

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
 Data File : BP001337.D  
 Acq On : 20 Dec 2019 11:31  
 Operator : JU  
 Sample : K6283-02  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 GROUNDWATER

Integration Parameters: rteint.p

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % 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\_P\METHODS\8270-BP121919.M

Title : ASP BNA STANDARDS FOR 5 POINT 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         | 5.610       | 594           | 599         | 610          | rVB      | 66251          | 102844        | 4.09%           | 0.591%        |
| 2         | 6.204       | 694           | 700         | 712          | rVB      | 690367         | 826545        | 32.85%          | 4.750%        |
| 3         | 7.034       | 836           | 841         | 848          | rBV      | 22483          | 28410         | 1.13%           | 0.163%        |
| 4         | 7.475       | 911           | 916         | 921          | rBV      | 42170          | 47763         | 1.90%           | 0.274%        |
| 5         | 7.745       | 957           | 962         | 970          | rVB      | 462560         | 550755        | 21.89%          | 3.165%        |
| 6         | 7.822       | 970           | 975         | 980          | rBV      | 75945          | 90127         | 3.58%           | 0.518%        |
| 7         | 7.939       | 988           | 995         | 1006         | rBV      | 1347238        | 1622301       | 64.47%          | 9.323%        |
| 8         | 8.298       | 1051          | 1056        | 1064         | rBV      | 372730         | 416169        | 16.54%          | 2.392%        |
| 9         | 8.539       | 1090          | 1097        | 1102         | rBV      | 1261291        | 1531630       | 60.87%          | 8.802%        |
| 10        | 8.586       | 1102          | 1105        | 1110         | rVB      | 89827          | 98057         | 3.90%           | 0.564%        |
| 11        | 9.186       | 1197          | 1207        | 1210         | rBV      | 1029333        | 1353258       | 53.78%          | 7.777%        |
| 12        | 9.398       | 1238          | 1243        | 1249         | rVB      | 21610          | 33942         | 1.35%           | 0.195%        |
| 13        | 9.928       | 1320          | 1333        | 1339         | rBV2     | 78363          | 155451        | 6.18%           | 0.893%        |
| 14        | 9.992       | 1339          | 1344        | 1355         | rVB3     | 24421          | 42634         | 1.69%           | 0.245%        |
| 15        | 10.333      | 1397          | 1402        | 1406         | rBV      | 433299         | 496712        | 19.74%          | 2.854%        |
| 16        | 10.363      | 1406          | 1407        | 1416         | rVB      | 42814          | 43685         | 1.74%           | 0.251%        |
| 17        | 10.975      | 1505          | 1511        | 1519         | rBV2     | 24833          | 42555         | 1.69%           | 0.245%        |
| 18        | 12.116      | 1698          | 1705        | 1710         | rBV      | 1942797        | 2326010       | 92.44%          | 13.367%       |
| 19        | 12.786      | 1813          | 1819        | 1824         | rBV      | 92564          | 109559        | 4.35%           | 0.630%        |
| 20        | 13.198      | 1882          | 1889        | 1895         | rBV      | 471771         | 560149        | 22.26%          | 3.219%        |
| 21        | 13.298      | 1903          | 1906        | 1917         | rBV2     | 28437          | 45384         | 1.80%           | 0.261%        |
| 22        | 13.645      | 1960          | 1965        | 1975         | rBV2     | 44502          | 67654         | 2.69%           | 0.389%        |
| 23        | 14.492      | 2103          | 2109        | 2121         | rBV      | 1299483        | 1715651       | 68.18%          | 9.859%        |
| 24        | 15.598      | 2288          | 2297        | 2303         | rBV      | 524858         | 580630        | 23.07%          | 3.337%        |
| 25        | 16.492      | 2444          | 2449        | 2461         | rBV      | 183521         | 261796        | 10.40%          | 1.504%        |
| 26        | 17.580      | 2630          | 2634        | 2645         | rBV      | 55428          | 82362         | 3.27%           | 0.473%        |
| 27        | 17.886      | 2680          | 2686        | 2690         | rBV      | 2315564        | 2516305       | 100.00%         | 14.460%       |
| 28        | 19.115      | 2891          | 2895        | 2909         | rBV      | 147088         | 277536        | 11.03%          | 1.595%        |
| 29        | 19.245      | 2911          | 2917        | 2927         | rVB      | 421544         | 503731        | 20.02%          | 2.895%        |
| 30        | 19.927      | 3029          | 3033        | 3041         | rBV      | 25864          | 38361         | 1.52%           | 0.220%        |
| 31        | 20.304      | 3093          | 3097        | 3102         | rBV      | 33092          | 39306         | 1.56%           | 0.226%        |
| 32        | 20.386      | 3106          | 3111        | 3117         | rVB      | 34980          | 44894         | 1.78%           | 0.258%        |
| 33        | 20.468      | 3121          | 3125        | 3129         | rBV      | 40632          | 47535         | 1.89%           | 0.273%        |
| 34        | 20.698      | 3159          | 3164        | 3169         | rBV      | 40464          | 54838         | 2.18%           | 0.315%        |

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Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Integration Parameters: rteint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 3 % of largest Peak  
Start Thrs: 0.2 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

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

Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP121919.M  
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

|    |        |      |      |      |      |        |        |        |        |
|----|--------|------|------|------|------|--------|--------|--------|--------|
| 35 | 20.803 | 3176 | 3182 | 3190 | rVB  | 46099  | 68467  | 2.72%  | 0.393% |
| 36 | 21.015 | 3212 | 3218 | 3225 | rBV  | 317967 | 443177 | 17.61% | 2.547% |
| 37 | 21.133 | 3233 | 3238 | 3245 | rBV  | 35763  | 53523  | 2.13%  | 0.308% |
| 38 | 21.633 | 3318 | 3323 | 3328 | rBV2 | 23528  | 35902  | 1.43%  | 0.206% |
| 39 | 21.692 | 3328 | 3333 | 3340 | rBV7 | 18021  | 45757  | 1.82%  | 0.263% |

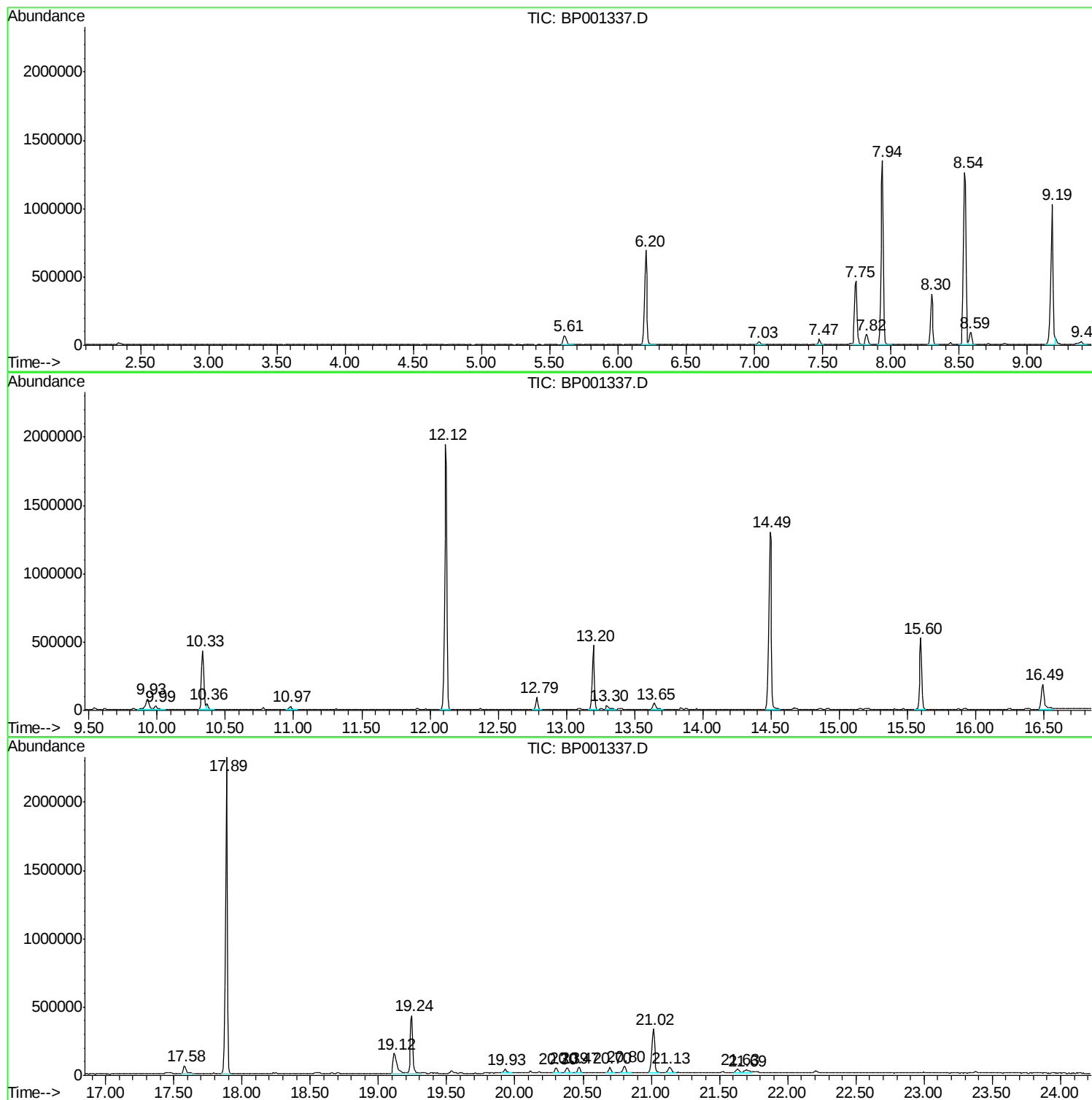
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
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Misc :  
ALS Vial : 4 Sample Multiplier: 1

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Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

