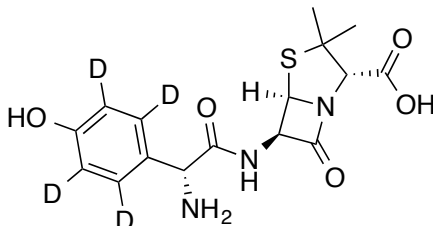


Certificate of Analysis



Name:	Amoxicillin-D4 (major)
Lot#:	GR-6-133
Test Date:	08/07/2024 (re-test date: 08/07/2029)
CAS No.:	26787-78-0 (unlabelled)
MF:	C ₁₆ H ₁₅ D ₄ N ₃ O ₃ S
MW:	369.43
Appearance:	White Solid
Purity:	99.4% by HPLC (average of two sample preparations); >98% atom D
¹H-NMR:	Conforms (contains ~33% D5 compound; shows a trace of DCM and Pivalic acid)
MS-ESI (-)	Conforms (shows peak at m/z = 368.1 [M-H] ⁻ for D4 and 369.11 [M-H] ⁻ for D5 compound; no non-deuterated compound can be detected)
Storage	Store at -18°C in a dry place away from direct sunlight

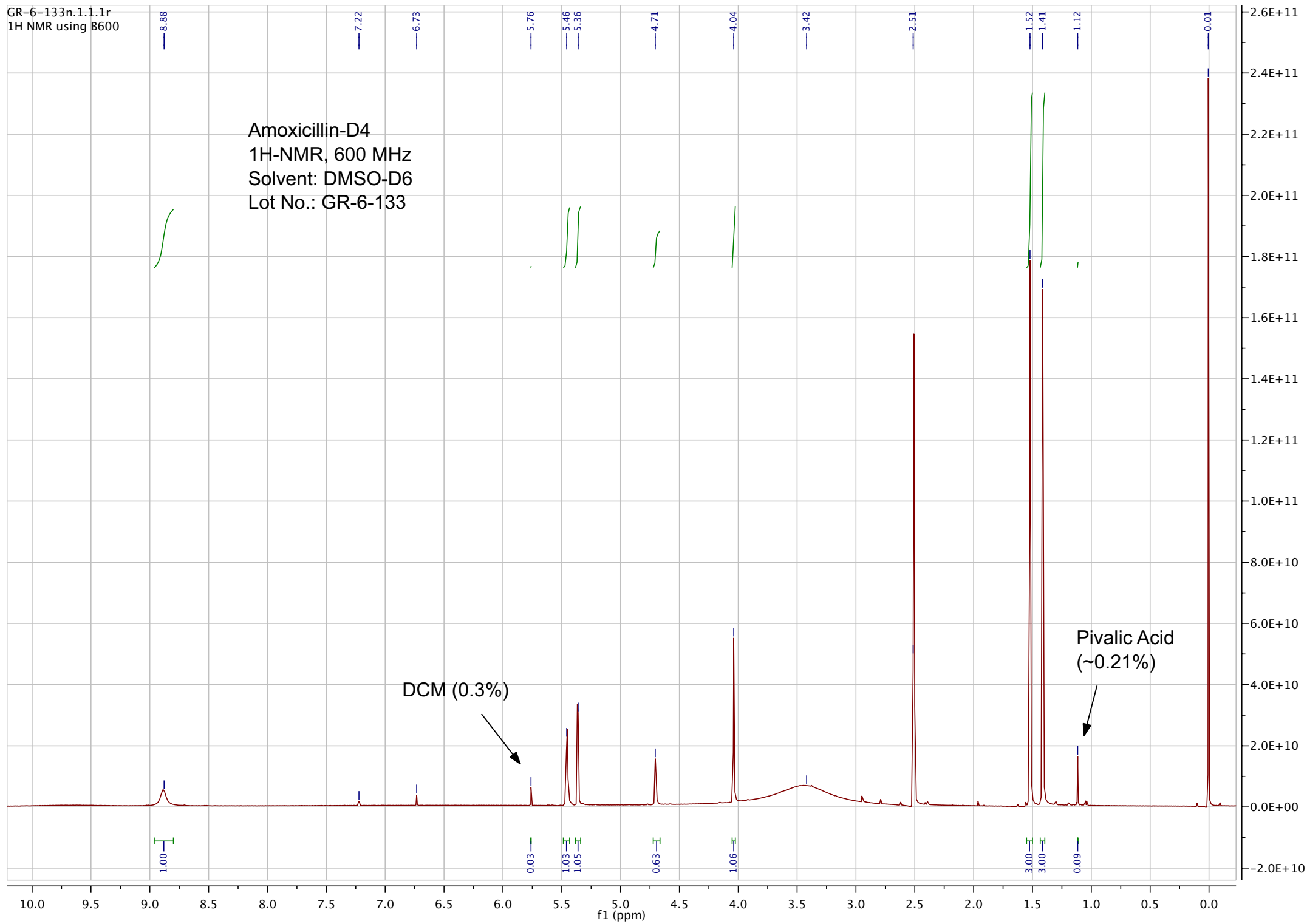
Approved by:

Date: 08/07/2024



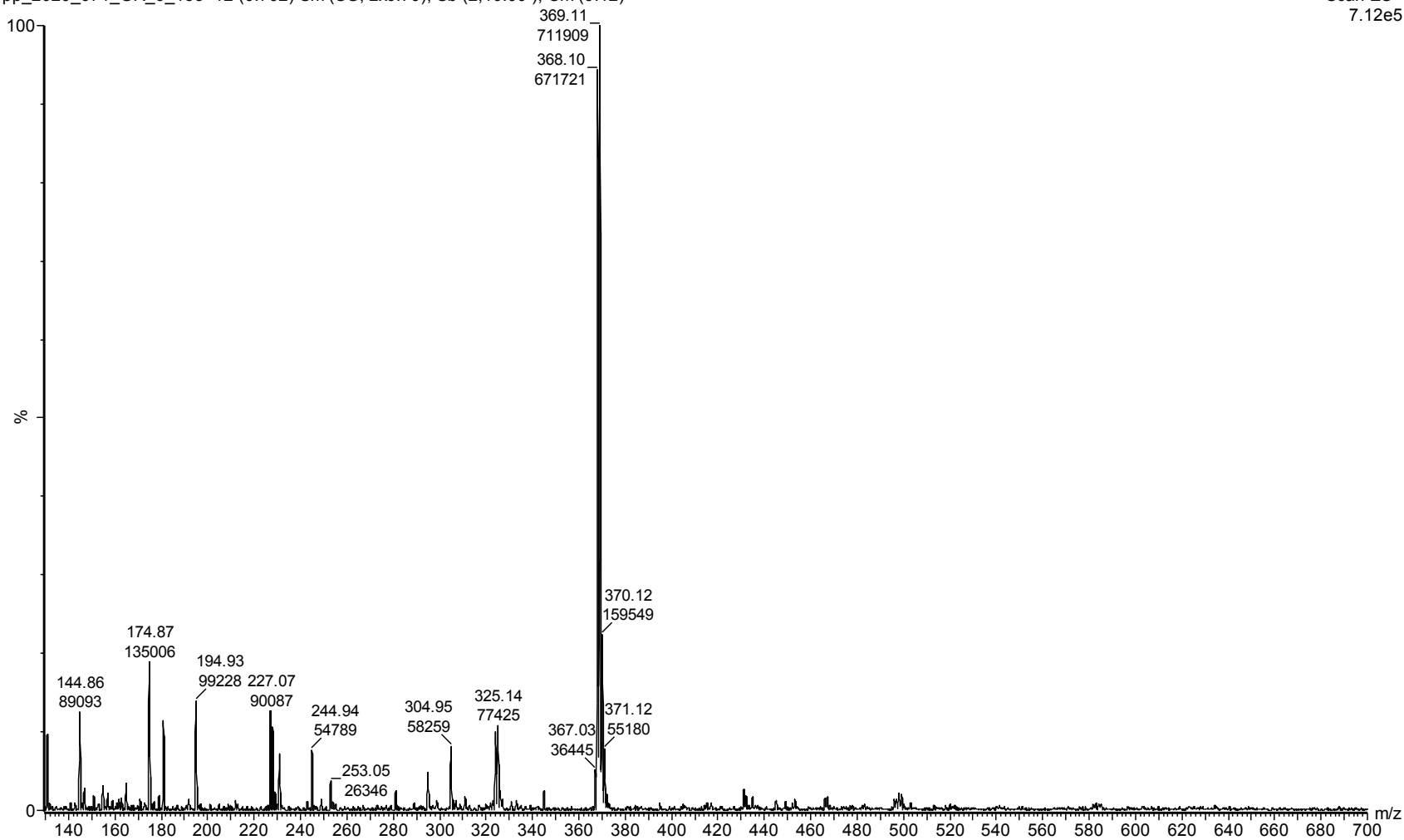
Viorica Rusu, QC/QA Manager

GR-6-133n.1.1.1r
1H NMR using B600



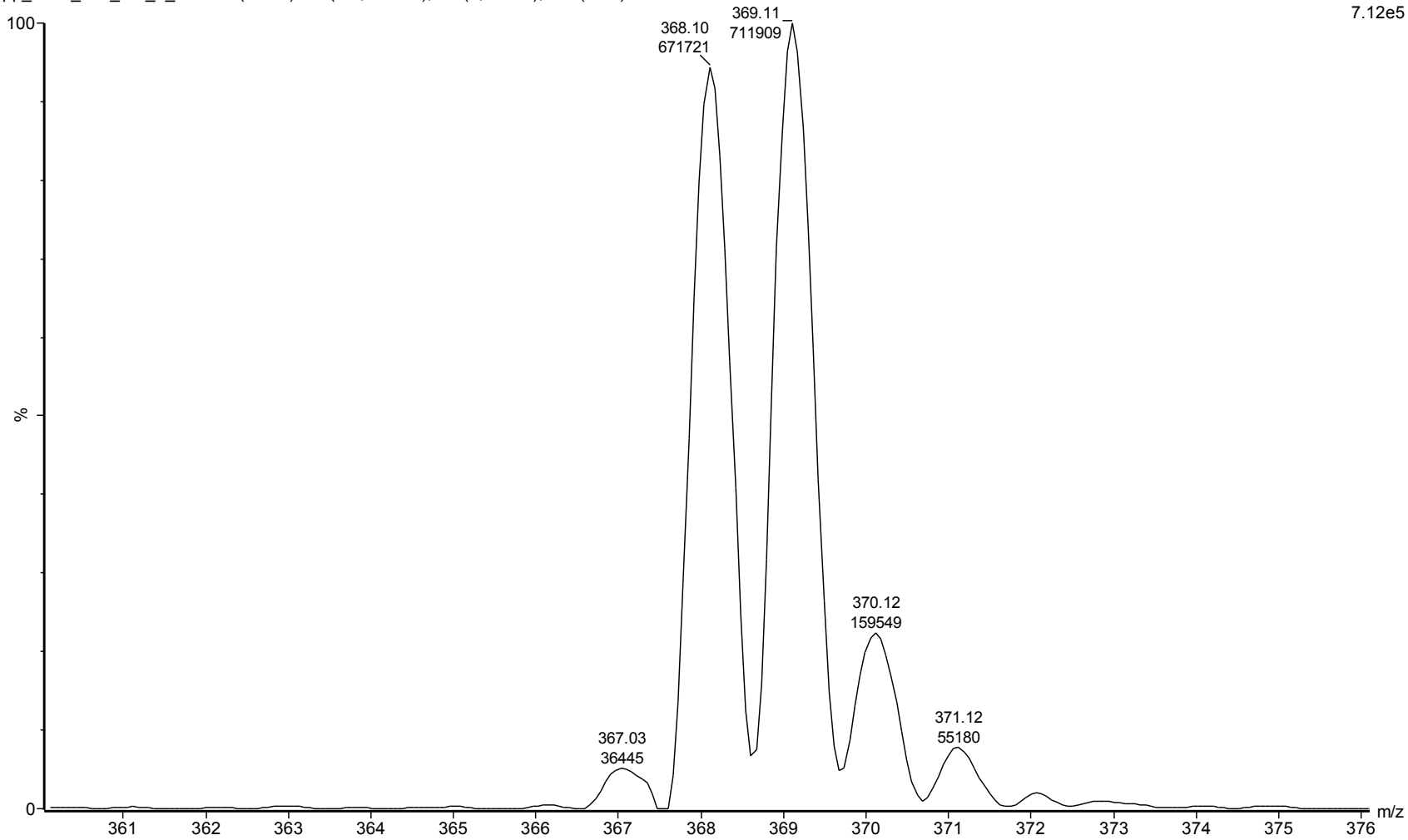
pp_2020_071_GR_6_133 12 (0.702) Sm (SG, 2x0.70); Sb (2,10.00); Cm (9:12)

Scan ES-
7.12e5



pp_2020_071_GR_6_133 12 (0.702) Sm (SG, 2x0.70); Sb (2,10.00); Cm (9:12)

