

MEF 134 Sample Analysis by Mass Spectrometry

1. MEF 134 Crude Extract (**Pages 5-17**)
2. MEF 134 FD fraction (Dichloromethane fraction of crude) (**Pages 18-35**)
3. MEF 134 FD-V5 (1st TLC fraction 5) (**Pages 36-45**)
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5. MEF 134 FD-V5V9 (2nd TLC fraction 9 of 1st TLC fraction 5) (**Pages 58-66**)
6. MEF 134 FD K1V1V1 (fraction preparation illustrated in Fig 1) (**Pages 67-77**)
7. MEF 134 FD K1V5V3 (fraction preparation illustrated in Fig 1) (**Pages 78-83**)
8. MEF 134 FD K2V3V5 (fraction preparation illustrated in Fig 1) (**Pages 84-95**)

The HPLC-HRMS full scan was performed on the fractions from MEF 134. These fractions include; MEF 134 crude, MEF 134 FD, MEF 134 FDV5, MEF 134 FDV5V7, MEF134FDV5V9, MEF 134 FD K1V1V1, MEF 134 FD K1V5V3 and MEF 134 FD K2V3V5.

All the major peaks and masses from the absorbance and total ion chromatogram spectra from the crude extract were distinctly different compared to that obtained from the FD sample in terms of the mixture of compounds detected in corresponding peaks. Whilst the crude and the FD had several prominent masses in common, other co-eluting compounds found in the corresponding peak of the crude were absent or minor in the FD. This observation indicated that Kupchan fractionation achieved high enrichment to a large extent. The comparisons between the samples FD and FDV5 showed no observable peaks that were identical which demonstrates a remarkably higher levels of enrichment of bioactive compounds as determined in the bioassays. However,

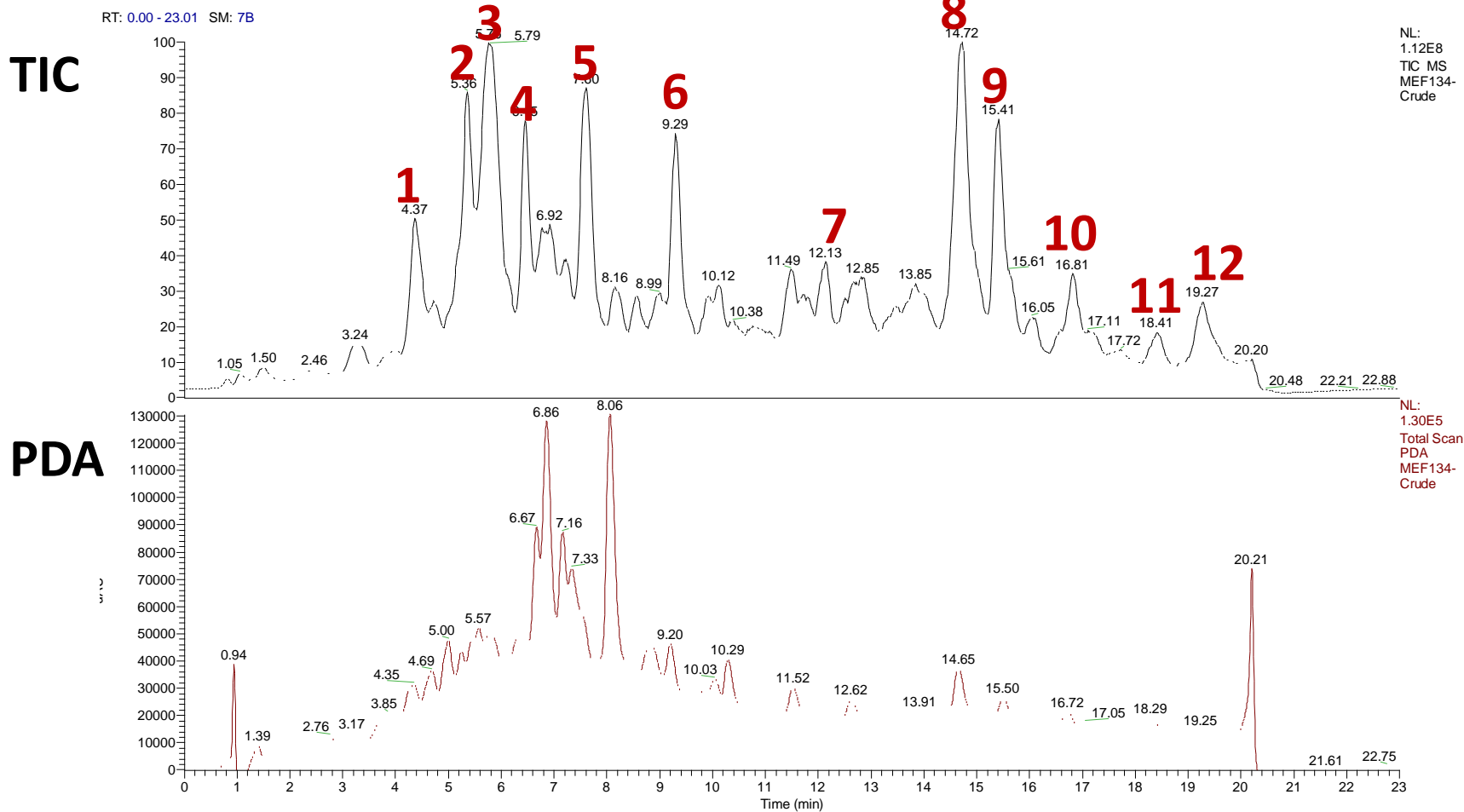
fractions FDV5V7 and FDV5V9 contain similar compounds, for example molecular weight 354 (M+H) with the sum formula $C_{20}H_{40}O_2N_3$ and a similar compound with one C_2H_4 group more with mass 282 and sum formula $C_{22}H_{44}O_2N_3$ were identified. The two other compounds with mass 253 and sum formula $C_{15}H_{29}ON_2$ and compound with mass 237 and sum formula $C_{15}H_{29}N_2$ were also present in both fractions. There are three compounds with molecular weight above 1000 Da which are clear distinct for FDV5V9, these are 1031 Da, 1045 Da and 1059 Da their bioactivity can be readily determined in future experiments using size exclusion chromatography. This technique was not employed in this study due to the limited quantities of the extracts obtained from the 20 Litres of culture. These interesting observations save us great motivation to develop the capacity to culture and process at a high scale.

The HPLC-HRMS full scan of MEF134 FD K1V1V1 showed 11 major components. The mass spectrometry analyses identified some major masses which are 149.02, 337.23, 409.29, 265.26 and 391.30 Da.

The total ion current chromatogram of MEF134 FD K1V5V3 detected 6 major components. Mass spectrometry analyses of the components identified these masses; 340.23, 453.34 and 267.17.

From the total ion current chromatogram of MEF 134 FD K2V3V5, 11 major components were detected. Analysis of these components detected these major masses; 340.26, 425.30, 300.29 and 568.48. The major masses obtained from the 3 anti-cancer fractions were not similar which also indicating that different compounds in these three fractions are responsible for the activities seen.

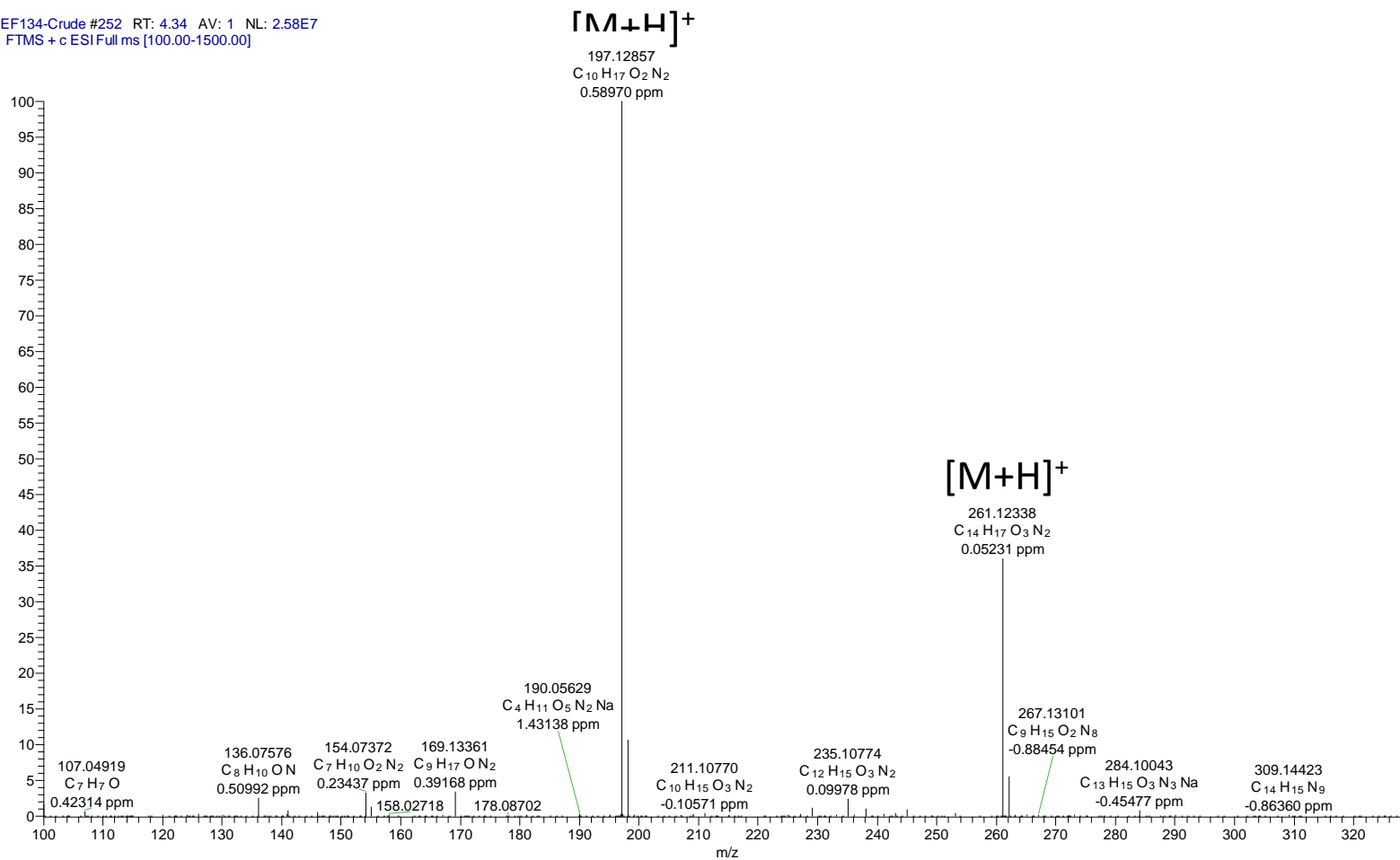
1. MEF134 Crude HPLC-HRMS Fullscan



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #252 RT: 4.34 AV: 1 NL: 2.58E7
T: FTMS + c ESIFull ms [100.00-1500.00]

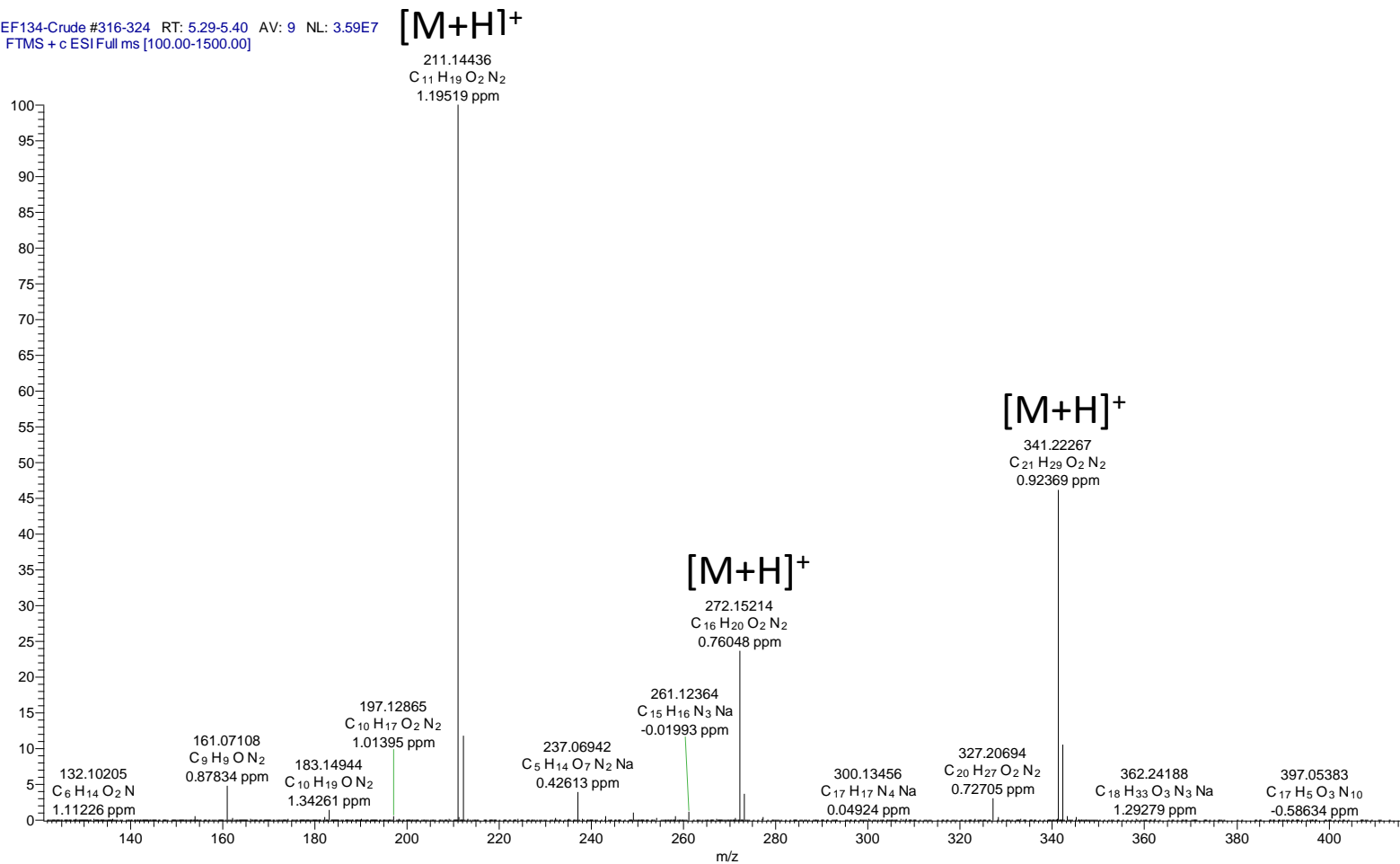
1



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #316-324 RT: 5.29-5.40 AV: 9 NL: 3.59E7
T: FTMS + c ESIFull ms [100.00-1500.00]

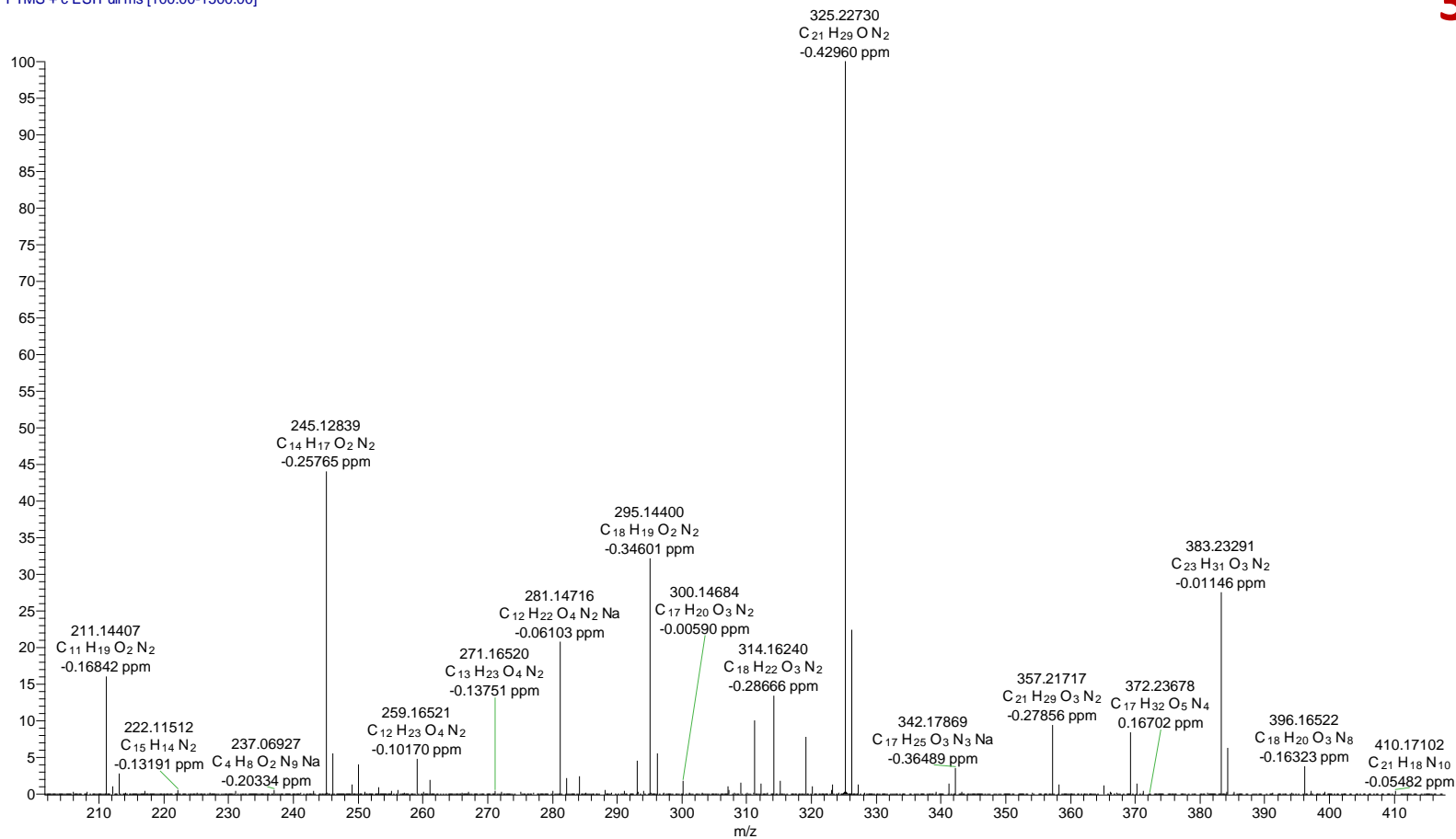
2



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #339-360 RT: 5.62-5.93 AV: 22 NL: 1.74E7
T: FTMS + c ESI Full ms [100.00-1500.00]

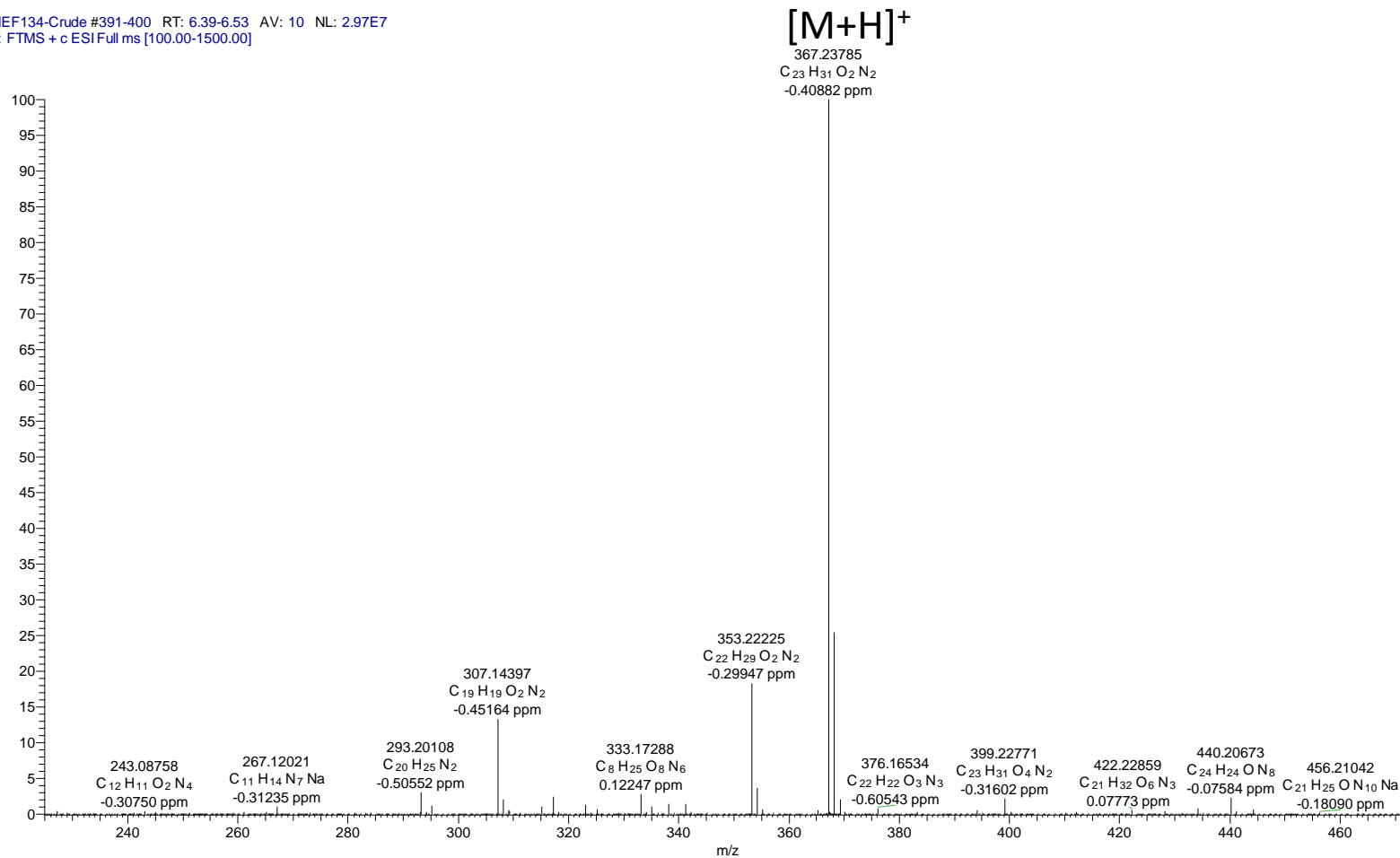
3



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #391-400 RT: 6.39-6.53 AV: 10 NL: 2.97E7
T: FTMS + c ESI Full ms [100.00-1500.00]

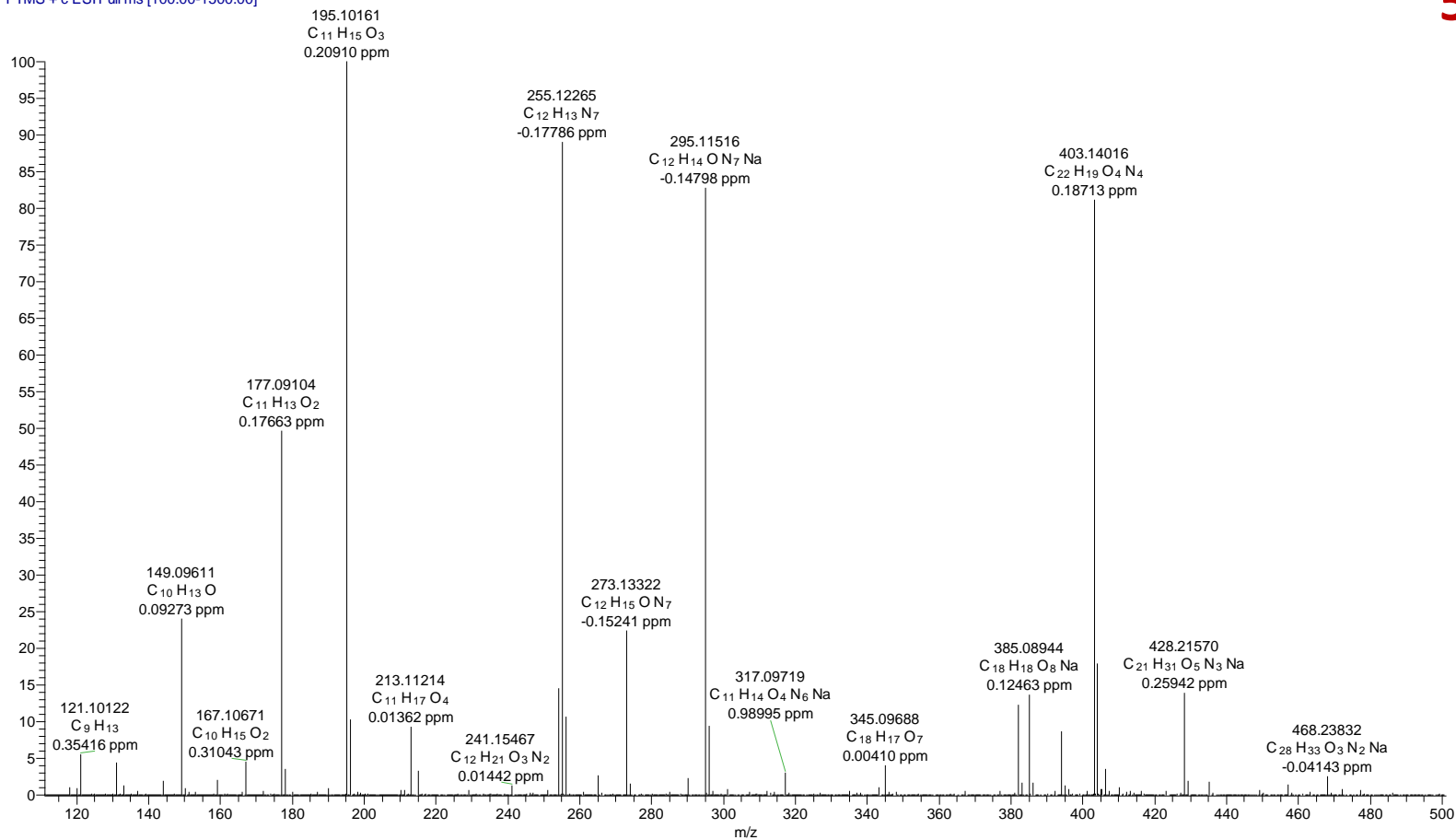
4



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #458-477 RT: 7.47-7.79 AV: 20 NL: 9.07E6
T: FTMS + c ESIFull ms [100.00-1500.00]

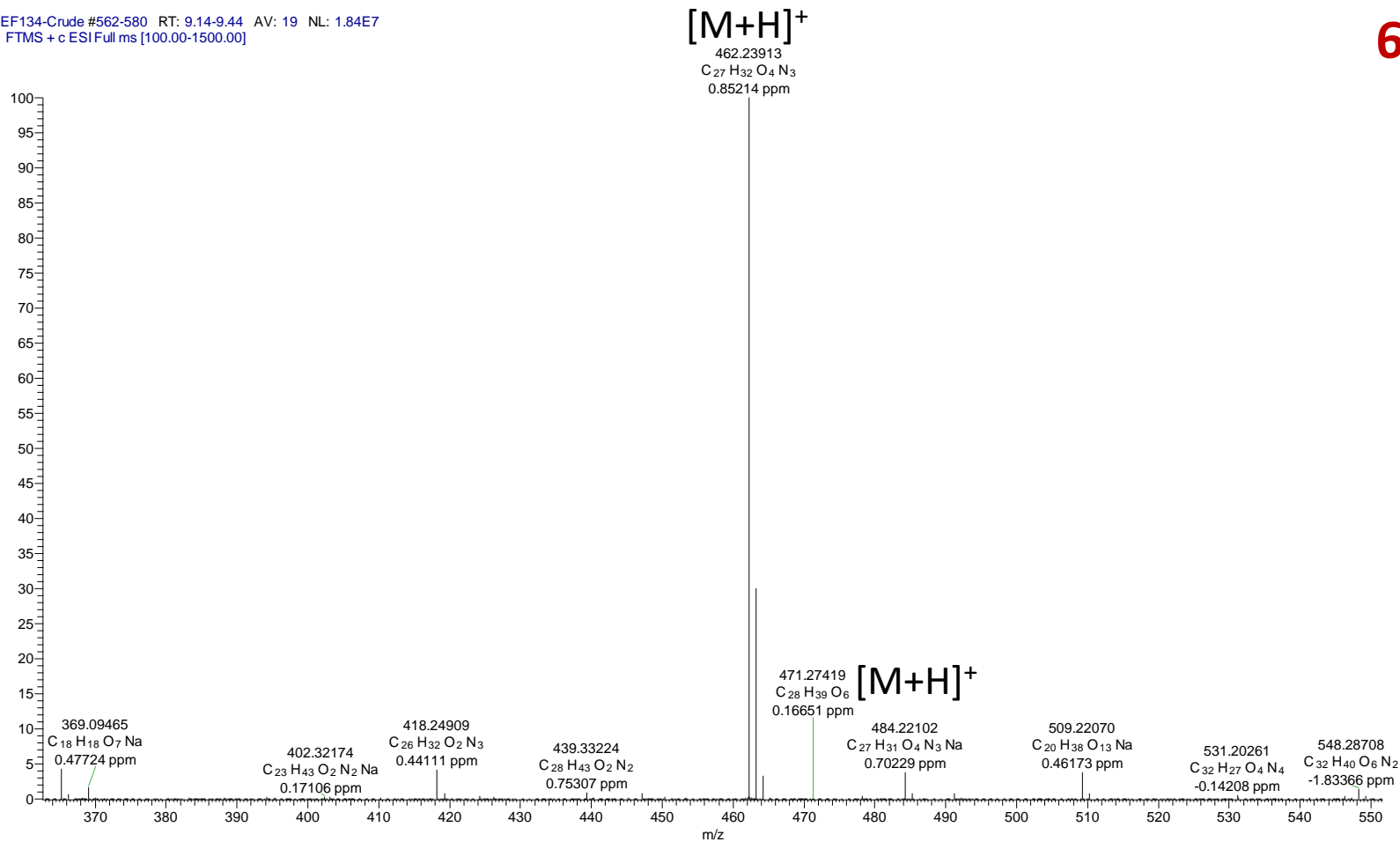
5



1. MEF Crude HPLC-HRMS Spectra

MEF134-Crude #562-580 RT: 9.14-9.44 AV: 19 NL: 1.84E7
T: FTMS + c ESI Full ms [100.00-1500.00]

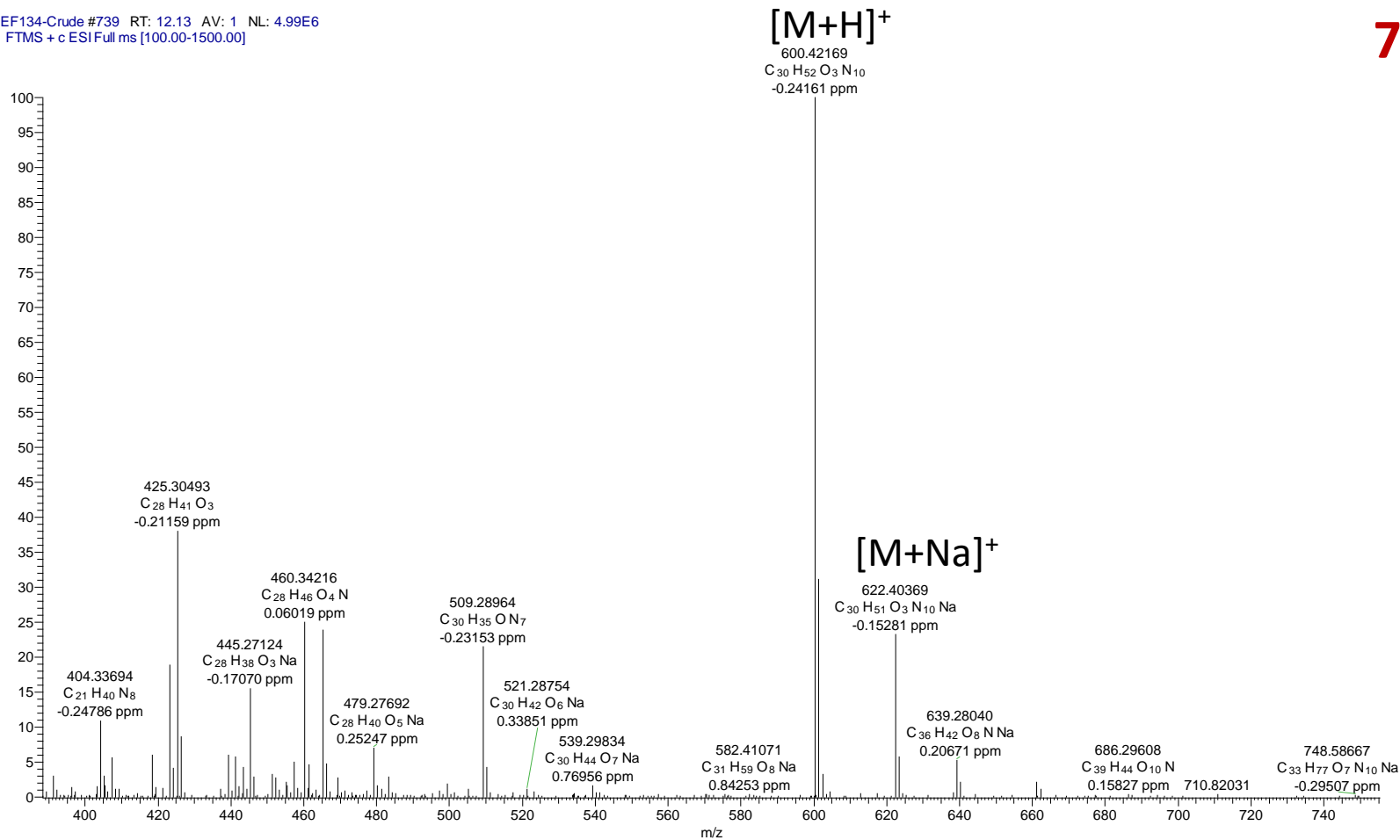
6



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #739 RT: 12.13 AV: 1 NL: 4.99E6
T: FTMS + c ESI Full ms [100.00-1500.00]

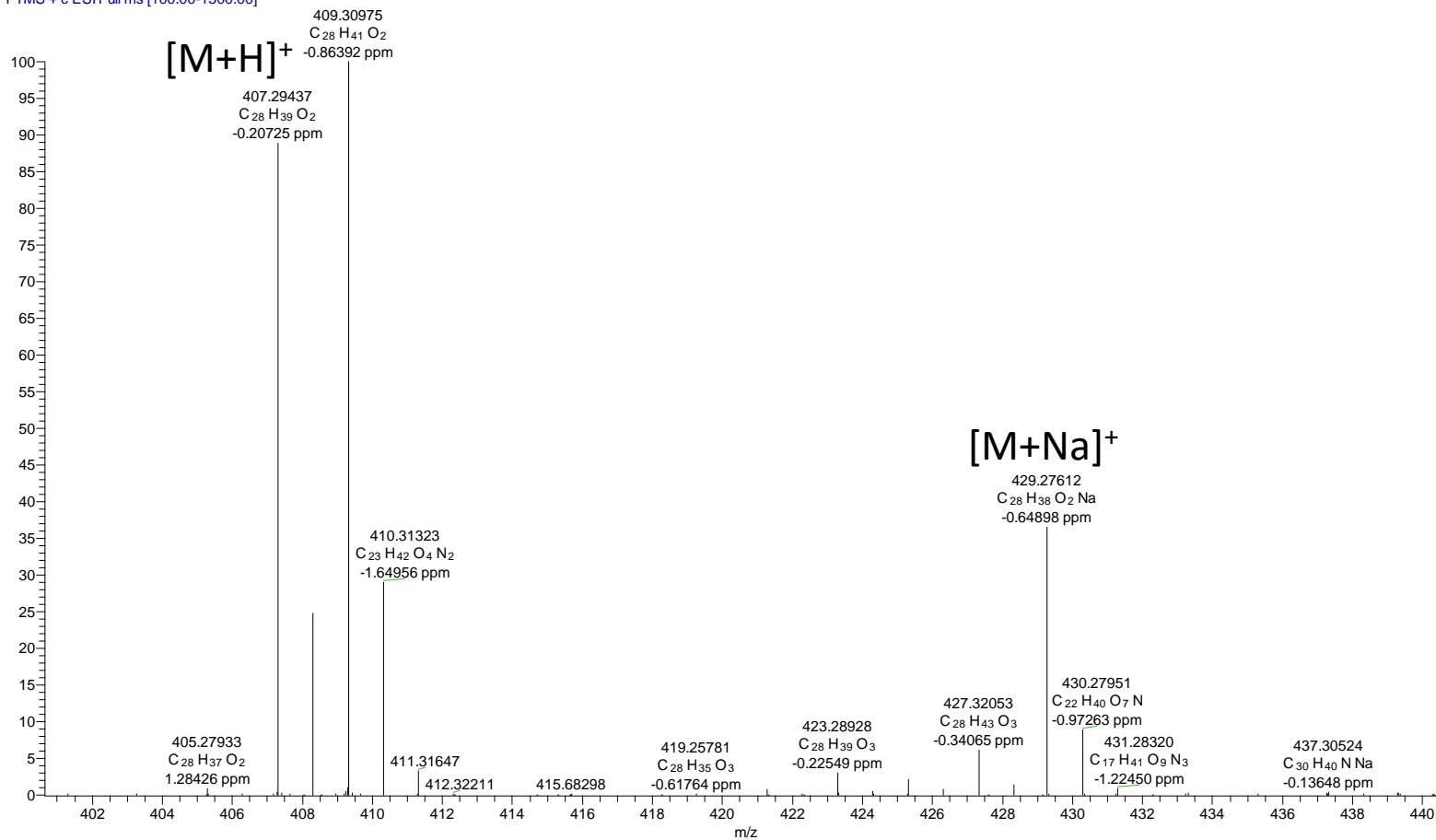
7



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #891 RT: 14.72 AV: 1 NL: 1.90E7
T: FTMS + c ESI Full ms [100.00-1500.00]

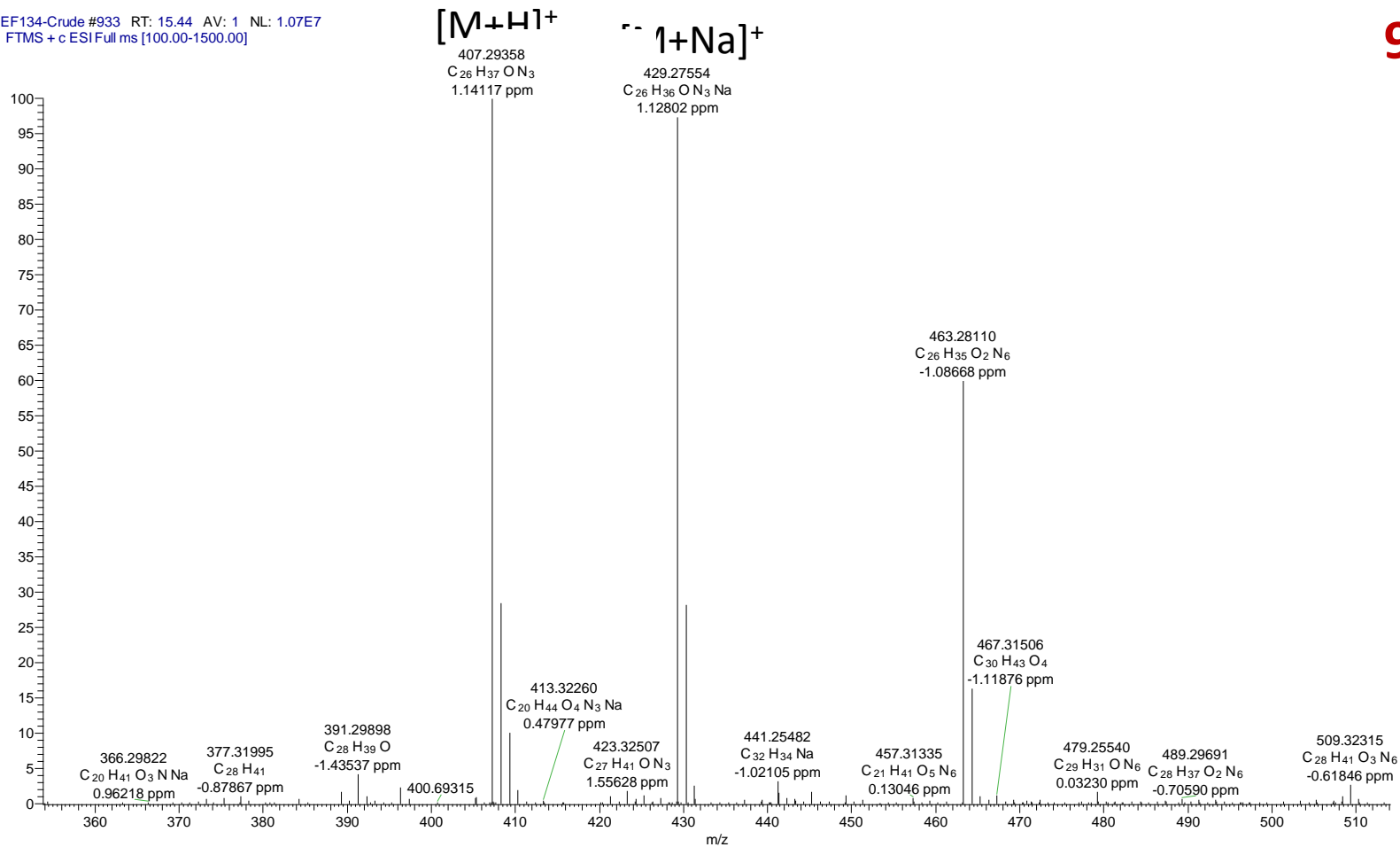
8



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #933 RT: 15.44 AV: 1 NL: 1.07E7
T: FTMS + c ESI Full ms [100.00-1500.00]

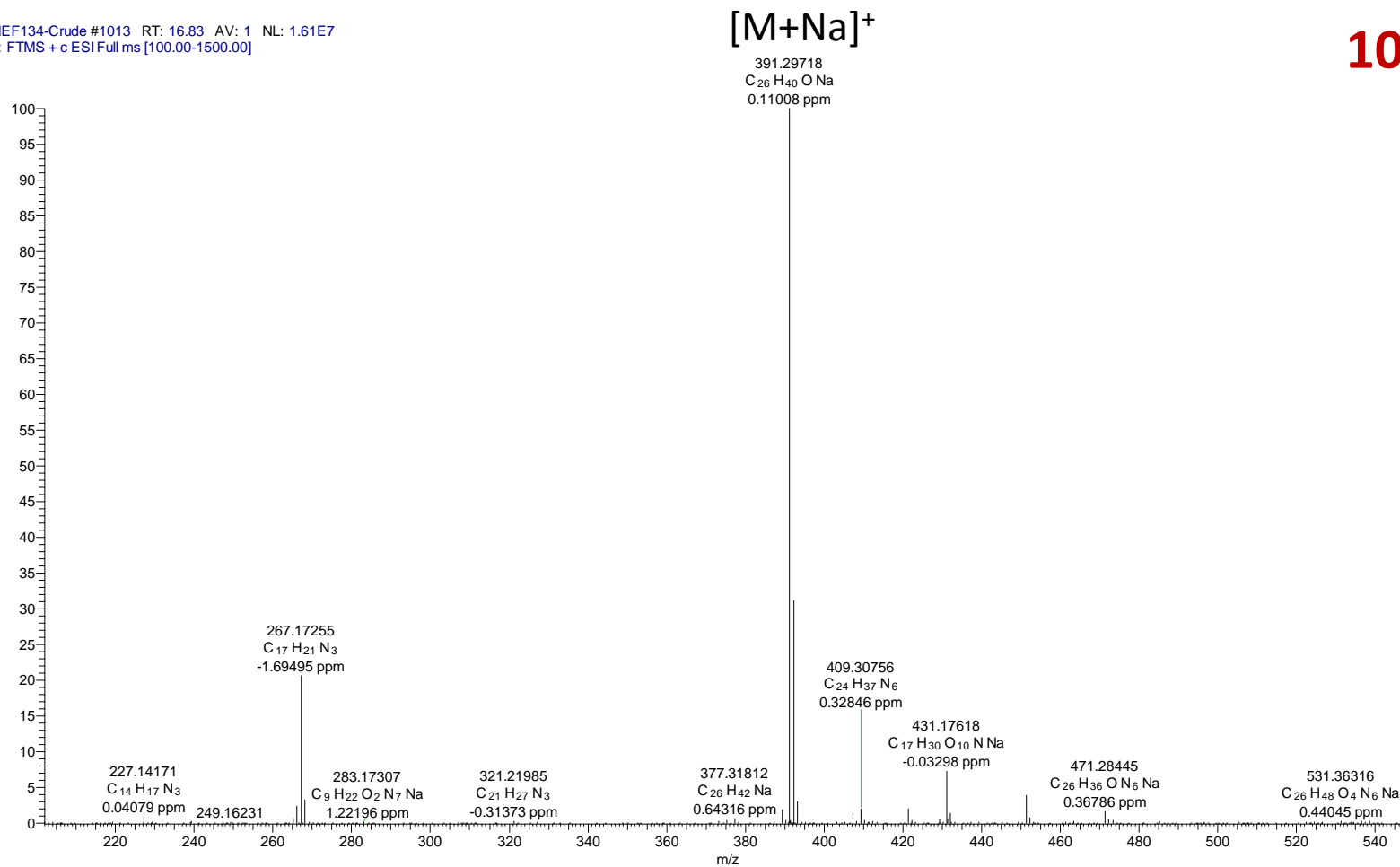
9



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #1013 RT: 16.83 AV: 1 NL: 1.61E7
T: FTMS + c ESIFull ms [100.00-1500.00]

