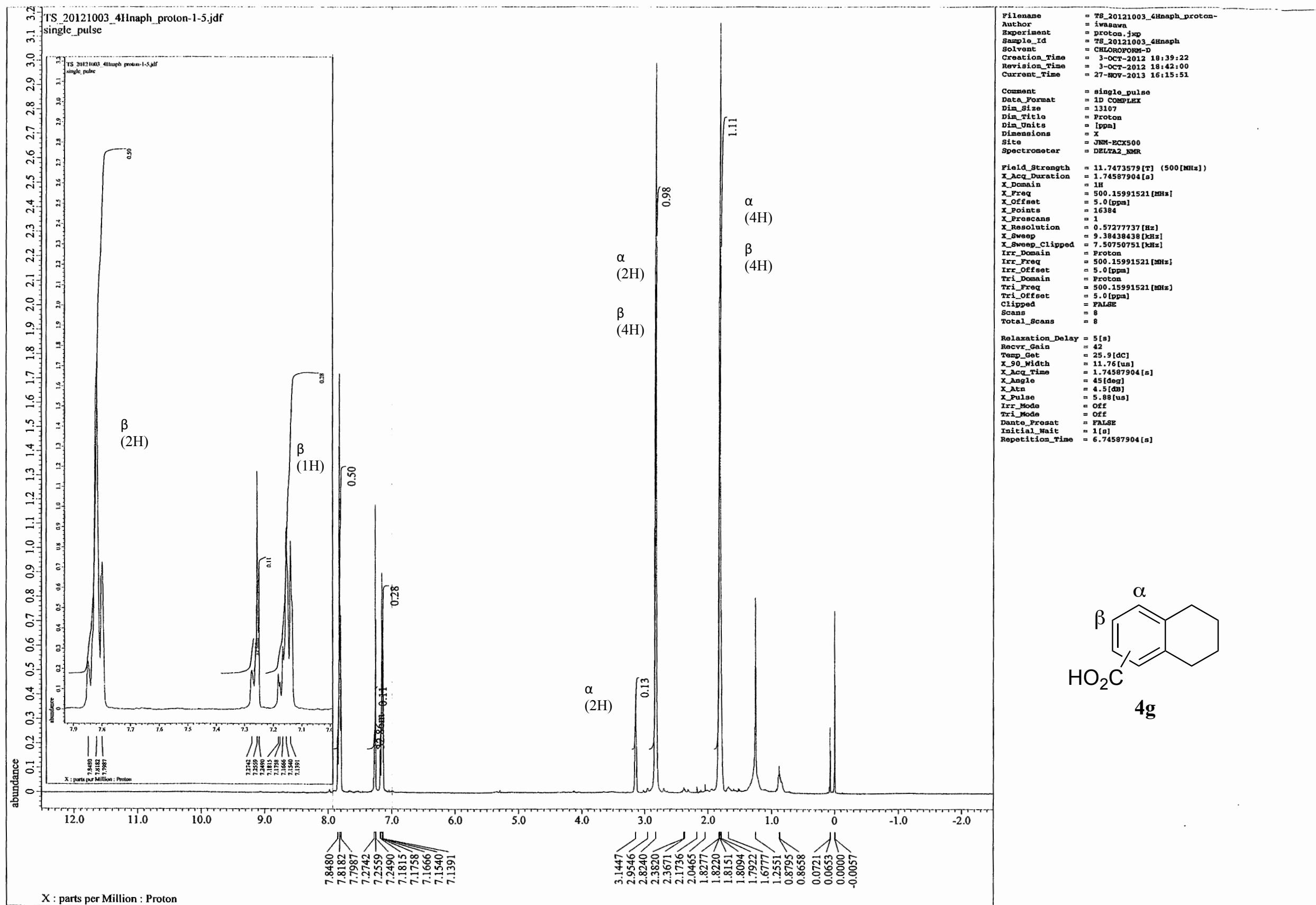
¹H NMR spectra of **4e**.



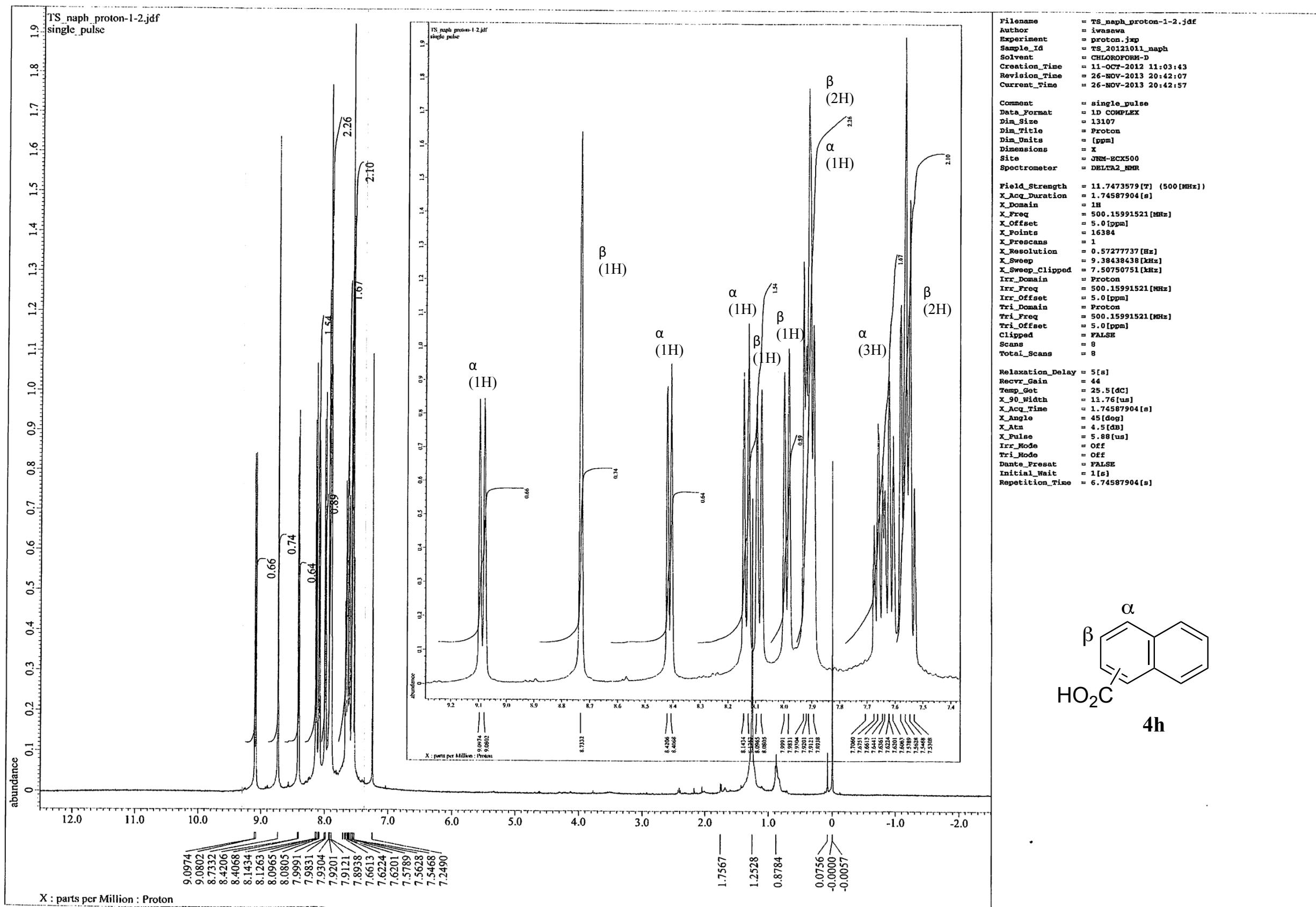
¹H NMR spectra of **4f**.



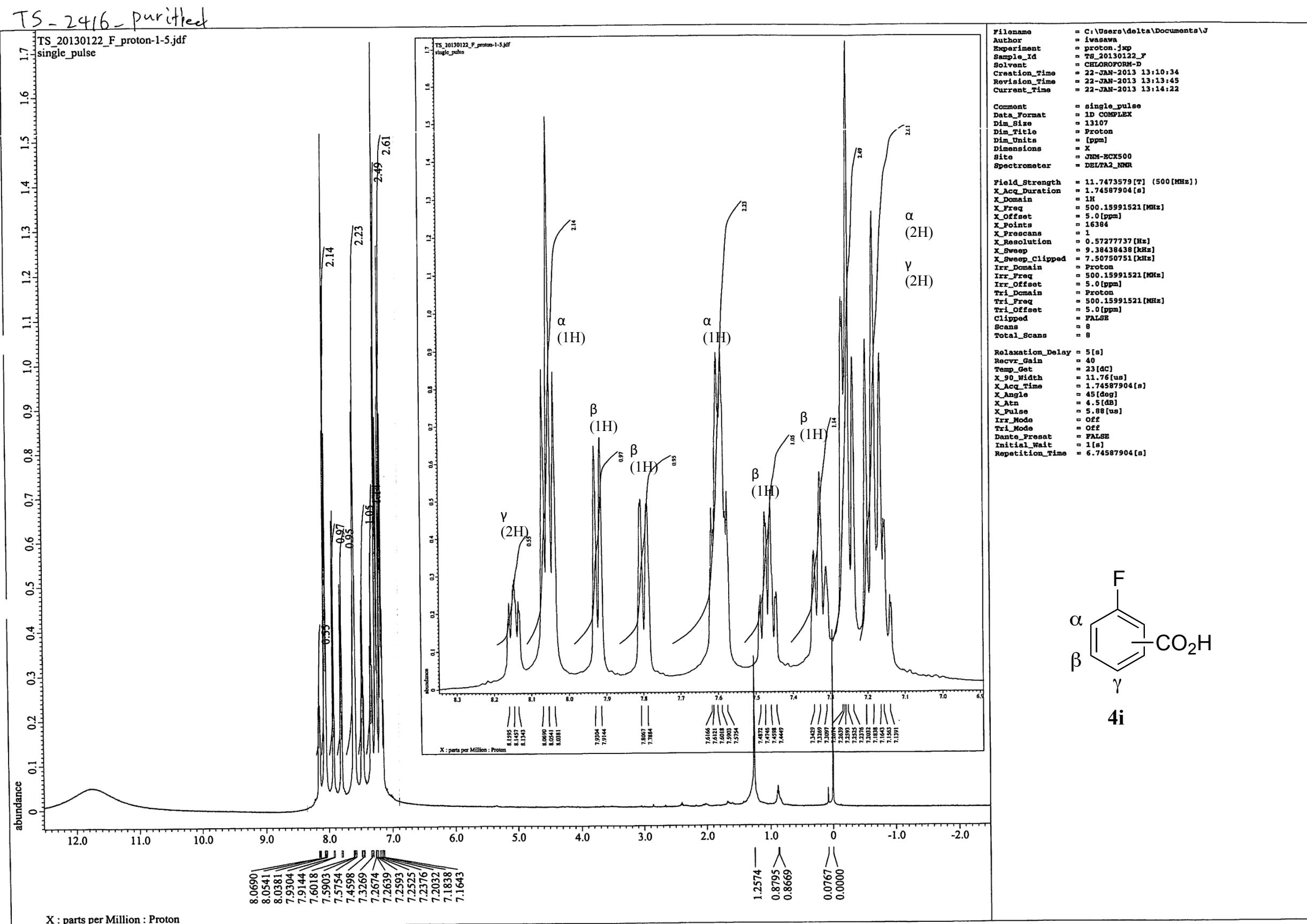
¹H NMR spectra of **4g**.



¹H NMR spectra of **4h**.

