

Electronic supporting information

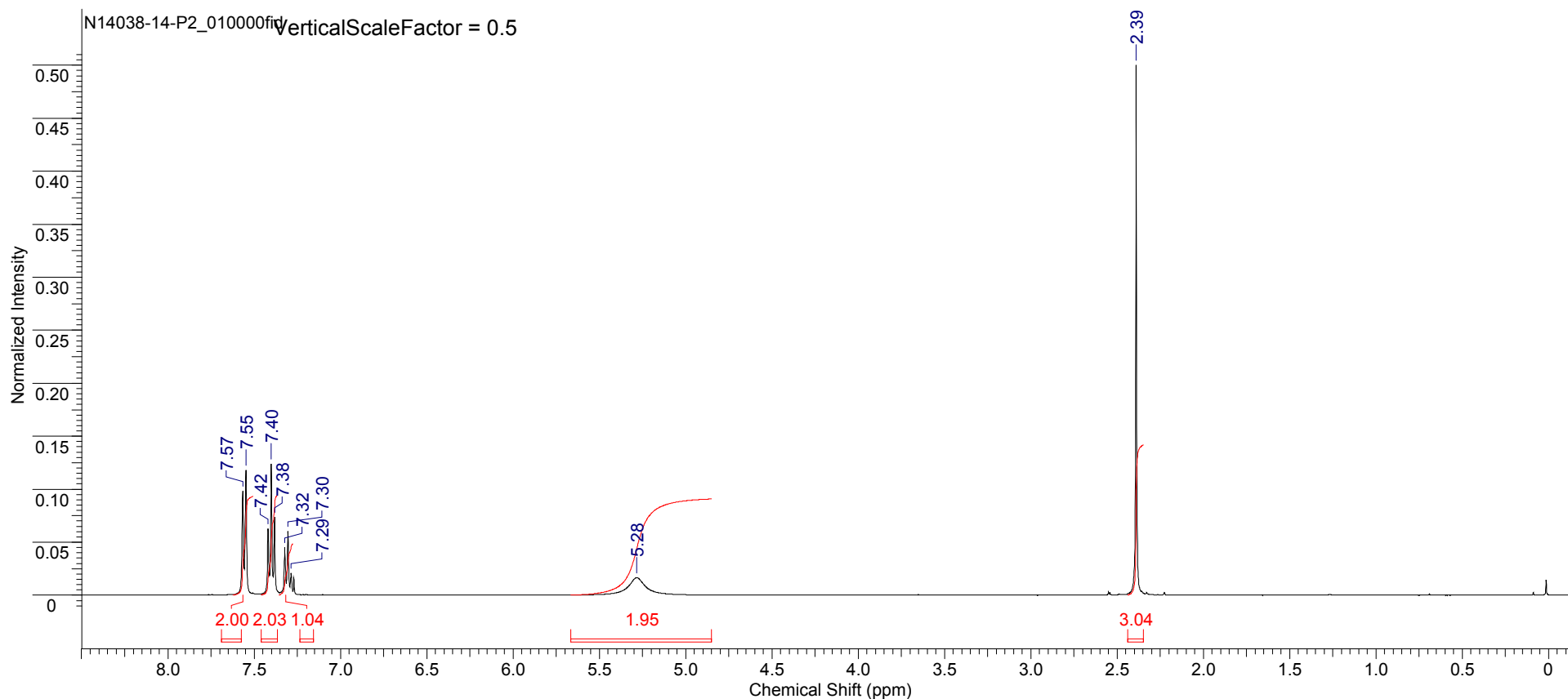
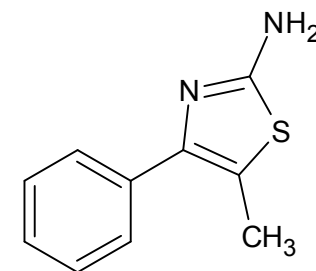
**Direct preparation of thiazoles, imidazoles,
imidazopyridines and thiazolidines from alkenes**

Timothy J. Donohoe,^{*a} Mikhail A Kabeshov,^a Akshat Rathi,^{\$a} and Ian E. D. Smith^b

¹ H and ¹³ C NMR spectra of the isolated compounds	Page
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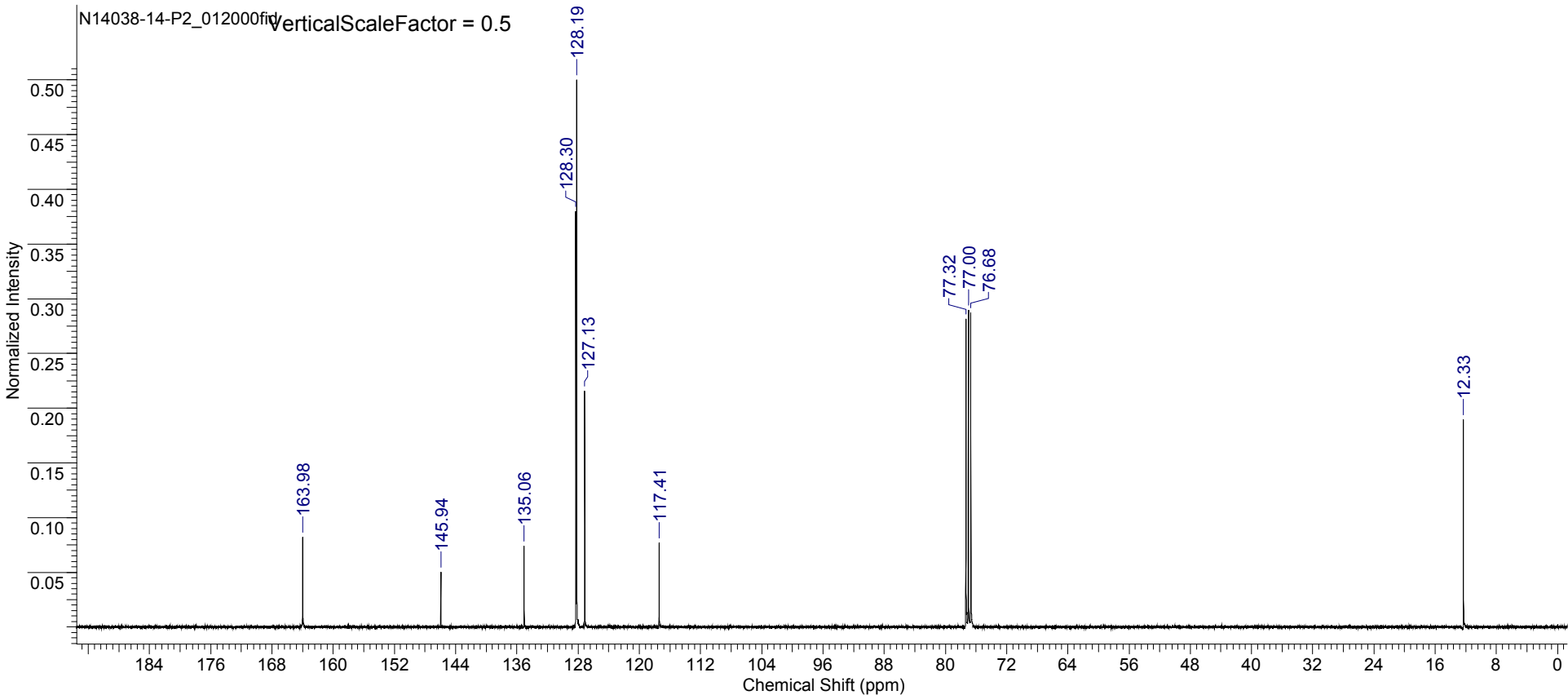
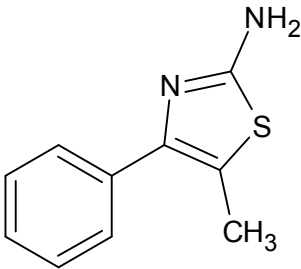
Formula C ₁₀ H ₁₀ N ₂ S	FW 190.2648
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Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2456.4697
Sweep Width (Hz)	8223.18	Temperature (degree C)	20.160		



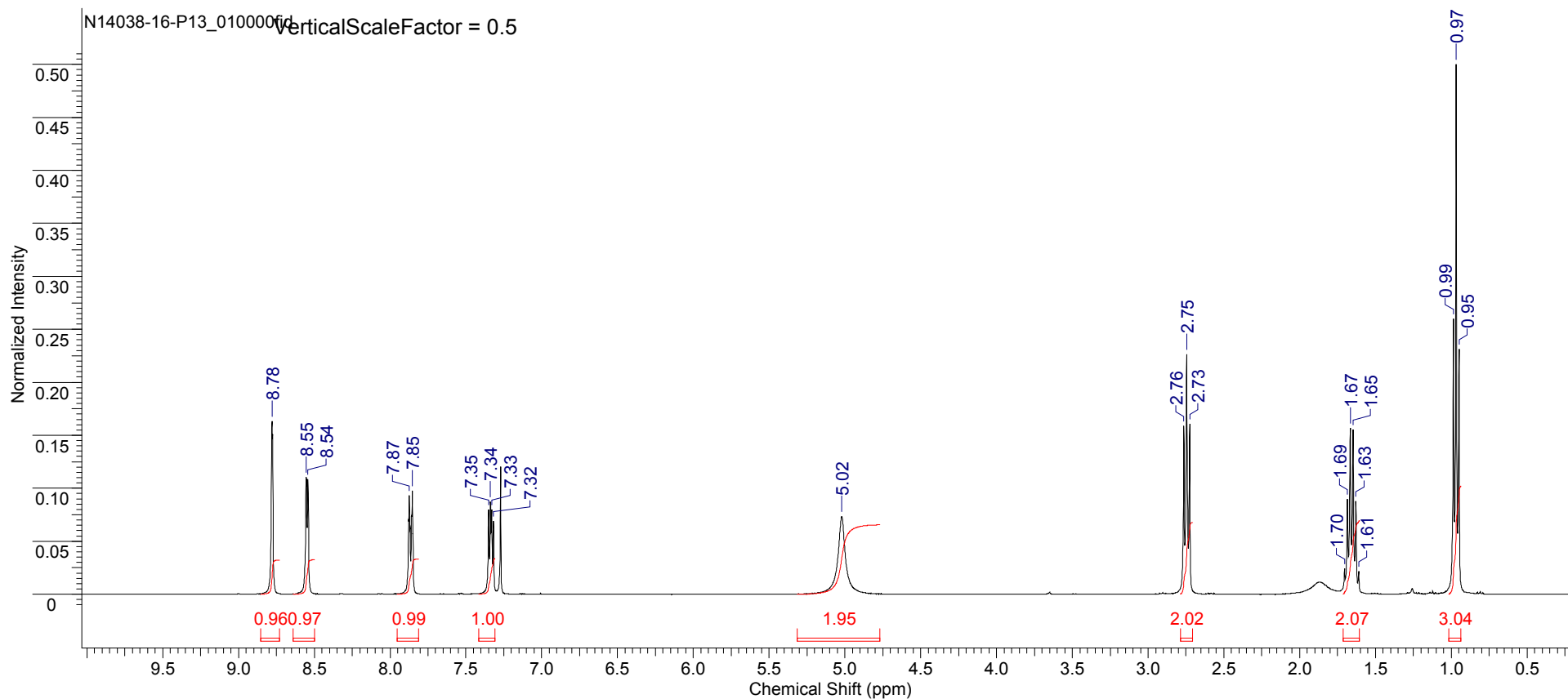
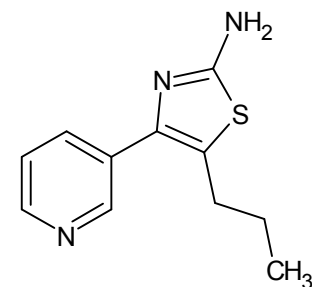
Formula C ₁₀ H ₁₀ N ₂ S	FW 190.2648
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Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12023.3662
Temperature (degree C)	20.160	Sweep Width (Hz)	26177.21		



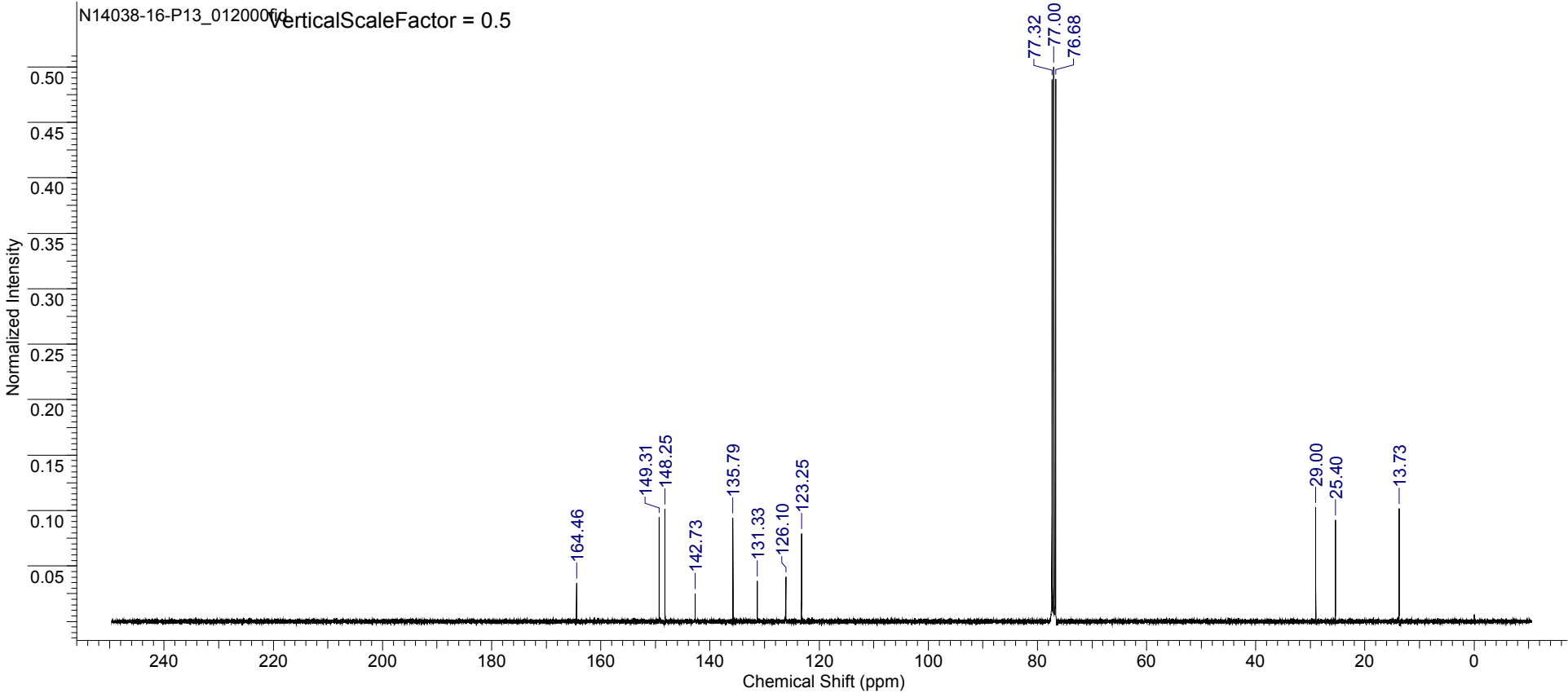
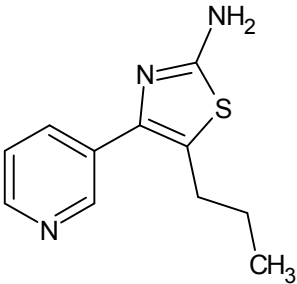
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Owner	chemist	Points Count	16384	Pulse Sequence	zg30	Receiver Gain	574.70
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.1042	Sweep Width (Hz)	8223.18
Temperature (degree C)	21.160						



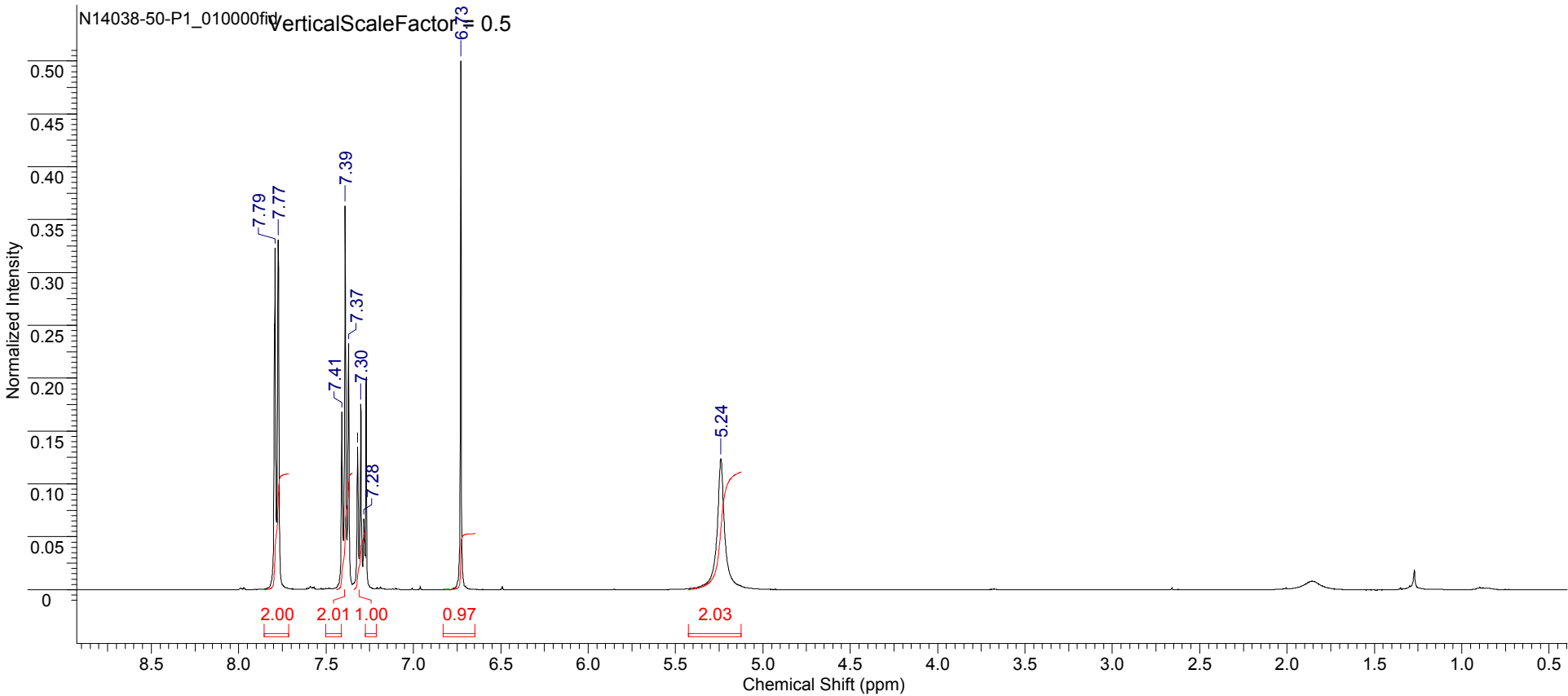
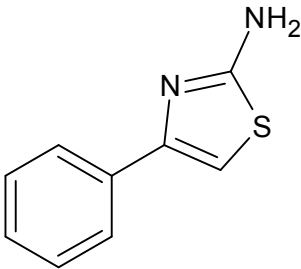
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Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12027.3613
Temperature (degree C)	21.160			Sweep Width (Hz)	26177.21



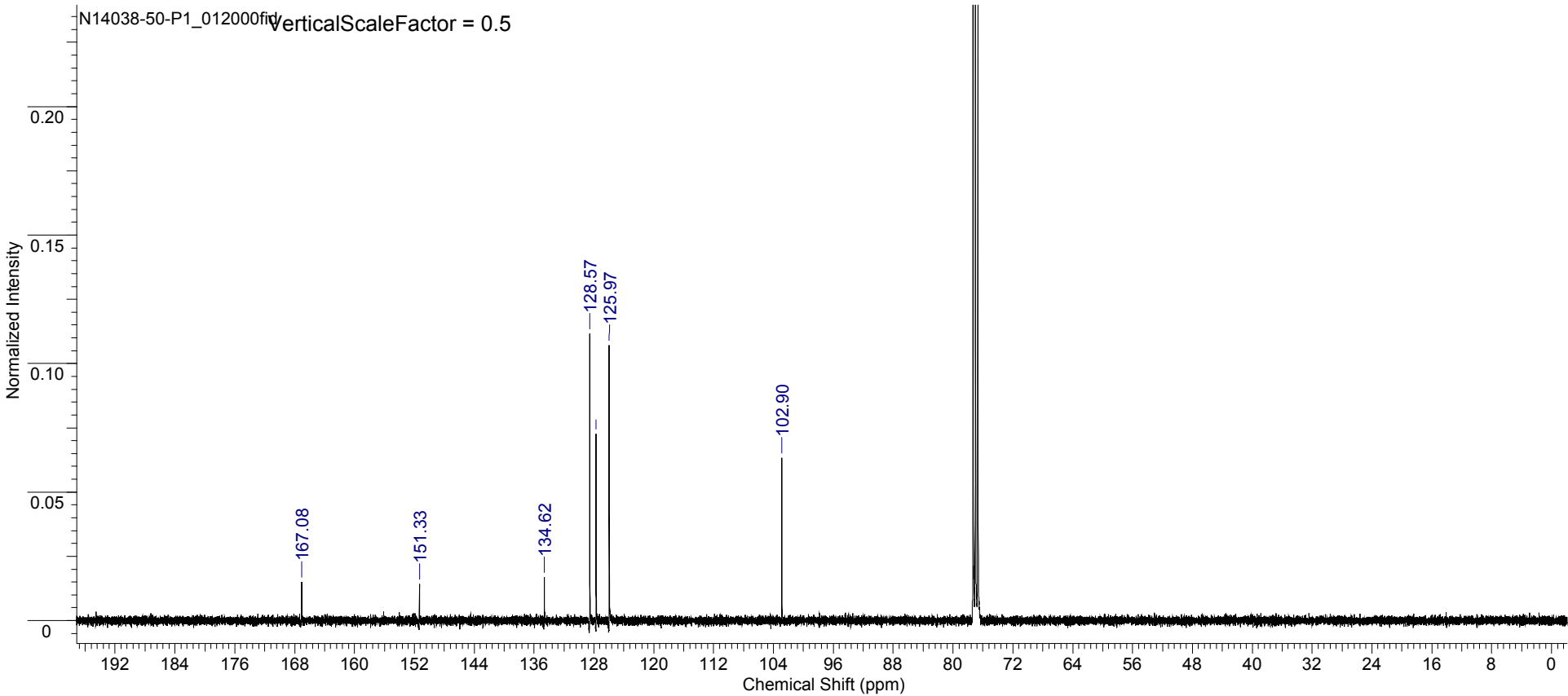
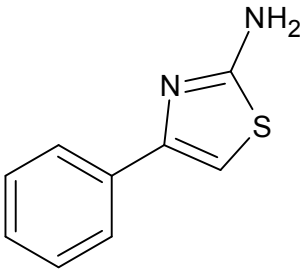
Formula C ₉ H ₆ N ₂ S	FW 176.2382
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Owner	root	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Receiver Gain	32.00
Sweep Width (Hz)	8223.18	Temperature (degree C)	25.660	Spectrum Offset (Hz)	2465.5391



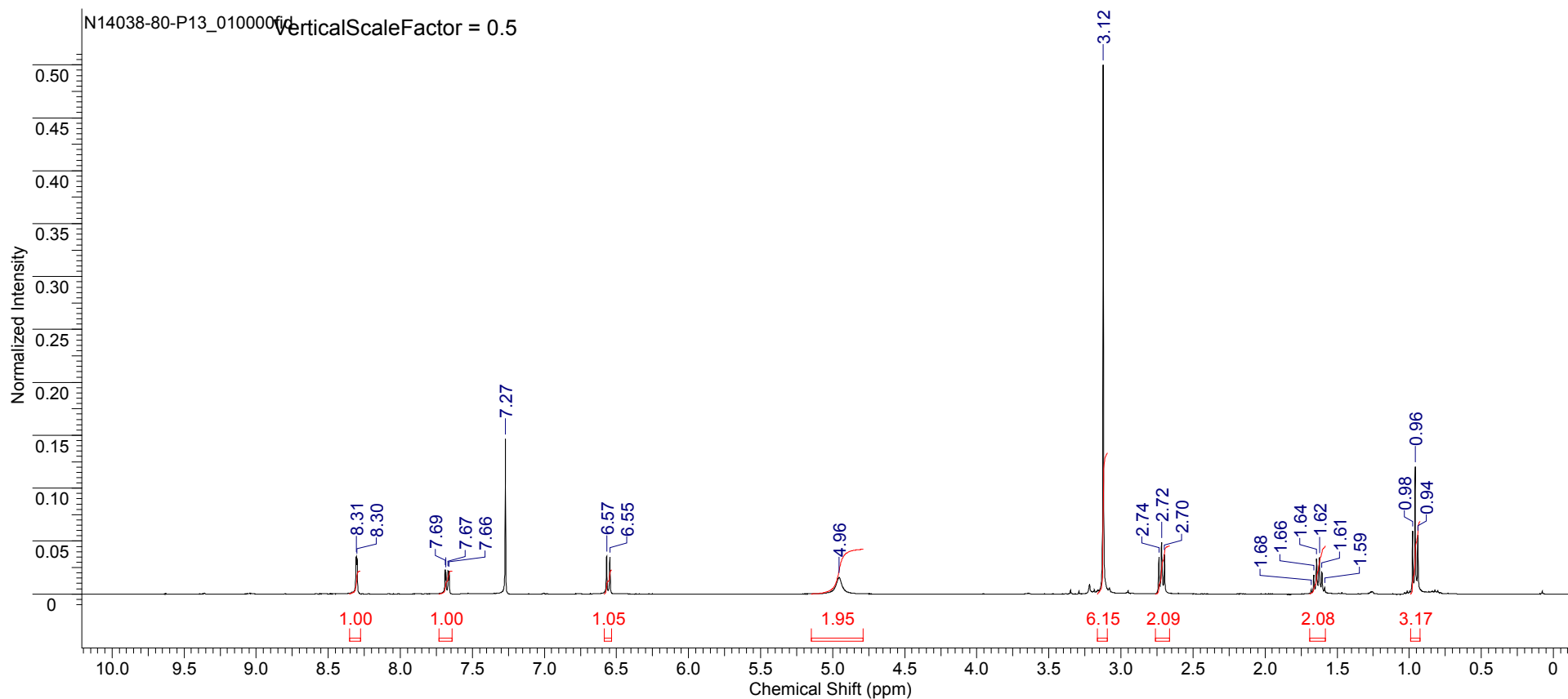
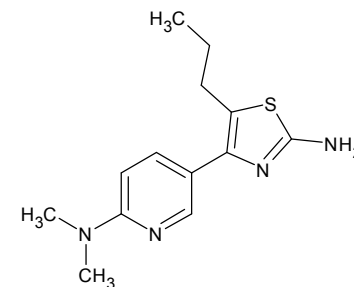
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Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12028.1602
Temperature (degree C)	20.160			Sweep Width (Hz)	26177.21