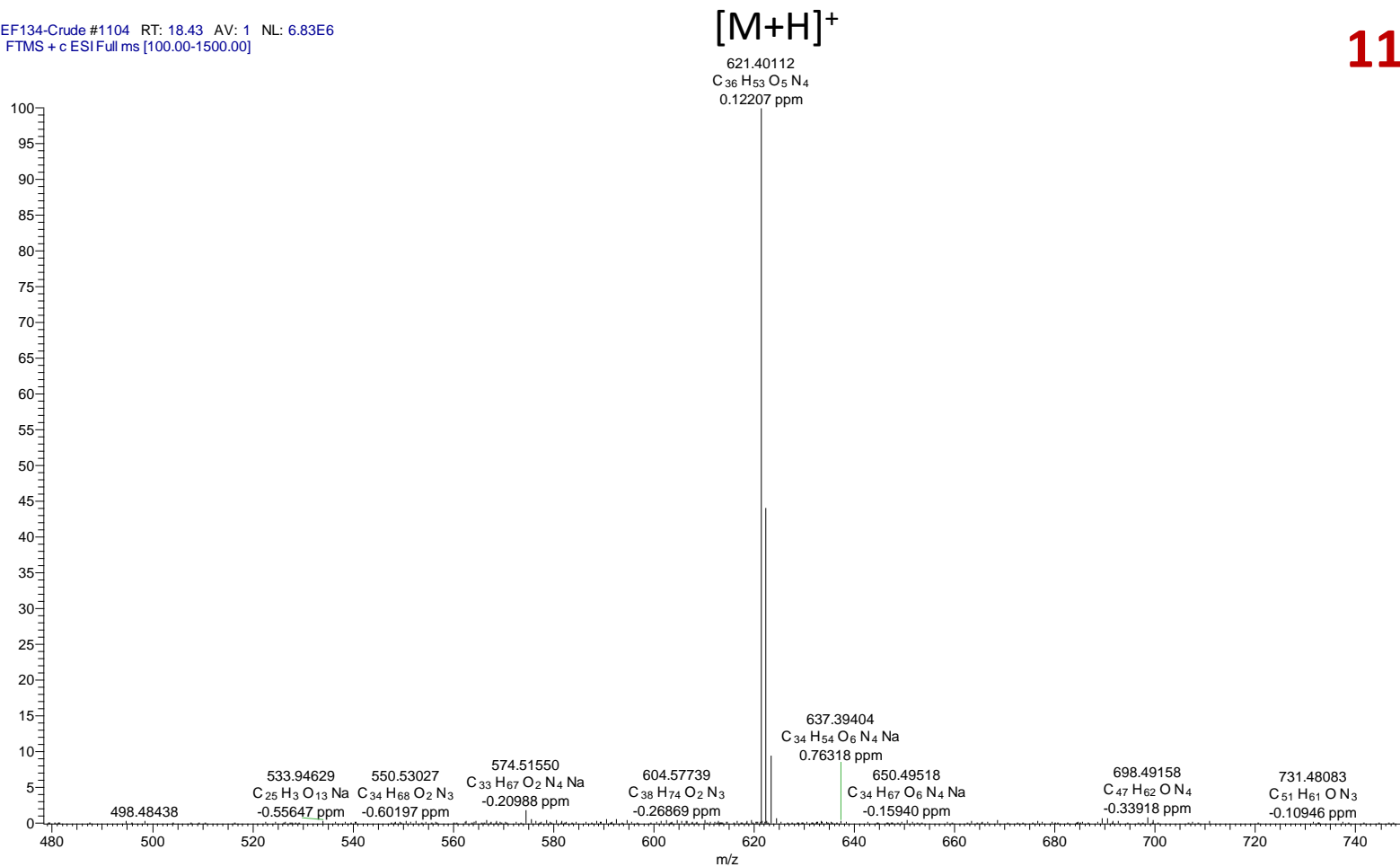
10



1. MEF134 Crude HPLC-HRMS Spectra

MEF134-Crude #1104 RT: 18.43 AV: 1 NL: 6.83E6
T: FTMS + c ESIFull ms [100.00-1500.00]

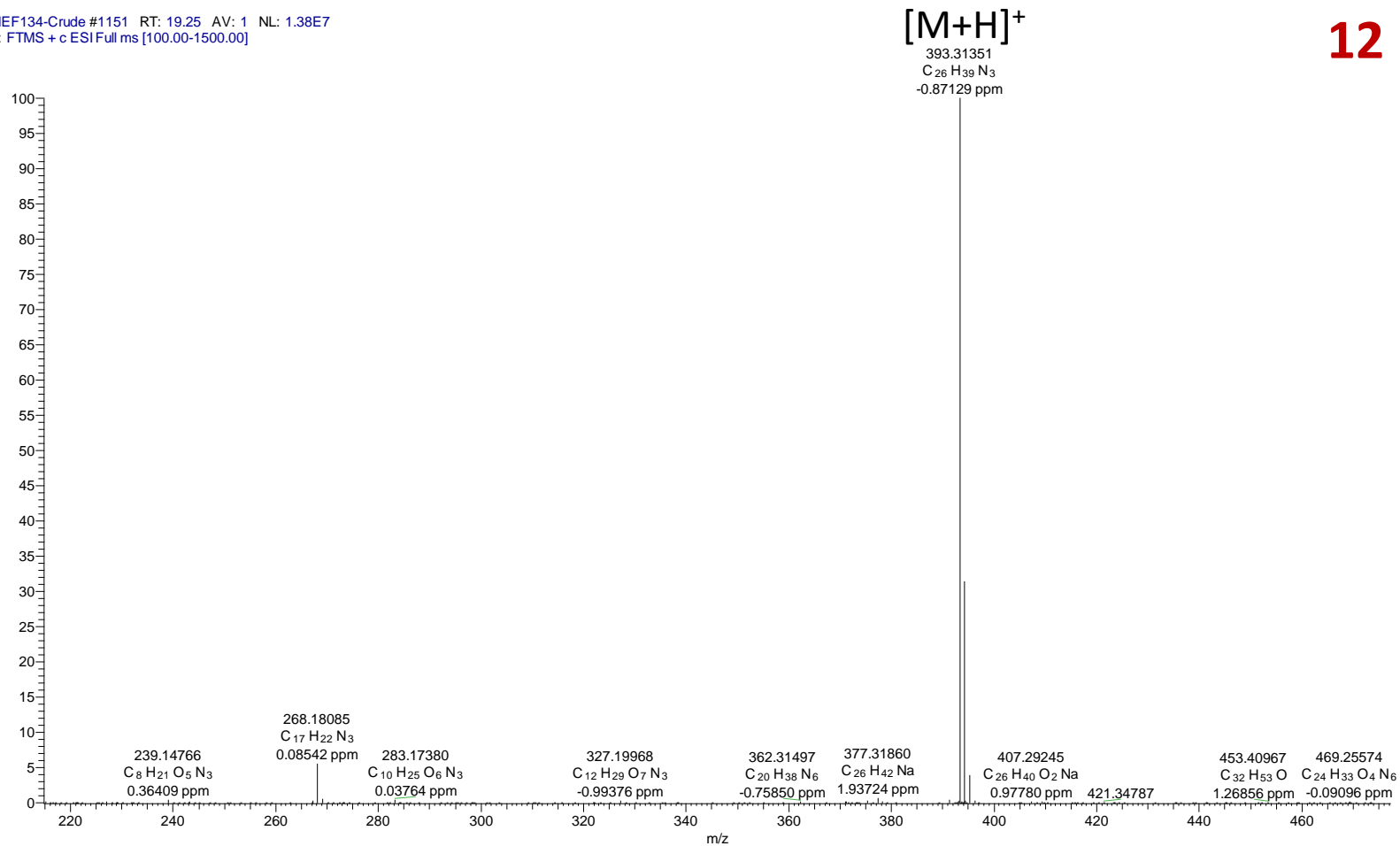
11



1. MEF134 Crude HPLC-HRMS Spectra

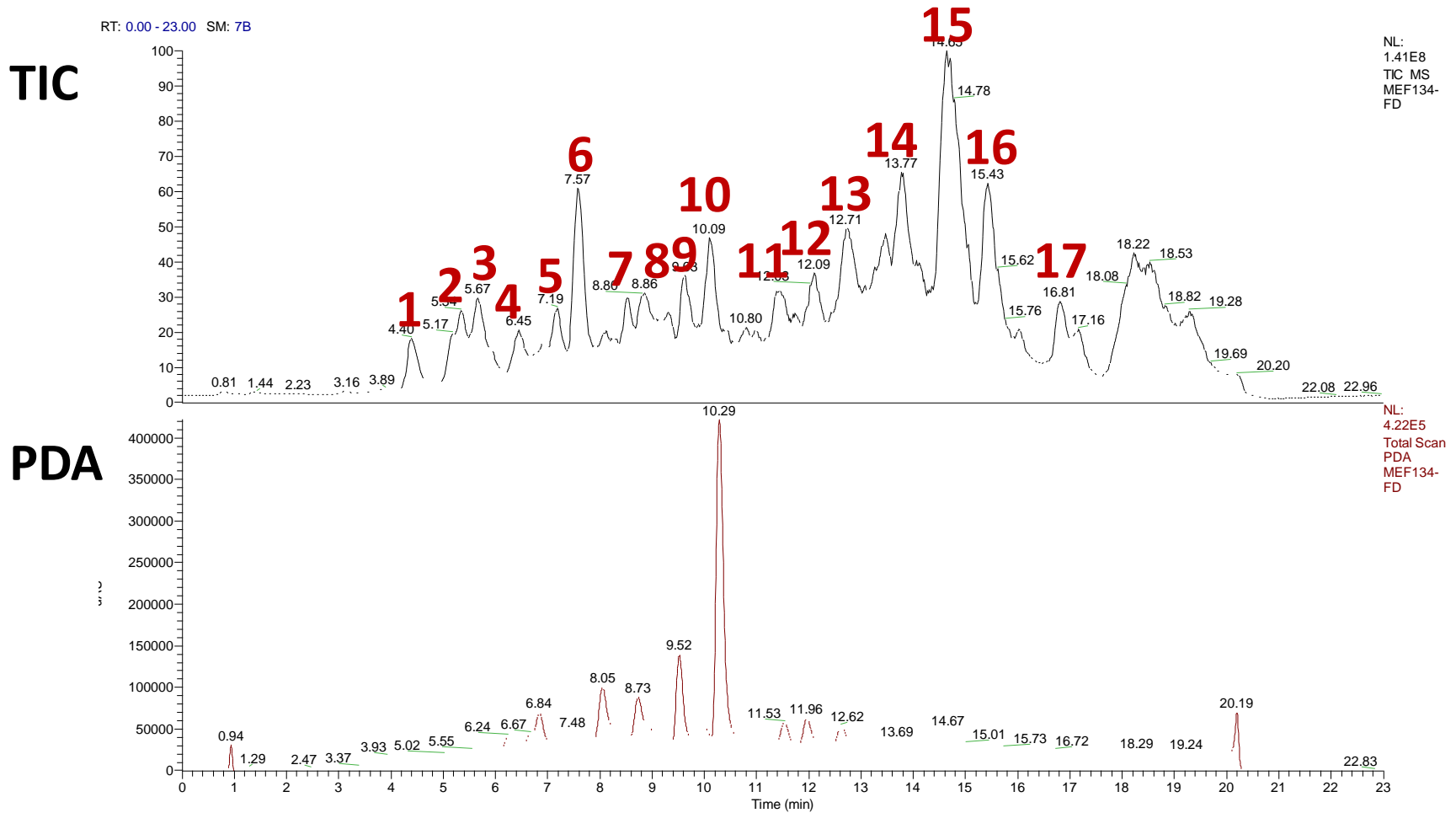
MEF134-Crude #1151 RT: 19.25 AV: 1 NL: 1.38E7
T: FTMS + c ESIFull ms [100.00-1500.00]

12



2. MEF134 FD

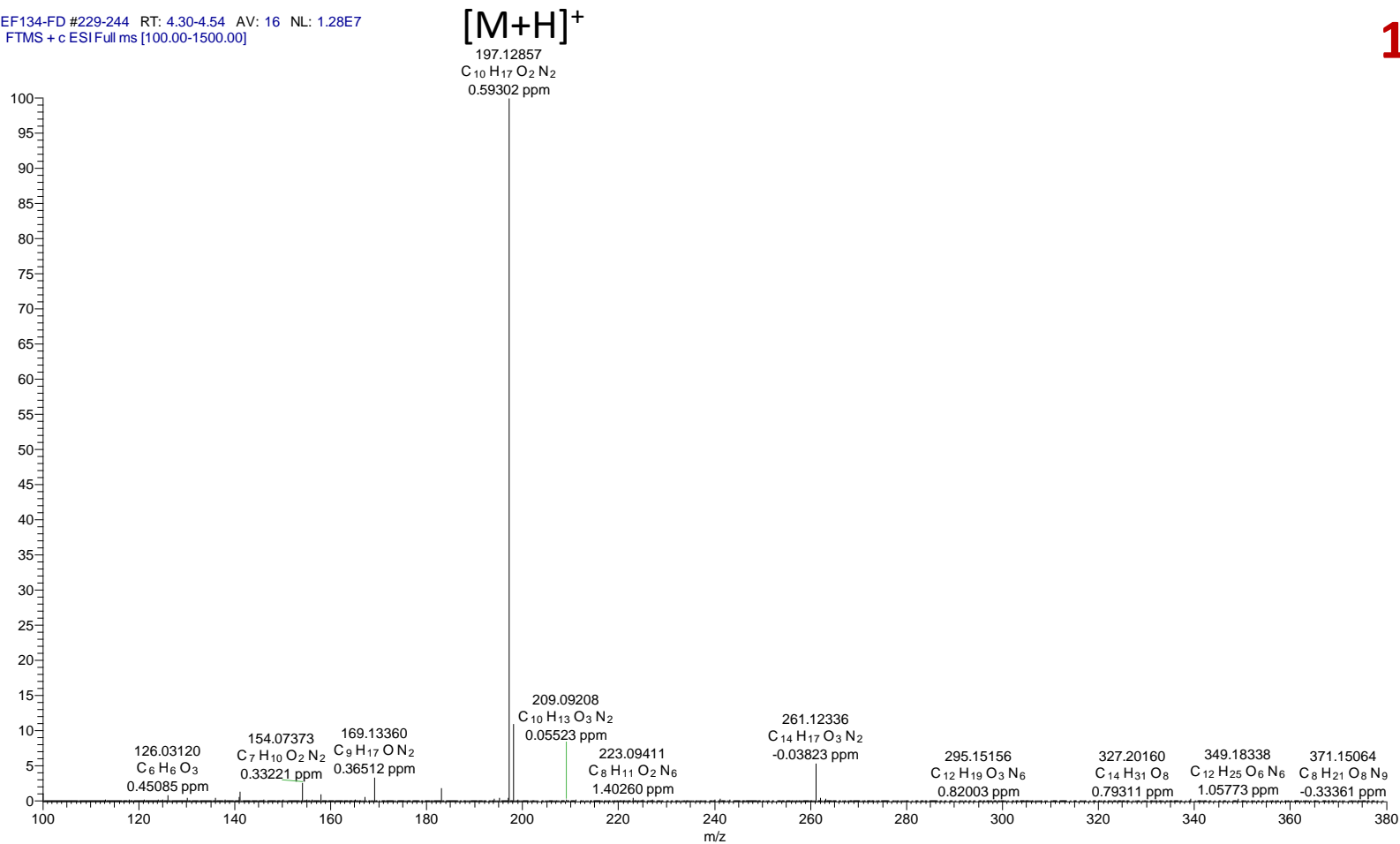
HPLC-HRMS Fullscan



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #229-244 RT: 4.30-4.54 AV: 16 NL: 1.28E7
T: FTMS + c ESIFull ms [100.00-1500.00]

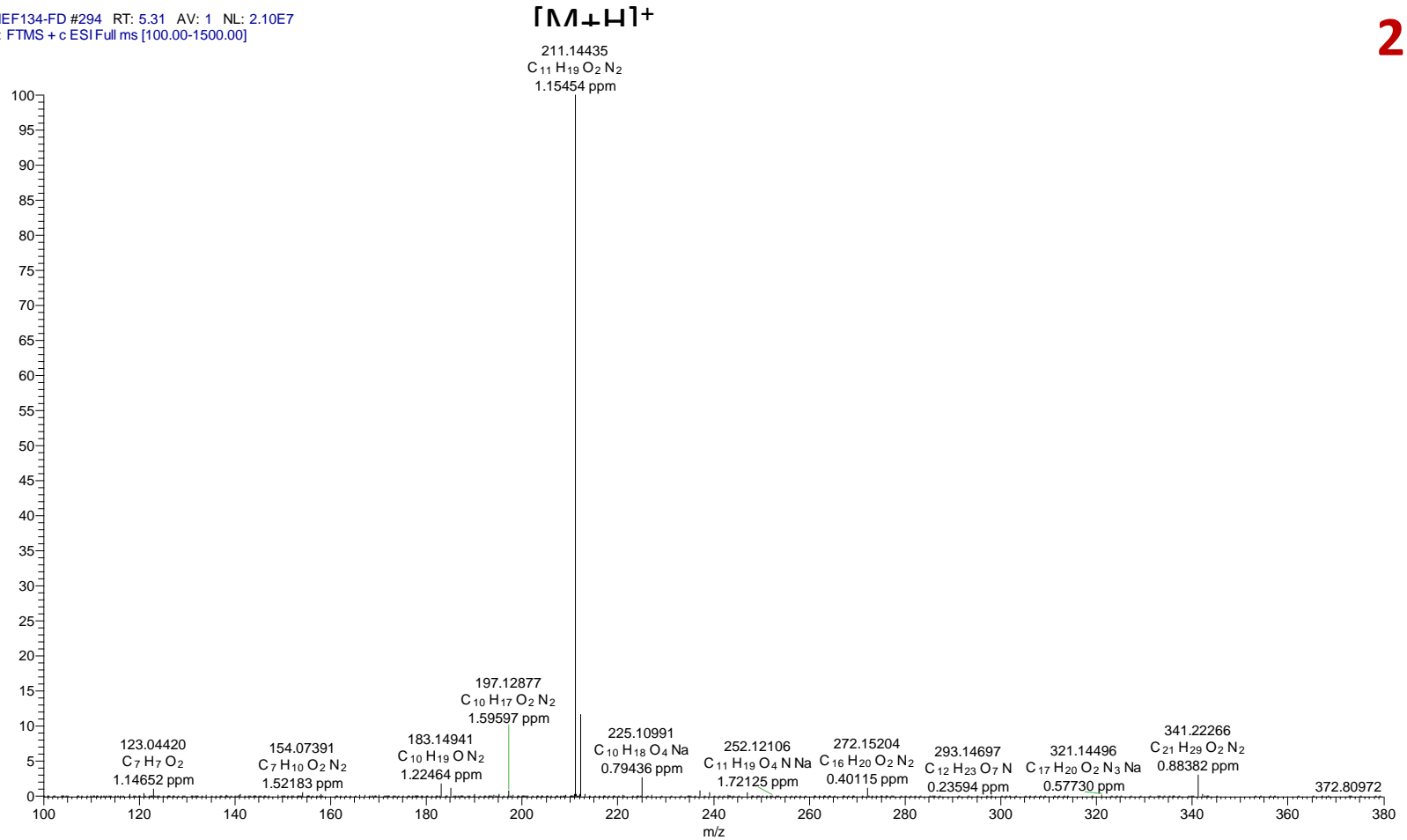
1



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #294 RT: 5.31 AV: 1 NL: 2.10E7
T: FTMS + c ESI Full ms [100.00-1500.00]

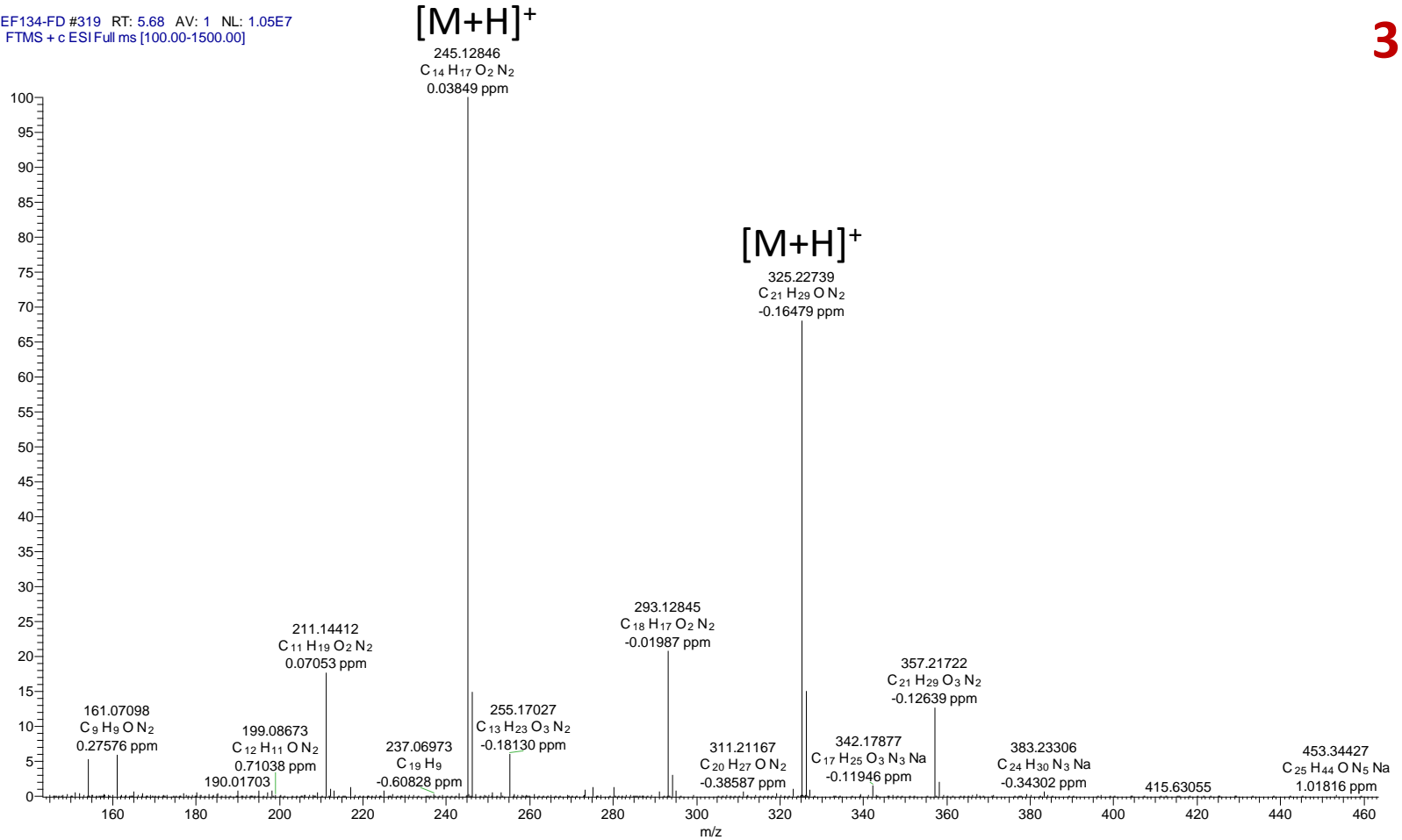
2



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #319 RT: 5.68 AV: 1 NL: 1.05E7
T: FTMS + c ESI Full ms [100.00-1500.00]

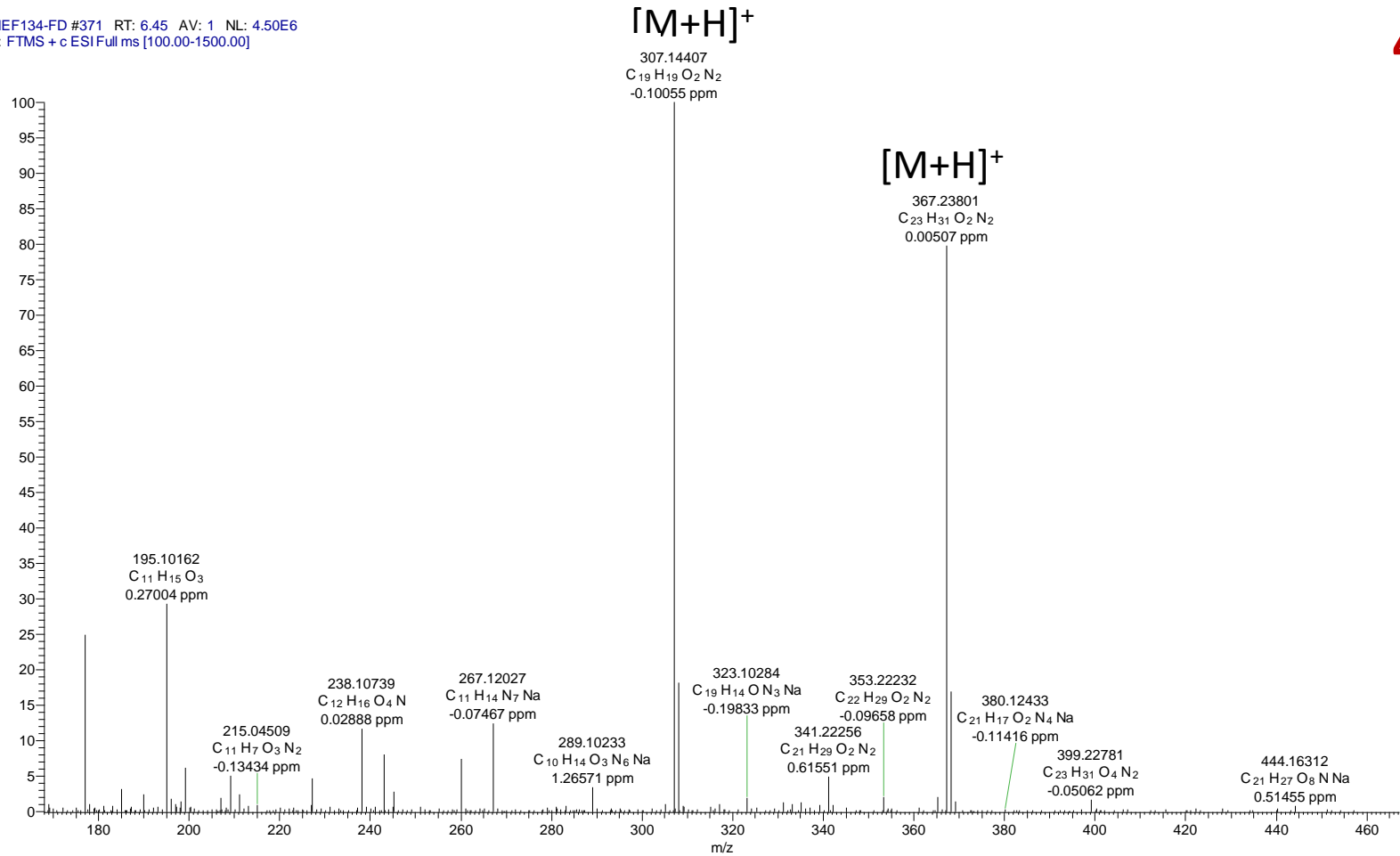
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2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #371 RT: 6.45 AV: 1 NL: 4.50E6
T: FTMS + c ESI Full ms [100.00-1500.00]

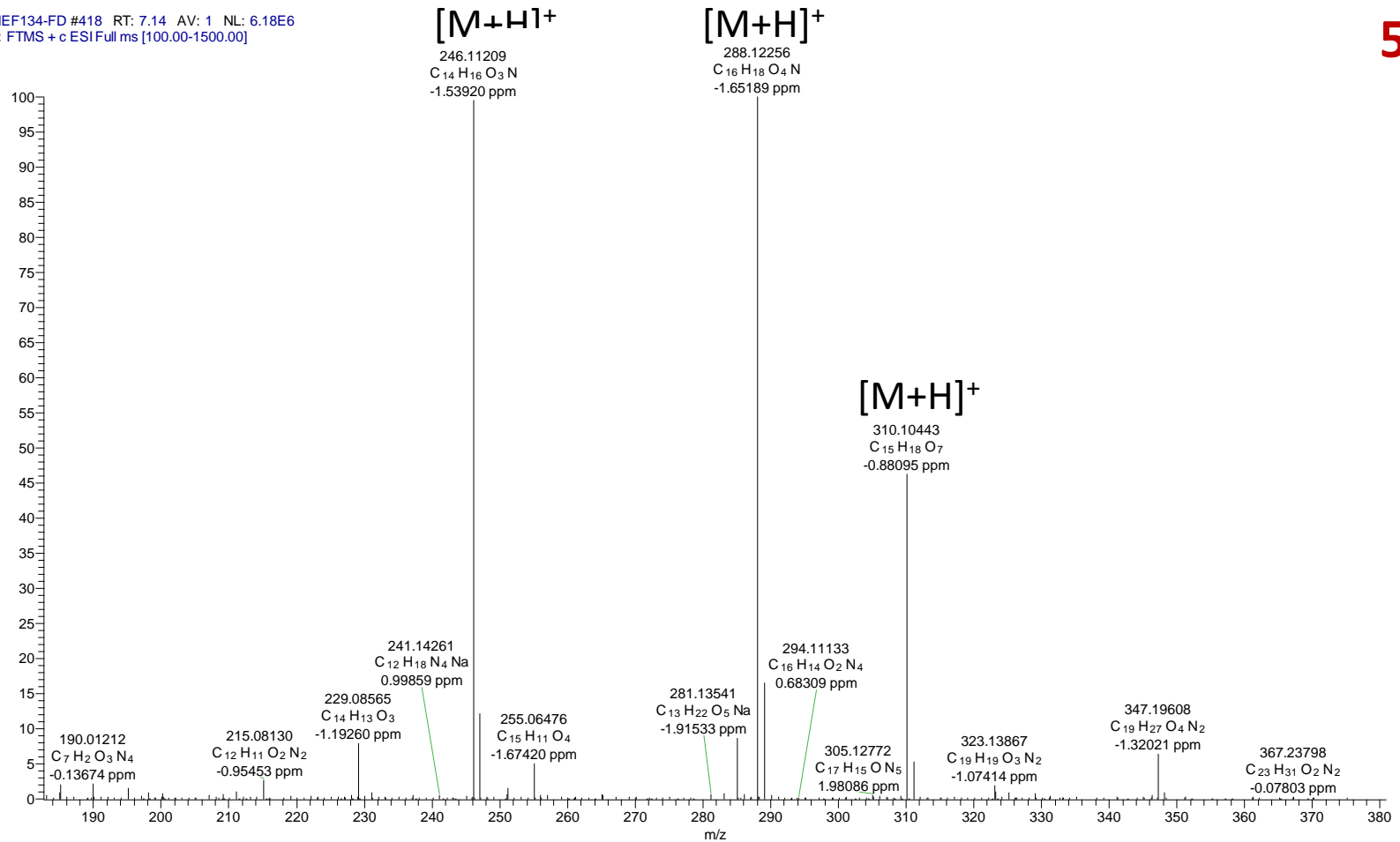
4



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #418 RT: 7.14 AV: 1 NL: 6.18E6
T: FTMS + c ESI Full ms [100.00-1500.00]

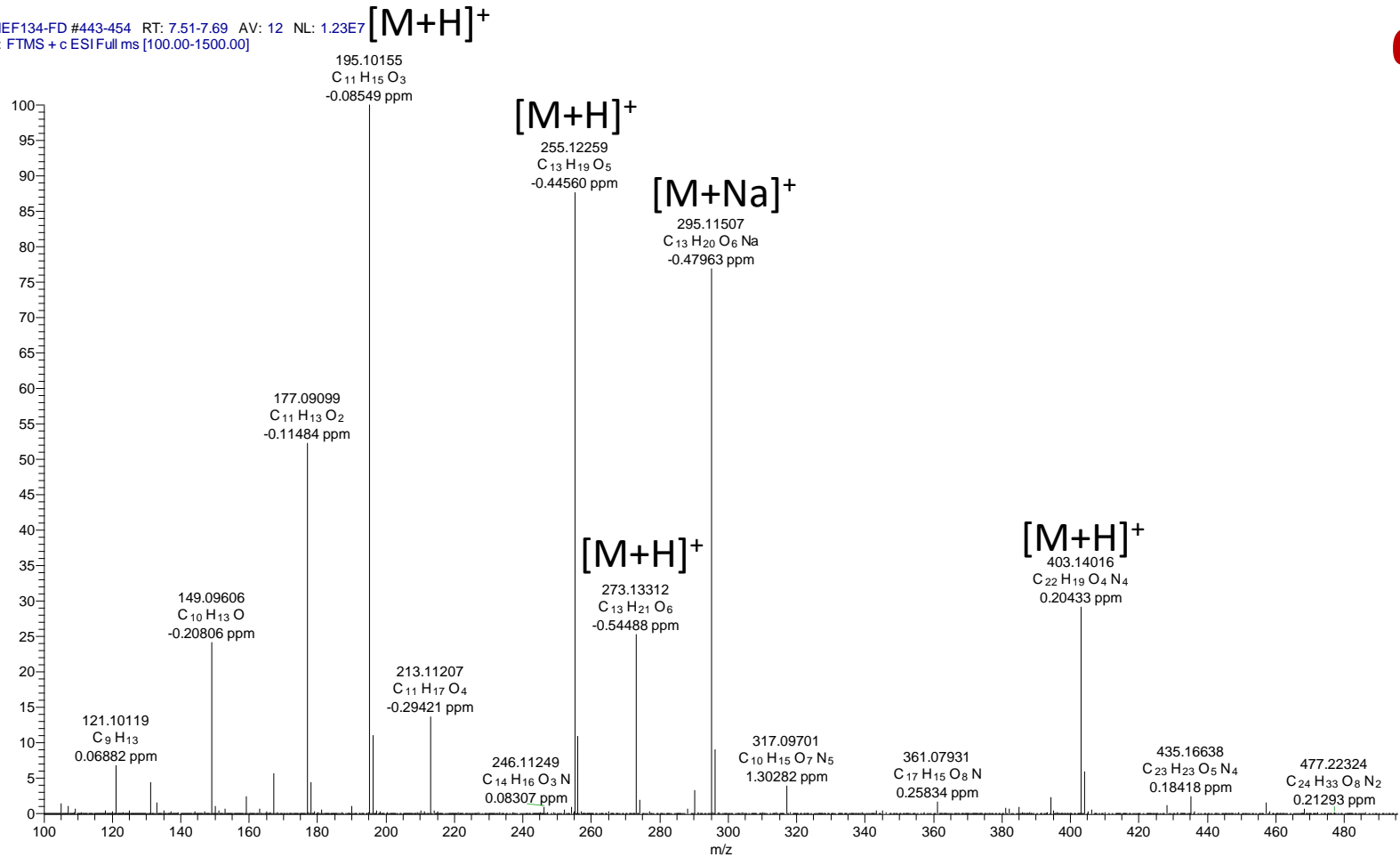
5



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #443-454 RT: 7.51-7.69 AV: 12 NL: 1.23E7
T: FTMS + c ESIFull ms [100.00-1500.00]

6

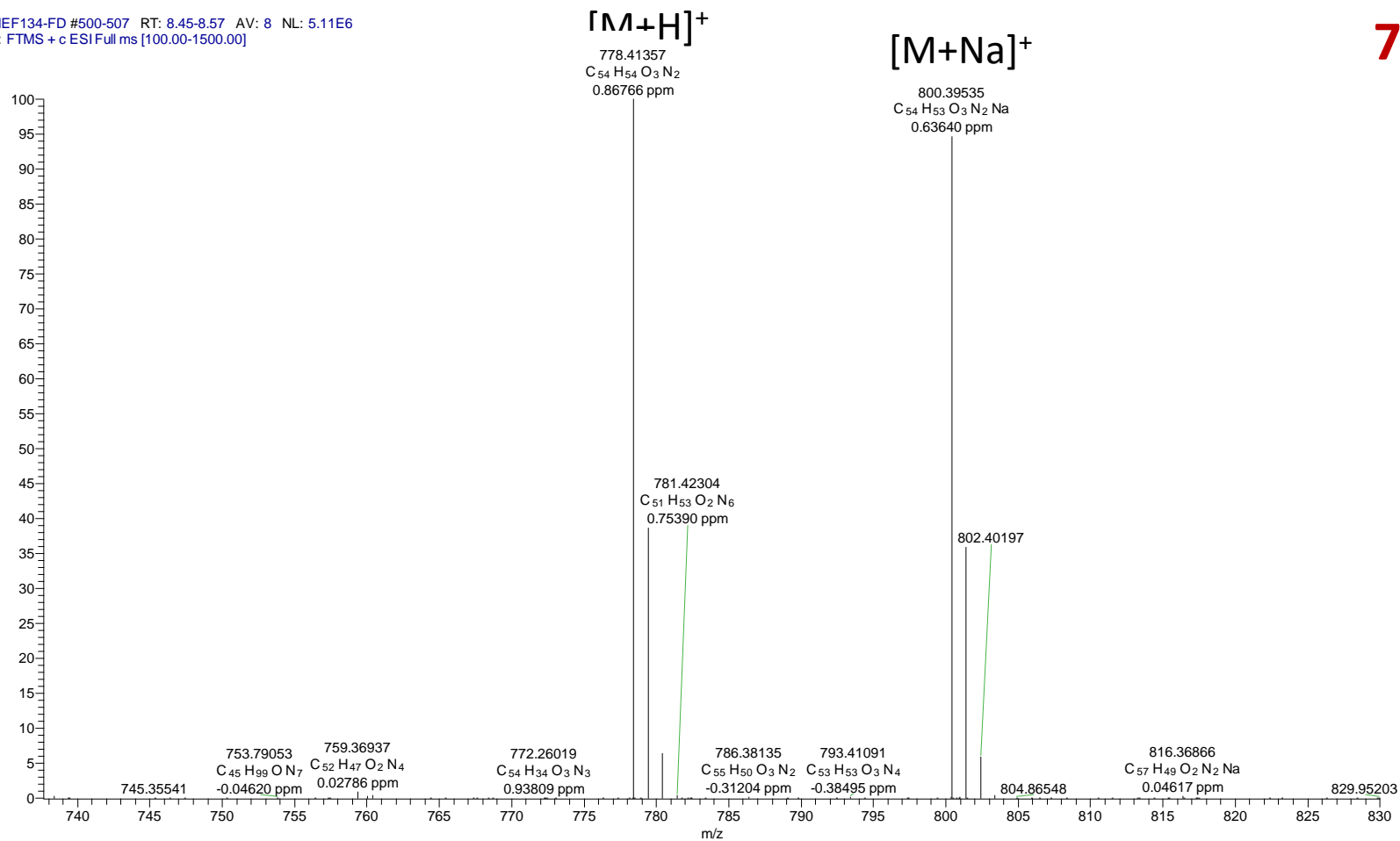


2. MEF134 FD

HPLC-HRMS Spectra

MEF134-FD #500-507 RT: 8.45-8.57 AV: 8 NL: 5.11E6
T: FTMS + c ESIFull ms [100.00-1500.00]

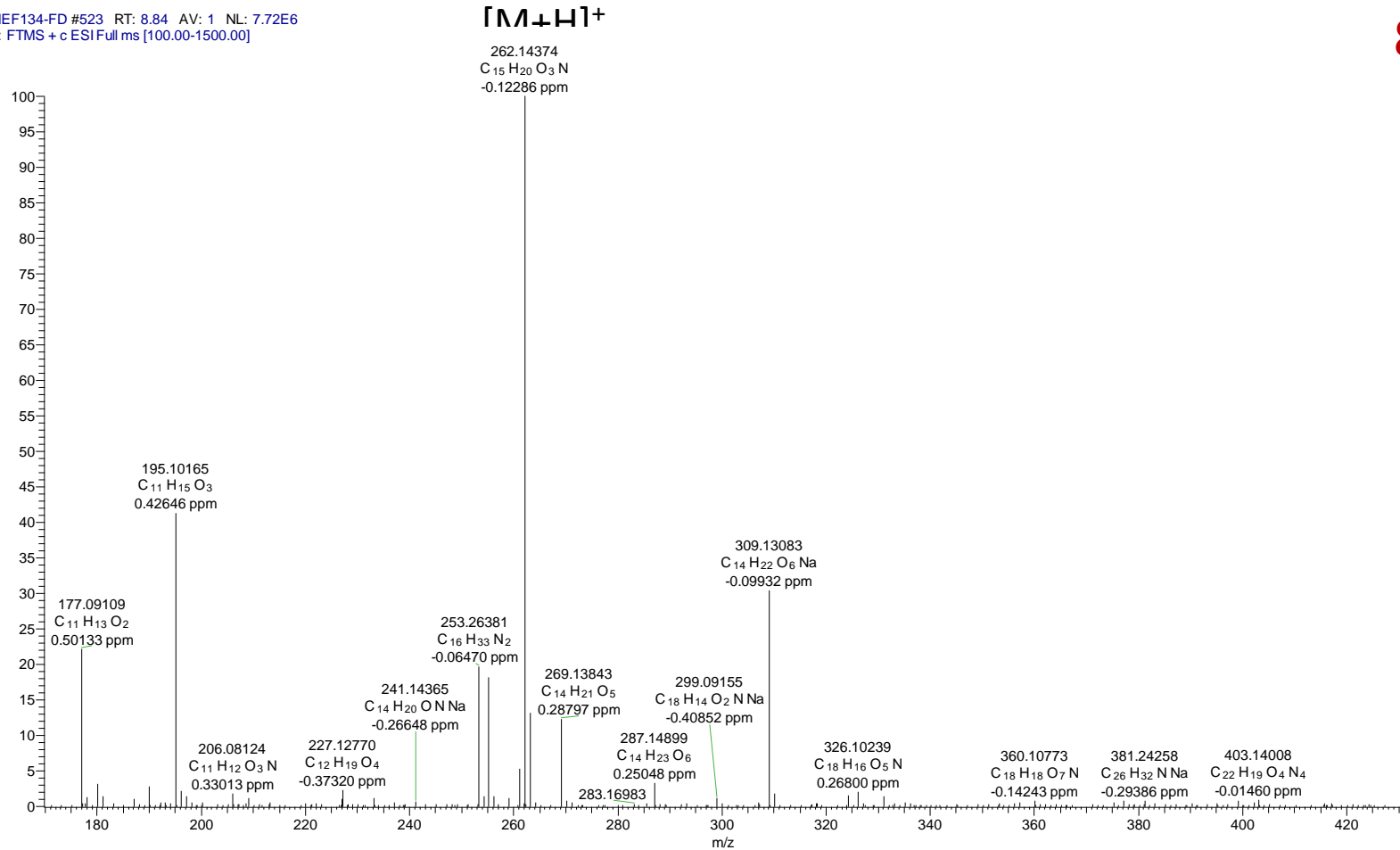
7



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #523 RT: 8.84 AV: 1 NL: 7.72E6
T: FTMS + c ESI Full ms [100.00-1500.00]

