

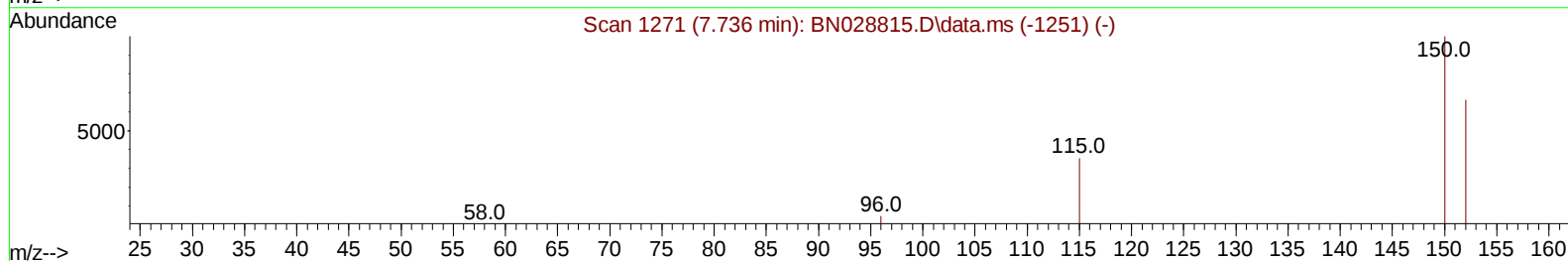
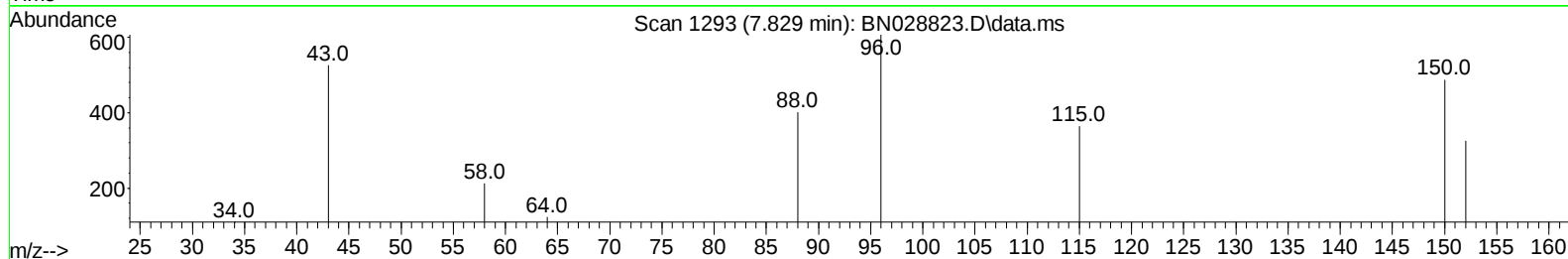
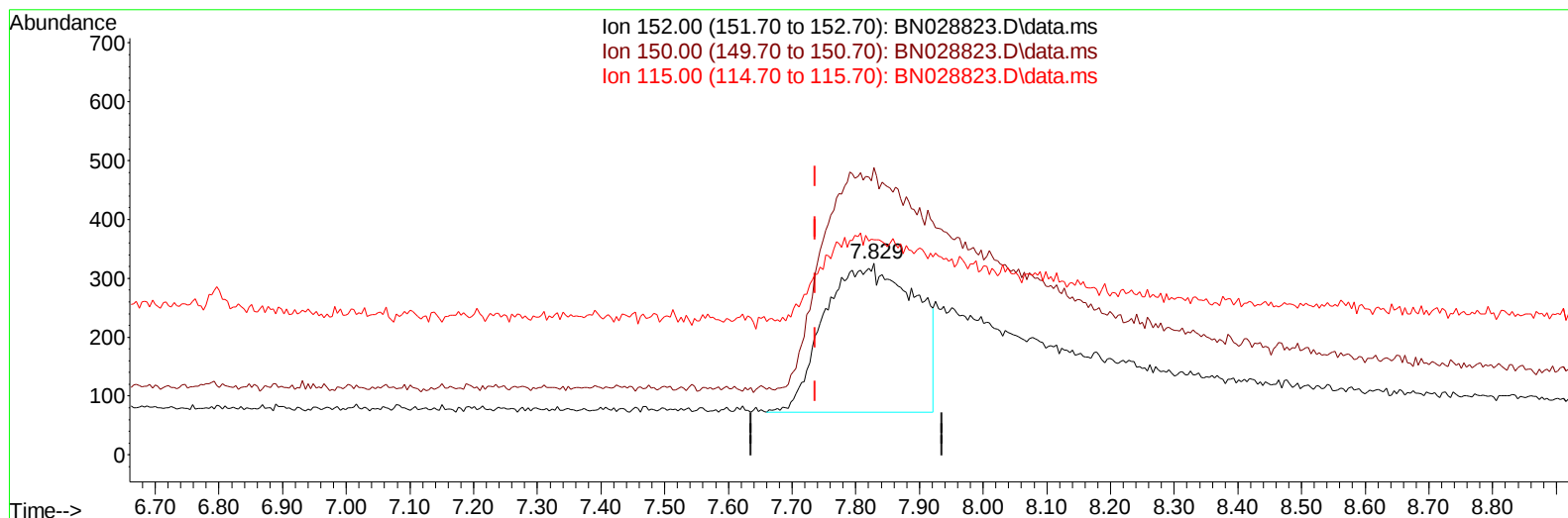
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN110923.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Nov 21 23:49:43 2023  
 Response via : Initial Calibration

Reviewed By :Yogesh Patel 11/23/2023  
 Supervised By :mohammad ahmed 11/25/2023



TIC: BN028823.D\data.ms

(1) 1,4-Dichlorobenzene-d4 (I)

7.829min (+ 0.093) 0.40 ng/u1

response 2494

| Ion    | Exp%   | Act%    |
|--------|--------|---------|
| 152.00 | 100.00 | 100.00  |
| 150.00 | 155.30 | 149.69  |
| 115.00 | 62.20  | 111.96# |
| 0.00   | 0.00   | 0.00    |

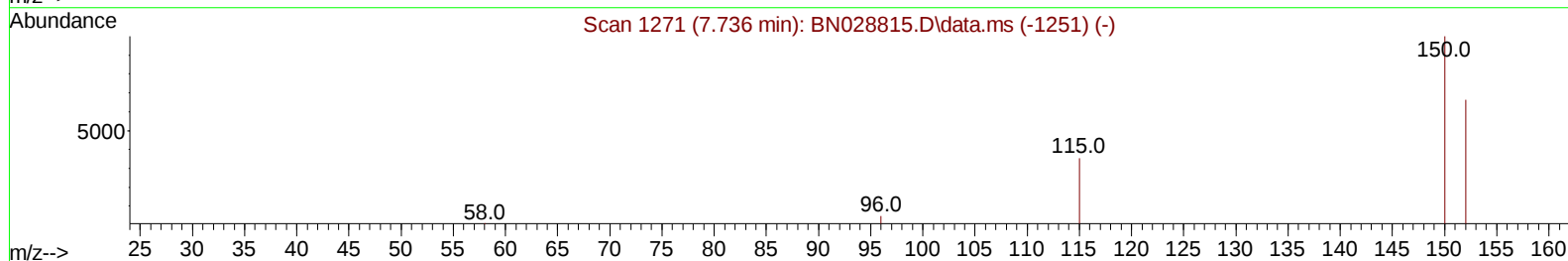
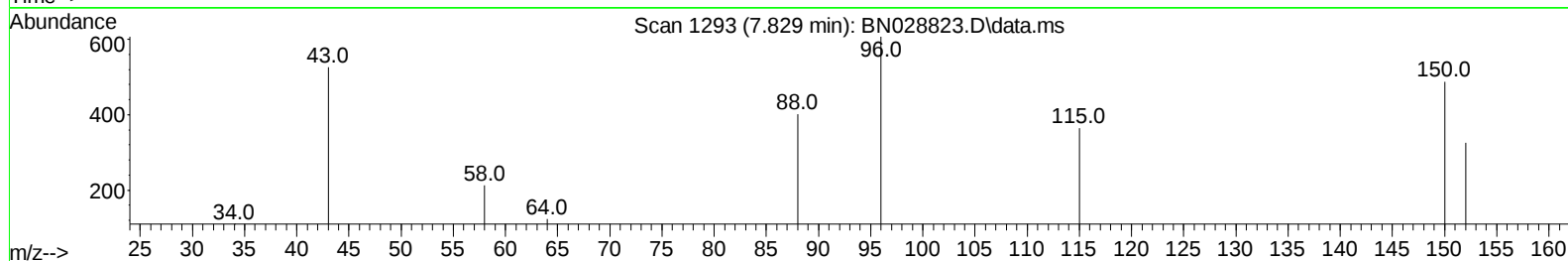
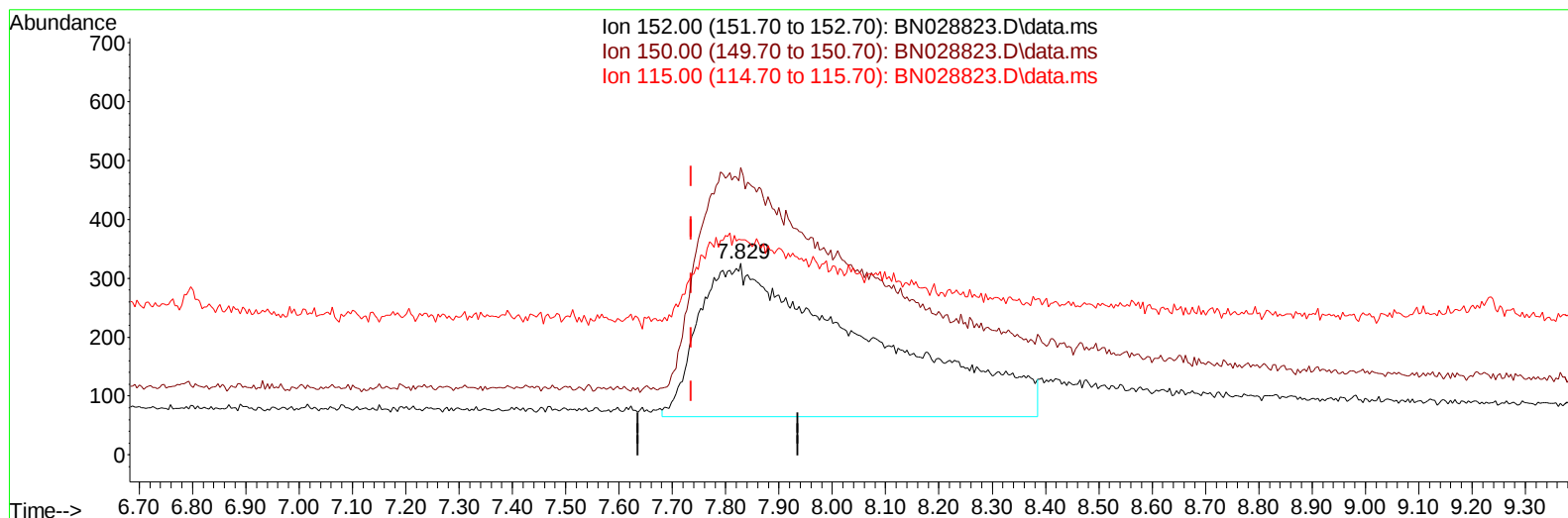
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
Data File : BN028823.D  
Acq On : 21 Nov 2023 22:40  
Operator : MA/JU  
Sample : PB156953BS  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN110923.M  
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QLast Update : Tue Nov 21 23:49:43 2023  
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Supervised By :mohammad ahmed 11/25/2023