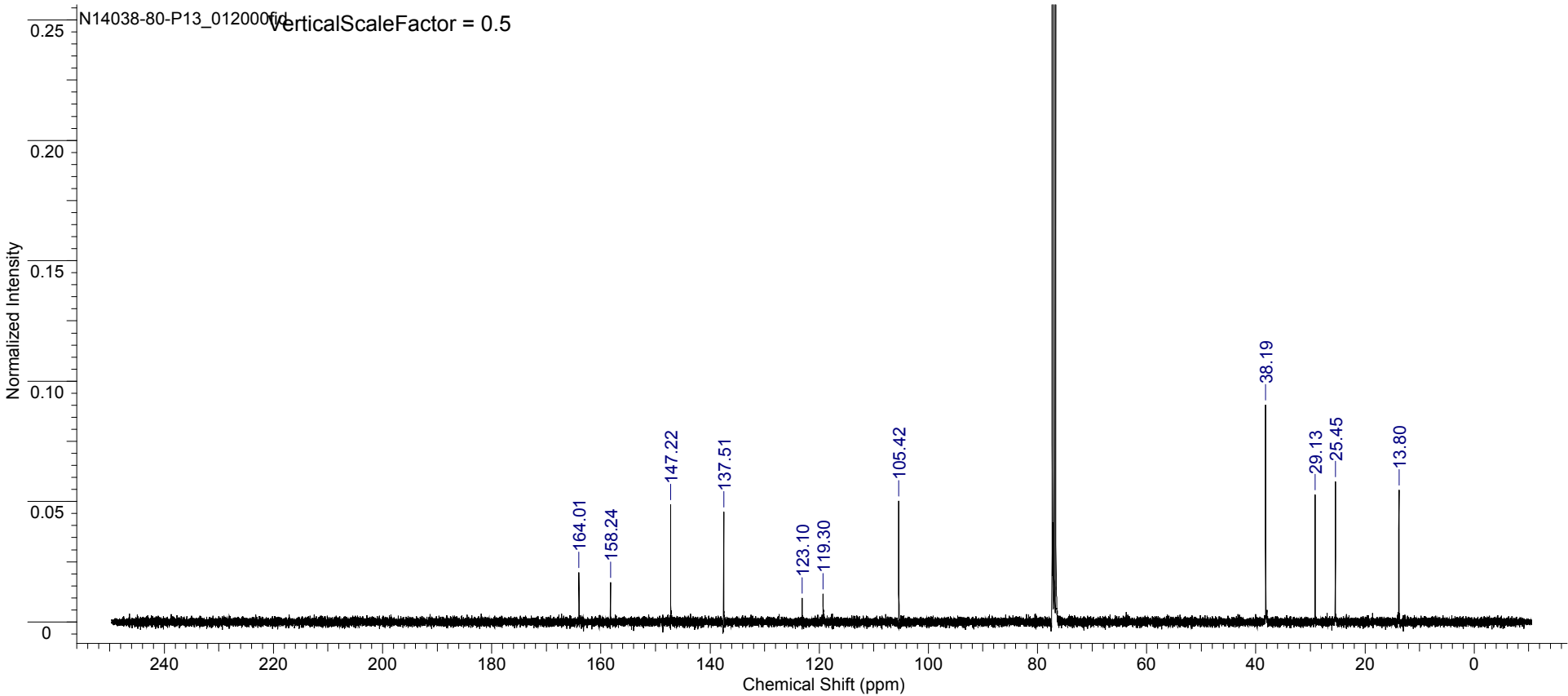
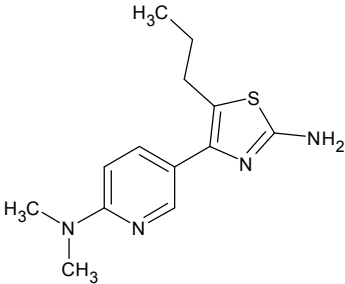
Formula C ₁₃ H ₁₀ N ₂ S	FW 262.3738
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Date	24 Feb 2010 18:57:04	Date Stamp	24 Feb 2010 18:57:04				
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Nucleus	1H	Number of Transients	16	Origin	dpx400n	Original Points Count	16384
Owner	chemist	Points Count	16384	Pulse Sequence	zg30	Receiver Gain	574.70
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2524	Sweep Width (Hz)	8223.18
Temperature (degree C)	21.160						



Formula C ₁₃ H ₁₀ N ₂ S	FW 262.3738
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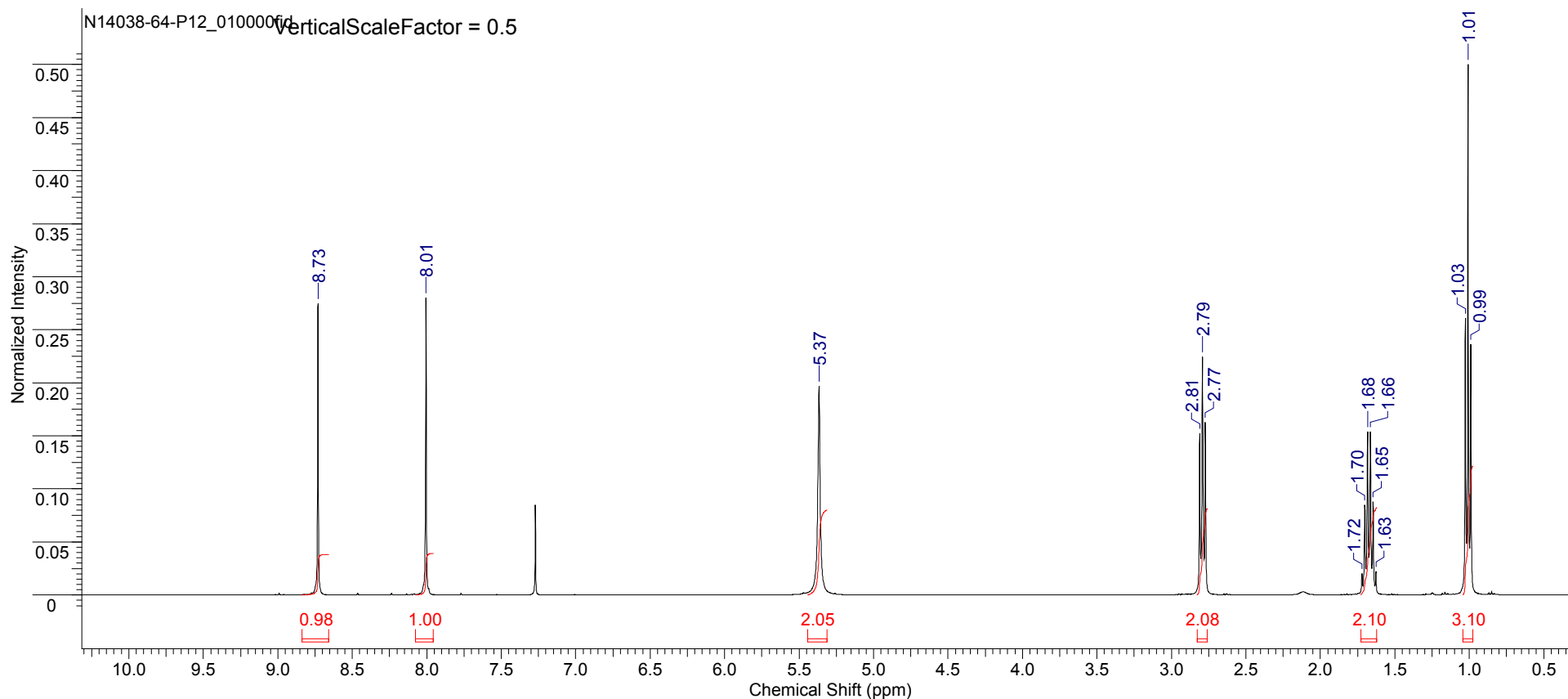
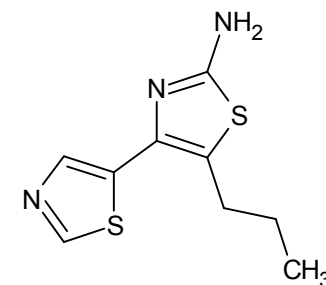
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Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12028.9590
Temperature (degree C)	21.160			Sweep Width (Hz)	26177.21



28/02/2010 18:12:06

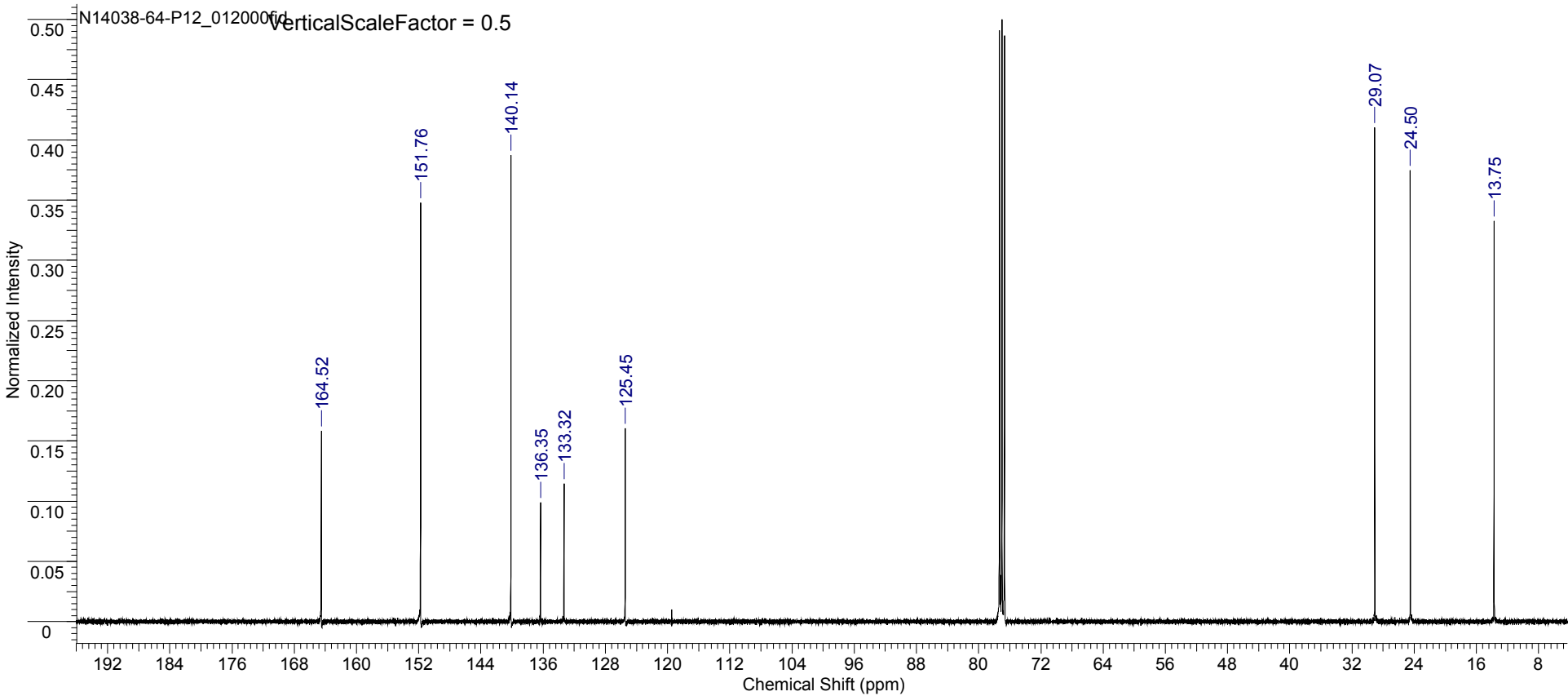
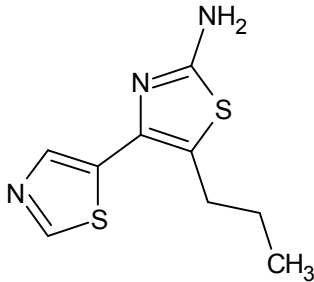
Formula C ₉ H ₁₁ N ₃ S ₂	FW 225.3337
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Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2446
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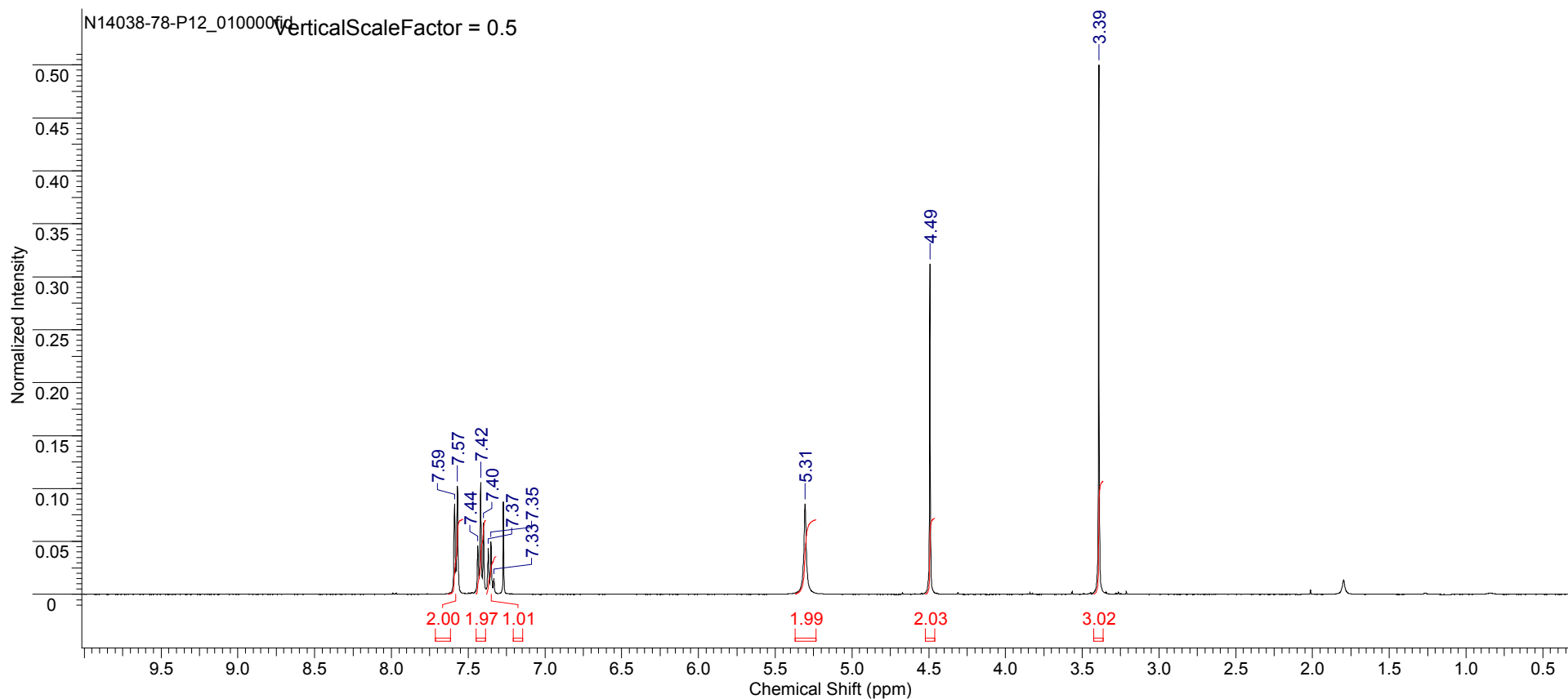
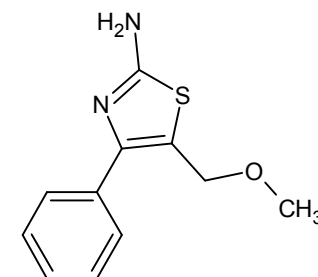
Formula C ₉ H ₁₁ N ₃ S ₂	FW 225.3337
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Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12023.3672
Temperature (degree C)	20.160	Sweep Width (Hz)		26177.21	



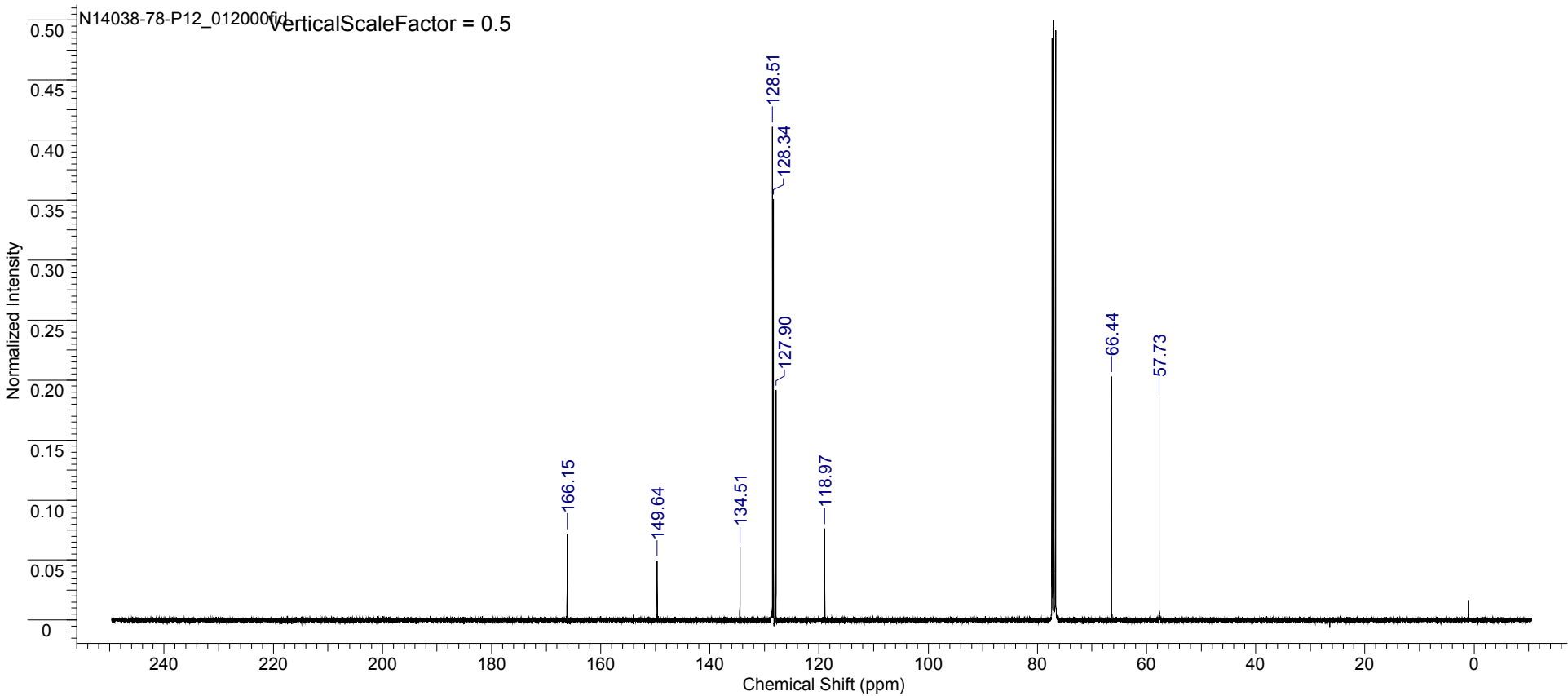
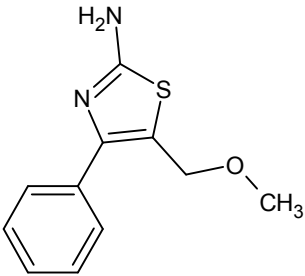
Formula C ₁₁ H ₁₂ N ₂ OS	FW 220.2908
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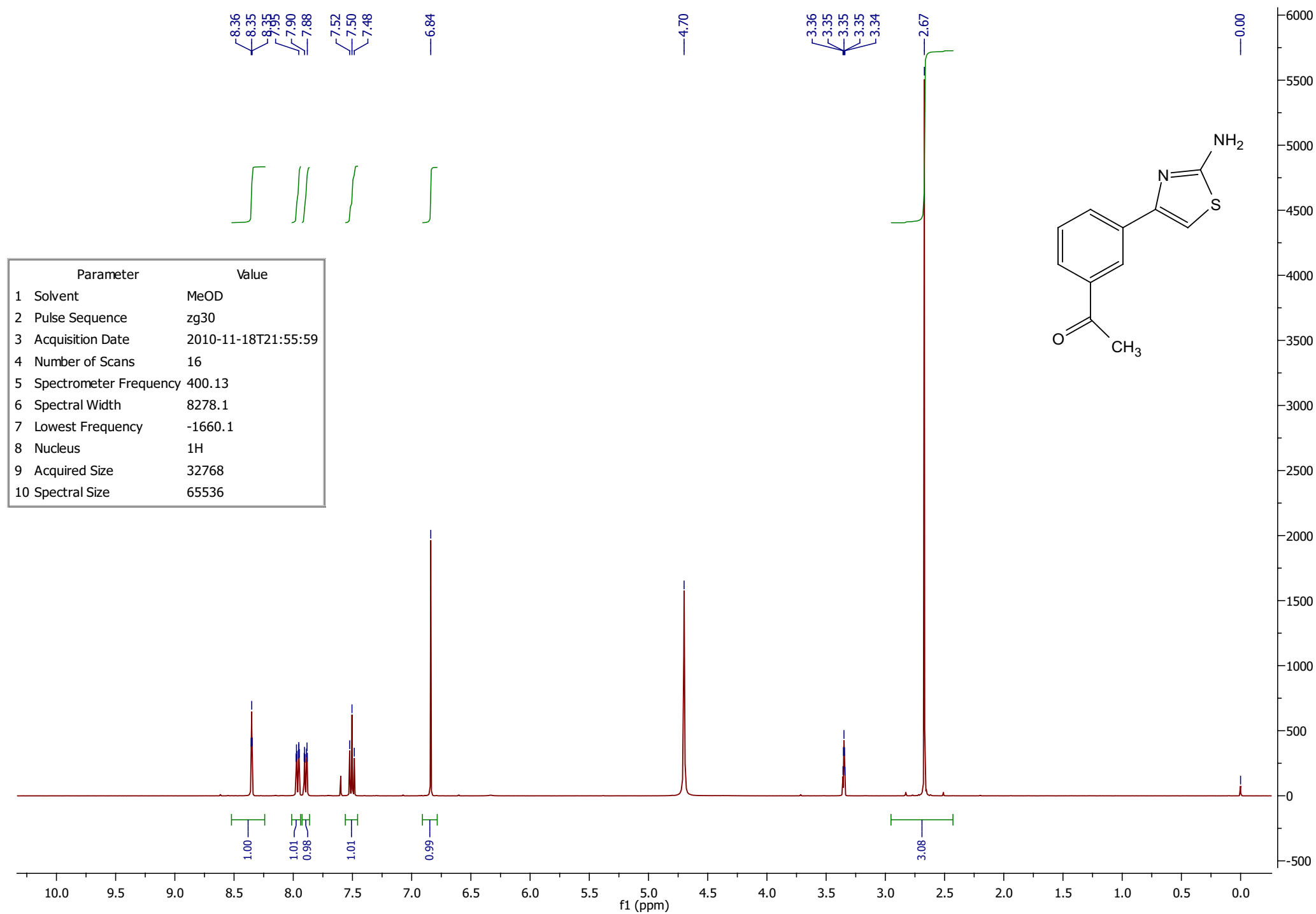
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Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.3210
Temperature (degree C)	20.160	Sweep Width (Hz) 8223.18			

