Synthesis and photophysical properties of poly(ester-amine) dendrimers with focal 4-amino-N-benzyl-phthalimide, as sensitive media probes and switchable proton sensors

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Page 2: ESI-MS spectrum of compound 2

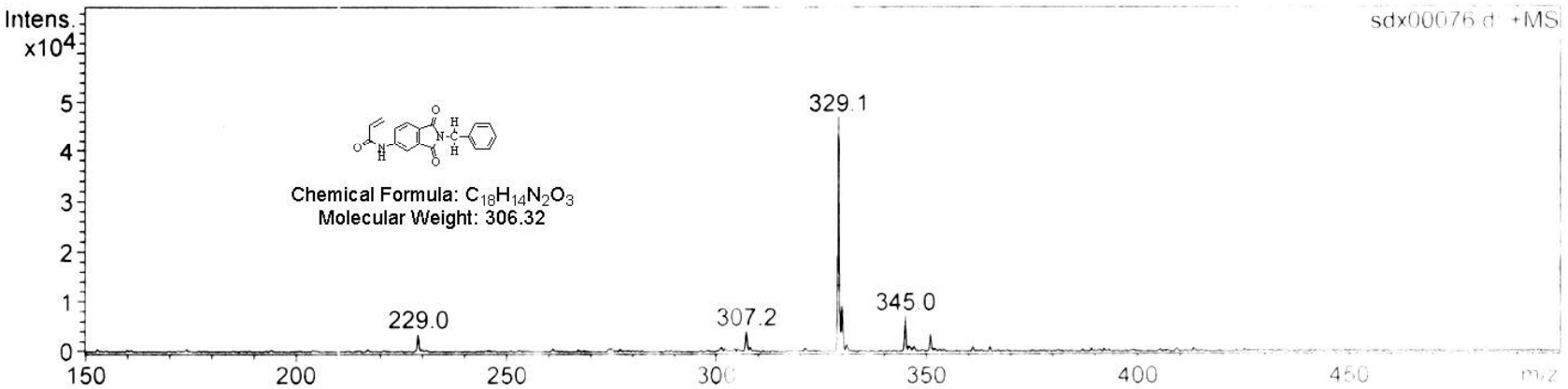
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00076.d	Acquisition Date	11/22/05 16:01:18
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	3-306		

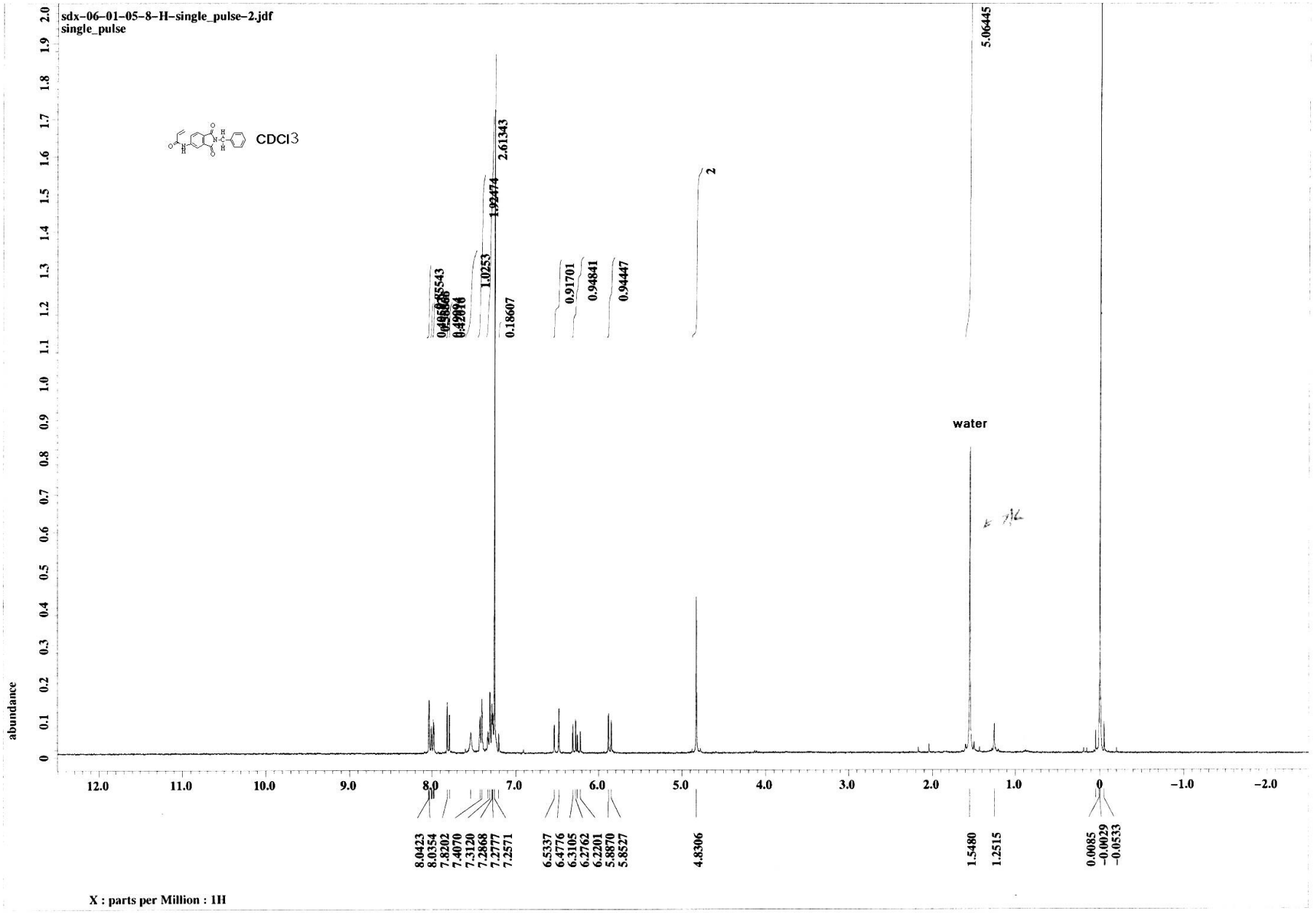
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	150.00 m/z	Scan End	500.00 m/z
Capillary Exit	100.2 Volt	Skim 1	29.2 Volt	Trap Drive	31.9
Accumulation Time	32209 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	229.0	3538	0.4	48.4
2	301.2	1049	0.4	14.3
3	307.2	4083	0.5	55.8
4	329.1	46903	0.4	641.0
5	330.0	9162	0.4	125.2
6	331.1	1621	0.4	22.2
7	345.0	7134	0.4	97.5
8	345.9	1147	0.6	15.7
9	351.0	3712	0.4	50.7
10	361.0	1010	0.4	13.8

