CHEMICAL ANALYSIS TEST REPORT

Laboratory: Nectar Spectra Laboratories
Location: Barcelona, Spain
Contact: office@nectarspectralabs.com

We hereby certify that:

The test(s) shown below were conducted according to industry standard proceedures, using verified reference standards and calibrated instruments. We vouch for the accuracy of these results. Nevertheless we cannot rule out the presence of other minor/trace compounds below the limit of detection of our instruments.

We do not guarantee the safety of consumption of any product, and do not vouch for suppliers of products tested by us, nor for batches. We provide results for scientific and informational purposes on the samples we tested.

Sample Purchase ID	P1459
Sample Lab ID	L1648
Sample ALIAS	Zion Pharma P1459
Date of sample reception	9-Nov-2026
Date of report	13-Nov-2026
Techniques used:	FTIR + HPLC-DAD + NMR
Report by (technician ID)	F2401
Expected substance	Memantine HCl

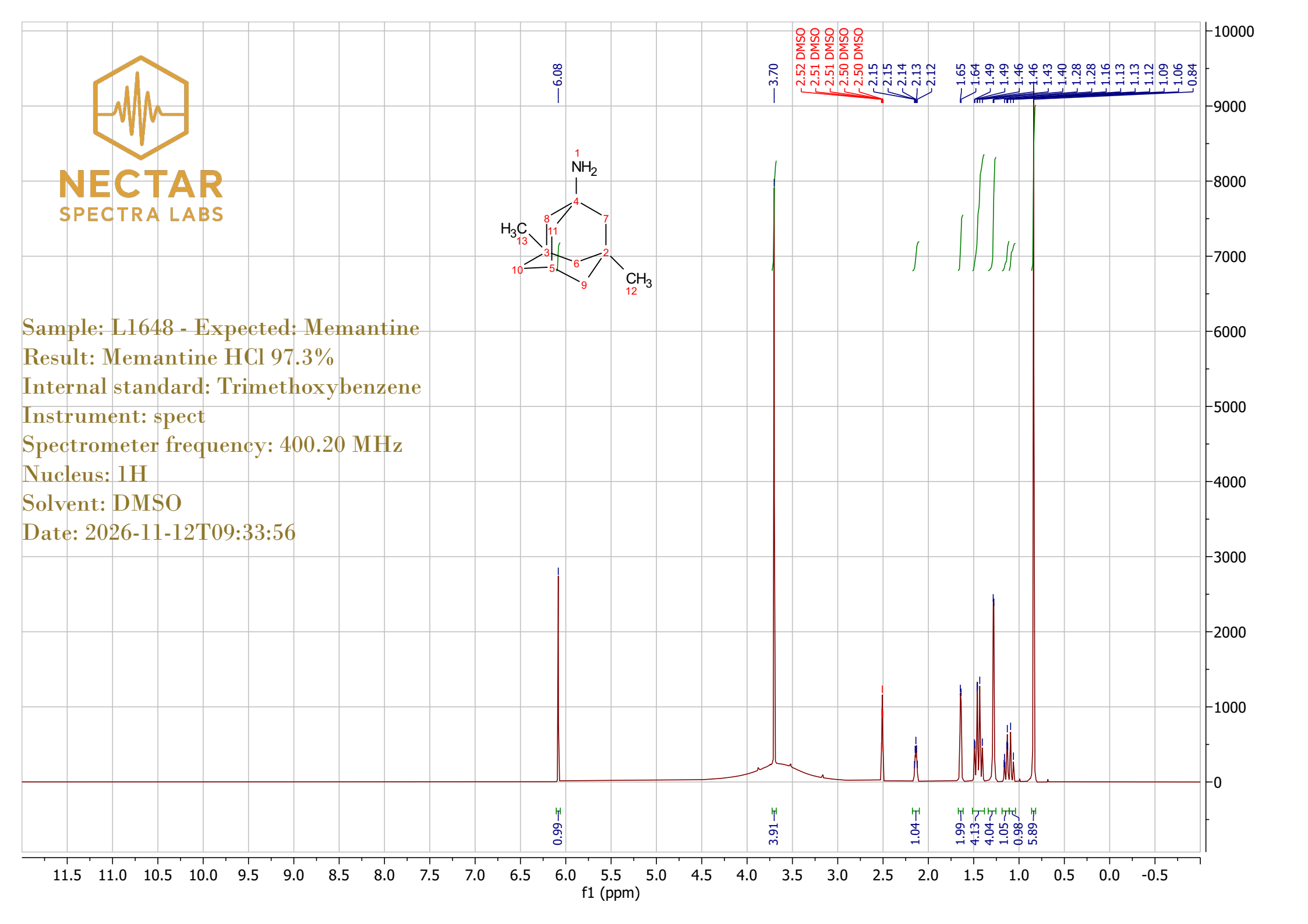
RESULTS:

Memantine HCl 97.3%

Lab comments:

REPORT VERIFICATION CODE: 10b6816e3756d6b71a50e32ba1a9f09e https://www.nectarspectralabs.com/en/report-verifier