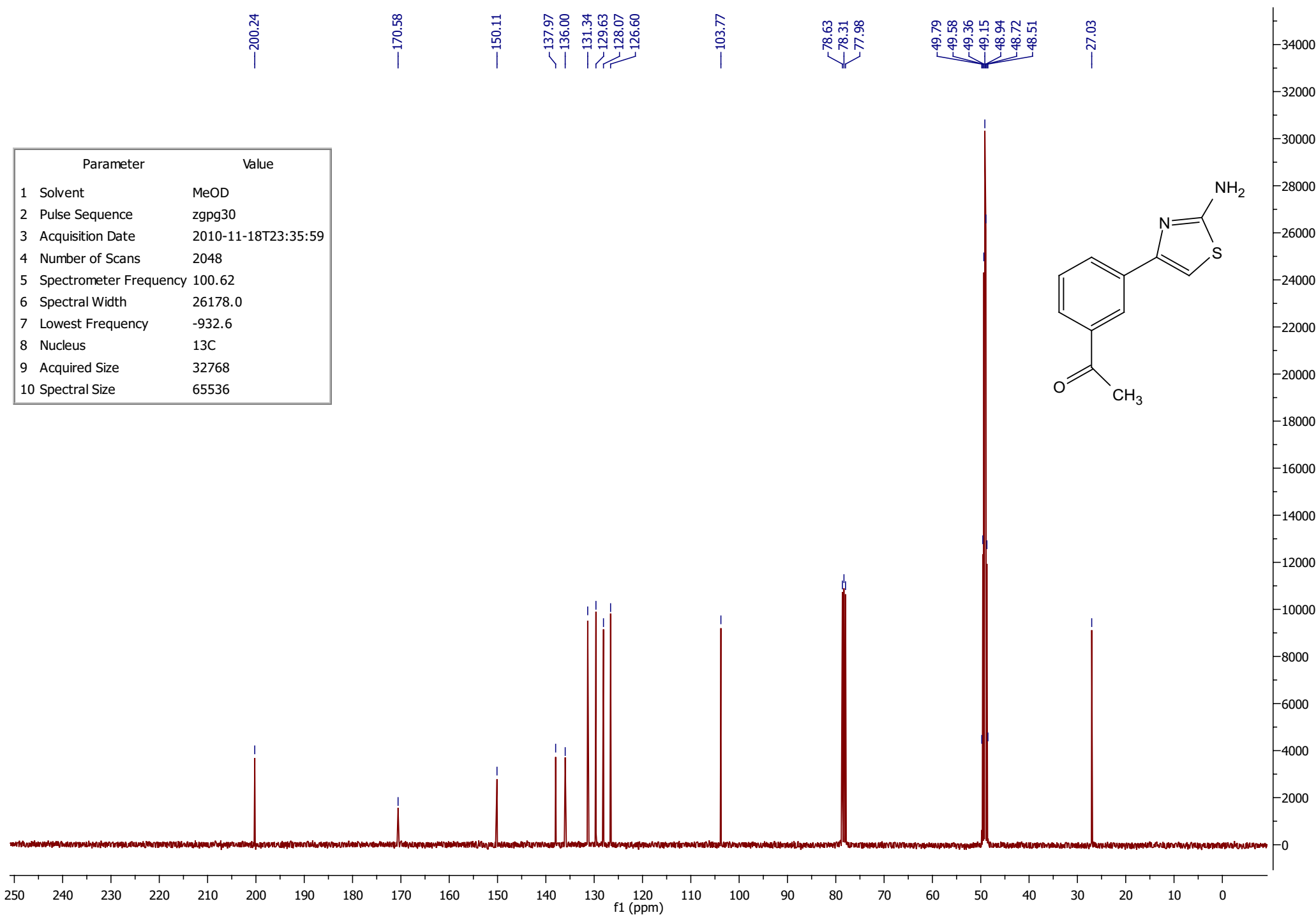


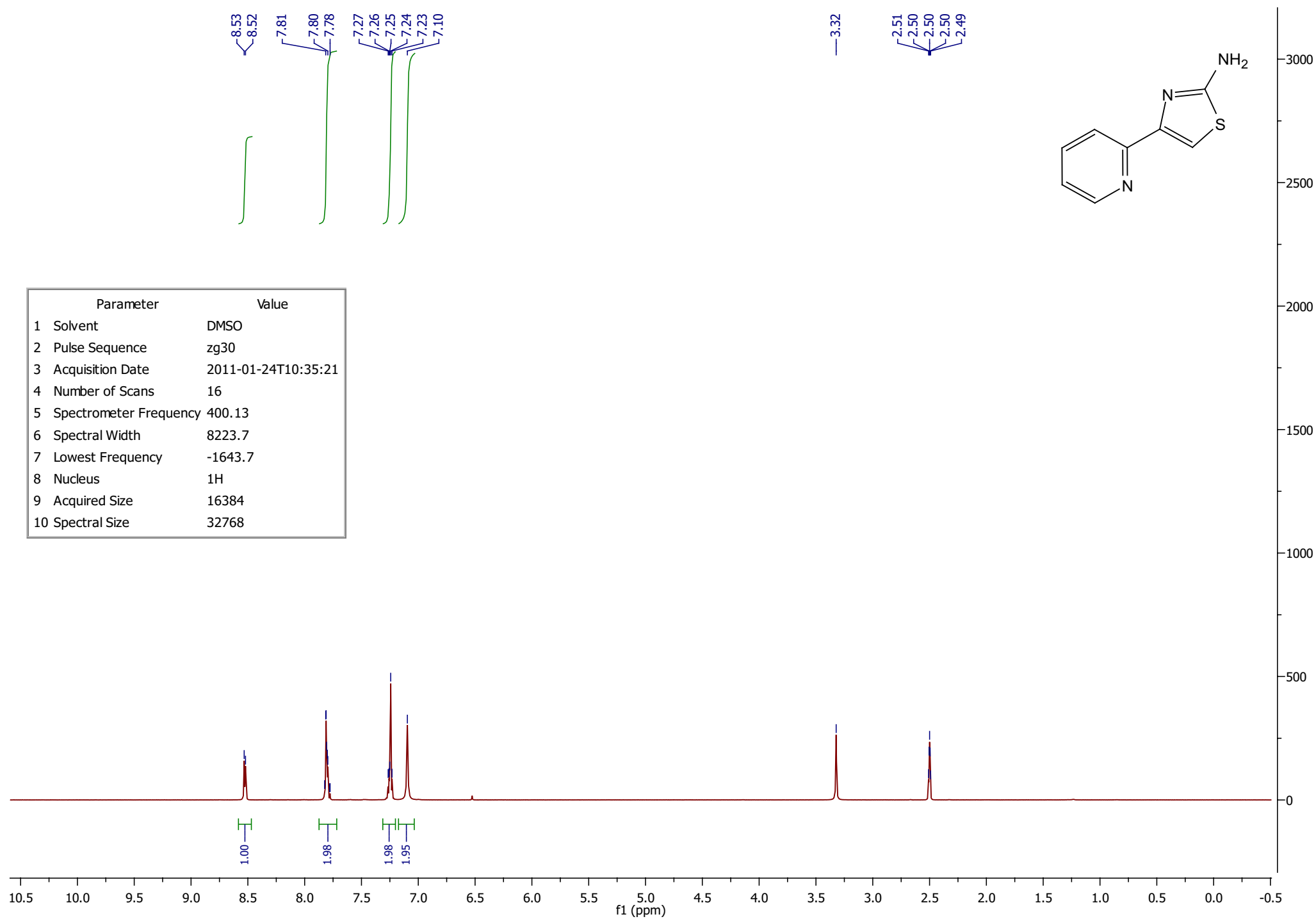
Formula C ₁₁ H ₁₂ NOS	FW 220.2908
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Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12026.5625
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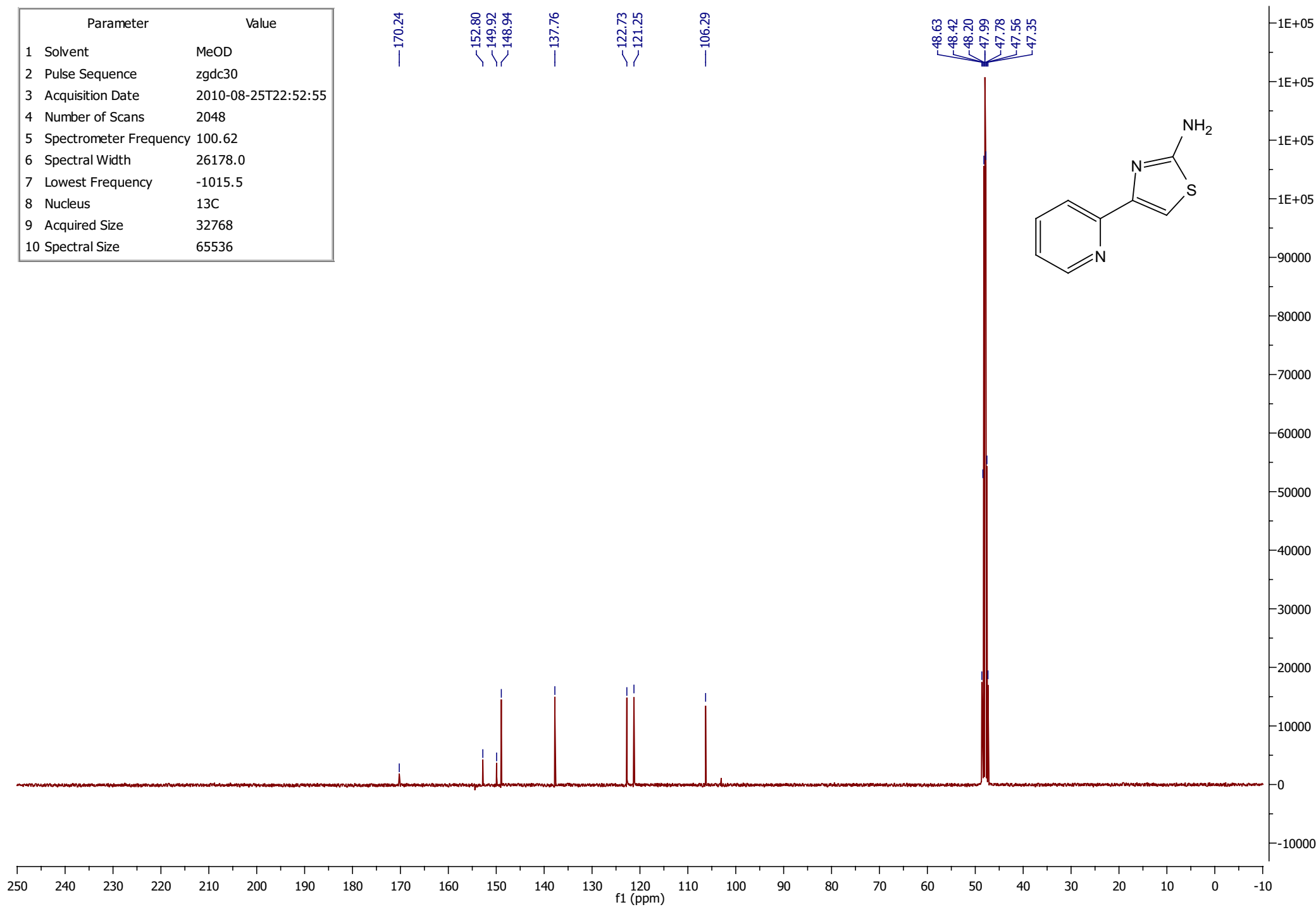


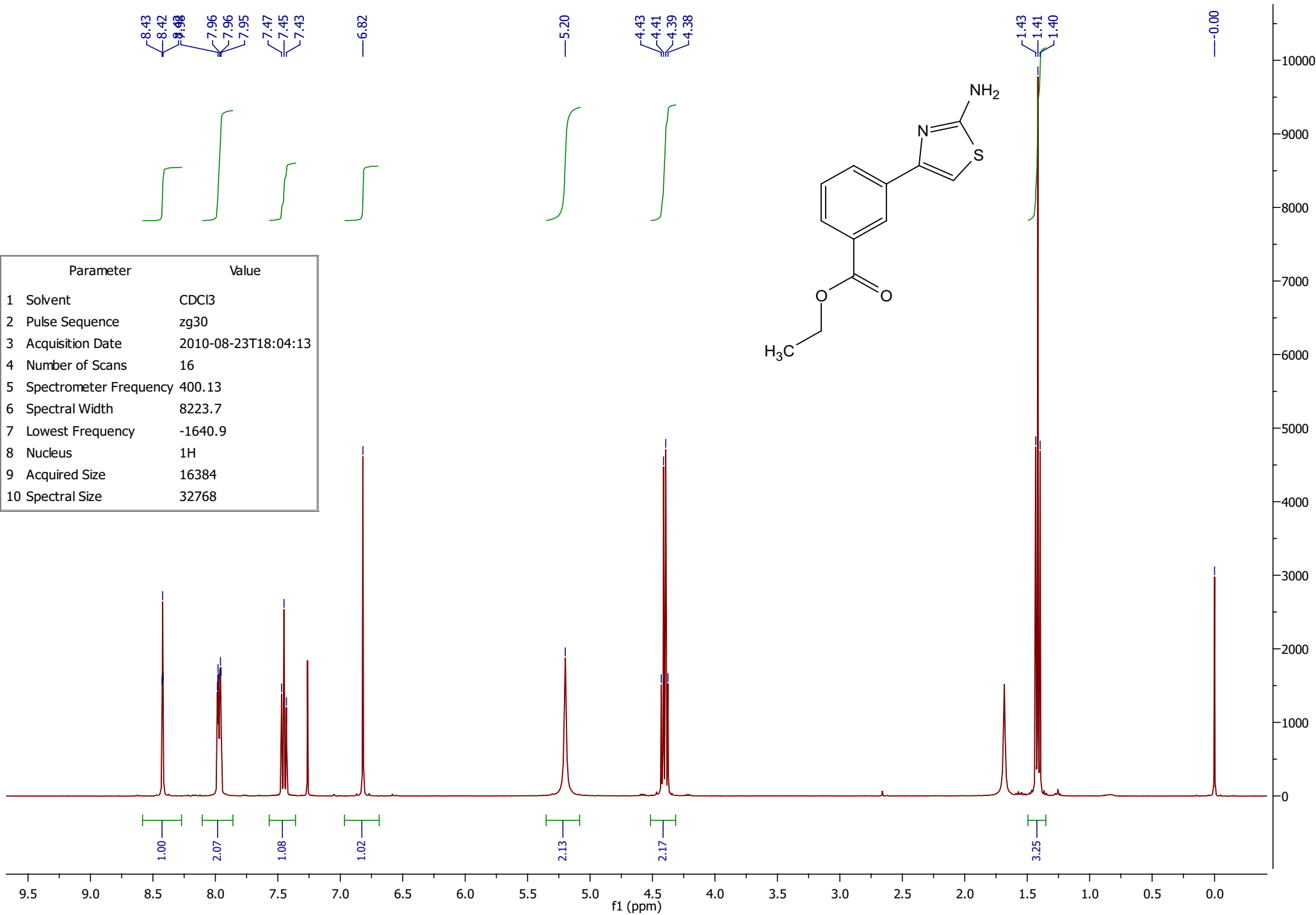






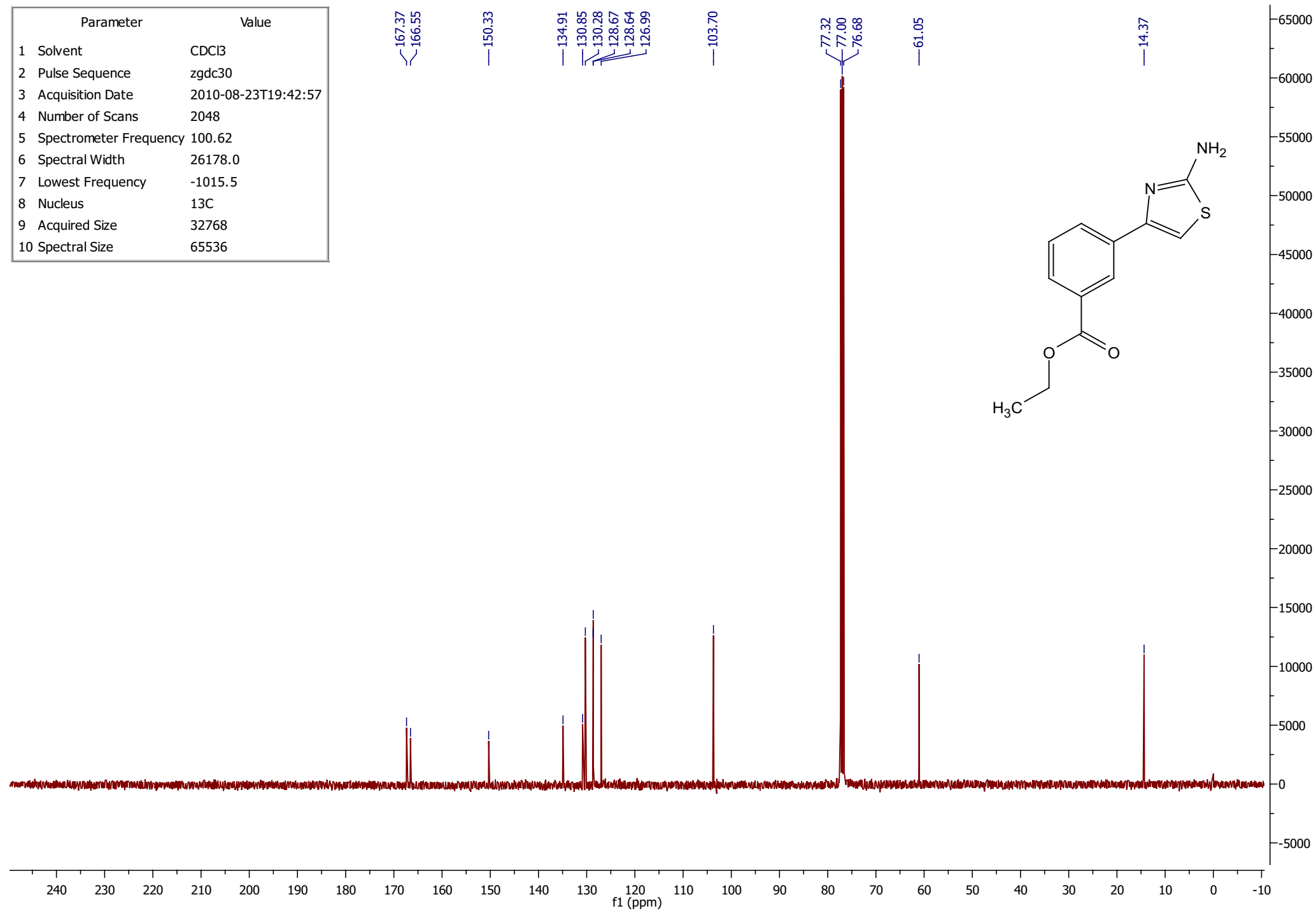
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2 Pulse Sequence	zgdc30
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6 Spectral Width	26178.0
7 Lowest Frequency	-1015.5
8 Nucleus	¹³ C
9 Acquired Size	32768
10 Spectral Size	65536

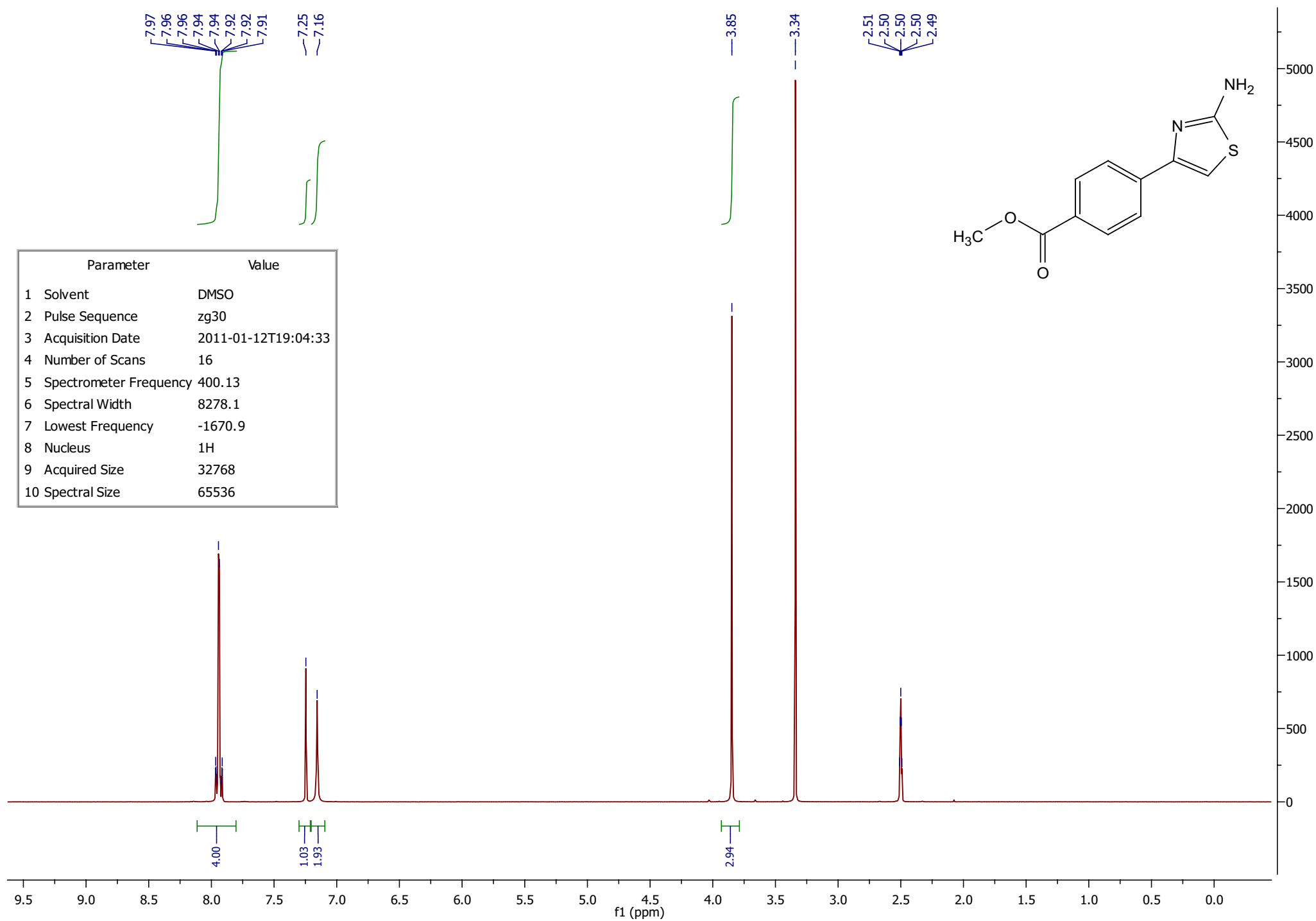


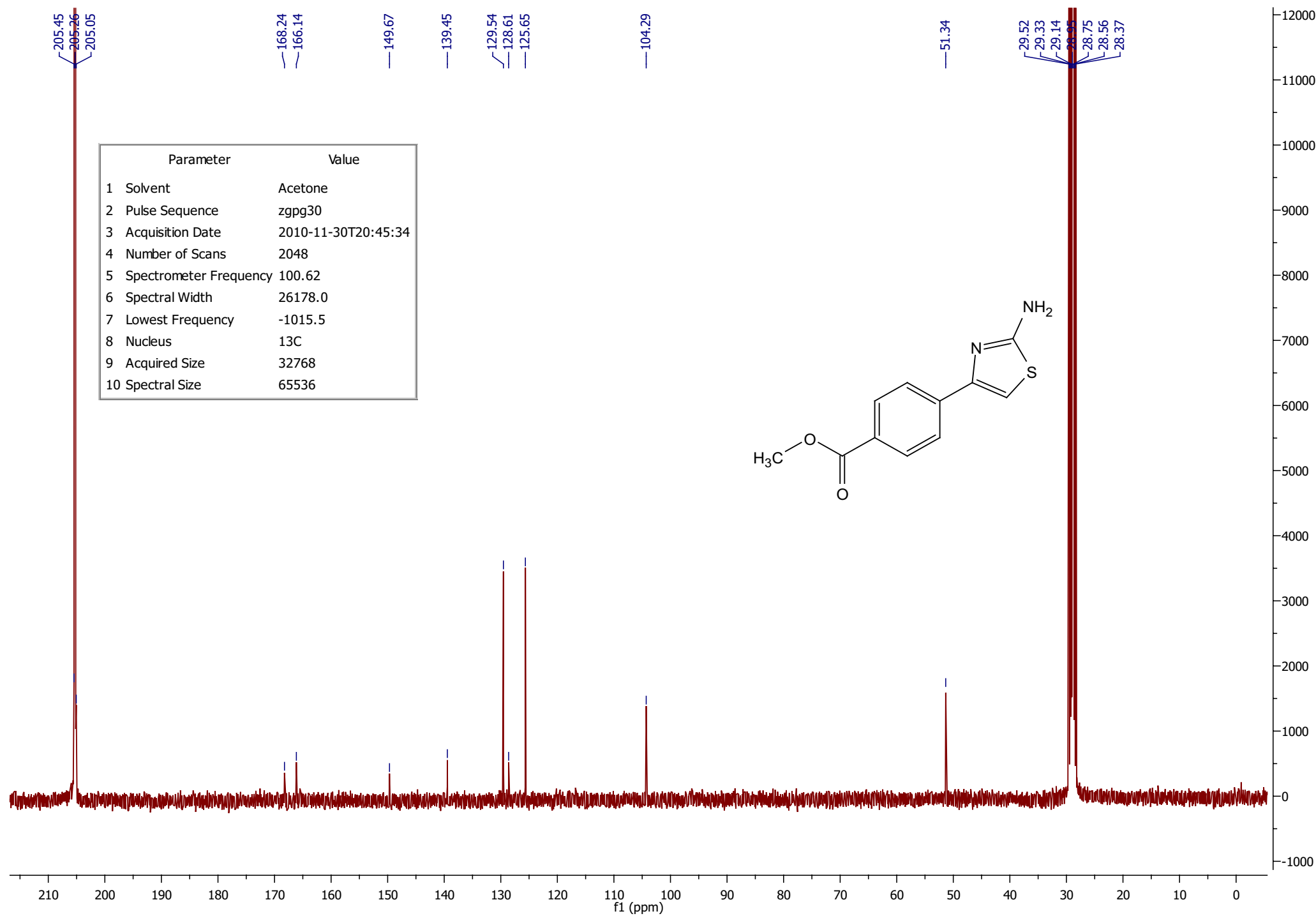


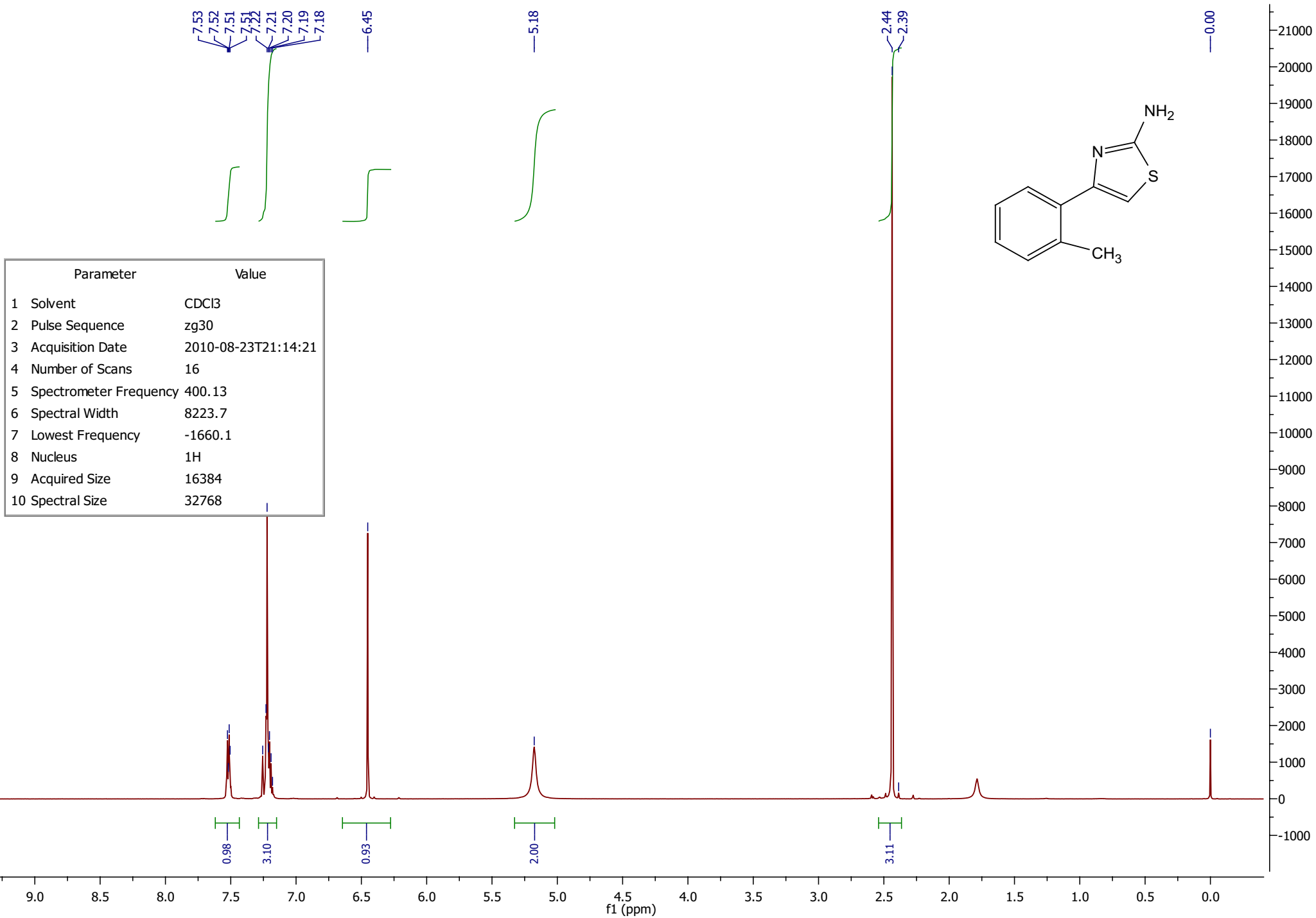
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6 Spectral Width	8223.7
7 Lowest Frequency	-1640.9
8 Nucleus	1H
9 Acquired Size	16384
10 Spectral Size	32768

Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zgdc30
3 Acquisition Date	2010-08-23T19:42:57
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26178.0
7 Lowest Frequency	-1015.5
8 Nucleus	13C
9 Acquired Size	32768
10 Spectral Size	65536