Page 3: ^{1}H NMR spectrum of compound 2



Page 4: ESI-MS spectrum of compound 3

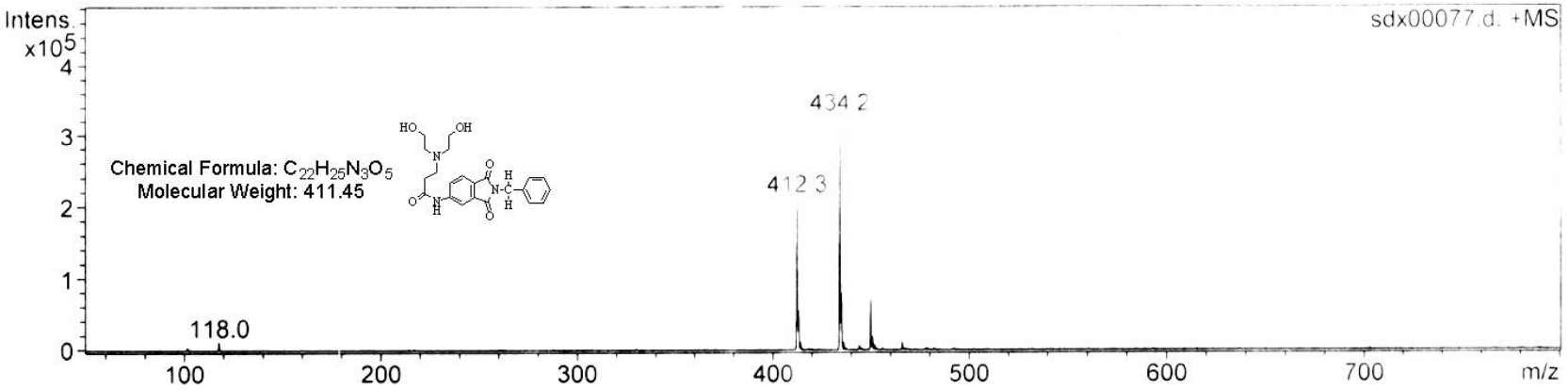
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00077.d	Acquisition Date	11/22/05 16:05:18
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	4-410		

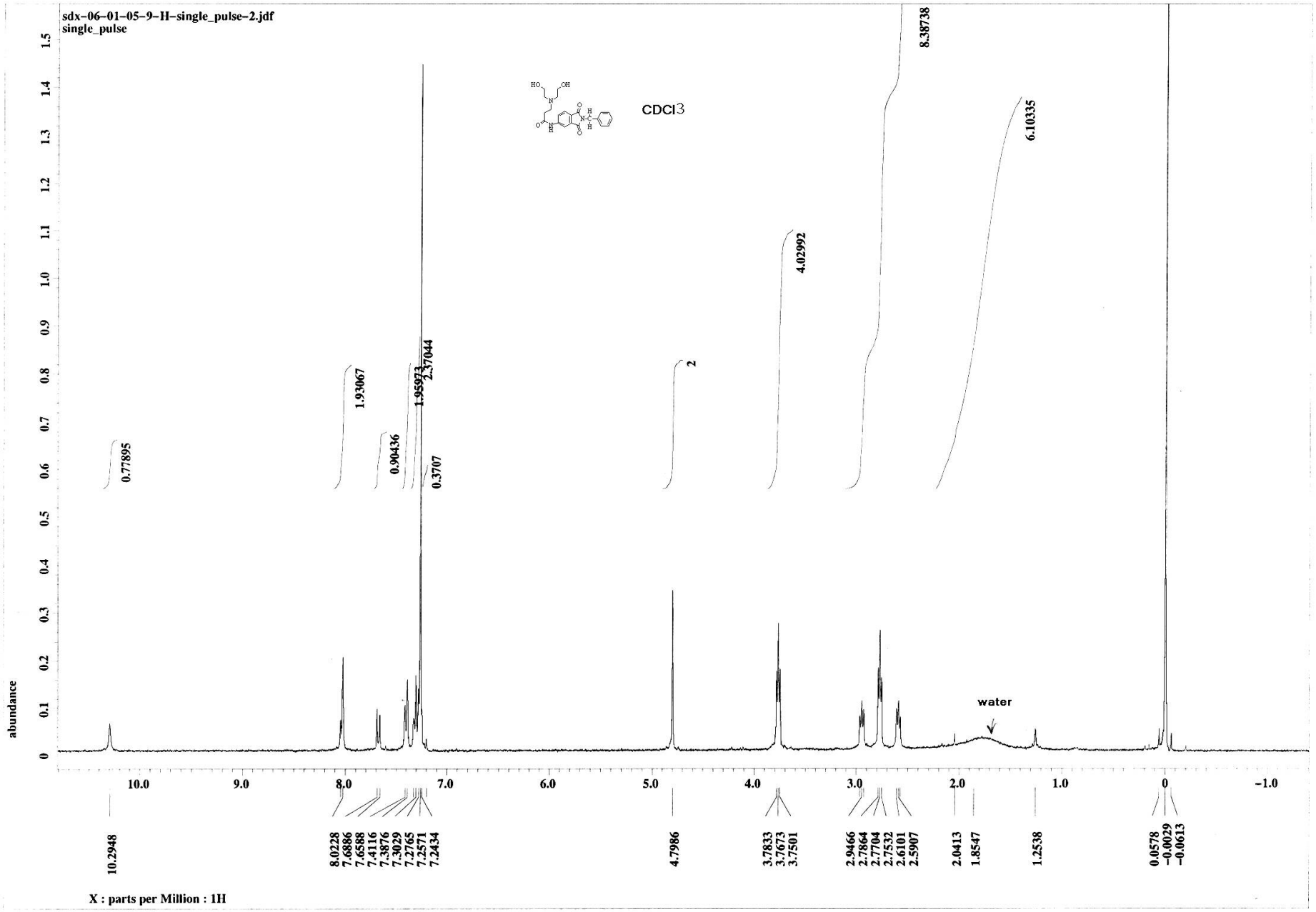
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	50.00 m/z	Scan End	800.00 m/z
Capillary Exit	107.3 Volt	Skim 1	34.4 Volt	Trap Drive	36.6
Accumulation Time	4792 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	118.0	10801	0.4	131.9
2	412.3	210736	0.5	2572.8
3	413.1	54038	0.4	659.7
4	414.3	10566	0.4	129.0
5	434.2	326420	0.4	3985.1
6	434.9	78306	0.4	956.0
7	436.1	10217	0.4	124.7
8	450.0	69376	0.4	847.0
9	450.9	17876	0.4	218.2
10	466.0	10419	0.4	127.2