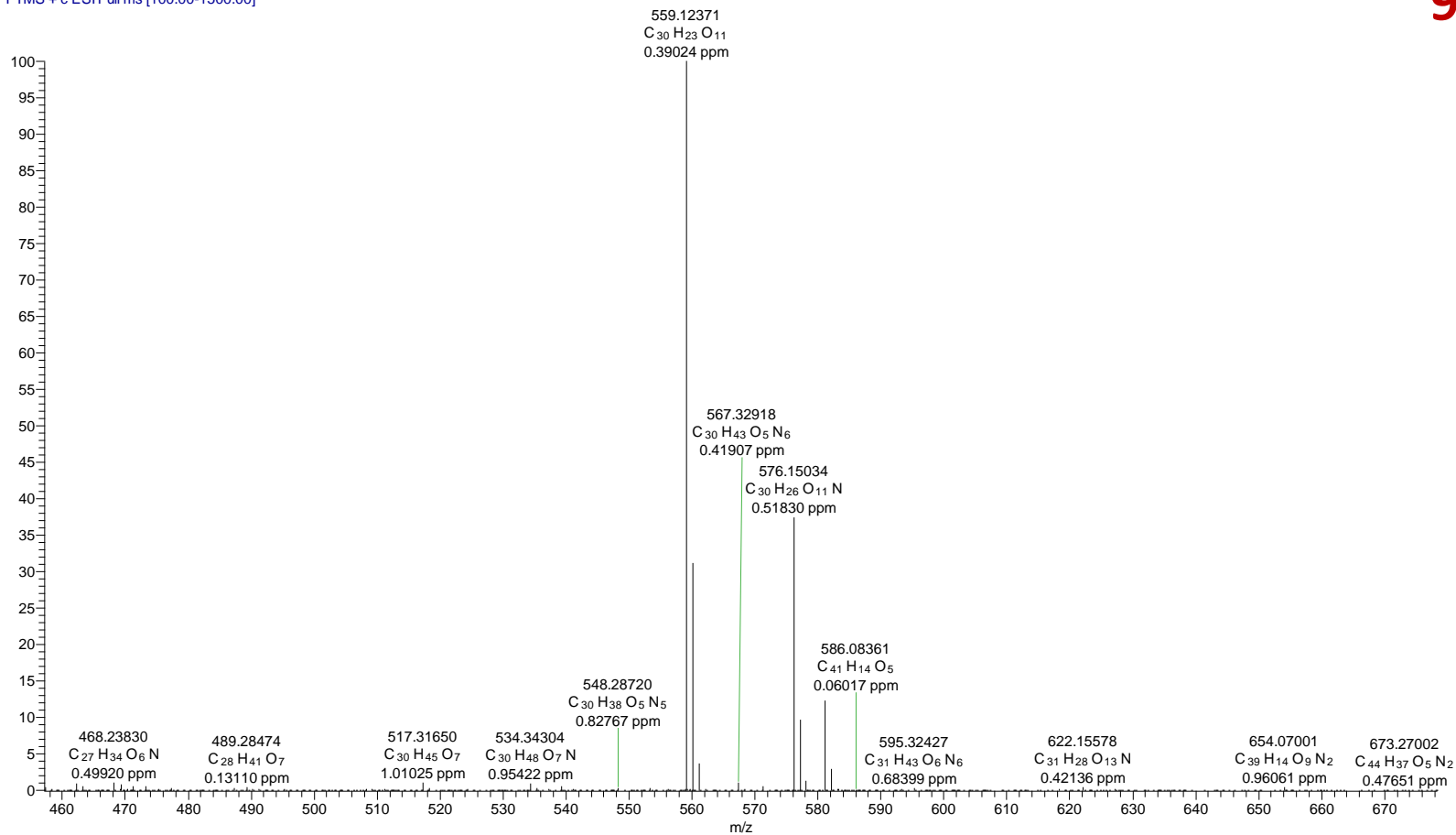
8



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #565-577 RT: 9.55-9.75 AV: 13 NL: 1.08E7
T: FTMS + c ESI Full ms [100.00-1500.00]

9

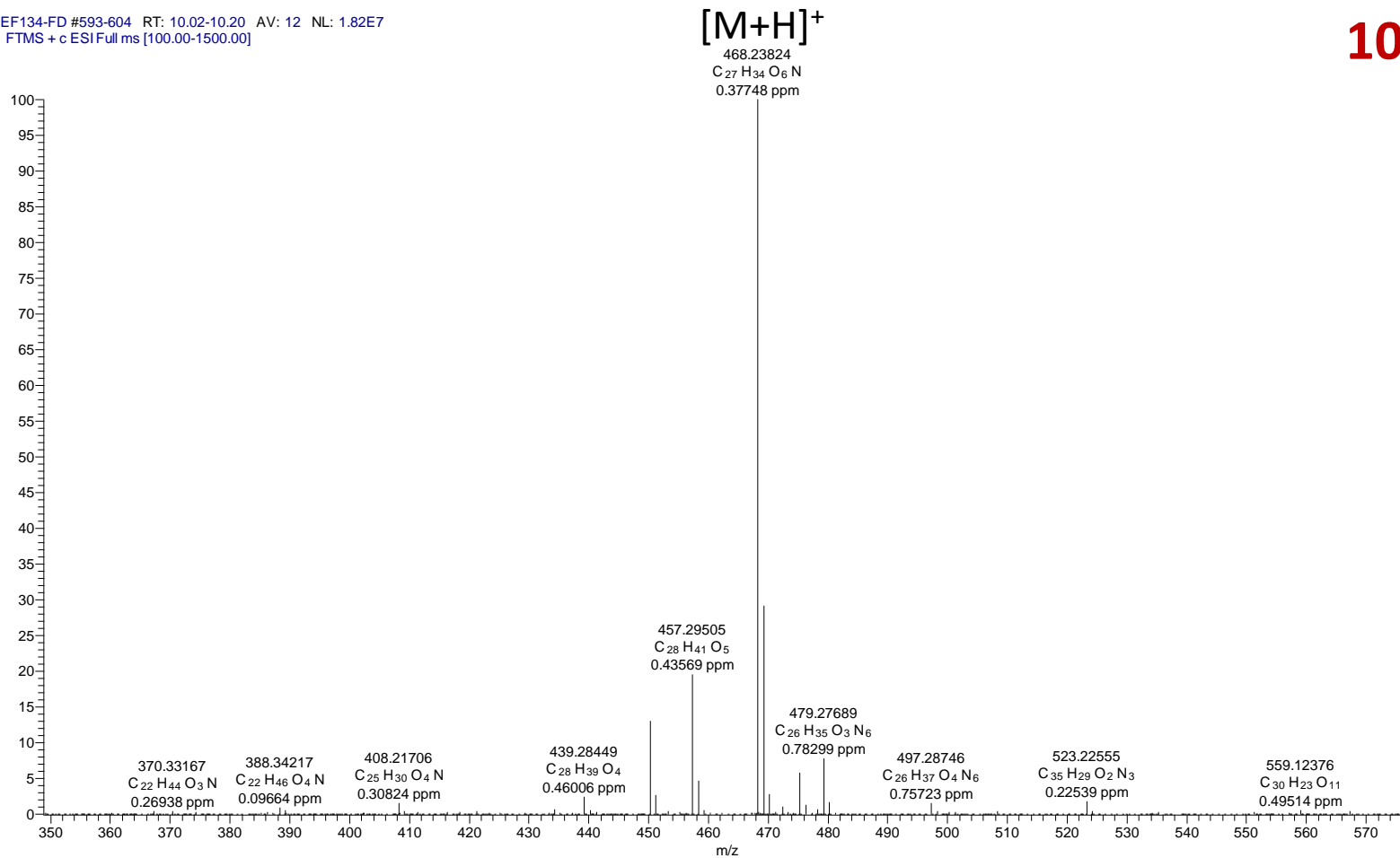


2. MEF134 FD

HPLC-HRMS Spectra

MEF134-FD #593-604 RT: 10.02-10.20 AV: 12 NL: 1.82E7
T: FTMS + c ESIFull ms [100.00-1500.00]

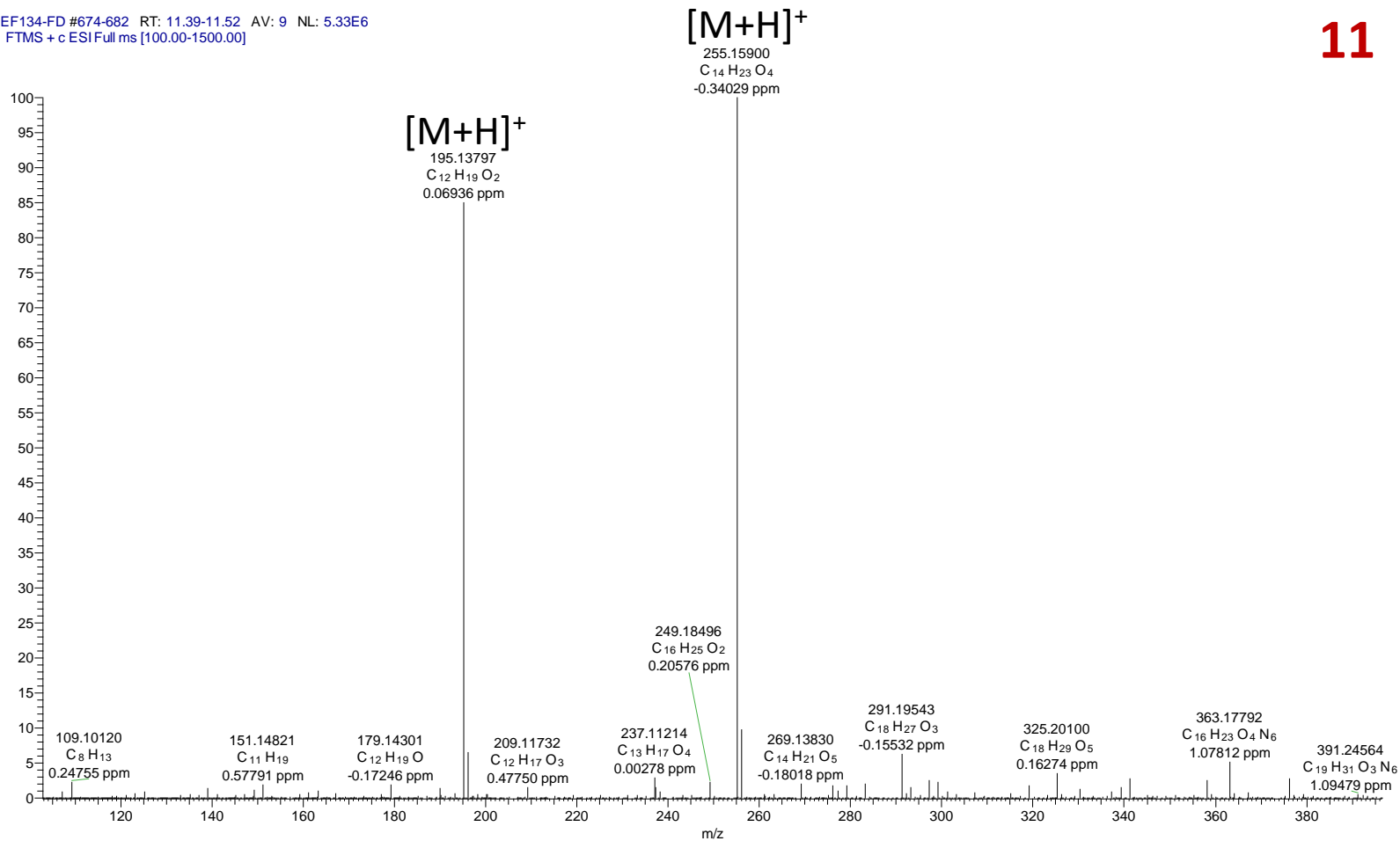
10



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #674-682 RT: 11.39-11.52 AV: 9 NL: 5.33E6
T: FTMS + c ESIFull ms [100.00-1500.00]

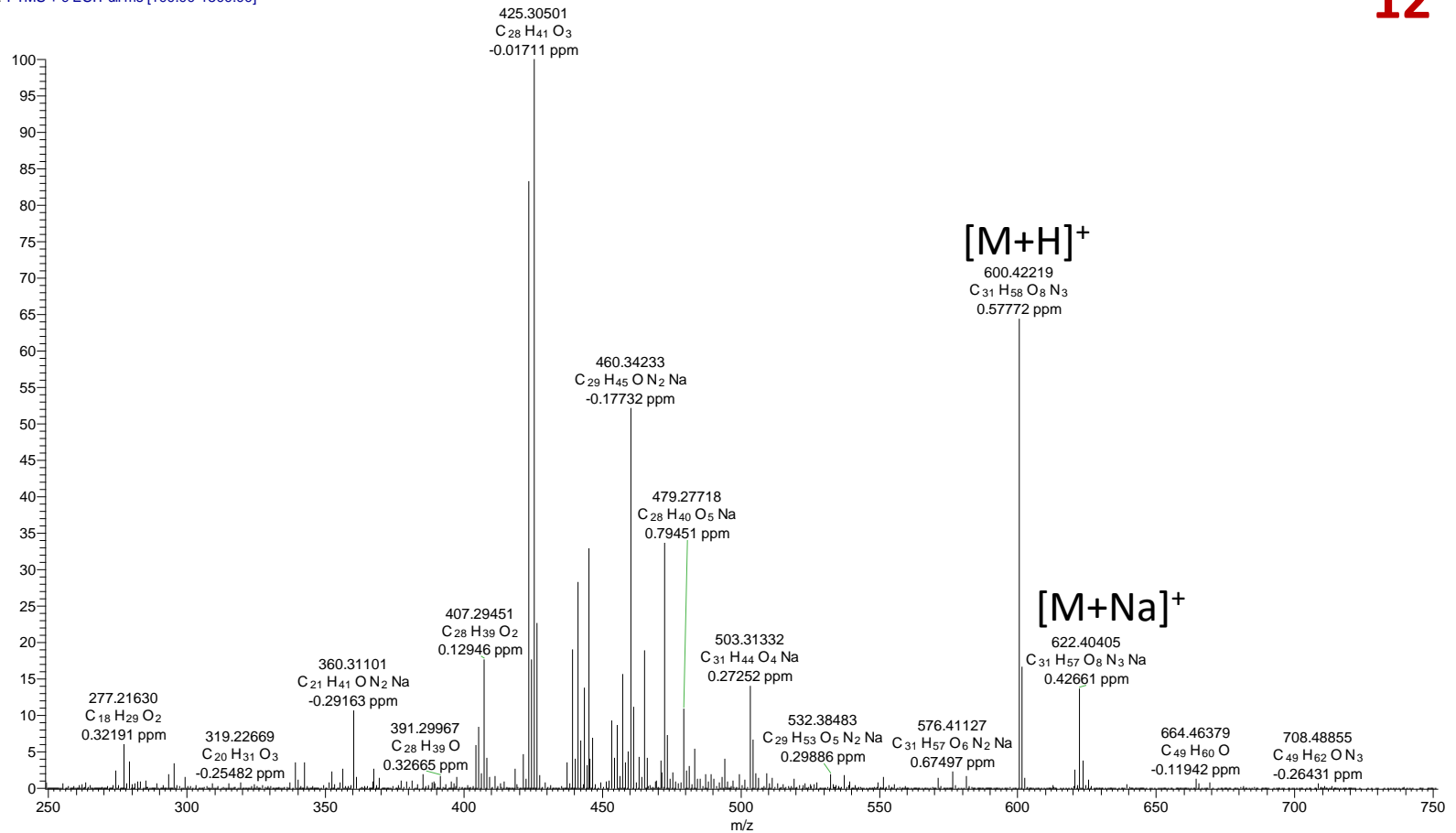
11



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #710-723 RT: 12.00-12.22 AV: 14 NL: 3.10E6
T: FTMS + c ESIFull ms [100.00-1500.00]

12

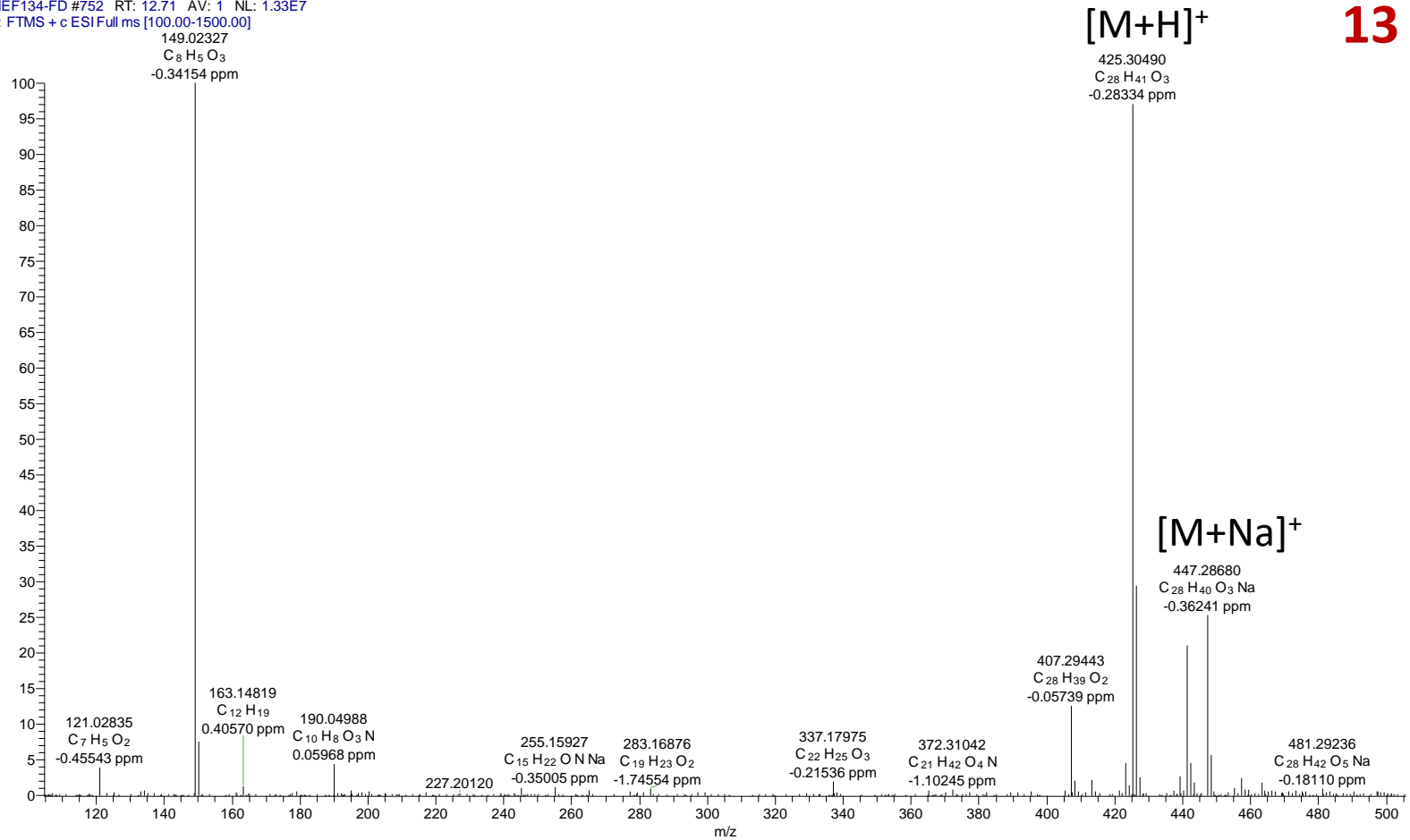


2. MEF134 FD

HPLC-HRMS Spectra

MEF134-FD #752 RT: 12.71 AV: 1 NL: 1.33E7
T: FTMS + c ESIFull ms [100.00-1500.00]

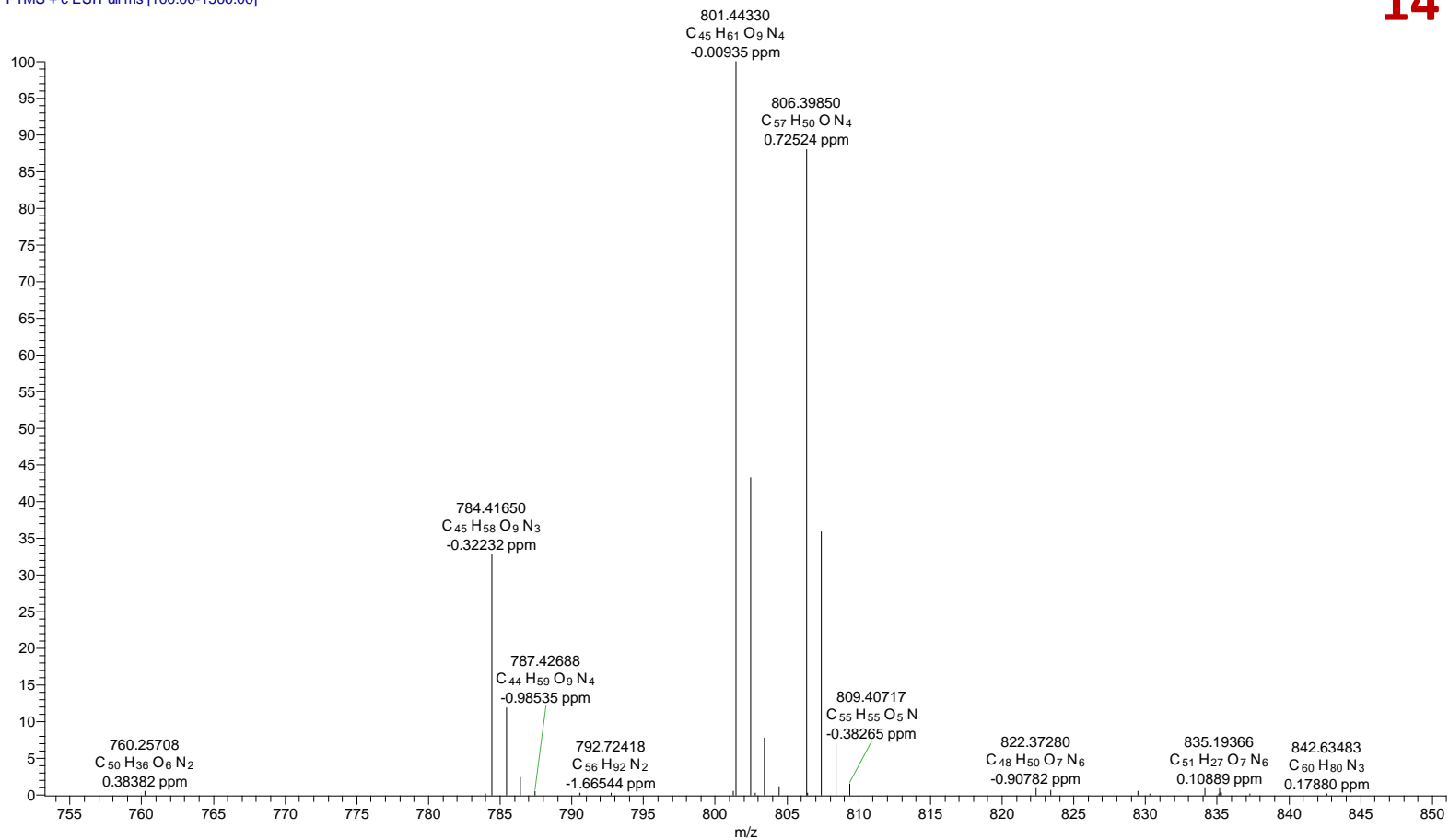
13



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #816 RT: 13.79 AV: 1 NL: 8.79E6
T: FTMS + c ESI Full ms [100.00-1500.00]

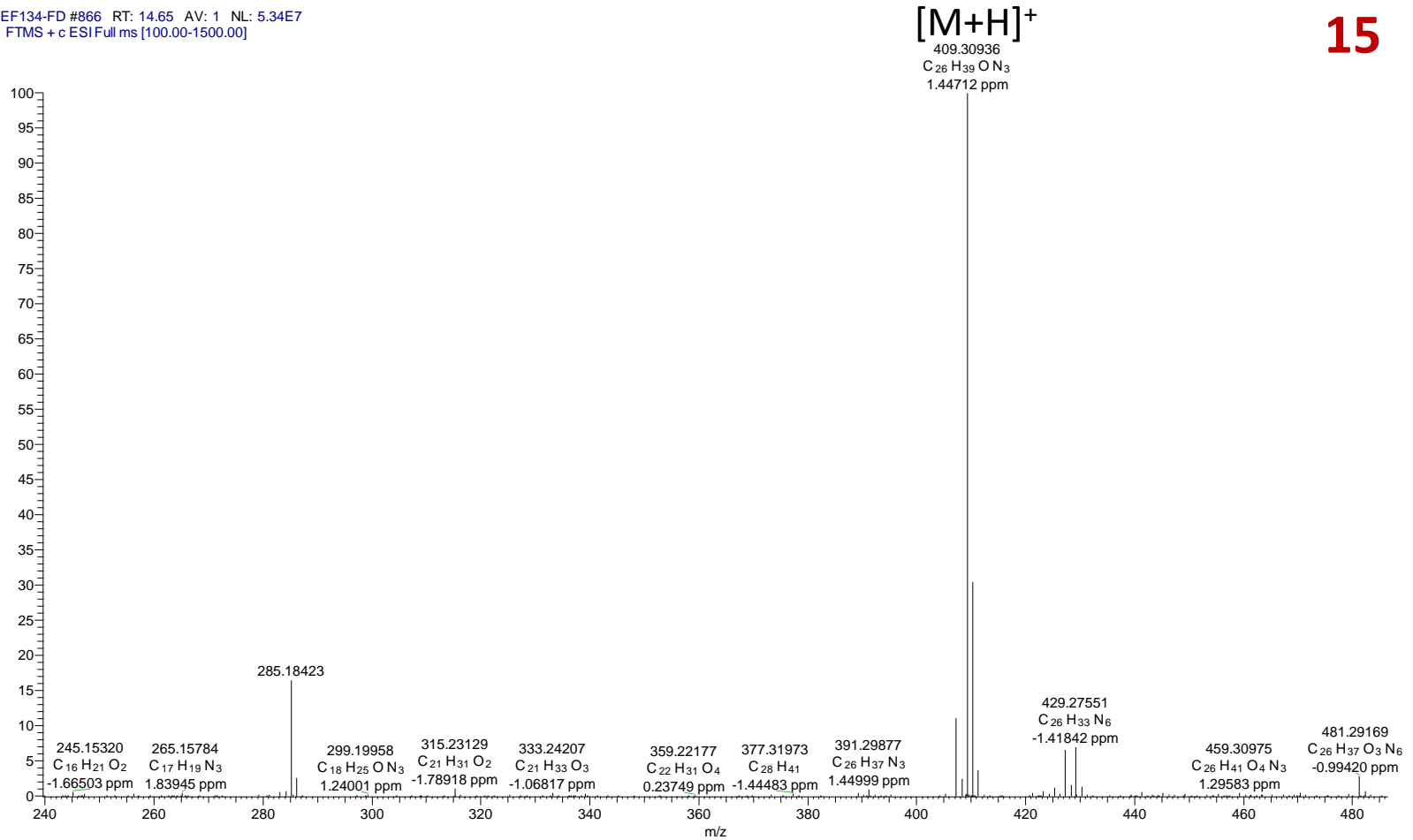
14



2. MEF134 FD HPLC-HRMS Spectra

MEF134-FD #866 RT: 14.65 AV: 1 NL: 5.34E7
T: FTMS + c ESIFull ms [100.00-1500.00]

15

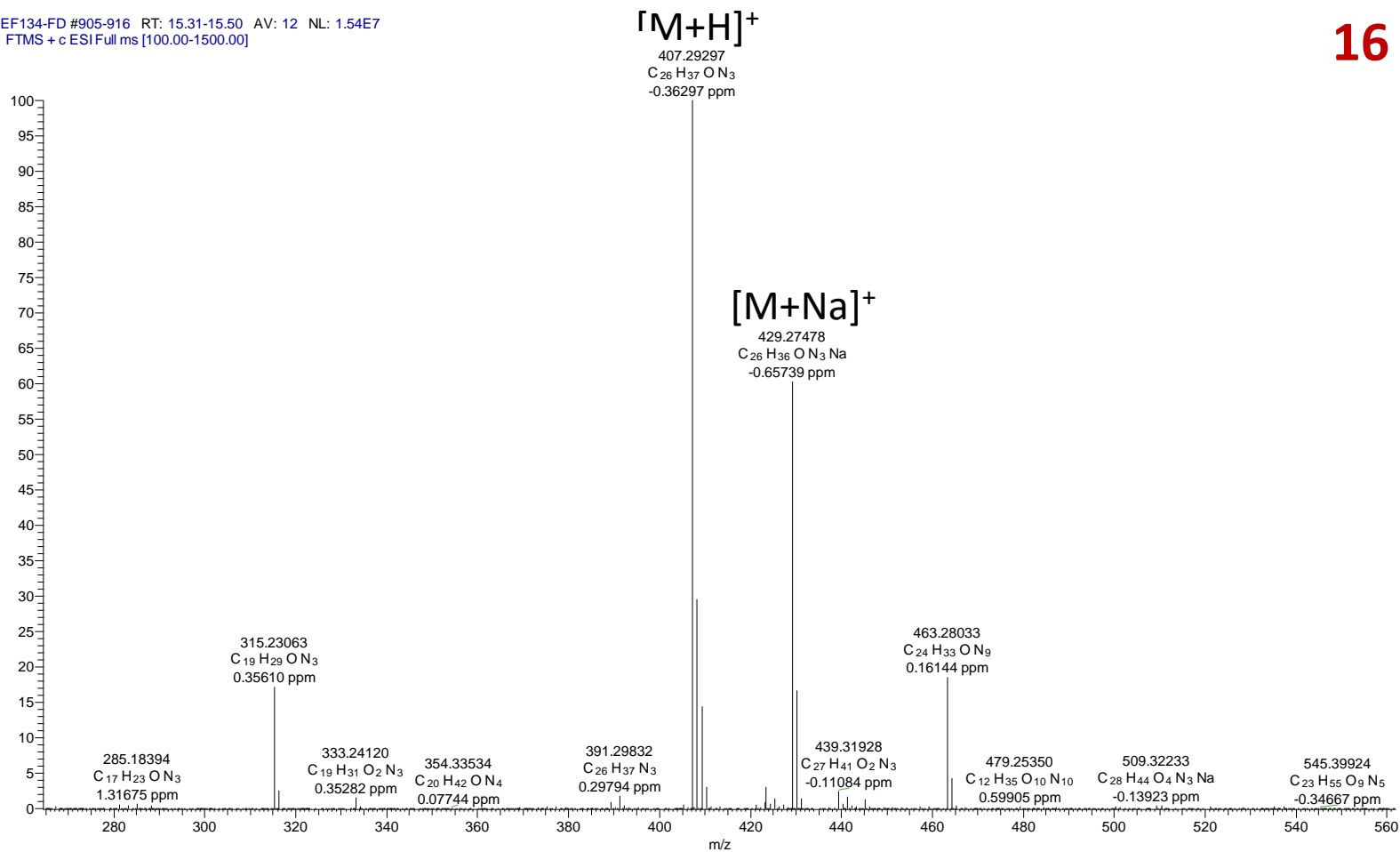


2. MEF134 FD

HPLC-HRMS Spectra

MEF134-FD #905-916 RT: 15.31-15.50 AV: 12 NL: 1.54E7
T: FTMS + c ESI Full ms [100.00-1500.00]

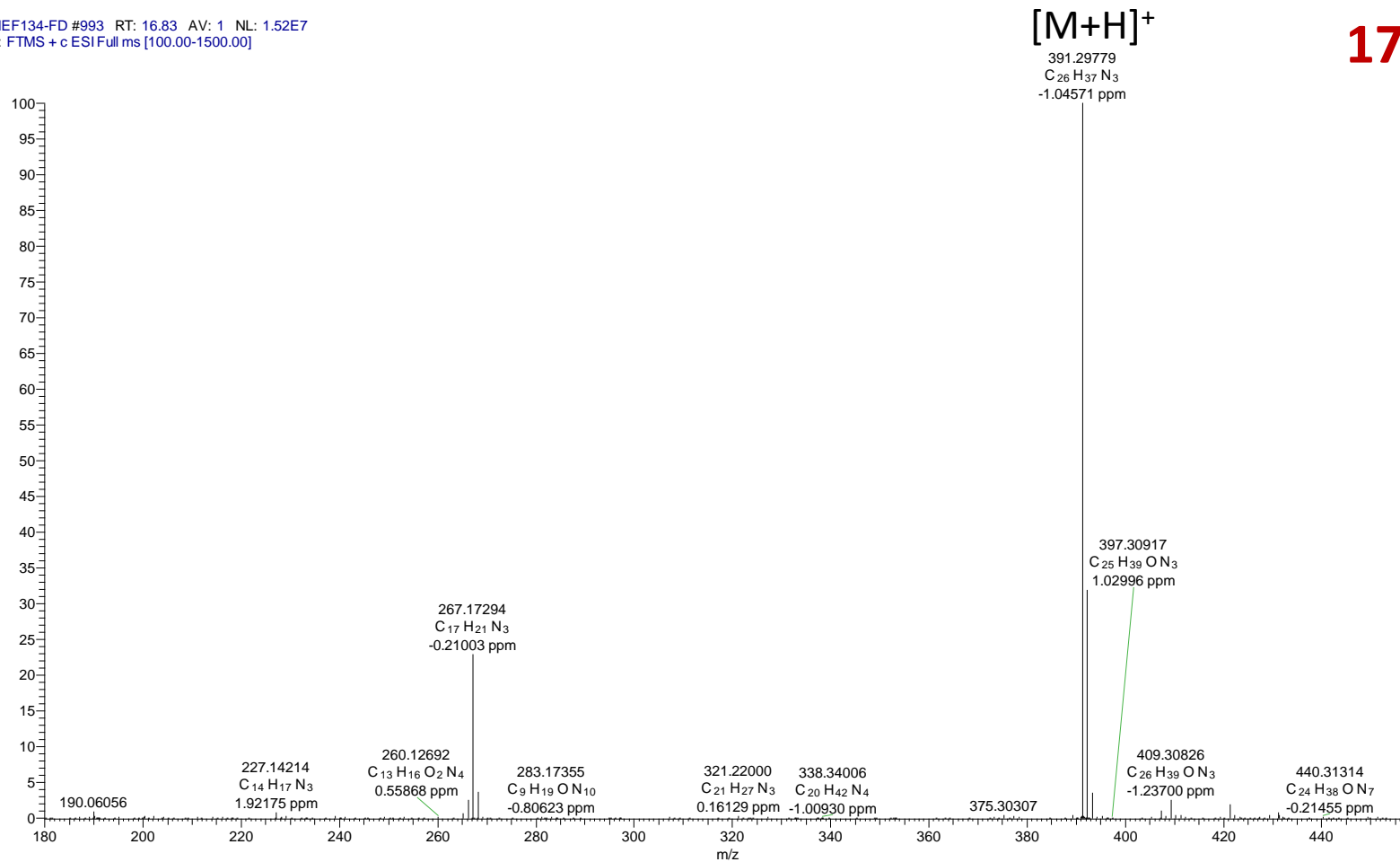
16



2. MEF134 FD HPLC-HRMS Spectra

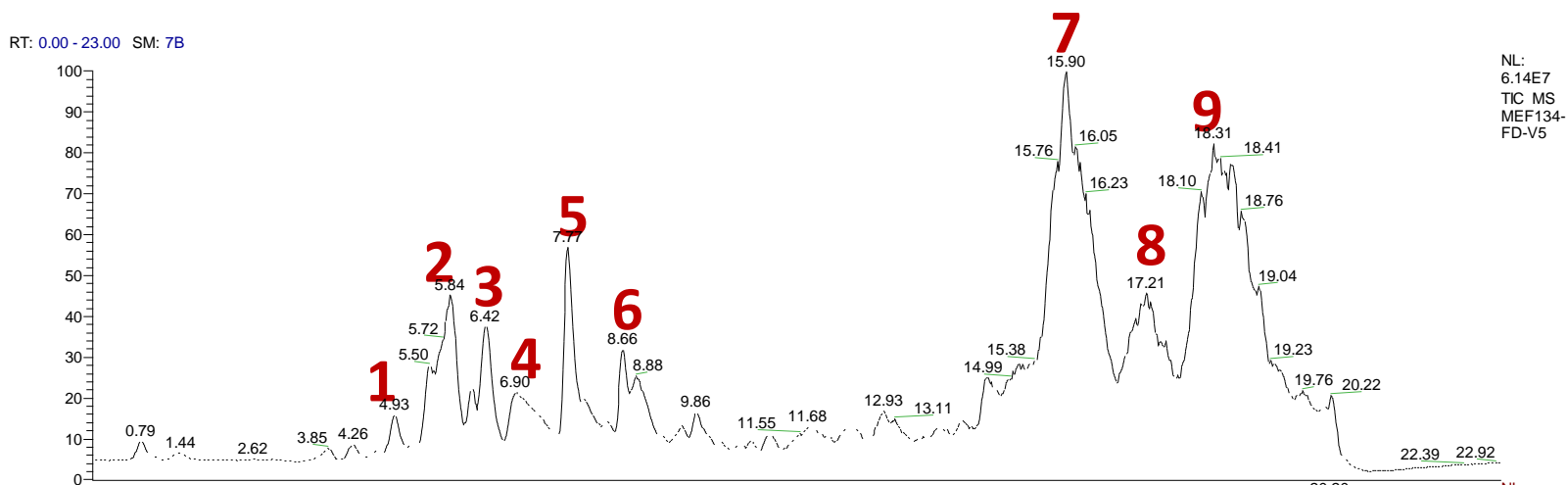
MEF134-FD #993 RT: 16.83 AV: 1 NL: 1.52E7
T: FTMS + c ESIFull ms [100.00-1500.00]

17

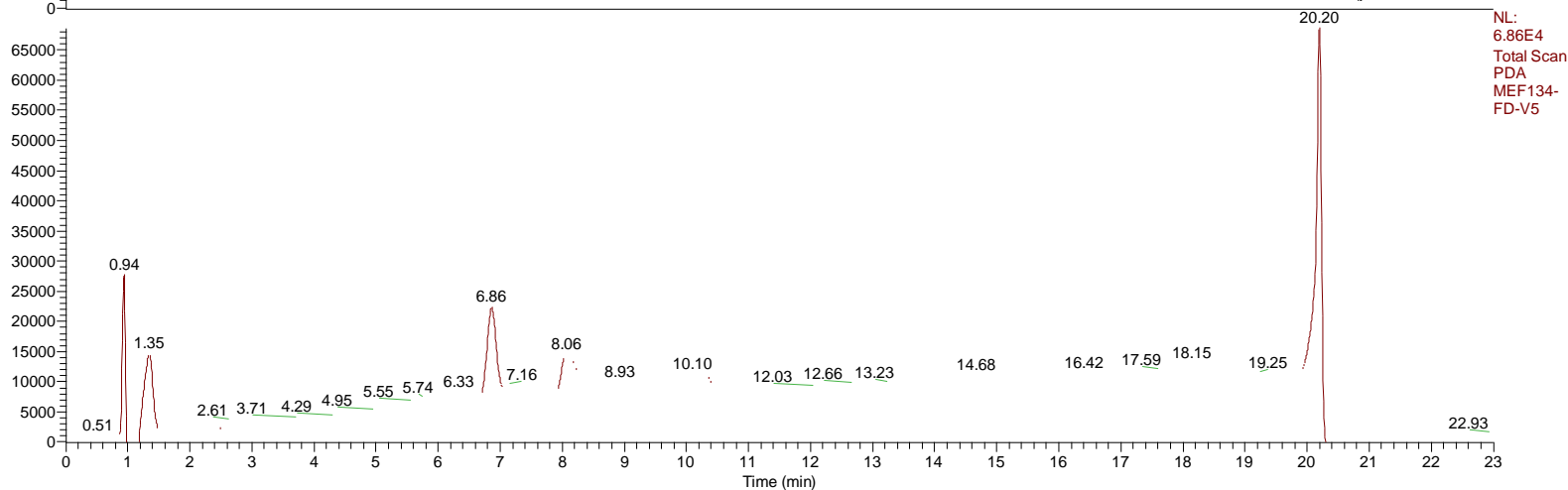


3. MEF134 FD V5 HPLC-HRMS Fullscan

TIC



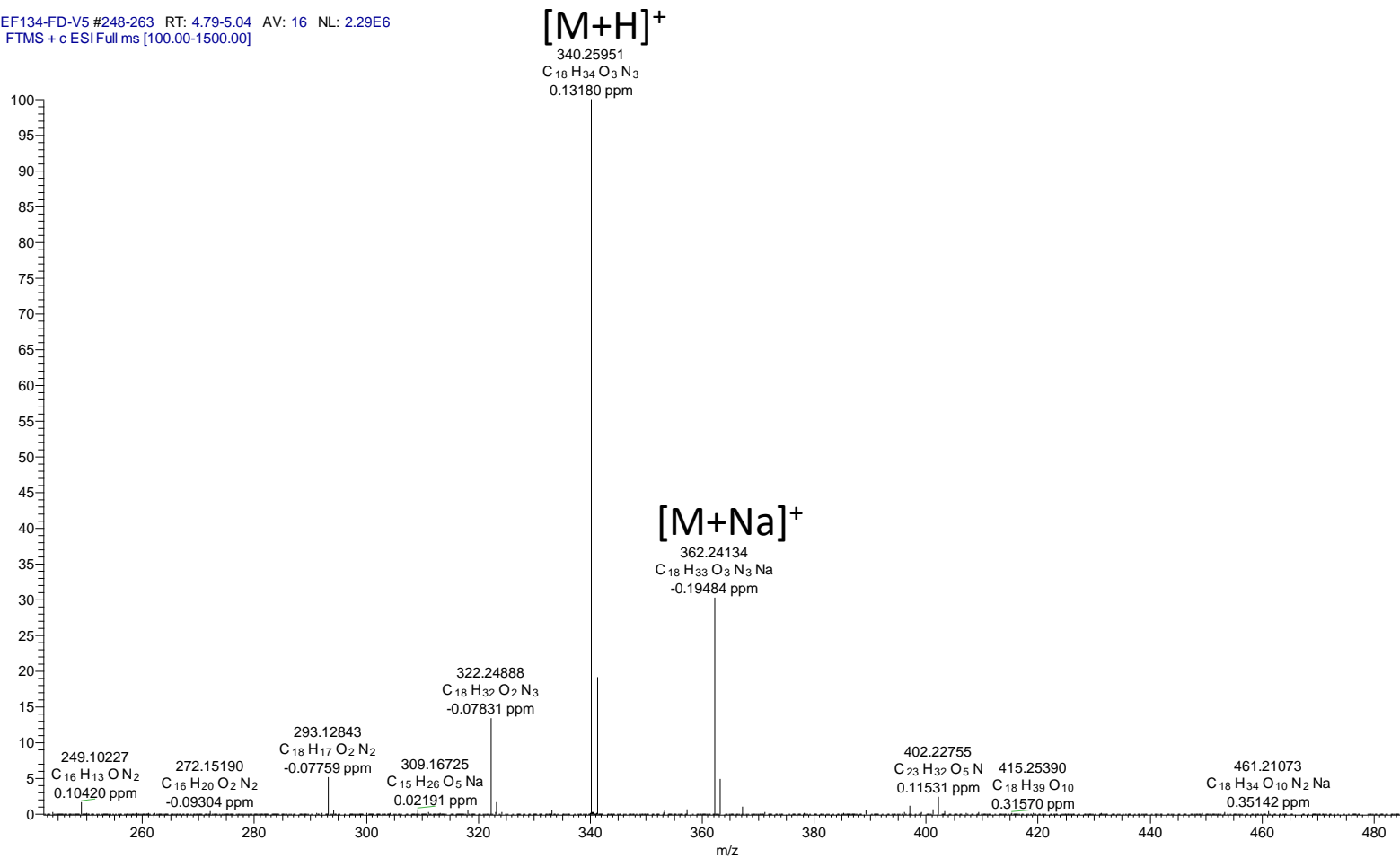
PDA



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #248-263 RT: 4.79-5.04 AV: 16 NL: 2.29E6
T: FTMS + c ESI Full ms [100.00-1500.00]

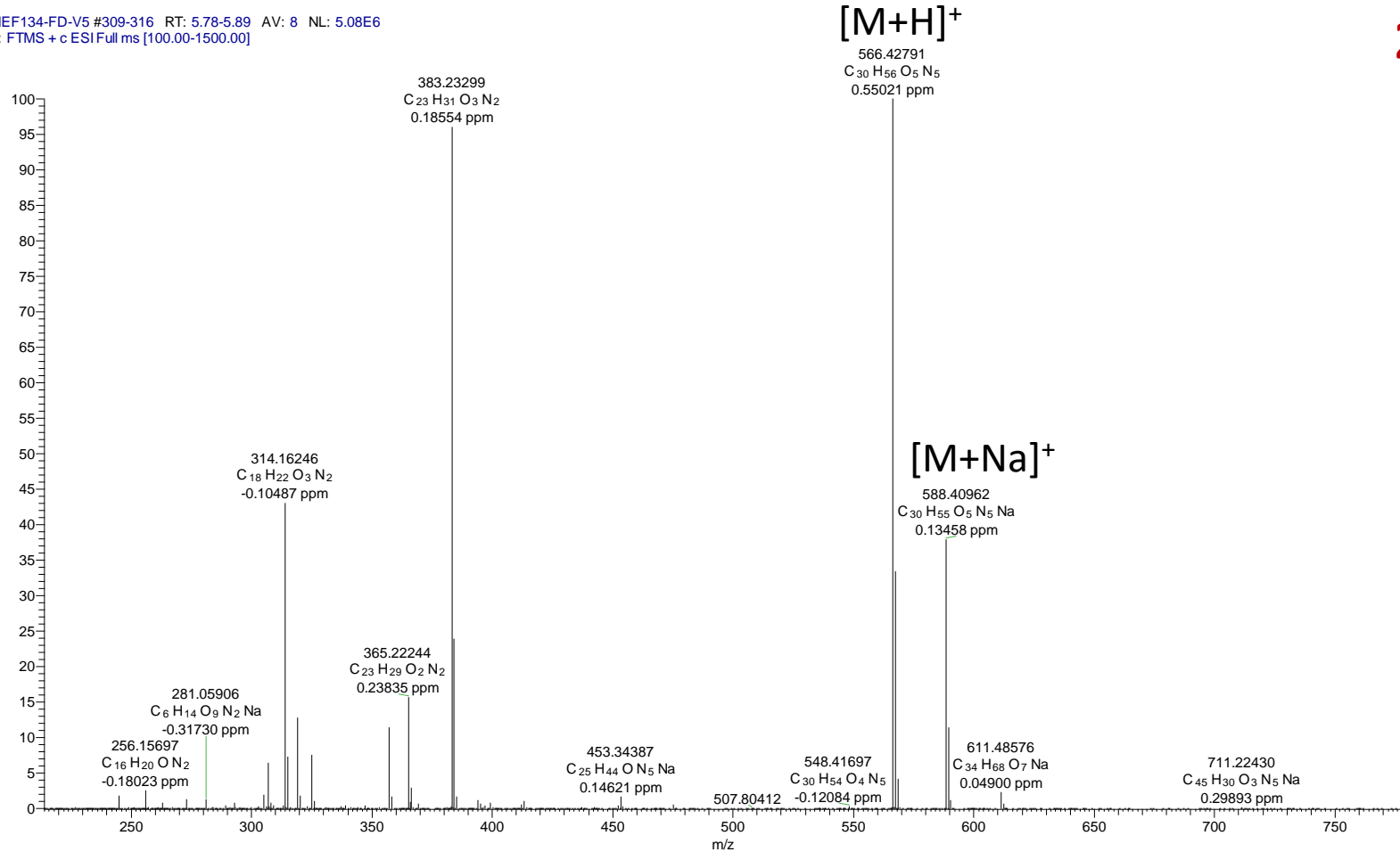
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3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #309-316 RT: 5.78-5.89 AV: 8 NL: 5.08E6
T: FTMS + c ESI Full ms [100.00-1500.00]

