

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
 Data File : BM029951.D  
 Acq On : 11 May 2021 20:13  
 Operator : CG/JU  
 Sample : M2177-21  
 Misc :  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BG591

## Integration Parameters: LSCINT.P

Integrator: RTE  
 Smoothing : OFF  
 Sampling : 1  
 Start Thrs: 0.2  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 0.1 % of largest Peak  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
 Title : SVOA CALIBRATION

Signal : TIC

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 6.734       | 649           | 654         | 673          | rVV      | 212609         | 461376        | 9.05%           | 0.673%        |
| 2         | 6.893       | 676           | 681         | 700          | rVV      | 174953         | 339490        | 6.66%           | 0.495%        |
| 3         | 7.081       | 707           | 713         | 725          | rBV      | 261277         | 476212        | 9.34%           | 0.694%        |
| 4         | 7.546       | 785           | 792         | 810          | rBV      | 494115         | 858495        | 16.84%          | 1.252%        |
| 5         | 8.263       | 909           | 914         | 934          | rVV      | 271137         | 568648        | 11.15%          | 0.829%        |
| 6         | 8.704       | 983           | 989         | 999          | rBV      | 211358         | 424877        | 8.33%           | 0.620%        |
| 7         | 9.422       | 1101          | 1111        | 1121         | rBV      | 182905         | 361494        | 7.09%           | 0.527%        |
| 8         | 9.957       | 1196          | 1202        | 1222         | rBV      | 253704         | 588016        | 11.53%          | 0.857%        |
| 9         | 10.322      | 1256          | 1264        | 1268         | rBV      | 730838         | 1255708       | 24.63%          | 1.831%        |
| 10        | 10.369      | 1268          | 1272        | 1281         | rVV      | 251576         | 438710        | 8.61%           | 0.640%        |
| 11        | 10.475      | 1284          | 1290        | 1310         | rVV      | 181007         | 460441        | 9.03%           | 0.671%        |
| 12        | 11.992      | 1541          | 1548        | 1557         | rBV      | 142040         | 273156        | 5.36%           | 0.398%        |
| 13        | 12.216      | 1579          | 1586        | 1596         | rBV      | 153058         | 271740        | 5.33%           | 0.396%        |
| 14        | 13.028      | 1720          | 1724        | 1735         | rVV      | 24297          | 47539         | 0.93%           | 0.069%        |
| 15        | 13.222      | 1752          | 1757        | 1767         | rVB2     | 34358          | 79640         | 1.56%           | 0.116%        |
| 16        | 13.375      | 1774          | 1783        | 1792         | rBV3     | 50253          | 143453        | 2.81%           | 0.209%        |
| 17        | 13.510      | 1800          | 1806        | 1812         | rBV      | 118375         | 216836        | 4.25%           | 0.316%        |
| 18        | 13.569      | 1812          | 1816        | 1819         | rVV      | 62500          | 85325         | 1.67%           | 0.124%        |
| 19        | 13.616      | 1819          | 1824        | 1830         | rVB      | 618735         | 884028        | 17.34%          | 1.289%        |
| 20        | 13.751      | 1842          | 1847        | 1851         | rBV      | 56707          | 85869         | 1.68%           | 0.125%        |
| 21        | 13.886      | 1863          | 1870        | 1884         | rBV      | 748562         | 1214459       | 23.82%          | 1.771%        |
| 22        | 14.192      | 1912          | 1922        | 1928         | rBV      | 1154822        | 1733694       | 34.01%          | 2.528%        |
| 23        | 14.257      | 1928          | 1933        | 1943         | rVB      | 514089         | 760531        | 14.92%          | 1.109%        |
| 24        | 14.410      | 1953          | 1959        | 1962         | rBV2     | 25282          | 51706         | 1.01%           | 0.075%        |
| 25        | 14.451      | 1962          | 1966        | 1970         | rVV2     | 45325          | 99819         | 1.96%           | 0.146%        |
| 26        | 14.504      | 1972          | 1975        | 1982         | rVV3     | 50124          | 105201        | 2.06%           | 0.153%        |
| 27        | 14.598      | 1986          | 1991        | 1998         | rVV      | 151088         | 264883        | 5.20%           | 0.386%        |
| 28        | 14.675      | 2001          | 2004        | 2009         | rVB      | 38468          | 54221         | 1.06%           | 0.079%        |
| 29        | 14.822      | 2024          | 2029        | 2034         | rBV3     | 35031          | 68759         | 1.35%           | 0.100%        |
| 30        | 14.980      | 2050          | 2056        | 2061         | rBV4     | 41168          | 92341         | 1.81%           | 0.135%        |
| 31        | 15.192      | 2080          | 2092        | 2097         | rBV      | 994845         | 1475555       | 28.94%          | 2.152%        |
| 32        | 15.245      | 2097          | 2101        | 2107         | rVV      | 326044         | 525642        | 10.31%          | 0.767%        |
| 33        | 15.333      | 2111          | 2116        | 2120         | rVV2     | 194926         | 340909        | 6.69%           | 0.497%        |
| 34        | 15.369      | 2120          | 2122        | 2126         | rVV      | 91777          | 139968        | 2.75%           | 0.204%        |

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 Title : SVOA CALIBRATION

|    |        |      |      |      |      |         |         |         |        |
|----|--------|------|------|------|------|---------|---------|---------|--------|
| 35 | 15.410 | 2126 | 2129 | 2135 | rVV2 | 91569   | 165015  | 3.24%   | 0.241% |
| 36 | 15.457 | 2135 | 2137 | 2141 | rVV3 | 41146   | 71257   | 1.40%   | 0.104% |
| 37 | 15.498 | 2141 | 2144 | 2148 | rVV3 | 51070   | 85562   | 1.68%   | 0.125% |
| 38 | 15.545 | 2148 | 2152 | 2159 | rVB  | 62493   | 114726  | 2.25%   | 0.167% |
| 39 | 15.698 | 2172 | 2178 | 2185 | rVV  | 49122   | 110340  | 2.16%   | 0.161% |
| 40 | 15.780 | 2185 | 2192 | 2200 | rVB8 | 20228   | 56313   | 1.10%   | 0.082% |
| 41 | 15.927 | 2212 | 2217 | 2224 | rVB7 | 43892   | 85609   | 1.68%   | 0.125% |
| 42 | 16.098 | 2243 | 2246 | 2252 | rVV6 | 20353   | 42587   | 0.84%   | 0.062% |
| 43 | 16.251 | 2266 | 2272 | 2277 | rVB3 | 51254   | 103890  | 2.04%   | 0.151% |
| 44 | 16.298 | 2277 | 2280 | 2286 | rVB2 | 47362   | 68676   | 1.35%   | 0.100% |
| 45 | 16.604 | 2327 | 2332 | 2340 | rVB  | 92971   | 143787  | 2.82%   | 0.210% |
| 46 | 16.686 | 2341 | 2346 | 2351 | rVV4 | 28661   | 75227   | 1.48%   | 0.110% |
| 47 | 16.763 | 2354 | 2359 | 2367 | rVB  | 144281  | 229103  | 4.49%   | 0.334% |
| 48 | 16.939 | 2384 | 2389 | 2393 | rBV  | 1259150 | 1877129 | 36.82%  | 2.737% |
| 49 | 16.986 | 2393 | 2397 | 2402 | rVV  | 3096943 | 4315649 | 84.65%  | 6.293% |
| 50 | 17.039 | 2402 | 2406 | 2409 | rVV  | 1052647 | 1467974 | 28.79%  | 2.141% |
| 51 | 17.074 | 2409 | 2412 | 2419 | rVV  | 478175  | 701522  | 13.76%  | 1.023% |
| 52 | 17.145 | 2419 | 2424 | 2429 | rVB  | 46757   | 88889   | 1.74%   | 0.130% |
| 53 | 17.351 | 2452 | 2459 | 2474 | rBV2 | 224740  | 434068  | 8.51%   | 0.633% |
| 54 | 17.463 | 2474 | 2478 | 2484 | rVV2 | 54145   | 85110   | 1.67%   | 0.124% |
| 55 | 17.521 | 2485 | 2488 | 2498 | rVB4 | 52122   | 109174  | 2.14%   | 0.159% |
| 56 | 17.657 | 2508 | 2511 | 2519 | rVB3 | 31347   | 59519   | 1.17%   | 0.087% |
| 57 | 17.815 | 2533 | 2538 | 2542 | rBV  | 295635  | 428193  | 8.40%   | 0.624% |
| 58 | 17.863 | 2542 | 2546 | 2553 | rVV  | 375237  | 567185  | 11.13%  | 0.827% |
| 59 | 17.945 | 2556 | 2560 | 2565 | rVV  | 87997   | 143208  | 2.81%   | 0.209% |
| 60 | 18.010 | 2565 | 2571 | 2575 | rVV2 | 498223  | 873047  | 17.13%  | 1.273% |
| 61 | 18.045 | 2575 | 2577 | 2587 | rVB  | 213941  | 263671  | 5.17%   | 0.384% |
| 62 | 18.321 | 2619 | 2624 | 2628 | rBV  | 199973  | 296370  | 5.81%   | 0.432% |
| 63 | 18.368 | 2628 | 2632 | 2638 | rVV  | 296602  | 430712  | 8.45%   | 0.628% |
| 64 | 18.445 | 2642 | 2645 | 2653 | rVB  | 36793   | 57618   | 1.13%   | 0.084% |
| 65 | 18.568 | 2663 | 2666 | 2670 | rVB2 | 66015   | 77453   | 1.52%   | 0.113% |
| 66 | 18.621 | 2672 | 2675 | 2678 | rVB  | 42612   | 51610   | 1.01%   | 0.075% |
| 67 | 18.739 | 2691 | 2695 | 2701 | rBV3 | 120498  | 253698  | 4.98%   | 0.370% |
| 68 | 18.886 | 2715 | 2720 | 2727 | rBV4 | 74810   | 181970  | 3.57%   | 0.265% |
| 69 | 19.004 | 2734 | 2740 | 2748 | rBV  | 3847757 | 5098032 | 100.00% | 7.434% |
| 70 | 19.104 | 2755 | 2757 | 2761 | rVB2 | 57737   | 65474   | 1.28%   | 0.095% |
| 71 | 19.339 | 2792 | 2797 | 2799 | rBV2 | 1911897 | 2641902 | 51.82%  | 3.853% |

