

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
 Data File : BF107300.D
 Acq On : 11 Jul 2018 15:18
 Operator : JU/SJ
 Sample : J3933-02 5X
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 EP-2-4

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

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

Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.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	5.572	546	550	568	rBB	189270	223843	8.92%	0.635%
2	6.578	718	721	736	rBV	202967	235569	9.38%	0.668%
3	6.707	740	743	748	rBV	284164	245352	9.77%	0.696%
4	6.931	777	781	789	rBV	383707	335632	13.37%	0.952%
5	7.084	803	807	815	rBB	234932	196527	7.83%	0.557%
6	7.495	873	877	887	rBV	147171	145663	5.80%	0.413%
7	8.213	996	999	1002	rBV	494960	434761	17.32%	1.233%
8	8.930	1118	1121	1129	rBB	81781	68031	2.71%	0.193%
9	9.030	1132	1138	1143	rBB	83514	72221	2.88%	0.205%
10	9.289	1178	1182	1185	rBV	336043	277732	11.06%	0.787%
11	9.630	1236	1240	1243	rBV	84970	85184	3.39%	0.242%
12	9.836	1272	1275	1280	rVB2	61649	60912	2.43%	0.173%
13	9.977	1296	1299	1302	rBV2	481468	406676	16.20%	1.153%
14	10.013	1302	1305	1308	rVB	154187	124621	4.96%	0.353%
15	10.177	1329	1333	1337	rBV3	54164	70737	2.82%	0.201%
16	10.383	1364	1368	1370	rBV2	47425	59487	2.37%	0.169%
17	10.530	1389	1393	1397	rVV	128776	130660	5.20%	0.370%
18	10.595	1402	1404	1405	rVV	77171	61956	2.47%	0.176%
19	10.613	1405	1407	1409	rVV2	69607	63722	2.54%	0.181%
20	10.666	1413	1416	1418	rVV	56742	72149	2.87%	0.205%
21	10.777	1431	1435	1438	rBV2	165825	167375	6.67%	0.475%
22	11.077	1479	1486	1489	rBV3	88142	134564	5.36%	0.382%
23	11.107	1489	1491	1494	rVV2	103538	90001	3.59%	0.255%
24	11.230	1509	1512	1516	rVV3	65748	81958	3.26%	0.232%
25	11.283	1516	1521	1524	rVV	111420	135869	5.41%	0.385%
26	11.330	1524	1529	1533	rVV4	89810	134944	5.38%	0.383%
27	11.371	1533	1536	1544	rVB	154346	144831	5.77%	0.411%
28	11.477	1550	1554	1556	rBV	445120	422654	16.84%	1.198%
29	11.507	1556	1559	1562	rVB	1673471	1481281	59.01%	4.200%
30	11.554	1564	1567	1570	rBV	303021	256470	10.22%	0.727%
31	11.713	1589	1594	1597	rBV3	109763	151686	6.04%	0.430%
32	11.807	1605	1610	1615	rBV2	175758	219847	8.76%	0.623%
33	11.889	1619	1624	1629	rVB2	98456	150703	6.00%	0.427%
34	11.942	1629	1633	1636	rBV3	62109	77192	3.07%	0.219%

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Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
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35	11.983	1636	1640	1642	rBV	730430	635704	25.32%	1.802%
36	12.013	1642	1645	1648	rVB	897604	743181	29.61%	2.107%
37	12.060	1648	1653	1655	rBV	222827	212728	8.47%	0.603%
38	12.095	1655	1659	1661	rBV2	796918	881876	35.13%	2.500%
39	12.118	1661	1663	1666	rVB	680452	517393	20.61%	1.467%
40	12.213	1677	1679	1682	rVB	96420	73413	2.92%	0.208%
41	12.271	1686	1689	1692	rBV	339374	336840	13.42%	0.955%
42	12.313	1693	1696	1699	rVB2	380141	364579	14.52%	1.034%
43	12.348	1699	1702	1704	rBV	131654	100093	3.99%	0.284%
44	12.424	1709	1715	1718	rBV2	274227	330993	13.19%	0.938%
45	12.454	1718	1720	1723	rVB	157537	124703	4.97%	0.354%
46	12.483	1723	1725	1727	rVB	157176	118031	4.70%	0.335%
47	12.536	1730	1734	1736	rBV	592836	664390	26.47%	1.884%
48	12.571	1736	1740	1742	rVV3	248535	343877	13.70%	0.975%
49	12.630	1746	1750	1753	rBV2	294763	435613	17.35%	1.235%
50	12.707	1758	1763	1766	rBV	1644951	1735657	69.14%	4.921%
51	12.736	1766	1768	1770	rBV	93671	68943	2.75%	0.195%
52	12.760	1770	1772	1776	rVB2	183328	162031	6.45%	0.459%
53	12.842	1783	1786	1790	rBV2	210658	264420	10.53%	0.750%
54	12.877	1790	1792	1795	rVB2	139042	114150	4.55%	0.324%
55	12.942	1795	1803	1806	rBV	1905131	2510319	100.00%	7.118%
56	12.977	1806	1809	1813	rVB2	263851	297727	11.86%	0.844%
57	13.036	1813	1819	1820	rBV2	112848	168479	6.71%	0.478%
58	13.060	1820	1823	1826	rVV2	326225	269479	10.73%	0.764%
59	13.089	1826	1828	1834	rVB3	148934	183419	7.31%	0.520%
60	13.148	1834	1838	1843	rBV2	376204	650139	25.90%	1.843%
61	13.207	1844	1848	1850	rBV3	74482	86666	3.45%	0.246%
62	13.260	1850	1857	1862	rVB	463326	875748	34.89%	2.483%
63	13.307	1862	1865	1866	rBV2	62906	55779	2.22%	0.158%
64	13.330	1866	1869	1871	rBV	206580	195805	7.80%	0.555%
65	13.371	1871	1876	1878	rVV	500507	563153	22.43%	1.597%
66	13.418	1882	1884	1888	rVB3	73836	74387	2.96%	0.211%
67	13.465	1888	1892	1894	rBV	538344	474415	18.90%	1.345%
68	13.495	1894	1897	1899	rVB	461818	393053	15.66%	1.114%
69	13.560	1905	1908	1909	rBV2	48285	55508	2.21%	0.157%
70	13.577	1909	1911	1914	rVB2	92011	78491	3.13%	0.223%
71	13.660	1923	1925	1927	rBV2	54292	58540	2.33%	0.166%

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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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72	13.683	1927	1929	1932	rVV	87403	81401	3.24%	0.231%
73	13.748	1937	1940	1942	rVV2	94347	121014	4.82%	0.343%
74	13.777	1942	1945	1948	rVV	406507	446120	17.77%	1.265%
75	13.836	1952	1955	1958	rVB	113948	107332	4.28%	0.304%
76	13.889	1958	1964	1966	rBV	436974	568298	22.64%	1.611%
77	13.912	1966	1968	1970	rVV	349482	273567	10.90%	0.776%
78	13.942	1970	1973	1979	rVV3	219302	354025	14.10%	1.004%
79	13.989	1979	1981	1984	rVB	334245	310562	12.37%	0.881%
80	14.136	2001	2006	2010	rBV2	1216459	2011965	80.15%	5.705%
81	14.171	2010	2012	2015	rVV	1280910	1213064	48.32%	3.440%
82	14.224	2019	2021	2023	rBV2	74093	61305	2.44%	0.174%
83	14.254	2023	2026	2028	rBV2	169729	149196	5.94%	0.423%
84	14.301	2031	2034	2042	rBV7	151257	346378	13.80%	0.982%
85	14.465	2059	2062	2064	rBV	107450	90967	3.62%	0.258%
86	14.495	2064	2067	2069	rBV	169743	165325	6.59%	0.469%
87	14.536	2069	2074	2077	rVV	518403	602321	23.99%	1.708%
88	14.571	2077	2080	2082	rVB	293768	233544	9.30%	0.662%
89	14.612	2084	2087	2089	rVB2	184334	171618	6.84%	0.487%
90	14.636	2089	2091	2094	rVB2	129192	107642	4.29%	0.305%
91	14.665	2094	2096	2098	rBV	252218	226190	9.01%	0.641%
92	14.877	2129	2132	2135	rBV2	148531	200875	8.00%	0.570%
93	15.236	2188	2193	2201	rBV2	712058	1556391	62.00%	4.413%
94	15.348	2210	2212	2215	rVB	137662	123209	4.91%	0.349%
95	15.565	2244	2249	2255	rBV	562600	788418	31.41%	2.235%
96	15.636	2256	2261	2267	rVV	668869	970620	38.67%	2.752%
97	15.695	2267	2271	2274	rVV	273879	362122	14.43%	1.027%
98	15.730	2274	2277	2283	rVB2	185609	289342	11.53%	0.820%
99	17.295	2537	2543	2549	rVB	266606	544402	21.69%	1.544%
100	17.789	2621	2627	2637	rVB	241588	550752	21.94%	1.562%

