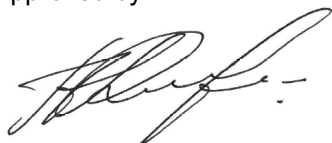


<b>Name:</b>	<b>Promethazine-D6 Hydrochloride</b>
<b>Lot#:</b>	GR-12-157
<b>Test Date:</b>	02/10/2024 (re-test date: 02/10/2029)
<b>CAS No.:</b>	1189947-02-1
<b>MF:</b>	C <sub>17</sub> H <sub>15</sub> D <sub>6</sub> ClN <sub>2</sub> S
<b>MW:</b>	326.92
<b>Appearance:</b>	Pale Pink Solid
<b>Purity:</b>	98.7% by HPLC (average of two sample preparations); 99% atom D
<b><sup>1</sup>H-NMR:</b>	Conforms
<b>MS-ESI (+)</b>	Conforms (shows peak at m/z = 291.18 [M <sub>free base</sub> +H] <sup>+</sup> )
<b>Storage</b>	Store at -18°C in a dry place away from direct sunlight

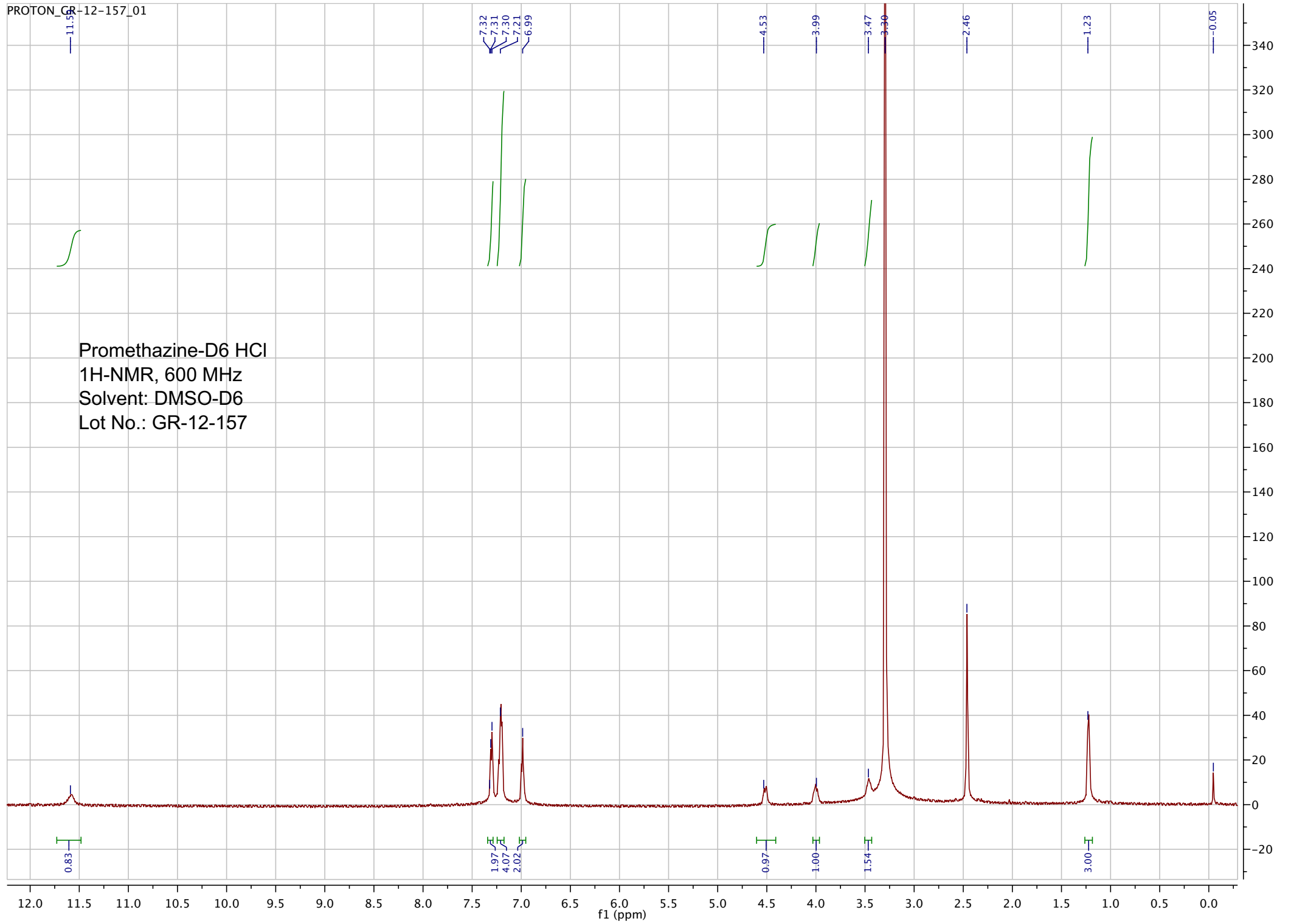
Approved by:

Date: 02/12/2024



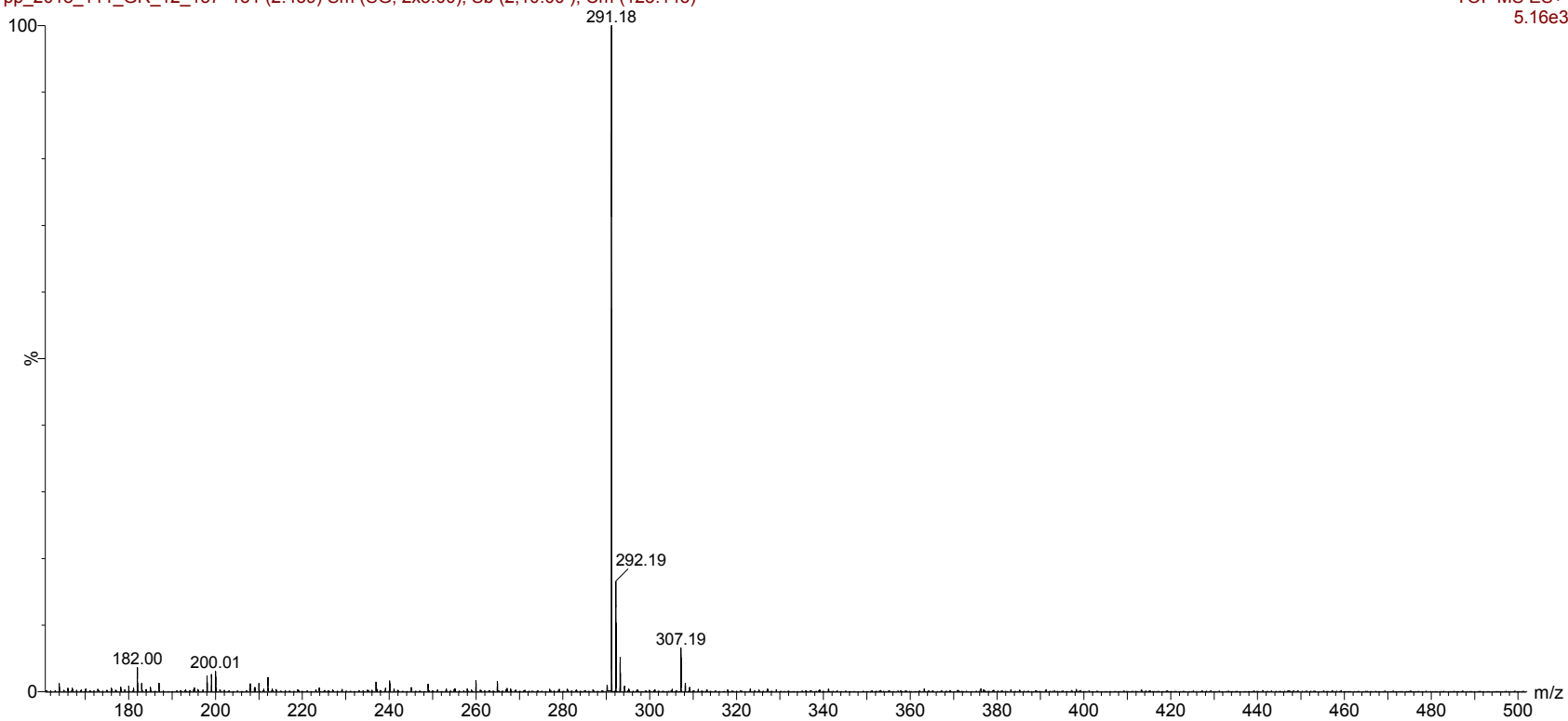
Viorica Rusu, QC/QA Manager

Promethazine-D6 HCl  
1H-NMR, 600 MHz  
Solvent: DMSO-D6  
Lot No.: GR-12-157



pp\_2018\_111\_GR\_12\_157 131 (2.439) Sm (SG, 2x5.00); Sb (2,10.00 ); Cm (125:143)