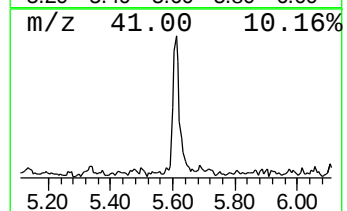
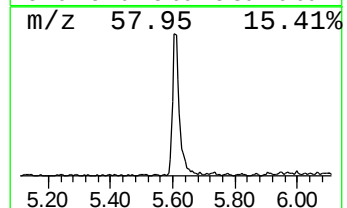
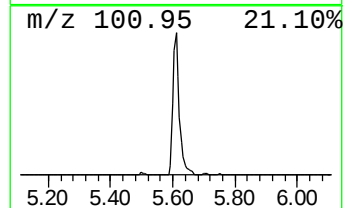
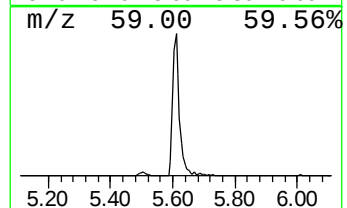
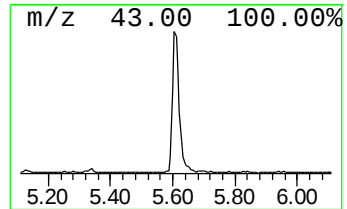
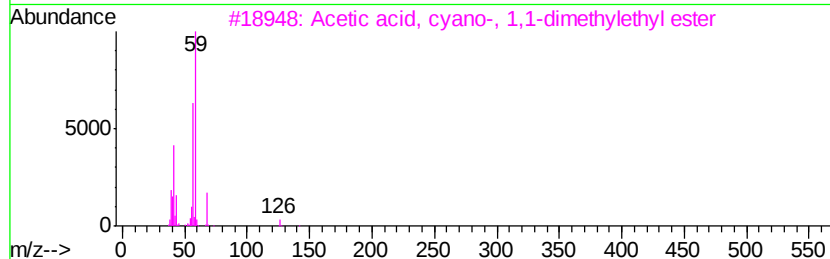
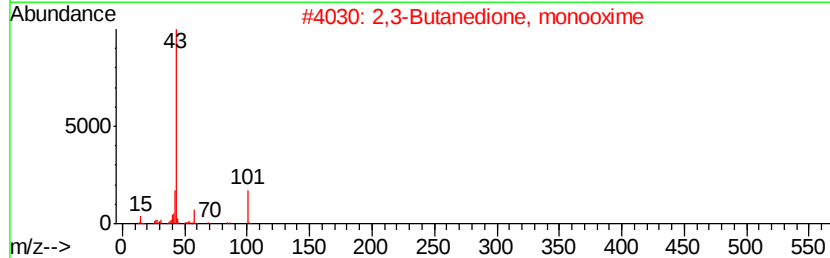
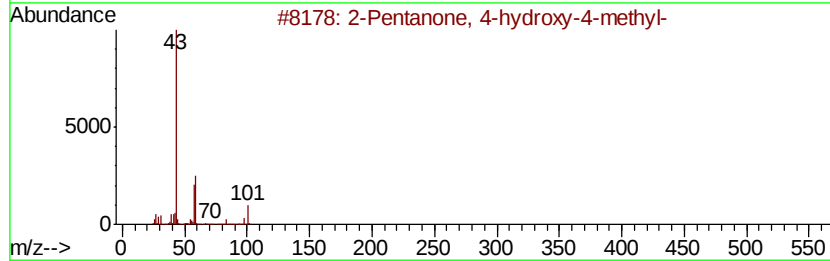
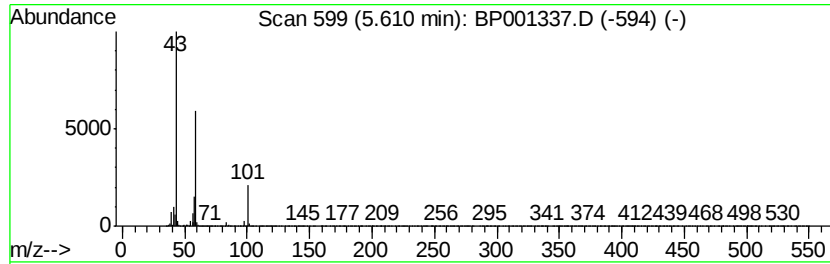
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 5

| R.T. | EstConc | Area   | Relative to ISTD       | R.T. |
|------|---------|--------|------------------------|------|
| 5.61 | 4.94 ng | 102844 | 1,4-Dichlorobenzene-d4 | 8.30 |

| Hit# | of | 5 | Tentative ID                         | MW  | MolForm  | CAS#        | Qual |
|------|----|---|--------------------------------------|-----|----------|-------------|------|
| 1    |    |   | 2-Pentanone, 4-hydroxy-4-methyl-     | 116 | C6H12O2  | 000123-42-2 | 56   |
| 2    |    |   | 2,3-Butanedione, monooxime           | 101 | C4H7NO2  | 000057-71-6 | 35   |
| 3    |    |   | Acetic acid, cyano-, 1,1-dimethyl... | 141 | C7H11NO2 | 001116-98-9 | 17   |
| 4    |    |   | Morpholine, 4-methyl-                | 101 | C5H11NO  | 000109-02-4 | 9    |
| 5    |    |   | 3-Hexanol, 4-methyl-                 | 116 | C7H16O   | 000615-29-2 | 9    |



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GROUNDWATER

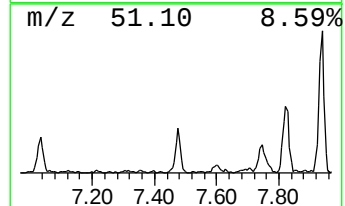
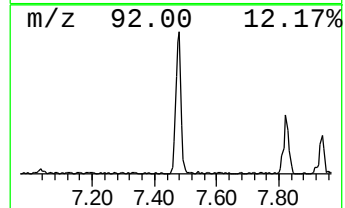
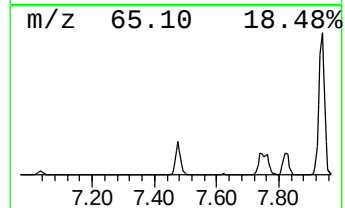
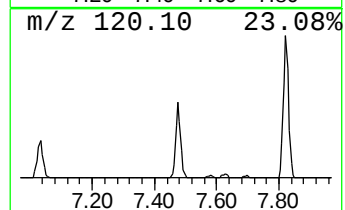
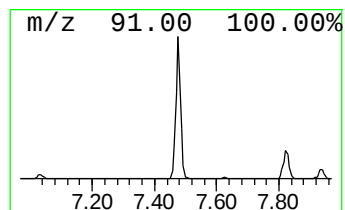
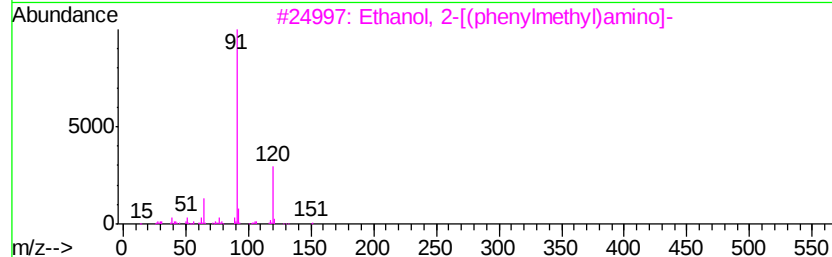
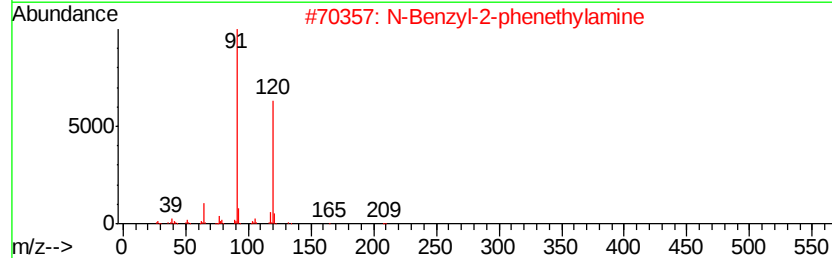
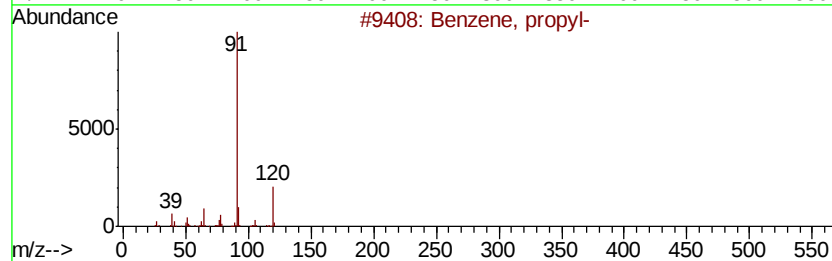
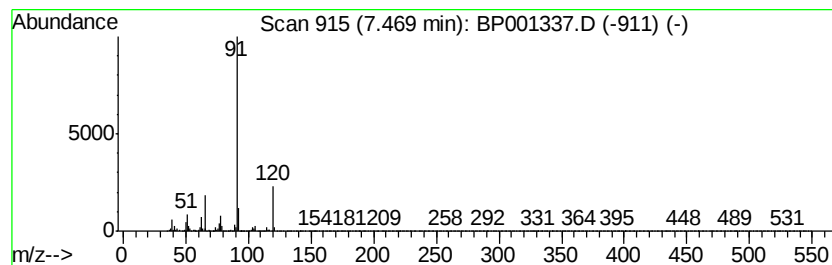
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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Peak Number 2 Benzene, propyl- Concentration Rank 13

| R.T. | EstConc | Area  | Relative to ISTD       | R.T. |
|------|---------|-------|------------------------|------|
| 7.47 | 2.30 ng | 47763 | 1,4-Dichlorobenzene-d4 | 8.30 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|---------|--------------|------|
| 1    |    |   | Benzene, propyl-                    | 120 | C9H12   | 000103-65-1  | 83   |
| 2    |    |   | N-Benzyl-2-phenethylamine           | 211 | C15H17N | 003647-71-0  | 78   |
| 3    |    |   | Ethanol, 2-[(phenylmethyl)amino]-   | 151 | C9H13NO | 000104-63-2  | 64   |
| 4    |    |   | 6-Methylenebicyclo[3.2.0]hept-3-... | 120 | C8H8O   | 1000211-11-9 | 52   |
| 5    |    |   | Benzeneacetaldehyde                 | 120 | C8H8O   | 000122-78-1  | 47   |



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Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

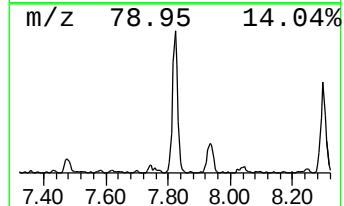
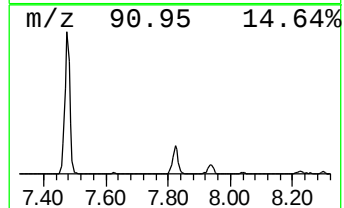
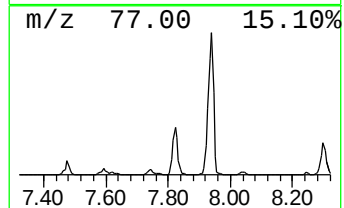
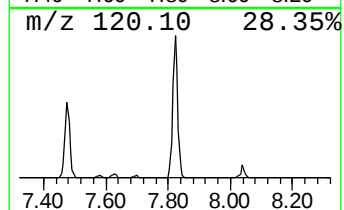
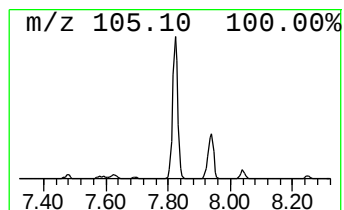
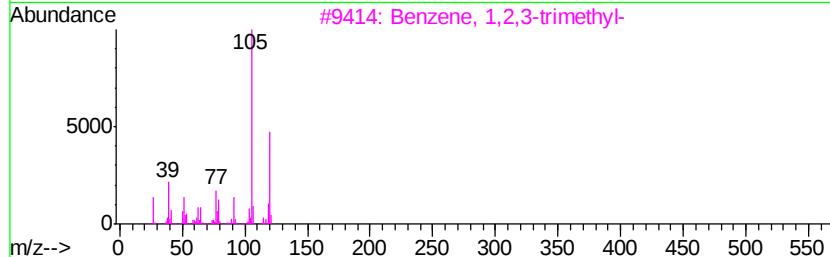
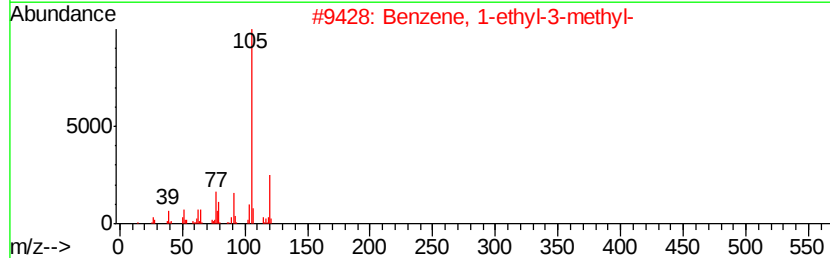
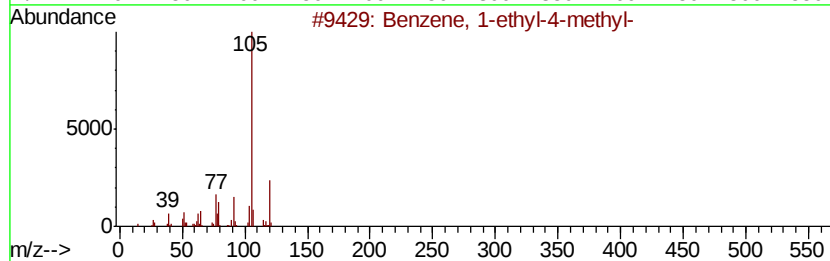
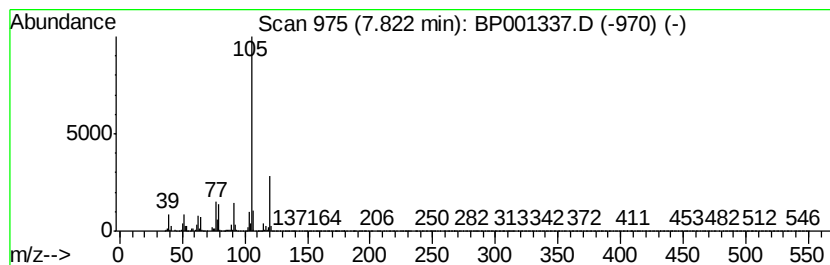
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 3 Benzene, 1-ethyl-4-methyl- Concentration Rank 7