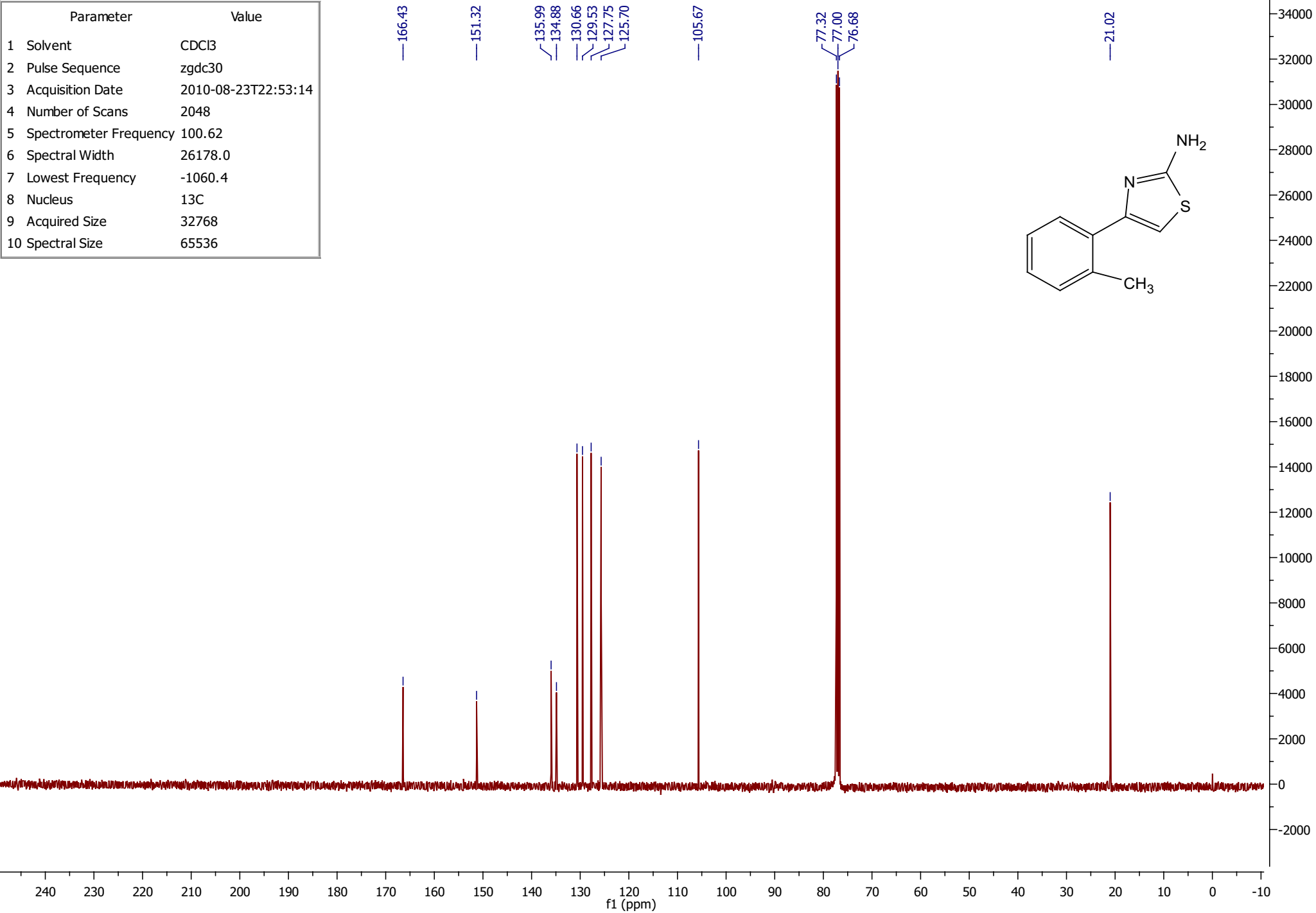


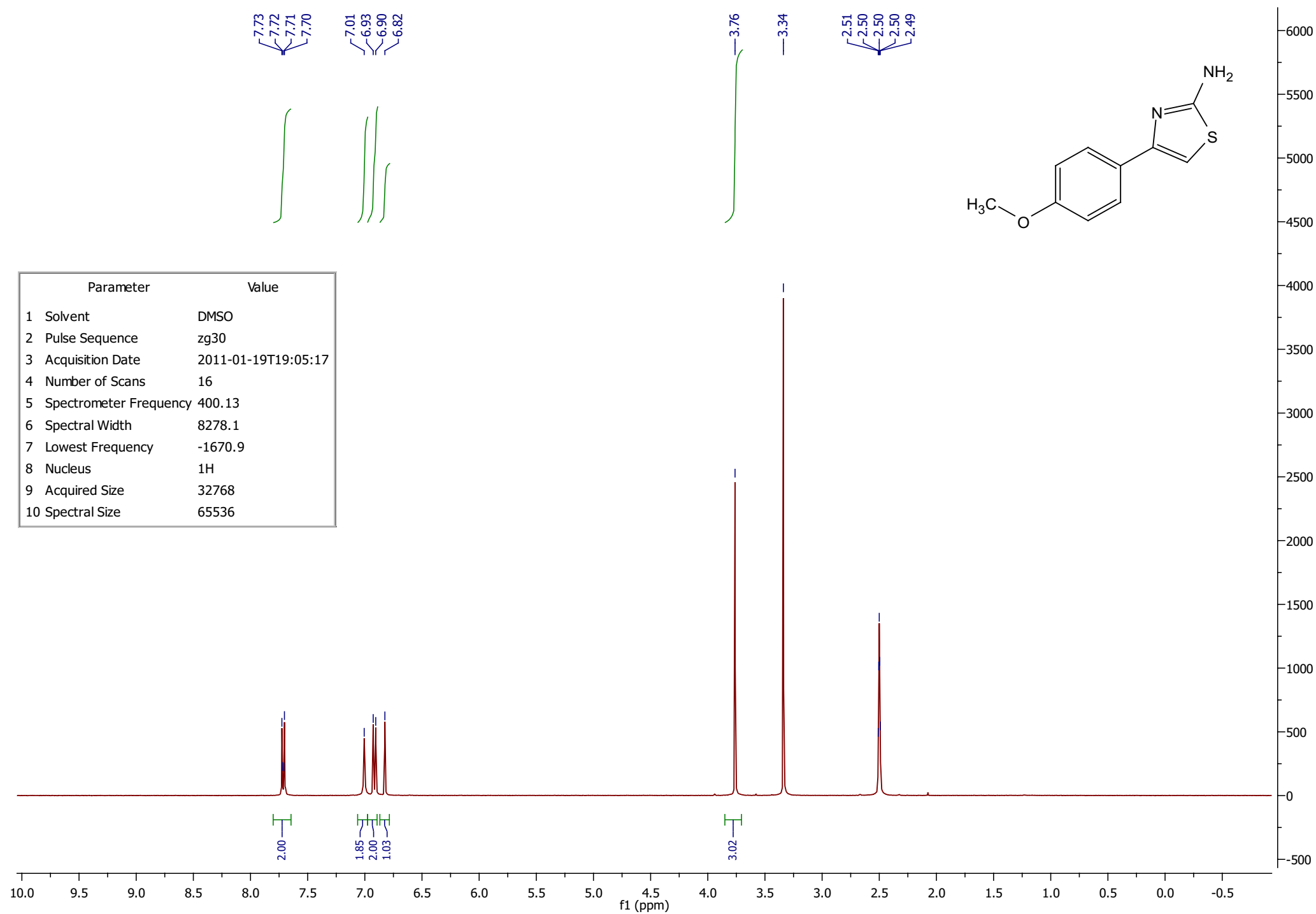


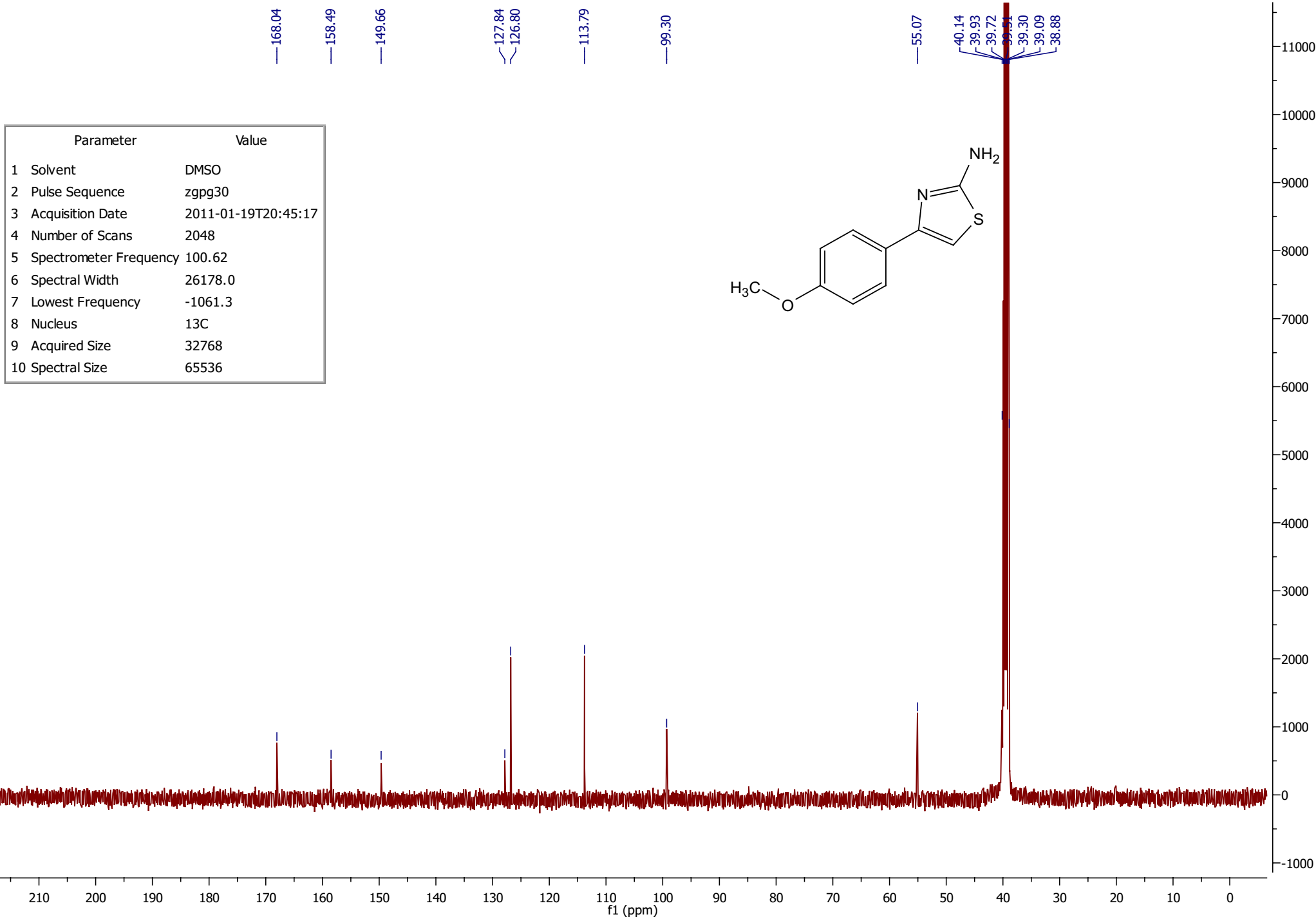


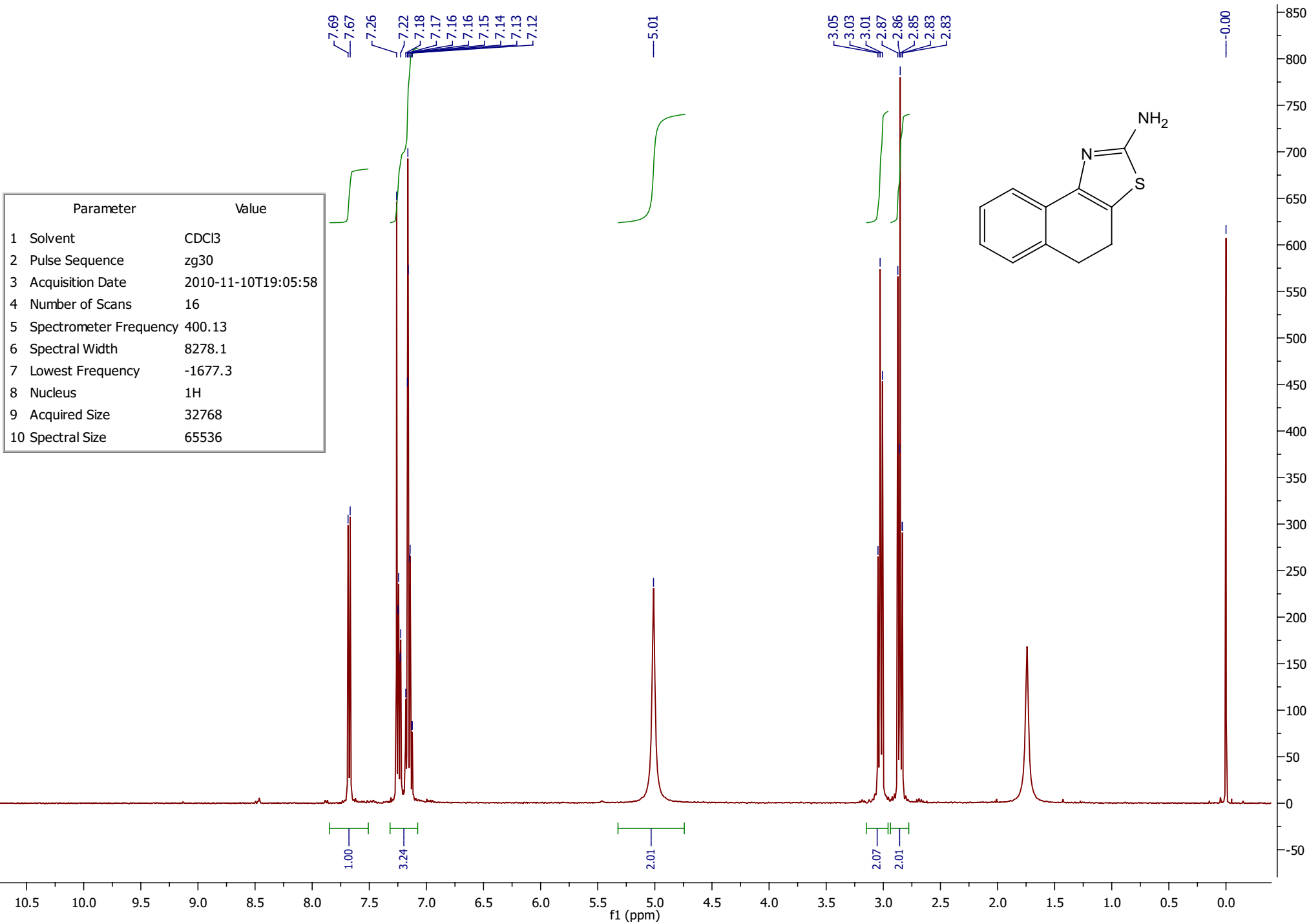


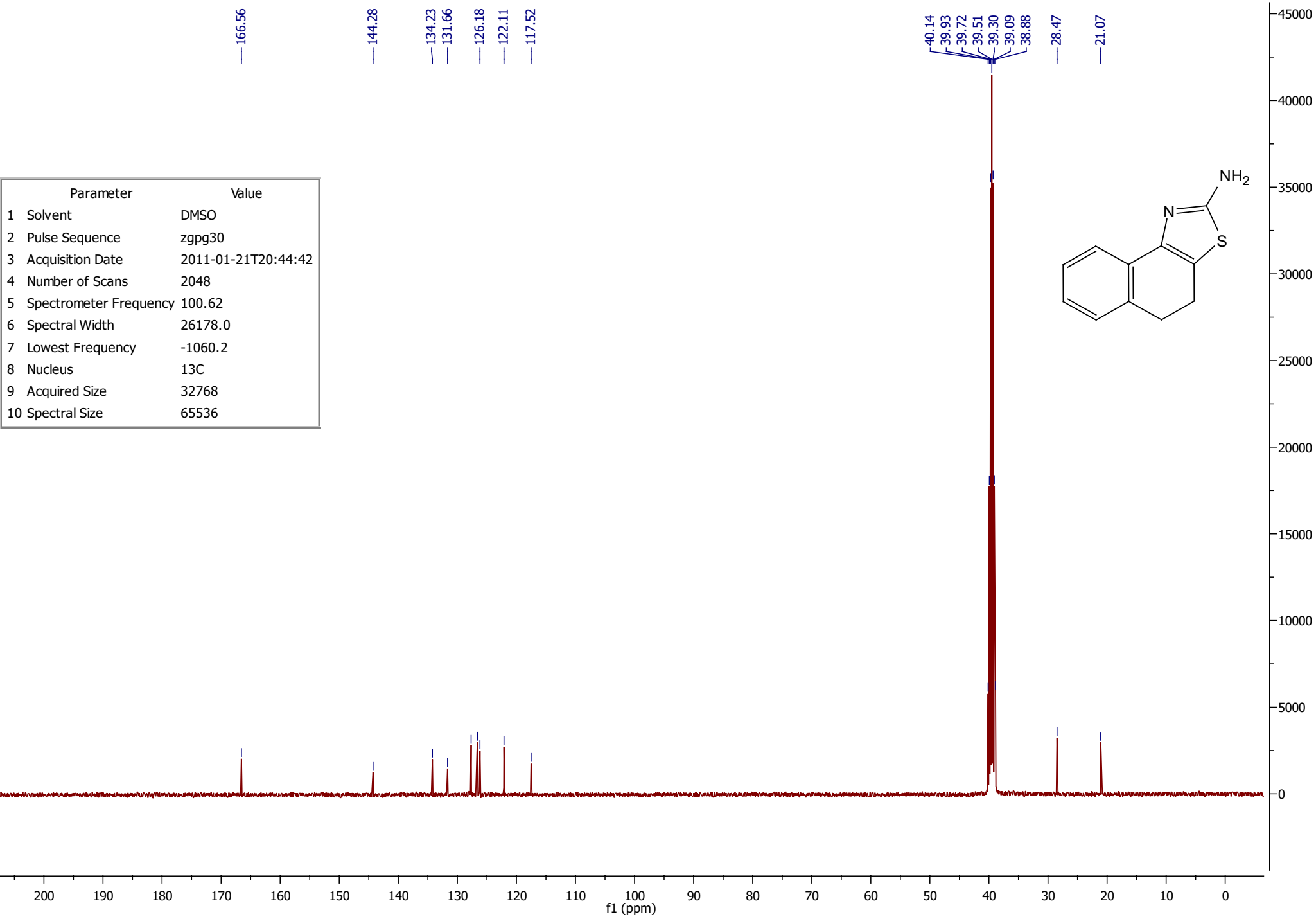
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8 Nucleus	13C
9 Acquired Size	32768
10 Spectral Size	65536





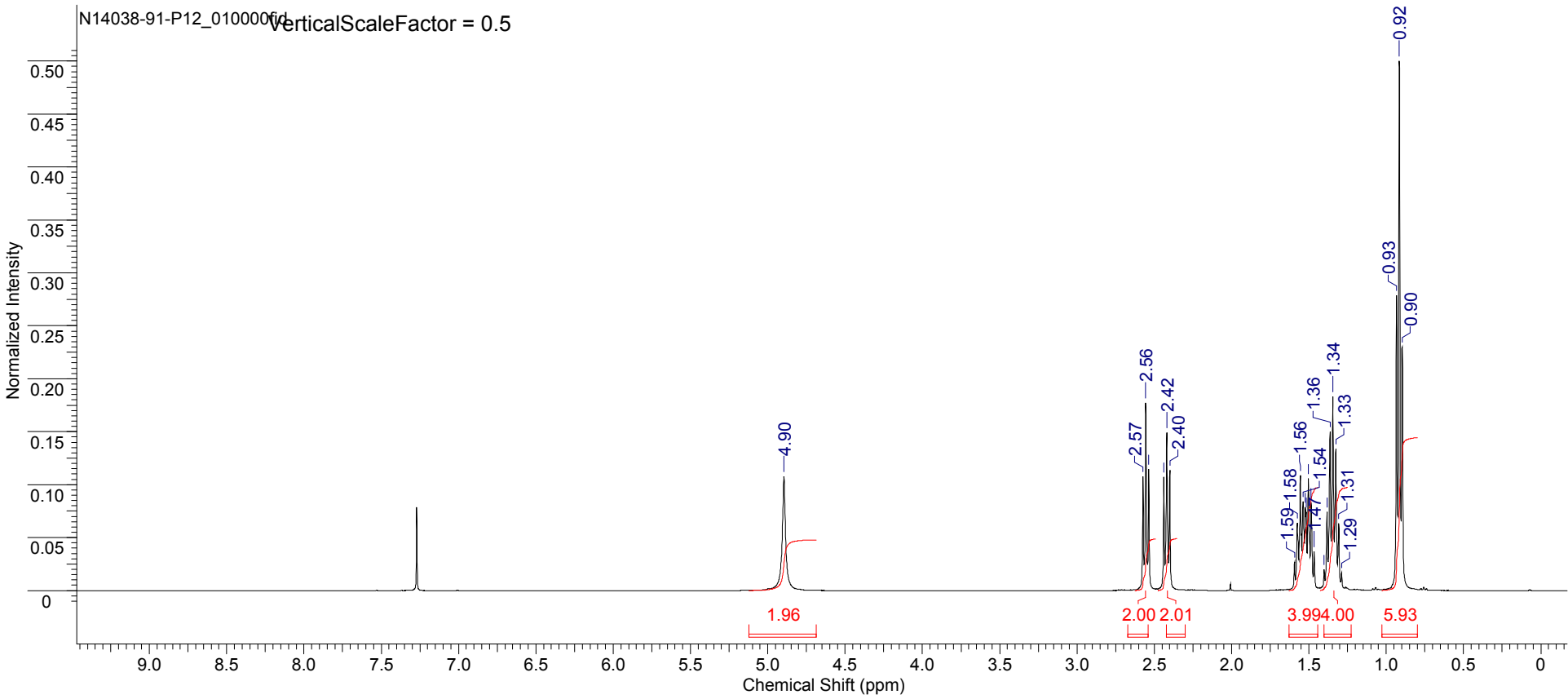
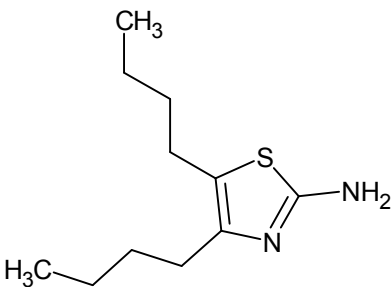






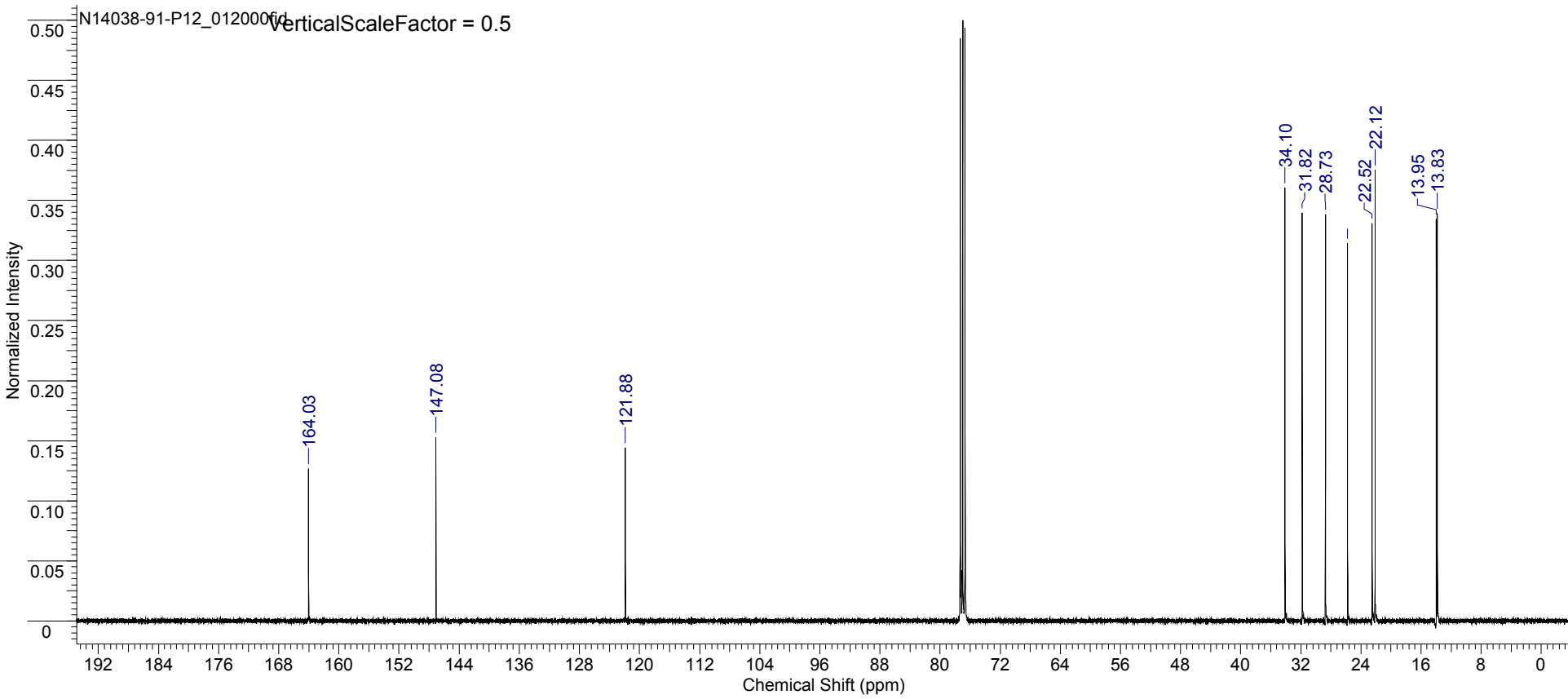
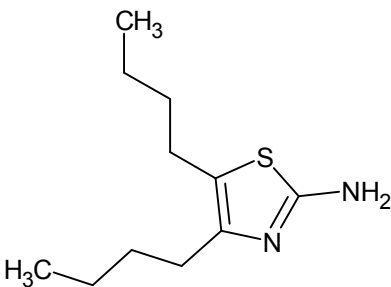
Formula C ₁₁ H ₂₀ N ₂ S	FW 212.3549
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Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2363
Temperature (degree C)	20.160			Sweep Width (Hz)	8223.18

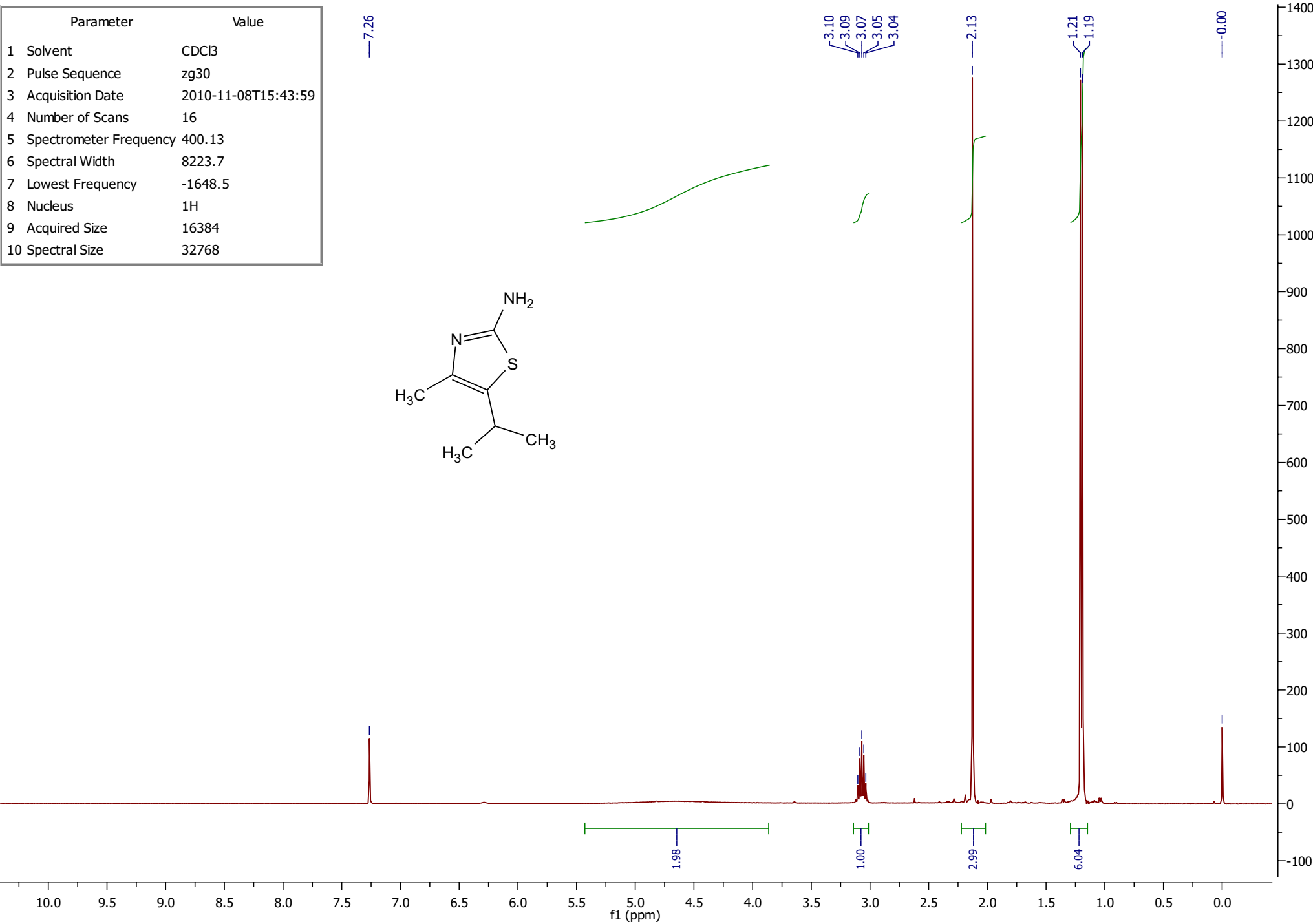
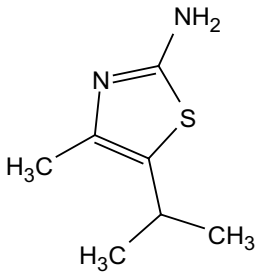


Formula C ₁₁ H ₂₀ N ₂ S	FW 212.3549
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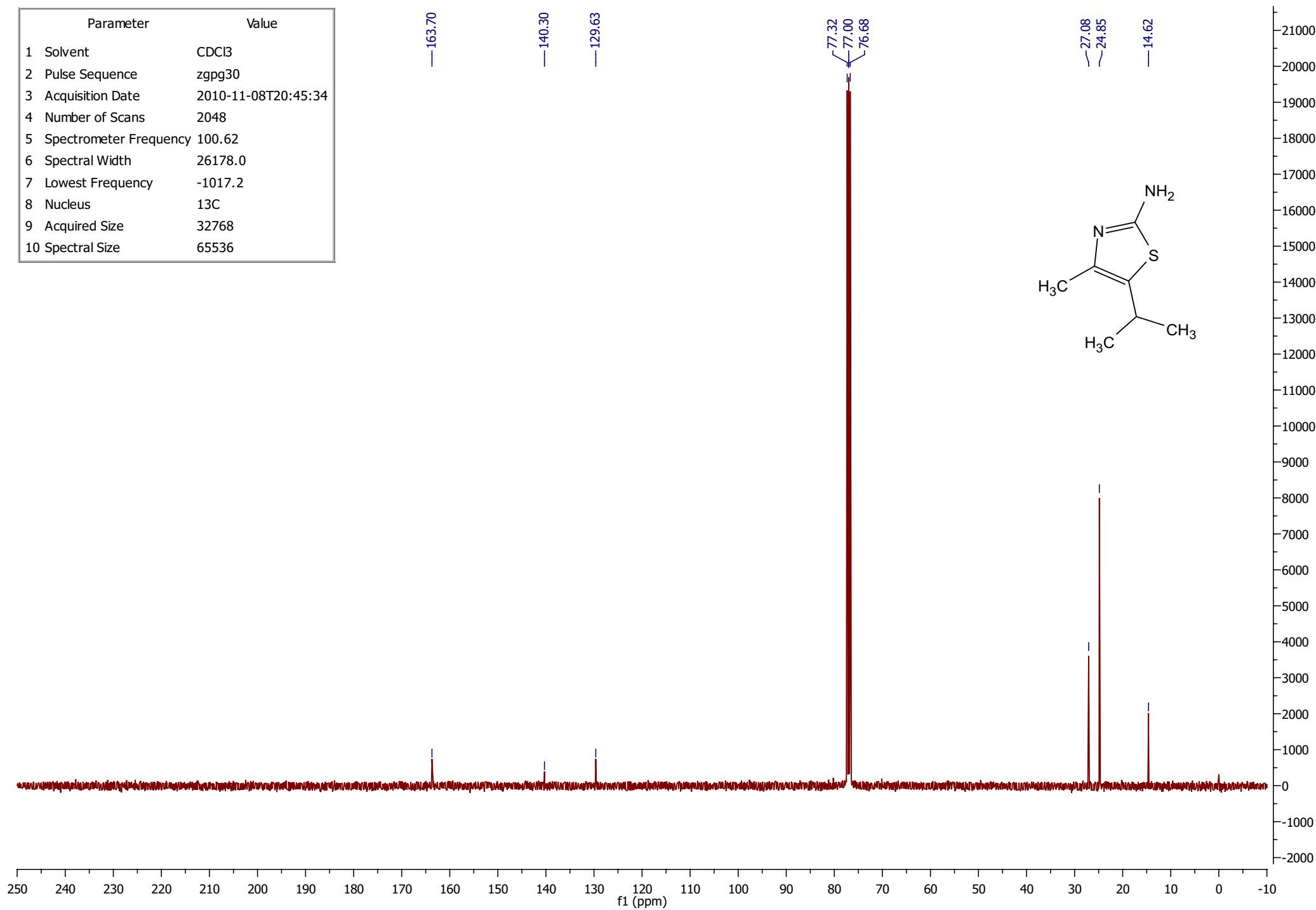
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File Name	G:\iodoketones\Suppl_data\N14038-91-P12\N14038-91-P12_012000fid			Frequency (MHz)	100.62
Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12026.5625
Temperature (degree C)	20.160			Receiver Gain	5792.60
				Sweep Width (Hz)	26177.21

