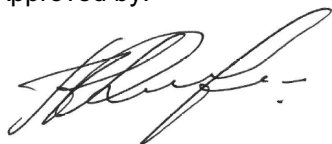


Name:	Metoprolol-D7 Hydrochloride
Lot#:	GR-9-165
Test Date:	01/26/2022 (re-test date: 01/26/2027)
CAS No.:	1219798-61-4
MF:	C ₁₅ H ₁₉ D ₇ ClNO ₃
MW:	310.87
Appearance:	White solid
Purity:	99.7% by HPLC (average of two sample preparations); 99.5% atom D
NMR (¹H):	Conforms
MS-ESI (+)	Conforms (shows peak at m/z = 275.21 [M _(free base) +H] ⁺)
Storage	Store at -18°C in a dry place away from direct sunlight

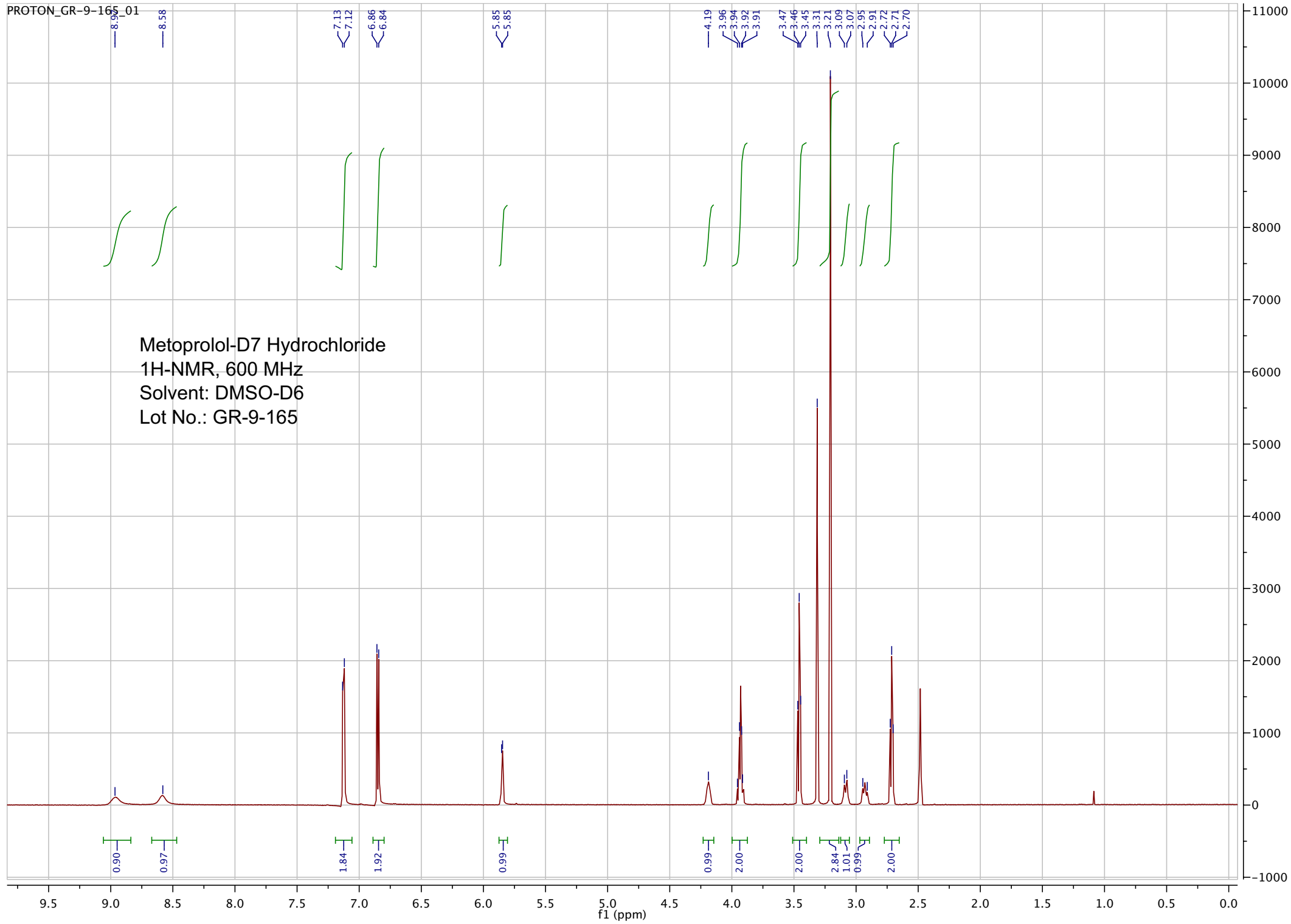
Approved by:

Date: 01/26/2022



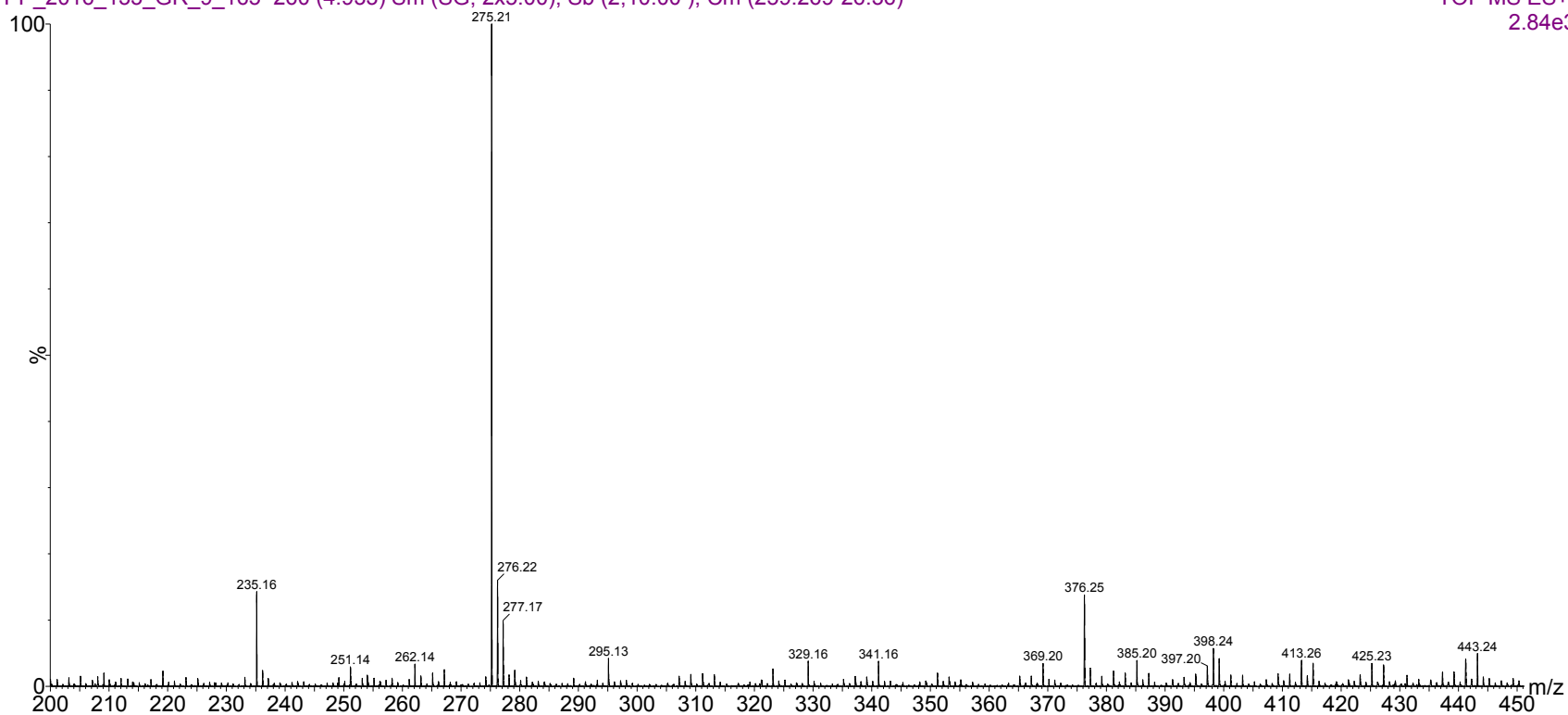
Viorica Rusu, QC/QA Manager

Metoprolol-D7 Hydrochloride
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-9-165



PP_2016_133_GR_9_165 260 (4.933) Sm (SG, 2x5.00); Sb (2,10.00); Cm (259:269-26:36)

