LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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-BF020320.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	5.439	565	570	589	rVB	3534444	3672673	29.55%	2.108%
2	6.451	737	742	761	rBV	3811864	3730956	30.02%	2.141%
3	6.810	800	803	807	rBV	1305556	1178369	9.48%	0.676%
4	6.969	826	830	834	rBV	3755862	3310064	26.64%	1.900%
5	7.375	894	899	902	rBV	2587282	2513555	20.23%	1.443%
6	8.092	1017	1021	1023	rBV	1601703	1501725	12.08%	0.862%
7	8.116	1023	1025	1030	rVB	1315688	1033904	8.32%	0.593%
8	8.810	1139	1143	1149	rBV	701684	678967	5.46%	0.390%
9	8.904	1154	1159	1167	rVB	670097	618240	4.98%	0.355%
10	9.169	1200	1204	1208	rBV	5380730	5015399	40.36%	2.878%
11	9.433	1243	1249	1253	rBV	275482	389302	3.13%	0.223%
12	9.510	1258	1262	1264	rVV	481768	513751	4.13%	0.295%
13	9.533	1264	1266	1269	rVV	330834	299048	2.41%	0.172%
14	9.621	1278	1281	1287	rVV	252624	303436	2.44%	0.174%
15	9.710	1290	1296	1301	rBV	784690	700569	5.64%	0.402%
16	9.851	1313	1320	1322	rBV	2008153	2074994	16.70%	1.191%
17	9.880	1322	1325	1328	rVV	1305240	1096124	8.82%	0.629%
18	10.051	1350	1354	1358	rVV	1363323	1232812	9.92%	0.708%
19	10.392	1409	1412	1418	rVB	1634625	1613980	12.99%	0.926%
20	10.463	1418	1424	1425	rBV2	224279	317024	2.55%	0.182%
21	10.551	1436	1439	1445	rVB	517426	491581	3.96%	0.282%
22	10.639	1445	1454	1458	rVV	4062667	4138437	33.30%	2.375%
23	10.763	1471	1475	1480	rVB	252602	285736	2.30%	0.164%
24	10.945	1498	1506	1508	rBV3	385091	636244	5.12%	0.365%
25	11.139	1535	1539	1543	rVV	1471304	1301321	10.47%	0.747%
26	11.186	1543	1547	1550	rVV2	260202	362767	2.92%	0.208%
27	11.227	1551	1554	1560	rVB	1594793	1488585	11.98%	0.854%
28	11.339	1566	1573	1574	rBV	1729447	2237142	18.00%	1.284%
29	11.368	1574	1578	1581	rVV	9219481	12426901	100.00%	7.132%
30	11.416	1581	1586	1588	rVV	3684160	3424420	27.56%	1.965%
31	11.563	1605	1611	1614	rBV2	1759180	1736214	13.97%	0.996%
32	11.627	1619	1622	1625	rVV	419118	367197	2.95%	0.211%
33	11.663	1625	1628	1633	rVB2	762858	697412	5.61%	0.400%
34	11.745	1640	1642	1646	rVB	422059	403713	3.25%	0.232%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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-BF020320.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	11.833	1652	1657	1660	rVV	1973923	2134492	17.18%	1.225%
36	11.863	1660	1662	1666	rVV	2997659	2638644	21.23%	1.514%
37	11.910	1666	1670	1673	rVV	853074	821972	6.61%	0.472%
38	11.945	1673	1676	1679	rVV2	2435404	3007601	24.20%	1.726%
39	11.968	1679	1680	1684	rVB	1493874	931457	7.50%	0.535%
40	12.127	1704	1707	1709	rVV	1379534	1274826	10.26%	0.732%
41	12.157	1709	1712	1718	rVB2	1818943	1647395	13.26%	0.945%
42	12.280	1731	1733	1735	rVV	406267	357247	2.87%	0.205%
43	12.310	1735	1738	1740	rVV	449183	380554	3.06%	0.218%
44	12.333	1740	1742	1745	rVB2	393229	343778	2.77%	0.197%
45	12.386	1745	1751	1754	rBV	986506	1351752	10.88%	0.776%
46	12.421	1755	1757	1759	rVV	575094	597184	4.81%	0.343%
47	12.474	1763	1766	1771	rVB	1040738	1120350	9.02%	0.643%
48	12.562	1774	1781	1783	rVV	8422050	11379032	91.57%	6.531%
49	12.610	1787	1789	1792	rVV2	343512	307940	2.48%	0.177%
50	12.639	1792	1794	1797	rVB	392167	359791	2.90%	0.206%
51	12.698	1797	1804	1808	rBV2	726959	1085623	8.74%	0.623%
52	12.786	1812	1819	1823	rBV2	8034193	11919240	95.91%	6.841%
53	12.821	1823	1825	1830	rVB2	594860	687488	5.53%	0.395%
54	12.892	1833	1837	1838	rBV	791910	692464	5.57%	0.397%
55	12.921	1838	1842	1848	rVB	5731677	6501813	52.32%	3.731%
56	12.998	1849	1855	1858	rBV2	933468	1554429	12.51%	0.892%
57	13.080	1865	1869	1870	rVV4	680016	705459	5.68%	0.405%
58	13.104	1870	1873	1876	rVB	1375216	1413717	11.38%	0.811%
59	13.168	1881	1884	1886	rVB	562249	456068	3.67%	0.262%
60	13.204	1886	1890	1894	rBV2	1303249	1524497	12.27%	0.875%
61	13.298	1903	1906	1909	rBV	779023	671739	5.41%	0.386%
62	13.327	1909	1911	1915	rVB	797057	766907	6.17%	0.440%
63	13.480	1934	1937	1939	rBV3	252673	343566	2.76%	0.197%
64	13.609	1953	1959	1963	rVB	1675379	1677903	13.50%	0.963%
65	13.721	1973	1978	1980	rBV2	1607343	1799132	14.48%	1.033%
66	13.751	1980	1983	1985	rVV	1065397	1124311	9.05%	0.645%
67	13.774	1985	1987	1991	rVV2	882074	1240622	9.98%	0.712%
68	13.815	1991	1994	2001	rVB	1855671	2108561	16.97%	1.210%
69	13.886	2001	2006	2013	rVB	345664	543557	4.37%	0.312%
70	13.968	2013	2020	2023	rBV2	5619183	8739110	70.32%	5.016%
71	14.004	2023	2026	2033	rVB	5124262	5580782	44.91%	3.203%

LSC Area Percent Report

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Sample : L1468-02
Misc :
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Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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

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Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	14.080	2037	2039	2043	rVV	472672	460233	3.70%	0.264%
73	14.133	2043	2048	2050	rVV3	412418	704417	5.67%	0.404%
74	14.156	2050	2052	2055	rVV2	401645	393303	3.16%	0.226%
75	14.192	2055	2058	2062	rVV2	457635	683025	5.50%	0.392%
76	14.227	2062	2064	2067	rVB2	321440	291170	2.34%	0.167%
77	14.292	2072	2075	2078	rVV4	201696	320561	2.58%	0.184%
78	14.321	2078	2080	2082	rVV	348446	340543	2.74%	0.195%
79	14.357	2082	2086	2089	rVV	1250474	1403167	11.29%	0.805%
80	14.392	2089	2092	2095	rVV	740122	792590	6.38%	0.455%
81	14.439	2095	2100	2105	rVV4	510095	1026492	8.26%	0.589%
82	14.480	2105	2107	2109	rVV2	590881	583439	4.69%	0.335%
83	14.504	2109	2111	2114	rVV	473666	409119	3.29%	0.235%
84	14.551	2115	2119	2125	rVB3	417939	561880	4.52%	0.322%
85	14.662	2134	2138	2140	rBV3	316541	404304	3.25%	0.232%
86	14.692	2140	2143	2148	rVB3	238587	314983	2.53%	0.181%
87	14.845	2164	2169	2176	rVB2	347698	674452	5.43%	0.387%
88	15.009	2191	2197	2200	rBV	3422349	5887970	47.38%	3.379%
89	15.109	2211	2214	2218	rVB	723763	714645	5.75%	0.410%
90	15.192	2225	2228	2230	rBV3	218307	284966	2.29%	0.164%
91	15.303	2242	2247	2252	rVB	2002890	2829099	22.77%	1.624%
92	15.368	2252	2258	2262	rVB	2840198	3599092	28.96%	2.066%
93	15.421	2262	2267	2270	rBV	1349535	1904569	15.33%	1.093%
94	15.451	2270	2272	2279	rVB2	906406	1211847	9.75%	0.695%
95	15.968	2357	2360	2371	rVB4	183680	356747	2.87%	0.205%
96	16.862	2505	2512	2519	rVB2	1322928	2731197	21.98%	1.567%
97	17.027	2535	2540	2545	rBV	260640	485055	3.90%	0.278%
98	17.086	2546	2550	2555	rVB2	170183	322604	2.60%	0.185%
99	17.297	2579	2586	2596	rVB	1043160	2367575	19.05%	1.359%
100	17.521	2619	2624	2637	rVB2	247254	599420	4.82%	0.344%

Sum of corrected areas: 174242029

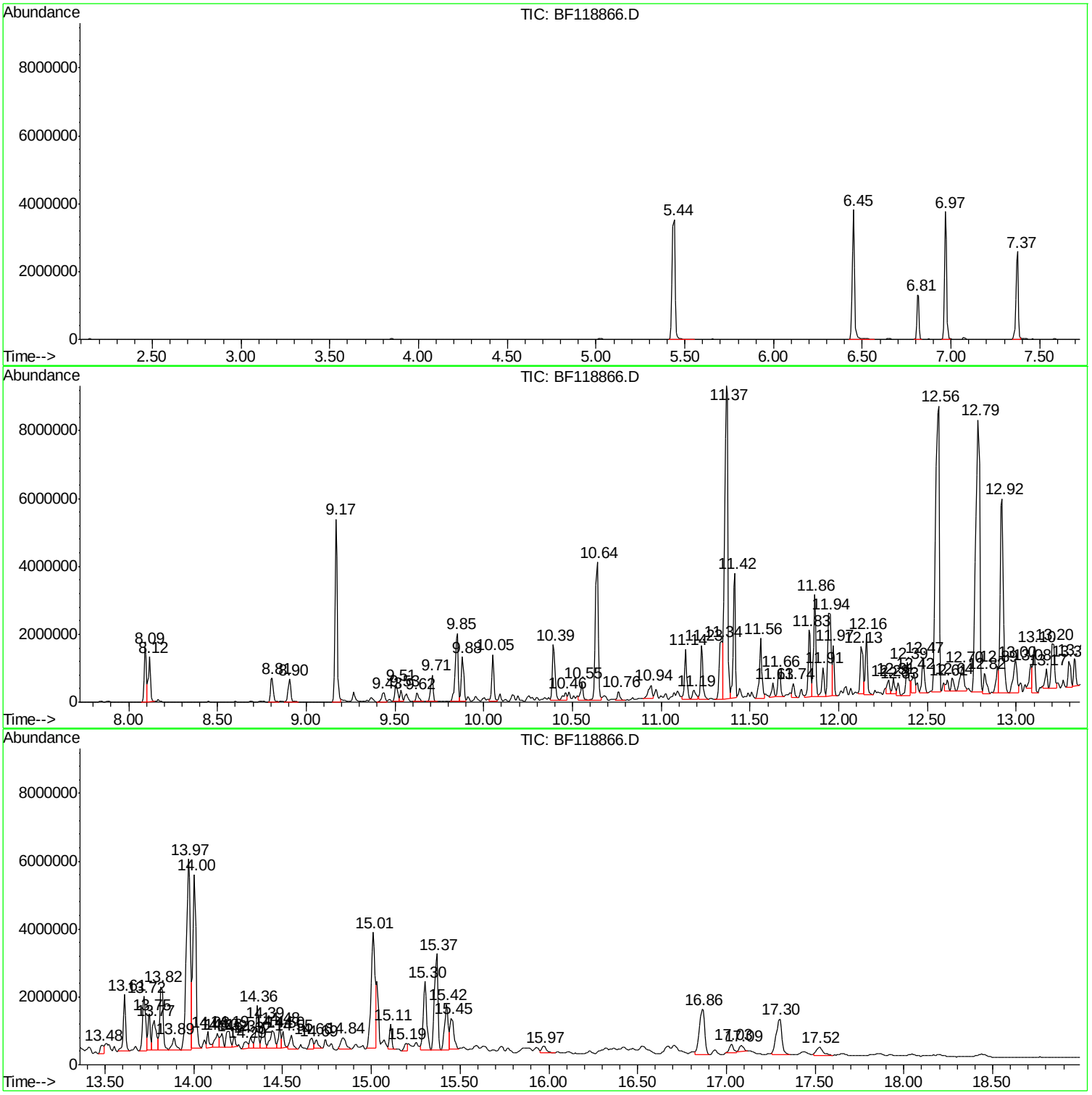
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.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\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