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 Title : SVOA CALIBRATION

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|-----|--------|------|------|------|------|---------|---------|--------|--------|
| 72  | 19.368 | 2799 | 2802 | 2811 | rVV  | 3338348 | 4302660 | 84.40% | 6.274% |
| 73  | 19.445 | 2811 | 2815 | 2822 | rVB2 | 124618  | 206888  | 4.06%  | 0.302% |
| 74  | 19.551 | 2829 | 2833 | 2838 | rBV  | 151870  | 203715  | 4.00%  | 0.297% |
| 75  | 19.615 | 2840 | 2844 | 2849 | rVB  | 127940  | 189659  | 3.72%  | 0.277% |
| 76  | 19.692 | 2853 | 2857 | 2864 | rVV4 | 151901  | 347121  | 6.81%  | 0.506% |
| 77  | 19.827 | 2877 | 2880 | 2883 | rBV3 | 116343  | 196336  | 3.85%  | 0.286% |
| 78  | 19.868 | 2883 | 2887 | 2891 | rVB2 | 397009  | 556770  | 10.92% | 0.812% |
| 79  | 19.968 | 2900 | 2904 | 2908 | rBV2 | 346351  | 430012  | 8.43%  | 0.627% |
| 80  | 20.021 | 2908 | 2913 | 2917 | rVV2 | 265058  | 410414  | 8.05%  | 0.598% |
| 81  | 20.062 | 2917 | 2920 | 2924 | rVB  | 134776  | 176455  | 3.46%  | 0.257% |
| 82  | 20.162 | 2934 | 2937 | 2941 | rBV  | 136294  | 155601  | 3.05%  | 0.227% |
| 83  | 20.209 | 2941 | 2945 | 2949 | rBV  | 150728  | 207215  | 4.06%  | 0.302% |
| 84  | 20.615 | 3011 | 3014 | 3021 | rVB  | 183602  | 248247  | 4.87%  | 0.362% |
| 85  | 20.774 | 3038 | 3041 | 3045 | rBV  | 206629  | 280954  | 5.51%  | 0.410% |
| 86  | 20.815 | 3045 | 3048 | 3051 | rVV  | 268984  | 320278  | 6.28%  | 0.467% |
| 87  | 20.856 | 3051 | 3055 | 3060 | rVV3 | 320438  | 572390  | 11.23% | 0.835% |
| 88  | 20.909 | 3062 | 3064 | 3071 | rVB  | 194450  | 270695  | 5.31%  | 0.395% |
| 89  | 21.056 | 3086 | 3089 | 3092 | rBV2 | 254094  | 291786  | 5.72%  | 0.425% |
| 90  | 21.121 | 3095 | 3100 | 3105 | rVV2 | 2390238 | 5055158 | 99.16% | 7.372% |
| 91  | 21.168 | 3105 | 3108 | 3118 | rVB  | 1857683 | 2378837 | 46.66% | 3.469% |
| 92  | 21.280 | 3124 | 3127 | 3133 | rBV  | 373435  | 505815  | 9.92%  | 0.738% |
| 93  | 22.645 | 3354 | 3359 | 3364 | rBV  | 1747933 | 3737382 | 73.31% | 5.450% |
| 94  | 22.803 | 3383 | 3386 | 3392 | rVB  | 247988  | 363961  | 7.14%  | 0.531% |
| 95  | 23.103 | 3432 | 3437 | 3440 | rBV  | 793586  | 1301422 | 25.53% | 1.898% |
| 96  | 23.150 | 3441 | 3445 | 3448 | rVV  | 749631  | 1266250 | 24.84% | 1.847% |
| 97  | 23.192 | 3448 | 3452 | 3459 | rVB  | 1580638 | 2663682 | 52.25% | 3.884% |
| 98  | 23.286 | 3463 | 3468 | 3472 | rBV2 | 917143  | 1581761 | 31.03% | 2.307% |
| 99  | 25.433 | 3826 | 3833 | 3843 | rVB2 | 697755  | 1948280 | 38.22% | 2.841% |
| 100 | 26.086 | 3938 | 3944 | 3956 | rVB  | 441163  | 1235457 | 24.23% | 1.802% |

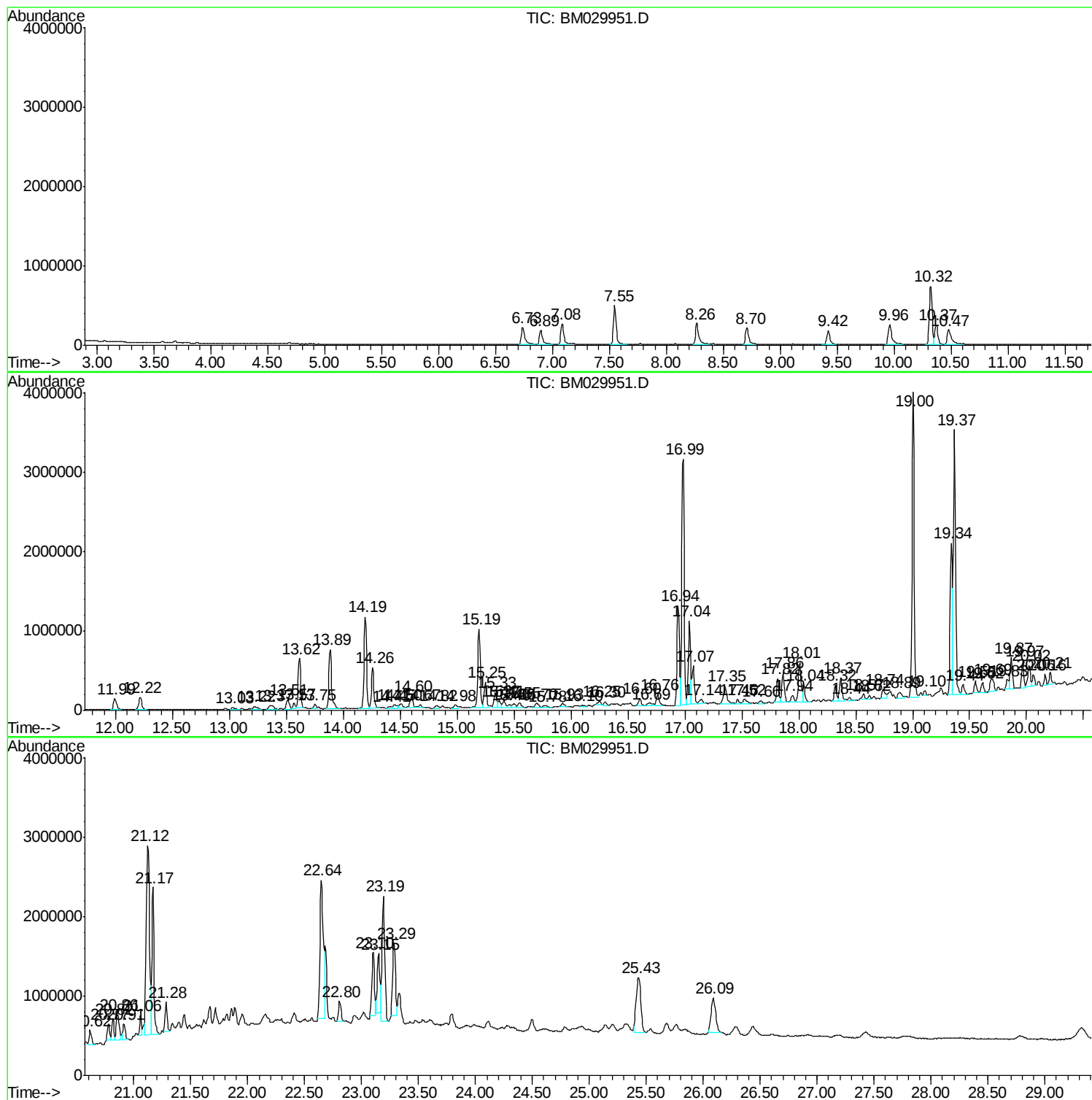
Sum of corrected areas: 68575211

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P



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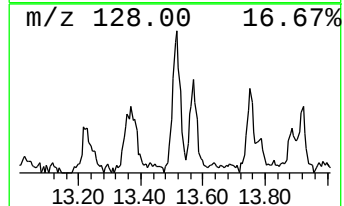
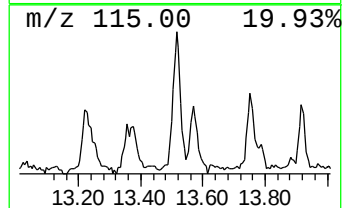
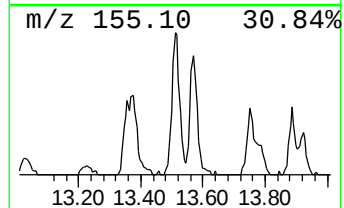
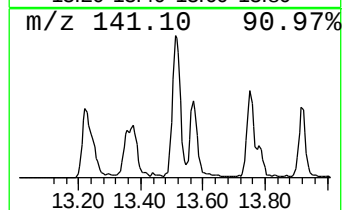
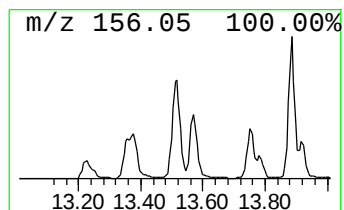
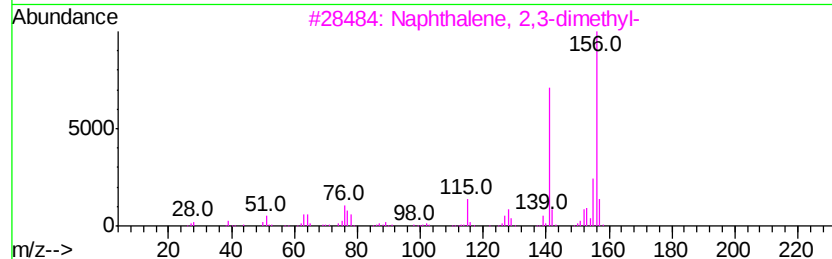
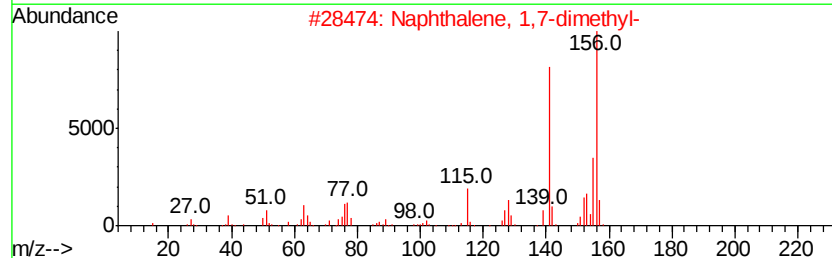
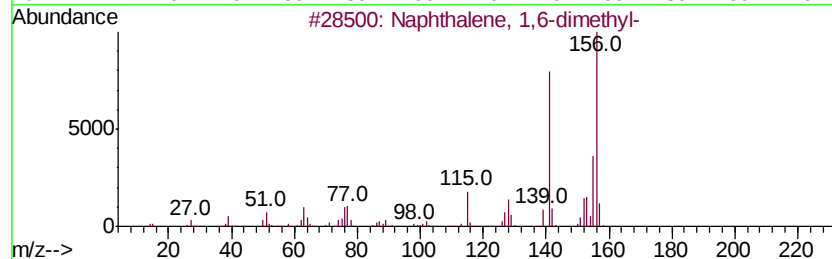
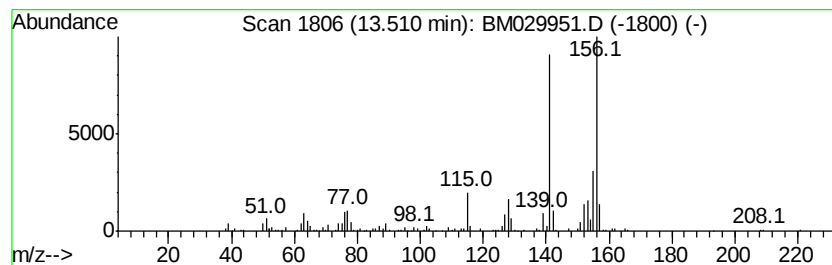
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Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Naphthalene, 1,6-dimethyl- Concentration Rank 9

