

Name:	Erdosteine- ¹³ C ₄
Lot#:	GR-11-283
Test Date:	02/27/2023 (re-test date: 02/27/2028)
CAS No.:	84611-23-4 (unlabeled)
MF:	C ₄ ¹³ C ₄ H ₁₁ NO ₄ S ₂
MW:	253.27
Appearance:	Off-White Solid
Purity:	98.0% by HPLC (average of two sample preparations); 99% atom ¹³ C
¹H-NMR:	Conforms (shows a trace of TEA)
MS-ESI (-)	Conforms (shows peak at m/z = 252.02 [M-H] ⁻)
Storage	Store at -18°C in a dry place away from direct sunlight

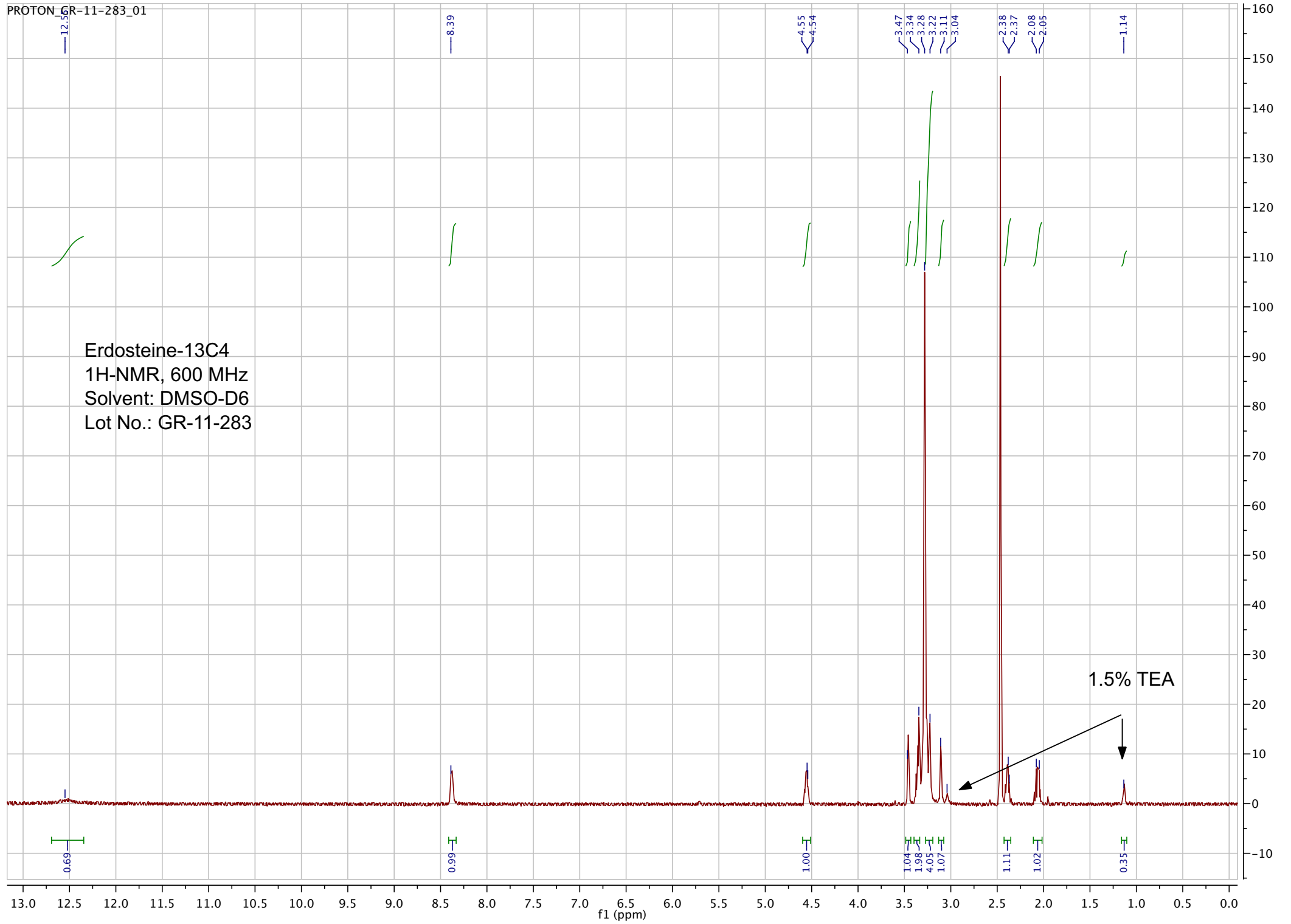
Approved by:

Date: 02/27/2023



Viorica Rusu, QC/QA Manager

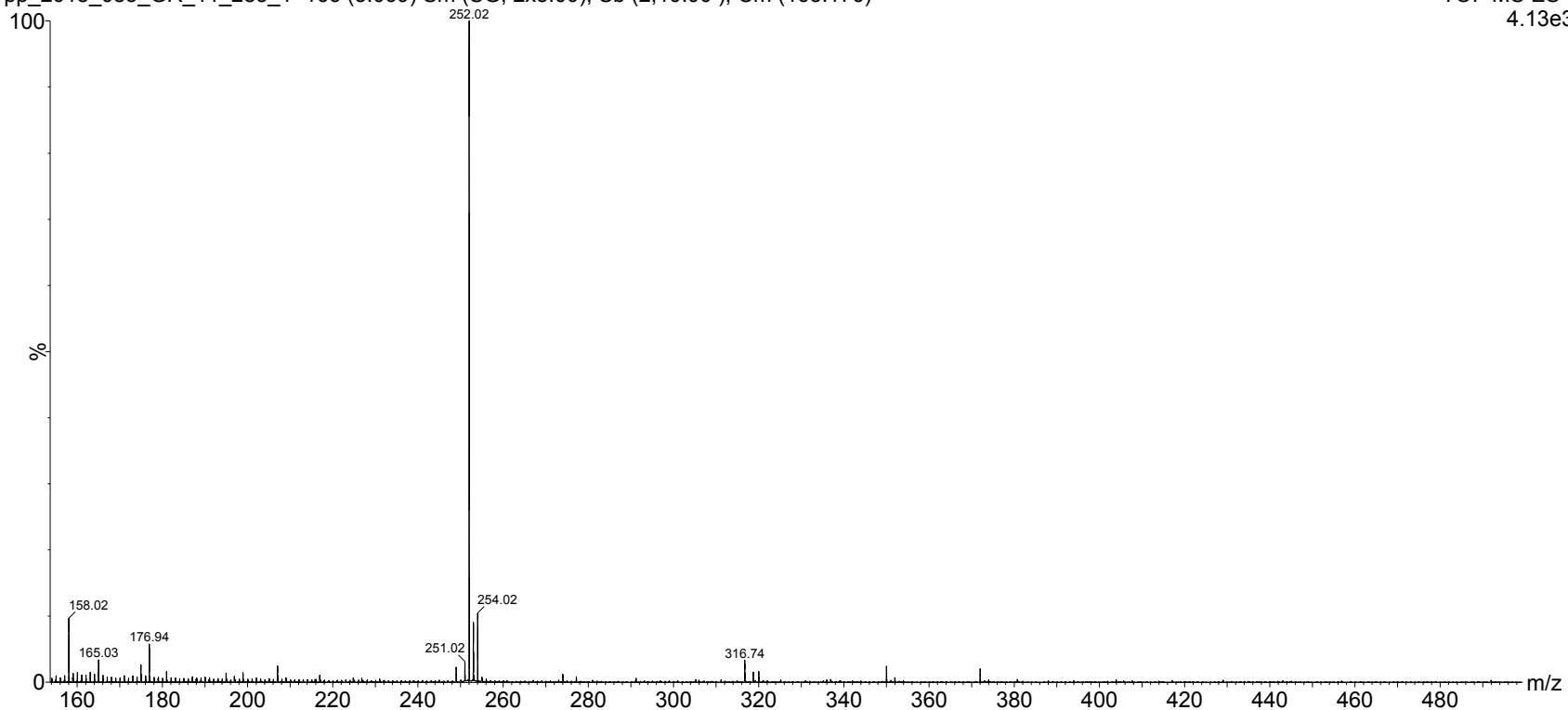
Erdosteine-13C4
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-11-283



24-Jul-2018, 15:00:00

TOF MS ES-
4.13e3

pp_2018_083_GR_11_283_1 166 (3.069) Sm (SG, 2x5.00); Sb (2,10.00); Cm (165:176)