| R.T. | EstConc | Area  | Relative to ISTD       | R.T. |
|------|---------|-------|------------------------|------|
| 7.82 | 4.33 ng | 90127 | 1,4-Dichlorobenzene-d4 | 8.30 |

| Hit# | of | Tentative ID               | MW  | MolForm | CAS#        | Qual |
|------|----|----------------------------|-----|---------|-------------|------|
| 1    | 5  | Benzene, 1-ethyl-4-methyl- | 120 | C9H12   | 000622-96-8 | 95   |
| 2    |    | Benzene, 1-ethyl-3-methyl- | 120 | C9H12   | 000620-14-4 | 93   |
| 3    |    | Benzene, 1,2,3-trimethyl-  | 120 | C9H12   | 000526-73-8 | 91   |
| 4    |    | Benzene, 1-ethyl-2-methyl- | 120 | C9H12   | 000611-14-3 | 90   |
| 5    |    | Mesitylene                 | 120 | C9H12   | 000108-67-8 | 90   |



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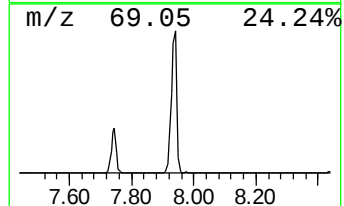
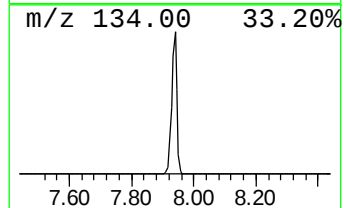
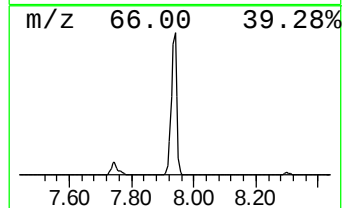
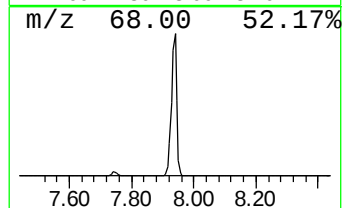
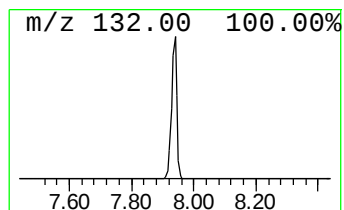
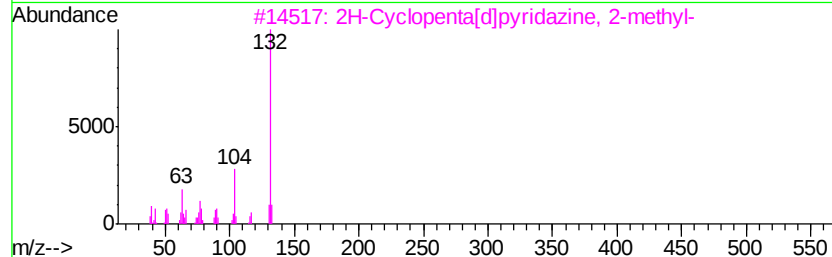
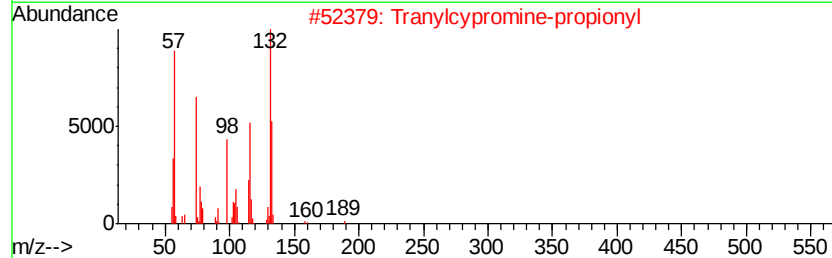
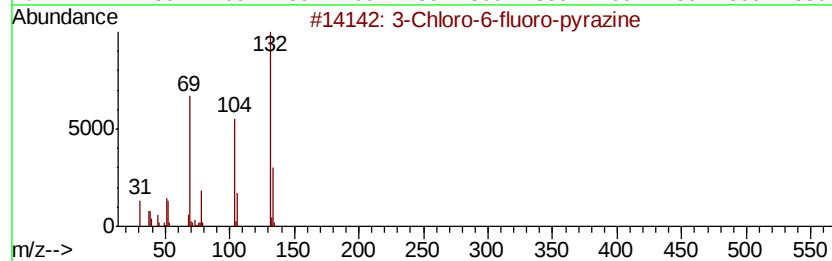
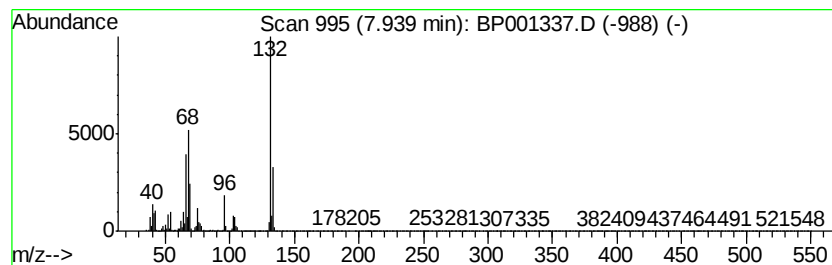
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 4 unknown7.94 Concentration Rank 1

| R.T. | EstConc  | Area    | Relative to ISTD       | R.T. |
|------|----------|---------|------------------------|------|
| 7.94 | 77.96 ng | 1622300 | 1,4-Dichlorobenzene-d4 | 8.30 |

| Hit# | of | 5 | Tentative ID                          | MW  | MolForm   | CAS#         | Qual |
|------|----|---|---------------------------------------|-----|-----------|--------------|------|
| 1    |    |   | 3-Chloro-6-fluoro-pyrazine            | 132 | C4H2ClFN2 | 1000146-10-7 | 14   |
| 2    |    |   | Tranylcypromine-propionyl             | 189 | C12H15NO  | 1000123-86-3 | 10   |
| 3    |    |   | 2H-Cyclopenta[d]pyridazine, 2-methyl- | 132 | C8H8N2    | 022291-85-6  | 10   |
| 4    |    |   | Cyclopropanamine, 1-phenyl-           | 133 | C9H11N    | 1000351-26-2 | 10   |
| 5    |    |   | 1H-Benzimidazole, 2-methyl-           | 132 | C8H8N2    | 000615-15-6  | 10   |



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Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

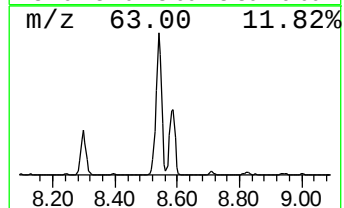
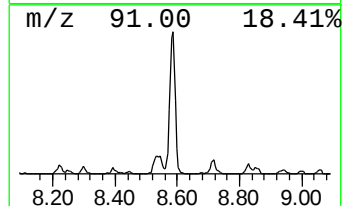
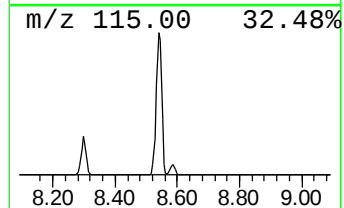
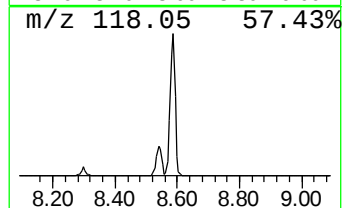
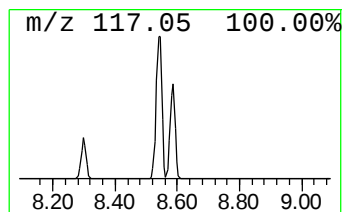
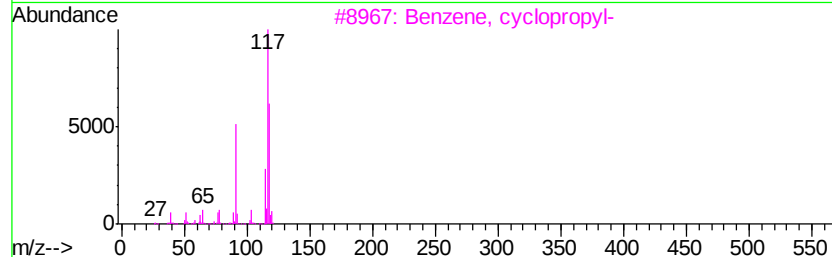
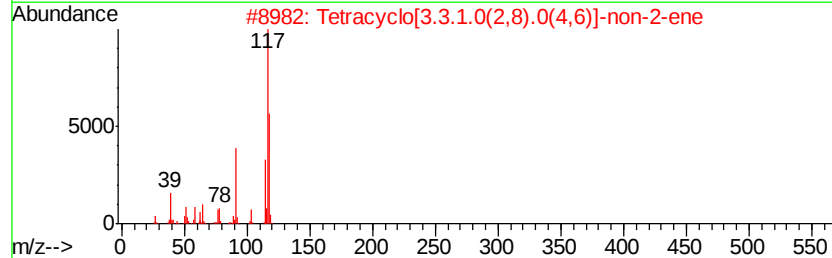
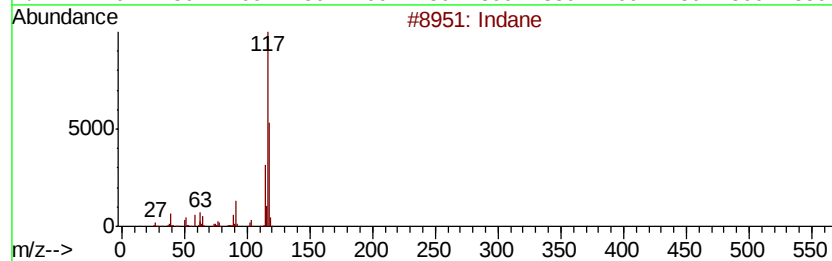
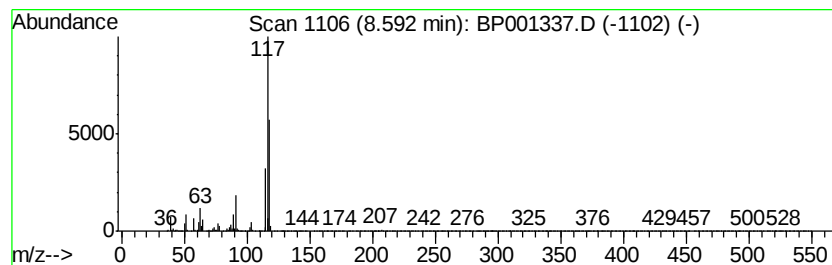
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 6 Indane Concentration Rank 6