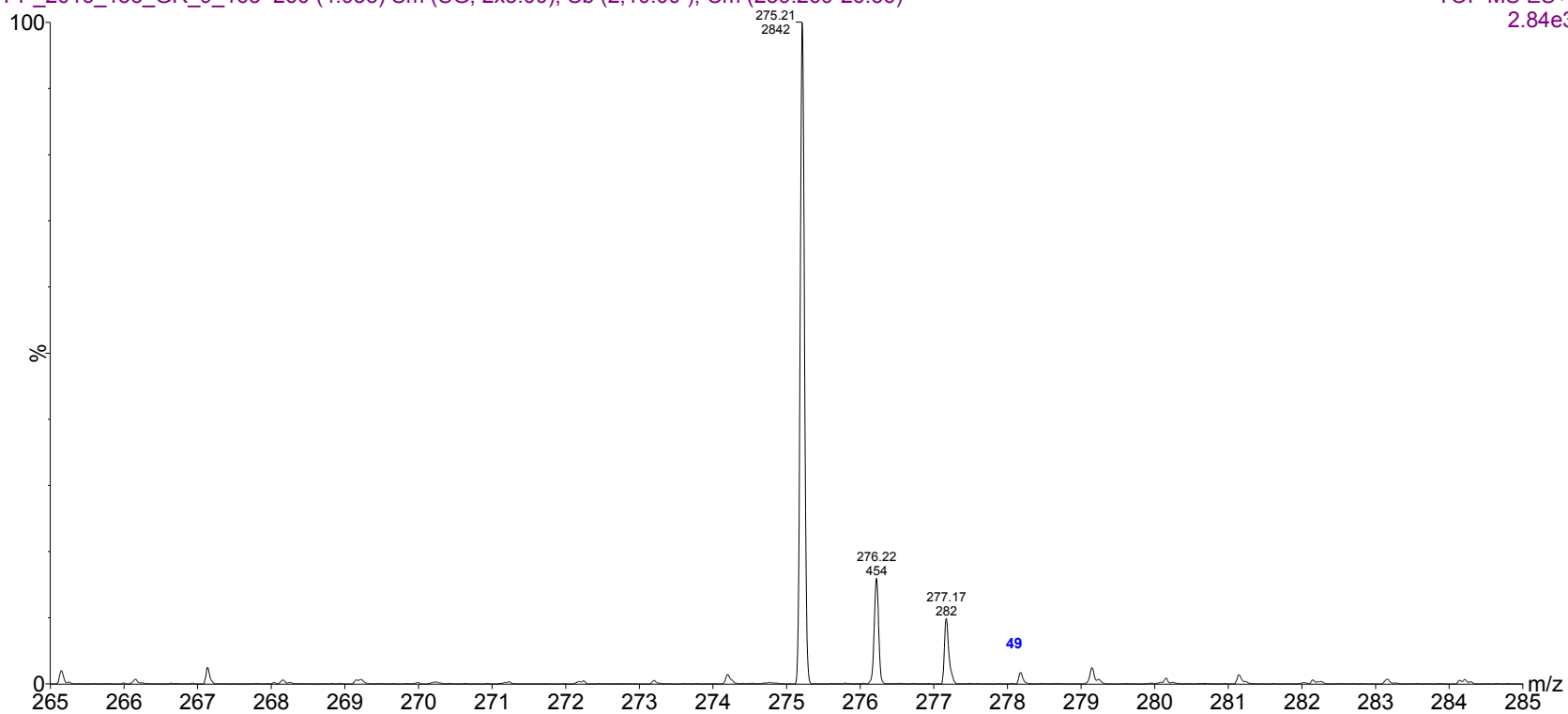
TOF MS ES+
2.84e3



ESI-MS spectrum for sample GR-9-165. Shows monoisotopic $[M+H]^+$ mass.