| R.T.    | EstConc    | Area                       | Relative to ISTD | R.T.           |
|---------|------------|----------------------------|------------------|----------------|
| 13.51   | 2.50 ng/ul | 216836                     | Acenaphthene-d10 | 14.19          |
| Hit# of | 5          | Tentative ID               | MW MolForm       | CAS# Qual      |
| 1       |            | Naphthalene, 1,6-dimethyl- | 156 C12H12       | 000575-43-9 98 |
| 2       |            | Naphthalene, 1,7-dimethyl- | 156 C12H12       | 000575-37-1 98 |
| 3       |            | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 4       |            | Naphthalene, 2,3-dimethyl- | 156 C12H12       | 000581-40-8 97 |
| 5       |            | Naphthalene, 2,7-dimethyl- | 156 C12H12       | 000582-16-1 97 |



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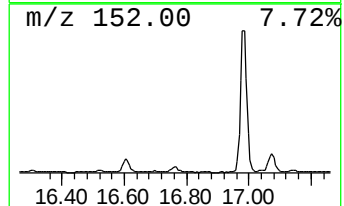
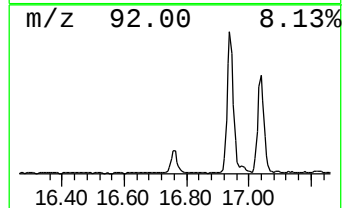
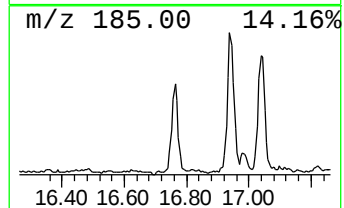
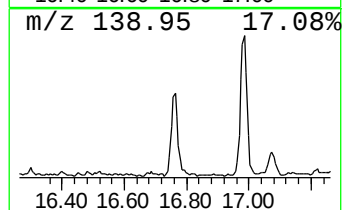
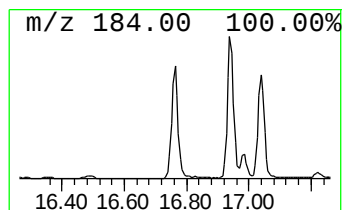
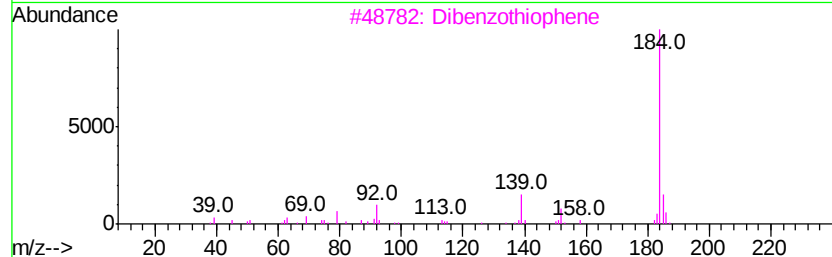
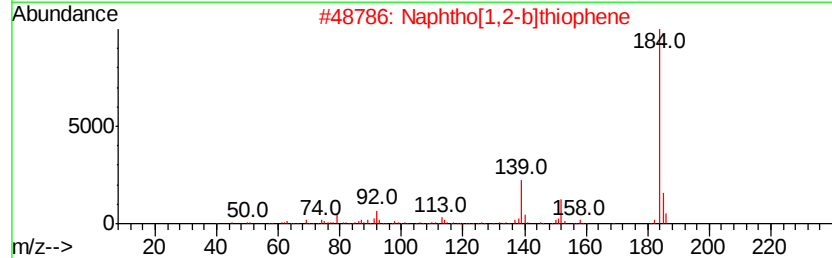
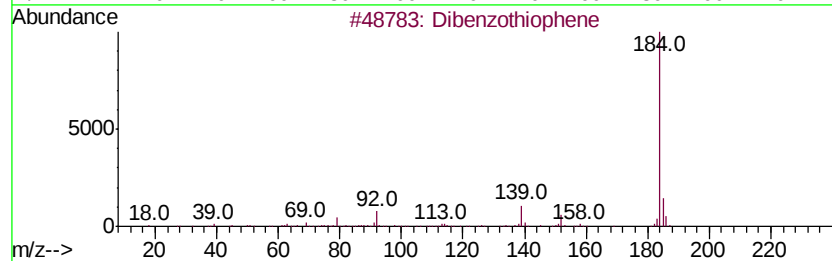
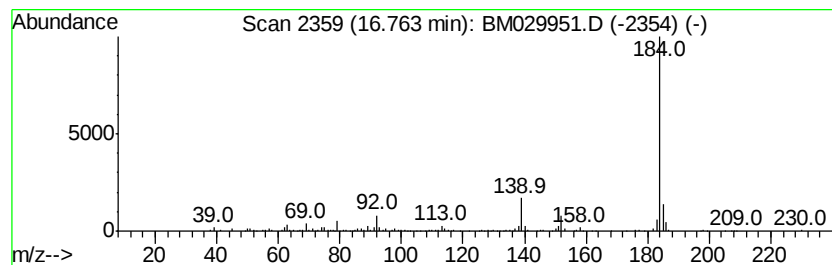
TIC Library : C:\DATABASE\NIST11.L  
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\*\*\*\*\*  
Peak Number 2 Dibenzothiophene Concentration Rank 10

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 16.76 | 2.44 ng/ul | 229103 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|------|----|-------------------------|-----|---------|-------------|------|
| 1    | 5  | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 95   |
| 2    |    | Naphtho[1,2-b]thiophene | 184 | C12H8S  | 000234-41-3 | 94   |
| 3    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 93   |
| 4    |    | Dibenzothiophene        | 184 | C12H8S  | 000132-65-0 | 91   |
| 5    |    | Azuleno(2,1-b)thiophene | 184 | C12H8S  | 000248-13-5 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

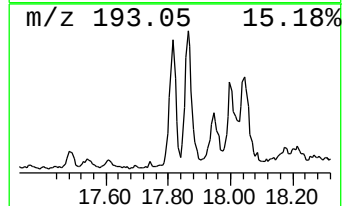
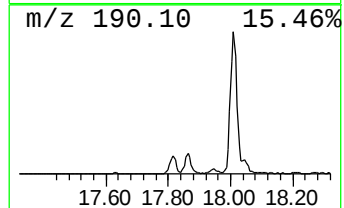
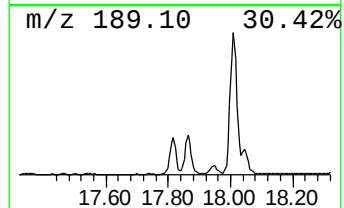
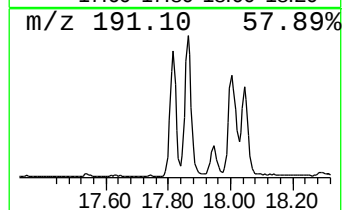
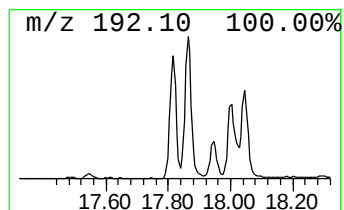
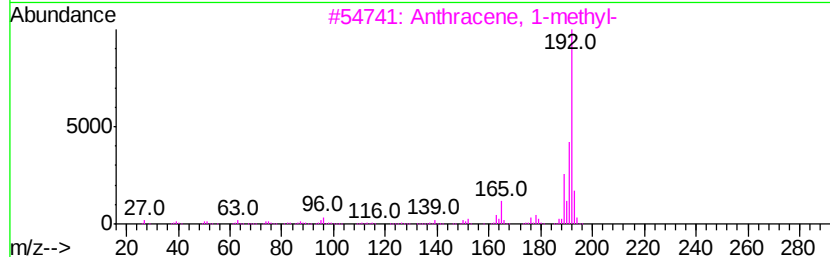
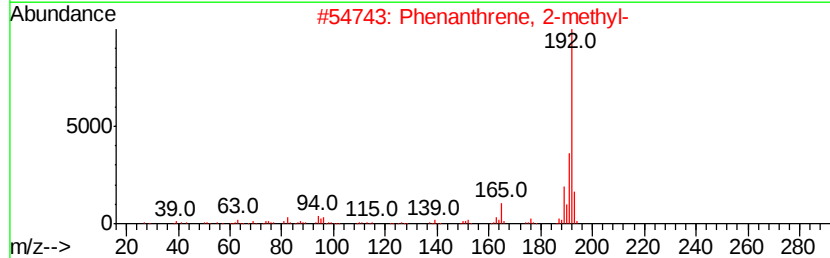
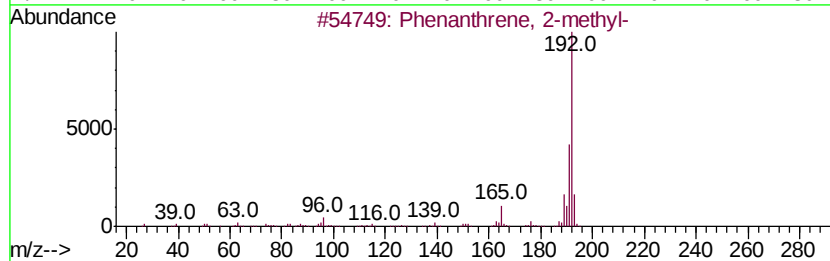
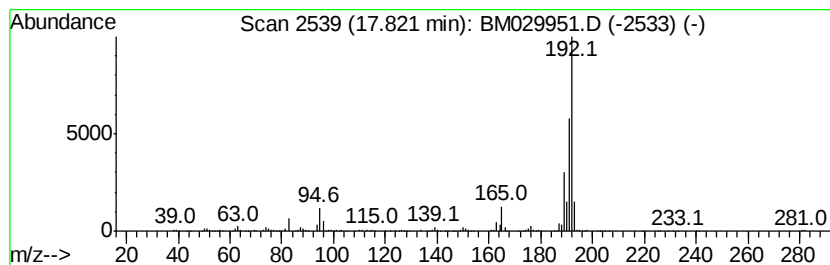
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Phenanthrene, 2-methyl- Concentration Rank 5

