

**Name:** Drospirenone EP Impurity D  
(6,7-Dehydro Drospirenone)

**Lot#:** GR-16-055

**Test Date:** 06/23/2021 (re-test date: 06/23/2026)

**CAS No.:** 67372-69-4

**MF:** C<sub>23</sub>H<sub>28</sub>O<sub>3</sub>

**MW:** 352.48

**Appearance:** Off-white solid

**Purity:** 99.5% by HPLC (average of two sample preparations)

**<sup>1</sup>H-NMR:** Conforms (contains a trace of ACN)

**MS-ESI (+)** Conforms (shows peak at m/z = 353.19 [M+H]<sup>+</sup>)

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

Approved by:

Date: 06/24/2021

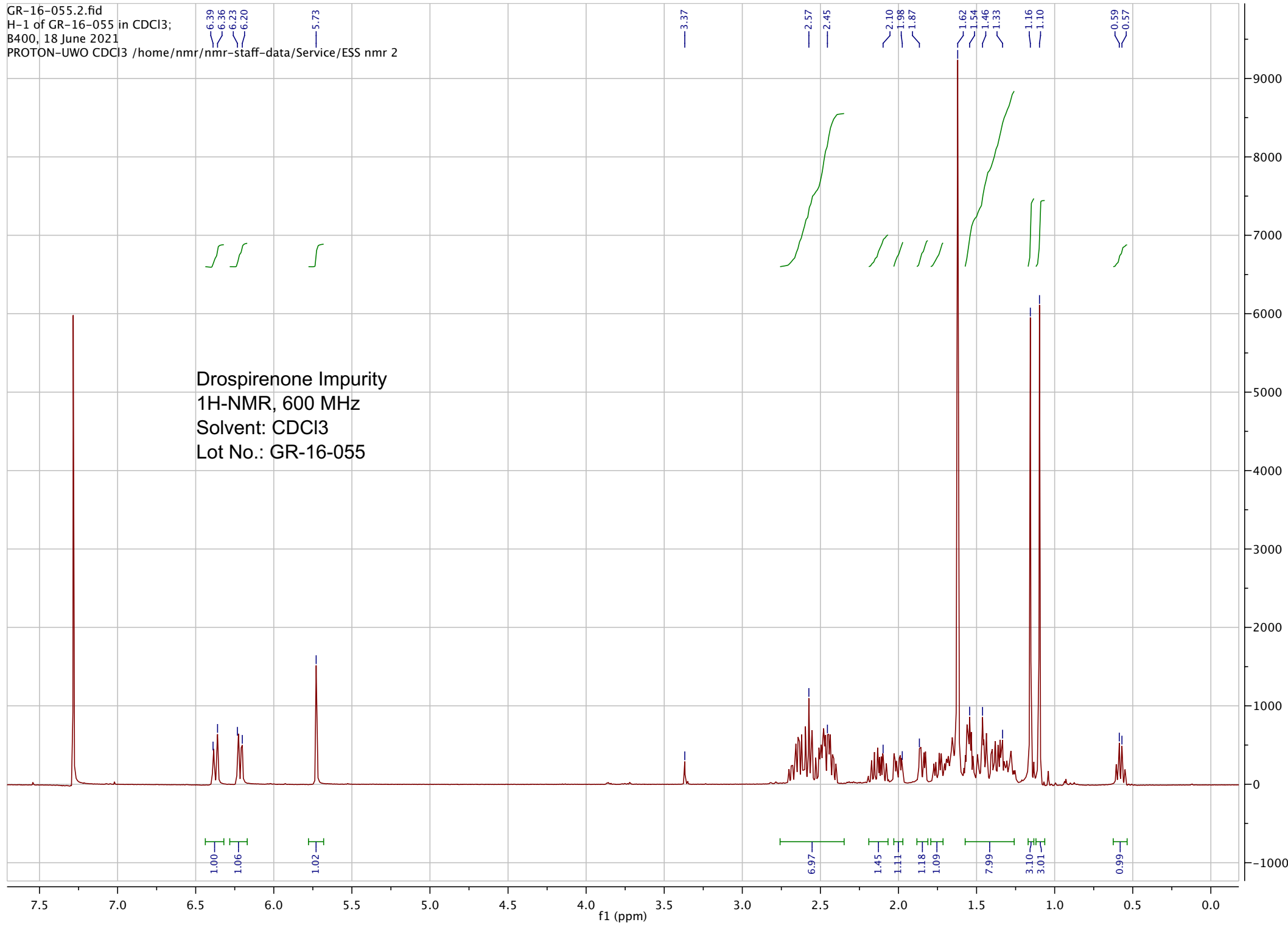


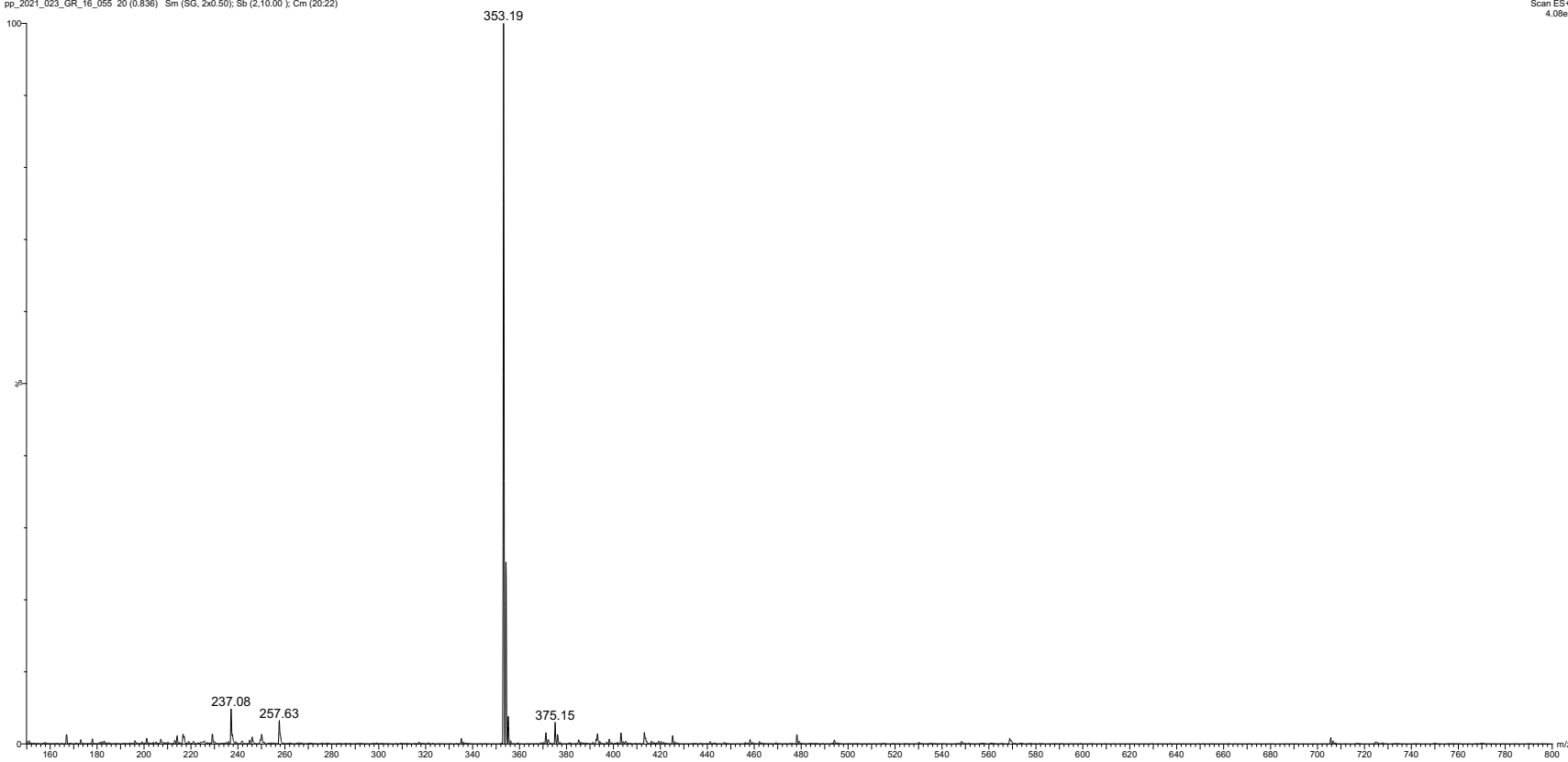
---

Viorica Rusu, QC/QA Manager

GR-16-055.2.fid  
H-1 of GR-16-055 in CDCl3;  
B400, 18 June 2021  
PROTON-UWO CDCl3 /home/nmr/nmr-staff-data/Service/ESS nmr 2

