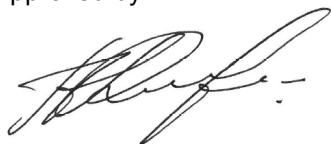


<b>Name:</b>	<b>Losartan Acid-D4</b>
<b>Lot#:</b>	GR-13-167
<b>Test Date:</b>	07/18/2019 (re-test date: 07/18/2024)
<b>CAS No.:</b>	1246820-62-1
<b>MF:</b>	C <sub>22</sub> H <sub>17</sub> D <sub>4</sub> ClN <sub>6</sub> O <sub>2</sub>
<b>MW:</b>	440.92
<b>Appearance:</b>	Off-White Solid
<b>Purity:</b>	96.6% by HPLC; >98% atom D
<b><sup>1</sup>H-NMR:</b>	Conforms
<b>MS-ESI (+)</b>	Conforms (shows peaks at m/z = 441.17, 443.17 [M+H] <sup>+</sup> ; exhibits the expected isotope pattern for mono-chloro compounds)

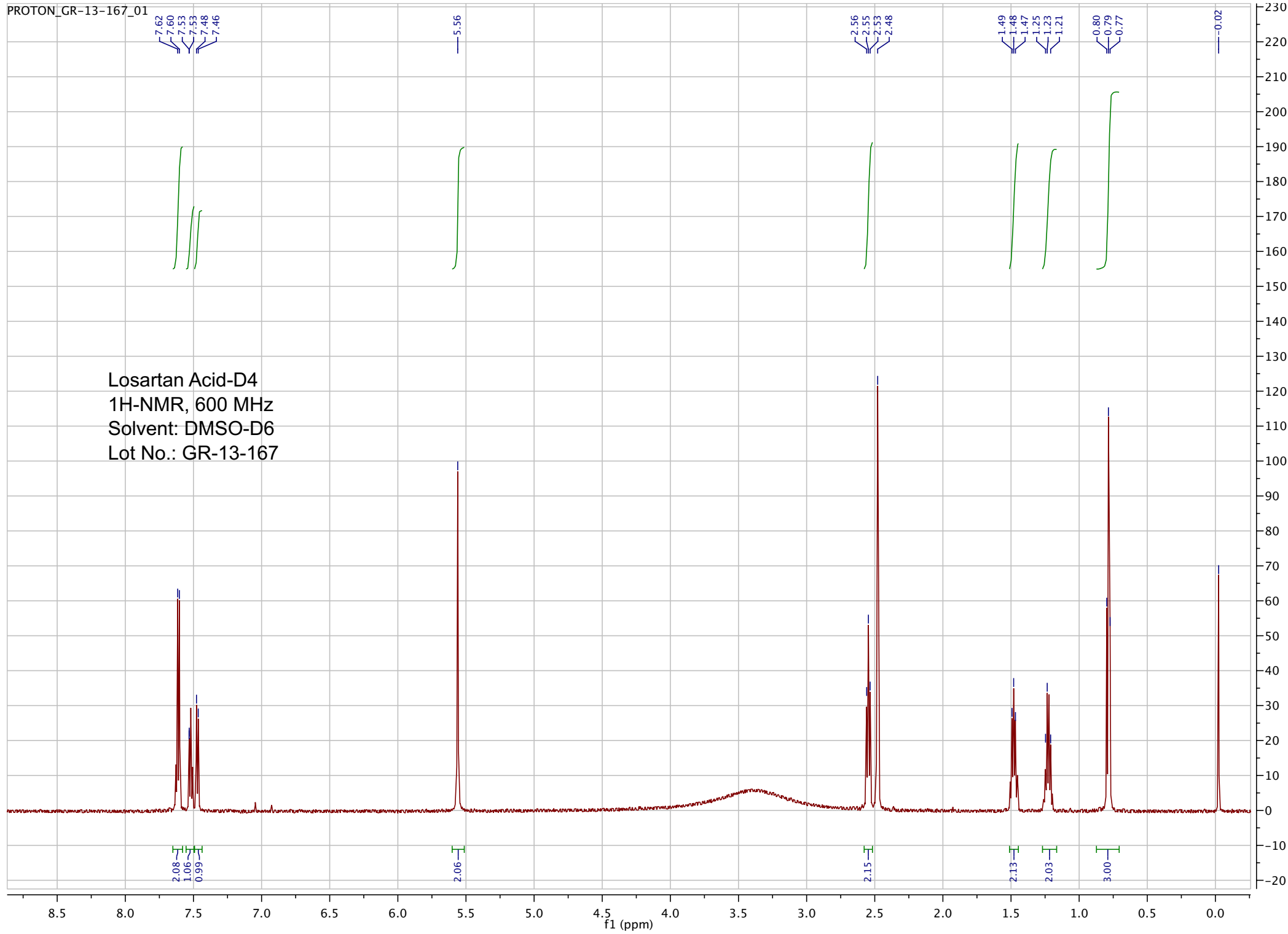
Approved by:

Date: 07/25/2019



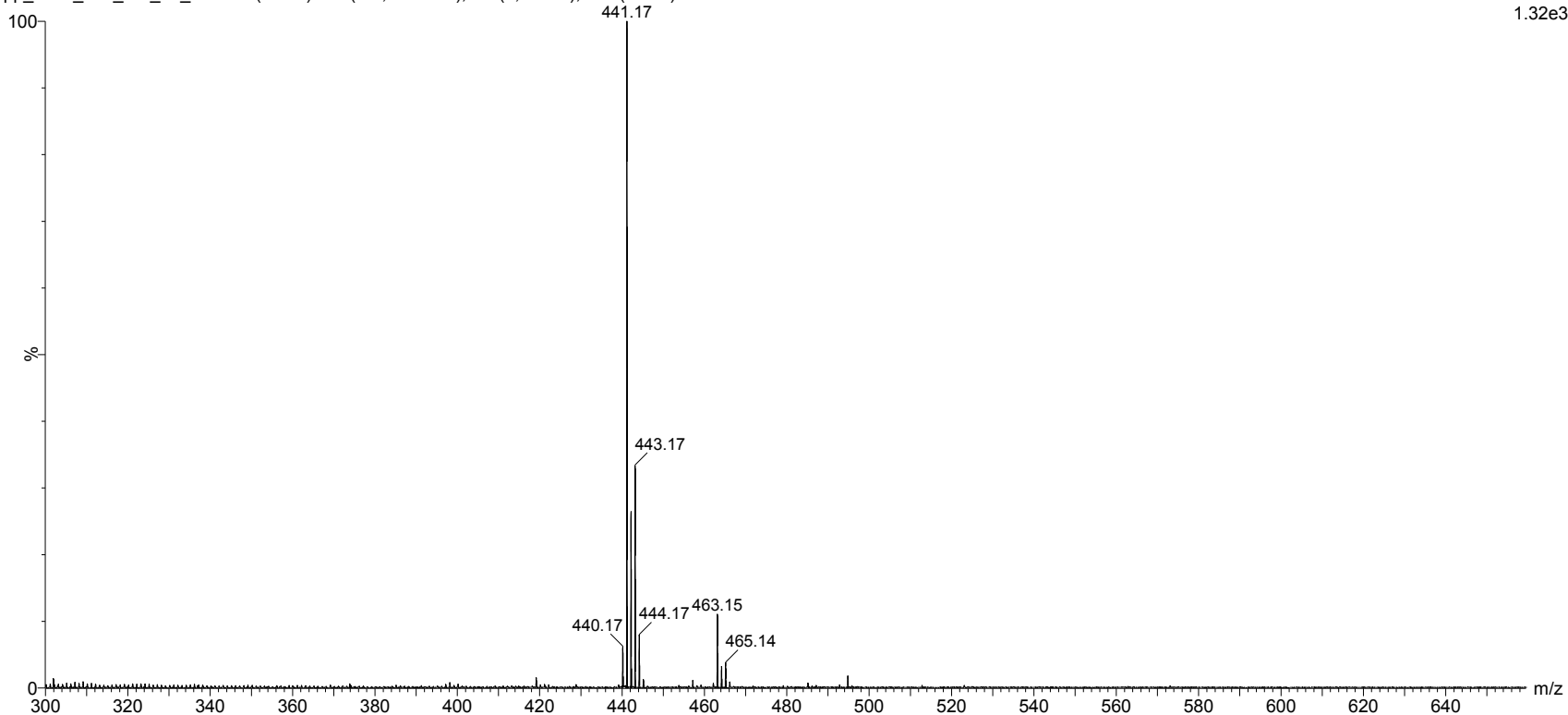
Viorica Rusu, QC/QA Manager

Losartan Acid-D4  
1H-NMR, 600 MHz  
Solvent: DMSO-D6  
Lot No.: GR-13-167



pp\_2019\_076\_GR\_13\_167 69 (1.310) Sm (SG, 2x10.00); Sb (2,10.00); Cm (69:77)

