

Name:	Norethindrone acetate-3-isopropylidienol ether
Lot#:	GR-19-299-1
Test Date:	10/23/2025 (re-test date: 10/23/2030)
CAS No.:	2417092-17-0
MF:	C ₂₅ H ₃₄ O ₃
MW:	382.54
Appearance:	White solid
Purity:	97.3% by HPLC (average of two sample preparations)
¹H-NMR:	Conforms
MS-ESI (+)	Conforms (shows peak at m/z = 383.26 [M+H] ⁺)
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

Date: 10/29/2025



Viorica Rusu, QC/QA Manager

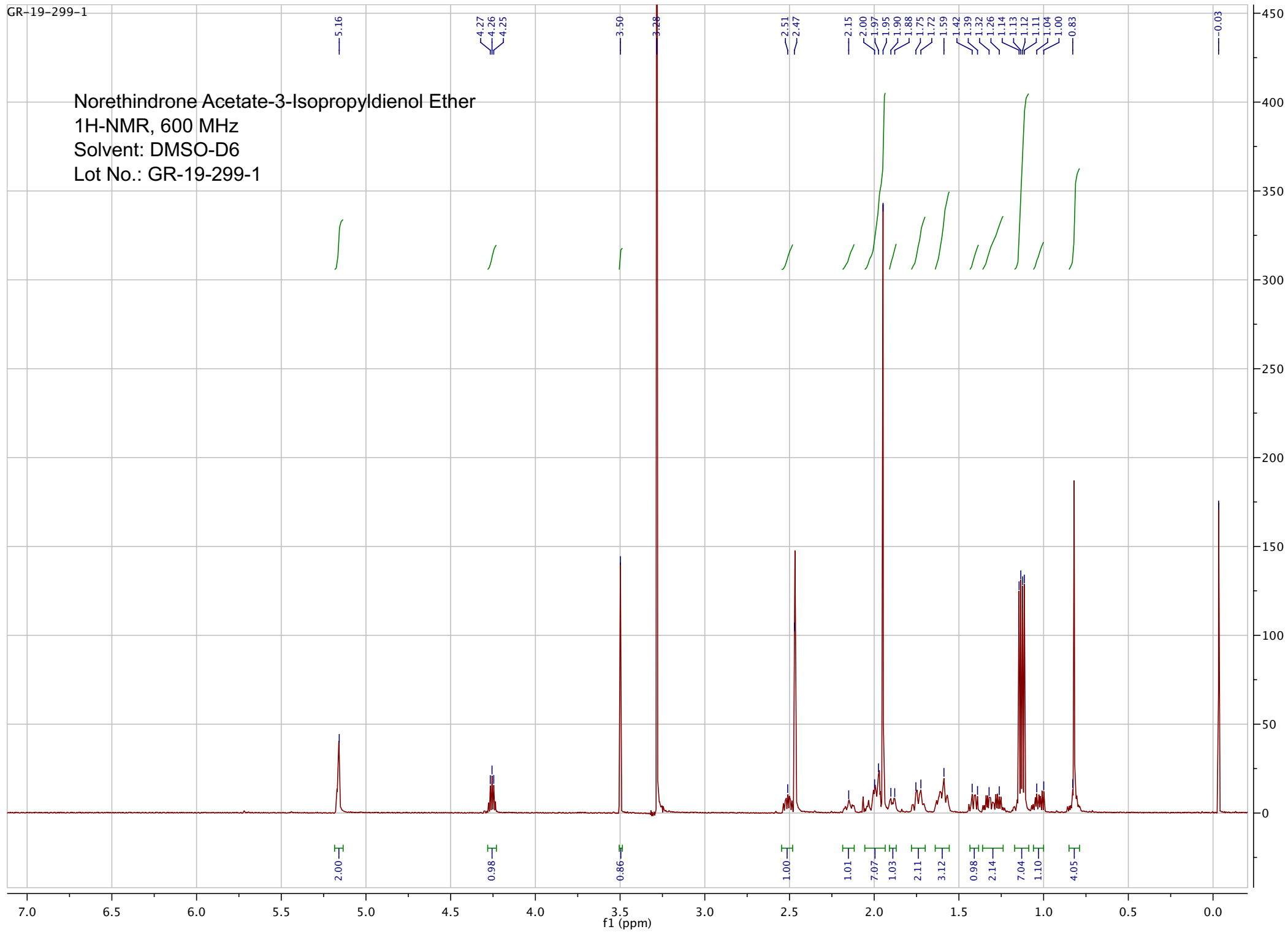
GR-19-299-1

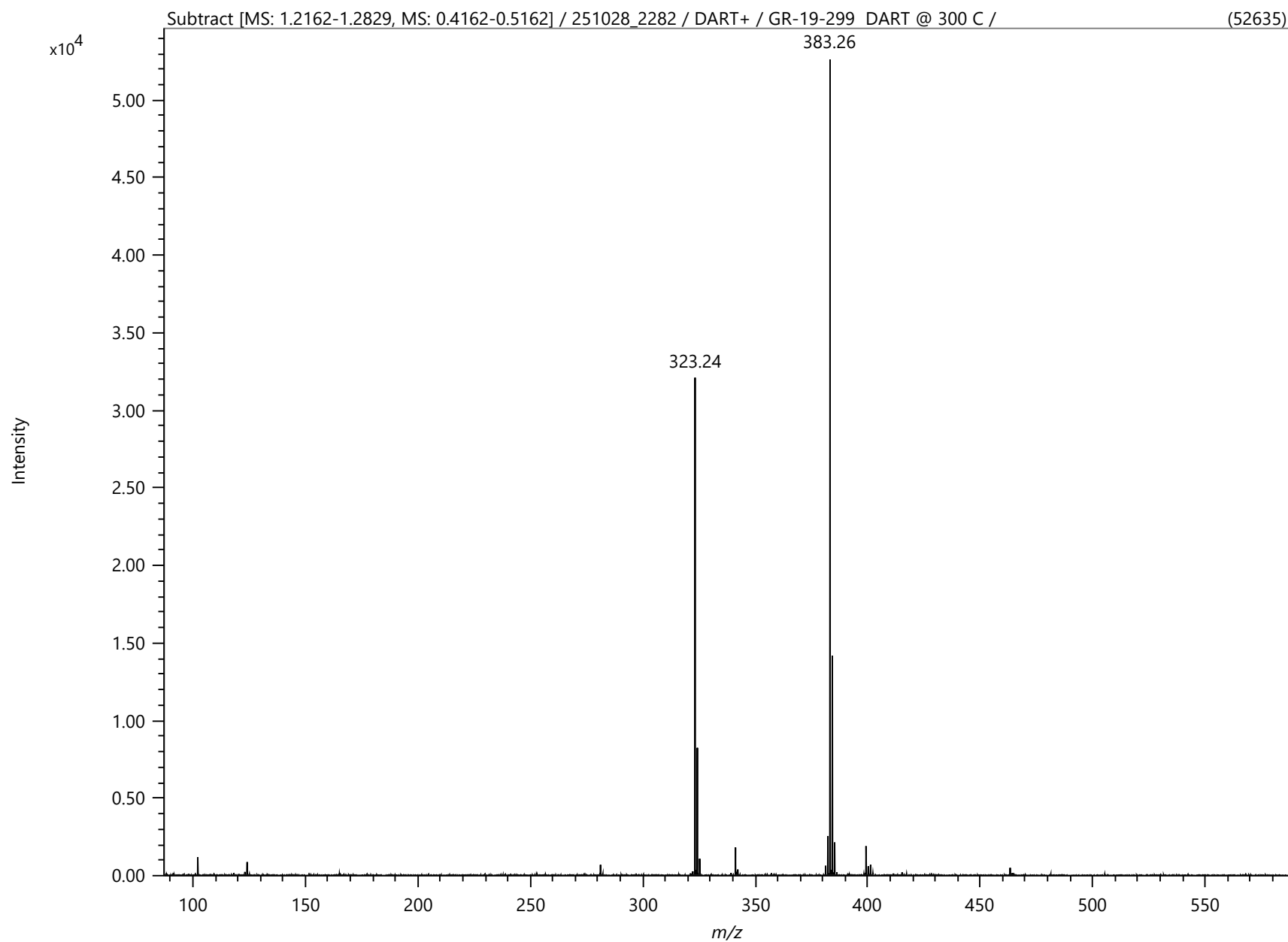
Norethindrone Acetate-3-Isopropyl dienol Ether

