

Name: 17-epi-Norethindrone
Lot#: GR-18-025
Test Date: 01/24/2023 (re-test date: 01/24/2028)
CAS No.: 38673-36-8
MF: C₂₀H₂₆O₂
MW: 298.42
Appearance: Beige solid
Purity: 98.6% by HPLC (average of two sample preparations)
¹H-NMR: Conforms
MS-ESI (+) Conforms (shows peak at m/z = 299.20 [M+H]⁺)
Storage Store at 0-5°C in a dry place away from direct sunlight

Approved by:

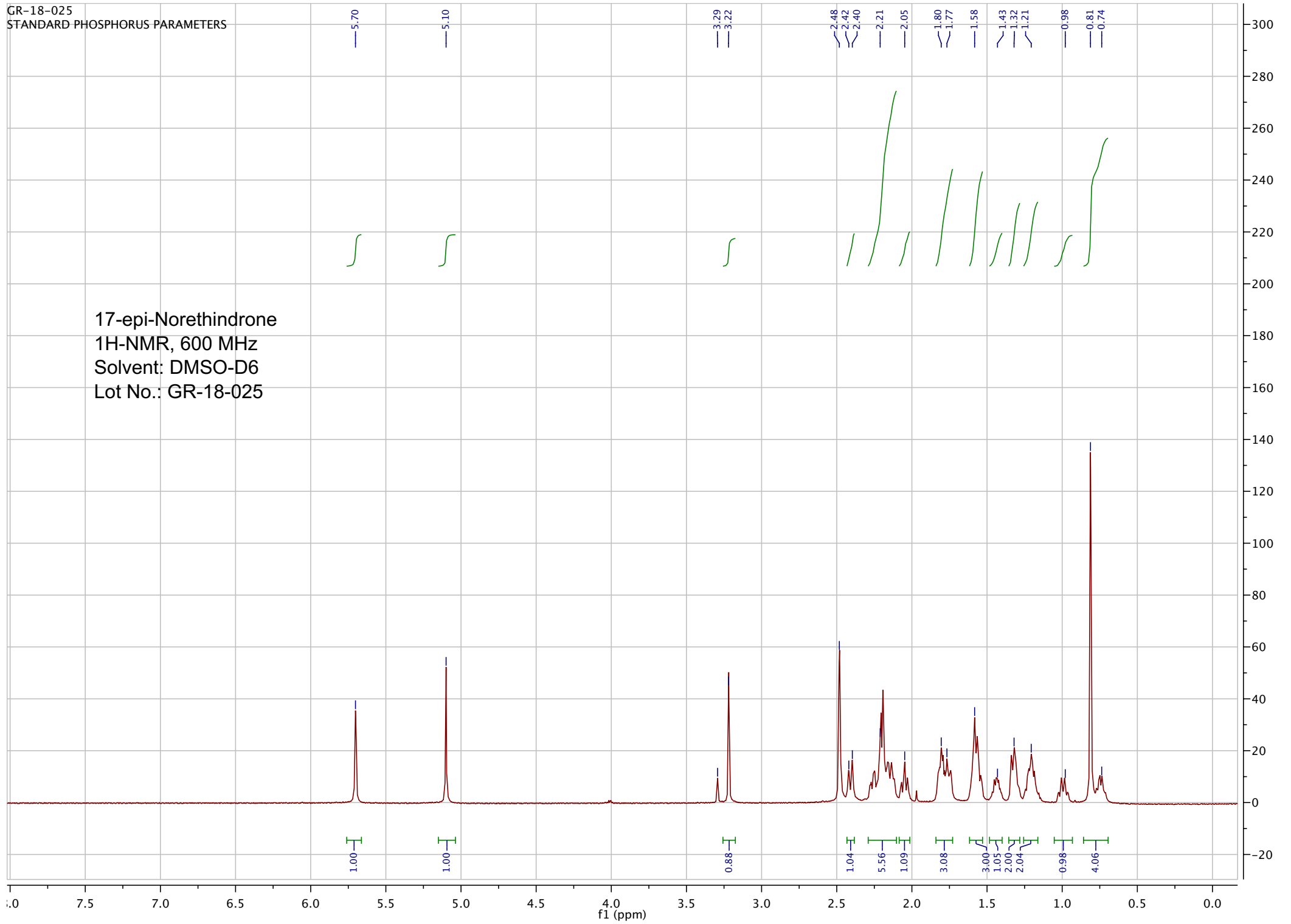
Date: 01/30/2023



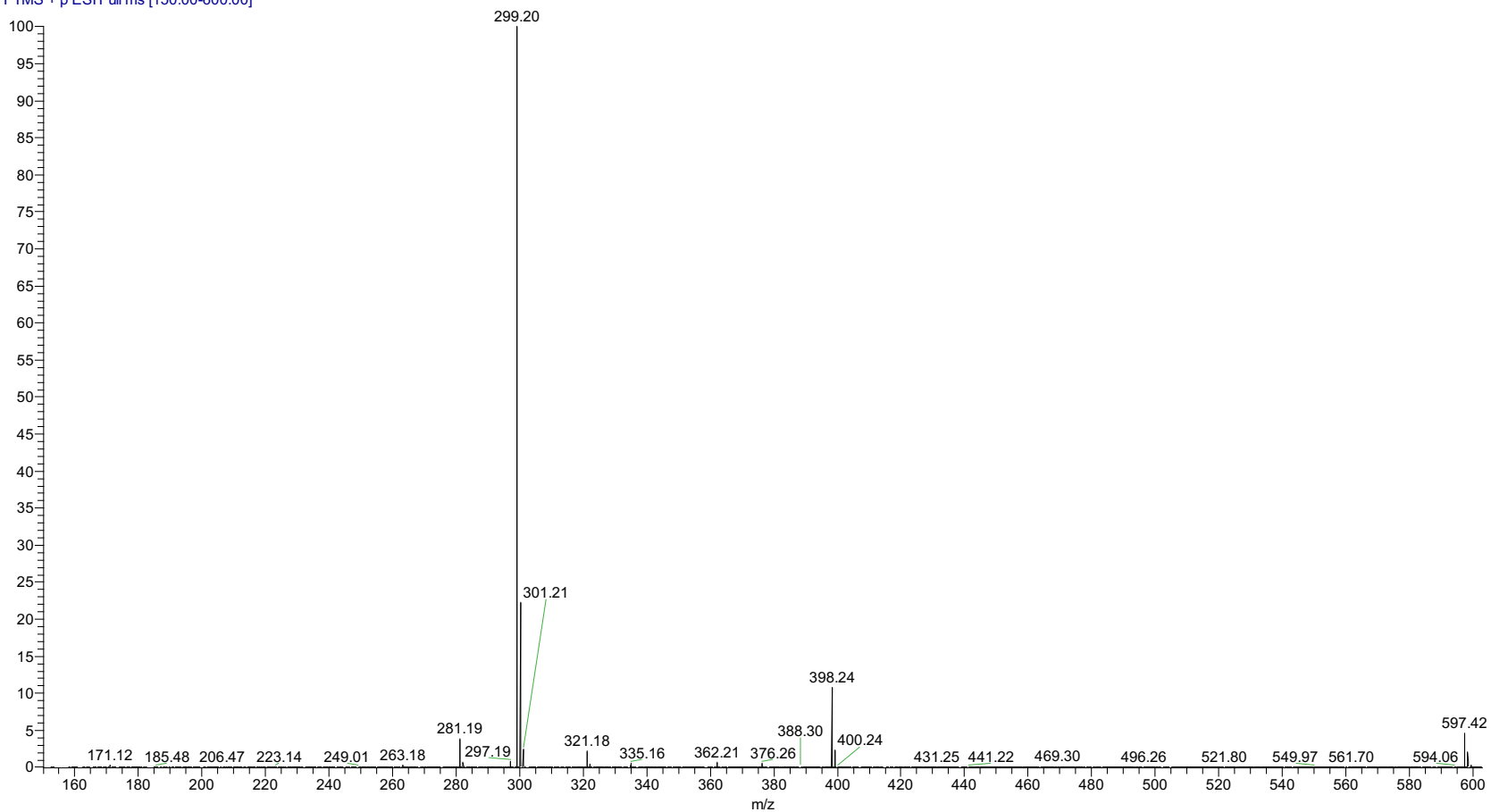
Viorica Rusu, QC/QA Manager

GR-18-025
STANDARD PHOSPHORUS PARAMETERS

17-epi-Norethindrone
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-18-025



pp_2023_007_GR_18_025_1#507-526 RT: 1.61-1.67 AV: 20 SB: 3 I.43 NL: 2.67E5
T: FTMS + p ESI Full ms [150.00-600.00]

