

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF120823\  
 Data File : BF136473.D  
 Acq On : 08 Dec 2023 18:09  
 Operator : CG\JU  
 Sample : 05600-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TOPSOIL-LKWD-DENALI-1

Quant Time: Dec 08 18:28:20 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF120523.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 06 09:40:27 2023  
 Response via : Initial Calibration

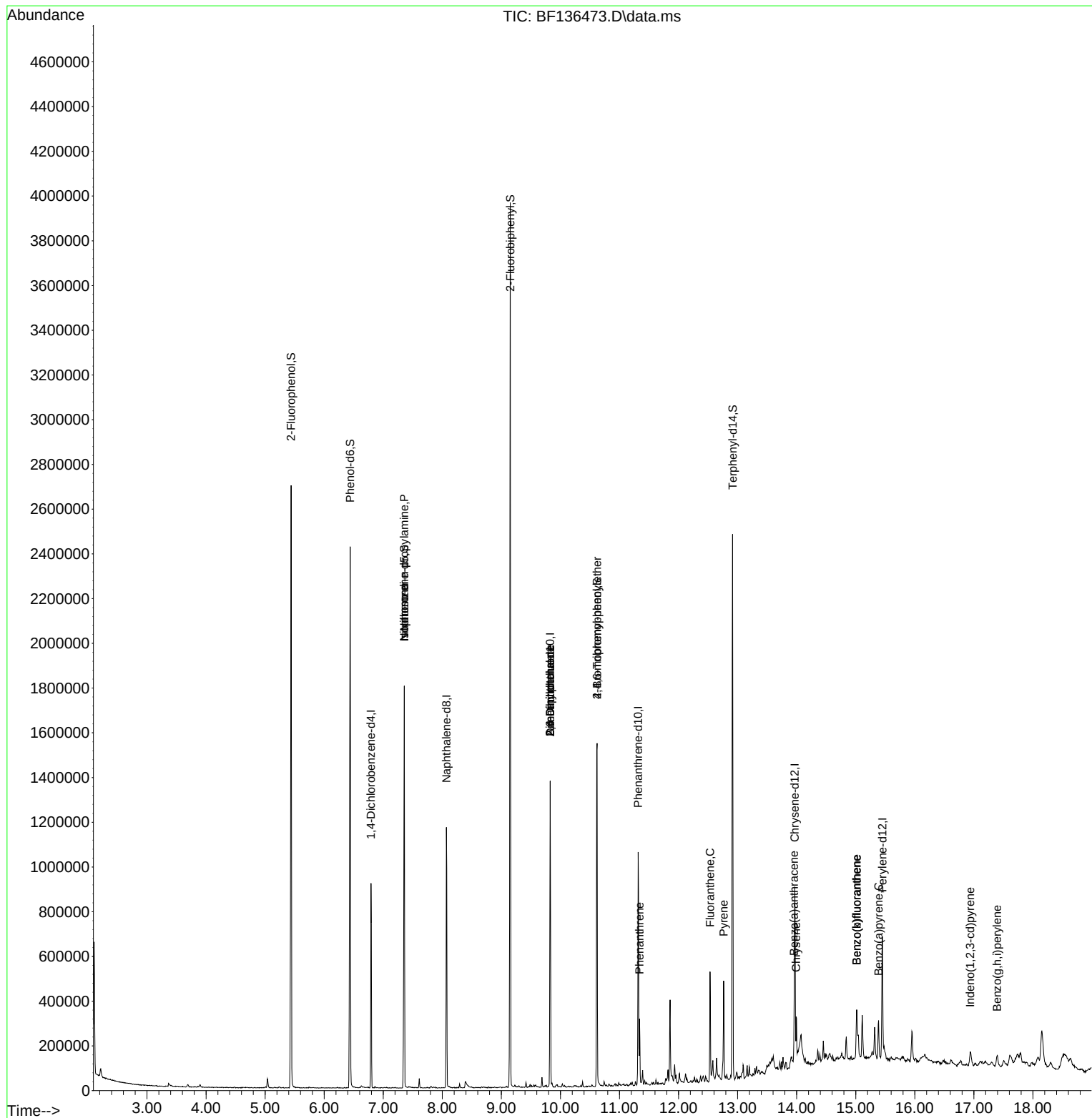
| Compound                      | R.T.   | QIon | Response | Conc      | Units | Dev(Min) |
|-------------------------------|--------|------|----------|-----------|-------|----------|
| -----                         |        |      |          |           |       |          |
| Internal Standards            |        |      |          |           |       |          |
| 1) 1,4-Dichlorobenzene-d4     | 6.792  | 152  | 134165   | 20.000    | ng    | -0.01    |
| 21) Naphthalene-d8            | 8.069  | 136  | 517451   | 20.000    | ng    | -0.01    |
| 39) Acenaphthene-d10          | 9.827  | 164  | 244379   | 20.000    | ng    | -0.01    |
| 64) Phenanthrene-d10          | 11.316 | 188  | 374464   | 20.000    | ng    | -0.01    |
| 76) Chrysene-d12              | 13.968 | 240  | 237829   | 20.000    | ng    | #-0.01   |
| 86) Perylene-d12              | 15.451 | 264  | 249134   | 20.000    | ng    | 0.00     |
|                               |        |      |          |           |       |          |
| System Monitoring Compounds   |        |      |          |           |       |          |
| 5) 2-Fluorophenol             | 5.439  | 112  | 747967   | 82.333    | ng    | 0.00     |
| 7) Phenol-d6                  | 6.439  | 99   | 913152   | 80.564    | ng    | 0.00     |
| 23) Nitrobenzene-d5           | 7.357  | 82   | 553754   | 57.853    | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol      | 10.622 | 330  | 209308   | 69.463    | ng    | -0.01    |
| 45) 2-Fluorobiphenyl          | 9.151  | 172  | 1118155  | 62.433    | ng    | -0.01    |
| 79) Terphenyl-d14             | 12.915 | 244  | 863818   | 47.873    | ng    | 0.00     |
|                               |        |      |          |           |       |          |
| Target Compounds              |        |      |          |           |       | Qvalue   |
| 9) Benzaldehyde               | 6.345  | 77   | 377      | Below Cal |       | 96       |
| 19) n-Nitroso-di-n-propyla... | 7.357  | 70   | 72536    | 11.094 ng | #     | 76       |
| 25) Isophorone                | 7.357  | 82   | 553749   | 32.201 ng | #     | 65       |
| 50) Dimethylphthalate         | 9.827  | 163  | 49325    | 2.741 ng  | #     | 1        |
| 51) 2,6-Dinitrotoluene        | 9.827  | 165  | 31404    | 7.758 ng  | #     | 29       |
| 57) 2,4-Dinitrotoluene        | 9.827  | 165  | 31404    | 5.865 ng  | #     | 28       |
| 67) 4-Bromophenyl-phenylether | 10.622 | 248  | 12838    | 2.949 ng  | #     | 1        |
| 71) Phenanthrene              | 11.339 | 178  | 99808    | 4.849 ng  |       | 97       |
| 75) Fluoranthene              | 12.533 | 202  | 186432   | 8.643 ng  |       | 96       |
| 77) Benzidine                 | 12.915 | 184  | 10496    | Below Cal | #     | 94       |
| 78) Pyrene                    | 12.763 | 202  | 173585   | 7.453 ng  |       | 97       |
| 81) Benzo(a)anthracene        | 13.957 | 228  | 90444    | 5.460 ng  |       | 96       |
| 83) Chrysene                  | 13.992 | 228  | 86017    | 5.277 ng  |       | 98       |
| 87) Indeno(1,2,3-cd)pyrene    | 16.939 | 276  | 45159    | 2.609 ng  |       | 96       |
| 88) Benzo(b)fluoranthene      | 15.015 | 252  | 158970   | 9.333 ng  |       | 97       |
| 89) Benzo(k)fluoranthene      | 15.015 | 252  | 158970   | 9.903 ng  |       | 97       |
| 90) Benzo(a)pyrene            | 15.386 | 252  | 80990    | 5.757 ng  |       | 99       |
| 92) Benzo(g,h,i)perylene      | 17.392 | 276  | 42670    | 2.932 ng  |       | 95       |
| -----                         |        |      |          |           |       |          |

