LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

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_F\METHODS\8270-BF073019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.134	3	8	19	rVB	757042	1000602	16.60%	1.091%
2	5.475	572	576	600	rBV	2758961	2981665	49.46%	3.252%
3	6.486	743	748	751	rBV	2905628	3064127	50.82%	3.342%
4	6.628	767	772	775	rBV	3175759	3164428	52.49%	3.451%
5	6.851	806	810	818	rBV	1123439	915368	15.18%	0.998%
6	7.010	833	837	840	rBV	2891828	2549781	42.29%	2.781%
7	7.410	901	905	917	rBV	1949868	2087162	34.62%	2.276%
8	8.133	1024	1028	1030	rBV	1303832	1097811	18.21%	1.197%
9	8.151	1030	1031	1038	rVB	165990	141118	2.34%	0.154%
10	8.945	1163	1166	1176	rVB	77985	84893	1.41%	0.093%
11	9.210	1207	1211	1222	rBV	3453054	3271796	54.27%	3.569%
12	9.551	1266	1269	1271	rBV	115004	107310	1.78%	0.117%
13	9.604	1275	1278	1286	rVV	485424	415364	6.89%	0.453%
14	9.751	1298	1303	1308	rBV	499263	433836	7.20%	0.473%
15	9.892	1320	1327	1330	rBV	1522873	1281546	21.26%	1.398%
16	9.922	1330	1332	1336	rVB	236507	208944	3.47%	0.228%
17	10.098	1358	1362	1366	rVV	242444	245020	4.06%	0.267%
18	10.210	1377	1381	1384	rBV3	79849	90946	1.51%	0.099%
19	10.298	1392	1396	1398	rBV2	79798	91109	1.51%	0.099%
20	10.439	1417	1420	1426	rVB2	274726	286722	4.76%	0.313%
21	10.598	1444	1447	1450	rVB	172551	153962	2.55%	0.168%
22	10.680	1457	1461	1467	rBV	2084873	1981082	32.86%	2.161%
23	10.810	1478	1483	1488	rVB3	100295	127120	2.11%	0.139%
24	10.992	1508	1514	1516	rBV3	107926	156865	2.60%	0.171%
25	11.116	1530	1535	1537	rBV2	175339	186118	3.09%	0.203%
26	11.139	1537	1539	1544	rVV	155819	164542	2.73%	0.179%
27	11.186	1544	1547	1550	rVV	370663	327422	5.43%	0.357%
28	11.227	1551	1554	1558	rVV3	152515	225922	3.75%	0.246%
29	11.274	1559	1562	1568	rVB	307963	294936	4.89%	0.322%
30	11.380	1576	1580	1582	rBV	1102381	1126195	18.68%	1.228%
31	11.410	1582	1585	1588	rVV	4023155	3665346	60.80%	3.998%
32	11.457	1588	1593	1596	rVV	1000273	900345	14.93%	0.982%
33	11.486	1596	1598	1602	rVB2	124029	134521	2.23%	0.147%
34	11.610	1614	1619	1621	rBV2	453644	518646	8.60%	0.566%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

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_F\METHODS\8270-BF073019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	11.674	1627	1630	1634	rVB2	188281	170626	2.83%	0.186%
36	11.716	1634	1637	1641	rVB4	143345	157224	2.61%	0.171%
37	11.839	1655	1658	1660	rBV	96964	85792	1.42%	0.094%
38	11.880	1662	1665	1667	rVV	745328	648886	10.76%	0.708%
39	11.910	1667	1670	1675	rVV	1459213	1358395	22.53%	1.482%
40	11.957	1675	1678	1681	rVV	356555	347774	5.77%	0.379%
41	11.992	1681	1684	1687	rVV2	950924	1134961	18.83%	1.238%
42	12.015	1687	1688	1693	rVB	586956	363212	6.02%	0.396%
43	12.063	1693	1696	1698	rBV2	105041	121674	2.02%	0.133%
44	12.086	1698	1700	1703	rVB3	108483	92643	1.54%	0.101%
45	12.174	1712	1715	1718	rVV	566239	516575	8.57%	0.563%
46	12.204	1718	1720	1724	rVB	583278	518602	8.60%	0.566%
47	12.327	1738	1741	1744	rVB2	154109	140709	2.33%	0.153%
48	12.357	1744	1746	1748	rBV	149801	110300	1.83%	0.120%
49	12.380	1748	1750	1753	rVB	157094	139040	2.31%	0.152%
50	12.433	1755	1759	1761	rBV	414788	439136	7.28%	0.479%
51	12.468	1761	1765	1767	rVV3	250214	333787	5.54%	0.364%
52	12.527	1771	1775	1780	rVB	501566	586341	9.73%	0.640%
53	12.604	1783	1788	1791	rBV	4599339	5461382	90.59%	5.957%
54	12.663	1796	1798	1800	rVB	205754	154214	2.56%	0.168%
55	12.692	1800	1803	1806	rBV	621682	562048	9.32%	0.613%
56	12.745	1807	1812	1816	rVV3	268329	408864	6.78%	0.446%
57	12.833	1820	1827	1830	rBV2	4403364	6028839	100.00%	6.576%
58	12.874	1831	1834	1839	rVB2	374488	416250	6.90%	0.454%
59	12.962	1843	1849	1852	rBV2	2456866	2670844	44.30%	2.913%
60	12.986	1852	1853	1857	rVB	427272	273323	4.53%	0.298%
61	13.045	1858	1863	1866	rBV2	488417	831375	13.79%	0.907%
62	13.098	1870	1872	1874	rBV2	91355	83238	1.38%	0.091%
63	13.133	1874	1878	1879	rBV3	417619	502290	8.33%	0.548%
64	13.151	1879	1881	1884	rVB	682726	647481	10.74%	0.706%
65	13.198	1885	1889	1890	rBV3	111064	155643	2.58%	0.170%
66	13.221	1890	1893	1895	rVB	242749	189611	3.15%	0.207%
67	13.257	1895	1899	1903	rBV2	756138	834180	13.84%	0.910%
68	13.315	1906	1909	1912	rBV2	152438	161844	2.68%	0.177%
69	13.351	1912	1915	1917	rBV	408741	336764	5.59%	0.367%
70	13.380	1917	1920	1924	rBV2	414322	391107	6.49%	0.427%
71	13.662	1965	1968	1973	rVB	829989	756593	12.55%	0.825%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

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_F\METHODS\8270-BF073019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	13.774	1983	1987	1989	rBV	687980	718589	11.92%	0.784%
73	13.798	1989	1991	1994	rVV	662194	667405	11.07%	0.728%
74	13.827	1994	1996	2001	rVV2	550869	778746	12.92%	0.849%
75	13.874	2001	2004	2011	rVB	731617	824455	13.68%	0.899%
76	14.021	2022	2029	2032	rBV2	3103997	4698628	77.94%	5.125%
77	14.057	2032	2035	2038	rVB	2633030	2713388	45.01%	2.960%
78	14.133	2046	2048	2050	rBV	352432	260989	4.33%	0.285%
79	14.174	2052	2055	2057	rBV	349976	336085	5.57%	0.367%
80	14.251	2064	2068	2071	rBV2	342020	394895	6.55%	0.431%
81	14.374	2087	2089	2091	rBV	253417	235598	3.91%	0.257%
82	14.415	2093	2096	2099	rVV	710676	663617	11.01%	0.724%
83	14.451	2099	2102	2105	rVB2	295156	317787	5.27%	0.347%
84	14.492	2106	2109	2111	rBV3	209106	225739	3.74%	0.246%
85	14.539	2114	2117	2119	rBV	390499	365790	6.07%	0.399%
86	14.727	2147	2149	2151	rBV	170656	129178	2.14%	0.141%
87	14.798	2158	2161	2166	rBV5	146696	204630	3.39%	0.223%
88	14.909	2177	2180	2184	rBV2	218022	286810	4.76%	0.313%
89	15.080	2203	2209	2216	rBV	2253148	5174812	85.83%	5.644%
90	15.186	2223	2227	2230	rBV	489521	540687	8.97%	0.590%
91	15.380	2256	2260	2266	rVB	1399632	1997592	33.13%	2.179%
92	15.451	2266	2272	2276	rVV	2038295	2669203	44.27%	2.911%
93	15.504	2277	2281	2284	rVV	819759	1077457	17.87%	1.175%
94	15.539	2284	2287	2293	rVB2	579896	819963	13.60%	0.894%
95	15.945	2353	2356	2360	rVB2	169371	227808	3.78%	0.248%
96	16.986	2526	2533	2540	rVB	798437	1586530	26.32%	1.730%
97	17.150	2557	2561	2566	rVB	134486	216820	3.60%	0.236%
98	17.209	2567	2571	2577	rBV2	149295	271167	4.50%	0.296%
99	17.433	2602	2609	2618	rVB	595737	1256540	20.84%	1.371%
100	17.668	2645	2649	2665	rVB2	163660	408069	6.77%	0.445%

Sum of corrected areas: 91683114

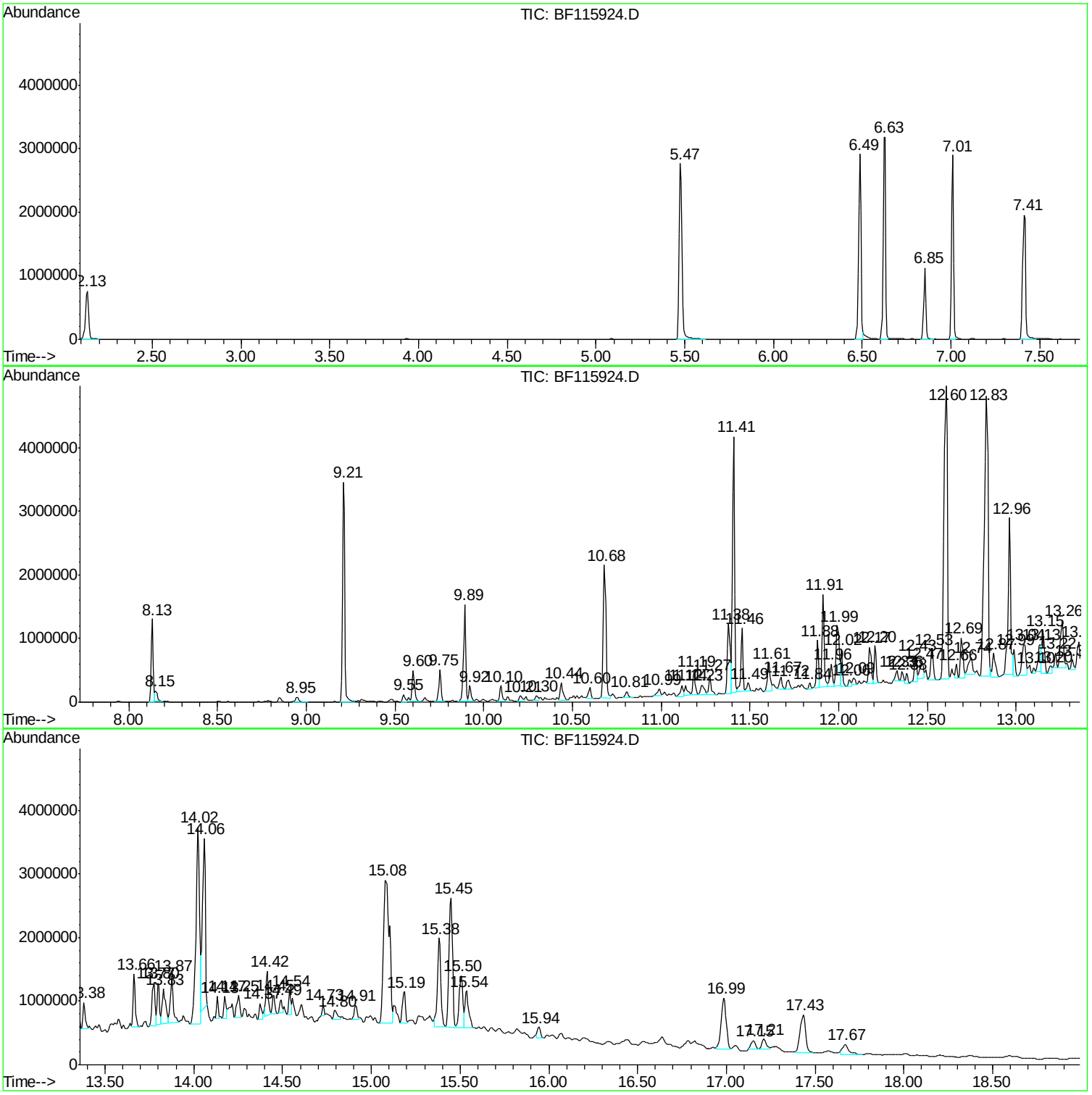
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

