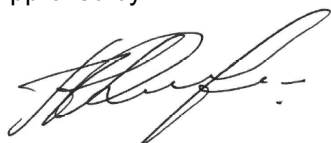


Name:	Budesonide Impurity J
Lot#:	GR-15-131
Test Date:	11/09/2020 (re-test date: 11/09/2025)
CAS No.:	313474-59-8
MF:	C ₂₅ H ₃₃ BrO ₆
MW:	509.43
Appearance:	White solid
Purity:	98.0% by HPLC (average of two sample preparations)
¹H-NMR:	Conforms (contains a trace of EtOAc)
MS-ESI (+)	Conforms (shows peaks at m/z = 509.15, 511.15 [M+H] ⁺ shows the expected isotope pattern for mono-bromo compounds)
Storage	Long term store at 0 - 5° C in a dry place away from direct sunlight

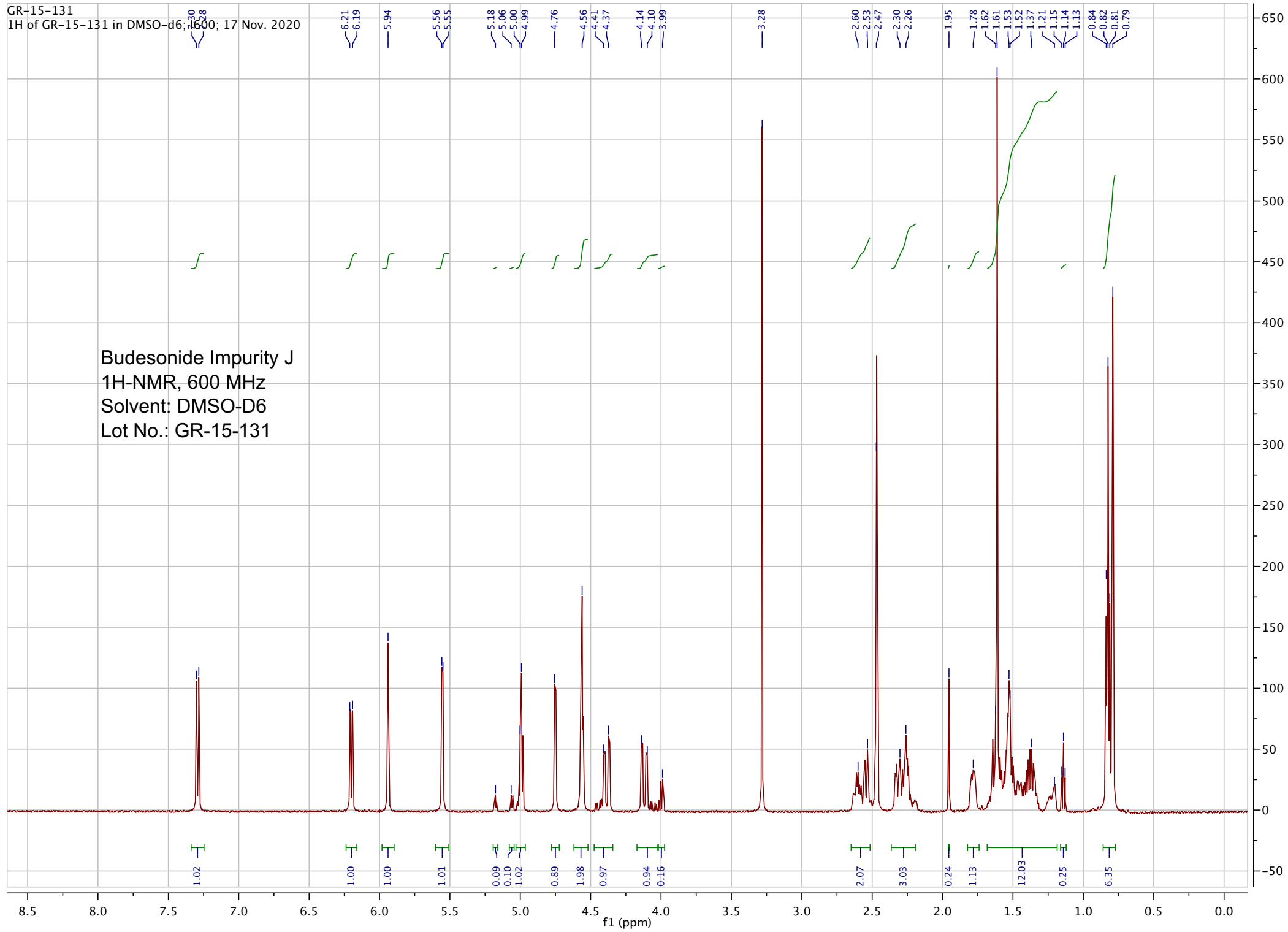
Approved by:

Date: 01/08/2021

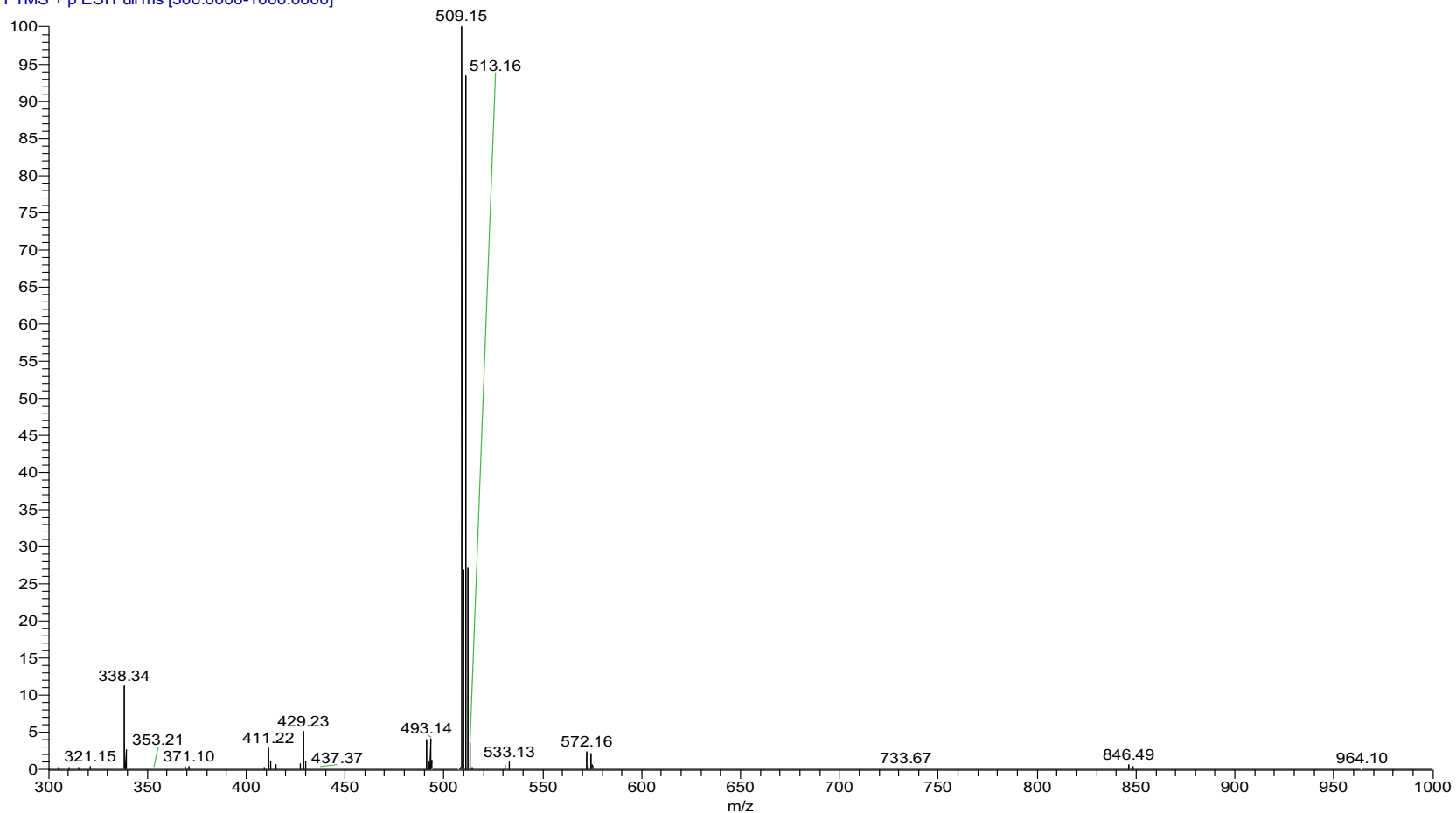


Viorica Rusu, QC/QA Manager

GR-15-131
1H of GR-15-131 in DMSO-d6; 600; 17 Nov. 2020

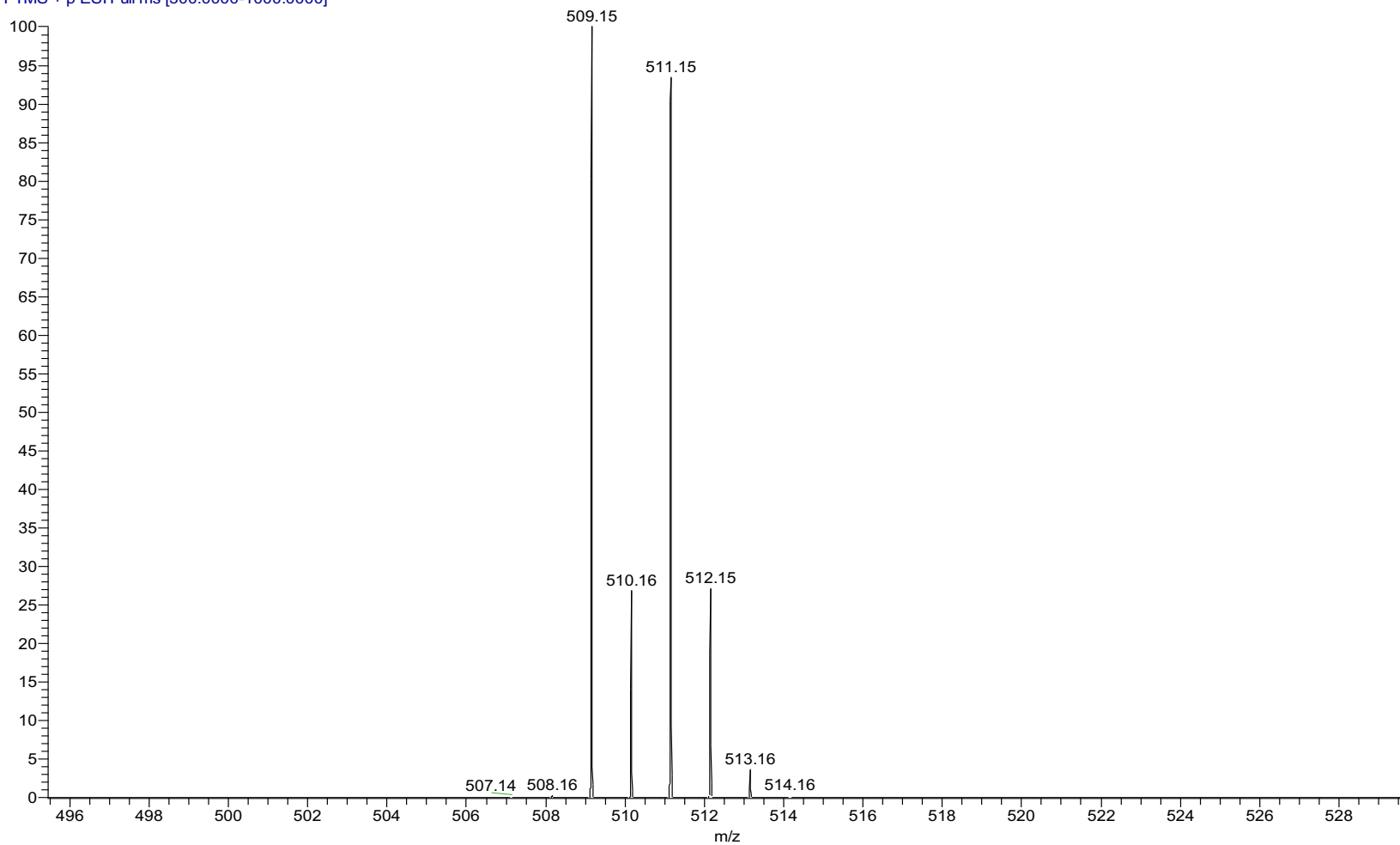