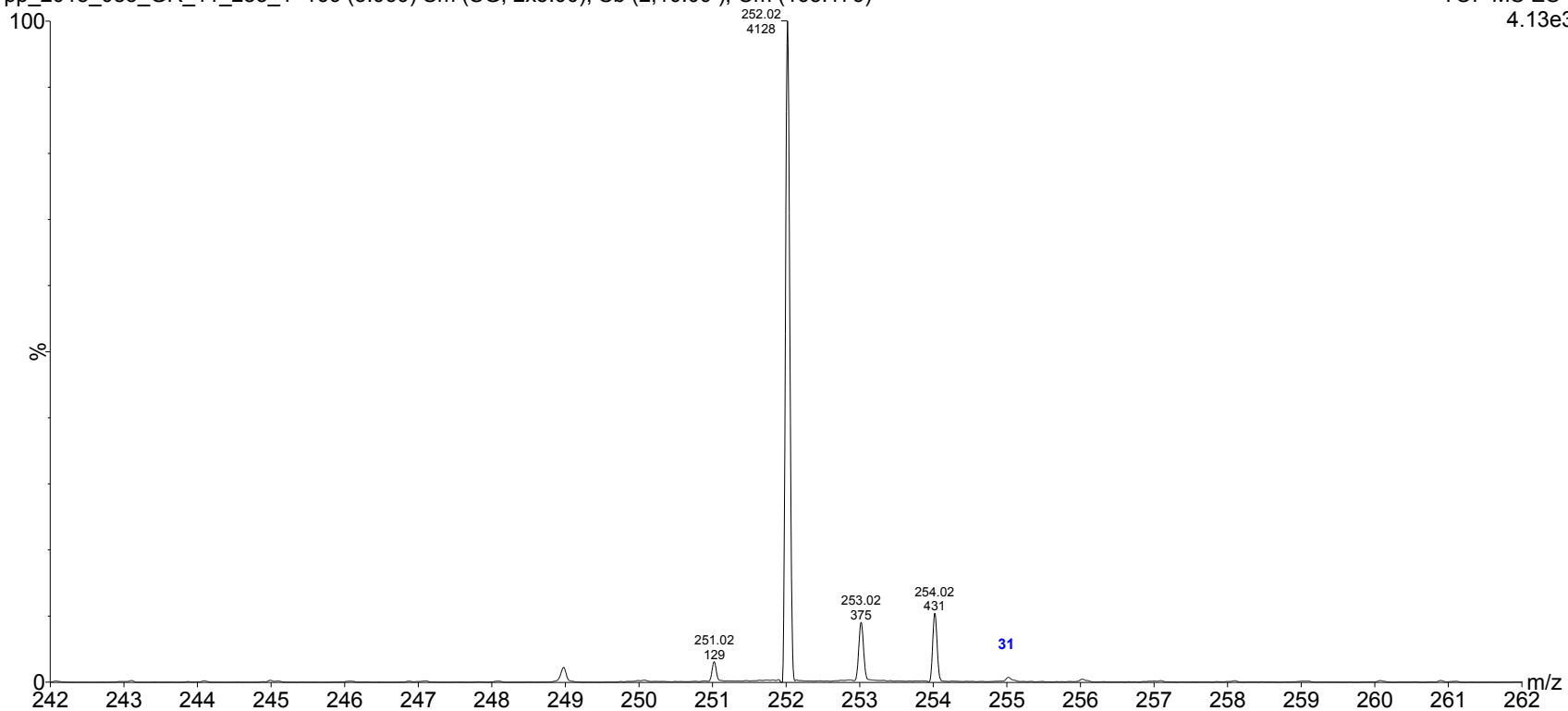


ESI-MS spectrum for sample GR-11-283. Shows monoisotopic [M-H]- mass.