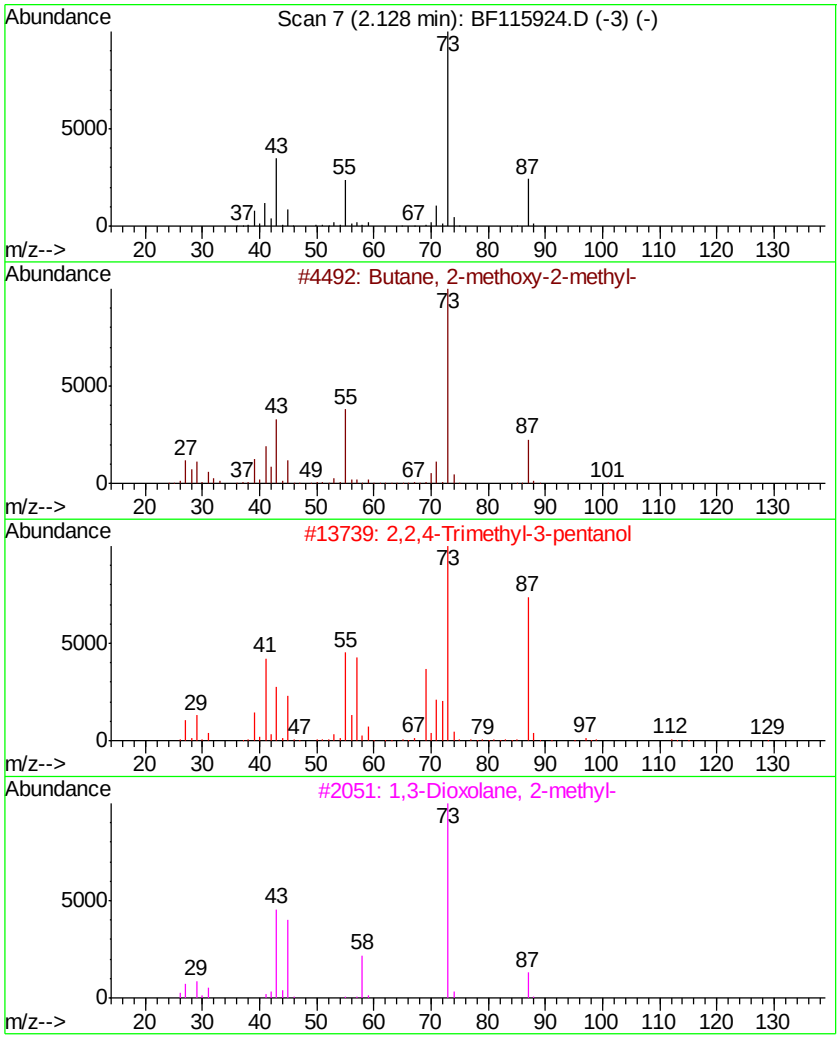
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

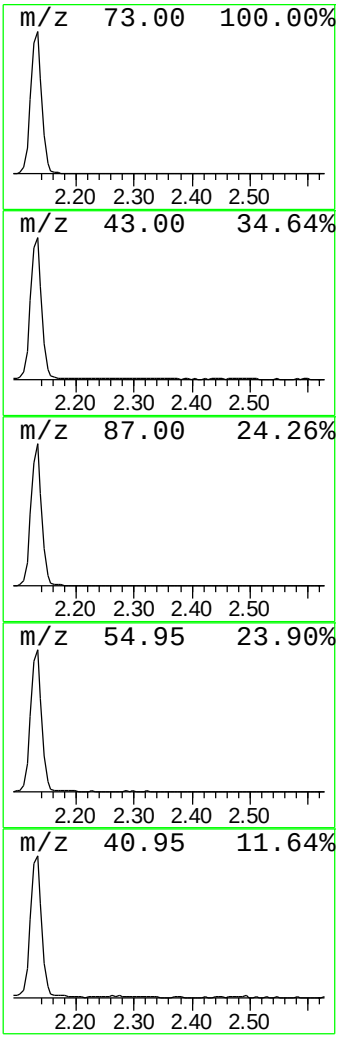
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.13	21.86 ng	1000600	1,4-Dichlorobenzene-d4	6.85

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	83
2	2,2,4-Trimethyl-3-pentanol	130	C8H18O	005162-48-1	39
3	1,3-Dioxolane, 2-methyl-	88	C4H8O2	000497-26-7	37
4	Pentane, 3-methoxy-	102	C6H14O	036839-67-5	23
5	Silane, tetramethyl-	88	C4H12Si	000075-76-3	17





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

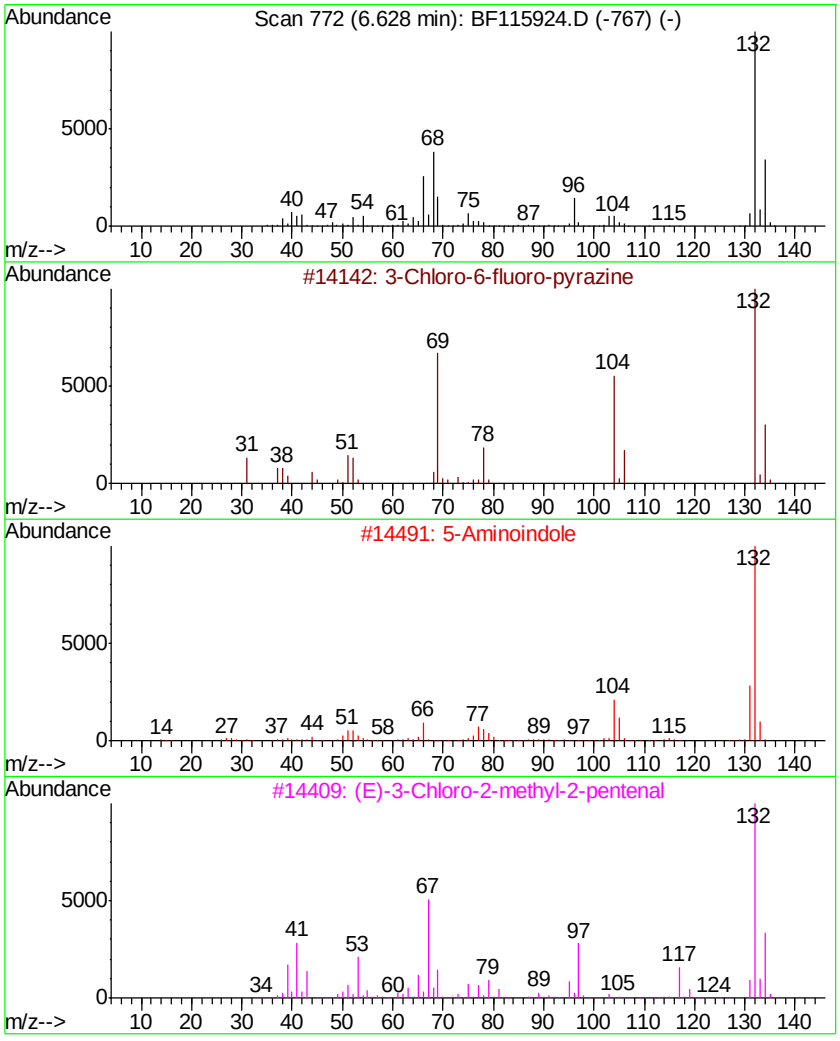
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

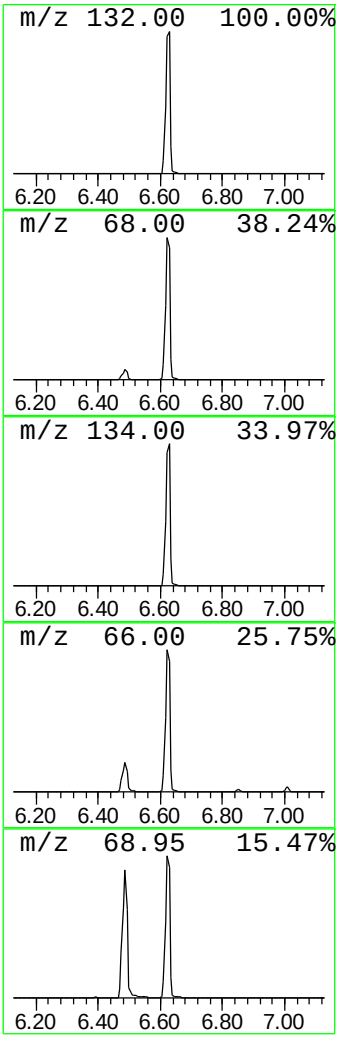
****

Peak Number 2 unknown6.63 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.63	69.14 ng	3164430	1,4-Dichlorobenzene-d4	6.85

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	27
2	5-Aminoindole	132	C8H8N2	005192-03-0	22
3	(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	16
4	5-Fluoro-2-chloropyrimidine	132	C4H2ClFN2	062802-42-0	16
5	Bicyclo[4.2.0]octa-1,3,5-triene,...	132	C10H12	028749-81-7	9





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

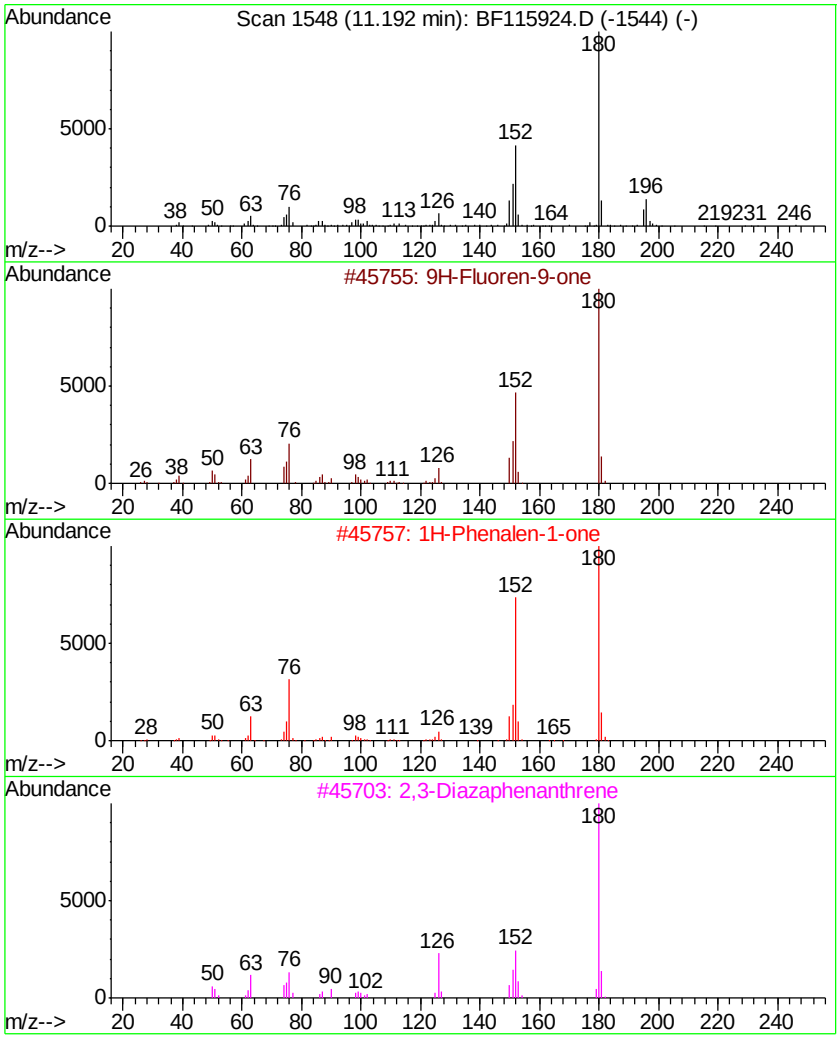
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

