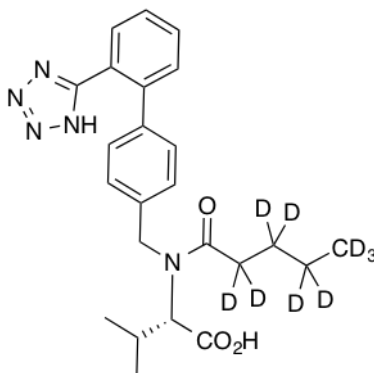




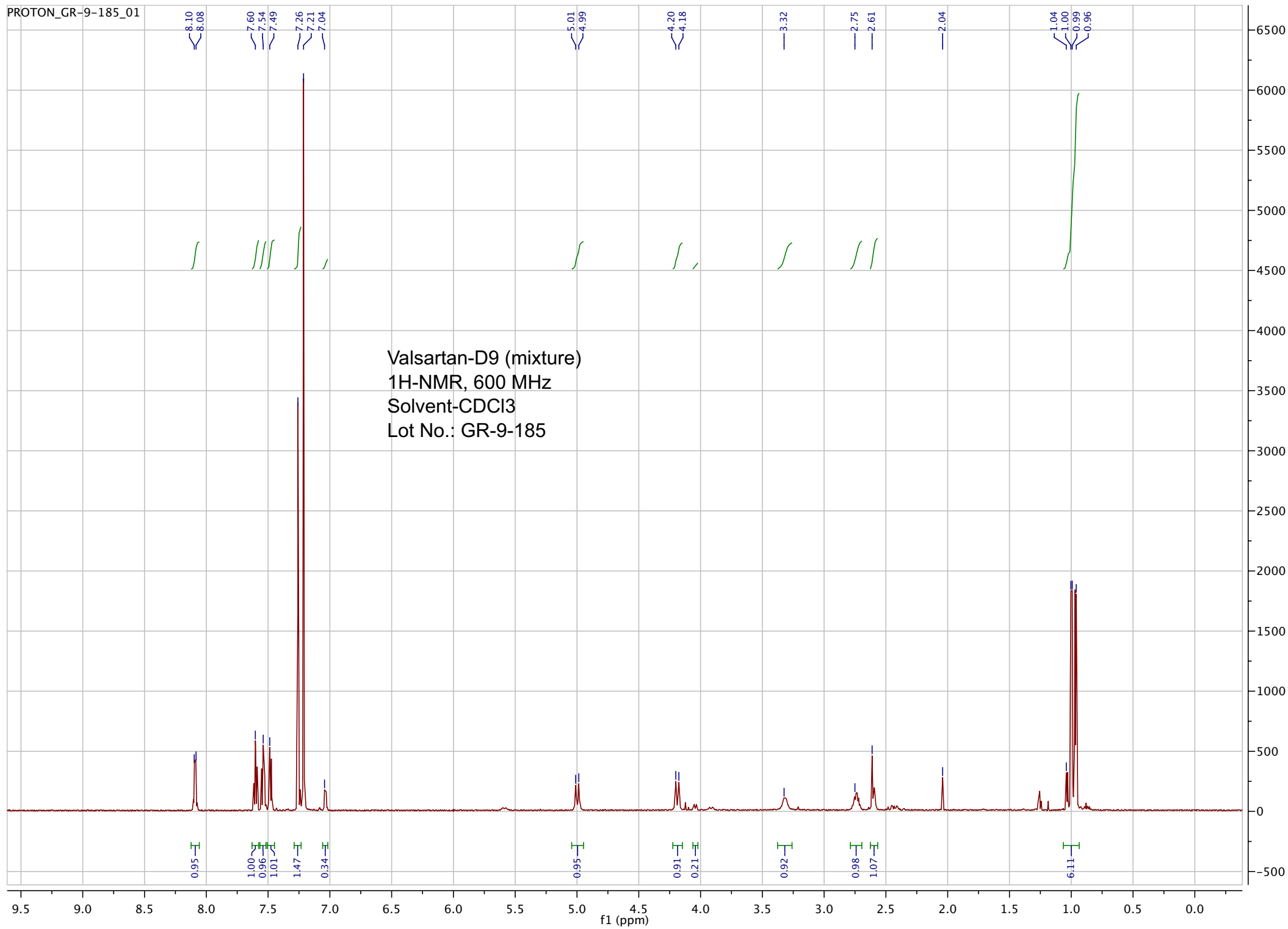
Name:	Valsartan-D9 (mixture of D7, D8, D9 forms)
Lot#:	GR-9-185
Test Date:	02/13/2022 (re-test date: 02/13/2027)
CAS No.:	1089736-73-1
MF:	C ₂₄ H ₂₀ D ₉ N ₅ O ₃
MW:	444.57
Appearance:	White solid
Purity:	99.6% by HPLC (average of two sample preparations), 98% atom D
¹H-NMR:	Conforms
MS-ESI (+)	Conforms (shows peaks at m/z = 467.27 [M+Na] ⁺ (D9-32%); 466.26 [M+Na] ⁺ (D8-41%), 465.26 [M+Na] ⁺ (D7-27%))
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