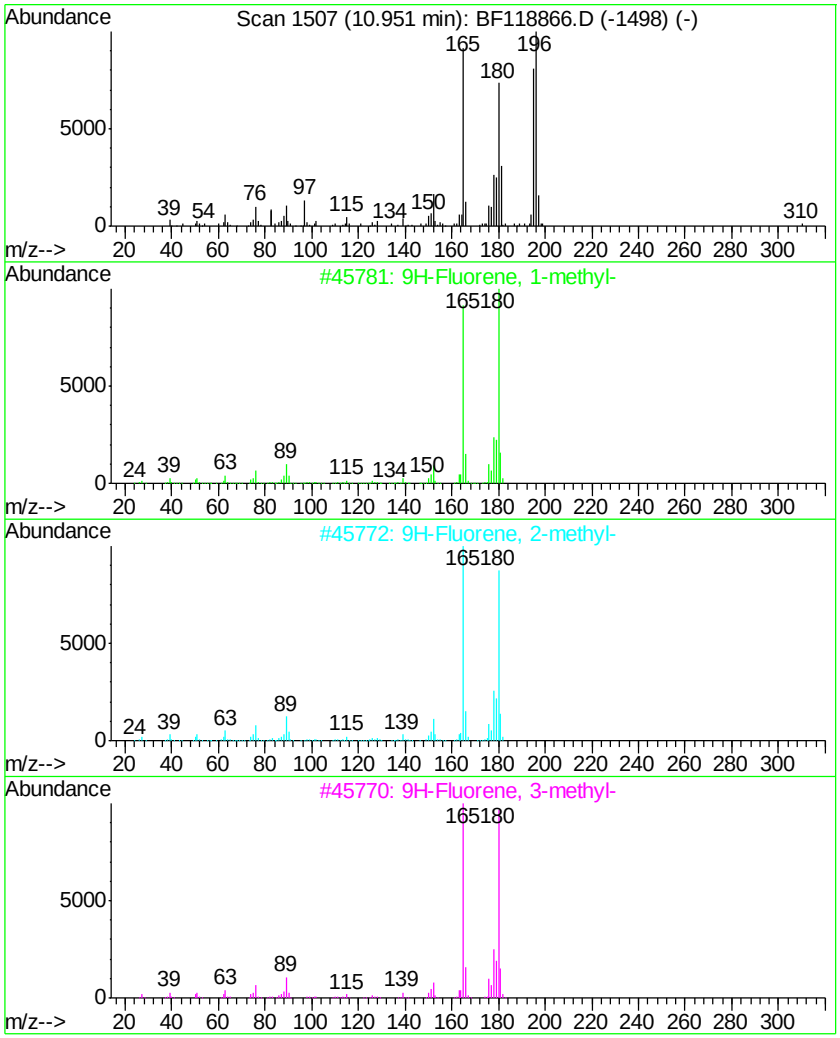
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

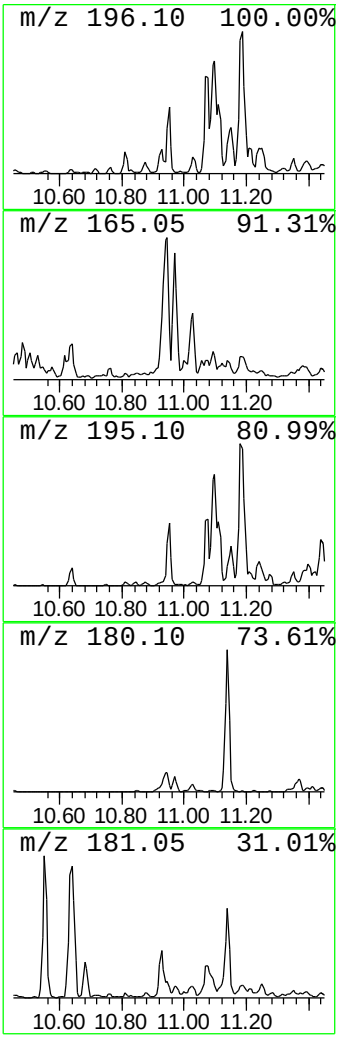
****

Peak Number 2 9H-Fluorene, 1-methyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	5.69 ng	636244	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluorene, 1-methyl-	180	C14H12	001730-37-6	96
2	9H-Fluorene, 2-methyl-	180	C14H12	001430-97-3	95
3	9H-Fluorene, 3-methyl-	180	C14H12	002523-39-9	94
4	9H-Fluorene, 9-methyl-	180	C14H12	002523-37-7	93
5	9H-Fluorene, 4-methyl-	180	C14H12	001556-99-6	89





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

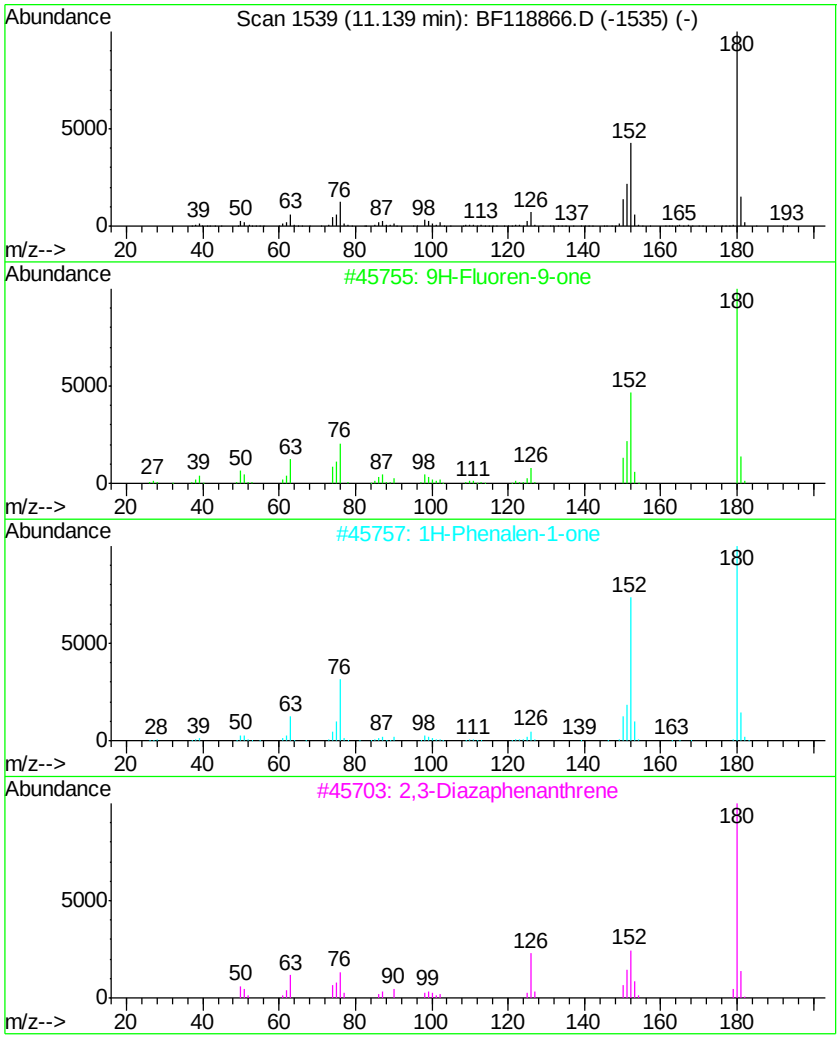
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

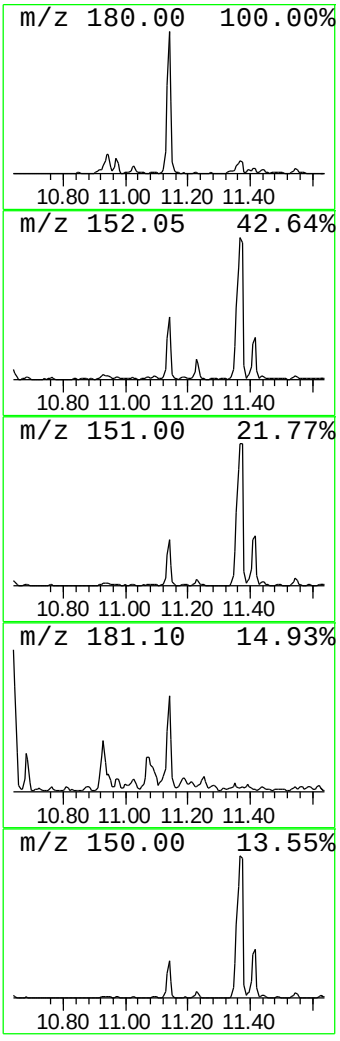
****

Peak Number 3 9H-Fluoren-9-one Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.14	11.63 ng	1301320	Phenanthrene-d10	11.33

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	64
3	2,3-Diazaphenanthrene	180	C12H8N2	000229-72-1	59
4	5-Methoxy-4-methyl-2,1,3-benzoth...	180	C8H8N2OS	089976-68-1	50
5	Phenazine	180	C12H8N2	000092-82-0	47