24-Jul-2018, 15:00:00

TOF MS ES-
4.13e3

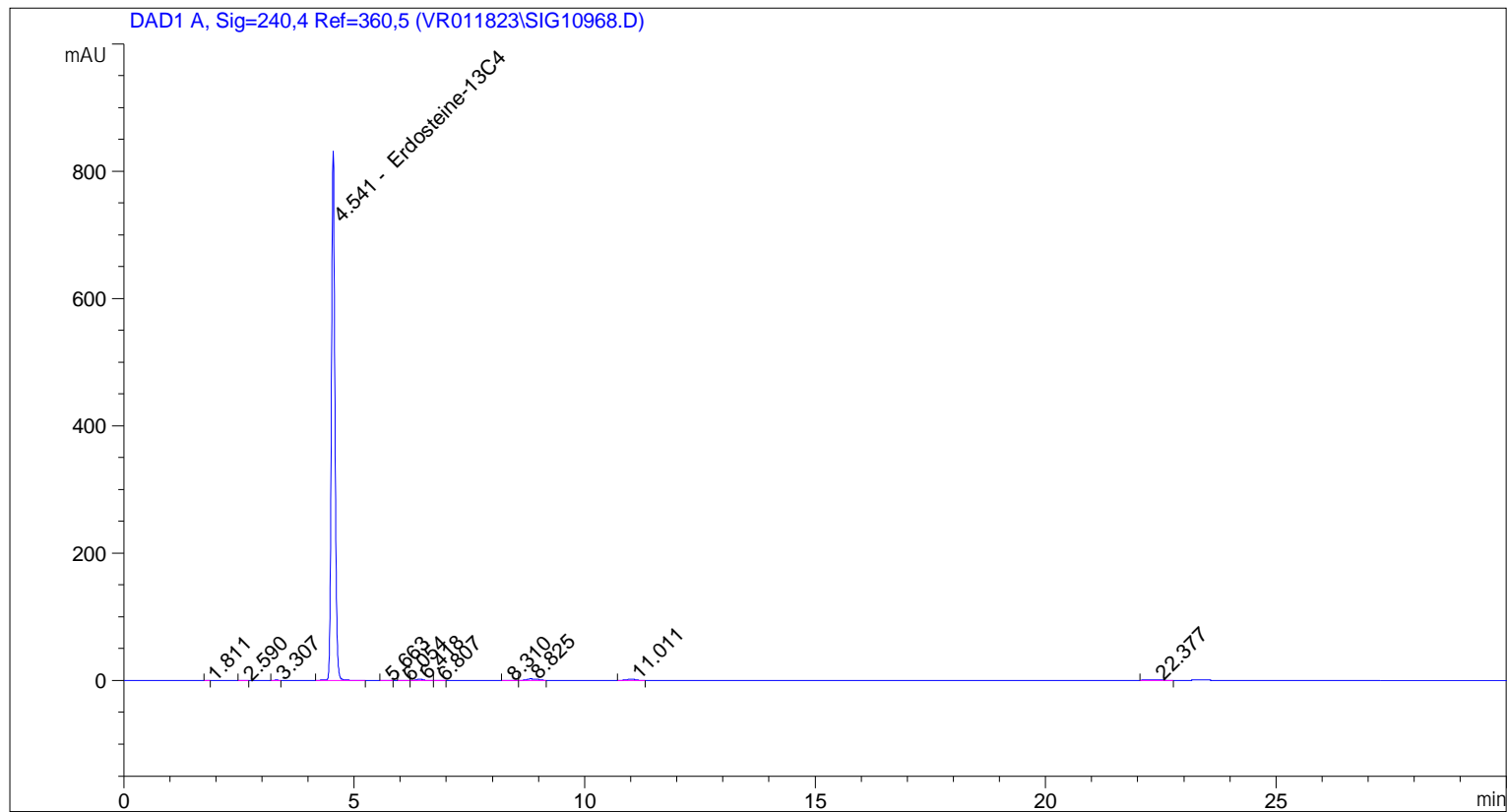
pp_2018_083_GR_11_283_1 166 (3.069) Sm (SG, 2x5.00); Sb (2,10.00); Cm (165:176)



Expansion of above, showing intensity labels.

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 80
Injection Date  : 2/27/2023 9:25:35 AM
                                           Inj Volume : 5.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR022723_283.M
Last changed   : 2/27/2023 9:24:33 AM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR022723_283PM.M
Last changed   : 2/27/2023 10:30:08 AM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By           :      Signal
Calib. Data Modified :      2/27/2023 10:16:24 AM
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	1.811	BB	0.0627	6.40202e-1	0.0136	?
2	2.590	BB	0.0989	1.21474	0.0259	?
3	3.307	BB	0.0702	2.01225	0.0428	?
4	4.541	BB	0.0846	4608.75293	98.0905	Erdosteine-13C4
5	5.663	BB	0.0970	1.36673	0.0291	?
6	6.054	BB	0.1180	1.24941	0.0266	?
7	6.418	BB	0.1217	17.74729	0.3777	?
8	6.807	BB	0.1024	8.64152e-1	0.0184	?