TIC: BN028823.D\data.ms

(1) 1,4-Dichlorobenzene-d4 (I)

7.829min (+ 0.093) 0.40 ng/ul m

response 5761

| Ion    | Exp%   | Act%    |
|--------|--------|---------|
| 152.00 | 100.00 | 100.00  |
| 150.00 | 155.30 | 149.69  |
| 115.00 | 62.20  | 111.96# |
| 0.00   | 0.00   | 0.00    |

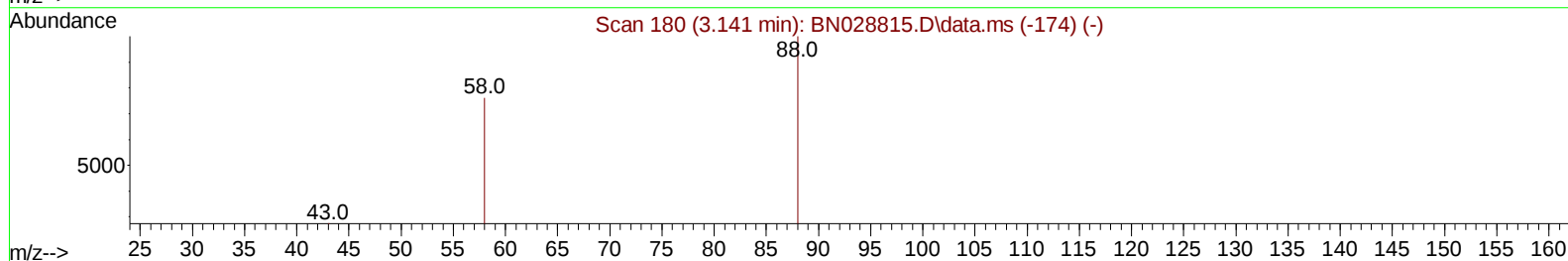
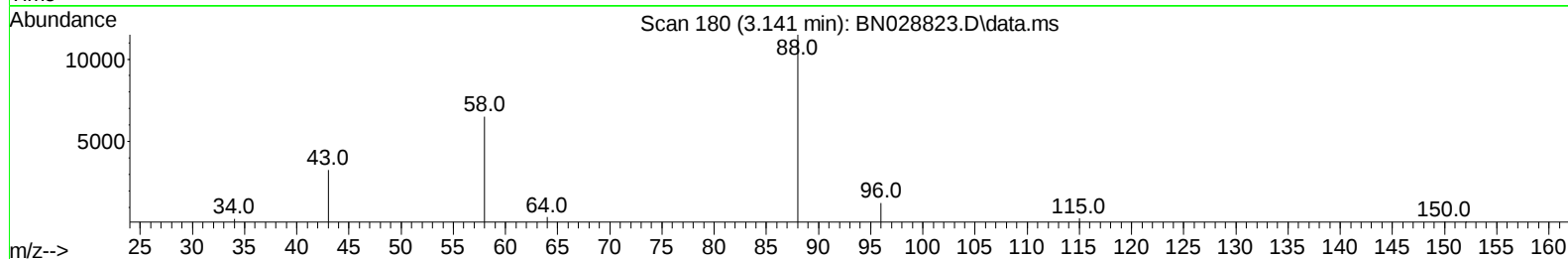
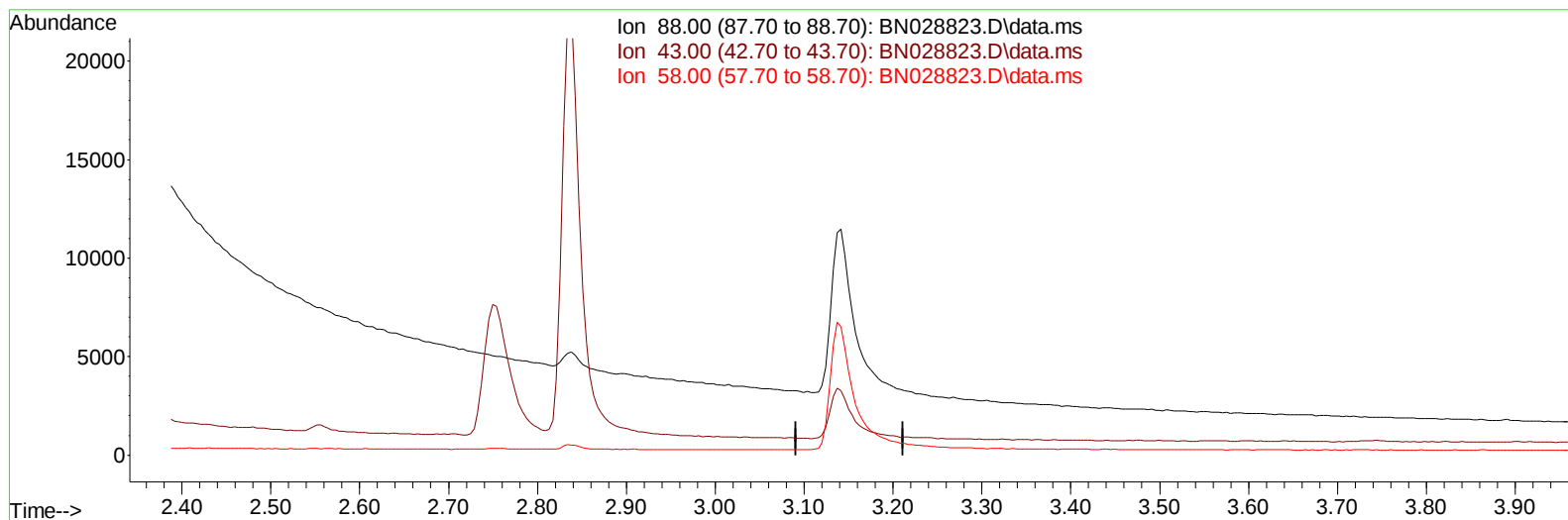
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
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TIC: BN028823.D\data.ms

(2) 1,4-Dioxane

3.141min (-3.141) 0.00 ng/u1

response 0

| Ion   | Exp%   | Act%  |
|-------|--------|-------|
| 88.00 | 100.00 | 0.00  |
| 43.00 | 41.10  | 0.00# |
| 58.00 | 52.30  | 0.00# |
| 0.00  | 0.00   | 0.00  |

