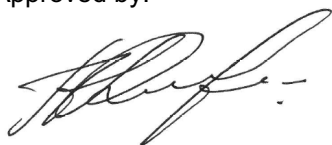


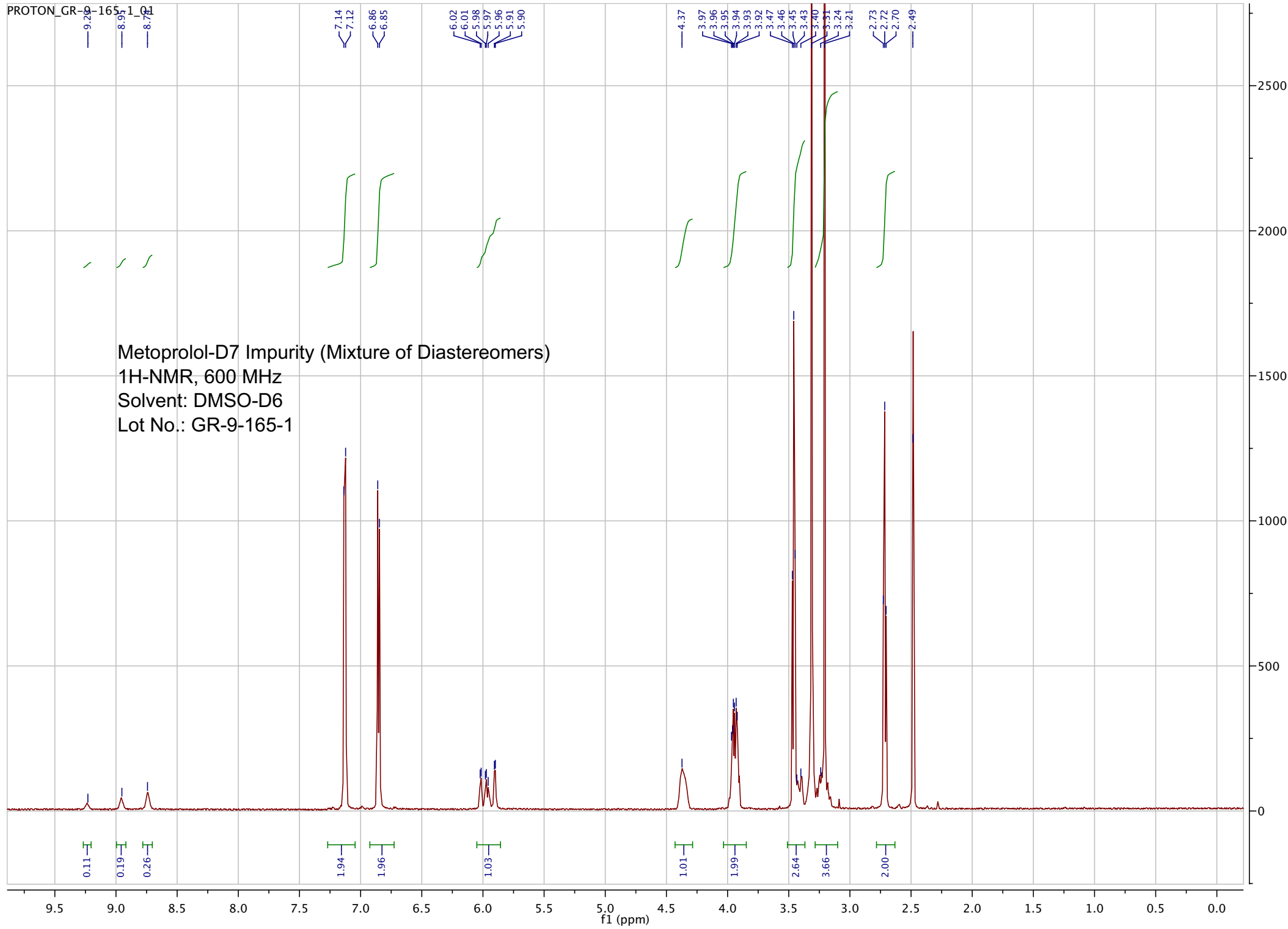
Name:	Metoprolol EP Impurity O-D7 Hydrochloride
Lot#:	GR-9-165-1
Test Date:	02/13/2022 (re-test date: 02/13/2027)
CAS No.:	154784-36-8 (<i>unlabeled</i>)
MF:	C ₂₇ H ₃₅ D ₇ ClNO ₆
MW:	519.13
Appearance:	White solid
Purity:	99.6% by HPLC (average of two sample preparations); 99.5% atom D
NMR (¹H):	Conforms
MS-ESI (+)	Conforms (shows peak at m/z = 483.36 [M _(free base) +H] ⁺)
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

