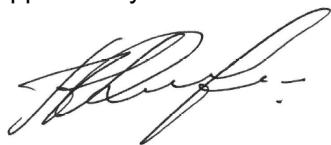


Name:	20β-Dihydrodydrogesterone
Lot#:	GR-19-083b
Test Date:	02/13/2024 (re-test date: 02/13/2029)
CAS No.:	4243-73-6
MF:	C ₂₁ H ₃₀ O ₂
MW:	314.47
Appearance:	Off-white crystals
Purity:	98.9% by HPLC (average of two sample preparations)
¹H-NMR:	Conforms (contains a trace of ACN)
MS-DART (+)	Conforms (shows peak at m/z = 315.2 [M+H ⁺] ⁺)
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

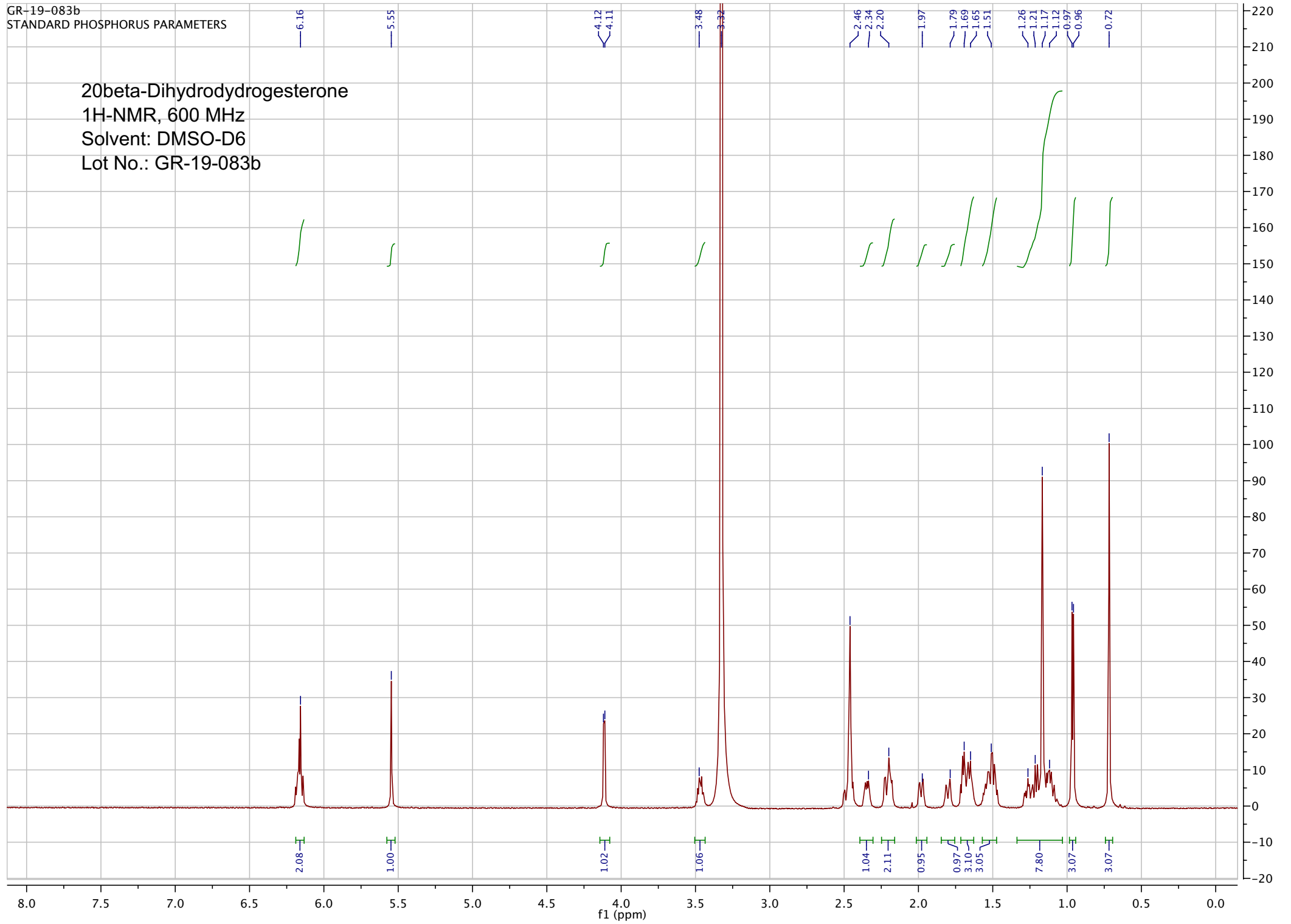
Date: 03/05/2024

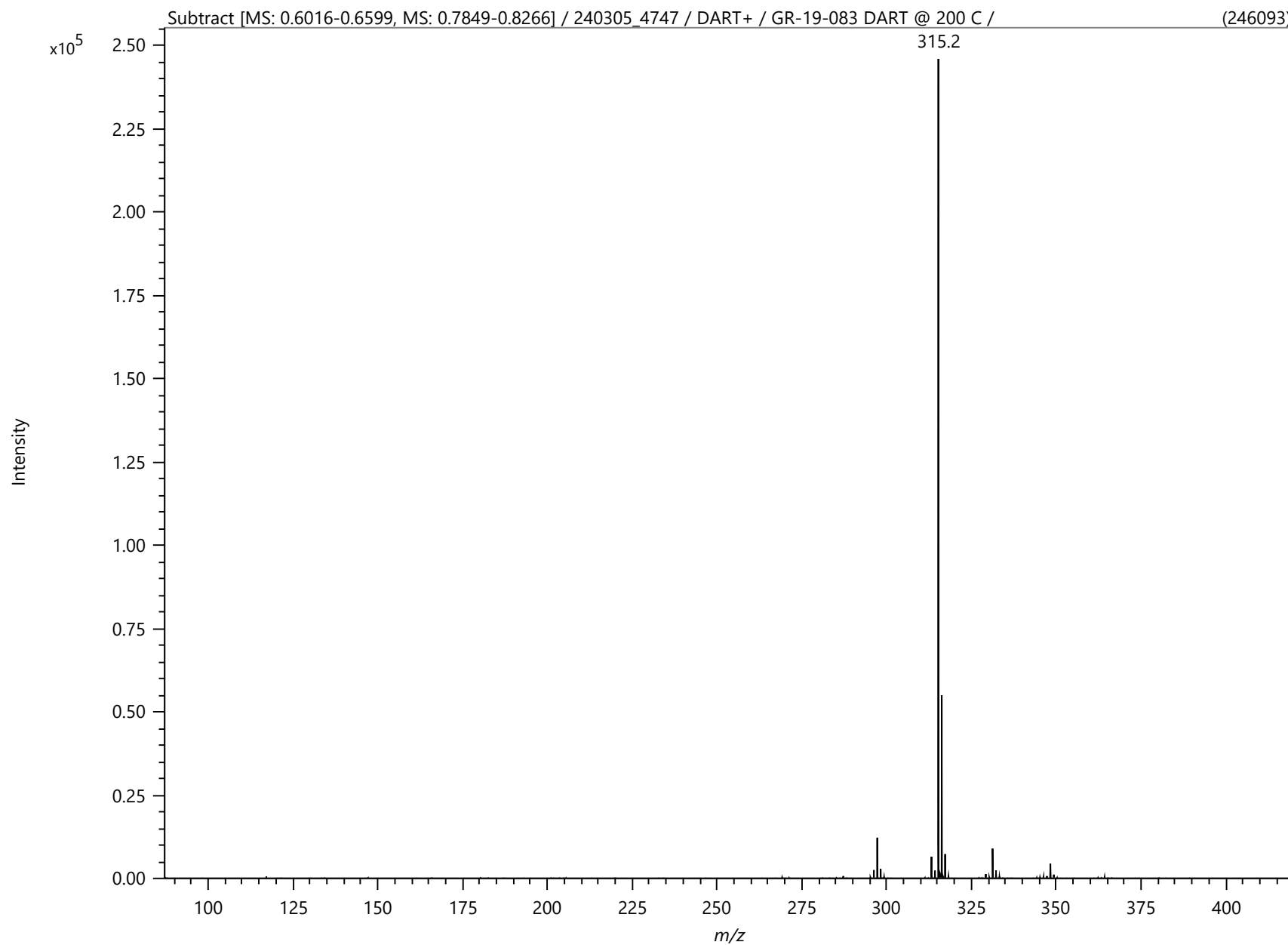


Viorica Rusu, QC/QA Manager

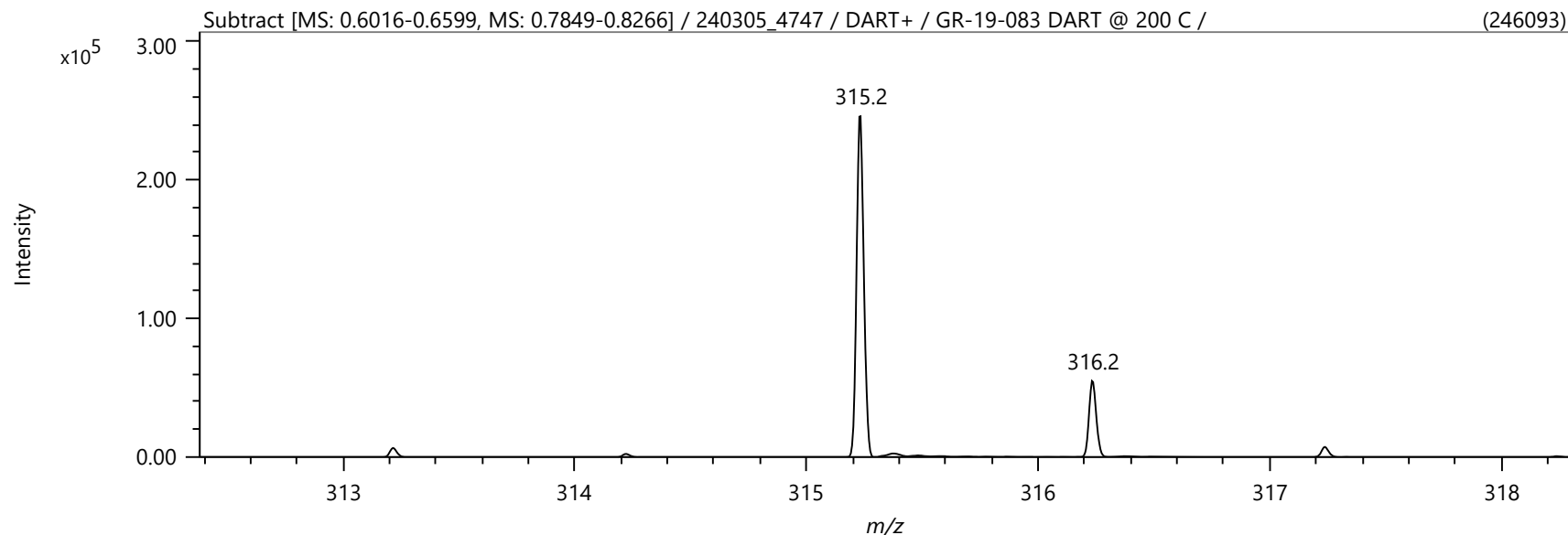
GR-19-083b
STANDARD PHOSPHORUS PARAMETERS

20beta-Dihydrodydrogesterone
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-19-083b





Spectrum



Elemental Composition

Parameters

Tolerance: ±5.00 mDa
 Electron: Odd/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
315.23262	246093.30	C ₂₁ H ₃₁ O ₂	315.23186	0.76	2.41	6.5
		C ₈ H ₂₉ N ₉ O ₄	315.23370	-1.09	-3.44	-1.0
		C ₁₉ H ₂₉ N ₃ O	315.23051	2.10	6.67	7.0
		C ₁₀ H ₃₁ N ₆ O ₅	315.23504	-2.43	-7.70	-1.5
		C ₁₇ H ₂₇ N ₆	315.22917	3.44	10.93	7.5
		C ₁₁ H ₂₇ N ₁₀ O	315.23638	-3.77	-11.95	3.5

Mass	Intensity	Formula	Calculated Mass	Mass Difference [mDa]	Mass Difference [ppm]	DBE
		C16 H31 N2 O4	315.22783	4.78	15.17	2.5