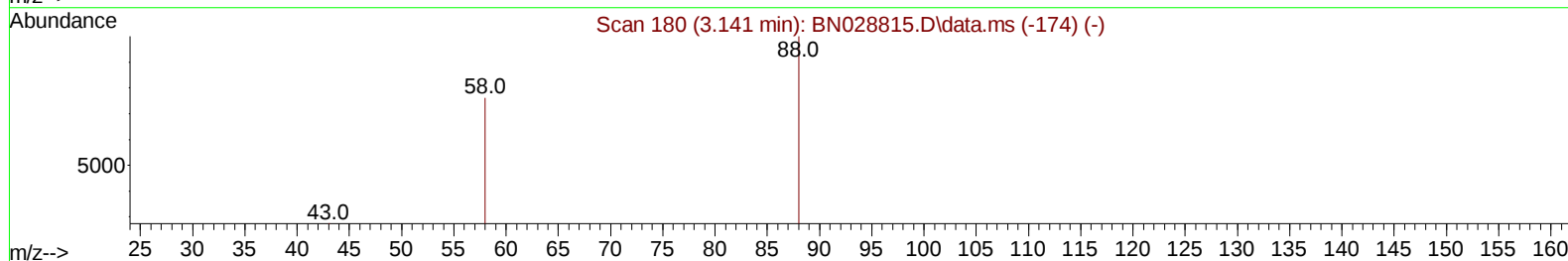
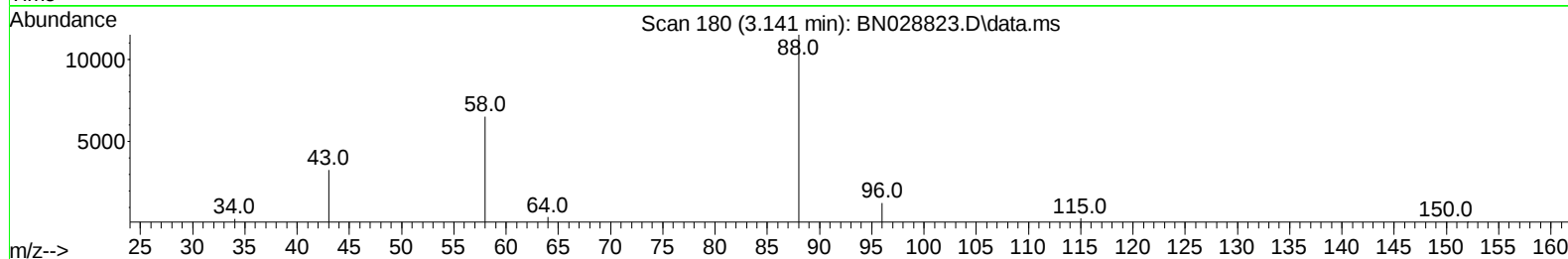
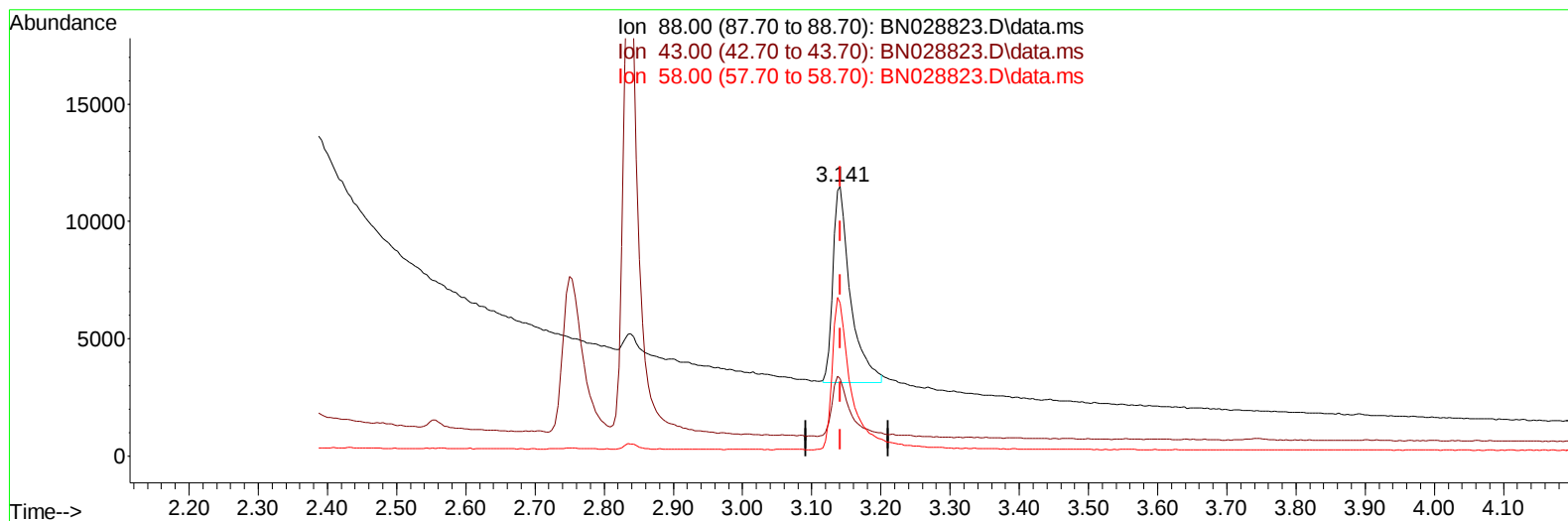
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
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 Supervised By :mohammad ahmed 11/25/2023



TIC: BN028823.D\data.ms

**(2) 1,4-Dioxane**

**3.141min (-0.000) 2.09 ng/ul m**

**response 14739**

| <b>Ion</b>   | <b>Exp%</b>   | <b>Act%</b>   |
|--------------|---------------|---------------|
| <b>88.00</b> | <b>100.00</b> | <b>100.00</b> |
| <b>43.00</b> | <b>41.10</b>  | <b>28.56#</b> |
| <b>58.00</b> | <b>52.30</b>  | <b>56.76</b>  |
| <b>0.00</b>  | <b>0.00</b>   | <b>0.00</b>   |

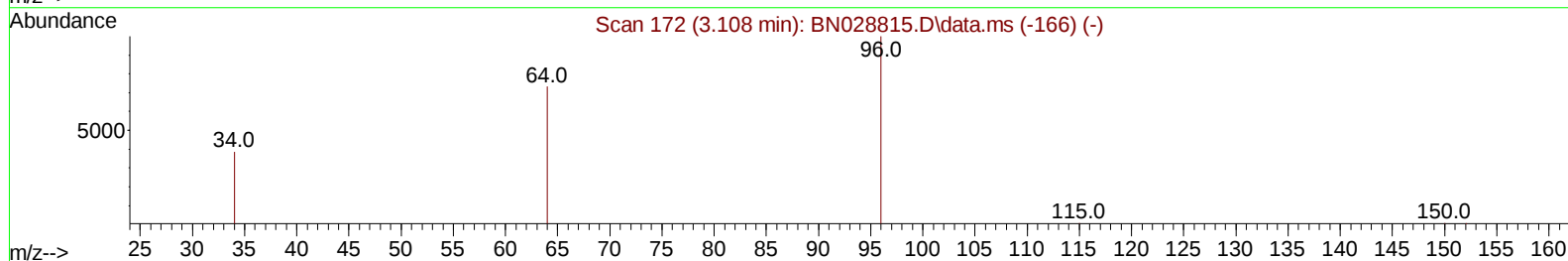
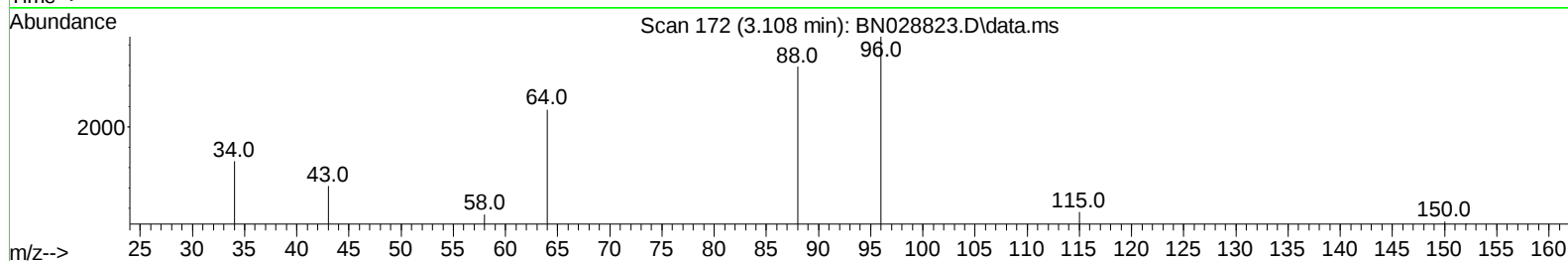
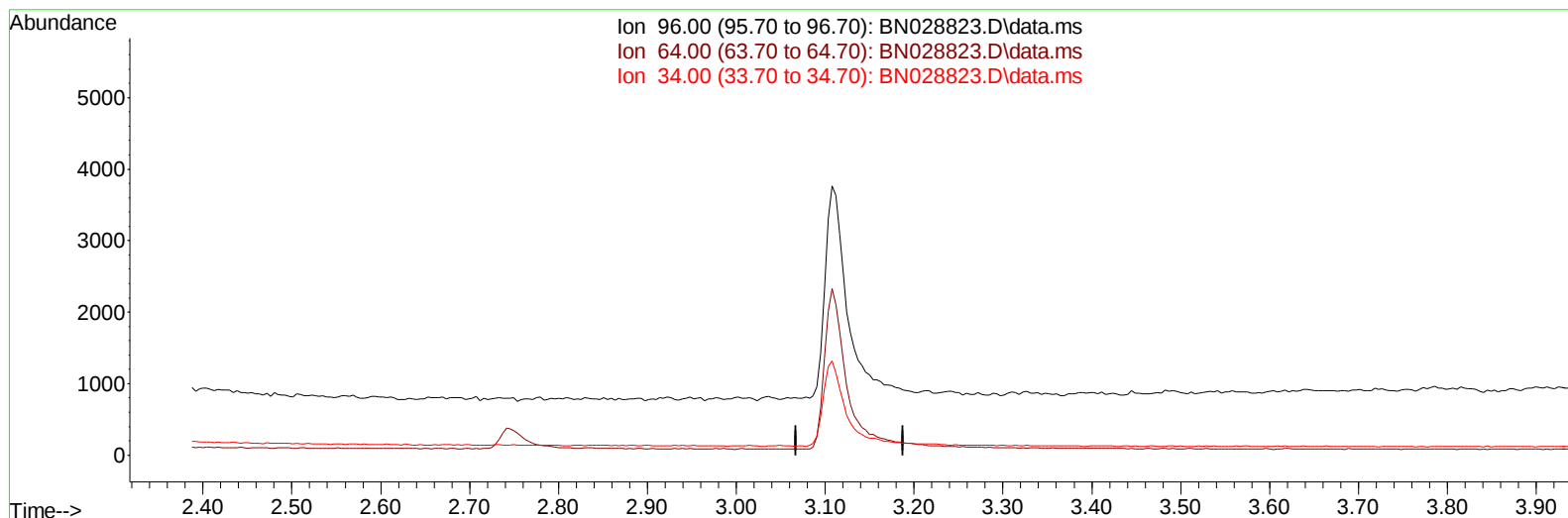
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
Data File : BN028823.D  
Acq On : 21 Nov 2023 22:40  
Operator : MA/JU  
Sample : PB156953BS  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
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TIC: BN028823.D\data.ms