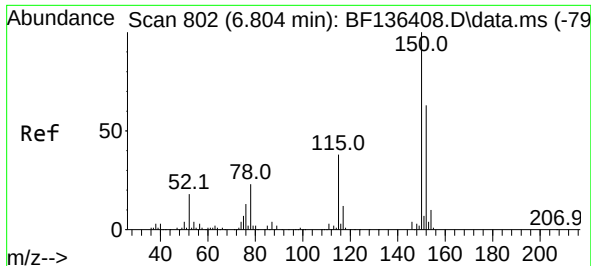
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_F\Data\BF120823\  
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Quant Time: Dec 08 18:28:20 2023  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\8270-BF120523.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Dec 06 09:40:27 2023  
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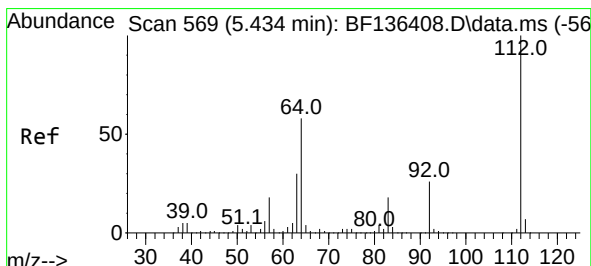
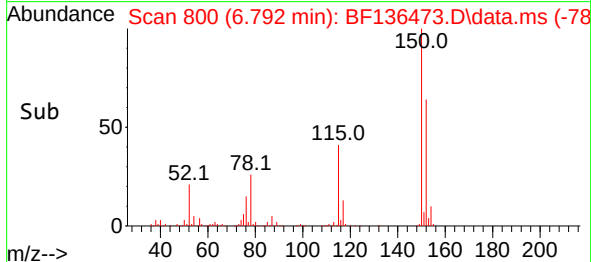
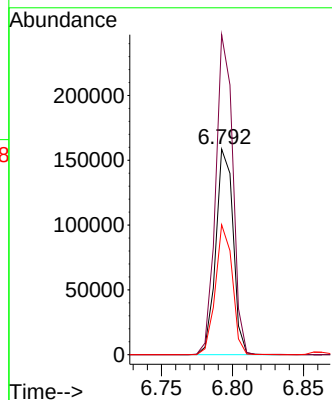
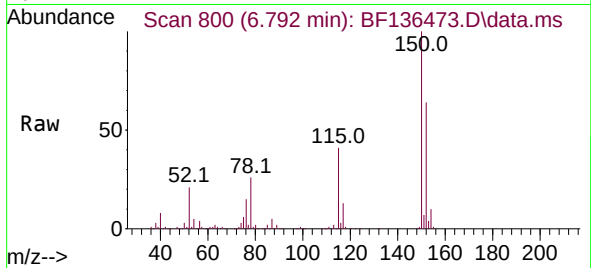




#1  
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.792 min Scan# 80  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

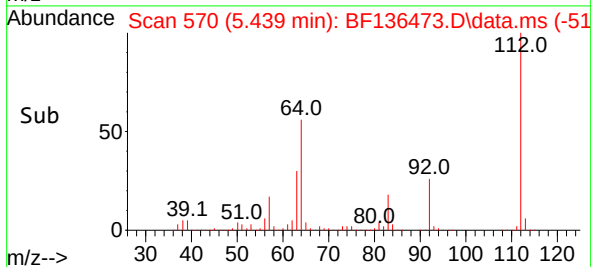
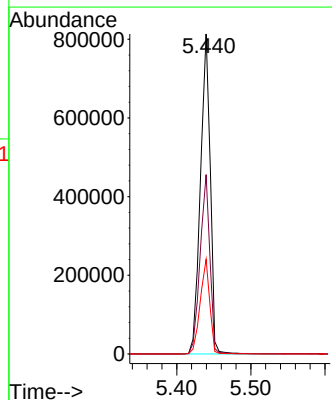
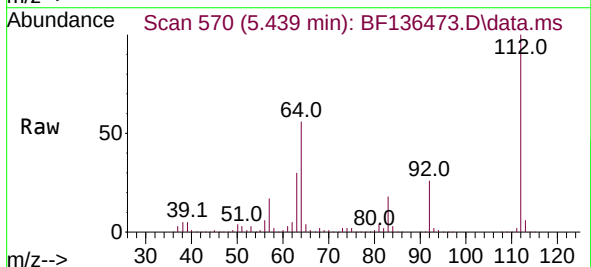
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

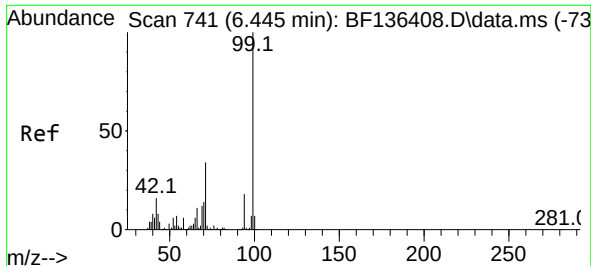
Tgt Ion:152 Resp: 134165  
Ion Ratio Lower Upper  
152 100  
150 155.6 126.4 189.6  
115 63.1 48.2 72.4



#5  
2-Fluorophenol  
Concen: 82.333 ng  
RT: 5.439 min Scan# 570  
Delta R.T. 0.006 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:112 Resp: 747967  
Ion Ratio Lower Upper  
112 100  
64 56.0 46.5 69.7  
63 29.6 23.9 35.9

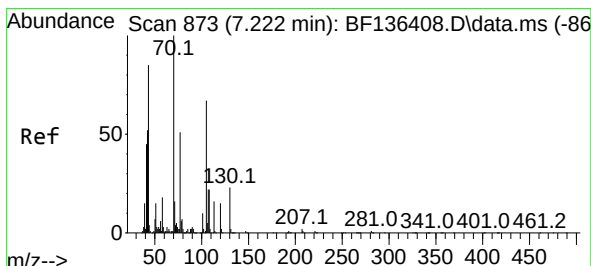
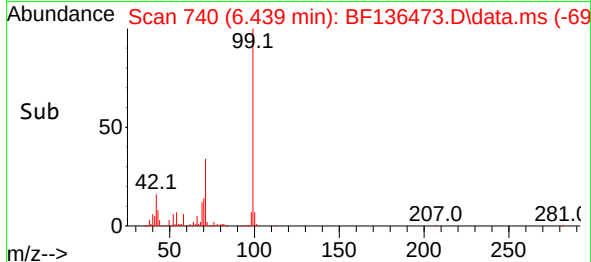
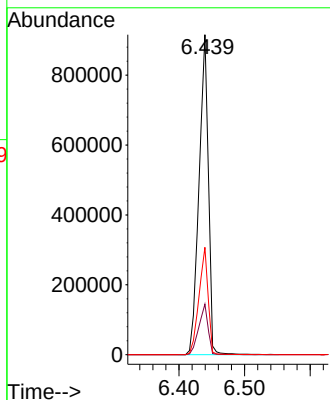
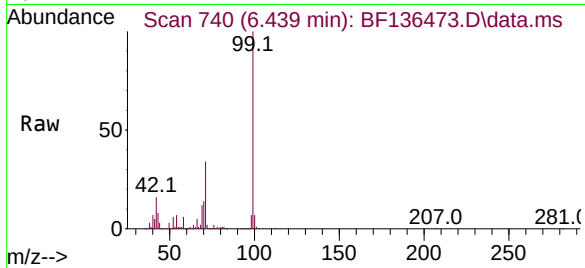




#7  
Phenol-d6  
Concen: 80.564 ng  
RT: 6.439 min Scan# 741  
Delta R.T. -0.006 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

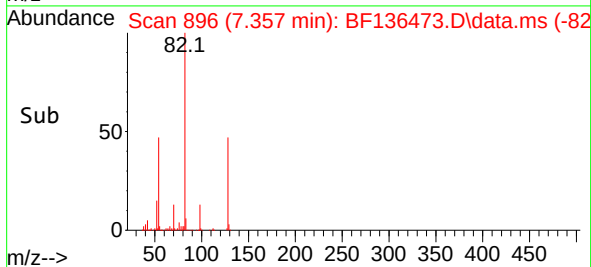
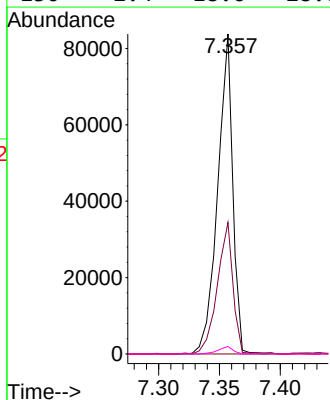
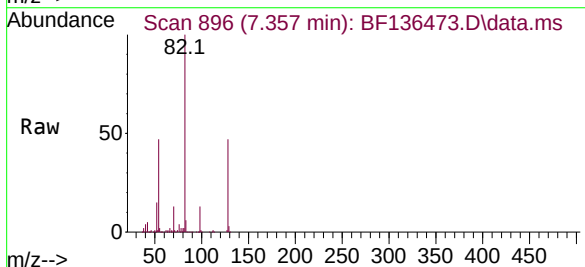
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

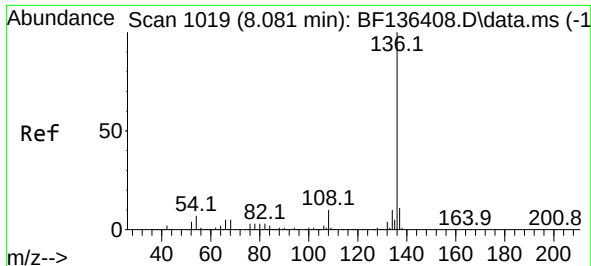
Tgt Ion: 99 Resp: 913152  
Ion Ratio Lower Upper  
99 100  
42 15.8 12.8 19.2  
71 33.6 27.0 40.4



#19  
n-Nitroso-di-n-propylamine  
Concen: 11.094 ng  
RT: 7.357 min Scan# 896  
Delta R.T. 0.135 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion: 70 Resp: 72536  
Ion Ratio Lower Upper  
70 100  
42 41.1 41.4 62.0#  
101 0.0 8.2 12.4#  
130 2.4 18.6 28.0#



