

Name:	Clobetasol Propionate EP Impurity F
Lot#:	GR-10-207
Test Date:	04/08/2022 (re-test date: 04/08/2027)
CAS No.:	2412496-00-3
MF:	C ₂₂ H ₂₇ FO ₄
MW:	374.35
Appearance:	White solid
Purity:	97.9% by HPLC (average of two sample preparations)
¹H-NMR:	Conforms
MS-ESI (+)	Conforms (shows peaks at m/z = 355.18 [M-HF+H] ⁺ & 375.19 [M+H] ⁺)
Storage	Store at 0-5°C in a dry place away from direct sunlight

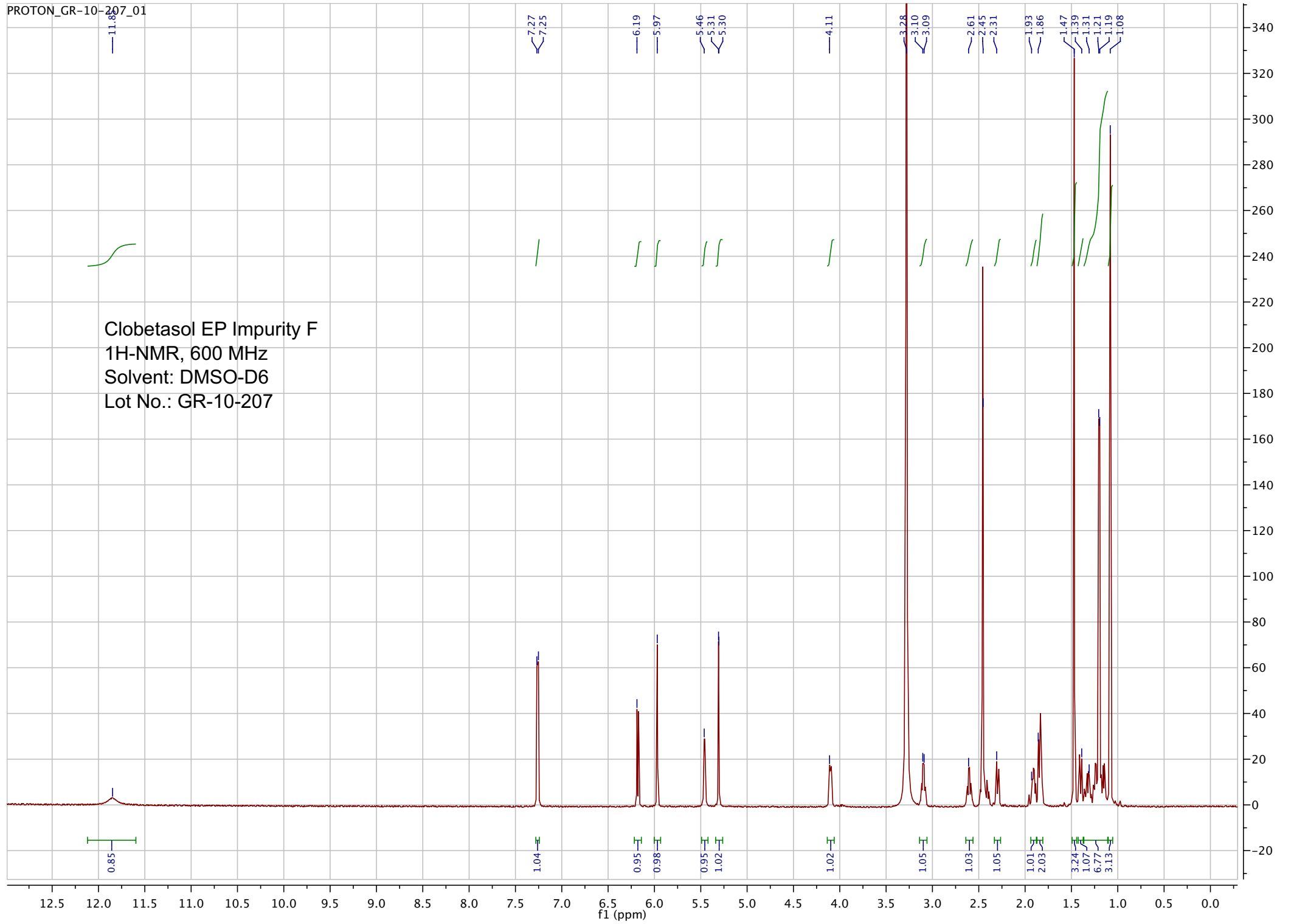
Approved by:

Date: 04/08/2022



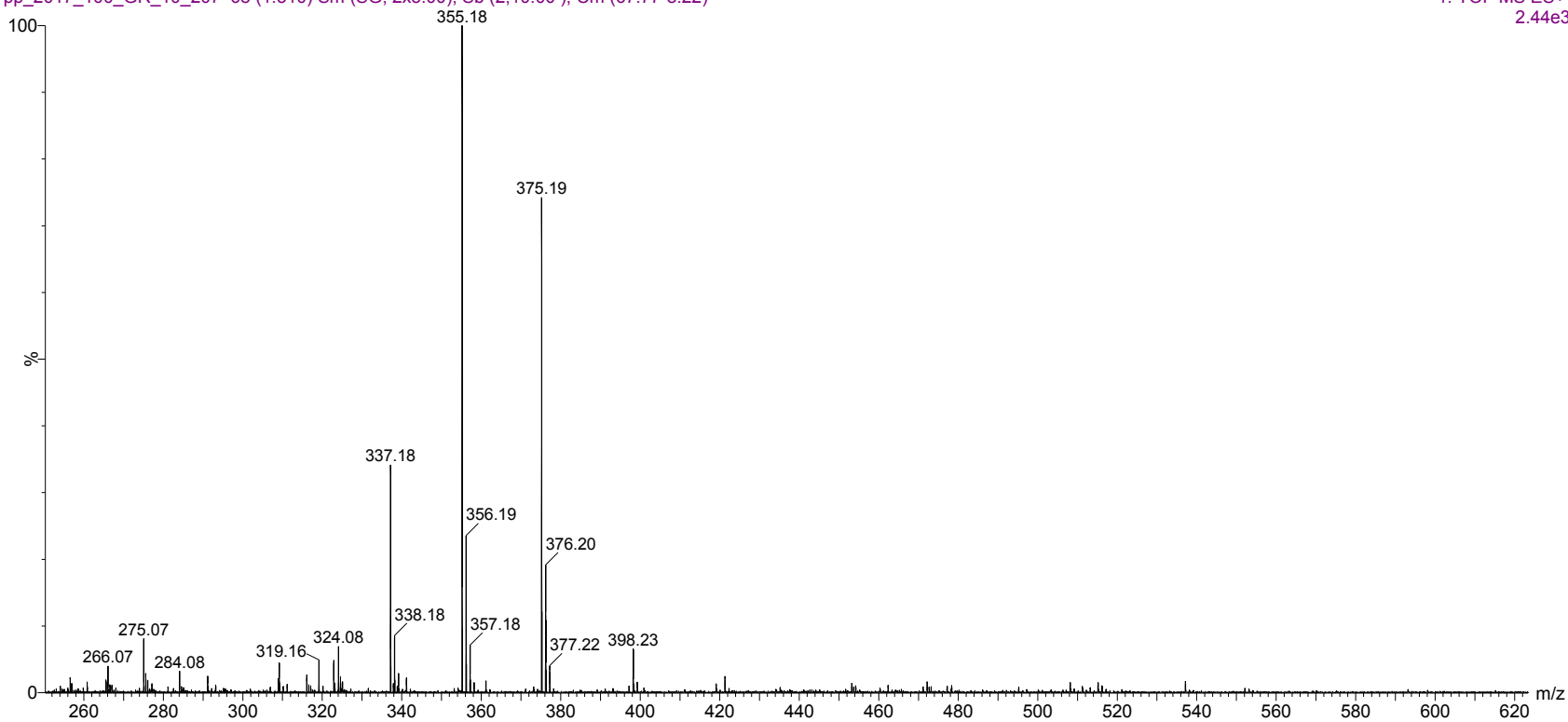
Viorica Rusu, QC/QA Manager

Clobetasol EP Impurity F
 1H-NMR, 600 MHz
 Solvent: DMSO-D6
 Lot No.: GR-10-207



pp_2017_100_GR_10_207 68 (1.310) Sm (SG, 2x5.00); Sb (2,10.00); Cm (67:77-8:22)