(3) 1,4-Dioxane-d8 (S)

3.108min (-3.108) 0.00 ng/u1

response 0

| Ion   | Exp%   | Act%  |
|-------|--------|-------|
| 96.00 | 100.00 | 0.00  |
| 64.00 | 67.40  | 0.00# |
| 34.00 | 38.60  | 0.00# |
| 0.00  | 0.00   | 0.00  |

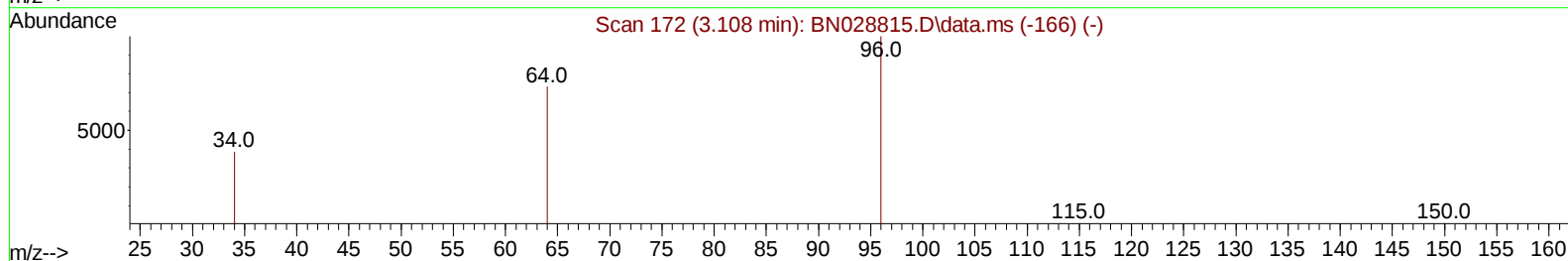
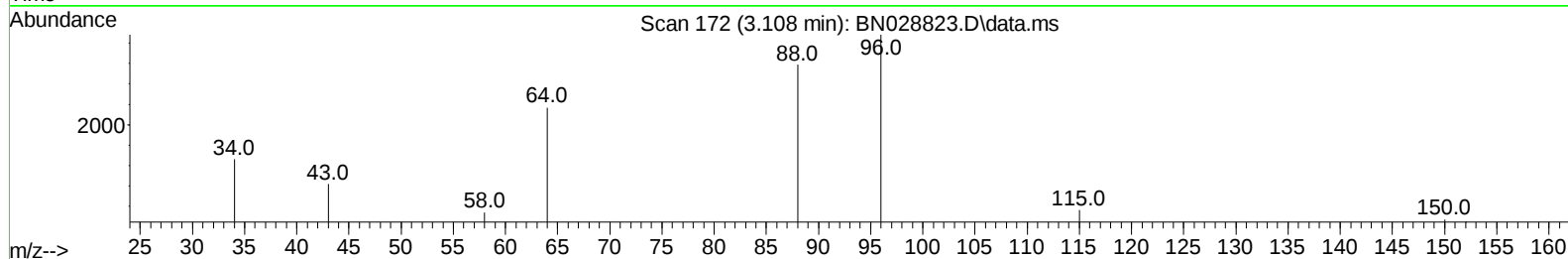
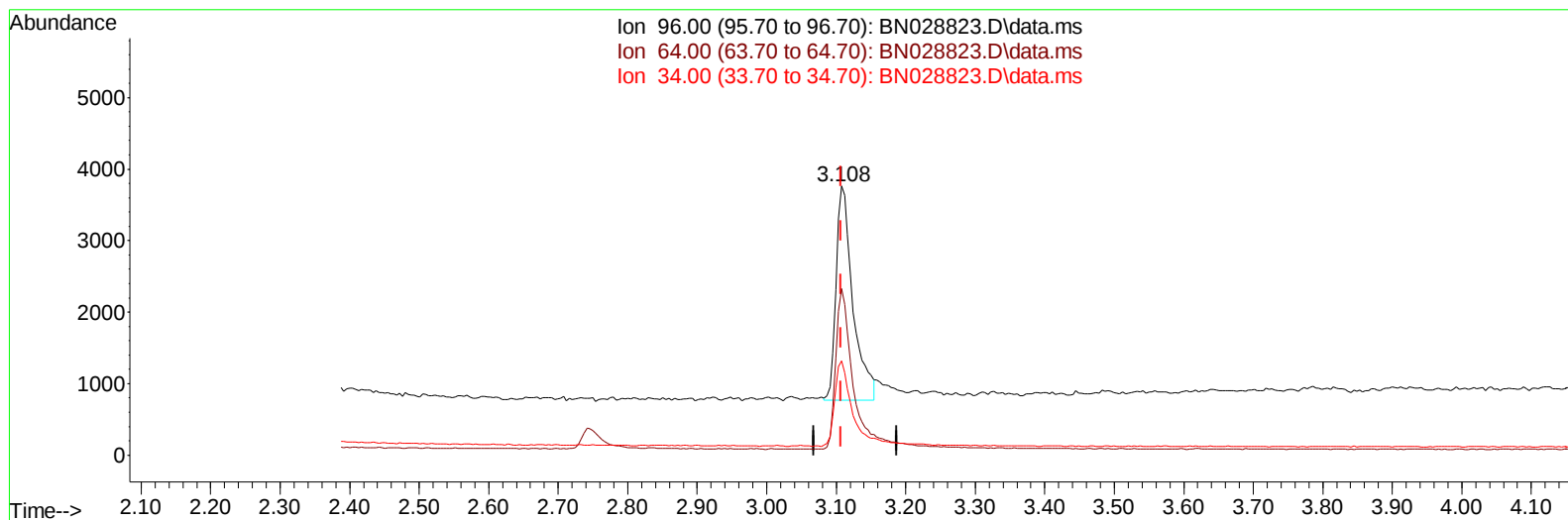
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
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 Supervised By :mohammad ahmed 11/25/2023



TIC: BN028823.D\data.ms

**(3) 1,4-Dioxane-d8 (S)**

**3.108min (-0.000) 0.79 ng/ul m**

**response 5027**

| Ion   | Exp%   | Act%   |
|-------|--------|--------|
| 96.00 | 100.00 | 100.00 |
| 64.00 | 67.40  | 62.01  |
| 34.00 | 38.60  | 35.06  |
| 0.00  | 0.00   | 0.00   |

