

**Name:** 6-Keto Ethynyl Estradiol

**Lot#:** GR-15-105

**Test Date:** 09/15/2020 (re-test date: 09/15/2025)

**CAS No.:** 38002-18-5

**MF:** C<sub>20</sub>H<sub>22</sub>O<sub>3</sub>

**MW:** 310.40

**Appearance:** Pale yellow solid

**Purity:** 97.3% by HPLC (average of two sample preparations)

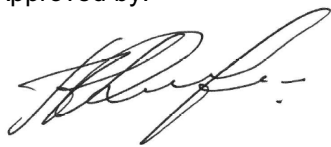
**<sup>1</sup>H-NMR:** Conforms (contains 1.1% EtOAc)

**MS-ESI (-)** Conforms (shows peak at m/z = 309.15 [M-H]<sup>-</sup>)

**Storage** Long term store at 0 - 5° C in a dry place away from direct sunlight

Approved by:

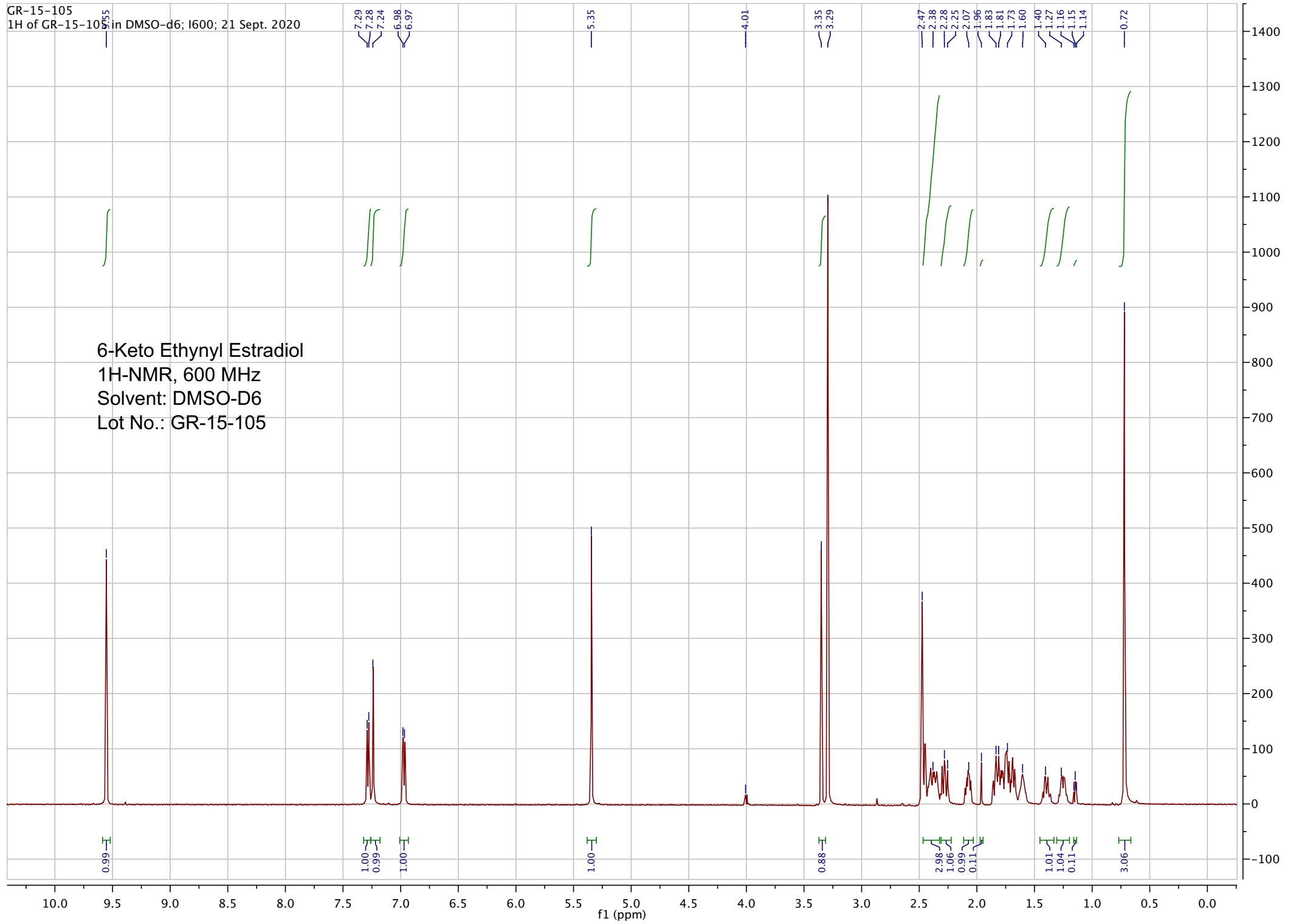
Date: 09/28/2020



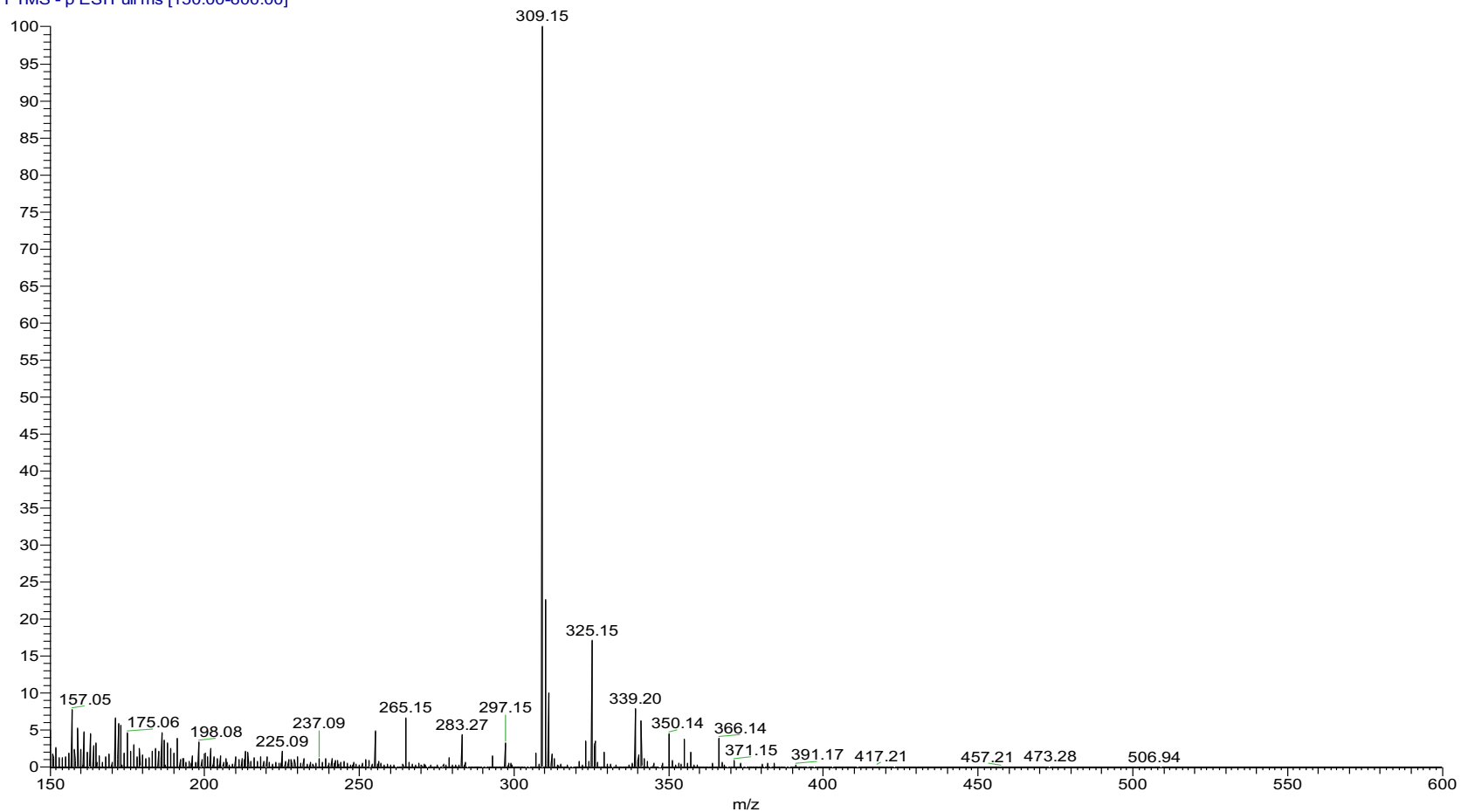
Viorica Rusu, QC/QA Manager

GR-15-105  
1H of GR-15-105 in DMSO-d6; 1600; 21 Sept. 2020

6-Keto Ethynyl Estradiol  
1H-NMR, 600 MHz  
Solvent: DMSO-D6  
Lot No.: GR-15-105