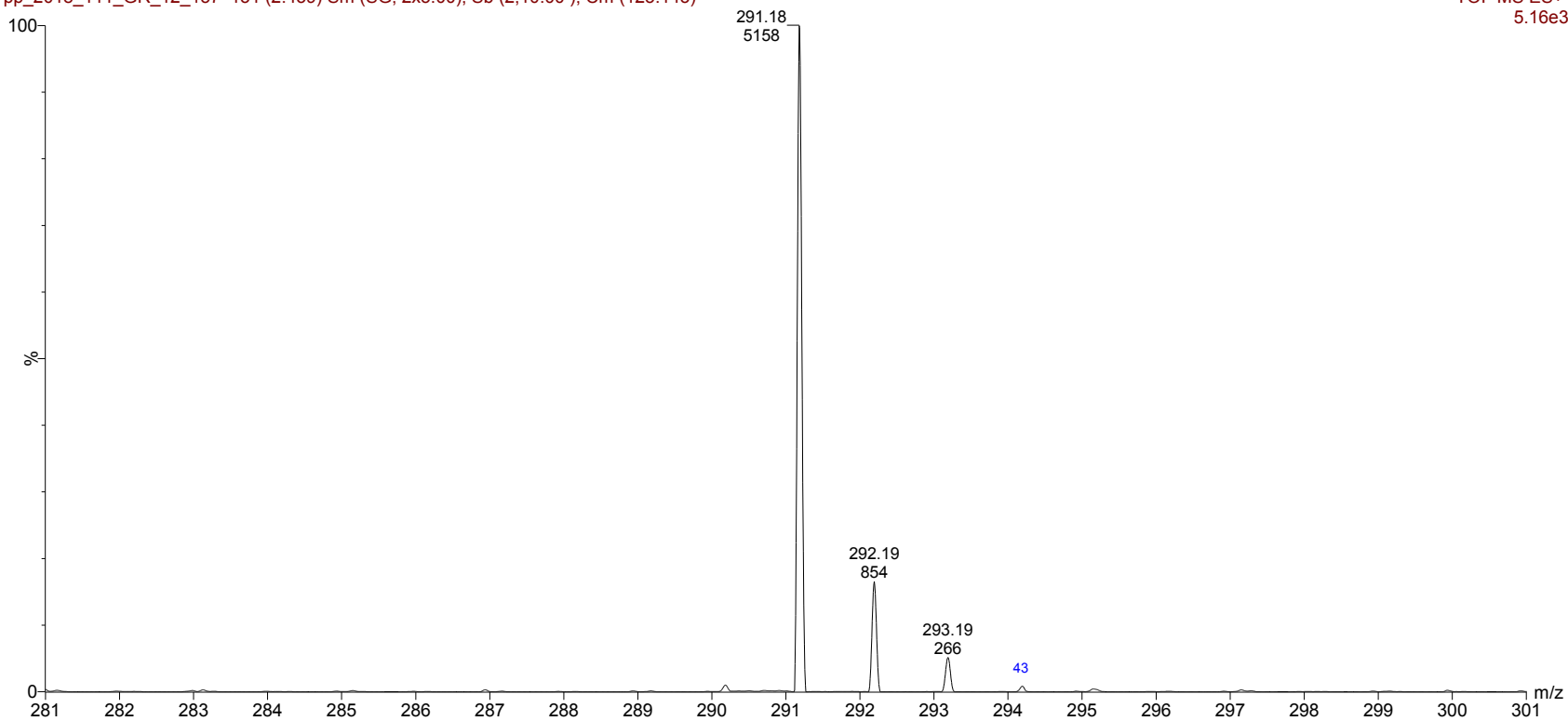
TOF MS ES+  
5.16e3



ESI-MS spectrum for sample GR-12-157. Shows monoisotopic [M+H]<sup>+</sup> mass.

pp\_2018\_111\_GR\_12\_157 131 (2.439) Sm (SG, 2x5.00); Sb (2,10.00 ); Cm (125:143)