Date: 02/13/2022

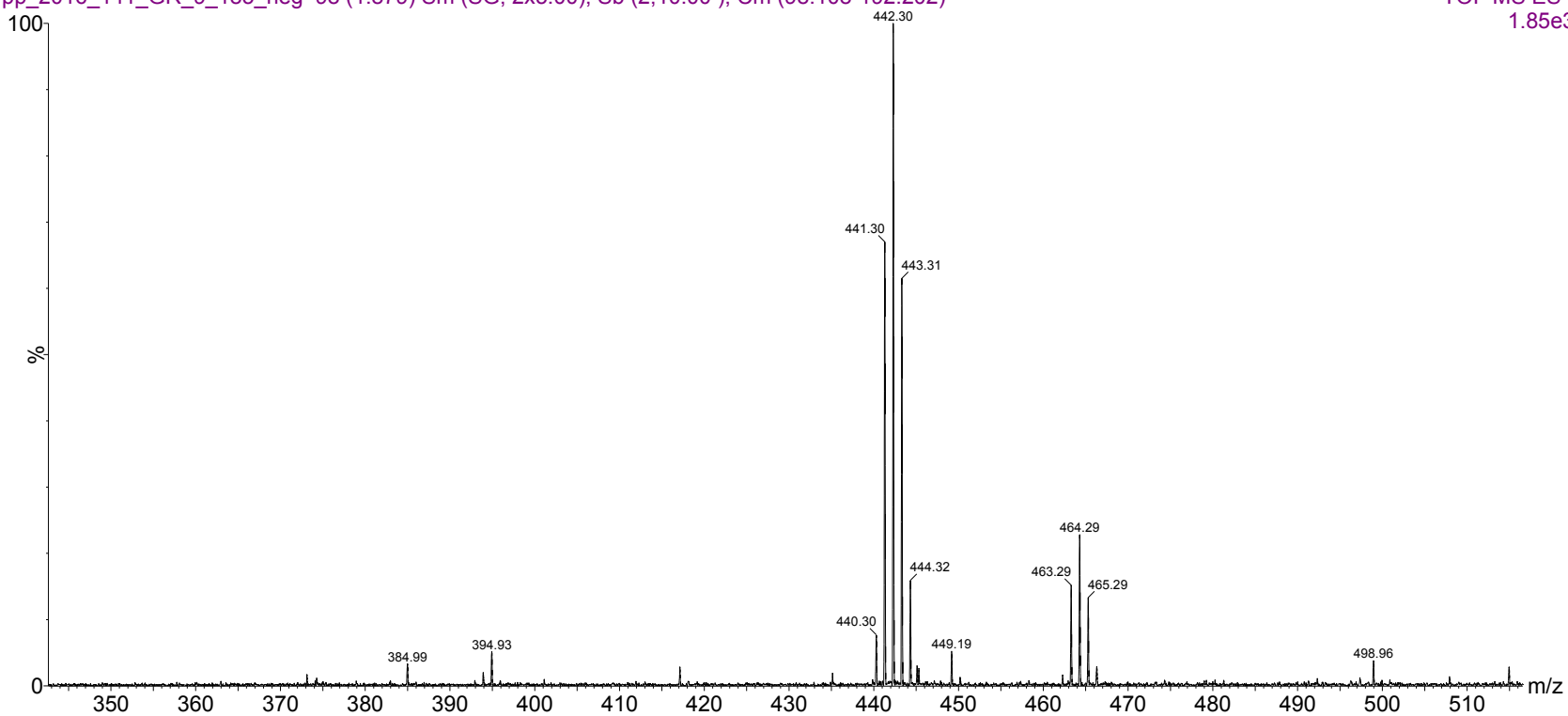
Viorica Rusu, QC/QA Manager

PROTON_GR-9-185_01



pp_2016_141_GR_9_185_neg 98 (1.879) Sm (SG, 2x5.00); Sb (2,10.00); Cm (98:108-192:202)