Page 5: ^{1}H NMR spectrum of compound 3



Page 6: ESI-MS spectrum of compound 4

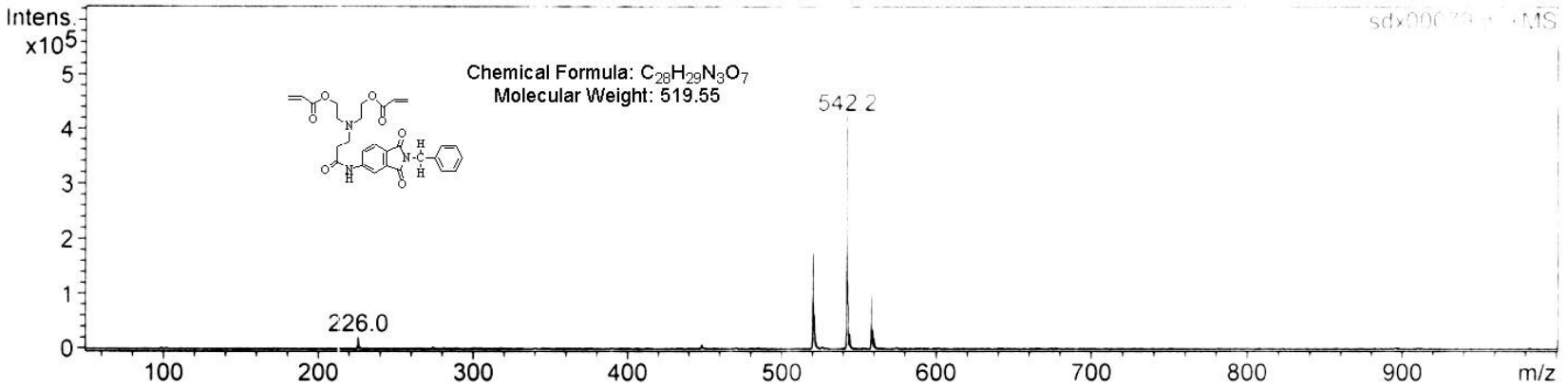
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00079.d	Acquisition Date	11/22/05 16:09:50
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	5-520		

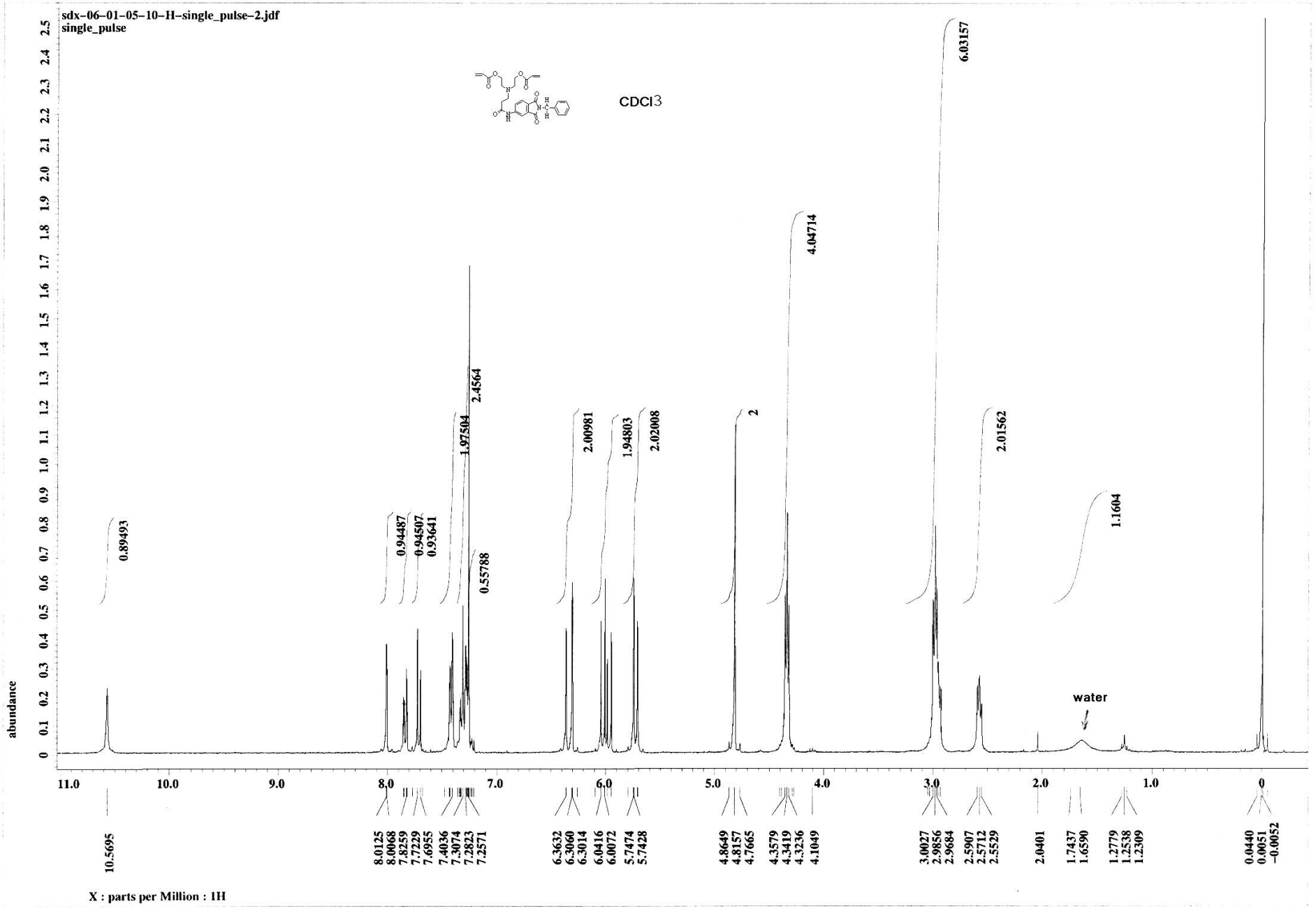
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	50.00 m/z	Scan End	1000.00 m/z
Capillary Exit	114.3 Volt	Skim 1	39.1 Volt	Trap Drive	41.6
Accumulation Time	5610 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	226.0	20423	0.5	166.5
2	520.4	174288	0.5	1421.1
3	521.2	61466	0.5	501.2
4	522.3	12491	0.5	101.8
5	542.2	422547	0.4	3445.3
6	542.9	123761	0.4	1009.1
7	544.1	26031	0.4	212.3
8	558.1	104195	0.4	849.6
9	559.0	34233	0.4	279.1
10	560.0	18092	0.4	147.5