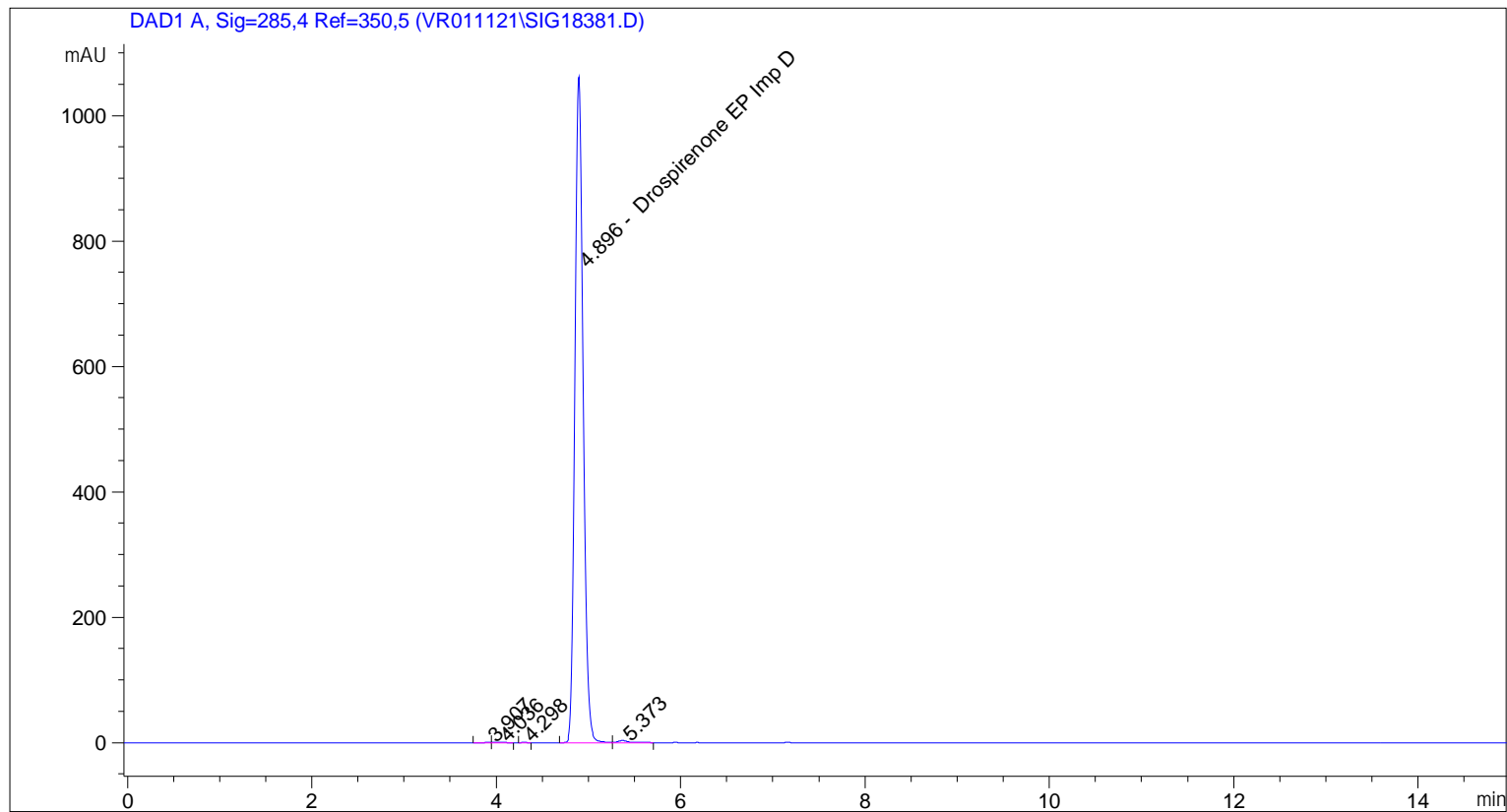
Drospirenone Impurity  
1H-NMR, 600 MHz  
Solvent: CDCl3  
Lot No.: GR-16-055





ESI-MS spectrum for sample GR-16-055. Shows monoisotopic  $[M+H]^+$  mass.

=====  
Acq. Operator : vrusu  
Acq. Instrument : Instrument 1 Location : Vial 32  
Injection Date : 6/23/2021 12:55:58 PM Inj Volume : 5.0 µl  
Acq. Method : C:\CHEM32\1\METHODS\VR062321\_053.M  
Last changed : 6/23/2021 12:54:54 PM by vrusu  
Analysis Method : C:\CHEM32\1\METHODS\VR062321\_053PM.M  
Last changed : 6/23/2021 2:34:55 PM by vrusu



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

Sorted By : Signal  
Calib. Data Modified : 6/23/2021 2:34:17 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=285,4 Ref=350,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.907	BV	0.0721	1.24671	0.0191	?
2	4.036	VB	0.0926	4.45035	0.0682	?
3	4.298	BP	0.0709	6.77590e-1	0.0104	?
4	4.896	BV	0.0952	6491.79102	99.5314	Drospirenone EP Imp D
5	5.373	VB	0.1100	24.18646	0.3708	?

