LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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	5.469	571	575	598	rBV	2233180	2306306	34.04%	2.592%
2	6.481	743	747	763	rBV	2341544	2559127	37.77%	2.876%
3	6.622	767	771	774	rBV	2820499	2430926	35.88%	2.732%
4	6.851	806	810	817	rBV	880302	756506	11.17%	0.850%
5	7.004	833	836	848	rBV	2069461	1961907	28.96%	2.205%
6	7.410	901	905	917	rBV	1676424	1573061	23.22%	1.768%
7	8.133	1024	1028	1045	rBV	1001536	976998	14.42%	1.098%
8	9.210	1207	1211	1223	rBV	3212075	2822289	41.65%	3.172%
9	9.604	1275	1278	1286	rVB	254451	212762	3.14%	0.239%
10	9.892	1323	1327	1330	rBV	1348129	1146663	16.92%	1.289%
11	9.922	1330	1332	1337	rVB	633823	533576	7.88%	0.600%
12	10.098	1357	1362	1366	rVV	217855	225471	3.33%	0.253%
13	10.439	1416	1420	1426	rBV	540755	496126	7.32%	0.558%
14	10.598	1444	1447	1451	rVB	162316	168727	2.49%	0.190%
15	10.680	1457	1461	1468	rBV	1968032	1937635	28.60%	2.178%
16	10.804	1476	1482	1488	rVB6	89019	162349	2.40%	0.182%
17	10.986	1507	1513	1516	rBV3	175083	247737	3.66%	0.278%
18	11.016	1516	1518	1521	rVV2	154327	150997	2.23%	0.170%
19	11.139	1537	1539	1544	rVV	140687	157006	2.32%	0.176%
20	11.186	1544	1547	1550	rVV2	136257	134186	1.98%	0.151%
21	11.239	1550	1556	1559	rVV4	181176	305897	4.51%	0.344%
22	11.274	1559	1562	1568	rVB	372234	373378	5.51%	0.420%
23	11.380	1576	1580	1582	rBV	1351781	1368031	20.19%	1.538%
24	11.410	1582	1585	1588	rVV	4462828	4128881	60.94%	4.641%
25	11.457	1588	1593	1596	rVV	1894158	1640014	24.21%	1.843%
26	11.492	1596	1599	1602	rVV	208681	251529	3.71%	0.283%
27	11.539	1605	1607	1613	rVV5	86368	142884	2.11%	0.161%
28	11.610	1615	1619	1627	rVV2	450430	515065	7.60%	0.579%
29	11.669	1627	1629	1632	rVV	166813	166159	2.45%	0.187%
30	11.710	1634	1636	1642	rVB3	107549	134180	1.98%	0.151%
31	11.880	1660	1665	1667	rBV	725467	647812	9.56%	0.728%
32	11.910	1667	1670	1674	rVB	1051402	921802	13.61%	1.036%
33	11.957	1675	1678	1681	rBV	429338	383119	5.65%	0.431%
34	11.998	1681	1685	1687	rBV2	1192311	1373629	20.27%	1.544%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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	12.080	1697	1699	1703	rVV4	131207	150887	2.23%	0.170%
36	12.174	1712	1715	1718	rVV	624115	577370	8.52%	0.649%
37	12.204	1718	1720	1725	rVV	310849	339834	5.02%	0.382%
38	12.327	1738	1741	1744	rVB	184735	159461	2.35%	0.179%
39	12.380	1748	1750	1753	rVB	148594	124487	1.84%	0.140%
40	12.433	1755	1759	1762	rBV	515918	552609	8.16%	0.621%
41	12.468	1762	1765	1768	rVV2	319110	394954	5.83%	0.444%
42	12.527	1771	1775	1779	rBV2	286703	374350	5.53%	0.421%
43	12.604	1783	1788	1791	rBV	4789851	5957362	87.93%	6.696%
44	12.663	1796	1798	1801	rVB2	192978	162139	2.39%	0.182%
45	12.745	1809	1812	1816	rVV	250401	280045	4.13%	0.315%
46	12.833	1820	1827	1832	rBV3	4317560	6775391	100.00%	7.615%
47	12.874	1832	1834	1839	rVB2	387749	430903	6.36%	0.484%
48	12.968	1842	1850	1857	rVB2	3190914	4084423	60.28%	4.591%
49	13.045	1858	1863	1866	rBV2	395107	701074	10.35%	0.788%
50	13.127	1874	1877	1879	rBV3	314994	374997	5.53%	0.421%
51	13.157	1879	1882	1884	rVB	1108796	1019549	15.05%	1.146%
52	13.186	1884	1887	1890	rBV4	98224	129263	1.91%	0.145%
53	13.221	1890	1893	1895	rBV	922676	795056	11.73%	0.894%
54	13.257	1895	1899	1901	rVV2	616972	667577	9.85%	0.750%
55	13.280	1901	1903	1906	rVB	272111	264504	3.90%	0.297%
56	13.310	1906	1908	1911	rVB	169764	156109	2.30%	0.175%
57	13.351	1912	1915	1917	rBV	323993	285926	4.22%	0.321%
58	13.380	1917	1920	1923	rBV2	351792	313439	4.63%	0.352%
59	13.533	1942	1946	1948	rBV2	149738	192426	2.84%	0.216%
60	13.574	1951	1953	1956	rVV	267647	285271	4.21%	0.321%
61	13.633	1960	1963	1966	rVV2	166568	226087	3.34%	0.254%
62	13.662	1966	1968	1972	rVV	366806	373585	5.51%	0.420%
63	13.774	1982	1987	1989	rBV2	501519	592577	8.75%	0.666%
64	13.798	1989	1991	1993	rVV	587819	462084	6.82%	0.519%
65	13.827	1993	1996	2001	rVV3	434746	693790	10.24%	0.780%
66	13.874	2001	2004	2010	rVB	420764	505127	7.46%	0.568%
67	14.021	2021	2029	2032	rBV2	3293414	5119277	75.56%	5.754%
68	14.057	2032	2035	2038	rVV	2928878	2862079	42.24%	3.217%
69	14.133	2045	2048	2051	rVV	916742	780364	11.52%	0.877%
70	14.174	2052	2055	2059	rVV3	212218	300781	4.44%	0.338%
71	14.215	2059	2062	2064	rVB2	229798	215984	3.19%	0.243%

LSC Area Percent Report

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Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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	14.245	2064	2067	2071	rBV2	305961	392367	5.79%	0.441%
73	14.374	2086	2089	2091	rVV2	200330	185296	2.73%	0.208%
74	14.410	2091	2095	2098	rVV	616136	667387	9.85%	0.750%
75	14.445	2098	2101	2104	rVV	282634	311069	4.59%	0.350%
76	14.486	2104	2108	2110	rVV4	295643	407992	6.02%	0.459%
77	14.509	2110	2112	2114	rVV	305467	298616	4.41%	0.336%
78	14.533	2114	2116	2118	rVV	333868	348854	5.15%	0.392%
79	14.557	2118	2120	2123	rVV	420244	380467	5.62%	0.428%
80	14.604	2123	2128	2131	rVV2	194786	278077	4.10%	0.313%
81	14.727	2146	2149	2157	rVB3	216215	347058	5.12%	0.390%
82	14.792	2157	2160	2165	rBV3	177901	222395	3.28%	0.250%
83	14.909	2176	2180	2183	rBV	175576	225820	3.33%	0.254%
84	15.074	2202	2208	2210	rBV	1864458	2848968	42.05%	3.202%
85	15.121	2214	2216	2222	rVV2	304889	498291	7.35%	0.560%
86	15.174	2222	2225	2229	rVB	393579	432746	6.39%	0.486%
87	15.262	2237	2240	2241	rBV2	123509	131160	1.94%	0.147%
88	15.374	2254	2259	2265	rVB	1041725	1425066	21.03%	1.602%
89	15.439	2265	2270	2275	rVV	1700602	2058655	30.38%	2.314%
90	15.498	2275	2280	2283	rVV	1001451	1339179	19.77%	1.505%
91	15.527	2283	2285	2292	rVB2	507196	642092	9.48%	0.722%
92	15.851	2338	2340	2347	rVB3	71542	122437	1.81%	0.138%
93	15.939	2350	2355	2359	rVV	239753	392797	5.80%	0.441%
94	16.056	2372	2375	2380	rVB2	125042	176085	2.60%	0.198%
95	16.439	2437	2440	2446	rVB	94714	148000	2.18%	0.166%
96	16.980	2525	2532	2538	rBV	745996	1408138	20.78%	1.583%
97	17.145	2554	2560	2565	rBV	182368	350854	5.18%	0.394%
98	17.203	2565	2570	2576	rVV2	122222	221834	3.27%	0.249%
99	17.427	2600	2608	2618	rBV	534191	1191066	17.58%	1.339%
100	17.662	2642	2648	2664	rVB2	187175	528219	7.80%	0.594%

Sum of corrected areas: 88974861

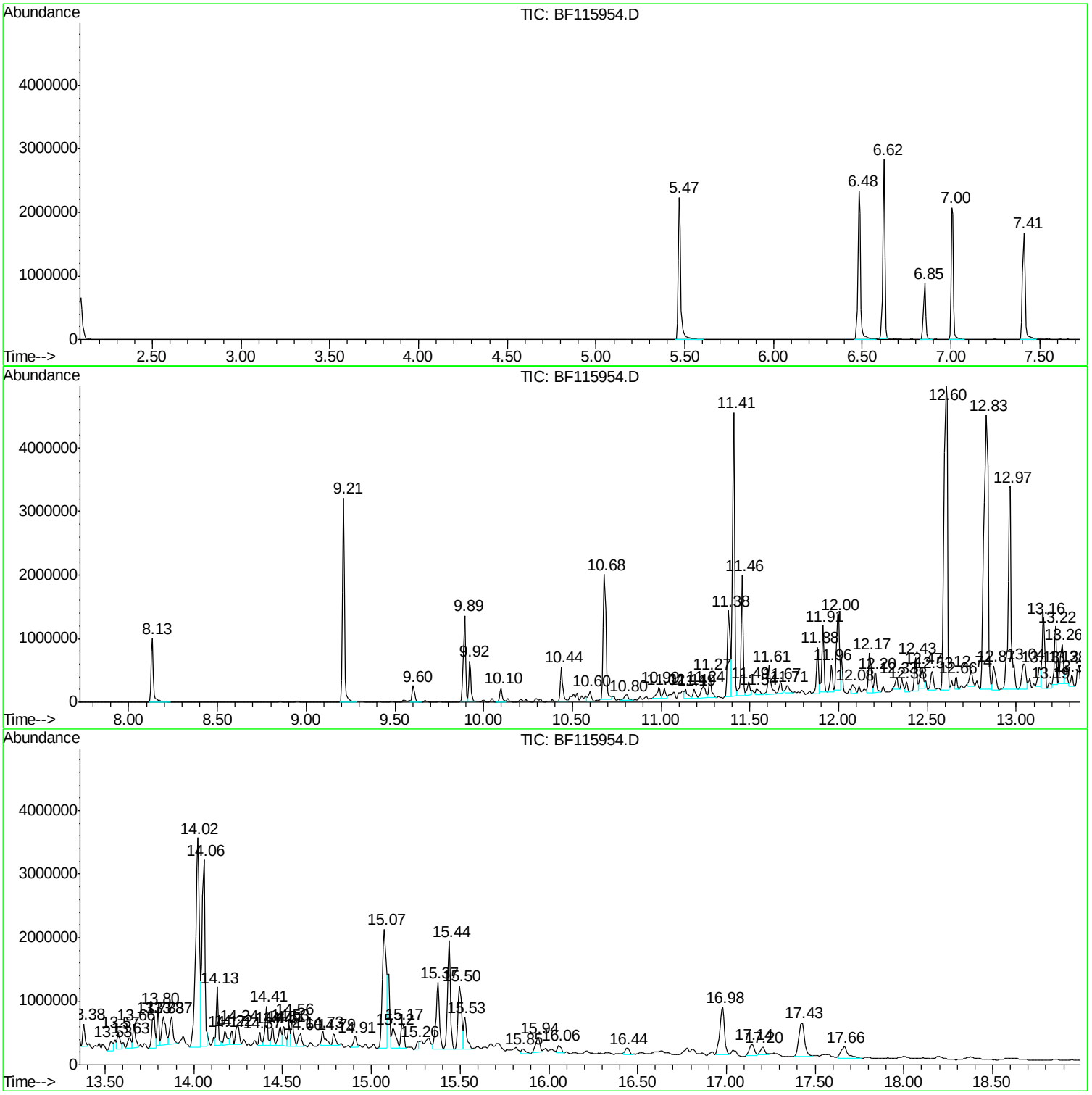
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