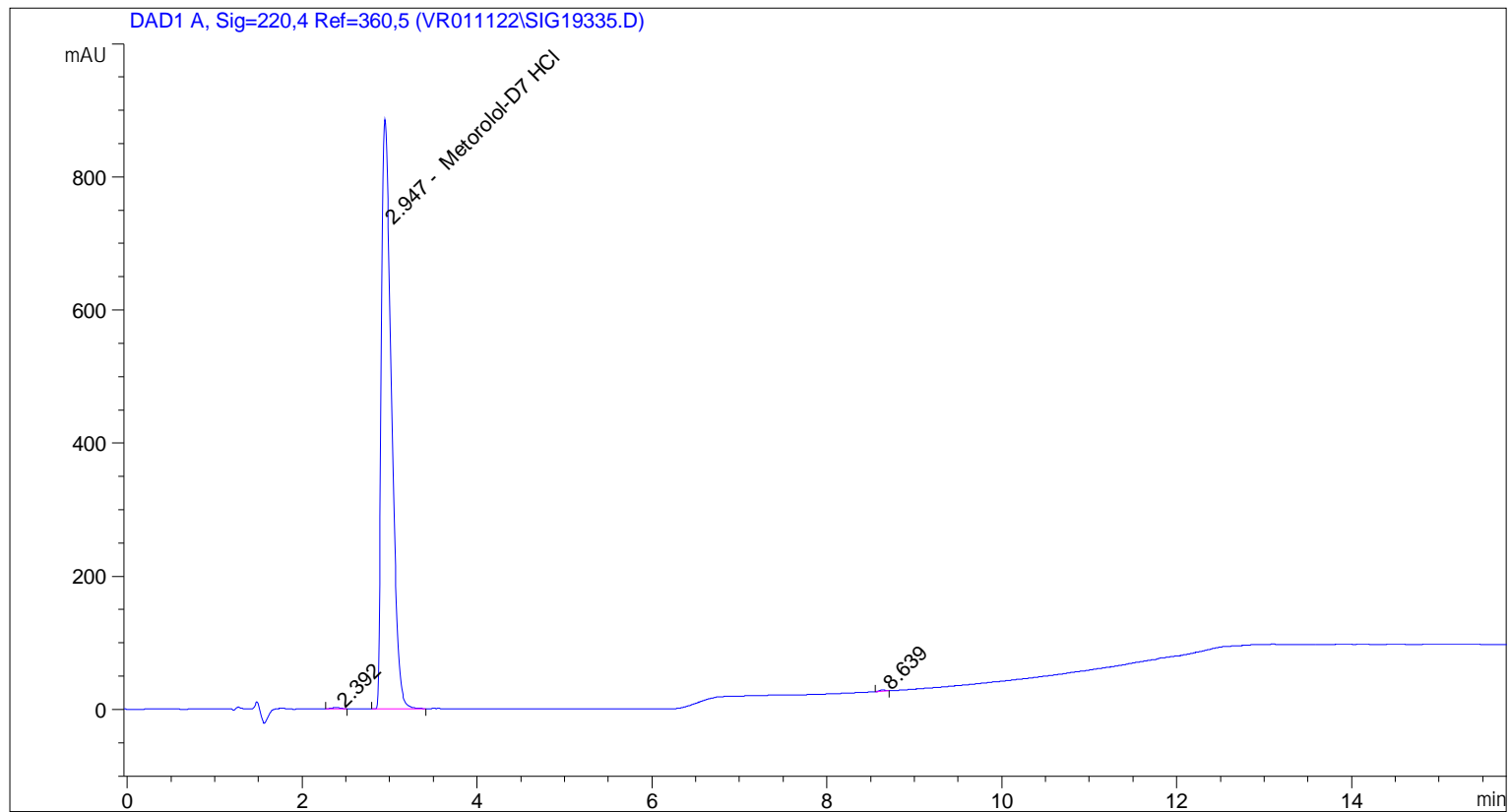
PP_2016_133_GR_9_165 260 (4.933) Sm (SG, 2x5.00); Sb (2,10.00); Cm (259:269-26:36)

TOF MS ES+
2.84e3



\Expansion of above with intensity labels.

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 41
Injection Date : 1/26/2022 9:19:23 AM Inj Volume : 7.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR012622_165.M
Last changed : 1/26/2022 9:18:17 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR012622_165PM.M
Last changed : 1/26/2022 10:15:37 AM by vrusu