2

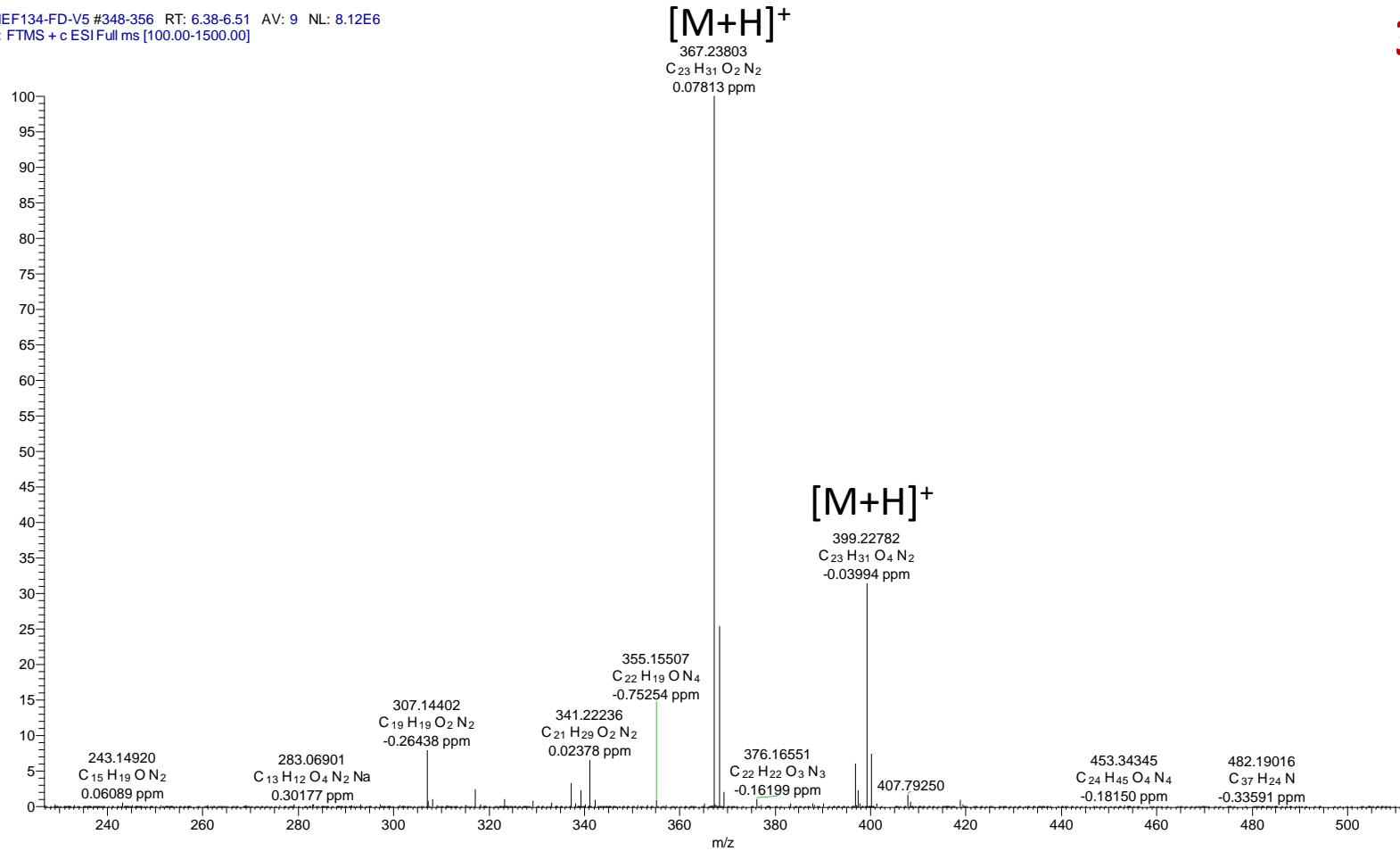


MEF FD V5

HPLC-HRMS Spectra

MEF134-FD-V5 #348-356 RT: 6.38-6.51 AV: 9 NL: 8.12E6
T: FTMS + c ESI Full ms [100.00-1500.00]

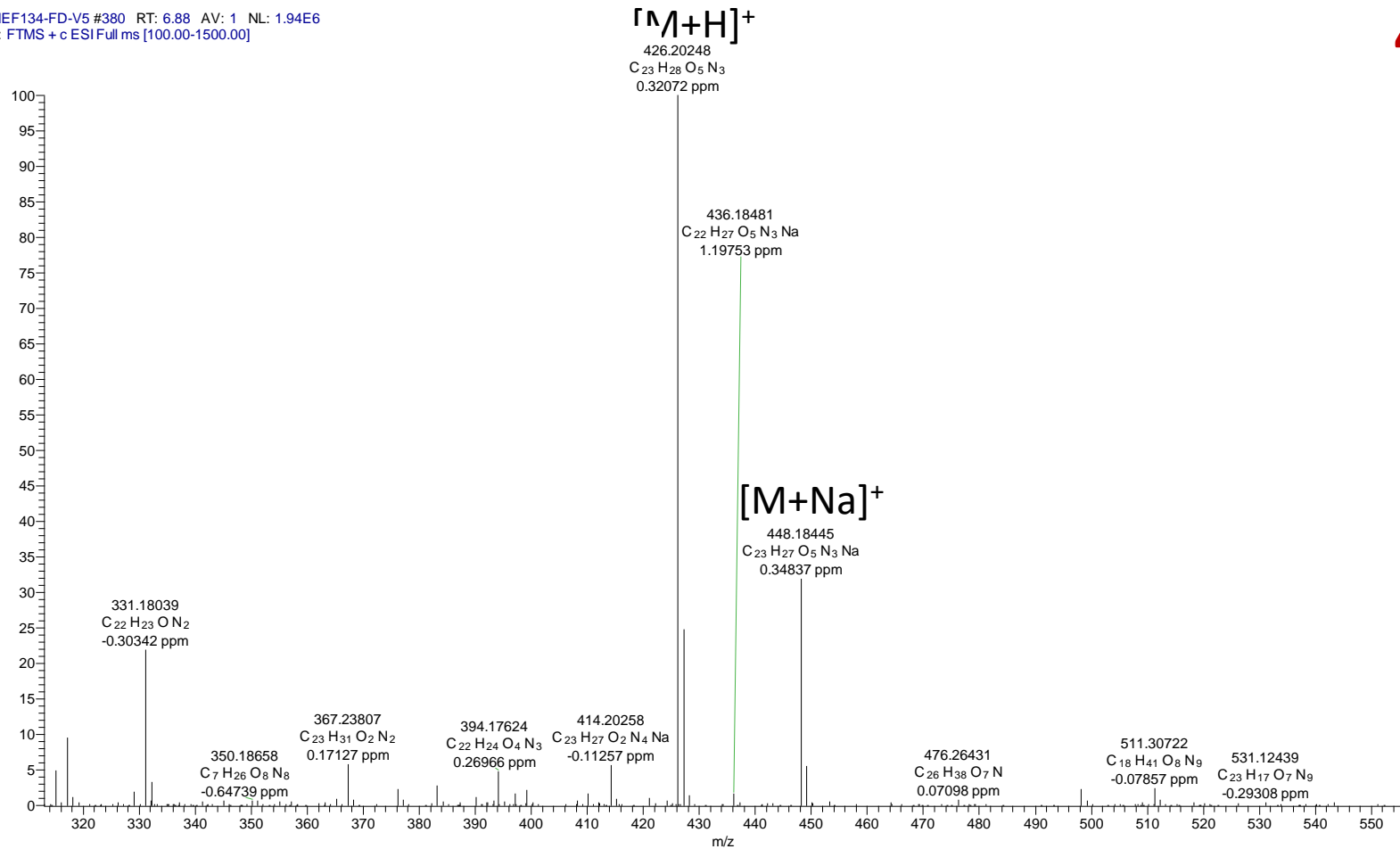
3



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #380 RT: 6.88 AV: 1 NL: 1.94E6
T: FTMS + c ESI Full ms [100.00-1500.00]

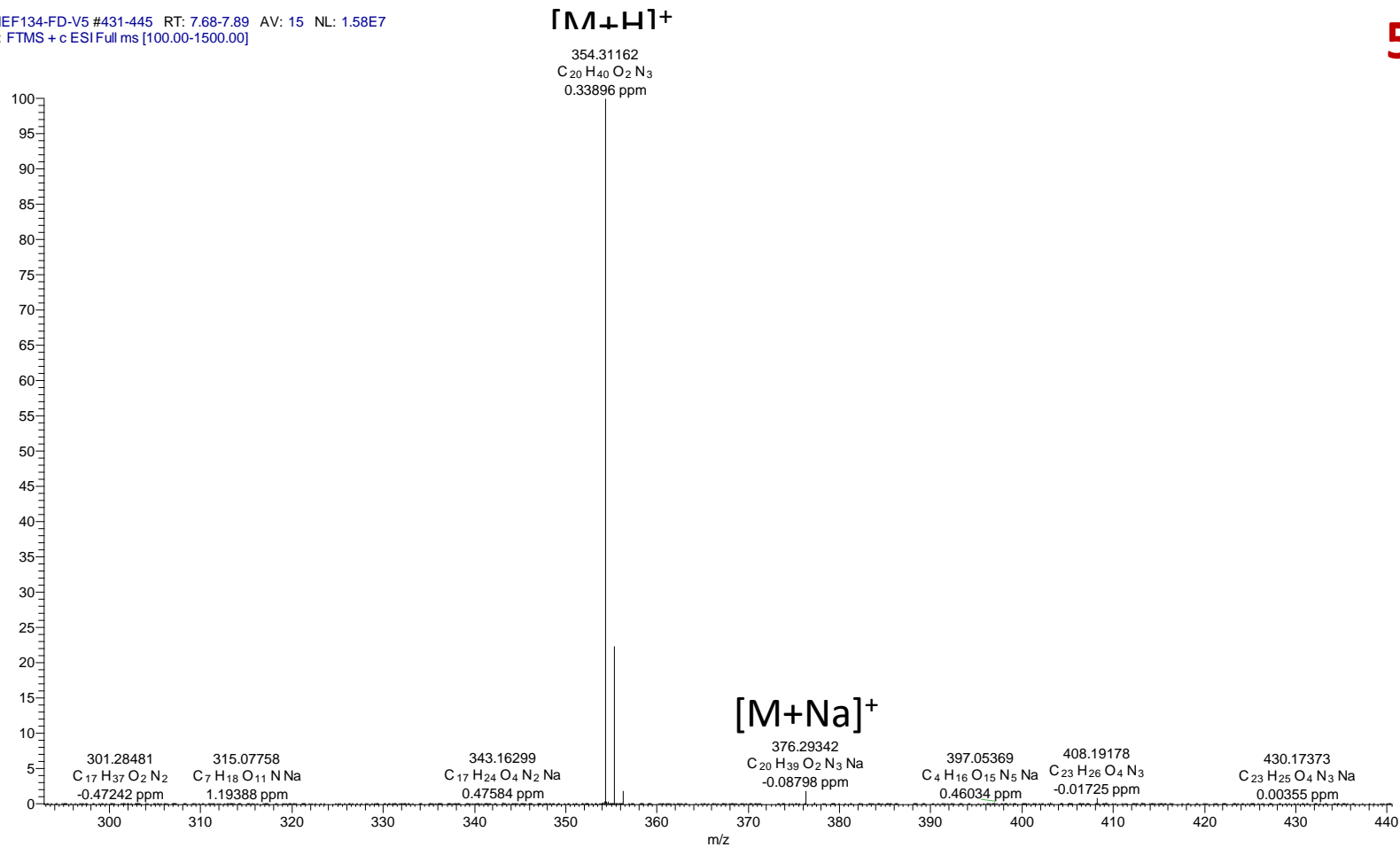
4



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #431-445 RT: 7.68-7.89 AV: 15 NL: 1.58E7
T: FTMS + c ESI Full ms [100.00-1500.00]

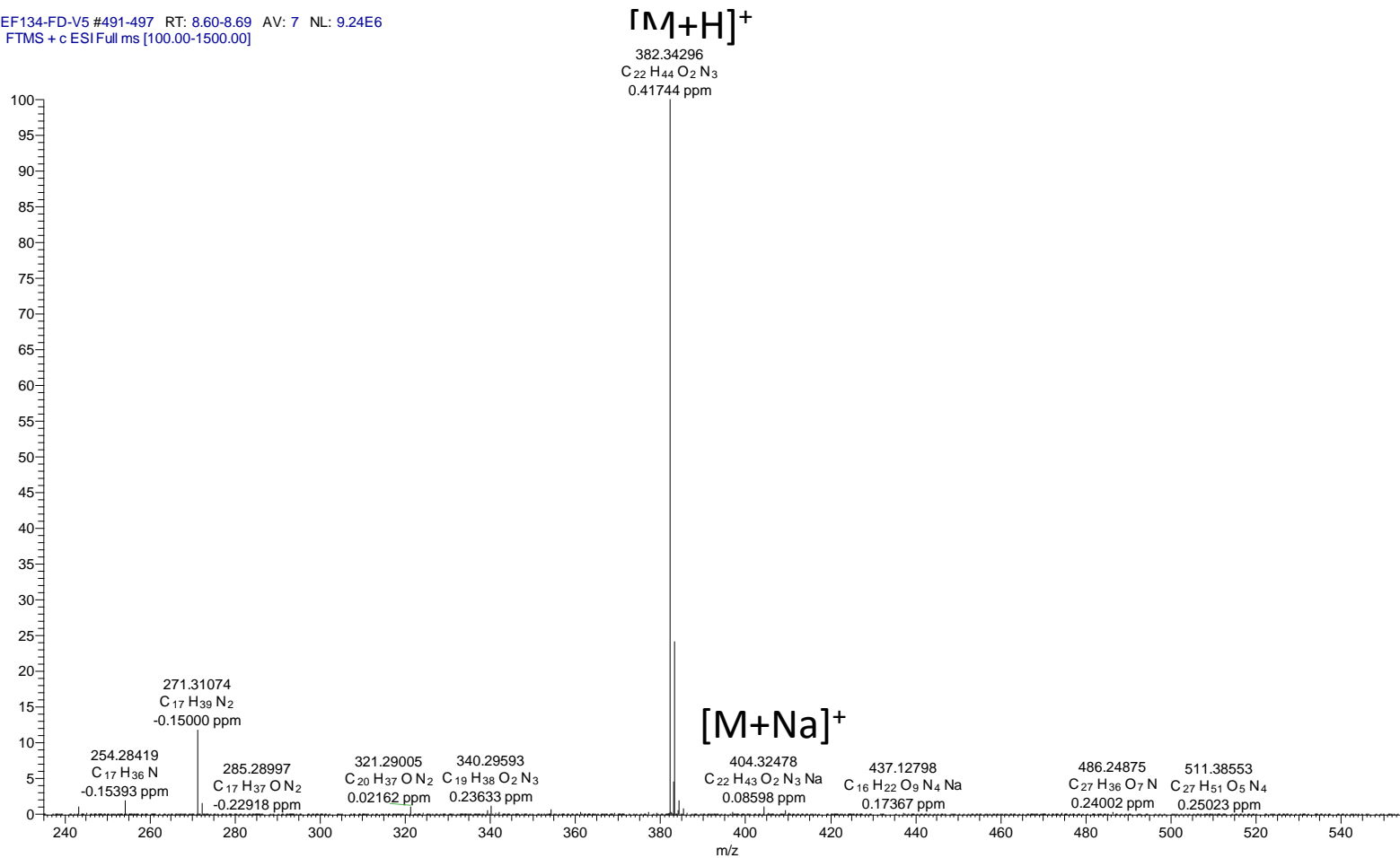
5



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #491-497 RT: 8.60-8.69 AV: 7 NL: 9.24E6
T: FTMS + c ESI Full ms [100.00-1500.00]

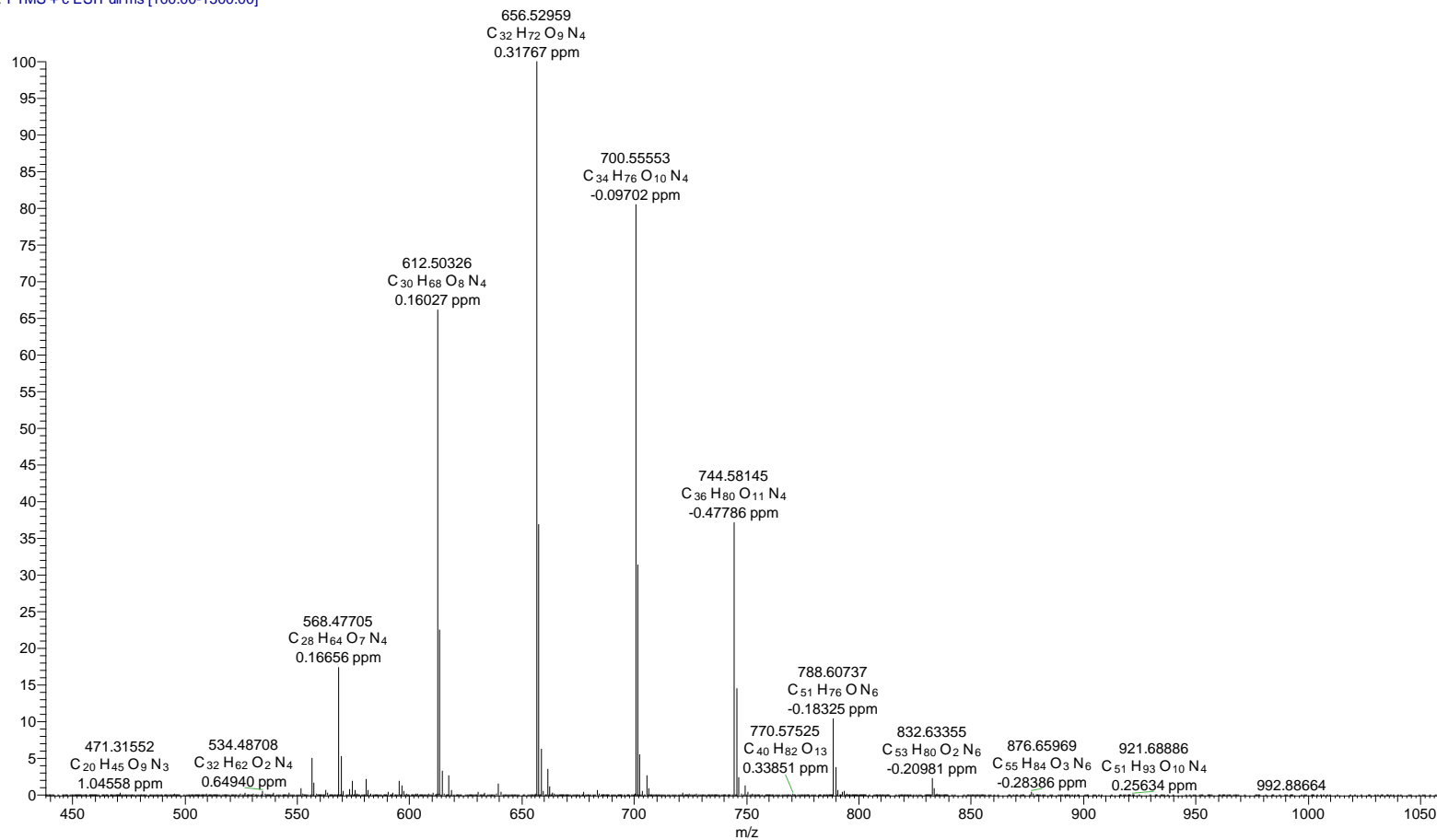
6



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #944-957 RT: 15.79-16.02 AV: 14 NL: 9.03E6
T: FTMS + c ESI Full ms [100.00-1500.00]

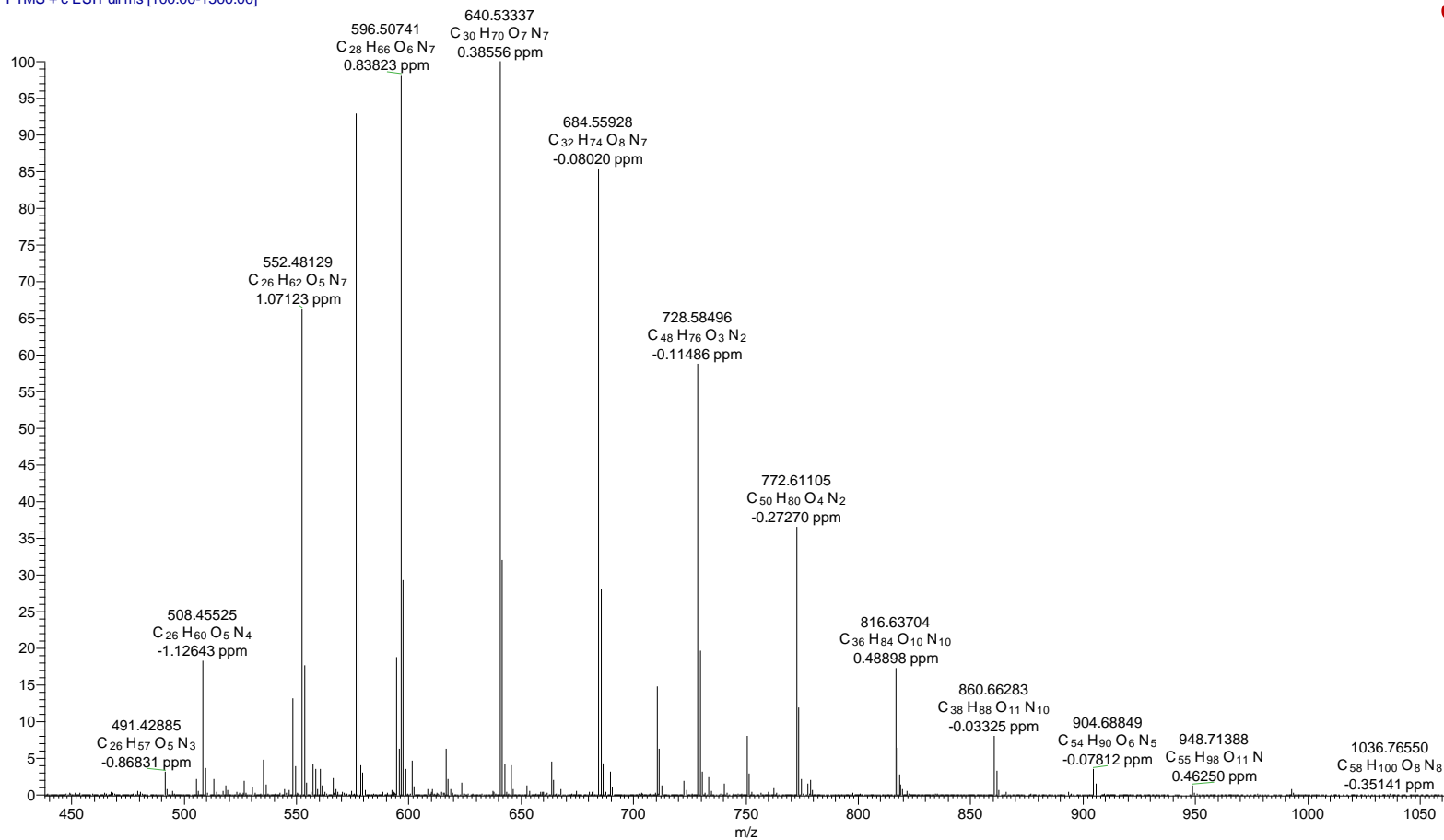
7



3. MEF134 FD V5 HPLC-HRMS Spectra

MEF134-FD-V5 #1015-1036 RT: 17.03-17.40 AV: 22 NL: 1.64E6
T: FTMS + c ESI Full ms [100.00-1500.00]

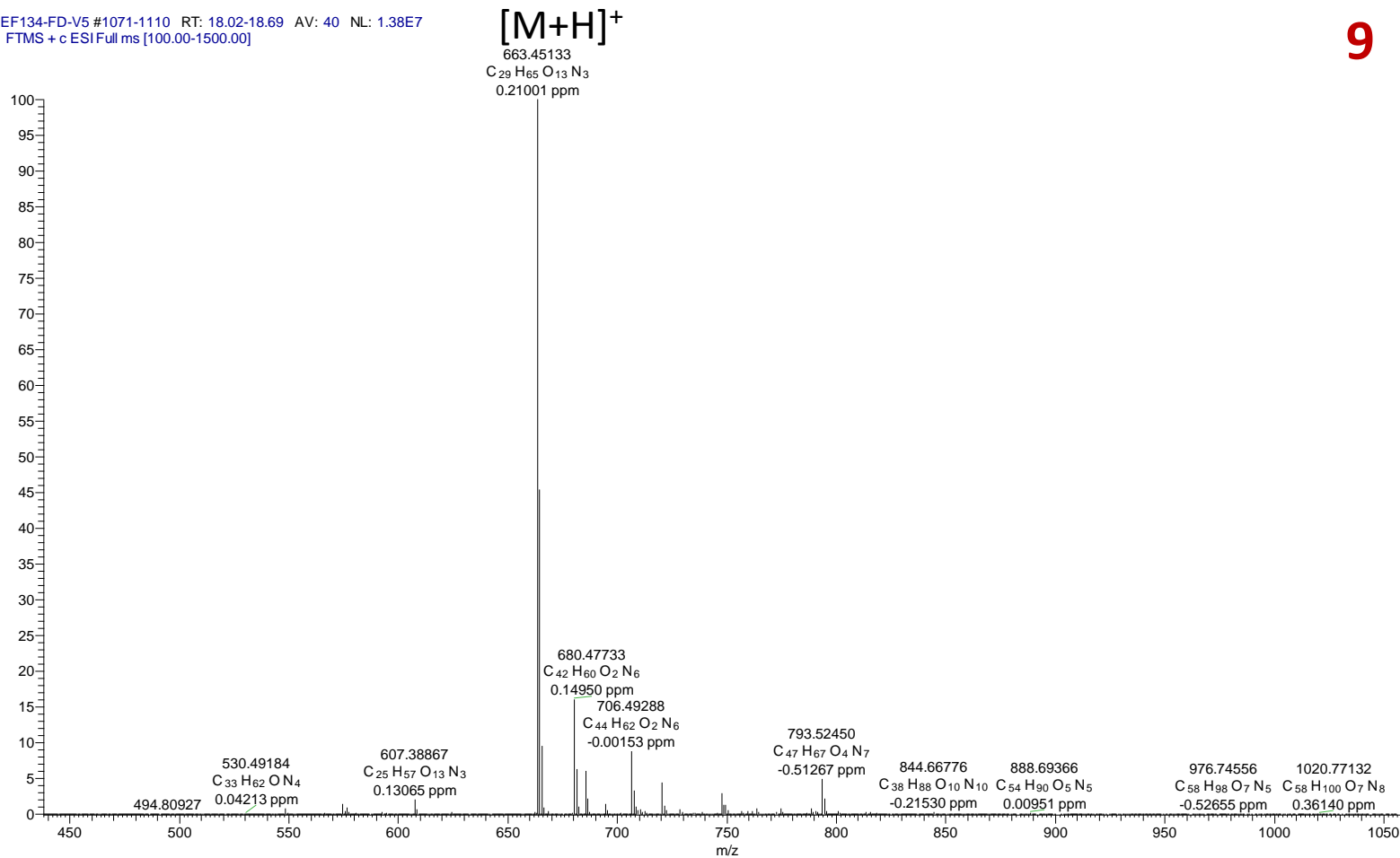
8



3. MEF134 FD V5 HPLC-HRMS Spectra

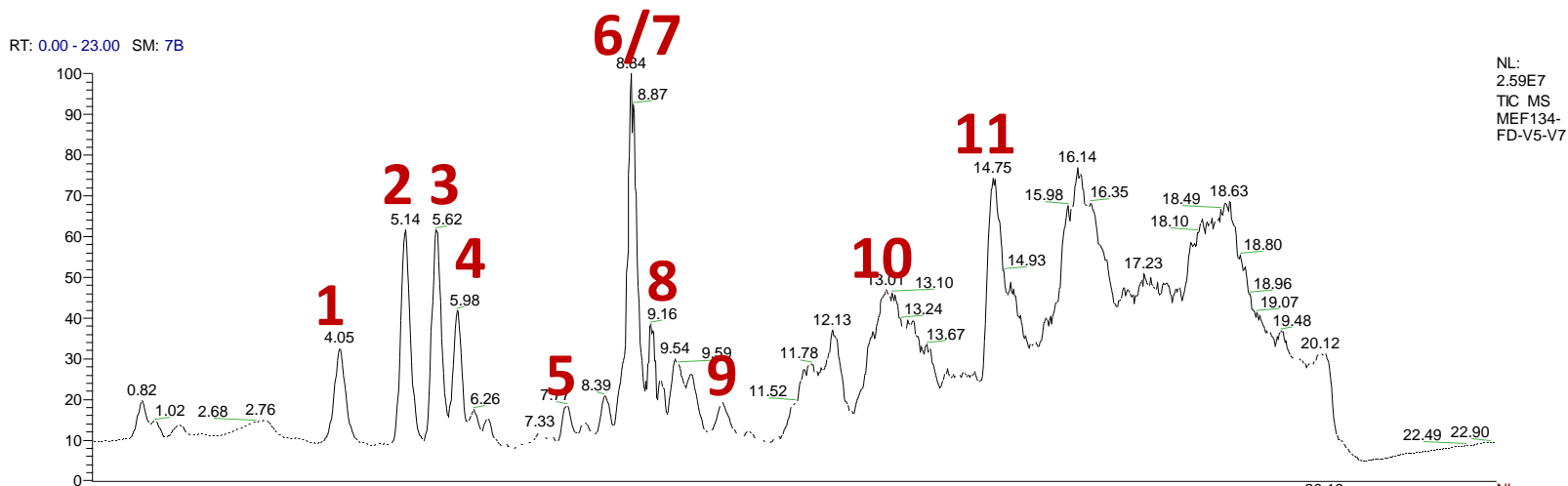
MEF134-FD-V5 #1071-1110 RT: 18.02-18.69 AV: 40 NL: 1.38E7
T: FTMS + c ESI Full ms [100.00-1500.00]

9

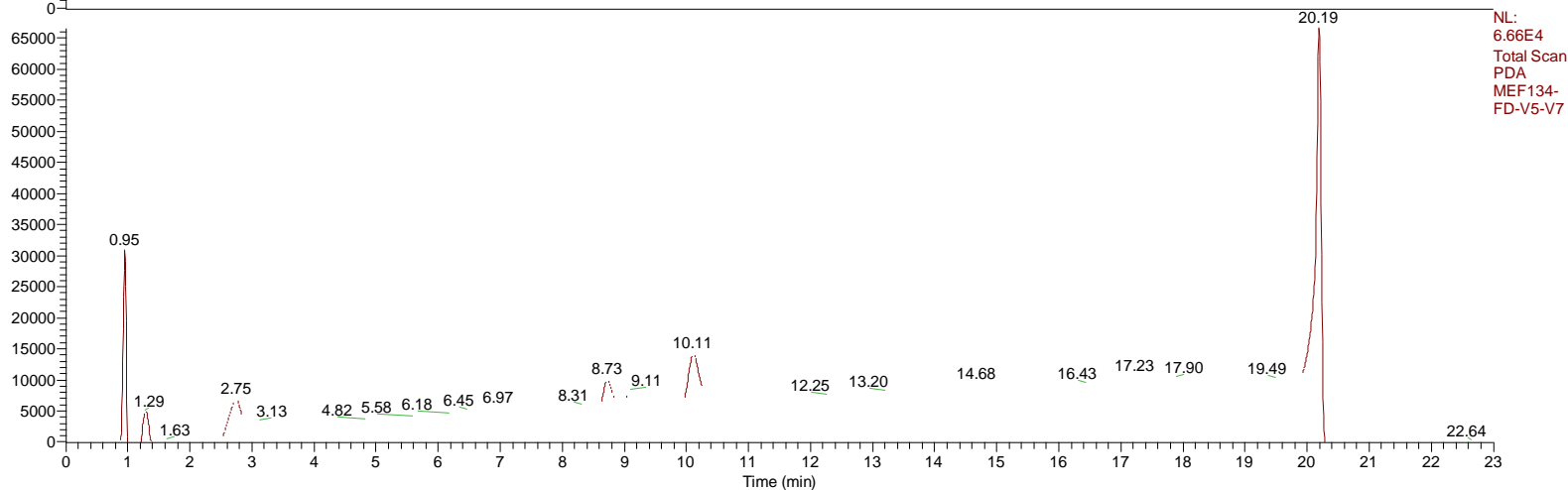


4. MEF134 FD V5 V7 HPLC-HRMS Fullscan

TIC



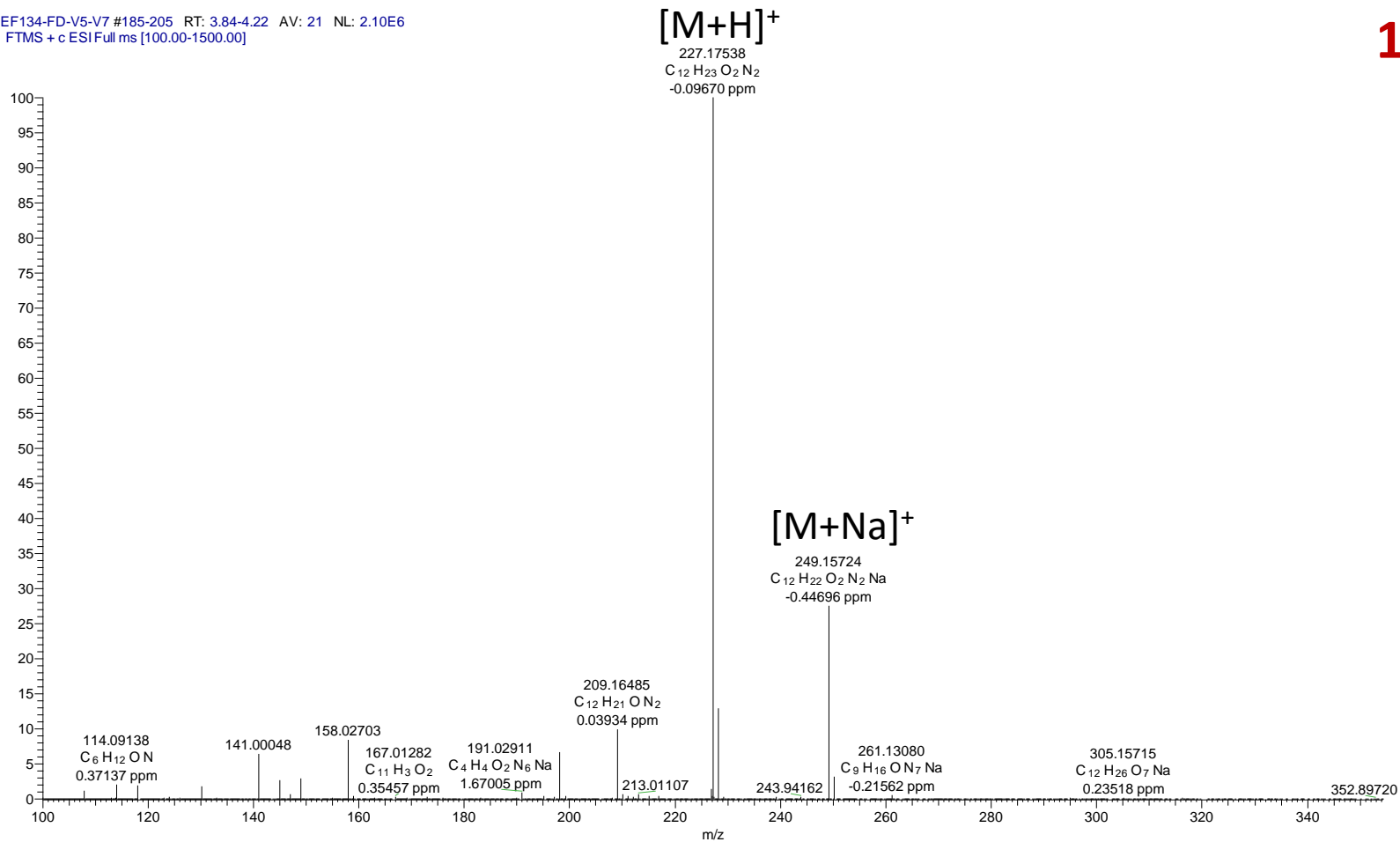
PDA



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #185-205 RT: 3.84-4.22 AV: 21 NL: 2.10E6
T: FTMS + c ESI Full ms [100.00-1500.00]

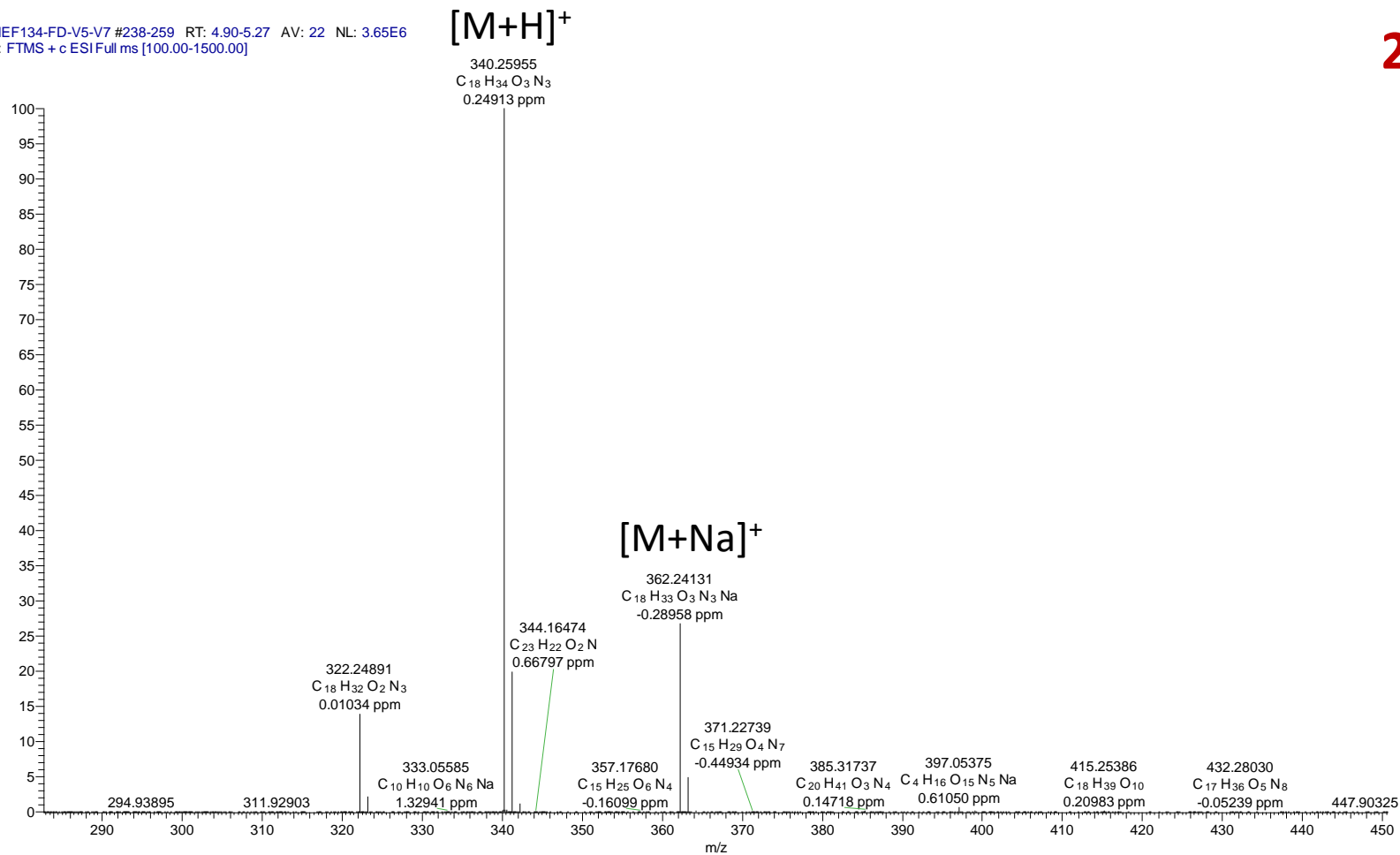
1



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #238-259 RT: 4.90-5.27 AV: 22 NL: 3.65E6
T: FTMS + c ESI Full ms [100.00-1500.00]

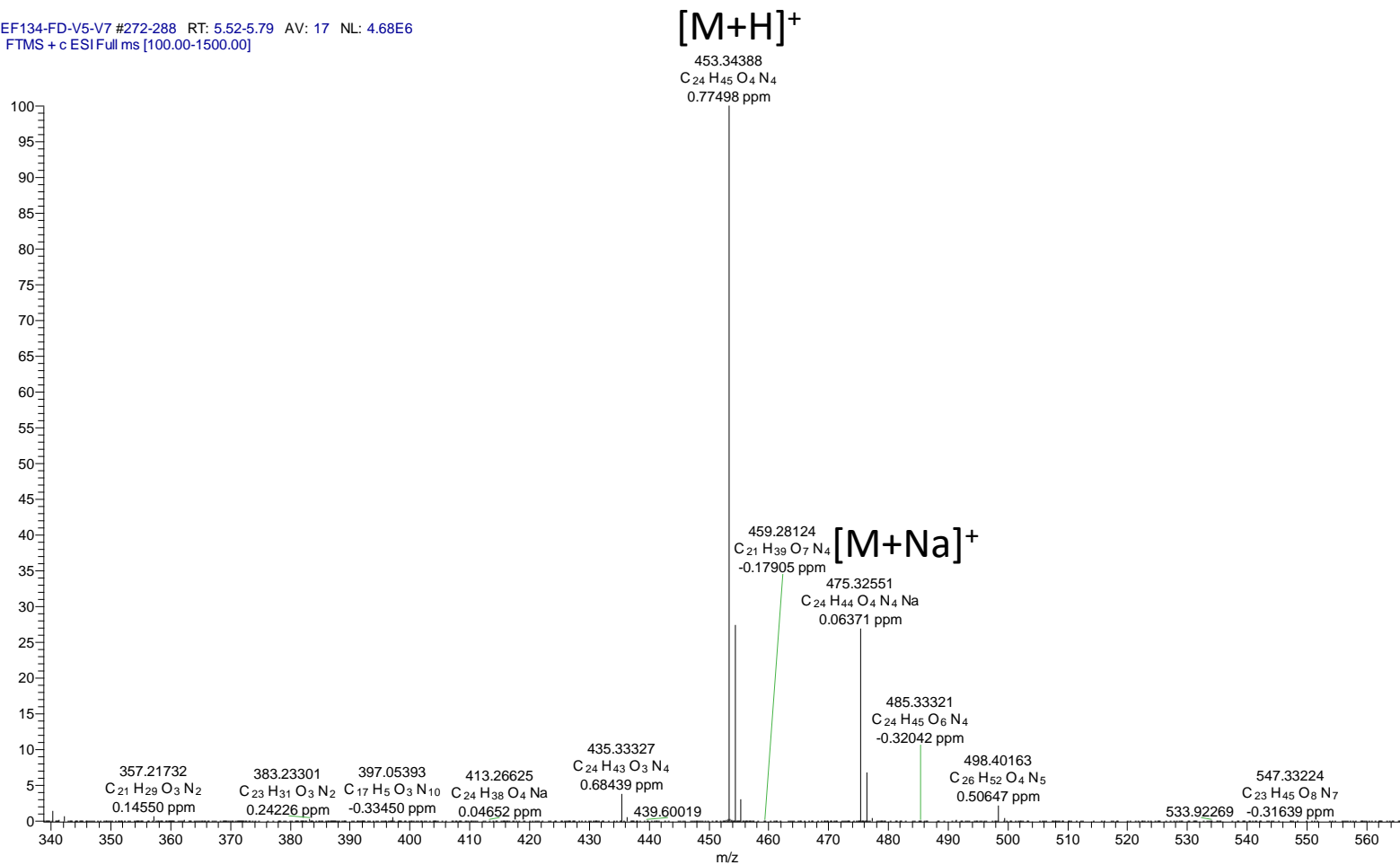
2



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #272-288 RT: 5.52-5.79 AV: 17 NL: 4.68E6
T: FTMS + c ESI Full ms [100.00-1500.00]