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.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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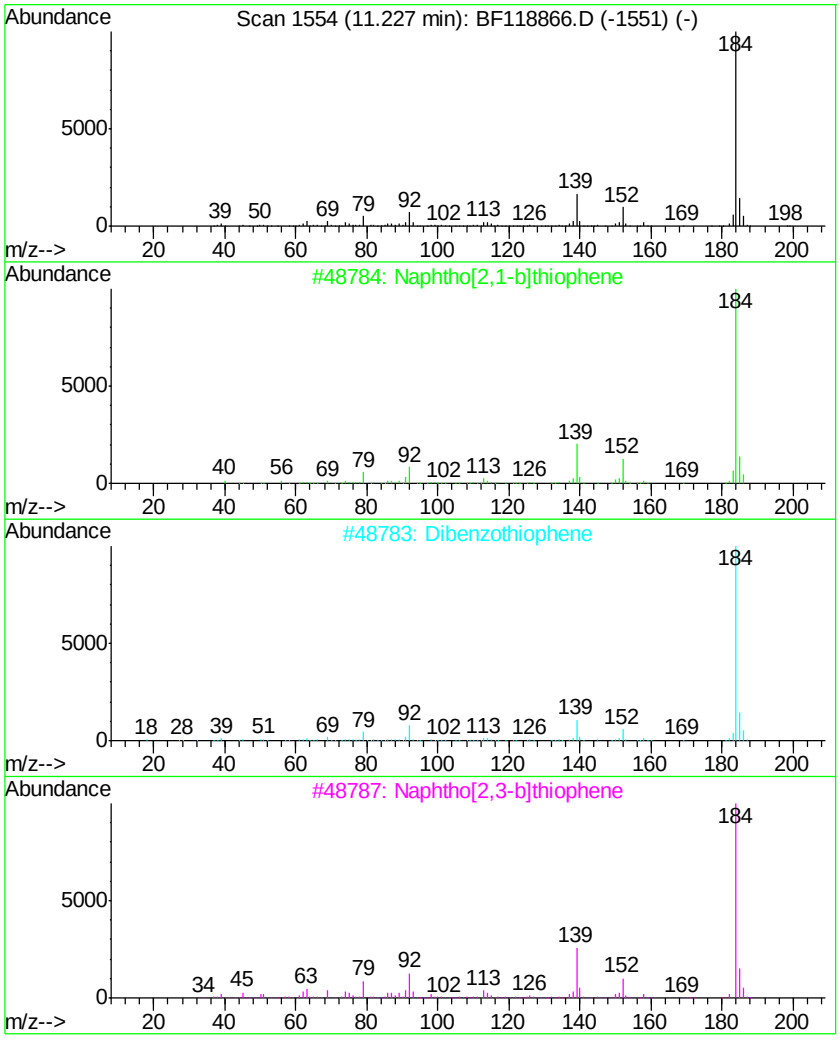
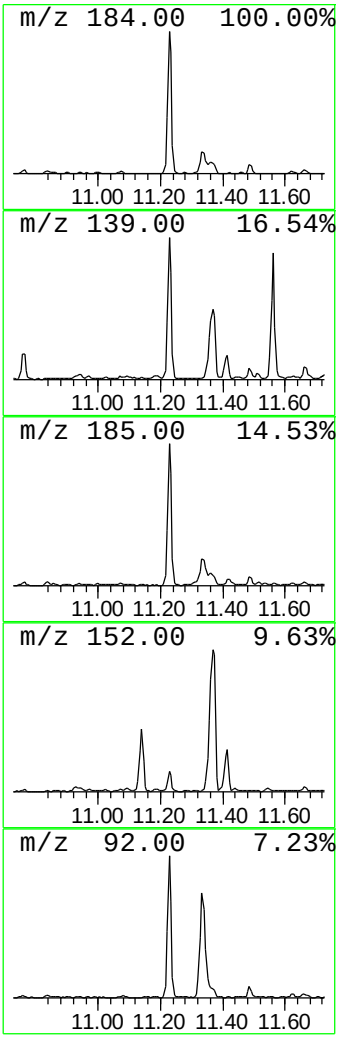
Peak Number 4 Naphtho[2,1-b]thiophene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.23	13.31 ng	1488590	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	97
2	Dibenzothiophene	184	C12H8S	000132-65-0	97
3	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	95
4	Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	95
5	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	80





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
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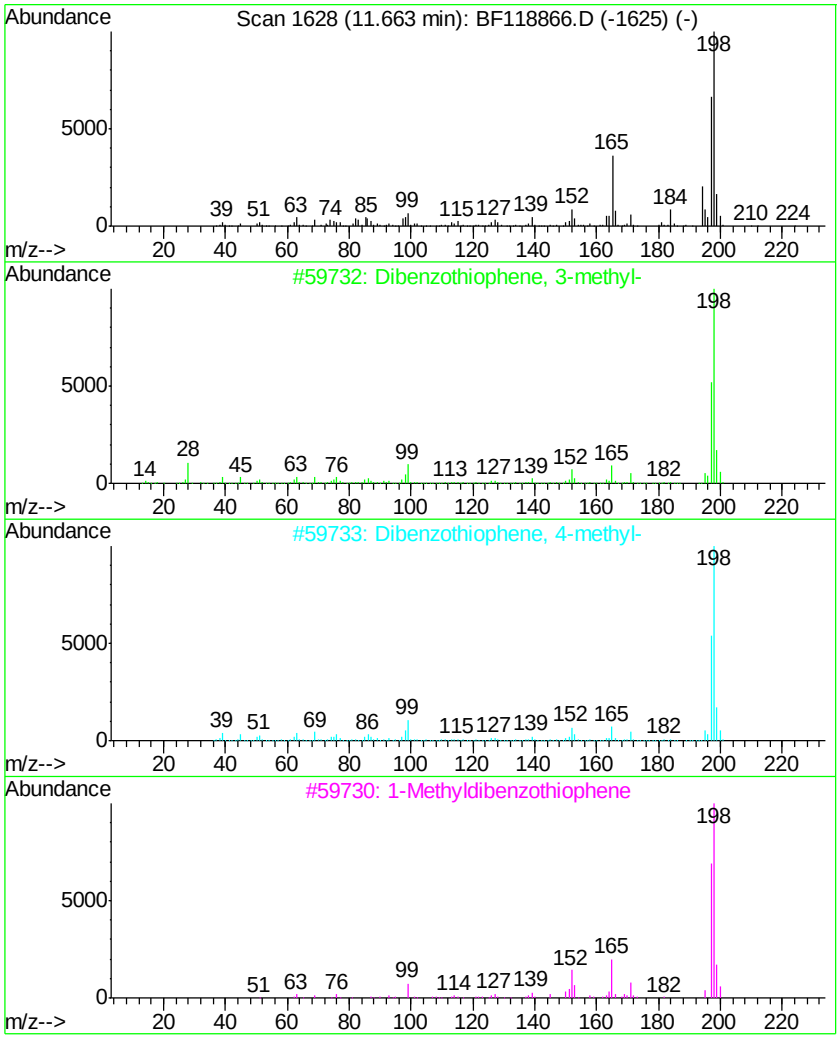
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

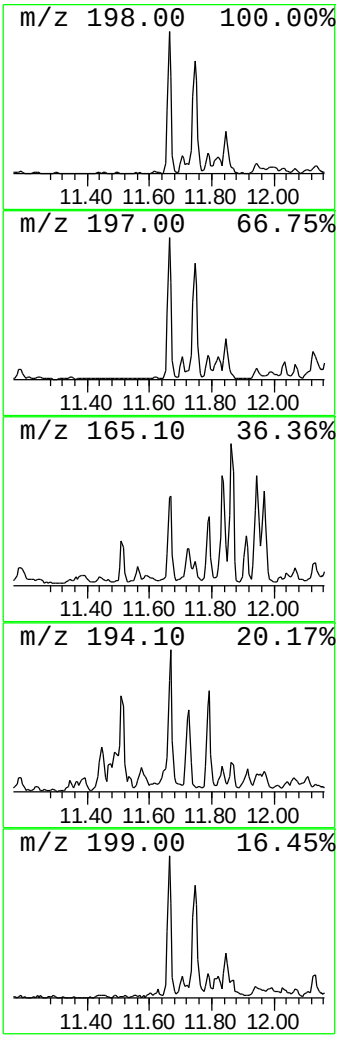
****

Peak Number 5 Dibenzothiophene, 3-methyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.66	6.23 ng	697412	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene, 3-methyl-	198	C13H10S	016587-52-3	90
2	Dibenzothiophene, 4-methyl-	198	C13H10S	007372-88-5	81
3	1-Methyldibenzothiophene	198	C13H10S	031317-07-4	76
4	Thioxanthene	198	C13H10S	000261-31-4	64
5	Benzenamine, 4,4'-methylenebis-	198	C13H14N2	000101-77-9	62





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

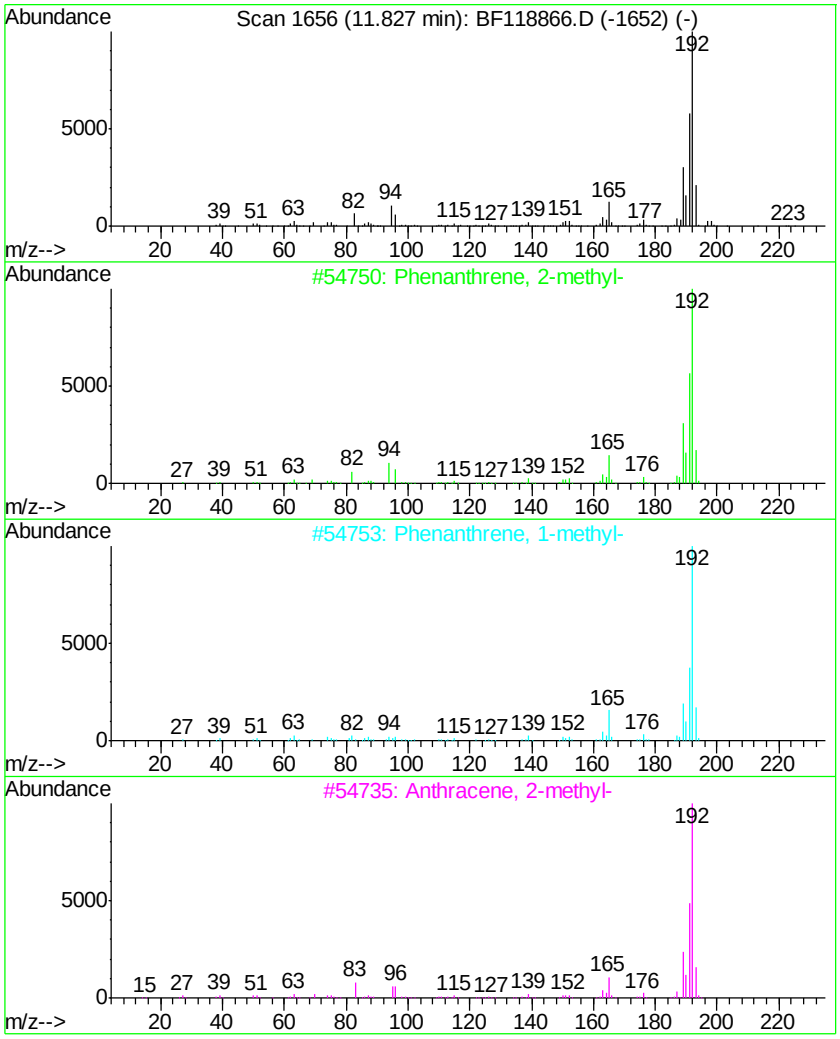
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

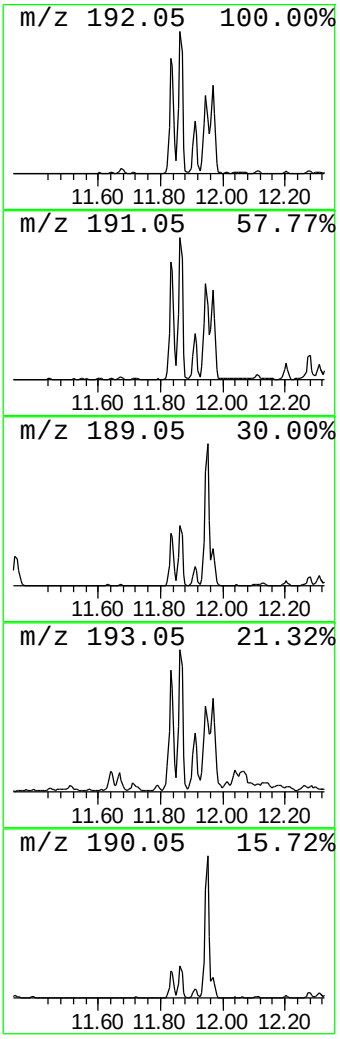
****

Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.83	19.08 ng	2134490	Phenanthrene-d10	11.33

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	93
3	Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
4	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	93
5	Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	93