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.82 | 4.56 ng/ul | 428193 | Phenanthrene-d10 | 16.94 |

| Hit# of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|---------|---|-------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 96   |
| 2       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 95   |
| 3       |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 95   |
| 4       |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 94   |
| 5       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 94   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

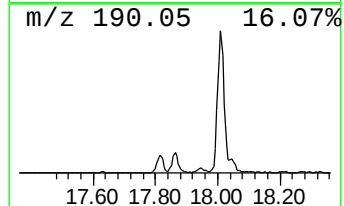
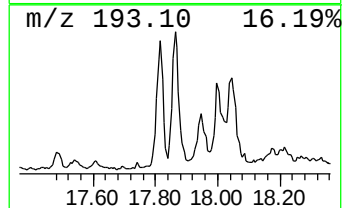
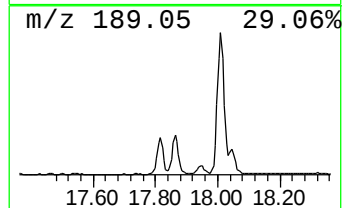
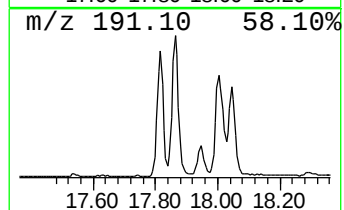
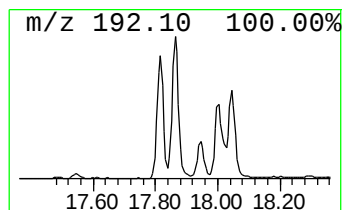
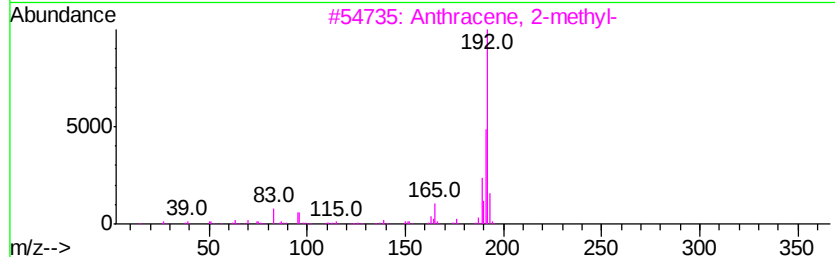
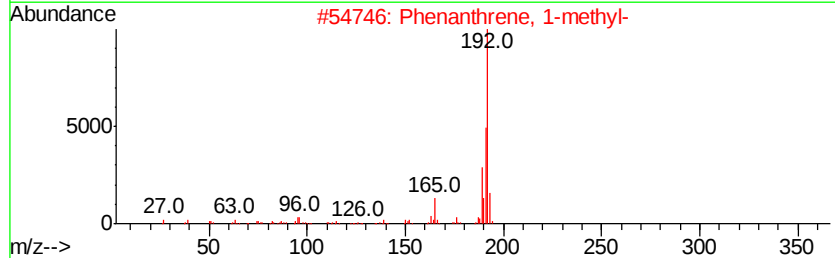
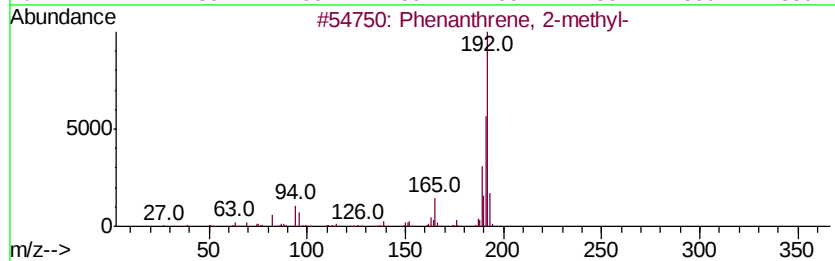
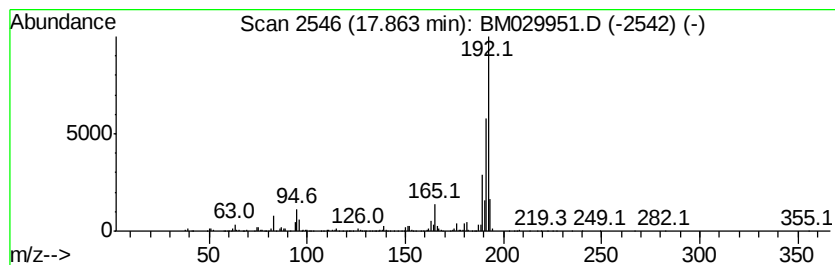
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TIC Integration Parameters: LSCINT.P

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Peak Number 4 Phenanthrene, 1-methyl- Concentration Rank 2

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 17.86 | 6.04 ng/ul | 567185 | Phenanthrene-d10 | 16.94 |

| Hit# of | 5 | Tentative ID                            | MW  | MolForm | CAS#        | Qual |
|---------|---|-----------------------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl-                 | 192 | C15H12  | 002531-84-2 | 98   |
| 2       |   | Phenanthrene, 1-methyl-                 | 192 | C15H12  | 000832-69-9 | 97   |
| 3       |   | Anthracene, 2-methyl-                   | 192 | C15H12  | 000613-12-7 | 96   |
| 4       |   | 1H-Cyclopropa[1,1]phenanthrene, 1a, ... | 192 | C15H12  | 000949-41-7 | 96   |
| 5       |   | Phenanthrene, 2-methyl-                 | 192 | C15H12  | 002531-84-2 | 96   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

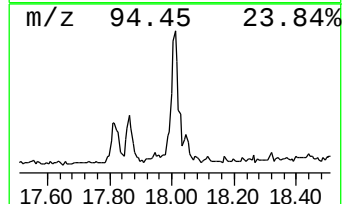
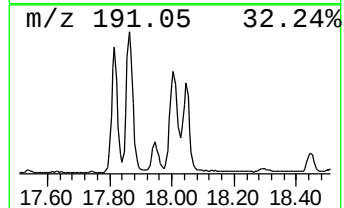
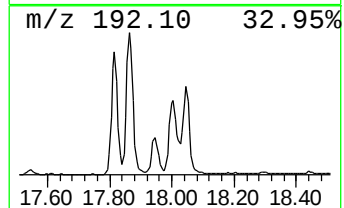
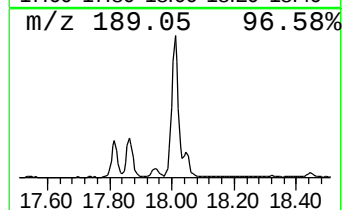
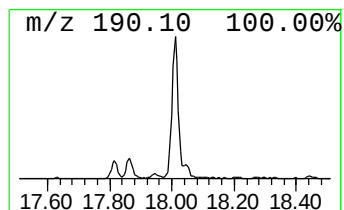
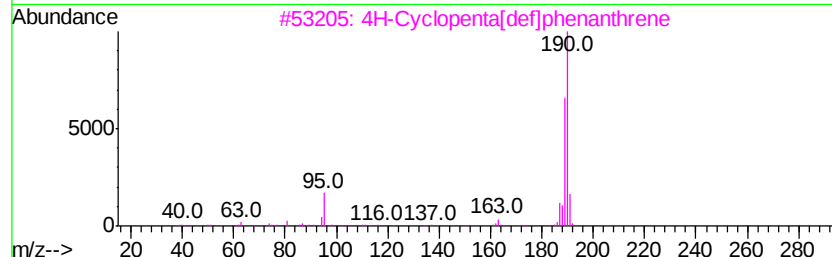
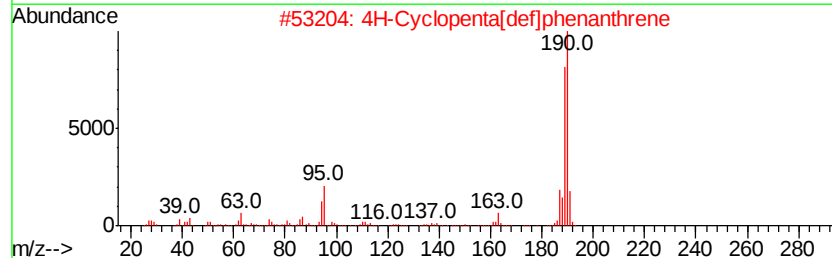
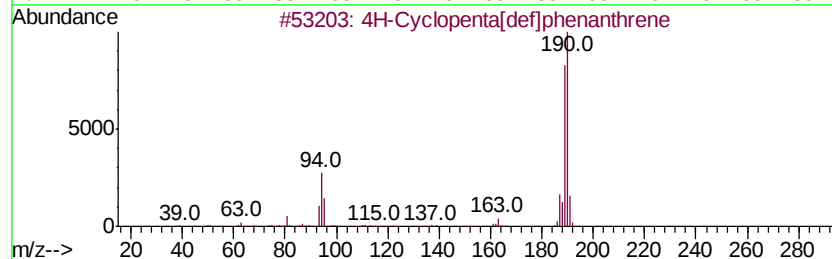
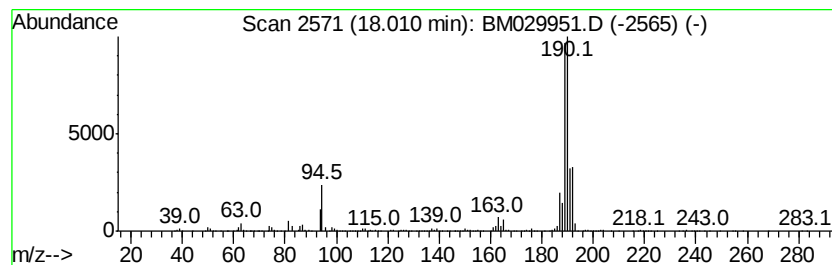
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 5 4H-Cyclopenta[def]phenanthrene Concentration Rank 1

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.01 | 9.30 ng/ul | 873047 | Phenanthrene-d10 | 16.94 |

| Hit# of | 5 | Tentative ID                        | MW  | MolForm    | CAS#        | Qual |
|---------|---|-------------------------------------|-----|------------|-------------|------|
| 1       |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 93   |
| 2       |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 70   |
| 3       |   | 4H-Cyclopenta[def]phenanthrene      | 190 | C15H10     | 000203-64-5 | 64   |
| 4       |   | 6H-Cyclobuta[flk]phenanthrene       | 190 | C15H10     | 083469-43-6 | 64   |
| 5       |   | Thiophene-3-carboxaldehyde, 5-ch... | 190 | C5H4BClO3S | 036155-87-0 | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