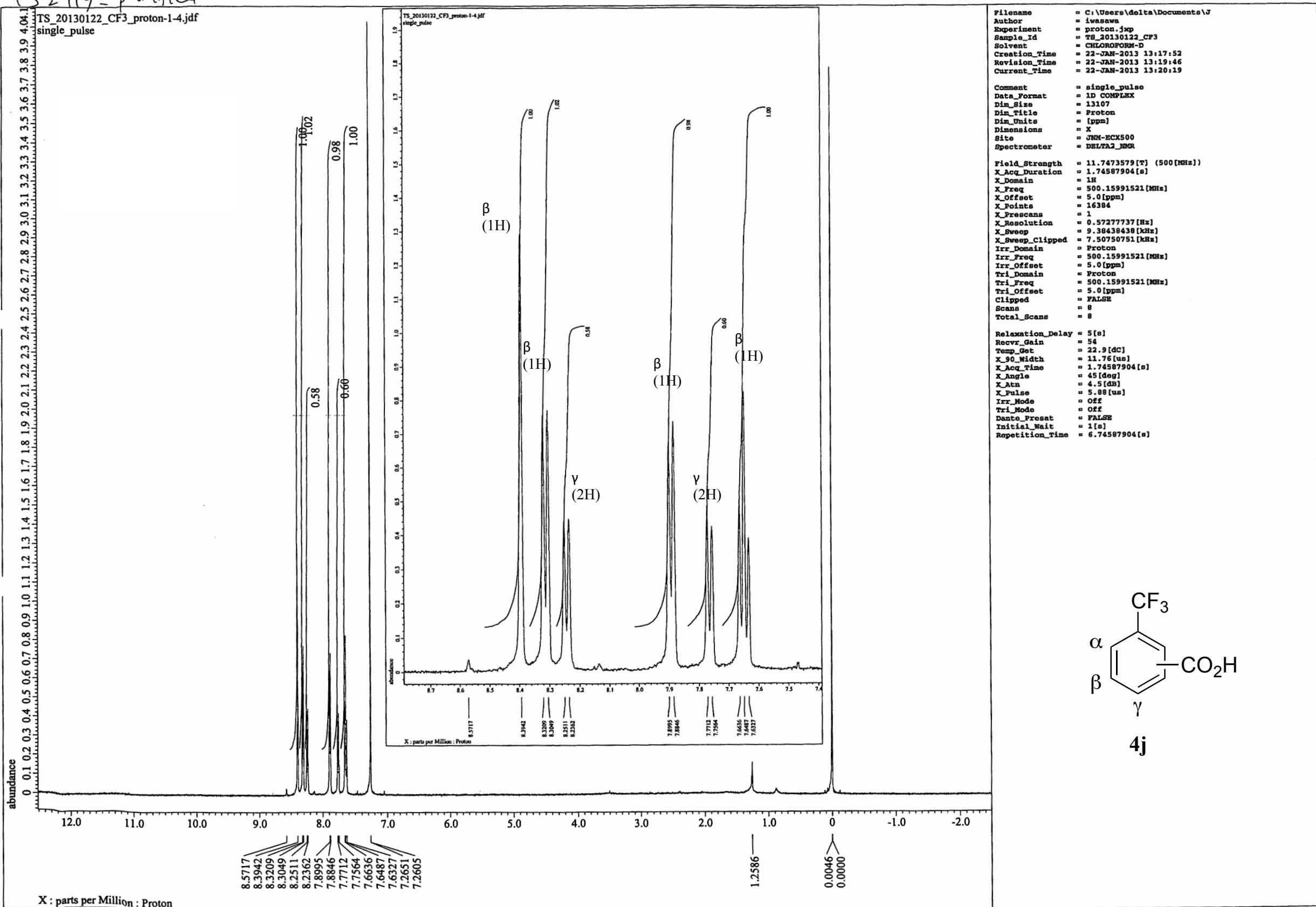


¹H NMR spectra of **4i**.

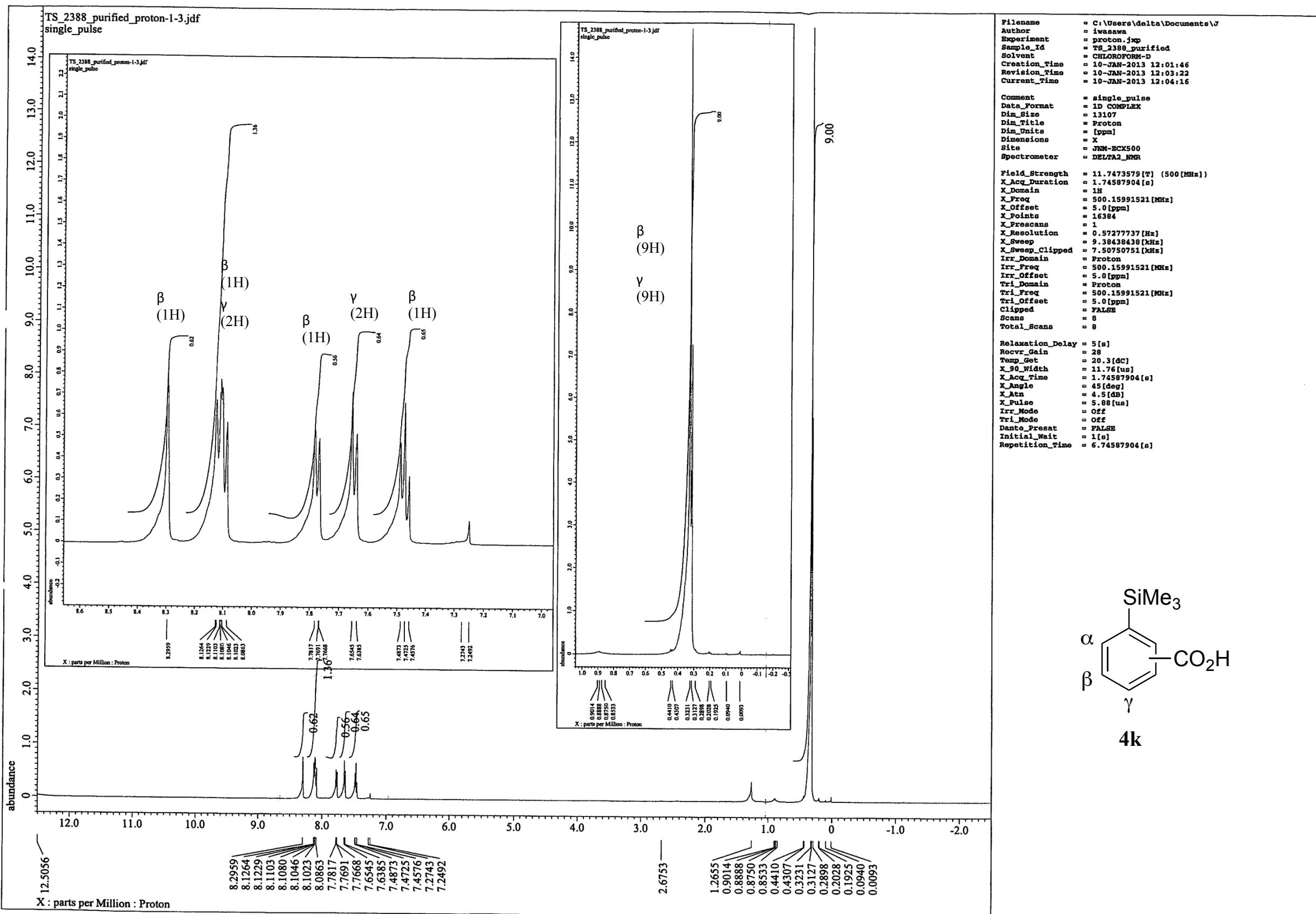


¹H NMR spectra of **4j**.

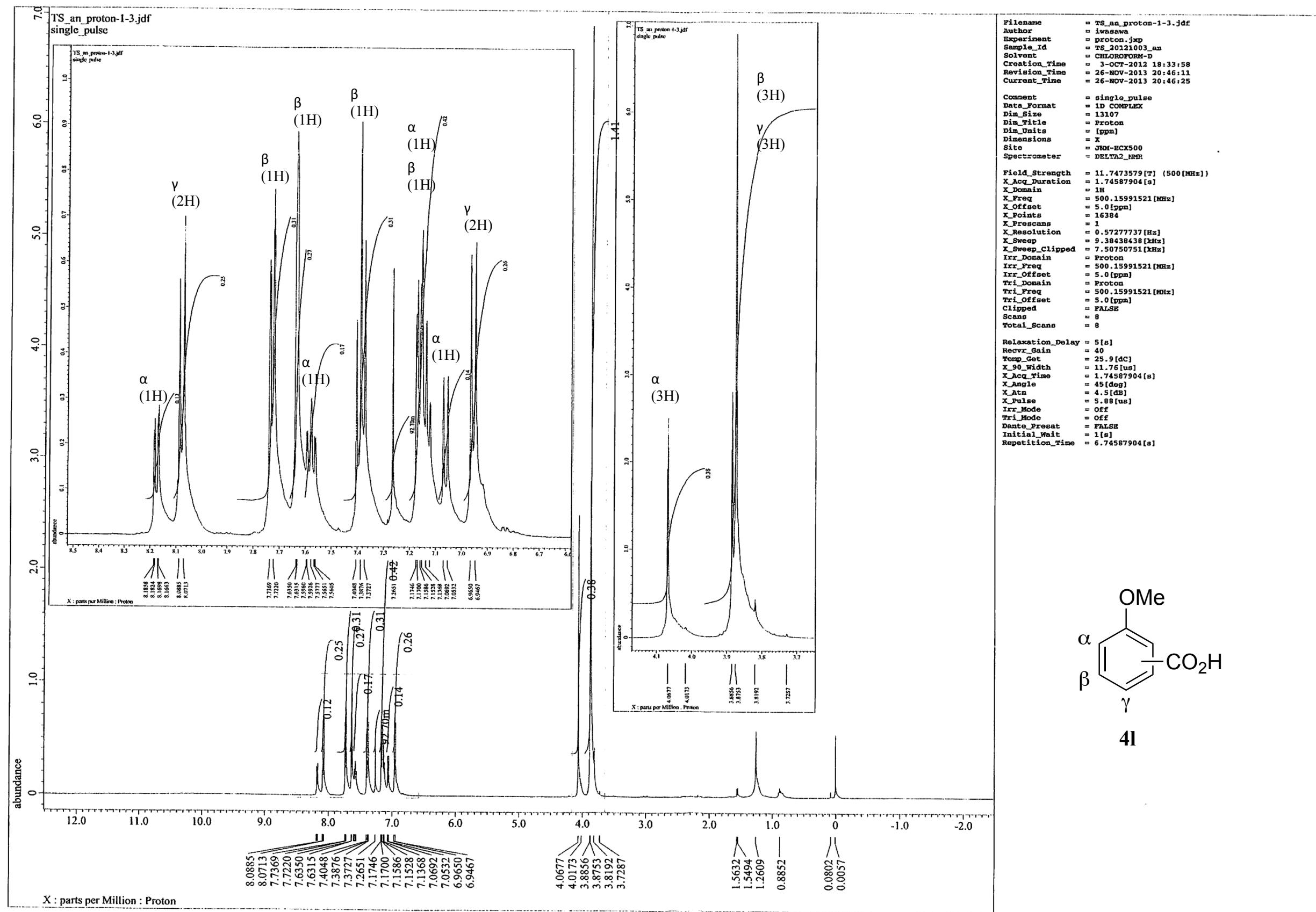
TS2419 - purified



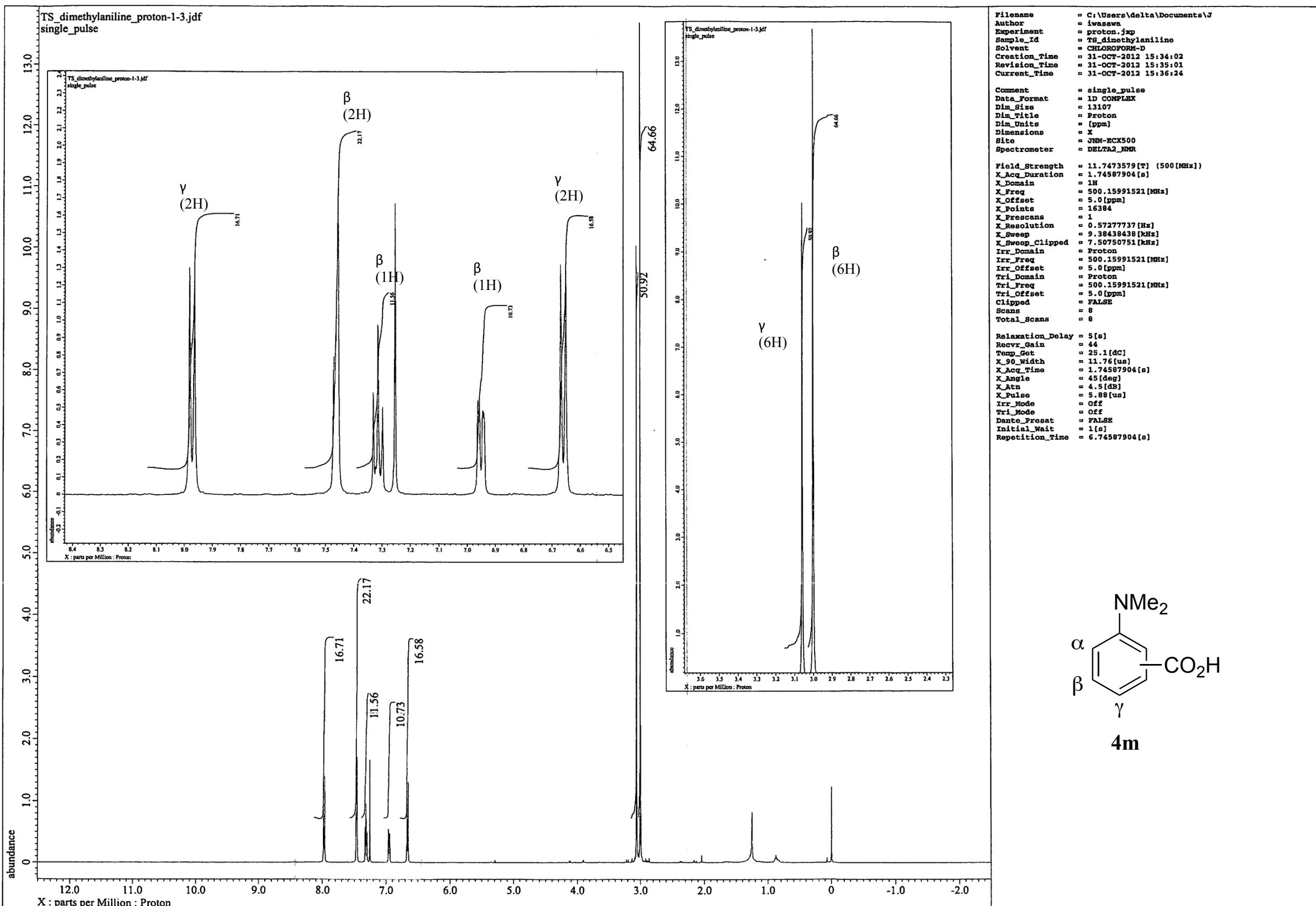
¹H NMR spectra of **4k**.