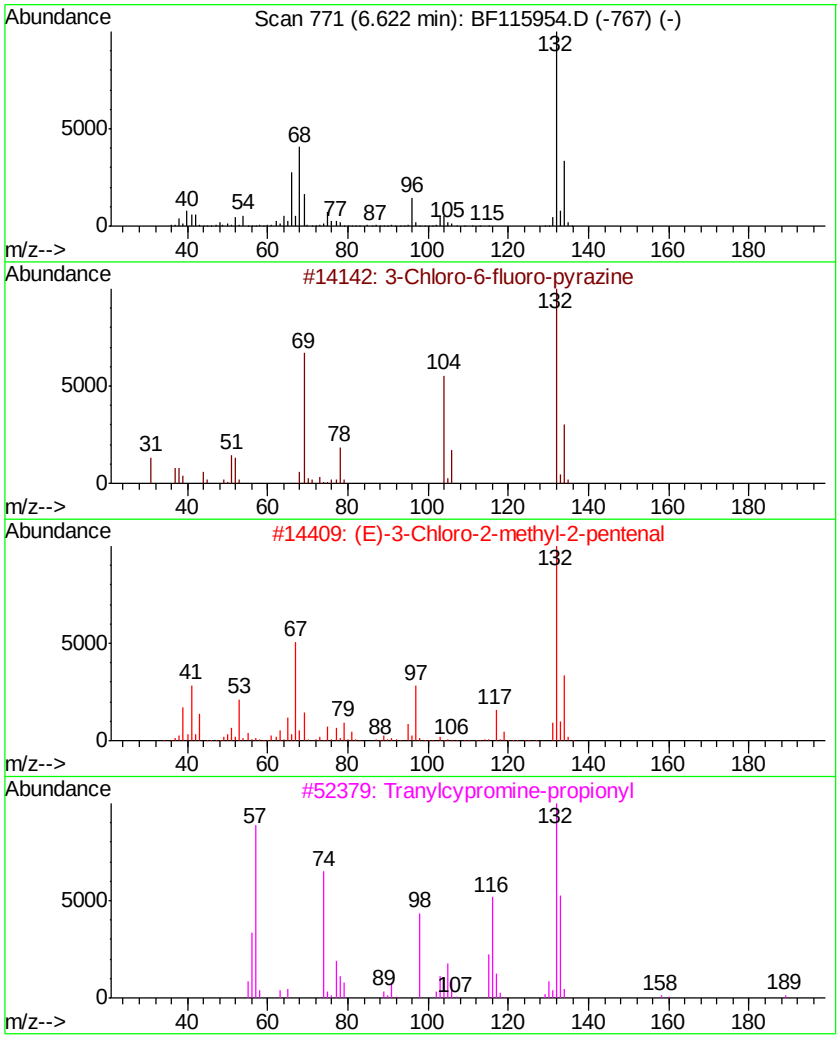
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

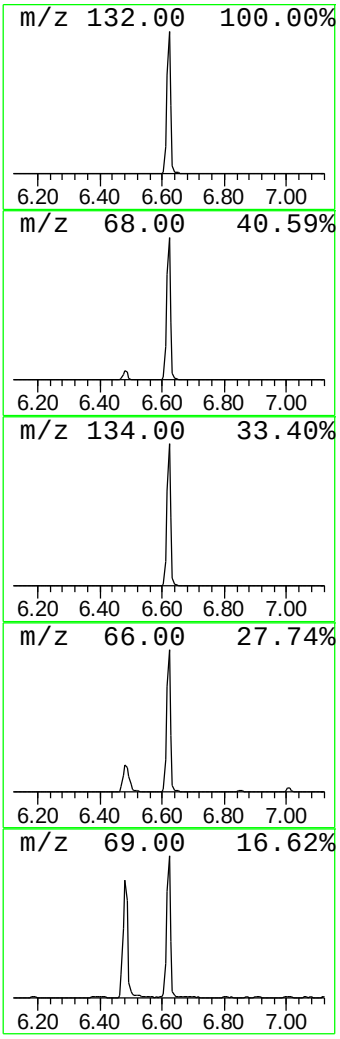
****

Peak Number 1 unknown6.62 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.62	64.27 ng	2430930	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	(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	16
3	Tranylcypromine-propionyl	189	C12H15NO	1000123-86-3	12
4	Benzene, 1-ethenyl-3,5-dimethyl-	132	C10H12	005379-20-4	9
5	2H-Cyclopenta[d]pyridazine, 2-me...	132	C8H8N2	022291-85-6	9





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

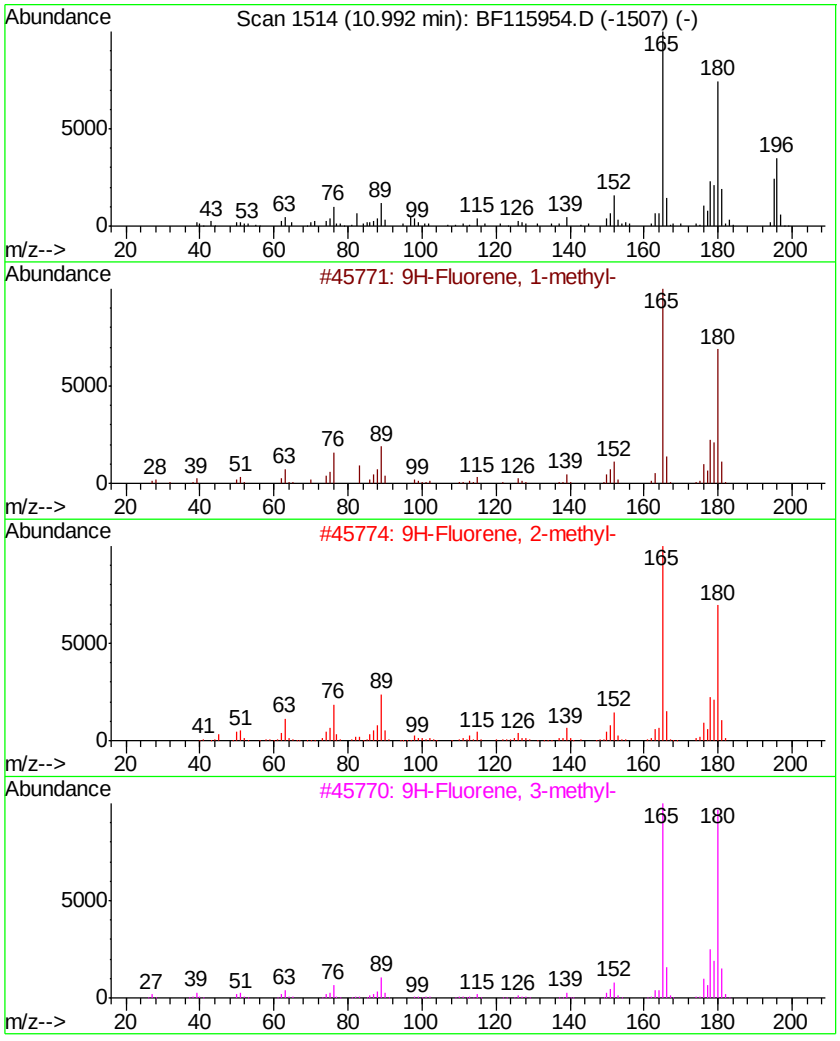
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

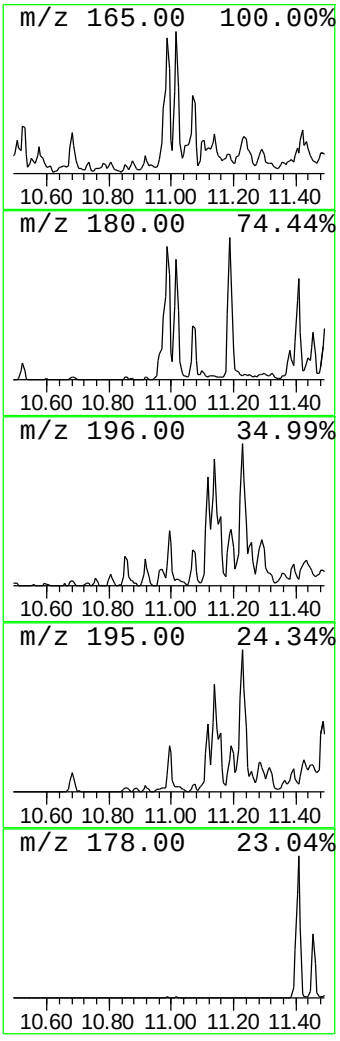
****

Peak Number 3 9H-Fluorene, 1-methyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.99	3.62 ng	247737	Phenanthrene-d10	11.38

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	89
4	4a,9a-Methano-9H-fluorene	180	C14H12	019540-84-2	89
5	9H-Fluorene, 9-methyl-	180	C14H12	002523-37-7	81





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Acq On : 2 Aug 2019 18:44
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Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

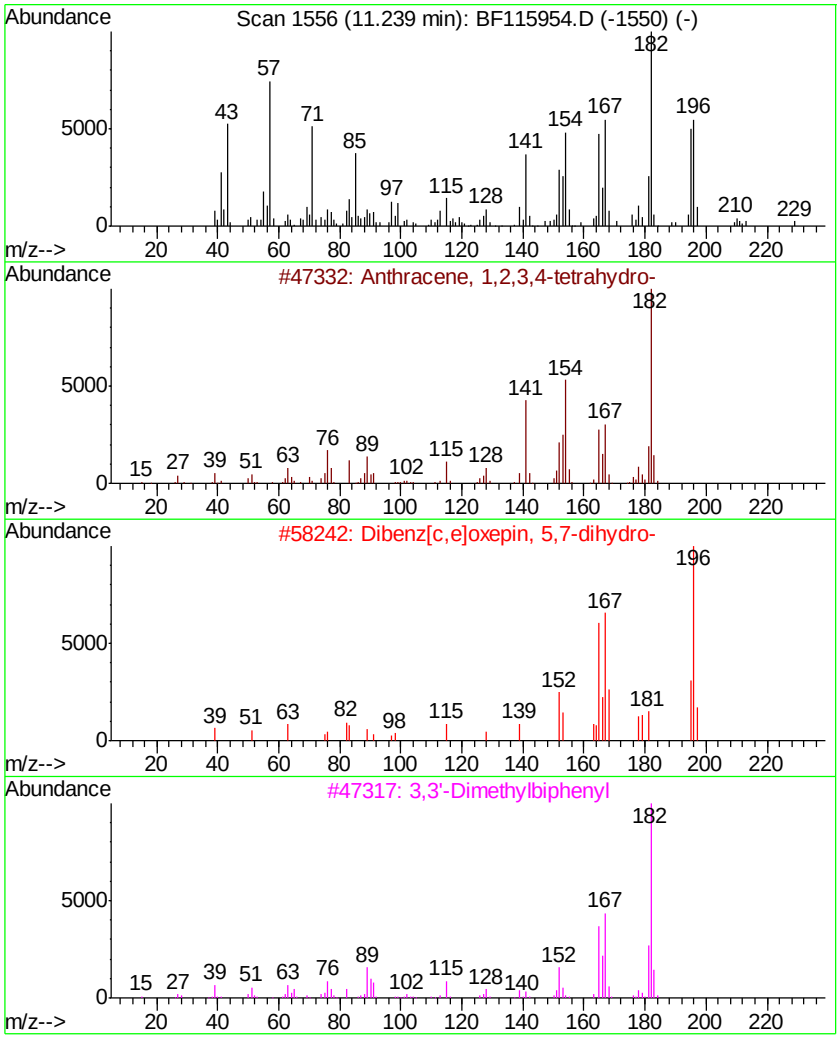
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