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Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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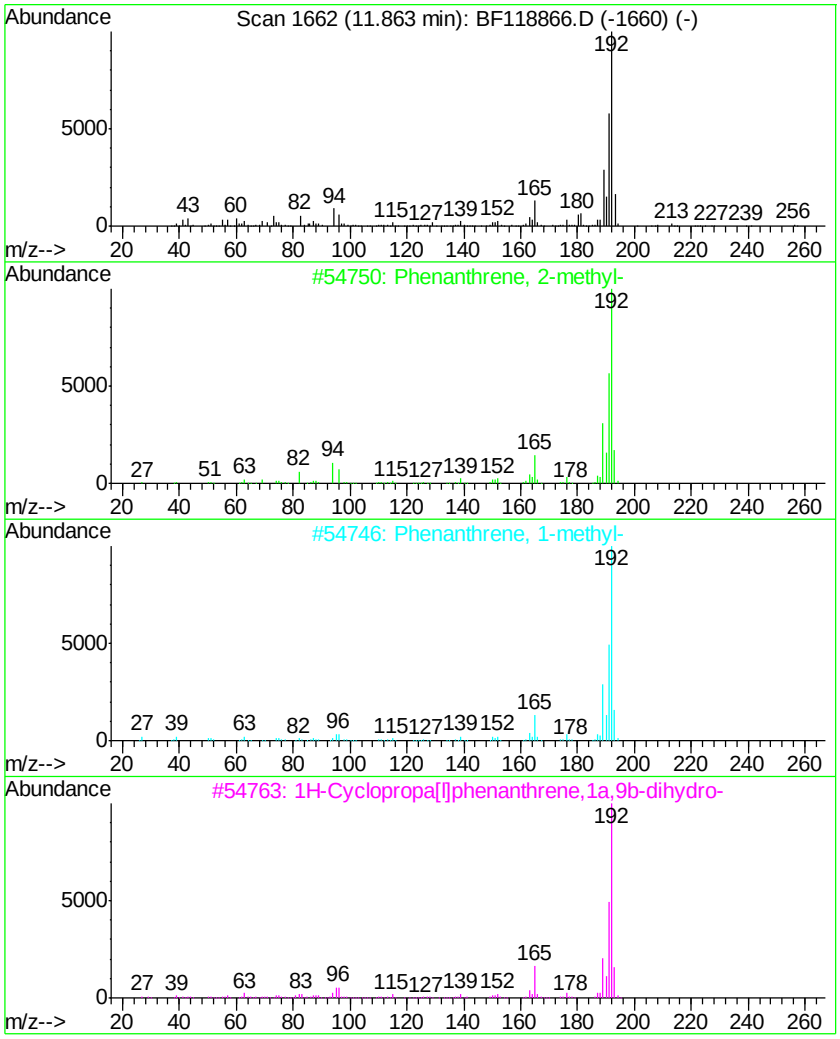
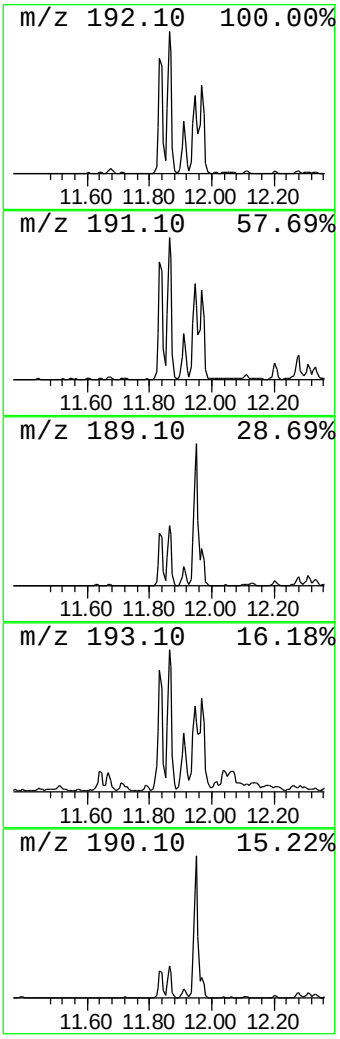
Peak Number 7 Phenanthrene, 1-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.86	23.59 ng	2638640	Phenanthrene-d10	11.33

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	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96
4	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95





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Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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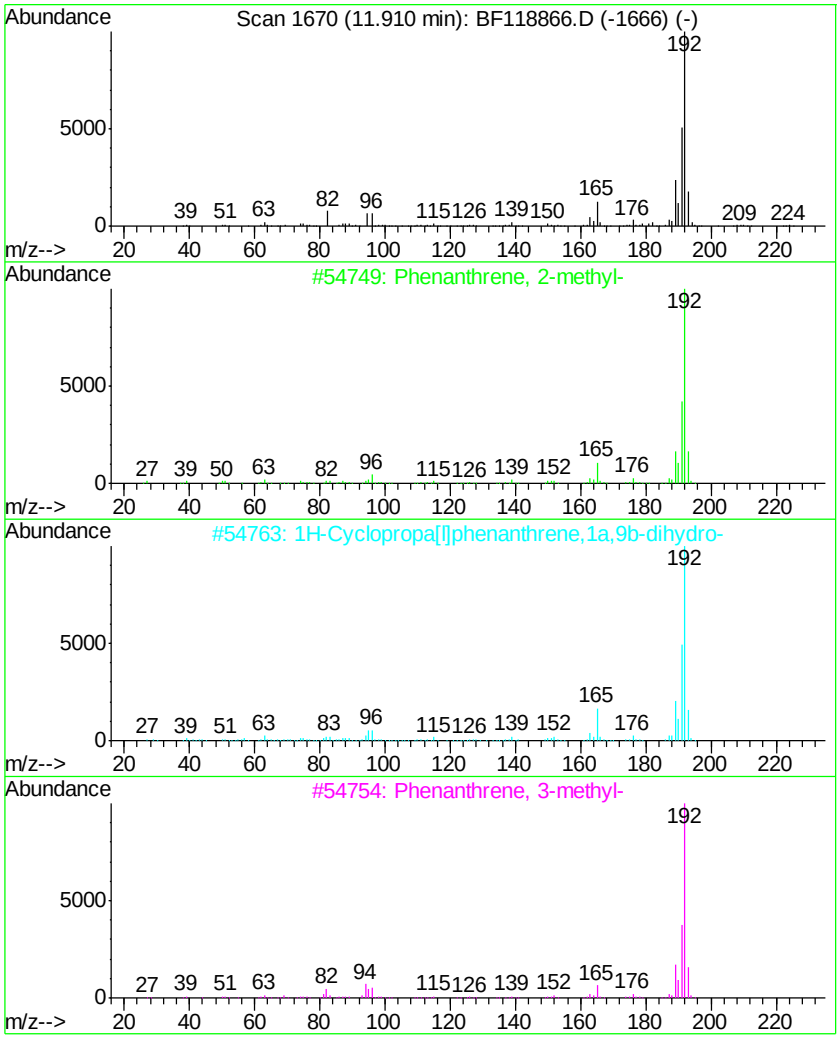
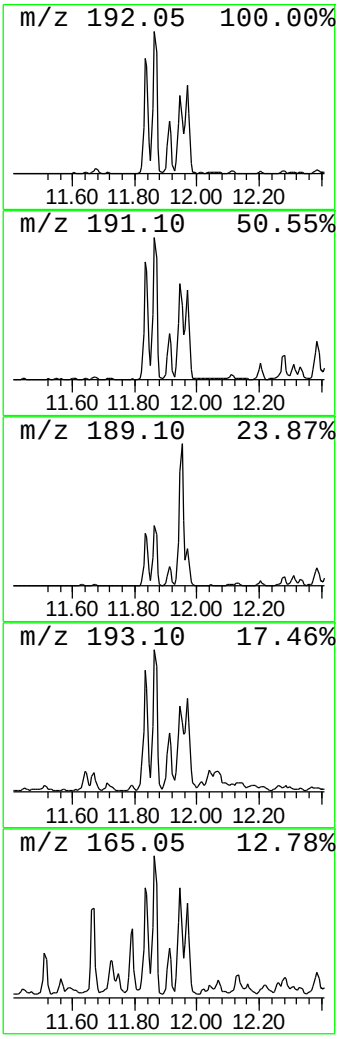
Peak Number 8 1H-Cyclopropa[l]phenanthren... Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.91	7.35 ng	821972	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96
3	Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	95
4	Anthracene, 9-methyl-	192	C15H12	000779-02-2	94
5	1H-Indene, 1-phenyl-	192	C15H12	001961-96-2	93





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Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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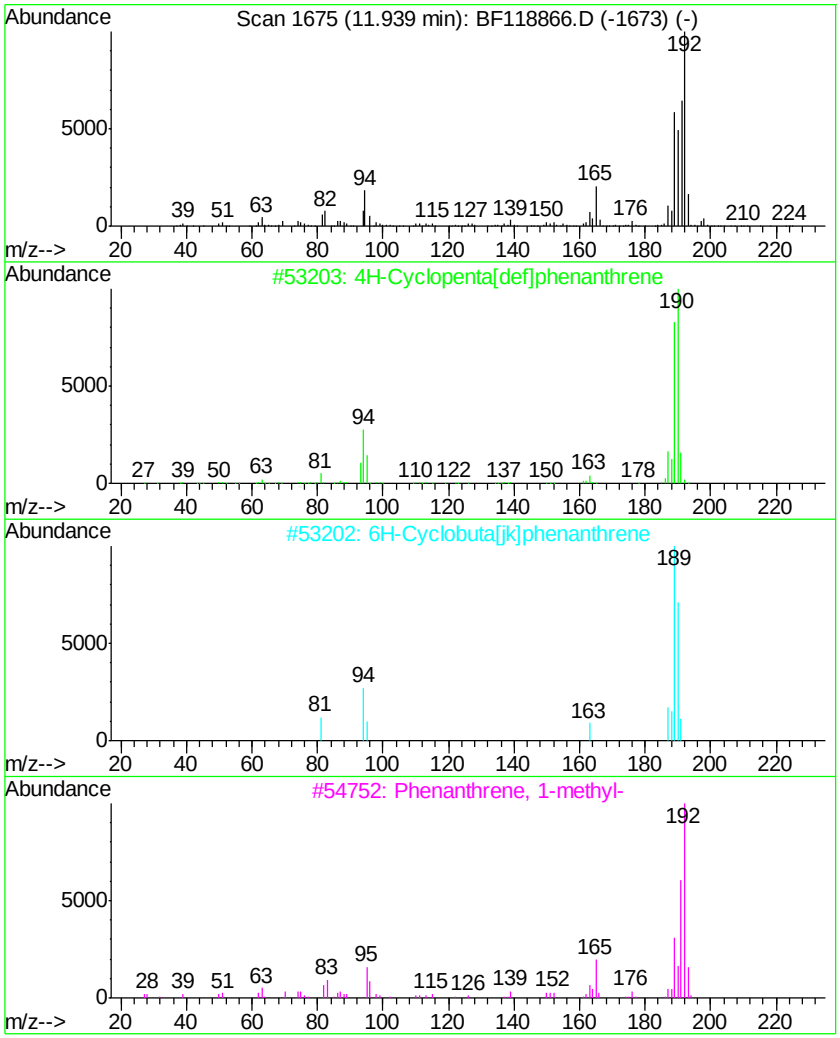
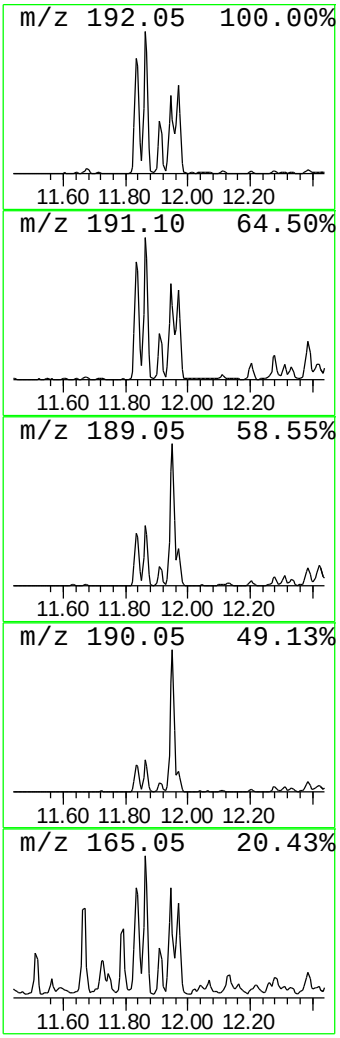
Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.94	26.89 ng	3007600	Phenanthrene-d10	11.33