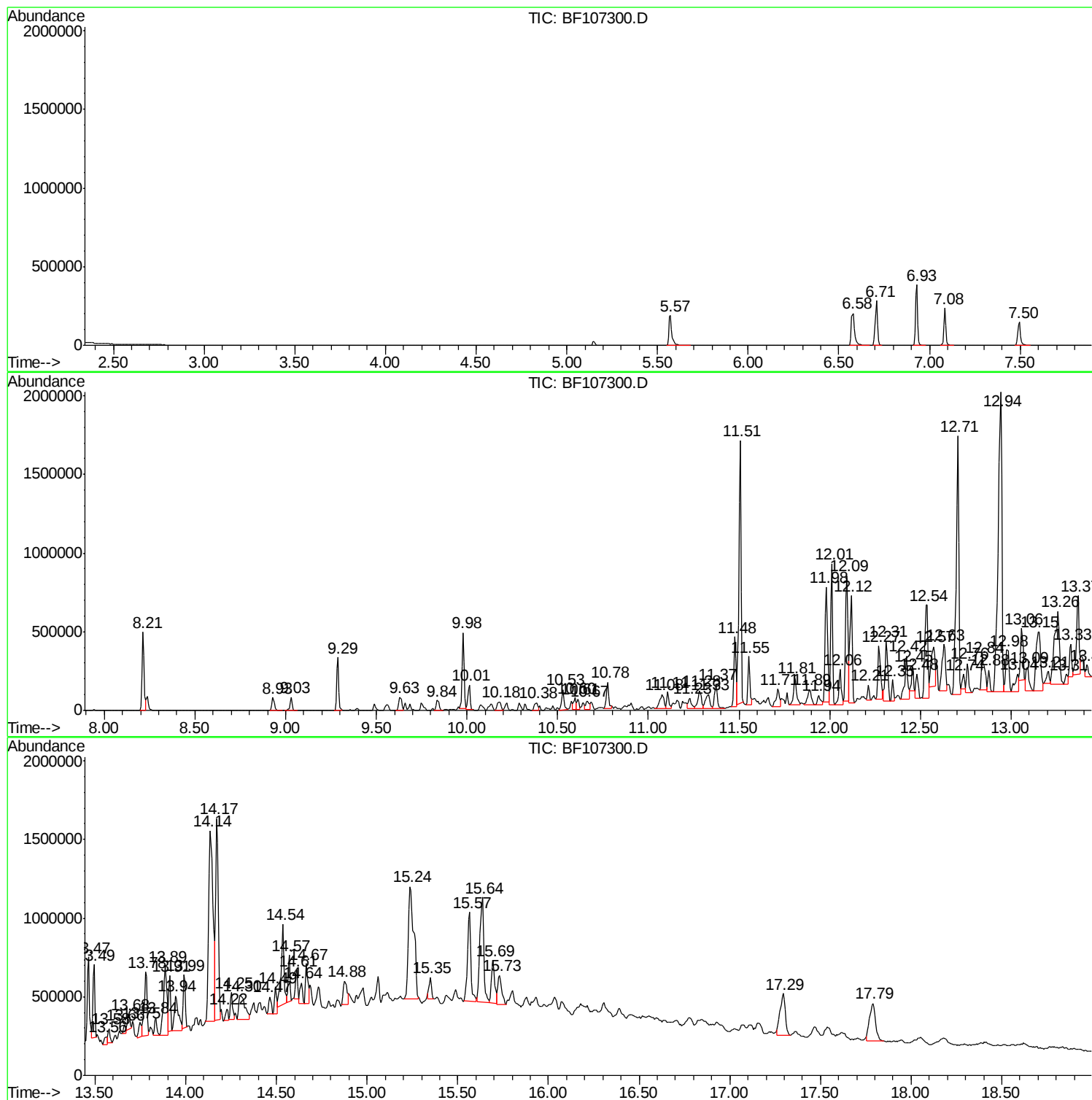
Sum of corrected areas: 35268497

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Instrument :
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ClientSampled :
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.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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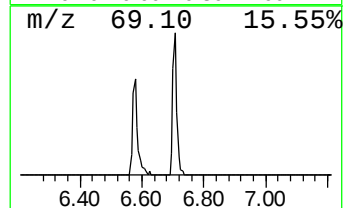
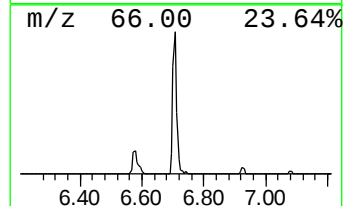
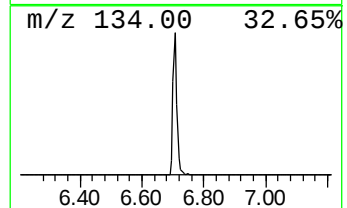
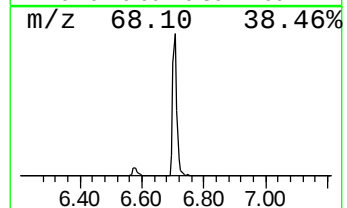
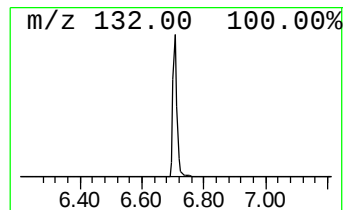
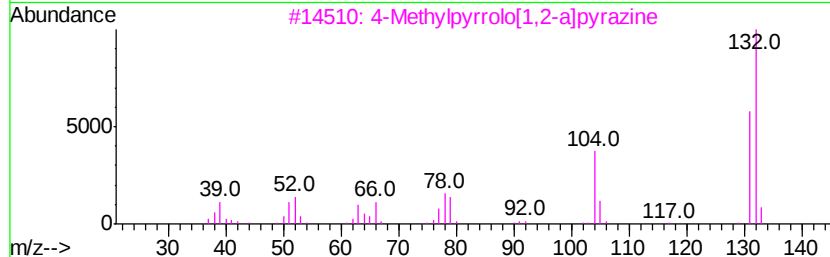
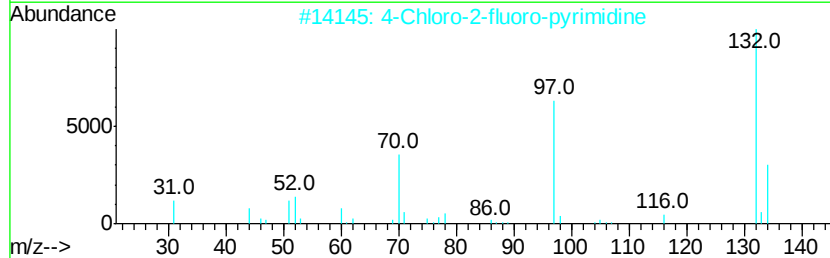
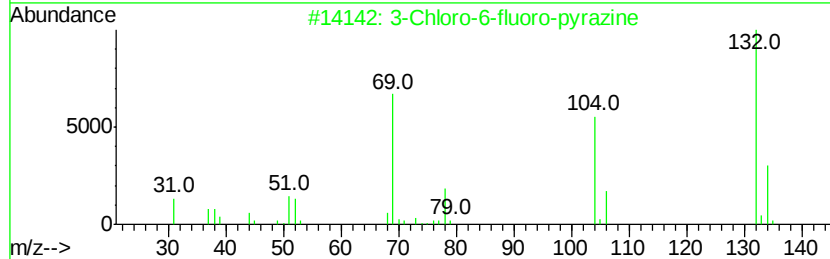
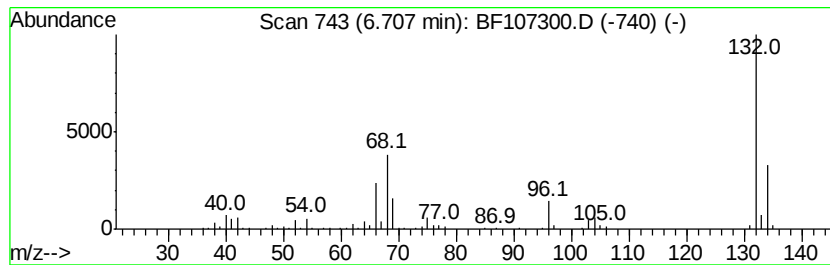
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 1 unknown6.71 Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.71	14.62 ng	245352	1,4-Dichlorobenzene-d4	6.93

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	27
2		4-Chloro-2-fluoro-pyrimidine	132	C4H2ClFN2	051422-00-5	9
3		4-Methylpyrrolo[1,2-a]pyrazine	132	C8H8N2	064608-60-2	9
4		4-Chloro-6-fluoro-pyrimidine	132	C4H2ClFN2	051422-01-6	9
5		1H-Benzimidazole, 2-methyl-	132	C8H8N2	000615-15-6	9



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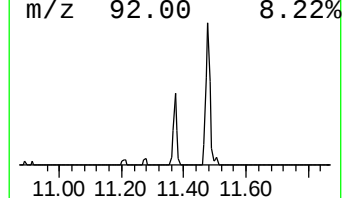
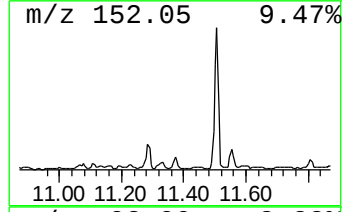
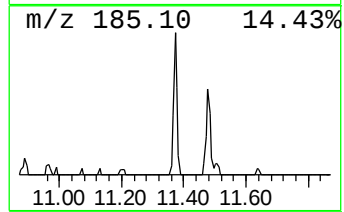
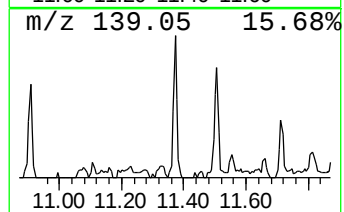
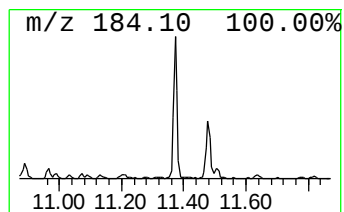
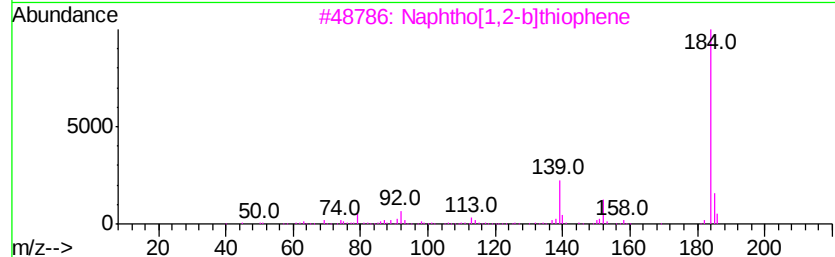
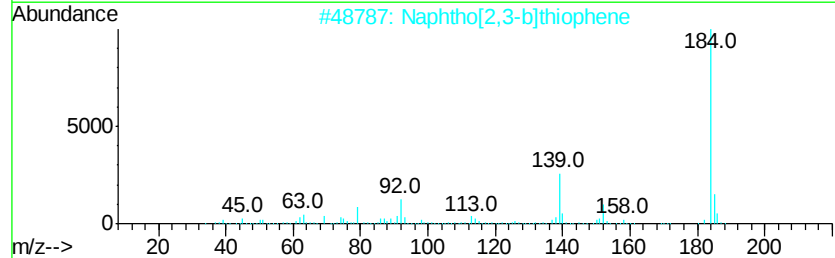
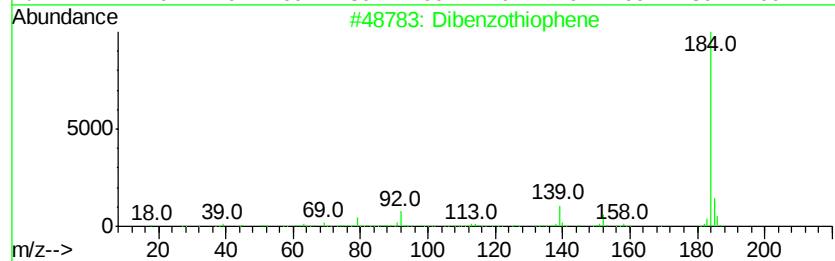
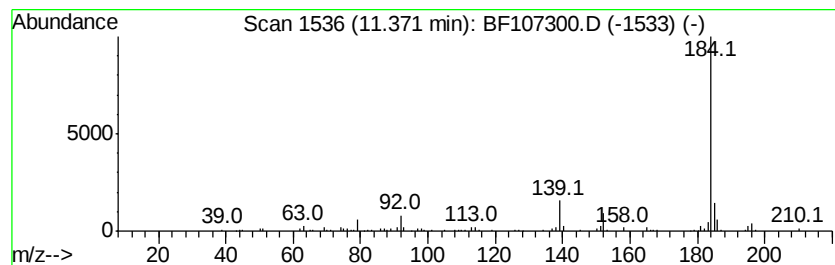
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TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

Peak Number 3 Dibenzothiophene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.37	6.85 ng	144831	Phenanthrene-d10	11.48

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Dibenzothiophene	184	C12H8S	000132-65-0	96
2		Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	94
3		Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	94
4		Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	93
5		Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91



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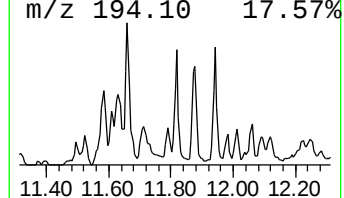
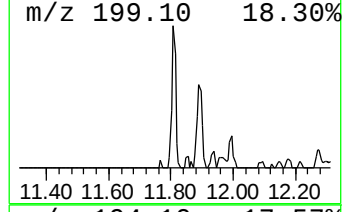
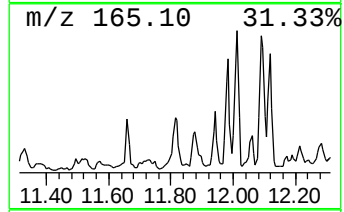
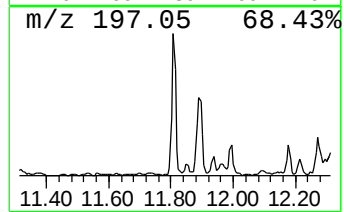
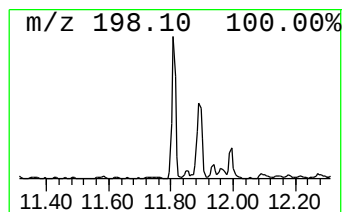
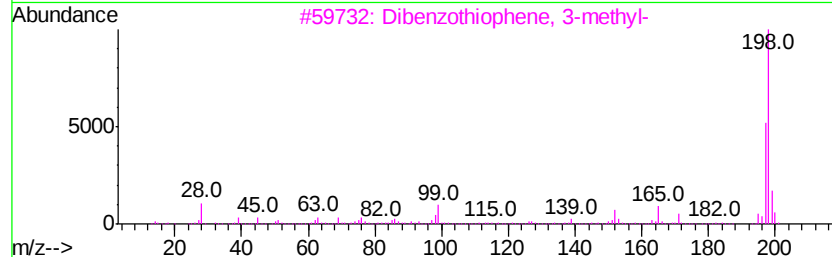
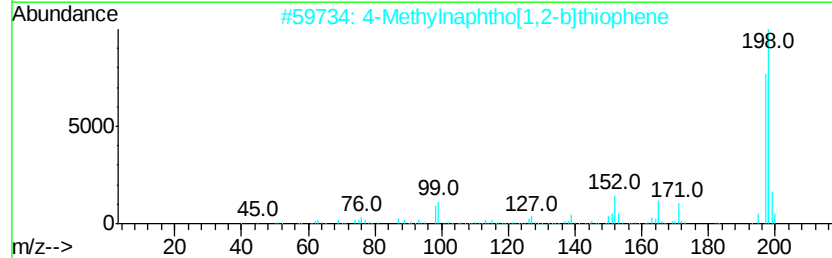
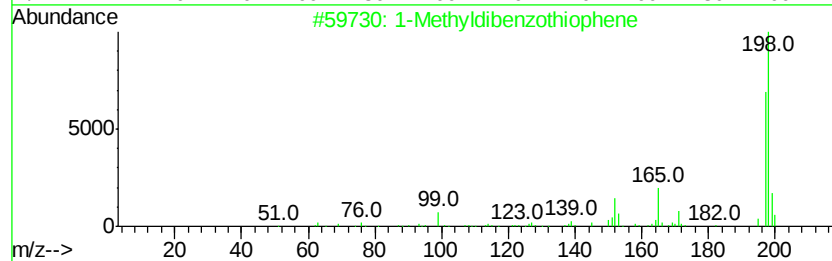
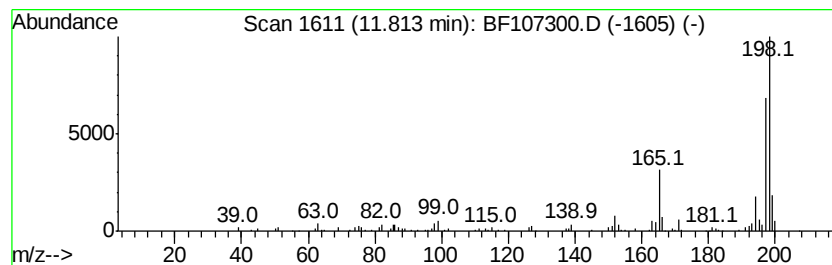
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 4 1-Methyldibenzothiophene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.81	10.40 ng	219847	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Methyldibenzothiophene	198	C13H10S	031317-07-4	97
2		4-Methylnaphtho[1,2-b]thiophene	198	C13H10S	067388-11-8	95
3		Dibenzothiophene, 3-methyl-	198	C13H10S	016587-52-3	94
4		Dibenzothiophene, 4-methyl-	198	C13H10S	007372-88-5	93
5		Benzenamine, 4,4'-methylenebis-	198	C13H14N2	000101-77-9	72