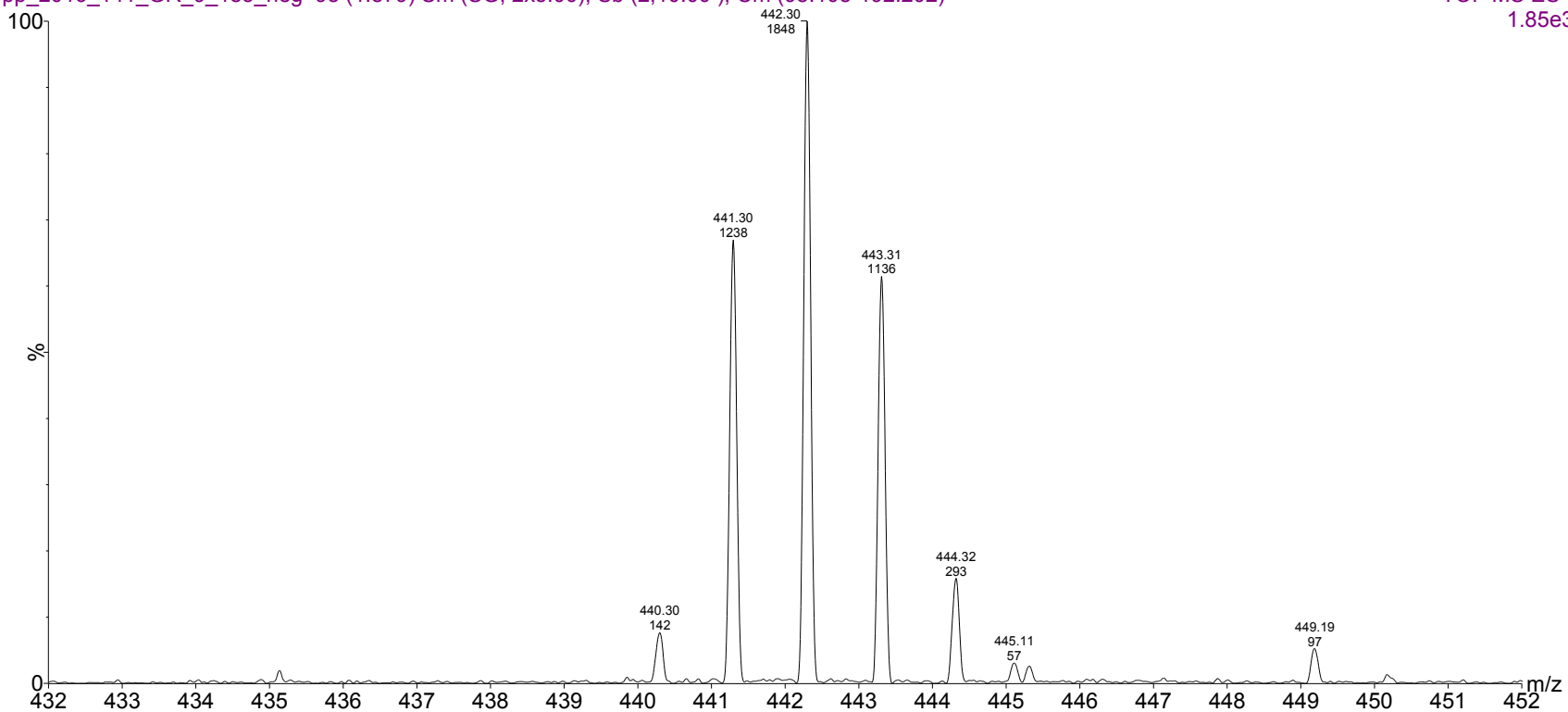
TOF MS ES-
1.85e3



ESI-MS spectrum for sample GR-9-185 negative ion mode. Shows monoisotopic [M-H]⁻ mass.