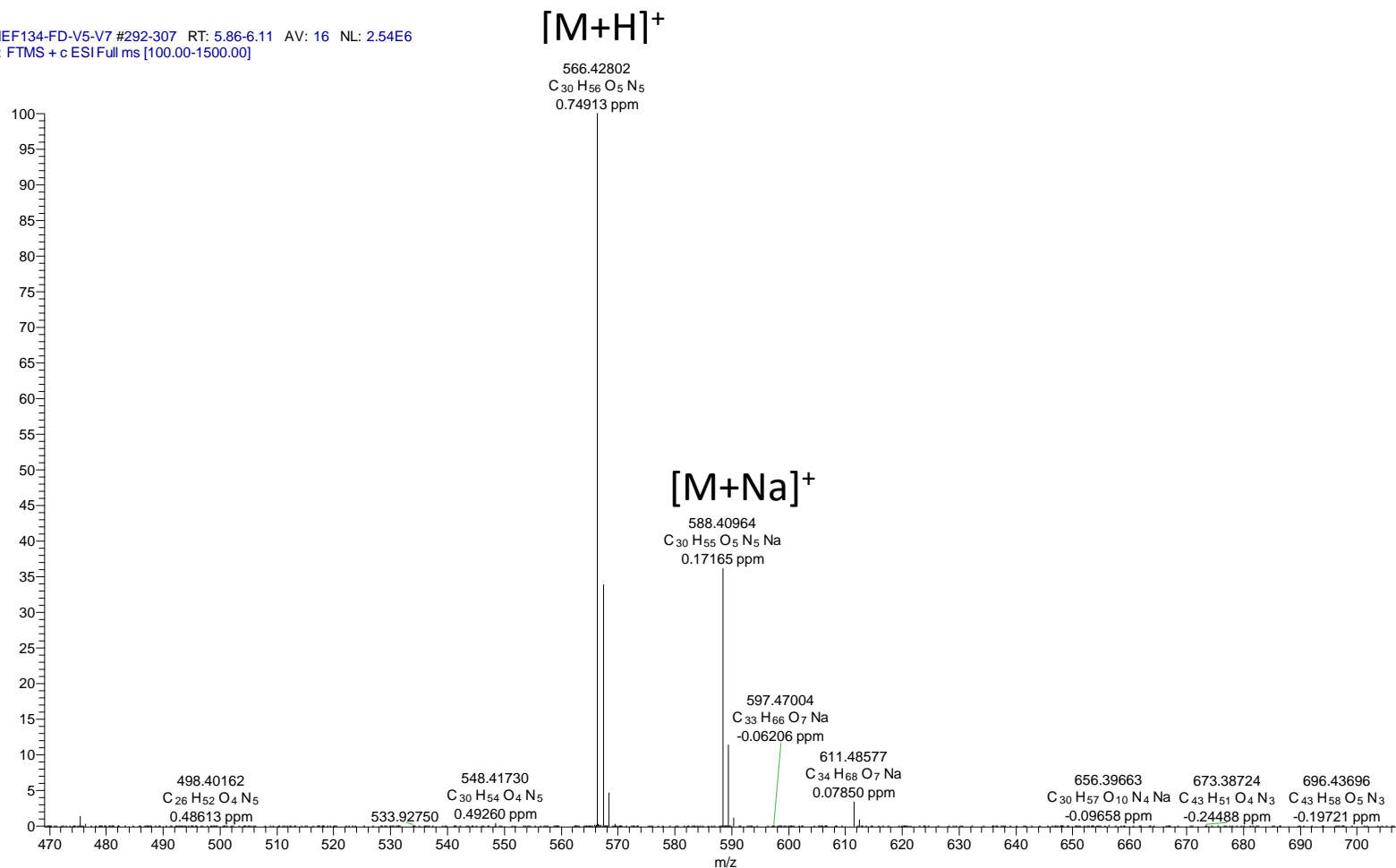
3



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #292-307 RT: 5.86-6.11 AV: 16 NL: 2.54E6
T: FTMS + c ESI Full ms [100.00-1500.00]

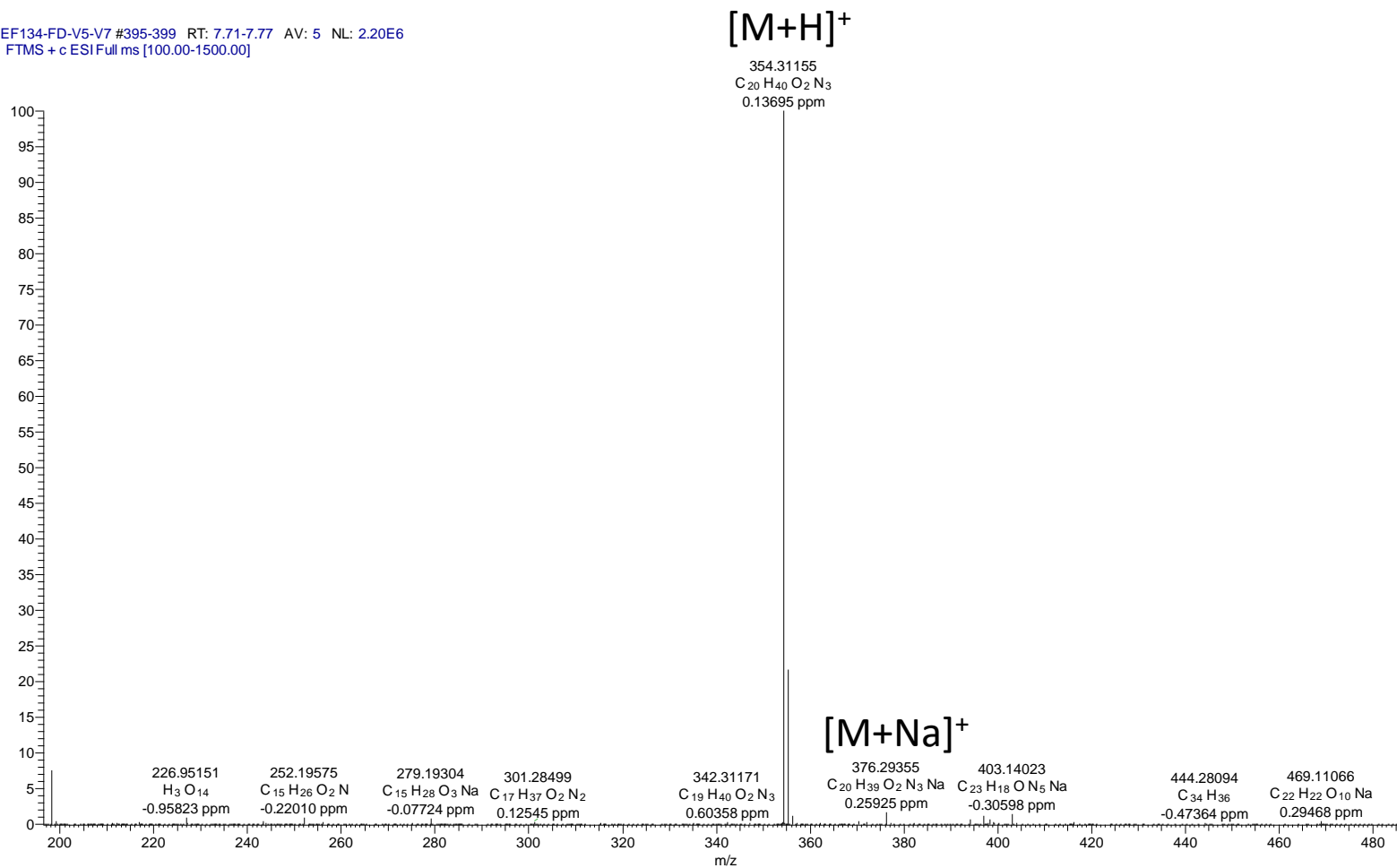
4



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #395-399 RT: 7.71-7.77 AV: 5 NL: 2.20E6
T: FTMS + c ESI Full ms [100.00-1500.00]

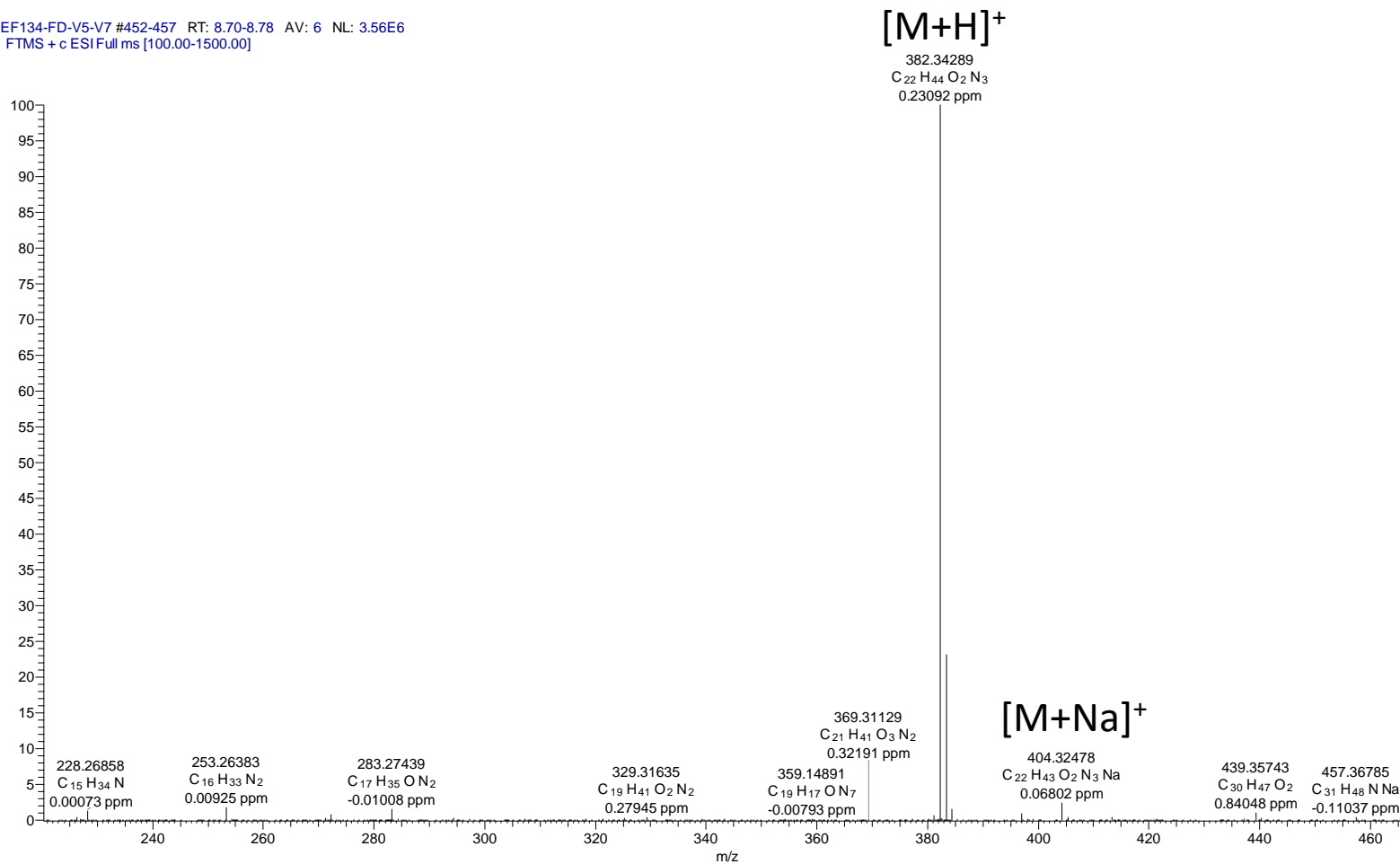
5



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #452-457 RT: 8.70-8.78 AV: 6 NL: 3.56E6
T: FTMS + c ESIFull ms [100.00-1500.00]

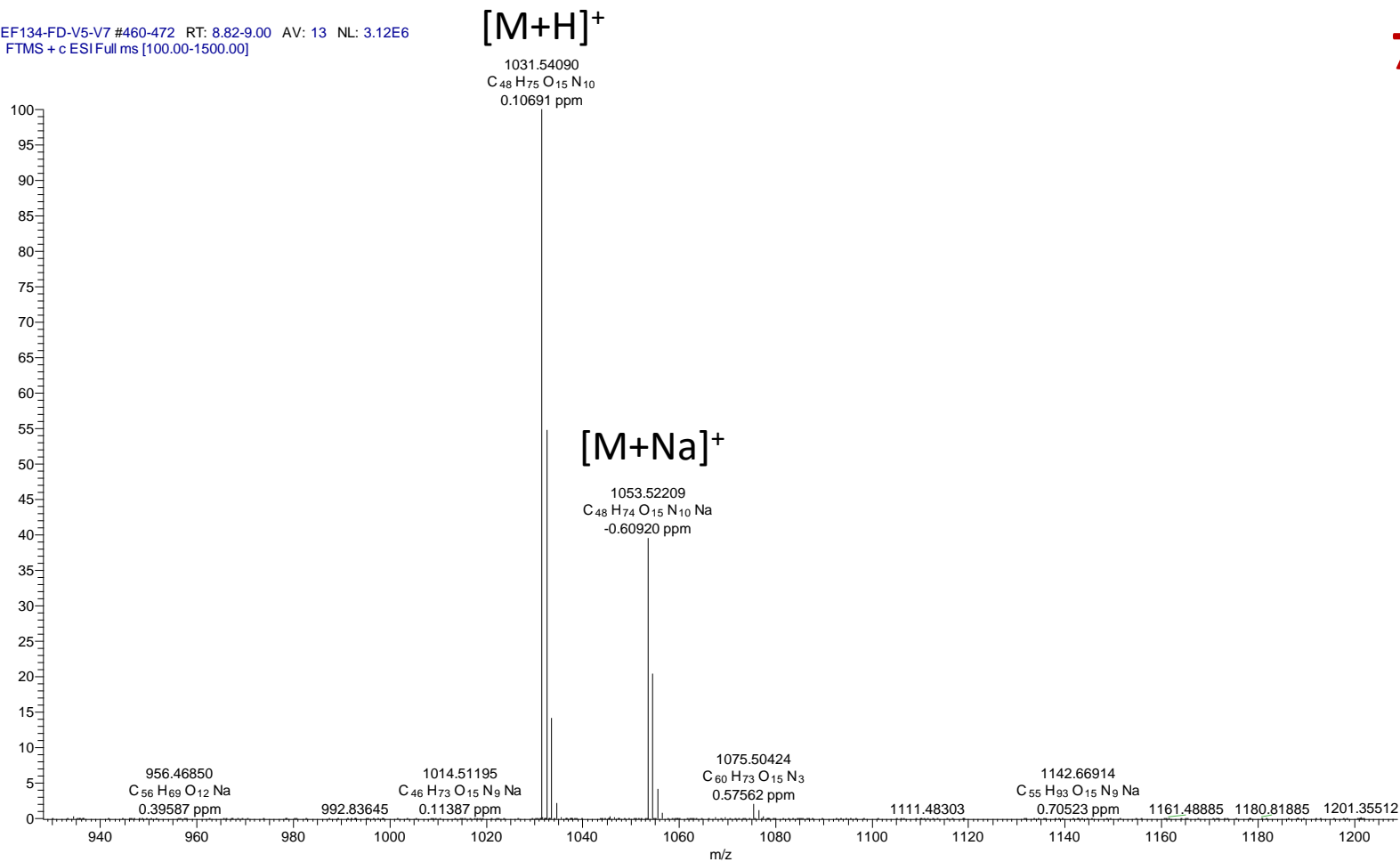
6



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #460-472 RT: 8.82-9.00 AV: 13 NL: 3.12E6
T: FTMS + c ESI Full ms [100.00-1500.00]

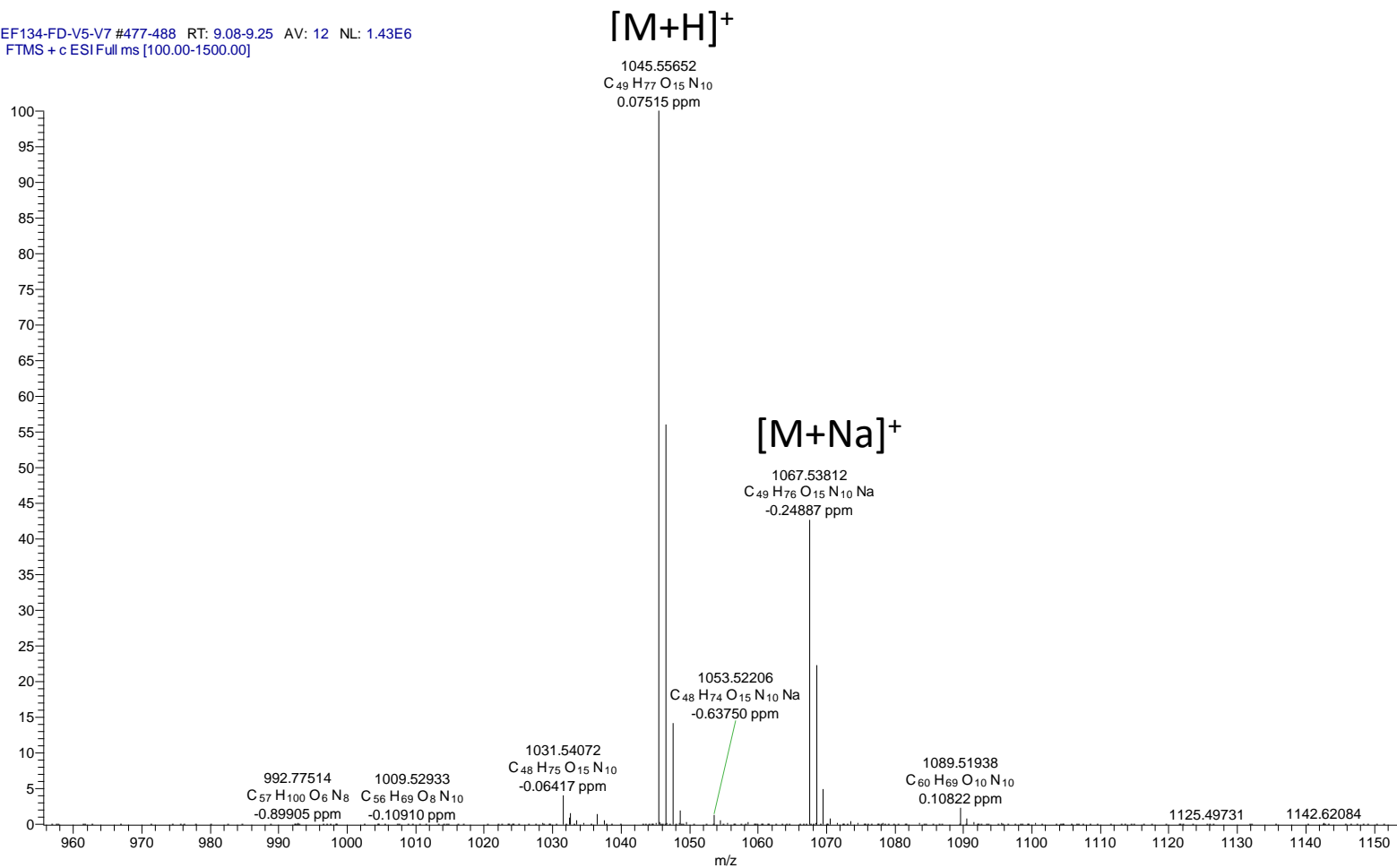
7



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #477-488 RT: 9.08-9.25 AV: 12 NL: 1.43E6
T: FTMS + c ESI Full ms [100.00-1500.00]

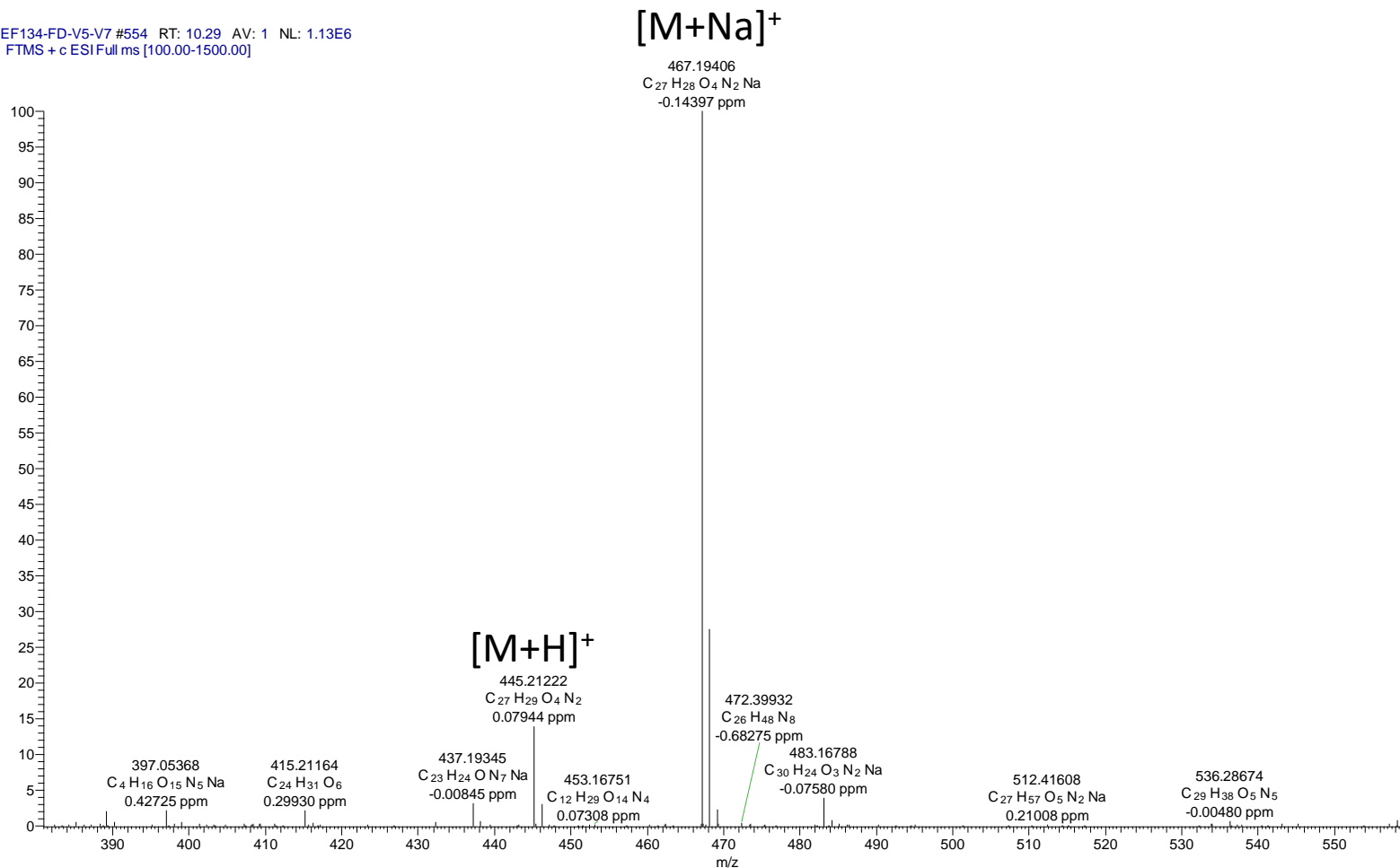
8



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #554 RT: 10.29 AV: 1 NL: 1.13E6
T: FTMS + c ESI Full ms [100.00-1500.00]

9

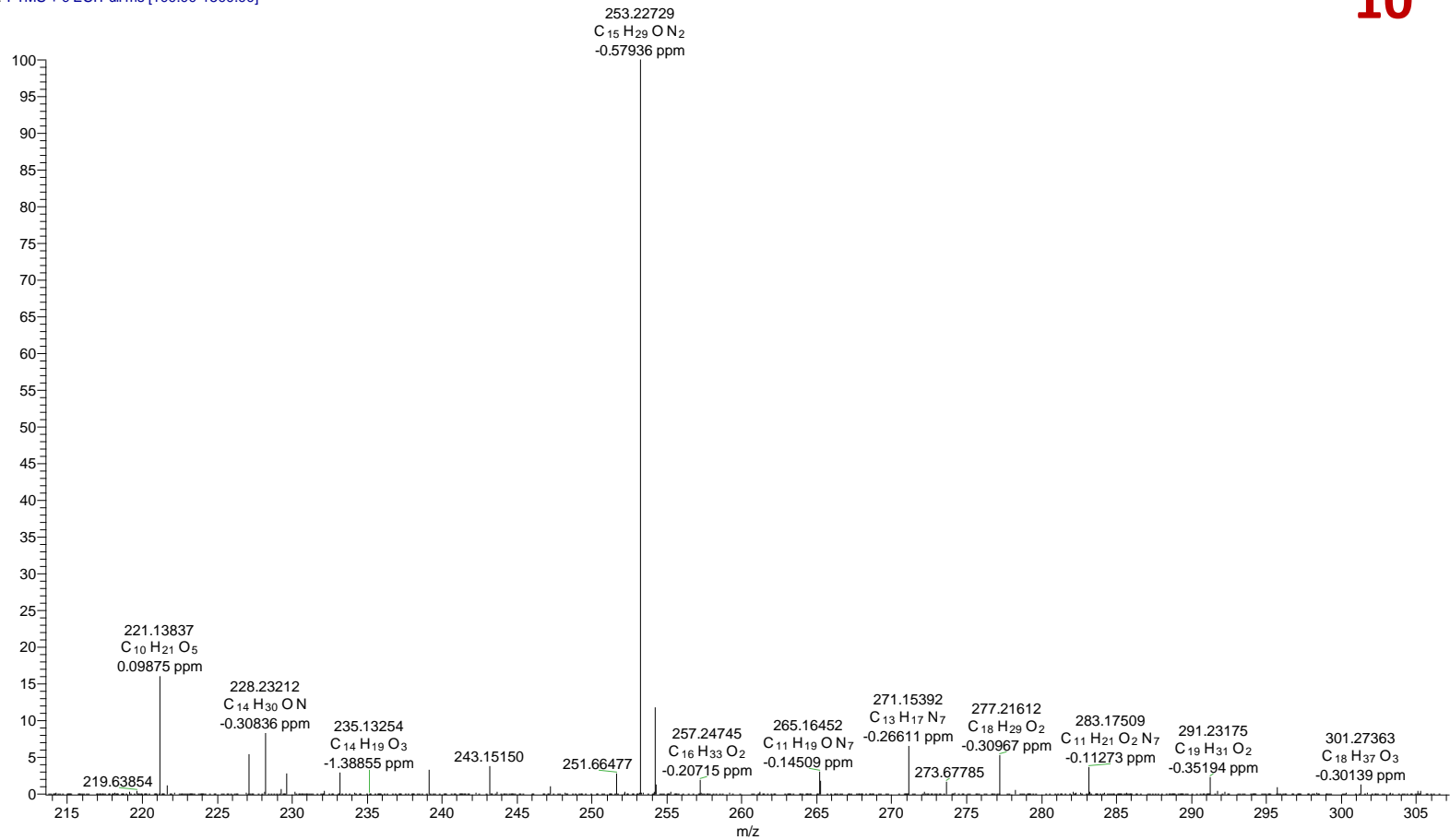


4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #718-739 RT: 12.93-13.26 AV: 22 NL: 8.34E5
T: FTMS + c ESI Full ms [100.00-1500.00]

[M+H]⁺

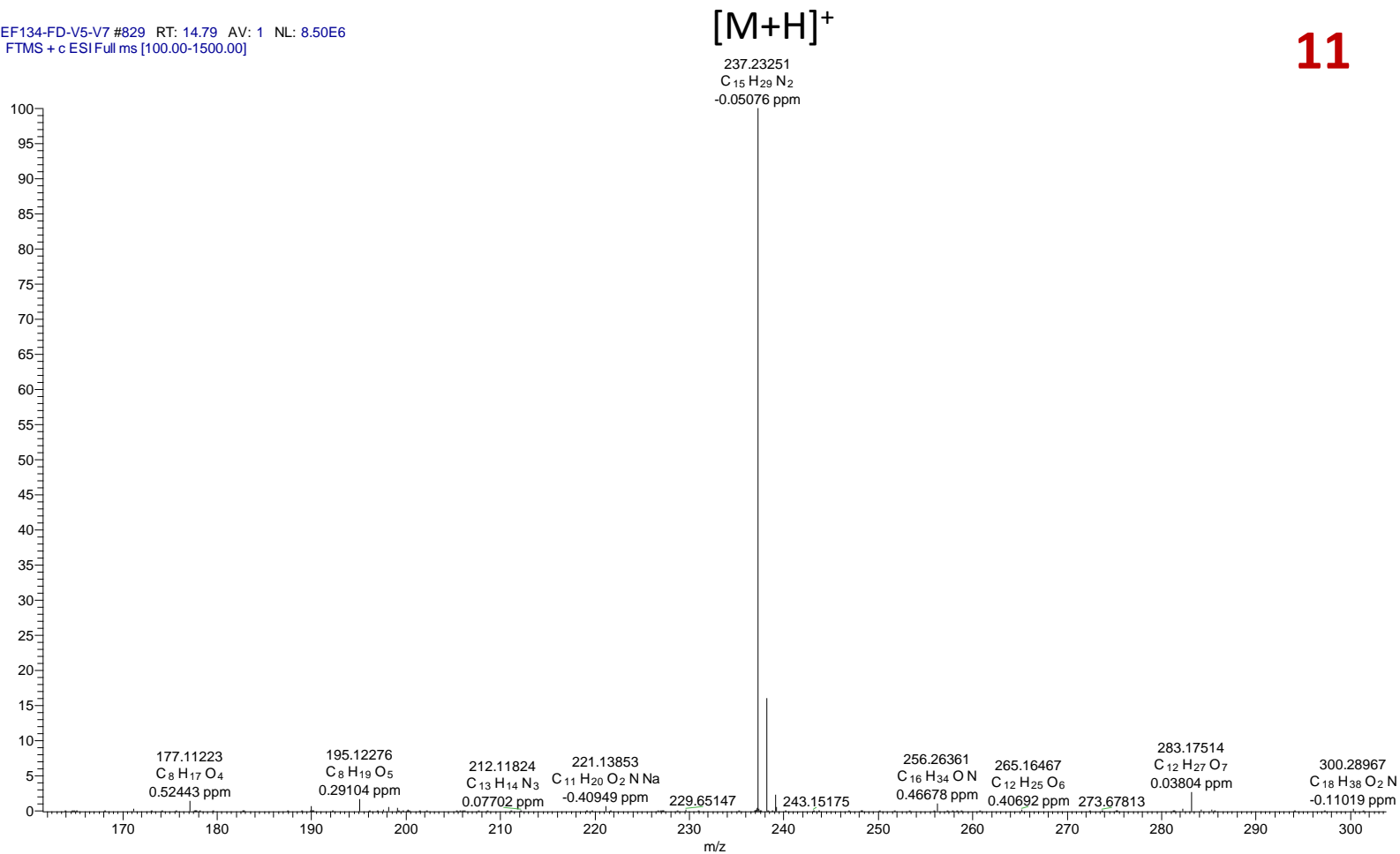
10



4. MEF134 FD V5 V7 HPLC-HRMS Spectra

MEF134-FD-V5-V7 #829 RT: 14.79 AV: 1 NL: 8.50E6
T: FTMS + c ESI Full ms [100.00-1500.00]

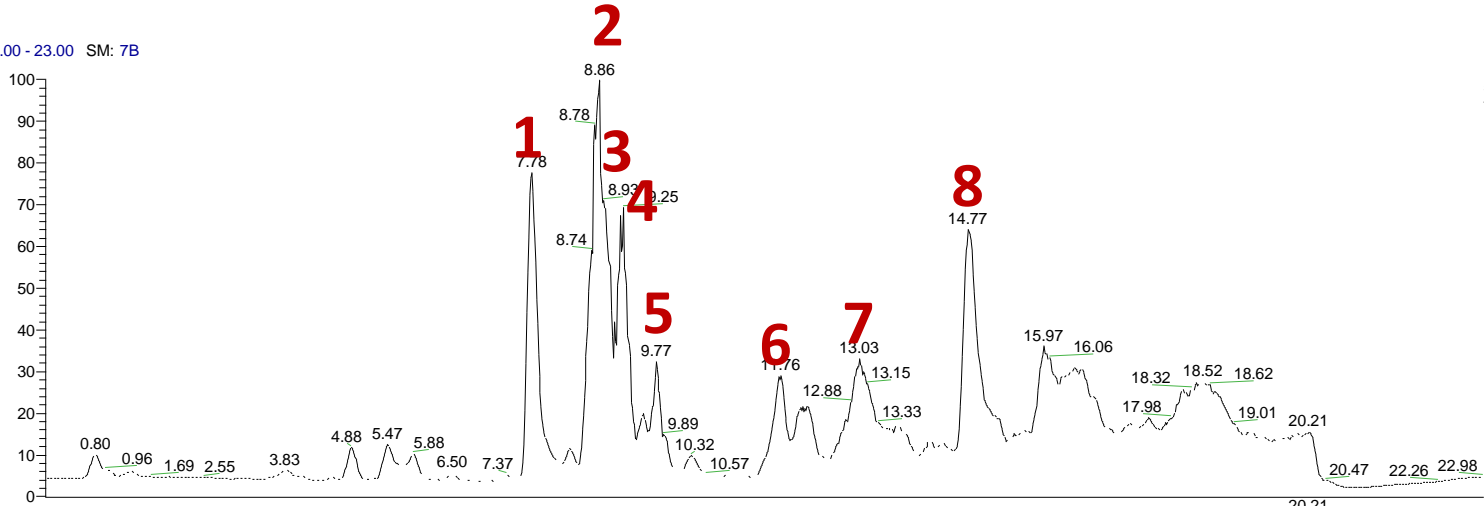
11



5. MEF134 FD V5 V9 HPLC-HRMS Fullscan

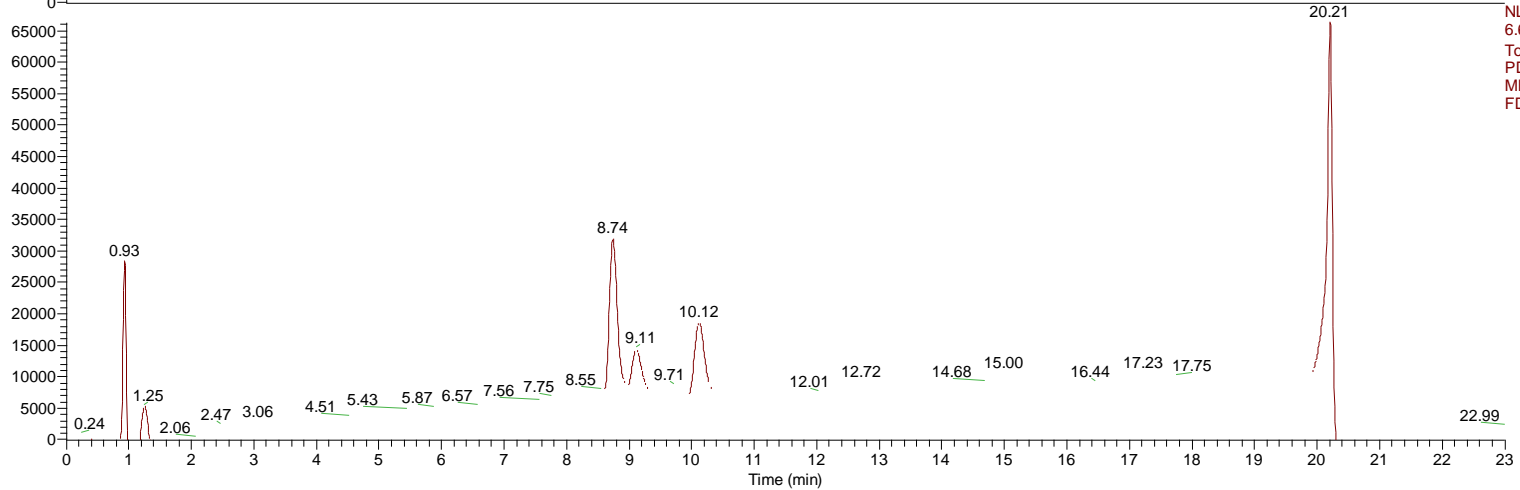
TIC

RT: 0.00 - 23.00 SM: 7B



NL:
5.88E7
TIC MS
MEF134-
FD-V5-V9

PDA

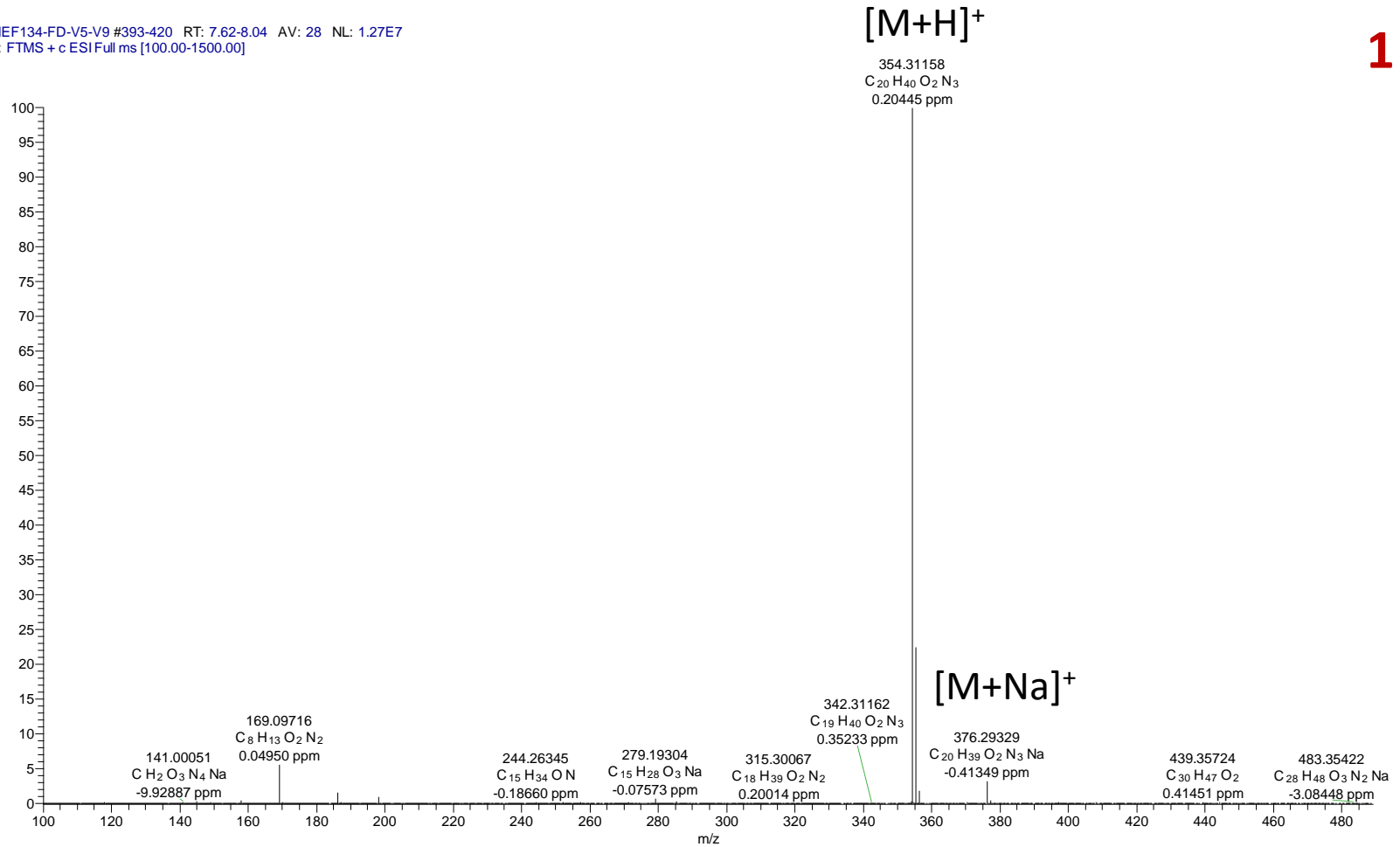


NL:
6.63E4
Total Scan
PDA
MEF134-
FD-V5-V9

5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #393-420 RT: 7.62-8.04 AV: 28 NL: 1.27E7
T: FTMS + c ESI Full ms [100.00-1500.00]

1

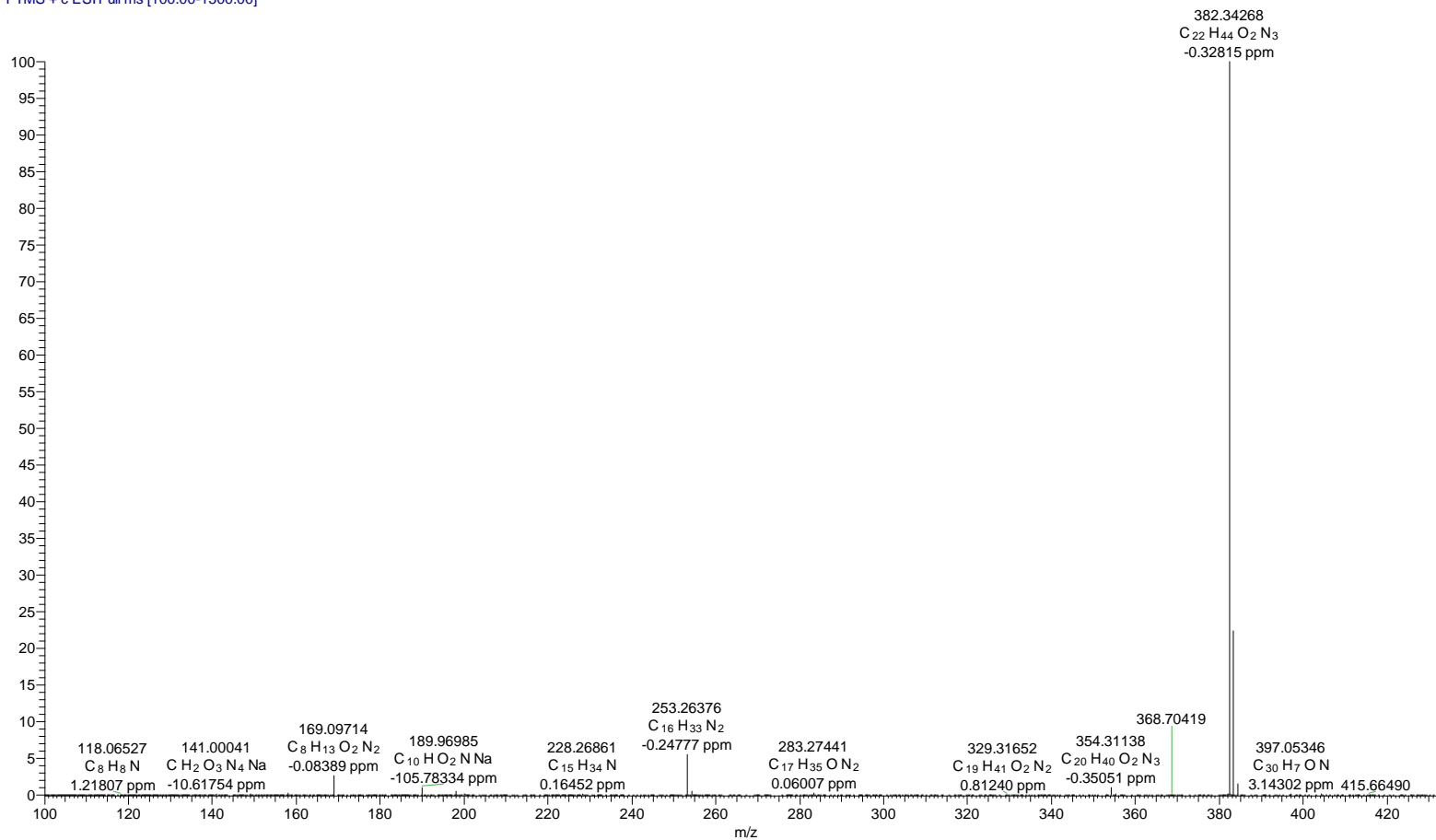


5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #463-472 RT: 8.72-8.86 AV: 10 NL: 1.03E7
T: FTMS + c ESI Full ms [100.00-1500.00]