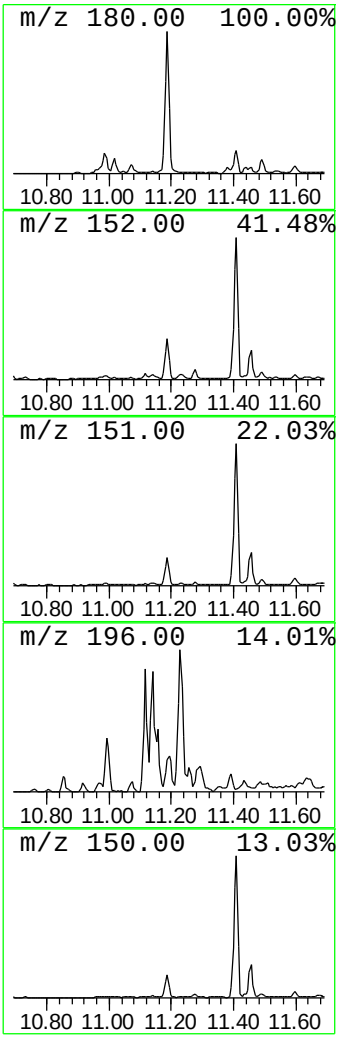
****

Peak Number 4 9H-Fluoren-9-one Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	5.81 ng	327422	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluoren-9-one	180	C13H8O	000486-25-9	96
2	1H-Phenalen-1-one	180	C13H8O	000548-39-0	72
3	2,3-Diazaphenanthrene	180	C12H8N2	000229-72-1	42
4	1,1'-Biphenyl, 4-ethenyl-	180	C14H12	002350-89-2	40
5	2-Benzothiophen-4(5H)-one, 6,7-d...	180	C10H12OS	1000338-11-9	38





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

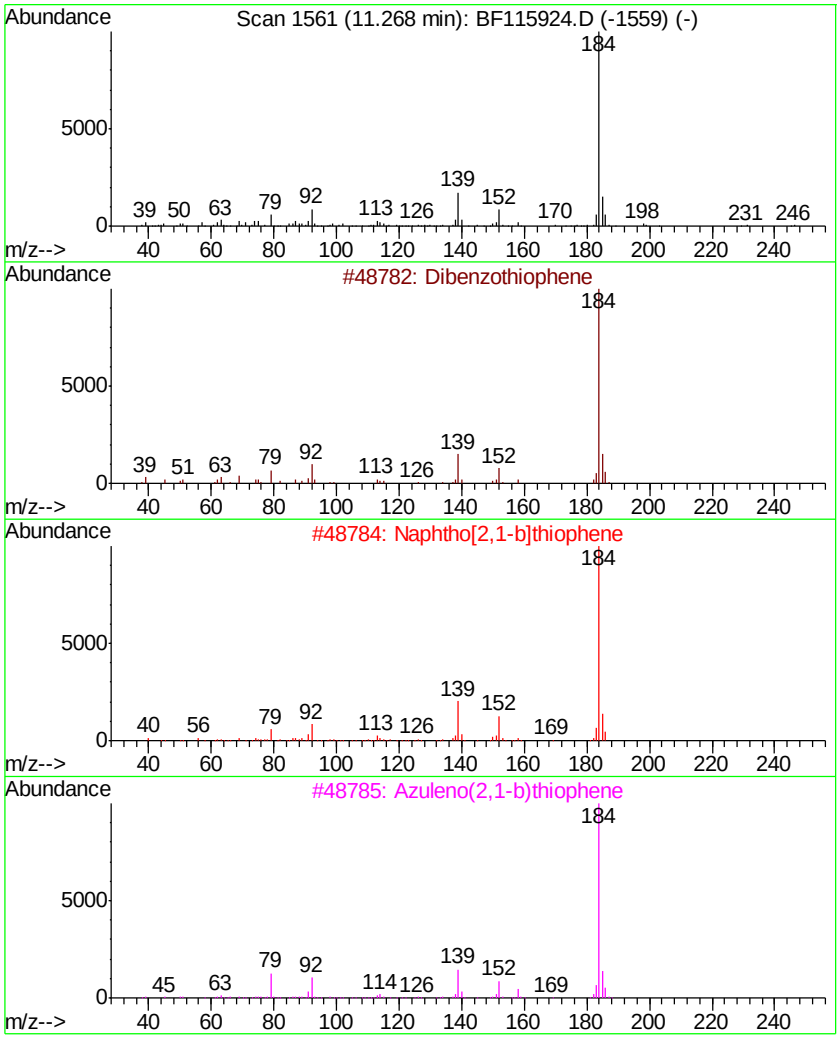
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

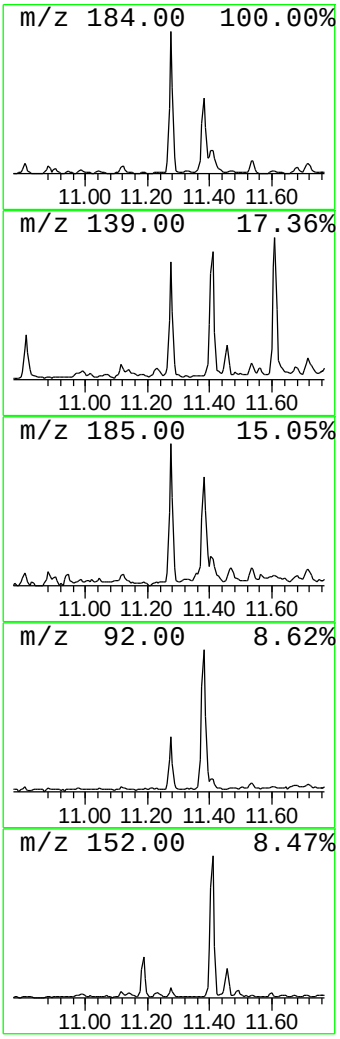
****

Peak Number 5 Dibenzothiophene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.27	5.24 ng	294936	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene	184	C12H8S	000132-65-0	96
2	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	95
3	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91
4	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	90
5	1,1'-Biphenyl, 2-methoxy-	184	C13H12O	000086-26-0	72





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

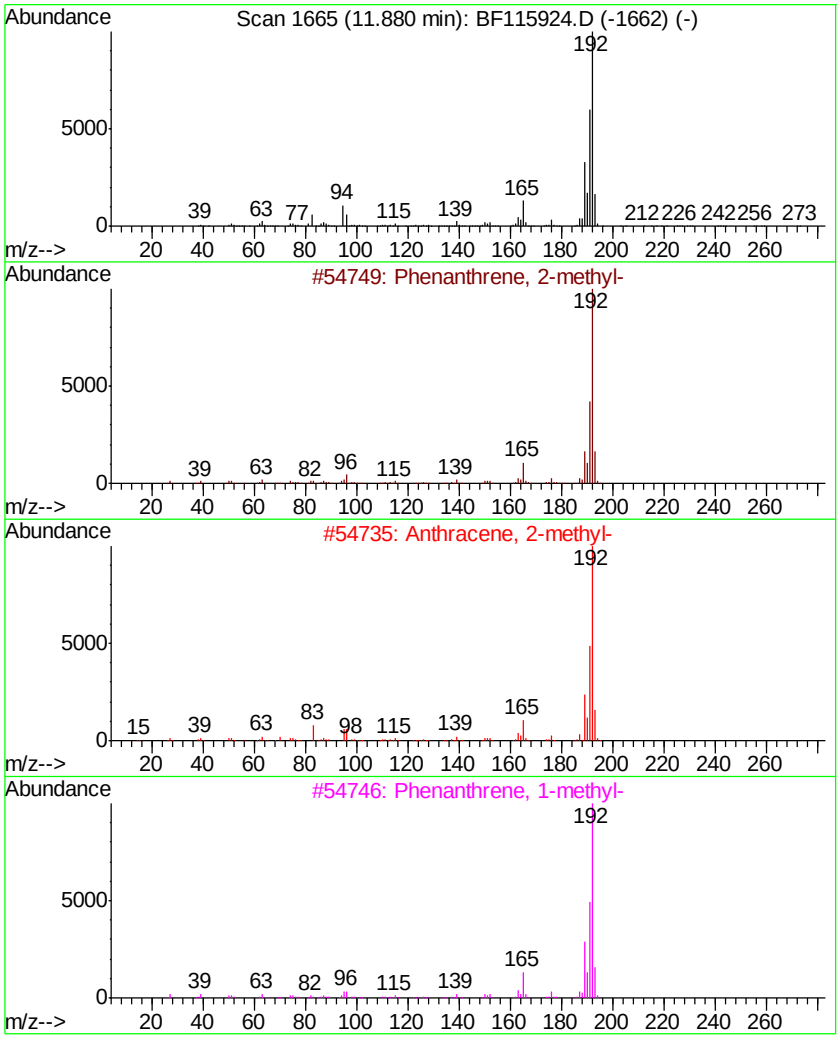
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

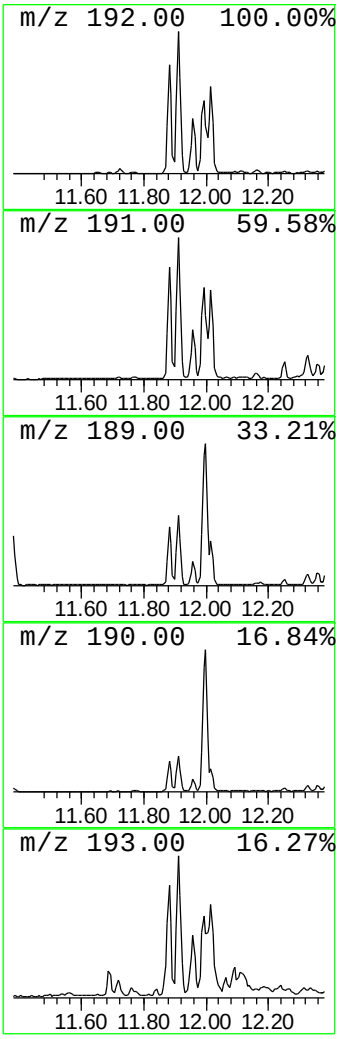
****

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.88	11.52 ng	648886	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
4	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	95
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	94





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

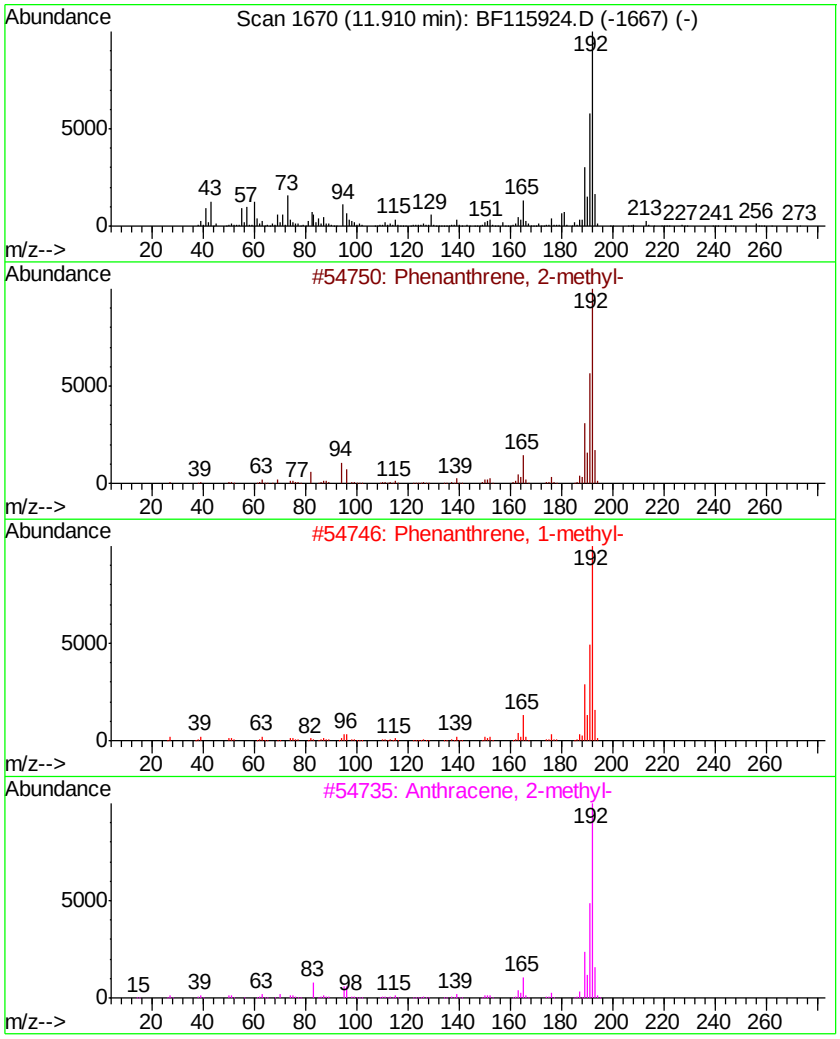
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