| R.T. | EstConc | Area  | Relative to ISTD       | R.T. |
|------|---------|-------|------------------------|------|
| 8.59 | 4.71 ng | 98057 | 1,4-Dichlorobenzene-d4 | 8.30 |

| Hit# of | 5                                | Tentative ID | MW  | MolForm | CAS#         | Qual |
|---------|----------------------------------|--------------|-----|---------|--------------|------|
| 1       | Indane                           |              | 118 | C9H10   | 000496-11-7  | 87   |
| 2       | Tetracyclo[3.3.1.0(2,8).0(4,6)]- | ...          | 118 | C9H10   | 1000191-13-7 | 81   |
| 3       | Benzene, cvclopropyl-            |              | 118 | C9H10   | 000873-49-4  | 64   |
| 4       | (Z)-1-Phenylpropene              |              | 118 | C9H10   | 000766-90-5  | 60   |
| 5       | Deltacyclene                     |              | 118 | C9H10   | 007785-10-6  | 58   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

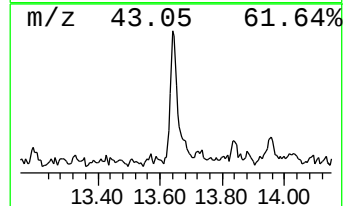
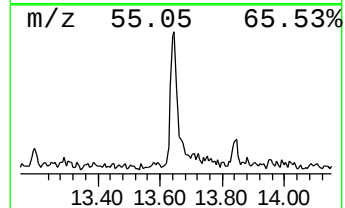
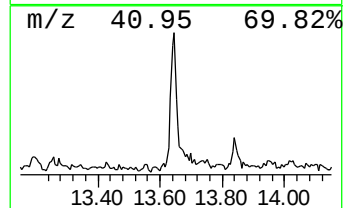
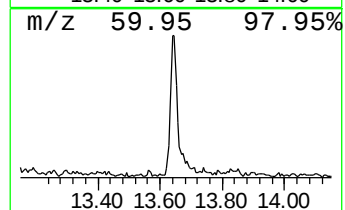
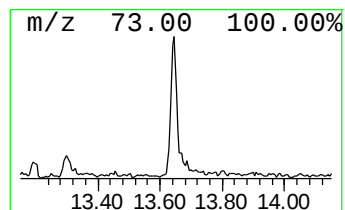
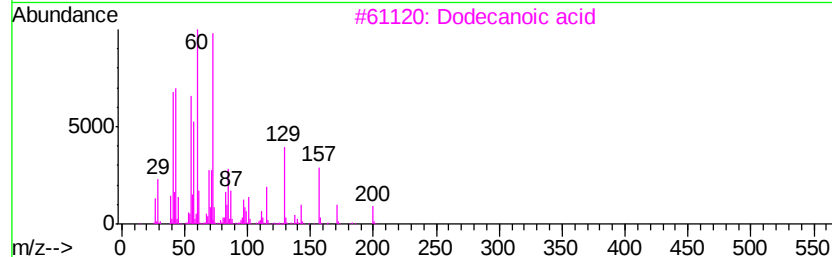
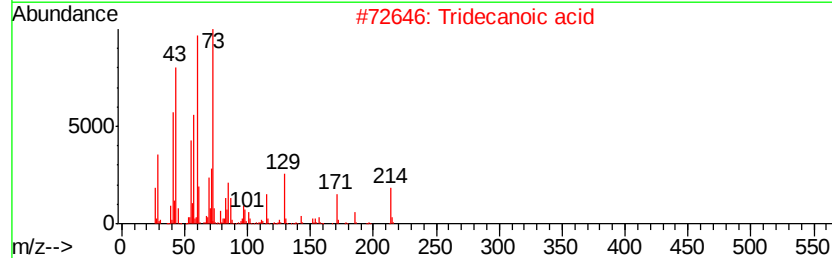
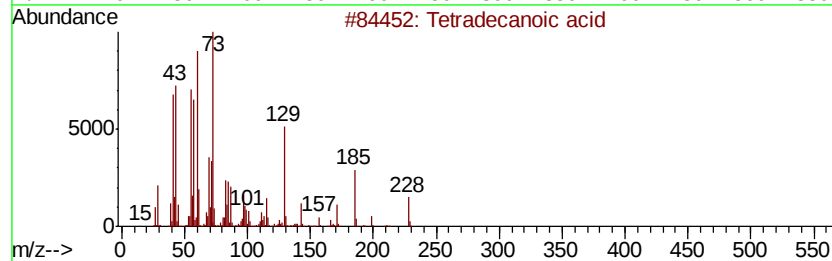
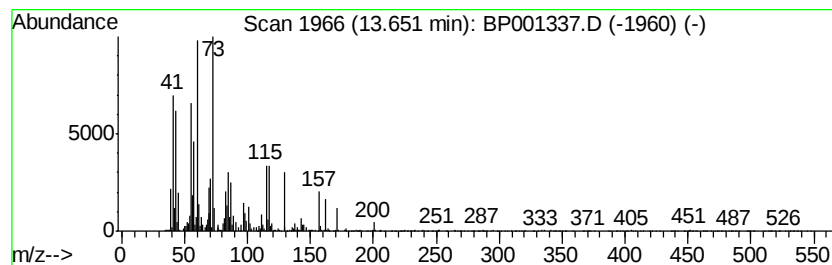
Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 7 Tetradecanoic acid Concentration Rank 11

| R.T.      | EstConc            | Area  | Relative to ISTD |             | R.T.  |
|-----------|--------------------|-------|------------------|-------------|-------|
| 13.65     | 2.42 ng            | 67654 | Acenaphthene-d10 |             | 13.20 |
| Hit# of 5 | Tentative ID       | MW    | MolForm          | CAS#        | Qual  |
| 1         | Tetradecanoic acid | 228   | C14H28O2         | 000544-63-8 | 64    |
| 2         | Tridecanoic acid   | 214   | C13H26O2         | 000638-53-9 | 64    |
| 3         | Dodecanoic acid    | 200   | C12H24O2         | 000143-07-7 | 62    |
| 4         | Undecanoic acid    | 186   | C11H22O2         | 000112-37-8 | 59    |
| 5         | Nonanoic acid      | 158   | C9H18O2          | 000112-05-0 | 58    |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

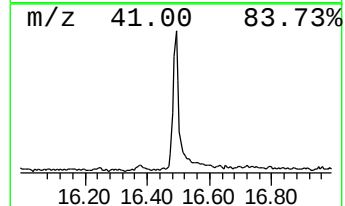
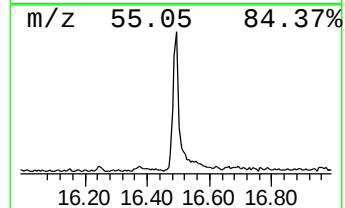
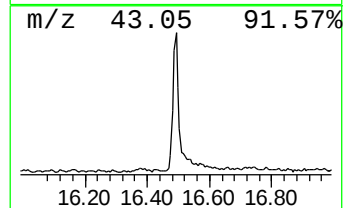
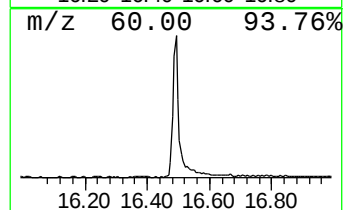
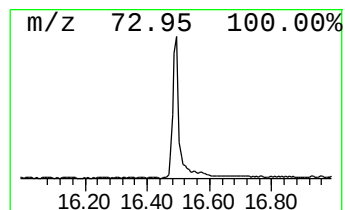
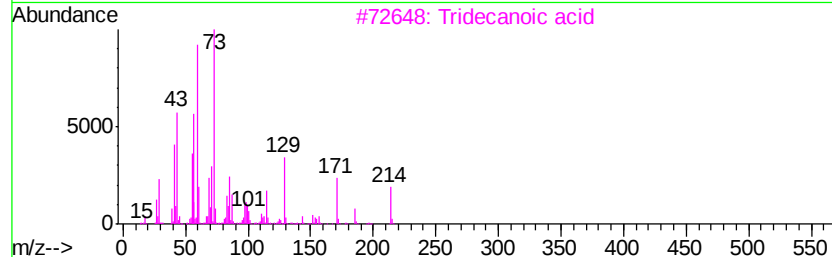
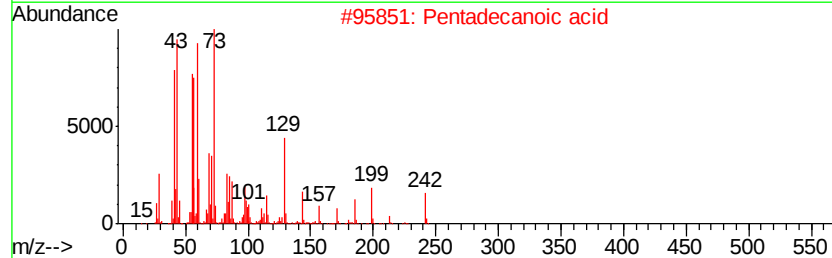
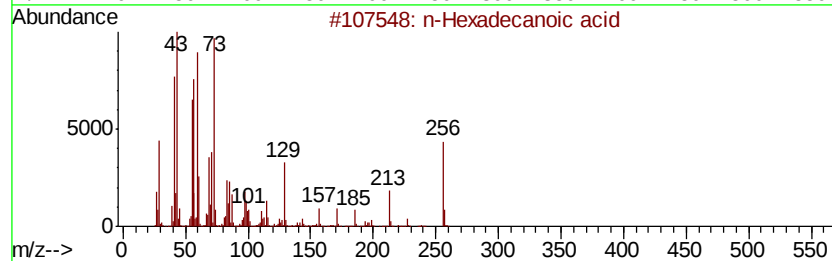
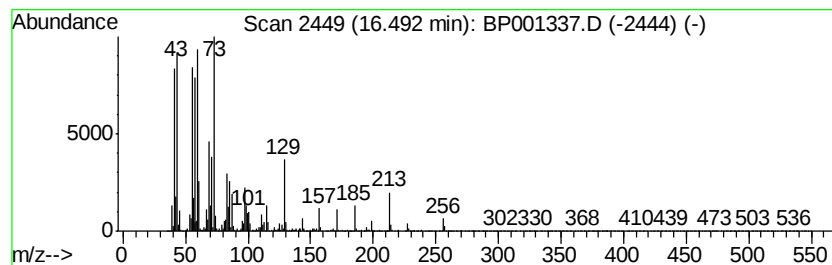
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 n-Hexadecanoic acid Concentration Rank 4

| R.T.  | EstConc | Area   | Relative to ISTD |  | R.T.  |
|-------|---------|--------|------------------|--|-------|
| 16.49 | 9.02 ng | 261796 | Phenanthrene-d10 |  | 15.60 |

| Hit# of | 5                   | Tentative ID | MW       | MolForm     | CAS# | Qual |
|---------|---------------------|--------------|----------|-------------|------|------|
| 1       | n-Hexadecanoic acid | 256          | C16H32O2 | 000057-10-3 | 97   |      |
| 2       | Pentadecanoic acid  | 242          | C15H30O2 | 001002-84-2 | 93   |      |
| 3       | Tridecanoic acid    | 214          | C13H26O2 | 000638-53-9 | 87   |      |
| 4       | Undecanoic acid     | 186          | C11H22O2 | 000112-37-8 | 81   |      |
| 5       | Tetradecanoic acid  | 228          | C14H28O2 | 000544-63-8 | 76   |      |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