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	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	42
5	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	42





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Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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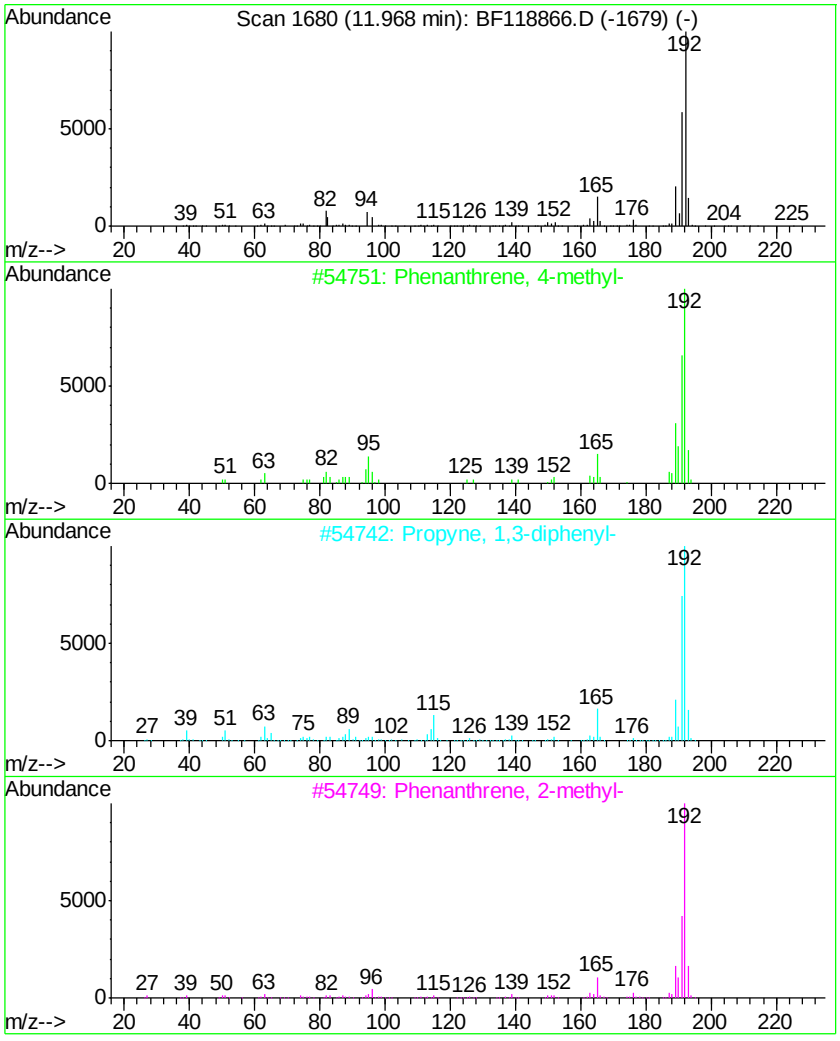
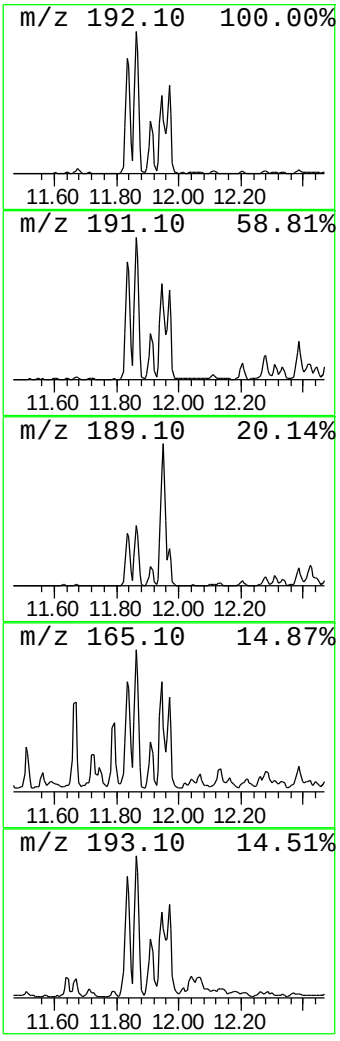
Peak Number 10 Phenanthrene, 4-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.97	8.33 ng	931457	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	91
2	Propyne, 1,3-diphenyl-	192	C15H12	004980-70-5	90
3	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	86
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	81
5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	81





Library Search Compound Report

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Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

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ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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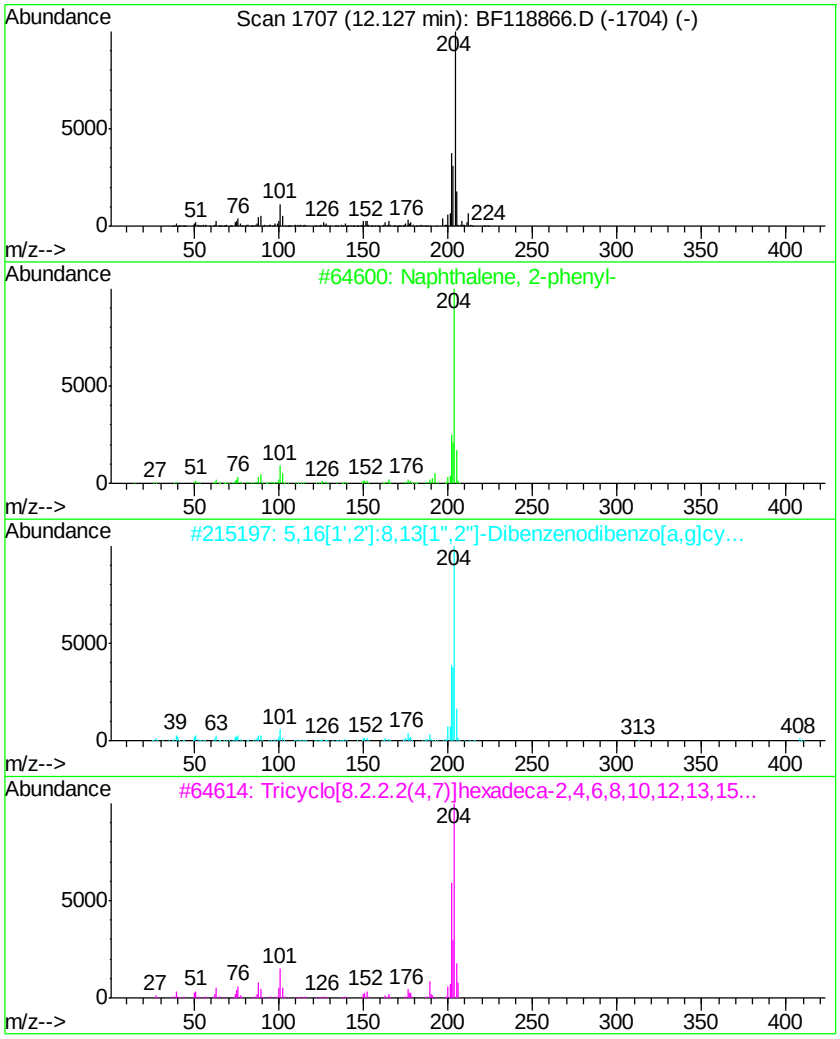
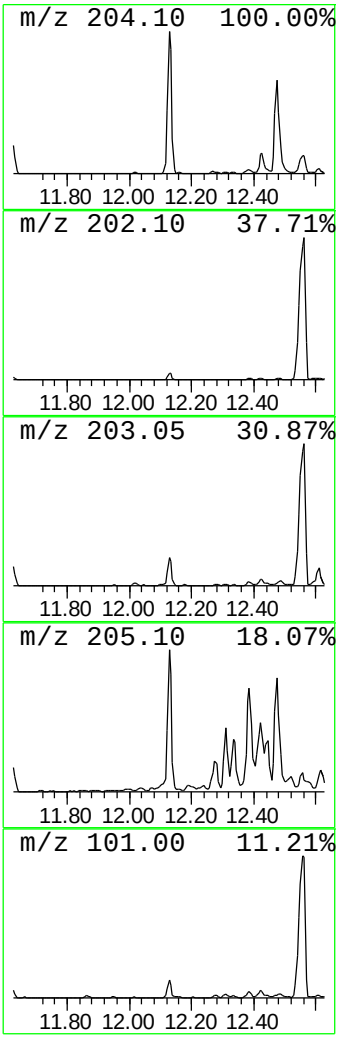
Peak Number 11 Naphthalene, 2-phenyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.13	11.40 ng	1274830	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	90
2	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	87
3	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	81
4	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	60
5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	58





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Misc :
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Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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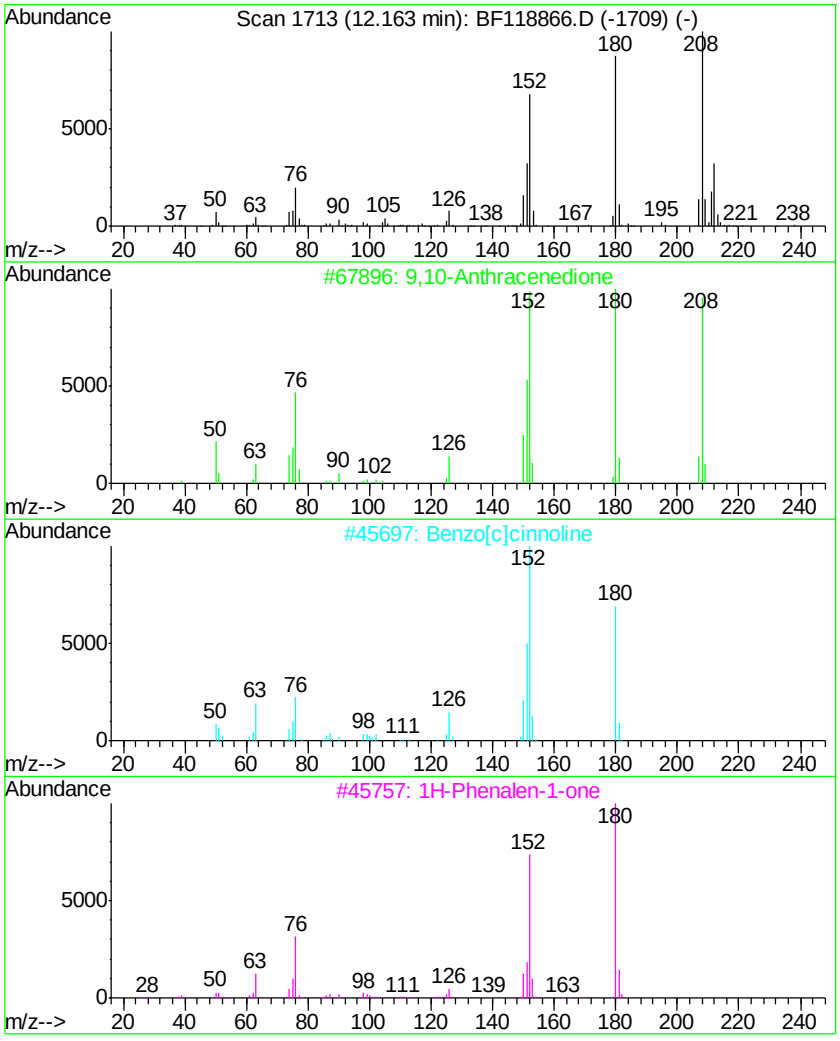
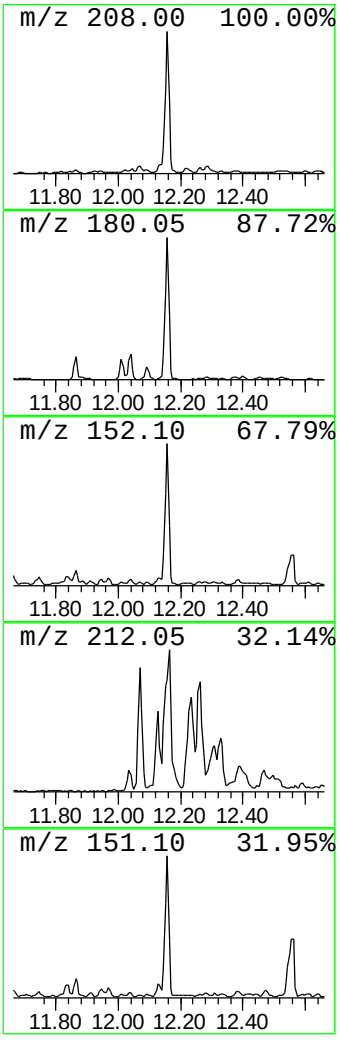
Peak Number 12 9,10-Anthracenedione Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.16	14.73 ng	1647400	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	98
2	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	64
3	1H-Phenalen-1-one	180	C13H8O	000548-39-0	60
4	1,4-Anthracenedione	208	C14H8O2	000635-12-1	58
5	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	49