Sample Name: VR-19-083b

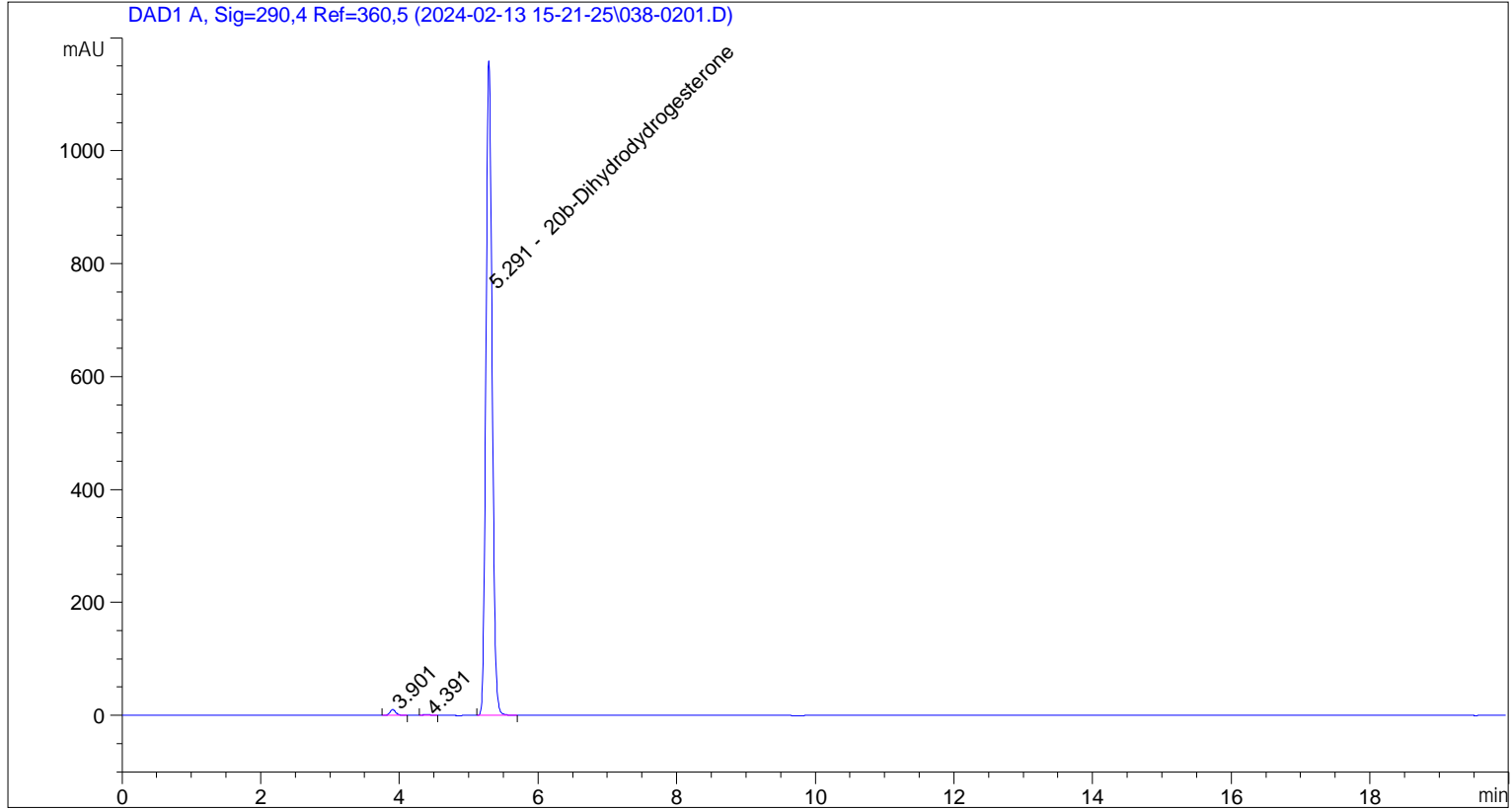
```

=====
Acq. Operator   : vrusu                               Seq. Line :    2
Acq. Instrument : Instrument 1                         Location  : Vial 38
Injection Date  : 2/13/2024 3:43:58 PM                Inj       :    1
                                                    Inj Volume: 5.0 µl

Acq. Method     : C:\CHEM32\1\DATA\2024-02-13 15-21-25\VR021324_083B.M
Last changed    : 2/13/2024 3:22:30 PM by vrusu
                  (modified after loading)

Analysis Method : C:\CHEM32\1\METHODS\VR021424_083BPM.M
Last changed    : 2/14/2024 7:20:51 AM by vrusu
=====