pp_2021_001_GR_15_131_1 #2047 RT: 4.60 AV: 1 NL: 4.40E7
T: FTMS + p ESI Full ms [300.0000-1000.0000]



ESI-MS spectrum for sample 2021-001, GR-15-131. Shows monoisotopic [M+H]⁺ mass.

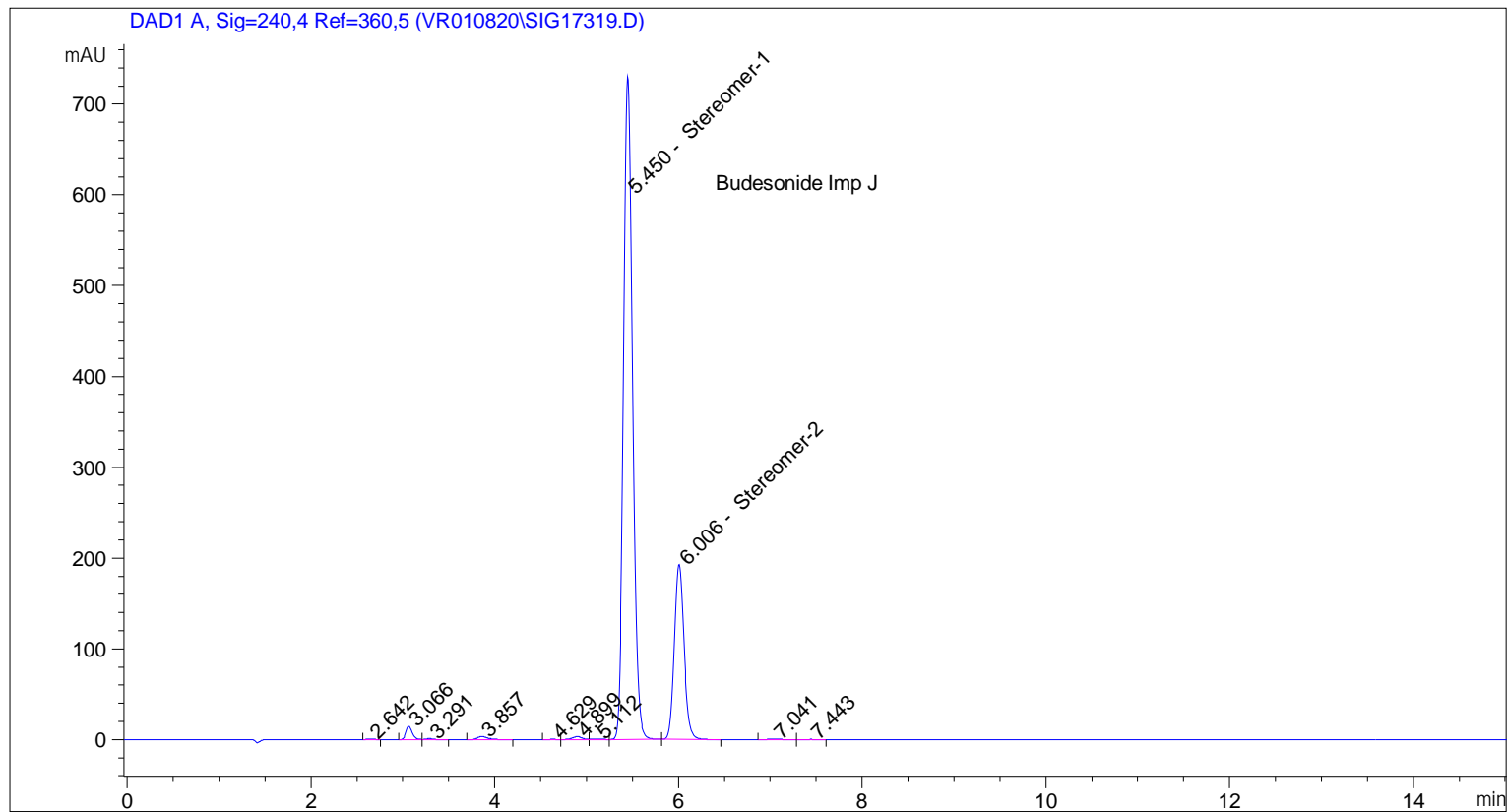
pp_2021_001_GR_15_131_1 #2047 RT: 4.60 AV: 1 NL: 4.40E7
T: FTMS + p ESI Full ms [300.0000-1000.0000]