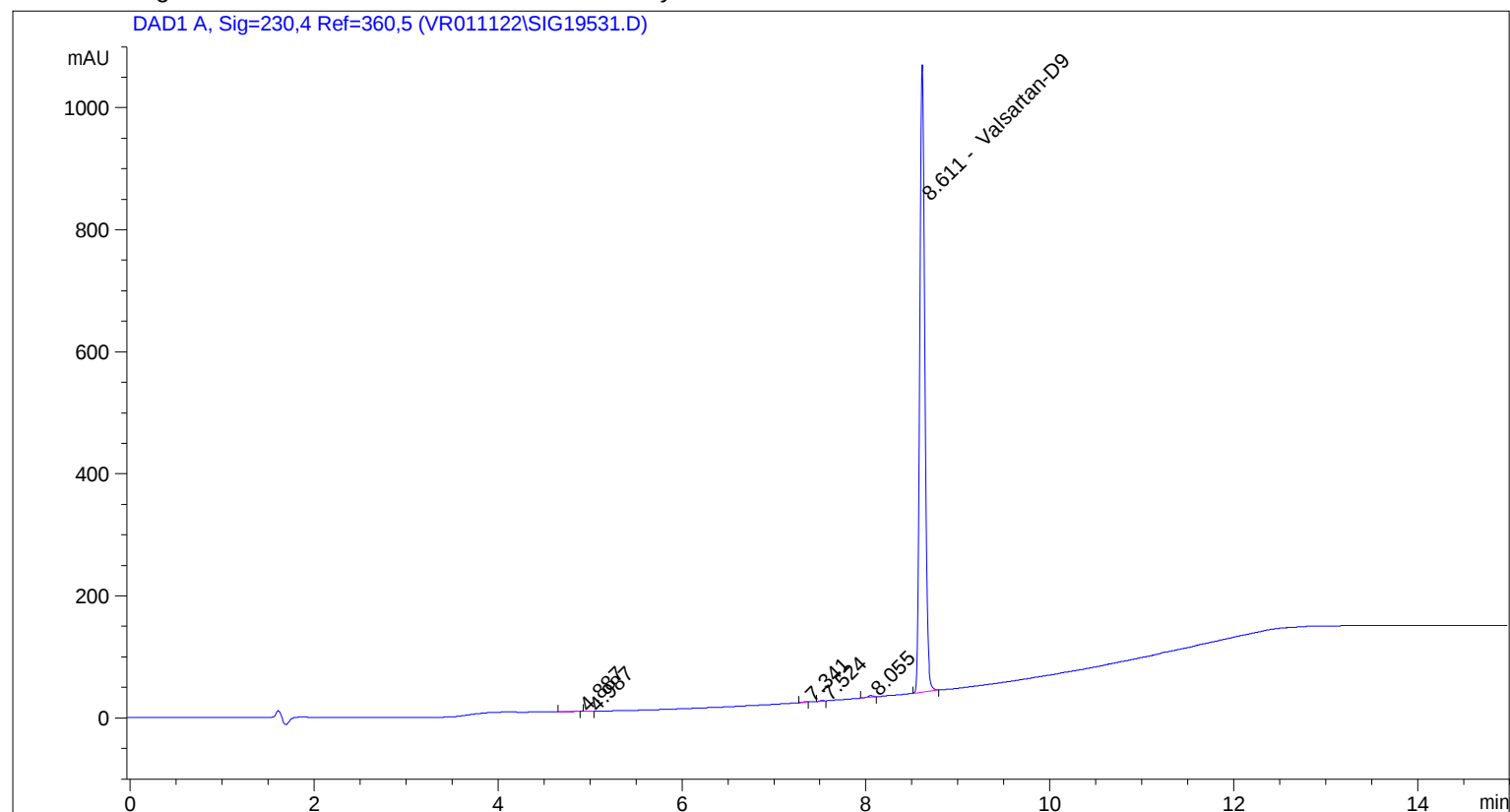
pp_2016_141_GR_9_185_neg 98 (1.879) Sm (SG, 2x5.00); Sb (2,10.00); Cm (98:108-192:202)

TOF MS ES-
1.85e3



Expansion of above.

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 16
Injection Date : 2/13/2022 9:40:15 AM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR021322_185.M
Last changed : 2/13/2022 9:36:32 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021322_185PM.M
Last changed : 2/13/2022 10:21:35 AM by vrusu



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

Sorted By : Signal
Calib. Data Modified : 2/13/2022 10:20:06 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=230,4 Ref=360,5

