

Name: 6β-Hydroxy Levonorgestrel
(Levonorgestrel EP Impurity H)

Lot#: GR-20-033

Test Date: 01/12/2026 (re-test date: 01/12/2031)

CAS No.: 55555-97-0

MF: C₂₁H₂₈O₃

MW: 328.45

Appearance: White Solid

Purity: 99.4% by HPLC (average of two sample preparations)

¹H-NMR: Conforms (shows a trace of EtOAc)

MS-ESI (+) Conforms (shows peaks at m/z = 329.21 [M+H]⁺)

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

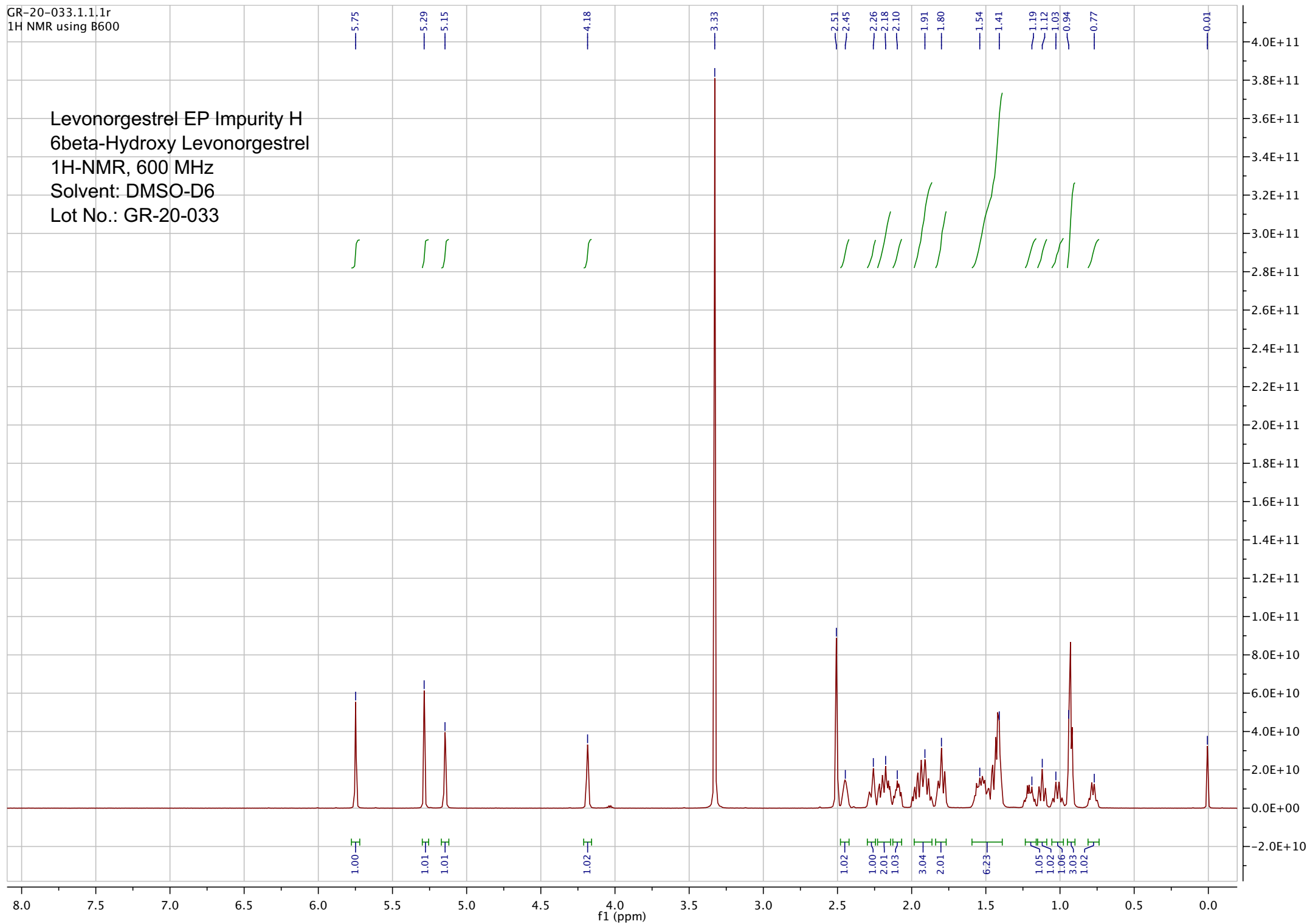
Approved by:

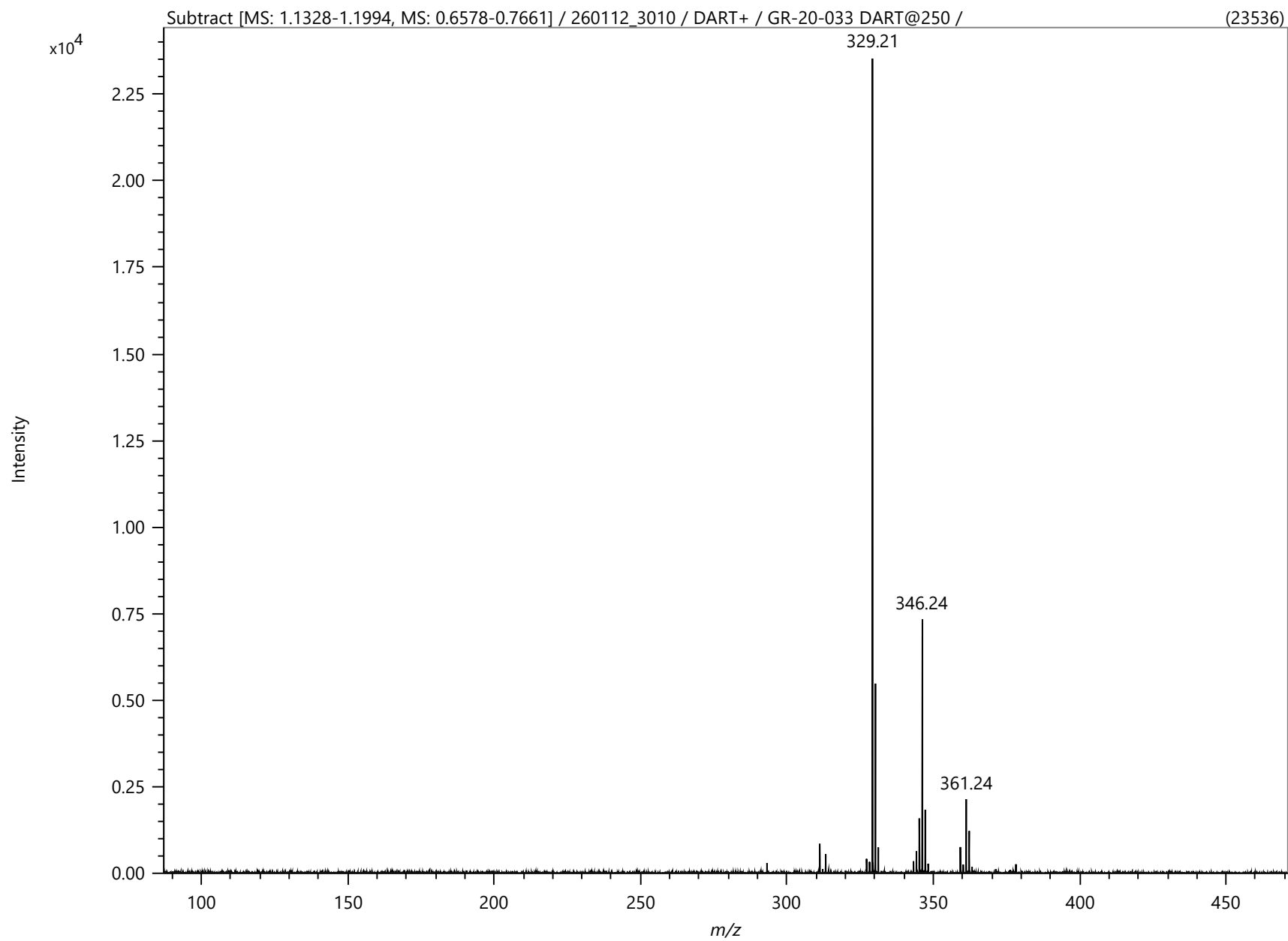
Date: 01/13/2026

A handwritten signature in black ink, likely belonging to Viorica Rusu.