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Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
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ClientSampleId :
EP-2-4

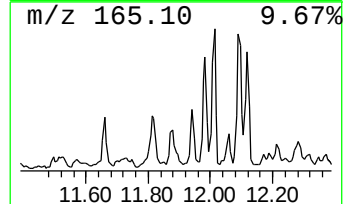
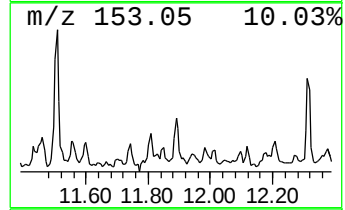
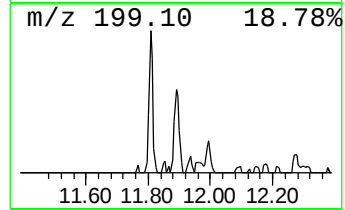
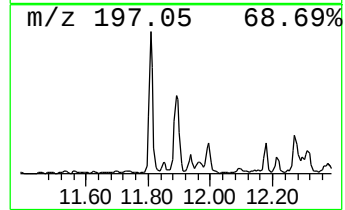
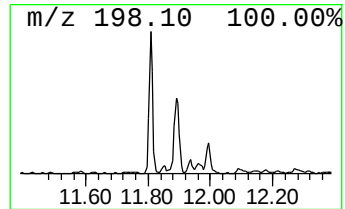
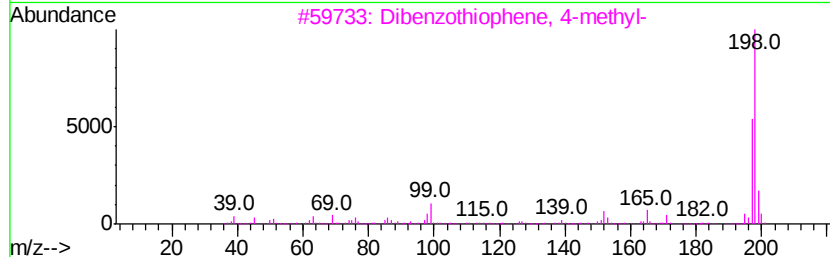
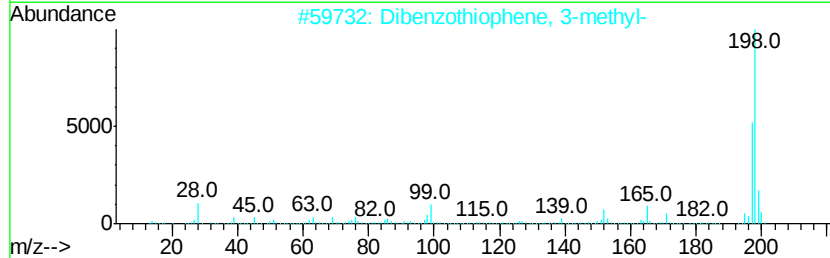
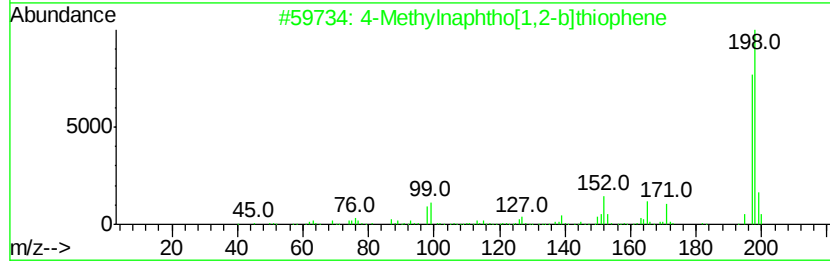
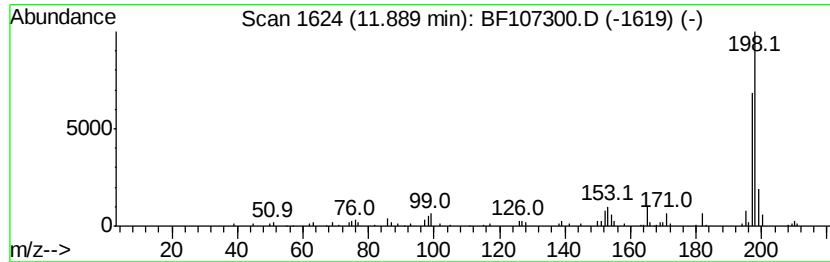
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 5 4-Methylnaphtho[1,2-b]thiop... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.89	7.13 ng	150703	Phenanthrene-d10	11.48

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		4-Methylnaphtho[1,2-b]thiophene	198	C13H10S	067388-11-8	95
2		Dibenzothiophene, 3-methyl-	198	C13H10S	016587-52-3	93
3		Dibenzothiophene, 4-methyl-	198	C13H10S	007372-88-5	93
4		1-Methyldibenzothiophene	198	C13H10S	031317-07-4	87
5		0,0,0-Triethyl thiophosphate	198	C6H15O3PS	000126-68-1	86



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
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ClientSampleId :
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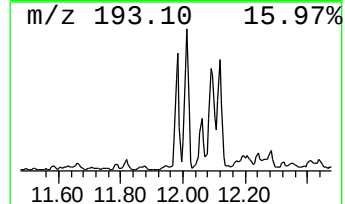
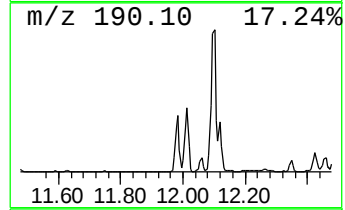
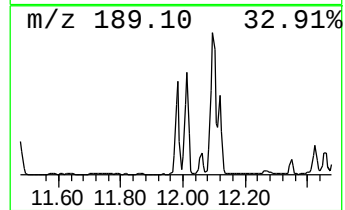
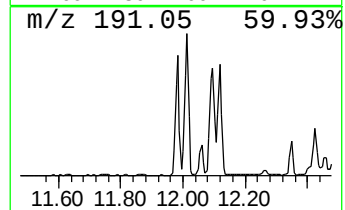
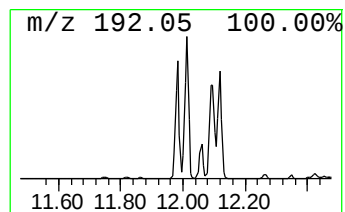
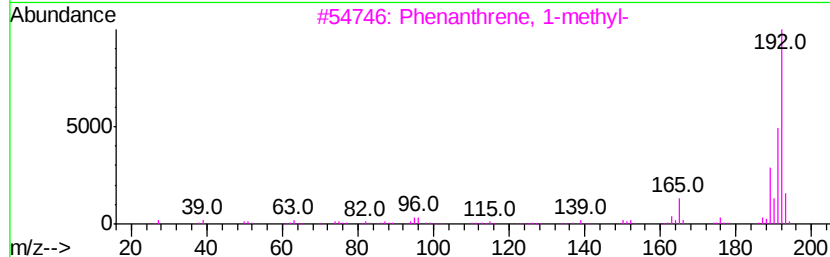
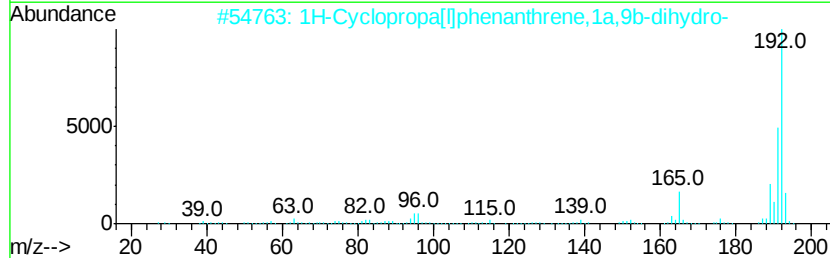
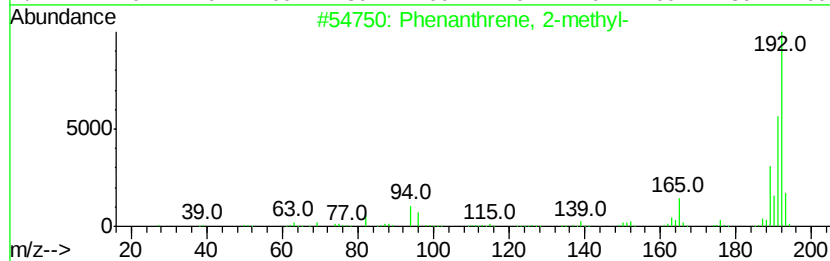
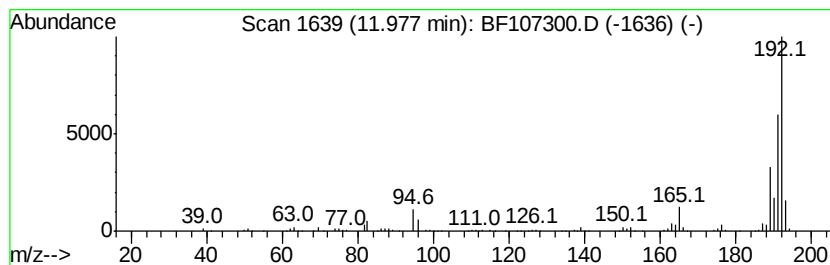
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 6 1H-Cyclopropa[l]phenanthren... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.98	30.08 ng	635704	Phenanthrene-d10	11.48

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	95
2		1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	95
3		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	93