Date: 02/13/2022



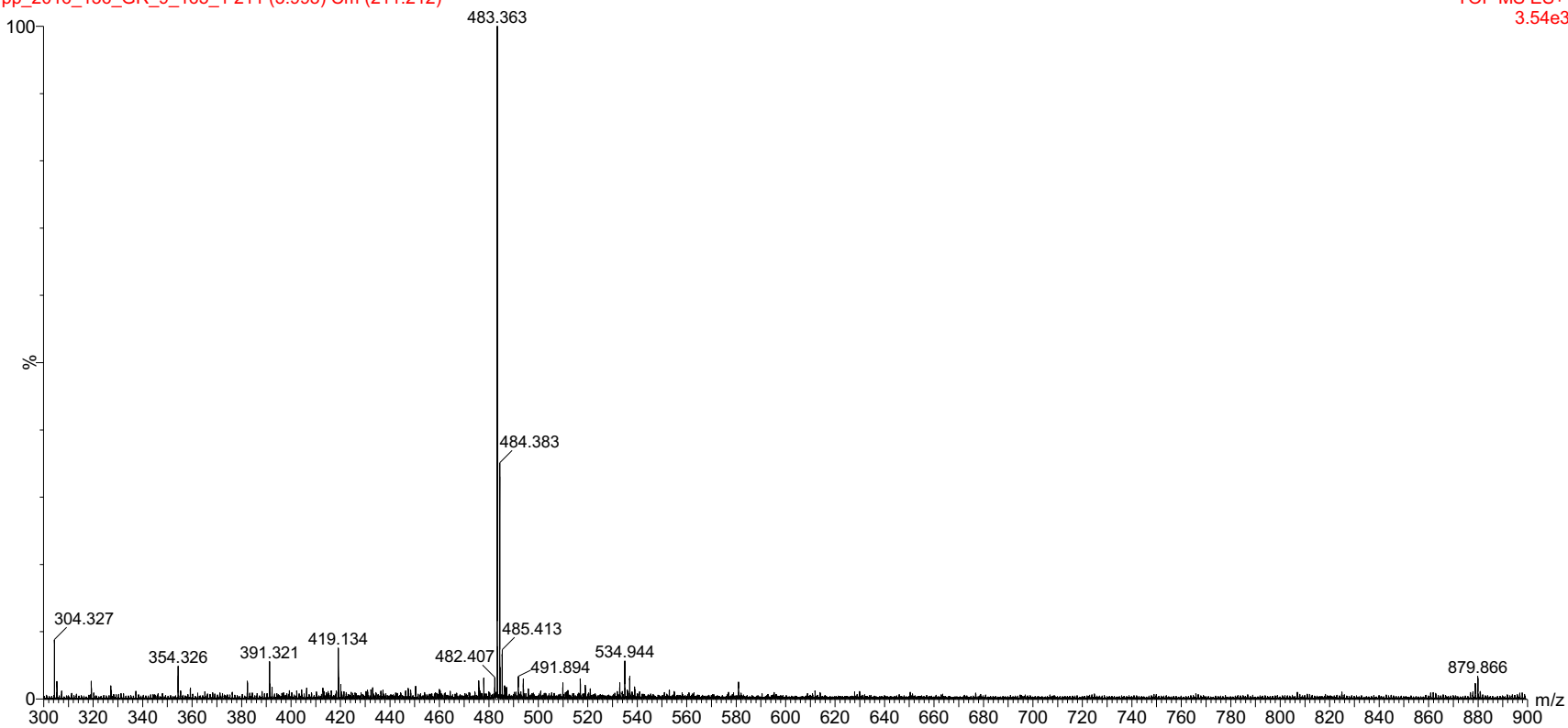
Viorica Rusu, QC/QA Manager



pp_2016_136_GR_9_165_1 211 (3.993) Cm (211:212)