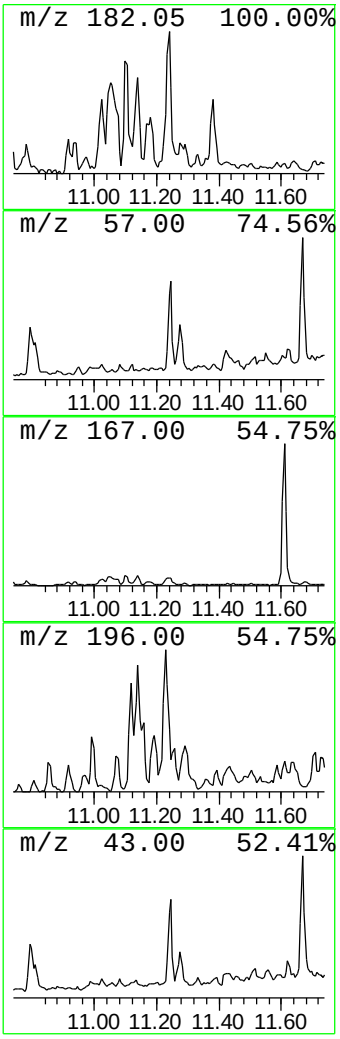
****

Peak Number 4 Anthracene, 1,2,3,4-tetrahy... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.24	4.47 ng	305897	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 1,2,3,4-tetrahydro-	182	C14H14	002141-42-6	78
2	Dibenz[c,e]oxepin, 5,7-dihydro-	196	C14H12O	001136-22-7	64
3	3,3'-Dimethylbiphenyl	182	C14H14	000612-75-9	60
4	4,4'-Dimethylbiphenyl	182	C14H14	000613-33-2	55
5	1,1'-Biphenyl, 2-ethyl-	182	C14H14	001812-51-7	46





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
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Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

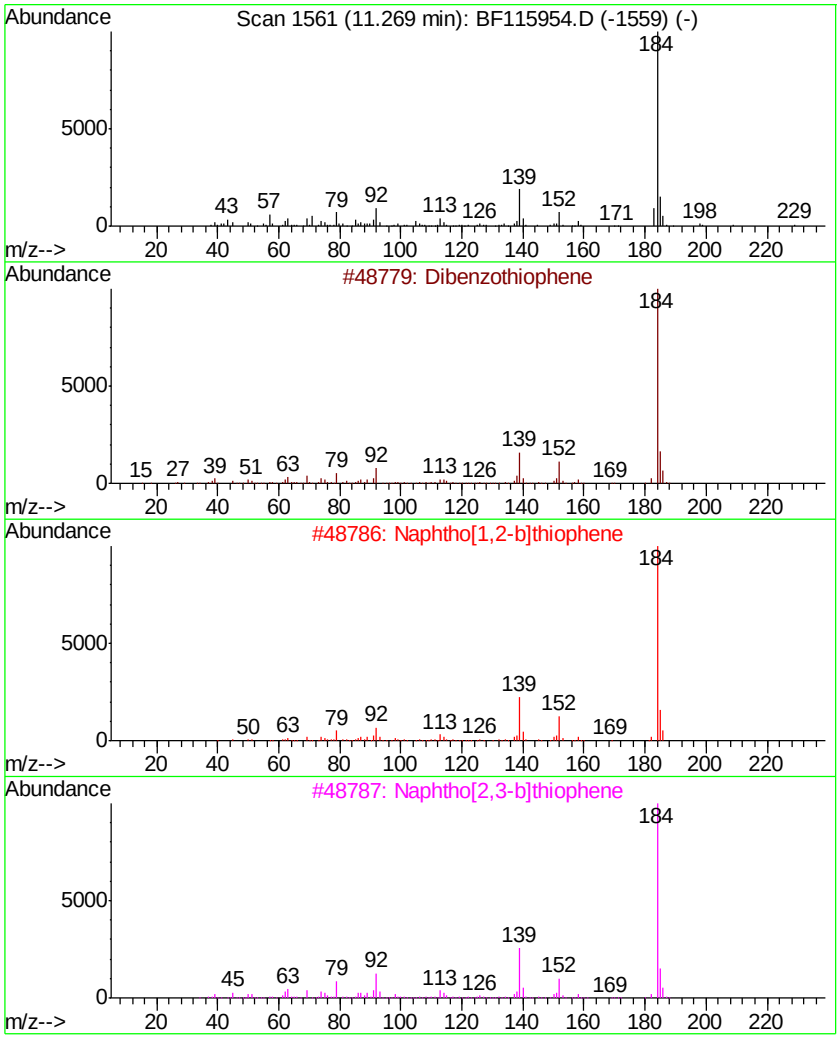
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

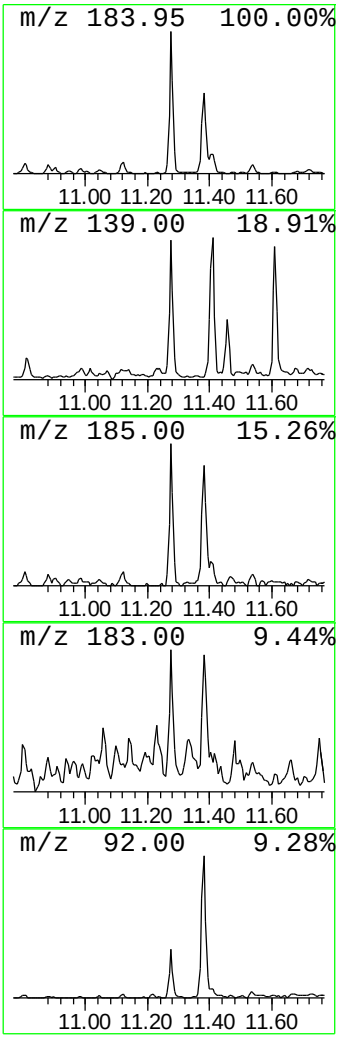
****

Peak Number 5 Dibenzothiophene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.27	5.46 ng	373378	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene	184	C12H8S	000132-65-0	97
2	Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	95
3	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	95
4	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91
5	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	91





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

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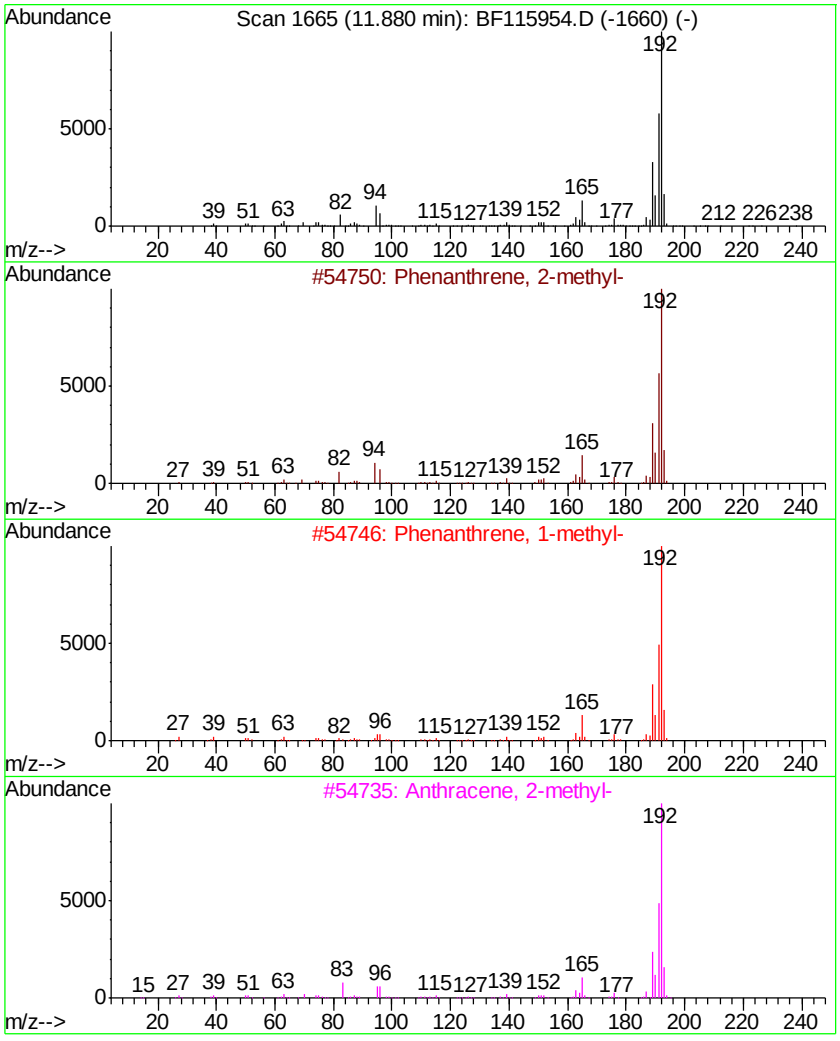
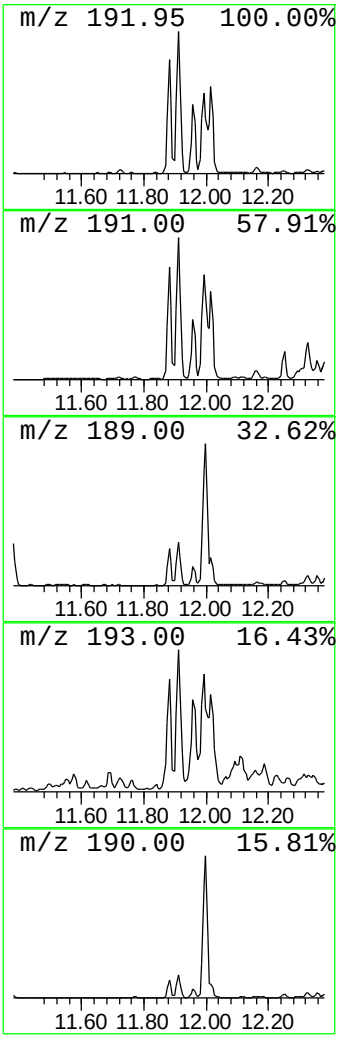
Peak Number 6 Phenanthrene, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.88	9.47 ng	647812	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	96
3	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
4	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	95
5	1H-Indene, 1-phenyl-	192	C15H12	001961-96-2	93