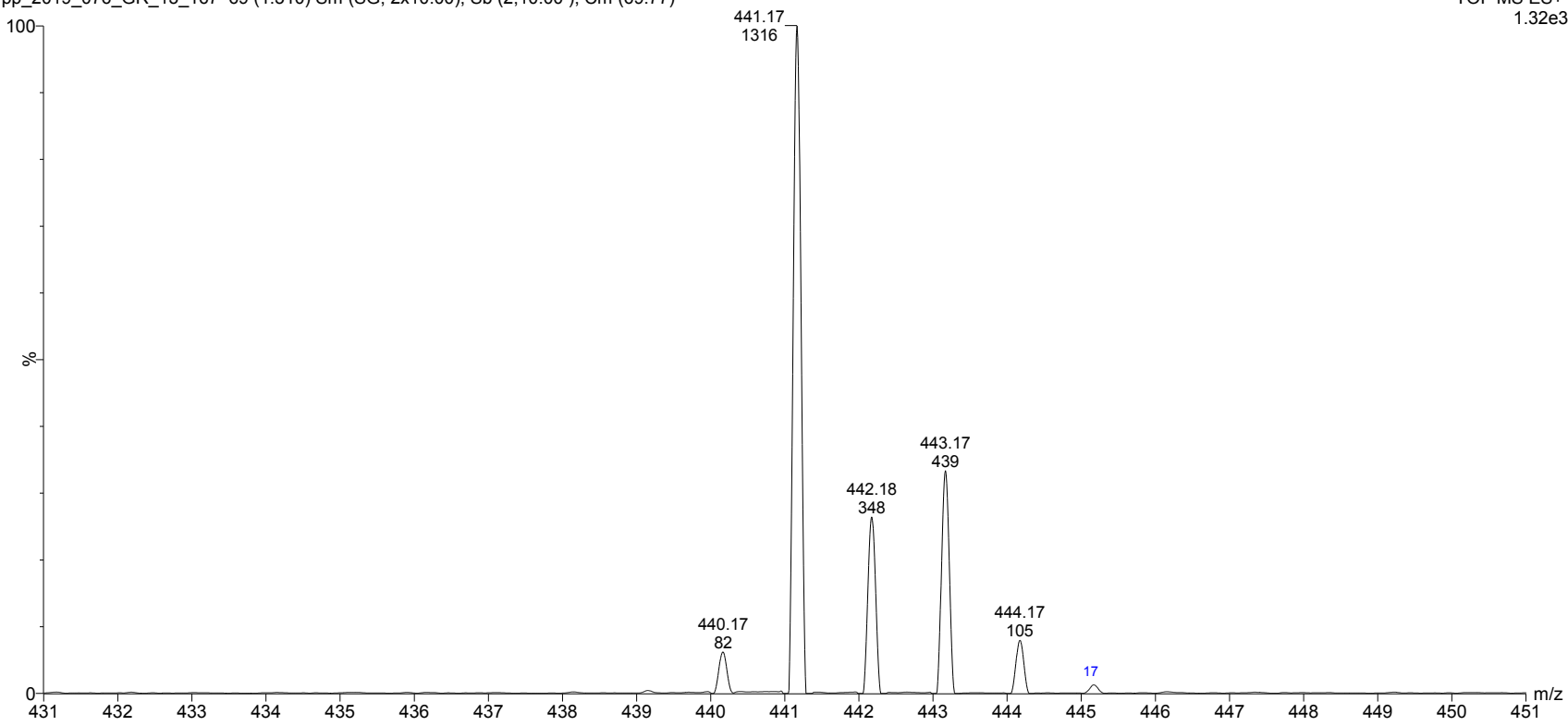
TOF MS ES+  
1.32e3



ESI-MS spectrum for sample GR-13-167. Shows monoisotopic [M+H]<sup>+</sup> mass.

pp\_2019\_076\_GR\_13\_167 69 (1.310) Sm (SG, 2x10.00); Sb (2,10.00 ); Cm (69:77)