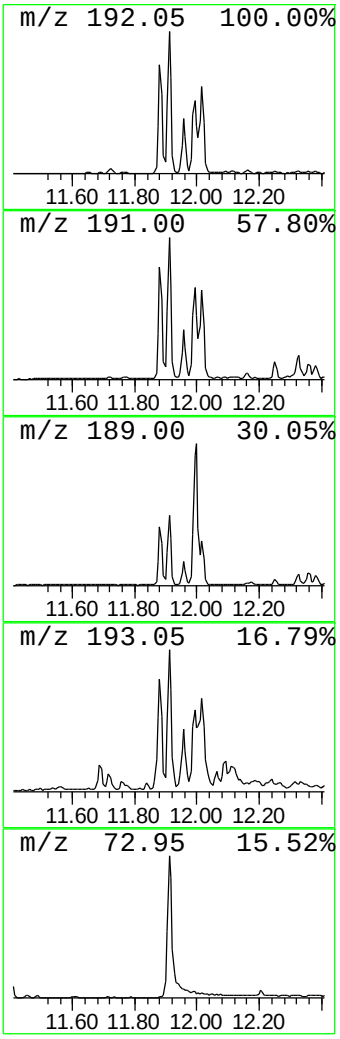
****

Peak Number 7 Phenanthrene, 1-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.91	24.12 ng	1358400	Phenanthrene-d10	11.38

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[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96
5	Anthracene, 9-methyl-	192	C15H12	000779-02-2	94





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

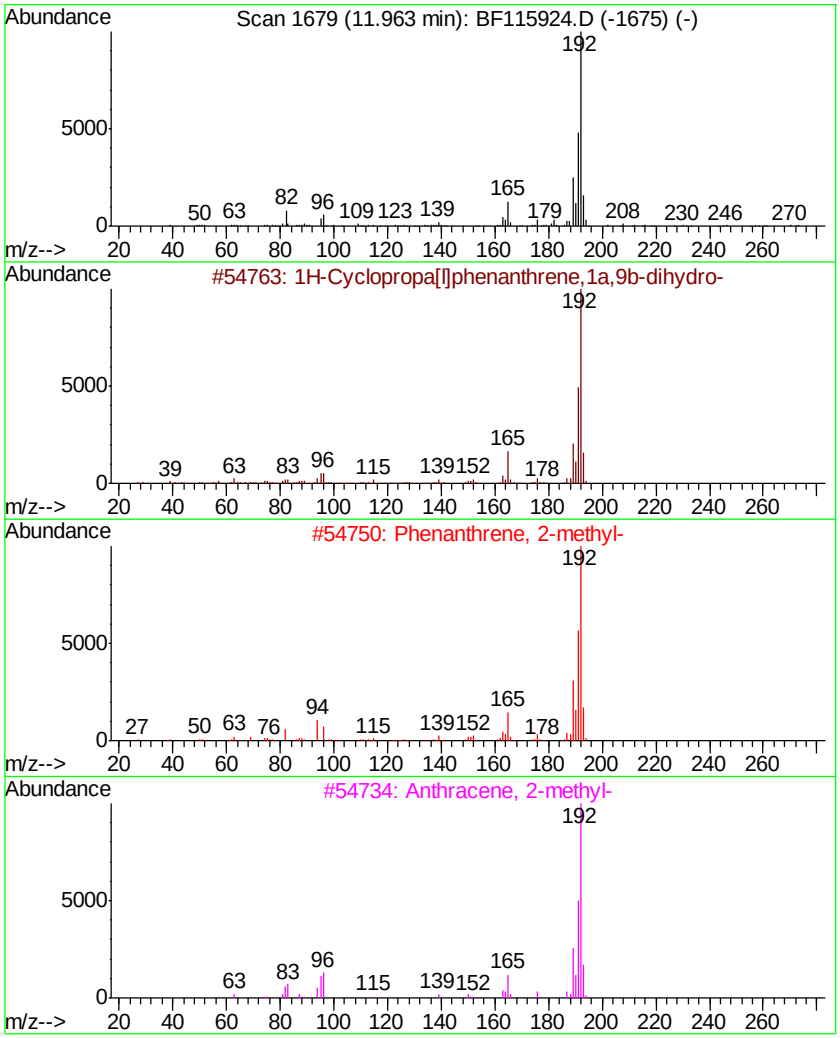
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

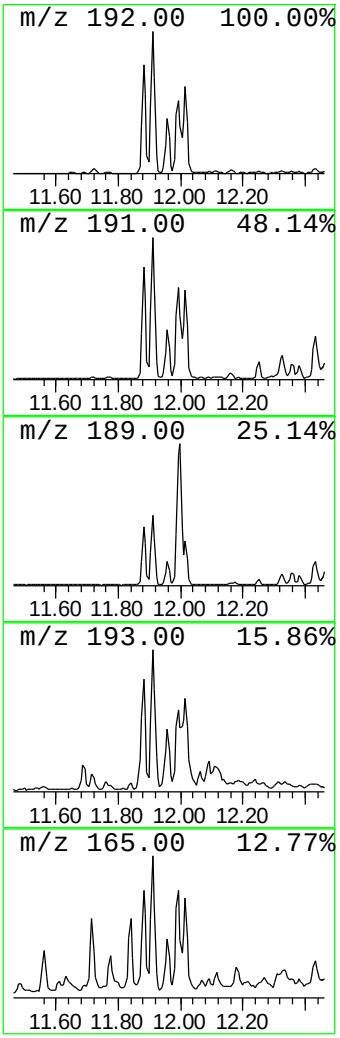
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 1H-Cyclopropa[l]phenanthren... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.96	6.18 ng	347774	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	95
2	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	95
3	Anthracene, 2-methyl-	192	C15H12	000613-12-7	94
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	94
5	Anthracene, 9-methyl-	192	C15H12	000779-02-2	94





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

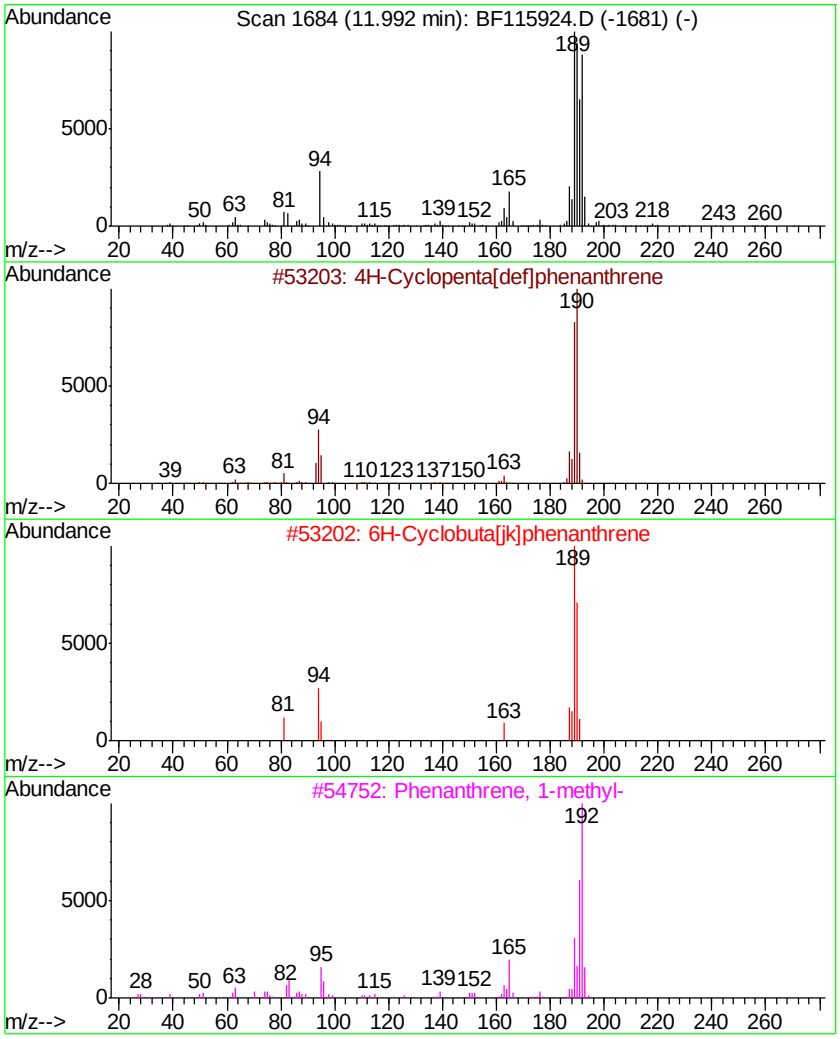
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

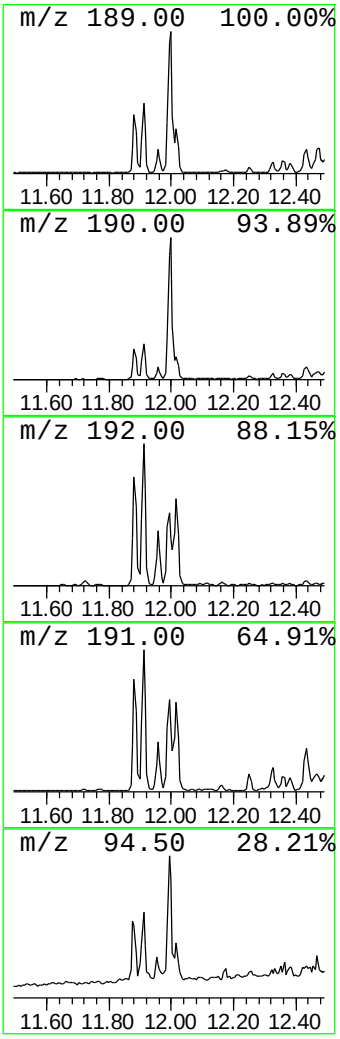
****

Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.99	20.16 ng	1134960	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
2	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	49
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	46
4	5H-Dibenzo[a,d]cycloheptene	192	C15H12	000256-81-5	46
5	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	42