Page 7: ^{1}H NMR spectrum of compound 4



Page 8: ESI-MS spectrum of compound 5

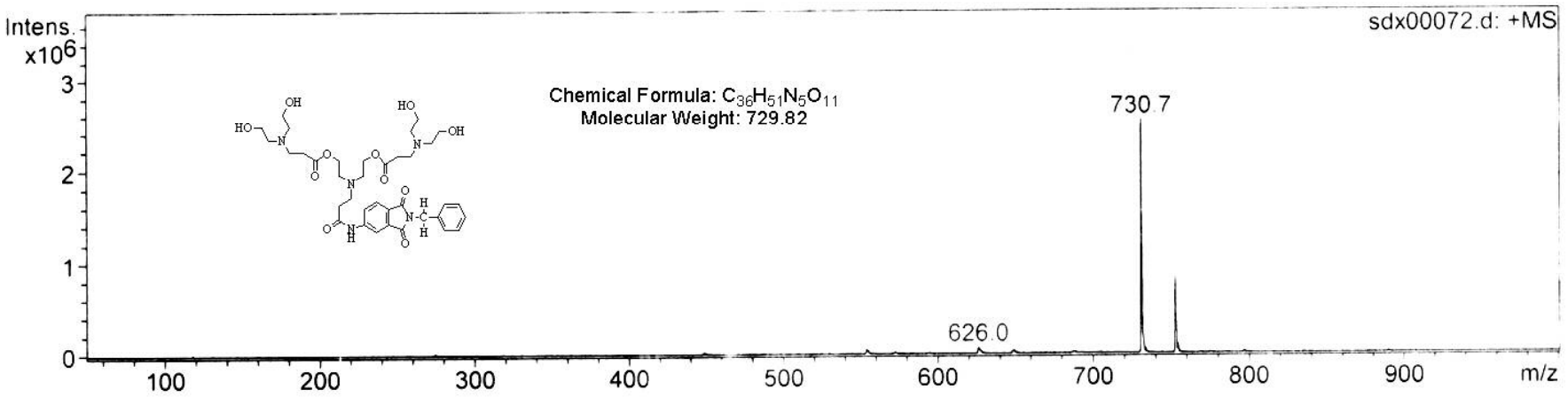
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00072.d	Acquisition Date	11/07/05 15:28:50
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	1		

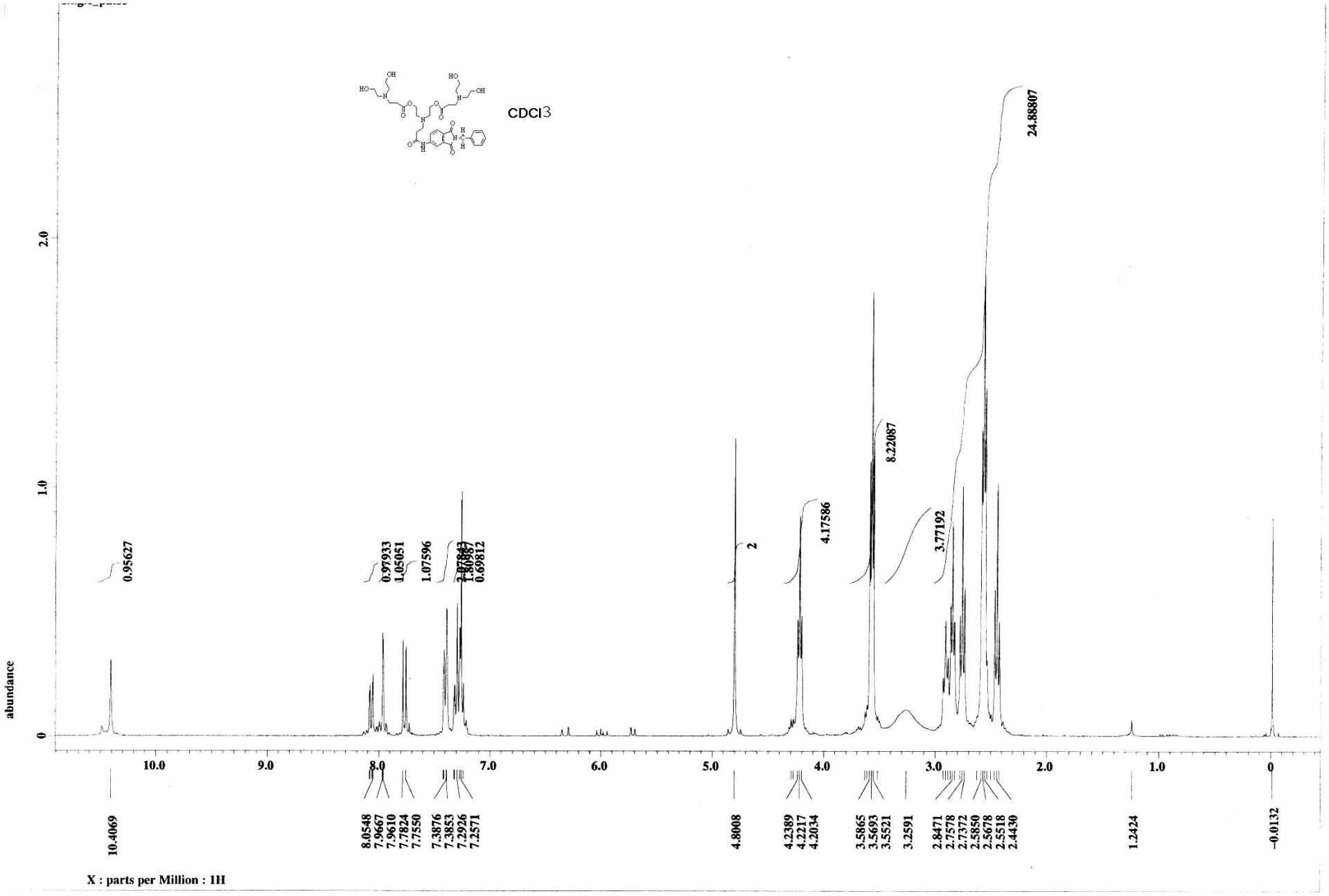
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	50.00 m/z	Scan End	1000.00 m/z
Capillary Exit	126.2 Volt	Skim 1	47.0 Volt	Trap Drive	51.2
Accumulation Time	669 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	626.0	69013	0.5	133.1
2	626.4	60791	0.2	117.2
3	730.7	2545781	0.6	4908.1
4	731.8	197249	0.5	380.3
5	733.5	54502	0.4	105.1
6	752.4	836530	0.4	1612.8
7	753.0	345745	0.4	666.6
8	754.2	98032	0.4	189.0