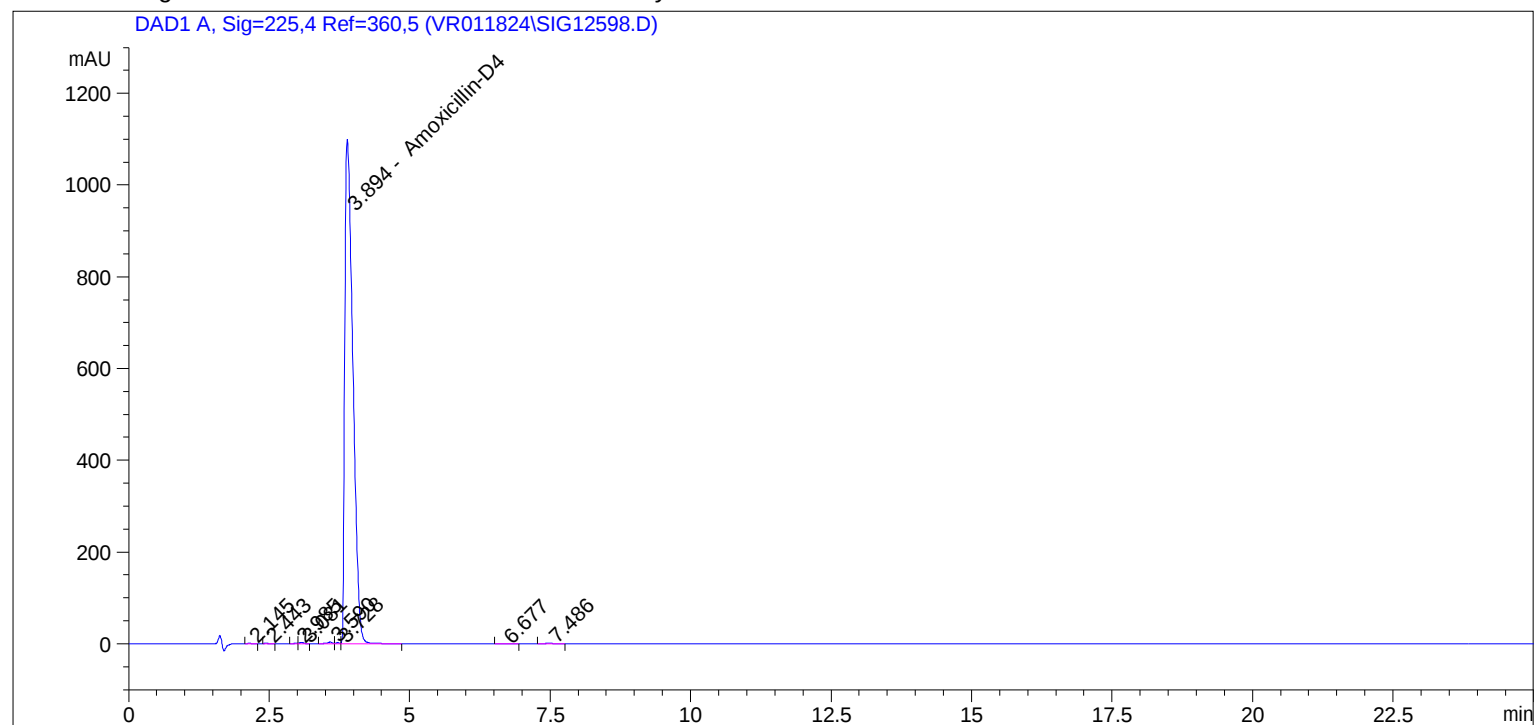
Scan ES-
7.12e5



Expansion of above showing intensity on peak annotation in the range of 360 – 376 Da.

Sample Name: GR-6-133

```
=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 3
Injection Date  : 8/7/2024 10:33:08 AM
                                           Inj Volume : 10.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR080724_133.M
Last changed    : 8/7/2024 10:31:56 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR080724_133PM.M
Last changed    : 8/7/2024 12:05:19 PM by vrusu
=====
```