9.0000000

TOF MS ES+
3.54e3

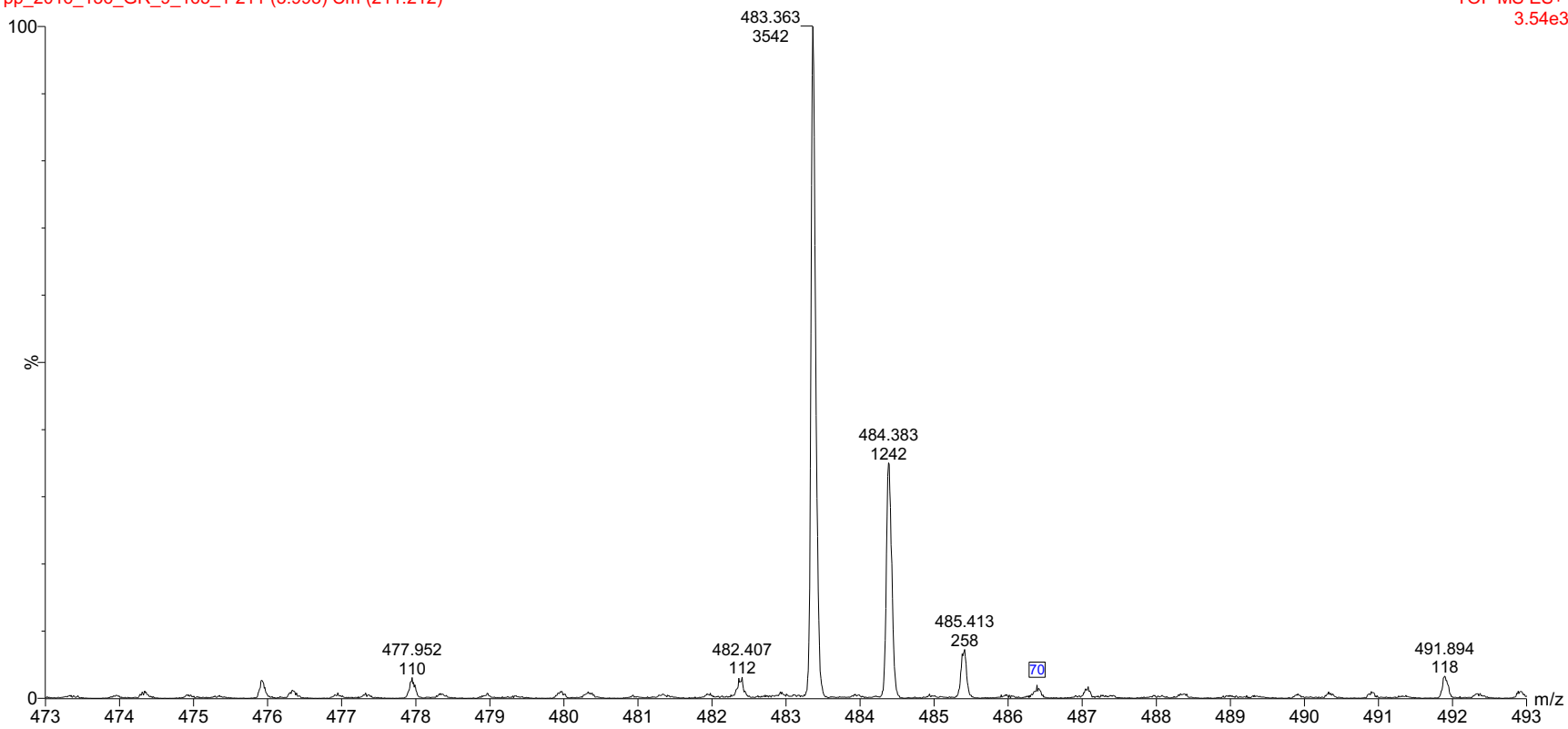


Raw ESI-MS spectrum for sample GR-9-165-1. Shows monoisotopic [M+H]⁺ mass

pp_2016_136_GR_9_165_1 211 (3.993) Cm (211:212)