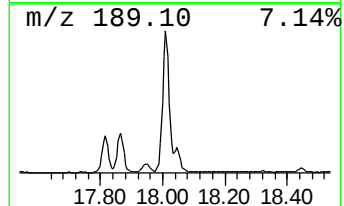
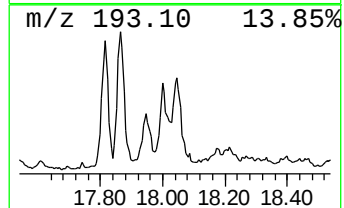
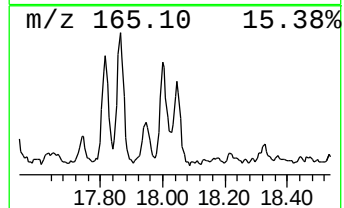
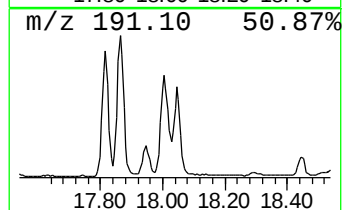
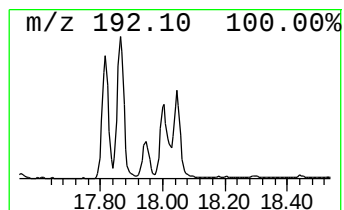
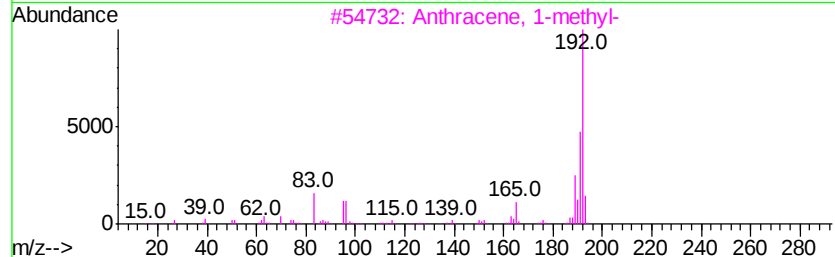
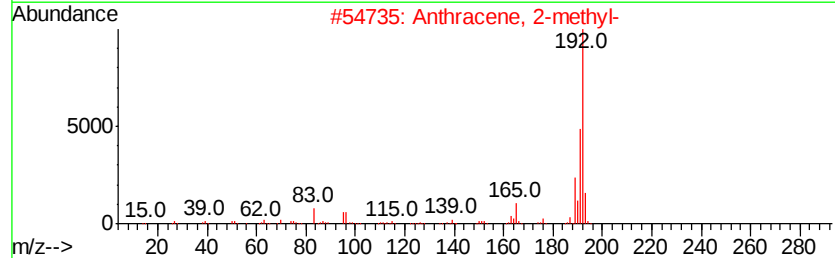
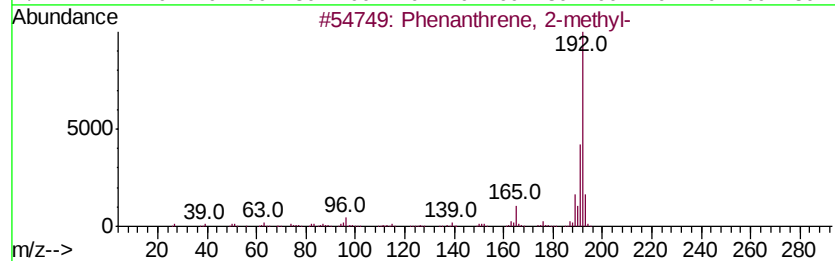
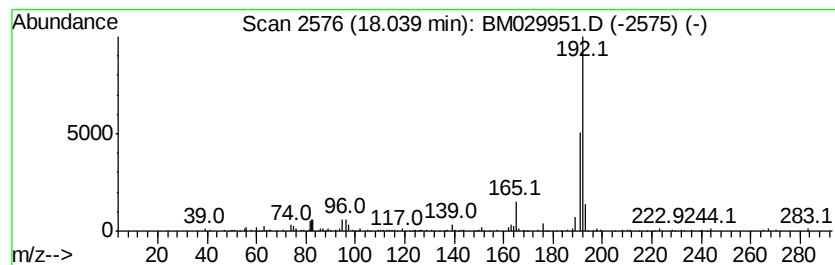
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Anthracene, 2-methyl- Concentration Rank 7

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.04 | 2.81 ng/ul | 263671 | Phenanthrene-d10 | 16.94 |

| Hit# of | 5 | Tentative ID            | MW  | MolForm | CAS#        | Qual |
|---------|---|-------------------------|-----|---------|-------------|------|
| 1       |   | Phenanthrene, 2-methyl- | 192 | C15H12  | 002531-84-2 | 89   |
| 2       |   | Anthracene, 2-methyl-   | 192 | C15H12  | 000613-12-7 | 76   |
| 3       |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 76   |
| 4       |   | Phenanthrene, 1-methyl- | 192 | C15H12  | 000832-69-9 | 76   |
| 5       |   | Anthracene, 1-methyl-   | 192 | C15H12  | 000610-48-0 | 74   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

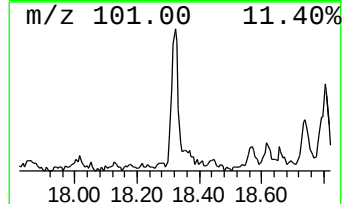
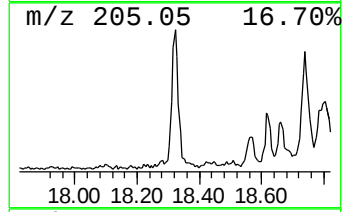
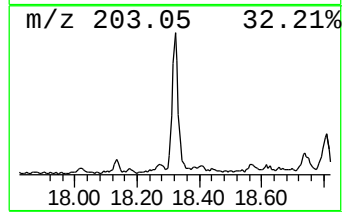
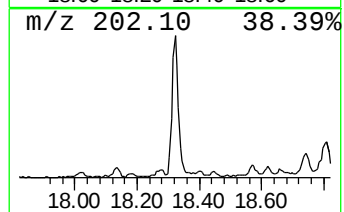
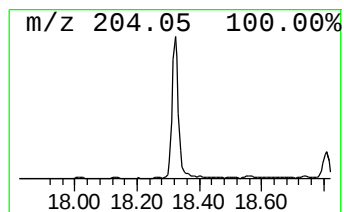
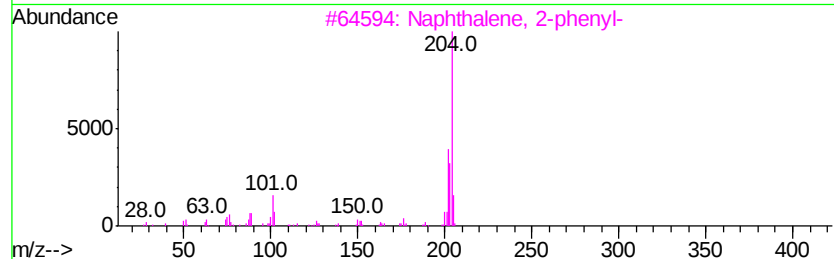
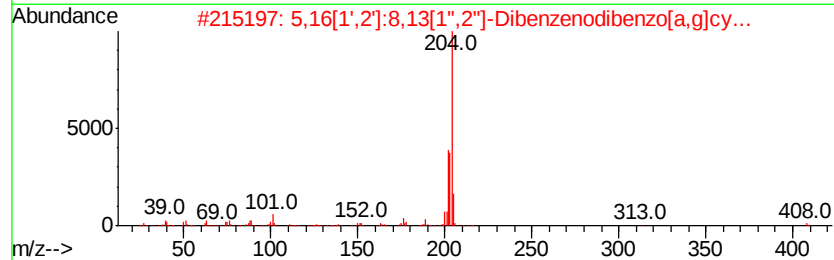
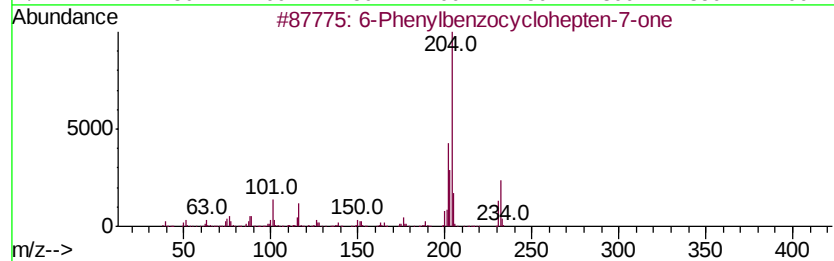
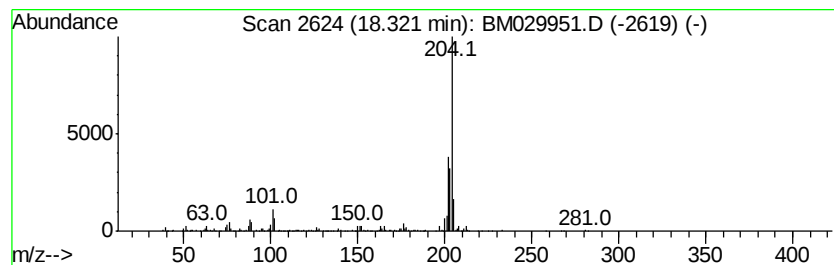
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 7 6-Phenylbenzocyclohepten-7-one Concentration Rank 6

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.32 | 3.16 ng/ul | 296370 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                          | MW  | MolForm | CAS#        | Qual |
|------|----|---------------------------------------|-----|---------|-------------|------|
| 1    | 5  | 6-Phenylbenzocyclohepten-7-one        | 232 | C17H12O | 093327-56-1 | 90   |
| 2    |    | 5,16[1',2'] : 8,13[1'',2'']-Dibenz... | 408 | C32H24  | 005672-97-9 | 90   |
| 3    |    | Naphthalene, 2-phenyl-                | 204 | C16H12  | 000612-94-2 | 86   |
| 4    |    | Naphthalene, 2-phenyl-                | 204 | C16H12  | 000612-94-2 | 76   |
| 5    |    | Tricyclo[8.2.2.2(4,7)]hexadeca-2...   | 204 | C16H12  | 006572-60-7 | 76   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampled :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