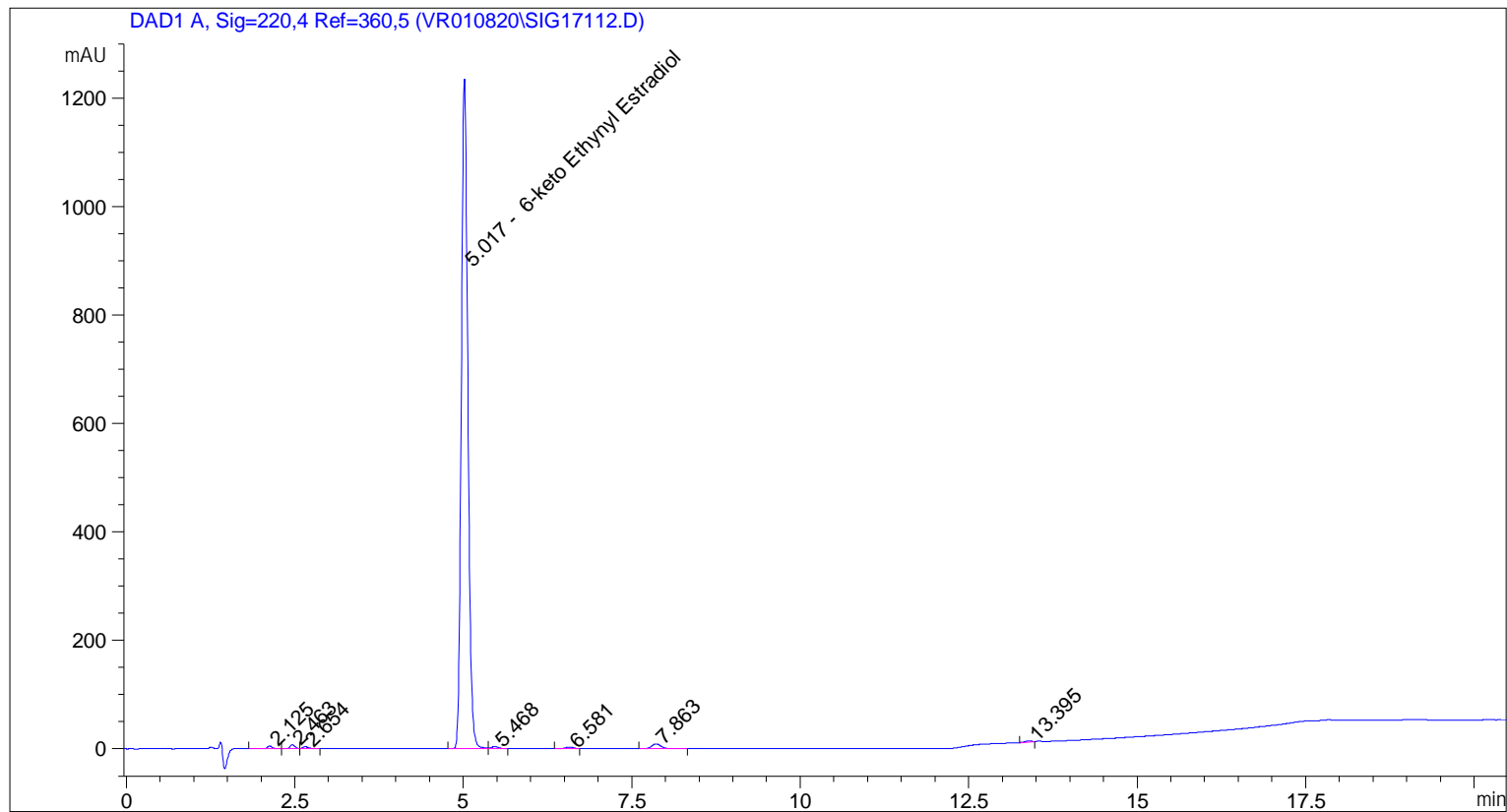
pp\_2020\_027\_GR\_15\_105\_001#415 RT: 1.99 AV: 1 NL: 4.39E5  
T: FTMS - p ESI Full ms [150.00-600.00]



ESI-MS spectrum for sample GR-15-105. Shows monoisotopic [M-H]- mass.