Page 9: ^{1}H NMR spectrum of compound 5



Page 10: ESI-MS spectrum of compound 6

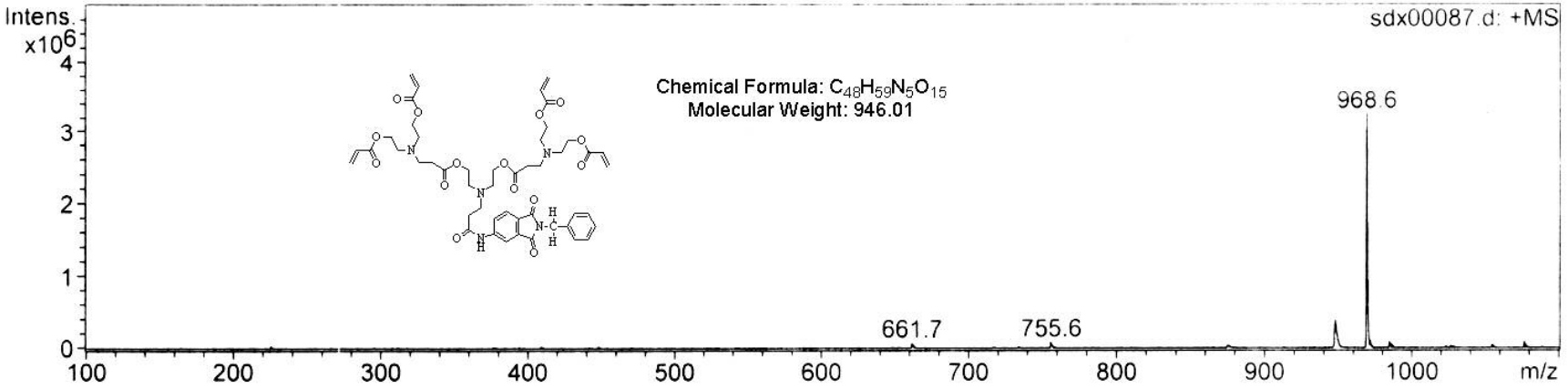
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00087.d	Acquisition Date	11/29/05 10:34:00
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	2		

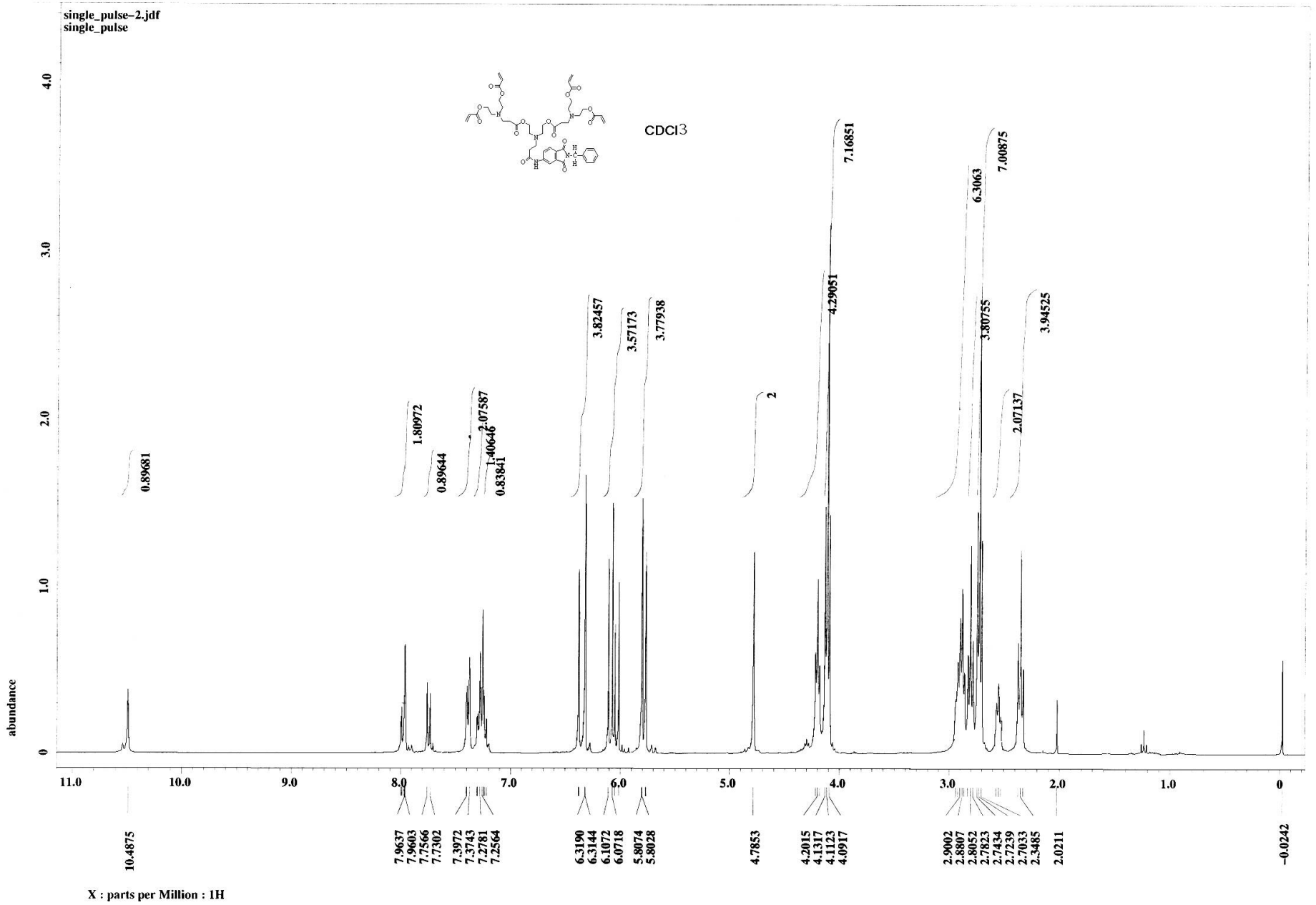
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	100.00 m/z	Scan End	1100.00 m/z
Capillary Exit	148.7 Volt	Skim 1	60.8 Volt	Trap Drive	60.9
Accumulation Time	454 µs	Averages	10 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	661.7	65429	0.5	104.3
2	755.6	74798	0.6	119.3
3	947.5	393937	1.3	628.2
4	948.7	179951	0.5	287.0
5	949.5	102418	0.4	163.3
6	968.6	3257314	0.7	5194.3
7	971.2	104799	0.5	167.1
8	984.1	86144	0.6	137.4
9	1076.2	87389	0.4	139.4