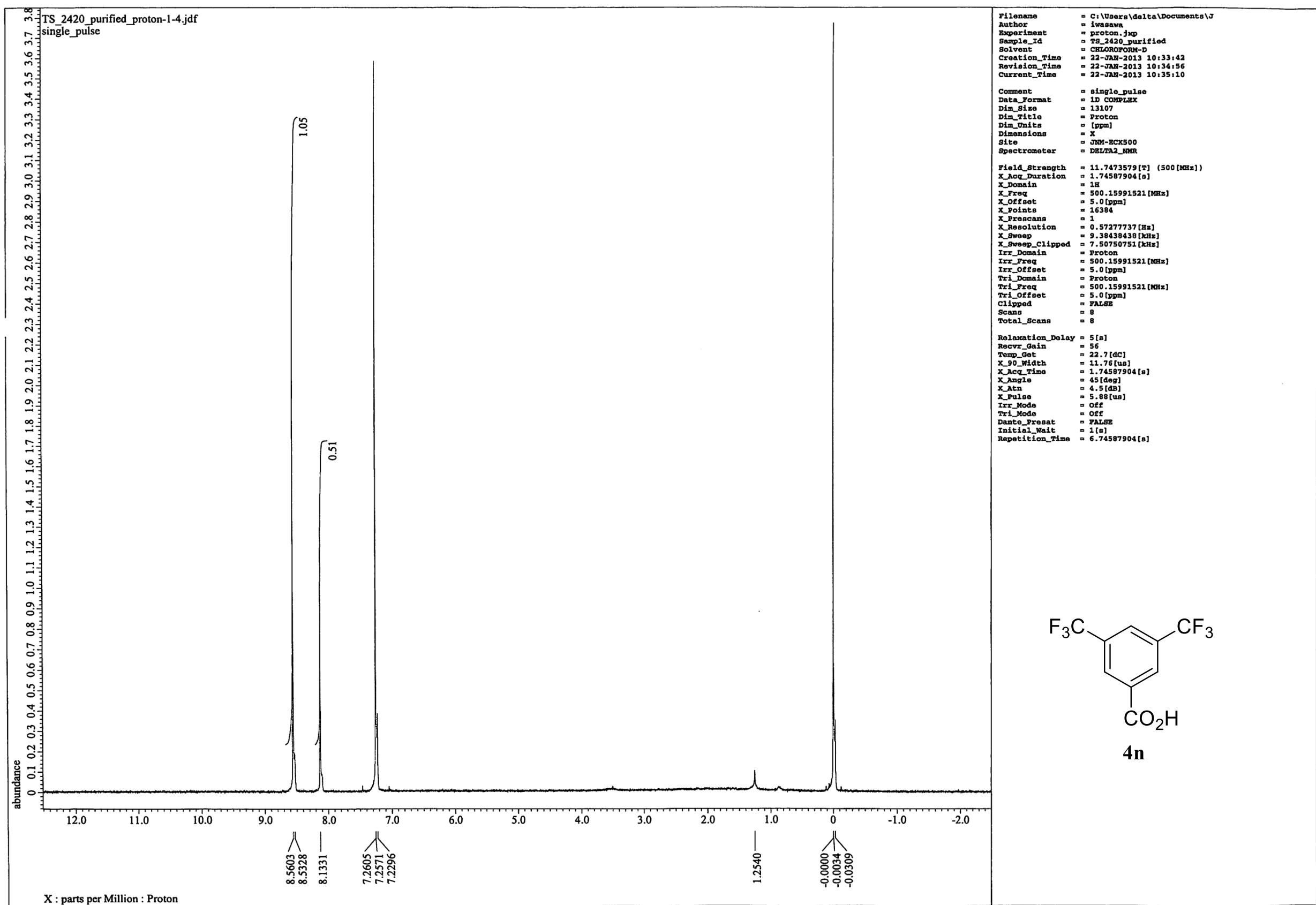
¹H NMR spectra of **4l**.



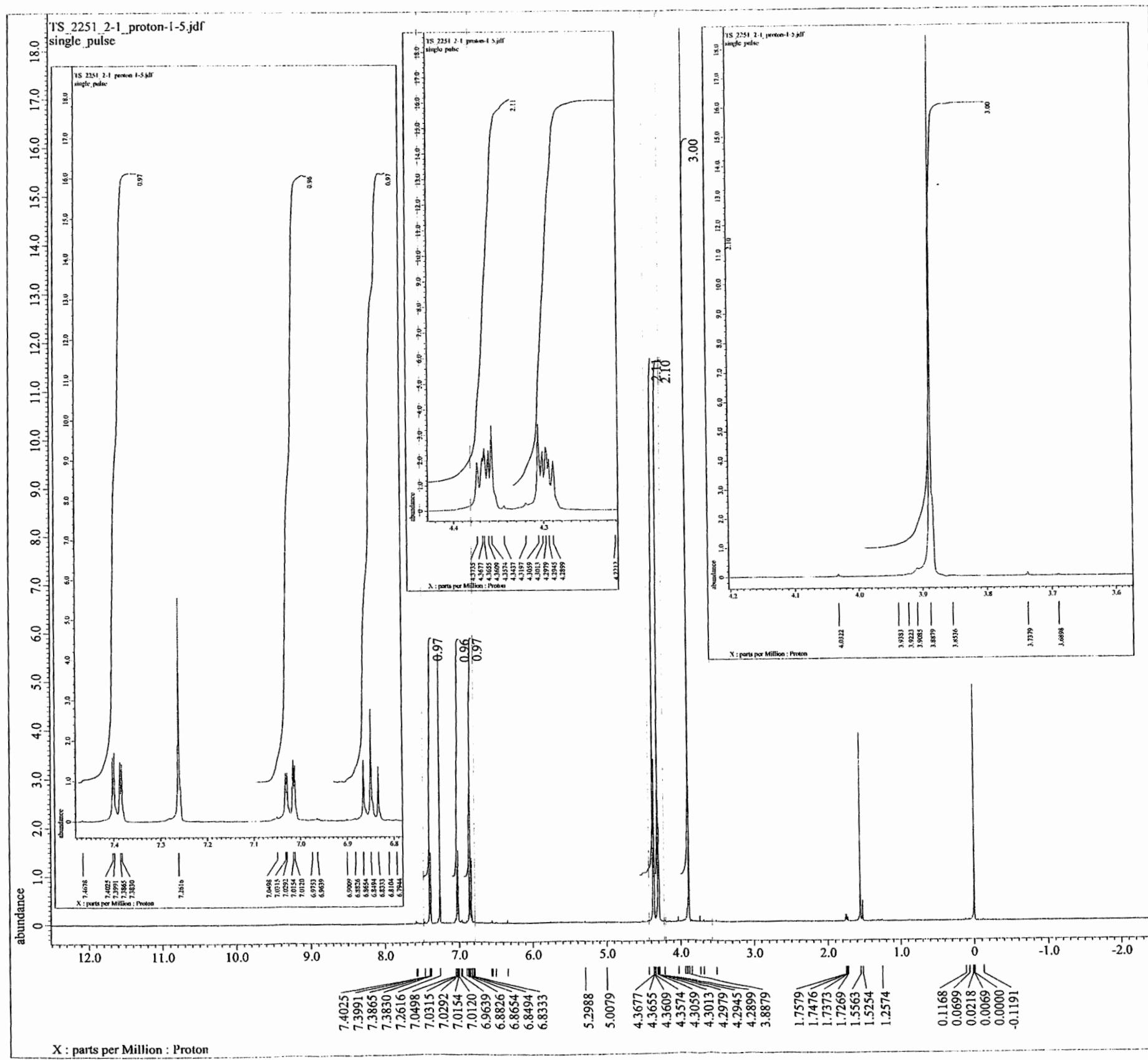
¹H NMR spectra of **4m**.



¹H NMR spectra of **4n**.



¹H NMR spectra of **a-5o**.