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Operator : HP/JU
Sample : K4131-01
Misc :
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Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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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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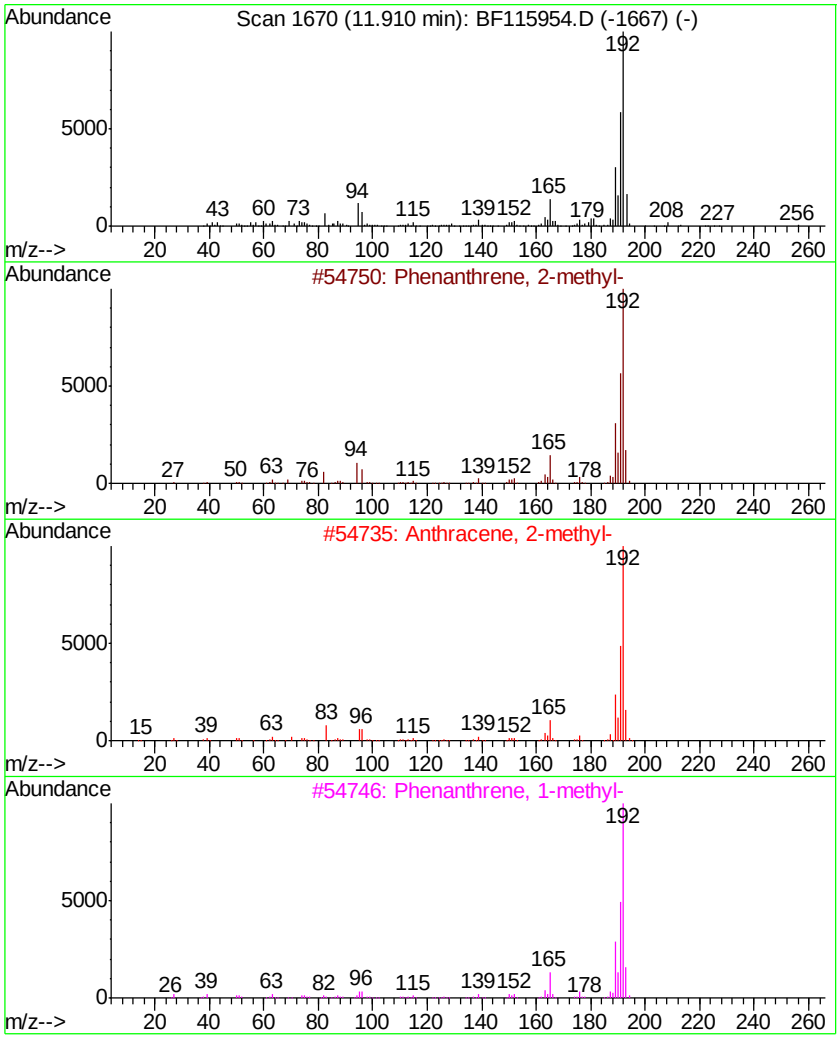
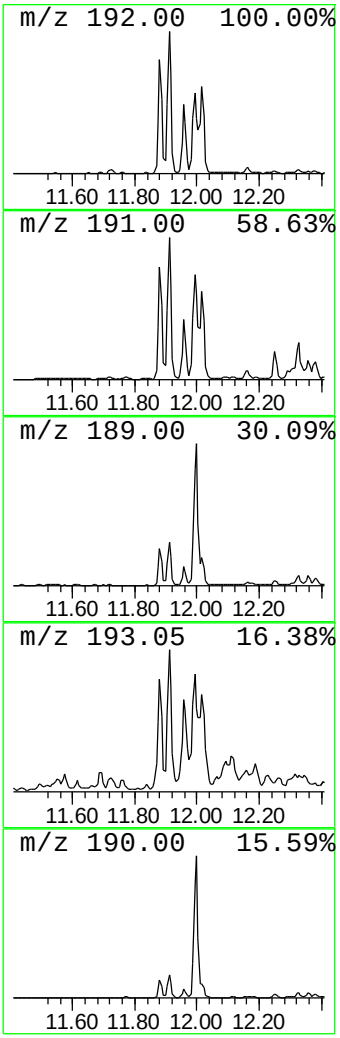
Peak Number 7 Phenanthrene, 1-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.91	13.48 ng	921802	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	96
5	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96





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Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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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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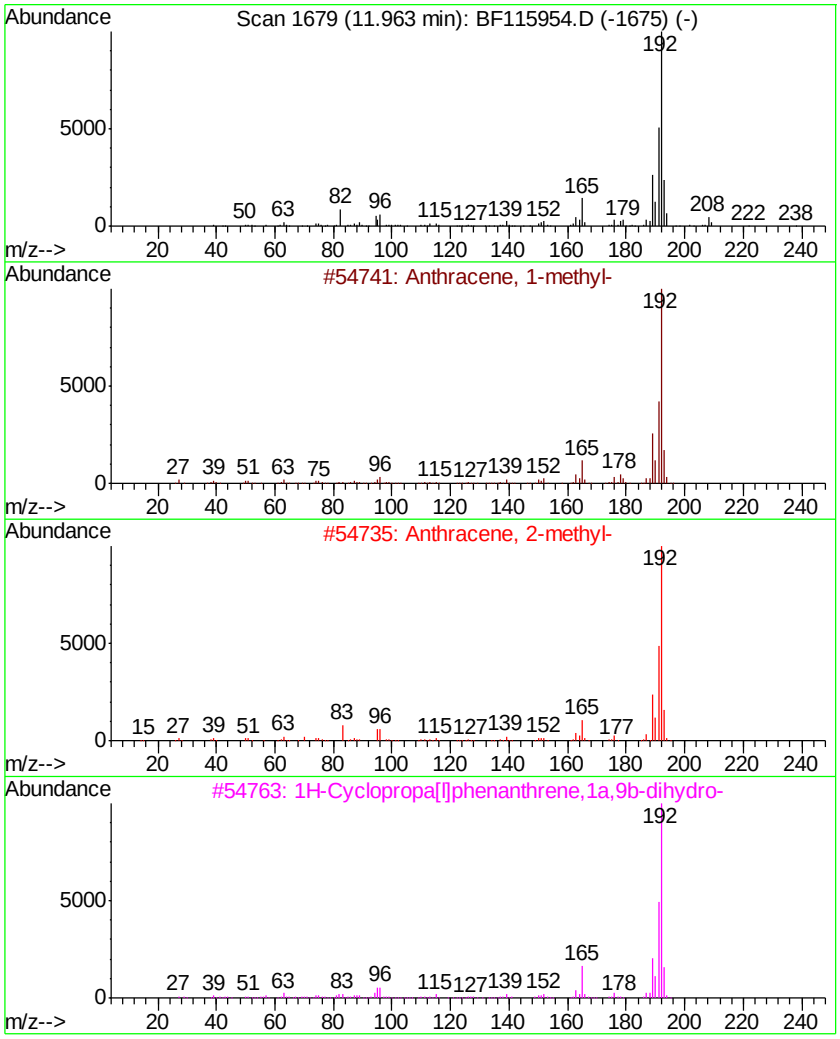
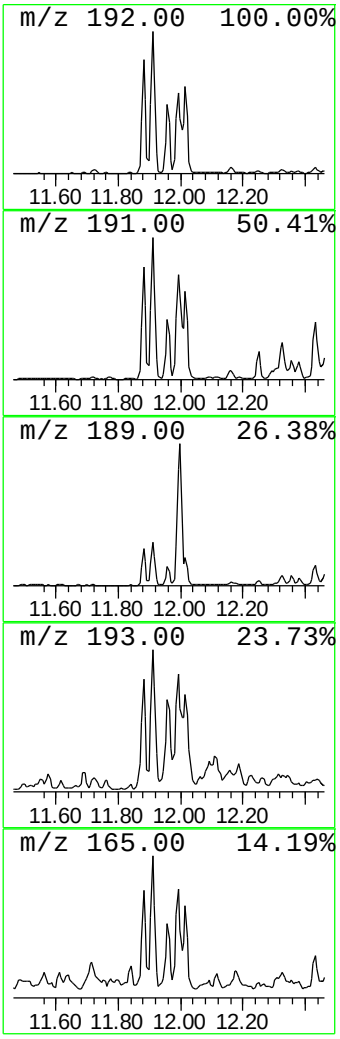
Peak Number 8 Anthracene, 1-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.96	5.60 ng	383119	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 1-methyl-	192	C15H12	000610-48-0	97
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96
4	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96





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Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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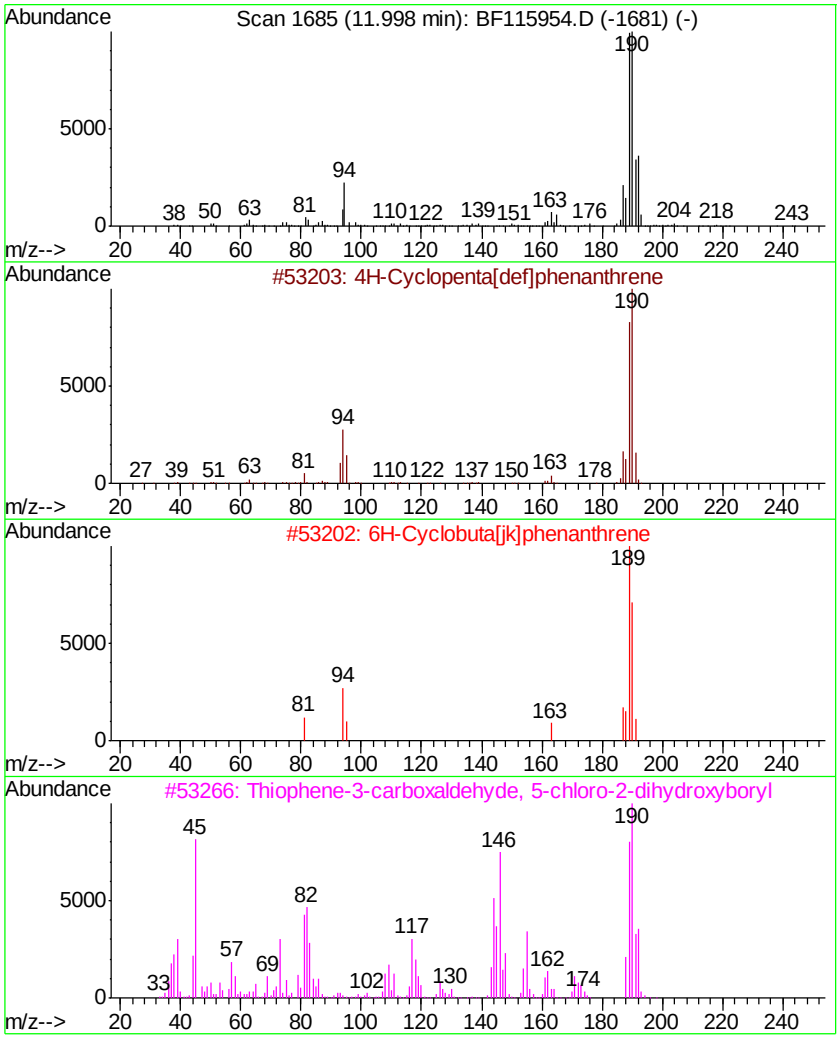
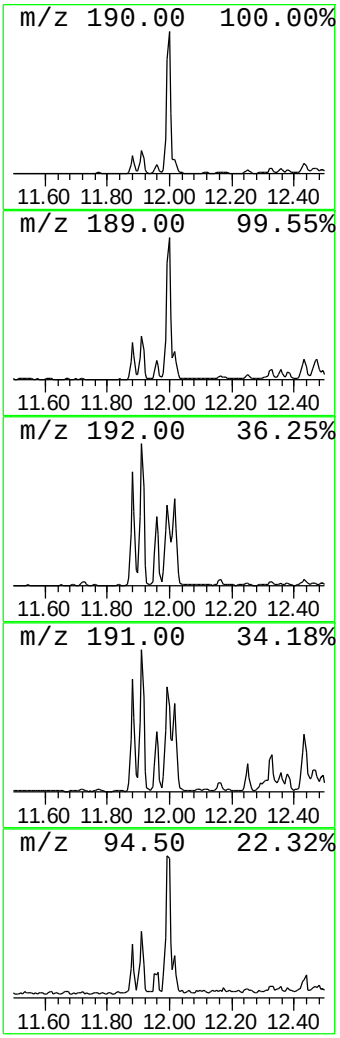
Peak Number 9 4H-Cyclopenta[def]phenanthrene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.00	20.08 ng	1373630	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	87
2	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	64
3	Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	53
4	2,3,5,6-Tetramethylterephthalald...	190	C12H14O2	007072-01-7	50
5	Methyl diselenide	190	C2H6Se2	007101-31-7	49