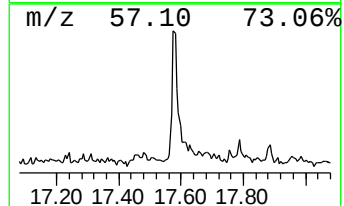
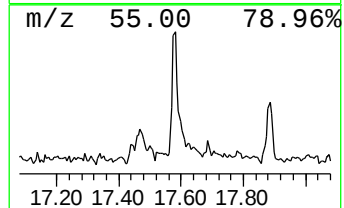
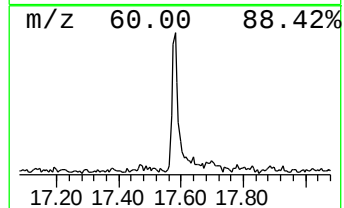
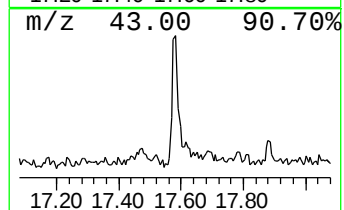
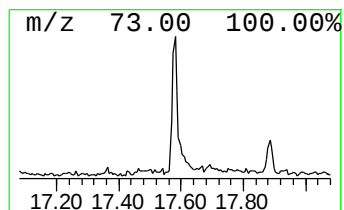
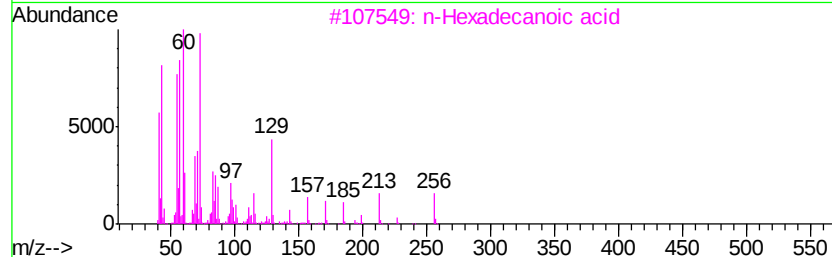
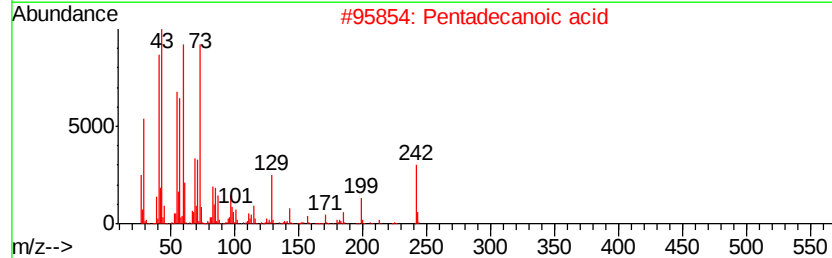
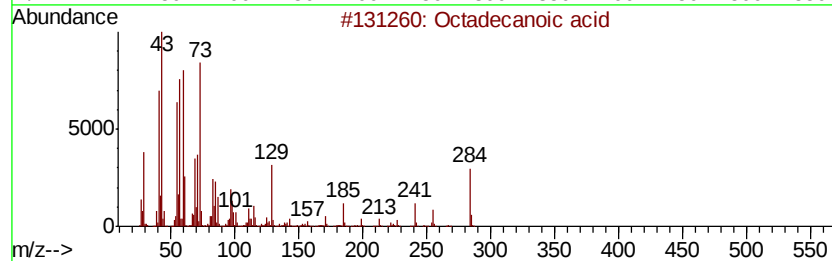
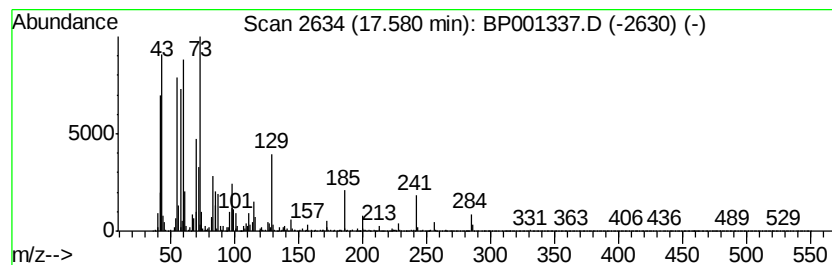
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Octadecanoic acid Concentration Rank 8

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 17.58 | 3.27 ng | 82362 | Chrysene-d12     | 19.24 |

| Hit# | of | Tentative ID        | MW  | MolForm  | CAS#        | Qual |
|------|----|---------------------|-----|----------|-------------|------|
| 1    | 5  | Octadecanoic acid   | 284 | C18H36O2 | 000057-11-4 | 99   |
| 2    |    | Pentadecanoic acid  | 242 | C15H30O2 | 001002-84-2 | 90   |
| 3    |    | n-Hexadecanoic acid | 256 | C16H32O2 | 000057-10-3 | 81   |
| 4    |    | Tetradecanoic acid  | 228 | C14H28O2 | 000544-63-8 | 80   |
| 5    |    | Tridecanoic acid    | 214 | C13H26O2 | 000638-53-9 | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

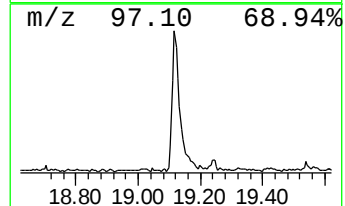
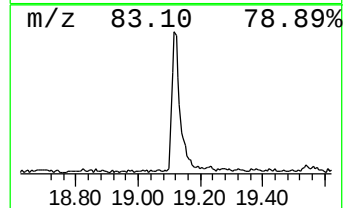
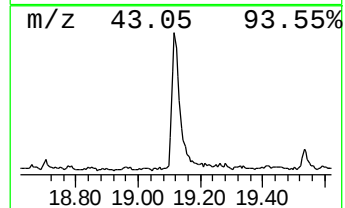
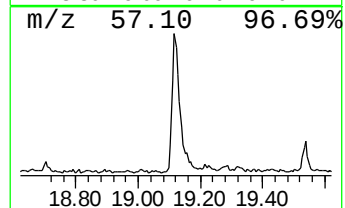
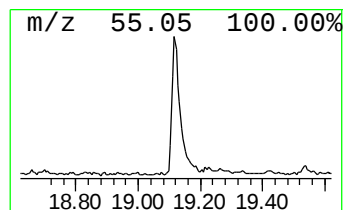
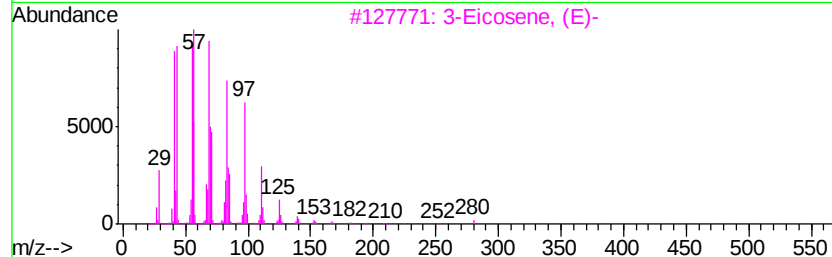
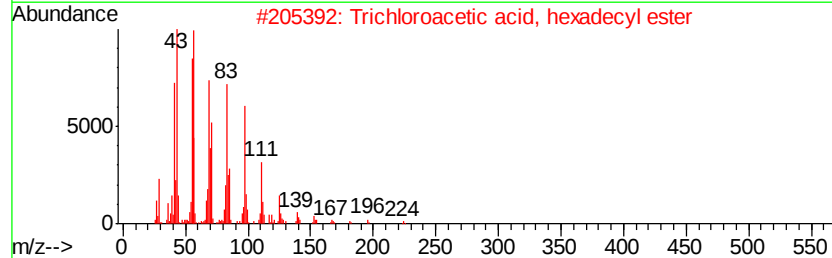
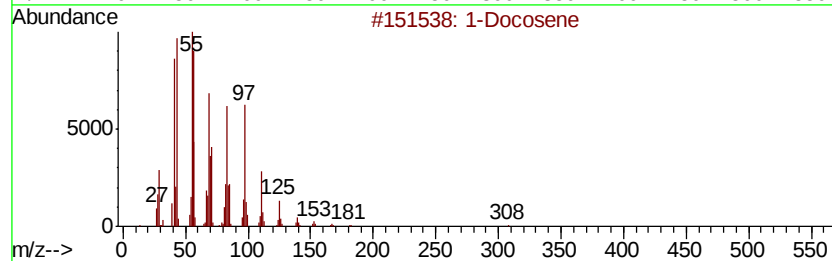
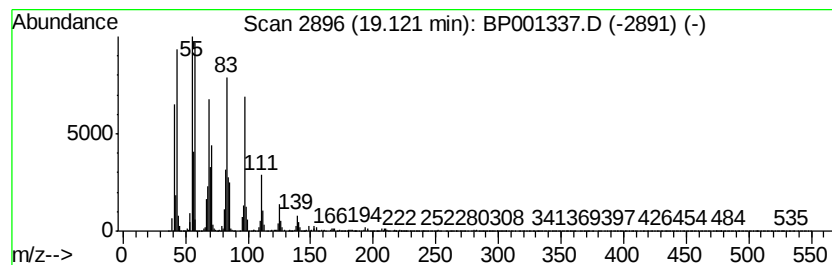
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 10 1-Docosene Concentration Rank 3

| R.T.  | EstConc  | Area   | Relative to ISTD | R.T.  |
|-------|----------|--------|------------------|-------|
| 19.12 | 11.02 ng | 277536 | Chrysene-d12     | 19.24 |

| Hit# | of | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|------|----|-------------------------------------|-----|-------------|--------------|------|
| 1    | 5  | 1-Docosene                          | 308 | C22H44      | 001599-67-3  | 95   |
| 2    |    | Trichloroacetic acid, hexadecyl ... | 386 | C18H33Cl3O2 | 074339-54-1  | 91   |
| 3    |    | 3-Eicosene, (E)-                    | 280 | C20H40      | 074685-33-9  | 91   |
| 4    |    | 1-Eicosene                          | 280 | C20H40      | 003452-07-1  | 91   |
| 5    |    | Heptadecyl trifluoroacetate         | 352 | C19H35F3O2  | 1000351-87-0 | 91   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
 Data File : BP001337.D  
 Acq On : 20 Dec 2019 11:31  
 Operator : JU  
 Sample : K6283-02  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