```

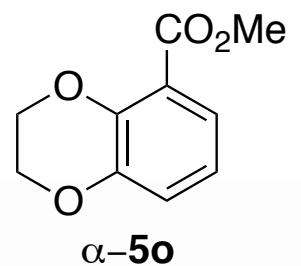
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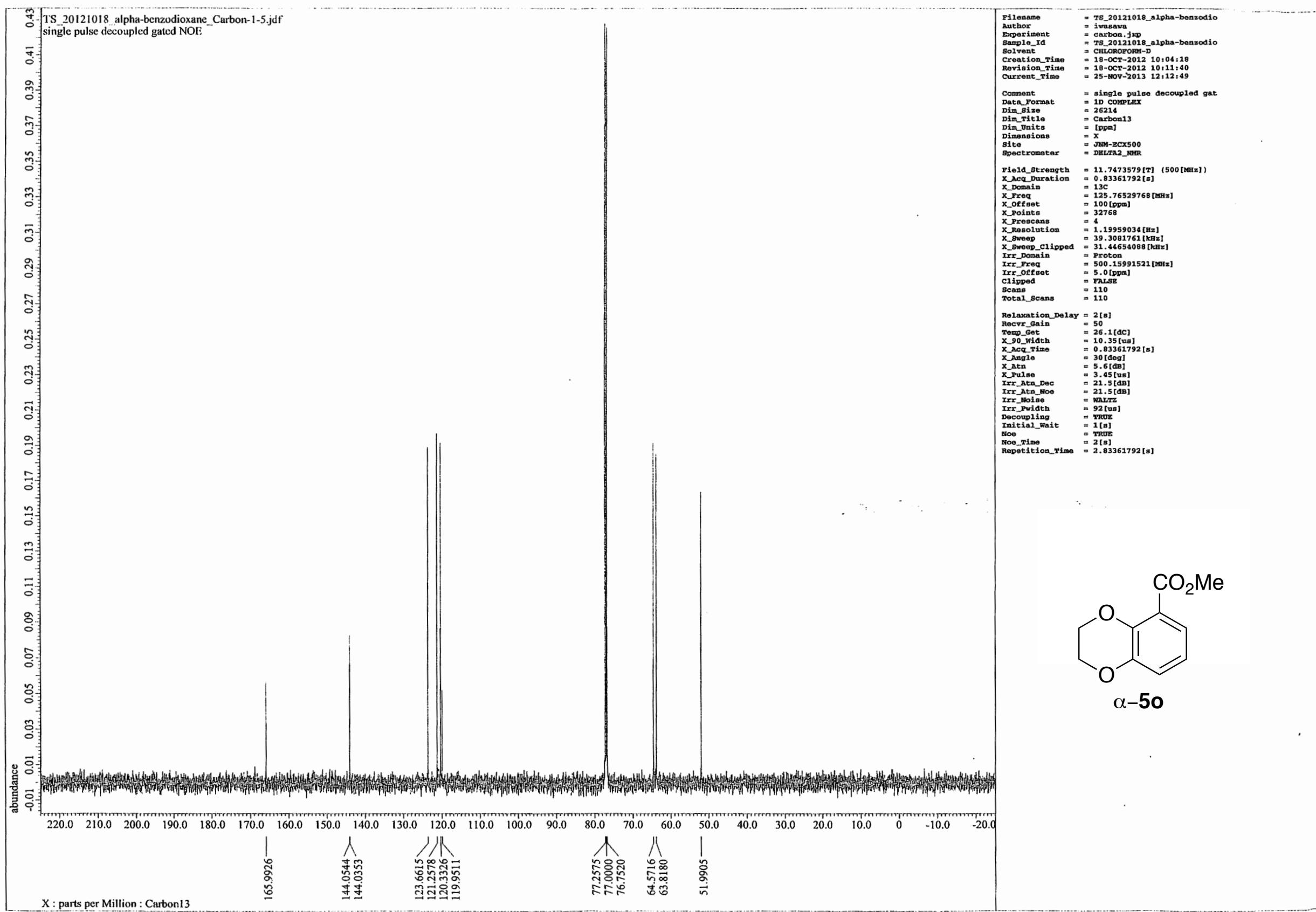
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X_Offset = 5.0[ppm]
X_Points = 16384
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X_Resolution = 0.57277737[Hz]
X_Sweep = 9.38438438[KHz]
X_Sweep_Clipped = 7.50750751[KHz]
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Irr_Freq = 500.15991521[MHz]
Irr_Offset = 5.0[ppm]
Tri_Domain = Proton
Tri_Freq = 500.15991521[MHz]
Tri_Offset = 5.0[ppm]
Clipped = FALSE
Scans = 8
Total_Scans = 8

Relaxation_Delay = 5[s]
Recvr_Gain = 52
Temp_Get = 25.6[dC]
X_90_Width = 11.76[us]
X_Acc_Time = 1.74587904[s]
X_Angle = 45[deg]
X_Atn = 4.5[dB]
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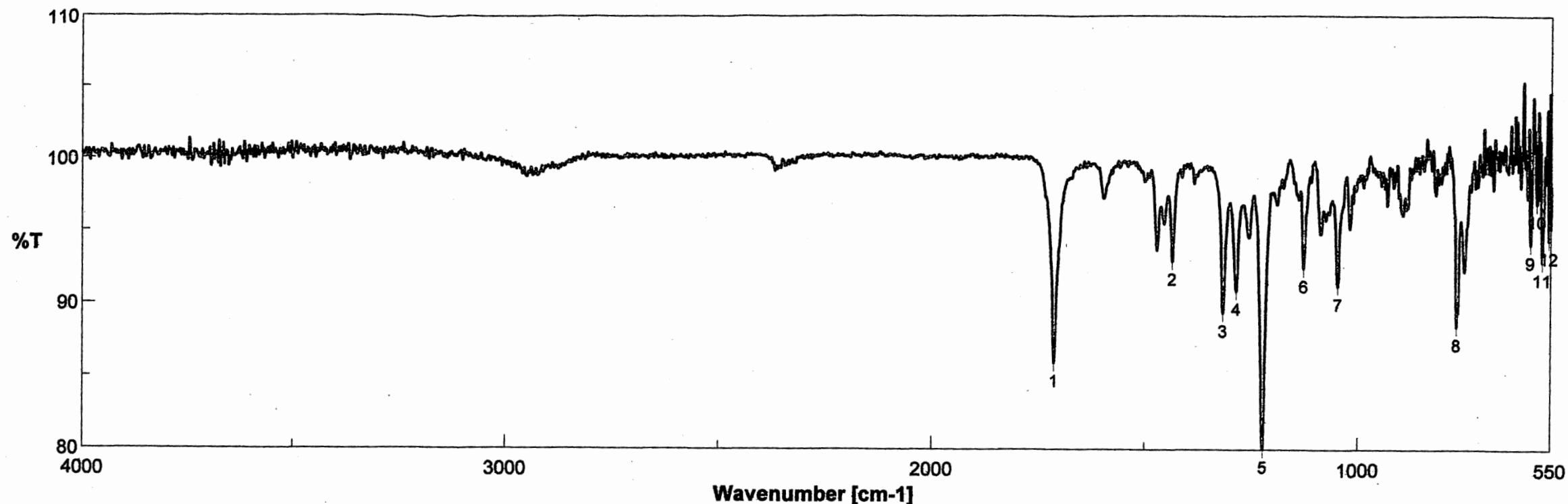
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¹³C NMR spectra of **α-50**.



IR spectra of α -5o.

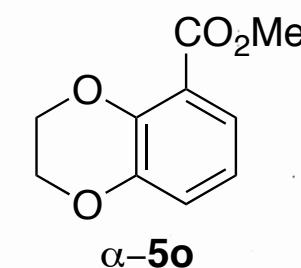


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2013/06/03 20:13
K. Sasano
dioxane_5.jws

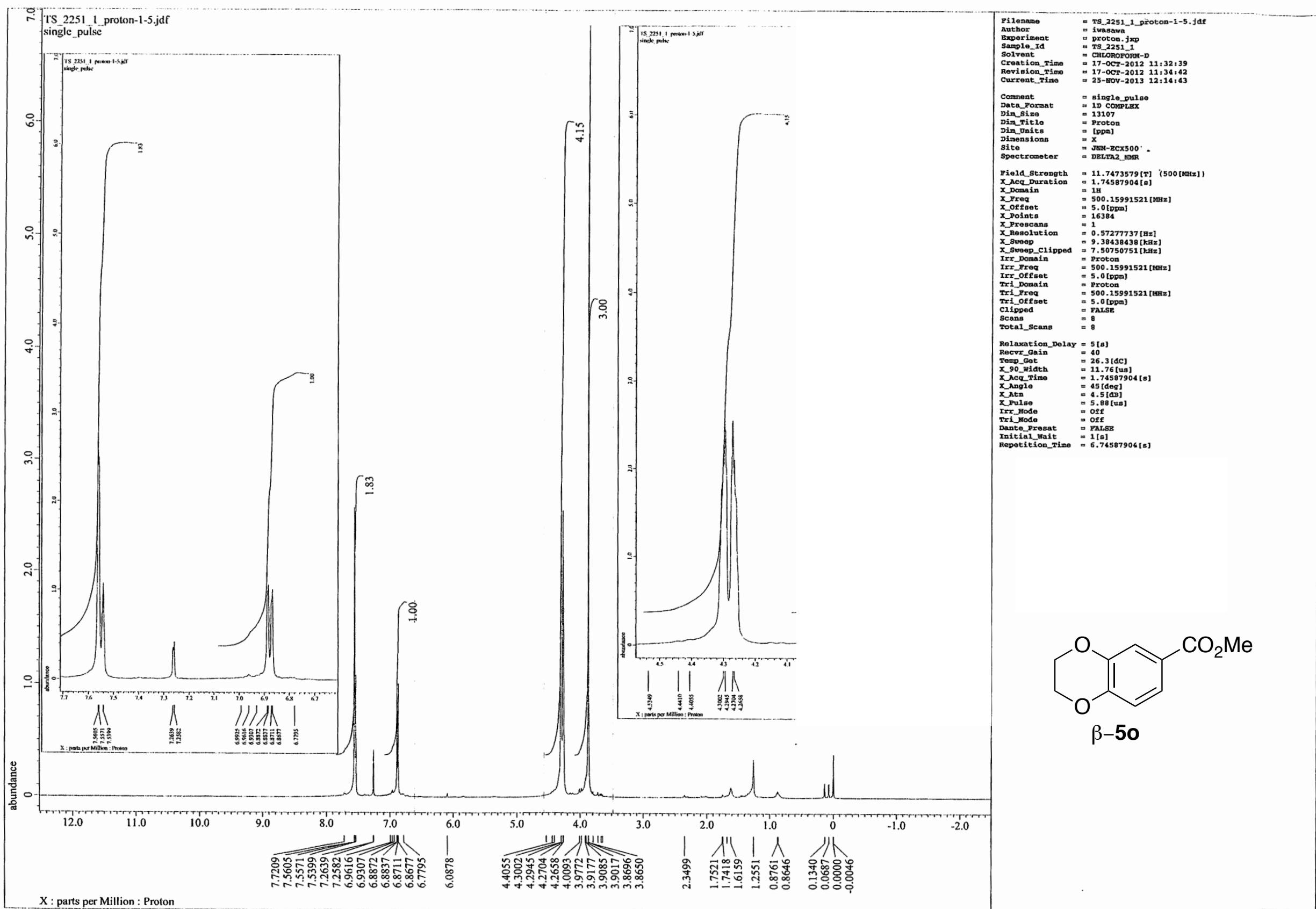
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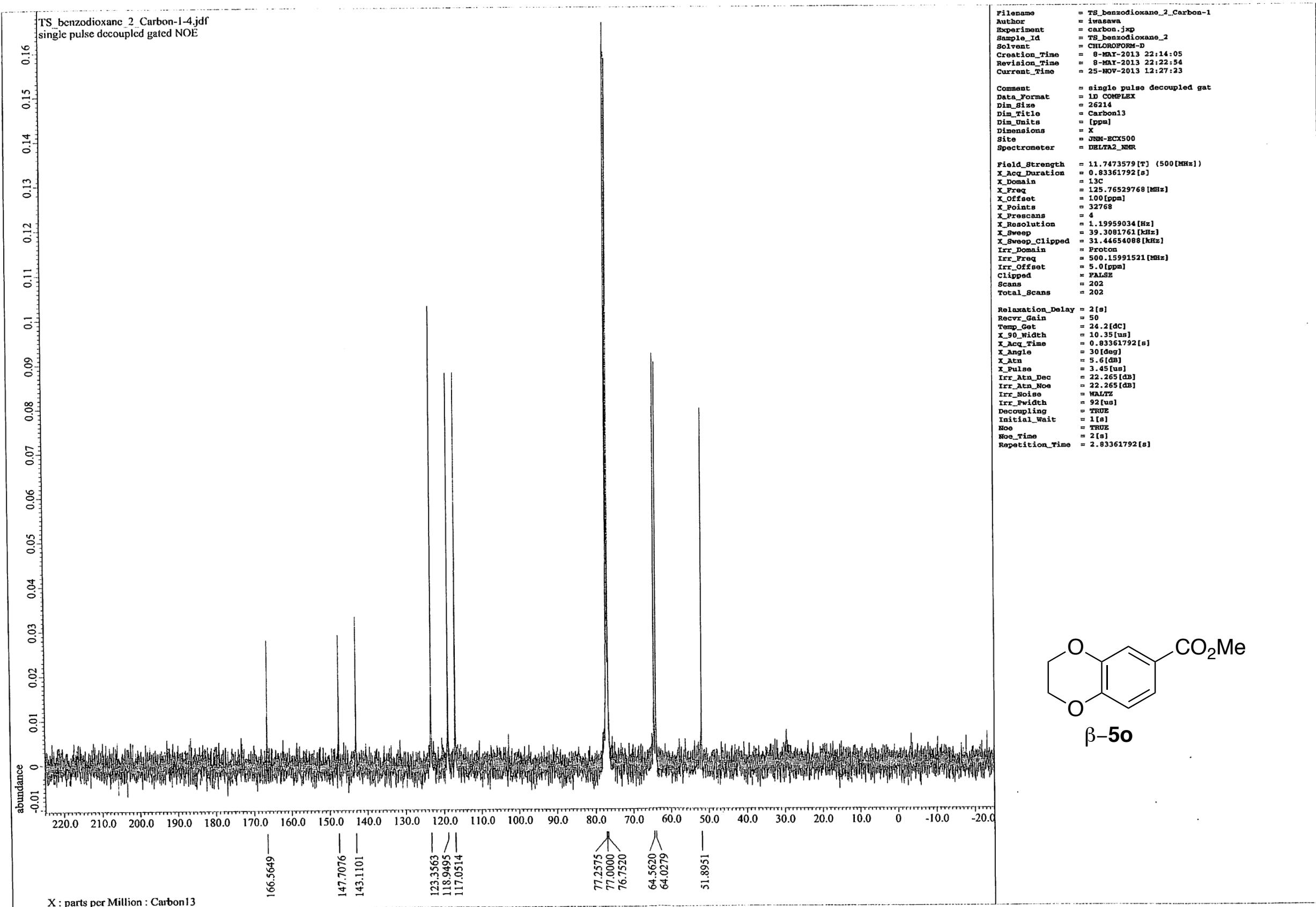


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6	1128.15	92.4773	7	1047.16	91.2523	8	769.94	88.4606	9	597.343	94.1444
11	570.826	92.9462	12	555.398	94.4415				5	1223.13	80.0373

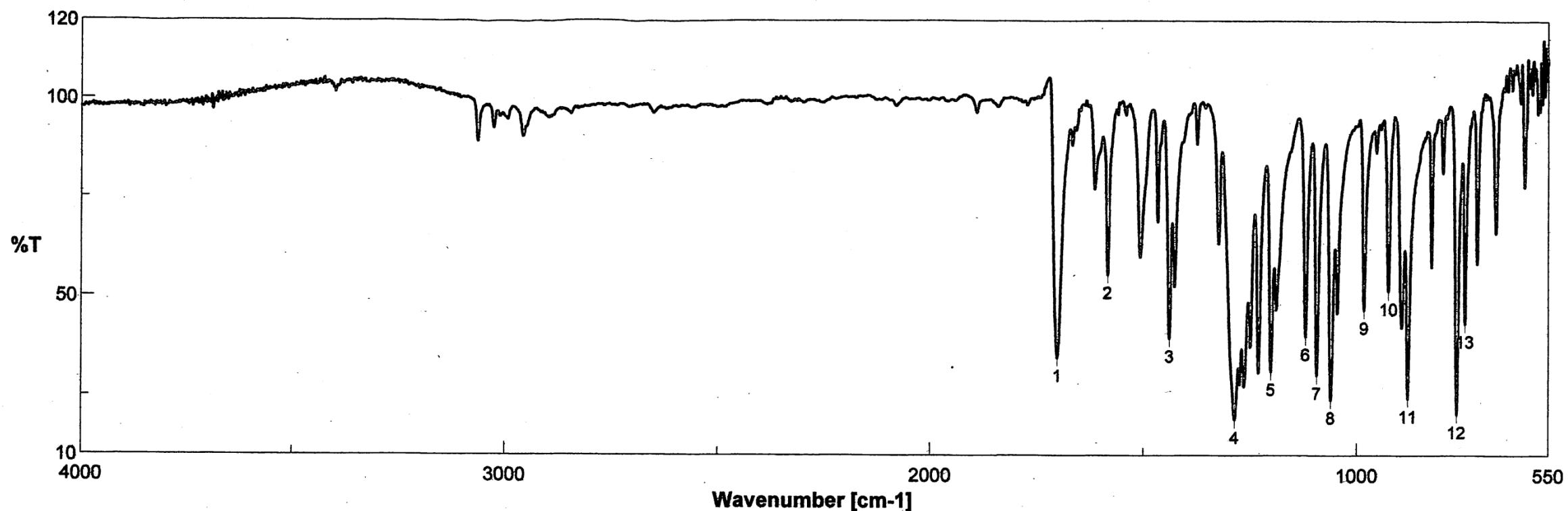
¹H NMR spectra of **β-5o**.