Page 11: ^{1}H NMR spectrum of compound 6



Page 12: ESI-MS spectrum of compound 7

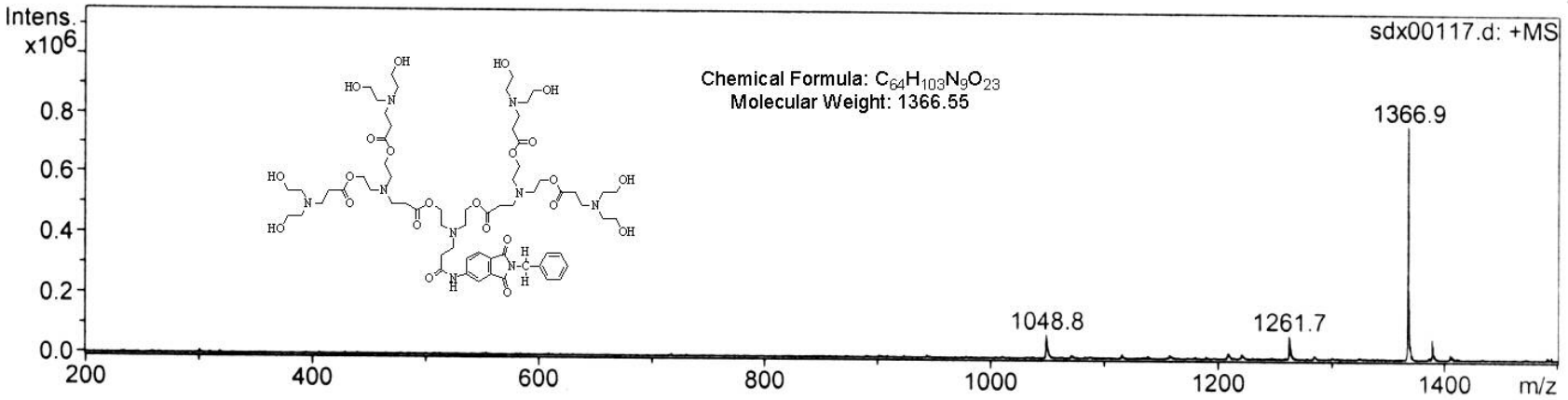
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00117.d	Acquisition Date	12/26/05 10:32:22
Method	XQ Default.ms	Operator	Administrator
Sample Name	n	Instrument	Esquire-LC_00136
Comment	1366-1		

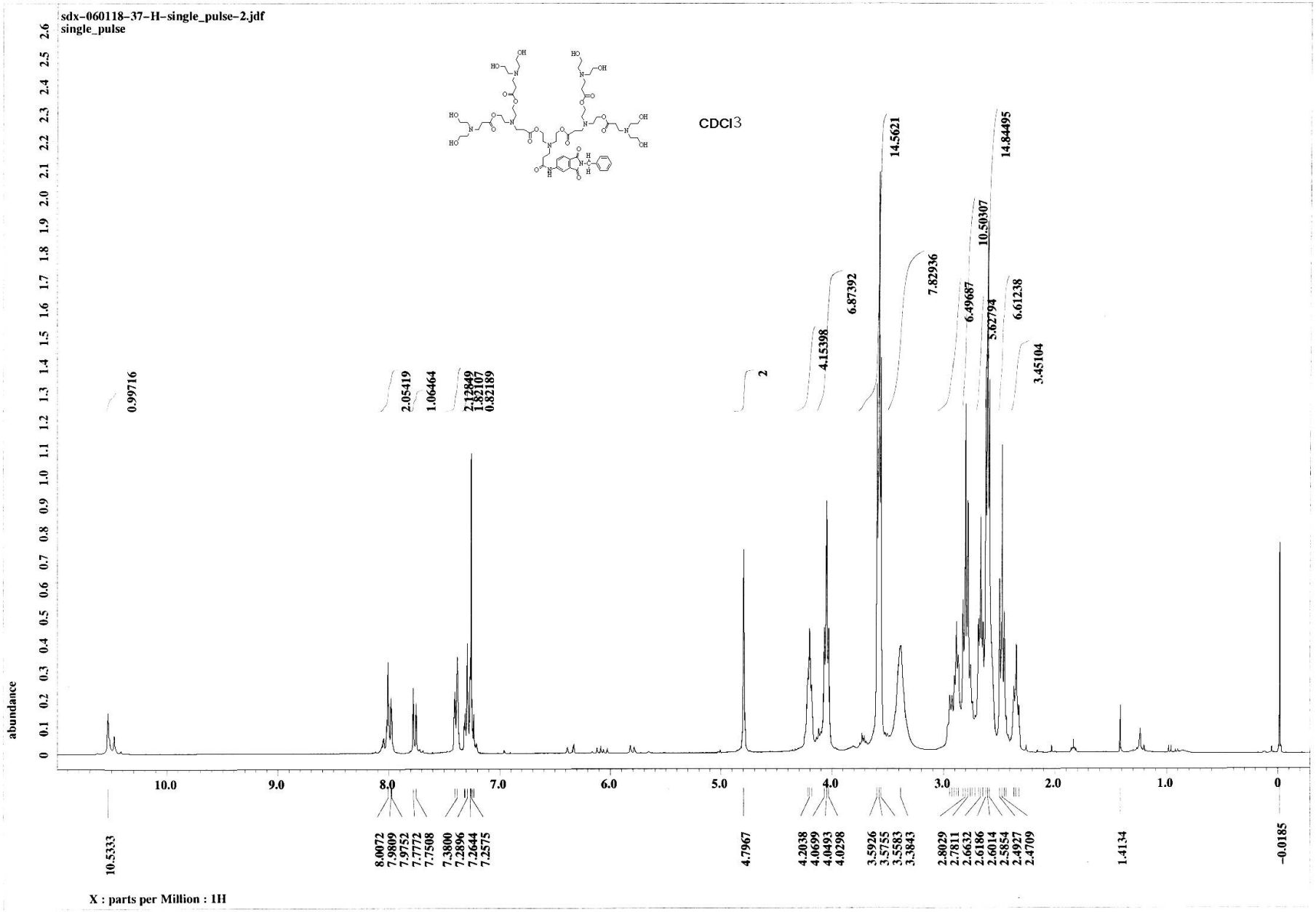
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	200.00 m/z	Scan End	1500.00 m/z
Capillary Exit	157.1 Volt	Skim 1	65.6 Volt	Trap Drive	80.0
Accumulation Time	1233 µs	Averages	10 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	1048.8	76478	0.5	246.2
2	1049.5	63679	0.5	205.0
3	1050.6	28224	0.3	90.9
4	1261.7	76475	0.5	246.2
5	1262.5	66615	0.5	214.4
6	1263.5	31627	0.5	101.8
7	1366.9	775471	0.7	2496.4
8	1369.3	45097	0.4	145.2
9	1388.4	67630	0.4	217.7
10	1389.3	46416	0.5	149.4