=====
Area Percent Report
=====

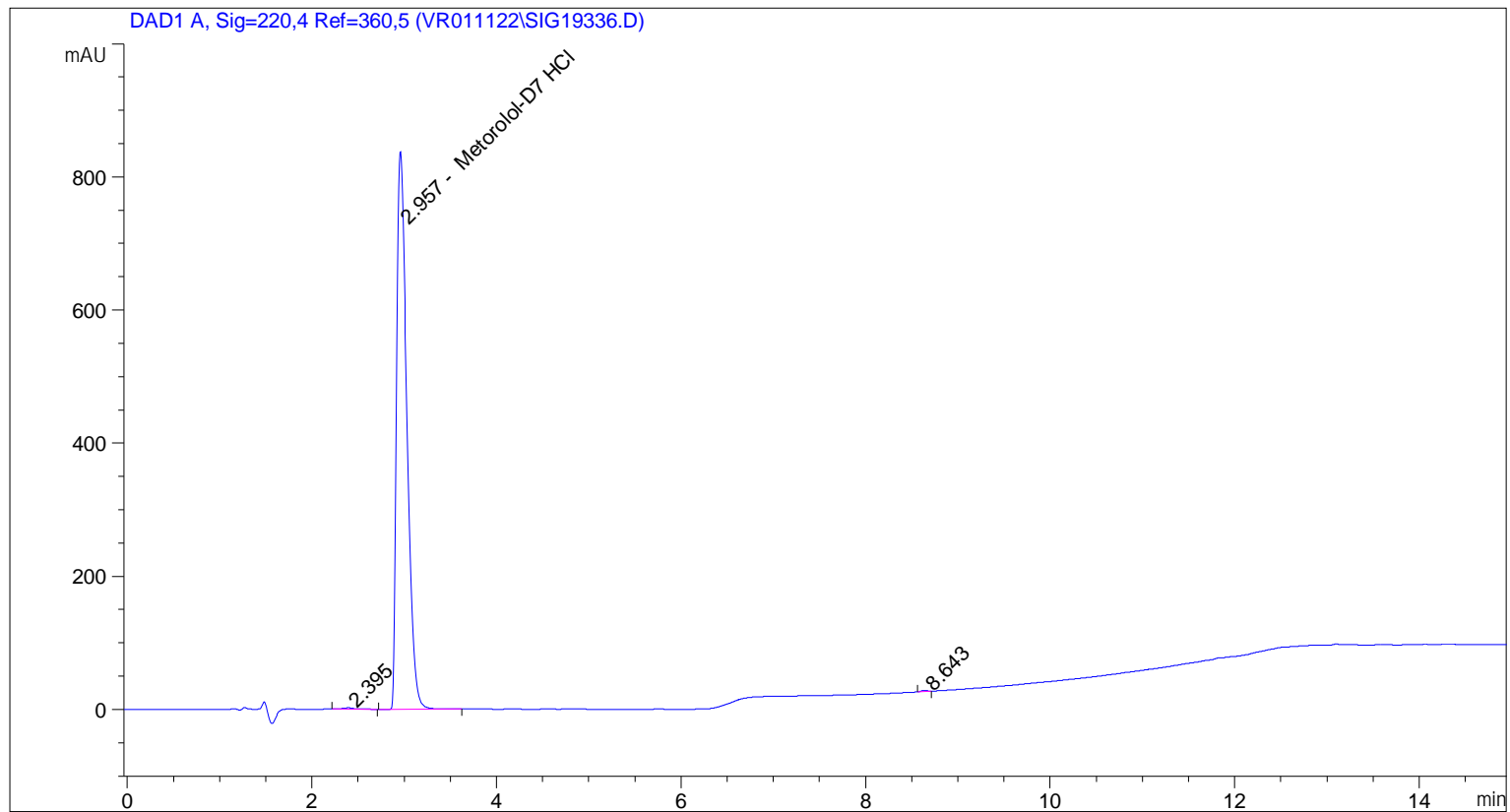
Sorted By : Signal
Calib. Data Modified : 1/26/2022 10:15:29 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.392	BB	0.0911	11.54874	0.1635	?
2	2.947	BB	0.1248	7041.94238	99.7188	Metorolol-D7 HCl
3	8.639	BB	0.0768	8.31187	0.1177	?

Totals : 7061.80299

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 42
Injection Date : 1/26/2022 9:41:36 AM Inj Volume : 7.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR012622_165.M
Last changed : 1/26/2022 9:40:38 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR012622_165PM.M
Last changed : 1/26/2022 10:15:37 AM by vrusu



=====
Area Percent Report
=====

Sorted By : Signal
Calib. Data Modified : 1/26/2022 10:15:29 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.395	BB	0.1166	15.33031	0.2320	?
2	2.957	BB	0.1236	6584.75684	99.6574	Metorolol-D7 HCl
3	8.643	BB	0.0764	7.30446	0.1105	?

Totals : 6607.39161