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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 13
Injection Date  : 9/15/2020 8:58:41 AM
                                           Inj Volume : 10.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR_091520_105.M
Last changed    : 9/15/2020 8:57:16 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR091520_105PM.M
Last changed    : 9/15/2020 9:21:51 AM by vrusu
  
```



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 Area Percent Report  
 =====

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Sorted By      : Signal
Calib. Data Modified : 9/15/2020 9:17:00 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	2.125	BB	0.0773	26.21288	0.3058	?
2	2.463	BV	0.0723	34.44469	0.4018	?
3	2.654	VB	0.0746	18.88277	0.2203	?
4	5.017	BV	0.1047	8347.05859	97.3675	6-keto Ethynyl Estradiol
5	5.468	VB	0.1068	25.50627	0.2975	?
6	6.581	BB	0.1202	22.39709	0.2613	?
7	7.863	BB	0.1471	84.65385	0.9875	?
8	13.395	BB	0.1013	13.58353	0.1585	?

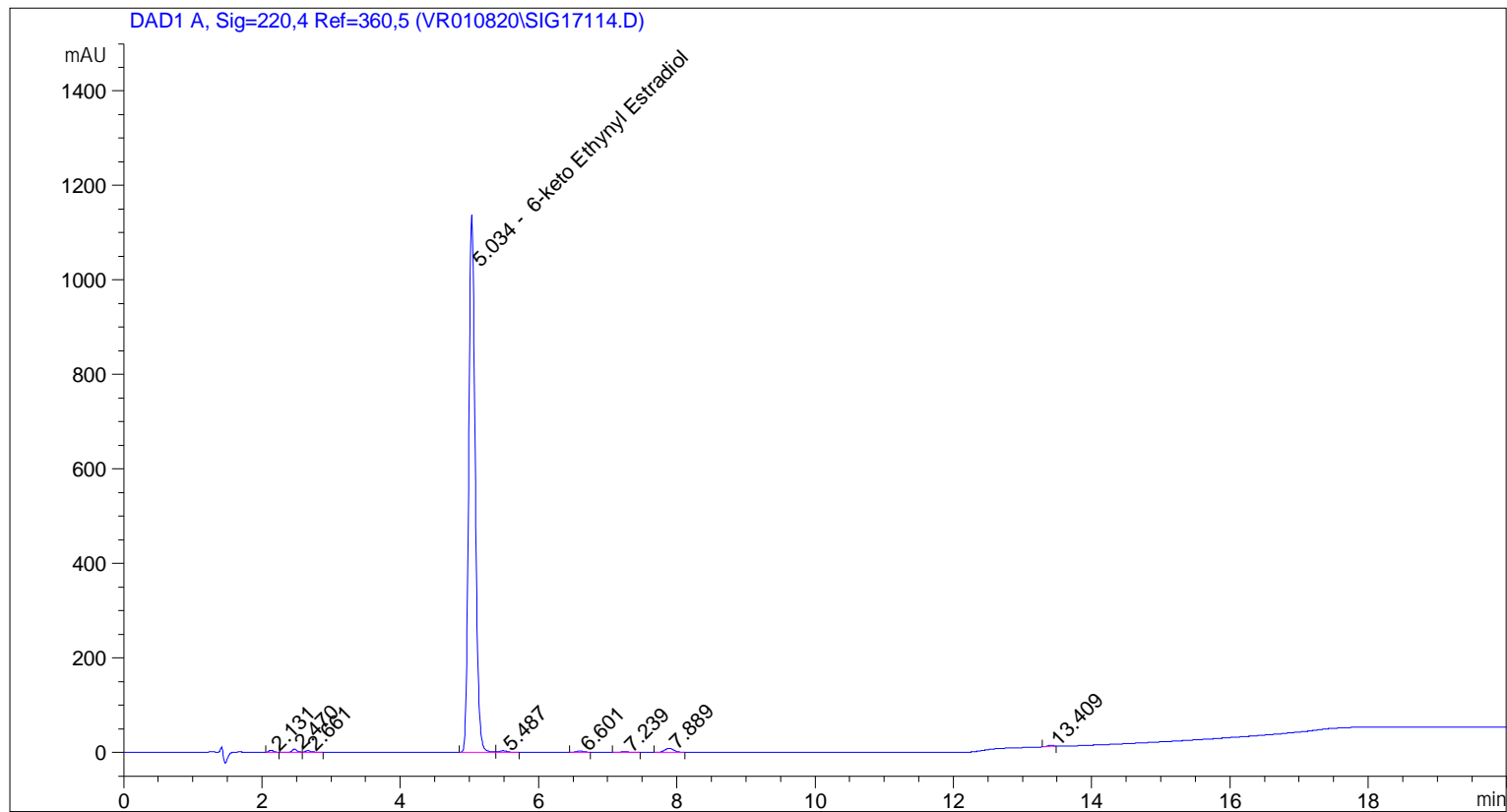
Sample Name: GR-15-105

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
Totals :				8572.73969		

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

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 14
Injection Date  : 9/15/2020 9:58:44 AM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR_091520_105.M
Last changed    : 9/15/2020 9:53:55 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR091520_105PM.M
Last changed    : 9/15/2020 12:13:59 PM by vrusu
  
```



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

```

Sorted By           : Signal
Calib. Data Modified : 9/15/2020 9:17:00 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	2.131	BB	0.0620	16.96444	0.2229	?
2	2.470	BV	0.0698	31.23687	0.4104	?
3	2.661	VB	0.0718	16.85914	0.2215	?
4	5.034	VV	0.1019	7403.90576	97.2829	6-keto Ethynyl Estradiol
5	5.487	VB	0.1106	25.59978	0.3364	?
6	6.601	BB	0.1176	17.32869	0.2277	?
7	7.239	BB	0.1432	10.91694	0.1434	?
8	7.889	BB	0.1406	75.94547	0.9979	?

Sample Name: GR-15-105

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	13.409	BB	0.0938	11.93672	0.1568	?

Totals : 7610.69381

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