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Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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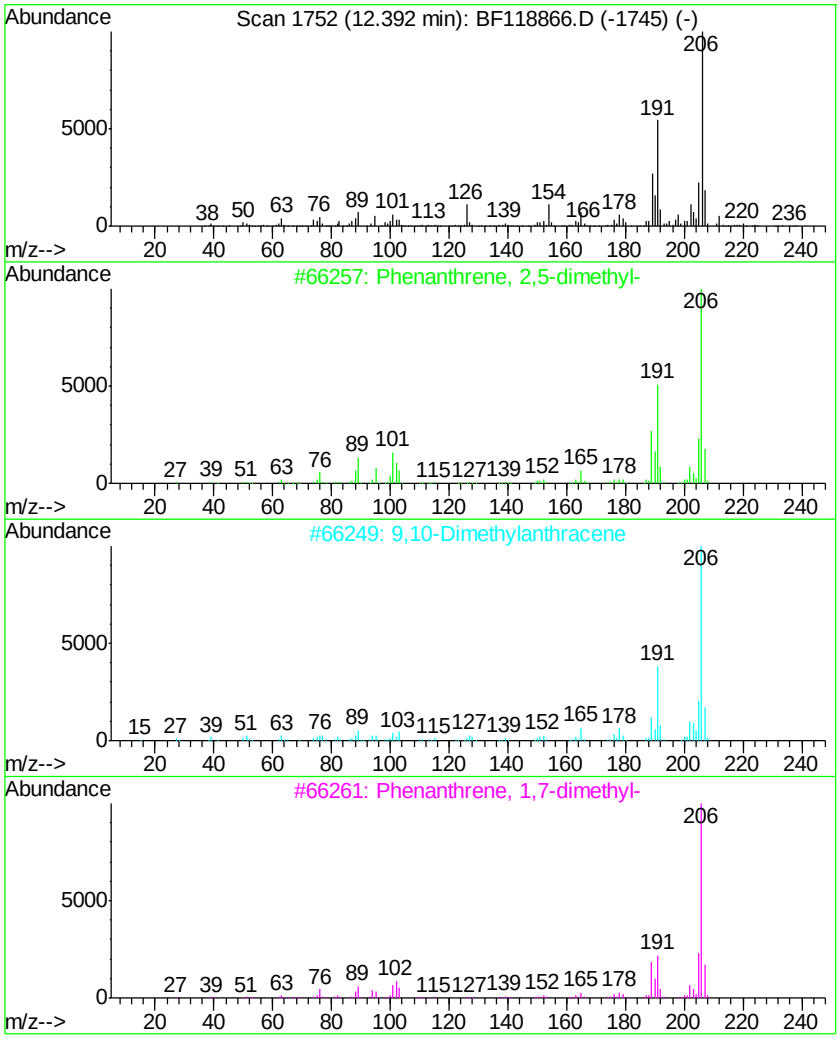
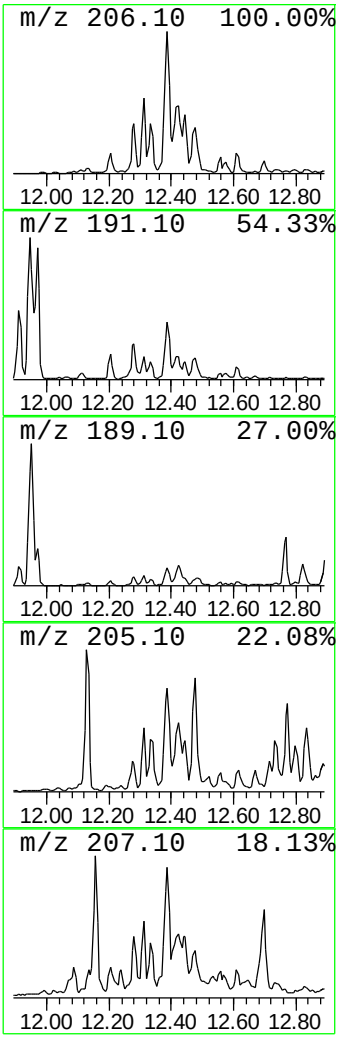
Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.39	12.08 ng	1351750	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	95
2	9,10-Dimethylanthracene	206	C16H14	000781-43-1	95
3	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	93
4	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	91
5	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	87





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Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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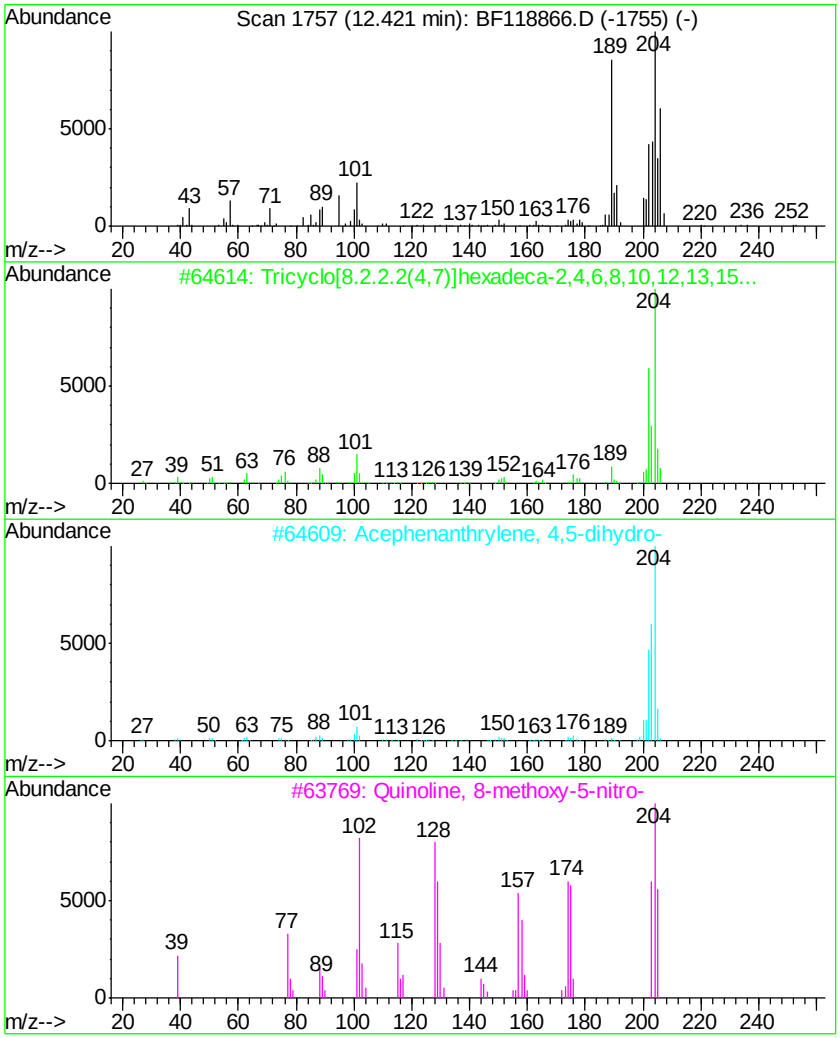
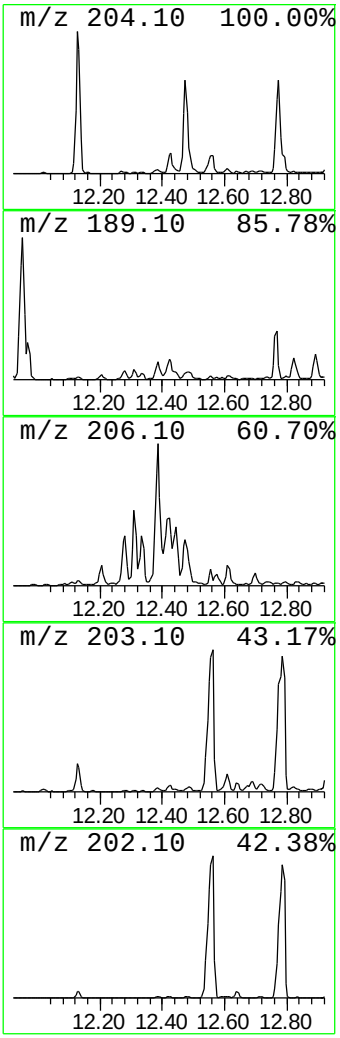
Peak Number 14 unknown12.42 Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.42	5.34 ng	597184	Phenanthrene-d10	11.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	43
2	Acephenanthrylene, 4,5-dihydro-	204	C16H12	006232-48-0	41
3	Quinoline, 8-methoxy-5-nitro-	204	C10H8N2O3	1000298-88-7	38
4	3,5-Dichloro-2,4-dimethyl-1-meth...	204	C9H10Cl2O	1000250-17-8	38
5	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	37