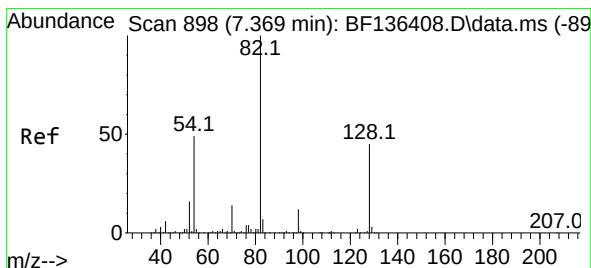
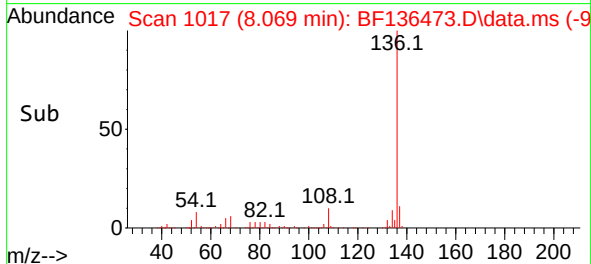
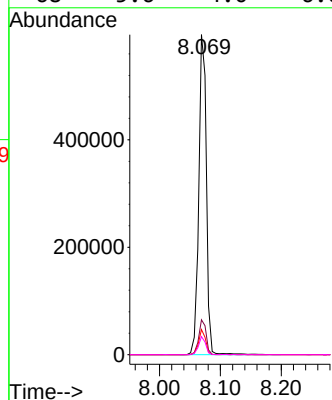
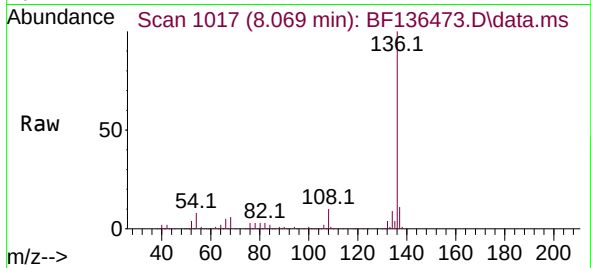


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.069 min Scan# 1017  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

Tgt Ion:136 Resp: 517451

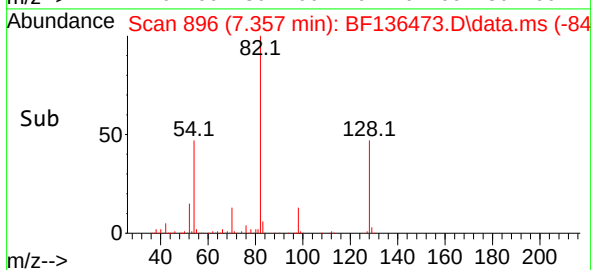
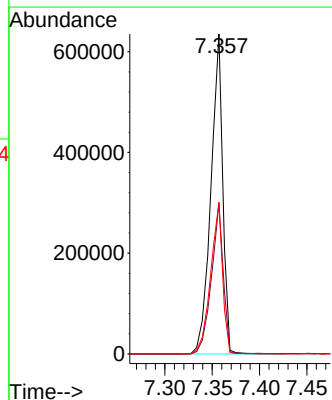
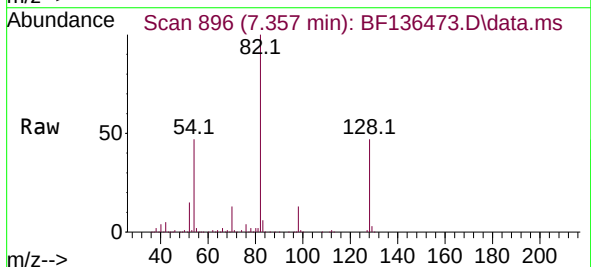
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 10.9  | 8.6   | 12.8  |
| 54  | 7.9   | 5.7   | 8.5   |
| 68  | 5.6   | 4.0   | 6.0   |

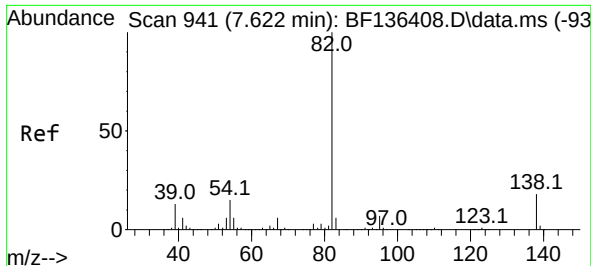


#23  
Nitrobenzene-d5  
Concen: 57.853 ng  
RT: 7.357 min Scan# 896  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion: 82 Resp: 553754

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 82  | 100   |       |       |
| 128 | 47.0  | 36.3  | 54.5  |
| 54  | 47.4  | 39.0  | 58.6  |

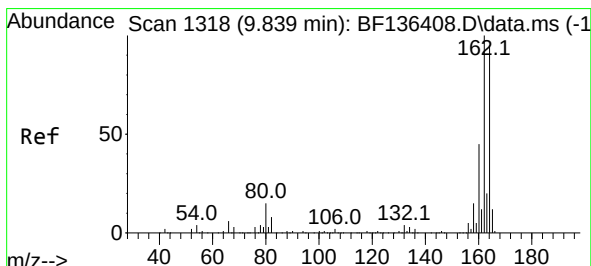
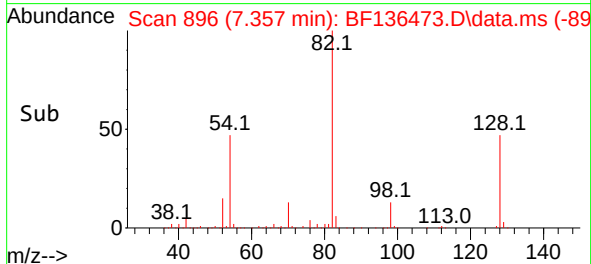
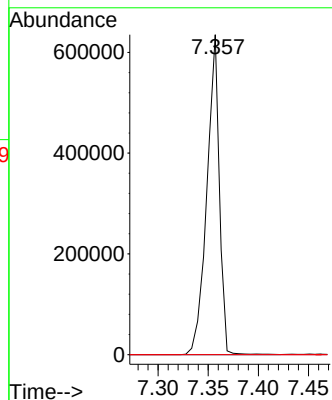
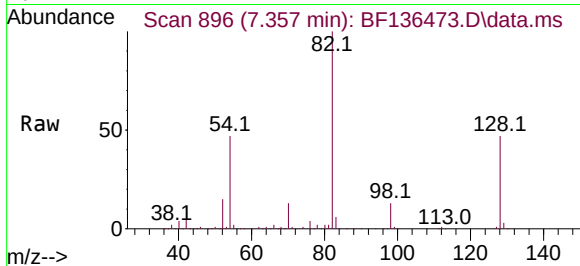




#25  
Isophorone  
Concen: 32.201 ng  
RT: 7.357 min Scan# 89  
Delta R.T. -0.265 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

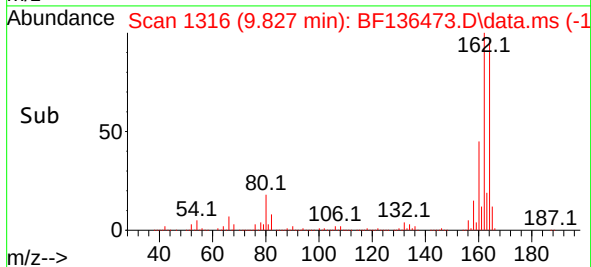
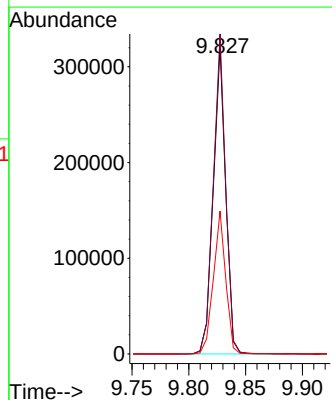
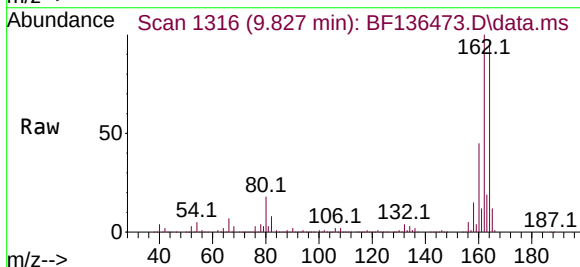
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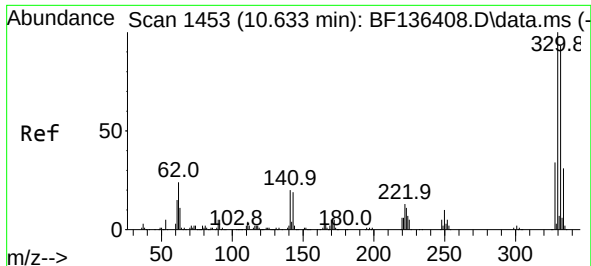
Tgt Ion: 82 Resp: 553749  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.7 8.5#  
138 0.0 14.5 21.7#



#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.827 min Scan# 1316  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:164 Resp: 244379  
Ion Ratio Lower Upper  
164 100  
162 104.2 84.4 126.6  
160 46.6 37.6 56.4