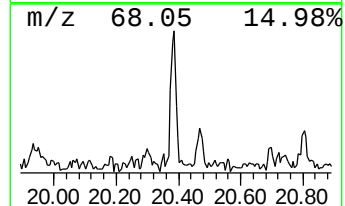
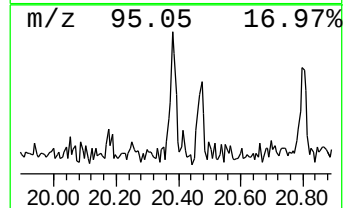
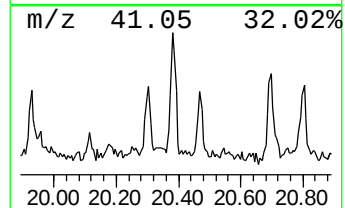
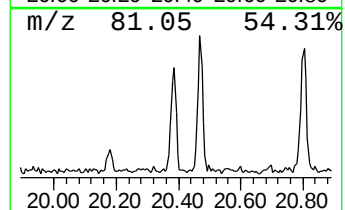
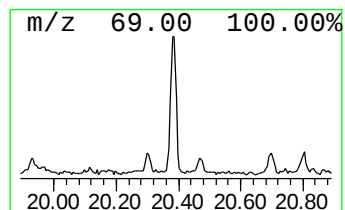
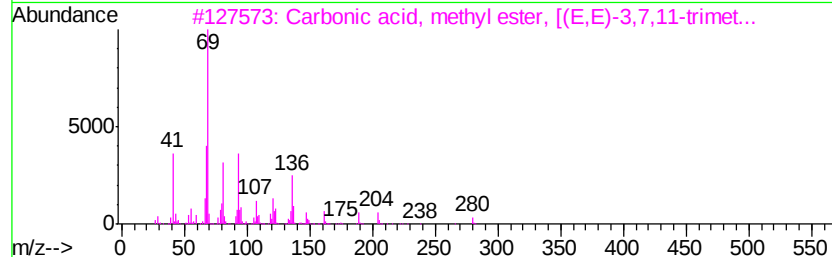
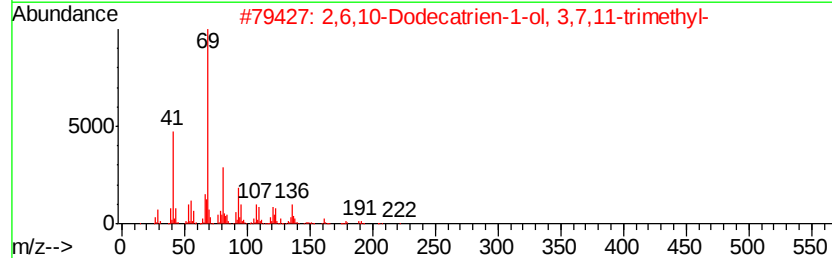
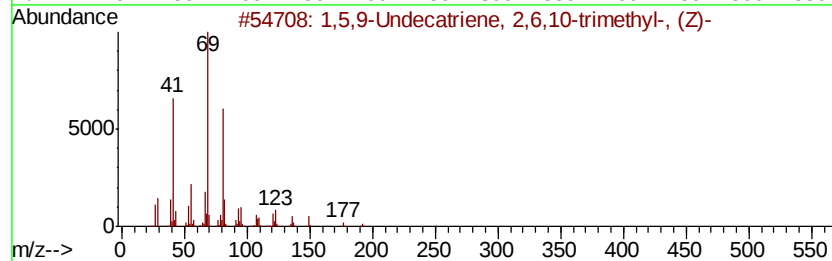
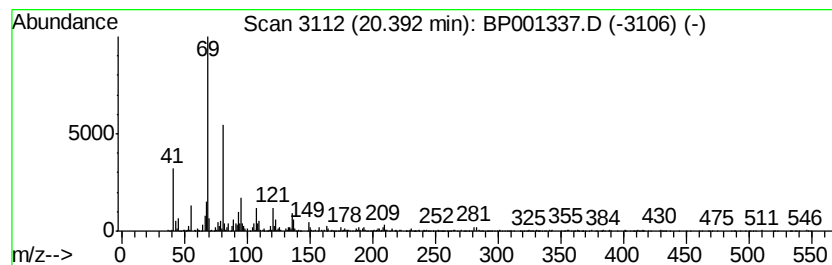
TIC Library : C:\DATABASE\NIST11.L  
 TIC Integration Parameters: LSCINT.P

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 Peak Number 11 1,5,9-Undecatriene, 2,6,10-... Concentration Rank 16

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 20.39 | 2.03 ng | 44894 | Perylene-d12     | 21.02 |

| Hit# | of | Tentative ID                         | MW  | MolForm  | CAS#         | Qual |
|------|----|--------------------------------------|-----|----------|--------------|------|
| 1    | 5  | 1,5,9-Undecatriene, 2,6,10-trime...  | 192 | C14H24   | 062951-96-6  | 80   |
| 2    |    | 2,6,10-Dodecatrien-1-ol, 3,7,11-...  | 222 | C15H26O  | 004602-84-0  | 64   |
| 3    |    | Carbonic acid, methyl ester, [(E...] | 280 | C17H28O3 | 1000164-38-7 | 64   |
| 4    |    | Supraene                             | 410 | C30H50   | 007683-64-9  | 64   |
| 5    |    | 4,9,13,17-Tetramethyl-4,8,12,16-...  | 316 | C22H36O  | 056882-09-8  | 64   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

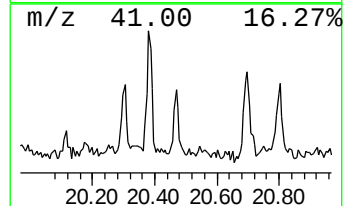
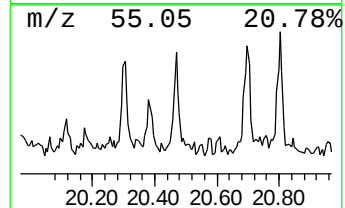
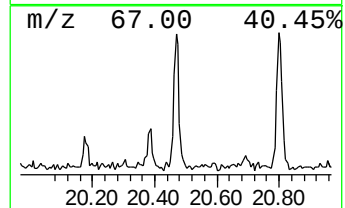
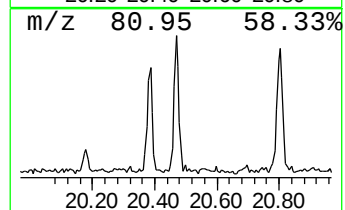
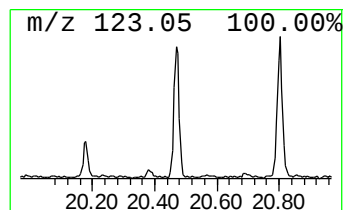
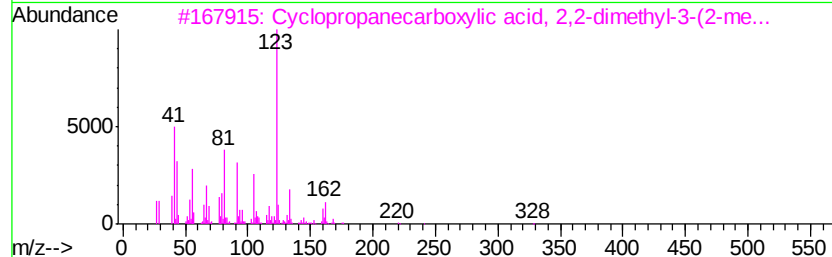
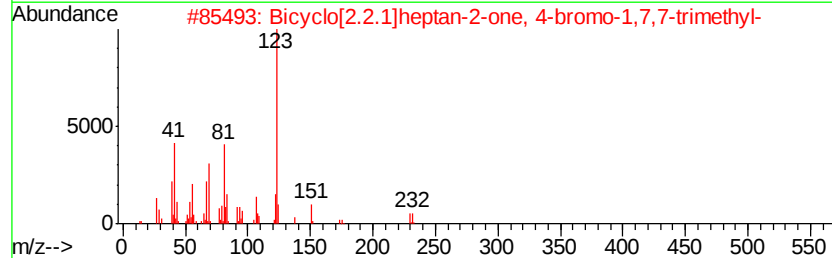
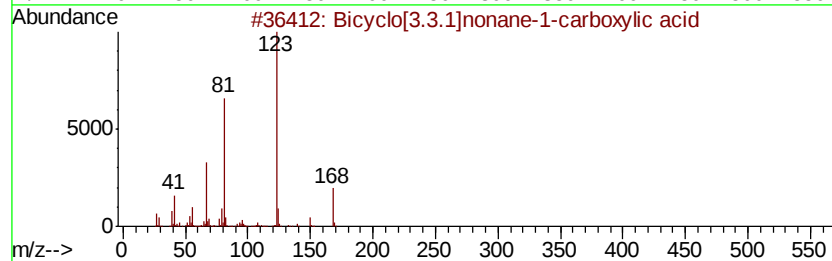
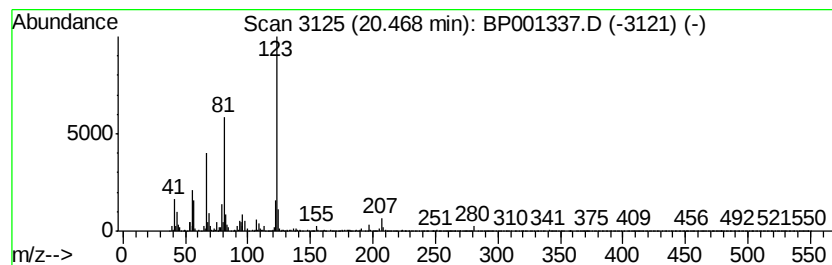
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 12 Bicyclo[3.3.1]nonane-1-carb... Concentration Rank 14

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 20.47 | 2.15 ng | 47535 | Perylene-d12     | 21.02 |

| Hit# | of | 5 | Tentative ID                                                       | MW  | MolForm    | CAS#         | Qual |
|------|----|---|--------------------------------------------------------------------|-----|------------|--------------|------|
| 1    |    |   | Bicyclo[3.3.1]nonane-1-carboxylic acid                             | 168 | C10H16O2   | 017530-63-1  | 64   |
| 2    |    |   | Bicyclo[2.2.1]heptan-2-one, 4-bromo-1,7,7-trimethyl-               | 230 | C10H15BrO  | 055784-70-8  | 59   |
| 3    |    |   | Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-2-propenyl)- | 328 | C21H28O3   | 000121-21-1  | 50   |
| 4    |    |   | Cyclopentene, 1,2,3,3,4-pentamethyl-                               | 138 | C10H18     | 197390-29-7  | 50   |
| 5    |    |   | Benzoic acid, 10-chlorodecyl ester                                 | 296 | C17H25ClO2 | 1000368-75-3 | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