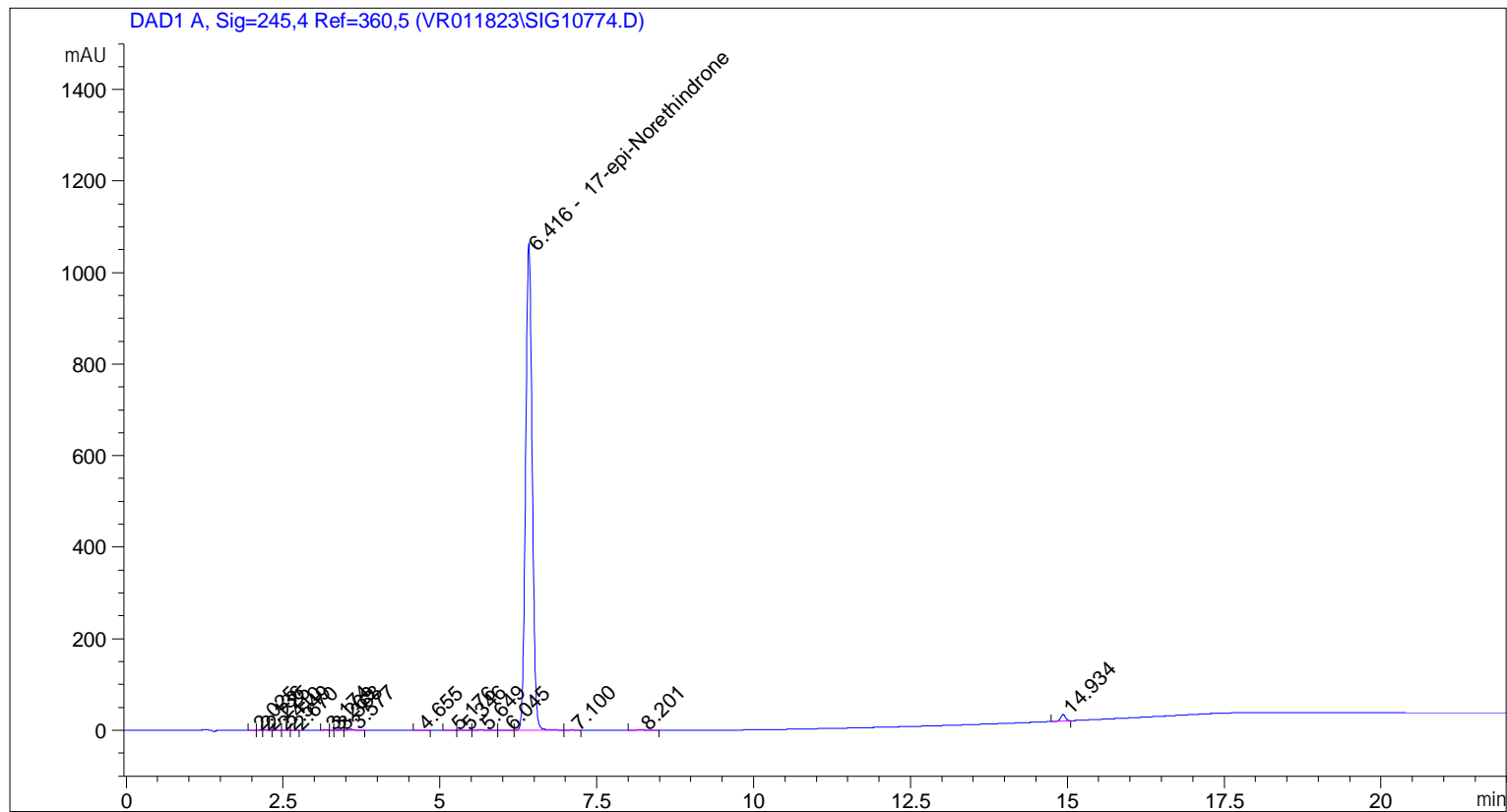


ESI-MS spectrum for sample GR_18_025. Shows monoisotopic $[M+H]^+$ mass.