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Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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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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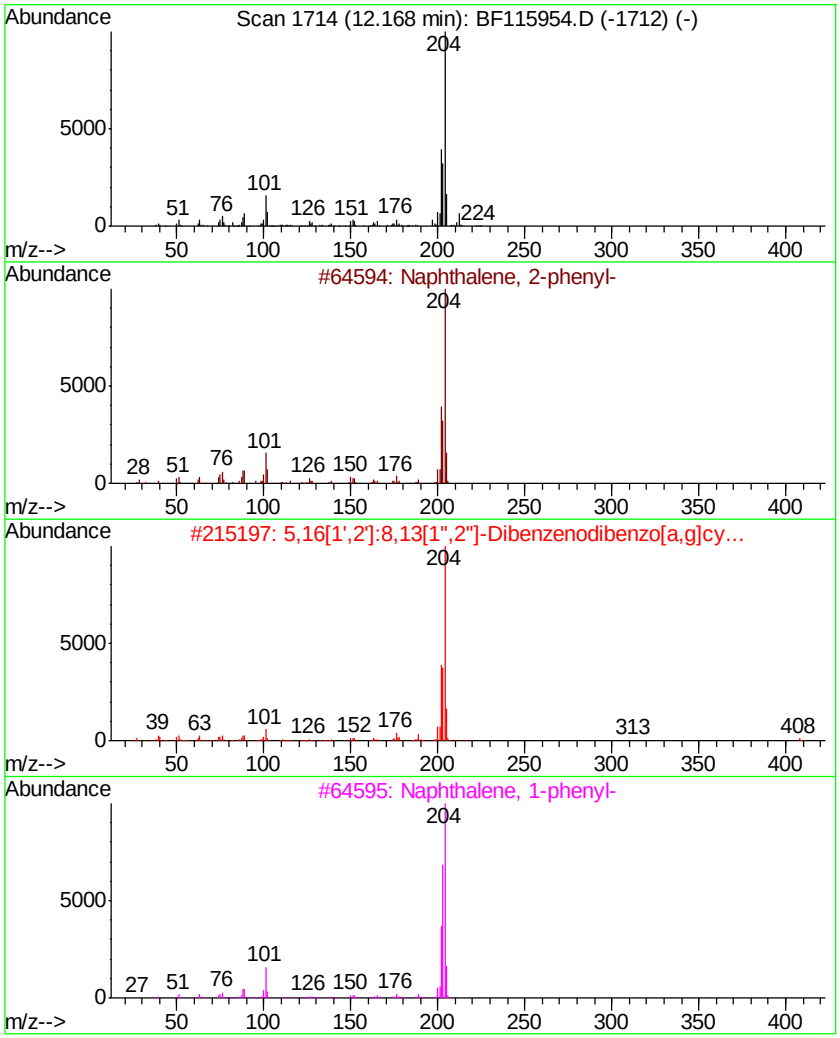
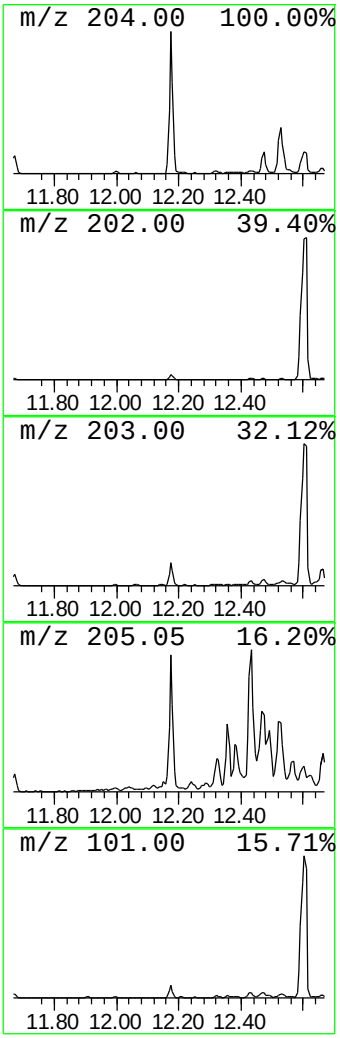
Peak Number 10 Naphthalene, 2-phenyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.17	8.44 ng	577370	Phenanthrene-d10	11.38

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	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	64
4	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	64
5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	53





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

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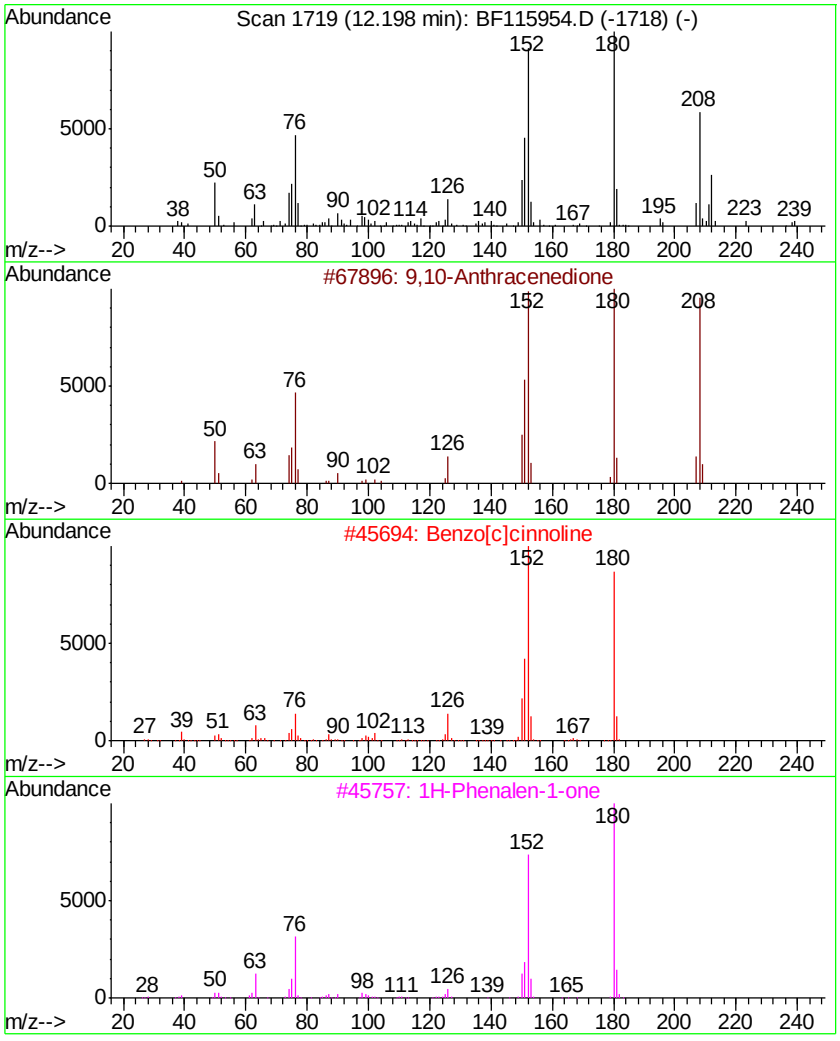
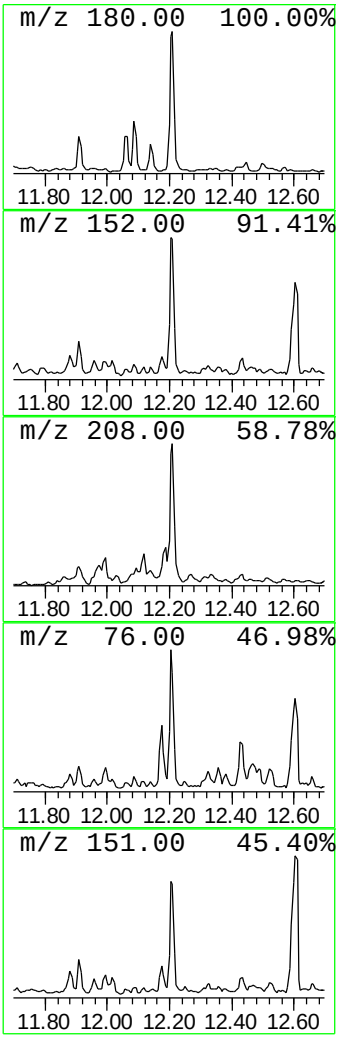
Peak Number 11 9,10-Anthracenedione Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.20	4.97 ng	339834	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	95
3	1H-Phenalen-1-one	180	C13H8O	000548-39-0	64
4	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	55
5	9H-Fluoren-9-one	180	C13H8O	000486-25-9	50





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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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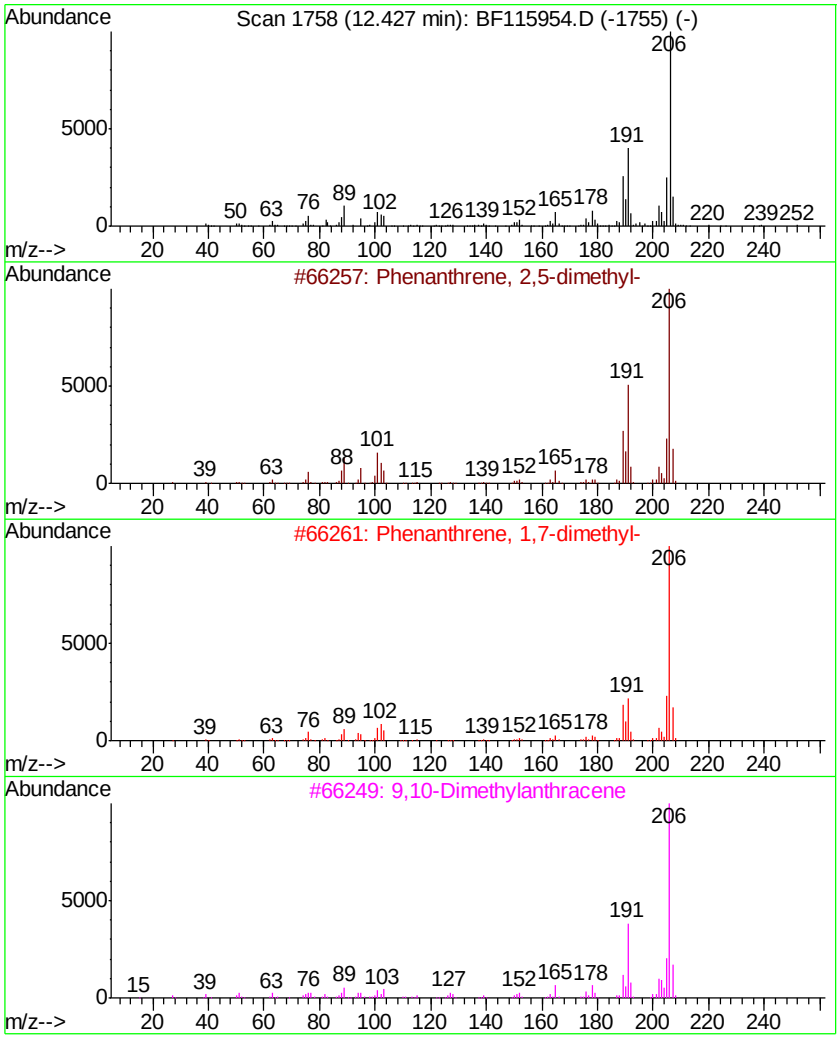
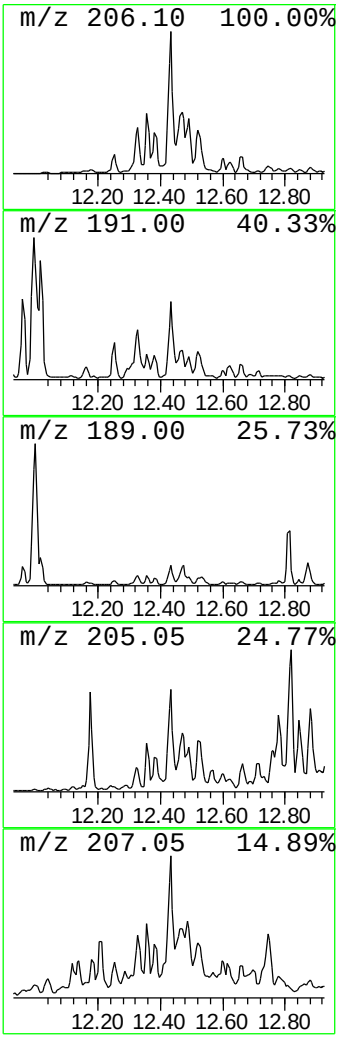
Peak Number 12 Phenanthrene, 2,5-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.43	8.08 ng	552609	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	97
2	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	93
3	9,10-Dimethylanthracene	206	C16H14	000781-43-1	93
4	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	93
5	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	87