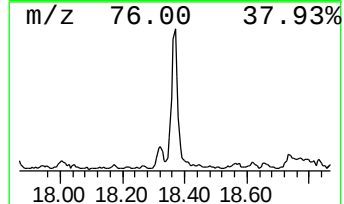
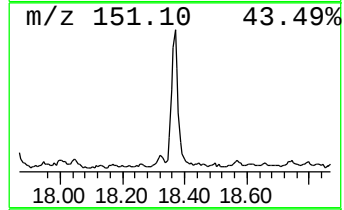
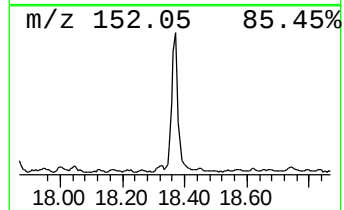
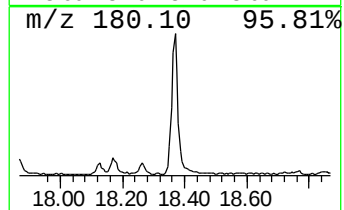
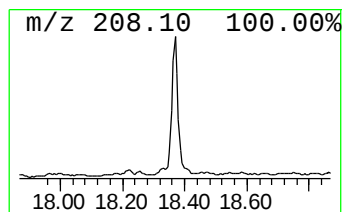
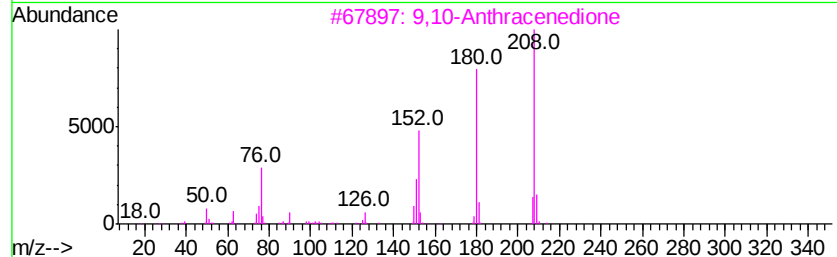
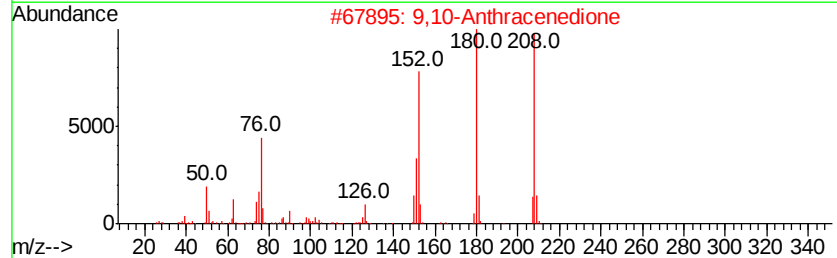
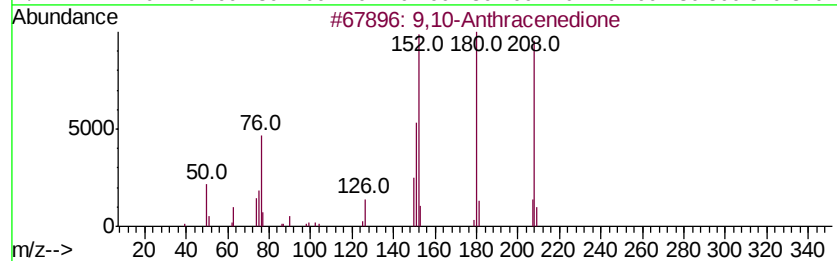
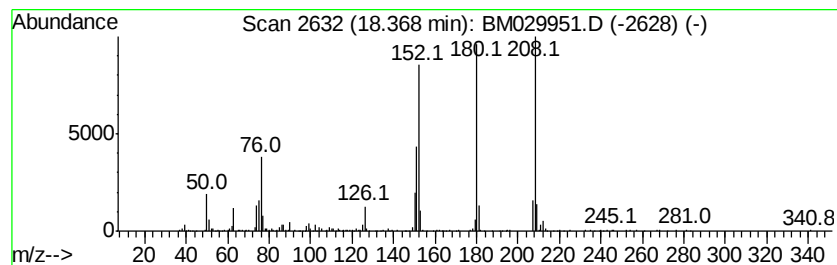
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 8 9,10-Anthracenedione Concentration Rank 4

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.37 | 4.59 ng/ul | 430712 | Phenanthrene-d10 | 16.94 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 99   |
| 2    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 96   |
| 3    |    |   | 9,10-Anthracenedione | 208 | C14H8O2 | 000084-65-1 | 94   |
| 4    |    |   | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 92   |
| 5    |    |   | Benzo[c]cinnoline    | 180 | C12H8N2 | 000230-17-1 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

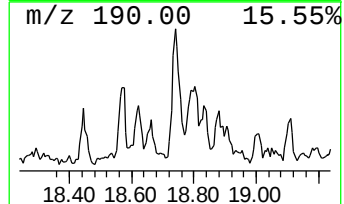
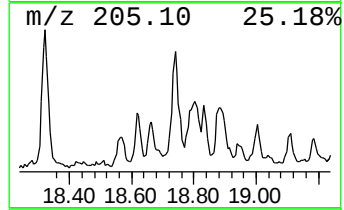
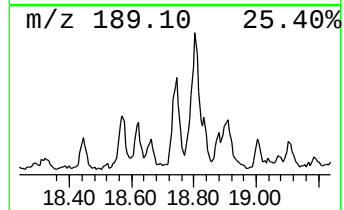
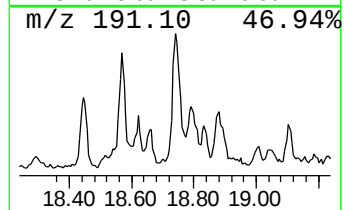
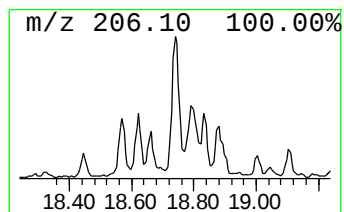
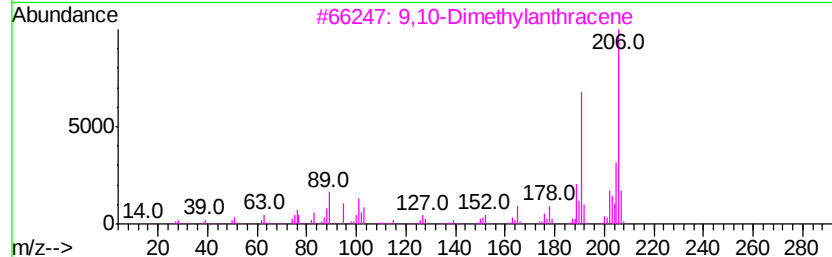
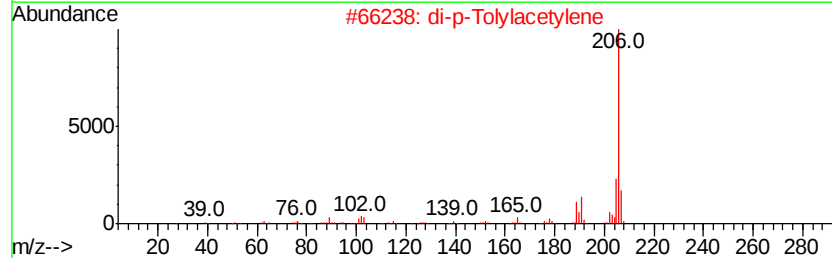
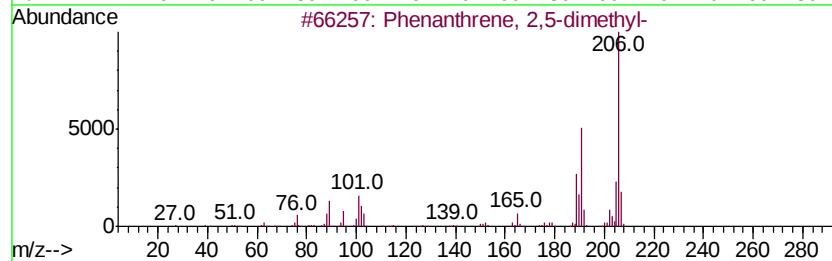
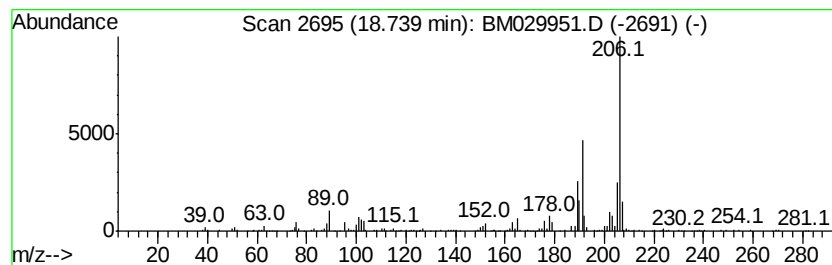
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 18.74 | 2.70 ng/ul | 253698 | Phenanthrene-d10 | 16.94 |

| Hit# | of | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|------|----|-----------------------------|-----|---------|-------------|------|
| 1    | 5  | Phenanthrene, 2,5-dimethyl- | 206 | C16H14  | 003674-66-6 | 93   |
| 2    |    | di-p-Tolylacetylene         | 206 | C16H14  | 002789-88-0 | 93   |
| 3    |    | 9,10-Dimethylantracene      | 206 | C16H14  | 000781-43-1 | 93   |
| 4    |    | 9,10-Dimethylantracene      | 206 | C16H14  | 000781-43-1 | 91   |
| 5    |    | Phenanthrene, 3,6-dimethyl- | 206 | C16H14  | 001576-67-6 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