#42

2,4,6-Tribromophenol

Concen: 69.463 ng

RT: 10.622 min Scan# 1451

Delta R.T. -0.012 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Instrument :

BNA\_F

ClientSampleId :

TOPSOIL-LKWD-DENALI-1

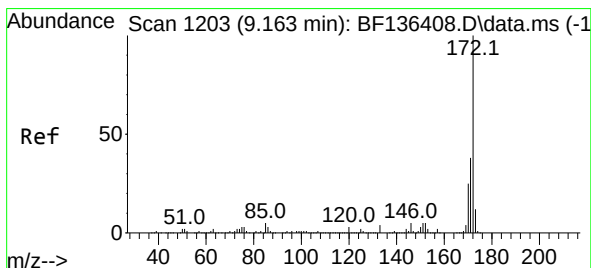
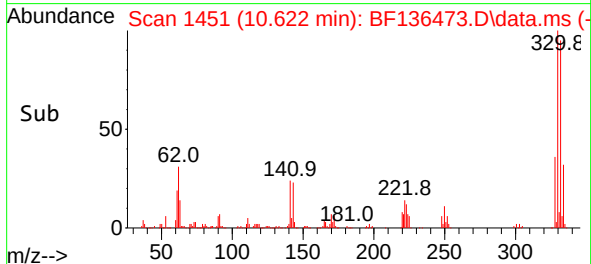
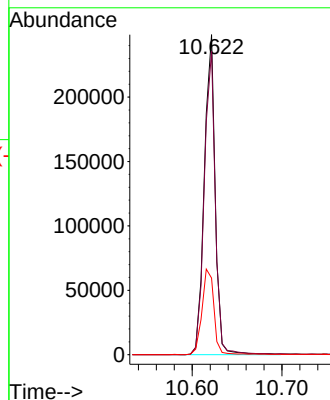
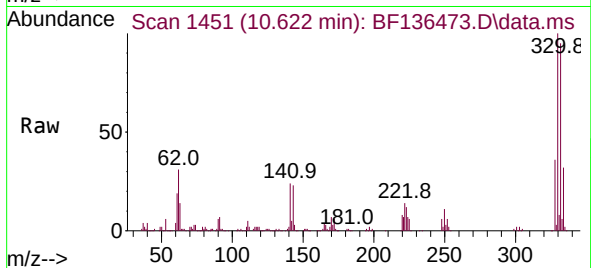
Tgt Ion:330 Resp: 209308

Ion Ratio Lower Upper

330 100

332 97.0 76.4 114.6

141 29.5 23.4 35.2



#45

2-Fluorobiphenyl

Concen: 62.433 ng

RT: 9.151 min Scan# 1201

Delta R.T. -0.012 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

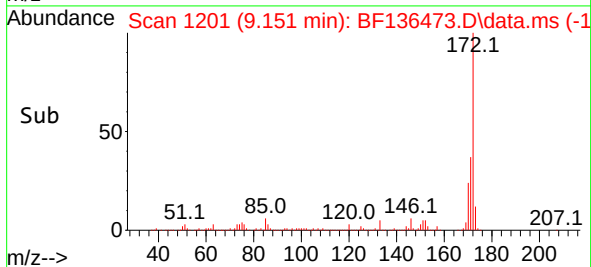
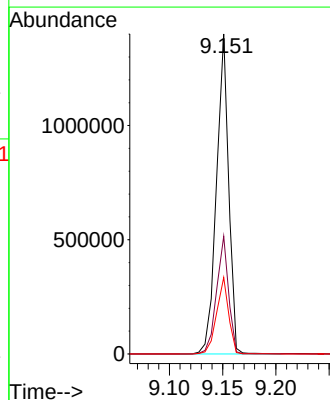
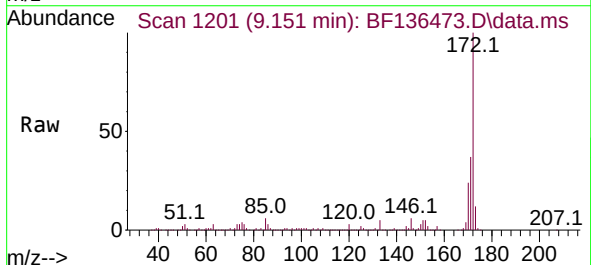
Tgt Ion:172 Resp: 1118155

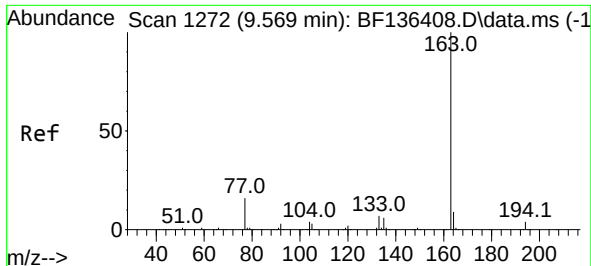
Ion Ratio Lower Upper

172 100

171 36.8 30.5 45.7

170 23.9 19.9 29.9

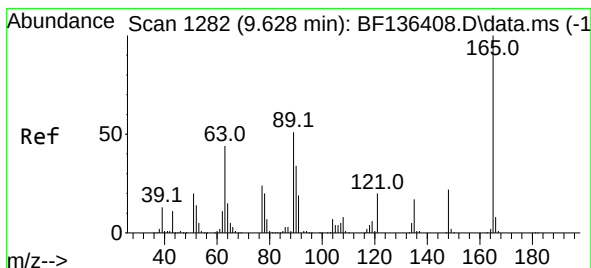
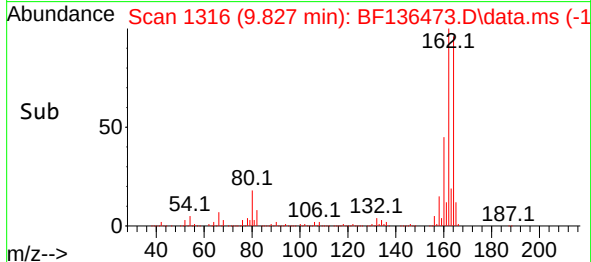
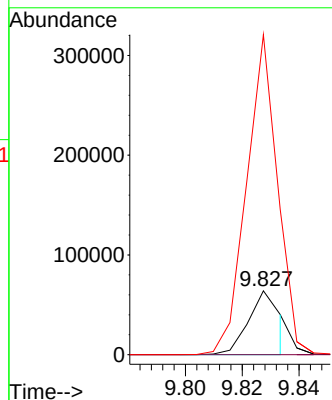
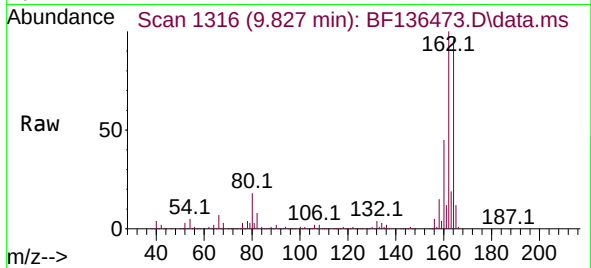




#50  
Dimethylphthalate  
Concen: 2.741 ng  
RT: 9.827 min Scan# 1316  
Delta R.T. 0.259 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

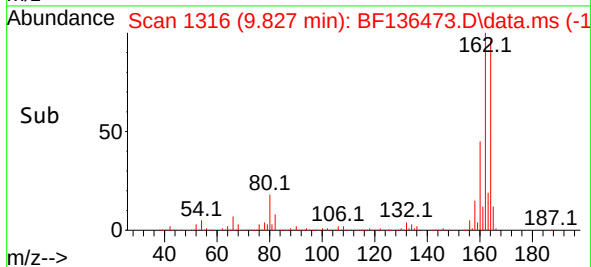
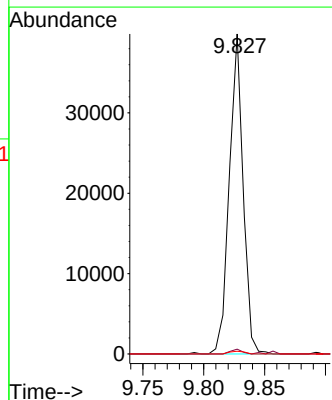
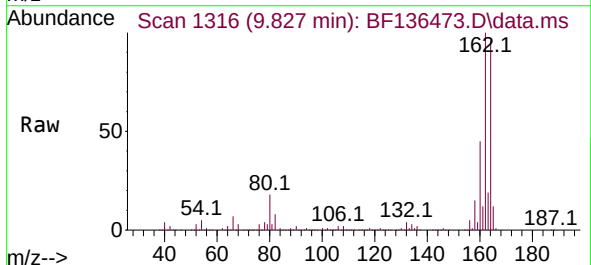
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

Tgt Ion:163 Resp: 49325  
Ion Ratio Lower Upper  
163 100  
194 0.0 3.0 4.6#  
164 501.0 7.4 11.2#