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Misc :
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Instrument : BNA_F
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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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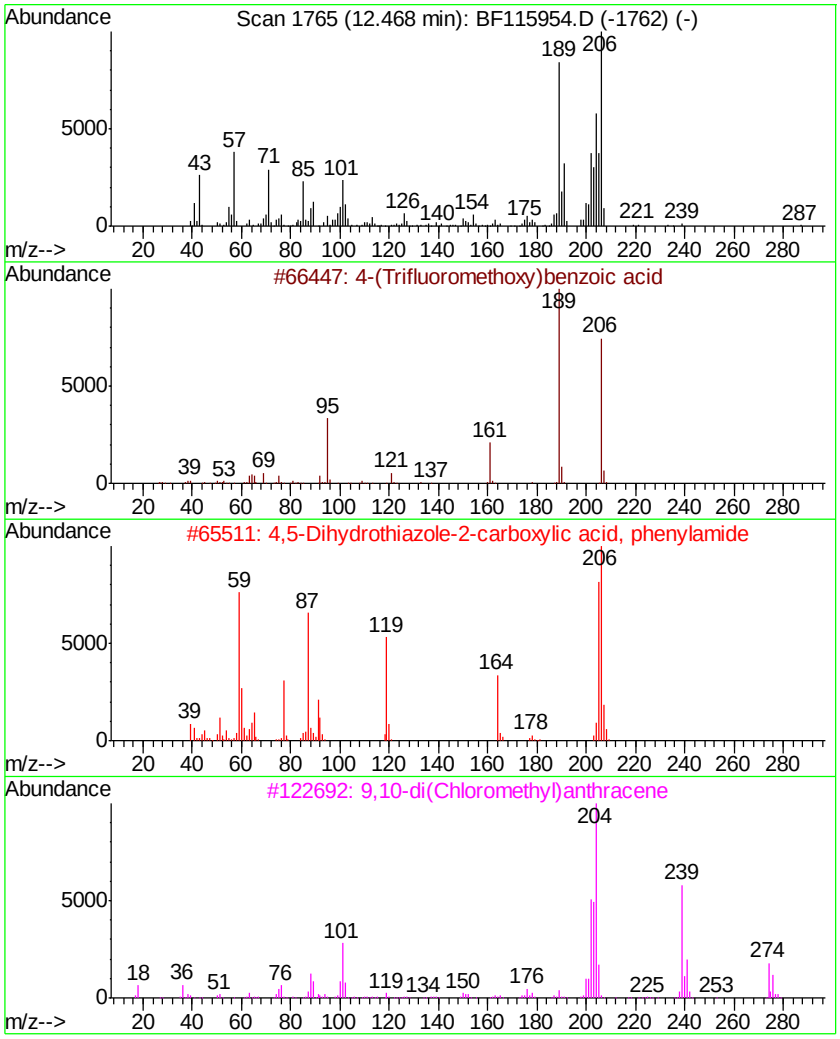
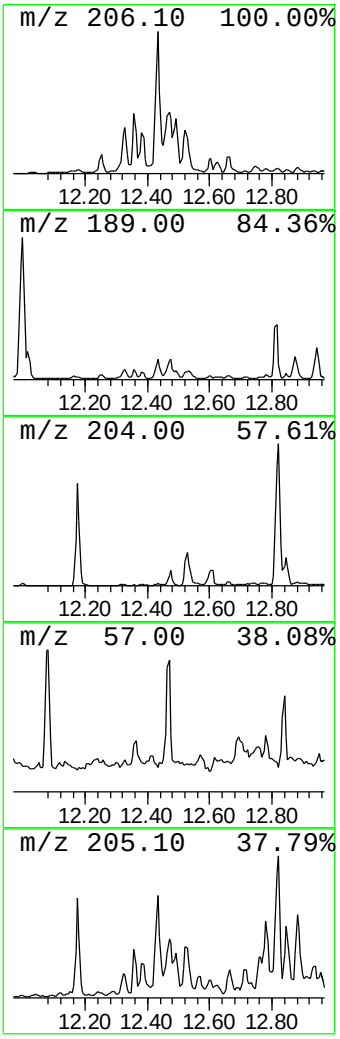
Peak Number 13 unknown12.47 Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.47	5.77 ng	394954	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-(Trifluoromethoxy)benzoic acid	206	C8H5F3O3	000330-12-1	38
2	4,5-Dihydrothiazole-2-carboxylic...	206	C10H10N2OS	1000311-64-1	25
3	9,10-di(Chloromethyl)anthracene	274	C16H12Cl2	010387-13-0	22
4	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	22
5	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	22





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Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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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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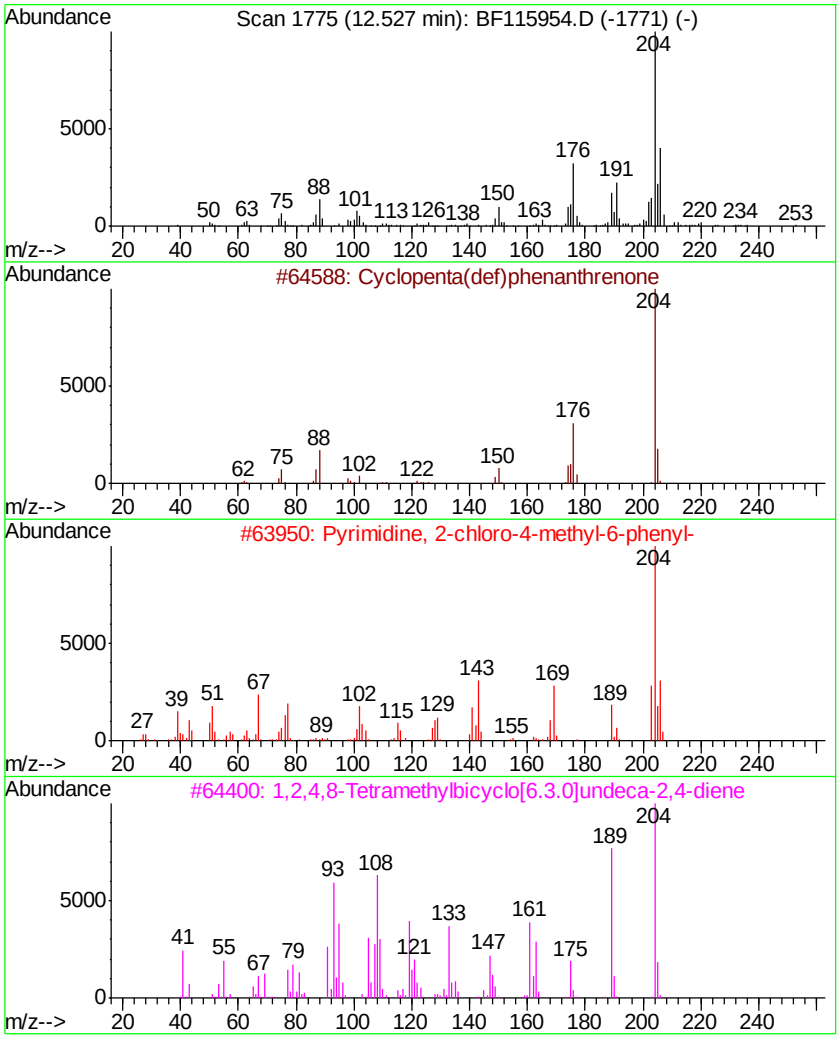
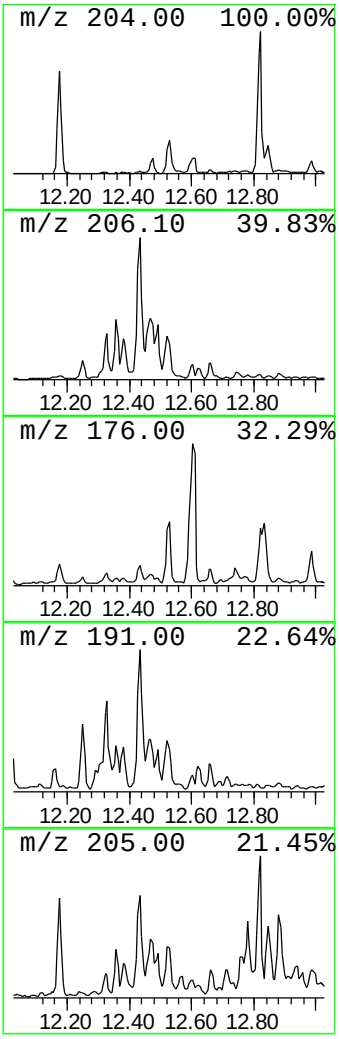
Peak Number 14 Cyclopenta(def)phenanthrenone Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.53	5.47 ng	374350	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	91
2	Pyrimidine, 2-chloro-4-methyl-6-...	204	C11H9ClN2	032785-40-3	50
3	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	50
4	Benzene, 1-chloro-3-phenoxy-	204	C12H9ClO	006452-49-9	50
5	[1,1'-Biphenyl]-4-ol, 4'-chloro-	204	C12H9ClO	028034-99-3	47





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Misc :
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Instrument : BNA_F
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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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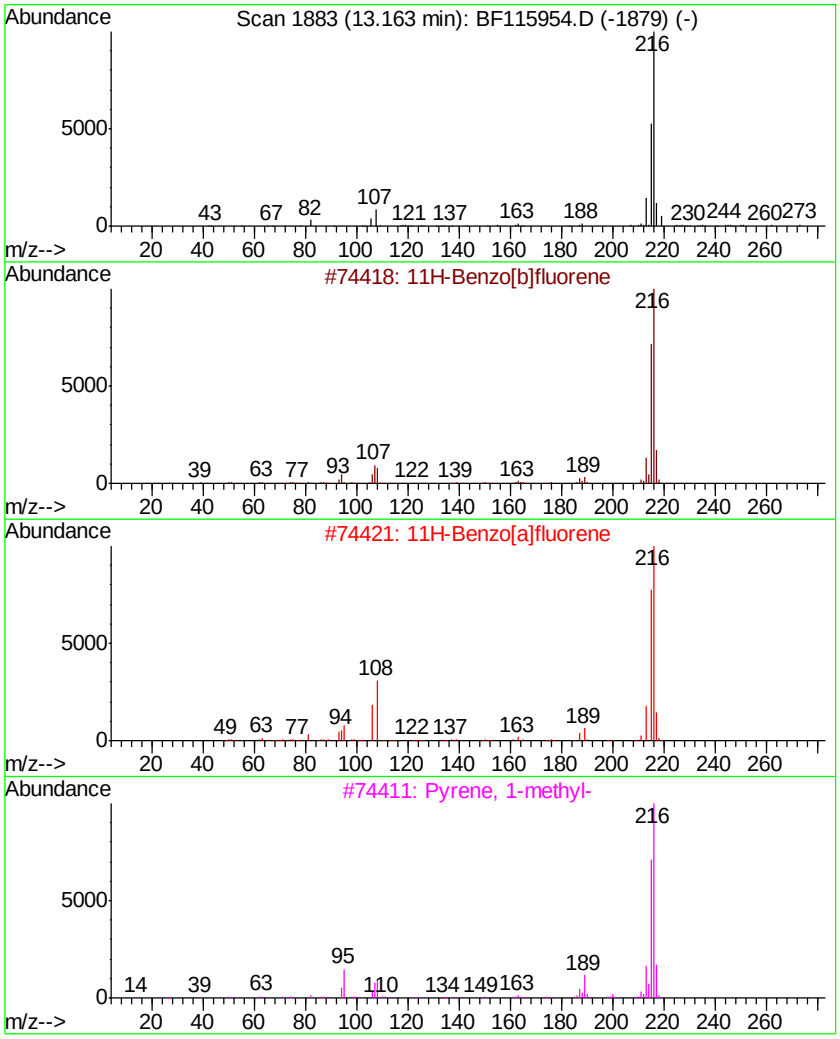
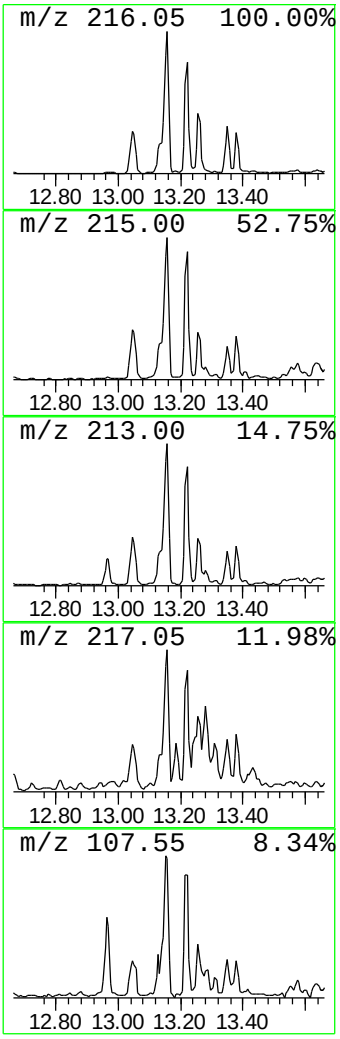
Peak Number 15 11H-Benzo[b]fluorene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.16	3.98 ng	1019550	Chrysene-d12	14.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	95
2	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	83
3	Pyrene, 1-methyl-	216	C17H12	002381-21-7	83
4	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	81
5	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	80