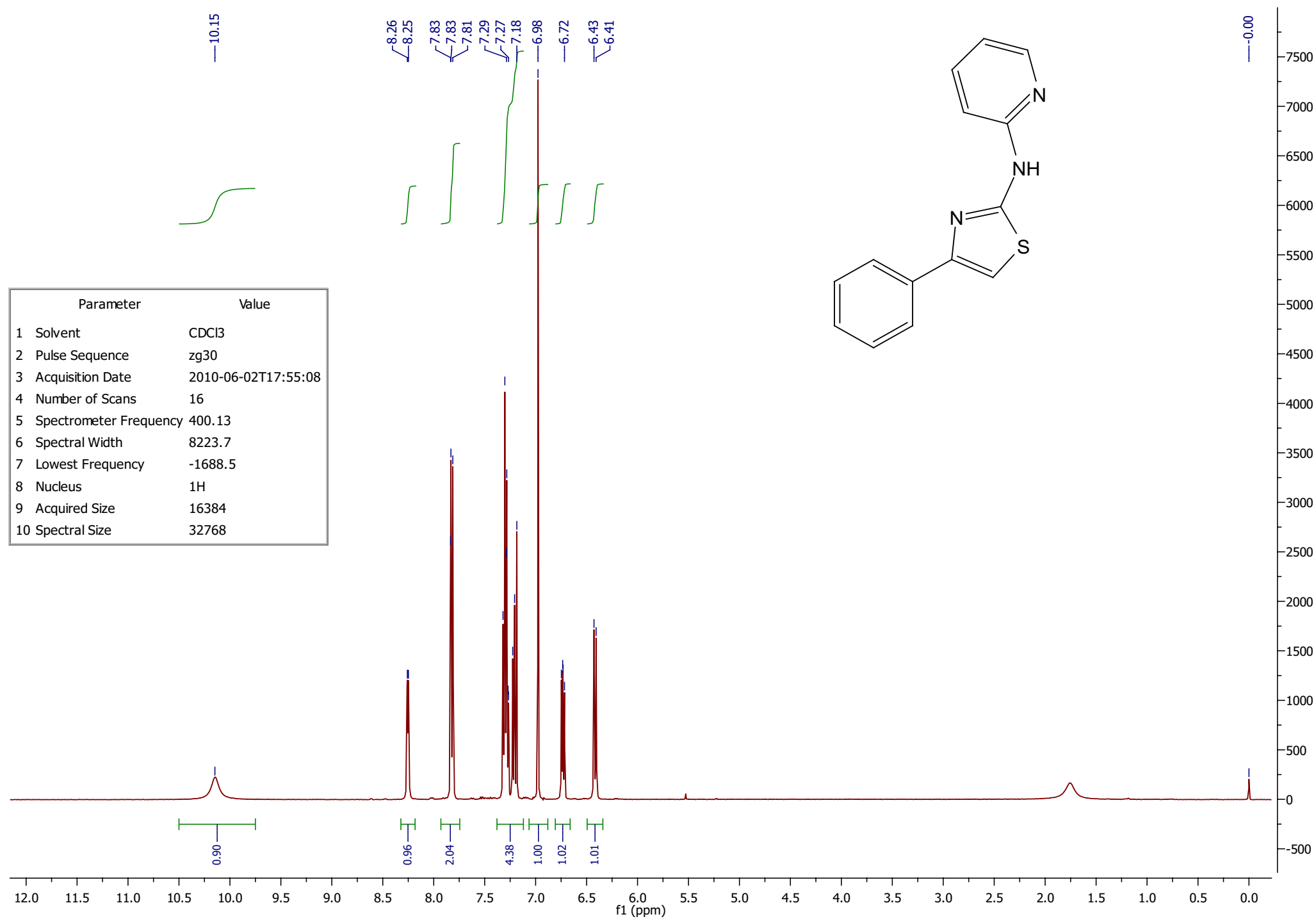


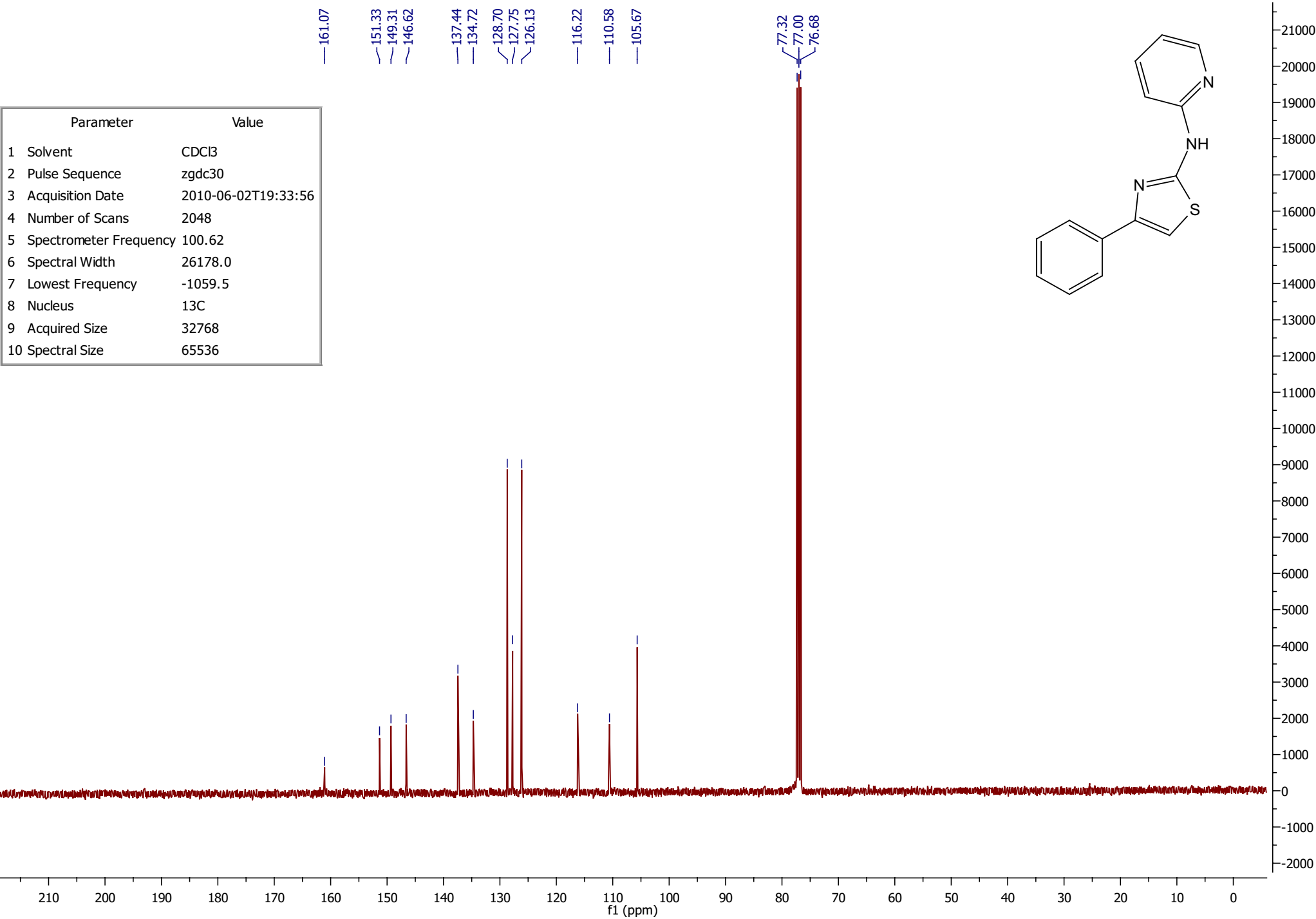
Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zg30
3 Acquisition Date	2010-11-08T15:43:59
4 Number of Scans	16
5 Spectrometer Frequency	400.13
6 Spectral Width	8223.7
7 Lowest Frequency	-1648.5
8 Nucleus	1H
9 Acquired Size	16384
10 Spectral Size	32768



Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zgpg30
3 Acquisition Date	2010-11-08T20:45:34
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26178.0
7 Lowest Frequency	-1017.2
8 Nucleus	13C
9 Acquired Size	32768
10 Spectral Size	65536

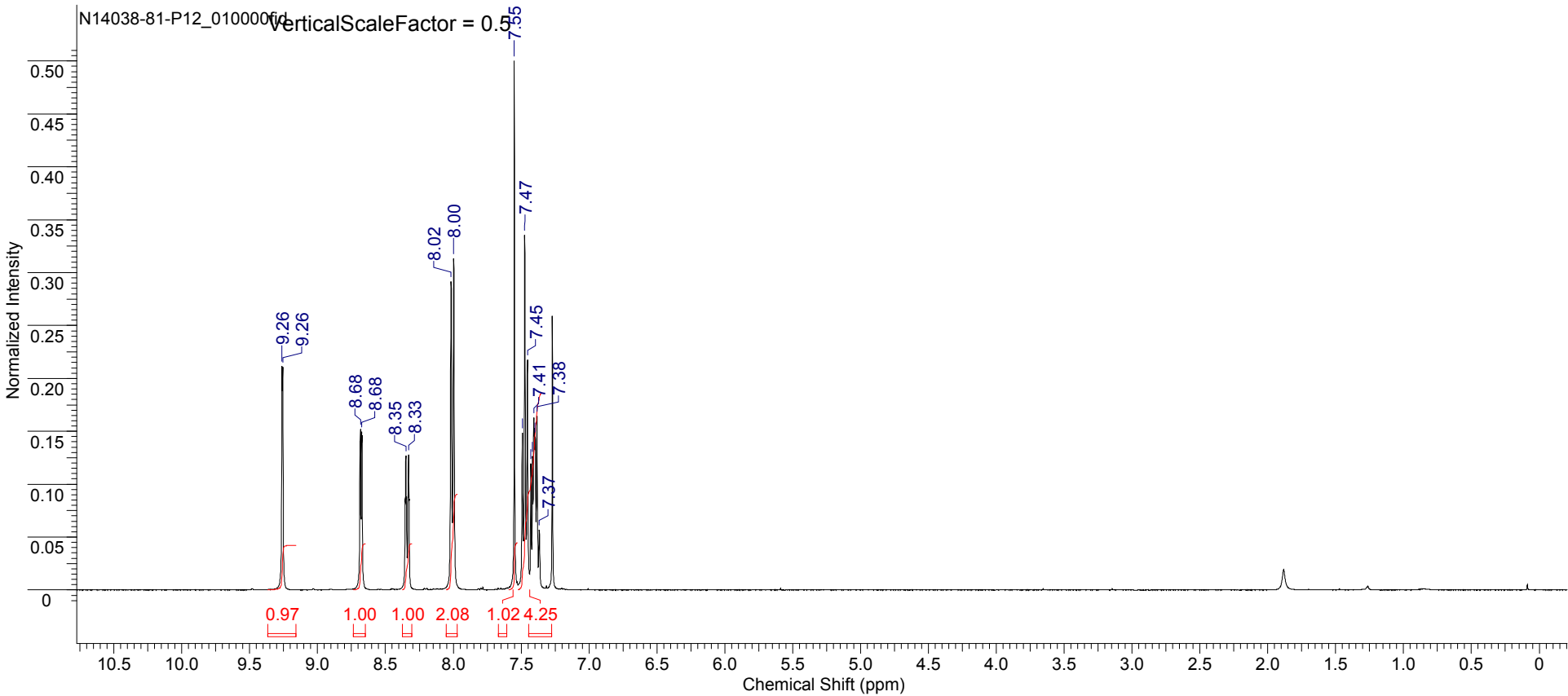
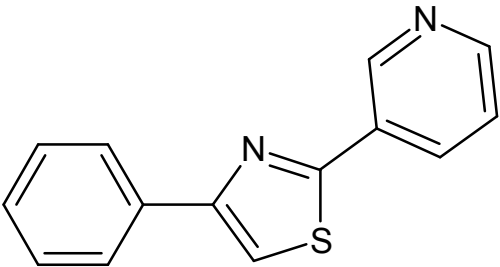






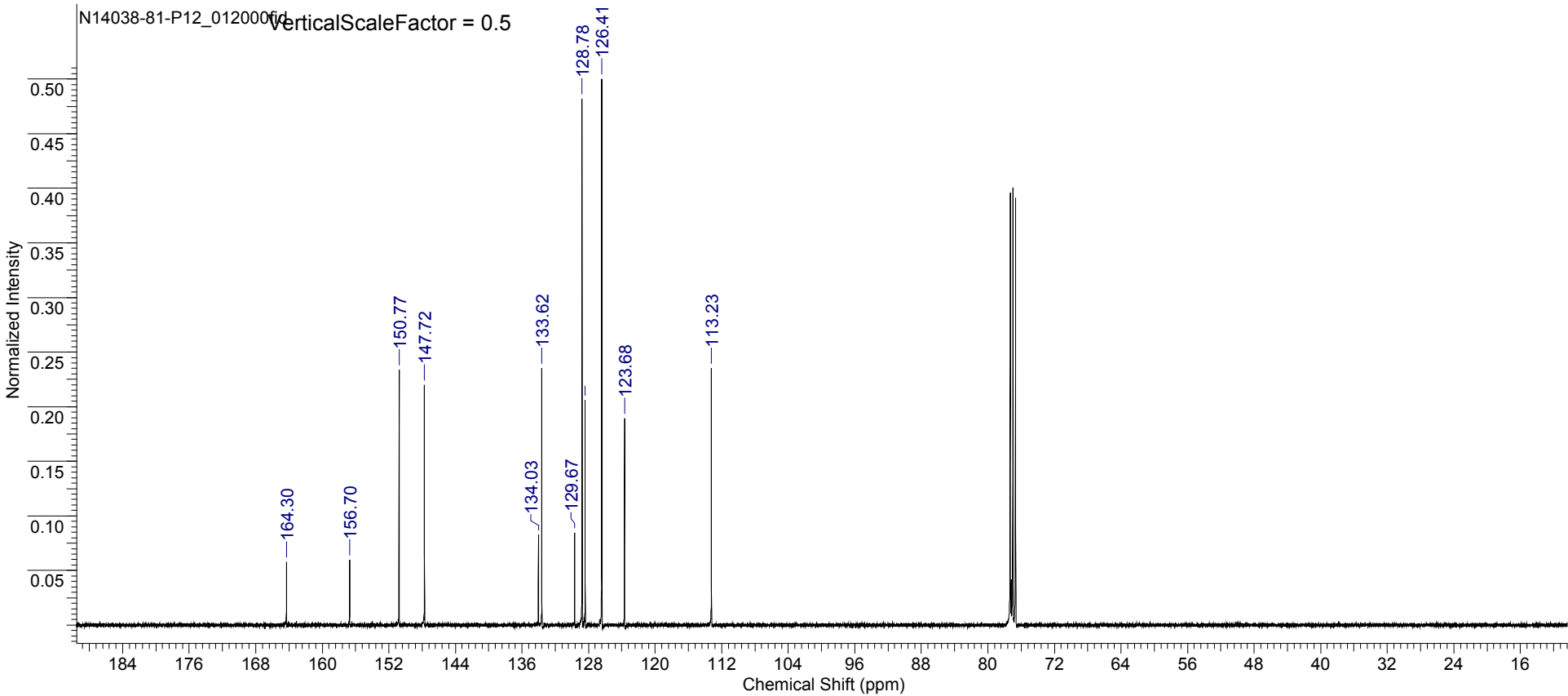
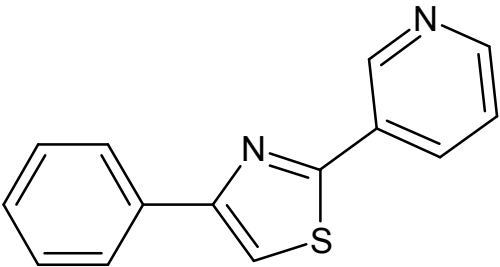
Formula C ₁₄ H ₁₀ N ₂ S	FW 238.3076
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Acquisition Time (sec)	1.9923	Comment	W151226 N14038-81-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X		
Date	25 Feb 2010 18:57:04	Date Stamp	25 Feb 2010 18:57:04		
File Name	D:\iodoketones\Suppl_data\N14038-81-P12\N14038-81-P12_010000fid			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2410
Temperature (degree C)	21.160			Sweep Width (Hz)	8223.18

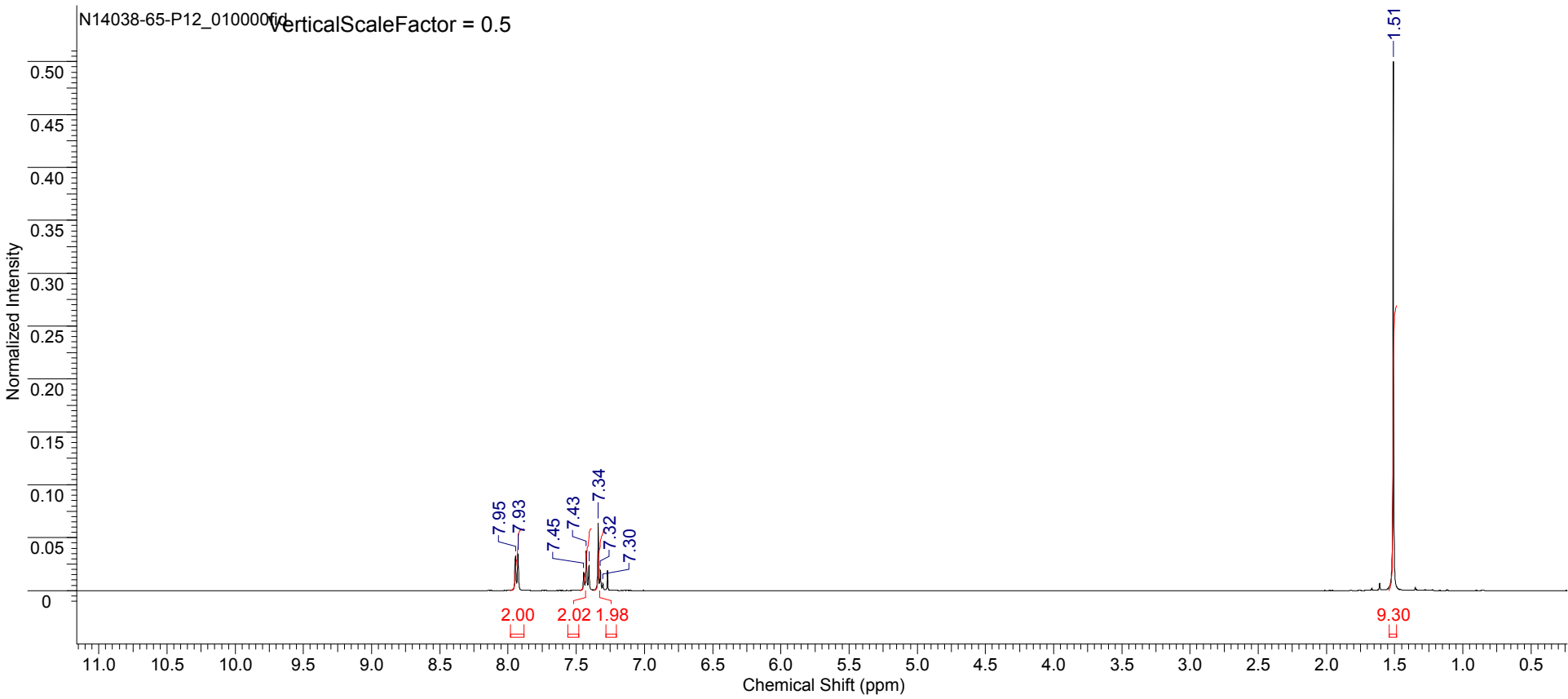
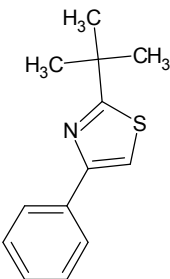


Formula C ₁₄ H ₁₀ N ₂ S	FW 238.3076
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Acquisition Time (sec)	1.2517	Comment	W151226 N14038-81-P12 mk772466 13C CDCl3 .. Kabeshov, Mikhail X		
Date	25 Feb 2010 20:35:12	Date Stamp	25 Feb 2010 20:35:12		
File Name	D:\iodoketones\Suppl_data\N14038-81-P12\N14038-81-P12_012000fid			Frequency (MHz)	100.62
Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12024.9648
Temperature (degree C)	21.160			Receiver Gain	9195.20
				Sweep Width (Hz)	26177.21

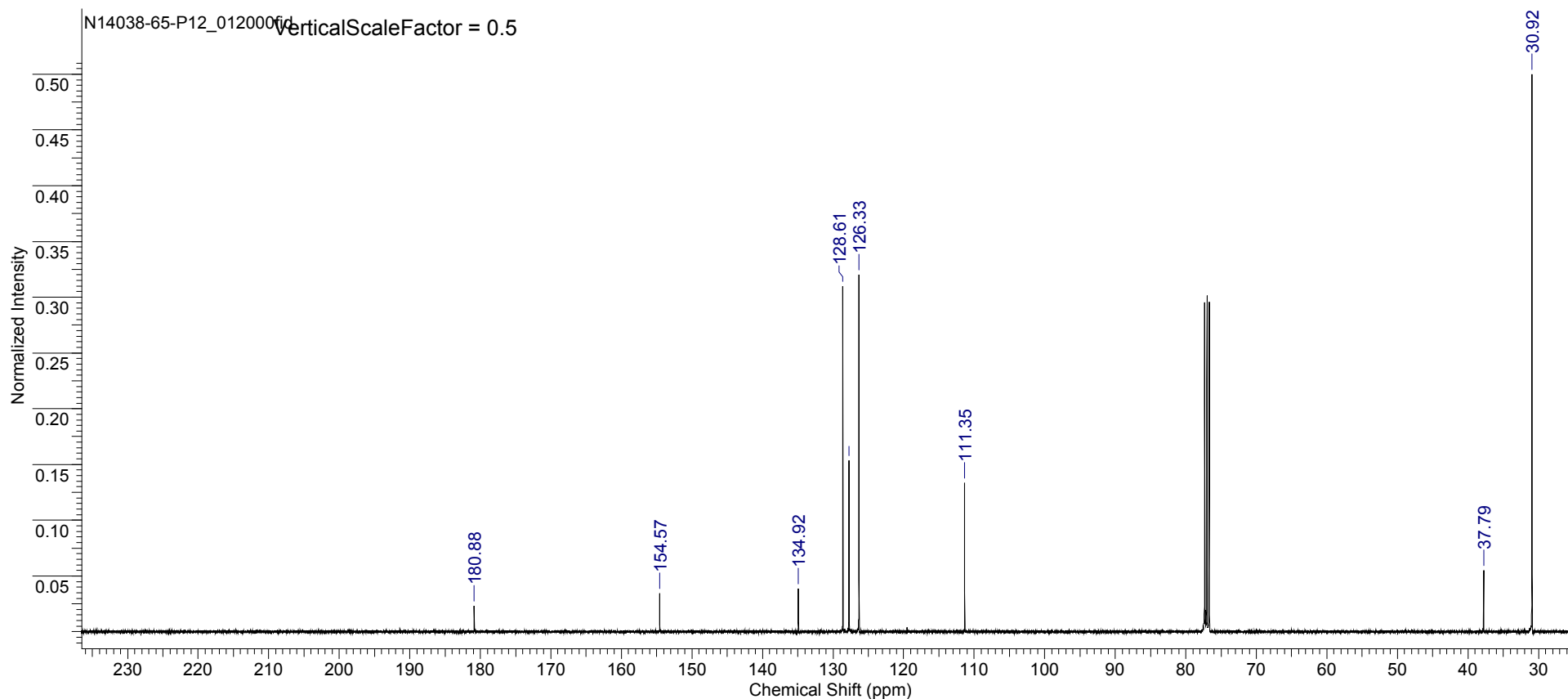
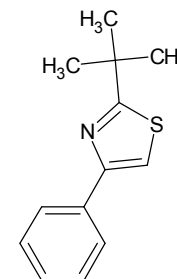


Formula C ₁₃ H ₁₅ NS	FW 217.3299				
Acquisition Time (sec) 1.9923	Comment W151001 N14038-65-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X				
Date 12 Feb 2010 22:06:56			Date Stamp 12 Feb 2010 22:06:56		
File Name D:\iodoketones\Suppl_data\N14038-65-P12\N14038-65-P12_010000fid				Frequency (MHz) 400.13	
Nucleus 1H	Number of Transients 16	Origin dpx400n		Original Points Count 16384	
Owner chemist	Points Count 16384	Pulse Sequence zg30		Receiver Gain 203.20	
SW(cyclical) (Hz) 8223.68	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 2457.3210	Sweep Width (Hz) 8223.18		
Temperature (degree C) 20.160					



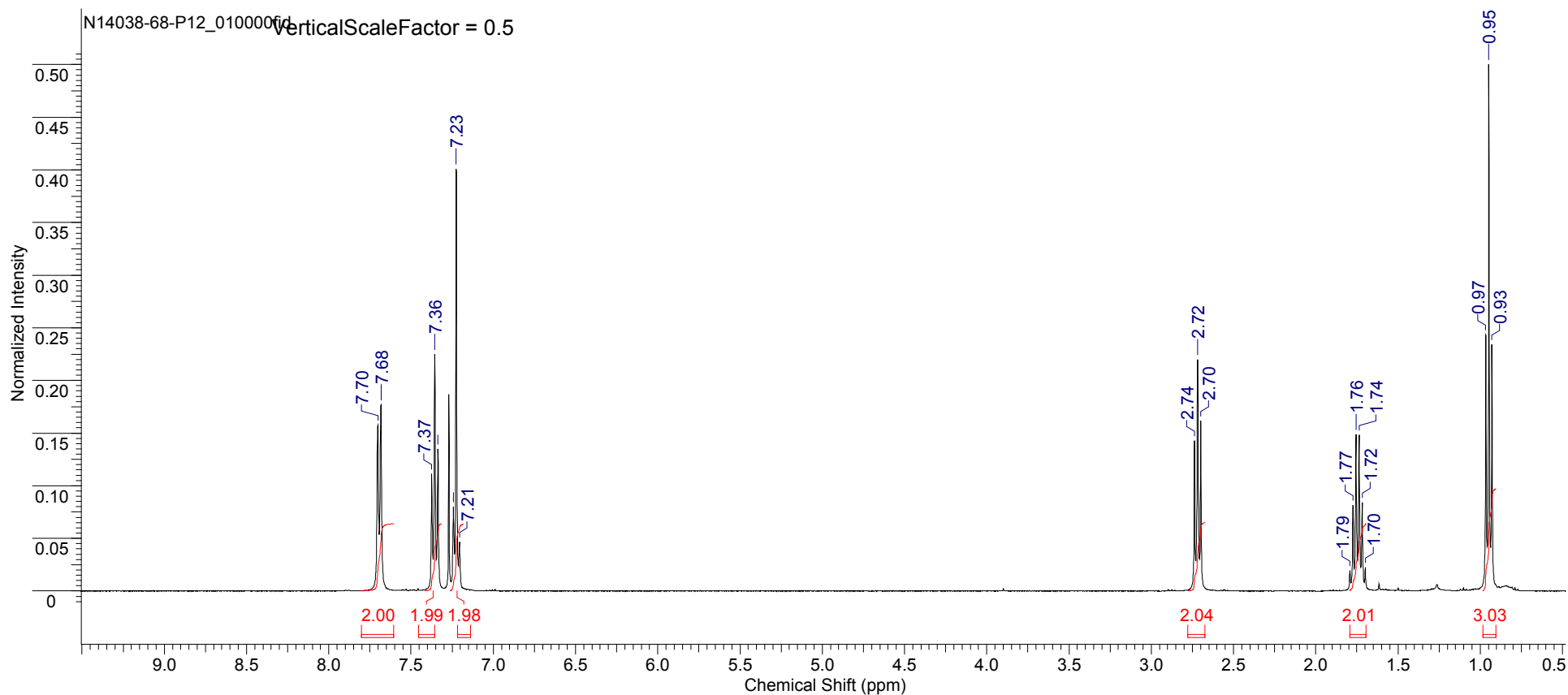
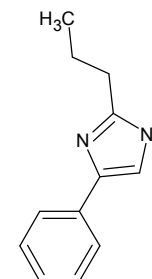
Formula C ₁₃ H ₁₅ NS	FW 217.3299
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Acquisition Time (sec)	1.2517	Comment W151001 N14038-65-P12 mk772466 13C CDCl3 .. Kabeshov, Mikhail X				
Date	12 Feb 2010 23:45:04	Date Stamp		12 Feb 2010 23:45:04		
File Name	D:\iodoketones\Suppl_data\N14038-65-P12\N14038-65-P12_012000fid			Frequency (MHz)	100.62	
Nucleus	13C	Number of Transients	2048	Origin	dpx400n	Original Points Count 32768
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30	Receiver Gain 9195.20
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12026.5625	Sweep Width (Hz) 26177.21
Temperature (degree C)	20.160					