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 55
Injection Date  : 1/24/2023 9:01:23 AM
                                           Inj Volume : 10.0 µl

Acq. Method     : C:\CHEM32\1\METHODS\VR012423_025.M
Last changed    : 1/24/2023 9:00:04 AM by vrusu
Analysis Method  : C:\CHEM32\1\METHODS\VR012423_025PM.M
Last changed    : 1/24/2023 9:54:11 AM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By           :      Signal
Calib. Data Modified :      1/24/2023 9:51:00 AM
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	2.025	BV	0.0700	9.26149e-1	0.0117	?
2	2.136	VV	0.0627	1.64740	0.0209	?
3	2.225	VB	0.0651	2.04709	0.0260	?
4	2.410	BB	0.0700	8.52617e-1	0.0108	?
5	2.549	BV	0.0807	1.51130	0.0192	?
6	2.670	VB	0.0727	1.17082	0.0148	?
7	3.174	BV	0.0727	2.04802	0.0260	?
8	3.269	VV	0.0559	8.19154e-1	0.0104	?

Sample Name: GR-18-025

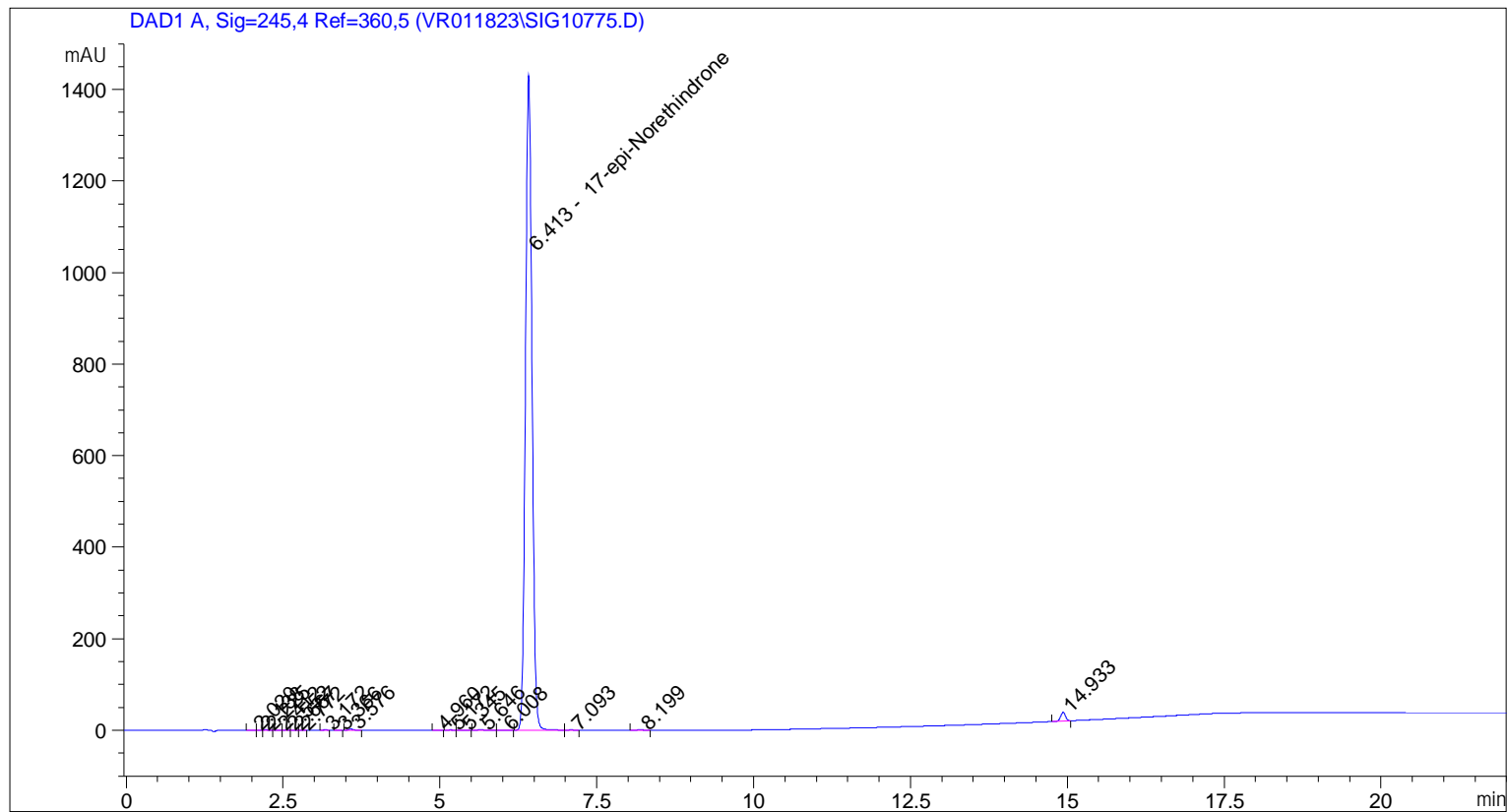
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	3.368	VB	0.0814	1.61176	0.0204	?
10	3.577	BB	0.0805	9.66129	0.1225	?
11	4.655	BB	0.0948	9.03893e-1	0.0115	?
12	5.176	BV	0.0885	1.90859	0.0242	?
13	5.346	VB	0.1022	2.07385	0.0263	?
14	5.649	BV	0.1162	4.48110	0.0568	?
15	6.045	VB	0.1139	8.48018e-1	0.0108	?
16	6.416	BV	0.1131	7773.46240	98.5733	17-epi-Norethindrone
17	7.100	VB	0.1322	2.39689	0.0304	?
18	8.201	BB	0.1361	4.04568	0.0513	?
19	14.934	BB	0.0834	73.55524	0.9327	?