¹³C NMR spectra of **β-5o**.



IR spectra of β -5o.

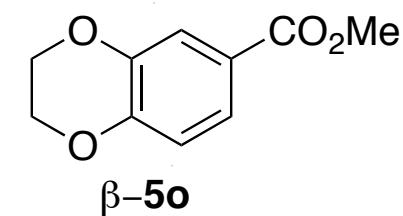


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K. Sasano
dioxane_6.jws

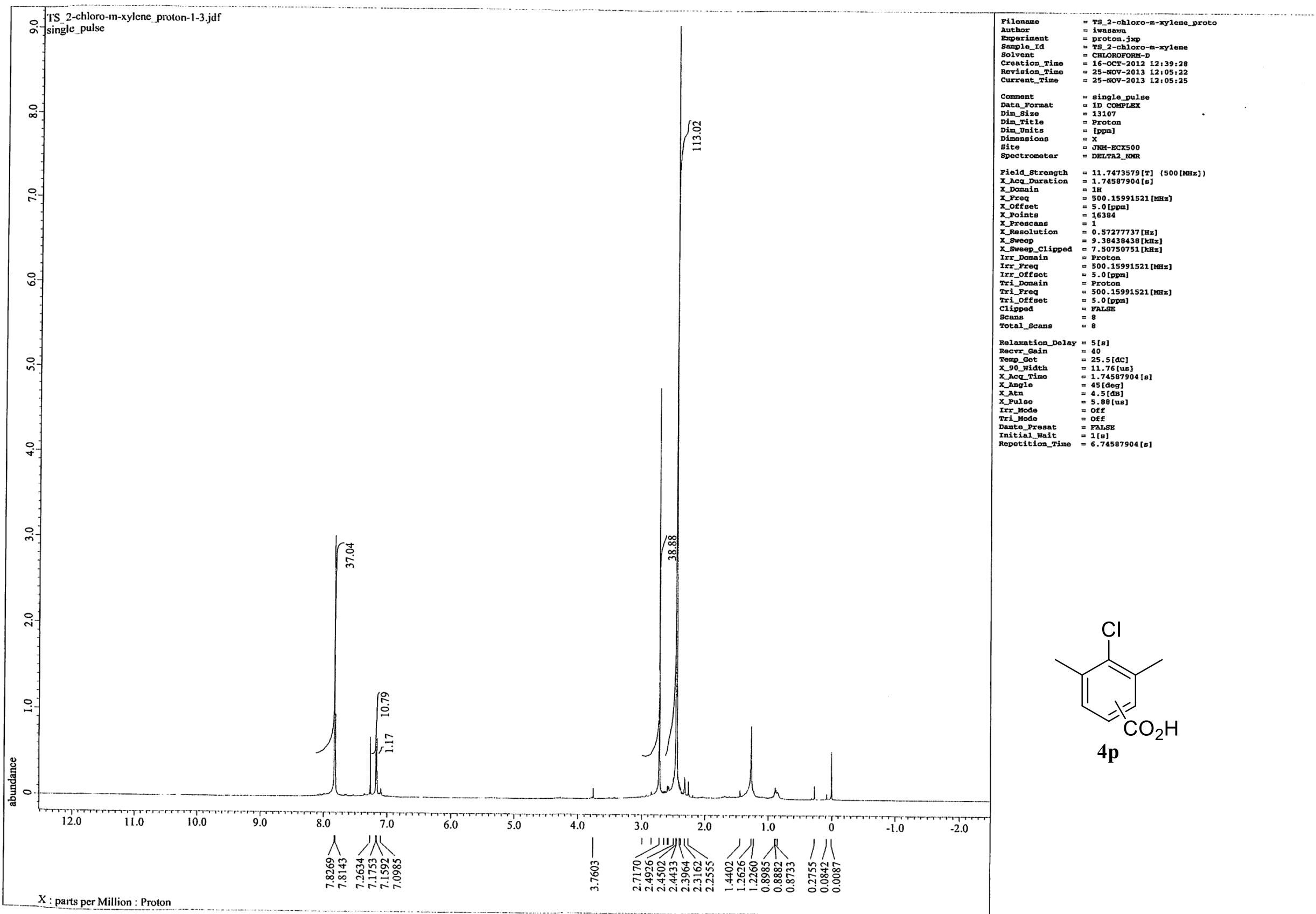
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更新日時
2013/06/03 20:53

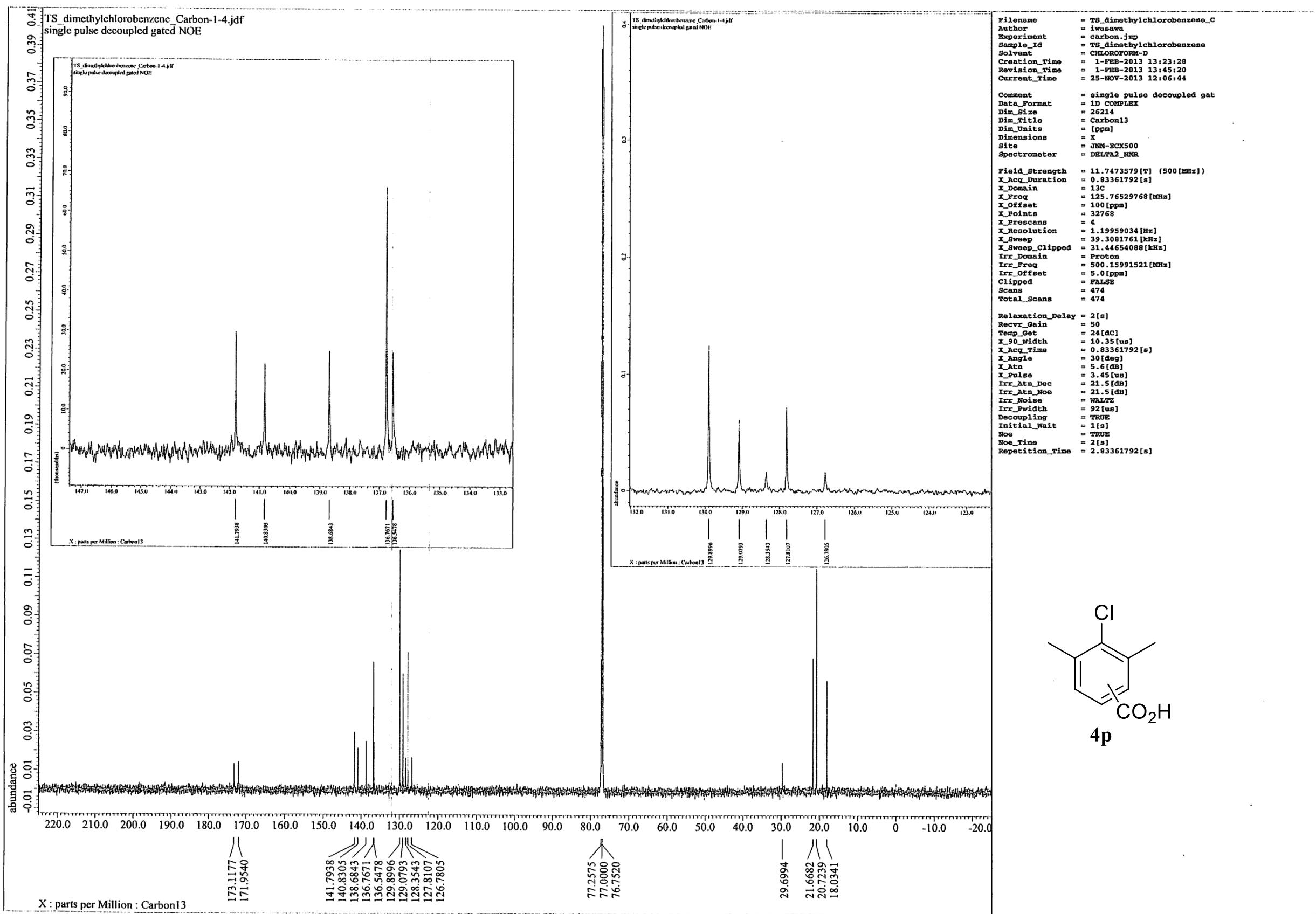


No. cm ⁻¹	%T								
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6 1120.44	40.0372	7 1094.4	30.3115	8 1061.14	24.0843	9 982.554	46.6535	10 925.182	51.3794
11 879.863	24.4322	12 766.083	20.3608	13 746.799	43.1443				

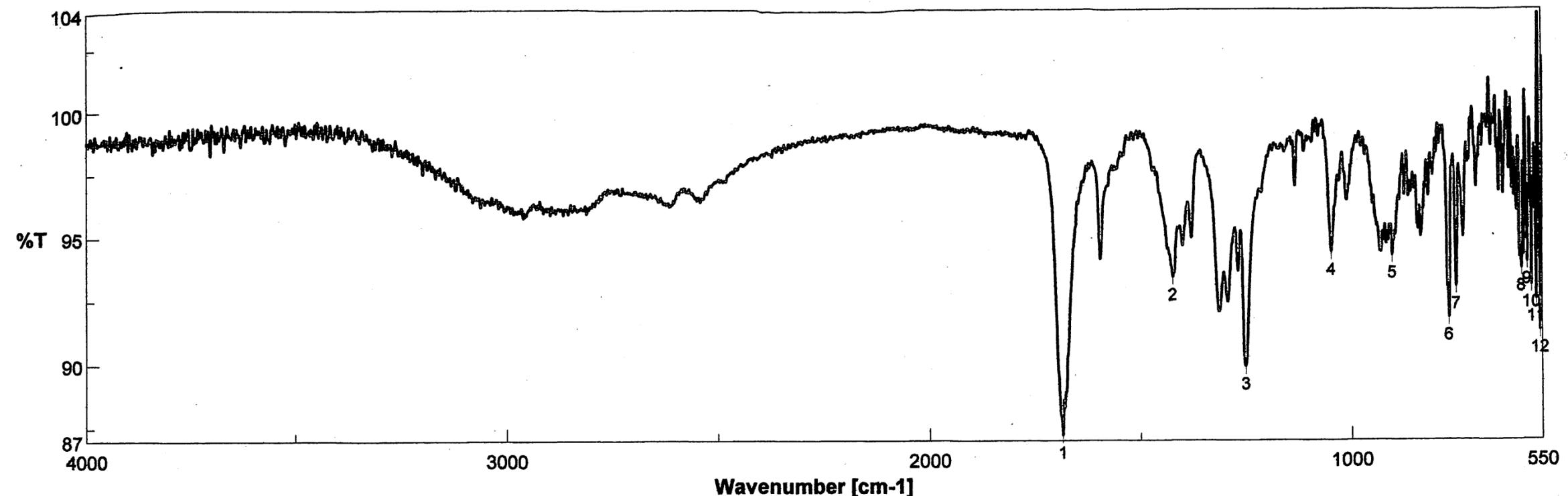
¹H NMR spectra of **4p**.