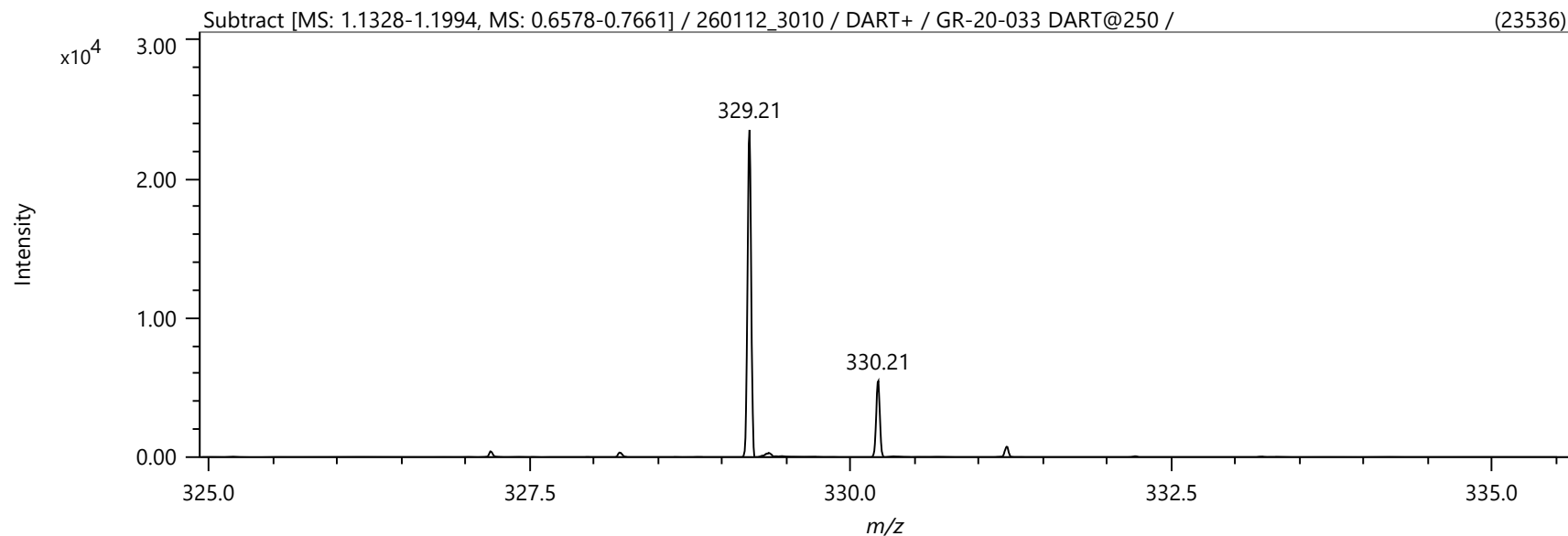
Viorica Rusu, QC/QA Manager

Levonorgestrel EP Impurity H
6beta-Hydroxy Levonorgestrel
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-20-033





Spectrum



Elemental Composition

Parameters

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

Elements Set 1:

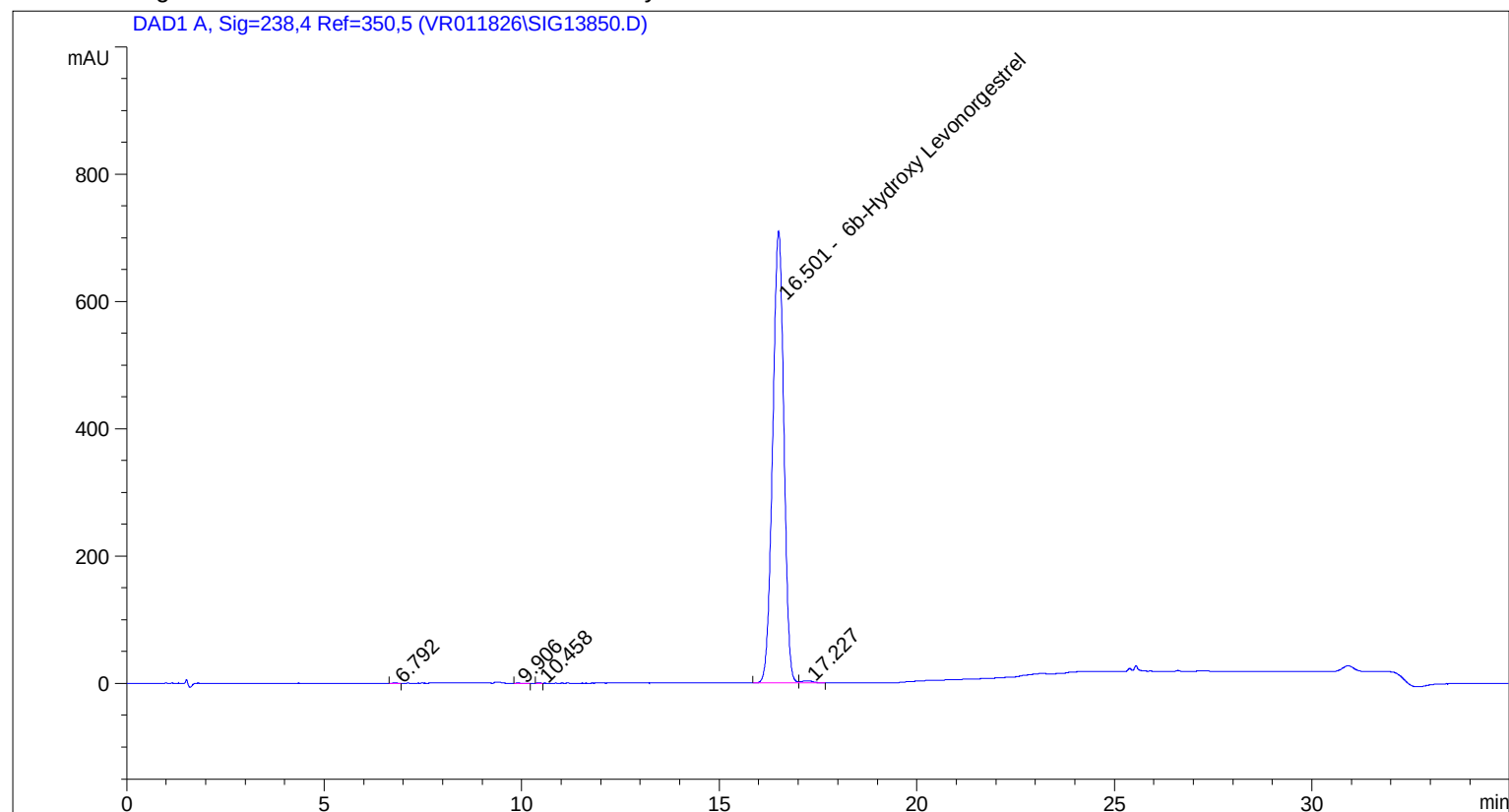
Symbol	C	H	O	N
Min	0	0	0	0
Max	100	200	20	10

Results

Mass	Intensity	Formula	Calculated Mass	Mass Difference [mDa]	Mass Difference [ppm]	DBE
329.21109	23536.29	C ₂₁ H ₂₉ O ₃	329.21112	-0.03	-0.11	7.5
		C ₁₇ H ₂₅ N ₆ O	329.20844	2.65	8.05	8.5
		C ₁₀ H ₂₉ N ₆ O ₆	329.21431	-3.22	-9.79	-0.5
		C ₁₆ H ₂₉ N ₂ O ₅	329.20710	3.99	12.11	3.5
		C ₁₁ H ₂₅ N ₁₀ O ₂	329.21565	-4.56	-13.85	4.5