¹H-NMR, 600 MHz

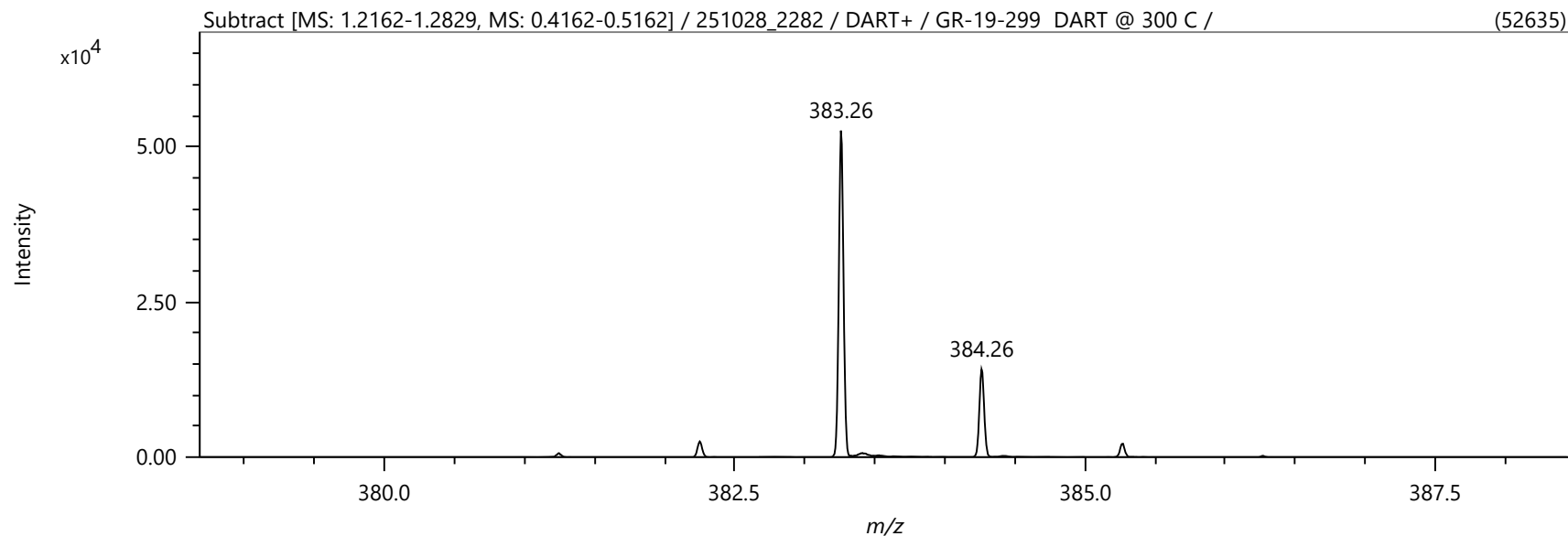
Solvent: DMSO-D₆

Lot No.: GR-19-299-1





Spectrum



Elemental Composition

Parameters

Tolerance: ± 5.00 mDa
 Electron: Even
 Charge: +1
 DBE: -1.5 - 100.0

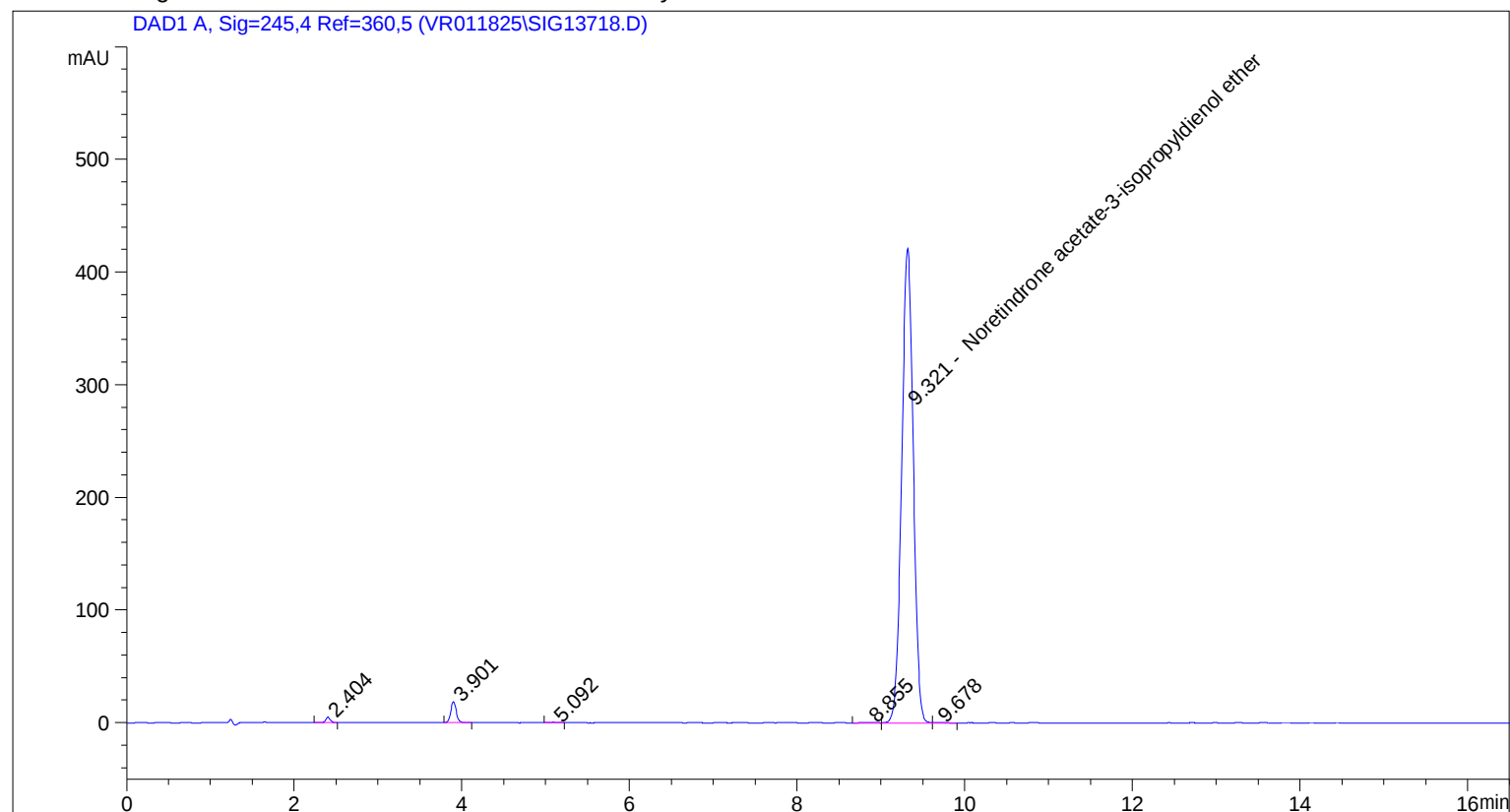
Elements Set 1:

Symbol	C	H	O	N
Min	0	0	0	0
Max	100	100	20	10

Results

Mass	Intensity	Formula	Calculated Mass	Mass Difference [mDa]	Mass Difference [ppm]	DBE
383.25962	52635.30	C ₂₅ H ₃₅ O ₃	383.25807	1.55	4.05	8.5
		C ₁₄ H ₃₅ N ₆ O ₆	383.26126	-1.64	-4.27	0.5
		C ₁₅ H ₃₁ N ₁₀ O ₂	383.26260	-2.97	-7.76	5.5
		C ₂₁ H ₃₁ N ₆ O	383.25539	4.24	11.05	9.5
		C ₁₈ H ₃₉ O ₈	383.26394	-4.32	-11.28	-0.5

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 55
Injection Date : 10/23/2025 1:46:13 PM Inj Volume : 5.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR102325_299.M
Last changed : 10/23/2025 1:43:07 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR102325_299PM.M
Last changed : 10/23/2025 4:35:09 PM by vrusu



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Area Percent Report
=====

Sorted By : Signal
Calib. Data Modified : 10/23/2025 4:33:05 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=245,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.404	BB	0.0569	18.05215	0.4340	?
2	3.901	BB	0.0722	85.17780	2.0480	?
3	5.092	BB	0.1030	3.61786	0.0870	?
4	8.855	BV	0.1327	5.48231	0.1318	?
5	9.321	VV	0.1501	4043.02246	97.2095	Noretindrone acetate-3-isopropylidienol ether
6	9.678	VB	0.1019	3.72857	0.0896	?