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

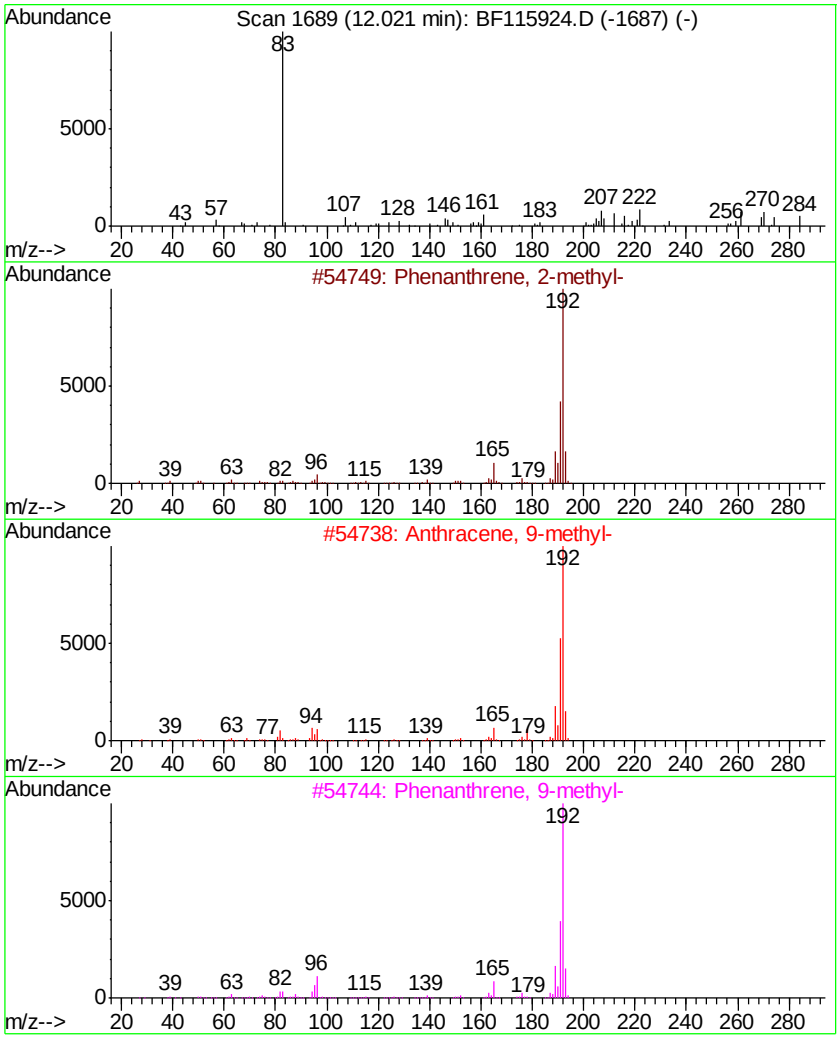
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

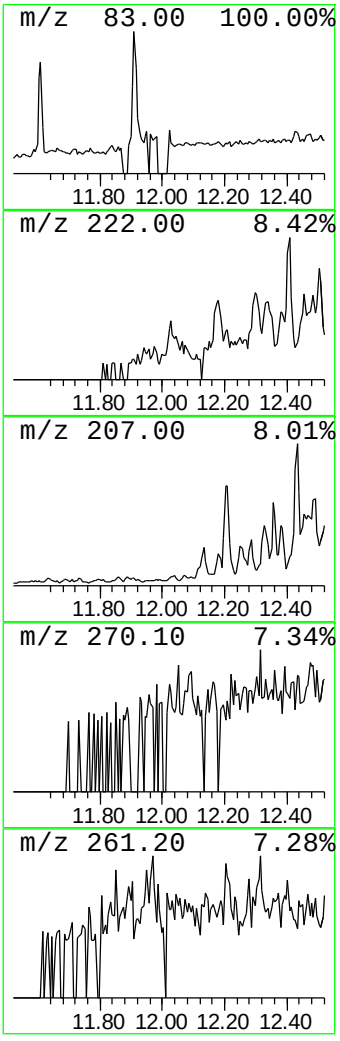
****

Peak Number 10 Anthracene, 1-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.02	6.45 ng	363212	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	89
2	Anthracene, 9-methyl-	192	C15H12	000779-02-2	87
3	Phenanthrene, 9-methyl-	192	C15H12	000883-20-5	81
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	68
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	68





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

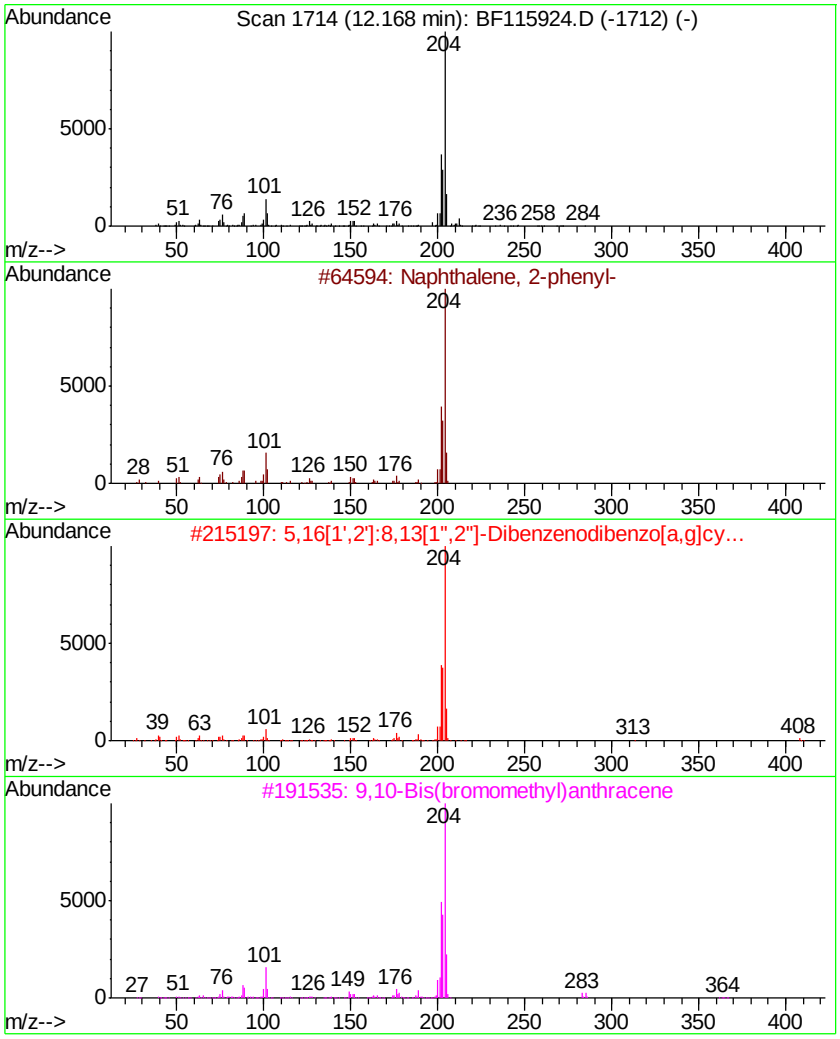
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

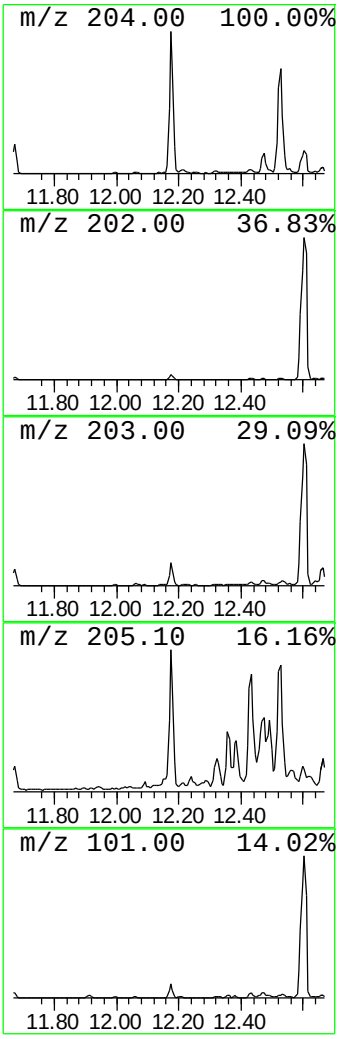
****

Peak Number 11 Naphthalene, 2-phenyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.17	9.17 ng	516575	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	94
2	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	87
3	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	62
4	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	60
5	[1,1'-Biphenyl]-2-ol, 5-chloro-	204	C12H9ClO	000607-12-5	53





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

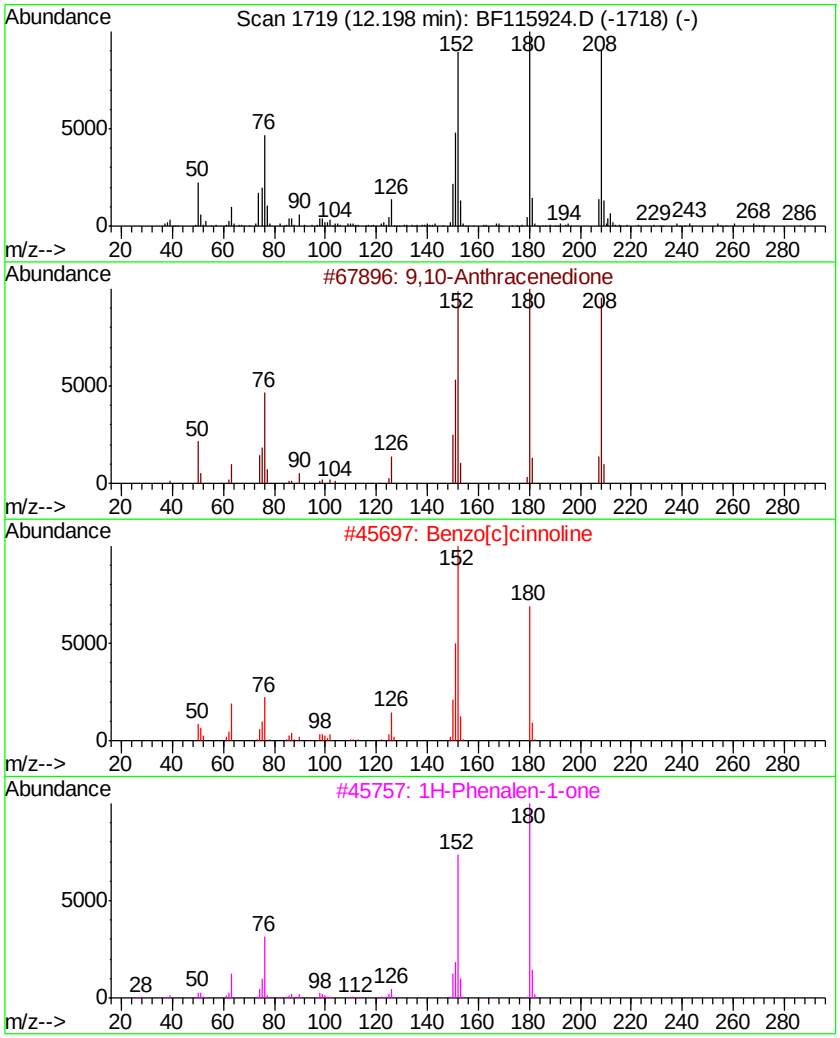
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

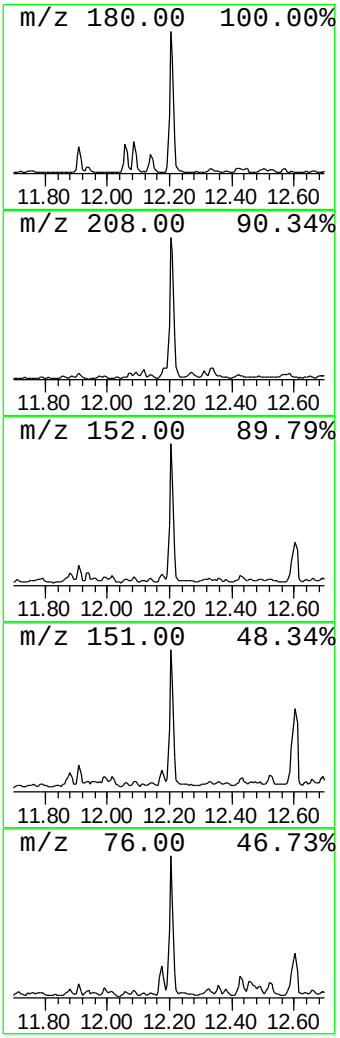
****

Peak Number 12 9,10-Anthracenedione Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.20	9.21 ng	518602	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	99
2	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	83
3	1H-Phenalen-1-one	180	C13H8O	000548-39-0	60
4	9H-Fluoren-9-one	180	C13H8O	000486-25-9	50
5	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	49