[M+H]⁺

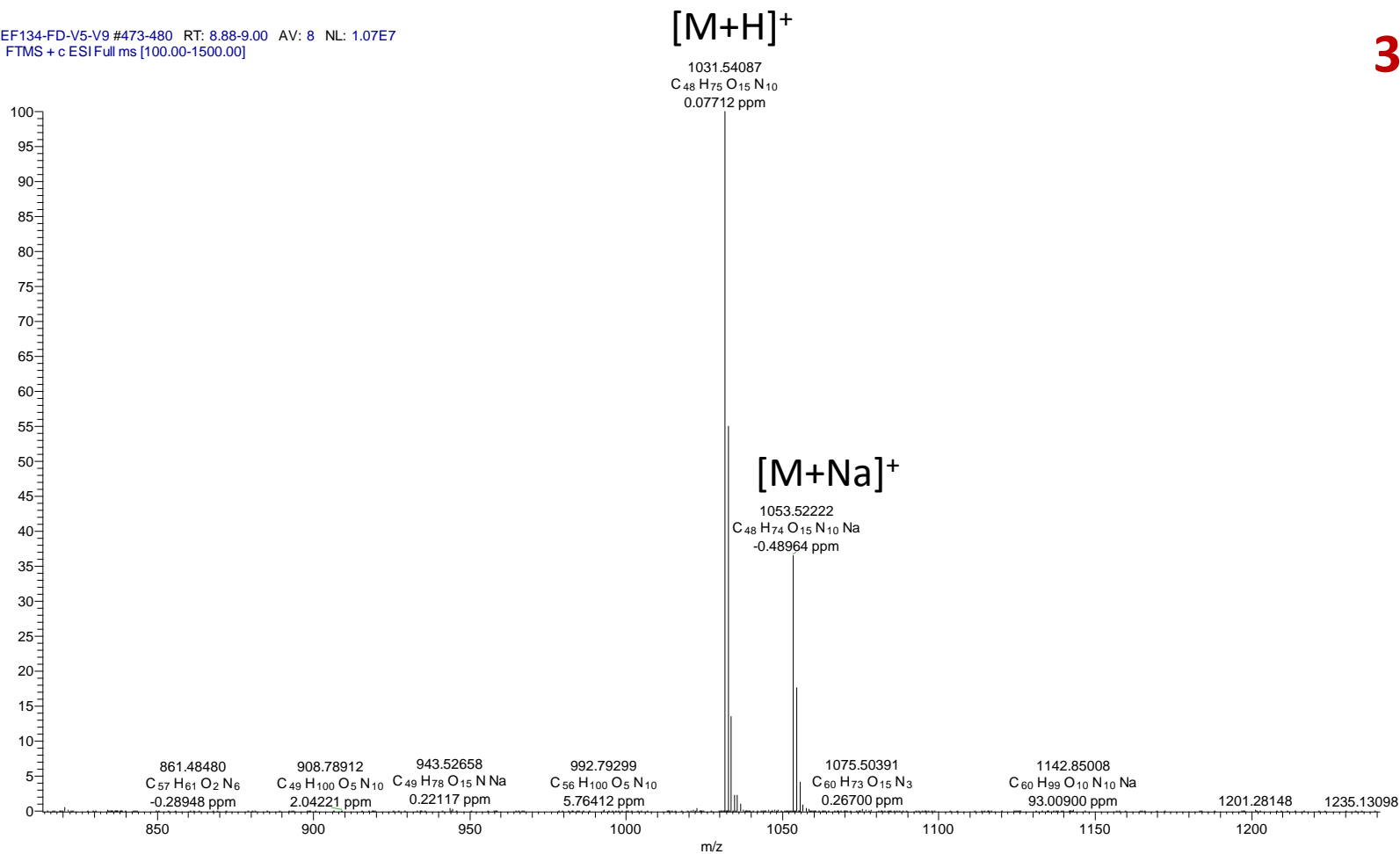
2



5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #473-480 RT: 8.88-9.00 AV: 8 NL: 1.07E7
T: FTMS + c ESI Full ms [100.00-1500.00]

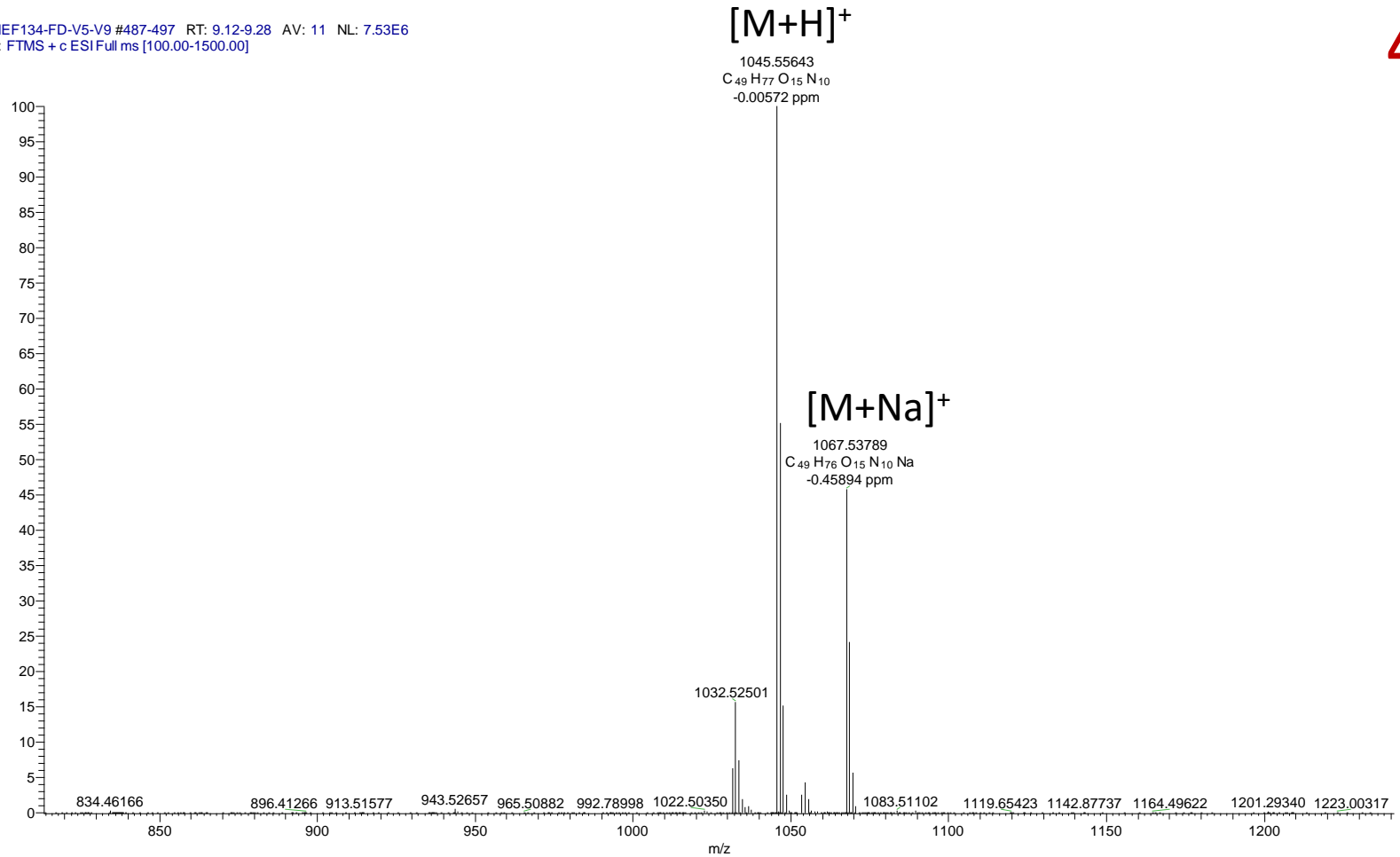
3



5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #487-497 RT: 9.12-9.28 AV: 11 NL: 7.53E6
T: FTMS + c ESI Full ms [100.00-1500.00]

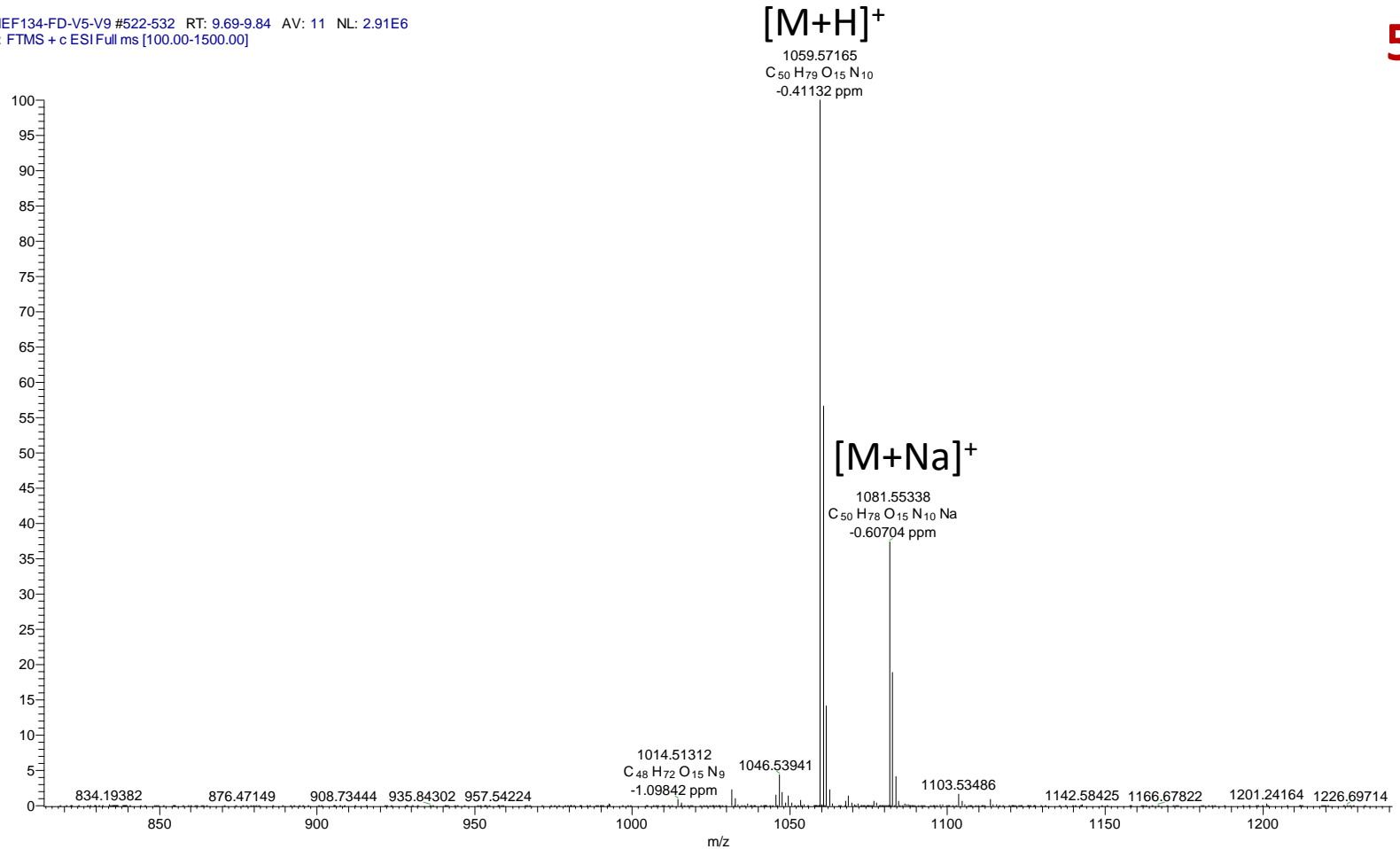
4



5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #522-532 RT: 9.69-9.84 AV: 11 NL: 2.91E6
T: FTMS + c ESI Full ms [100.00-1500.00]

5

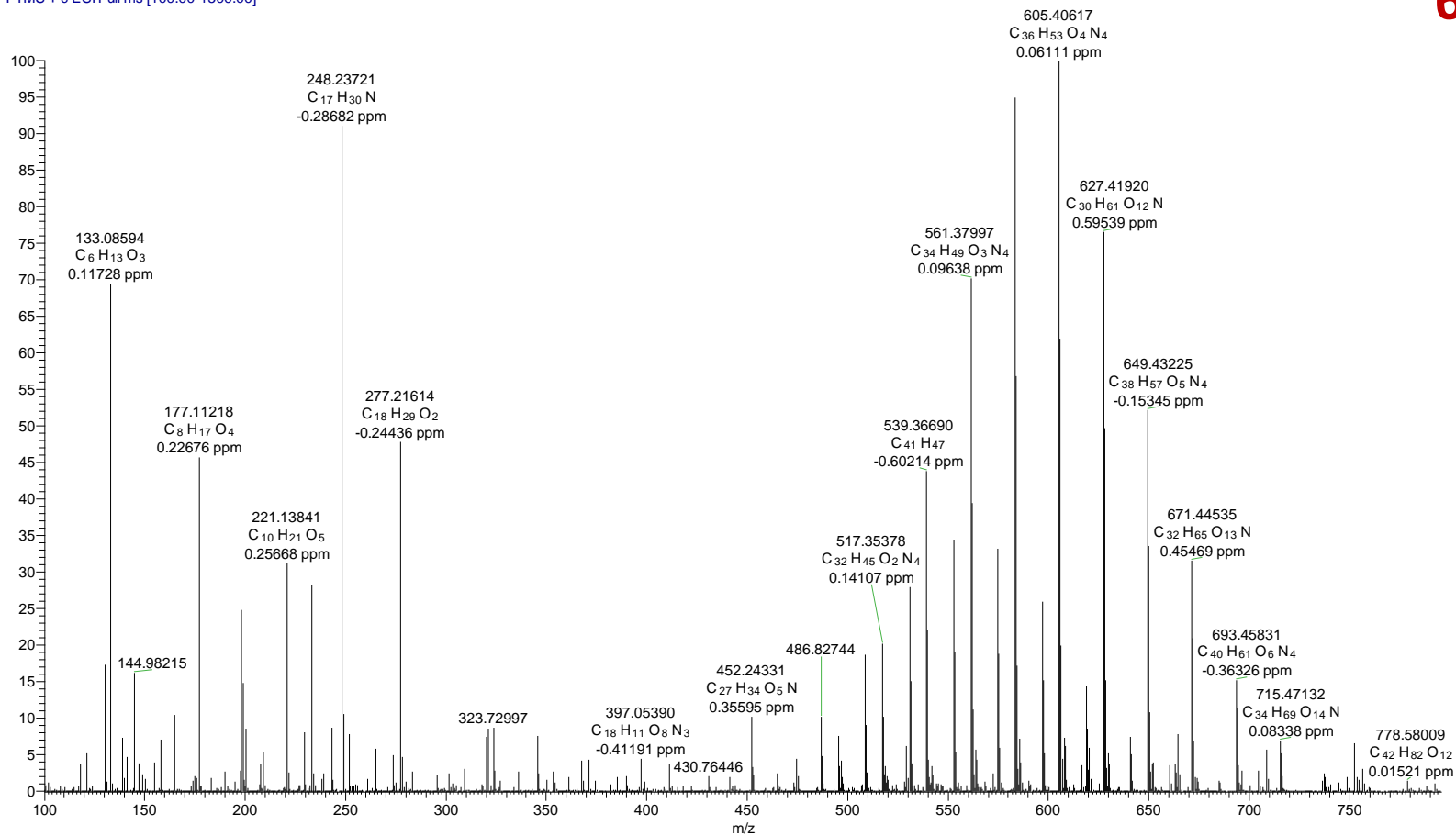


5. MEF134 FD V5 V9 HPLC-HRMS Spectra

Impurity

MEF134-FD-V5-V9 #640-660 RT: 11.59-11.90 AV: 21 NL: 4.71E5
T: FTMS + c ESI Full ms [100.00-1500.00]

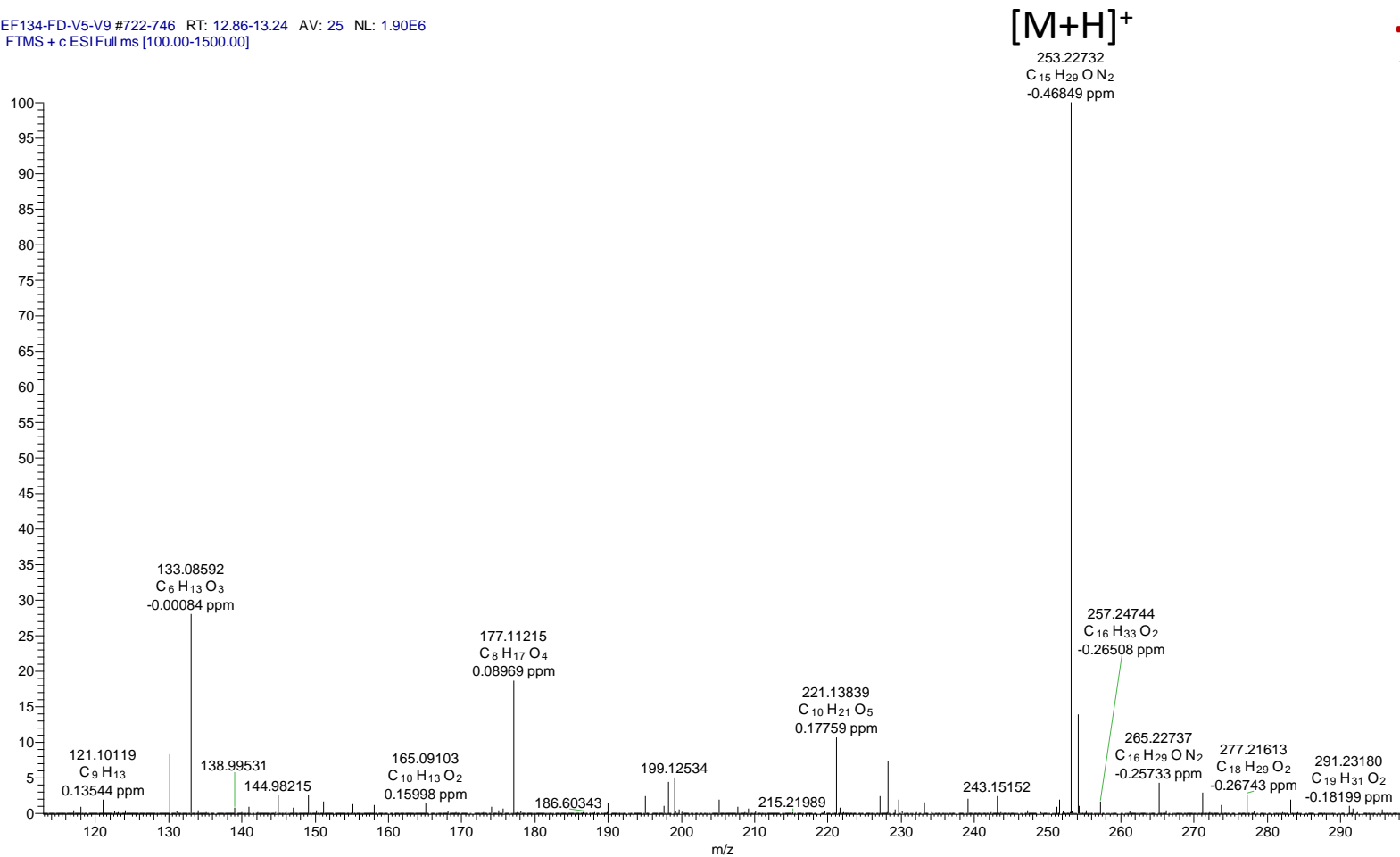
6



5. MEF134 FD V5 V9 HPLC-HRMS Spectra

MEF134-FD-V5-V9 #722-746 RT: 12.86-13.24 AV: 25 NL: 1.90E6
T: FTMS + c ESI Full ms [100.00-1500.00]

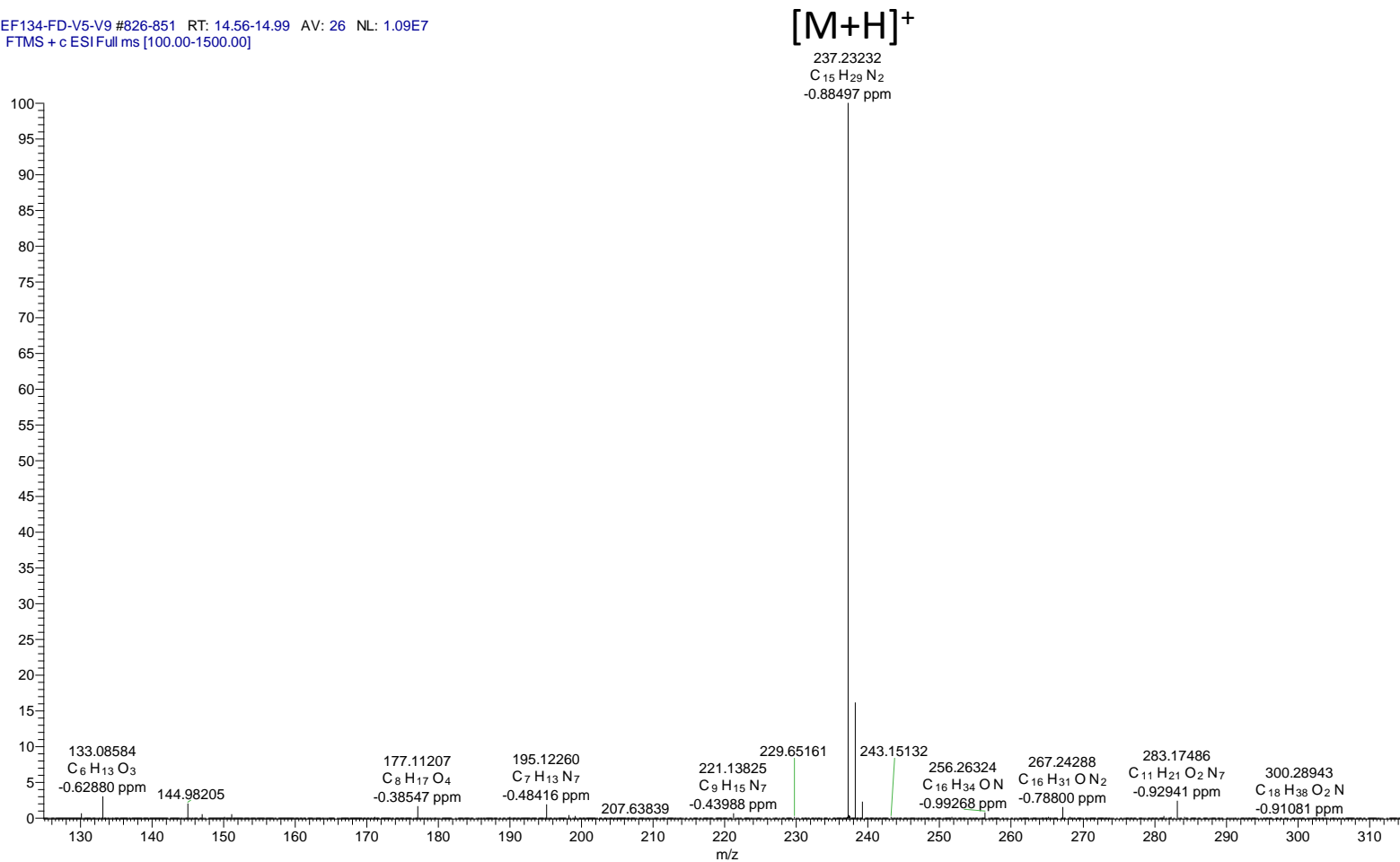
7



5. MEF134 FD V5 V9 HPLC-HRMS Spectra

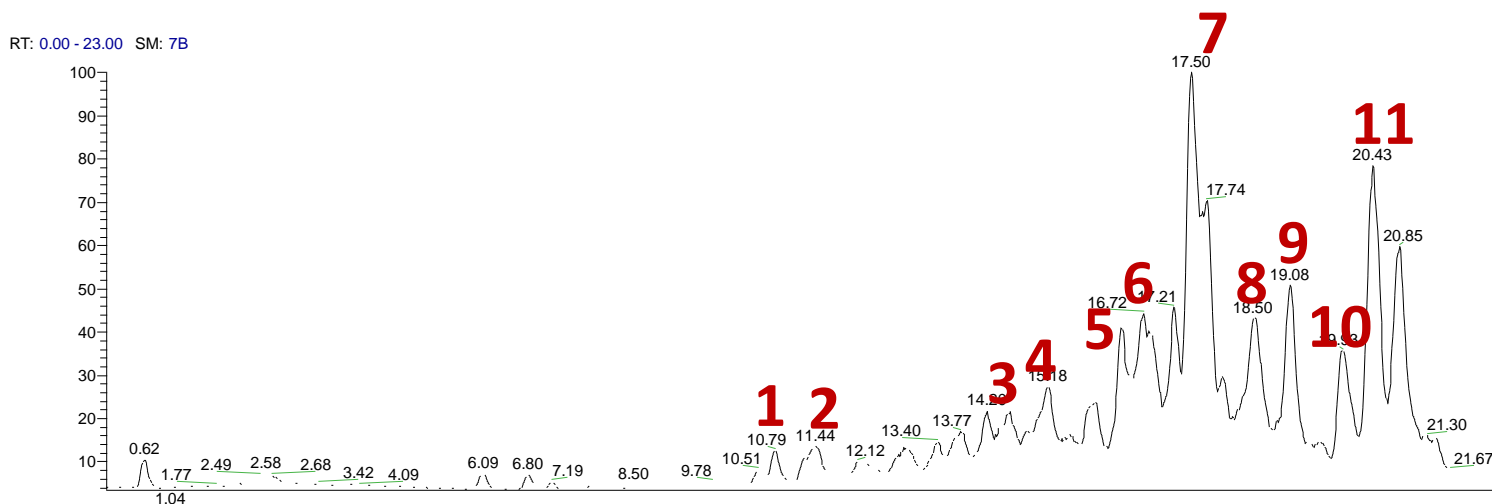
MEF134-FD-V5-V9 #826-851 RT: 14.56-14.99 AV: 26 NL: 1.09E7
T: FTMS + c ESI Full ms [100.00-1500.00]

8



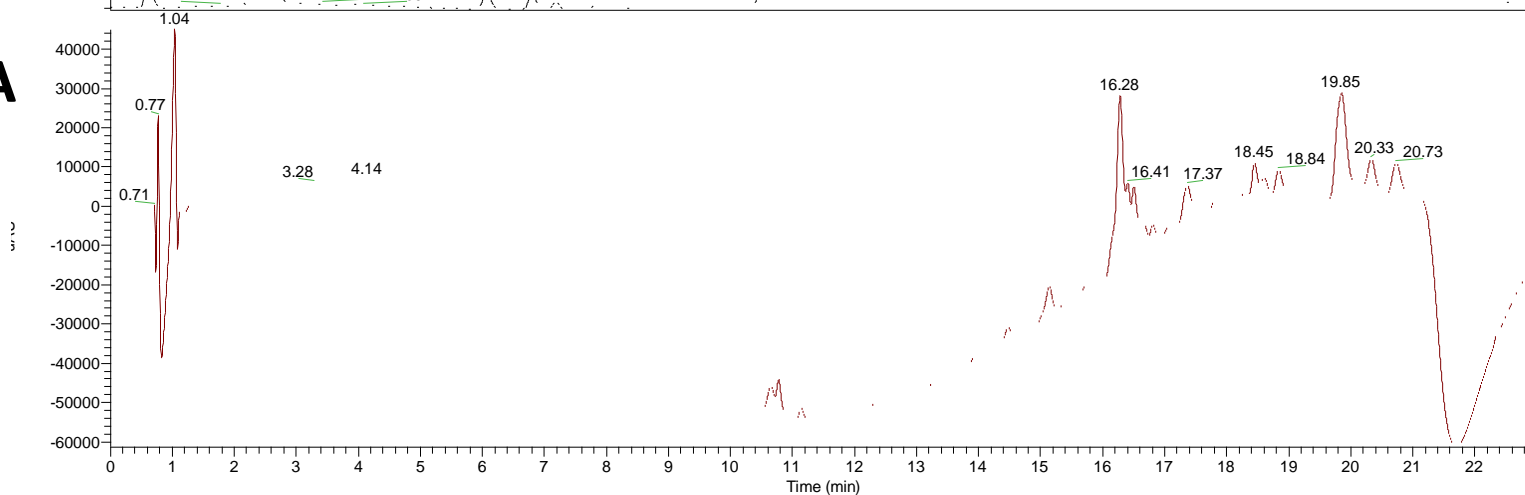
6. MEF134 FD K1V1S1-V1 HPLC-HRMS Fullscan

TIC



NL:
1.79E8
TIC MS
MEF134-
FD-
K1V1S1-
V1

PDA

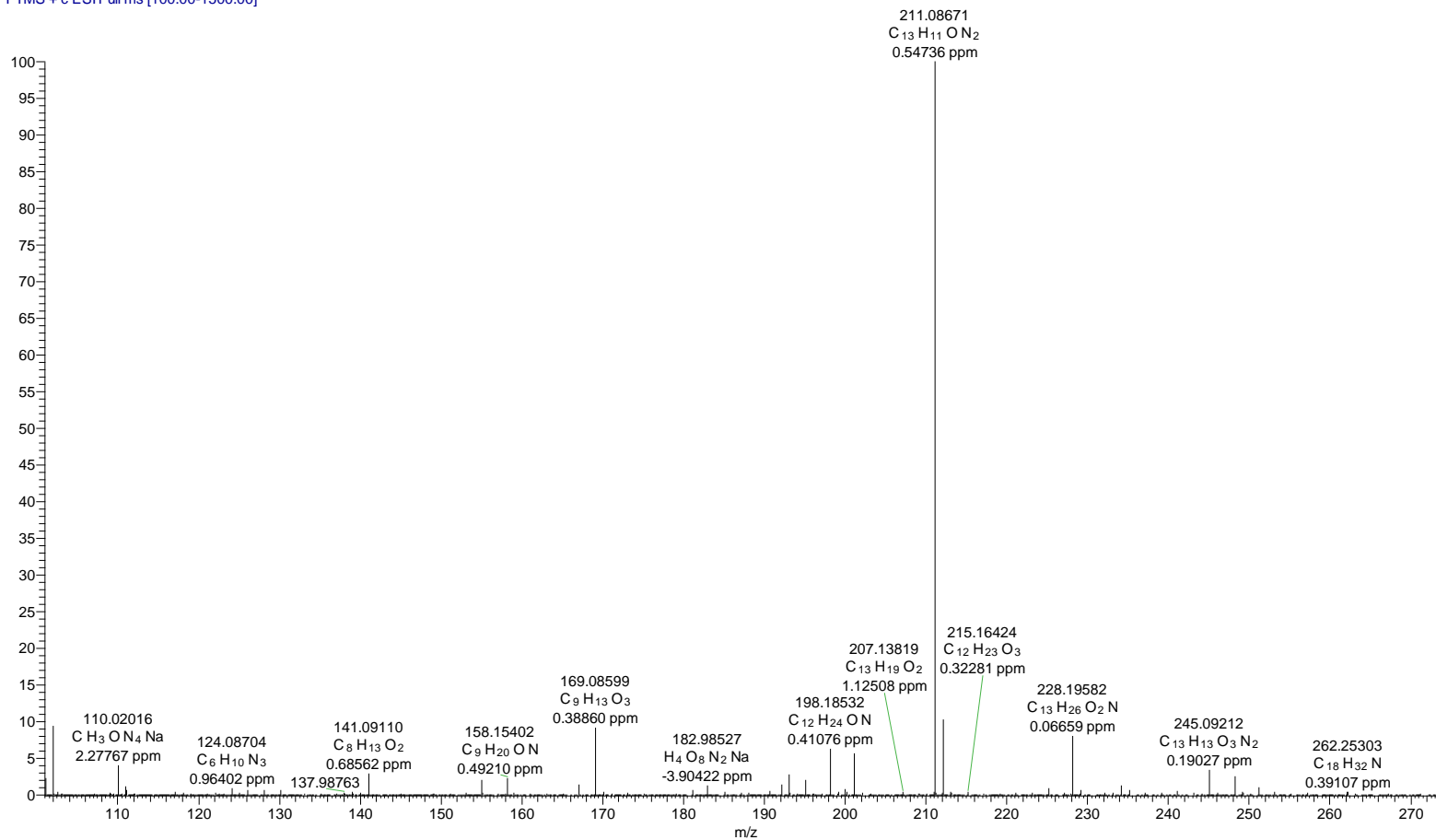


NL:
6.13E4
nm=200.0-
700.0
PDA
MEF134-
FD-
K1V1S1-
V1

6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

1

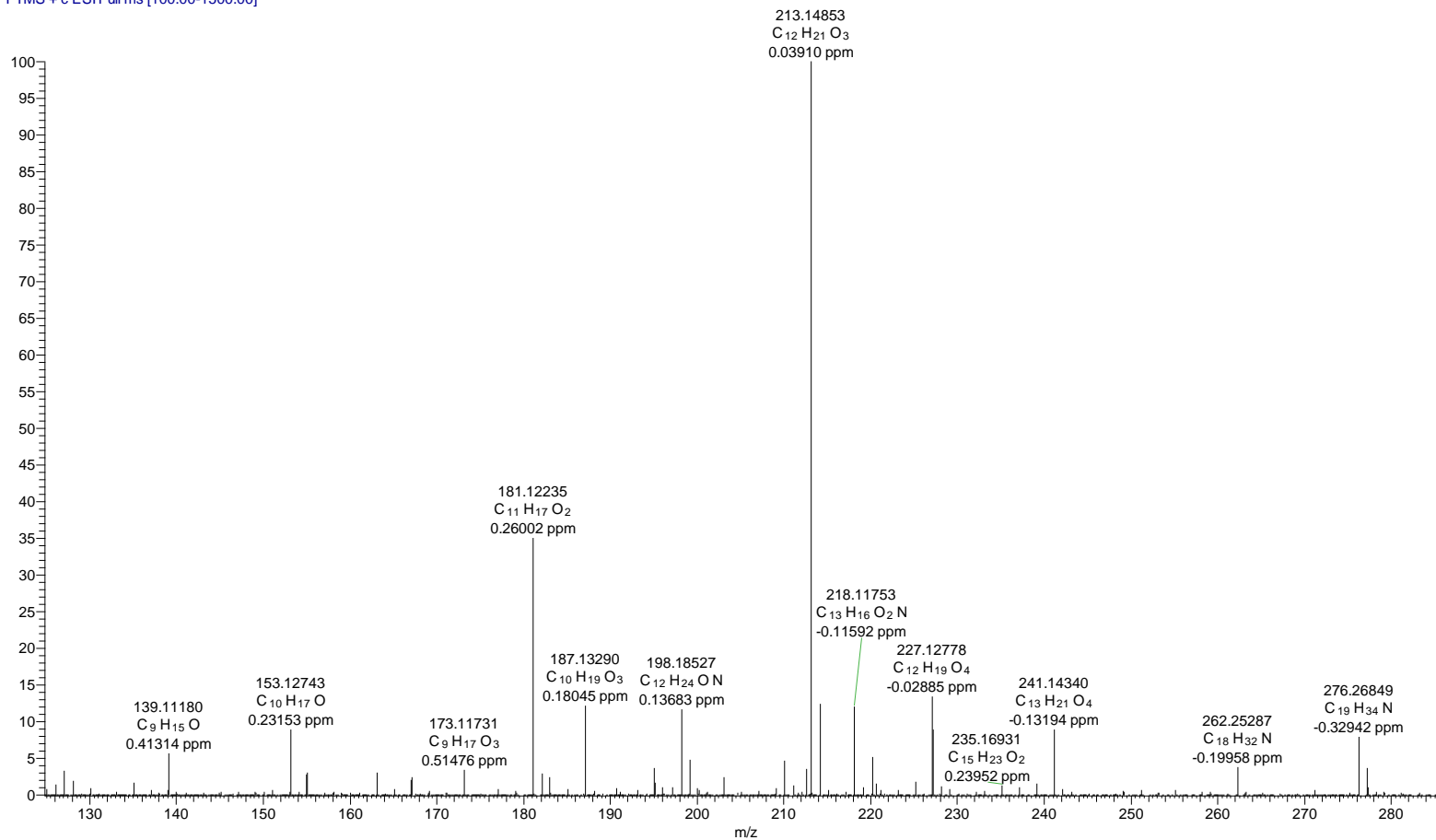
MEF134-FD-K1V1S1-V1 #641-655 RT: 10.68-10.89 AV: 15 NL: 5.81E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

2

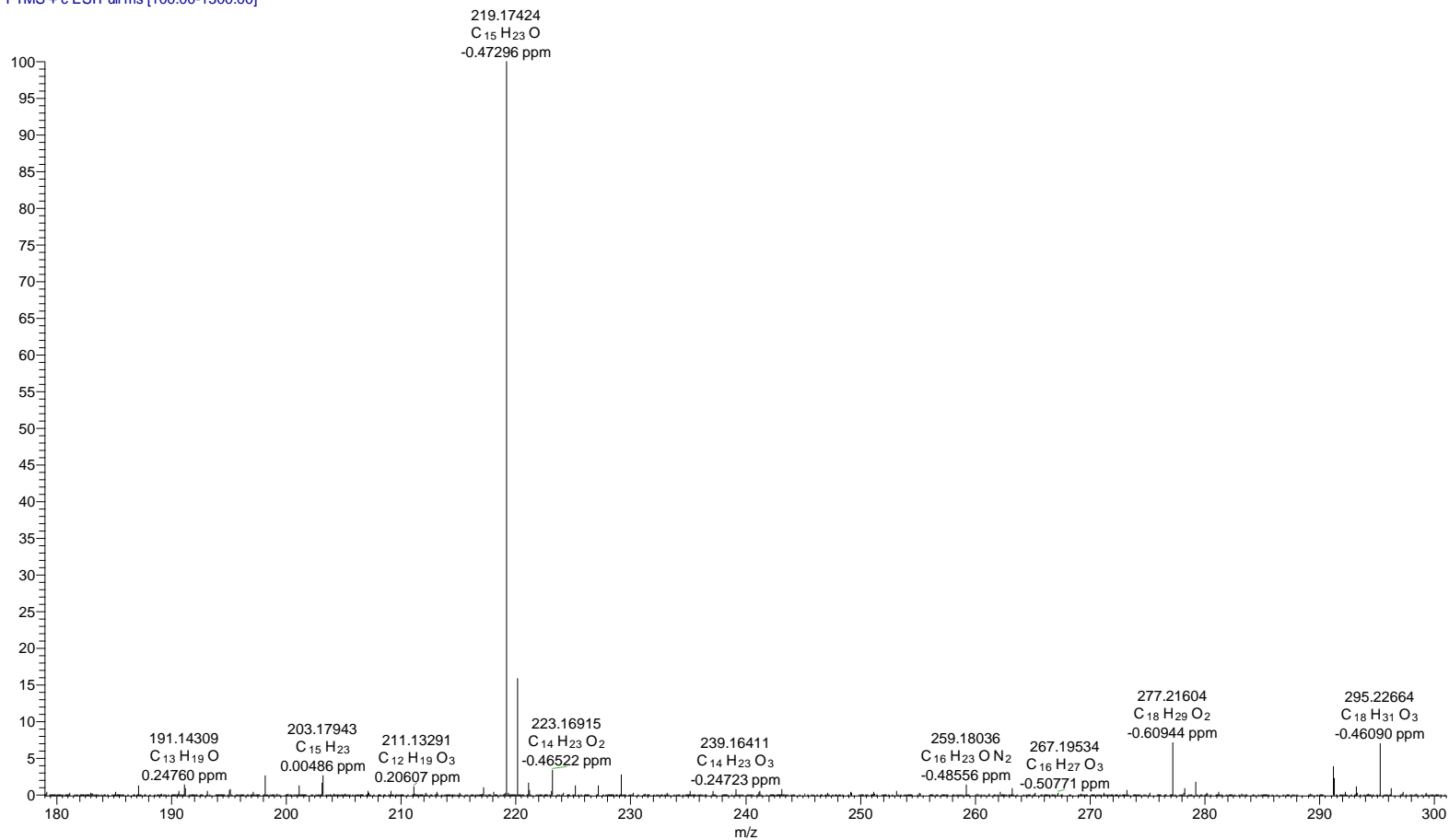
MEF134-FD-K1V1S1-V1 #676-694 RT: 11.22-11.49 AV: 19 NL: 2.78E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

3

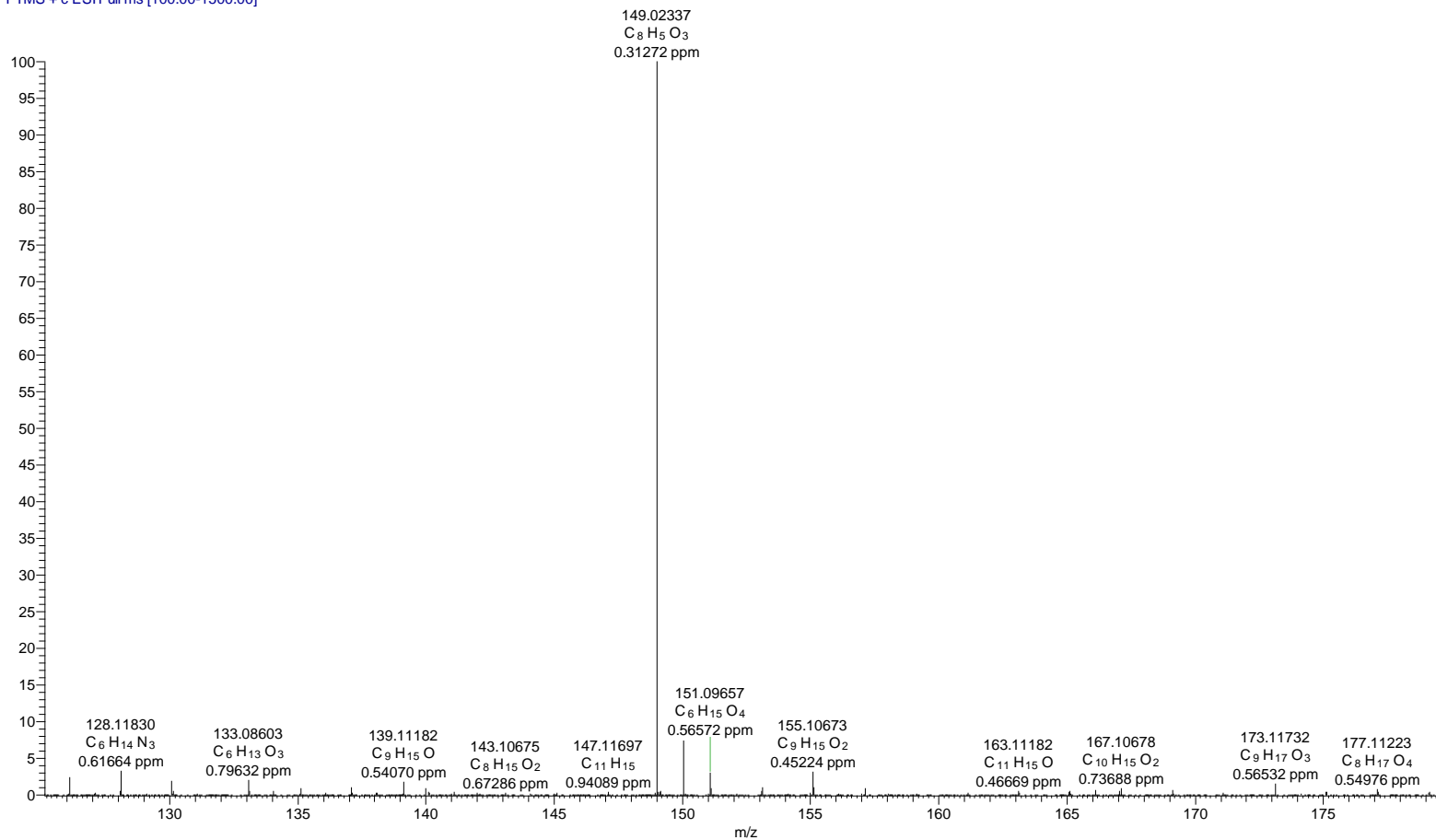
MEF134-FD-K1V1S1-V1 #890-910 RT: 14.42-14.71 AV: 21 NL: 6.87E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

4

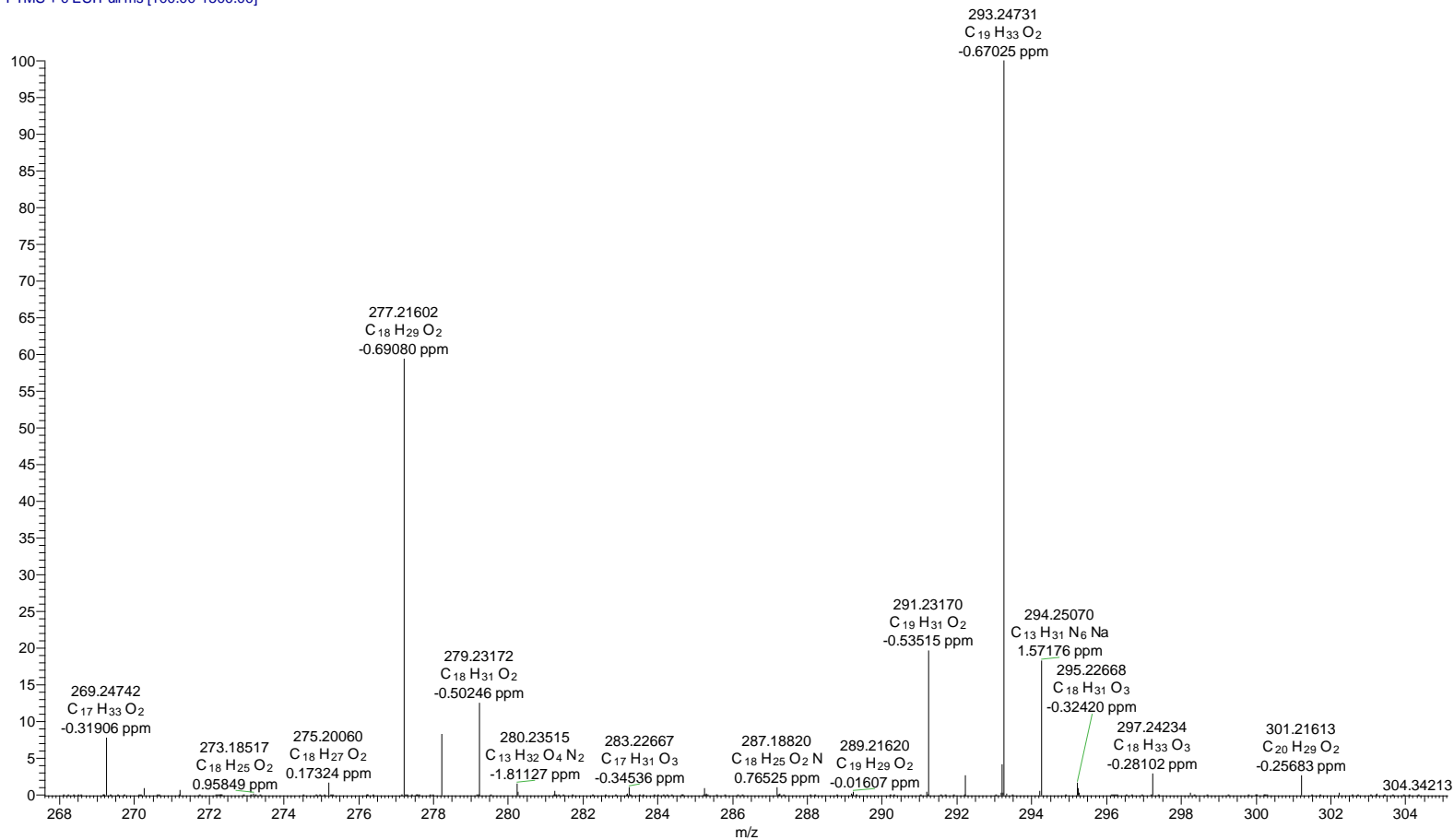
MEF134-FD-K1V1S1-V1 #925-948 RT: 14.93-15.27 AV: 24 NL: 4.49E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