Totals : 7885.97127

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*** End of Report ***

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 56
Injection Date  : 1/24/2023 9:30:32 AM
                                           Inj Volume : 10.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR012423_025.M
Last changed   : 1/24/2023 9:29:28 AM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR012423_025PM.M
Last changed   : 1/24/2023 9:54:11 AM by vrusu
  
```



Area Percent Report

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Sorted By           : Signal
Calib. Data Modified : 1/24/2023 9:51:00 AM
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	2.020	BV	0.0654	9.32902e-1	8.862e-3	?
2	2.138	VV	0.0588	1.68772	0.0160	?
3	2.225	VB	0.0637	2.49326	0.0237	?
4	2.412	BB	0.0658	1.00692	9.565e-3	?
5	2.552	BV	0.0803	1.97520	0.0188	?
6	2.667	VV	0.0657	1.61672	0.0154	?
7	2.772	VB	0.0648	4.47984e-1	4.256e-3	?
8	3.172	BB	0.0652	2.00282	0.0190	?

Sample Name: GR-18-025 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	3.366	BB	0.0627	9.33456e-1	8.867e-3	?
10	3.576	BB	0.0793	12.43124	0.1181	?
11	4.960	BB	0.0645	3.36990e-1	3.201e-3	?
12	5.172	BV	0.0882	2.72943	0.0259	?
13	5.345	VB	0.0981	2.77499	0.0264	?
14	5.646	BV	0.1119	5.91822	0.0562	?
15	6.008	VB	0.1068	1.03435	9.826e-3	?
16	6.413	BV	0.1127	1.03806e4	98.6113	17-epi-Norethindrone
17	7.093	VB	0.1151	2.88668	0.0274	?
18	8.199	BB	0.1338	5.01003	0.0476	?
19	14.933	BB	0.0830	99.96288	0.9496	?

Totals : 1.05267e4

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*** End of Report ***