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
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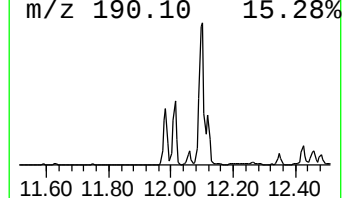
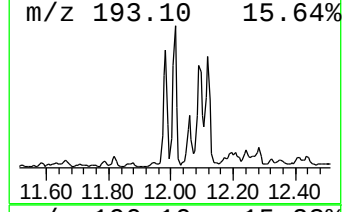
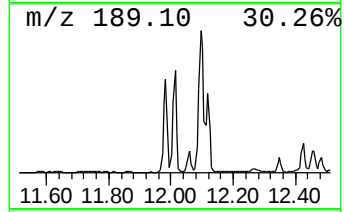
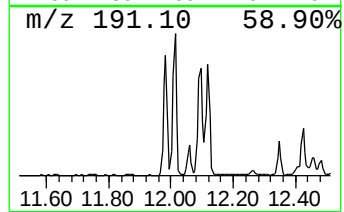
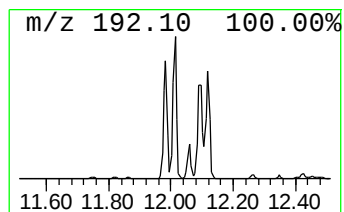
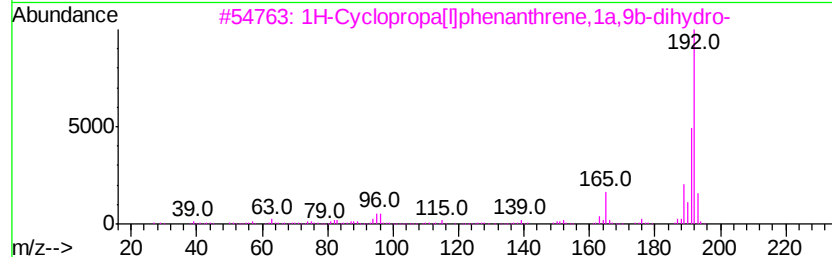
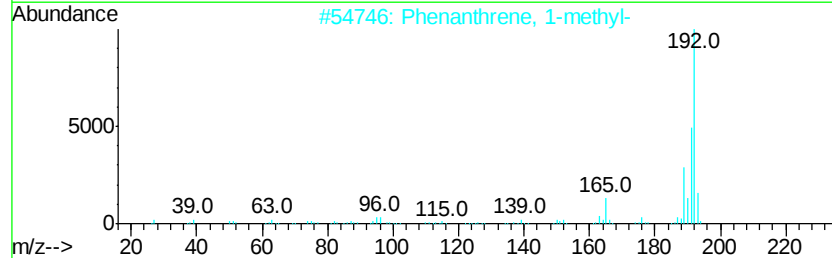
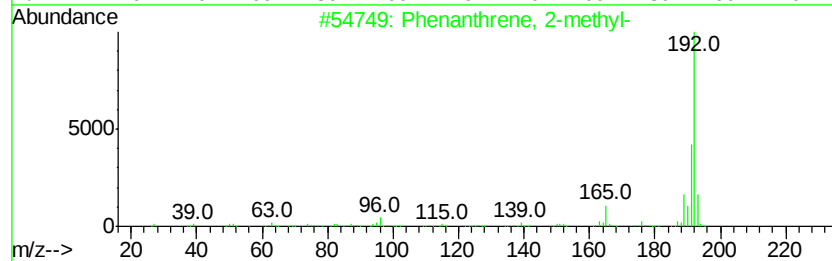
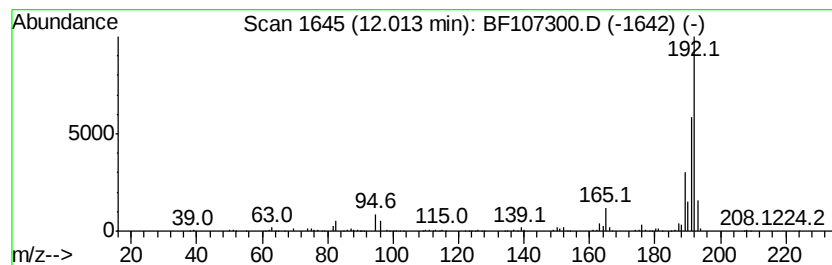
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 7 Phenanthrene, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.01	35.17 ng	743181	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
3		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	95
4		Anthracene, 9-methyl-	192	C15H12	000779-02-2	95
5		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
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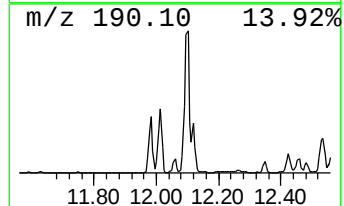
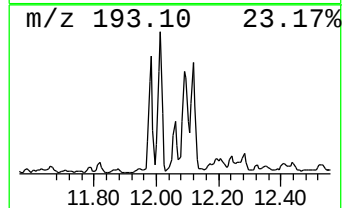
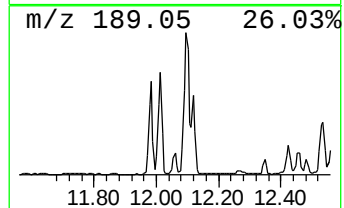
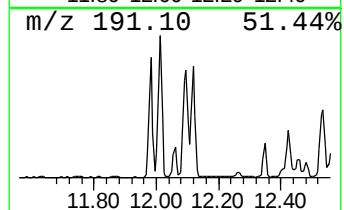
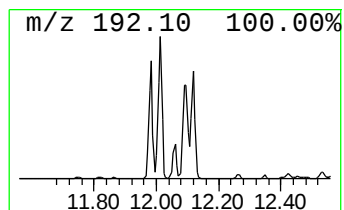
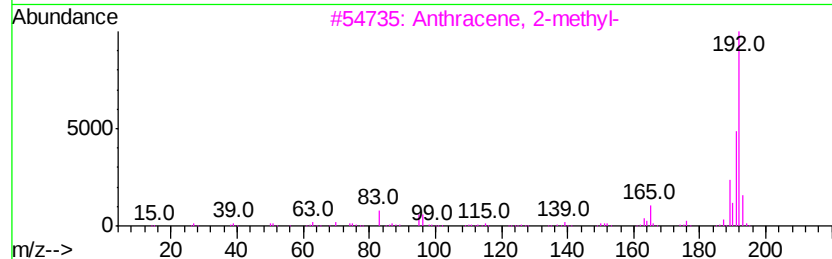
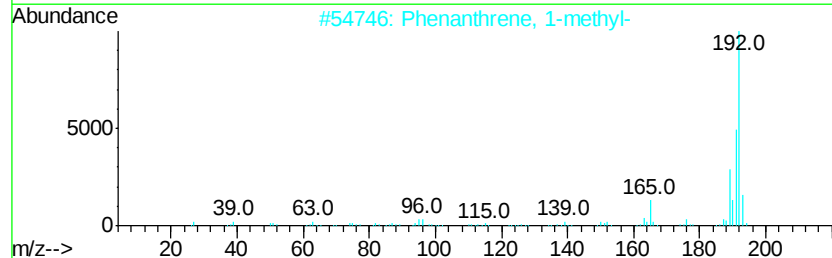
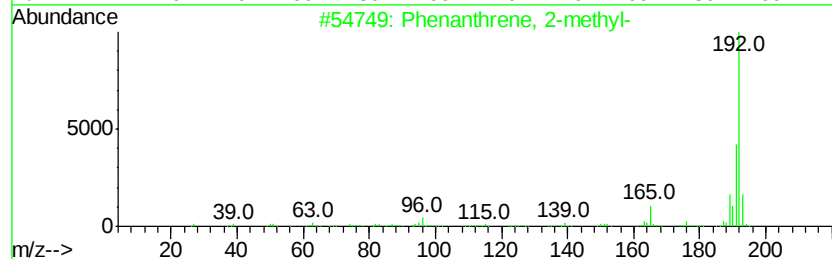
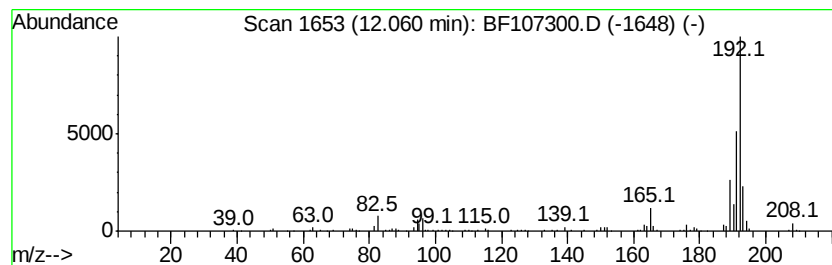
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 8 Phenanthrene, 1-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.06	10.07 ng	212728	Phenanthrene-d10	11.48

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
4		Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	94
5		1H-Cyclopropa[1]phenanthrene, 1a, ...	192	C15H12	000949-41-7	94



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
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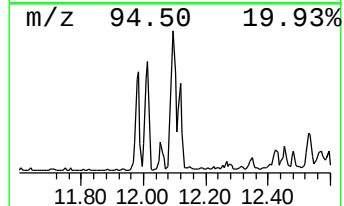
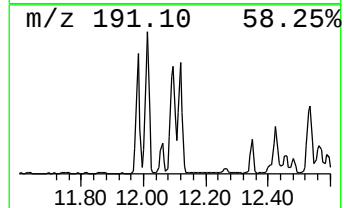
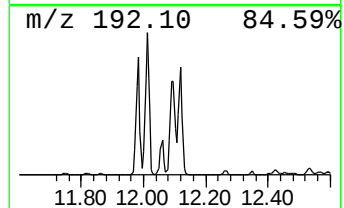
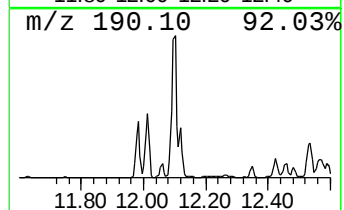
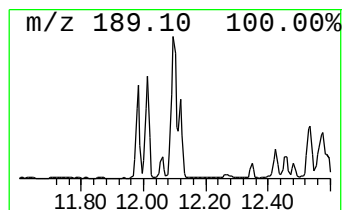
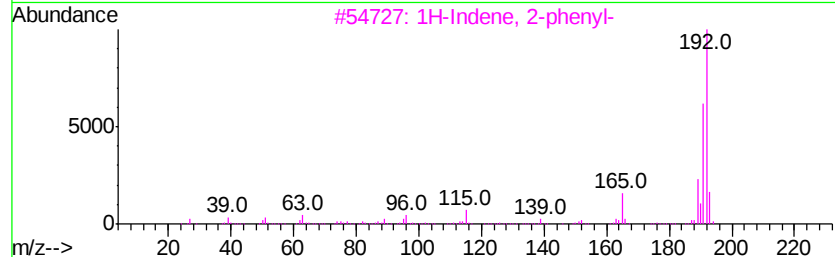
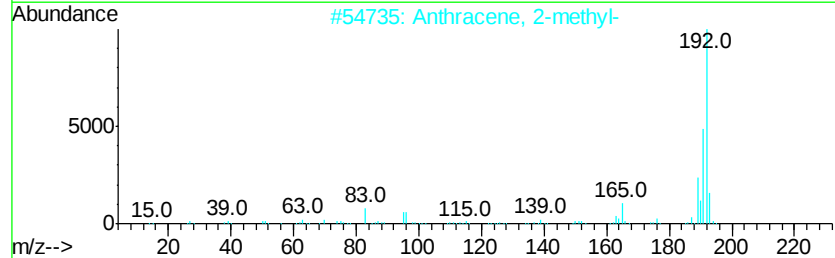
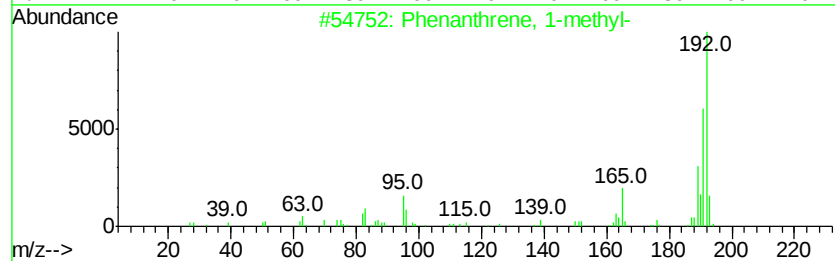
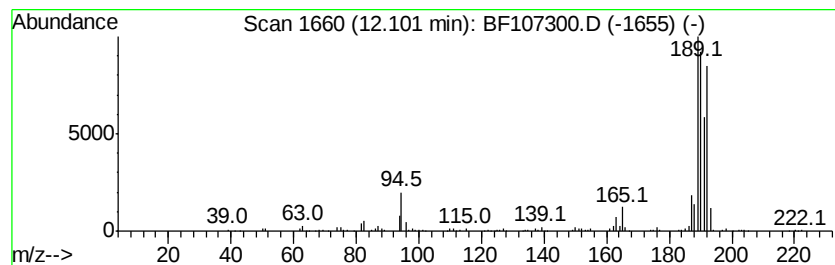
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 9 Anthracene, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.10	41.73 ng	881876	Phenanthrene-d10	11.48