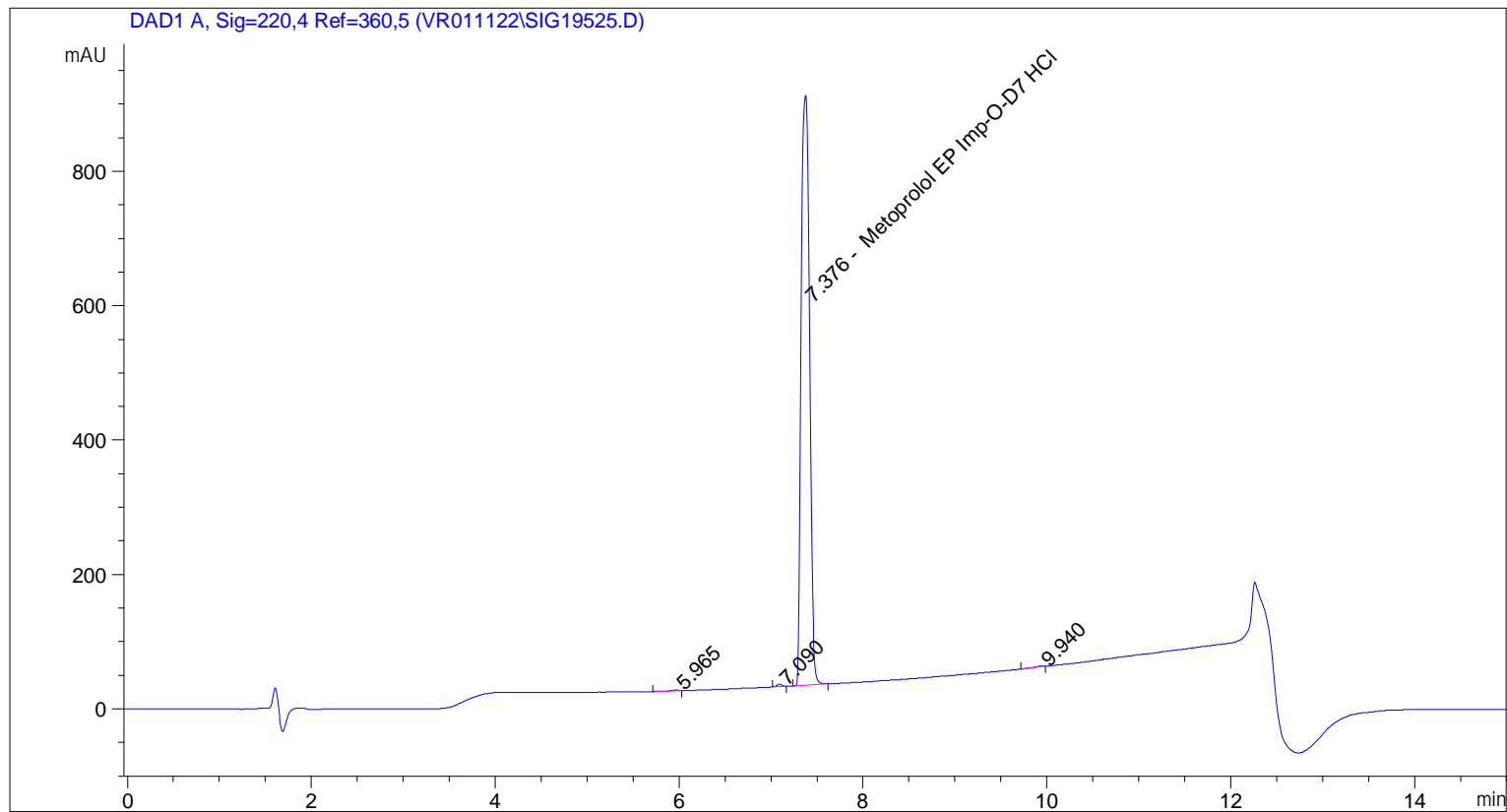
9.0000000

TOF MS ES+
3.54e3



Expansion of above showing intensity labels.

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 14
Injection Date : 2/13/2022 8:04:09 AM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR021322_165_1.M
Last changed : 2/13/2022 8:03:18 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021322_165PM.M
Last changed : 2/13/2022 9:23:13 AM by vrusu



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

Sorted By : Signal
Calib. Data Modified : 2/13/2022 9:21:44 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