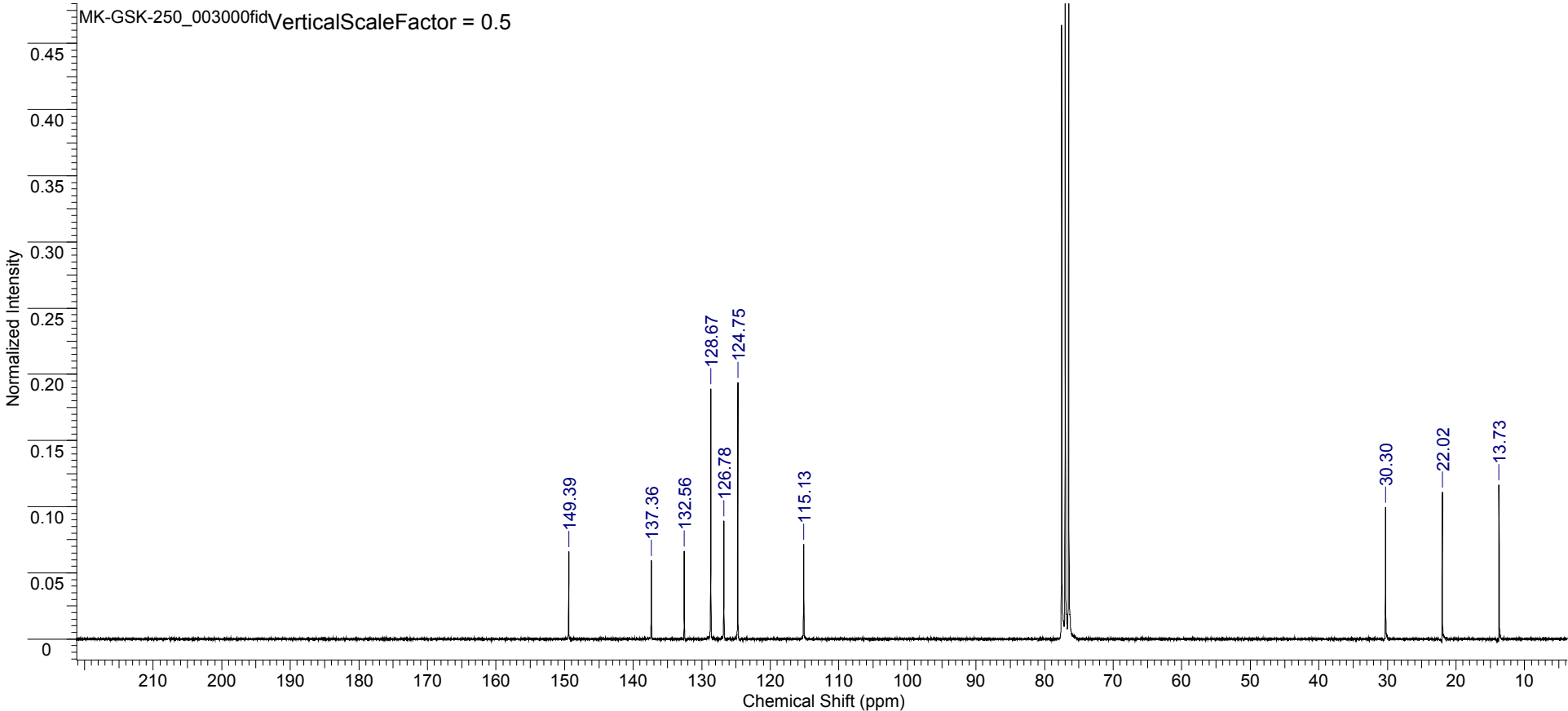
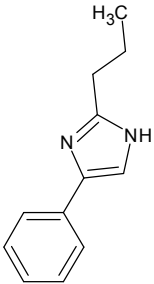
Formula C ₁₂ H ₁₄ N ₂	FW 186.2530
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Acquisition Time (sec)	1.9923	Comment W151002 N14038-68-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X			
Date	13 Feb 2010 01:16:48	Date Stamp		13 Feb 2010 01:16:48	
File Name	D:\iodoketones\Suppl_data\N14038-68-P12\N14038-68-P12_010000fid			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2456.9717
Temperature (degree C)	20.160				



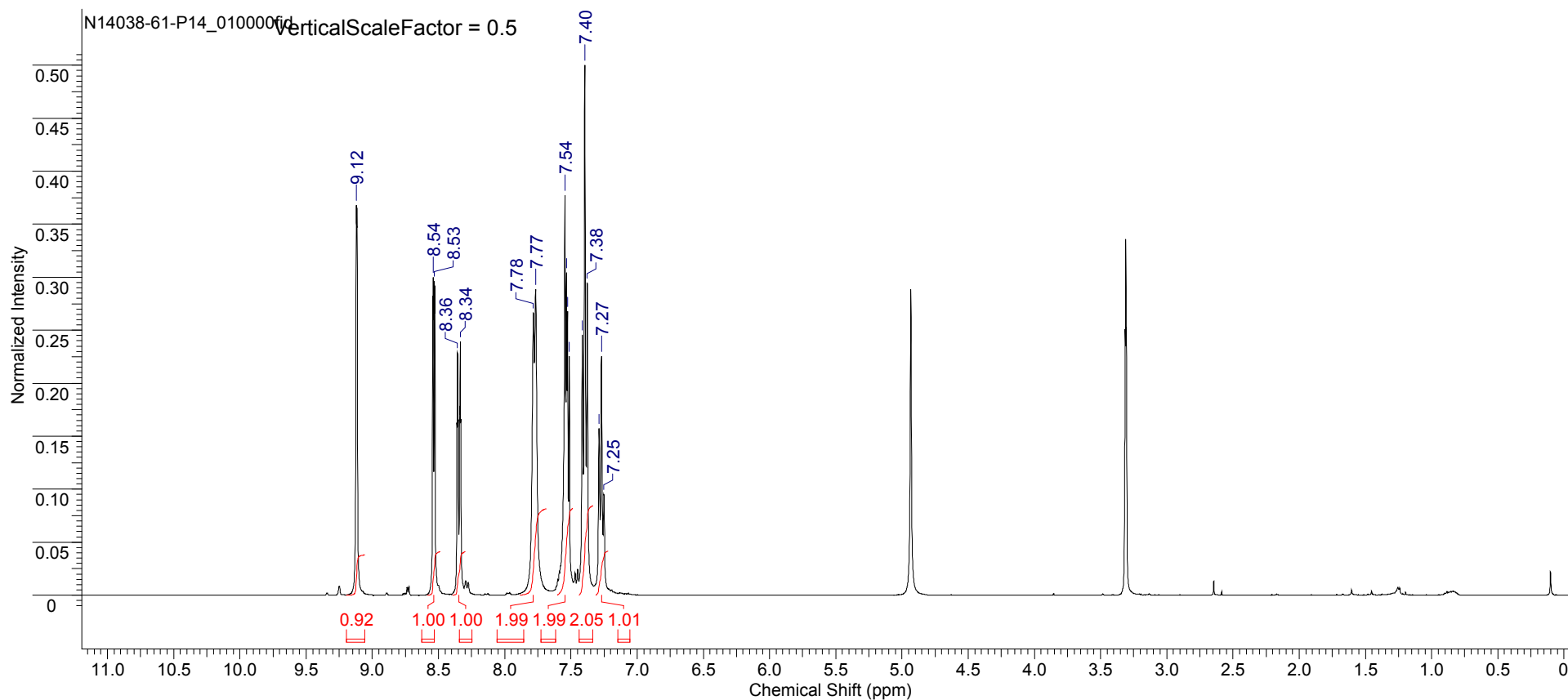
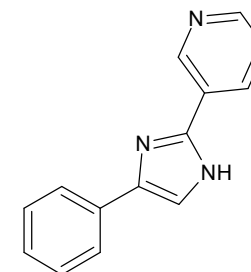
Formula C ₁₂ H ₁₄ N ₂	FW 186.2530
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Acquisition Time (sec)	1.0420	Comment	DPX250 13C Acquisition		Date	24 Apr 2010 08:19:12	
Date Stamp	24 Apr 2010 08:19:12		File Name	G:\MK-GSK-250\MK-GSK-250_003000fid			
Frequency (MHz)	62.90	Nucleus	13C	Number of Transients	30000	Origin	dpx250
Original Points Count	16384	Owner	root	Points Count	16384	Pulse Sequence	zgpg30
Receiver Gain	512.00	SW(cyclical) (Hz)	15723.27	Solvent	CHLOROFORM-d		
Spectrum Offset (Hz)	6888.0454	Sweep Width (Hz)	15722.31	Temperature (degree C)	26.023		



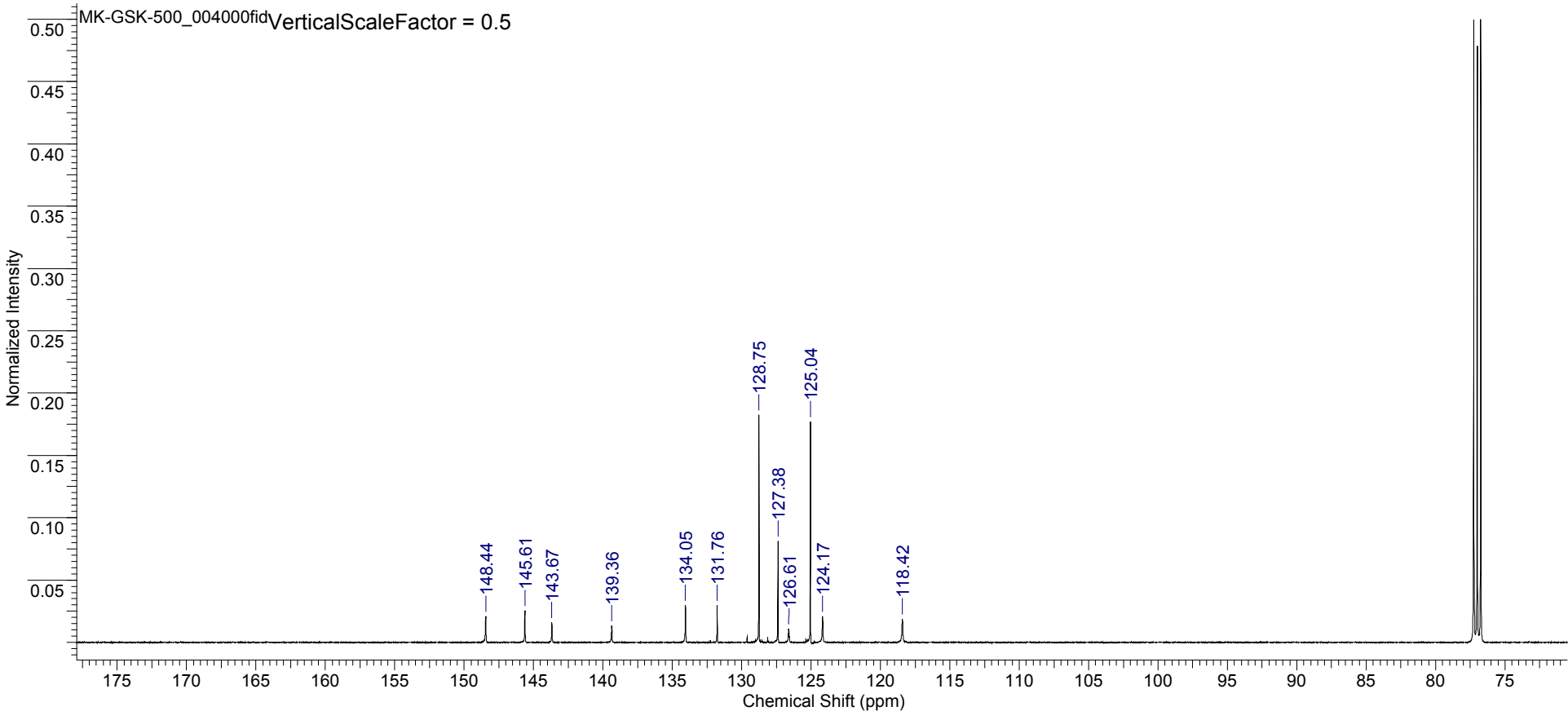
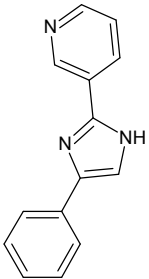
Formula C ₁₄ H ₁₁ N ₃	FW 221.2572
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Acquisition Time (sec) 1.9923	Comment W151170 N14038-61-P13 mk772466 1H MeOD .. Kabeshov, Mikhail X			
Date 23 Feb 2010 22:43:12			Date Stamp 23 Feb 2010 22:43:12	
File Name D:\iodoketones\Suppl_data\N14038-61-P14\N14038-61-P14_010000fid				Frequency (MHz) 400.13
Nucleus 1H	Number of Transients 16	Origin dpx400n	Original Points Count 16384	
Owner chemist	Points Count 16384	Pulse Sequence zg30	Receiver Gain 287.40	
SW(cyclical) (Hz) 8223.68	Solvent MeOD	Spectrum Offset (Hz) 2463.0754	Sweep Width (Hz) 8223.18	
Temperature (degree C) 20.160				



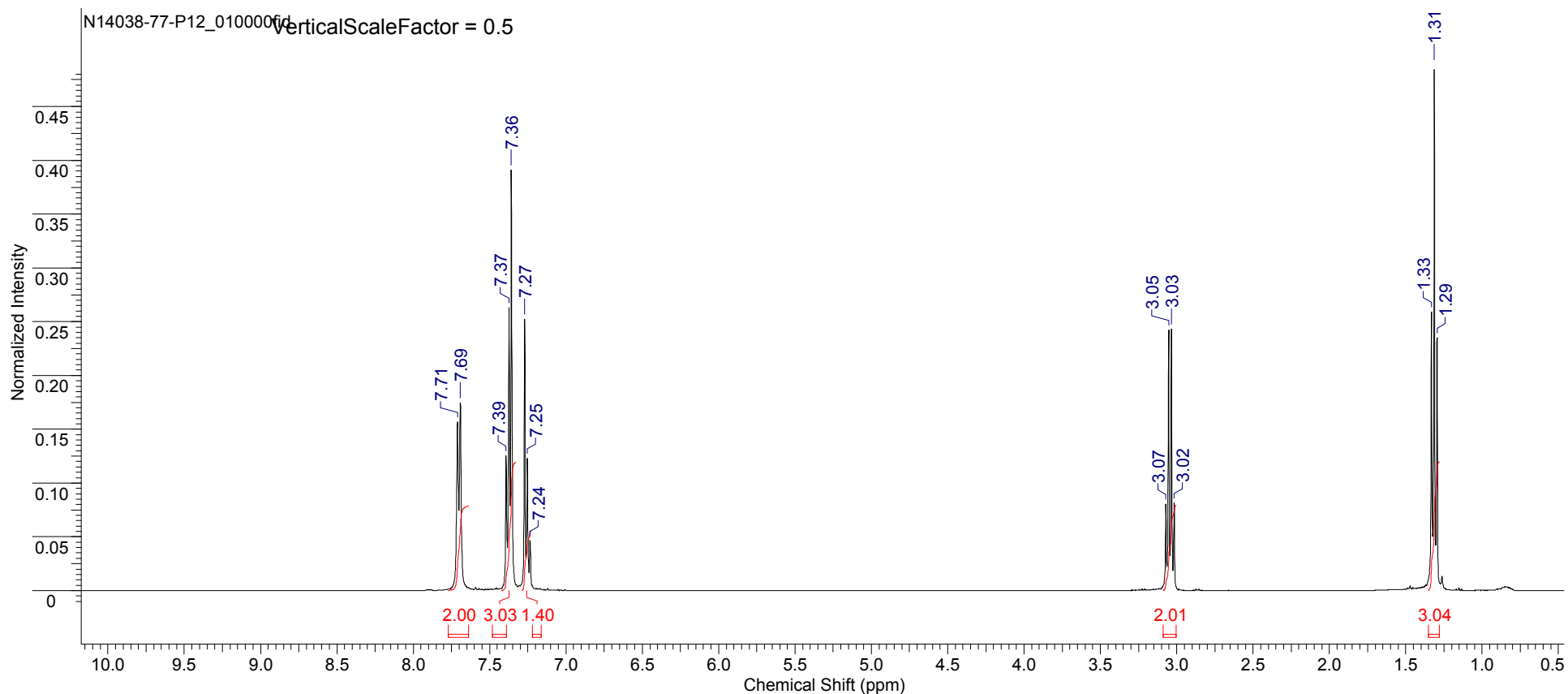
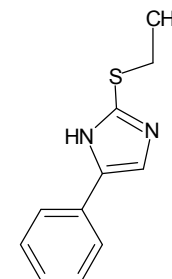
Formula C ₁₄ H ₁₁ N ₃	FW 221.2572
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Acquisition Time (sec)	1.1796	Comment	DRX500 13C acquisition BBO probe	Date	25 Apr 2010 08:36:16
Date Stamp	25 Apr 2010 08:36:16	File Name	G:\MK-GSK-500\MK-GSK-500_004000fid		
Frequency (MHz)	125.77	Nucleus	13C	Number of Transients	25000
Original Points Count	32768	Owner	root	Points Count	32768
Receiver Gain	32768.00	SW(cyclical) (Hz)	27777.78	Pulse Sequence	zgpg30
Spectrum Offset (Hz)	12515.2432	Solvent	CHLOROFORM-d		
		Sweep Width (Hz)	27776.93	Temperature (degree C)	24.996



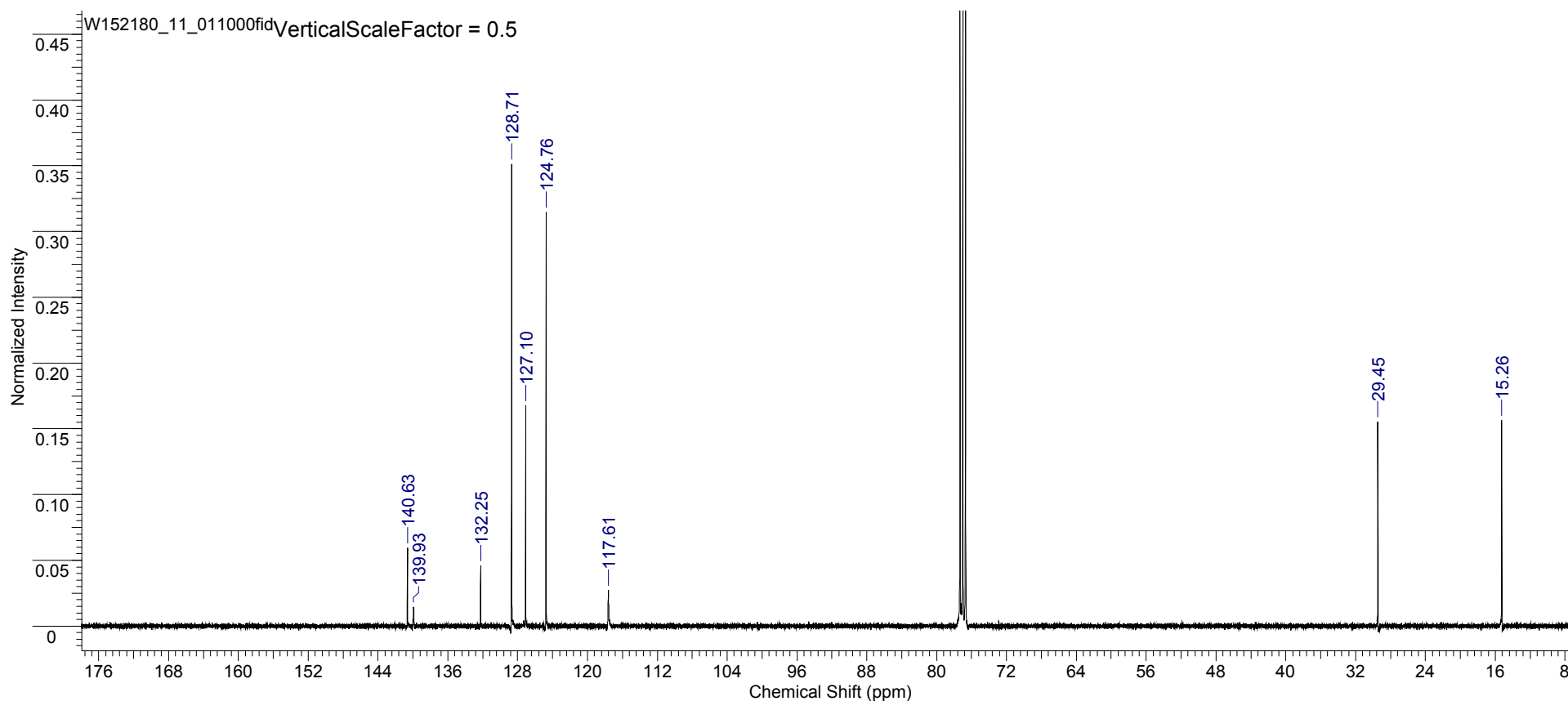
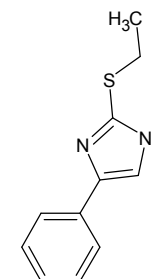
Formula C ₁₁ H ₁₂ N ₂ S	FW 204.2914
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Acquisition Time (sec)	1.9923	Comment	W151133 N14038-77-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X		
Date	22 Feb 2010 18:57:04	Date Stamp	22 Feb 2010 18:57:04		
File Name	D:\iodoketones\Suppl_data\N14038-77-P12\N14038-77-P12_010000fid			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2043
Temperature (degree C)	20.160			Sweep Width (Hz)	8223.18



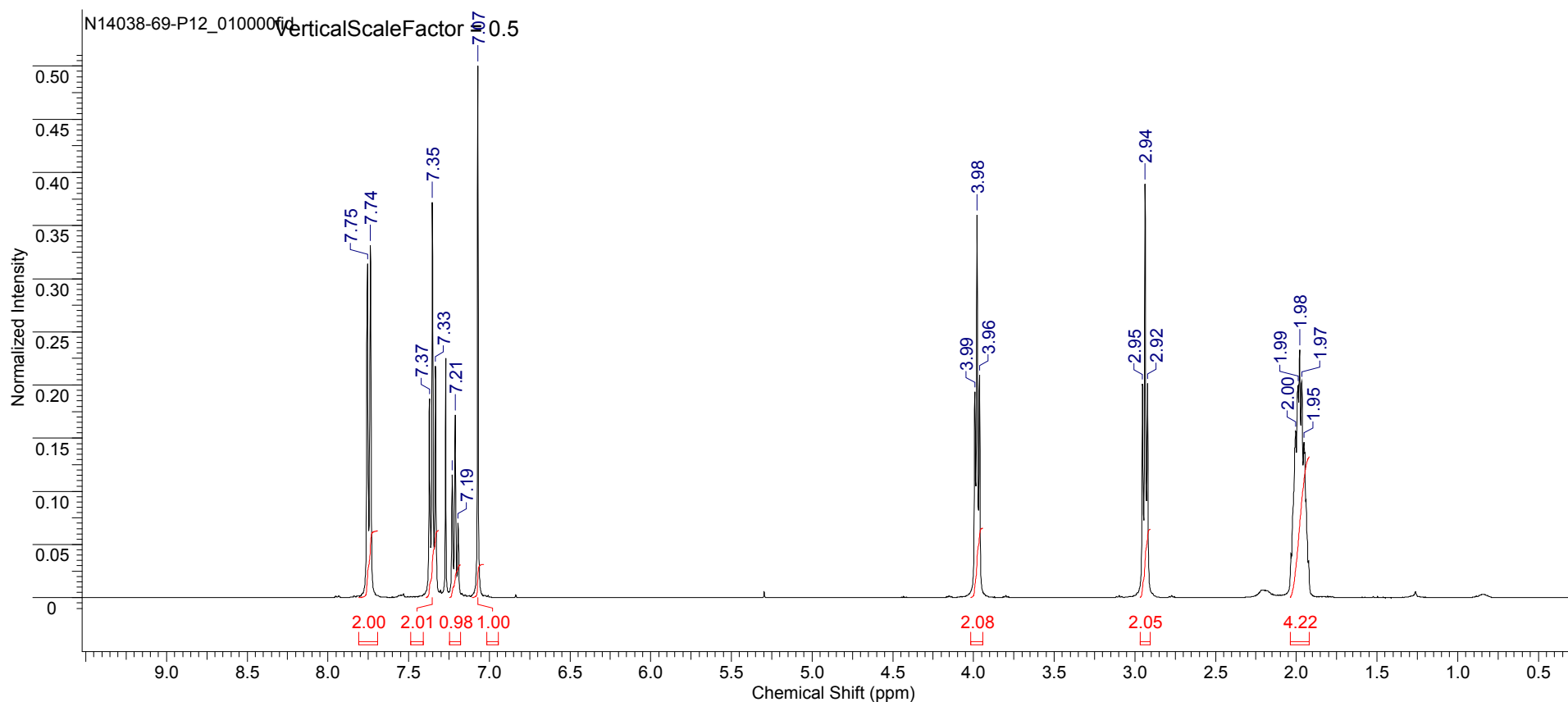
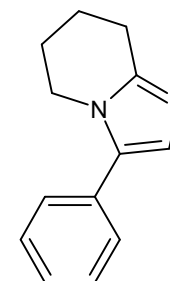
Formula C ₁₁ H ₁₂ N ₂ S	FW 204.2914
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Acquisition Time (sec) 1.2517	Comment W152180 N14038-IM-1A mk772466 13C CDCl3 .. Kabeshov, Mikhail X			
Date 21 Apr 2010 20:03:12			Date Stamp 21 Apr 2010 20:03:12	
File Name G:\iodoketones\Suppl data\N14038-77-P12\W152180_11\W152180_11_011000fid			Frequency (MHz) 100.62	
Nucleus 13C	Number of Transients 2048	Origin dpx400n	Original Points Count 32768	
Owner chemist	Points Count 32768	Pulse Sequence zgdc30	Receiver Gain 9195.20	
SW(cyclical) (Hz) 26178.01	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 12027.3613	Sweep Width (Hz) 26177.21	
Temperature (degree C) 22.160				