```



```

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

```

```

Sorted By           :      Signal
Calib. Data Modified :      2/14/2024 7:20:32 AM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: DAD1 A, Sig=290,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.901	BB	0.0860	58.47969	0.8011	?
2	4.391	BB	0.0883	8.82950	0.1210	?
3	5.291	BB	0.0968	7232.30176	99.0779	20b-Dihydrodydrogesterone

Totals : 7299.61095

Sample Name: VR-19-083b

=====

*** End of Report ***

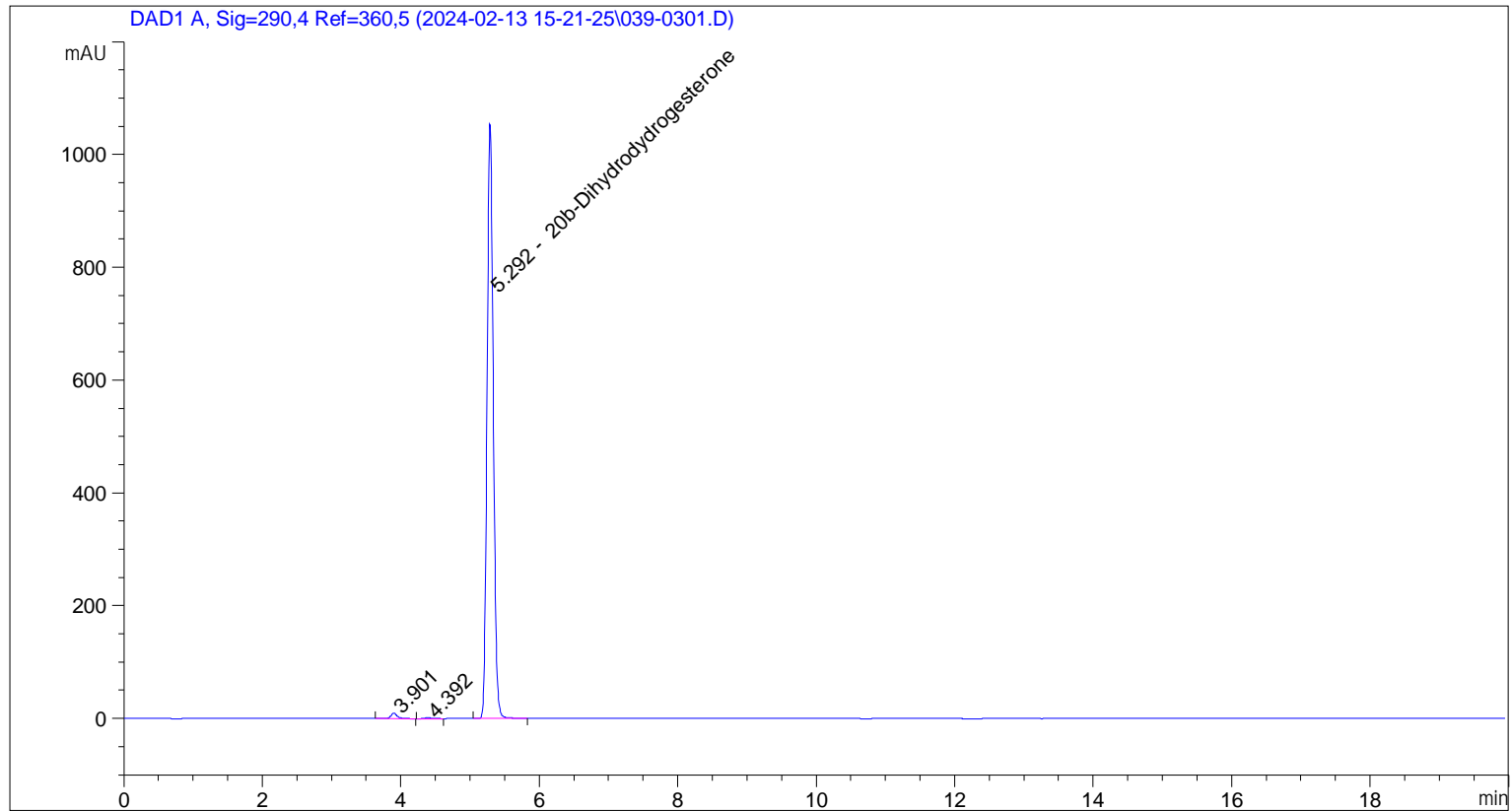
Sample Name: VR-19-083b spl-2

```

=====
Acq. Operator   : vrusu                               Seq. Line :    3
Acq. Instrument : Instrument 1                         Location  : Vial 39
Injection Date  : 2/13/2024 4:05:13 PM                Inj       :    1
                                                    Inj Volume: 5.0 µl

Acq. Method     : C:\CHEM32\1\DATA\2024-02-13 15-21-25\VR021324_083B.M
Last changed    : 2/13/2024 3:22:30 PM by vrusu
                  (modified after loading)

Analysis Method : C:\CHEM32\1\METHODS\VR021424_083BPM.M
Last changed    : 2/14/2024 7:20:51 AM by vrusu
    
```



Area Percent Report

```

Sorted By      :      Signal
Calib. Data Modified : 2/14/2024 7:20:32 AM
Multiplier:    :      1.0000
Dilution:     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: DAD1 A, Sig=290,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.901	BB	0.0977	65.28435	0.9804	?
2	4.392	BB	0.1177	15.39731	0.2312	?
3	5.292	BB	0.0966	6578.08447	98.7883	20b-Dihydrodydrogesterone

Totals : 6658.76613

Sample Name: VR-19-083b spl-2

=====

*** End of Report ***