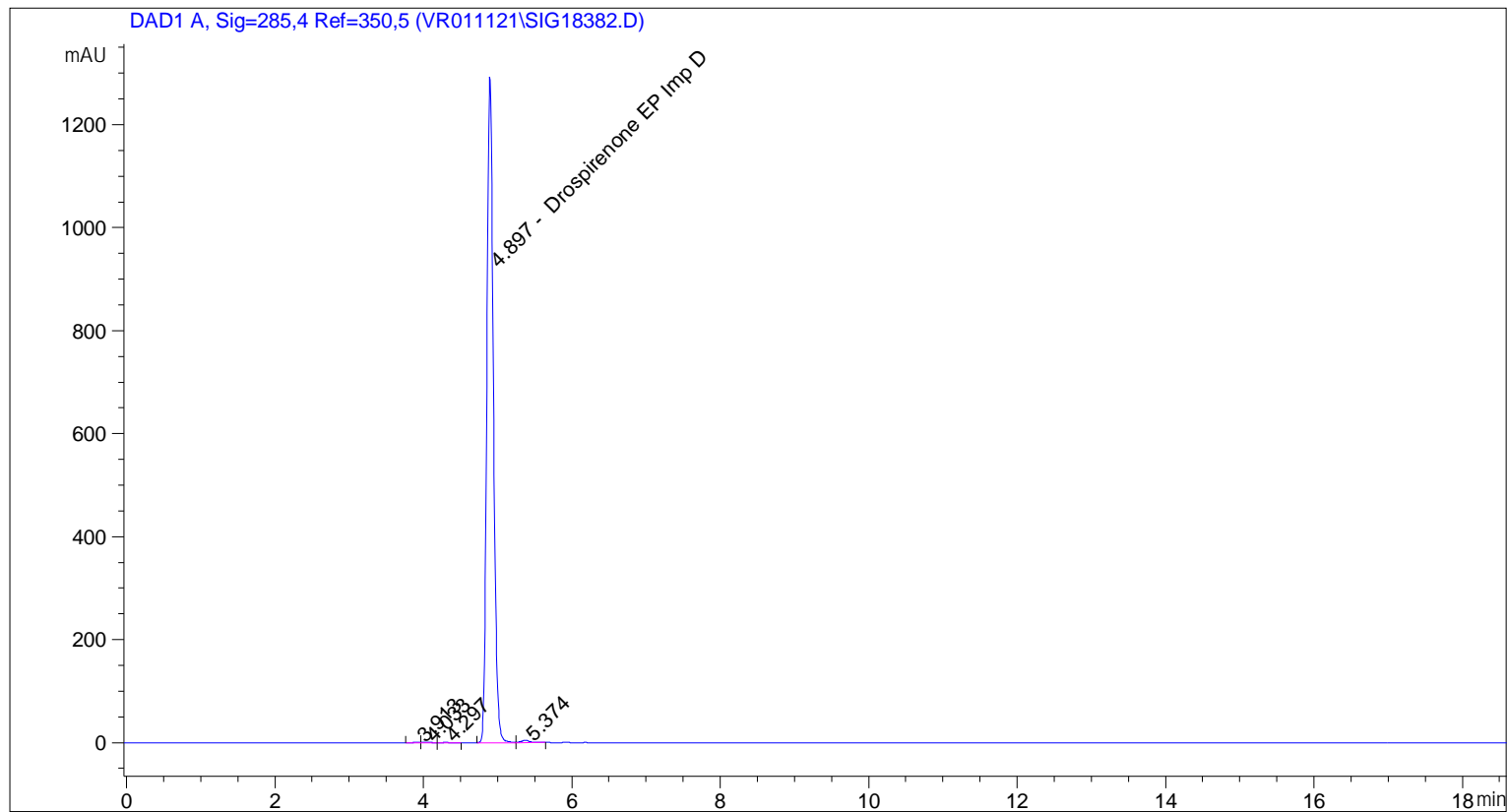
Totals : 6522.35212

=====

\*\*\* End of Report \*\*\*

```

=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 33
Injection Date  : 6/23/2021 1:13:38 PM
                                           Inj Volume : 5.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR062321_053.M
Last changed   : 6/23/2021 1:12:44 PM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR062321_053PM.M
Last changed   : 6/23/2021 2:34:55 PM by vrusu
  
```



Area Percent Report

```

Sorted By           : Signal
Calib. Data Modified : 6/23/2021 2:34:17 PM
Multiplier:         : 1.0000
Dilution:           : 1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=285,4 Ref=350,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.913	BV	0.0830	1.69074	0.0212	?
2	4.033	VB	0.0817	5.50691	0.0691	?
3	4.297	BB	0.0939	1.25771	0.0158	?
4	4.897	BV	0.0955	7933.15674	99.4724	Drospirenone EP Imp D
5	5.374	VB	0.1100	33.62059	0.4216	?

Totals : 7975.23268

=====

\*\*\* End of Report \*\*\*