


Name:	Nicardipine-D3 Hydrochloride
Lot#:	GR-19-023
Test Date:	12/06/2023 (re-test date: 12/06/2028)
CAS No.:	1432061-50-1
MF:	C ₂₆ H ₂₇ D ₃ ClN ₃ O ₆
MW:	519.00
Appearance:	Yellow Solid
Purity:	98.7% by HPLC (average of two sample preparations); 99.5% atom D
¹H-NMR:	Conforms (contains some ether)
MS-DART (+)	Conforms (shows peak at m/z = 483.2 [M _(free base) +H] ⁺)
Storage	Store at -18°C in a dry place away from direct sunlight

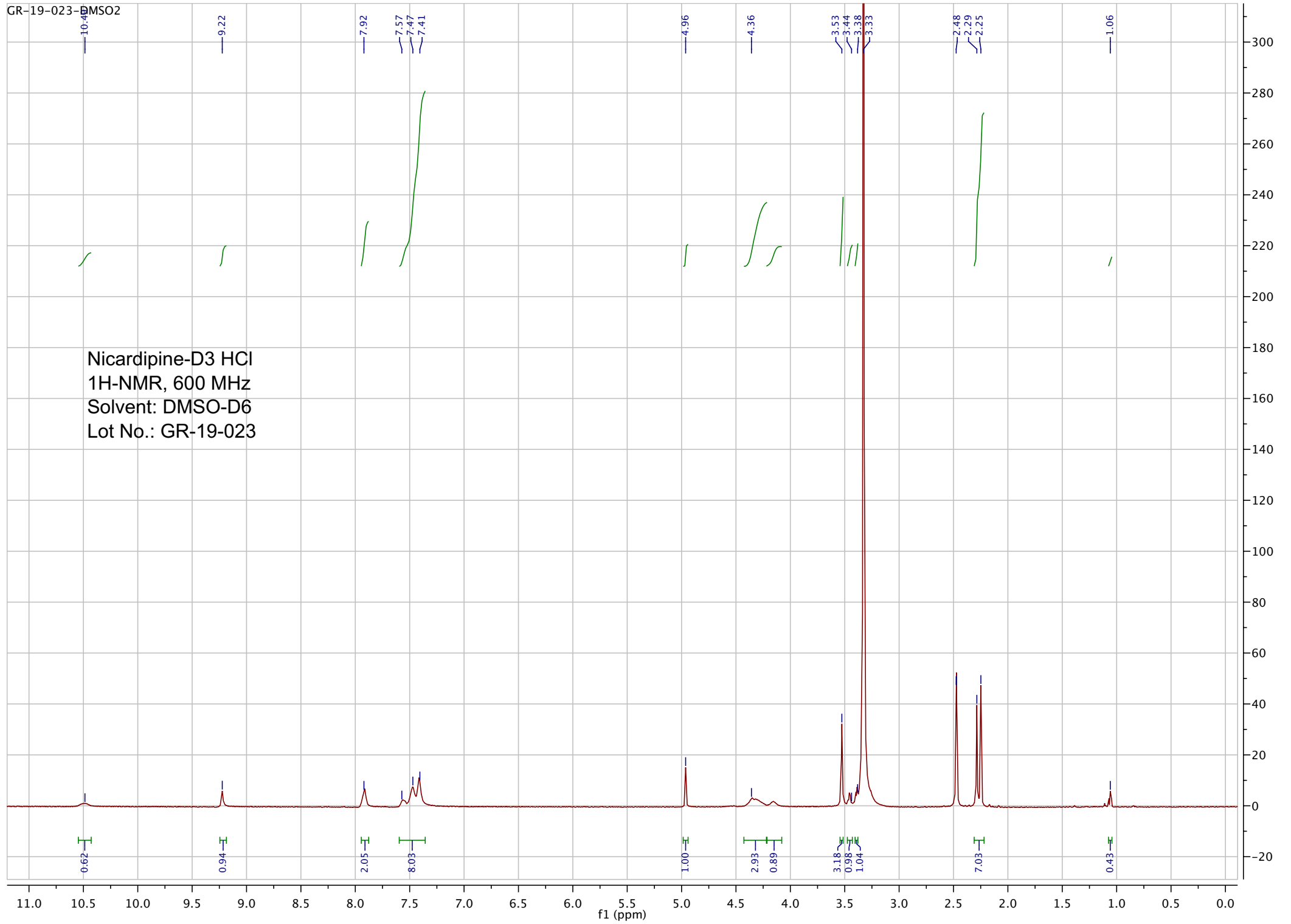
Approved by:

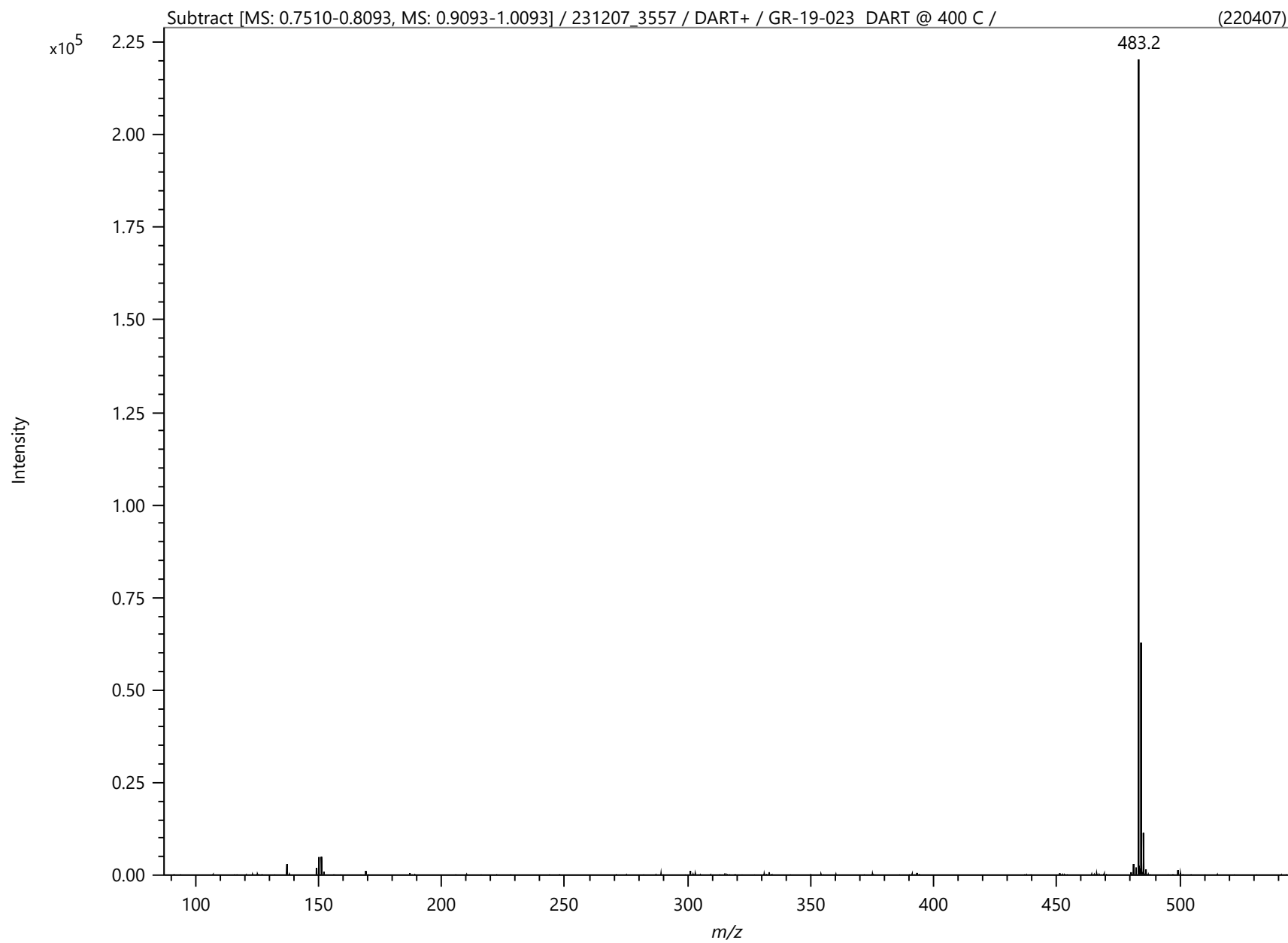
Date: 12/13/2023



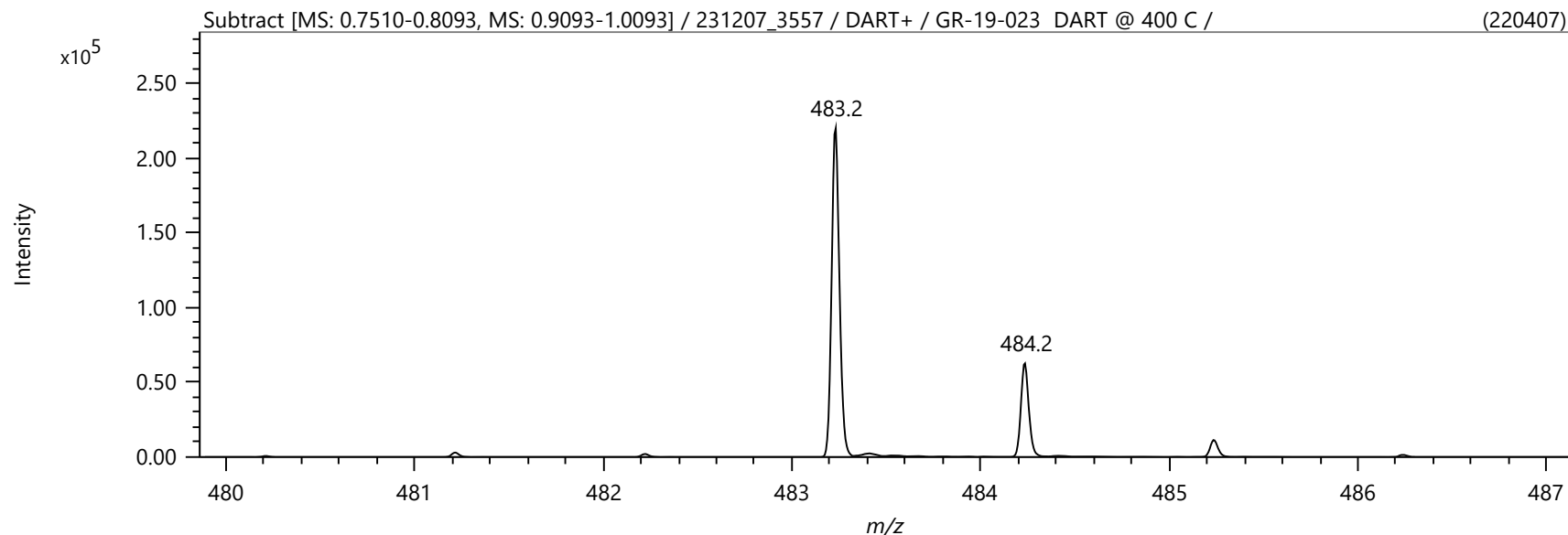
Viorica Rusu, QC/QA Manager

GR-19-023-DMSO2





Spectrum



Elemental Composition

Parameters

Tolerance: ±10.00 ppm
 Electron: Even
 Charge: +1
 DBE: -1.5 - 100.0

Elements Set 1:

Symbol	C	H	O	N	D
Min	0	0	0	0	3
Max	100	200	20	10	3

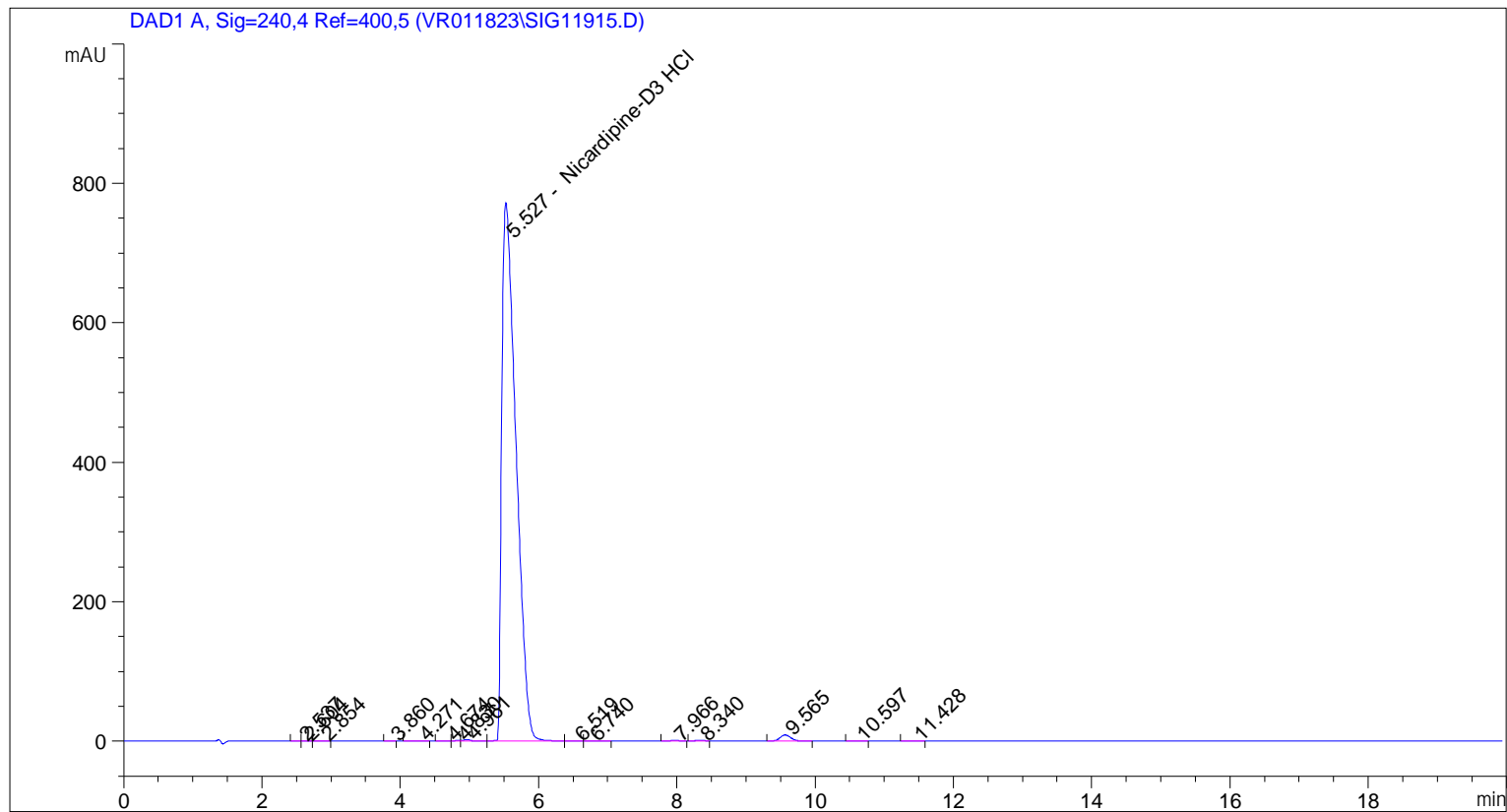
Results

Mass	Intensity	Formula	Calculated Mass	Mass Difference [mDa]	Mass Difference [ppm]	DBE
483.23239	220407.00	C26 H27 N3 O6 D3	483.23174	0.64	1.33	13.5
		C27 H23 N7 O2 D3	483.23308	-0.69	-1.44	18.5
		C14 H31 N5 O13 D3	483.23359	-1.21	-2.50	0.5
		C15 H27 N9 O9 D3	483.23493	-2.54	-5.27	5.5
		C22 H23 N9 O4 D3	483.22906	3.33	6.89	14.5
		C31 H27 N O4 D3	483.23577	-3.38	-6.99	17.5

Mass	Intensity	Formula	Calculated Mass	Mass Difference [mDa]	Mass Difference [ppm]	DBE
		C21 H27 N5 O8 D3	483.22772	4.67	9.66	9.5
		C32 H23 N5 D3	483.23710	-4.72	-9.76	22.5

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 2
Injection Date  : 12/6/2023 8:46:51 AM
                                           Inj Volume : 7.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR120623_023.M
Last changed    : 12/6/2023 8:45:57 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR120623_023PM.M
Last changed    : 12/6/2023 9:37:59 AM by vrusu
  
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 Area Percent Report
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Sorted By           :      Signal
Calib. Data Modified :      12/6/2023 9:37:26 AM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
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Signal 1: DAD1 A, Sig=240,4 Ref=400,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.537	VV	0.0679	2.07296	0.0186	?
2	2.604	VV	0.0742	2.68025	0.0241	?
3	2.854	VB	0.1115	2.09620	0.0189	?
4	3.860	VB	0.0757	1.79217	0.0161	?
5	4.271	BB	0.1099	1.47727	0.0133	?
6	4.674	BV	0.0897	1.22744	0.0110	?
7	4.830	VV	0.0864	4.29659	0.0387	?
8	4.961	VB	0.0959	14.72706	0.1325	?

