

Name: 18-Methyl Mestranol
(Levonorgestrel EP Impurity V)

Lot#: GR-8-035

Test Date: 02/23/2021 (re-test date: 02/23/2026)

CAS No.: 14009-70-2

MF: C₂₂H₂₈O₂

MW: 324.46

Appearance: Beige solid

Purity: 97.5% by HPLC (average of two sample preparations)

¹H-NMR: Conforms

MS-ESI (+) Conforms (shows peaks at m/z = 325.16 [M+H]⁺ and 307.16 [M-H₂O+H]⁺)

Storage Store at 0-8°C in a dry place away from direct sunlight

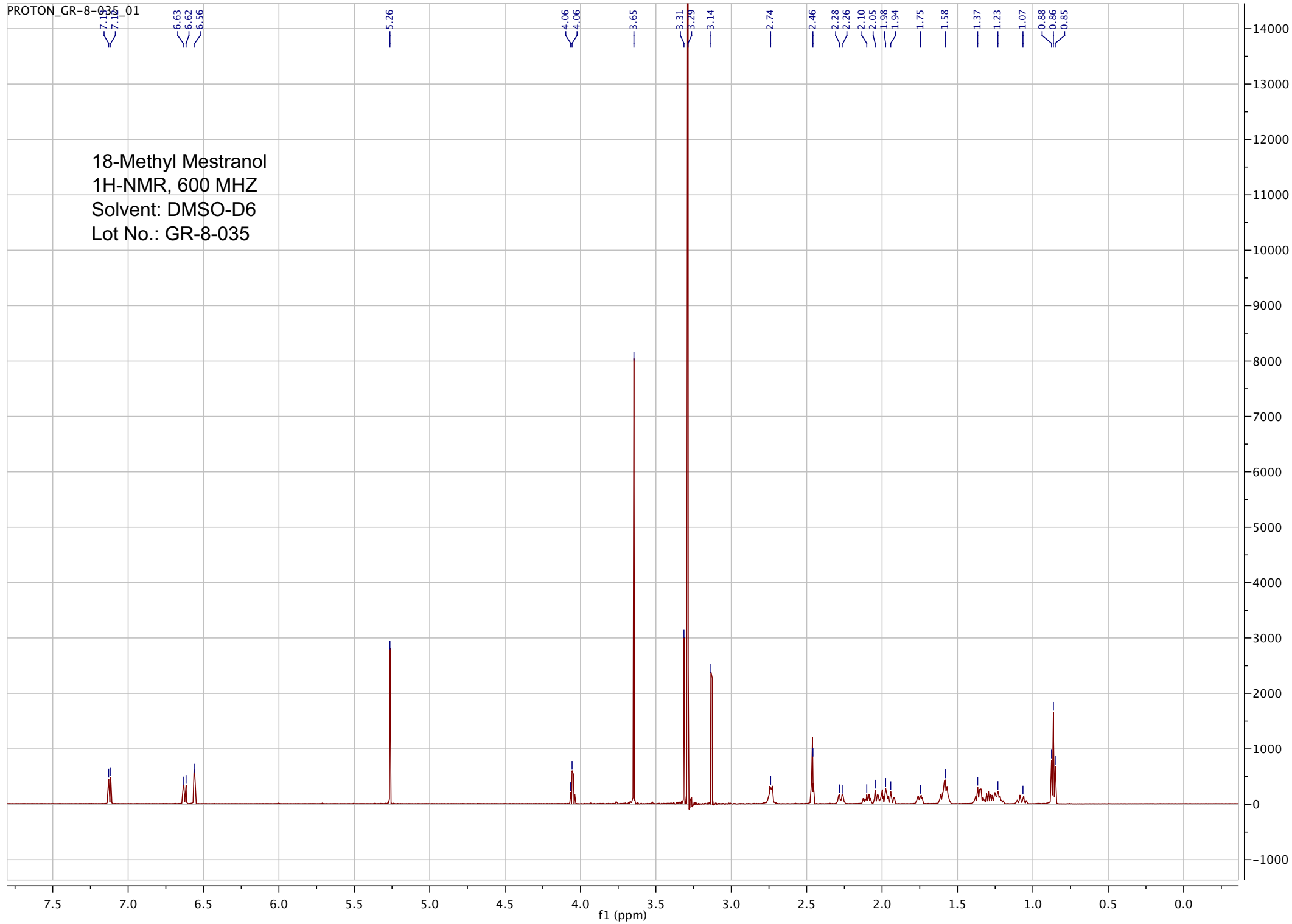
Approved by:

Date: 06/02/2021



Viorica Rusu, QC/QA Manager

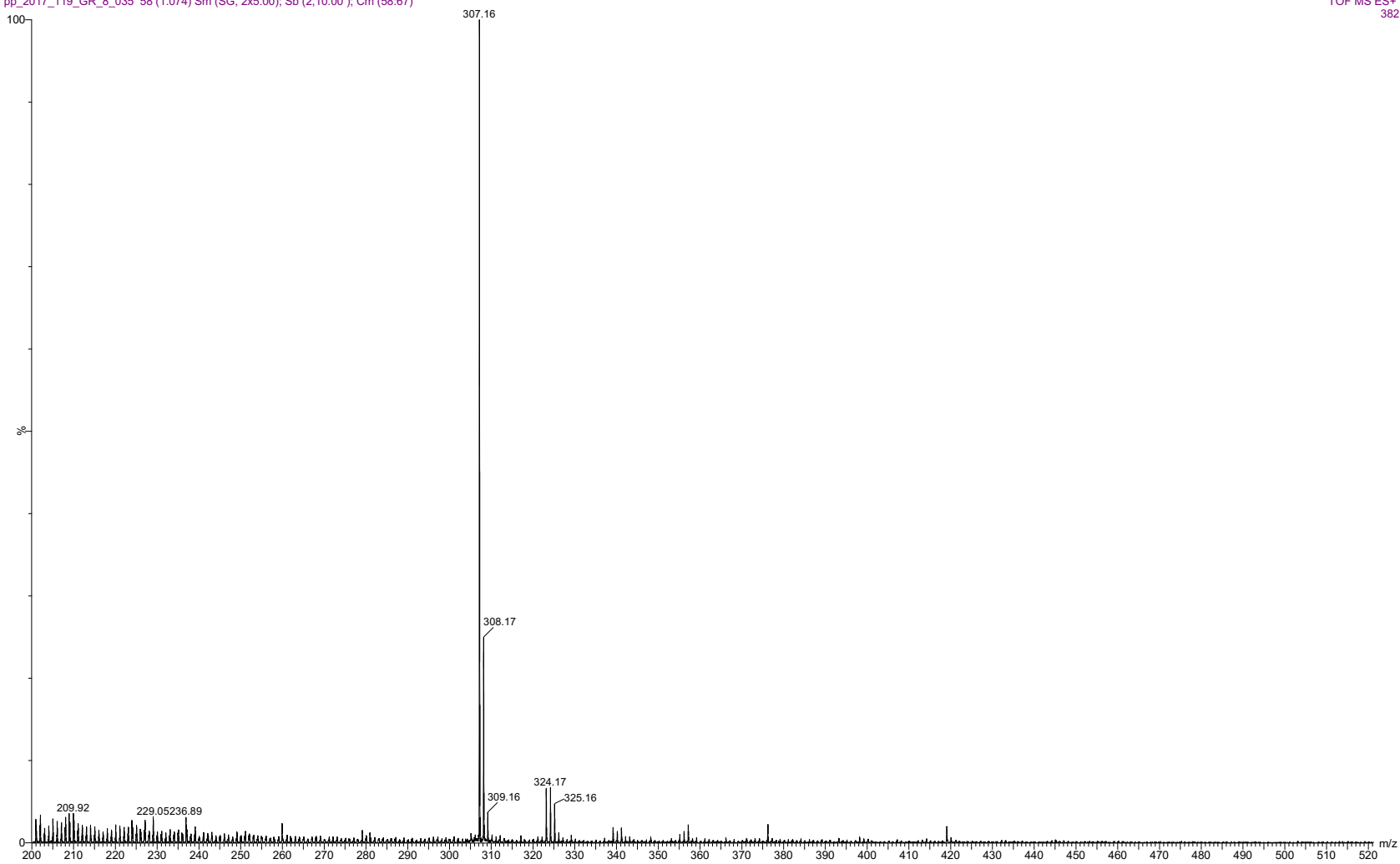
18-Methyl Mestranol
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-8-035



pp_2017_119_GR_8_035 58 (1.074) Sm (SG, 2x5.00); Sb (2,10.00); Cm (58:67)