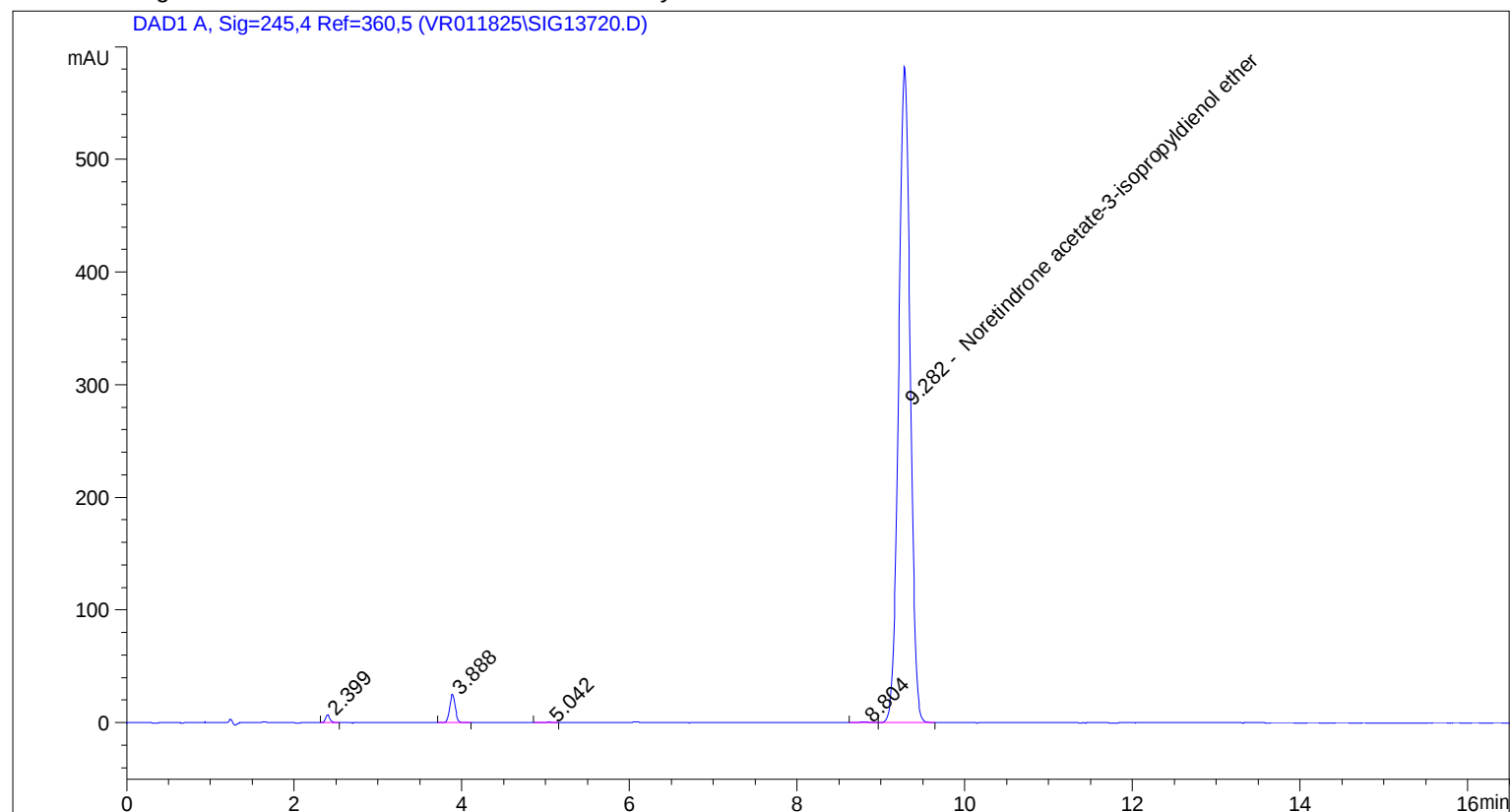
Totals : 4159.08116

Sample Name: GR-19-299-1

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*** End of Report ***

Sample Name: GR-19-299-1 spl-2

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 57
Injection Date  : 10/23/2025 2:34:13 PM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR102325_299.M
Last changed    : 10/23/2025 2:33:09 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR102325_299PM.M
Last changed    : 10/23/2025 4:35:09 PM by vrusu
=====
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                        Area Percent Report
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Sorted By           :      Signal
Calib. Data Modified :      10/23/2025 4:33:05 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
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Signal 1: DAD1 A, Sig=245,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.399	BB	0.0561	25.68307	0.4476	?
2	3.888	BB	0.0725	118.58158	2.0666	?
3	5.042	BB	0.1097	3.81045	0.0664	?
4	8.804	BB	0.1142	5.65252	0.0985	?
5	9.282	BB	0.1478	5584.18896	97.3208	Noretindrone acetate-3-isopropylidenol ether

Totals : 5737.91659

Sample Name: GR-19-299-1 spl-2

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*** End of Report ***