Sample Name: GR-11-283

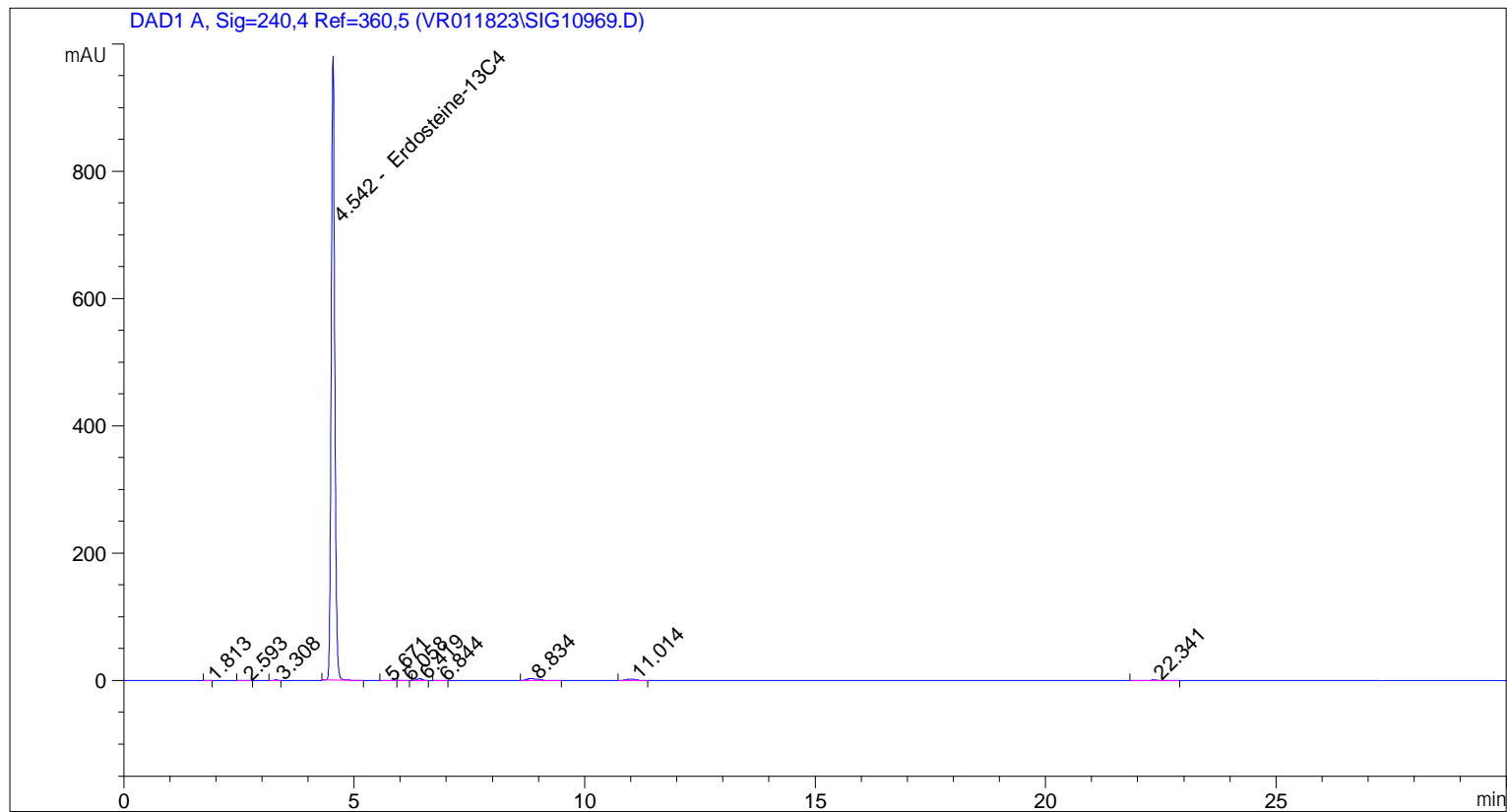
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	8.310	BB	0.1202	1.03782	0.0221	?
10	8.825	BB	0.2190	36.03874	0.7670	?
11	11.011	BB	0.1876	22.96524	0.4888	?
12	22.377	BB	0.2743	4.57935	0.0975	?

Totals : 4698.46886

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*** End of Report ***

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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 81
Injection Date  : 2/27/2023 9:57:21 AM
                                           Inj Volume : 5.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR022723_283.M
Last changed    : 2/27/2023 9:56:12 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR022723_283PM.M
Last changed    : 2/27/2023 10:30:08 AM by vrusu
  
```



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

```

Sorted By           :      Signal
Calib. Data Modified :      2/27/2023 10:16:24 AM
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	1.813	BB	0.0675	7.57658e-1	0.0137	?
2	2.593	BB	0.1156	1.71387	0.0309	?
3	3.308	BB	0.0725	2.80323	0.0506	?
4	4.542	BB	0.0866	5426.58105	97.9843	Erdosteine-13C4
5	5.671	BB	0.1096	1.42126	0.0257	?
6	6.058	BB	0.0980	1.12354	0.0203	?
7	6.419	BB	0.1170	20.11795	0.3633	?
8	6.844	BB	0.1317	1.24340	0.0225	?

Sample Name: GR-11-283 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	8.834	BB	0.2243	46.97952	0.8483	?
10	11.014	BB	0.1852	26.28330	0.4746	?
11	22.341	BV	0.3781	9.18928	0.1659	?

Totals : 5538.21407

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*** End of Report ***