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST11.L
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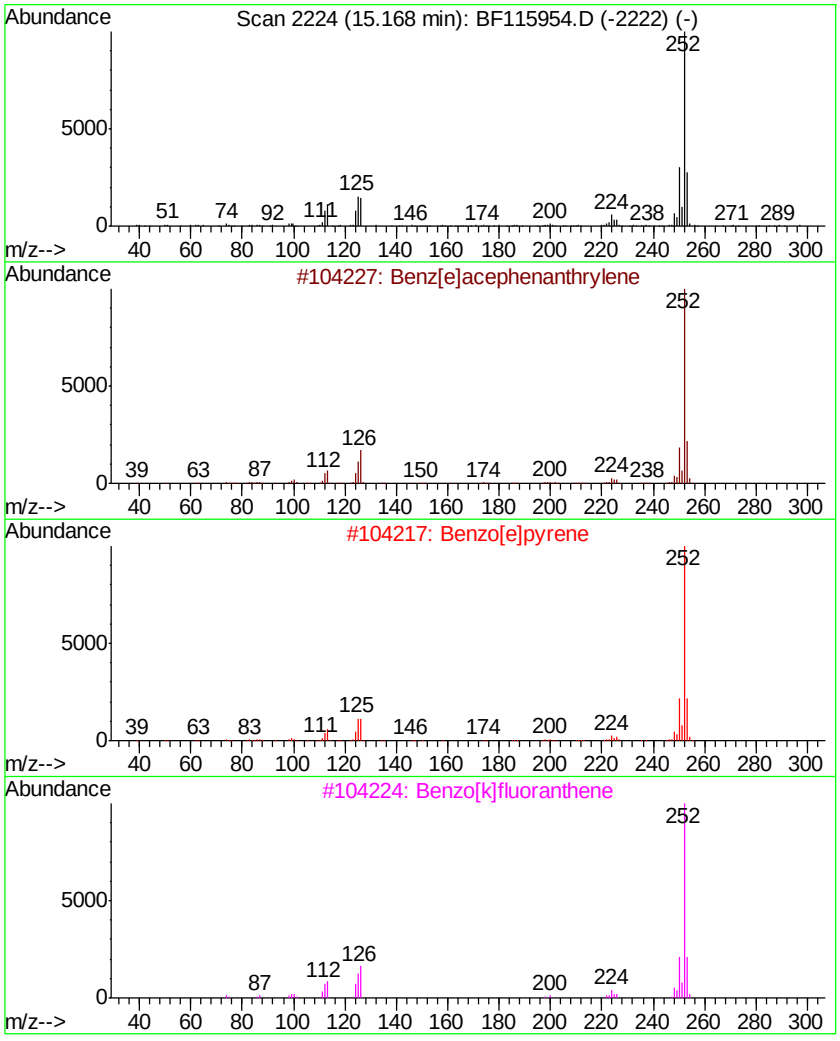
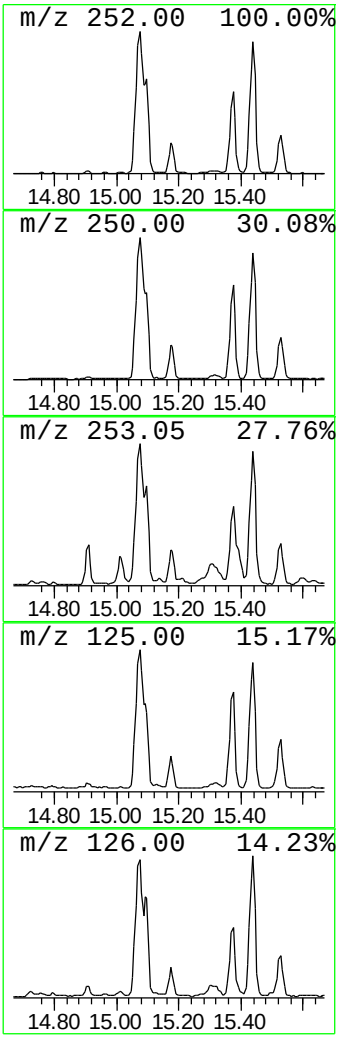
Peak Number 16 Benzo[e]pyrene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.17	6.46 ng	432746	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	96
2	Benzo[e]pyrene	252	C20H12	000192-97-2	96
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
4	Benzo[a]pyrene	252	C20H12	000050-32-8	91
5	Perylene	252	C20H12	000198-55-0	81





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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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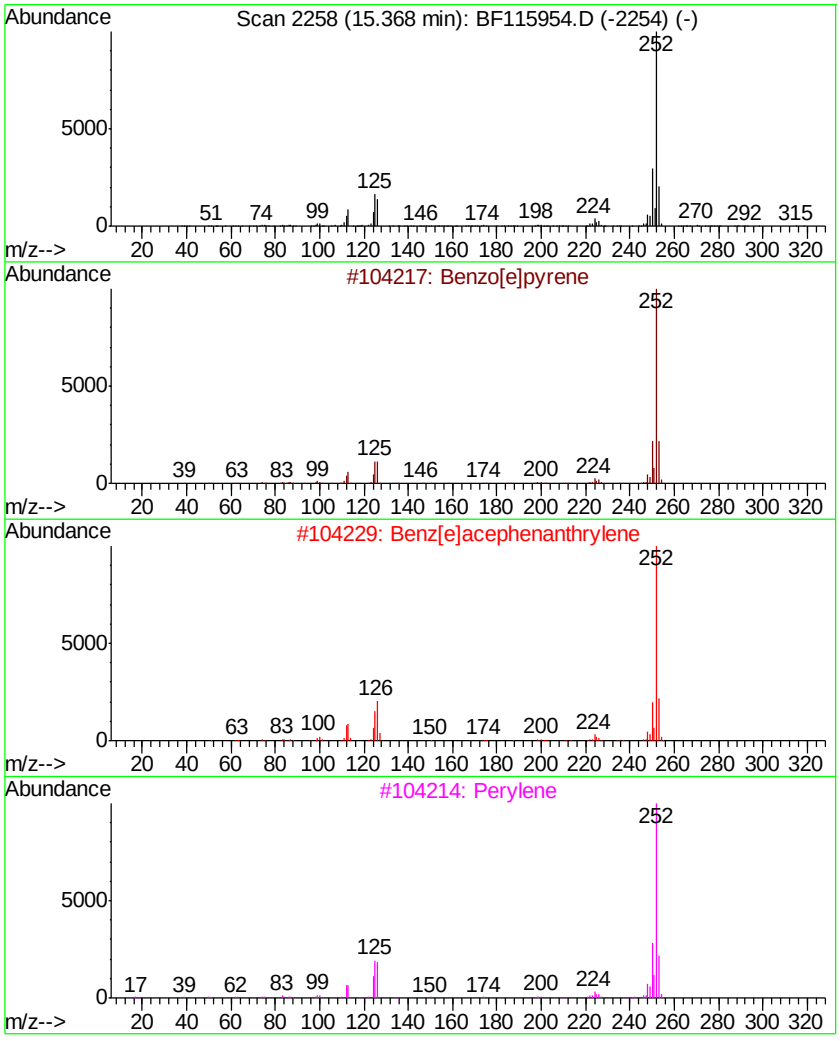
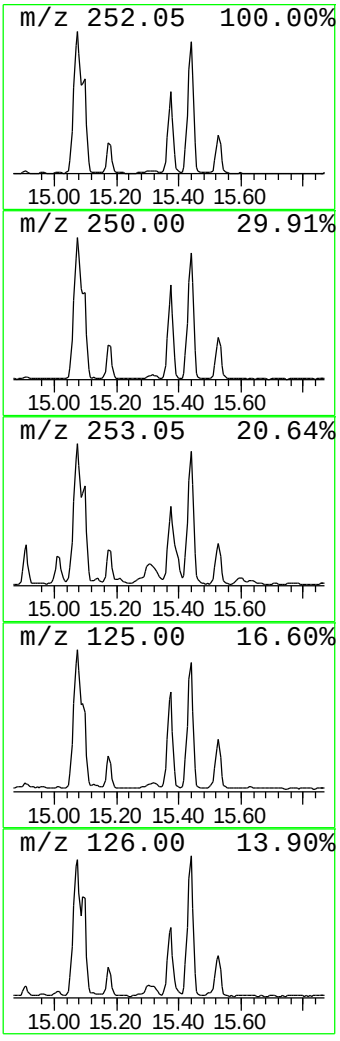
Peak Number 17 Benzo[j]fluoranthene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.37	21.28 ng	1425070	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	98
2	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	95
3	Perylene	252	C20H12	000198-55-0	94
4	Benzo[a]pyrene	252	C20H12	000050-32-8	93
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	89





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Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

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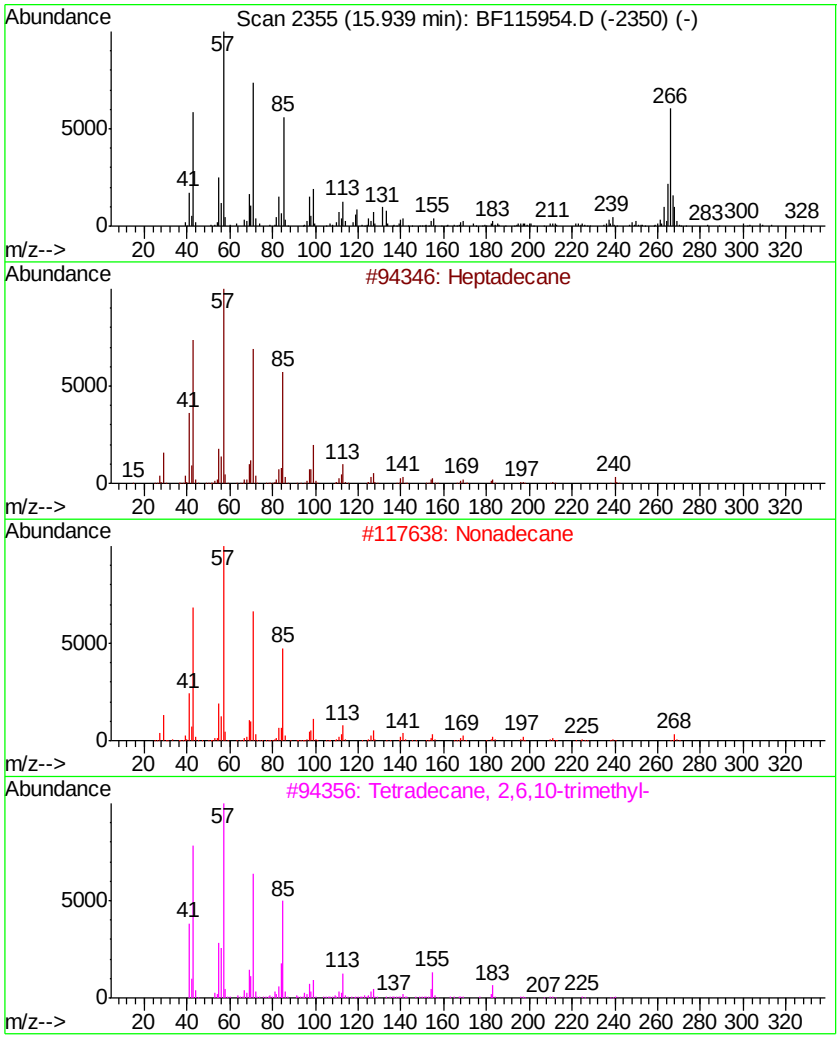
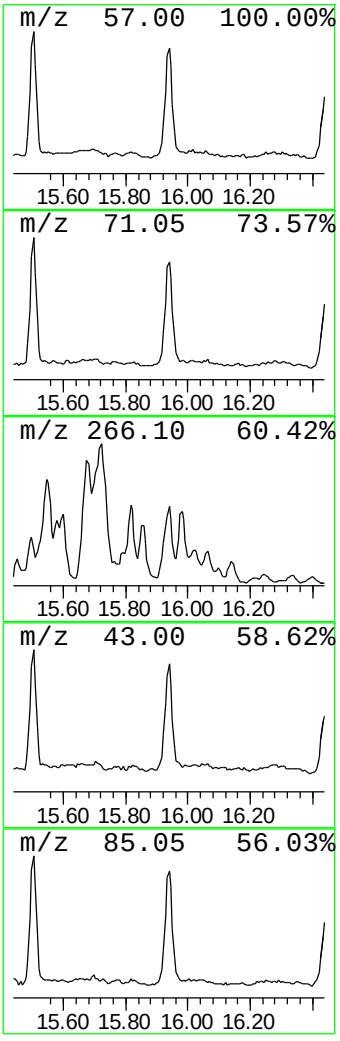
Peak Number 18 Heptadecane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.94	5.87 ng	392797	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	90
2	Nonadecane	268	C19H40	000629-92-5	70
3	Tetradecane, 2,6,10-trimethyl-	240	C17H36	014905-56-7	55
4	Heneicosane	296	C21H44	000629-94-7	55
5	Hexacosane	366	C26H54	000630-01-3	55