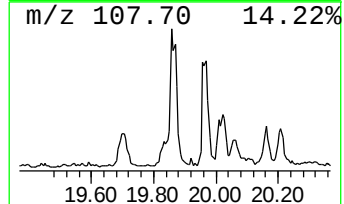
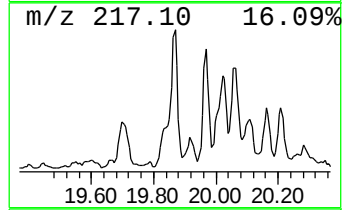
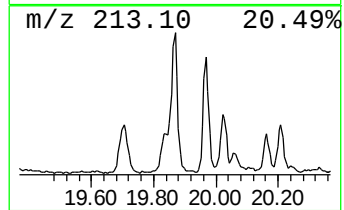
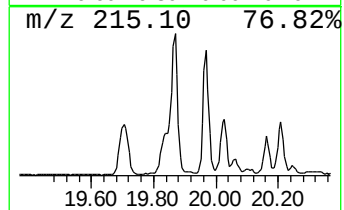
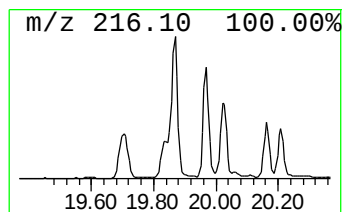
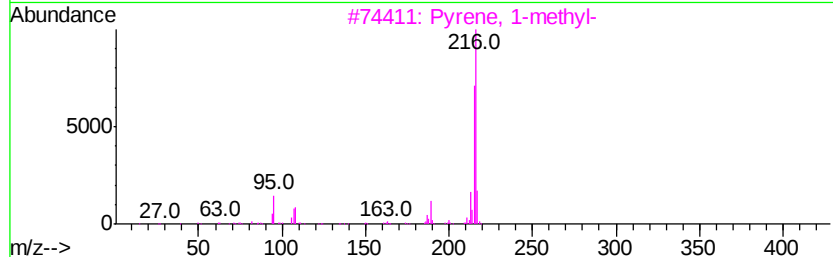
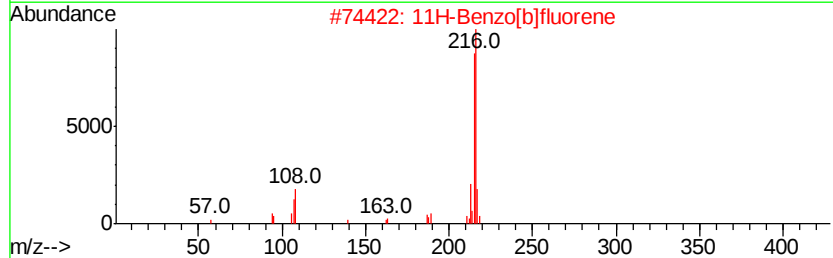
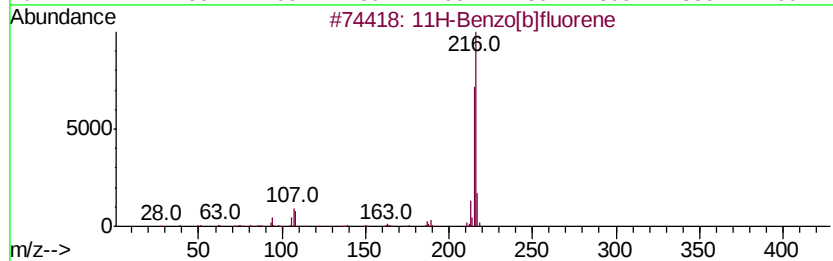
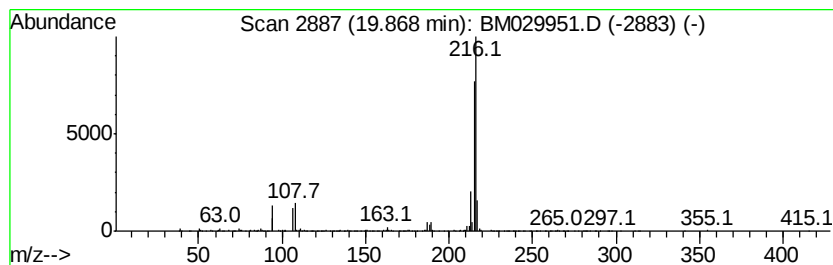
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 11H-Benzo[b]fluorene Concentration Rank 12

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 19.87 | 2.20 ng/ul | 556770 | Chrysene-d12     | 21.13 |

| Hit# | of | 5 | Tentative ID         | MW  | MolForm | CAS#        | Qual |
|------|----|---|----------------------|-----|---------|-------------|------|
| 1    |    |   | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 93   |
| 2    |    |   | 11H-Benzo[b]fluorene | 216 | C17H12  | 000243-17-4 | 91   |
| 3    |    |   | Pvrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 90   |
| 4    |    |   | 11H-Benzo[a]fluorene | 216 | C17H12  | 000238-84-6 | 83   |
| 5    |    |   | Pyrene, 1-methyl-    | 216 | C17H12  | 002381-21-7 | 83   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

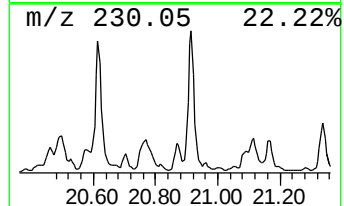
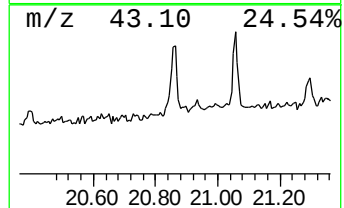
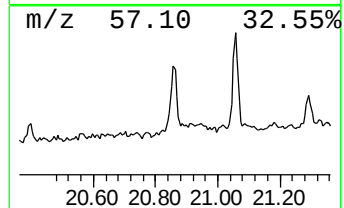
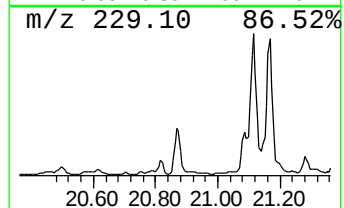
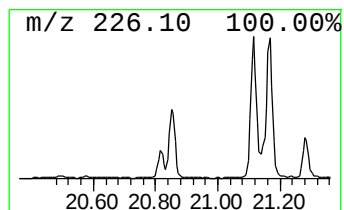
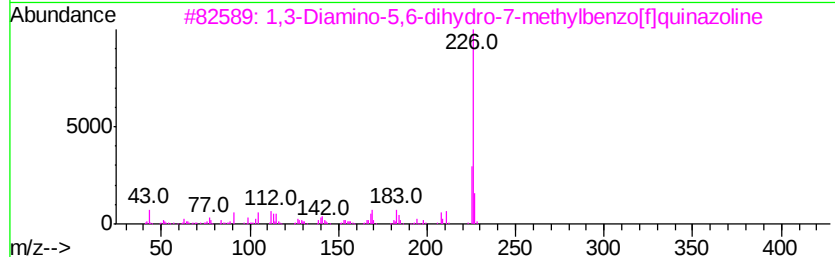
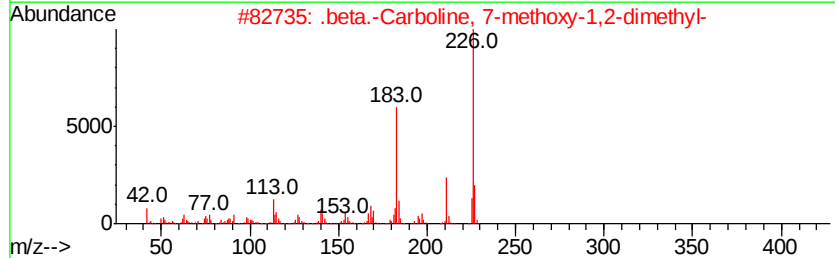
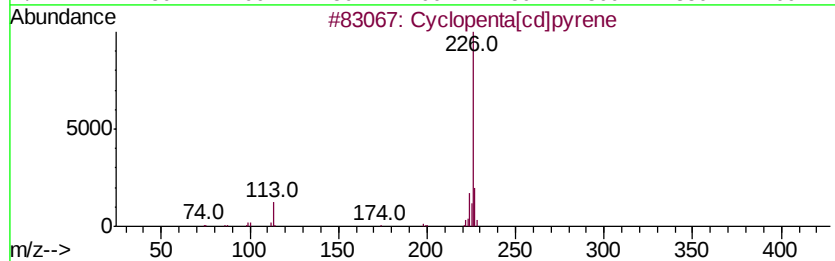
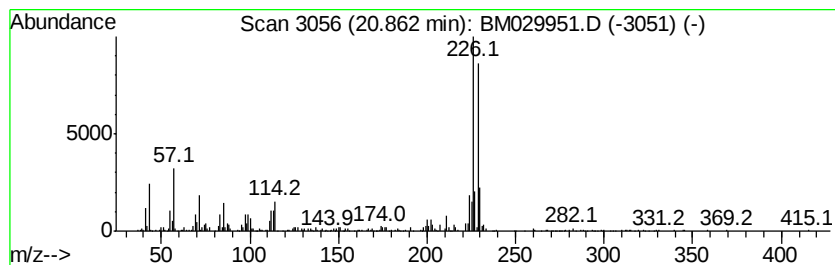
Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 11 Cyclopenta[cd]pyrene Concentration Rank 11

| R.T.    | EstConc    | Area                                | Relative to ISTD | R.T.      |              |      |
|---------|------------|-------------------------------------|------------------|-----------|--------------|------|
| 20.86   | 2.26 ng/ul | 572390                              | Chrysene-d12     | 21.13     |              |      |
| Hit# of | 5          | Tentative ID                        | MW               | MolForm   | CAS#         | Qual |
| 1       |            | Cyclopenta[cd]pyrene                | 226              | C18H10    | 027208-37-3  | 62   |
| 2       |            | .beta.-Carboline, 7-methoxy-1,2-... | 226              | C14H14N2O | 006519-18-2  | 53   |
| 3       |            | 1,3-Diamino-5,6-dihydro-7-methyl... | 226              | C13H14N4  | 037436-37-6  | 38   |
| 4       |            | 4-Naphthalen-2-yl-thiazol-2-ylamine | 226              | C13H10N2S | 1000300-53-4 | 38   |
| 5       |            | Isonipecotic acid, N-(2-furoyl)-... | 321              | C18H27N04 | 1000361-50-5 | 36   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

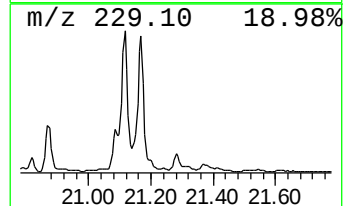
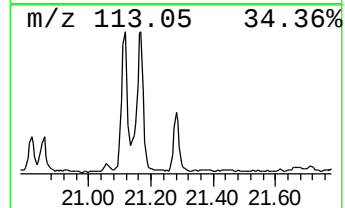
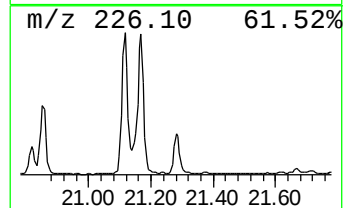
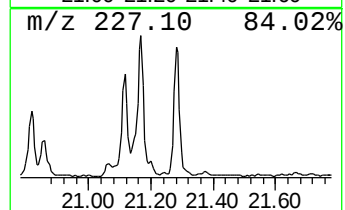
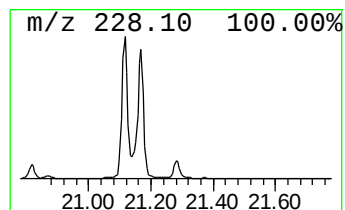
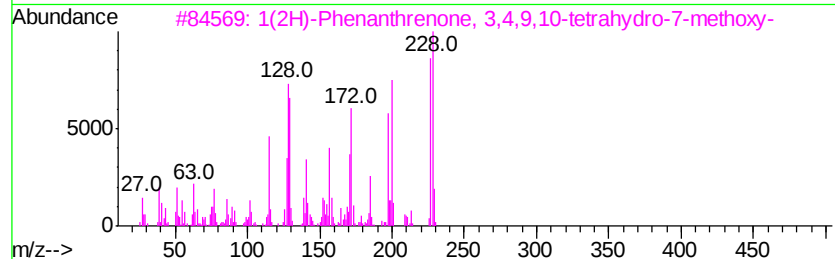
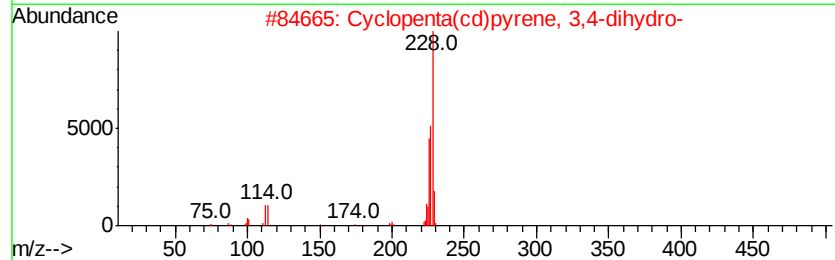
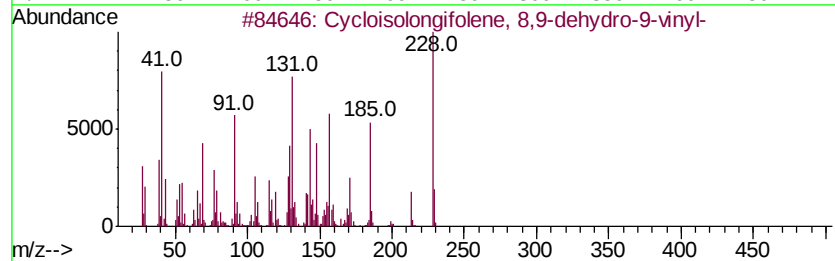
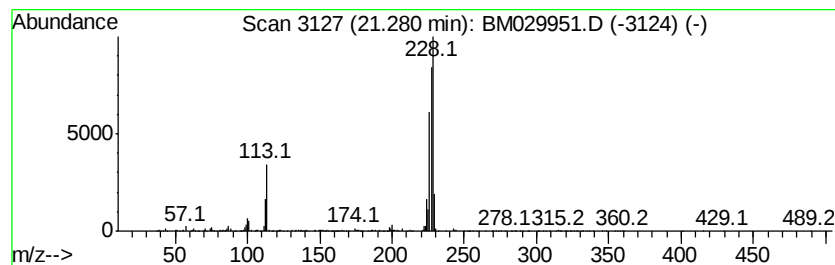
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Cycloisolongifolene, 8,9-de... Concentration Rank 13