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

```
Sorted By           :      Signal
Calib. Data Modified :      8/7/2024 12:04:56 PM
Multiplier:         :      1.603e3
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: DAD1 A, Sig=225,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.145	BB	0.0769	4.34494	0.0394	?
2	2.443	VB	0.0677	4.26924	0.0387	?
3	2.985	BV	0.0651	4.63558	0.0420	?
4	3.081	VB	0.0773	12.88399	0.1169	?
5	3.590	BV	0.0883	21.56749	0.1956	?
6	3.728	VV	0.0806	9.96286	0.0904	?
7	3.894	VB	0.1581	1.09544e4	99.3577	Amoxicillin-D4
8	6.677	BB	0.1365	3.90205	0.0354	?
9	7.486	BB	0.1529	9.25236	0.0839	?

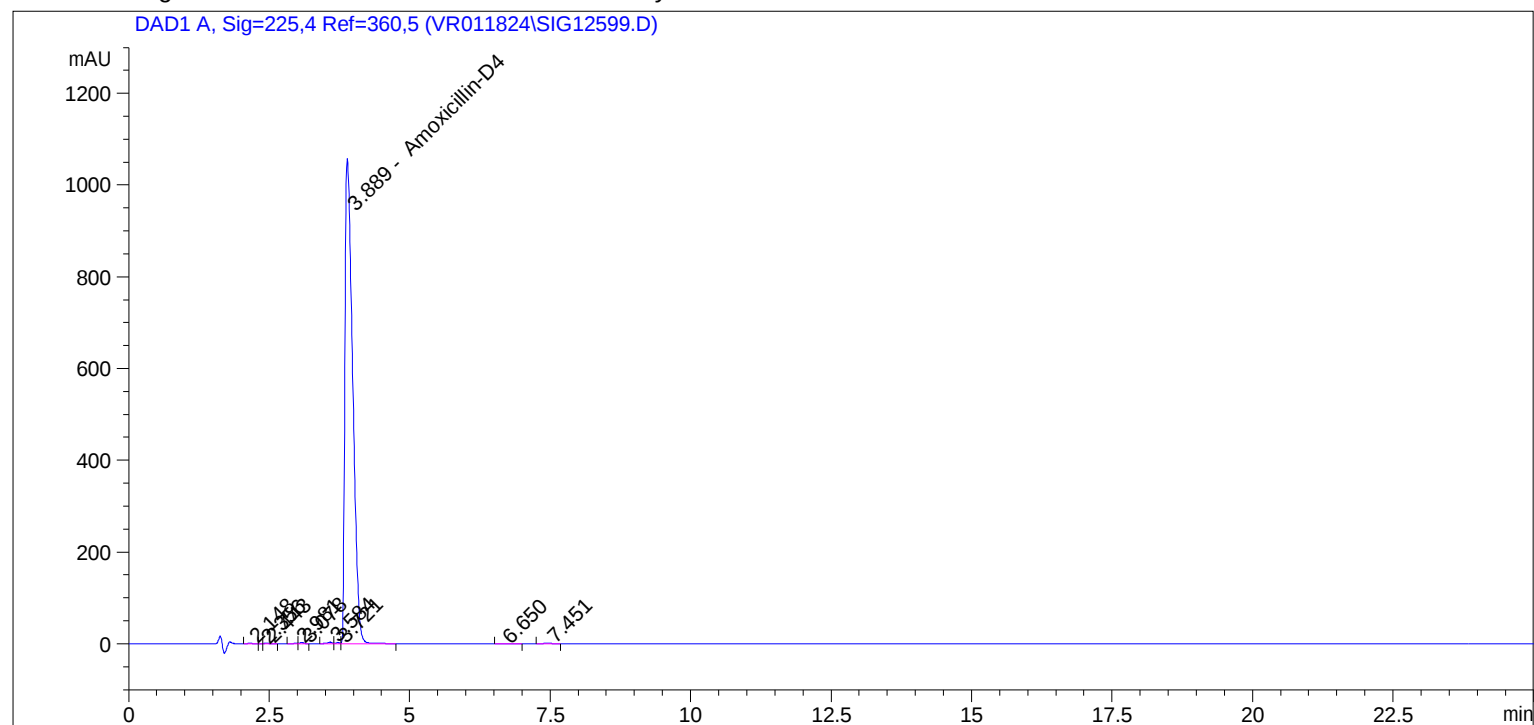
Totals : 1.10252e4

Sample Name: GR-6-133

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

Sample Name: GR-6-133 spl-2

```
=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 4
Injection Date  : 8/7/2024 11:01:05 AM
                                           Inj Volume : 10.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR080724_133.M
Last changed    : 8/7/2024 10:59:55 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR080724_133PM.M
Last changed    : 8/7/2024 12:05:19 PM by vrusu
=====
```



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

```
Sorted By           :      Signal
Calib. Data Modified :      8/7/2024 12:04:56 PM
Multiplier:         :      1.603e3
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: DAD1 A, Sig=225,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.148	BV	0.0841	5.56792	0.0543	?
2	2.356	VV	0.0547	1.23914	0.0121	?
3	2.443	VB	0.0806	5.37632	0.0524	?
4	2.981	BV	0.0658	4.54976	0.0443	?
5	3.078	VB	0.0728	11.04815	0.1077	?
6	3.584	BV	0.0885	19.86444	0.1936	?
7	3.721	VV	0.0780	10.14077	0.0988	?
8	3.889	VB	0.1524	1.01921e4	99.3161	Amoxicillin-D4
9	6.650	BB	0.1489	3.45621	0.0337	?
10	7.451	BV	0.1402	8.93974	0.0871	?

Sample Name: GR-6-133 spl-2

Totals : 1.02622e4

=====

*** End of Report ***