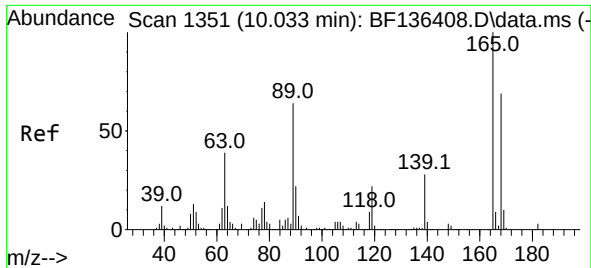


#51  
2,6-Dinitrotoluene  
Concen: 7.758 ng  
RT: 9.827 min Scan# 1316  
Delta R.T. 0.200 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:165 Resp: 31404  
Ion Ratio Lower Upper  
165 100  
63 1.5 40.4 60.6#  
89 0.9 40.6 60.8#



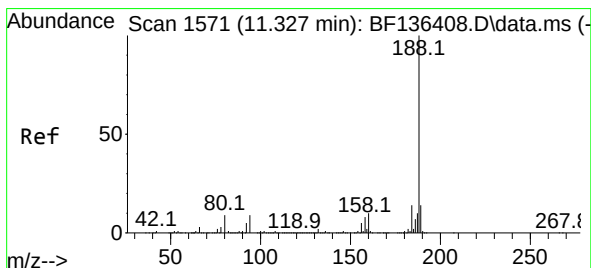
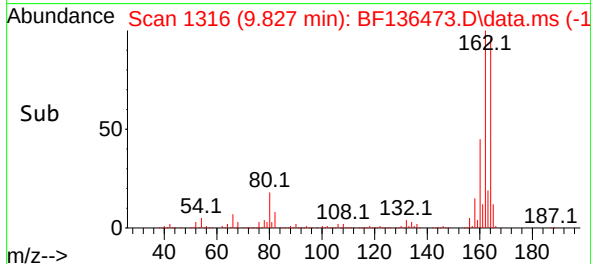
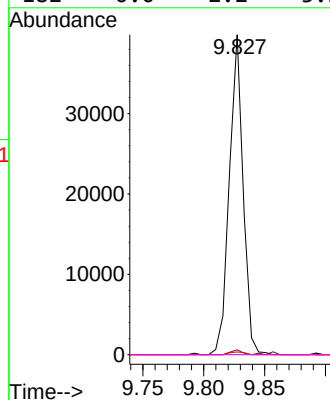
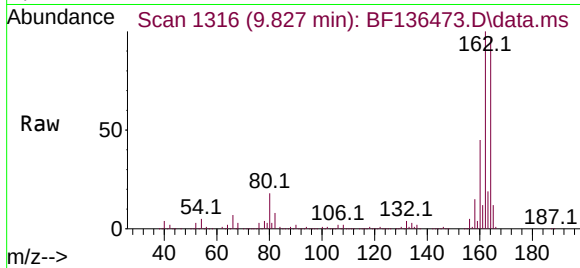




#57  
2,4-Dinitrotoluene  
Concen: 5.865 ng  
RT: 9.827 min Scan# 11  
Delta R.T. -0.206 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

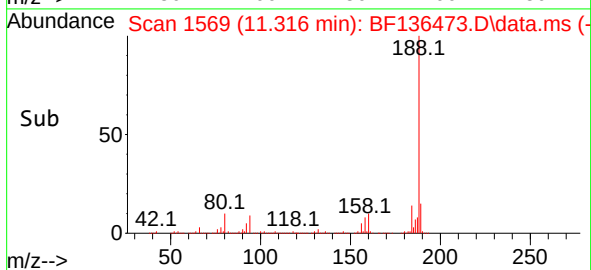
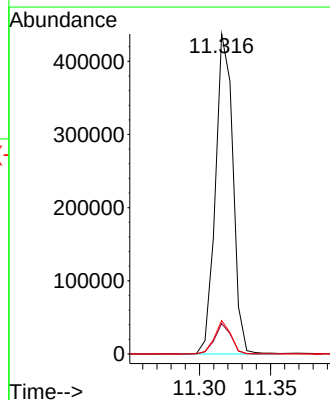
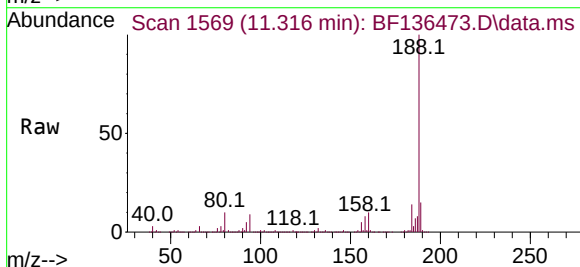
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

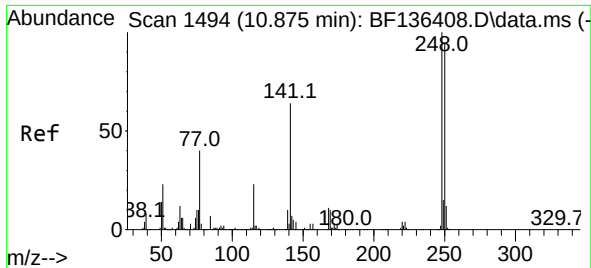
Tgt Ion:165 Resp: 31404  
Ion Ratio Lower Upper  
165 100  
63 1.5 31.4 47.2#  
89 0.9 51.7 77.5#  
182 0.0 2.2 3.2#



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.316 min Scan# 1569  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:188 Resp: 374464  
Ion Ratio Lower Upper  
188 100  
94 9.5 7.2 10.8  
80 10.4 7.2 10.8

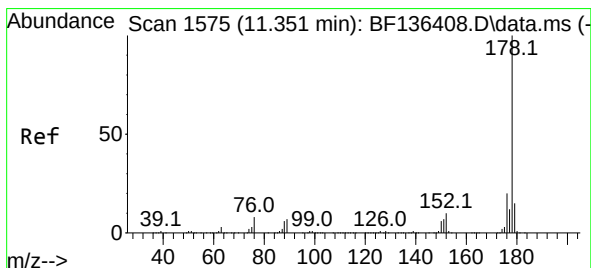
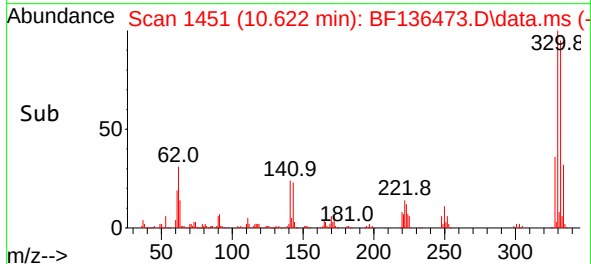
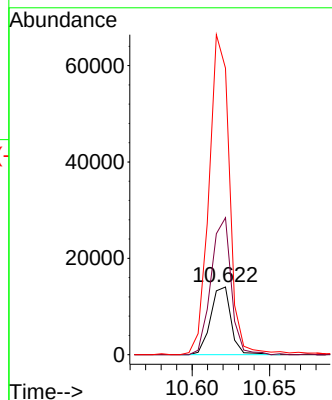
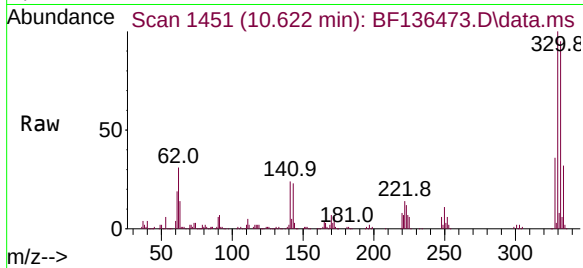




#67  
4-Bromophenyl-phenylether  
Concen: 2.949 ng  
RT: 10.622 min Scan# 1494  
Delta R.T. -0.253 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

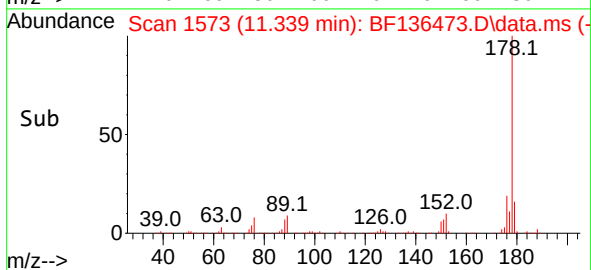
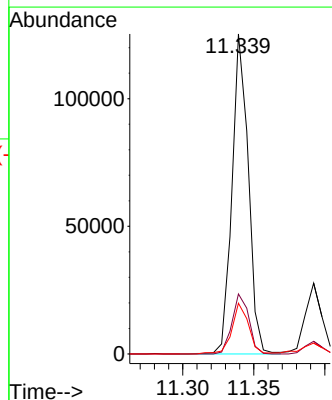
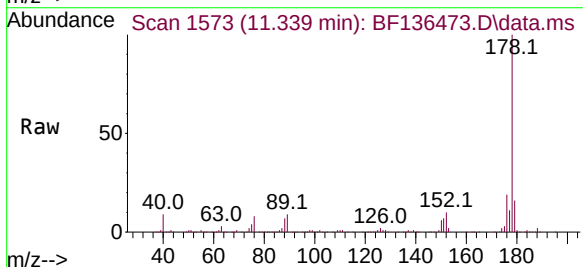
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