Expansion of above.

```

=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 25
Injection Date  : 11/9/2020 3:08:09 PM
                                           Inj Volume : 5.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR110920_131.M
Last changed   : 11/9/2020 3:07:12 PM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR110920_131PM.M
Last changed   : 11/9/2020 4:20:54 PM by vrusu
  
```



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

```

Sorted By      :      Signal
Calib. Data Modified : 11/9/2020 3:37:46 PM
Multiplier:    :      1.0000
Dilution:     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=240,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.642	BB	0.0714	3.83644	0.0587	?
2	3.066	BV	0.0741	70.29271	1.0761	?
3	3.291	VB	0.0870	6.53498	0.1000	?
4	3.857	BV	0.1152	26.47492	0.4053	?
5	4.629	BV	0.0765	1.51546	0.0232	?
6	4.899	VV	0.1076	23.73753	0.3634	?
7	5.112	VB	0.0989	4.32058	0.0661	?
8	5.450	BB	0.1056	4980.54541	76.2435	Stereomer-1

Sample Name: GR-15-131

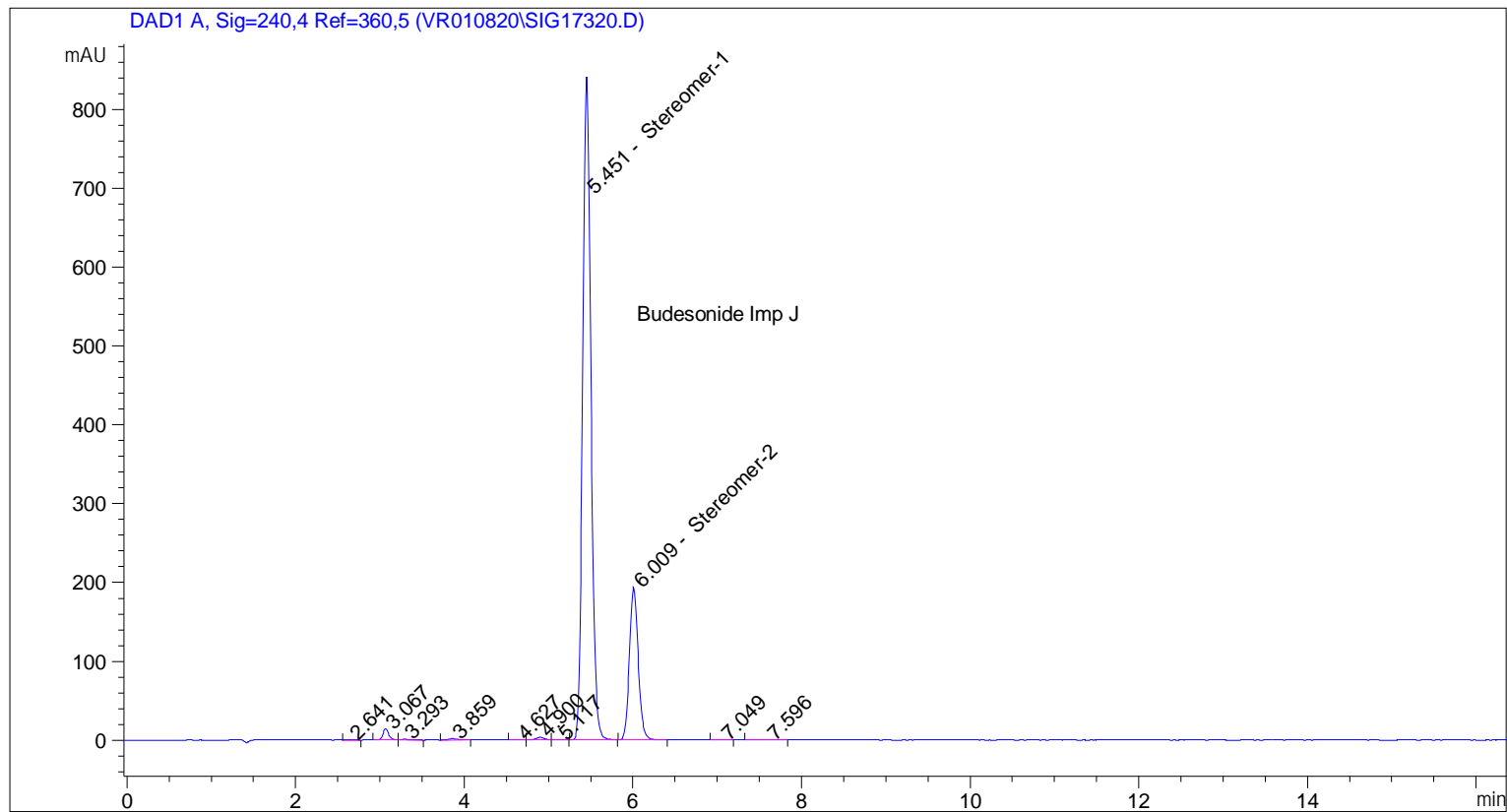
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	6.006	BB	0.1131	1407.38879	21.5447	Stereomer-2
10	7.041	BB	0.1166	5.92785	0.0907	?