| R.T.  | EstConc    | Area   | Relative to ISTD | R.T.  |
|-------|------------|--------|------------------|-------|
| 21.28 | 2.00 ng/ul | 505815 | Chrysene-d12     | 21.13 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | Cycloisolongifolene, 8,9-dehydro... | 228 | C17H24      | 1000151-80-0 | 91   |
| 2    |    | Cyclopenta(cd)pyrene, 3,4-dihydro-  | 228 | C18H12      | 025732-74-5  | 55   |
| 3    |    | 1(2H)-Phenanthrenone, 3,4,9,10-t... | 228 | C15H16O2    | 014427-61-3  | 50   |
| 4    |    | Dimethyl-[4-[2-(3-methylisoxazol... | 228 | C14H16N2O   | 1000306-39-6 | 50   |
| 5    |    | Isothiazol-5-amine, 4-bromo-3-ch... | 226 | C4H4BrClN2S | 1000272-59-9 | 47   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051021\  
Data File : BM029951.D  
Acq On : 11 May 2021 20:13  
Operator : CG/JU  
Sample : M2177-21  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

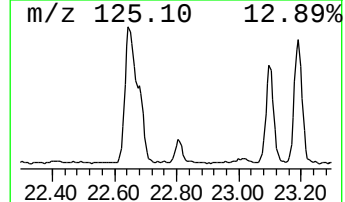
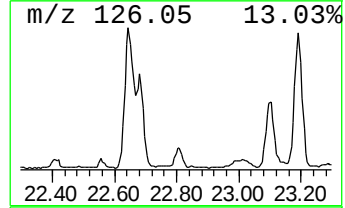
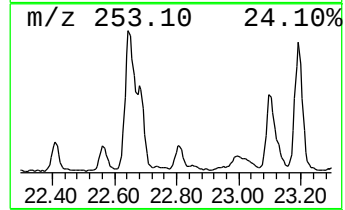
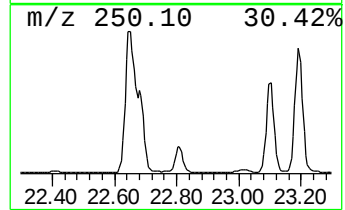
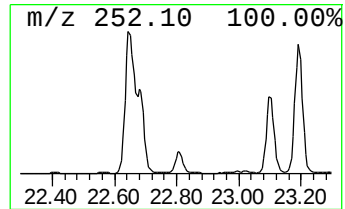
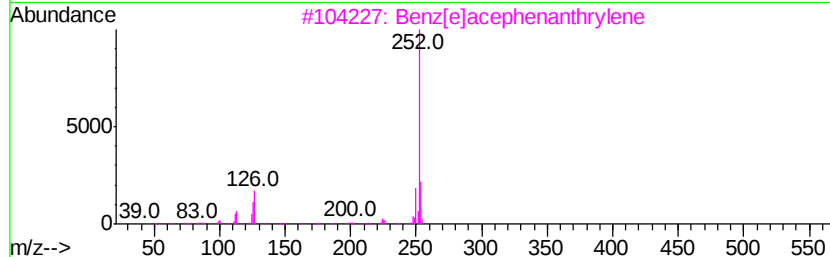
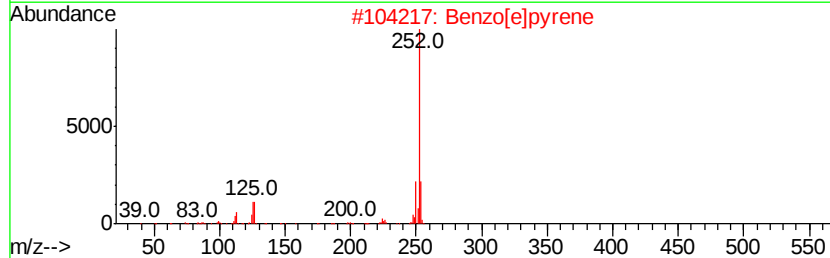
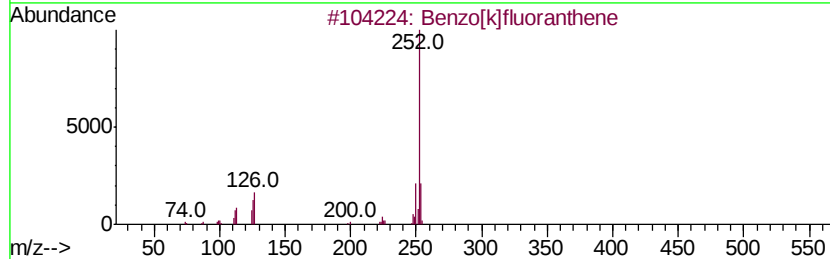
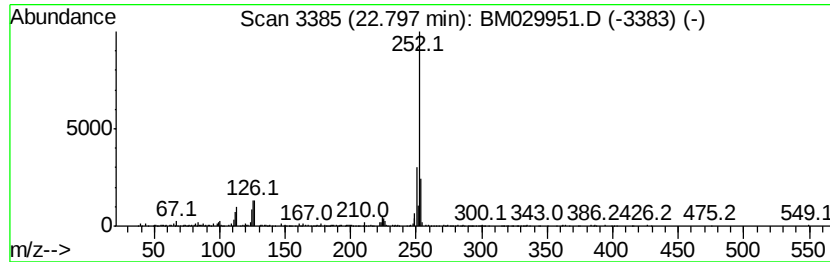
Instrument :  
BNA\_M  
ClientSampleId :  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 13 Benzo[e]pyrene Concentration Rank 3

| R.T.    | EstConc    | Area                      | Relative to ISTD | R.T.           |
|---------|------------|---------------------------|------------------|----------------|
| 22.80   | 4.60 ng/ul | 363961                    | Perylene-d12     | 23.29          |
| Hit# of | 5          | Tentative ID              | MW MolForm       | CAS# Qual      |
| 1       |            | Benzo[k]fluoranthene      | 252 C20H12       | 000207-08-9 99 |
| 2       |            | Benzo[e]pyrene            | 252 C20H12       | 000192-97-2 98 |
| 3       |            | Benzo[e]acephenanthrylene | 252 C20H12       | 000205-99-2 95 |
| 4       |            | Benzo[k]fluoranthene      | 252 C20H12       | 000207-08-9 93 |
| 5       |            | Benzo[a]pyrene            | 252 C20H12       | 000050-32-8 91 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM051021\  
 Data File : BM029951.D  
 Acq On : 11 May 2021 20:13  
 Operator : CG/JU  
 Sample : M2177-21  
 Misc :  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BG591

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SFAM-EPA-BM050721.M  
 Quant Title : SVOA CALIBRATION

TIC Library : C:\DATABASE\NIST11.L  
 TIC Integration Parameters: LSCINT.P

| TIC Top Hit name     | RT    | EstConc | Units | Response | --Internal Standard-- |       |         |      |
|----------------------|-------|---------|-------|----------|-----------------------|-------|---------|------|
|                      |       |         |       |          | #                     | RT    | Resp    | Conc |
| Naphthalene, 1,6-... | 13.51 | 2.5     | ng/ul | 216836   | 3                     | 14.19 | 1733690 | 20.0 |
| Dibenzothiophene     | 16.76 | 2.4     | ng/ul | 229103   | 4                     | 16.94 | 1877130 | 20.0 |
| Phenanthrene, 2-m... | 17.82 | 4.6     | ng/ul | 428193   | 4                     | 16.94 | 1877130 | 20.0 |
| Phenanthrene, 1-m... | 17.86 | 6.0     | ng/ul | 567185   | 4                     | 16.94 | 1877130 | 20.0 |
| 4H-Cyclopenta[def... | 18.01 | 9.3     | ng/ul | 873047   | 4                     | 16.94 | 1877130 | 20.0 |
| Anthracene, 2-met... | 18.04 | 2.8     | ng/ul | 263671   | 4                     | 16.94 | 1877130 | 20.0 |
| 6-Phenylbenzocycl... | 18.32 | 3.2     | ng/ul | 296370   | 4                     | 16.94 | 1877130 | 20.0 |
| 9,10-Anthracenedione | 18.37 | 4.6     | ng/ul | 430712   | 4                     | 16.94 | 1877130 | 20.0 |
| Phenanthrene, 2,5... | 18.74 | 2.7     | ng/ul | 253698   | 4                     | 16.94 | 1877130 | 20.0 |
| 11H-Benzo[b]fluorene | 19.87 | 2.2     | ng/ul | 556770   | 5                     | 21.13 | 5055160 | 20.0 |
| Cyclopenta[cd]pyrene | 20.86 | 2.3     | ng/ul | 572390   | 5                     | 21.13 | 5055160 | 20.0 |
| Cycloisolongifole... | 21.28 | 2.0     | ng/ul | 505815   | 5                     | 21.13 | 5055160 | 20.0 |
| Benzo[e]pyrene       | 22.80 | 4.6     | ng/ul | 363961   | 6                     | 23.29 | 1581760 | 20.0 |