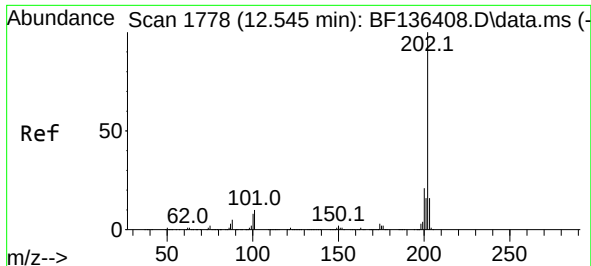
Tgt Ion:248 Resp: 12838  
Ion Ratio Lower Upper  
248 100  
250 202.2 76.2 114.2#  
141 423.1 51.0 76.4#



#71  
Phenanthrene  
Concen: 4.849 ng  
RT: 11.339 min Scan# 1573  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:178 Resp: 99808  
Ion Ratio Lower Upper  
178 100  
176 18.7 15.9 23.9  
179 15.9 11.8 17.6

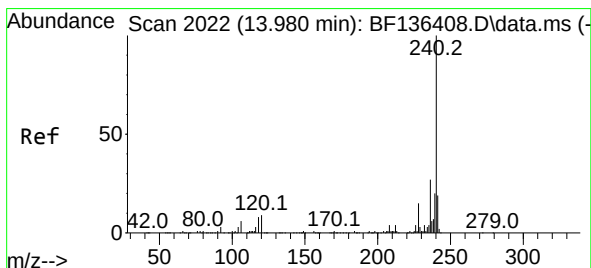
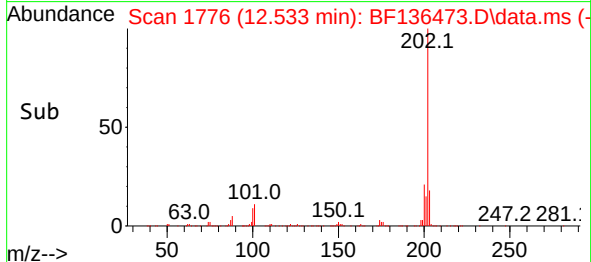
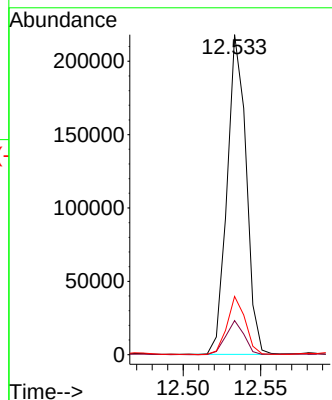
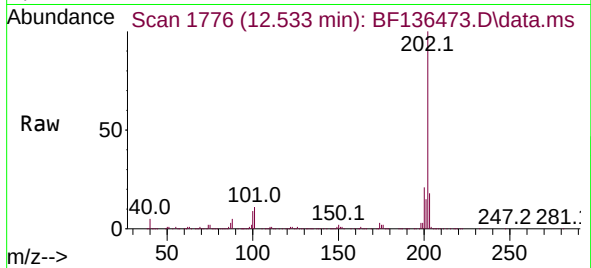




#75  
Fluoranthene  
Concen: 8.643 ng  
RT: 12.533 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

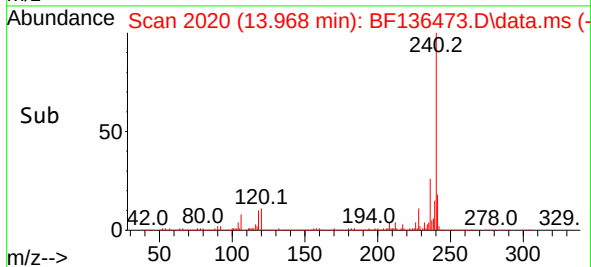
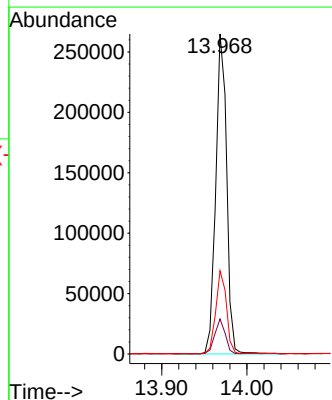
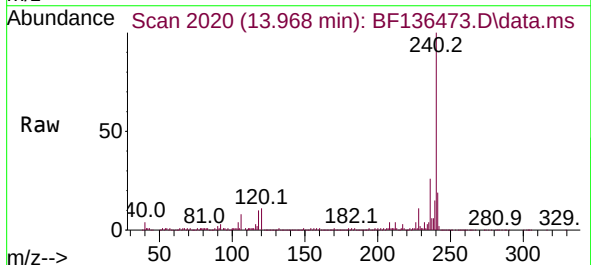
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

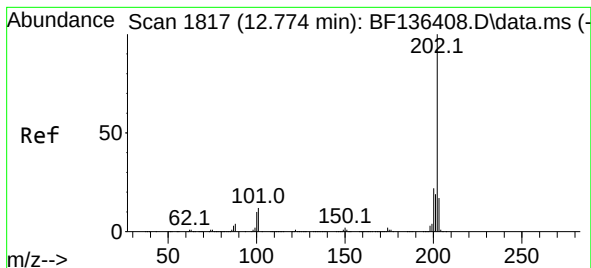
Tgt Ion:202 Resp: 186432  
Ion Ratio Lower Upper  
202 100  
101 10.7 0.0 29.9  
203 18.2 0.0 36.3



#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 13.968 min Scan# 2020  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:240 Resp: 237829  
Ion Ratio Lower Upper  
240 100  
120 11.0 7.3 10.9#  
236 26.0 21.3 31.9





#78

Pyrene

Concen: 7.453 ng

RT: 12.763 min Scan# 1815

Delta R.T. -0.012 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Instrument :

BNA\_F

ClientSampleId :

TOPSOIL-LKWD-DENALI-1

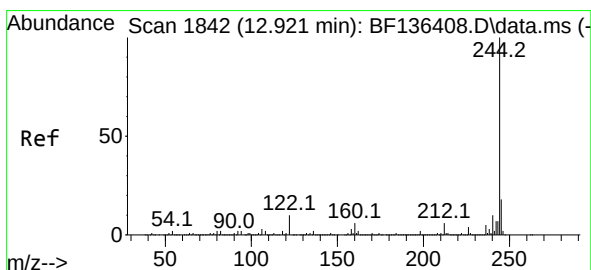
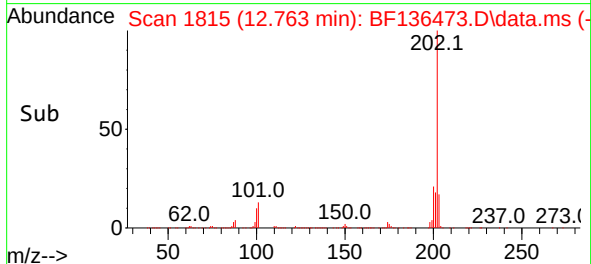
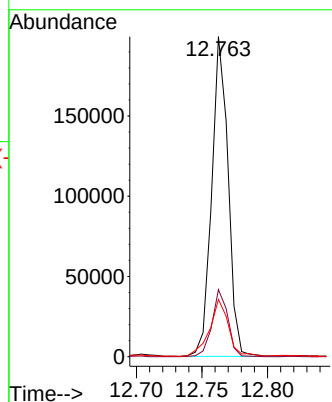
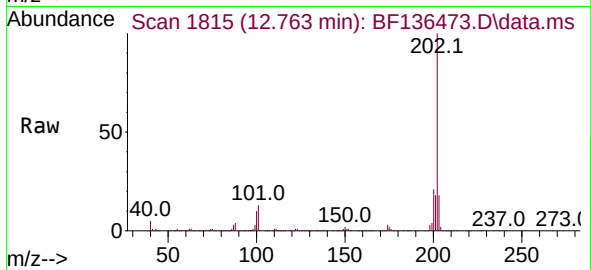
Tgt Ion:202 Resp: 173585

Ion Ratio Lower Upper

202 100

200 20.9 18.0 27.0

203 17.9 13.5 20.3



#79

Terphenyl-d14

Concen: 47.873 ng

RT: 12.915 min Scan# 1841

Delta R.T. -0.006 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

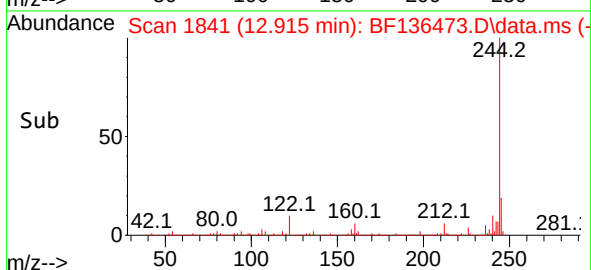
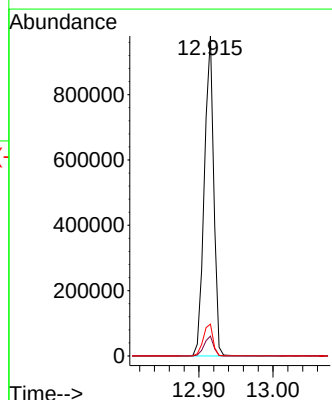
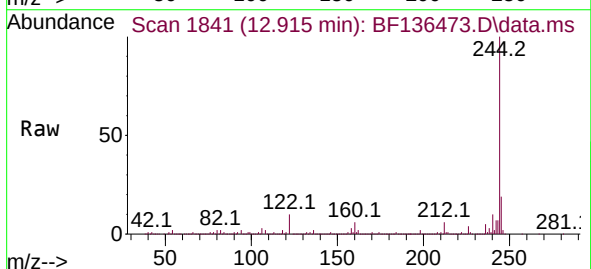
Tgt Ion:244 Resp: 863818