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Misc :
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Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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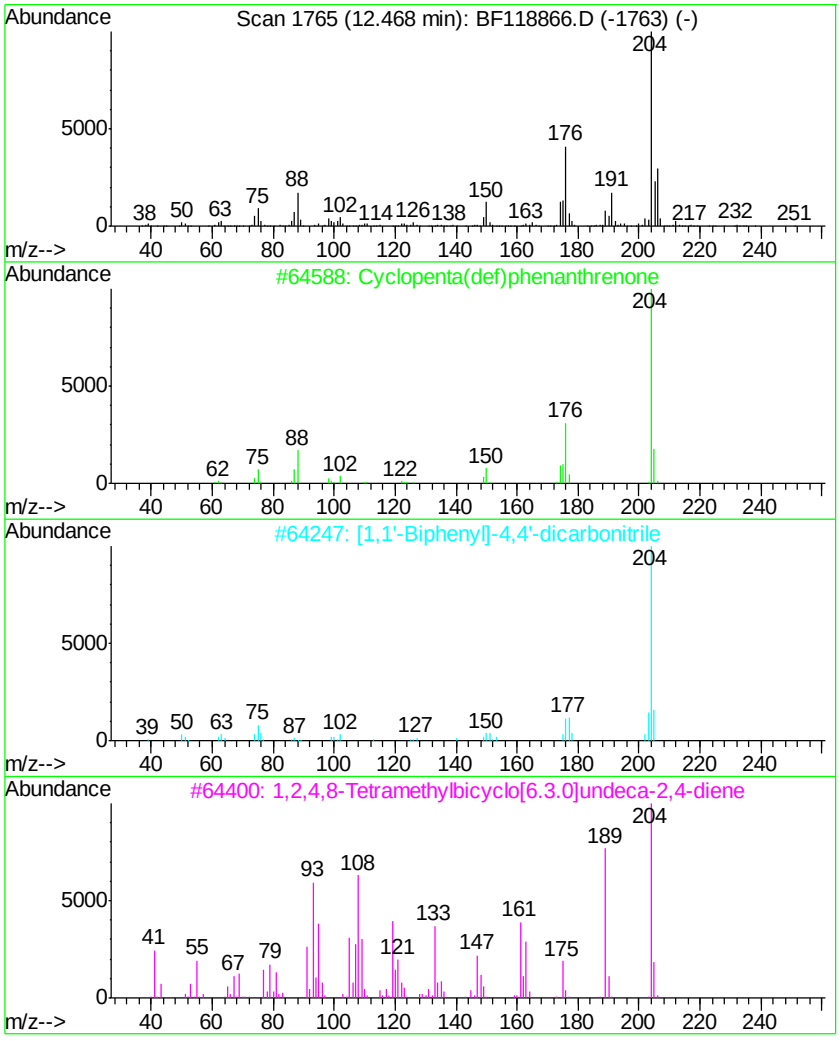
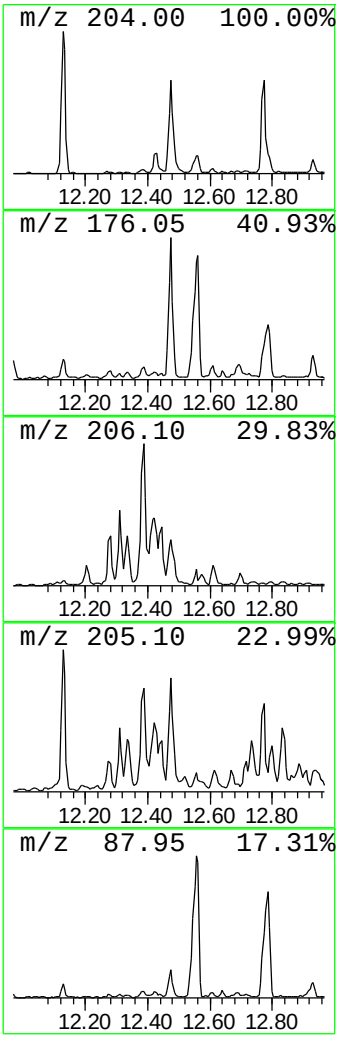
Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.47	10.02 ng	1120350	Phenanthrene-d10	11.33

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	49
3	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	45
4	2-Chloro-4-phenylphenol	204	C12H9ClO	000092-04-6	38
5	[1,1'-Biphenyl]-4-ol, 4'-chloro-	204	C12H9ClO	028034-99-3	38





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Misc :
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Instrument : BNA_F
ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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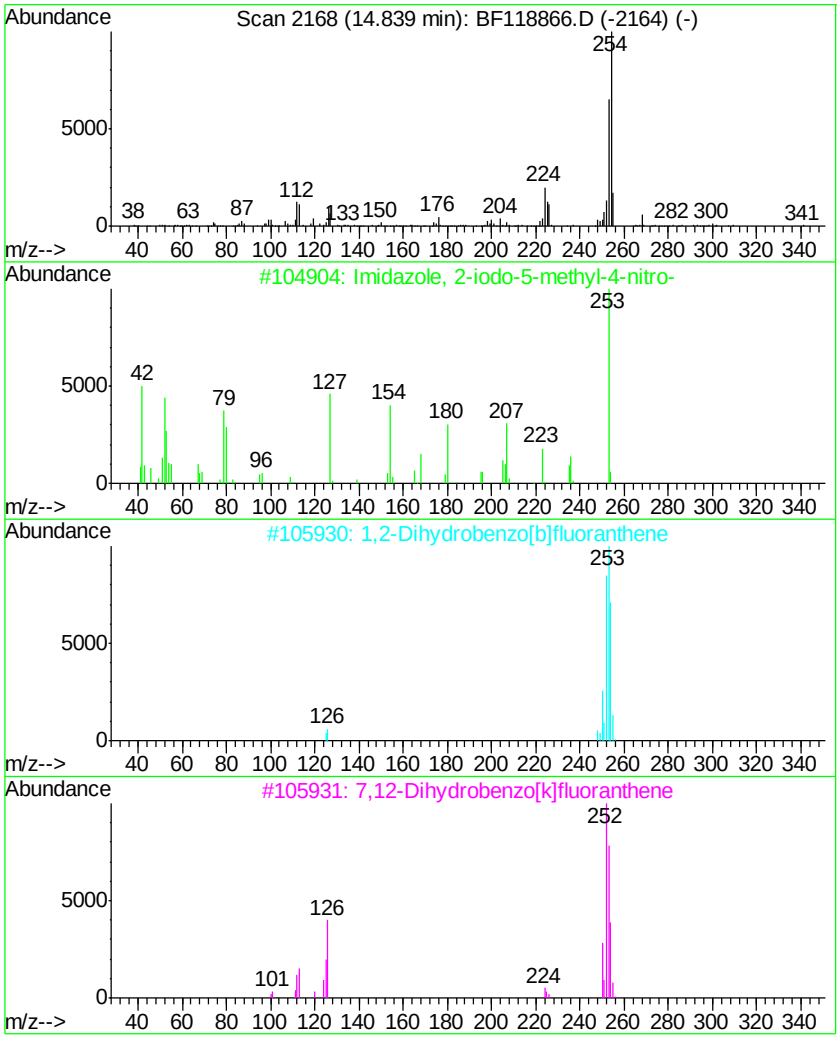
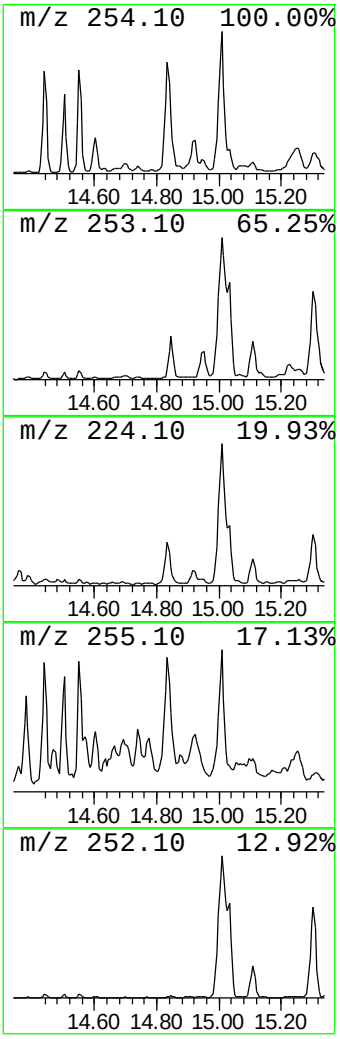
Peak Number 16 Imidazole, 2-iodo-5-methyl-... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.84	7.08 ng	674452	Perylene-d12	15.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Imidazole, 2-iodo-5-methyl-4-nitro-	253	C4H4IN3O2	149510-86-1	86
2	1,2-Dihydrobenzo[b]fluoranthene	254	C20H14	100516-13-0	64
3	7,12-Dihydrobenzo[k]fluoranthene	254	C20H14	1000080-17-7	64
4	Benz(a)anthracene-7-carbonitrile	253	C19H11N	007476-08-6	64
5	4,5-Dihydrobenzo[e]pyrene	254	C20H14	095676-42-9	55





Library Search Compound Report

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ClientSampleId : TP11-EP2-3

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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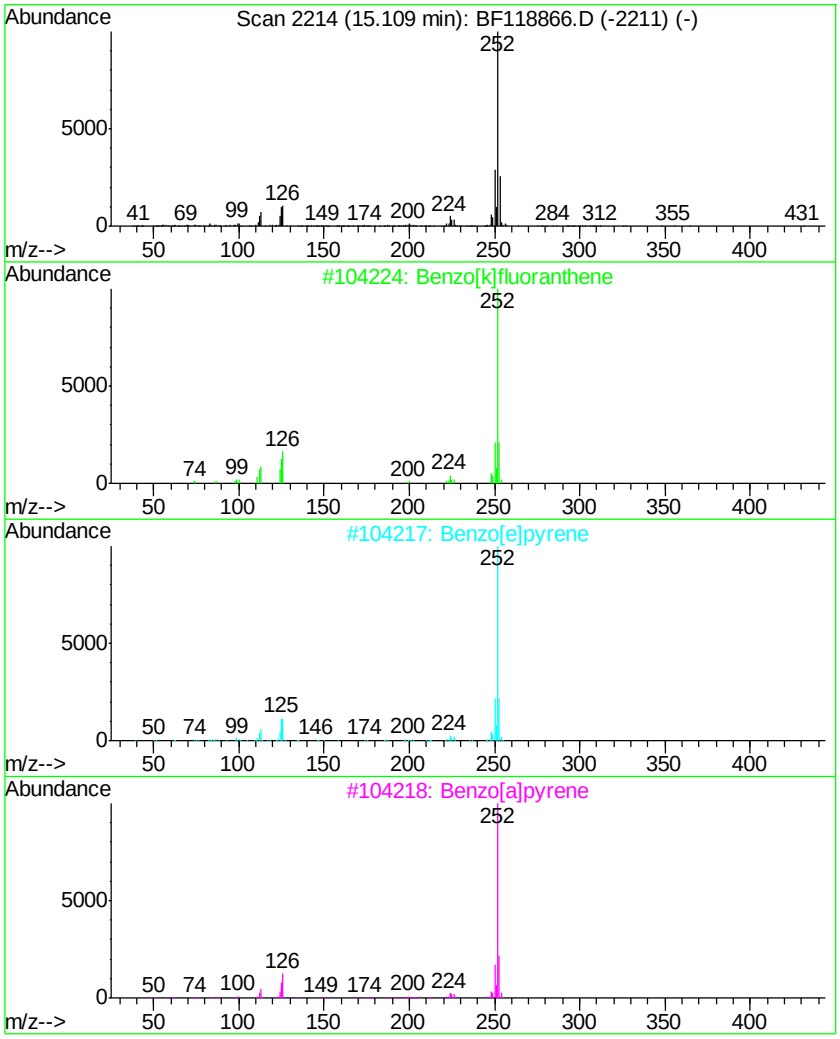
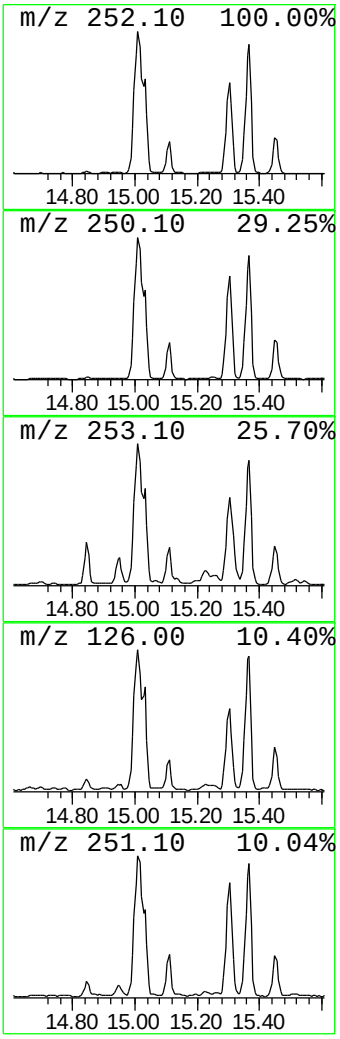
Peak Number 17 Benzo[e]pyrene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.11	7.50 ng	714645	Perylene-d12	15.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
2	Benzo[e]pyrene	252	C20H12	000192-97-2	98
3	Benzo[a]pyrene	252	C20H12	000050-32-8	95
4	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94
5	Perylene	252	C20H12	000198-55-0	81