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

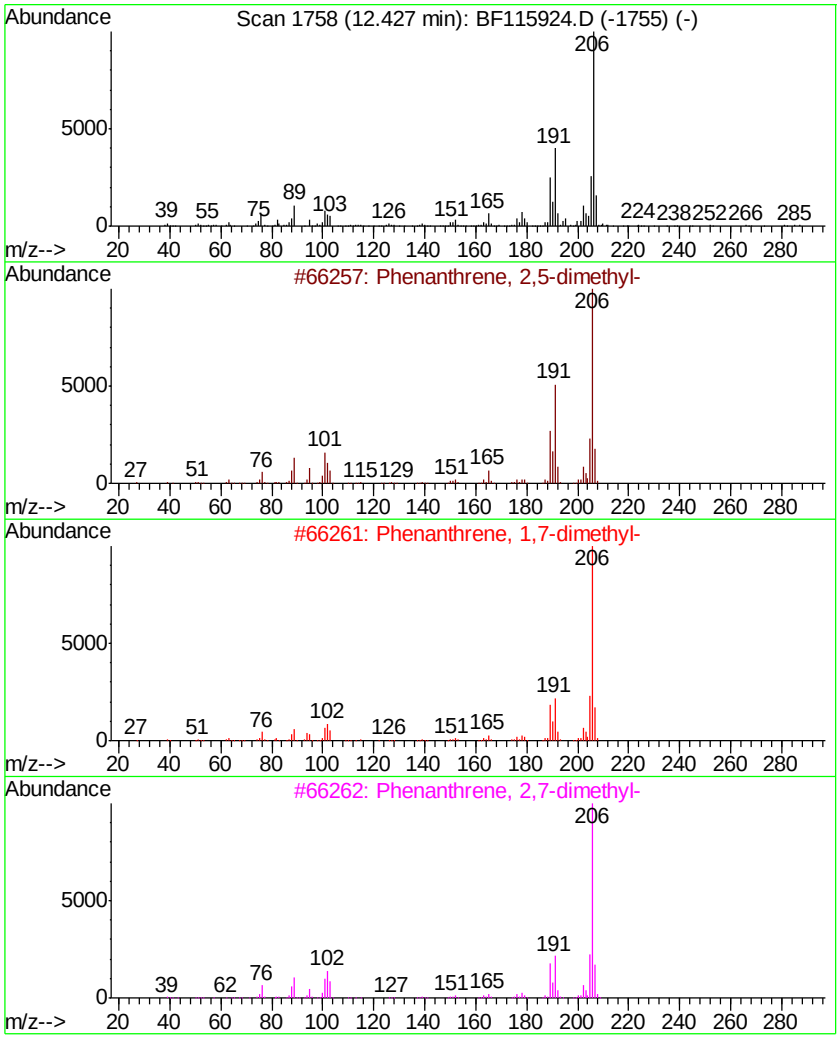
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

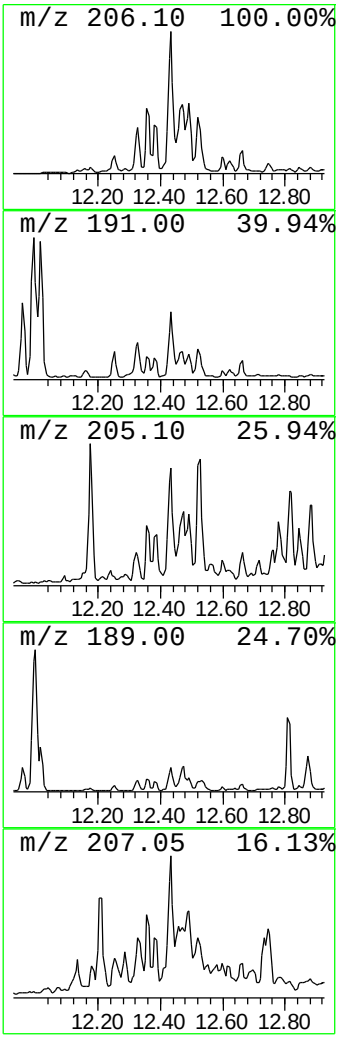
****

Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.43	7.80 ng	439136	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	93
2	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	90
3	Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	87
4	9,10-Dimethylanthracene	206	C16H14	000781-43-1	87
5	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	87





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

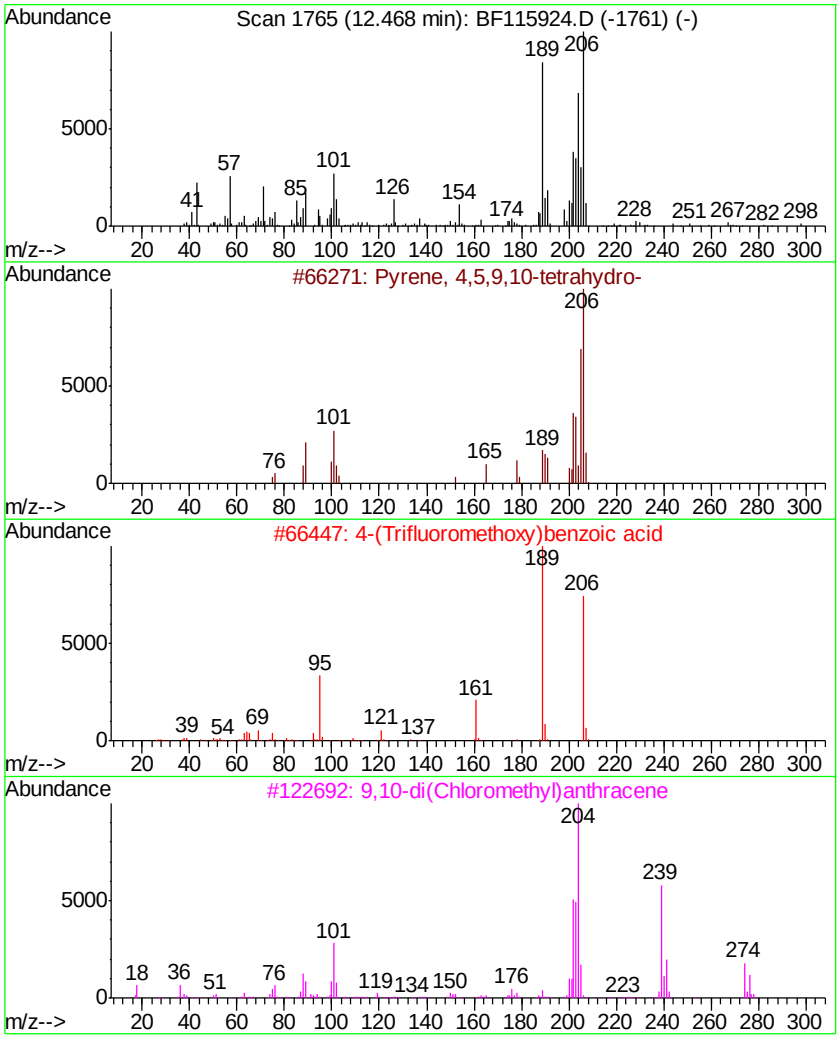
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

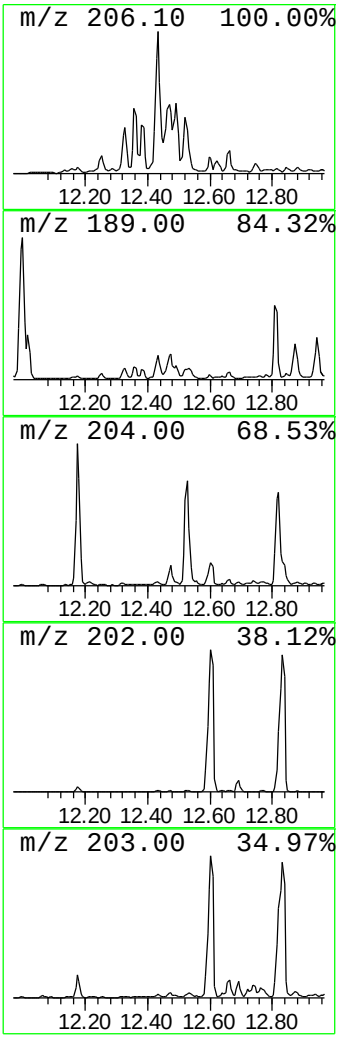
****

Peak Number 14 Pyrene, 4,5,9,10-tetrahydro- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.47	5.93 ng	333787	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	51
2	4-(Trifluoromethoxy)benzoic acid	206	C8H5F3O3	000330-12-1	38
3	9,10-di(Chloromethyl)anthracene	274	C16H12Cl2	010387-13-0	35
4	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	30
5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	27





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

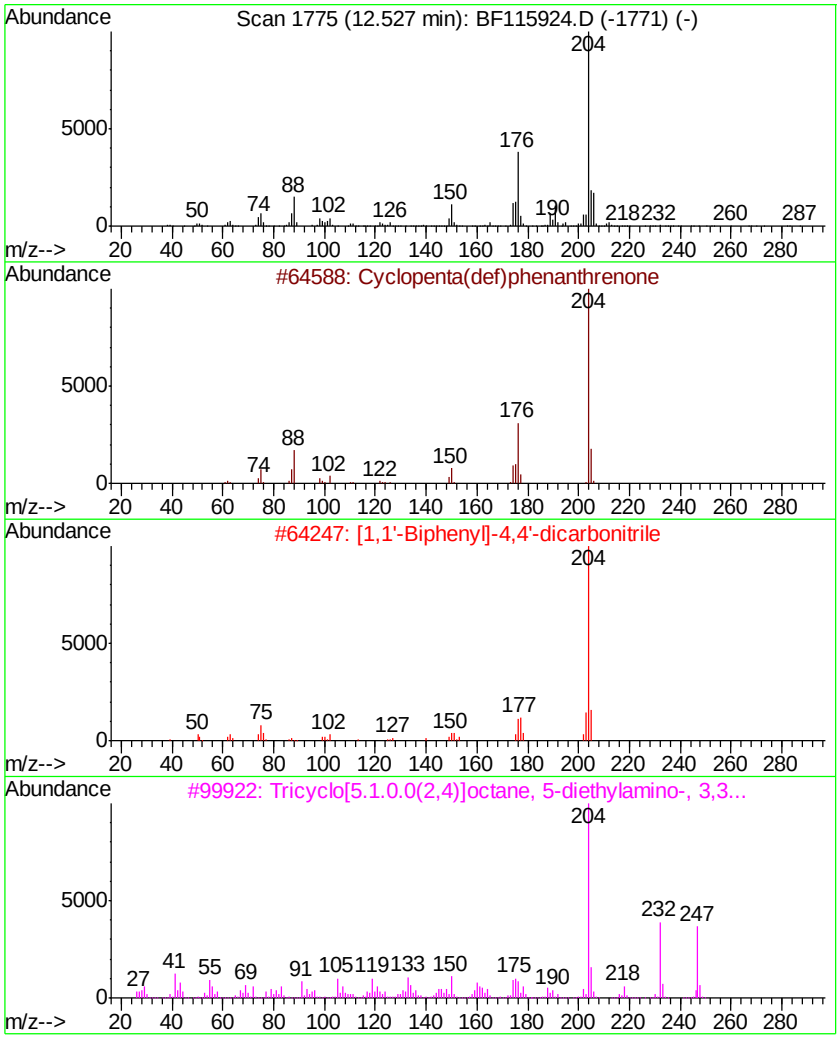
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

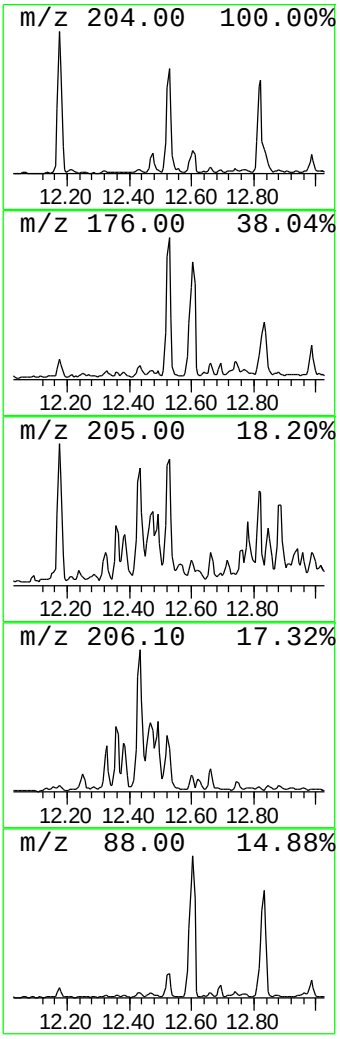
****

Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.53	10.41 ng	586341	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	97
2	[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	64
3	Tricyclo[5.1.0.0(2,4)]octane, 5-...	247	C17H29N	1000063-59-3	53
4	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	49
5	Tetracyano-p-quinodimethane	204	C12H4N4	001518-16-7	47