¹³C NMR spectra of 4p.



IR spectra of 4p.

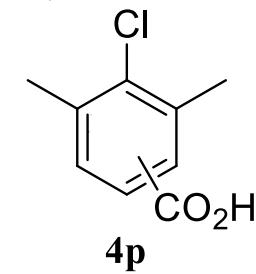


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K. Sasano
ClMe₂-CO₂H.jws

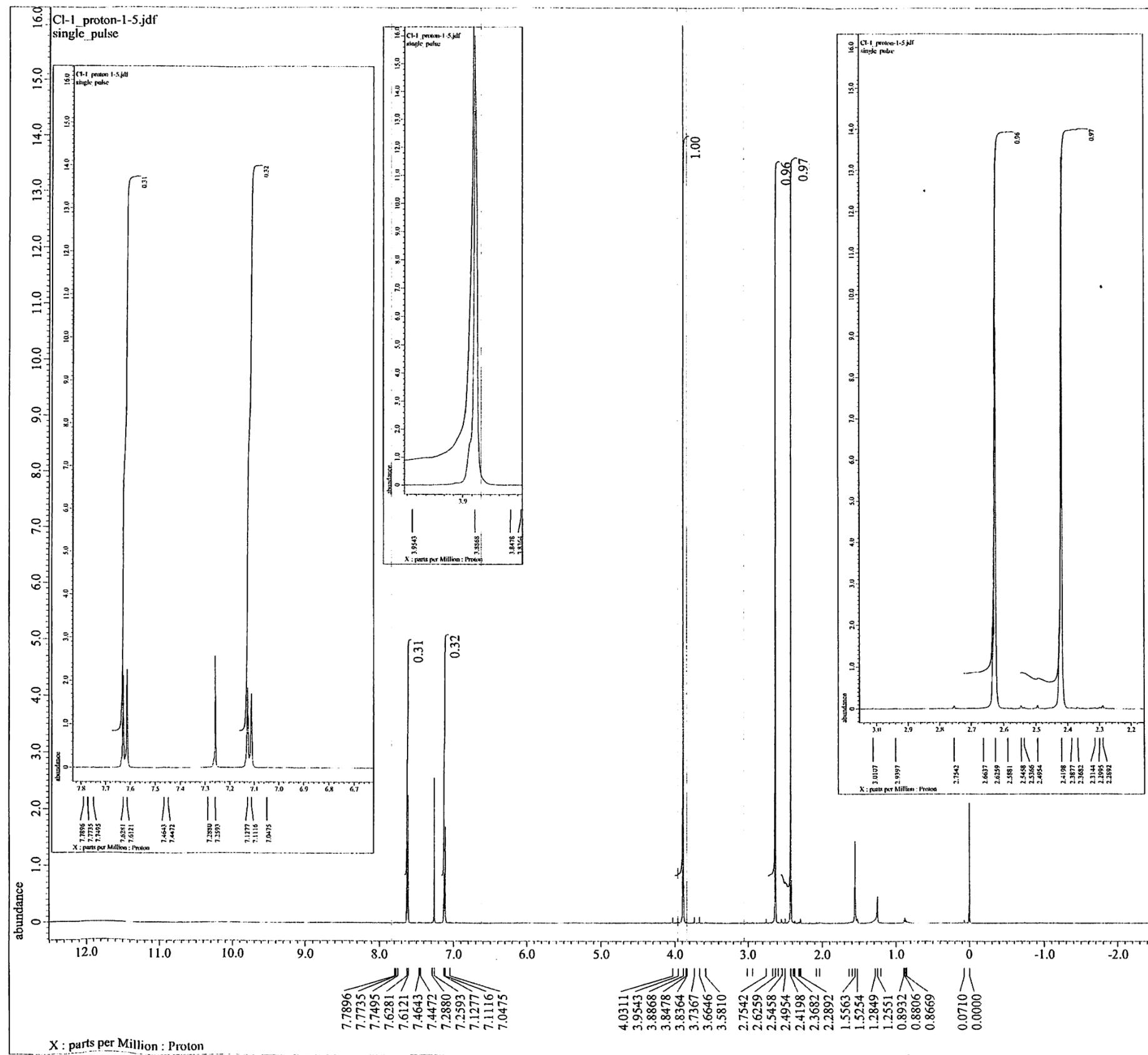
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更新日時

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2013/06/03 20:55



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6	768.976	91.815	7	752.102	93.0374	8	599.271	93.7386	9	585.772	94.0049
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¹H NMR spectra of **a-5p**.



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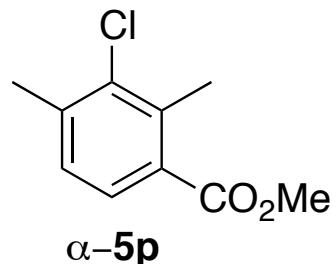
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author = ivasawa
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revision_time = 25-NOV-2013 12:07:50
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dim_units = (ppm)
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spectrometer = DELTA2_NMR

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x_freq = 500.15991521[MHz]
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x_points = 16384
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x_sweep_clipped = 7.50750751[Hz]
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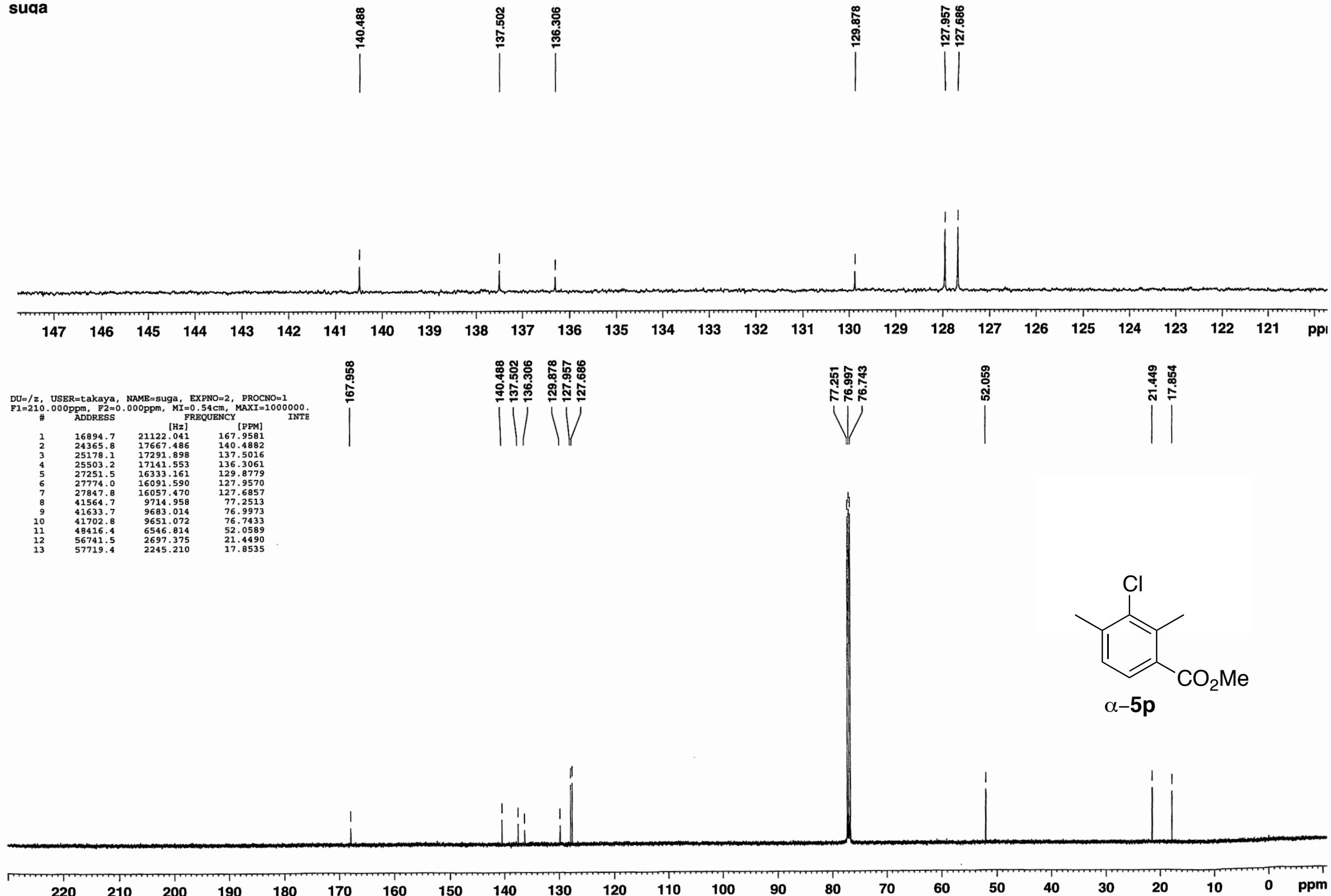
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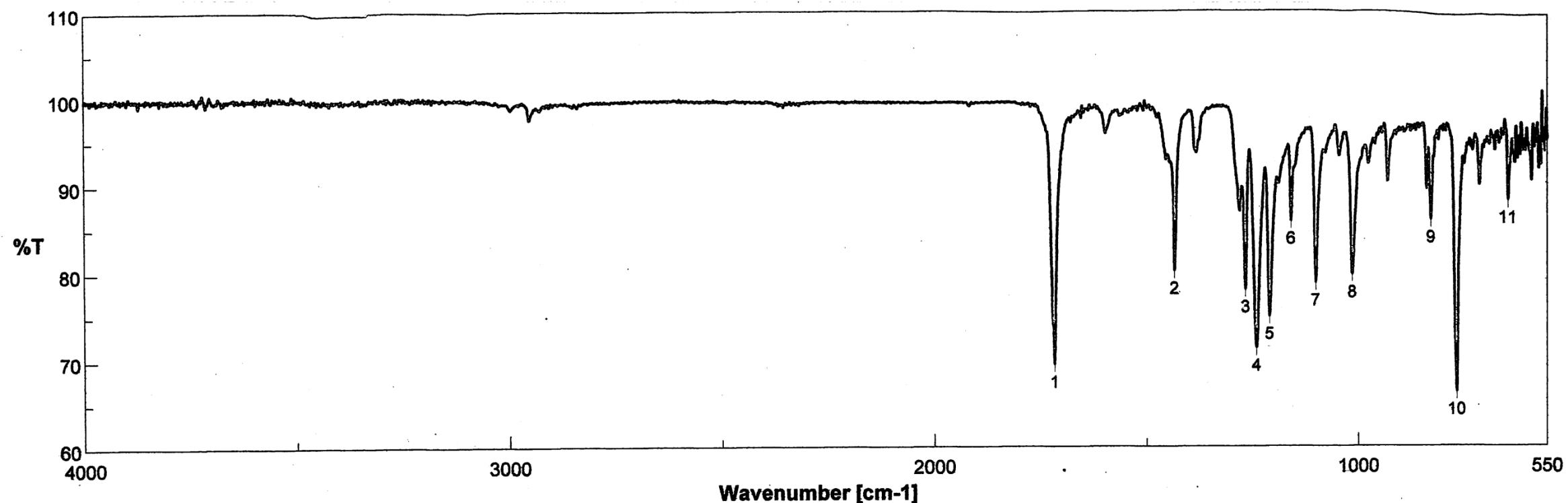


¹³C NMR spectra of **α-5p**.