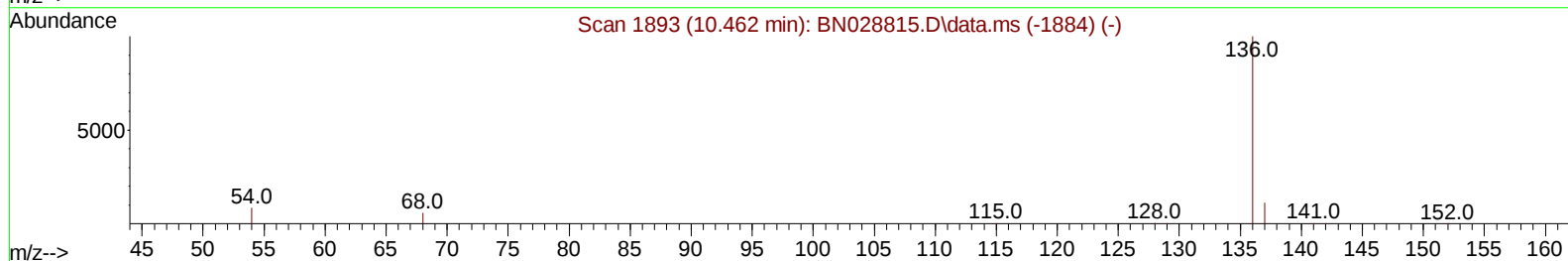
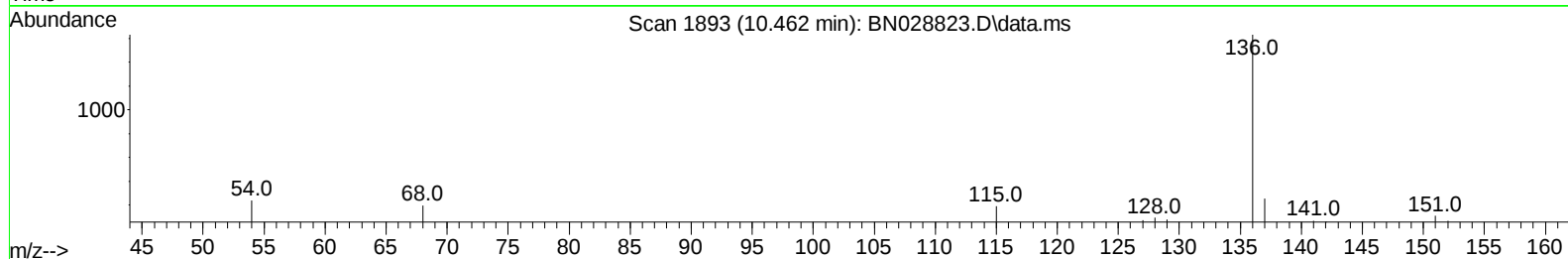
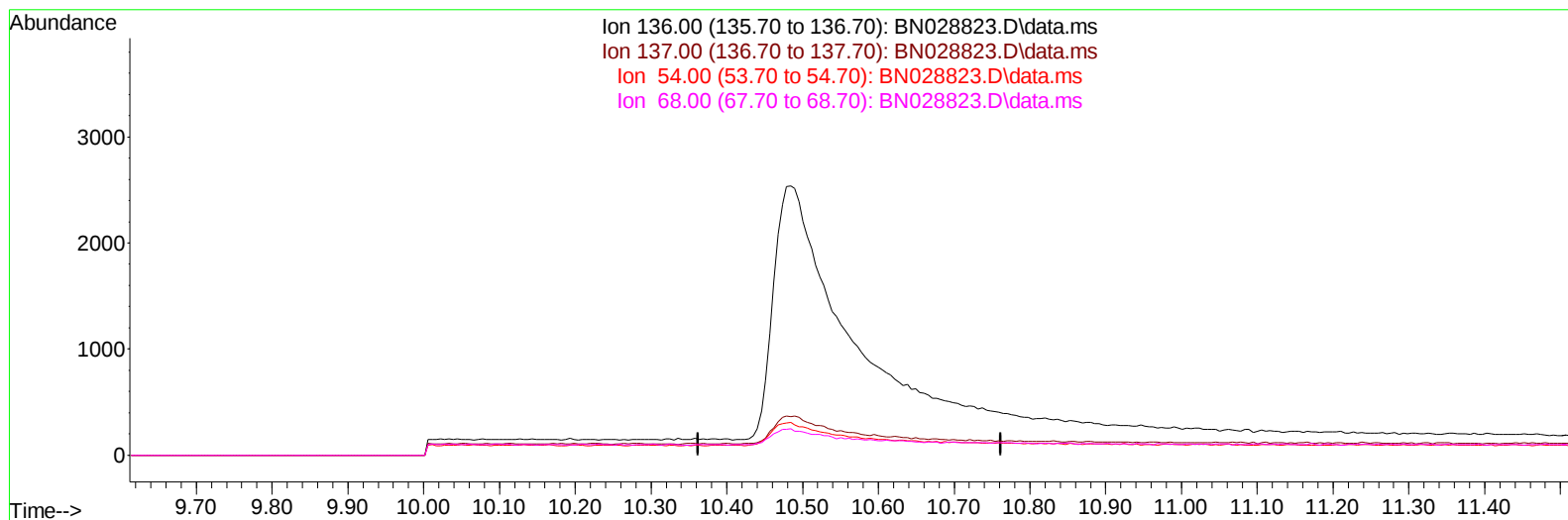
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Data File : BN028823.D  
Acq On : 21 Nov 2023 22:40  
Operator : MA/JU  
Sample : PB156953BS  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN110923.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Nov 21 23:49:43 2023  
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TIC: BN028823.D\data.ms

(4) Naphthalene-d8 (I)

10.462min (-10.462) 0.00 ng/u1

response 0

| Ion    | Exp%   | Act%  |
|--------|--------|-------|
| 136.00 | 100.00 | 0.00  |
| 137.00 | 11.20  | 0.00# |
| 54.00  | 9.00   | 0.00# |
| 68.00  | 7.10   | 0.00# |

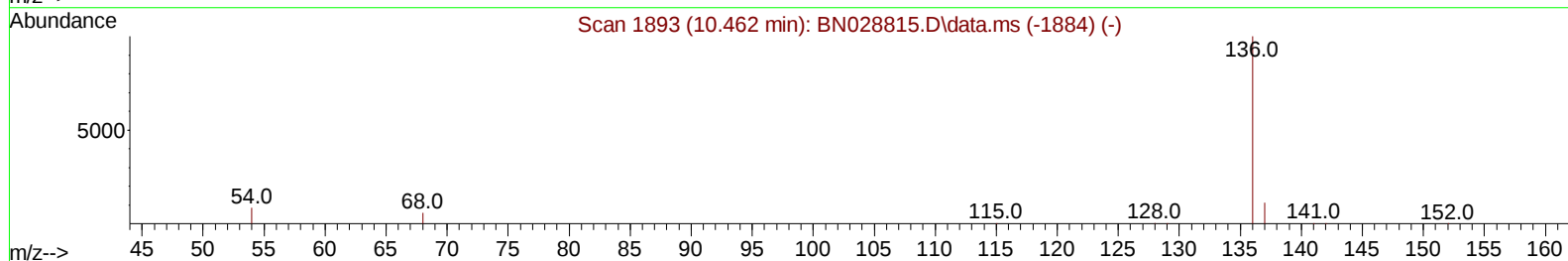
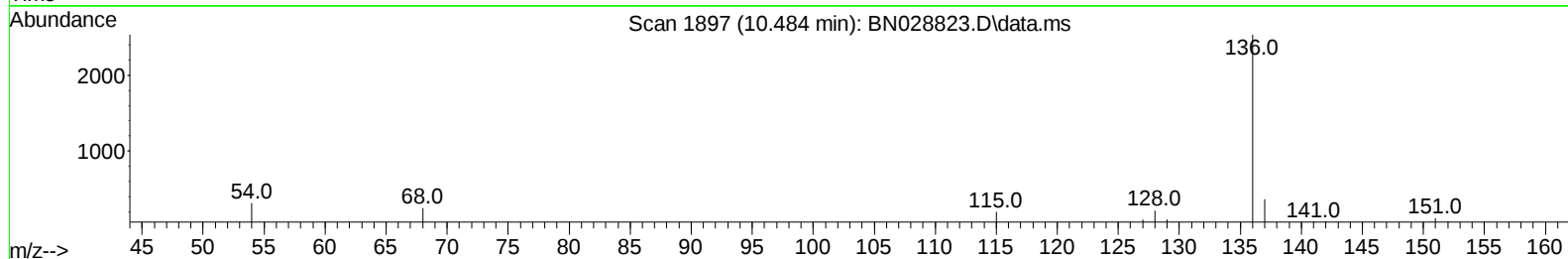
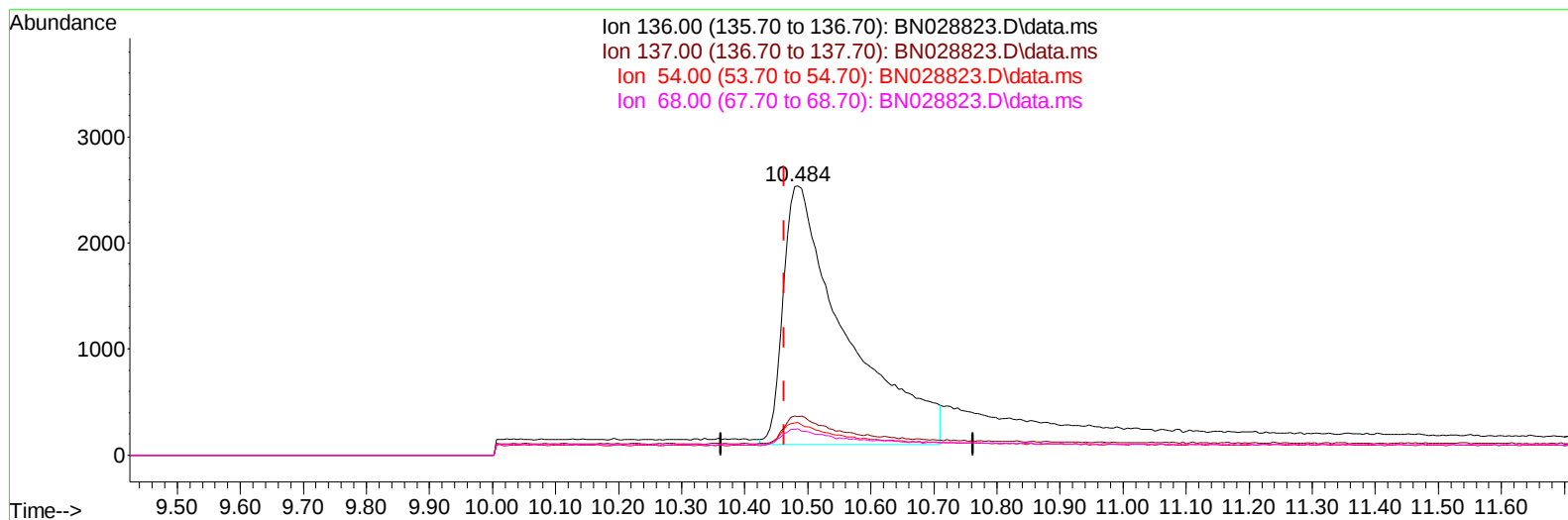
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Data File : BN028823.D  
Acq On : 21 Nov 2023 22:40  
Operator : MA/JU  
Sample : PB156953BS  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SLCS953