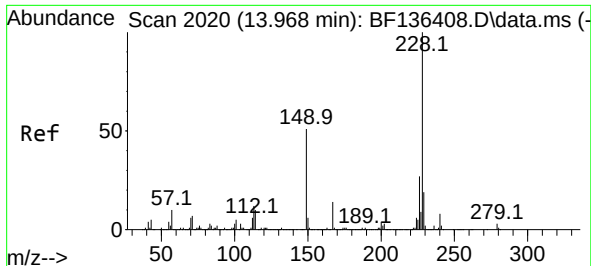
Ion Ratio Lower Upper

244 100

212 6.2 5.0 7.4

122 9.9 8.3 12.5

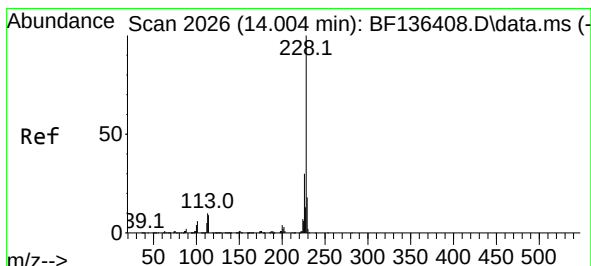
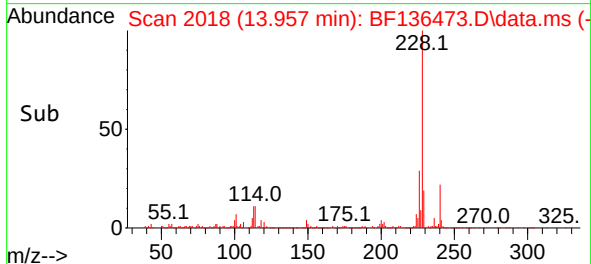
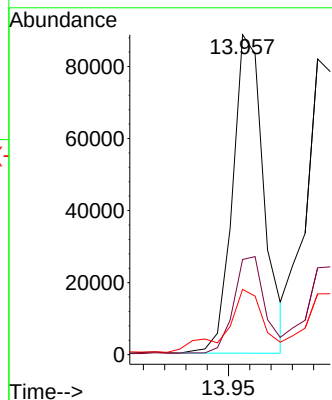
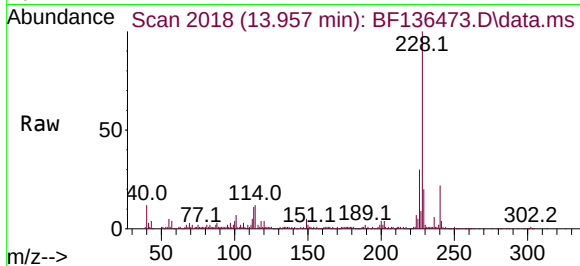




#81  
Benzo(a)anthracene  
Concen: 5.460 ng  
RT: 13.957 min Scan# 20  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

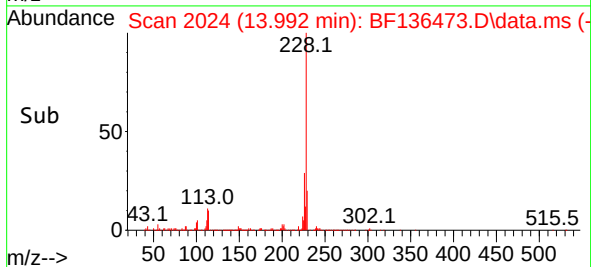
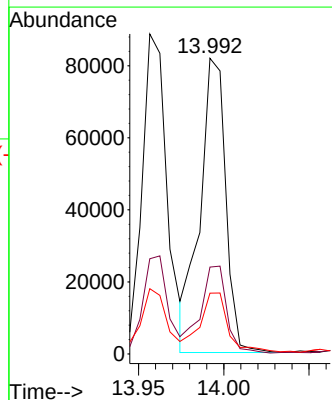
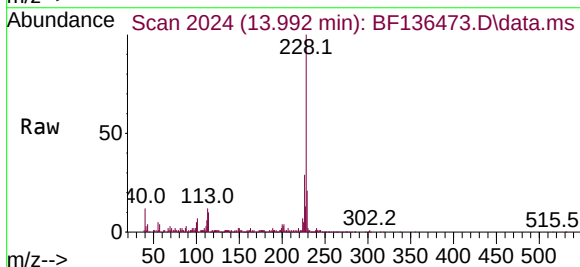
Instrument :  
BNA\_F  
ClientSampleId :  
TOPSOIL-LKWD-DENALI-1

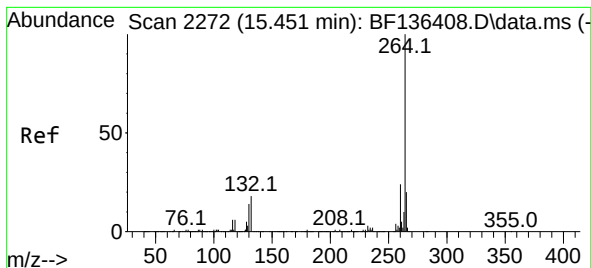
Tgt Ion:228 Resp: 90444  
Ion Ratio Lower Upper  
228 100  
226 29.8 21.8 32.8  
229 20.4 15.0 22.4



#83  
Chrysene  
Concen: 5.277 ng  
RT: 13.992 min Scan# 2024  
Delta R.T. -0.012 min  
Lab File: BF136473.D  
Acq: 08 Dec 2023 18:09

Tgt Ion:228 Resp: 86017  
Ion Ratio Lower Upper  
228 100  
226 29.4 23.8 35.6  
229 20.6 14.8 22.2





#86

Perylene-d12

Concen: 20.000 ng

RT: 15.451 min Scan# 21

Delta R.T. -0.000 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Instrument :

BNA\_F

ClientSampleId :

TOPSOIL-LKWD-DENALI-1

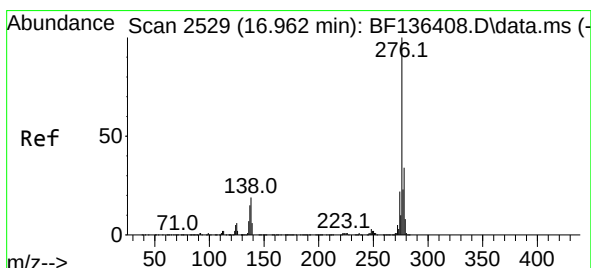
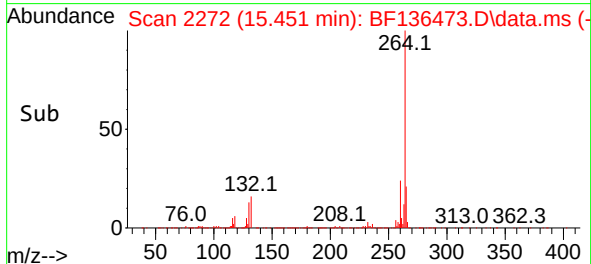
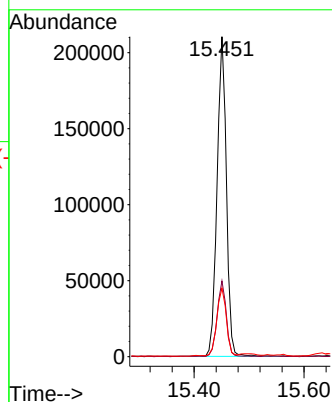
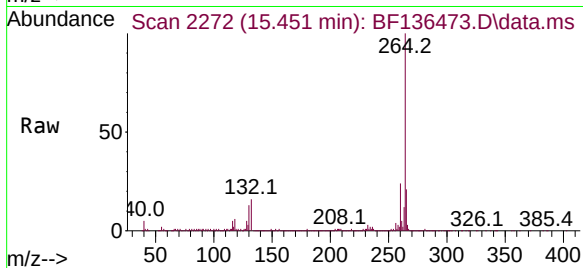
Tgt Ion:264 Resp: 249134

Ion Ratio Lower Upper

264 100

260 23.7 19.2 28.8

265 21.4 15.9 23.9



#87

Indeno(1,2,3-cd)pyrene

Concen: 2.609 ng

RT: 16.939 min Scan# 2525

Delta R.T. -0.024 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

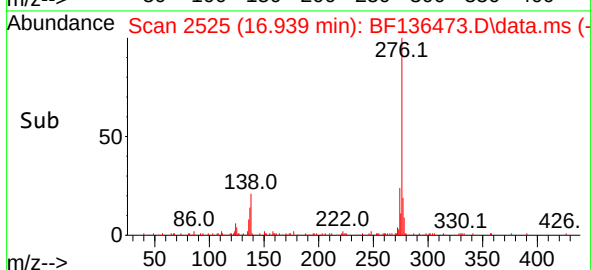
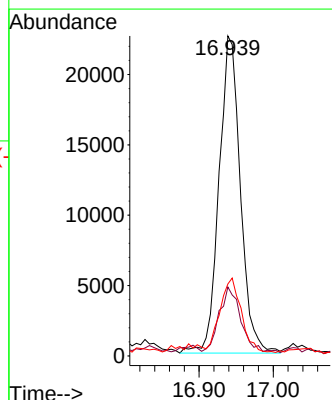
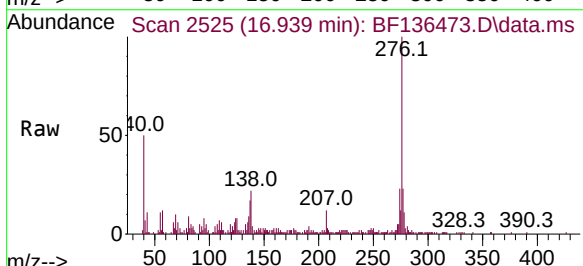
Tgt Ion:276 Resp: 45159