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	60
2		Anthracene, 2-methyl-	192	C15H12	000613-12-7	60
3		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	60
4		Anthracene, 1-methyl-	192	C15H12	000610-48-0	60
5		5H-Dibenzo[a,d]cycloheptene	192	C15H12	000256-81-5	60



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Misc :
ALS Vial : 7 Sample Multiplier: 1

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ClientSampleId :
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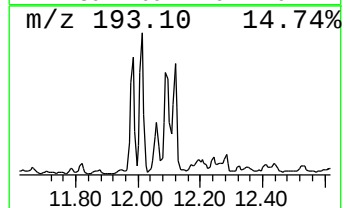
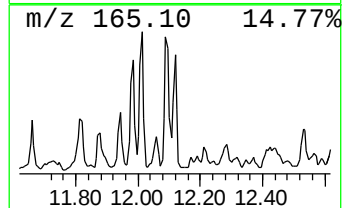
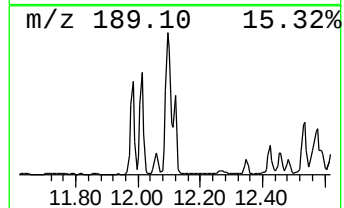
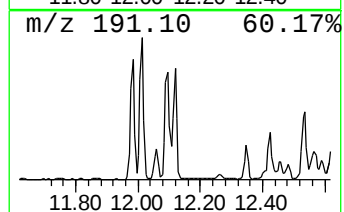
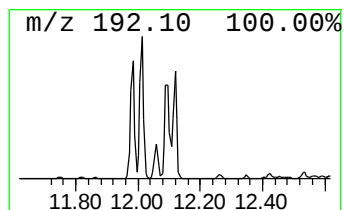
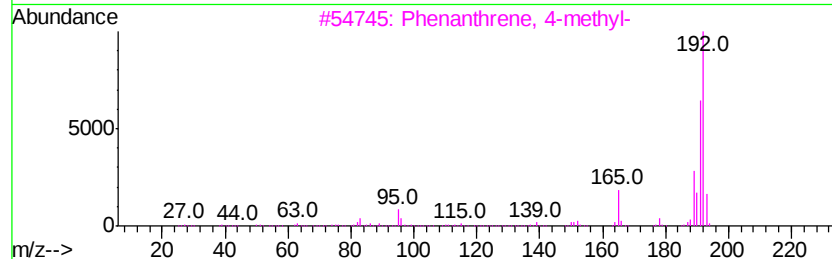
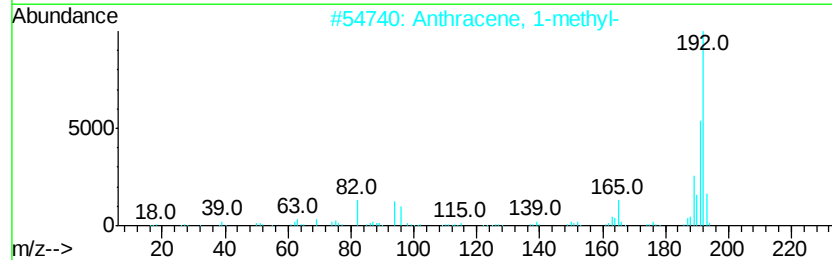
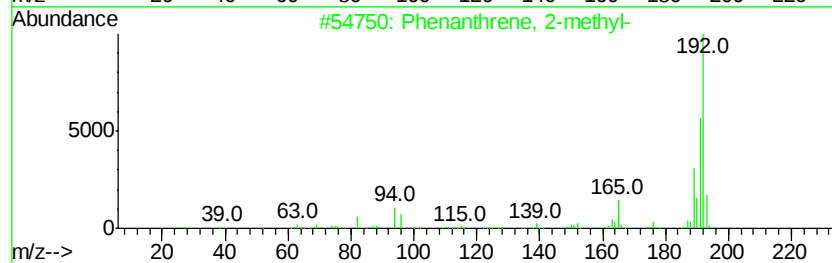
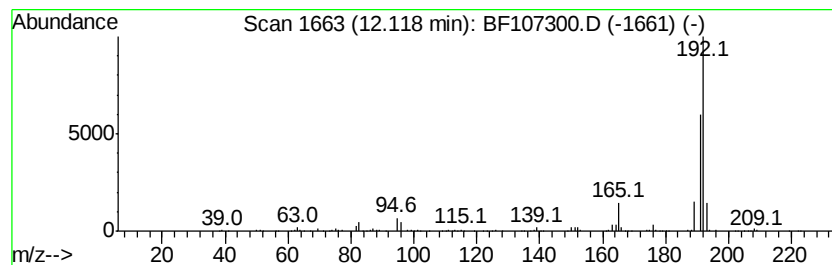
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 10 Phenanthrene, 4-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.12	24.48 ng	517393	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	87
2		Anthracene, 1-methyl-	192	C15H12	000610-48-0	87
3		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	87
4		1H-Cyclopropa[1,1]phenanthrene, 1a,...	192	C15H12	000949-41-7	87
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	87



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
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Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

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ClientSampleId :
EP-2-4

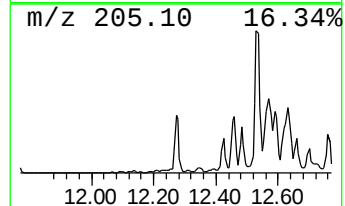
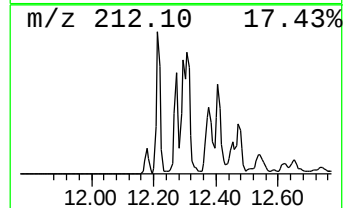
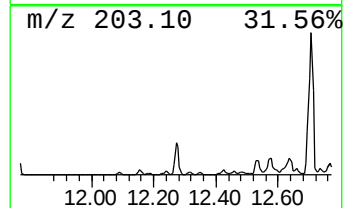
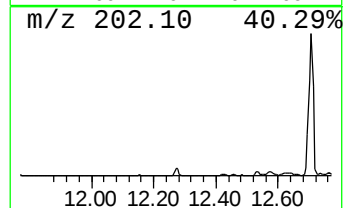
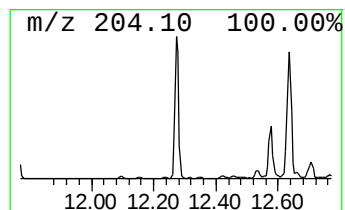
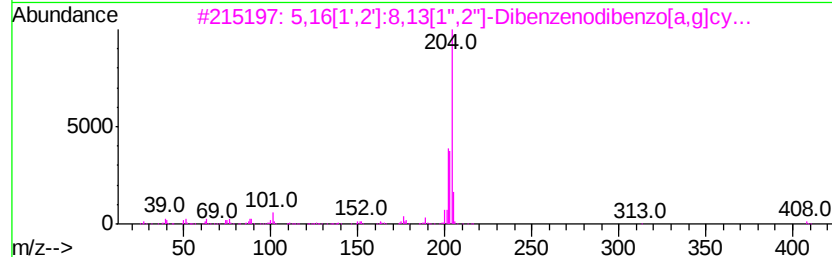
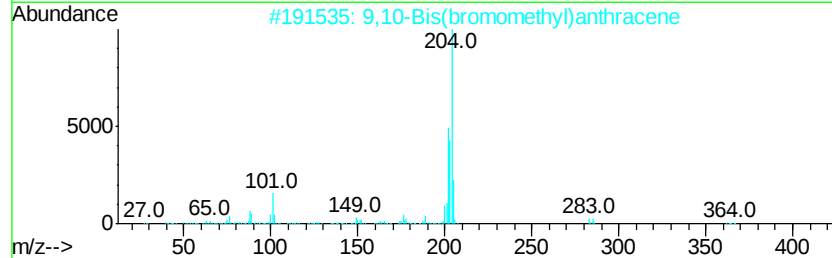
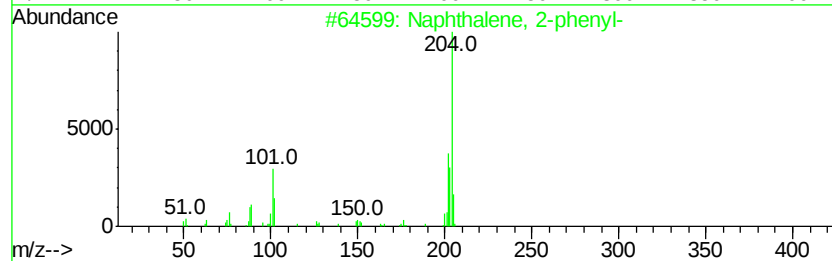
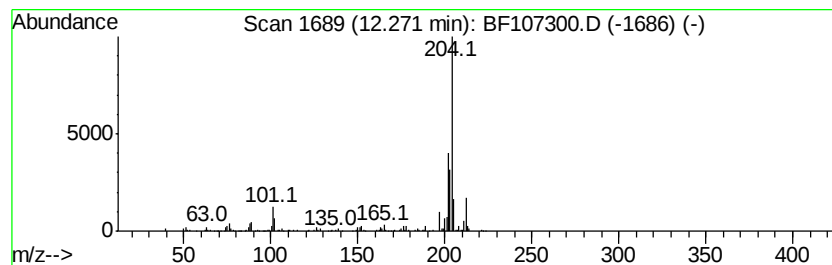
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.27	15.94 ng	336840	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	78
2		9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	53
3		5,16[1',2'1:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	53
4		Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	49
5		Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	46



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampled :
EP-2-4

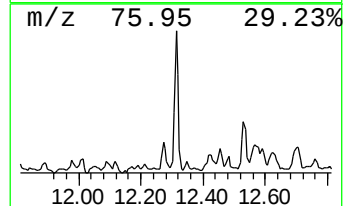
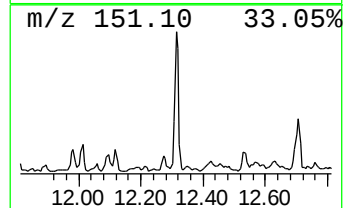
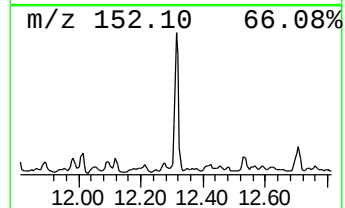
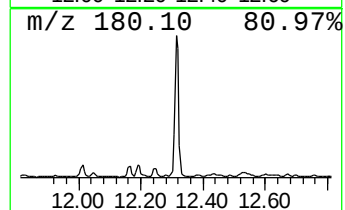
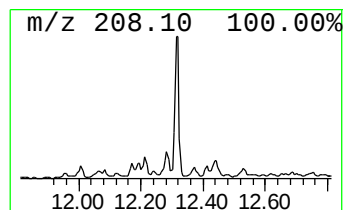
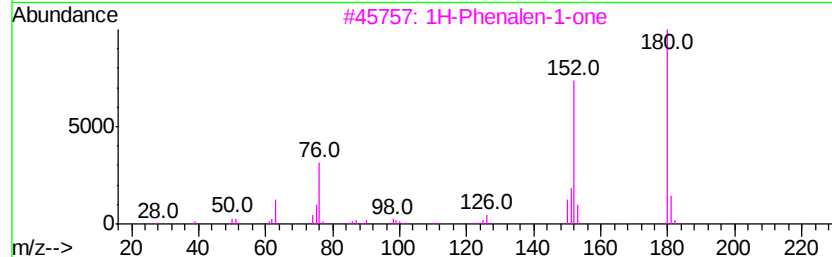
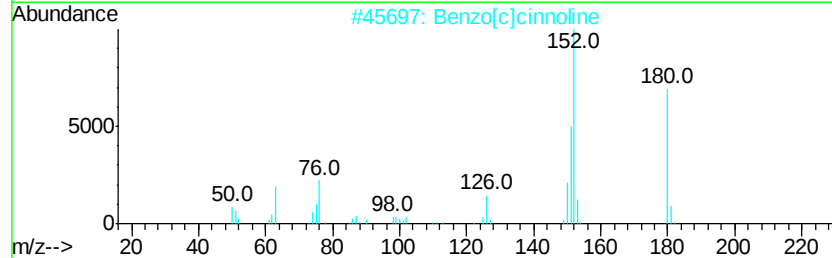
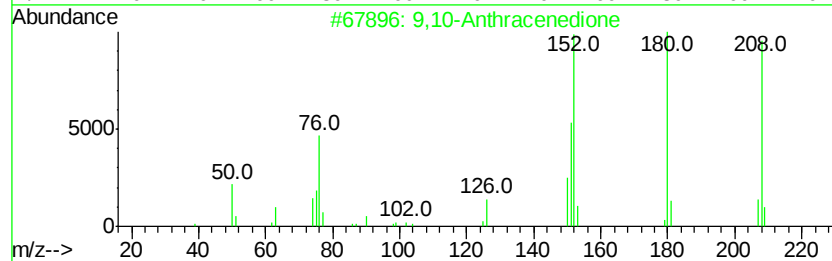
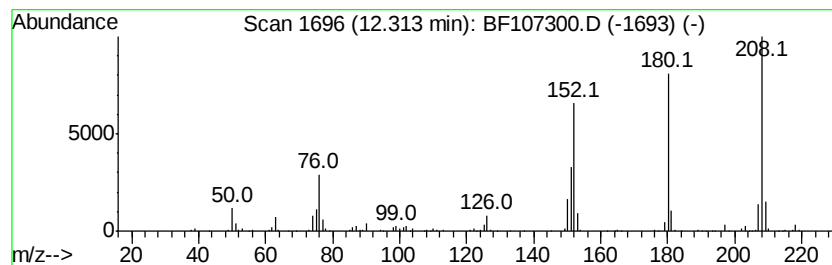
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 12 9,10-Anthracenedione Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.31	17.25 ng	364579	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Anthracenedione	208	C14H8O2	000084-65-1	97
2		Benzo[c]cinnoline	180	C12H8N2	000230-17-1	89
3		1H-Phenalen-1-one	180	C13H8O	000548-39-0	60
4		9,10-Phenanthrenedione	208	C14H8O2	000084-11-7	49
5		Benzo[h]cinnoline	180	C12H8N2	000230-31-9	49