suga



IR spectra of α -5p.

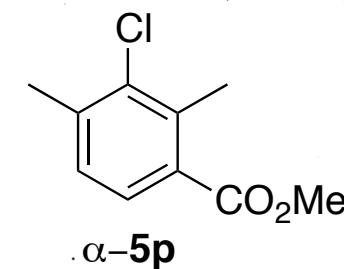


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K. Sasano
ClMe₂-CO₂Me.m. jws

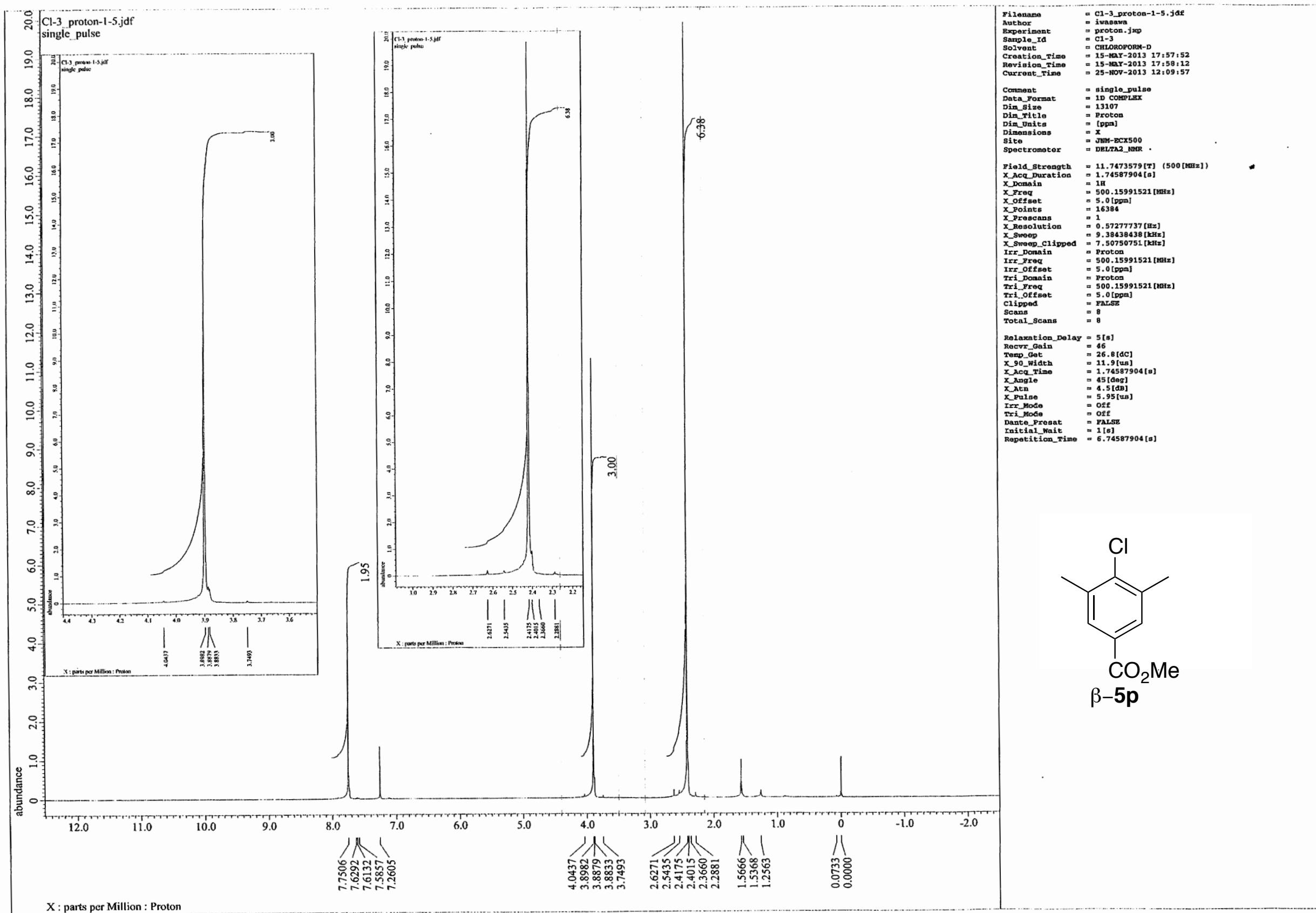
分解
アポダライゼーション
スキャンスピード
更新日時

2 cm⁻¹
Cosine
Auto (2 mm/sec)
2013/06/03 20:54

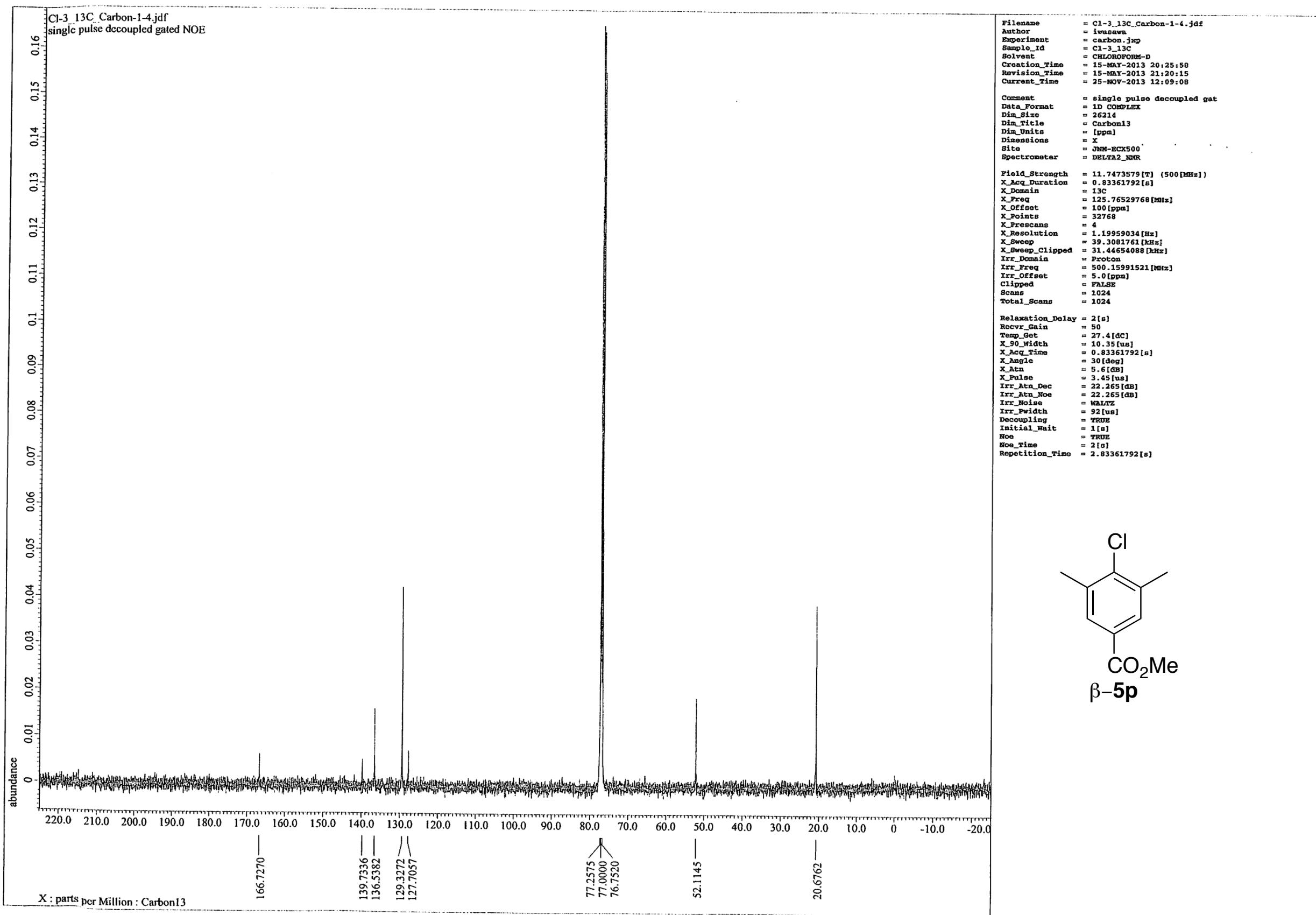


No.	cm ⁻¹	%T									
1	1716.82	69.4713	2	1435.26	80.1917	3	1267.48	78.0305	4	1241.45	71.3393
6	1159.97	85.8307	7	1101.15	78.7608	8	1013.89	79.6795	9	825.866	85.9394
11	642.662	88.2105							5	1210.6	74.9421
									10	765.119	66.2727

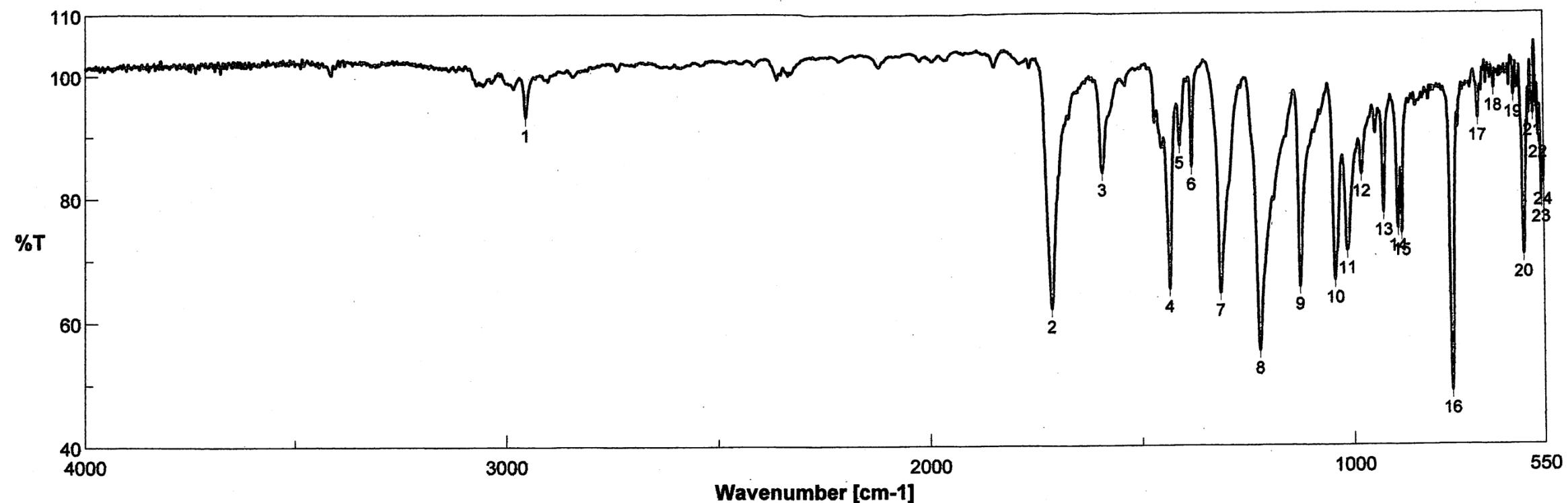
¹H NMR spectra of β -5p.



¹³C NMR spectra of β -5p.



IR spectra of β -5p.