11	7.443	BB	0.1093	1.84607	0.0283	?

Totals : 6532.42074

=====
*** End of Report ***

```

=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 26
Injection Date  : 11/9/2020 3:26:07 PM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR110920_131.M
Last changed    : 11/9/2020 3:25:04 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR110920_131PM.M
Last changed    : 11/9/2020 4:20:54 PM by vrusu
  
```



Area Percent Report

```

=====
Sorted By           : Signal
Calib. Data Modified : 11/9/2020 3:37:46 PM
Multiplier:         : 1.0000
Dilution:           : 1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=240,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.641	BB	0.0725	3.37298	0.0464	?
2	3.067	BV	0.0741	68.81316	0.9474	?
3	3.293	VB	0.0843	5.88227	0.0810	?
4	3.859	BB	0.1074	12.84510	0.1768	?
5	4.627	BV	0.0928	1.60722	0.0221	?
6	4.900	VV	0.1079	23.86123	0.3285	?
7	5.117	VB	0.0986	4.25495	0.0586	?
8	5.451	BB	0.1052	5722.46777	78.7860	Stereomer-1

Sample Name: GR-15-131 spl 2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	6.009	BB	0.1130	1408.53406	19.3925	Stereomer-2
10	7.049	BB	0.1199	4.88480	0.0673	?
11	7.596	BB	0.1545	6.78072	0.0934	?

Totals : 7263.30426

=====
*** End of Report ***