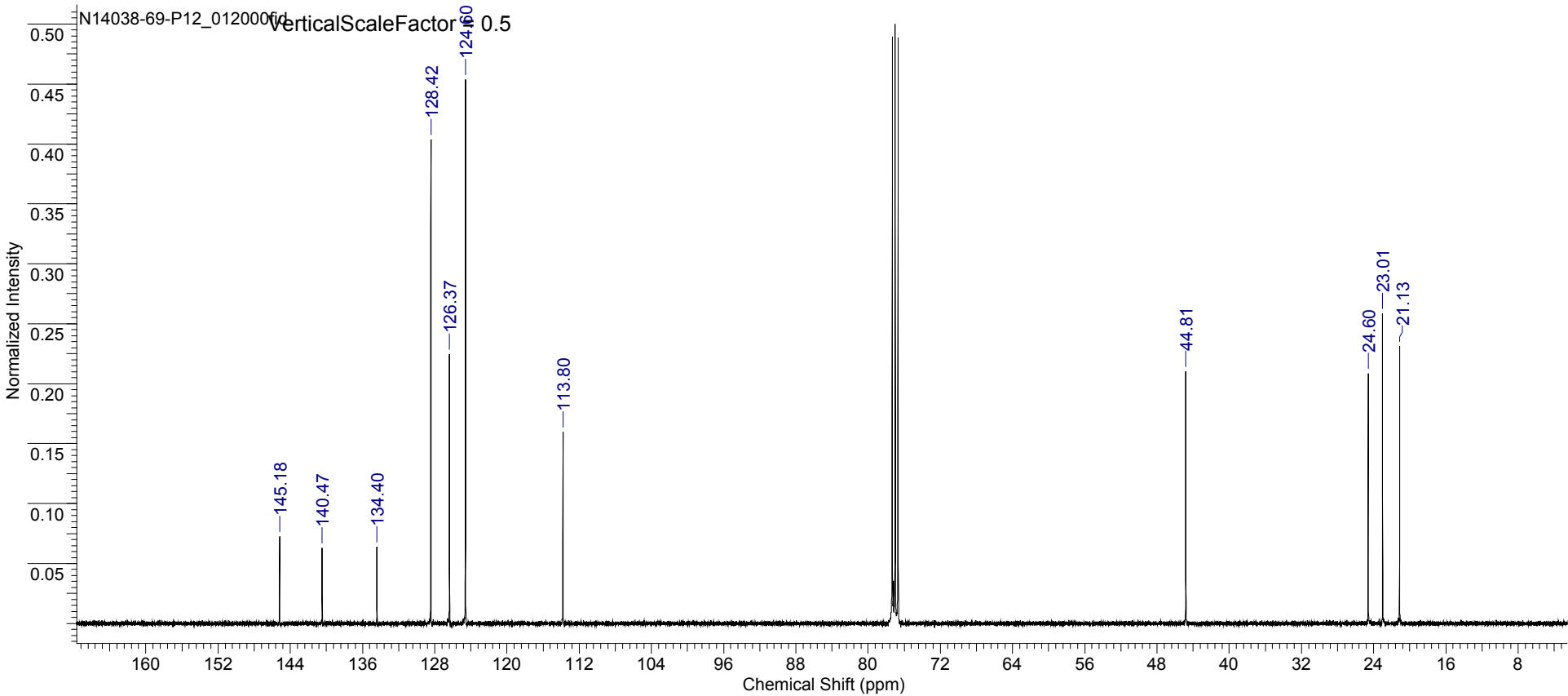
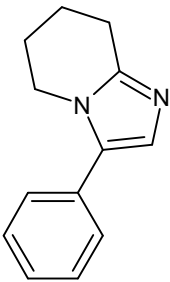
Formula C ₁₃ H ₁₄ N ₂	FW 198.2637
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Acquisition Time (sec)	1.9923	Comment	W151140 N14038-69-P13 mk772466 1H CDCI3 .. Kabeshov, Mikhail X				
Date	23 Feb 2010 04:26:40		Date Stamp	23 Feb 2010 04:26:40			
File Name	D:\iodoketones\Suppl_data\N14038-69-P12\N14038-69-P12_010000fid			Frequency (MHz)	400.13		
Nucleus	1H	Number of Transients	16	Origin	dpx400n	Original Points Count	16384
Owner	chemist	Points Count	16384	Pulse Sequence	zg30	Receiver Gain	203.20
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2524	Sweep Width (Hz)	8223.18
Temperature (degree C)	20.160						



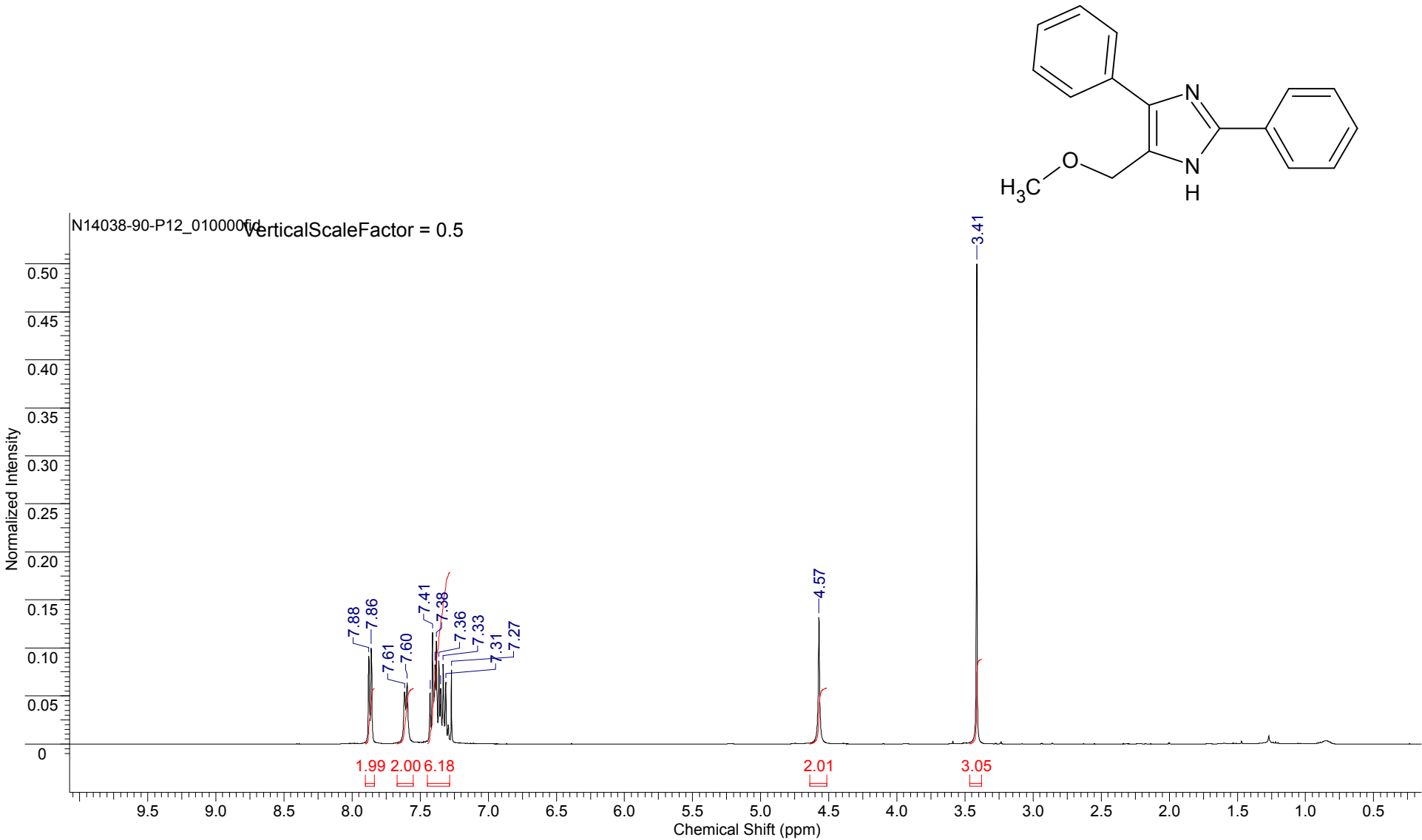
Formula C ₁₃ H ₁₄ N ₂	FW 198.2637
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Acquisition Time (sec)	1.2517	Comment W151140 N14038-69-P13 mk772466 13C CDCI3 .. Kabeshov, Mikhail X			
Date	23 Feb 2010 06:06:56	Date Stamp		23 Feb 2010 06:06:56	
File Name	D:\iodoketones\Suppl_data\N14038-69-P12\N14038-69-P12_012000fid			Frequency (MHz)	100.62
Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12024.9648
Temperature (degree C)	20.160	Sweep Width (Hz) 26177.21			



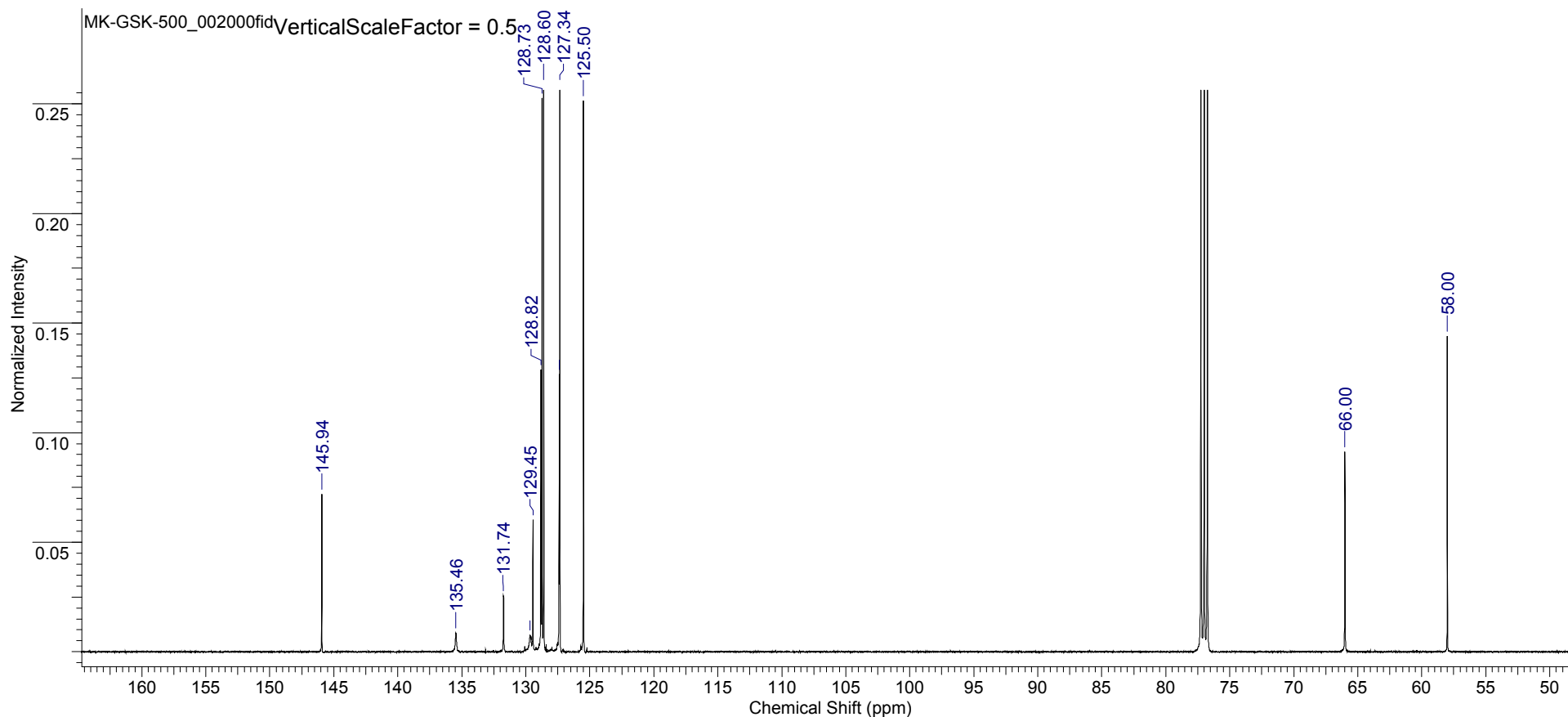
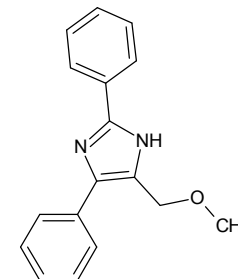
Formula C ₁₇ H ₁₆ N ₂ O	FW 264.3217
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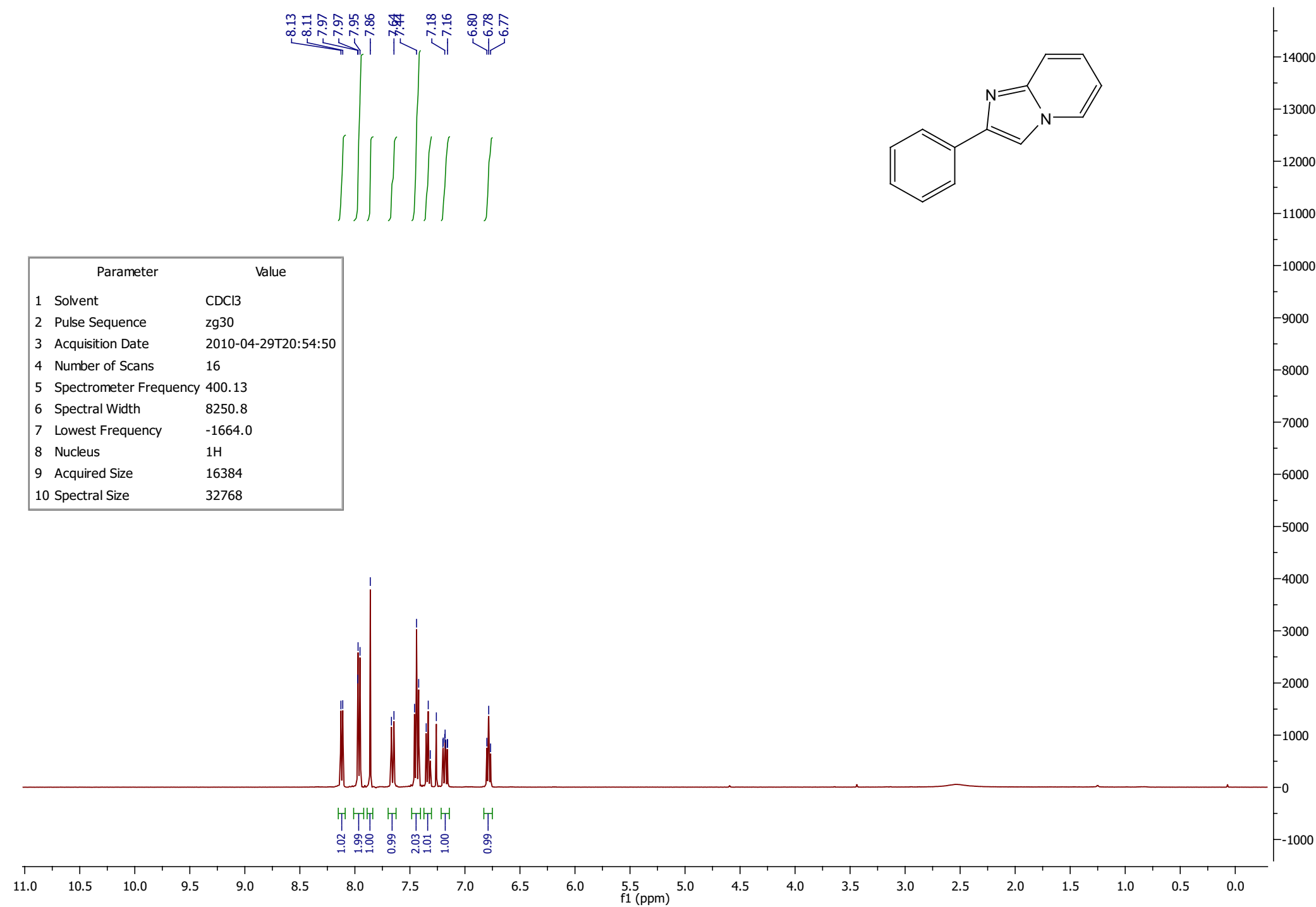
Acquisition Time (sec)	1.9923	Comment	W151486 N14038-90-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X		
Date	11 Mar 2010 18:57:04	Date Stamp	11 Mar 2010 18:57:04		
File Name	G:\iodoketones\Suppl_data\N14038-90-P12\N14038-90-P12_010000fid			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.2769
Temperature (degree C)	20.160			Sweep Width (Hz)	8223.18



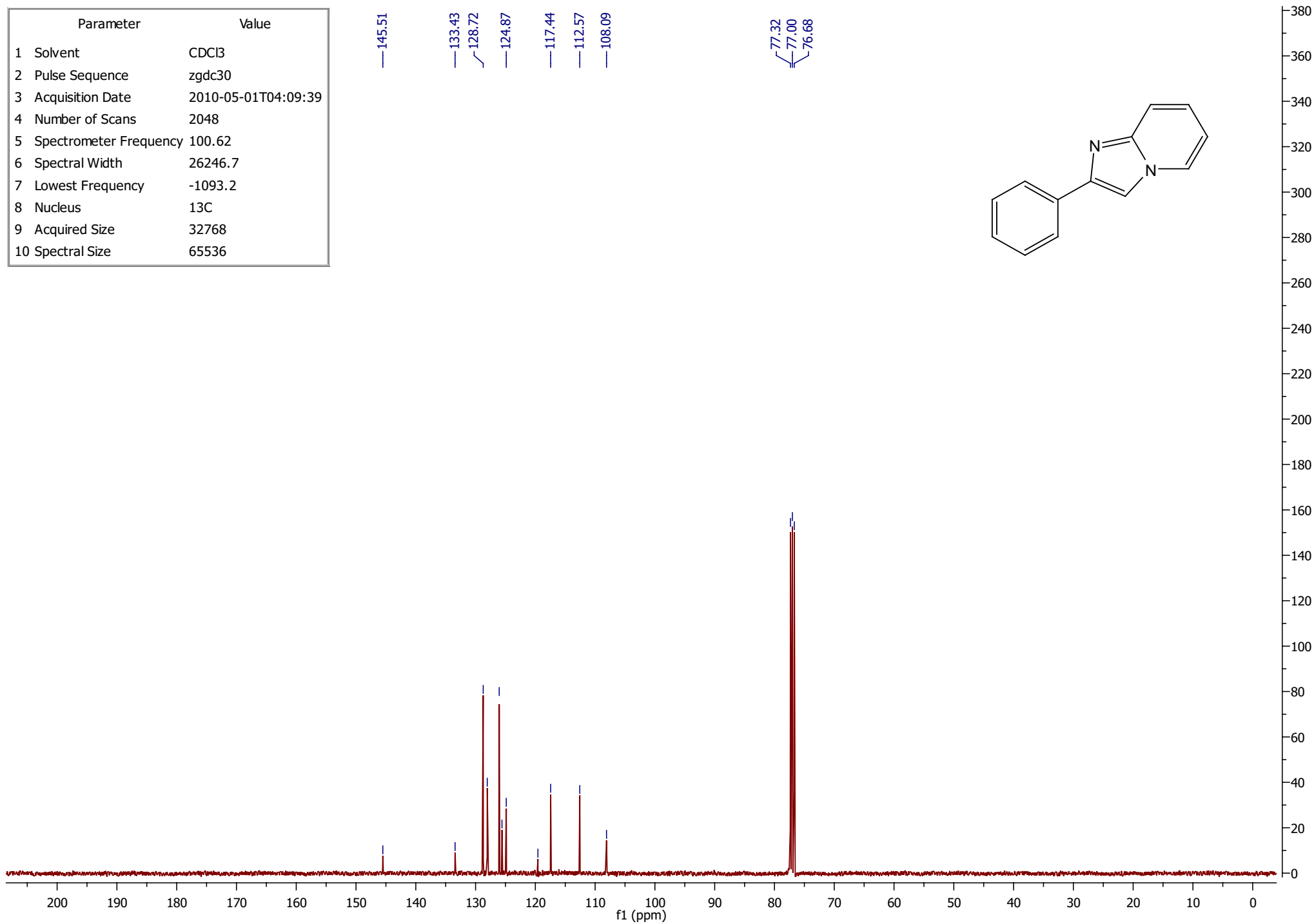
Formula C ₁₇ H ₁₆ N ₂ O	FW 264.3217
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Acquisition Time (sec)	1.1796	Comment	DRX500 13C acquisition BBO probe	Date	24 Apr 2010 08:19:12
Date Stamp	24 Apr 2010 08:19:12	File Name	G:\MK-GSK-500\MK-GSK-500_002000fid		
Frequency (MHz)	125.77	Nucleus	13C	Number of Transients	30000
Original Points Count	32768	Owner	root	Points Count	32768
Receiver Gain	6502.00	SW(cyclical) (Hz)	27777.78	Pulse Sequence	zgpg30
Spectrum Offset (Hz)	12513.5479	Solvent	CHLOROFORM-d		
		Sweep Width (Hz)	27776.93	Temperature (degree C)	24.996

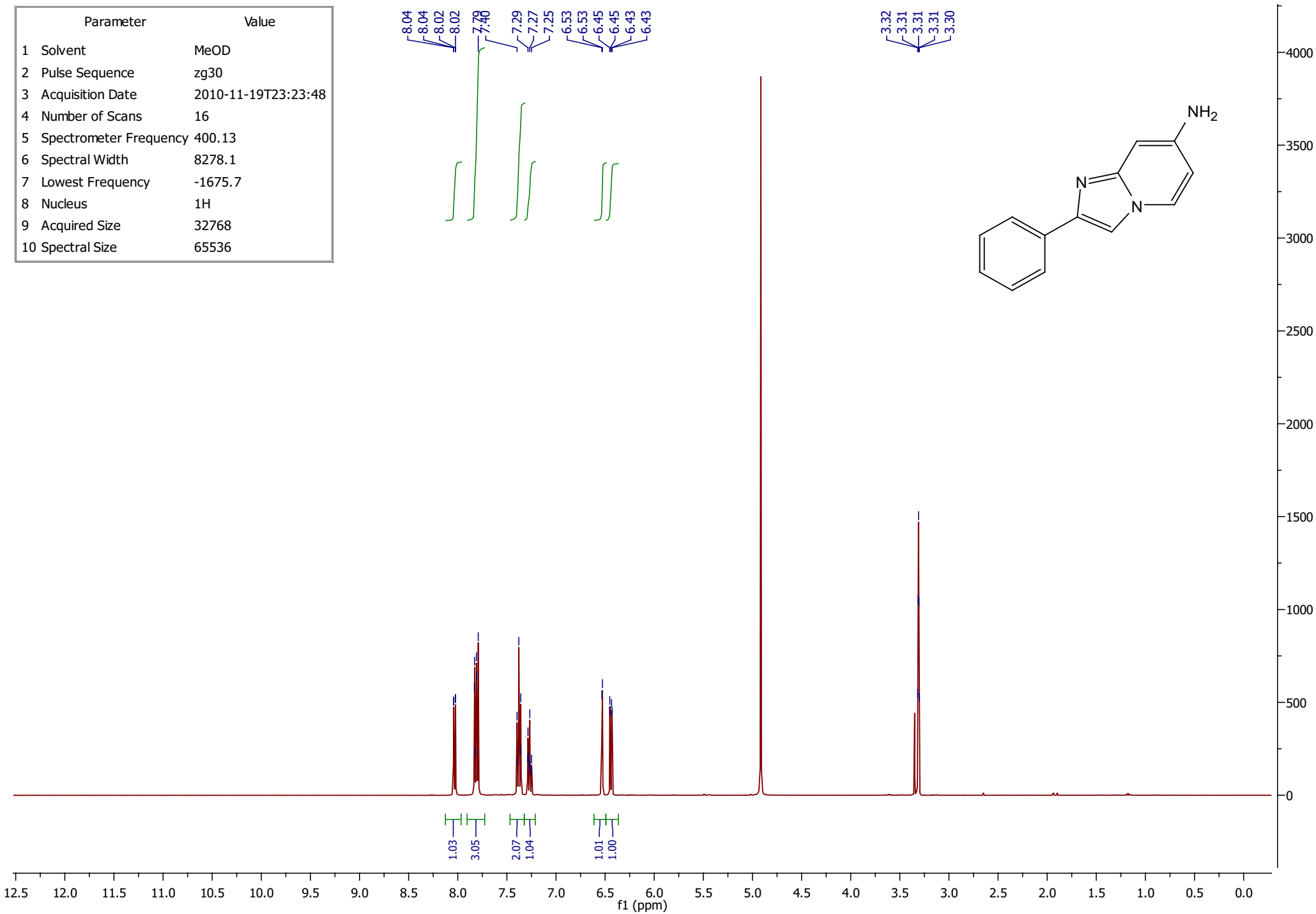




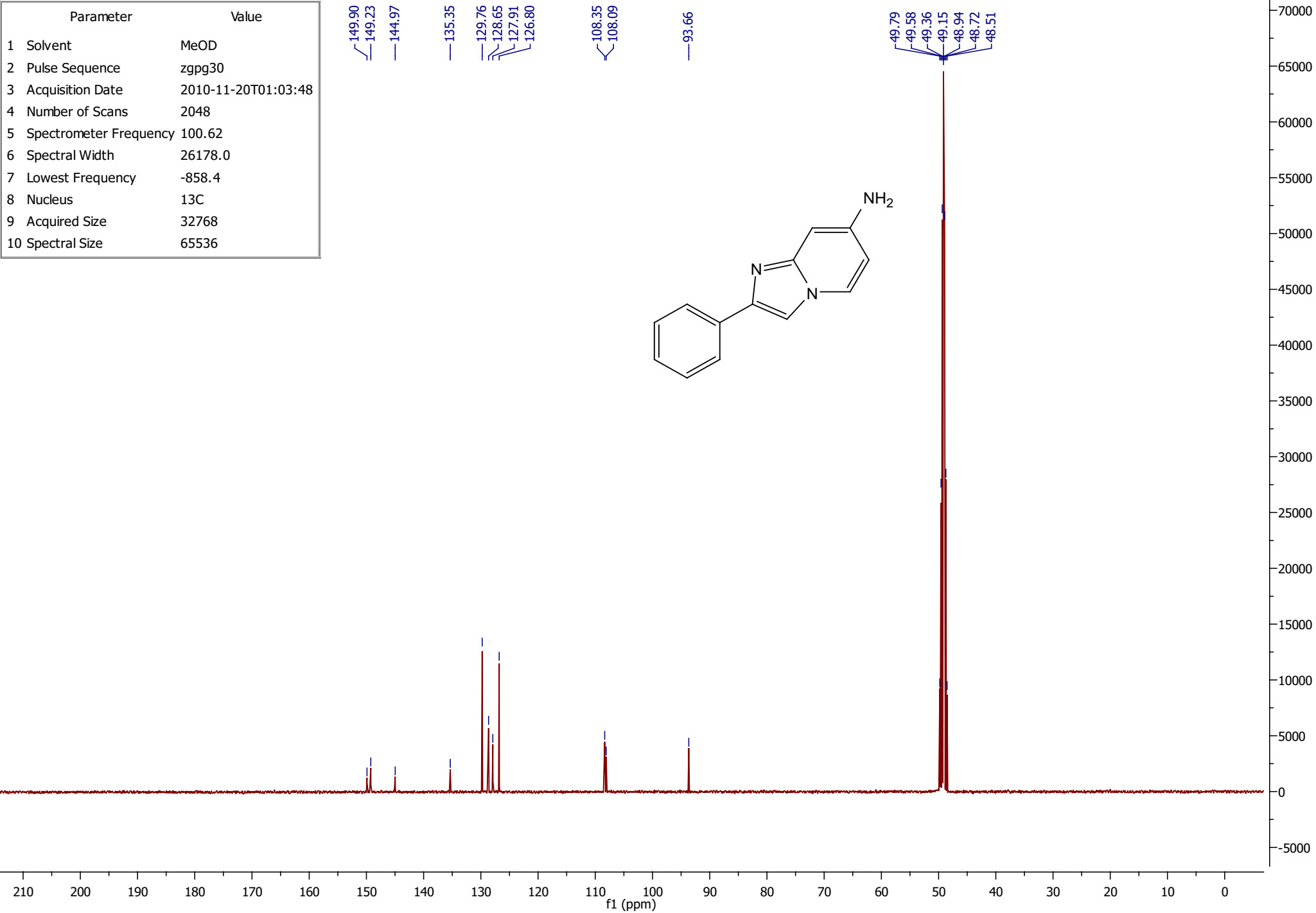
Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zgdc30
3 Acquisition Date	2010-05-01T04:09:39
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26246.7
7 Lowest Frequency	-1093.2
8 Nucleus	13C
9 Acquired Size	32768
10 Spectral Size	65536