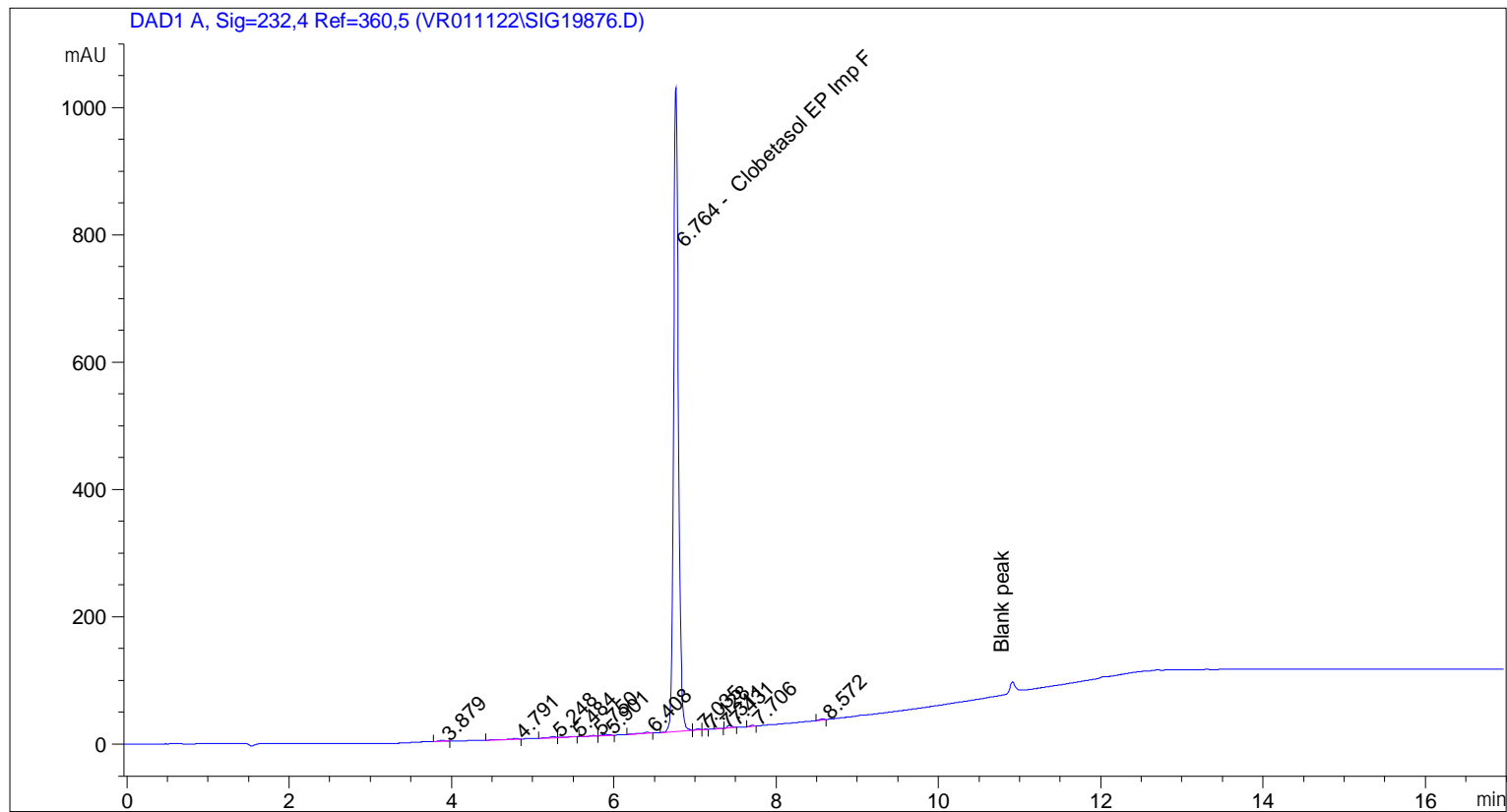
1: TOF MS ES+
2.44e3



ESI-MS spectrum for sample GR-10-207. Shows monoisotopic $[M+H]^+$ mass.

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 97
Injection Date  : 4/8/2022 9:26:56 AM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR040822_207.M
Last changed    : 4/8/2022 9:25:41 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR040822_207PM.M
Last changed    : 4/8/2022 12:49:20 PM by vrusu
  
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 Area Percent Report
 =====

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Sorted By           :      Signal
Calib. Data Modified :      4/8/2022 12:48:05 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=232,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.879	BB	0.0755	6.73962	0.1568	?
2	4.791	BB	0.1018	6.66602	0.1551	?
3	5.248	BV	0.0626	10.01857	0.2331	?
4	5.484	VB	0.1186	5.98290	0.1392	?
5	5.750	BV	0.0781	4.12129	0.0959	?
6	5.901	VB	0.0792	9.83798	0.2289	?
7	6.408	BB	0.0764	9.02085	0.2099	?
8	6.764	BV	0.0643	4207.31152	97.8826	Clobetasol EP Imp F