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

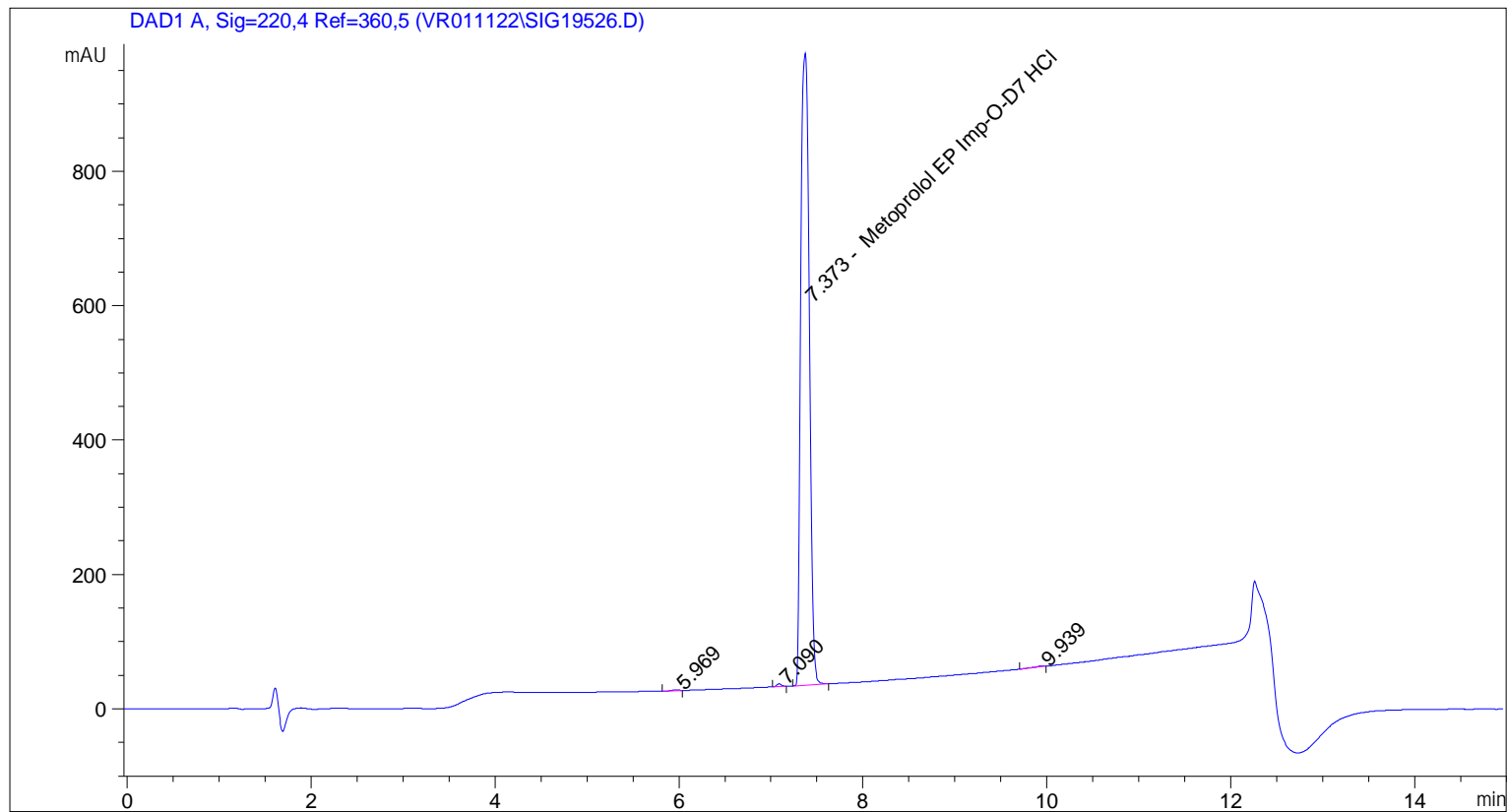
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	5.965	BB	0.0882	5.79896	0.1052	?
2	7.090	BB	0.0546	13.15275	0.2386	?
3	7.376	BB	0.1009	5488.99951	99.5631	Metoprolol EP Imp-O-D7 HCl
4	9.940	BB	0.0697	5.13673	0.0932	?

Totals : 5513.08795

=====

*** End of Report ***

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 15
Injection Date : 2/13/2022 8:20:58 AM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR021322_165_1.M
Last changed : 2/13/2022 8:20:08 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021322_165PM.M
Last changed : 2/13/2022 9:23:13 AM by vrusu



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

Sorted By : Signal
Calib. Data Modified : 2/13/2022 9:21:44 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	5.969	BB	0.0756	5.56605	0.0930	?
2	7.090	BB	0.0546	14.17611	0.2367	?
3	7.373	BB	0.1040	5960.64453	99.5446	Metoprolol EP Imp-O-D7 HCl
4	9.939	BB	0.0825	7.52511	0.1257	?

Totals : 5987.91180

=====

*** End of Report ***