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

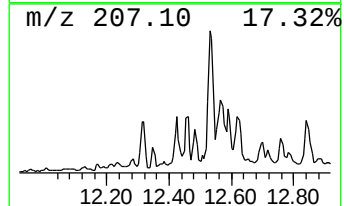
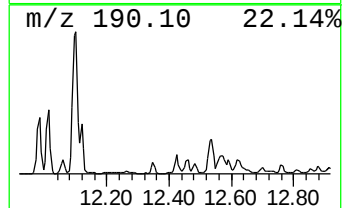
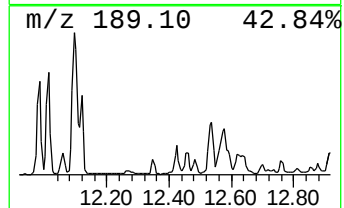
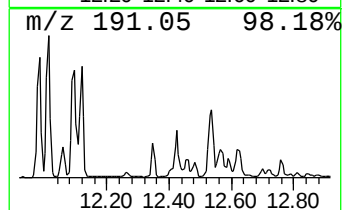
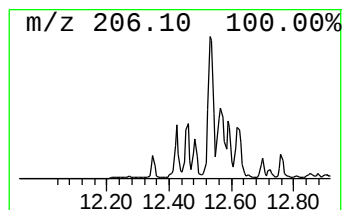
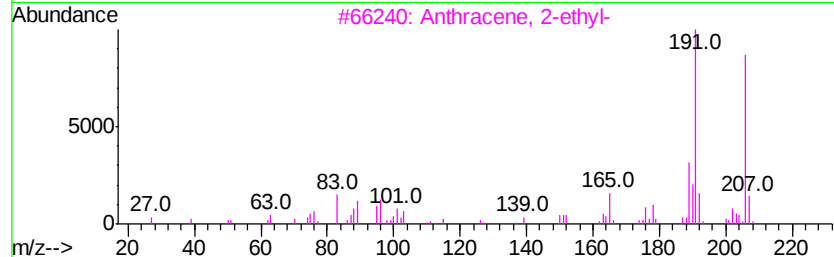
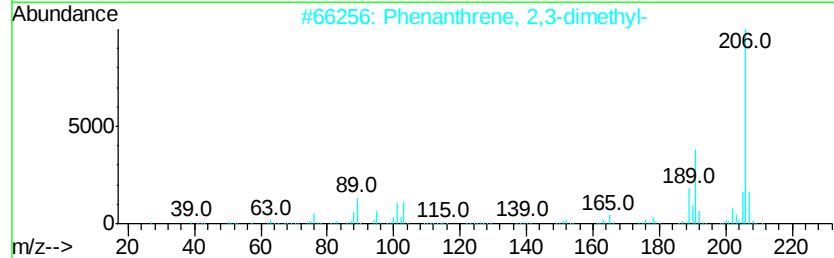
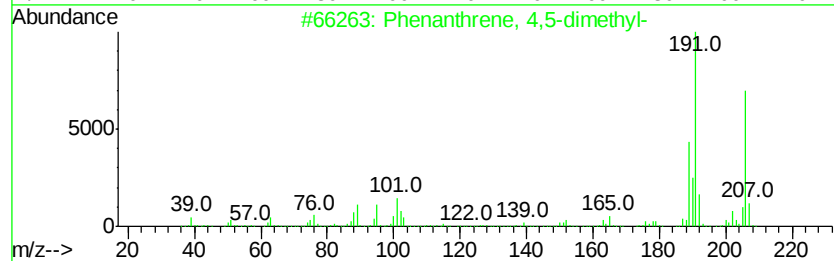
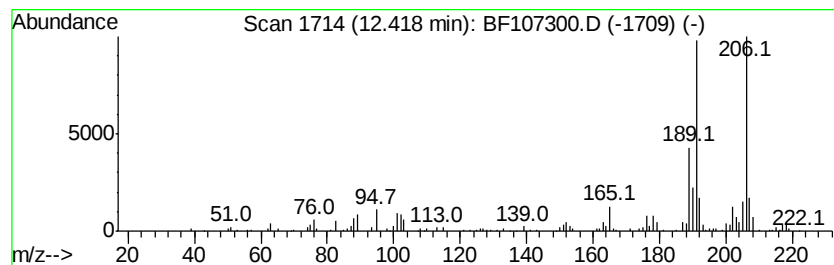
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BNA_F
ClientSampleId :
EP-2-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.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, 4,5-dimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD		R.T.
12.42	15.66 ng	330993	Phenanthrene-d10		11.48
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	97
2	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	91
3	Anthracene, 2-ethyl-	206	C16H14	052251-71-5	90
4	9,10-Dimethylantracene	206	C16H14	000781-43-1	90
5	Phenanthrene, 9-ethyl-	206	C16H14	003674-75-7	89



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
EP-2-4

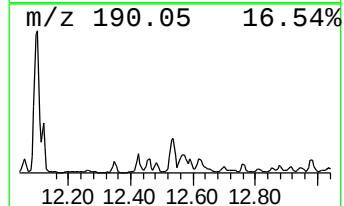
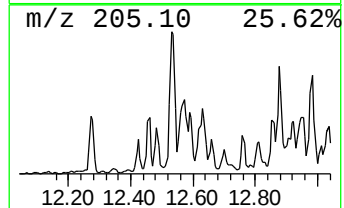
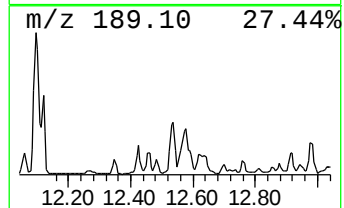
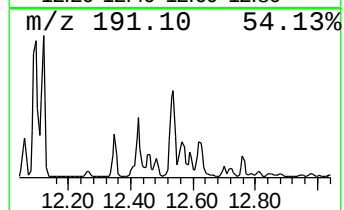
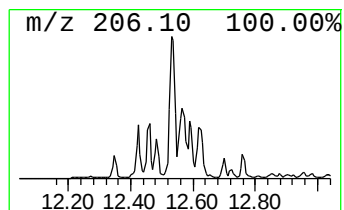
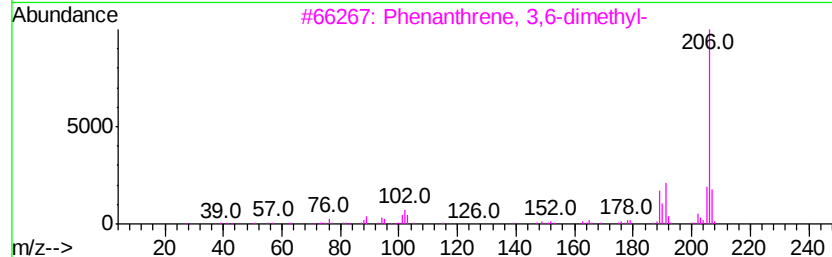
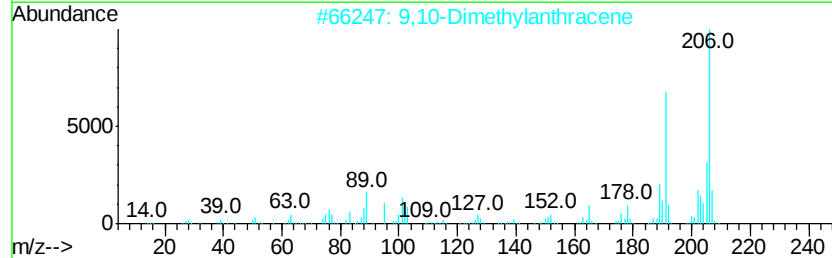
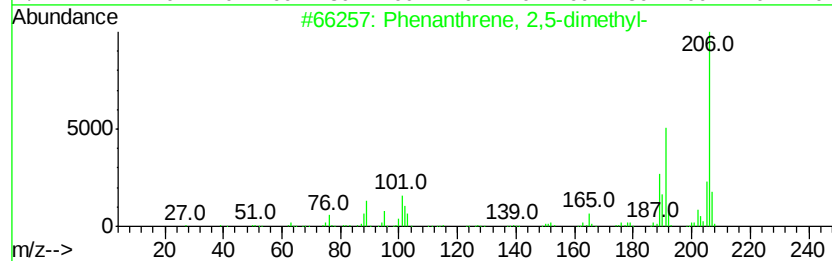
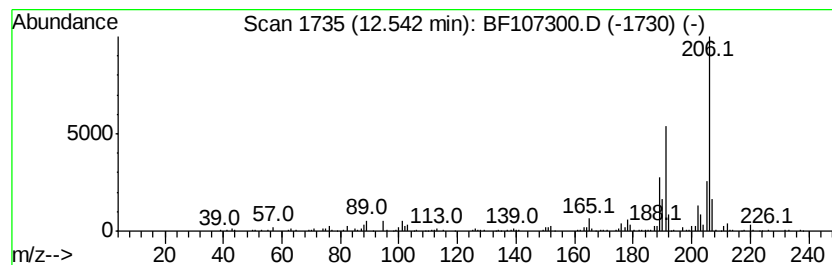
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 14 Phenanthrene, 2,5-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.54	31.44 ng	664390	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	96
2		9,10-Dimethylantracene	206	C16H14	000781-43-1	93
3		Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	91
4		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	87
5		Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	86