TOF MS ES+  
5.16e3



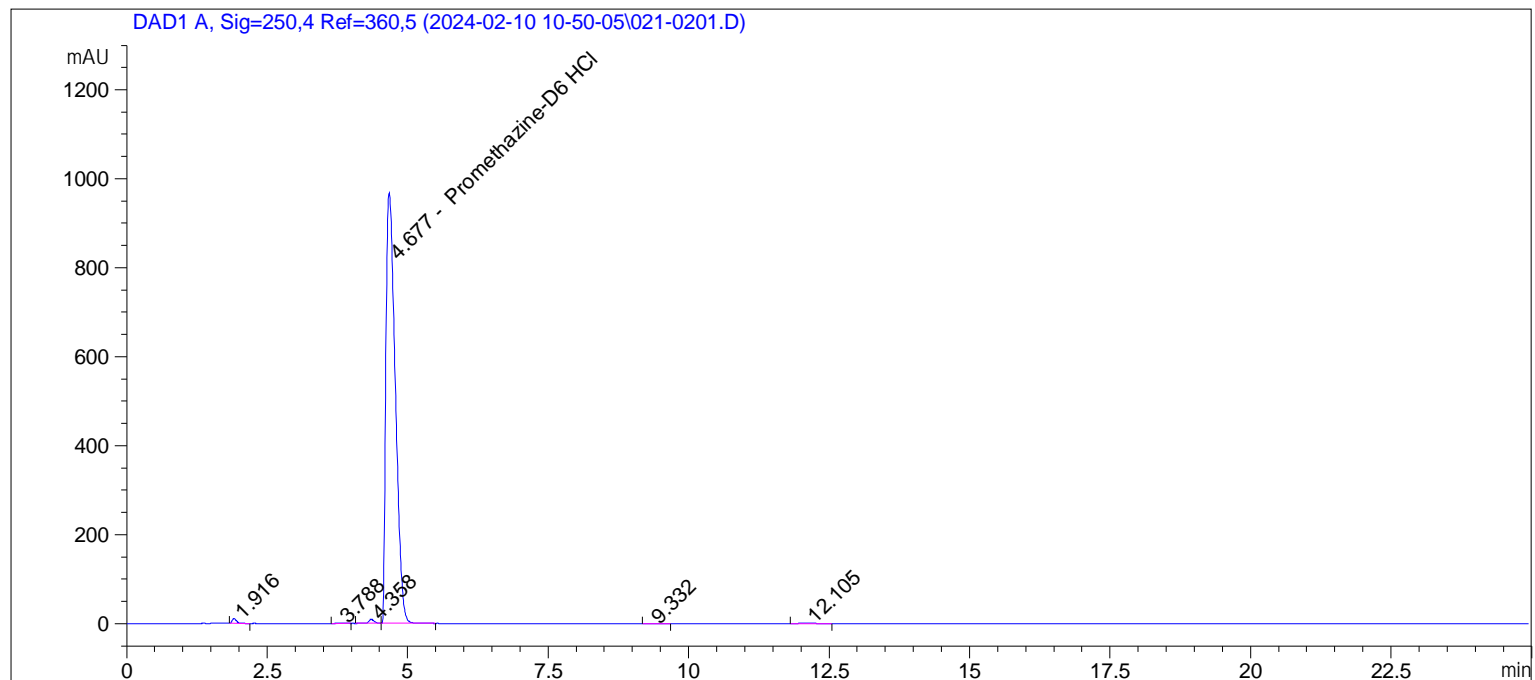
Expansion of above showing intensity labels.

Sample Name: GR-12-157

```

=====
Acq. Operator   : vrusu                      Seq. Line :    2
Acq. Instrument : Instrument 1                Location  : Vial 21
Injection Date  : 2/10/2024 11:17:50 AM      Inj       :    1
                                           Inj Volume: 10.0 µl

Acq. Method     : C:\CHEM32\1\DATA\2024-02-10 10-50-05\VR021024_157.M
Last changed    : 2/10/2024 10:49:48 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021024_157PM.M
Last changed    : 2/10/2024 2:30:02 PM by vrusu
=====
    
```