Manual IntegrationsAPPROVED

Quant Time: Nov 21 23:53:14 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN110923.M  
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QLast Update : Tue Nov 21 23:49:43 2023  
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TIC: BN028823.D\data.ms

(4) Naphthalene-d8 (I)

10.484min (+ 0.022) 0.40 ng/ul m

response 16917

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 136.00 | 100.00 | 100.00 |
| 137.00 | 11.20  | 14.31# |
| 54.00  | 9.00   | 12.22# |
| 68.00  | 7.10   | 9.78#  |

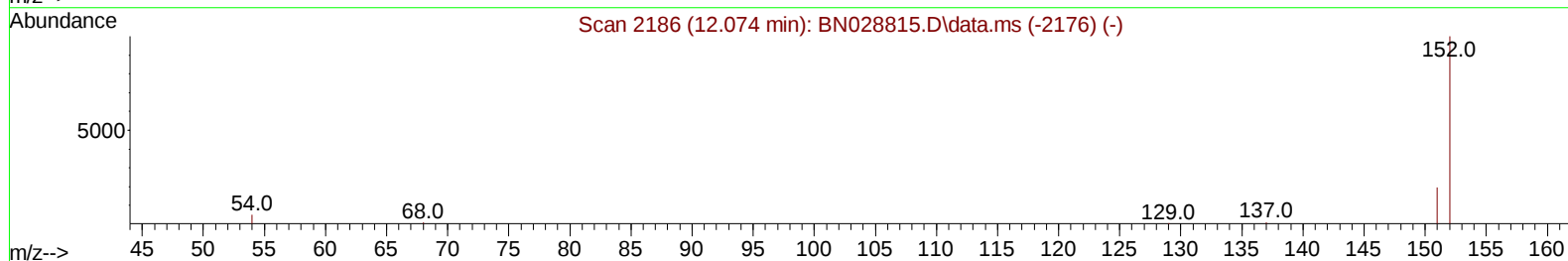
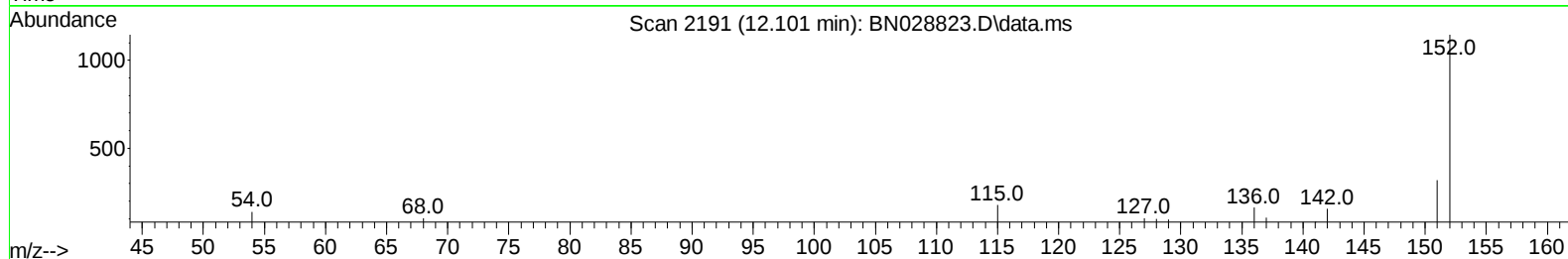
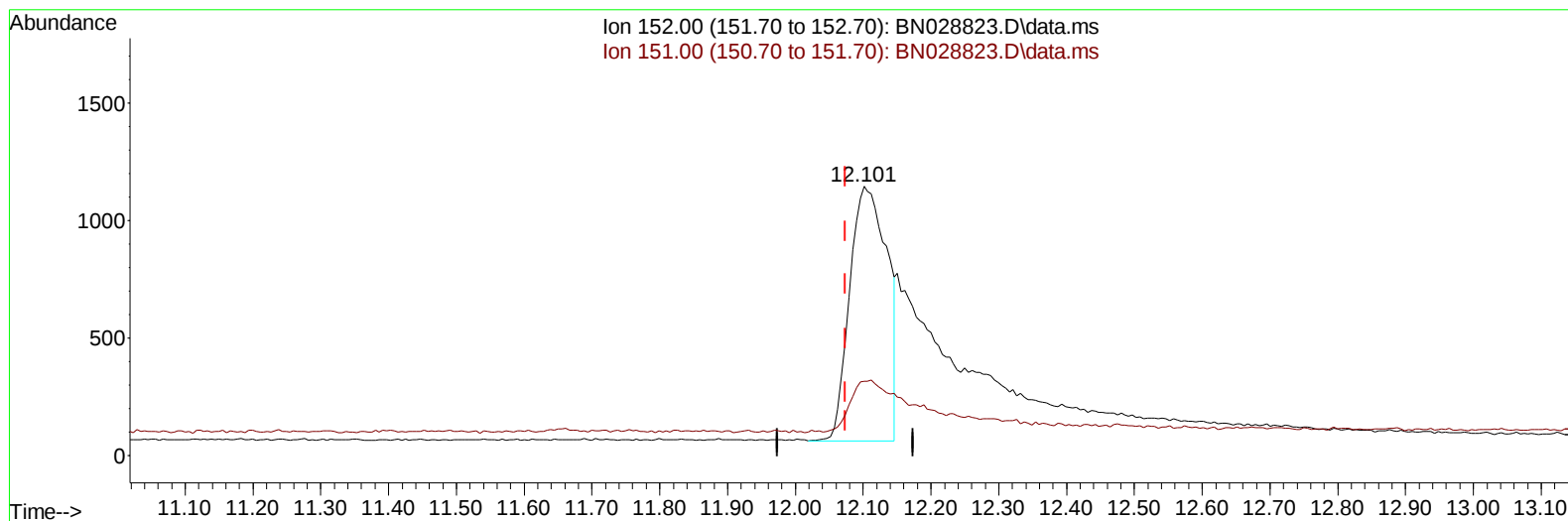
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 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

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TIC: BN028823.D\data.ms

**(6) 2-Methylnaphthalene-d10 (SURR)**

**12.101min (+ 0.027) 0.16 ng/u1**

**response 4141**

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 152.00 | 100.00 | 100.00 |
| 151.00 | 20.50  | 21.42  |
| 0.00   | 0.00   | 0.00   |
| 0.00   | 0.00   | 0.00   |

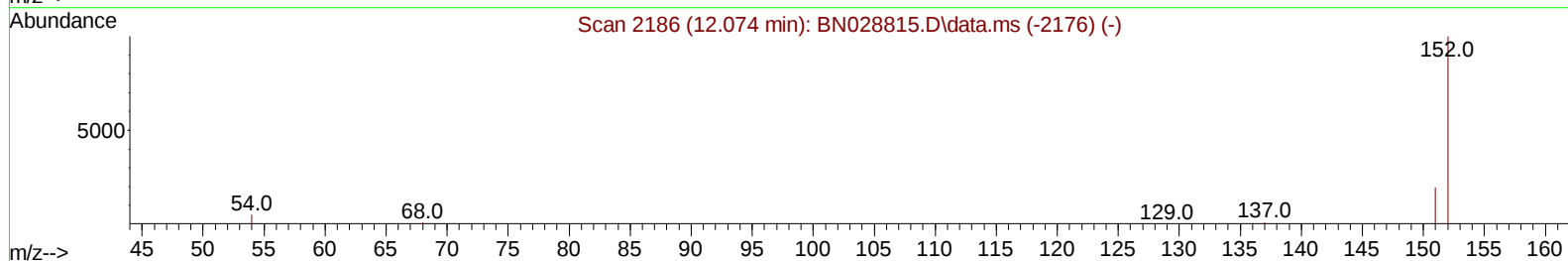
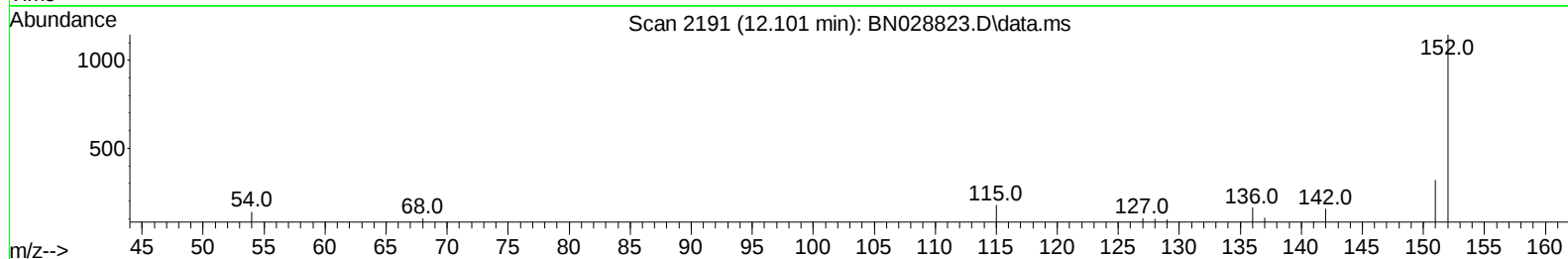
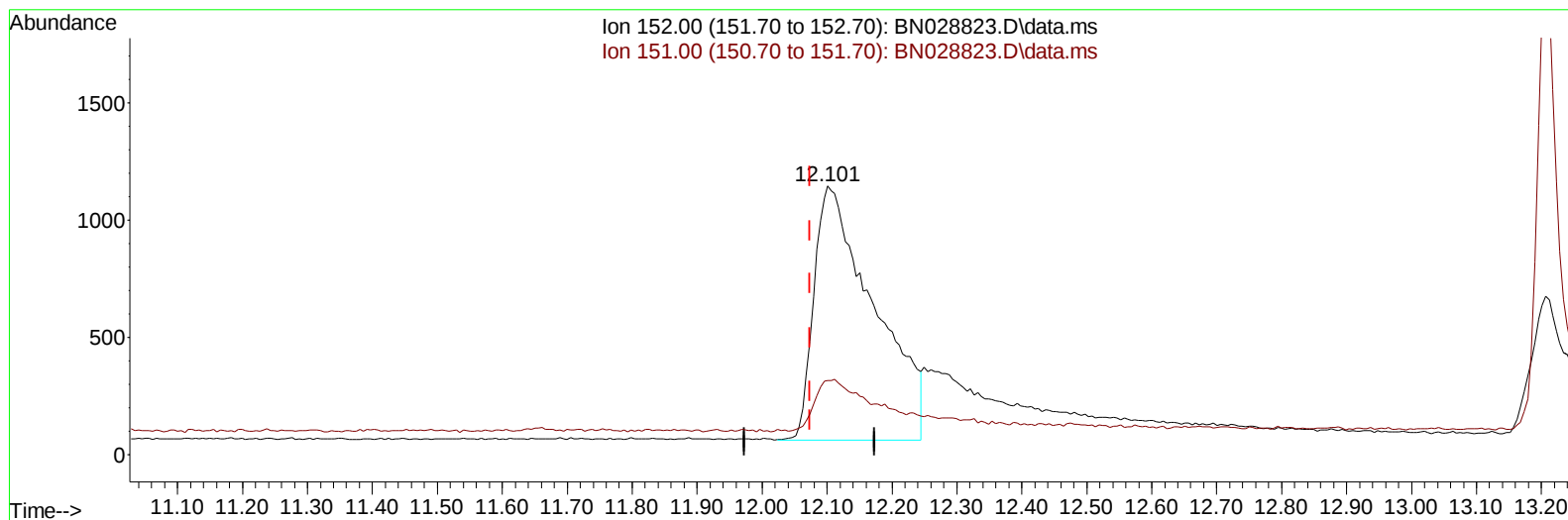
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