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Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

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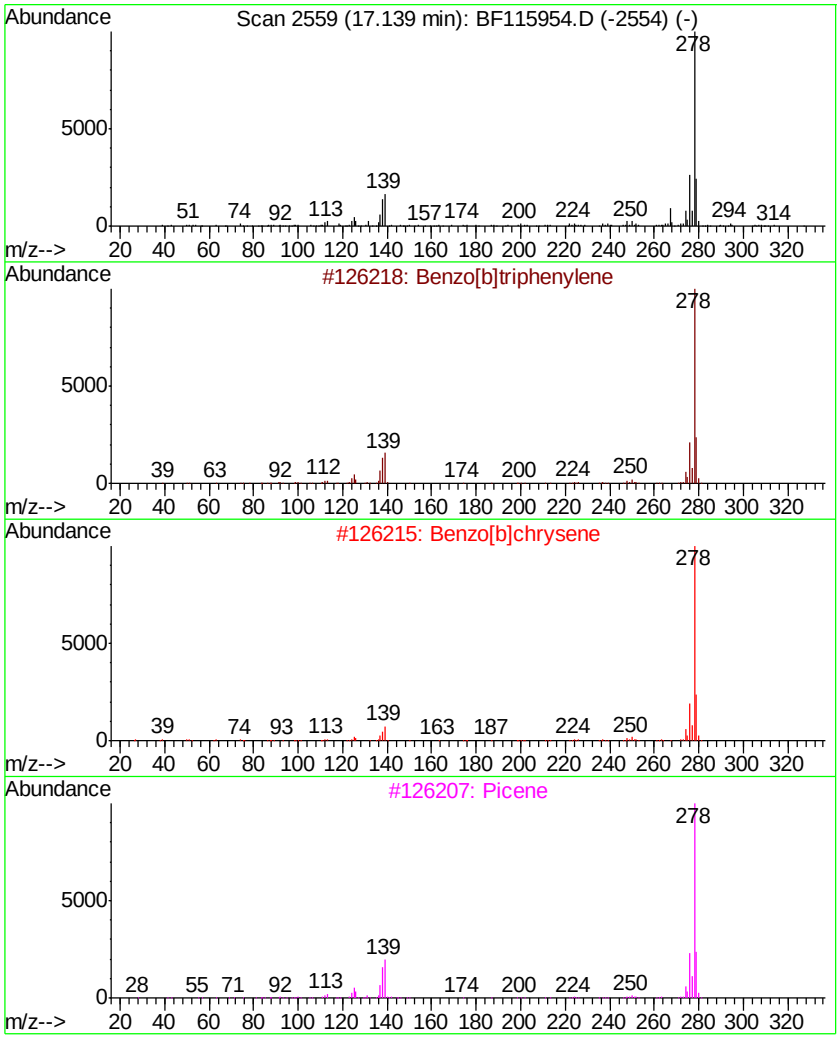
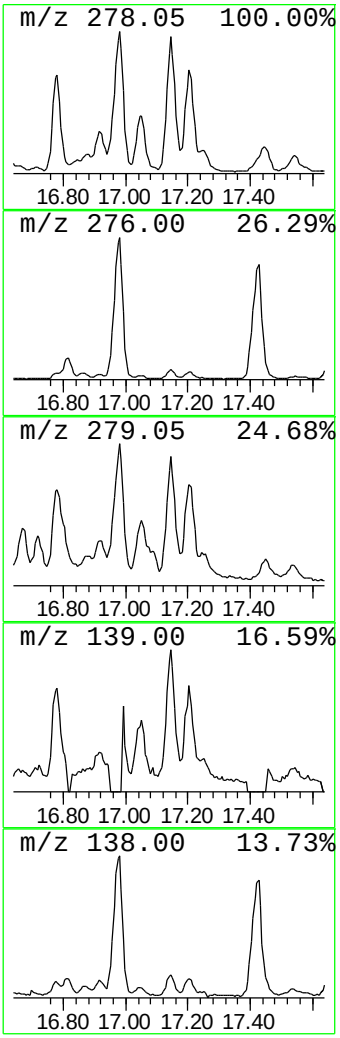
Peak Number 19 Benzo[b]triphenylene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.14	5.24 ng	350854	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene	278	C22H14	000215-58-7	98
2	Benzo[b]chrysene	278	C22H14	000214-17-5	98
3	Picene	278	C22H14	000213-46-7	98
4	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	97
5	Pyrene, 1-phenyl-	278	C22H14	005101-27-9	93





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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

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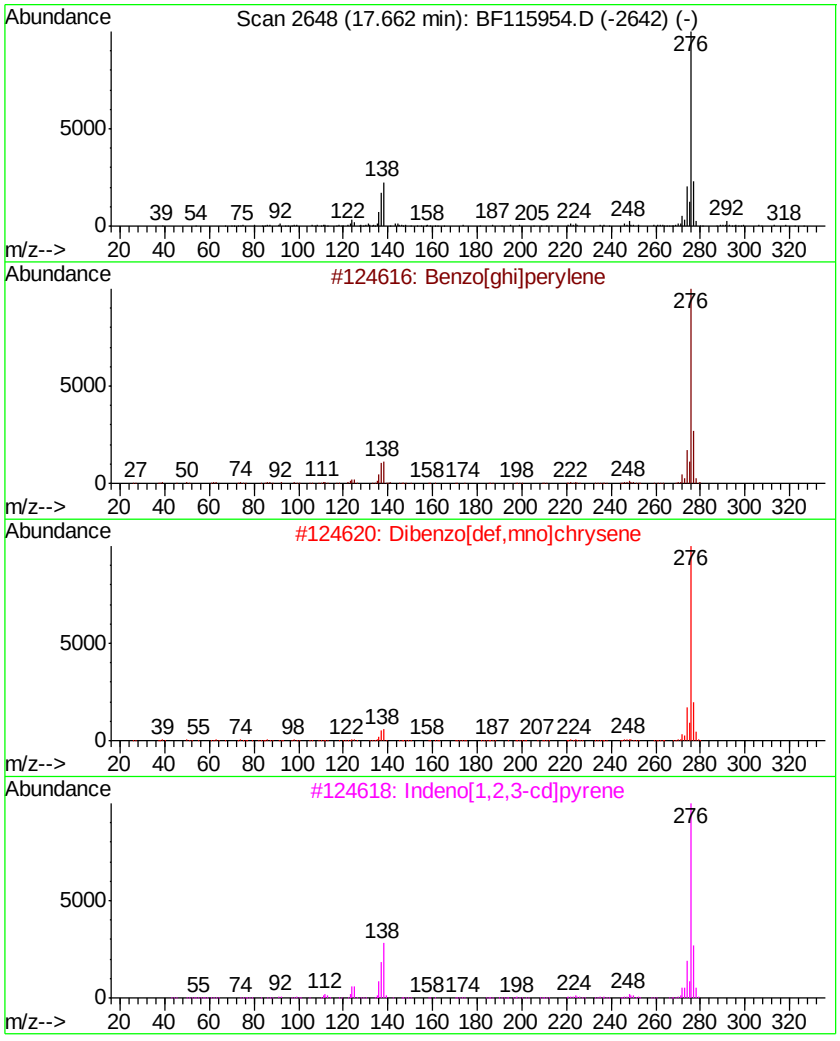
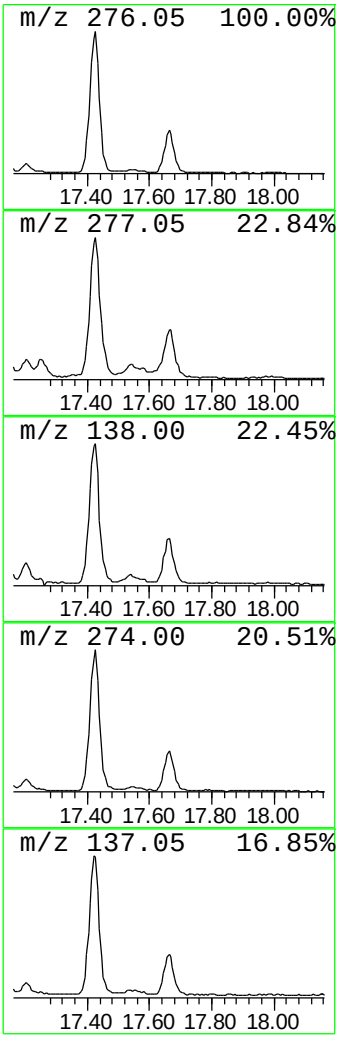
Peak Number 20 Dibenzo[def,mno]chrysene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.66	7.89 ng	528219	Perylene-d12	15.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[ghi]perylene	276	C22H12	000191-24-2	96
2	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	94
3	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	81
4	Phenol, 2-(4-chlorophenyliminome...	276	C13H9ClN2O3	1000262-90-3	59
5	Naphthalen-1-yl-(3-nitro-benzyli...	276	C17H12N2O2	200421-53-0	50





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF080219\
Data File : BF115954.D
Acq On : 2 Aug 2019 18:44
Operator : HP/JU
Sample : K4131-01
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : 1S-D1-D4-COMP-(0-1)

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
unknown6.62	6.62	64.3	ng	2430930	1	6.85	756506	20.0
9H-Fluorene, 1-me...	10.99	3.6	ng	247737	4	11.38	1368030	20.0
Anthracene, 1,2,3...	11.24	4.5	ng	305897	4	11.38	1368030	20.0
Dibenzothiophene	11.27	5.5	ng	373378	4	11.38	1368030	20.0
Phenanthrene, 2-m...	11.88	9.5	ng	647812	4	11.38	1368030	20.0
Phenanthrene, 1-m...	11.91	13.5	ng	921802	4	11.38	1368030	20.0
Anthracene, 1-met...	11.96	5.6	ng	383119	4	11.38	1368030	20.0
4H-Cyclopenta[def...	12.00	20.1	ng	1373630	4	11.38	1368030	20.0
Naphthalene, 2-ph...	12.17	8.4	ng	577370	4	11.38	1368030	20.0
9,10-Anthracenedione	12.20	5.0	ng	339834	4	11.38	1368030	20.0
Phenanthrene, 2,5...	12.43	8.1	ng	552609	4	11.38	1368030	20.0
unknown12.47	12.47	5.8	ng	394954	4	11.38	1368030	20.0
Cyclopenta(def)ph...	12.53	5.5	ng	374350	4	11.38	1368030	20.0
11H-Benzo[b]fluorene	13.16	4.0	ng	1019550	5	14.03	5119280	20.0
Benzo[e]pyrene	15.17	6.5	ng	432746	6	15.50	1339180	20.0
Benzo[j]fluoranthene	15.37	21.3	ng	1425070	6	15.50	1339180	20.0
Heptadecane	15.94	5.9	ng	392797	6	15.50	1339180	20.0
Benzo[b]triphenylene	17.14	5.2	ng	350854	6	15.50	1339180	20.0
Dibenzo[def,mno]c...	17.66	7.9	ng	528219	6	15.50	1339180	20.0