5

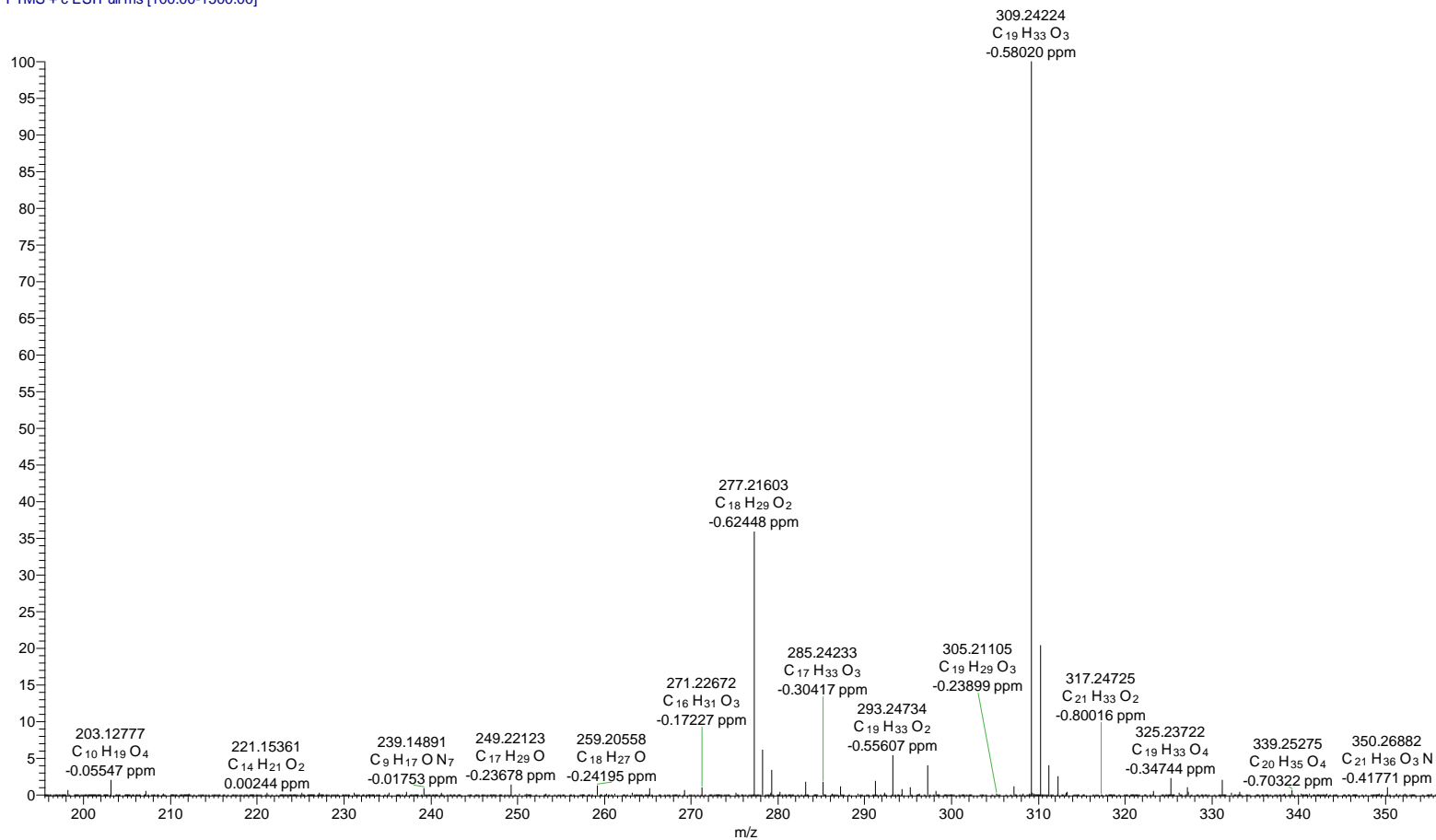
MEF134-FD-K1V1S1-V1 #1020-1030 RT: 16.33-16.47 AV: 11 NL: 5.76E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

6

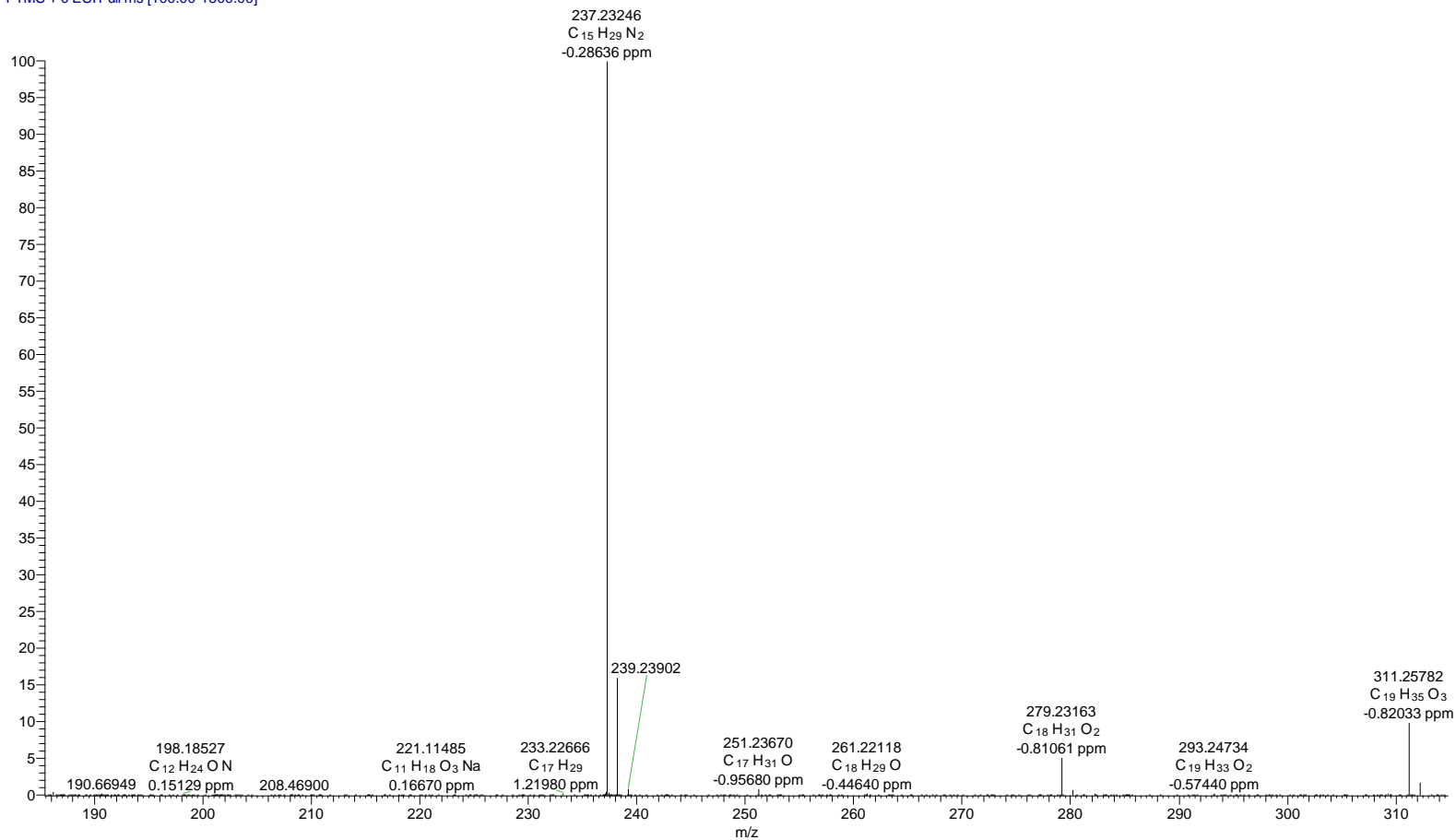
MEF134-FD-K1V1S1-V1 #1036-1053 RT: 16.56-16.81 AV: 18 NL: 1.75E7
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

7

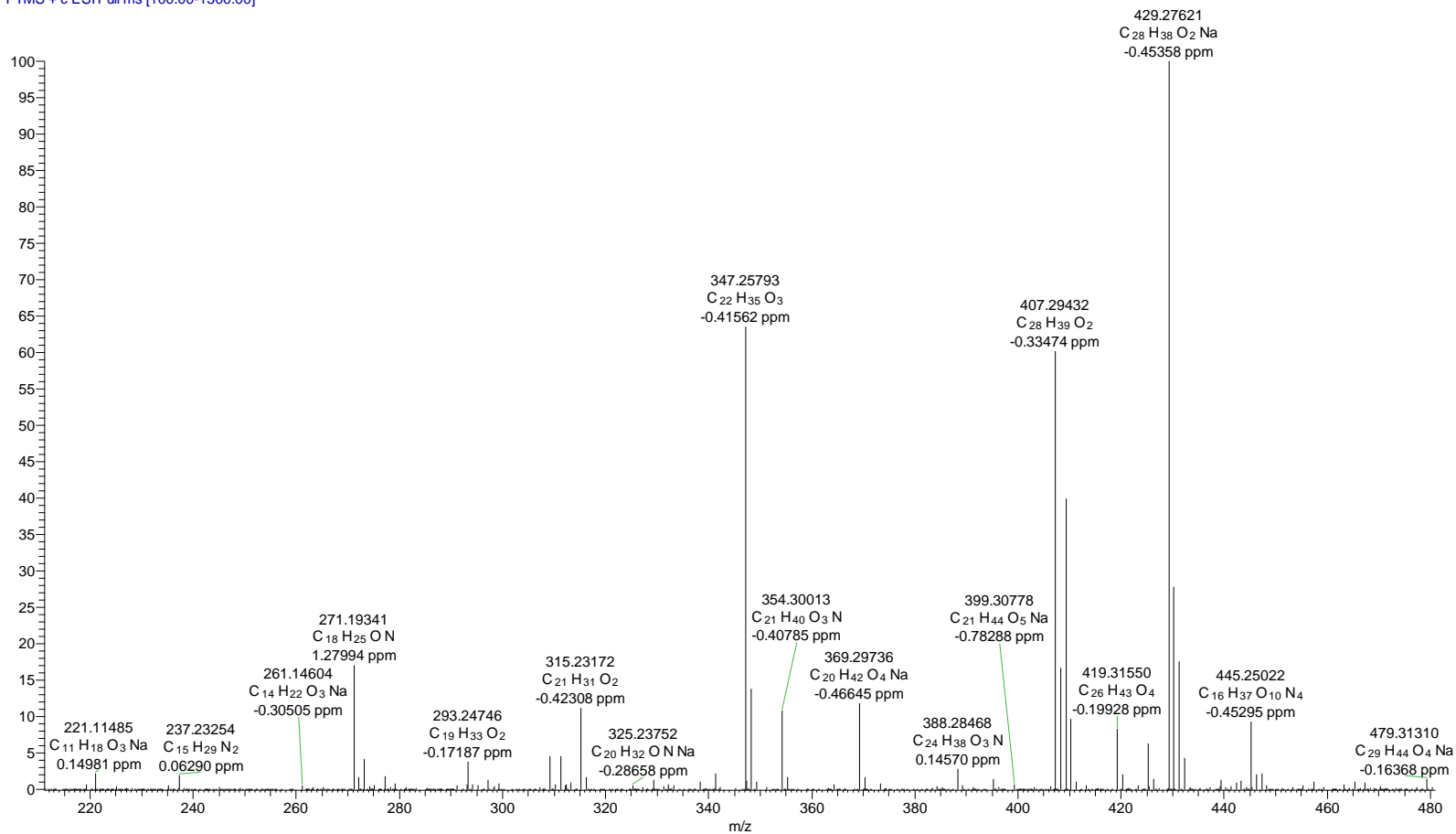
MEF134-FD-K1V1S1-V1 #1095-1102 RT: 17.45-17.57 AV: 8 NL: 9.71E7
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

8

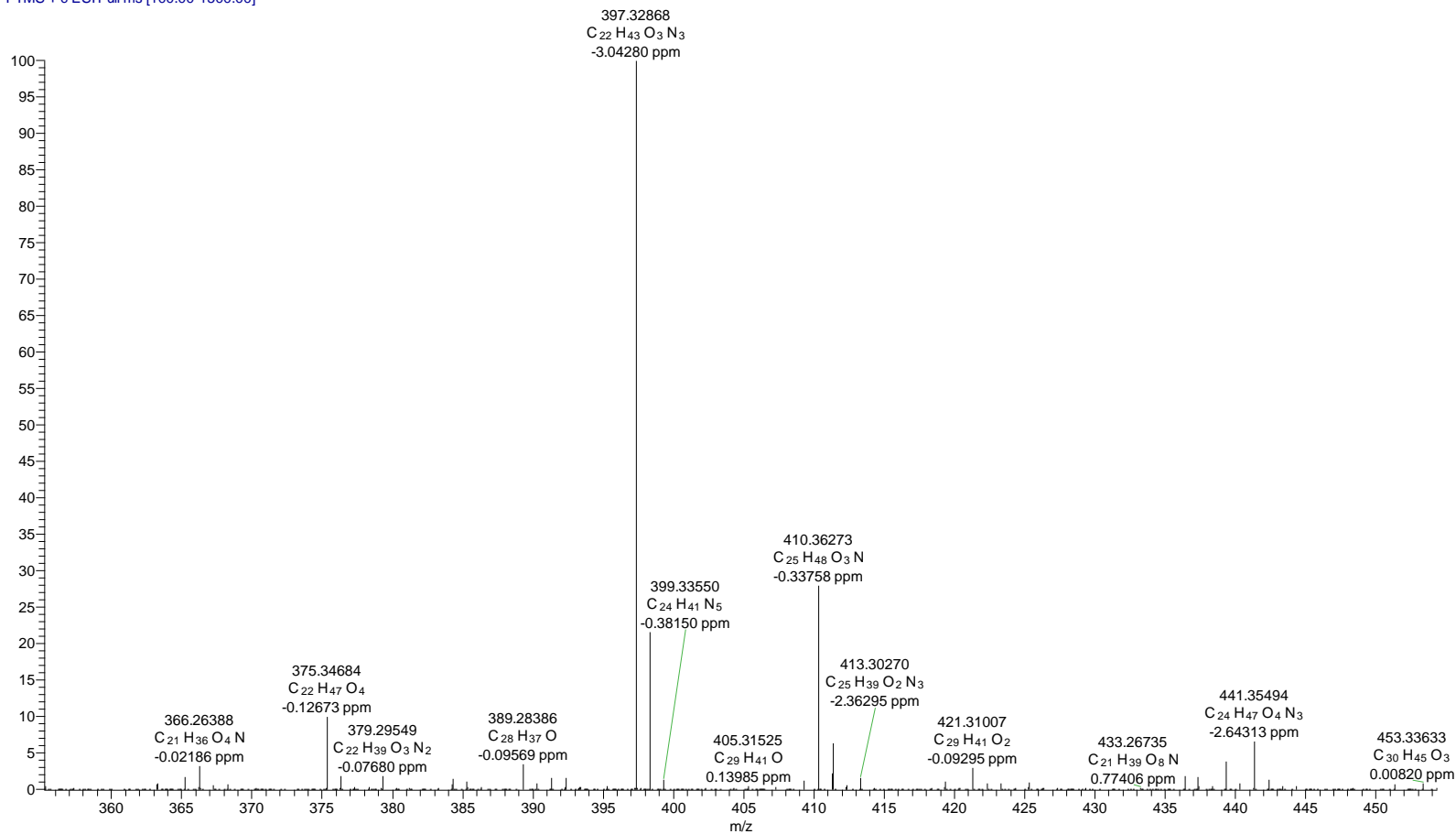
MEF134-FD-K1V1S1-V1 #1154-1161 RT: 18.44-18.56 AV: 8 NL: 7.80E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

10

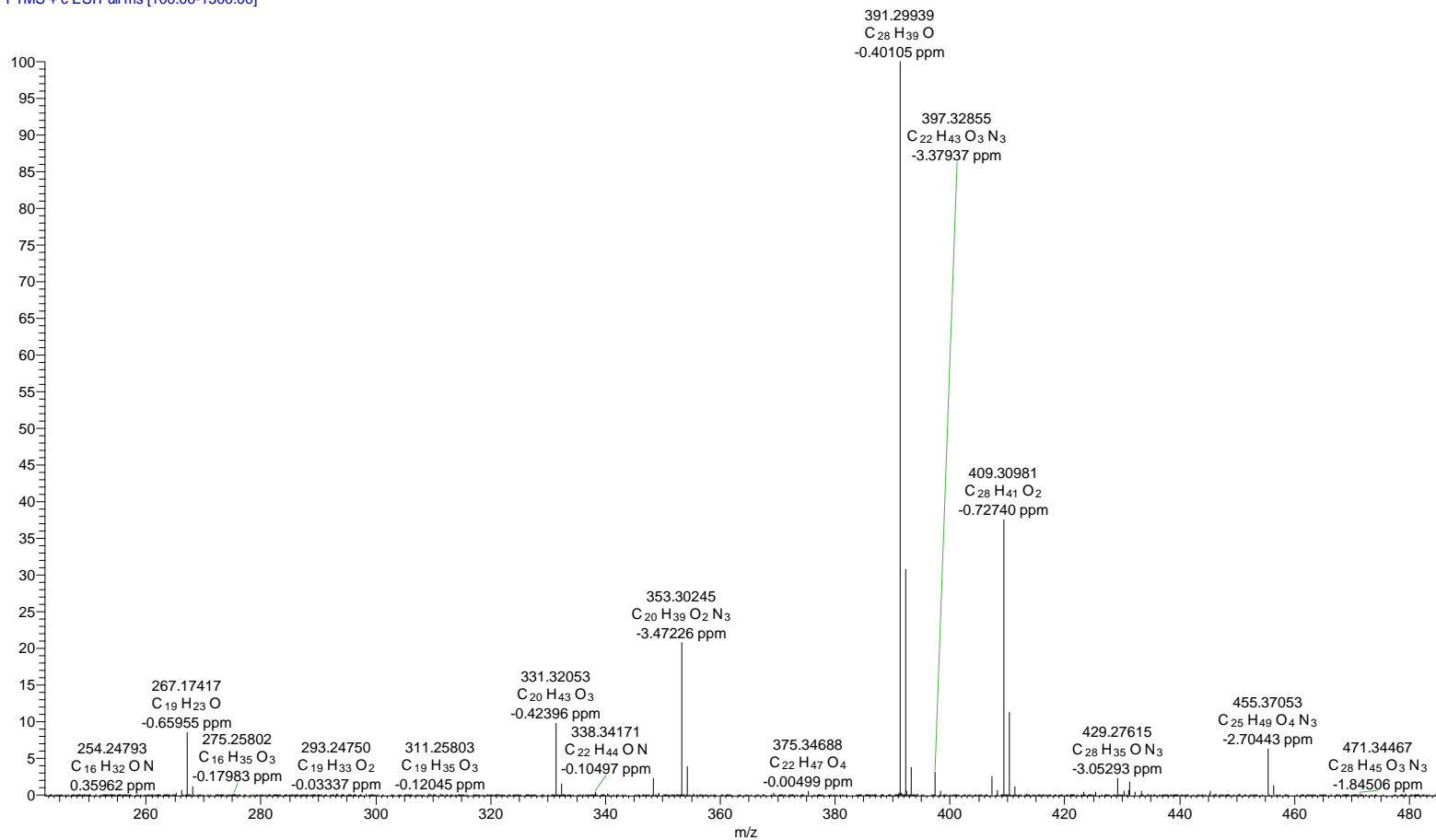
MEF134-FD-K1V1S1-V1 #1240-1261 RT: 19.82-20.17 AV: 22 NL: 7.49E6
T: FTMS + c ESIFull ms [100.00-1500.00]



6. MEF134 FD K1V1S1-V1 HPLC-HRMS Spectra

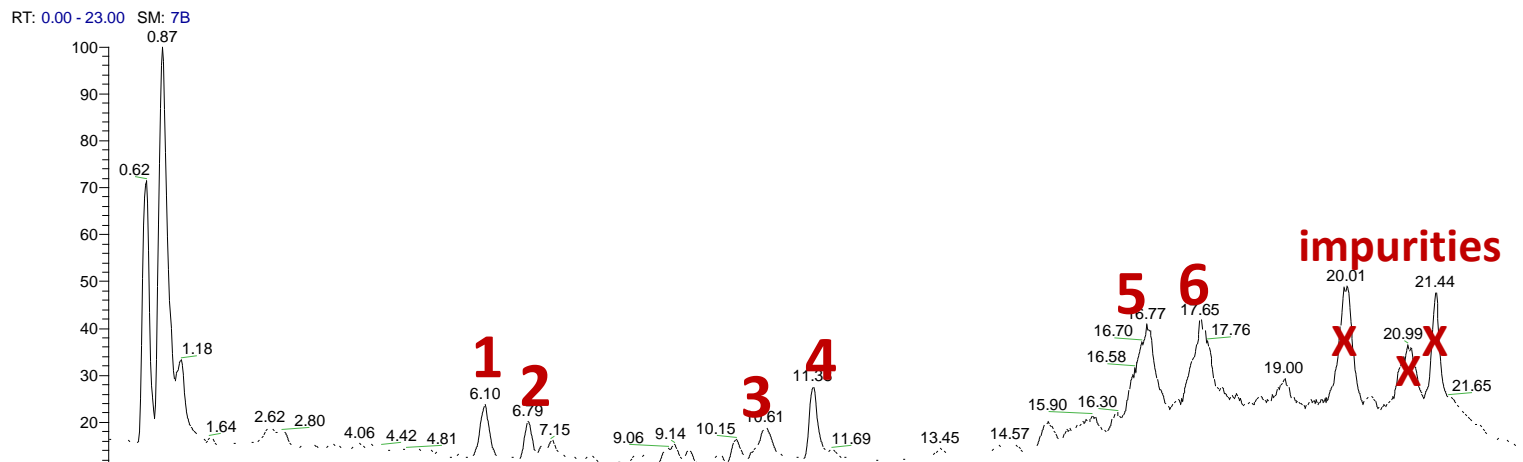
11

MEF134-FD-K1V1S1-V1 #1302-1316 RT: 20.78-21.01 AV: 15 NL: 2.51E7
T: FTMS + c ESIFull ms [100.00-1500.00]



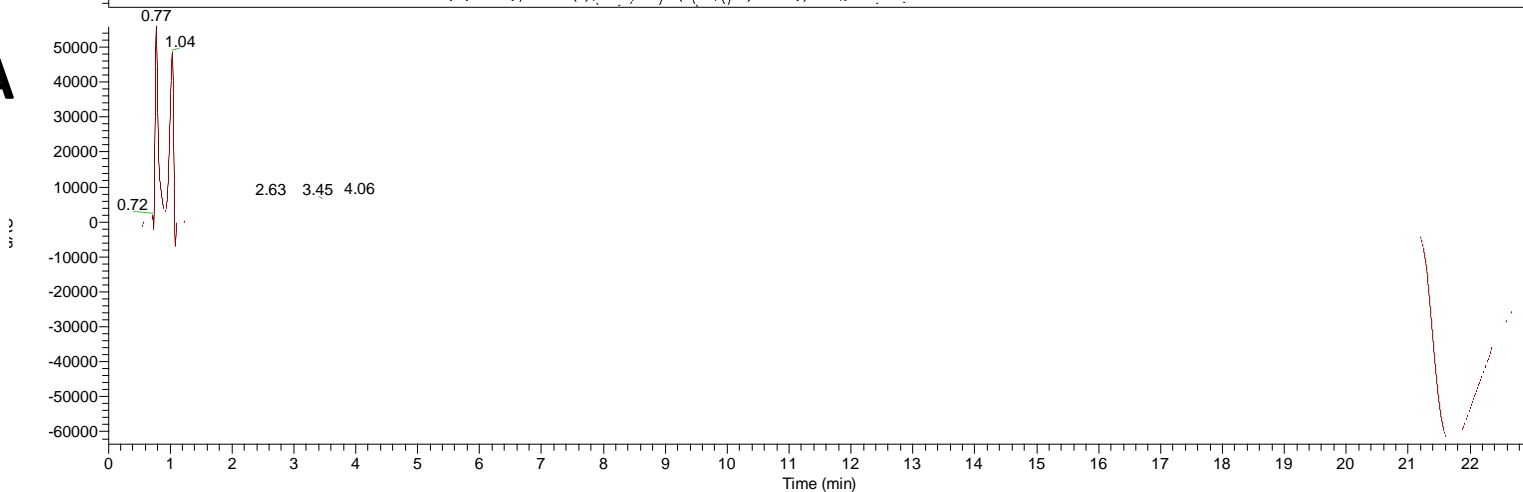
7. MEF134 FD K1V5S9+K1V5S10-V3 HPLC-HRMS Fullscan

TIC



NL:
5.37E7
TIC MS
MEF134-
FD-
K1V5S9+
K1V5S10-
V3

PDA

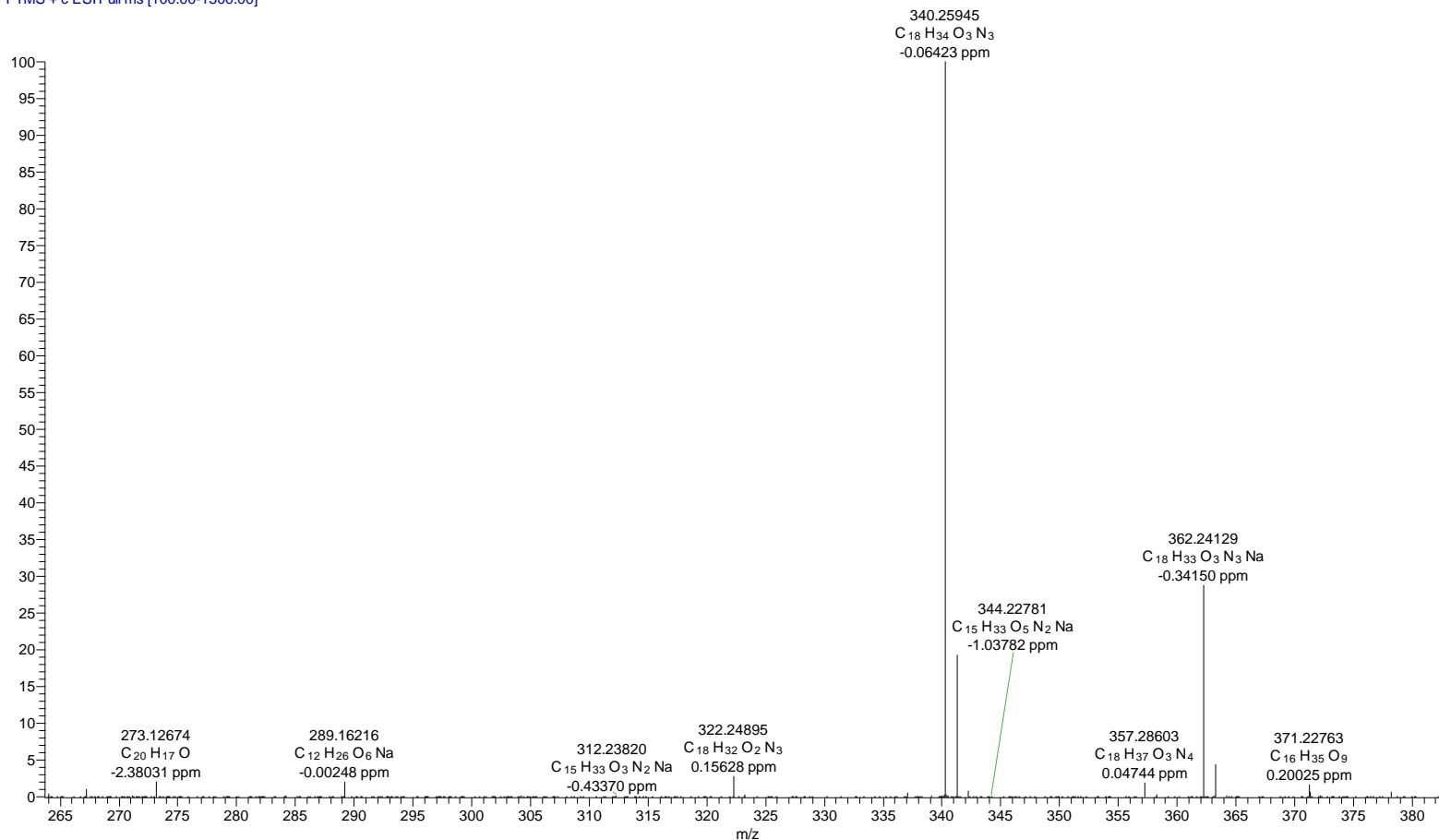


NL:
6.34E4
nm=200.0-
700.0 PDA
MEF134-
FD-
K1V5S9+
K1V5S10-
V3

7. MEF134 FD K1V5S9+K1V5S10-V3 HPLC-HRMS Spectra

1

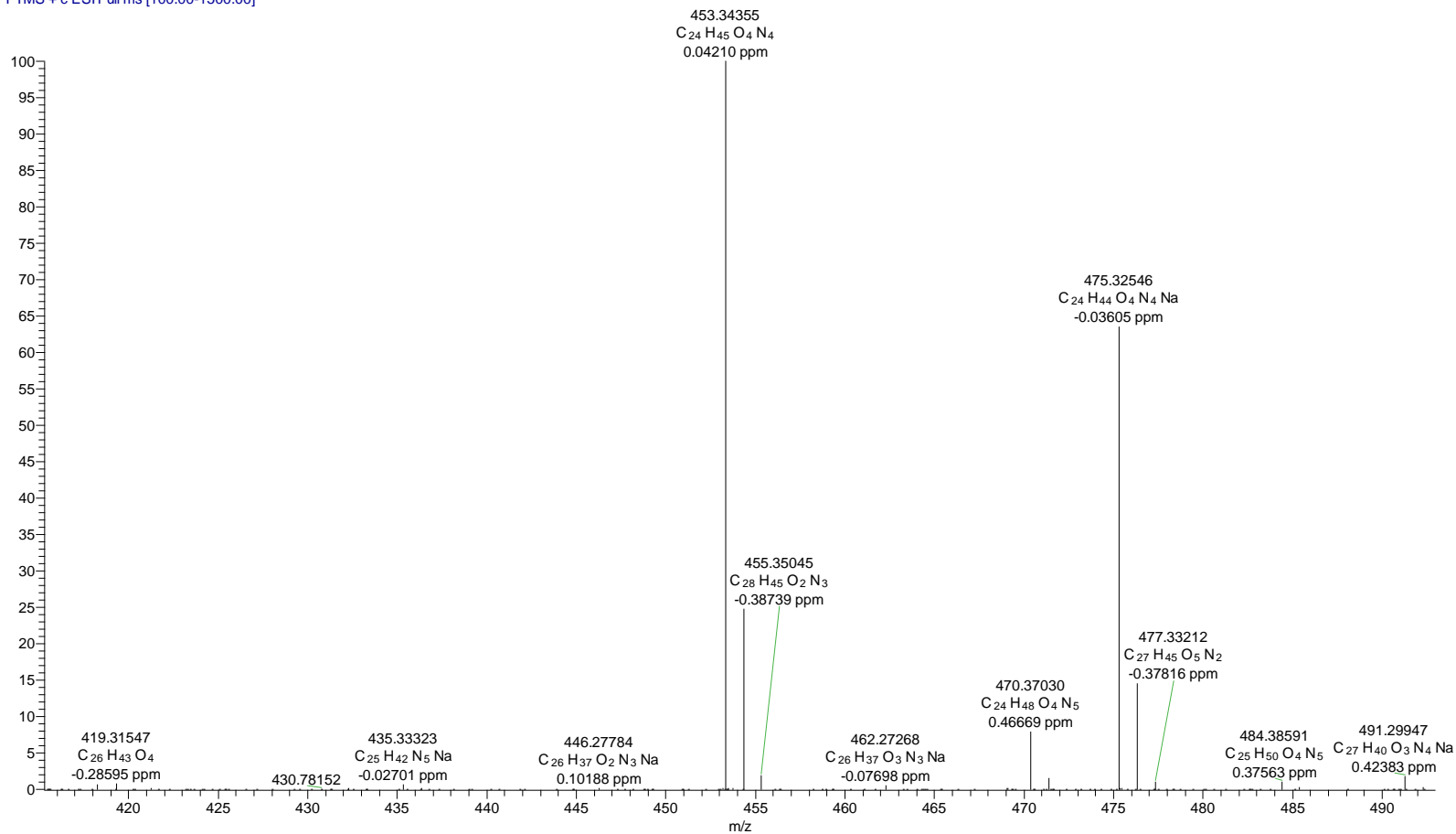
MEF134-FD-K1V5S9+K1V5S10-V3 #354-366 RT: 6.00-6.19 AV: 13 NL: 1.91E6
T: FTMS + c ESIFull ms [100.00-1500.00]



7. MEF134 FD K1V5S9+K1V5S10-V3 HPLC-HRMS Spectra

2

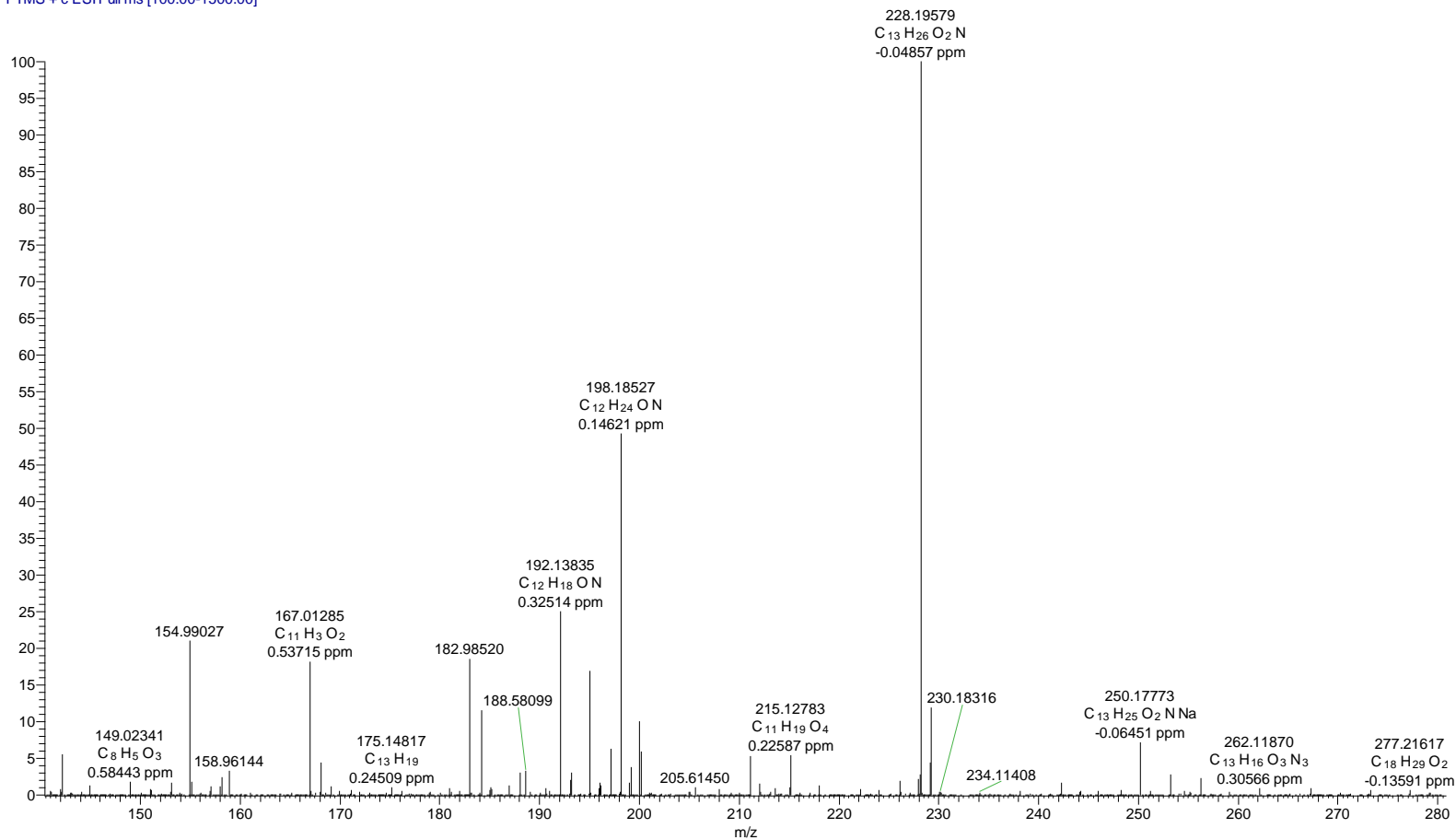
MEF134-FD-K1V5S9+K1V5S10-V3 #394-405 RT: 6.67-6.85 AV: 12 NL: 9.09E5
T: FTMS + c ESIFull ms [100.00-1500.00]



7. MEF134 FD K1V5S9+K1V5S10-V3 HPLC-HRMS Spectra

3

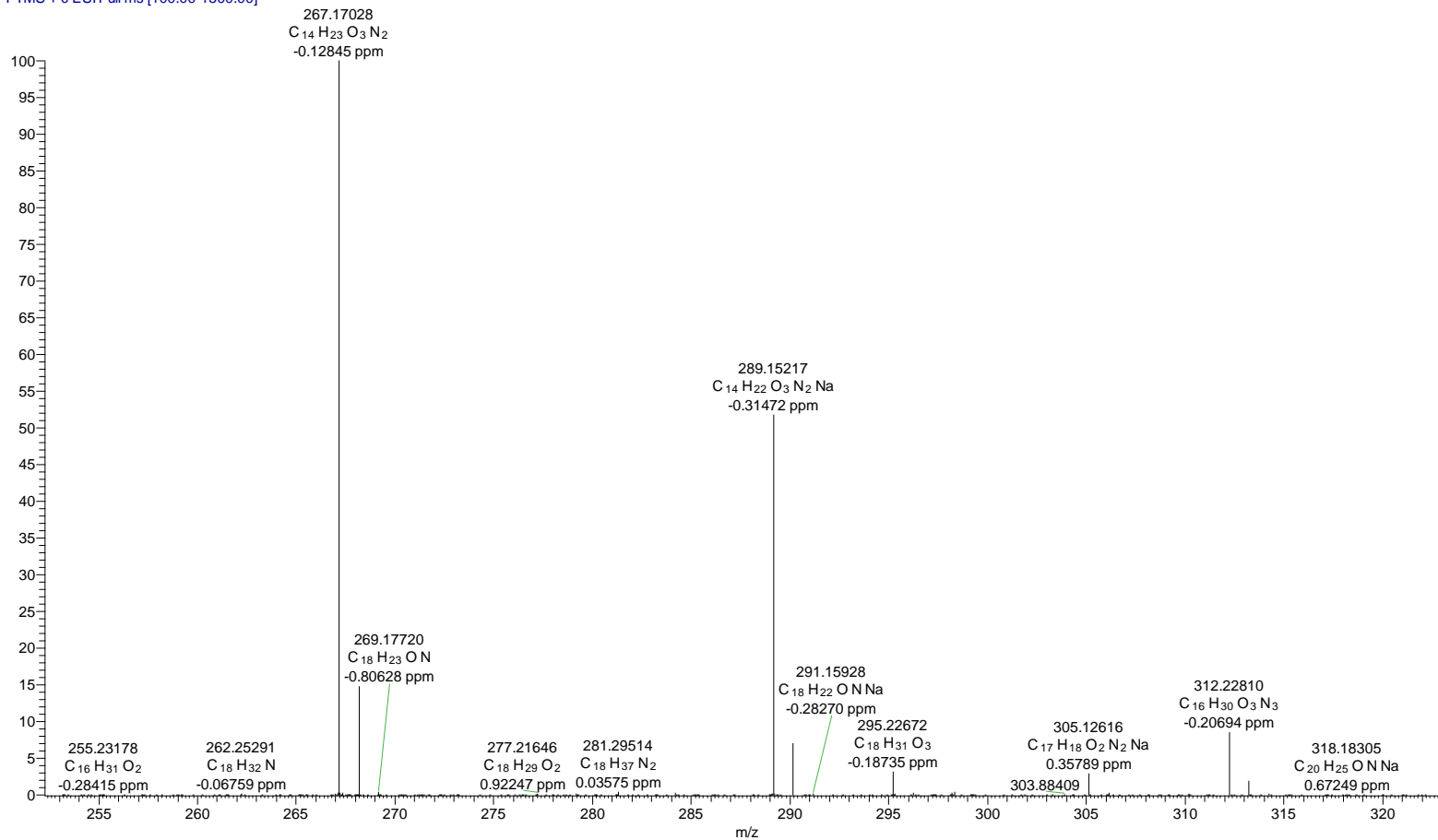
MEF134-FD-K1V5S9+K1V5S10-V3 #621-635 RT: 10.46-10.69 AV: 15 NL: 8.02E5
T: FTMS + c ESIFull ms [100.00-1500.00]



7. MEF134 FD K1V5S9+K1V5S10-V3 HPLC-HRMS Spectra

4

MEF134-FD-K1V5S9+K1V5S10-V3 #671-682 RT: 11.29-11.46 AV: 12 NL: 2.21E6
T: FTMS + c ESIFull ms [100.00-1500.00]