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
EP-2-4

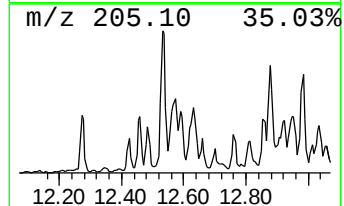
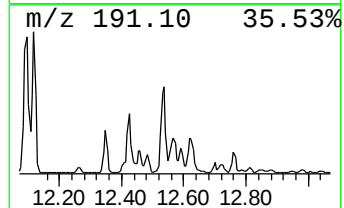
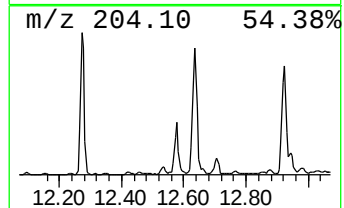
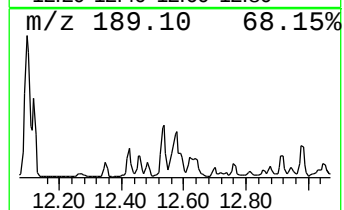
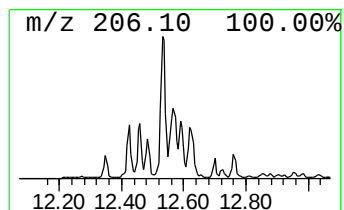
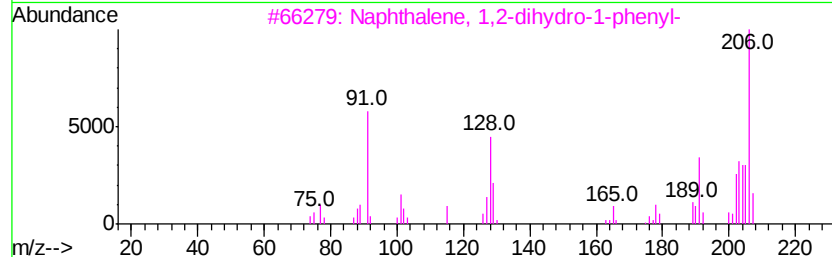
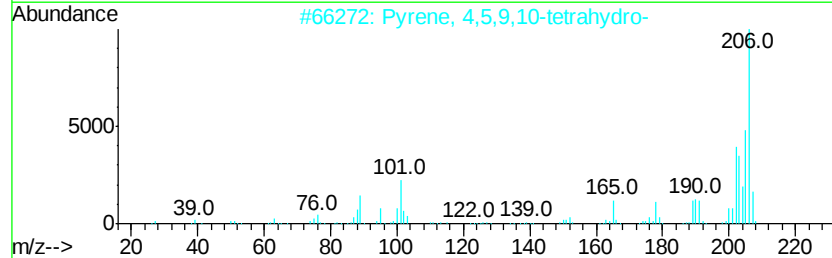
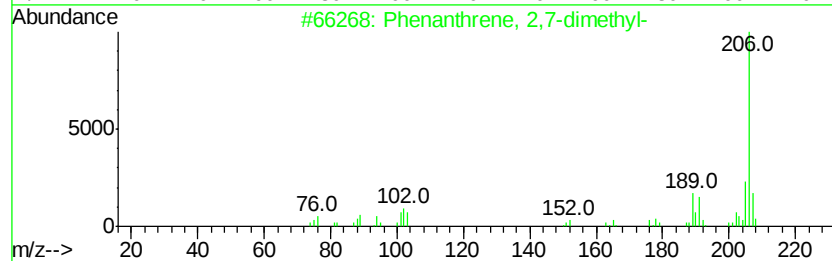
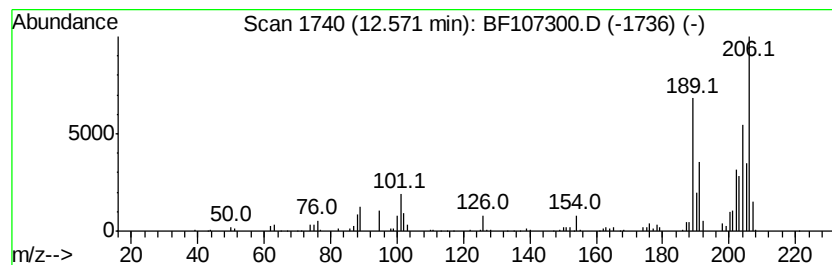
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 15 Phenanthrene, 2,7-dimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.57	16.27 ng	343877	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	64
2		Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	64
3		Naphthalene, 1,2-dihydro-1-phenyl-	206	C16H14	016606-46-5	55
4		Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	53
5		Benzene, 1,1'-(1,3-butadienylyde...	206	C16H14	004165-81-5	49



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
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ClientSampleId :
EP-2-4

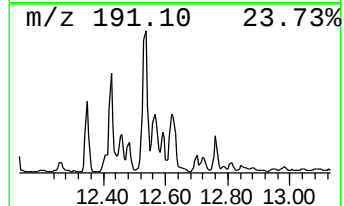
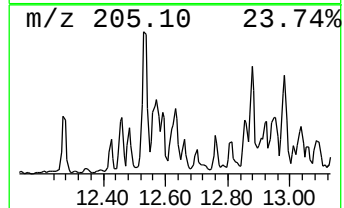
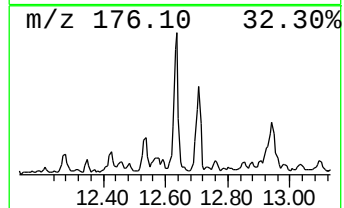
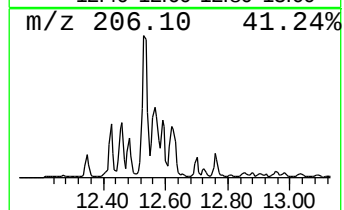
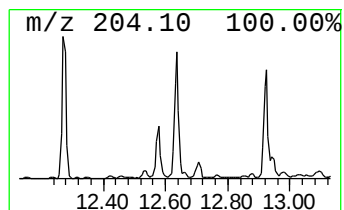
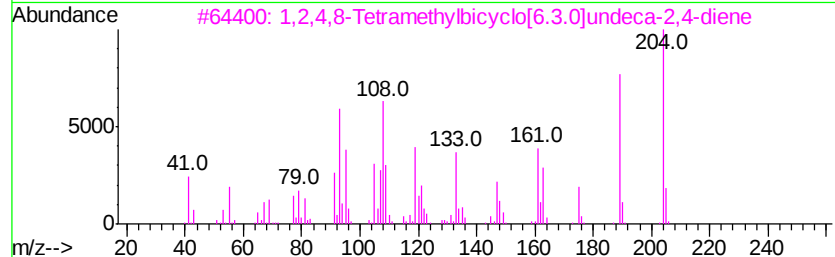
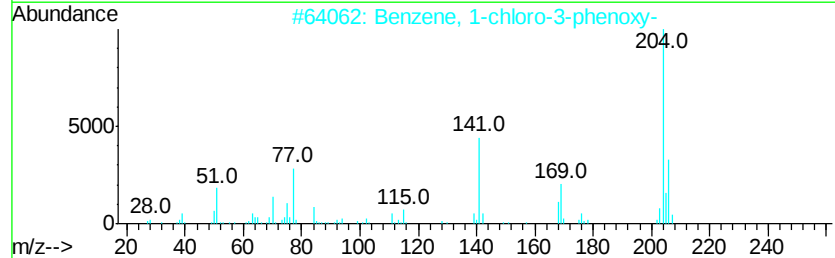
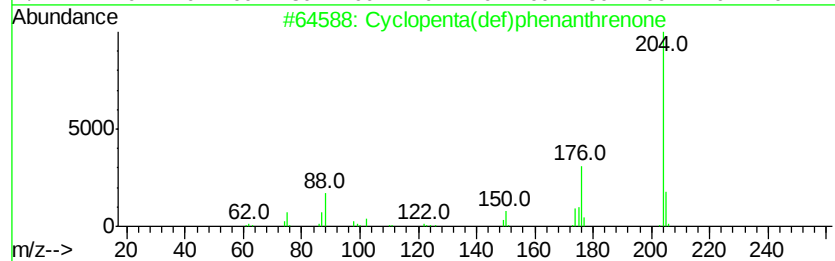
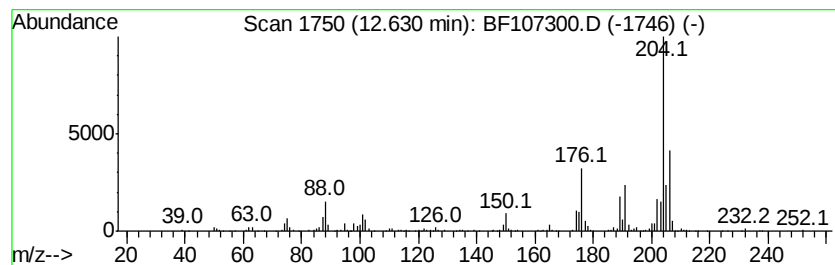
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 16 Cyclopenta(def)phenanthrenone Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.63	20.61 ng	435613	Phenanthrene-d10	11.48

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	95
2		Benzene, 1-chloro-3-phenoxy-	204	C12H9ClO	006452-49-9	50
3		1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene	204	C15H24	137235-51-9	50
4		[1,1'-Biphenyl]-4-ol, 4'-chloro-	204	C12H9ClO	028034-99-3	49
5		2-Chloro-4-phenylphenol	204	C12H9ClO	000092-04-6	43



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
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Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
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ClientSampleId :
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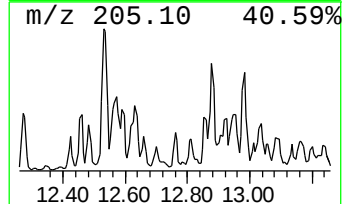
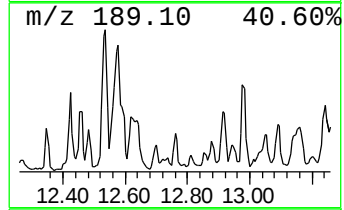
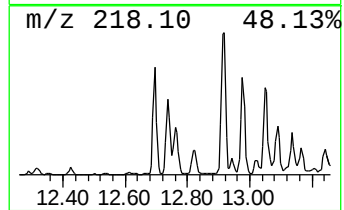
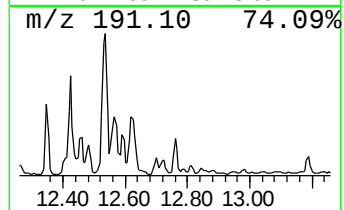
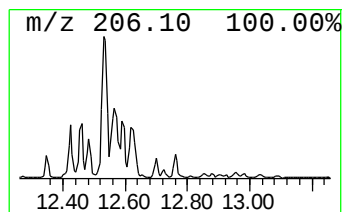
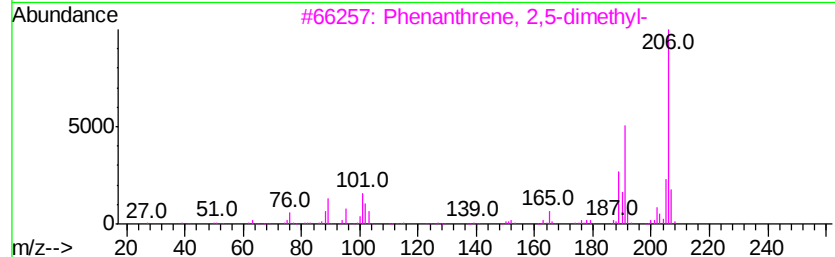
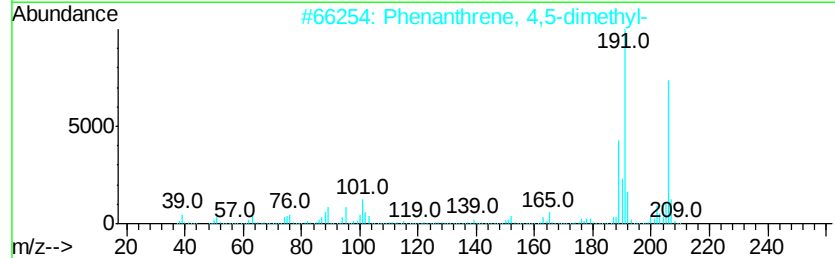
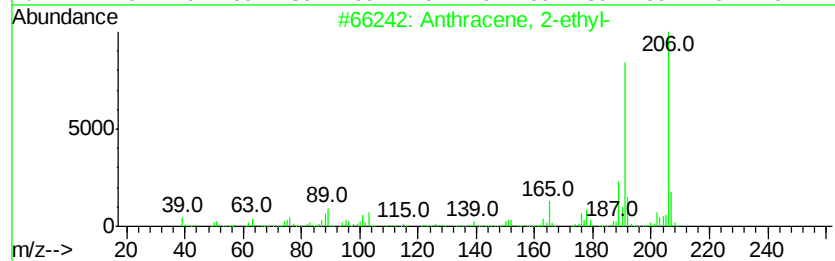
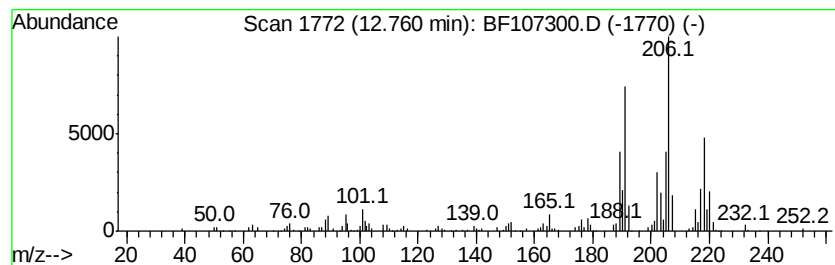
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 17 Anthracene, 2-ethyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.76	7.67 ng	162031	Phenanthrene-d10	11.48