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

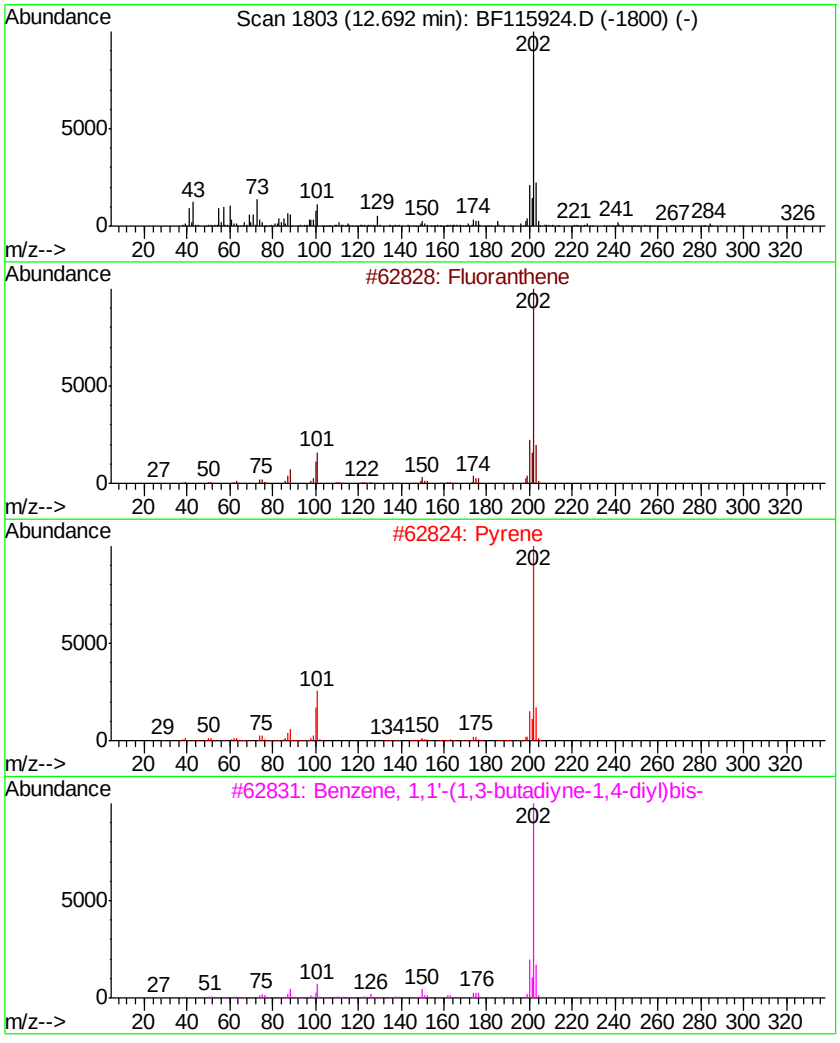
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

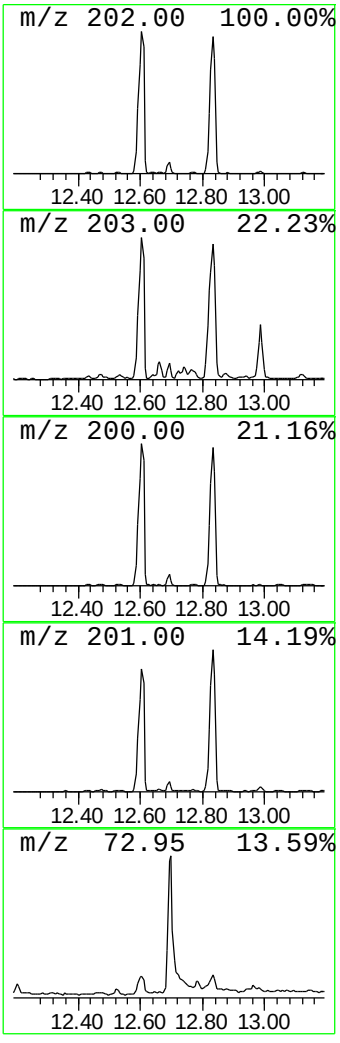
****

Peak Number 16 Benzene, 1,1'-(1,3-butadiyn... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.69	9.98 ng	562048	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Fluoranthene	202	C16H10	000206-44-0	95
2	Pyrene	202	C16H10	000129-00-0	92
3	Benzene, 1,1'-(1,3-butadiyne-1,4...	202	C16H10	000886-66-8	62
4	1,4-Pentadiyn-3-one, 1,5-diphenyl-	230	C17H10O	015814-30-9	50
5	4,4'-Bis(tetrahydrothiopyran)	202	C10H18S2	116196-83-9	50





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

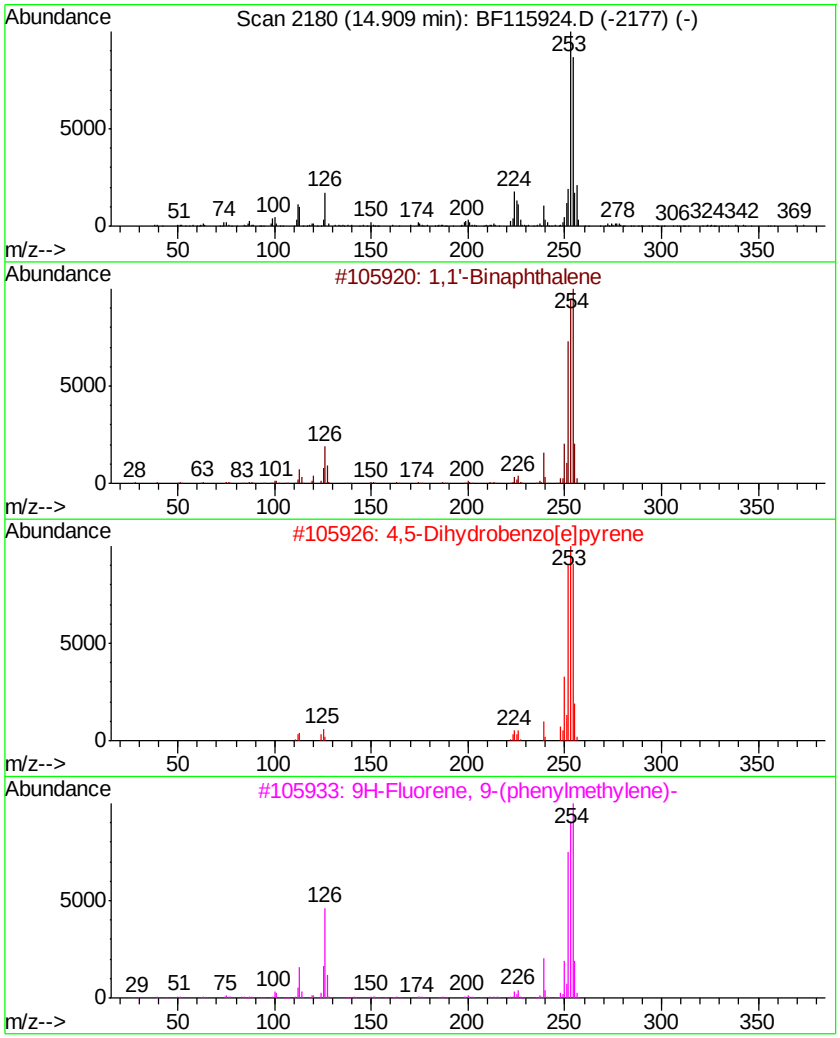
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

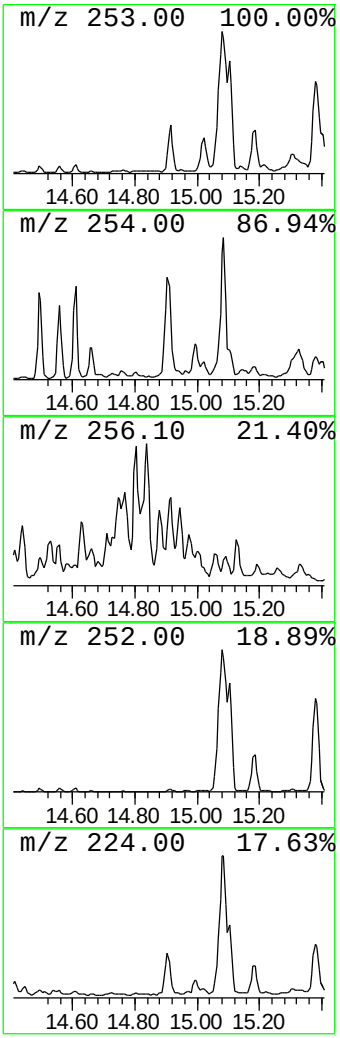
****

Peak Number 17 1,1'-Binaphthalene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.91	5.32 ng	286810	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Binaphthalene	254	C20H14	000604-53-5	81
2	4,5-Dihydrobenzo[e]pyrene	254	C20H14	095676-42-9	80
3	9H-Fluorene, 9-(phenylmethylene)-	254	C20H14	001836-87-9	74
4	3H-Pyrrolo[3,2-f]quinoline, 5-me...	254	C16H18N2O	1000350-44-1	72
5	9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	72





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

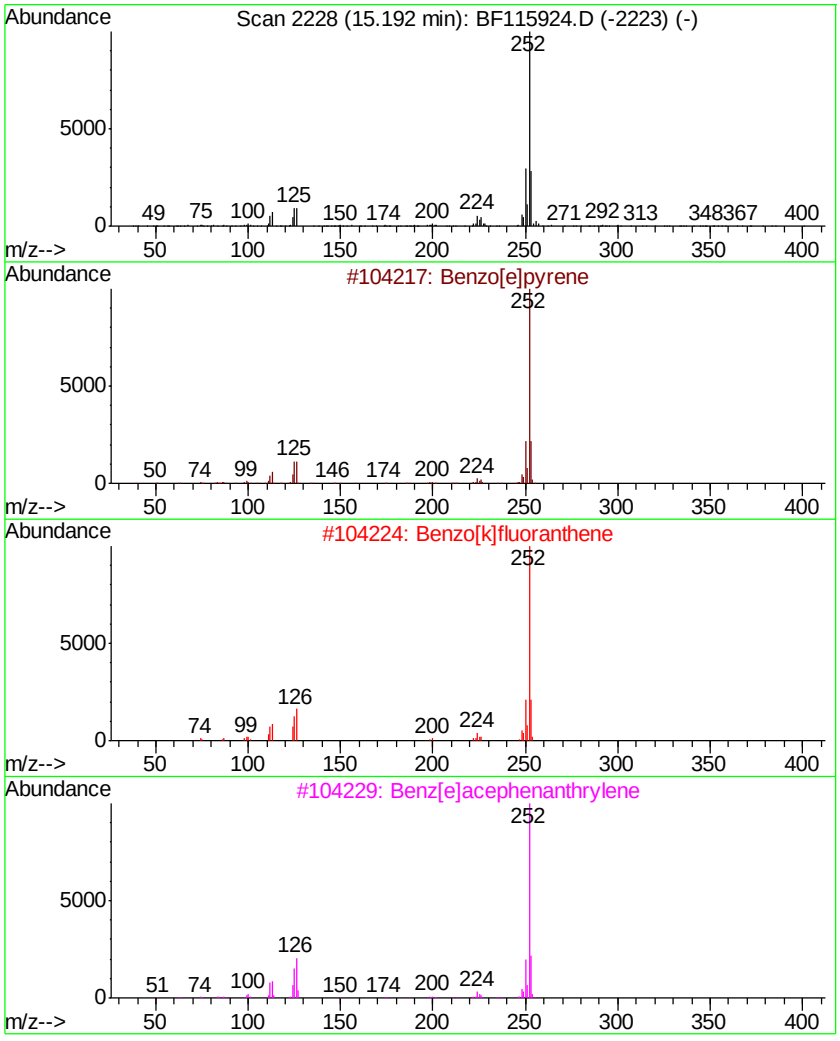
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