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

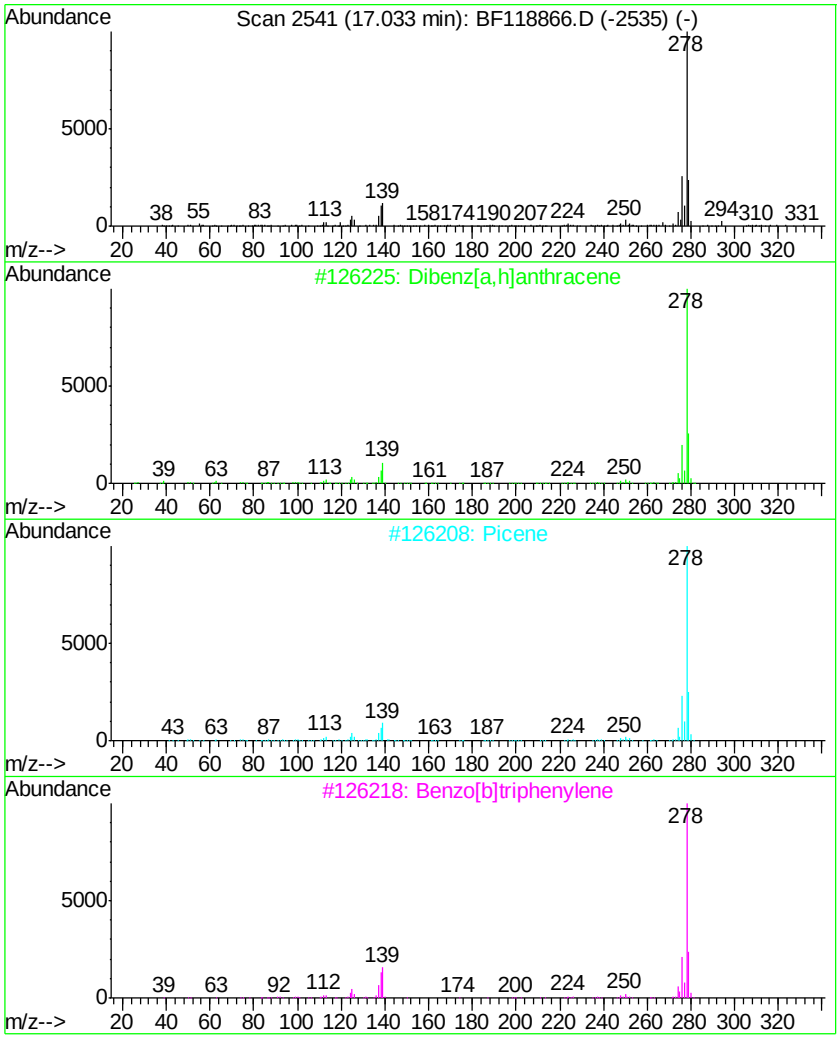
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

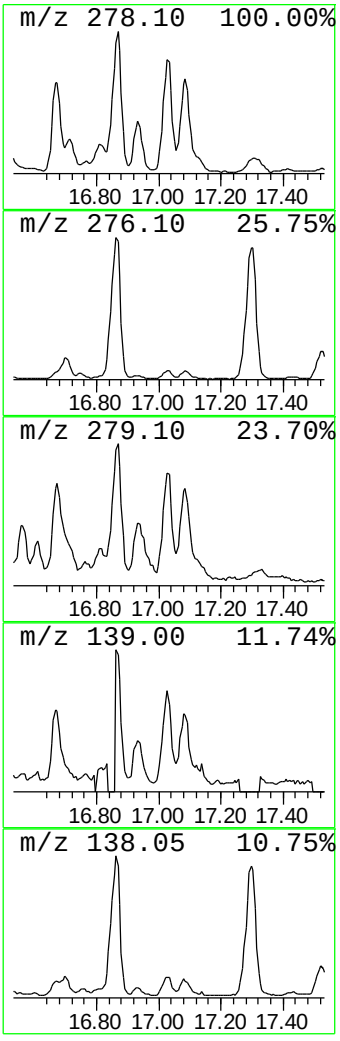
****

Peak Number 19 Picene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.03	5.09 ng	485055	Perylene-d12	15.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	98
2	Picene	278	C22H14	000213-46-7	98
3	Benzo[b]triphenylene	278	C22H14	000215-58-7	97
4	Benzo[b]chrysene	278	C22H14	000214-17-5	93
5	Pentaphene	278	C22H14	000222-93-5	93





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

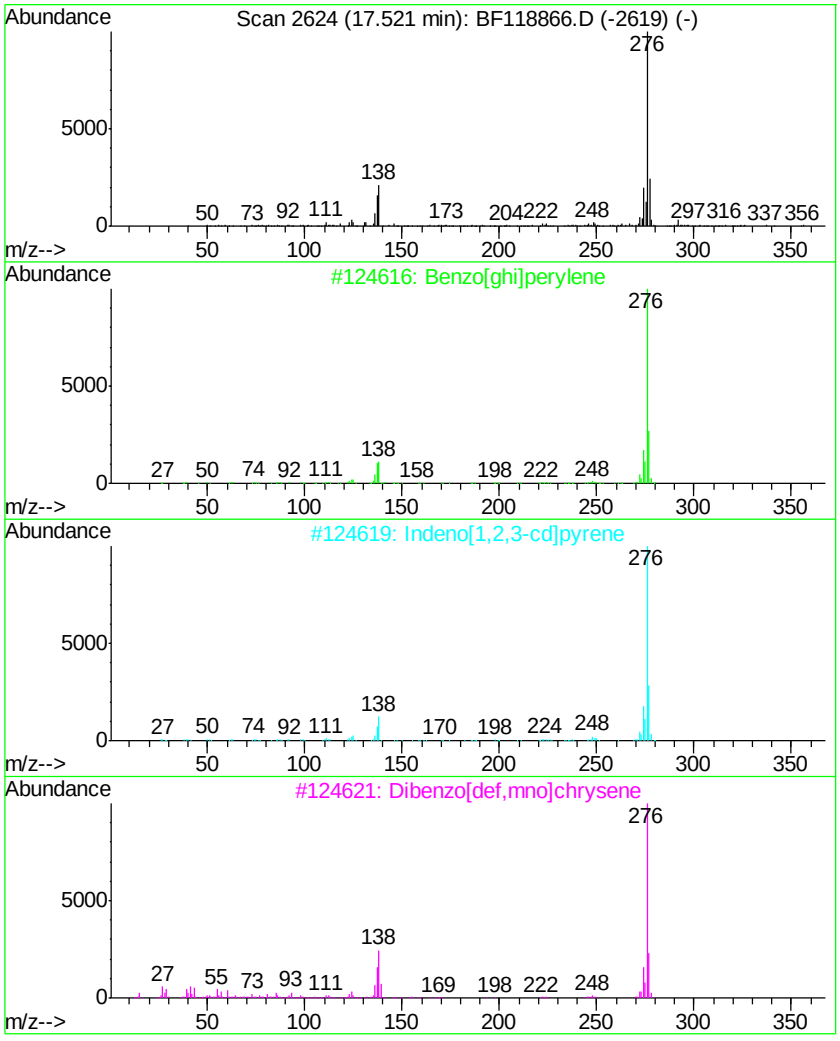
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

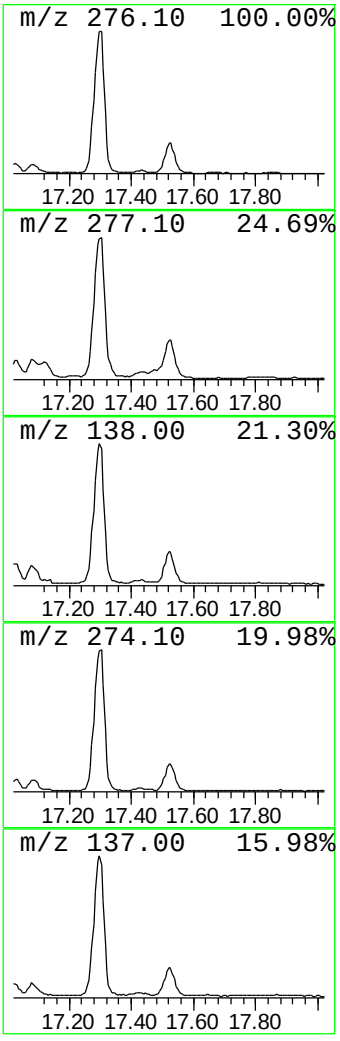
****

Peak Number 20 Dibenzo[def,mno]chrysene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.52	6.29 ng	599420	Perylene-d12	15.42

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[ghi]perylene	276	C22H12	000191-24-2	97
2	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	96
3	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
4	Indeno[1,2,3-cd]fluoranthene	276	C22H12	000193-43-1	81
5	Phenol, 2-(4-chlorophenyliminome...	276	C13H9ClN2O3	1000262-90-3	59





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF021020\
Data File : BF118866.D
Acq On : 10 Feb 2020 12:36
Operator : CG/JU
Sample : L1468-02
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : TP11-EP2-3

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF020320.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
9H-Fluorene, 1-me...	10.95	5.7	ng	636244	4	11.33	2237140	20.0
9H-Fluoren-9-one	11.14	11.6	ng	1301320	4	11.33	2237140	20.0
Naphtho[2,1-b]thi...	11.23	13.3	ng	1488590	4	11.33	2237140	20.0
Dibenzothiophene,...	11.66	6.2	ng	697412	4	11.33	2237140	20.0
Phenanthrene, 2-m...	11.83	19.1	ng	2134490	4	11.33	2237140	20.0
Phenanthrene, 1-m...	11.86	23.6	ng	2638640	4	11.33	2237140	20.0
1H-Cyclopropa[l]p...	11.91	7.3	ng	821972	4	11.33	2237140	20.0
4H-Cyclopenta[def...	11.94	26.9	ng	3007600	4	11.33	2237140	20.0
Phenanthrene, 4-m...	11.97	8.3	ng	931457	4	11.33	2237140	20.0
Naphthalene, 2-ph...	12.13	11.4	ng	1274830	4	11.33	2237140	20.0
9,10-Anthracenedione	12.16	14.7	ng	1647400	4	11.33	2237140	20.0
Phenanthrene, 2,5...	12.39	12.1	ng	1351750	4	11.33	2237140	20.0
unknown12.42	12.42	5.3	ng	597184	4	11.33	2237140	20.0
Cyclopenta(def)ph...	12.47	10.0	ng	1120350	4	11.33	2237140	20.0
Imidazole, 2-iodo...	14.84	7.1	ng	674452	6	15.42	1904570	20.0
Benzo[e]pyrene	15.11	7.5	ng	714645	6	15.42	1904570	20.0
Picene	17.03	5.1	ng	485055	6	15.42	1904570	20.0
Dibenzo[def,mno]c...	17.52	6.3	ng	599420	6	15.42	1904570	20.0