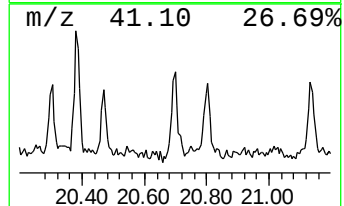
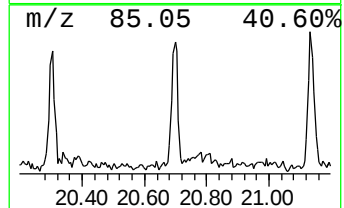
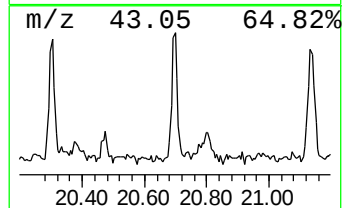
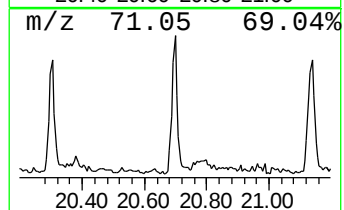
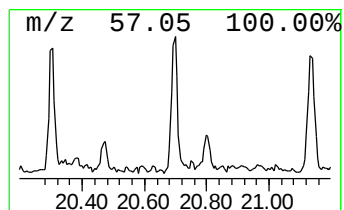
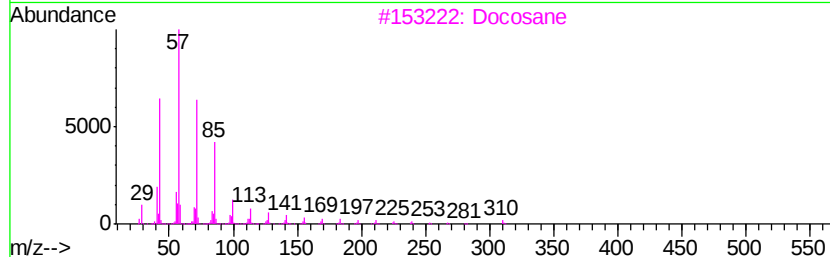
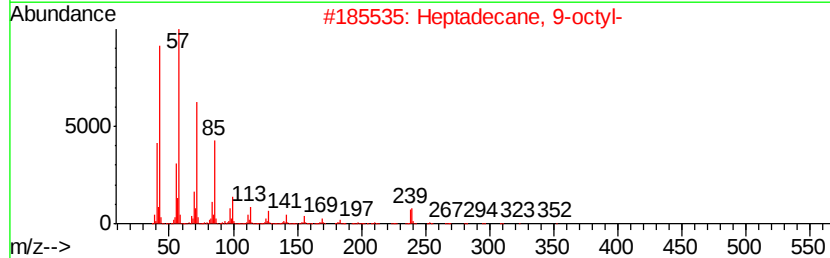
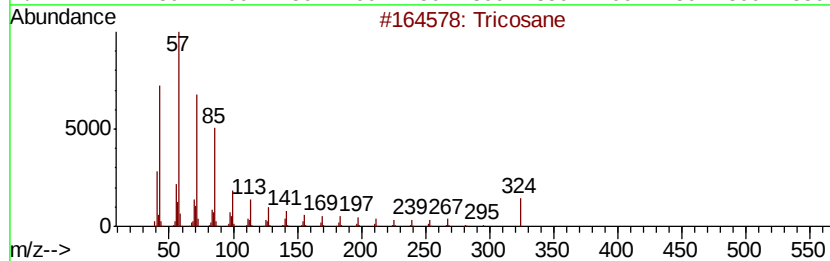
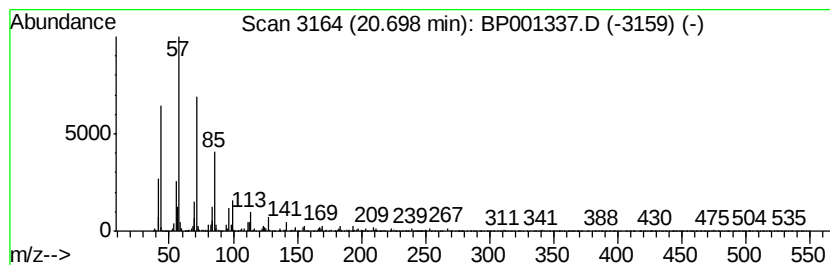
Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

\*\*\*\*\*  
Peak Number 13 Tricosane Concentration Rank 10

| R.T.    | EstConc               | Area         | Relative to ISTD | R.T.           |
|---------|-----------------------|--------------|------------------|----------------|
| 20.70   | 2.47 ng               | 54838        | Perylene-d12     | 21.02          |
| Hit# of | 5                     | Tentative ID | MW MolForm       | CAS# Qual      |
| 1       | Tricosane             | 324          | C23H48           | 000638-67-5 95 |
| 2       | Heptadecane, 9-octyl- | 352          | C25H52           | 007225-64-1 93 |
| 3       | Docosane              | 310          | C22H46           | 000629-97-0 93 |
| 4       | 2-Bromo dodecane      | 248          | C12H25Br         | 013187-99-0 93 |
| 5       | Octacosane            | 394          | C28H58           | 000630-02-4 90 |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

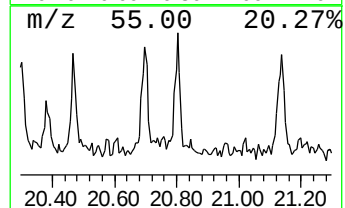
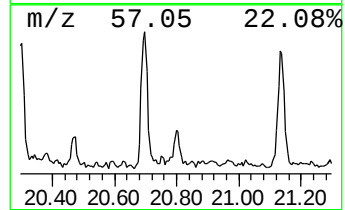
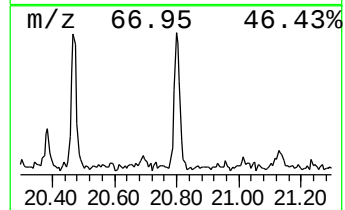
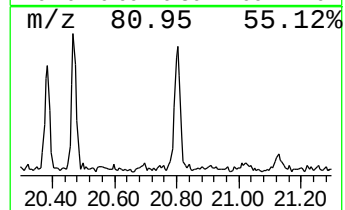
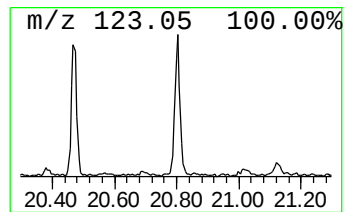
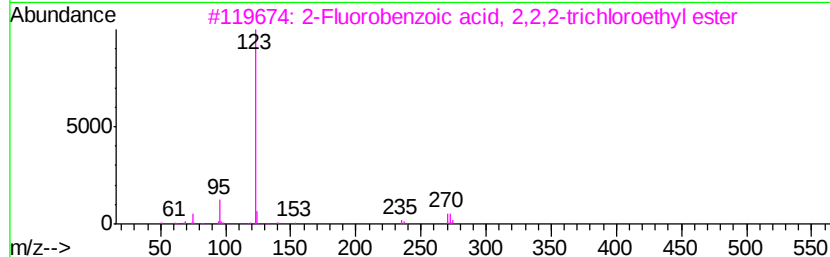
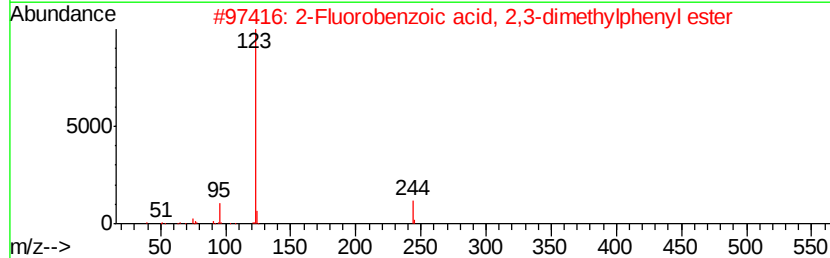
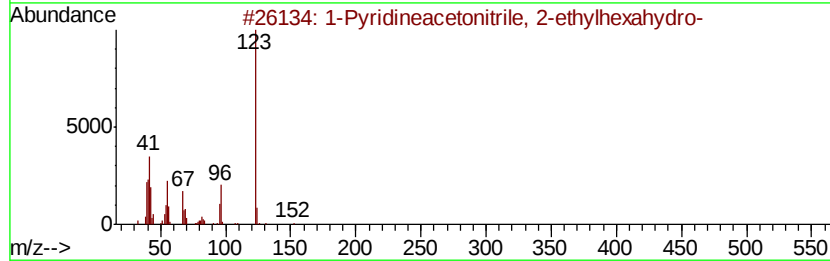
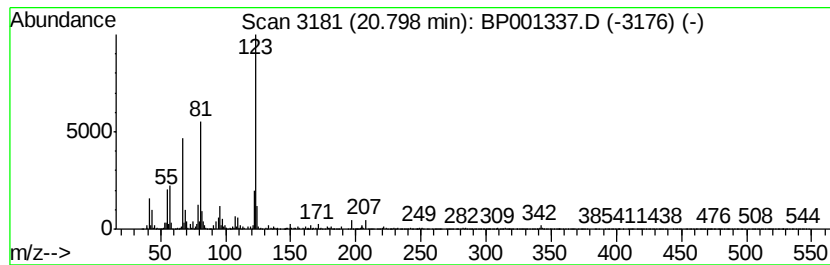
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 14 1-Pyridineacetonitrile, 2-e... Concentration Rank 9

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 20.80 | 3.09 ng | 68467 | Perylene-d12     | 21.02 |

| Hit# | of | Tentative ID                        | MW  | MolForm    | CAS#         | Qual |
|------|----|-------------------------------------|-----|------------|--------------|------|
| 1    | 5  | 1-Pyridineacetonitrile, 2-ethylh... | 152 | C9H16N2    | 951905-06-9  | 53   |
| 2    |    | 2-Fluorobenzoic acid, 2,3-dimeth... | 244 | C15H13F02  | 1000354-70-6 | 50   |
| 3    |    | 2-Fluorobenzoic acid, 2,2,2-tric... | 270 | C9H6Cl3F02 | 1000354-70-3 | 50   |
| 4    |    | 4-Fluorobenzoic acid, 2-methyloc... | 262 | C16H19F02  | 1000299-15-5 | 50   |
| 5    |    | Benzenemethanol, 3-amino-           | 123 | C7H9NO     | 001877-77-6  | 50   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
Data File : BP001337.D  
Acq On : 20 Dec 2019 11:31  
Operator : JU  
Sample : K6283-02  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