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Anthracene, 2-ethyl-	206	C16H14	052251-71-5	87
2			Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	78
3			Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	78
4			[14]Annulene, 1,6:8,13-bis(metha...	206	C16H14	085385-68-8	60
5			9,10-Dimethylantracene	206	C16H14	000781-43-1	55



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
EP-2-4

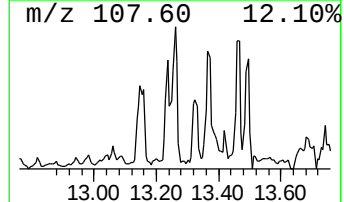
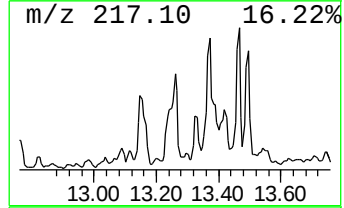
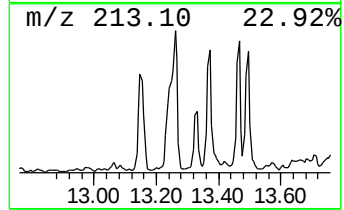
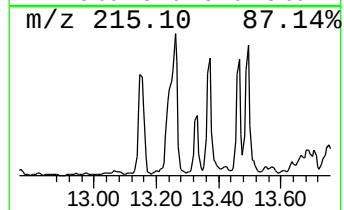
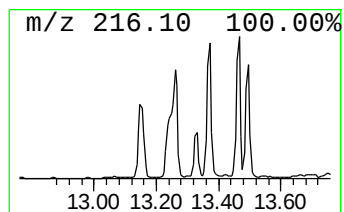
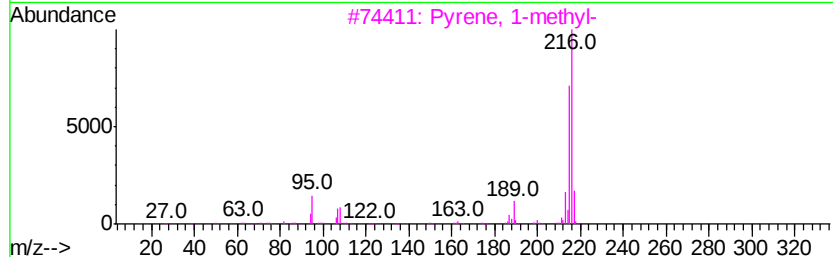
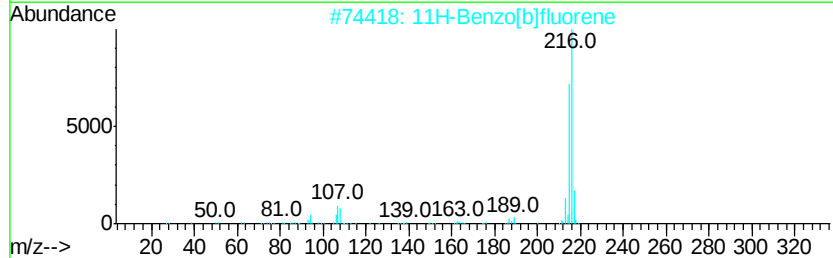
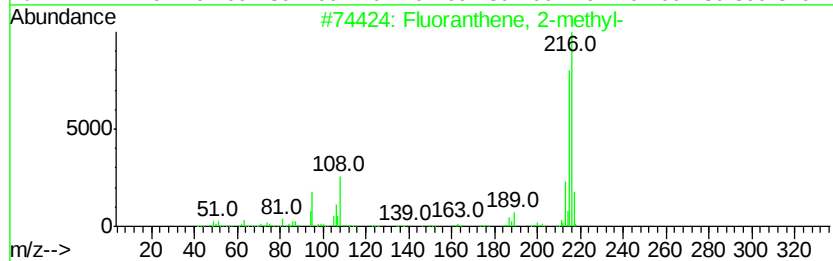
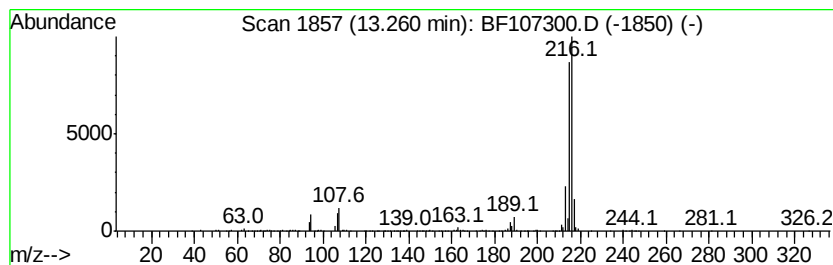
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 18 Fluoranthene, 2-methyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.26	8.71 ng	875748	Chrysene-d12	14.15

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	95
2			11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90
3			Pvrene, 1-methyl-	216	C17H12	002381-21-7	90
4			11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87
5			Pyrene, 2-methyl-	216	C17H12	003442-78-2	58



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF071118\
Data File : BF107300.D
Acq On : 11 Jul 2018 15:18
Operator : JU/SJ
Sample : J3933-02 5X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
EP-2-4

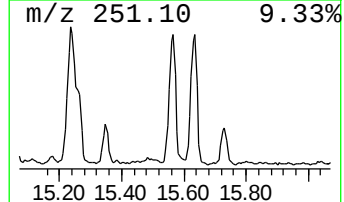
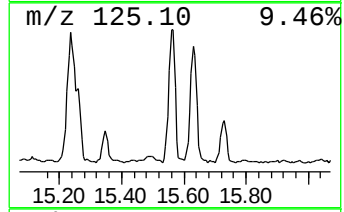
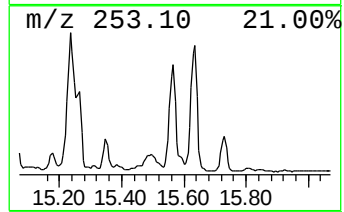
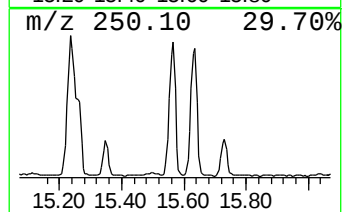
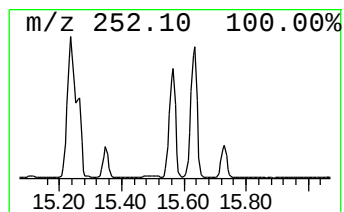
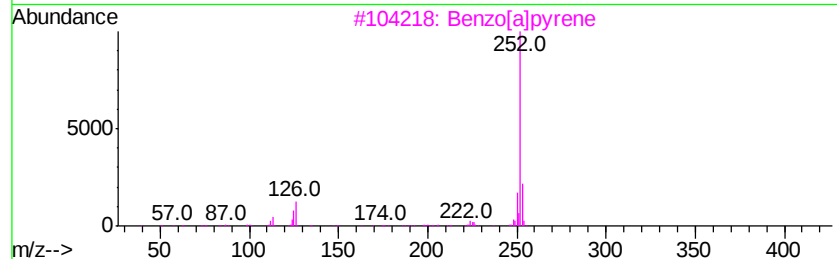
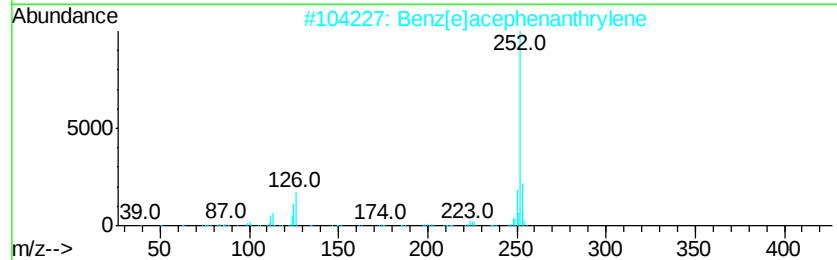
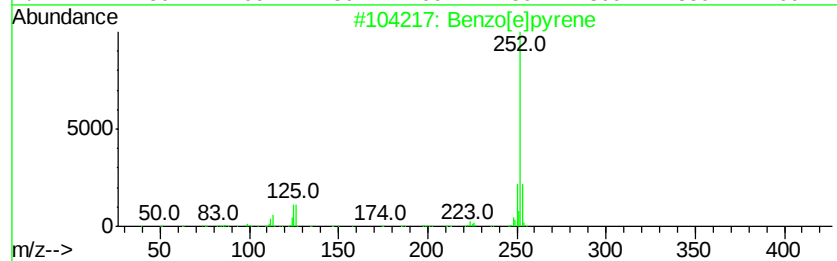
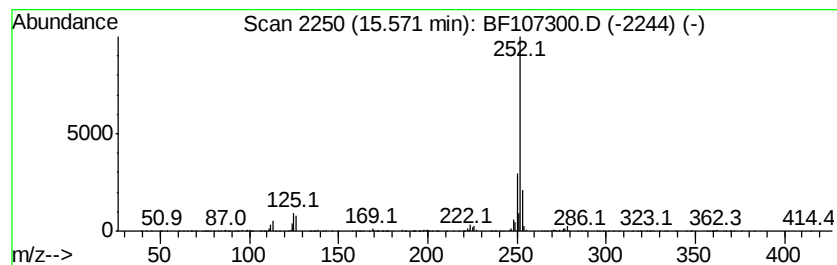
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF061918.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 20 Benzo[e]pyrene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.57	43.54 ng	788418	Perylene-d12	15.69

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]bpvrene	252	C20H12	000192-97-2	97
2		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	95
3		Benzo[a]bpvrene	252	C20H12	000050-32-8	93
4		Perylene	252	C20H12	000198-55-0	93
5		Benzo[k]fluoranthene	252	C20H12	000207-08-9	90



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF071118\
 Data File : BF107300.D
 Acq On : 11 Jul 2018 15:18
 Operator : JU/SJ
 Sample : J3933-02 5X
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 EP-2-4

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF061918.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown6.71	6.71	14.6	ng	245352	1	6.93	335632	20.0
Dibenzothiophene	11.37	6.8	ng	144831	4	11.48	422654	20.0
1-Methyldibenzoth...	11.81	10.4	ng	219847	4	11.48	422654	20.0
4-Methylnaphtho[1...	11.89	7.1	ng	150703	4	11.48	422654	20.0
1H-Cyclopropa[l]p...	11.98	30.1	ng	635704	4	11.48	422654	20.0
Phenanthrene, 2-m...	12.01	35.2	ng	743181	4	11.48	422654	20.0
Phenanthrene, 1-m...	12.06	10.1	ng	212728	4	11.48	422654	20.0
Anthracene, 2-met...	12.10	41.7	ng	881876	4	11.48	422654	20.0
Phenanthrene, 4-m...	12.12	24.5	ng	517393	4	11.48	422654	20.0
Naphthalene, 2-ph...	12.27	15.9	ng	336840	4	11.48	422654	20.0
9,10-Anthracenedione	12.31	17.3	ng	364579	4	11.48	422654	20.0
Phenanthrene, 4,5...	12.42	15.7	ng	330993	4	11.48	422654	20.0
Phenanthrene, 2,5...	12.54	31.4	ng	664390	4	11.48	422654	20.0
Phenanthrene, 2,7...	12.57	16.3	ng	343877	4	11.48	422654	20.0
Cyclopenta(def)ph...	12.63	20.6	ng	435613	4	11.48	422654	20.0
Anthracene, 2-ethyl-	12.76	7.7	ng	162031	4	11.48	422654	20.0
Fluoranthene, 2-m...	13.26	8.7	ng	875748	5	14.15	2011970	20.0
Benzo[e]pyrene	15.57	43.5	ng	788418	6	15.69	362122	20.0