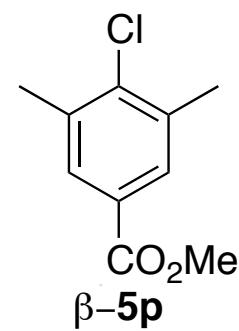


積算回数
ゼロフィリング
ゲイン
測定日時
測定者
ファイル名
サンプル名
コメント

8
ON
Auto (8)
2013/06/03 20:36
K. Sasano
ClMe₂-CO₂Me_p.jws

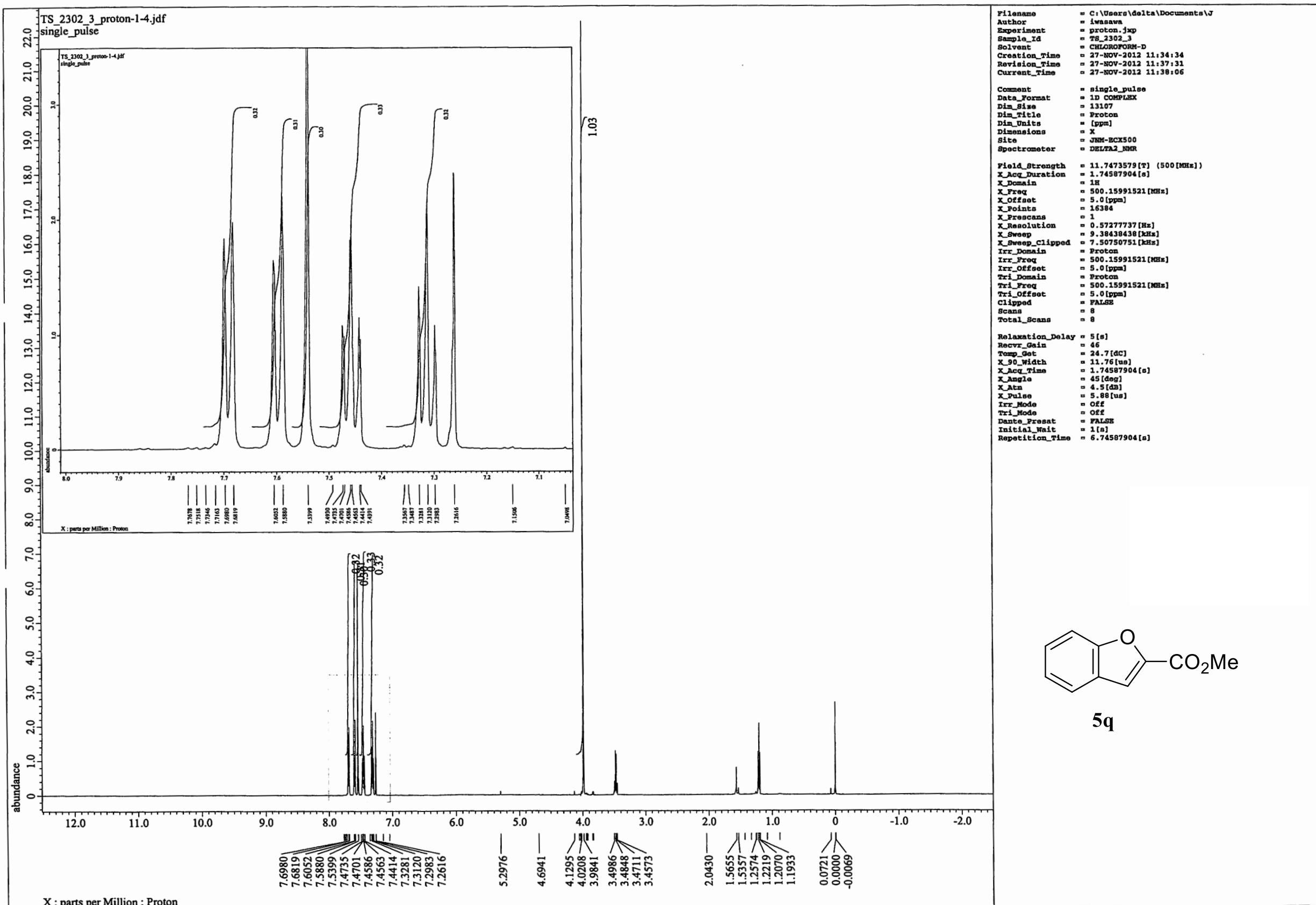
分解
アボダイゼーション
スキャンスピード
更新日時

2 cm⁻¹
Cosine
Auto (2 mm/sec)
2013/06/03 20:49

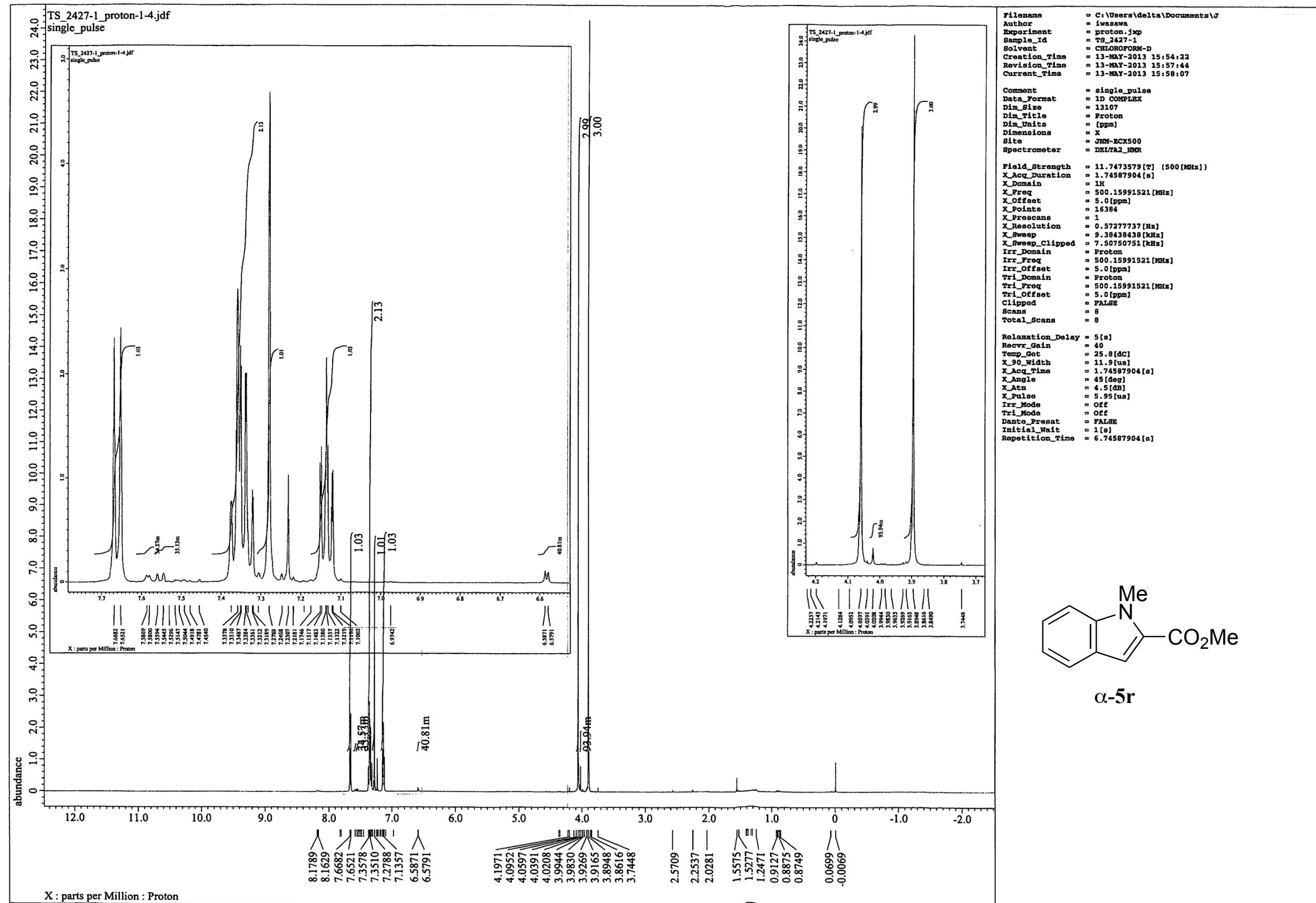


No.	cm ⁻¹	%T									
1	2954.41	93.144	2	1714.89	62.0927	3	1593.88	84.026	4	1435.26	65.3003
6	1383.19	84.9232	7	1315.21	64.6392	8	1222.65	55.3462	9	1127.19	65.6263
11	1015.34	71.3058	12	981.108	83.6657	13	929.039	77.3855	14	895.291	74.9175
16	769.458	48.7094	17	706.783	92.6701	18	668.696	97.5167	19	621.448	96.444
21	575.165	93.3757	22	563.112	89.7652	23	556.363	79.3485	24	552.024	82.1373

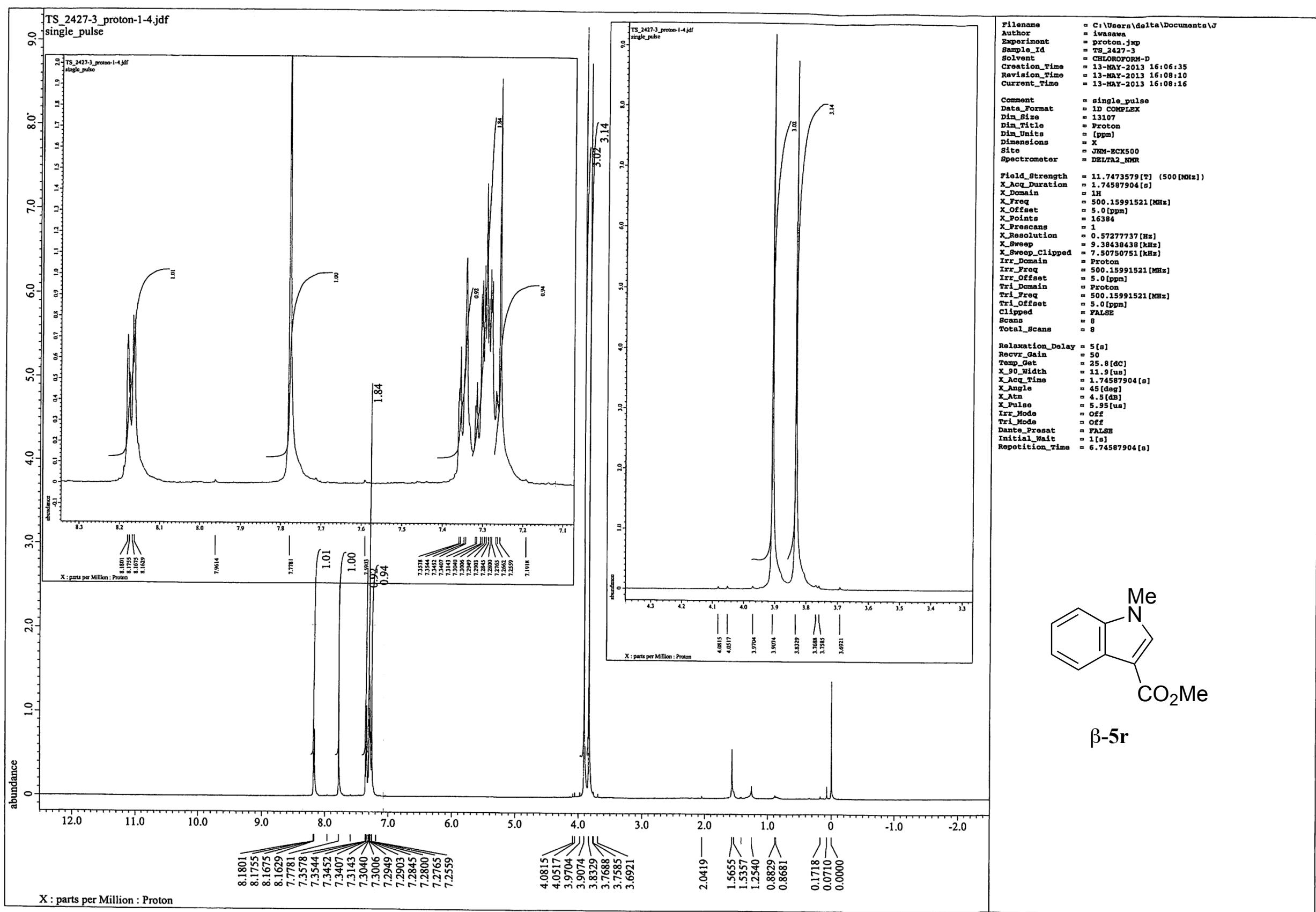
¹H NMR spectra of **5q**.



¹H NMR spectra of **a-5r**.



¹H NMR spectra of β -5r.



¹H NMR spectra of **5s**.