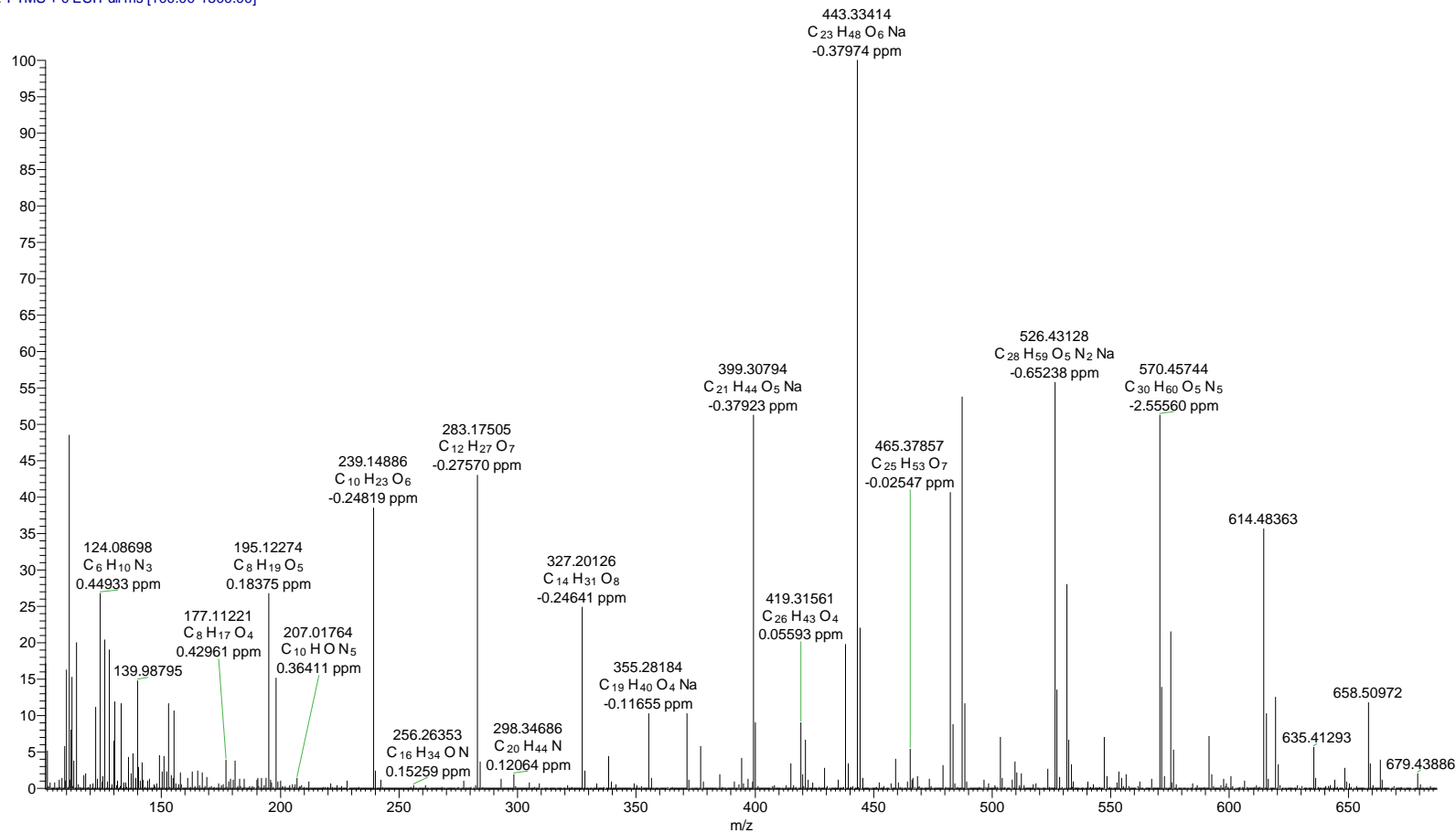


7. MEF134 FD K1V5S9+K1V5S10-V3

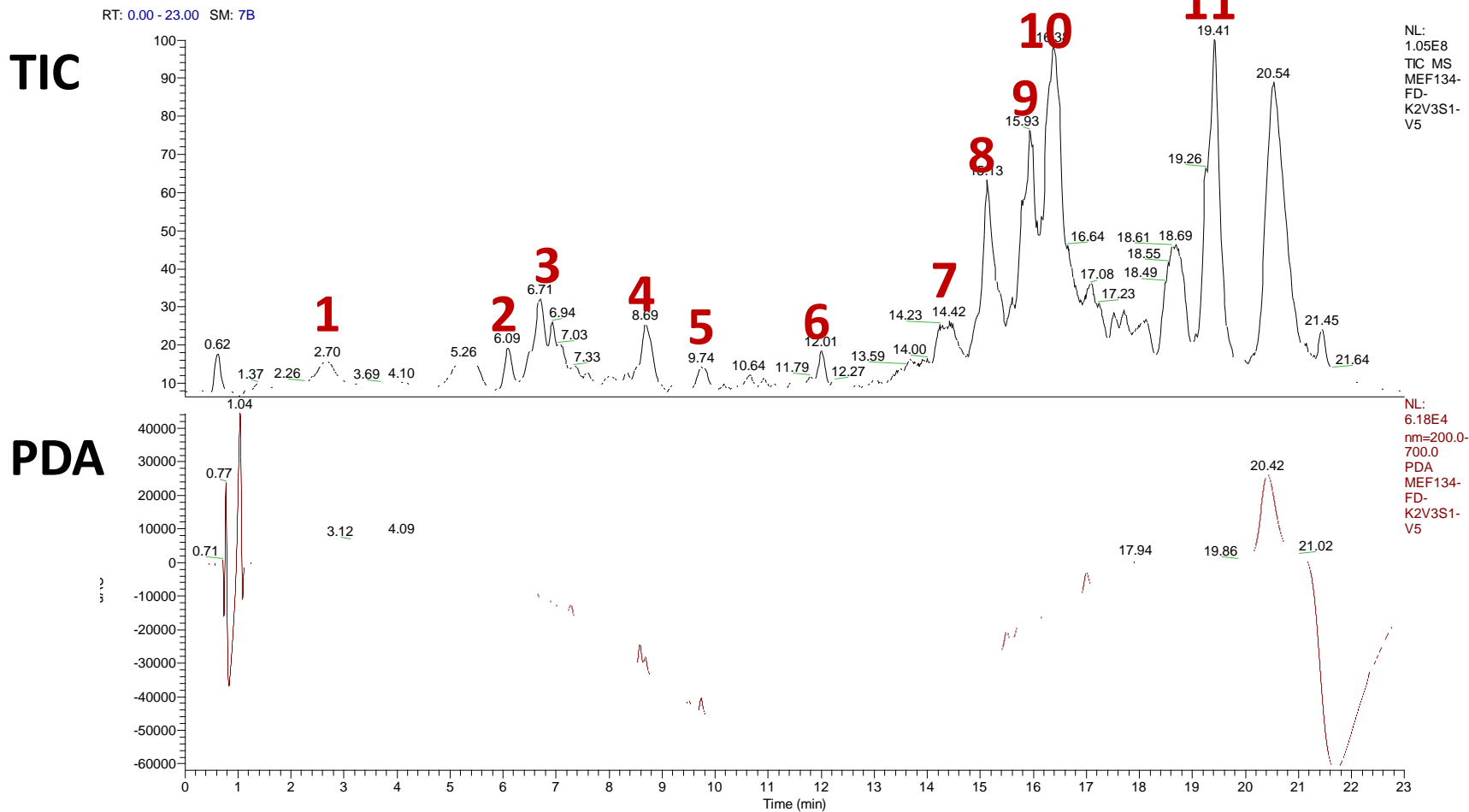
Impurity HPLC-HRMS Spectra

5

MEF134-FD-K1V5S9+K1V5S10-V3 #991-1027 RT: 16.46-17.00 AV: 37 NL: 1.03E6
T: FTMS + c ESIFull ms [100.00-1500.00]



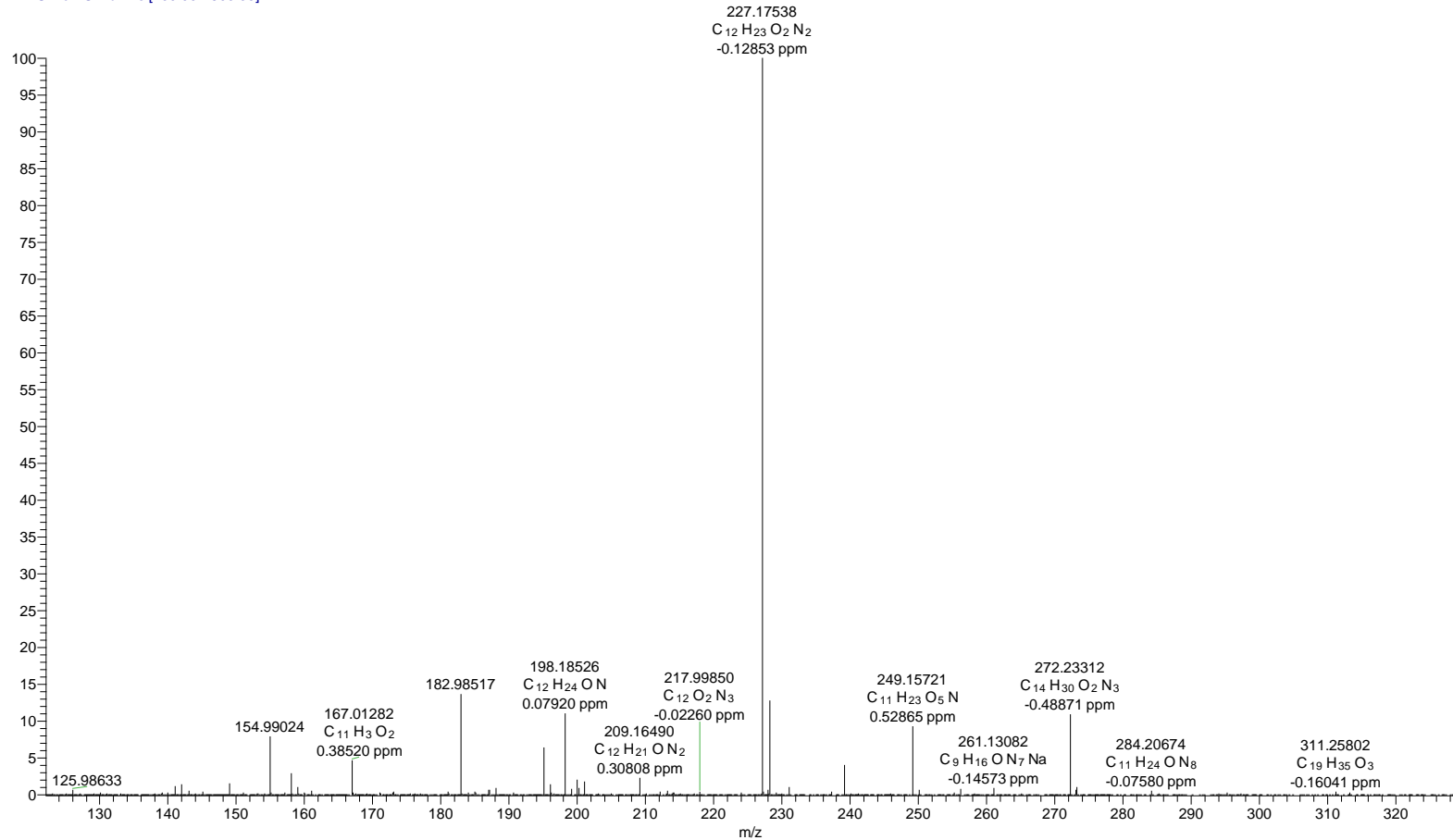
8. MEF134 FD K2V3S1-V5 HPLC-HRMS Fullscan



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

1

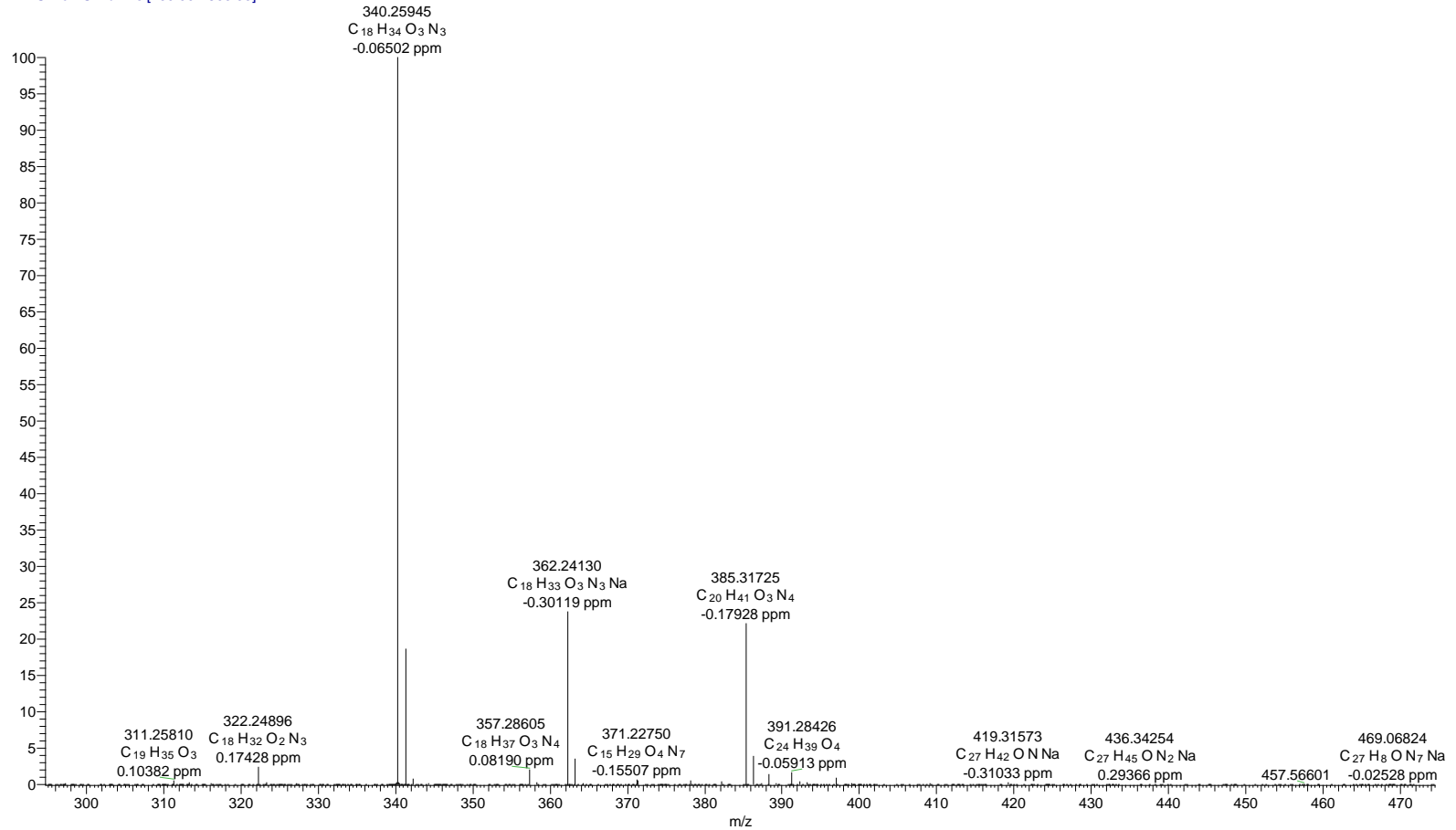
MEF134-FD-K2V3S1-V5 #154-173 RT: 2.52-2.82 AV: 20 NL: 4.04E6
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

2

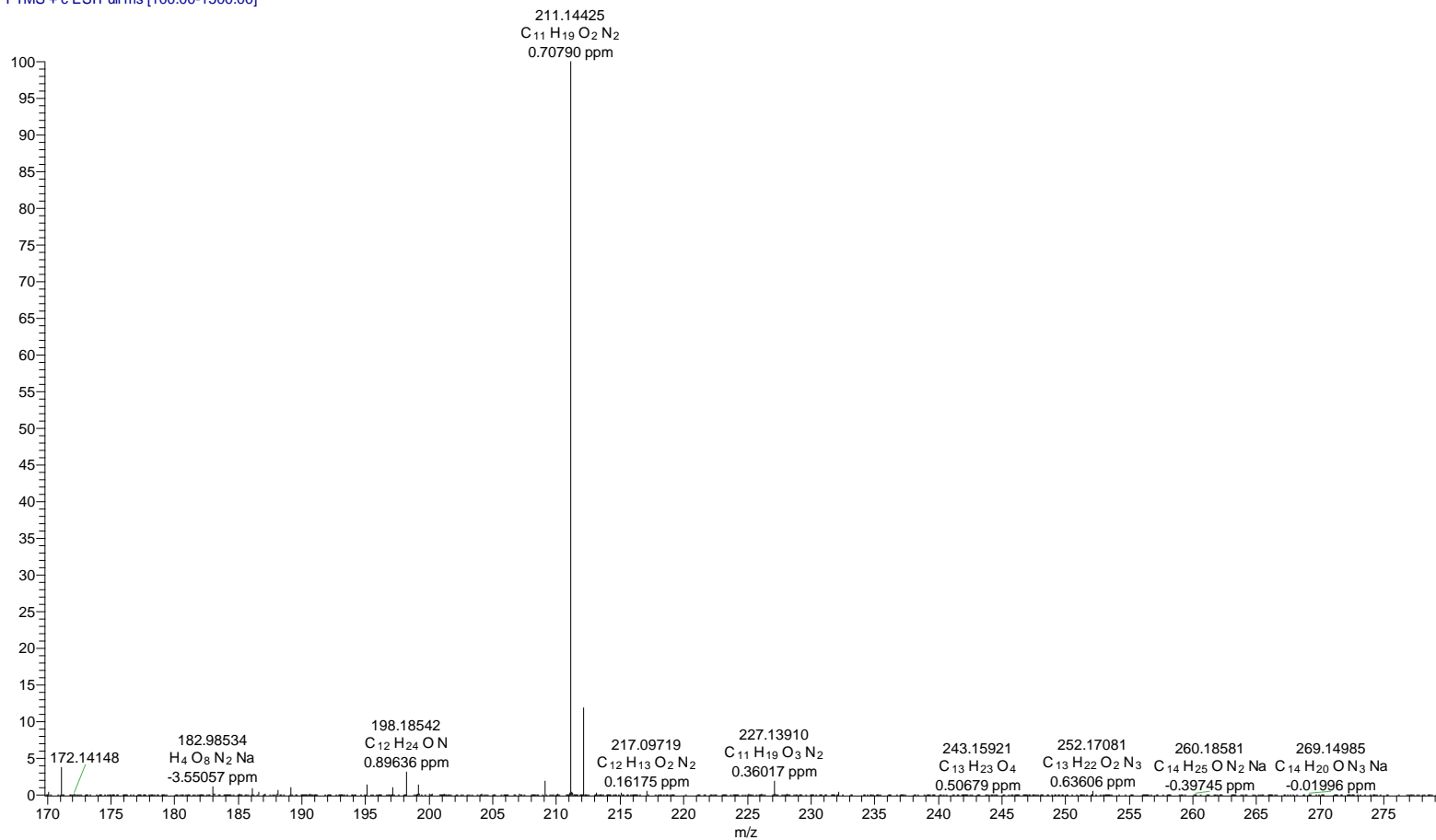
MEF134-FD-K2V3S1-V5 #366-382 RT: 5.96-6.21 AV: 17 NL: 2.84E6
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

3

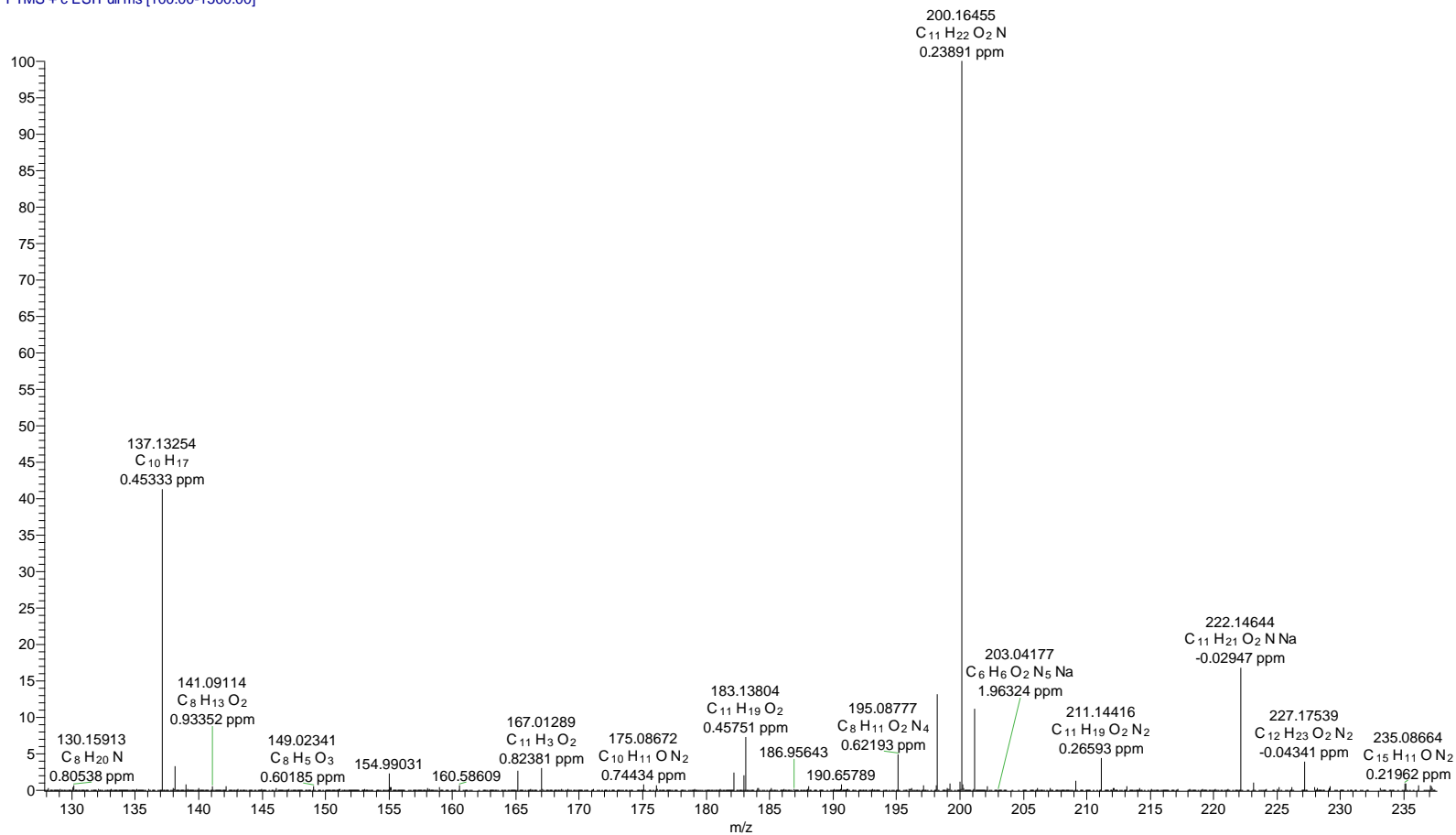
MEF134-FD-K2V3S1-V5 #406-420 RT: 6.59-6.80 AV: 15 NL: 1.35E7
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

4

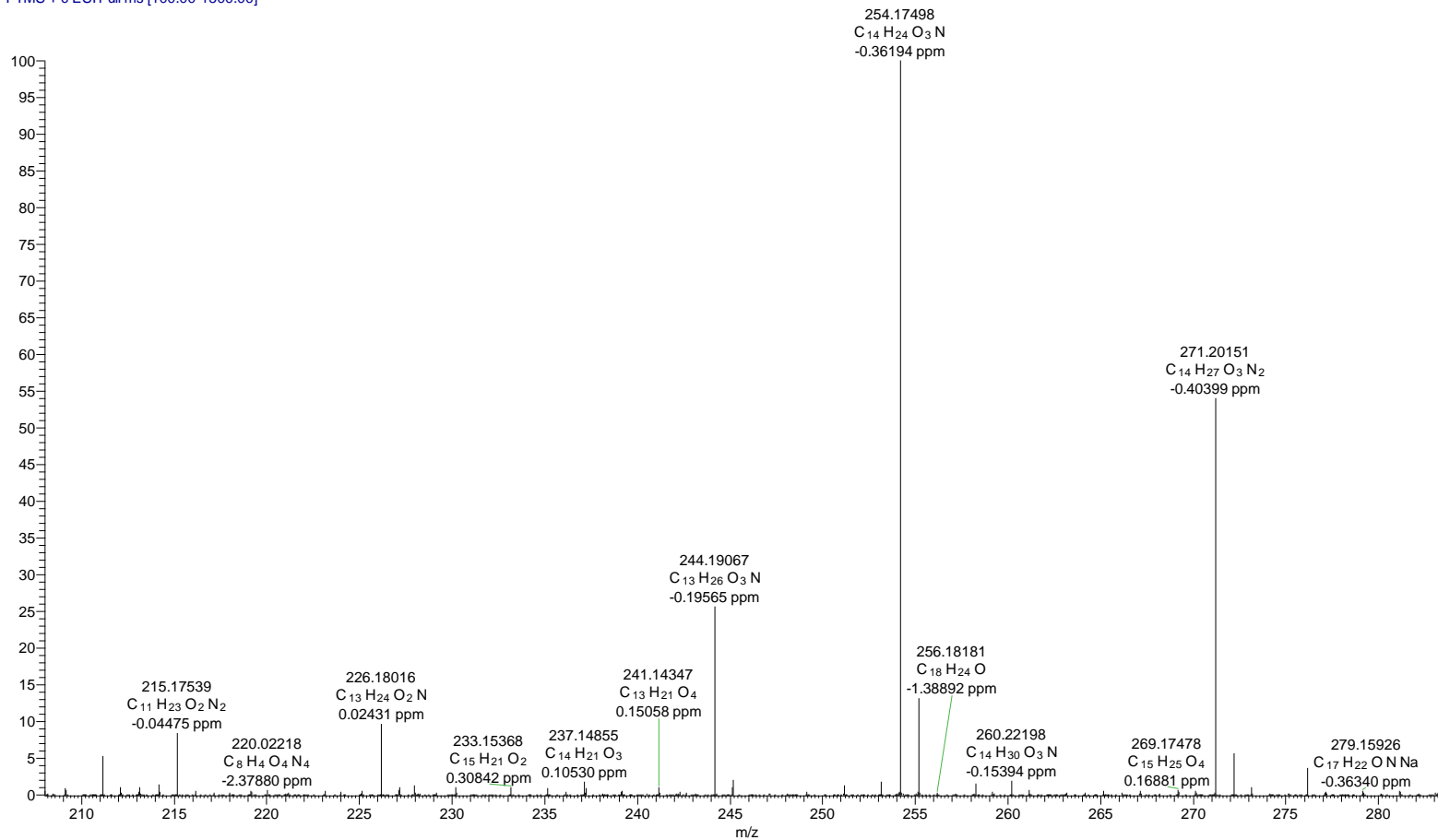
MEF134-FD-K2V3S1-V5 #531-554 RT: 8.51-8.85 AV: 24 NL: 2.90E6
T: FTMS + c ESIFull ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

5

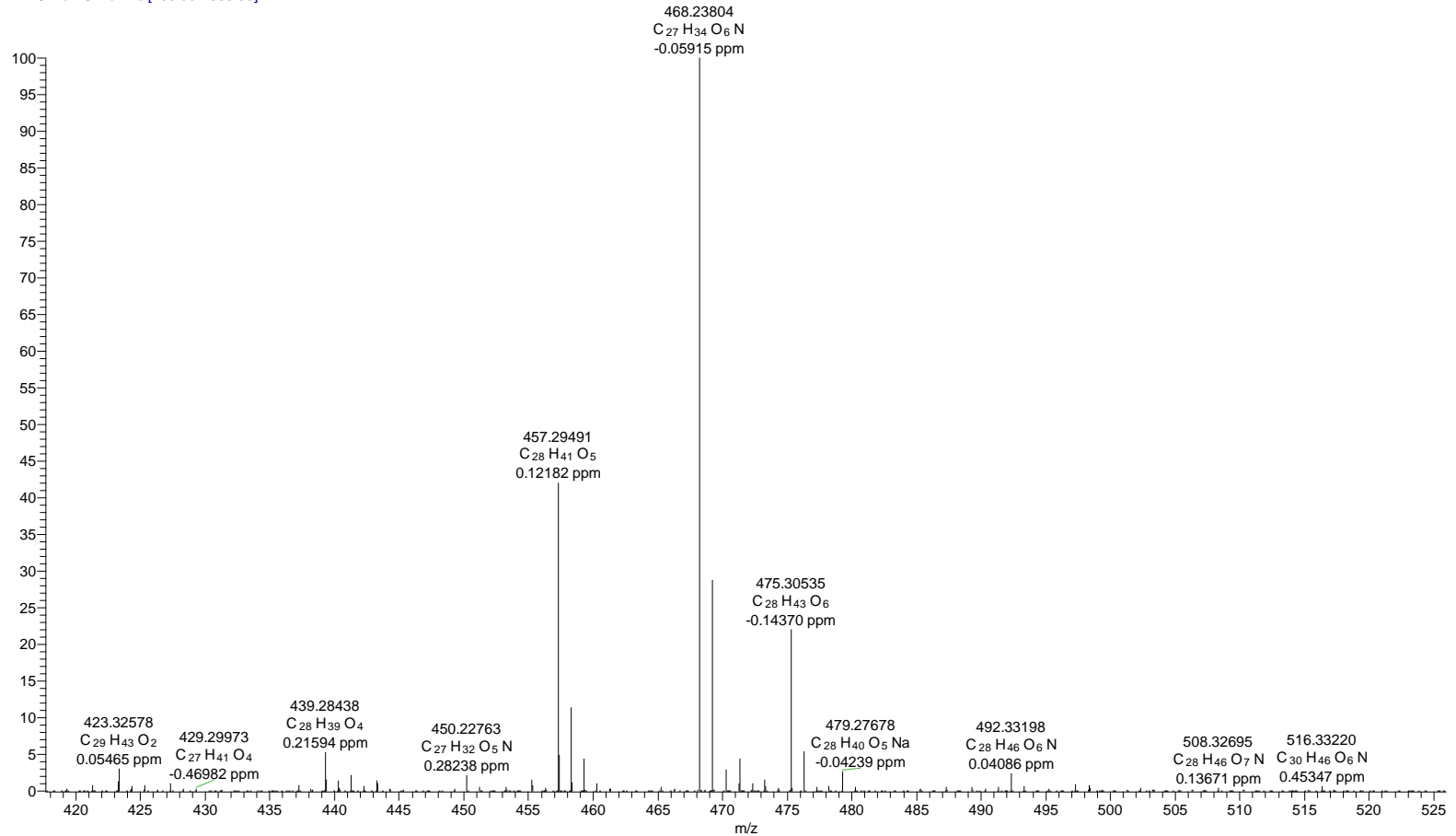
MEF134-FD-K2V3S1-V5 #604-621 RT: 9.62-9.88 AV: 18 NL: 1.01E6
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

6

MEF134-FD-K2V3S1-V5 #753-767 RT: 11.88-12.09 AV: 15 NL: 2.89E6
T: FTMS + c ESI Full ms [100.00-1500.00]



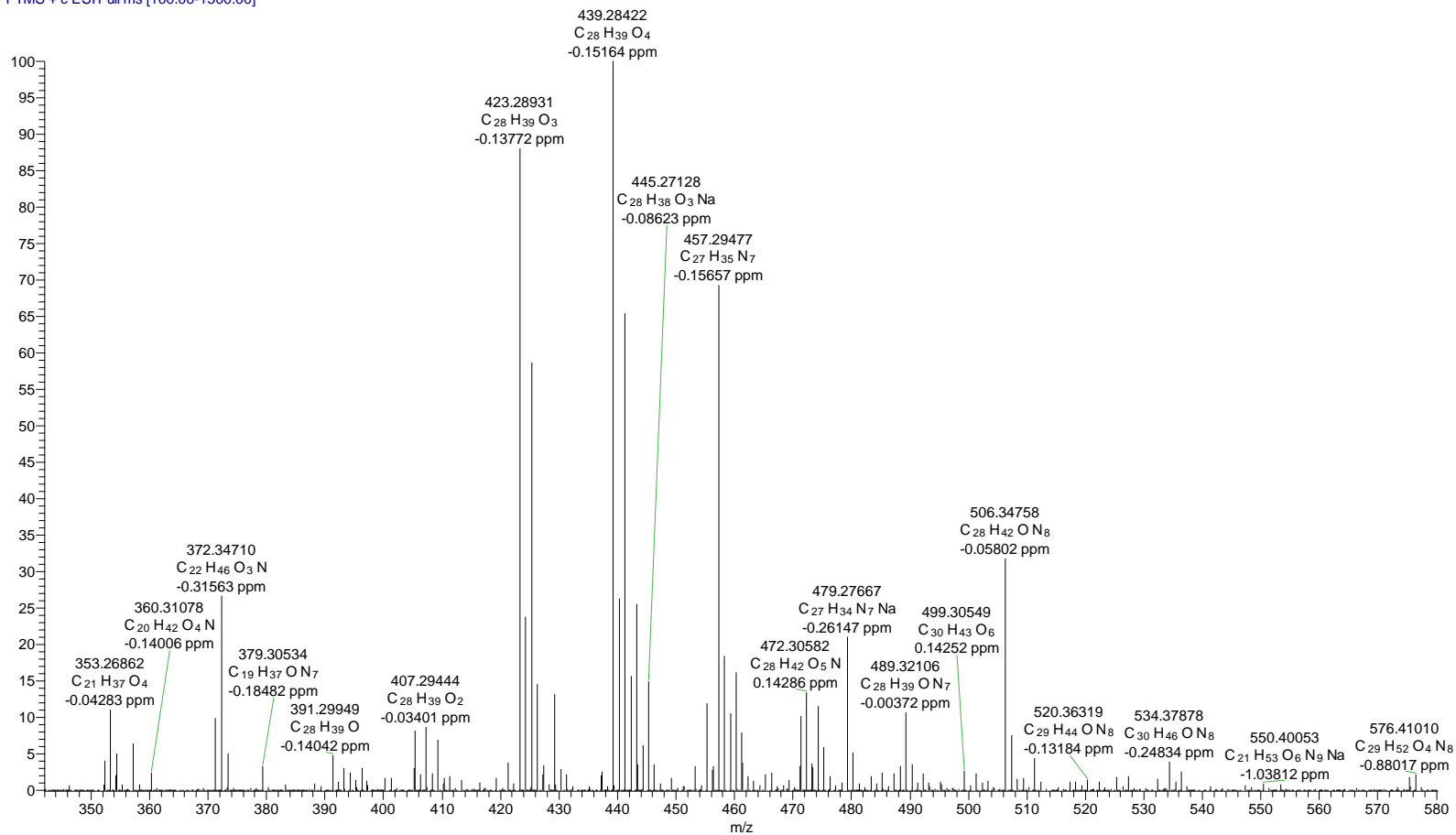
8. MEF134 FD K2V3S1-V5

Impurity

HPLC-HRMS Spectra

7

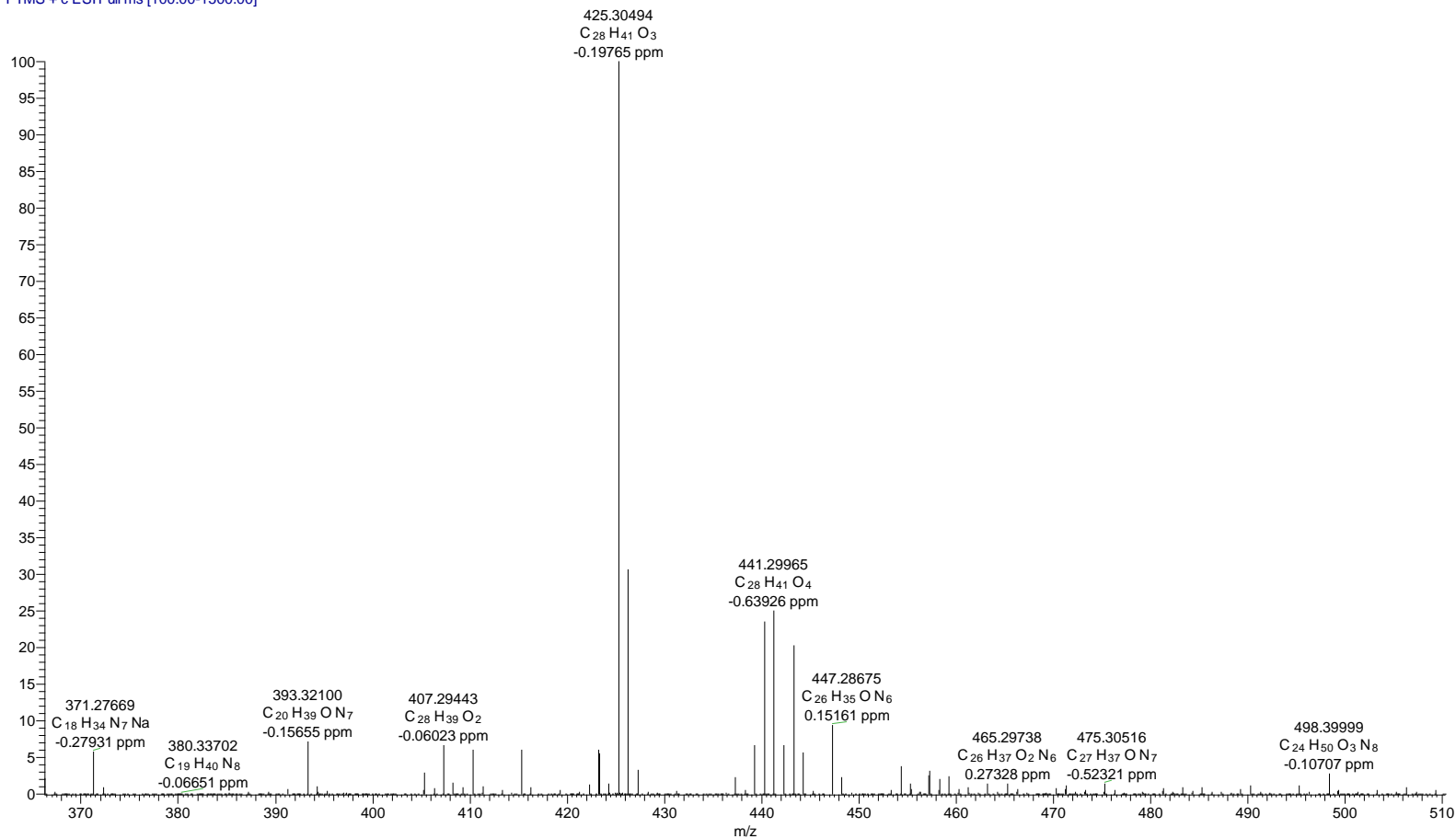
MEF134-FD-K2V3S1-V5 #906-932 RT: 14.17-14.56 AV: 27 NL: 1.42E6
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

8

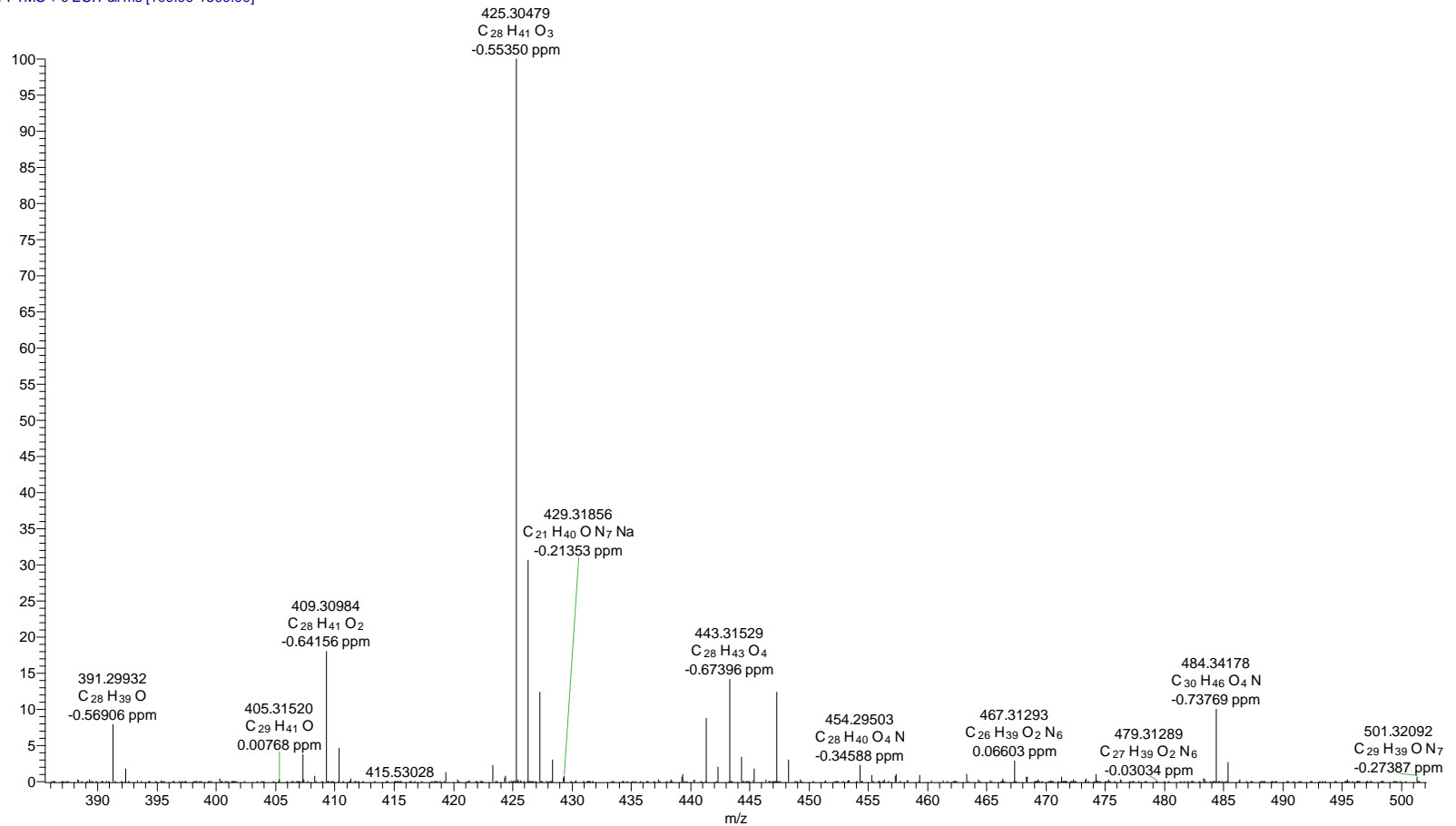
MEF134-FD-K2V3S1-V5 #960-985 RT: 14.97-15.33 AV: 26 NL: 8.67E6
T: FTMS + c ESIFull ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

9

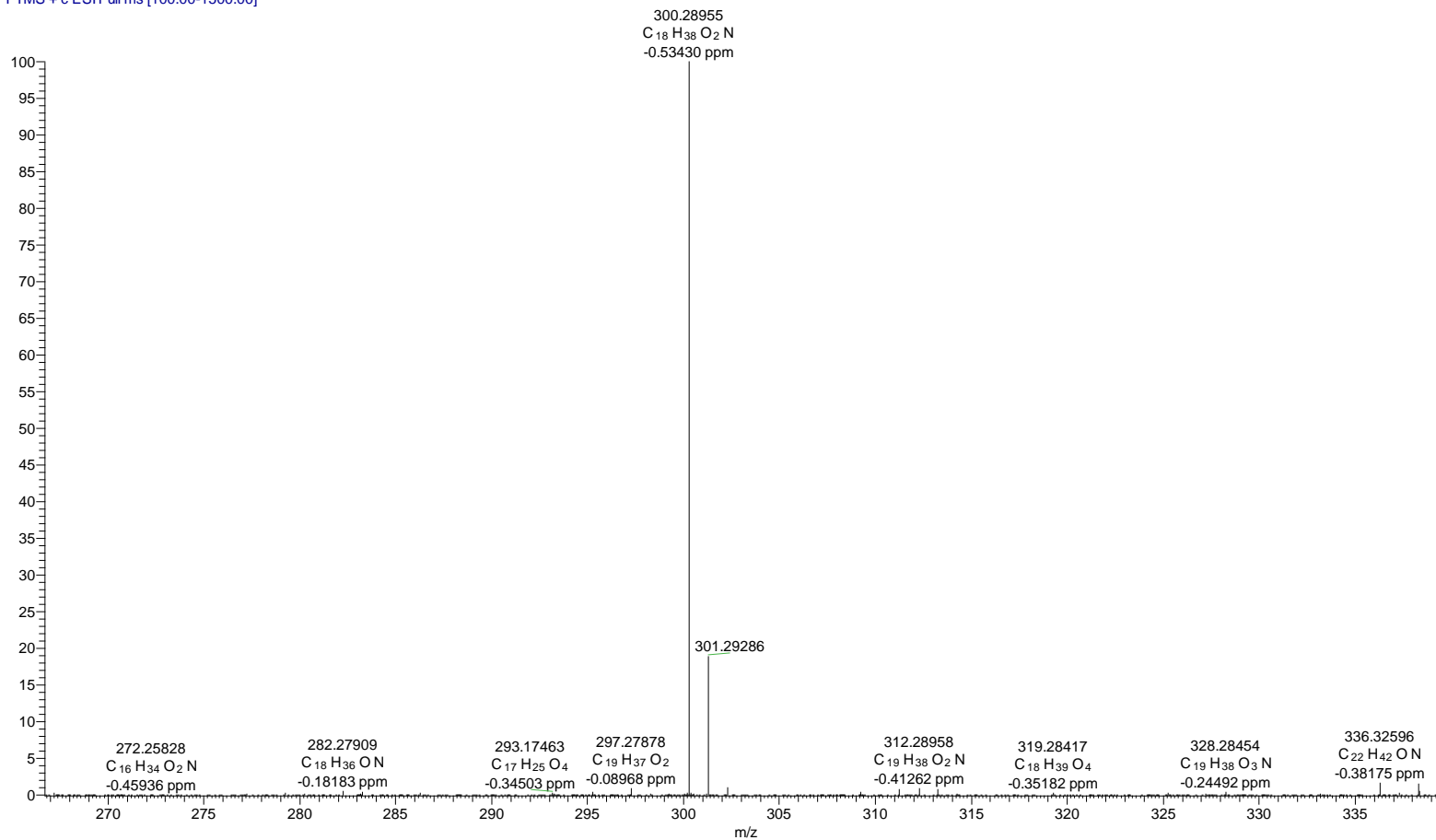
MEF134-FD-K2V3S1-V5 #1018-1032 RT: 15.82-16.02 AV: 15 NL: 1.69E7
T: FTMS + c ESIFull ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

10

MEF134-FD-K2V3S1-V5 #1042-1072 RT: 16.17-16.60 AV: 31 NL: 1.47E7
T: FTMS + c ESI Full ms [100.00-1500.00]



8. MEF134 FD K2V3S1-V5 HPLC-HRMS Spectra

11

MEF134-FD-K2V3S1-V5 #1231-1267 RT: 19.04-19.61 AV: 37 NL: 9.80E6
T: FTMS + c ESI Full ms [100.00-1500.00]