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Reviewed By :Yogesh Patel 11/23/2023  
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TIC: BN028823.D\data.ms

**(6) 2-Methylnaphthalene-d10 (SURR)**

12.101min (+ 0.027) 0.27 ng/ul m

response 6931

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 152.00 | 100.00 | 100.00 |
| 151.00 | 20.50  | 12.80# |
| 0.00   | 0.00   | 0.00   |
| 0.00   | 0.00   | 0.00   |

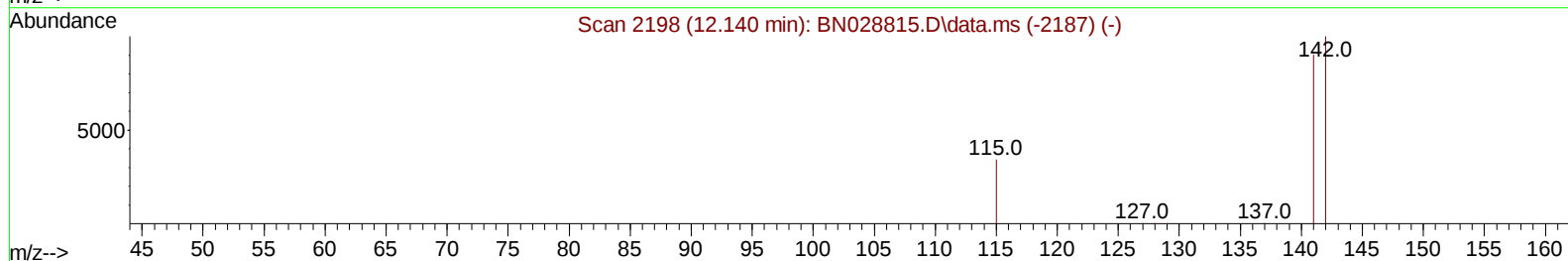
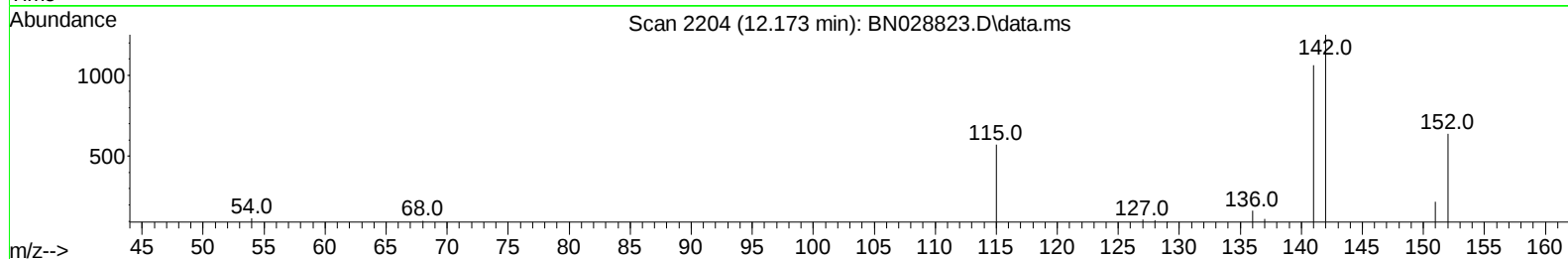
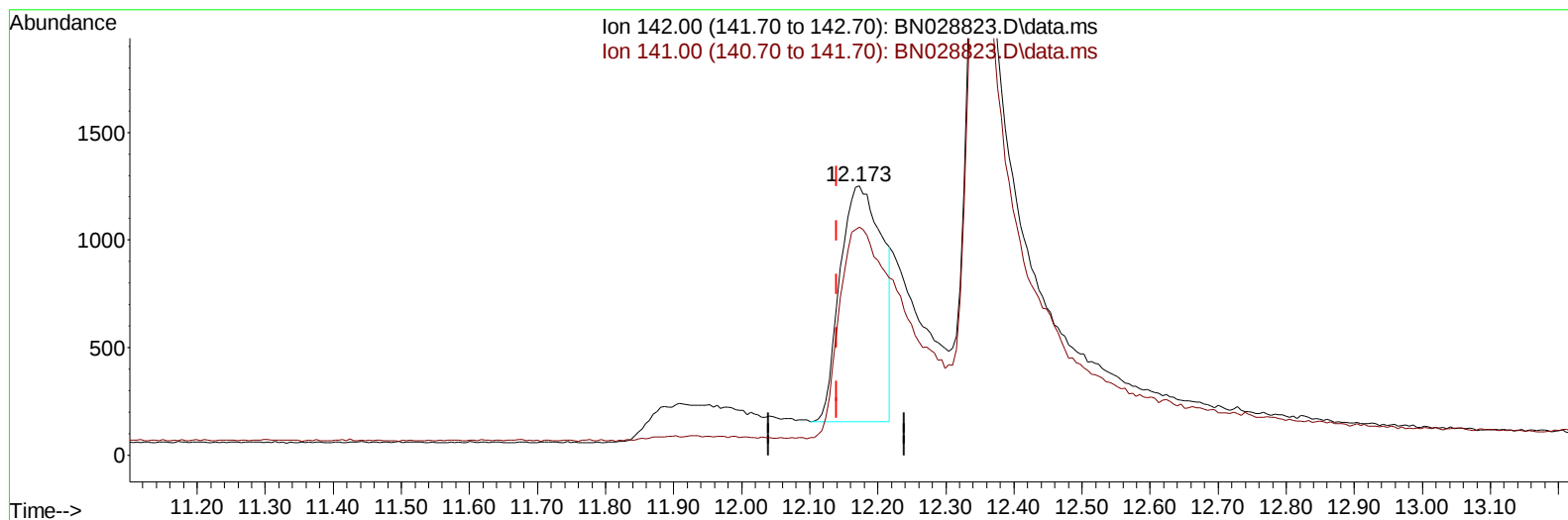
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
Data File : BN028823.D  
Acq On : 21 Nov 2023 22:40  
Operator : MA/JU  
Sample : PB156953BS  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SLCS953

## Manual IntegrationsAPPROVED

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TIC: BN028823.D\data.ms

## (7) 2-Methylnaphthalene

12.173min (+ 0.033) 0.15 ng/u1

response 4742

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 142.00 | 100.00 | 100.00 |
| 141.00 | 88.50  | 92.24  |
| 0.00   | 0.00   | 0.00   |
| 0.00   | 0.00   | 0.00   |