Sample Name: GR-20-033

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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 42
Injection Date  : 1/12/2026 11:06:43 AM
                                           Inj Volume : 15.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR011226_033.M
Last changed    : 1/12/2026 11:05:28 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR011226_033PM.M
Last changed    : 1/12/2026 1:25:43 PM by vrusu
=====
```



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

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Sorted By           :      Signal
Calib. Data Modified :      1/12/2026 1:24:29 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: DAD1 A, Sig=238,4 Ref=350,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	6.792	BB	0.1249	5.04770	0.0358	?
2	9.906	BB	0.0719	7.27711	0.0517	?
3	10.458	BV	0.0973	10.22454	0.0726	?
4	16.501	BV	0.3078	1.39849e4	99.3151	6b-Hydroxy Levonorgestrel
5	17.227	VB	0.2934	73.89975	0.5248	?

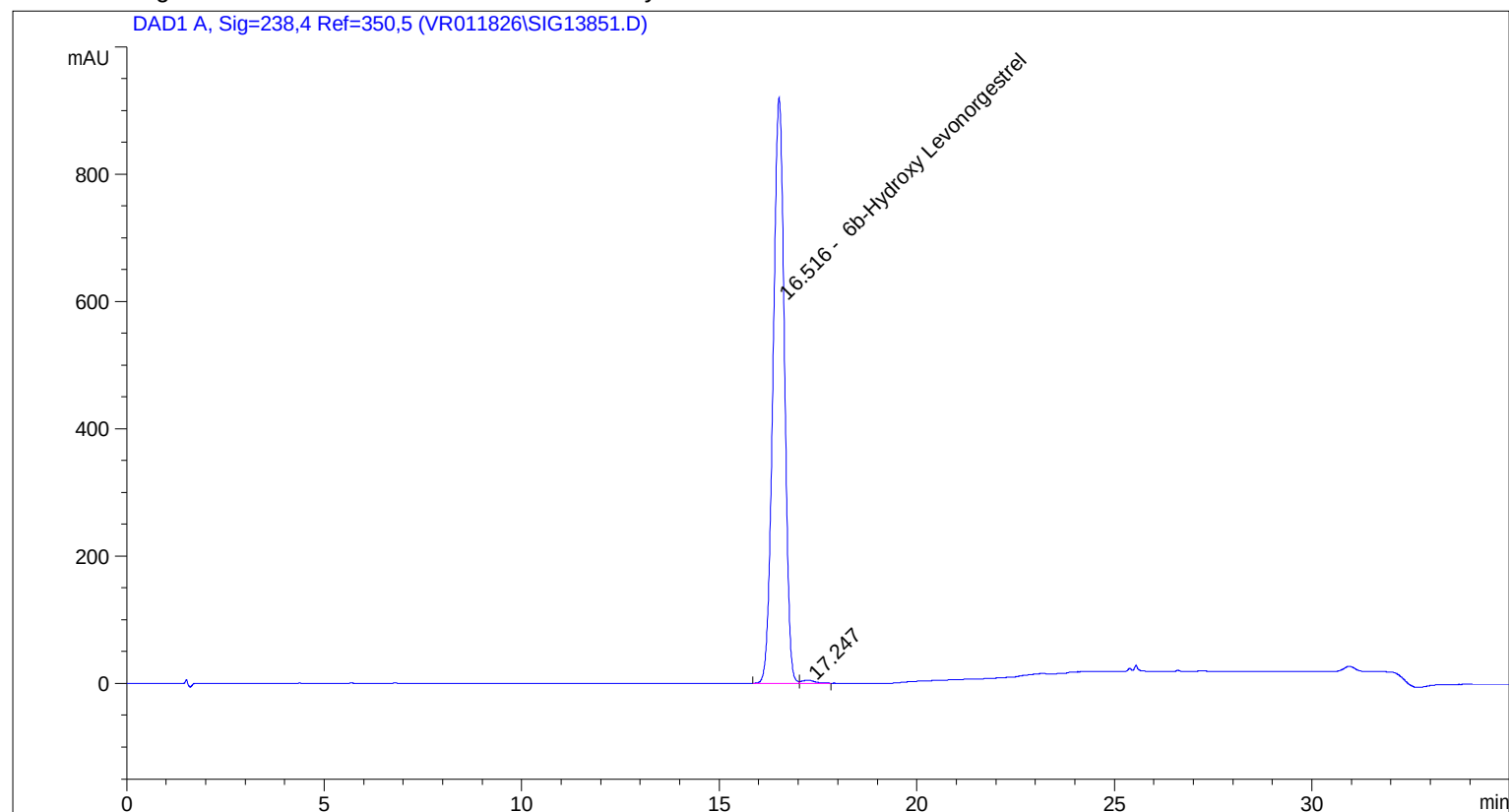
Totals : 1.40813e4

Sample Name: GR-20-033

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*** End of Report ***

=====
Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 43
Injection Date : 1/12/2026 11:43:34 AM Inj Volume : 15.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR011226_033.M
Last changed : 1/12/2026 11:42:21 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR011226_033PM.M
Last changed : 1/12/2026 1:25:43 PM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 1/12/2026 1:24:29 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=238,4 Ref=350,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	16.516	BV	0.3106	1.83363e4	99.4555	6b-Hydroxy Levonorgestrel
2	17.247	VB	0.2729	100.39203	0.5445	?

Totals : 1.84367e4

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*** End of Report ***