7.00000000

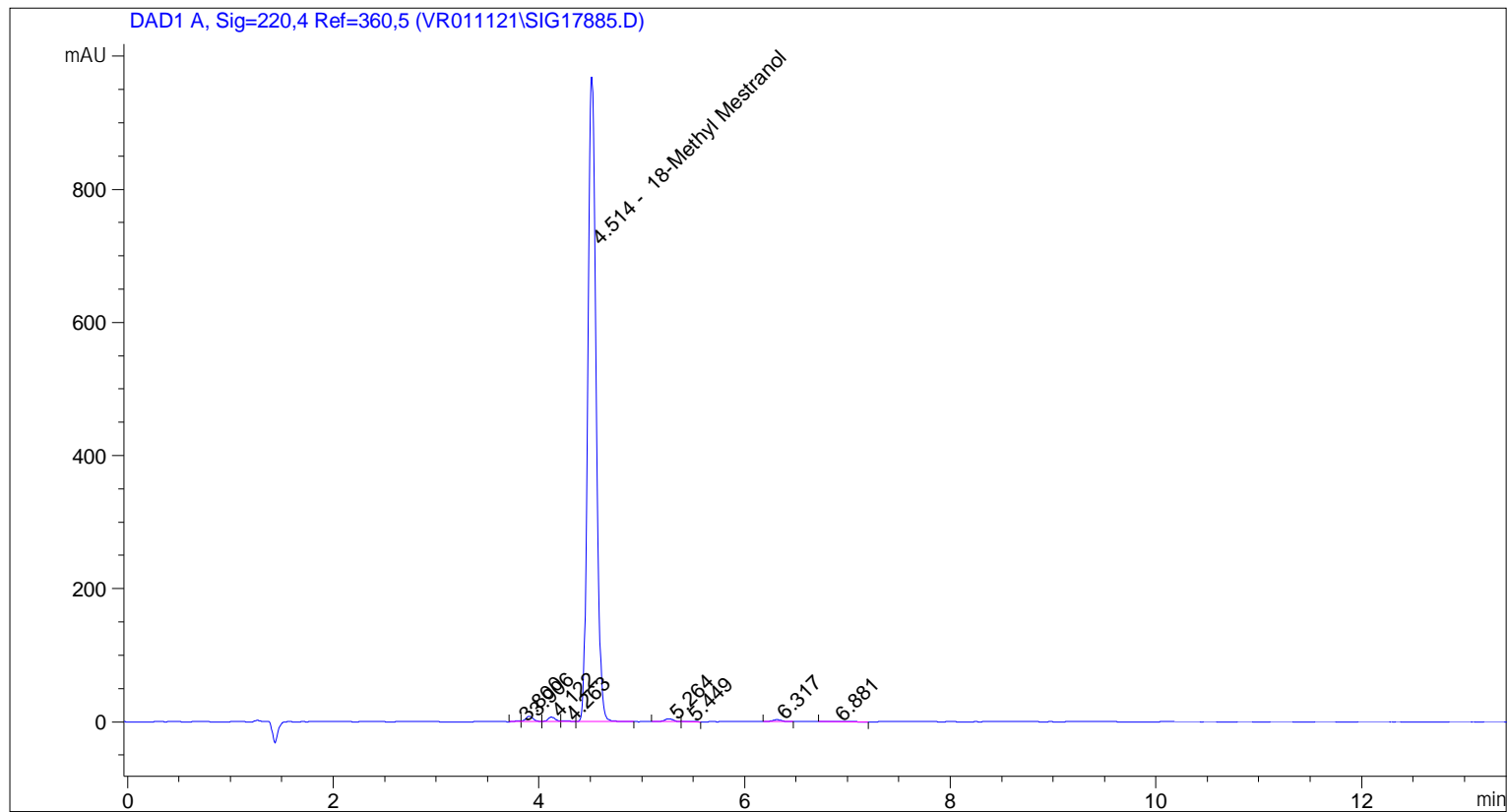
TOF MS ES+
382



ESI-MS spectrum for sample GR-8-035. Shows monoisotopic $[M+H]^+$ mass.

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 2
Injection Date  : 2/23/2021 8:44:40 AM
                                           Inj Volume : 6.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR022321_035.M
Last changed    : 2/23/2021 8:43:41 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR022321_035PM.M
Last changed    : 2/23/2021 9:36:22 AM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By           :      Signal
Calib. Data Modified :      2/23/2021 9:35:58 AM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.800	BV	0.0623	6.22684	0.1126	?
2	3.906	VB	0.0796	40.42780	0.7308	?
3	4.122	BV	0.0788	32.79179	0.5927	?
4	4.263	VB	0.0890	5.75269	0.1040	?
5	4.514	BB	0.0868	5383.54199	97.3103	18-Methyl Mestranol
6	5.264	BV	0.0998	28.40227	0.5134	?
7	5.449	VB	0.0975	4.89908	0.0886	?
8	6.317	BB	0.1048	19.55256	0.3534	?