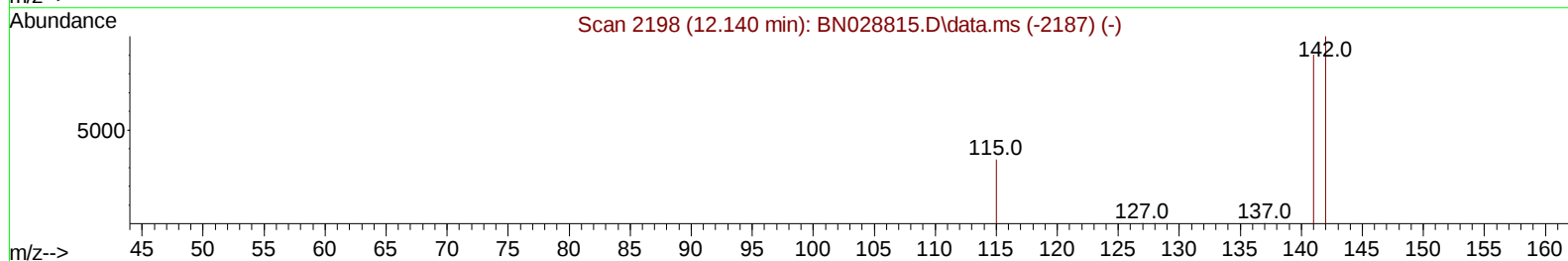
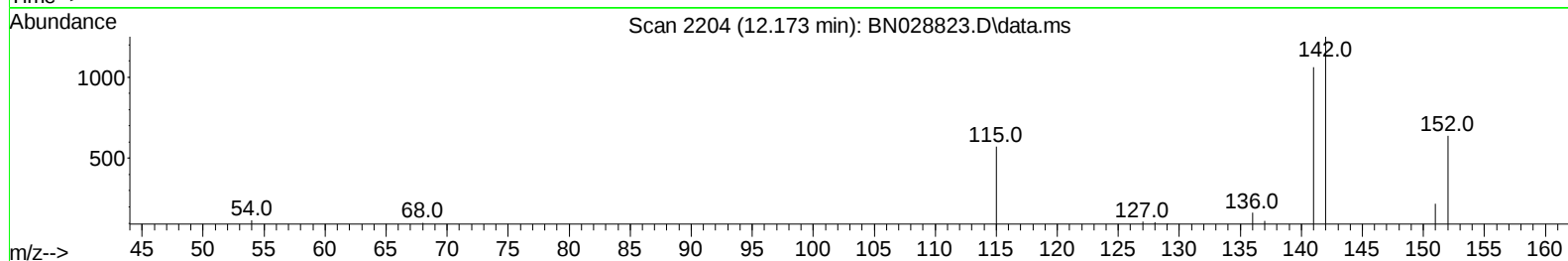
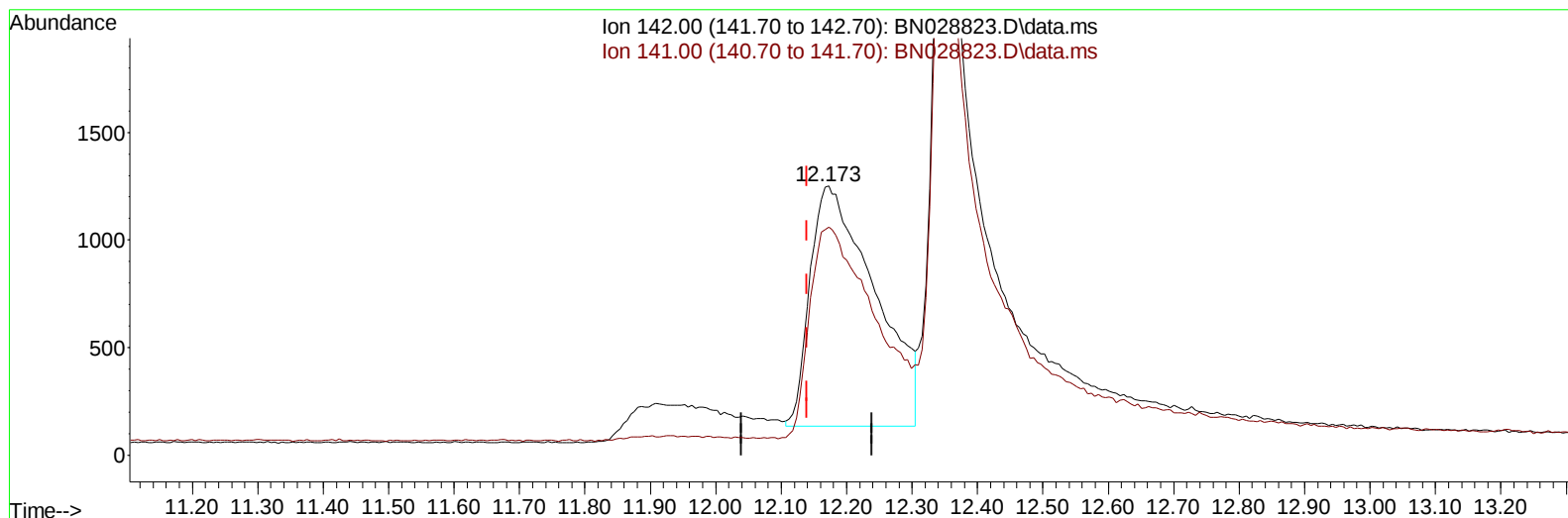
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
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 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

Manual IntegrationsAPPROVED

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 Supervised By :mohammad ahmed 11/25/2023



TIC: BN028823.D\data.ms

(7) 2-Methylnaphthalene

12.173min (+ 0.033) 0.25 ng/ul m

response 7664

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 142.00 | 100.00 | 100.00 |
| 141.00 | 88.50  | 57.07# |
| 0.00   | 0.00   | 0.00   |
| 0.00   | 0.00   | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN112223\  
 Data File : BN028823.D  
 Acq On : 21 Nov 2023 22:40  
 Operator : MA/JU  
 Sample : PB156953BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SLCS953

## Manual IntegrationsAPPROVED

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Quant Time: Nov 21 23:53:14 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\SFAM-EPA-SIM-BN110923.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Nov 21 23:49:43 2023  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|--------|------|----------|-------|--------|----------|
| -----                       |        |      |          |       |        |          |
| Internal Standards          |        |      |          |       |        |          |
| 1) 1,4-Dichlorobenzene-d4   | 7.829  | 152  | 5761m    | 0.400 | ng/ul  | 0.09     |
| 4) Naphthalene-d8           | 10.484 | 136  | 16917m   | 0.400 | ng/ul  | 0.02     |
| 9) Acenaphthene-d10         | 14.303 | 164  | 11625    | 0.400 | ng/ul  | 0.00     |
| 13) Phenanthrene-d10        | 17.069 | 188  | 18738    | 0.400 | ng/ul  | 0.00     |
| 17) Chrysene-d12            | 21.273 | 240  | 18018    | 0.400 | ng/ul  | 0.00     |
| 23) Perylene-d12            | 23.547 | 264  | 16983    | 0.400 | ng/ul  | # 0.00   |
| System Monitoring Compounds |        |      |          |       |        |          |
| 3) 1,4-Dioxane-d8           | 3.108  | 96   | 5027m    | 0.790 | ng/ul  | 0.00     |
| 6) 2-Methylnaphthalene-d10  | 12.101 | 152  | 6931m    | 0.272 | ng/ul  | 0.03     |
| 18) Fluoranthene-d10        | 19.099 | 212  | 22724    | 0.392 | ng/ul  | 0.00     |
| Target Compounds            |        |      |          |       |        |          |
|                             |        |      |          |       | Qvalue |          |
| 2) 1,4-Dioxane              | 3.141  | 88   | 14739m   | 2.094 | ng/ul  |          |
| 5) Naphthalene              | 10.534 | 128  | 13400    | 0.283 | ng/ul# | 94       |
| 7) 2-Methylnaphthalene      | 12.173 | 142  | 7664m    | 0.245 | ng/ul  |          |
| 8) 1-Methylnaphthalene      | 12.349 | 142  | 8326     | 0.263 | ng/ul  | 99       |
| 10) Acenaphthylene          | 14.030 | 152  | 18715    | 0.323 | ng/ul  | 97       |
| 11) Acenaphthene            | 14.363 | 153  | 14741    | 0.345 | ng/ul  | 98       |
| 12) Fluorene                | 15.376 | 166  | 13465    | 0.271 | ng/ul  | 98       |
| 14) Pentachlorophenol       | 16.723 | 266  | 3735     | 0.831 | ng/ul  | 100      |
| 15) Phenanthrene            | 17.107 | 178  | 21088    | 0.366 | ng/ul  | 97       |
| 16) Anthracene              | 17.217 | 178  | 13543    | 0.257 | ng/ul# | 93       |
| 19) Fluoranthene            | 19.127 | 202  | 27734    | 0.362 | ng/ul  | 99       |
| 20) Pyrene                  | 19.490 | 202  | 31612    | 0.398 | ng/ul  | 98       |
| 21) Benzo(a)anthracene      | 21.258 | 228  | 19340    | 0.271 | ng/ul  | 98       |
| 22) Chrysene                | 21.311 | 228  | 24021    | 0.345 | ng/ul  | 99       |
| 24) Benzo(b)fluoranthene    | 22.860 | 252  | 21528    | 0.338 | ng/ul  | 89       |
| 25) Benzo(k)fluoranthene    | 22.903 | 252  | 26272    | 0.394 | ng/ul# | 92       |
| 26) Benzo(a)pyrene          | 23.447 | 252  | 21961    | 0.365 | ng/ul# | 78       |
| 27) Indeno(1,2,3-cd)pyrene  | 25.881 | 276  | 25022    | 0.375 | ng/ul# | 98       |
| 28) Dibenzo(a,h)anthracene  | 25.911 | 278  | 18963    | 0.355 | ng/ul  | 95       |
| 29) Benzo(g,h,i)perylene    | 26.589 | 276  | 21641    | 0.395 | ng/ul  | 99       |
| -----                       |        |      |          |       |        |          |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