Page 13: ^{1}H NMR spectrum of compound 7



Page 14: ESI-MS spectrum of compound 8

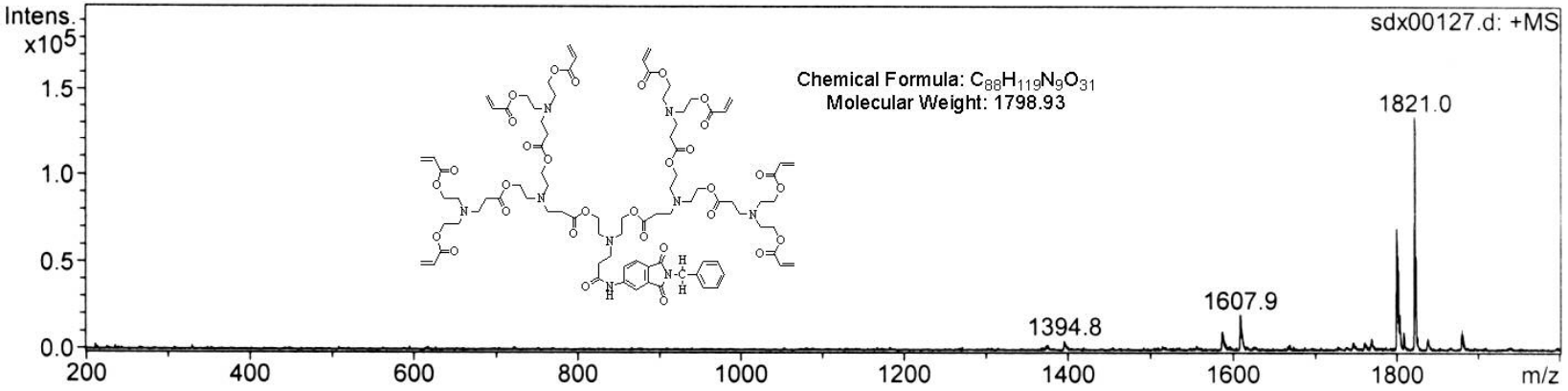
Mass Spectrum List Report

Analysis Info

Analysis Name	sdx00127.d	Acquisition Date	01/10/06 17:36:19
Method	XQ Default.ms	Operator	Administrator
Sample Name	1	Instrument	Esquire-LC_00136
Comment	1806-1		