END OF REPORT - SPECTRA ATTACHMENTS BELOW

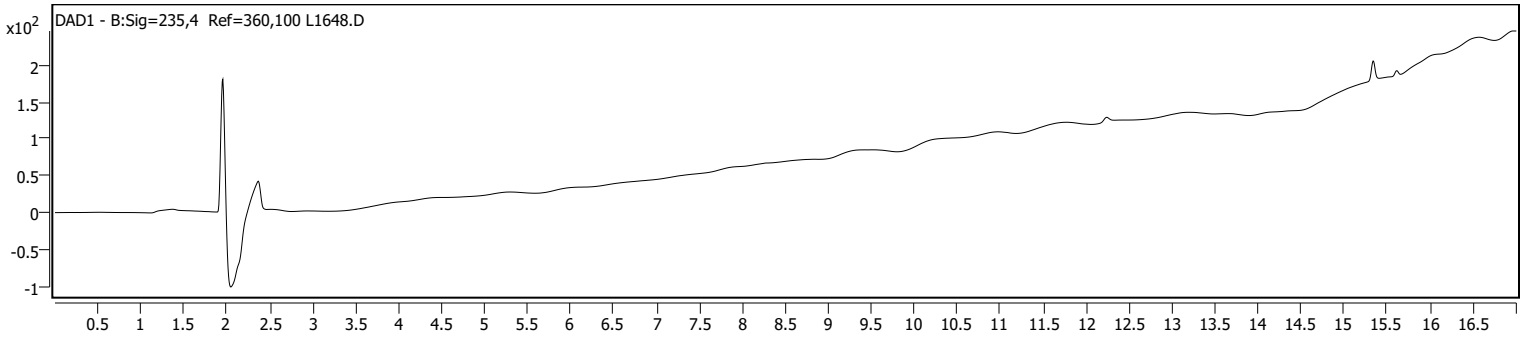

NECTAR
SPECTRA LABS
Sample: L1648 - Expected: Memantine
Result: Memantine HCl 97.3%
Internal standard: Trimethoxybenzene
Instrument: spect
Spectrometer frequency: 400.20 MHz
Nucleus: 1H
Solvent: DMSO
Date: 2026-11-12T09:33:56
6.08
3.70
2.52 DMSO
2.51 DMSO
2.51 DMSO
2.50 DMSO
2.50 DMSO
2.15
2.15
2.14
2.13
2.12
1.65
1.64
1.49
1.49
1.46
1.46
1.43
1.40
1.28
1.28
1.16
1.13
1.13
1.12
1.09
1.06
0.84
NH2
H3C
CH3
0.99
3.91
1.04
1.99
4.13
4.04
1.05
0.98
5.89
f1 (ppm)

Analysis Report

Sample Information

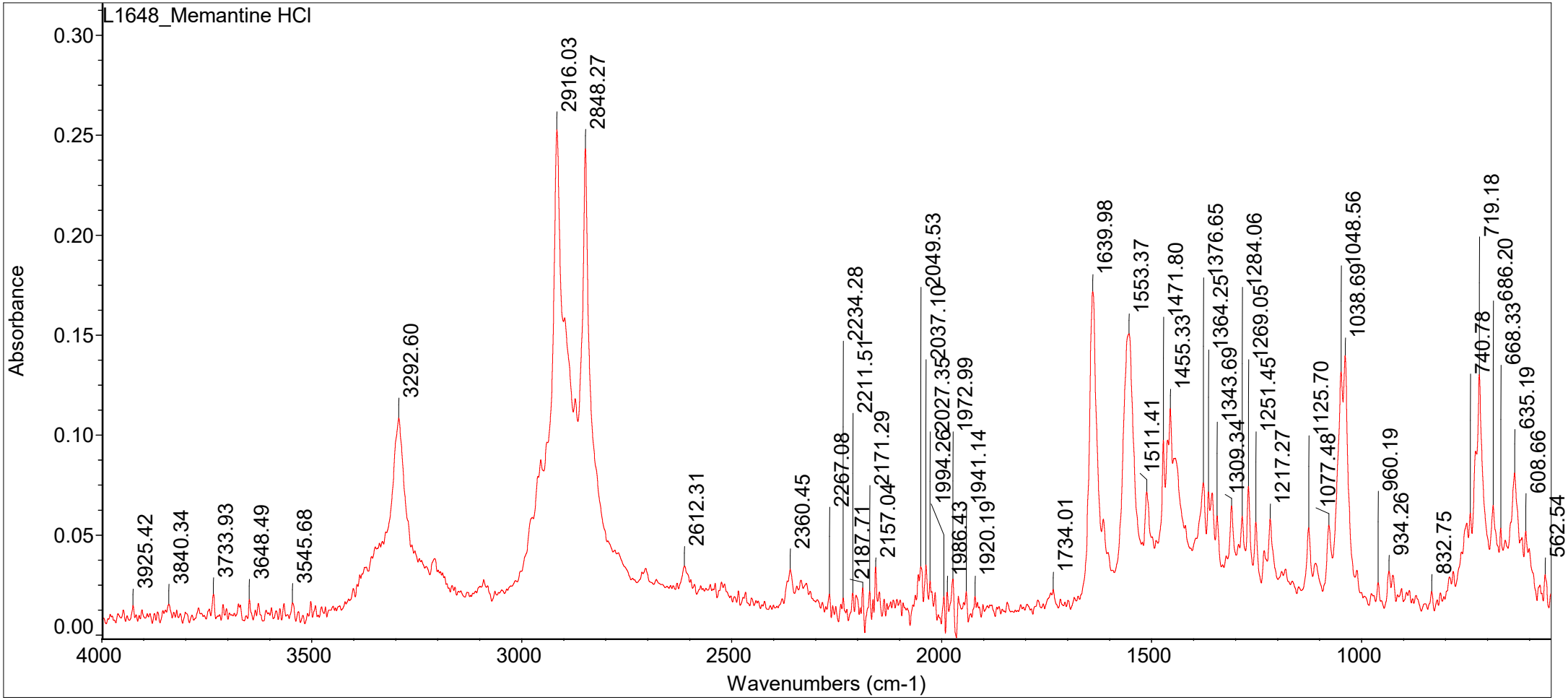
Name	L1648	**Data File Path**	C:\Users\offic\Documents\TLConscious\LAB\HPLC\Archivos ordenador HPLC\L1636AL1658PLUSNORCOCCOC 2018-07-04 20-35-19\L1648.D
Sample ID		**Acq. Time (Local)**	11/10/2026 10:44:15 AM (UTC+01:00)
Instrument	Instrument 1	**Method Path (Acq)**	0 A XTRALONGAPR2026NECTARSPECTRA.M
MS Type		**Version (Acq SW)**	
Inj. Vol. (ul)	4.99999999999999	**IRM Status**	
Position	Vial 26	**Method Path (DA)**	
Plate Pos.		**Target Source Path**	
Operator	NECTAR1	**Result Summary**	