Sample Name: GR-8-035

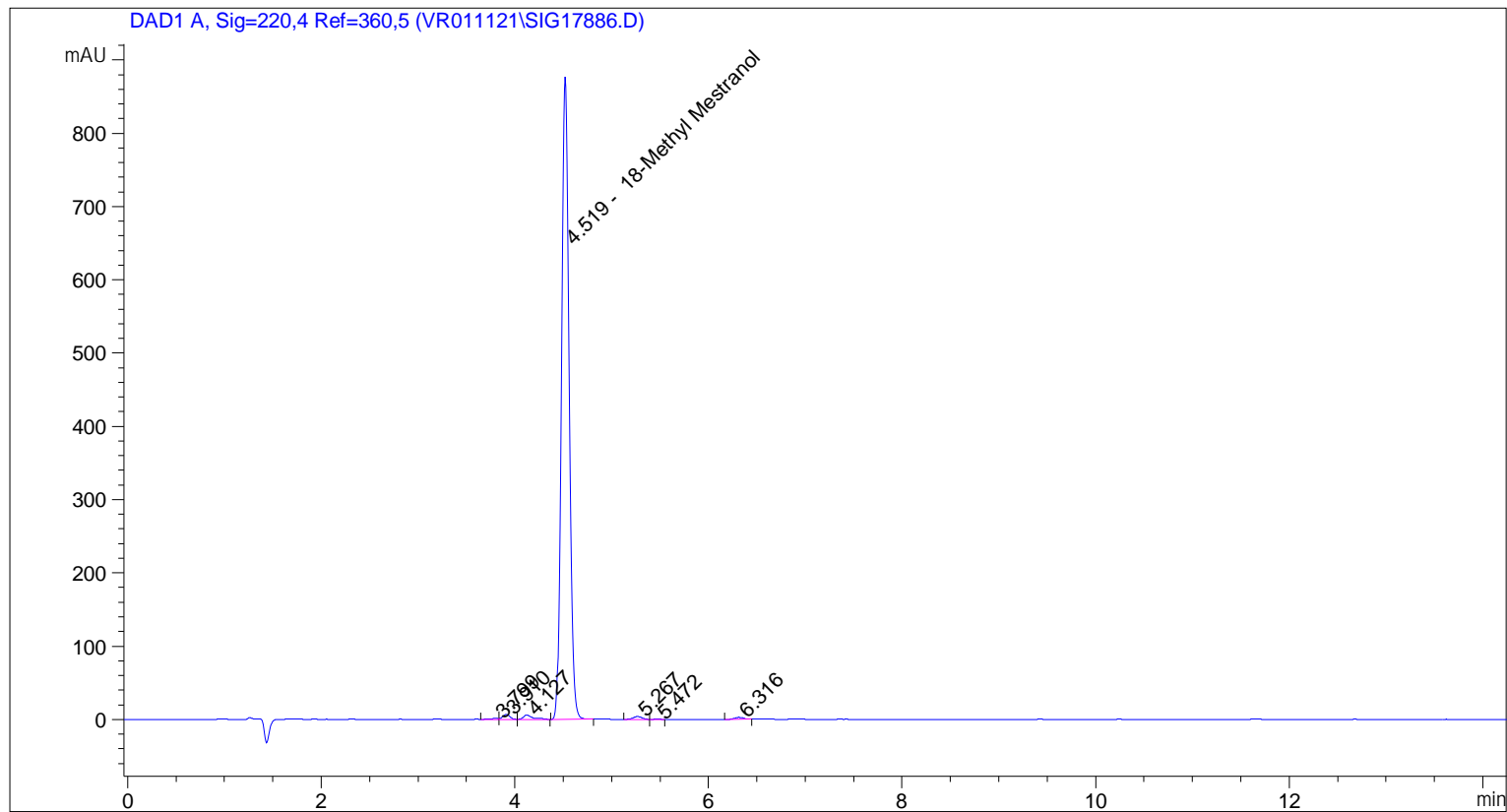
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	6.881	BB	0.1506	10.75249	0.1944	?

Totals : 5532.34751

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*** End of Report ***

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 3
Injection Date  : 2/23/2021 8:59:56 AM
                                           Inj Volume : 6.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR022321_035.M
Last changed   : 2/23/2021 8:59:03 AM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR022321_035PM.M
Last changed   : 2/23/2021 9:36:22 AM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By      :      Signal
Calib. Data Modified : 2/23/2021 9:35:58 AM
Multiplier:    :      1.0000
Dilution:     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.799	BV	0.0664	6.09968	0.1225	?
2	3.910	VB	0.0750	32.85582	0.6598	?
3	4.127	BB	0.0922	38.48988	0.7729	?
4	4.519	BB	0.0867	4860.30469	97.5995	18-Methyl Mestranol
5	5.267	BB	0.0935	22.91231	0.4601	?
6	5.472	BB	0.0681	1.24830	0.0251	?
7	6.316	BB	0.1054	17.93709	0.3602	?

Sample Name: GR-8-035 spl-2

Totals : 4979.84777

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*** End of Report ***