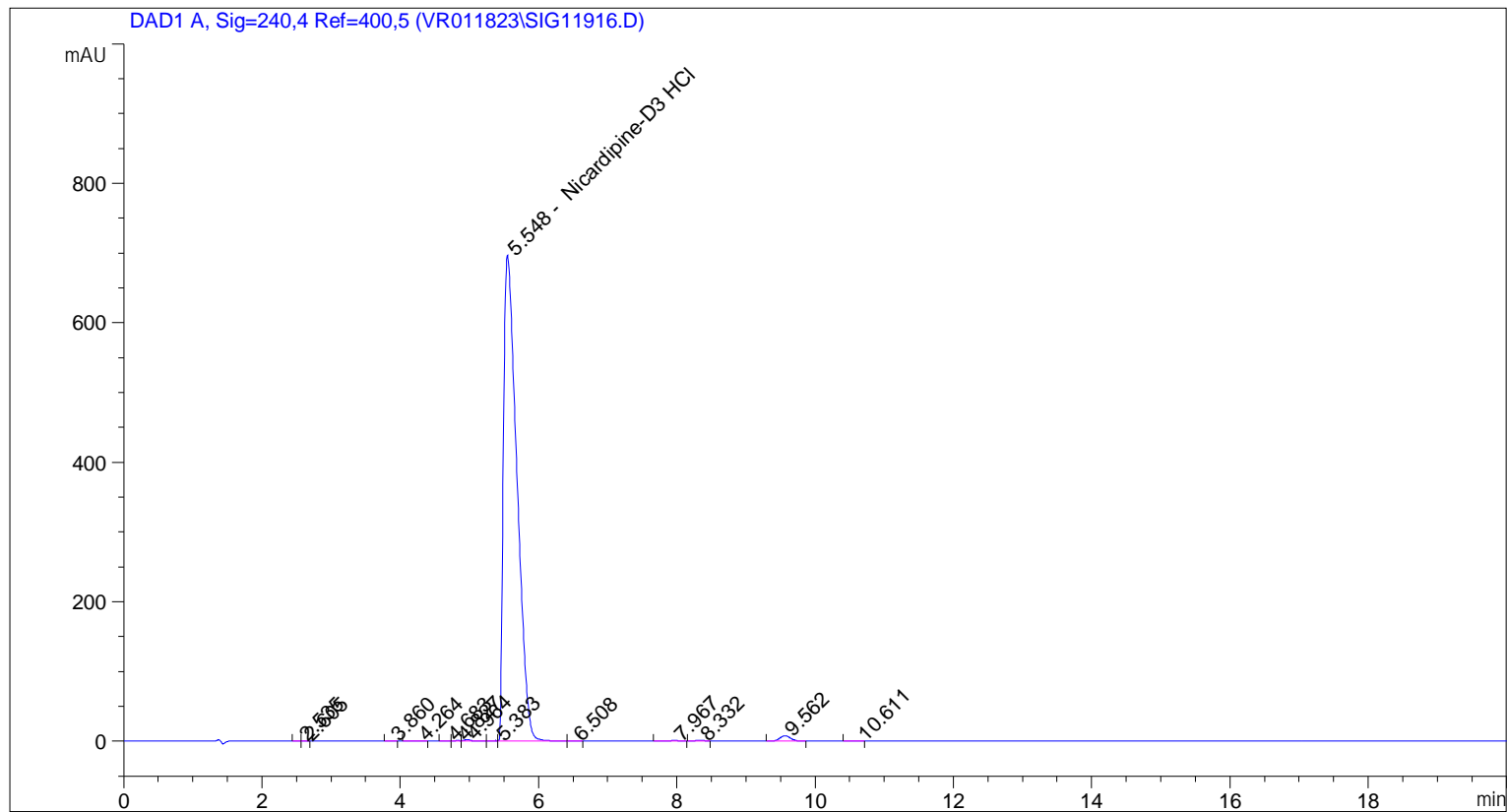
Sample Name: GR-19-023

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	5.527	BV	0.2178	1.09651e4	98.6420	Nicardipine-D3 HCl
10	6.519	VV	0.1403	4.28488	0.0385	?
11	6.740	VB	0.1388	1.86664	0.0168	?
12	7.966	BB	0.1397	7.08923	0.0638	?
13	8.340	BB	0.1398	8.42400	0.0758	?
14	9.565	BB	0.1686	94.78168	0.8527	?
15	10.597	BB	0.1365	1.95556	0.0176	?
16	11.428	BV	0.1602	2.18554	0.0197	?

Totals : 1.11161e4

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*** End of Report ***

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 3
Injection Date : 12/6/2023 9:08:32 AM Inj Volume : 7.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR120623_023.M
Last changed : 12/6/2023 9:07:39 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR120623_023PM.M
Last changed : 12/6/2023 9:37:59 AM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 12/6/2023 9:37:26 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=240,4 Ref=400,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.535	VV	0.0584	1.45767	0.0153	?
2	2.605	VB	0.0692	2.13804	0.0225	?
3	3.860	VB	0.0738	1.31933	0.0139	?
4	4.264	BB	0.1208	1.62609	0.0171	?
5	4.683	BV	0.0816	9.20337e-1	9.670e-3	?
6	4.827	VV	0.0810	3.60540	0.0379	?
7	4.964	VB	0.1001	13.26067	0.1393	?
8	5.383	BV	0.0673	2.46601	0.0259	?

Sample Name: GR-19-023 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	5.548	VV	0.2072	9390.92773	98.6684	Nicardipine-D3 HCl
10	6.508	VB	0.0955	1.49263	0.0157	?
11	7.967	BB	0.1567	7.27062	0.0764	?
12	8.332	BV	0.1468	8.18325	0.0860	?
13	9.562	BB	0.1706	81.89053	0.8604	?
14	10.611	BB	0.1260	1.10278	0.0116	?

Totals : 9517.66110

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*** End of Report ***