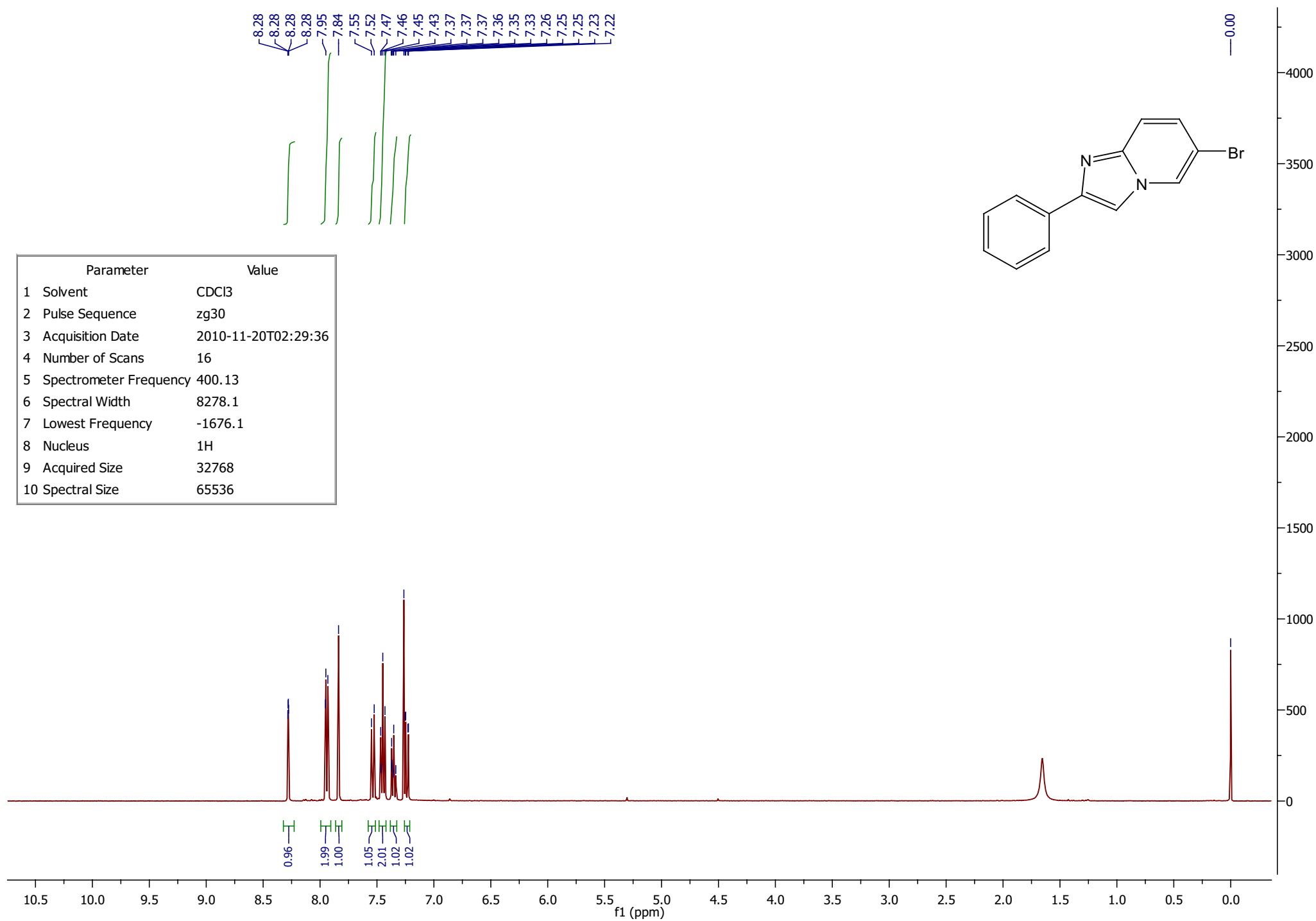


Parameter	Value
1 Solvent	MeOD
2 Pulse Sequence	zg30
3 Acquisition Date	2010-11-19T23:23:48
4 Number of Scans	16
5 Spectrometer Frequency	400.13
6 Spectral Width	8278.1
7 Lowest Frequency	-1675.7
8 Nucleus	¹ H
9 Acquired Size	32768
10 Spectral Size	65536

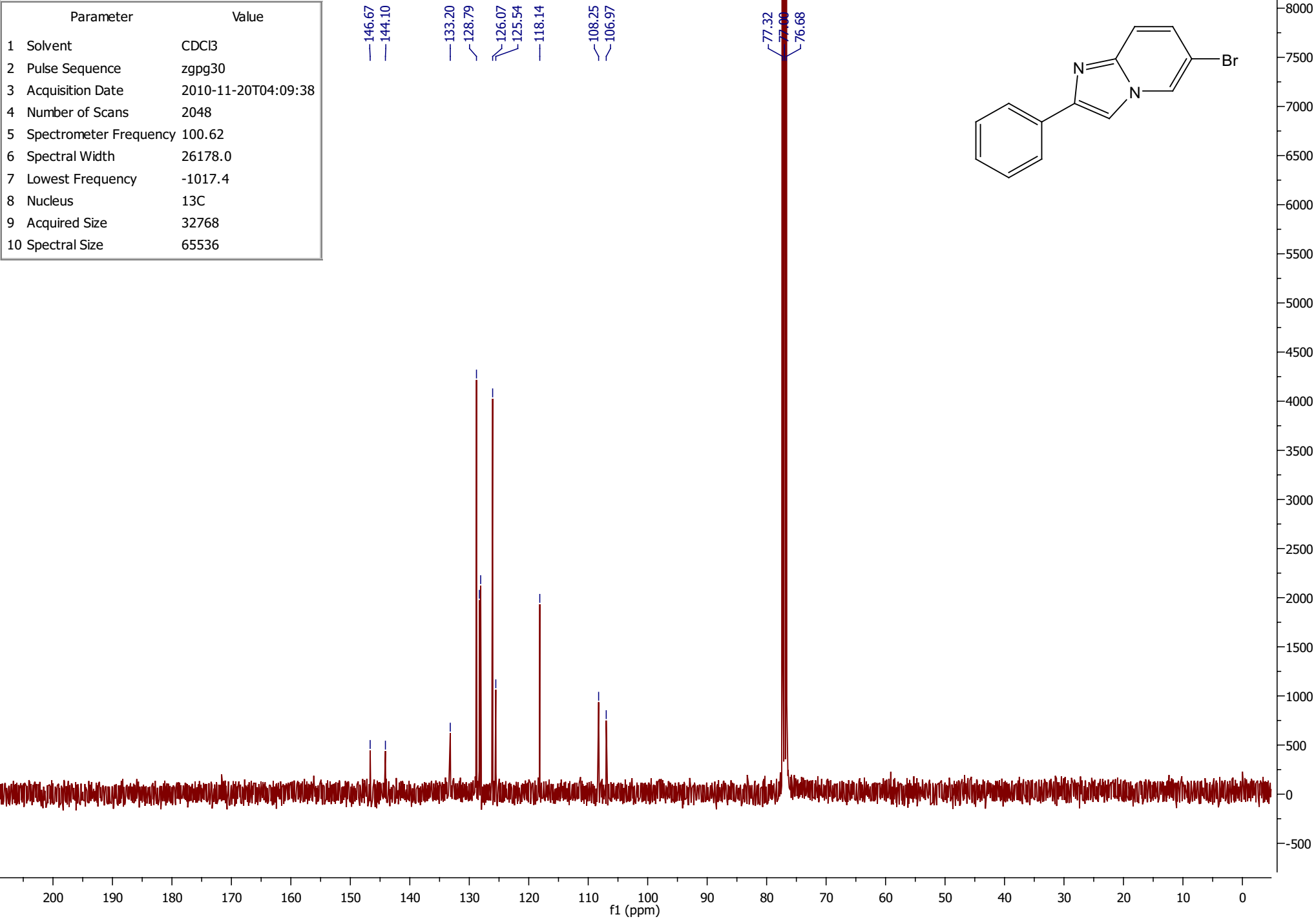


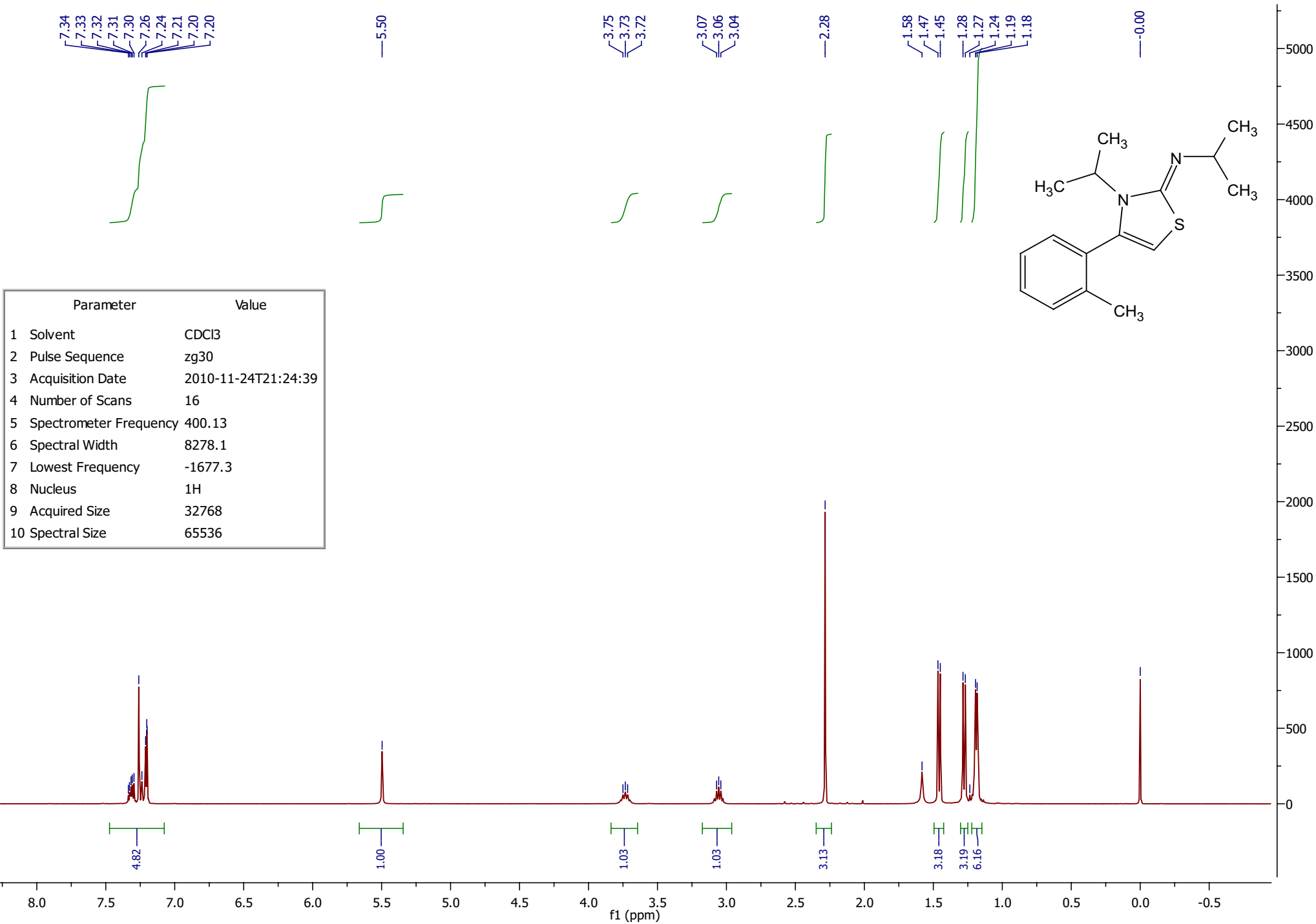
Parameter	Value
1 Solvent	MeOD
2 Pulse Sequence	zgpg30
3 Acquisition Date	2010-11-20T01:03:48
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26178.0
7 Lowest Frequency	-858.4
8 Nucleus	¹³ C
9 Acquired Size	32768
10 Spectral Size	65536



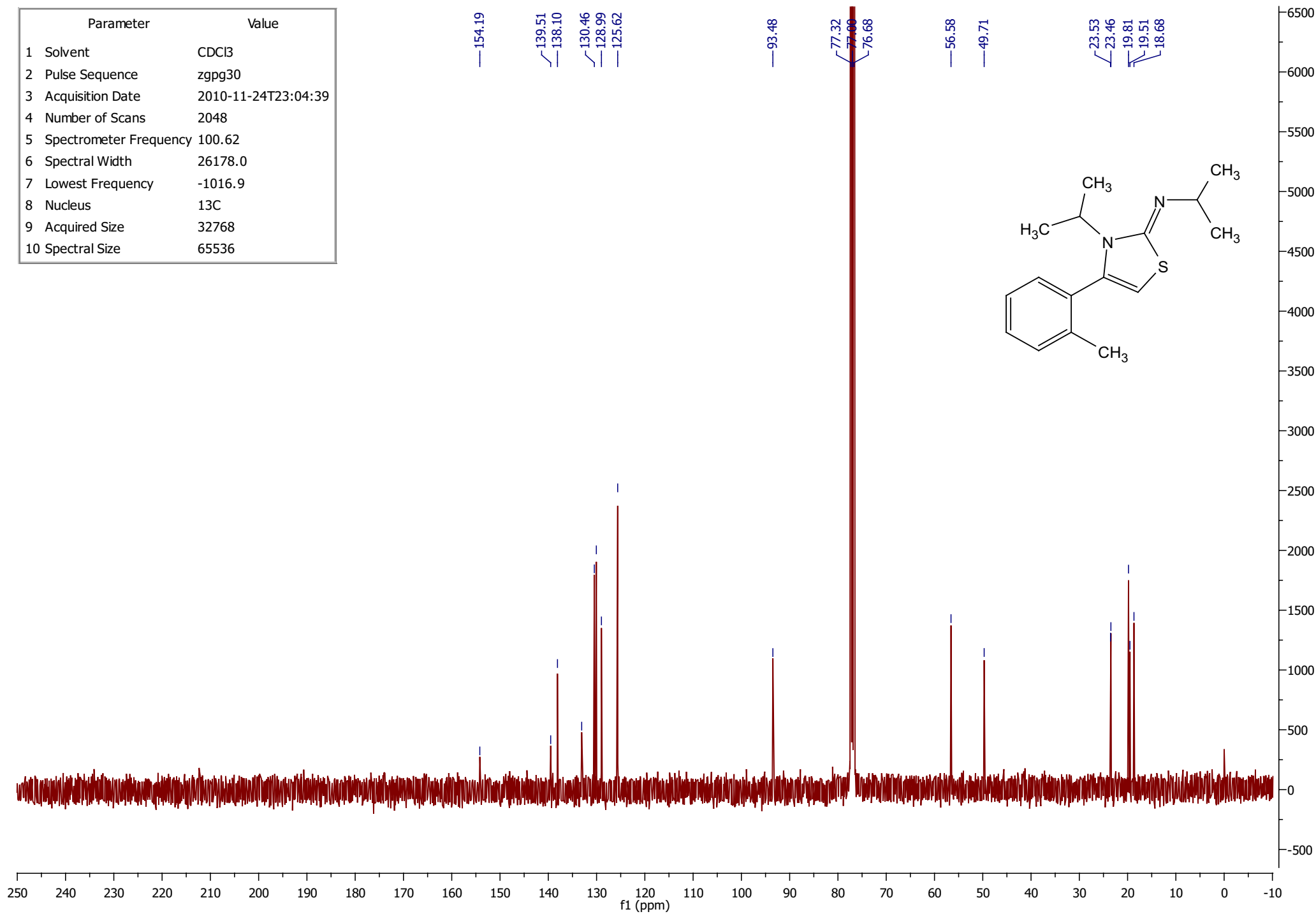


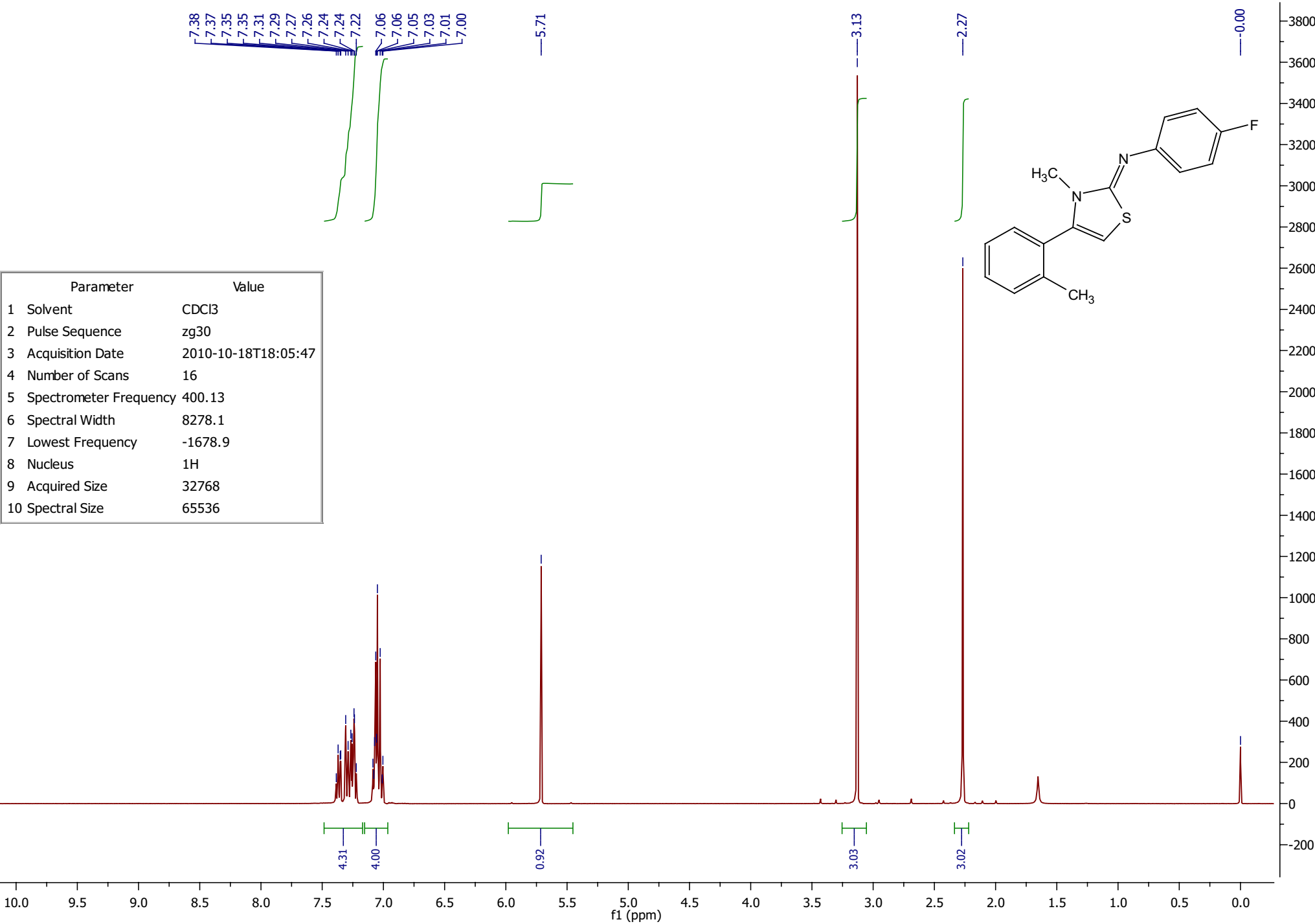
Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zgpg30
3 Acquisition Date	2010-11-20T04:09:38
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26178.0
7 Lowest Frequency	-1017.4
8 Nucleus	¹³ C
9 Acquired Size	32768
10 Spectral Size	65536



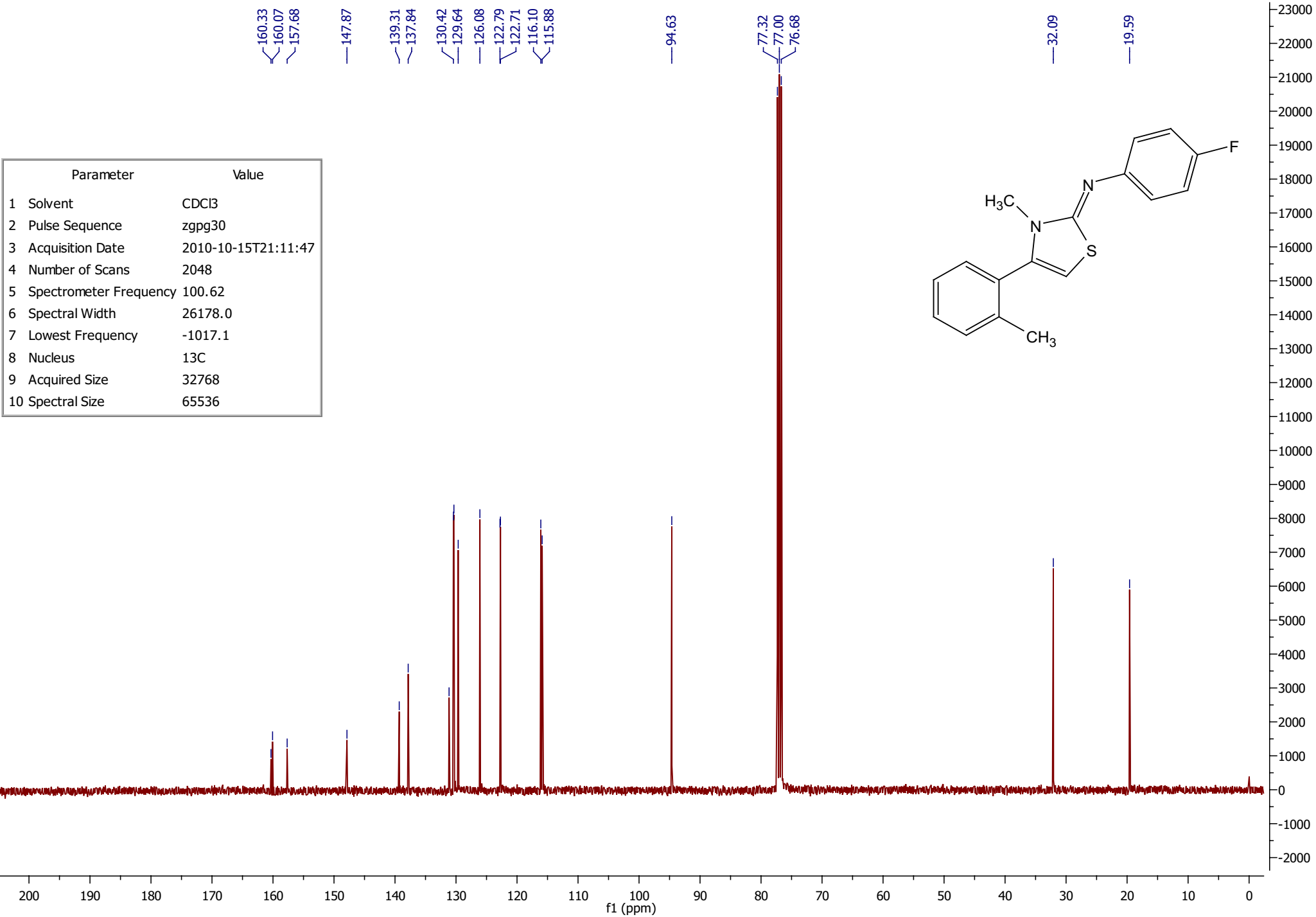


Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zgpg30
3 Acquisition Date	2010-11-24T23:04:39
4 Number of Scans	2048
5 Spectrometer Frequency	100.62
6 Spectral Width	26178.0
7 Lowest Frequency	-1016.9
8 Nucleus	13C
9 Acquired Size	32768
10 Spectral Size	65536



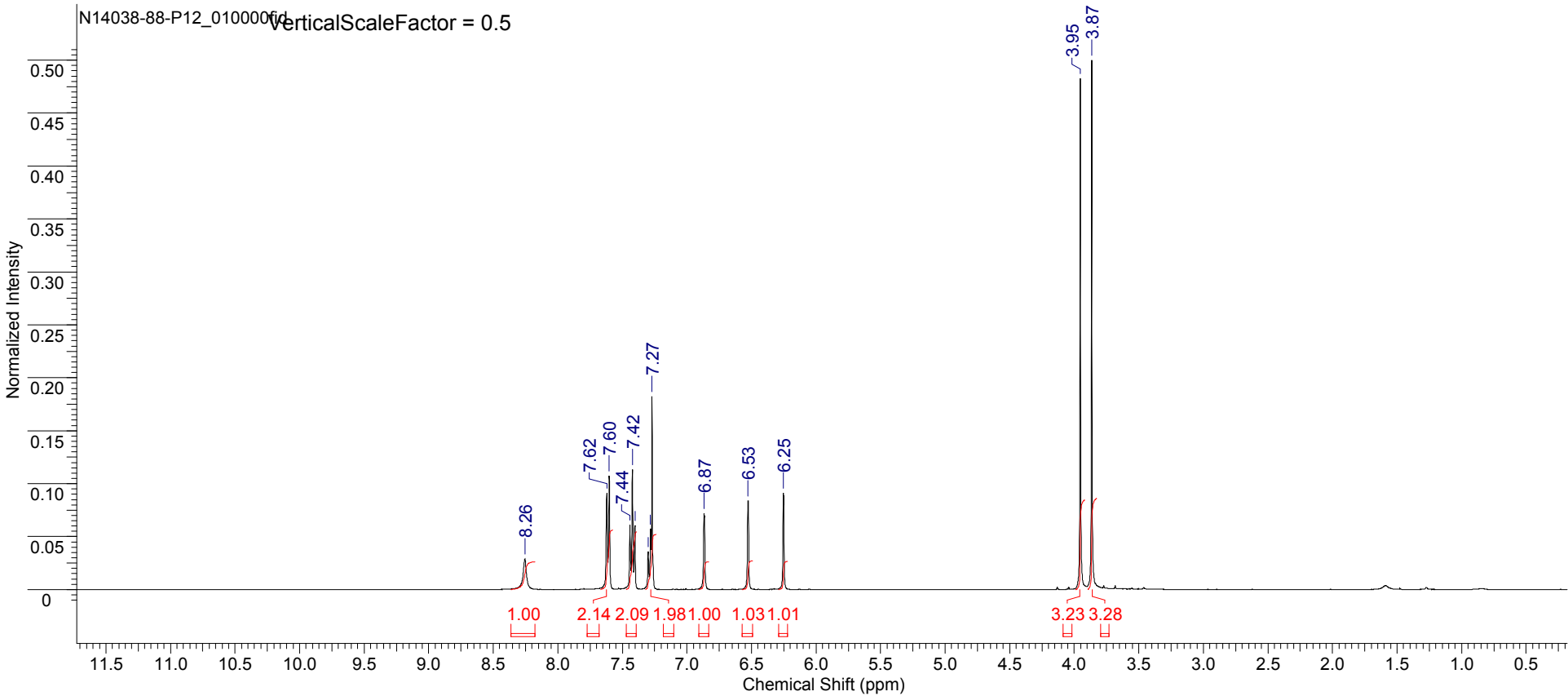
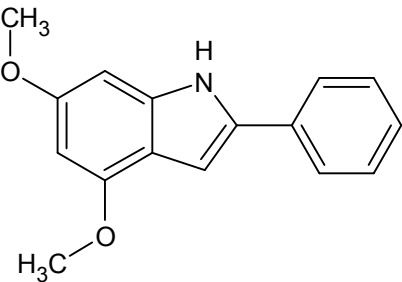


Parameter	Value
1 Solvent	CDCl3
2 Pulse Sequence	zg30
3 Acquisition Date	2010-10-18T18:05:47
4 Number of Scans	16
5 Spectrometer Frequency	400.13
6 Spectral Width	8278.1
7 Lowest Frequency	-1678.9
8 Nucleus	1H
9 Acquired Size	32768
10 Spectral Size	65536



Formula C ₁₆ H ₁₅ NO ₂	FW 253.2958
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Acquisition Time (sec)	1.9923	Comment	W151421 N14038-88-P12 mk772466 1H CDCl3 .. Kabeshov, Mikhail X		
Date	09 Mar 2010 20:20:16	Date Stamp	09 Mar 2010 20:20:16		
File Name	G:\iodoketones\Suppl_data\N14038-88-P12\N14038-88-P12_010000fid			Frequency (MHz)	400.13
Nucleus	1H	Number of Transients	16	Origin	dpx400n
Owner	chemist	Points Count	16384	Pulse Sequence	zg30
SW(cyclical) (Hz)	8223.68	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	2457.3286
Temperature (degree C)	20.160			Sweep Width (Hz)	8223.18



Formula C ₁₆ H ₁₅ NO ₂	FW 253.2958
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Acquisition Time (sec)	1.2517	Comment	W151421 N14038-88-P12 mk772466 13C CDCl3 .. Kabeshov, Mikhail X		
Date	09 Mar 2010 22:00:32	Date Stamp	09 Mar 2010 22:00:32		
File Name	G:\iodoketones\Suppl_data\N14038-88-P12\N14038-88-P12_012000fid			Frequency (MHz)	100.62
Nucleus	13C	Number of Transients	2048	Origin	dpx400n
Owner	bruker	Points Count	32768	Pulse Sequence	zgdc30
SW(cyclical) (Hz)	26178.01	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	12027.3623
Temperature (degree C)	20.160			Sweep Width (Hz)	26177.21