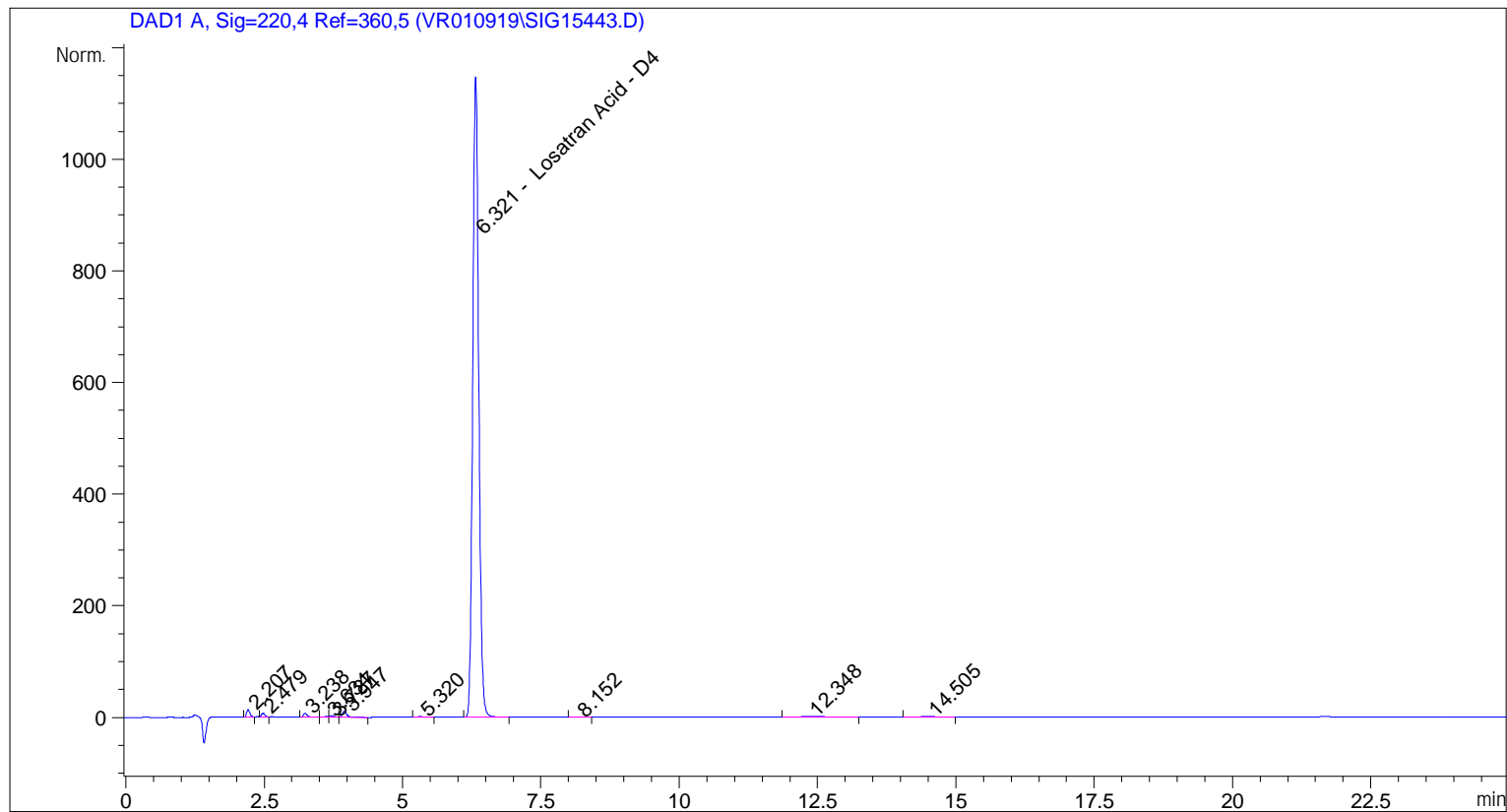
TOF MS ES+  
1.32e3



Expansion of above showing intensity.

```

=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 55
Injection Date  : 7/18/2019 8:58:25 AM
                                           Inj Volume : 15.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR071819_167.M
Last changed    : 7/18/2019 8:57:10 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR071819_167PM.M
Last changed    : 7/18/2019 11:52:44 AM by vrusu
  
```



Area Percent Report

```

Sorted By      : Signal
Calib. Data Modified : 7/18/2019 11:52:15 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	2.207	BB	0.0620	56.42946	0.6284	?
2	2.479	VV	0.0625	30.22198	0.3366	?
3	3.238	BB	0.0783	35.56957	0.3961	?
4	3.634	BV	0.0669	8.60434	0.0958	?
5	3.727	VV	0.0868	17.73094	0.1975	?
6	3.947	VB	0.0877	64.44555	0.7177	?
7	5.320	BB	0.1095	8.62198	0.0960	?
8	6.321	BB	0.1162	8678.58203	96.6462	Losartan Acid - D4

Sample Name: GR-13-167

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	8.152	BB	0.1721	5.03702	0.0561	?
10	12.348	BB	0.4611	45.64614	0.5083	?
11	14.505	BB	0.2870	28.85160	0.3213	?

Totals : 8979.74063

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