Sample Name: GR-10-207

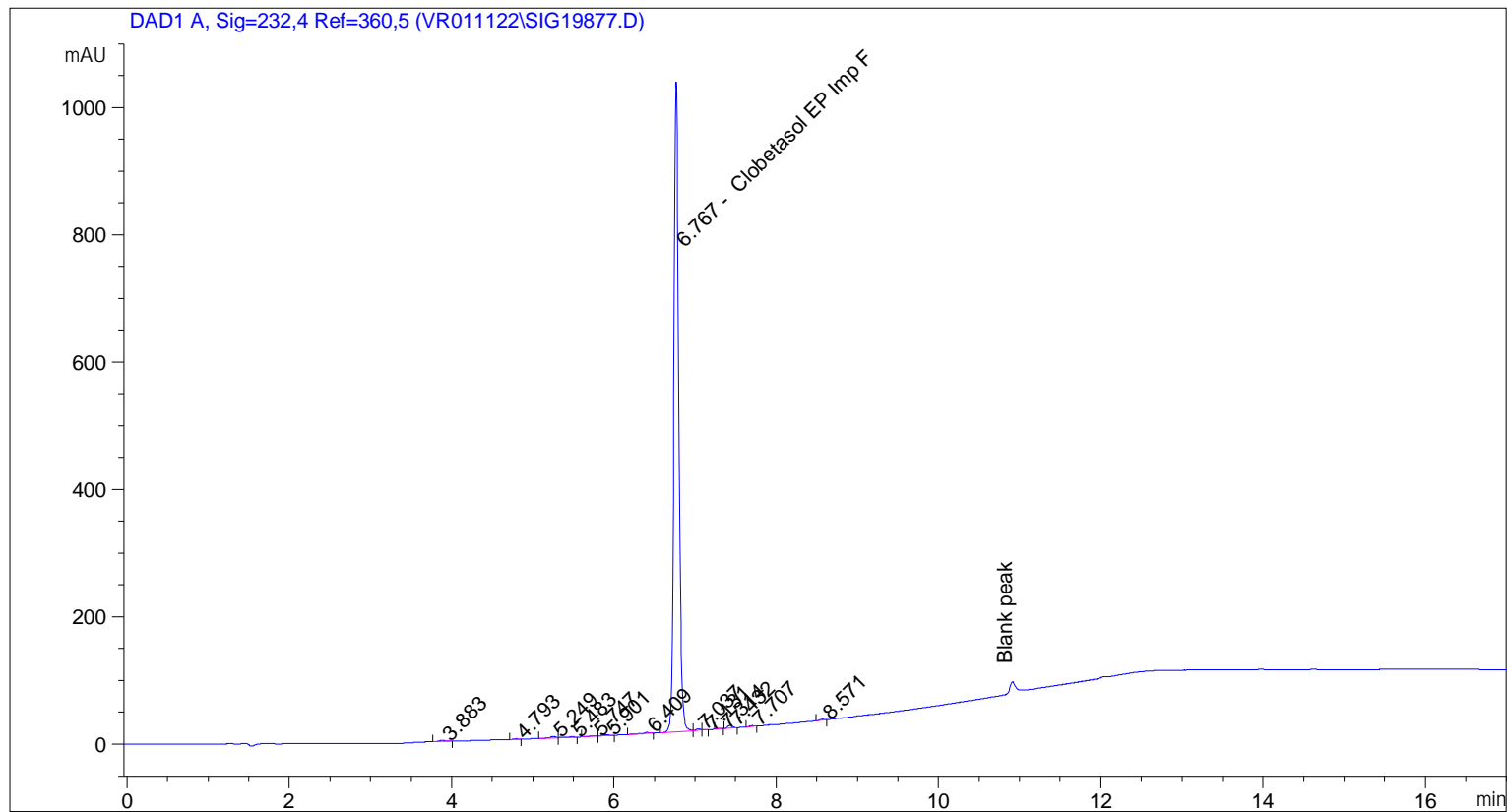
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	7.035	VV	0.0614	7.92075	0.1843	?
10	7.128	VB	0.0540	2.00483	0.0466	?
11	7.311	BB	0.0577	2.29985	0.0535	?
12	7.431	BB	0.0610	17.08942	0.3976	?
13	7.706	BB	0.0557	4.63911	0.1079	?
14	8.572	BB	0.0606	4.67326	0.1087	?

Totals : 4298.32596

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*** End of Report ***

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 98
Injection Date  : 4/8/2022 9:48:32 AM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR040822_207.M
Last changed    : 4/8/2022 9:47:39 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR040822_207PM.M
Last changed    : 4/8/2022 12:49:20 PM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By           :      Signal
Calib. Data Modified :      4/8/2022 12:48:05 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=232,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.883	BB	0.0808	8.15935	0.1884	?
2	4.793	BB	0.0602	3.19865	0.0738	?
3	5.249	BV	0.0668	10.47971	0.2419	?
4	5.483	VB	0.1165	5.61830	0.1297	?
5	5.747	BV	0.0701	3.51203	0.0811	?
6	5.901	VB	0.0777	9.59706	0.2215	?
7	6.409	BB	0.0787	9.95935	0.2299	?
8	6.767	BV	0.0643	4242.78418	97.9410	Clobetasol EP Imp F

Sample Name: GR-10-207 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	7.037	VV	0.0626	7.80318	0.1801	?
10	7.131	VB	0.0536	1.68480	0.0389	?
11	7.314	BB	0.0579	2.26779	0.0523	?
12	7.432	BB	0.0609	17.23361	0.3978	?
13	7.707	BB	0.0584	4.89389	0.1130	?
14	8.571	BB	0.0600	4.78665	0.1105	?

Totals : 4331.97856

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*** End of Report ***