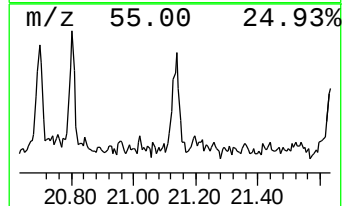
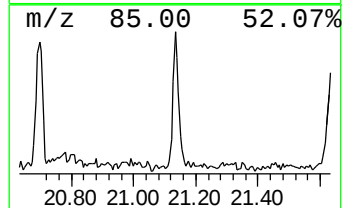
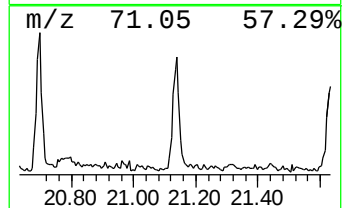
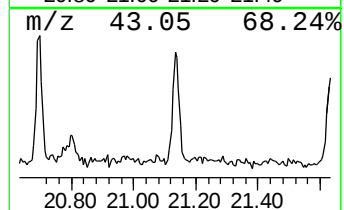
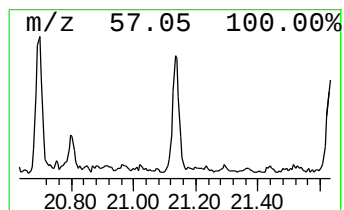
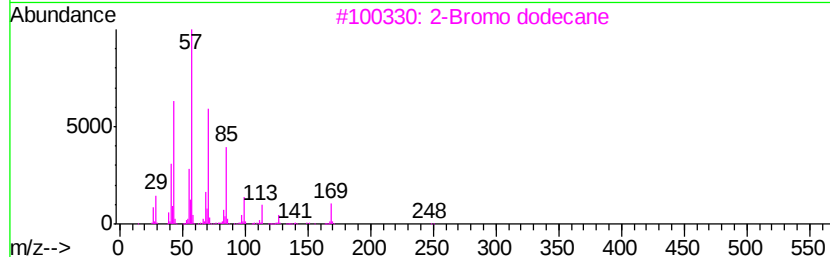
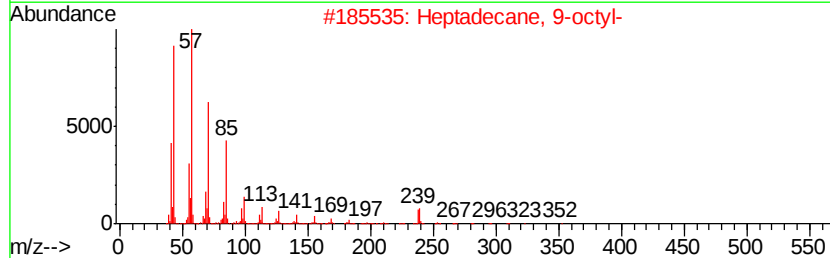
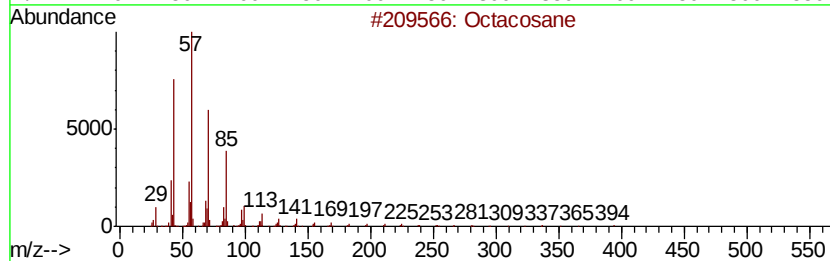
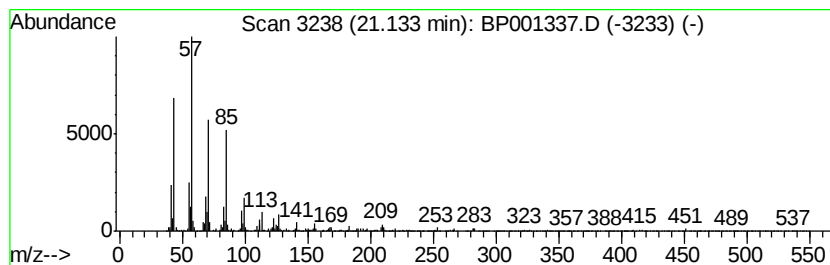
TIC Library : C:\DATABASE\NIST11.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 15 Octacosane Concentration Rank 12

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 21.13 | 2.42 ng | 53523 | Perylene-d12     | 21.02 |

| Hit# | of | Tentative ID          | MW  | MolForm  | CAS#        | Qual |
|------|----|-----------------------|-----|----------|-------------|------|
| 1    | 5  | Octacosane            | 394 | C28H58   | 000630-02-4 | 98   |
| 2    |    | Heptadecane, 9-octyl- | 352 | C25H52   | 007225-64-1 | 94   |
| 3    |    | 2-Bromo dodecane      | 248 | C12H25Br | 013187-99-0 | 93   |
| 4    |    | Eicosane              | 282 | C20H42   | 000112-95-8 | 92   |
| 5    |    | Nonacosane            | 408 | C29H60   | 000630-03-5 | 90   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP122019\  
 Data File : BP001337.D  
 Acq On : 20 Dec 2019 11:31  
 Operator : JU  
 Sample : K6283-02  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP121919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

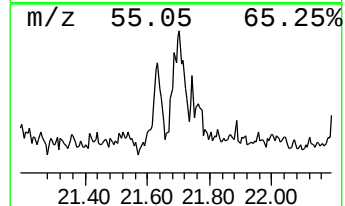
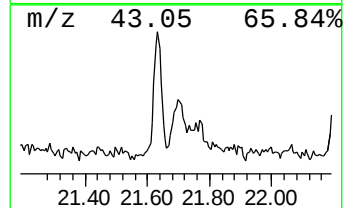
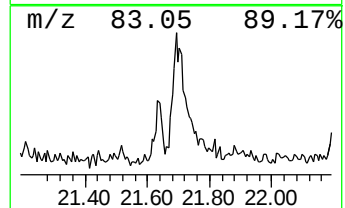
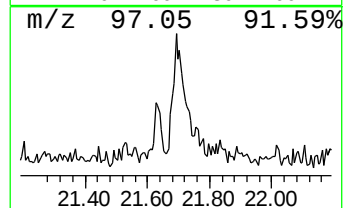
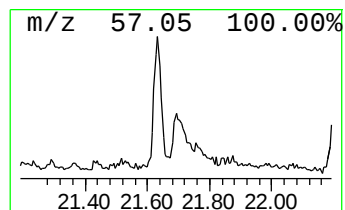
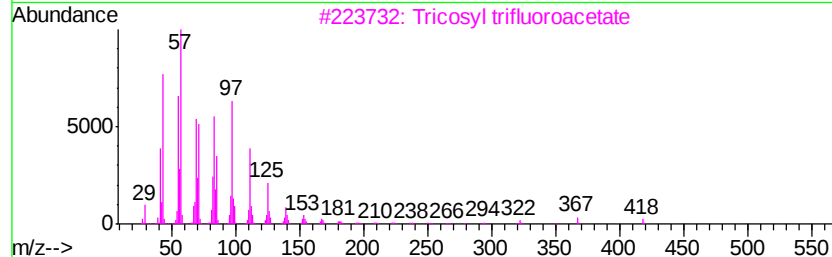
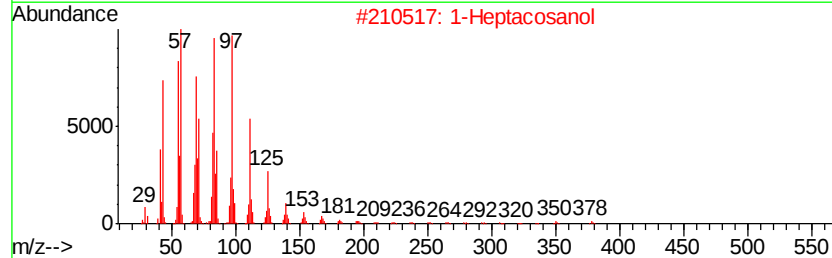
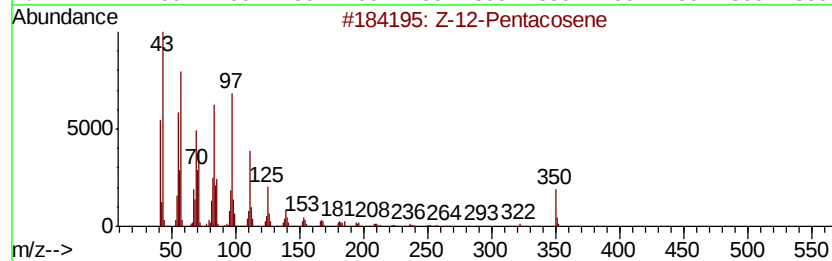
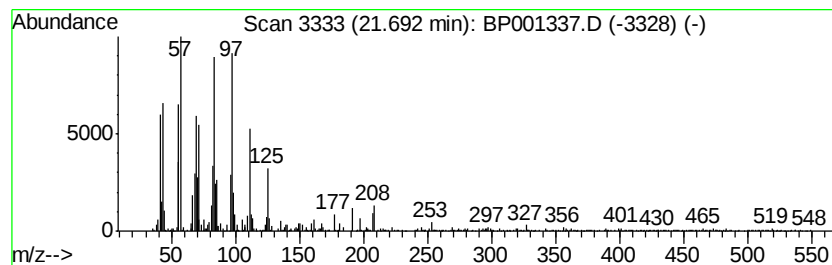
TIC Library : C:\DATABASE\NIST11.L  
 TIC Integration Parameters: LSCINT.P

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 Peak Number 16 Z-12-Pentacosene Concentration Rank 15

| R.T.  | EstConc | Area  | Relative to ISTD | R.T.  |
|-------|---------|-------|------------------|-------|
| 21.69 | 2.06 ng | 45757 | Perylene-d12     | 21.02 |

| Hit# | of | 5 | Tentative ID              | MW  | MolForm    | CAS#         | Qual |
|------|----|---|---------------------------|-----|------------|--------------|------|
| 1    |    |   | Z-12-Pentacosene          | 350 | C25H50     | 1000131-09-4 | 91   |
| 2    |    |   | 1-Heptacosanol            | 396 | C27H56O    | 002004-39-9  | 83   |
| 3    |    |   | Tricosyl trifluoroacetate | 436 | C25H47F3O2 | 1000351-75-1 | 80   |
| 4    |    |   | n-Tetracosanol-1          | 354 | C24H50O    | 000506-51-4  | 74   |
| 5    |    |   | Behenic alcohol           | 326 | C22H46O    | 000661-19-8  | 72   |



Data Path : Z:\SVOASRV\HPCHEM1\BNA\_P\DATA\BP122019\  
 Data File : BP001337.D  
 Acq On : 20 Dec 2019 11:31  
 Operator : JU  
 Sample : K6283-02  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 GROUNDWATER

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\8270-BP121919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT 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 |
| 2-Pentanone, 4-hy... | 5.61  | 4.9 ng  |       | 102844   | 1                     | 8.30  | 416169 | 20.0 |
| Benzene, propyl-     | 7.47  | 2.3 ng  |       | 47763    | 1                     | 8.30  | 416169 | 20.0 |
| Benzene, 1-ethyl-... | 7.82  | 4.3 ng  |       | 90127    | 1                     | 8.30  | 416169 | 20.0 |
| unknown7.94          | 7.94  | 78.0 ng |       | 1622300  | 1                     | 8.30  | 416169 | 20.0 |
| Indane               | 8.59  | 4.7 ng  |       | 98057    | 1                     | 8.30  | 416169 | 20.0 |
| Tetradecanoic acid   | 13.65 | 2.4 ng  |       | 67654    | 3                     | 13.20 | 560149 | 20.0 |
| n-Hexadecanoic acid  | 16.49 | 9.0 ng  |       | 261796   | 4                     | 15.60 | 580630 | 20.0 |
| Octadecanoic acid    | 17.58 | 3.3 ng  |       | 82362    | 5                     | 19.24 | 503731 | 20.0 |
| 1-Docosene           | 19.12 | 11.0 ng |       | 277536   | 5                     | 19.24 | 503731 | 20.0 |
| 1,5,9-Undecatrien... | 20.39 | 2.0 ng  |       | 44894    | 6                     | 21.02 | 443177 | 20.0 |
| Bicyclo[3.3.1]non... | 20.47 | 2.1 ng  |       | 47535    | 6                     | 21.02 | 443177 | 20.0 |
| Tricosane            | 20.70 | 2.5 ng  |       | 54838    | 6                     | 21.02 | 443177 | 20.0 |
| 1-Pyridineacetoni... | 20.80 | 3.1 ng  |       | 68467    | 6                     | 21.02 | 443177 | 20.0 |
| Octacosane           | 21.13 | 2.4 ng  |       | 53523    | 6                     | 21.02 | 443177 | 20.0 |
| Z-12-Pentacosene     | 21.69 | 2.1 ng  |       | 45757    | 6                     | 21.02 | 443177 | 20.0 |