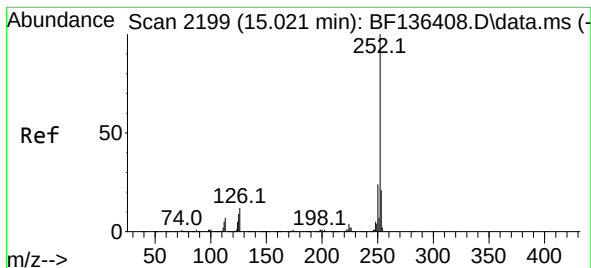
Ion Ratio Lower Upper

276 100

138 21.1 19.0 28.4

277 23.4 20.0 30.0





#88

Benzo(b)fluoranthene

Concen: 9.333 ng

RT: 15.015 min Scan# 2198

Delta R.T. -0.006 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Instrument :

BNA\_F

ClientSampleId :

TOPSOIL-LKWD-DENALI-1

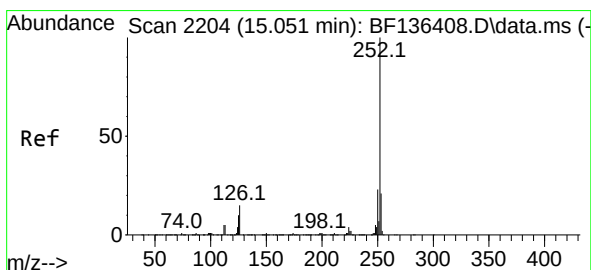
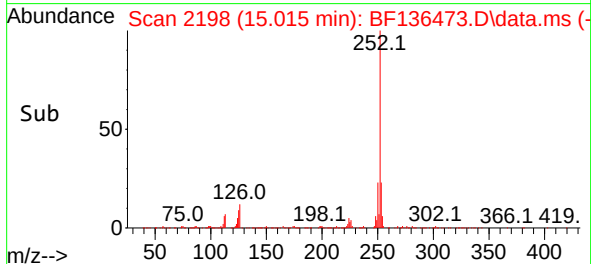
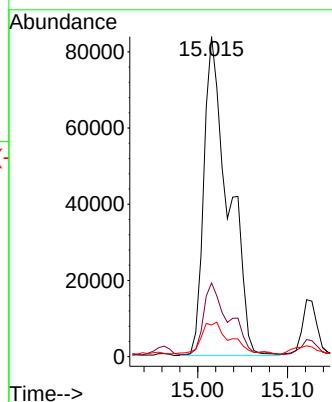
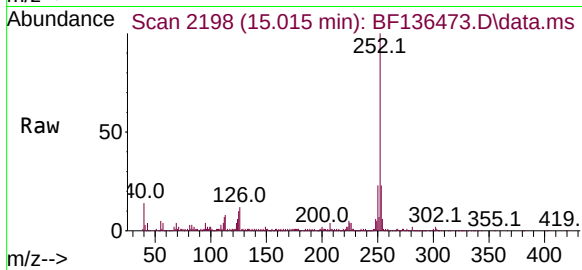
Tgt Ion:252 Resp: 158970

Ion Ratio Lower Upper

252 100

253 23.1 16.9 25.3

125 9.9 7.4 11.2



#89

Benzo(k)fluoranthene

Concen: 9.903 ng

RT: 15.015 min Scan# 2198

Delta R.T. -0.035 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

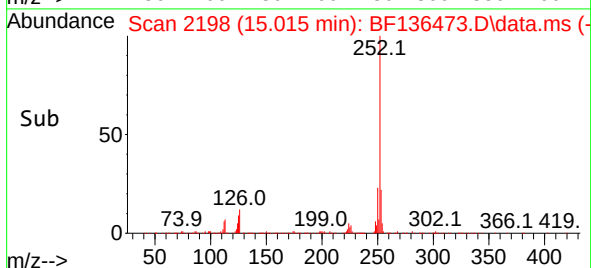
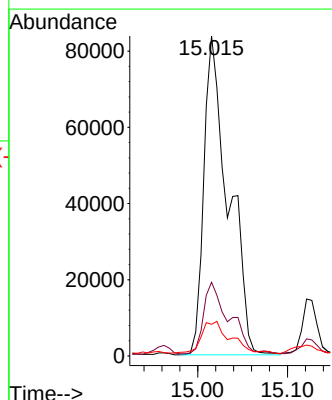
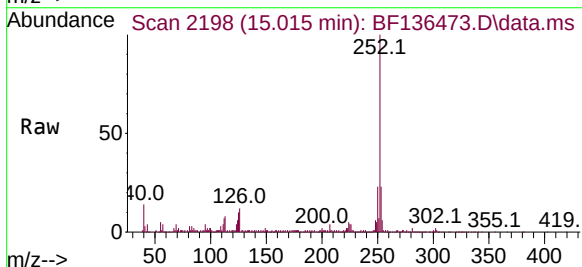
Tgt Ion:252 Resp: 158970

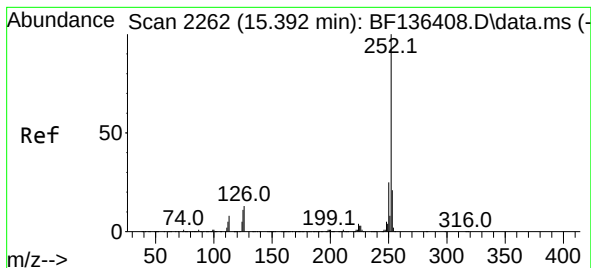
Ion Ratio Lower Upper

252 100

253 23.1 16.9 25.3

125 9.9 7.5 11.3





#90

Benzo(a)pyrene

Concen: 5.757 ng

RT: 15.386 min Scan# 21

Delta R.T. -0.006 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Instrument :

BNA\_F

ClientSampleId :

TOPSOIL-LKWD-DENALI-1

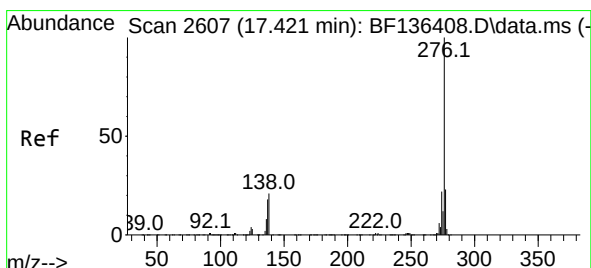
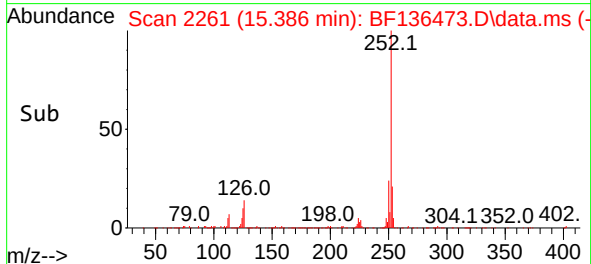
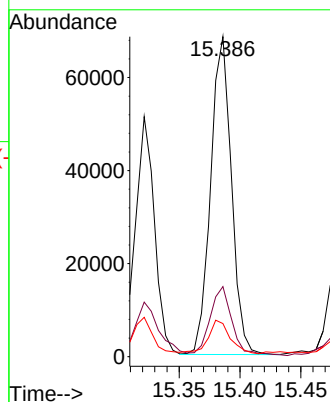
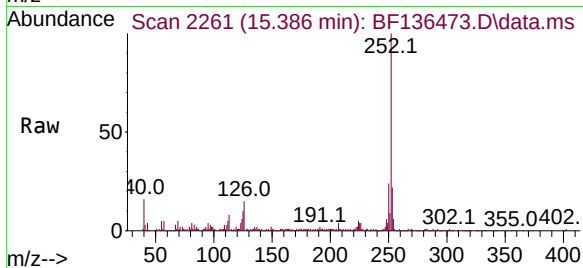
Tgt Ion:252 Resp: 80990

Ion Ratio Lower Upper

252 100

253 21.9 17.0 25.4

125 10.4 8.6 13.0



#92

Benzo(g,h,i)perylene

Concen: 2.932 ng

RT: 17.392 min Scan# 2602

Delta R.T. -0.030 min

Lab File: BF136473.D

Acq: 08 Dec 2023 18:09

Tgt Ion:276 Resp: 42670

Ion Ratio Lower Upper

276 100

277 25.8 18.7 28.1

138 18.3 16.6 25.0