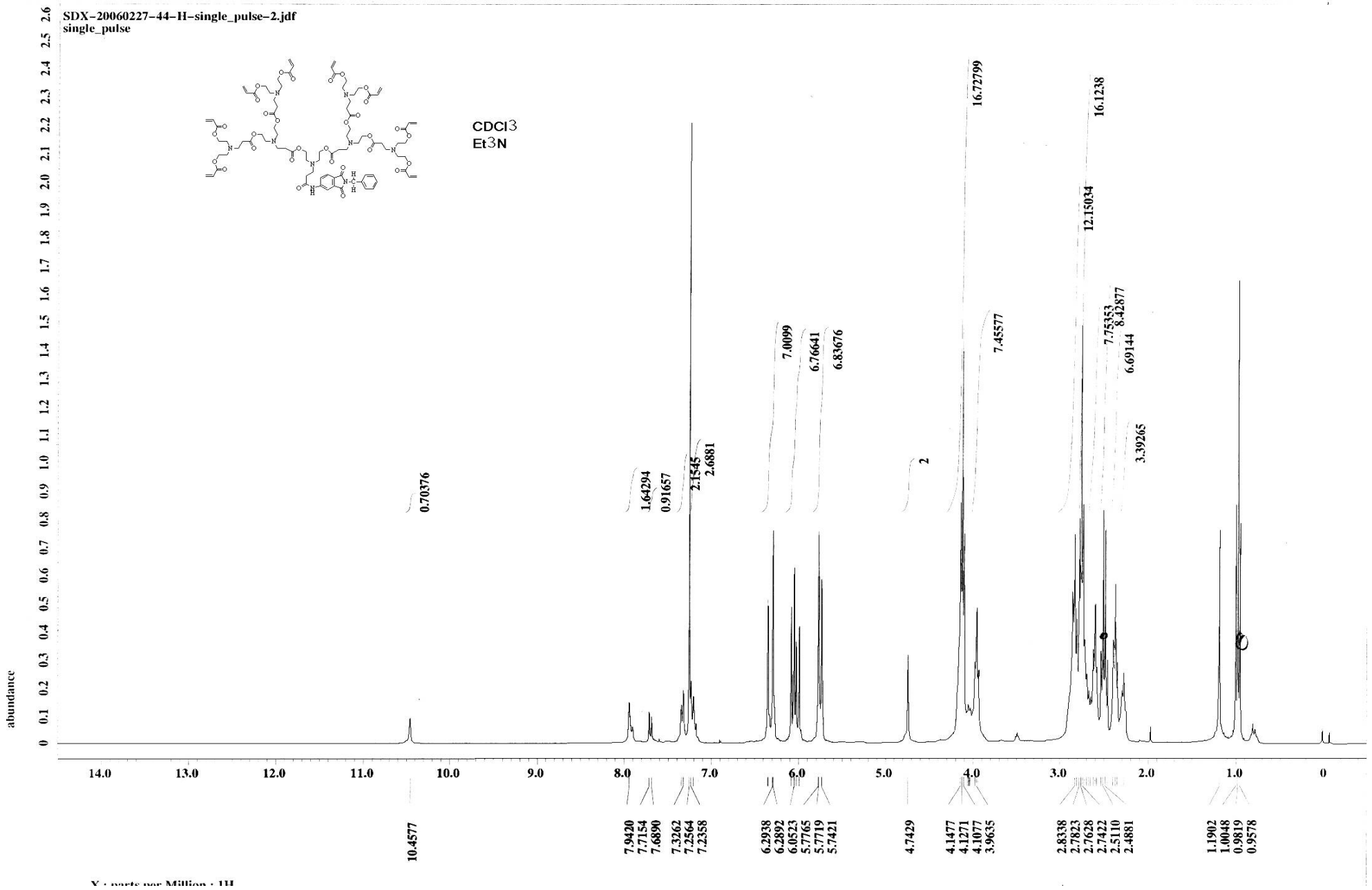
Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Std/Normal	Scan Begin	200.00 m/z	Scan End	2000.00 m/z
Capillary Exit	175.9 Volt	Skim 1	75.9 Volt	Trap Drive	99.9
Accumulation Time	9837 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	1607.9	20242	0.5	157.7
2	1608.8	19954	0.5	155.4
3	1799.0	69692	0.5	542.8
4	1799.5	63405	0.4	493.8
5	1800.5	53870	0.5	419.6
6	1801.5	45664	0.4	355.7
7	1803.2	20231	0.5	157.6
8	1821.0	134310	0.4	1046.1
9	1821.5	130161	0.4	1013.8
10	1822.9	53884	0.4	419.7

Page 15: ^{1}H NMR spectrum of compound 8



Page 16: ESI-MS spectrum of compound 9

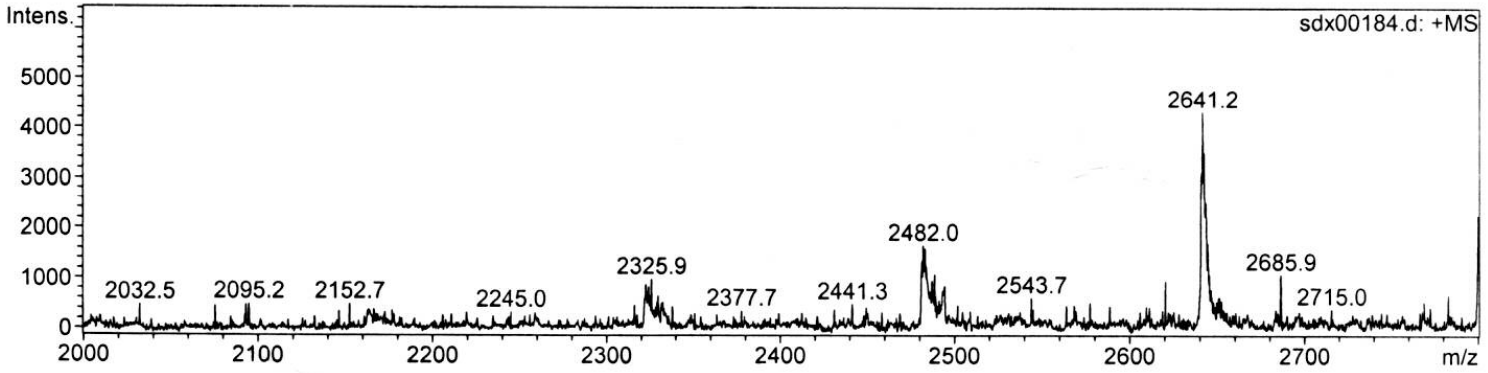
Mass Spectrum List Report

Analysis Info

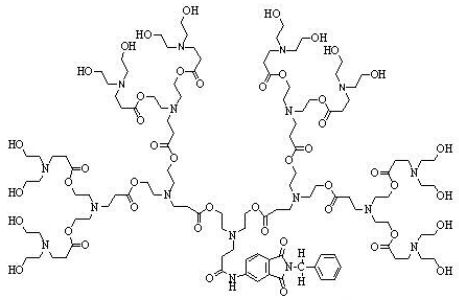
Analysis Name	sdx00184.d	Acquisition Date	06/20/06 09:44:32
Method	XQ Default.ms	Operator	Administrator
Sample Name	Default	Instrument	Esquire-LC_00136
Comment	2638		

Acquisition Parameter

Ion Source Type	ESI	Ion Polarity	Positive	Alternating Ion Polarity	n/a
Mass Range Mode	Extended	Scan Begin	2000.00 m/z	Scan End	2800.00 m/z
Capillary Exit	208.5 Volt	Skim 1	92.5 Volt	Trap Drive	137.7
Accumulation Time	50000 µs	Averages	5 Spectra	Auto MS/MS	Off



#	m/z	I	FWHM	S/N
1	2481.2	1353	0.7	14.1
2	2482.0	1659	0.5	17.3
3	2483.0	1605	0.6	16.7
4	2483.8	1229	0.7	12.8
5	2488.5	1089	0.3	11.3
6	2640.5	3117	0.5	32.4
7	2641.2	4333	0.5	45.1
8	2642.0	3508	0.3	36.5
9	2643.0	2506	0.7	26.1
10	2644.1	1707	0.5	17.8



Chemical Formula: $C_{120}H_{207}N_{17}O_{47}$
Molecular Weight: 2640.01

Page 17: ^{1}H NMR spectrum of compound 9