Area Percent Report

```

Sorted By           :      Signal
Calib. Data Modified :      2/10/2024 2:25:44 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: DAD1 A, Sig=250,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.916	BB	0.0821	57.78999	0.5058	?
2	3.788	BB	0.1023	3.11294	0.0272	?
3	4.358	BV	0.0997	62.00460	0.5427	?
4	4.677	VB	0.1838	1.12744e4	98.6735	Promethazine-D6 HCl
5	9.332	BB	0.2069	4.39272	0.0384	?
6	12.105	BB	0.2077	24.25880	0.2123	?

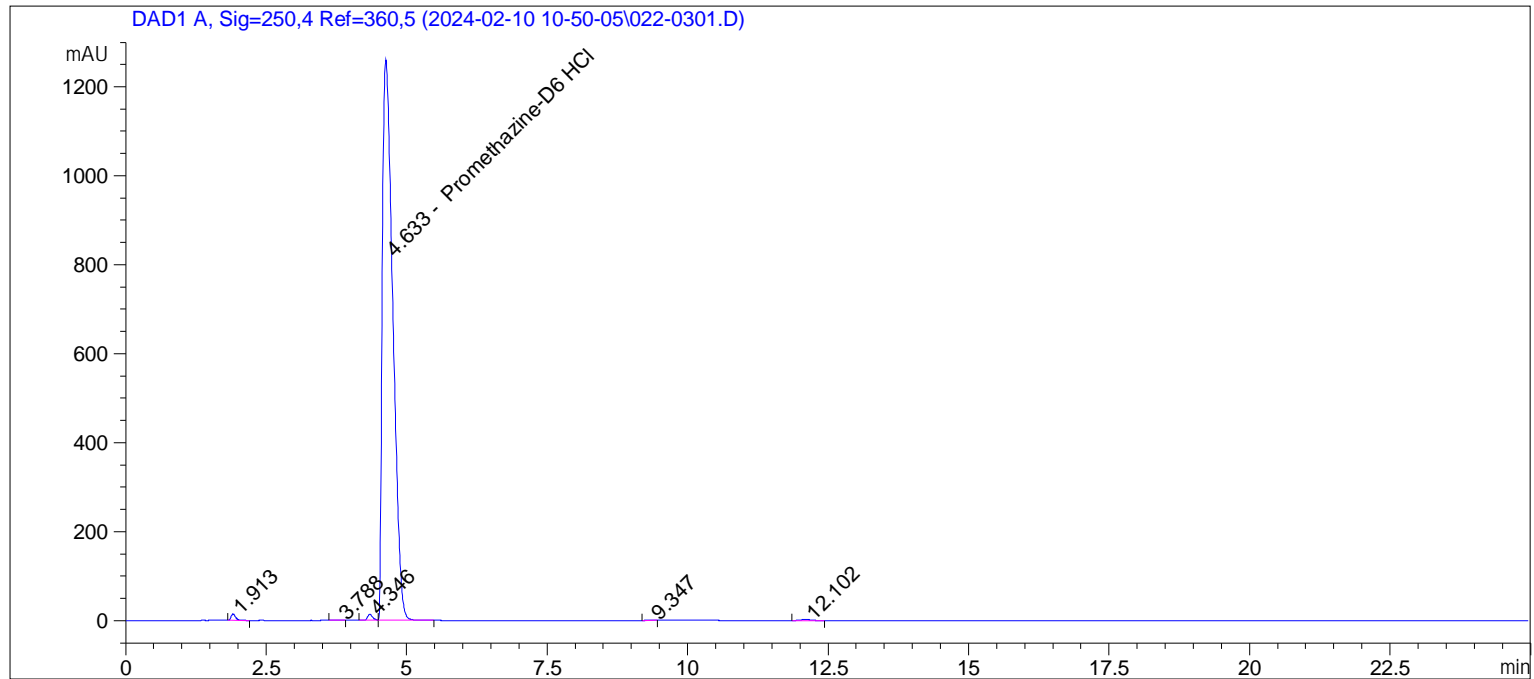
Totals : 1.14259e4

Sample Name: GR-12-157 spl-2

```

=====
Acq. Operator   : vrusu                      Seq. Line :    3
Acq. Instrument : Instrument 1                Location  : Vial 22
Injection Date  : 2/10/2024 11:44:13 AM      Inj       :    1
                                                Inj Volume: 10.0 µl

Acq. Method     : C:\CHEM32\1\DATA\2024-02-10 10-50-05\VR021024_157.M
Last changed    : 2/10/2024 10:49:48 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR021024_157PM.M
Last changed    : 2/10/2024 2:30:02 PM by vrusu
=====
    
```



Area Percent Report

```

Sorted By           :      Signal
Calib. Data Modified :      2/10/2024 2:25:44 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: DAD1 A, Sig=250,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.913	BB	0.0827	78.72343	0.4747	?
2	3.788	BV	0.1017	4.10499	0.0248	?
3	4.346	BV	0.0961	87.60724	0.5282	?
4	4.633	VB	0.2057	1.63803e4	98.7642	Promethazine-D6 HCl
5	9.347	BB	0.1346	2.51581	0.0152	?
6	12.102	BB	0.2011	32.01256	0.1930	?

Totals : 1.65852e4