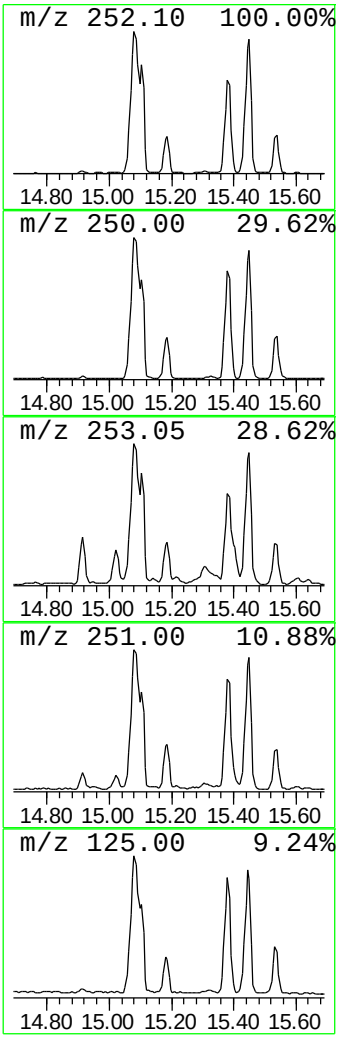
****

Peak Number 18 Benzo[e]pyrene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.19	10.04 ng	540687	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	97
2	Benzo[k]fluoranthene	252	C20H12	000207-08-9	95
3	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
4	Benzo[a]pyrene	252	C20H12	000050-32-8	91
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	81





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

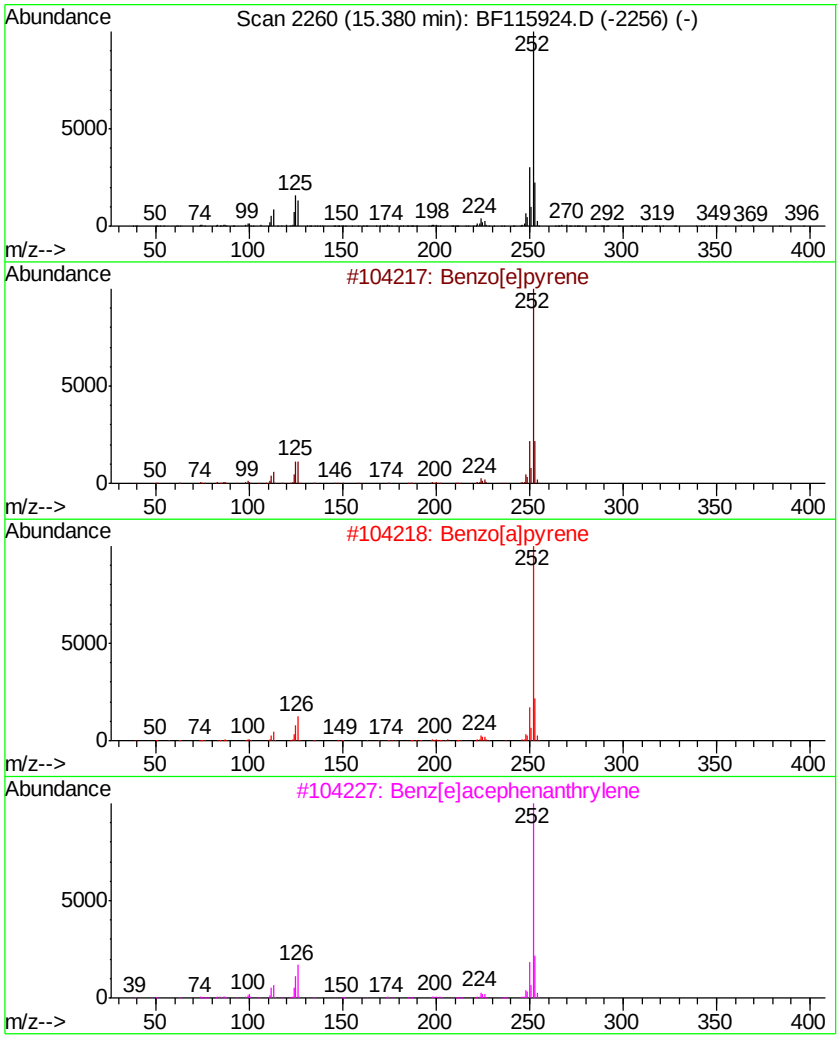
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

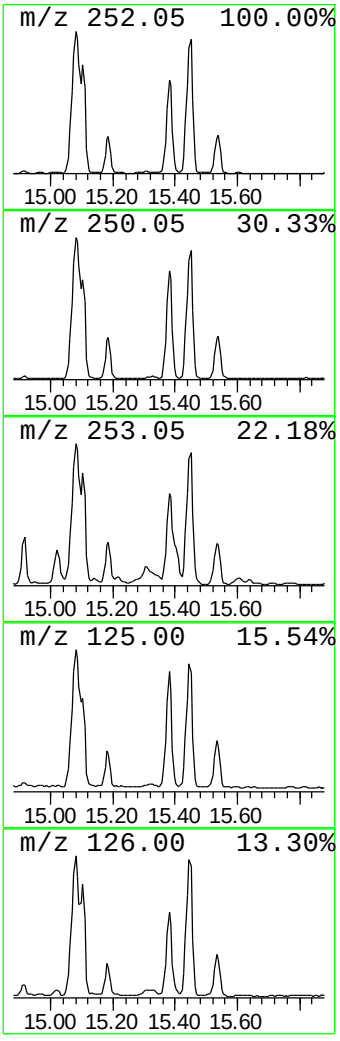
****

Peak Number 19 Benzo[j]fluoranthene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.38	37.08 ng	1997590	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	99
2	Benzo[a]pyrene	252	C20H12	000050-32-8	98
3	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	97
4	Perylene	252	C20H12	000198-55-0	97
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	95





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

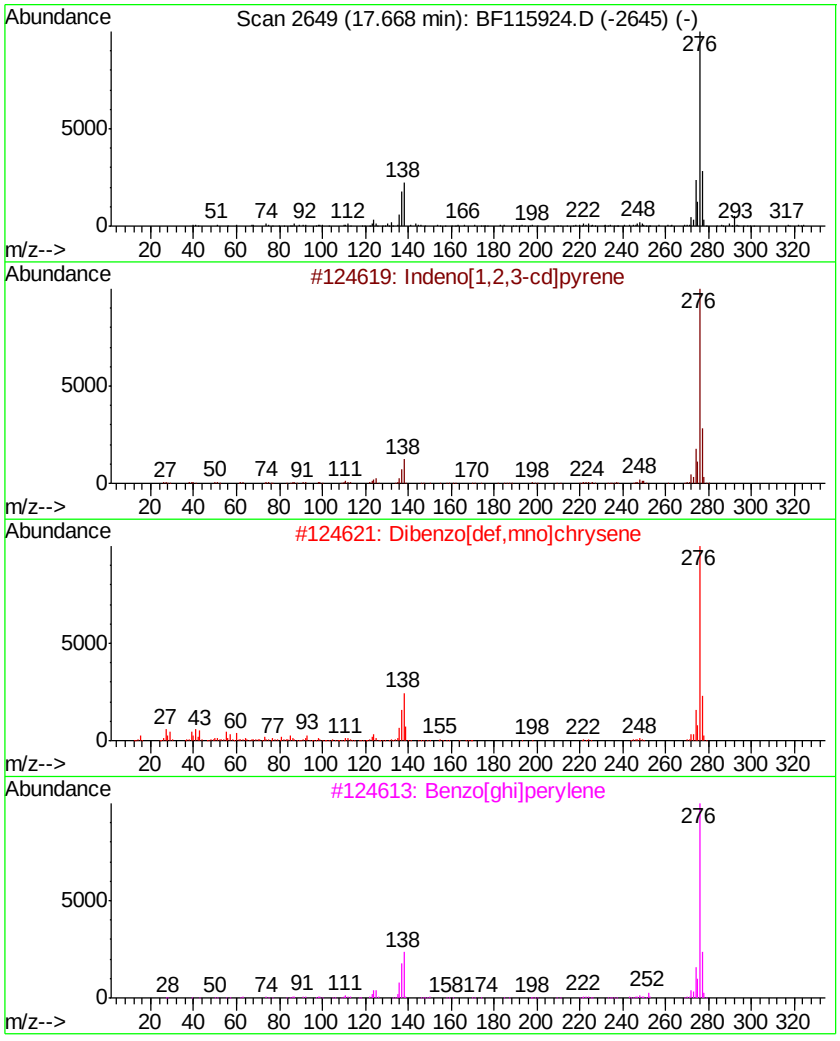
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

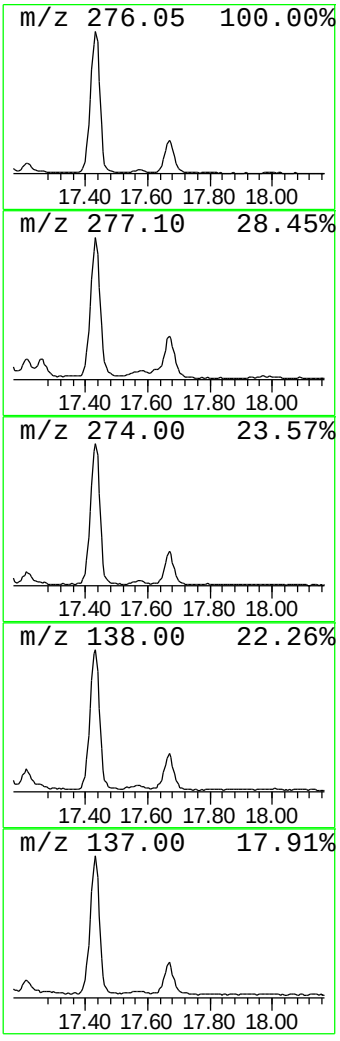
****

Peak Number 20 Dibenzo[def,mno]chrysene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.67	7.57 ng	408069	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	94
2	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
3	Benzo[ghi]perylene	276	C22H12	000191-24-2	91
4	1-Naphthalenecarboxylic acid, 2-...	276	C18H12O3	038119-11-8	43
5	6H-Pyrido[4,3-b]carbazole, 9-met...	276	C18H16N2O	010371-86-5	42





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF080119\
Data File : BF115924.D
Acq On : 1 Aug 2019 23:15
Operator : HP/JU
Sample : K4049-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SP-1

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF073019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	2.13	21.9	ng	1000600	1	6.85	915368	20.0
unknown6.63	6.63	69.1	ng	3164430	1	6.85	915368	20.0
9H-Fluoren-9-one	11.19	5.8	ng	327422	4	11.38	1126200	20.0
Dibenzothiophene	11.27	5.2	ng	294936	4	11.38	1126200	20.0
Phenanthrene, 2-m...	11.88	11.5	ng	648886	4	11.38	1126200	20.0
Phenanthrene, 1-m...	11.91	24.1	ng	1358400	4	11.38	1126200	20.0
1H-Cyclopropa[l]p...	11.96	6.2	ng	347774	4	11.38	1126200	20.0
4H-Cyclopenta[def...	11.99	20.2	ng	1134960	4	11.38	1126200	20.0
Anthracene, 1-met...	12.02	6.5	ng	363212	4	11.38	1126200	20.0
Naphthalene, 2-ph...	12.17	9.2	ng	516575	4	11.38	1126200	20.0
9,10-Anthracenedione	12.20	9.2	ng	518602	4	11.38	1126200	20.0
Phenanthrene, 2,5...	12.43	7.8	ng	439136	4	11.38	1126200	20.0
Pyrene, 4,5,9,10-...	12.47	5.9	ng	333787	4	11.38	1126200	20.0
Cyclopenta(def)ph...	12.53	10.4	ng	586341	4	11.38	1126200	20.0
Benzene, 1,1'-(1,...	12.69	10.0	ng	562048	4	11.38	1126200	20.0
1,1'-Binaphthalene	14.91	5.3	ng	286810	6	15.50	1077460	20.0
Benzo[e]pyrene	15.19	10.0	ng	540687	6	15.50	1077460	20.0
Benzo[j]fluoranthene	15.38	37.1	ng	1997590	6	15.50	1077460	20.0
Dibenzo[def,mno]c...	17.67	7.6	ng	408069	6	15.50	1077460	20.0