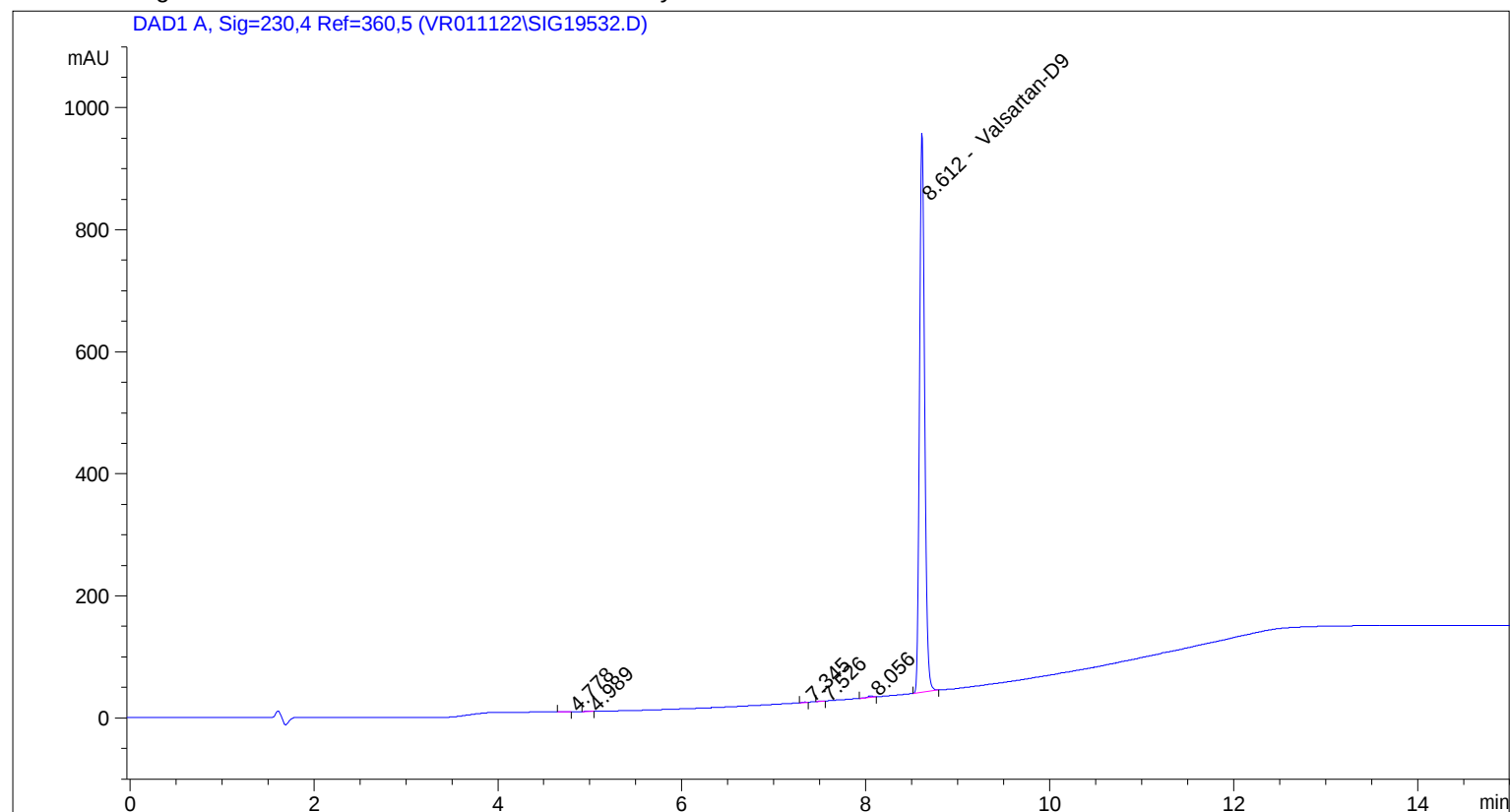
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	4.887	BB	1.8154	1.25817	0.0322	?
2	4.987	BB	0.0520	1.60934	0.0412	?
3	7.341	BB	0.0541	1.87880	0.0481	?
4	7.524	BB	0.0544	2.30315	0.0590	?
5	8.055	BB	0.0573	9.91973	0.2539	?
6	8.611	BB	0.0600	3889.33643	99.5656	Valsartan-D9

Totals : 3906.30561

Sample Name: GR-9-185

=====
*** End of Report ***

```
=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 17
Injection Date  : 2/13/2022 9:59:59 AM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR021322_185.M
Last changed    : 2/13/2022 9:59:11 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021322_185PM.M
Last changed    : 2/13/2022 10:21:35 AM by vrusu
=====
```



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

```
Sorted By           :      Signal
Calib. Data Modified :      2/13/2022 10:20:06 AM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: DAD1 A, Sig=230,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	4.778	BB	0.1184	4.77886e-1	0.0137	?
2	4.989	BB	0.0536	1.25889	0.0362	?
3	7.345	BB	0.0575	1.72755	0.0497	?
4	7.526	BB	0.0525	1.98282	0.0570	?
5	8.056	BB	0.0589	8.60819	0.2475	?
6	8.612	BB	0.0579	3464.61841	99.5960	Valsartan-D9

Totals : 3478.67374

Sample Name: GR-9-185 spl-2

=====
*** End of Report ***