Sample Chromatograms



Response Units vs. Acquisition Time (min)

MassHunter Qual 10.0
(End of Report)



Mon Nov 09 16:33:54 2026 (GMT+01:00)
FIND PEAKS:
Spectrum: L1648_Memantine HCl
Region: 4000.12 550.10
Absolute threshold: 0.006
Sensitivity: 50
Peak list:

Position:	562.54	Intensity:	0.0301
Position:	608.66	Intensity:	0.0519
Position:	635.19	Intensity:	0.0810
Position:	668.33	Intensity:	0.0534
Position:	686.20	Intensity:	0.0648
Position:	719.18	Intensity:	0.130
Position:	740.78	Intensity:	0.0609

Position:	832.75	Intensity:	0.0216
Position:	934.26	Intensity:	0.0318
Position:	960.19	Intensity:	0.0261
Position:	1038.69	Intensity:	0.140
Position:	1048.56	Intensity:	0.132
Position:	1077.48	Intensity:	0.0548
Position:	1125.70	Intensity:	0.0535
Position:	1217.27	Intensity:	0.0579
Position:	1251.45	Intensity:	0.0563
Position:	1269.05	Intensity:	0.0743
Position:	1284.06	Intensity:	0.0594
Position:	1309.34	Intensity:	0.0645
Position:	1343.69	Intensity:	0.0595
Position:	1364.25	Intensity:	0.0716
Position:	1376.65	Intensity:	0.0760
Position:	1455.33	Intensity:	0.113
Position:	1471.80	Intensity:	0.0973
Position:	1511.41	Intensity:	0.0715
Position:	1553.37	Intensity:	0.151
Position:	1639.98	Intensity:	0.172
Position:	1734.01	Intensity:	0.0227
Position:	1920.19	Intensity:	0.0191
Position:	1941.14	Intensity:	0.0217
Position:	1972.99	Intensity:	0.0279
Position:	1986.43	Intensity:	0.0213
Position:	1994.26	Intensity:	0.0193
Position:	2027.35	Intensity:	0.0270
Position:	2037.10	Intensity:	0.0350
Position:	2049.53	Intensity:	0.0341
Position:	2157.04	Intensity:	0.0339
Position:	2171.29	Intensity:	0.0218
Position:	2187.71	Intensity:	0.0236
Position:	2211.51	Intensity:	0.0208
Position:	2234.28	Intensity:	0.0184
Position:	2267.08	Intensity:	0.0204
Position:	2360.45	Intensity:	0.0328
Position:	2612.31	Intensity:	0.0344
Position:	2848.27	Intensity:	0.243
Position:	2916.03	Intensity:	0.253
Position:	3292.60	Intensity:	0.108
Position:	3545.68	Intensity:	0.0159
Position:	3648.49	Intensity:	0.0177
Position:	3733.93	Intensity:	0.0202
Position:	3840.34	Intensity:	0.0153
Position:	3925.42	Intensity:	0.0146