

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF053019\
 Data File : BF114676.D
 Acq On : 30 May 2019 22:34
 Operator : HP/JU
 Sample : K3068-10
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 B-6E(7-8)

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-BF052919.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	5.304	536	547	550	rBV	6216100	6829117	29.65%	1.943%
2	6.334	714	722	726	rBV	6380608	7147108	31.03%	2.034%
3	6.463	739	744	747	rBV	7158725	7168973	31.12%	2.040%
4	6.698	780	784	787	rBV	2534800	2284856	9.92%	0.650%
5	6.851	806	810	813	rBV	6437555	5704409	24.76%	1.623%
6	7.257	873	879	882	rBV	4414206	4586106	19.91%	1.305%
7	7.975	997	1001	1003	rBV	3627164	3101902	13.47%	0.883%
8	7.998	1003	1005	1008	rVB	1710520	1318515	5.72%	0.375%
9	8.687	1118	1122	1125	rVB	1283447	1049668	4.56%	0.299%
10	8.781	1135	1138	1142	rVB	1273722	1124547	4.88%	0.320%
11	9.051	1179	1184	1187	rBV	8425074	7472476	32.44%	2.126%
12	9.310	1222	1228	1232	rBV	593209	803448	3.49%	0.229%
13	9.381	1236	1240	1243	rVV	1214701	1218527	5.29%	0.347%
14	9.410	1243	1245	1248	rVV	775764	605169	2.63%	0.172%
15	9.439	1248	1250	1253	rVV	725994	610323	2.65%	0.174%
16	9.498	1257	1260	1266	rVV	682328	723769	3.14%	0.206%
17	9.581	1269	1274	1279	rVB	1396573	1129958	4.91%	0.322%
18	9.722	1292	1298	1301	rVV	3602494	3440013	14.93%	0.979%
19	9.751	1301	1303	1307	rVV	3588447	3264232	14.17%	0.929%
20	9.922	1327	1332	1336	rVB	2183565	1947602	8.46%	0.554%
21	10.128	1363	1367	1372	rBV2	410656	702869	3.05%	0.200%
22	10.263	1387	1390	1396	rBV	3358471	2968276	12.89%	0.845%
23	10.422	1415	1417	1423	rVB	1168360	1076810	4.67%	0.306%
24	10.504	1427	1431	1435	rVB	4914153	4650125	20.19%	1.323%
25	10.622	1447	1451	1456	rBV4	327502	594841	2.58%	0.169%
26	10.810	1476	1483	1486	rBV3	881261	1457096	6.33%	0.415%
27	10.839	1486	1488	1491	rVV2	700317	623046	2.70%	0.177%
28	10.963	1507	1509	1511	rVV2	724587	637897	2.77%	0.182%
29	11.004	1513	1516	1521	rVV	1461598	1481770	6.43%	0.422%
30	11.057	1521	1525	1528	rVV2	835011	1118970	4.86%	0.318%
31	11.092	1528	1531	1534	rVV	2018808	1755725	7.62%	0.500%
32	11.198	1545	1549	1550	rBV	2348970	2270658	9.86%	0.646%
33	11.233	1550	1555	1558	rVV	12068102	18087013	78.52%	5.147%
34	11.275	1558	1562	1565	rVV	5573326	5377215	23.34%	1.530%

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
 Data File : BF114676.D
 Acq On : 30 May 2019 22:34
 Operator : HP/JU
 Sample : K3068-10
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 B-6E(7-8)

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-BF052919.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	11.304	1565	1567	1571	rVB3	660394	675906	2.93%	0.192%
36	11.422	1581	1587	1590	rBV2	2756784	2967229	12.88%	0.844%
37	11.498	1597	1600	1602	rVV2	724261	743727	3.23%	0.212%
38	11.528	1602	1605	1608	rVB3	1037619	967137	4.20%	0.275%
39	11.698	1628	1634	1636	rBV	4175813	4140588	17.98%	1.178%
40	11.728	1636	1639	1644	rVV	5719814	6011500	26.10%	1.711%
41	11.775	1644	1647	1650	rVV	1913642	1752553	7.61%	0.499%
42	11.810	1650	1653	1655	rVV	6159652	6422384	27.88%	1.828%
43	11.833	1655	1657	1660	rVB	3592940	2703464	11.74%	0.769%
44	11.992	1681	1684	1686	rBV	2694715	2499217	10.85%	0.711%
45	12.016	1686	1688	1692	rVB	3479080	2791151	12.12%	0.794%
46	12.145	1704	1710	1712	rBV3	1570069	2064924	8.96%	0.588%
47	12.175	1712	1715	1717	rVV	817718	706760	3.07%	0.201%
48	12.198	1717	1719	1722	rVB	901460	716217	3.11%	0.204%
49	12.251	1723	1728	1730	rBV	2388879	2903419	12.60%	0.826%
50	12.286	1730	1734	1736	rVV	1435616	1865011	8.10%	0.531%
51	12.333	1739	1742	1749	rVB3	1865844	2536596	11.01%	0.722%
52	12.427	1749	1758	1760	rBV	11702287	20471582	88.87%	5.825%
53	12.469	1760	1765	1768	rVV4	877009	1468381	6.37%	0.418%
54	12.533	1772	1776	1777	rVV	2863824	2808291	12.19%	0.799%
55	12.551	1777	1779	1782	rVV2	2047882	2108920	9.16%	0.600%
56	12.651	1789	1796	1799	rVV3	11618409	23034377	100.00%	6.555%
57	12.680	1800	1801	1807	rVB2	1570496	1832187	7.95%	0.521%
58	12.751	1810	1813	1815	rVV	2087156	1868198	8.11%	0.532%
59	12.780	1815	1818	1825	rVB2	6925931	7881856	34.22%	2.243%
60	12.857	1825	1831	1833	rBV2	2593145	3984608	17.30%	1.134%
61	12.874	1833	1834	1837	rVB	927810	702255	3.05%	0.200%
62	12.939	1842	1845	1846	rVV	1782971	1854282	8.05%	0.528%
63	12.963	1846	1849	1852	rVB	4479669	4256459	18.48%	1.211%
64	13.027	1857	1860	1863	rBV	3144041	2793038	12.13%	0.795%
65	13.063	1863	1866	1869	rVV	3682133	3525735	15.31%	1.003%
66	13.086	1869	1870	1873	rVB2	822934	729387	3.17%	0.208%
67	13.157	1878	1882	1884	rBV	1920953	1656172	7.19%	0.471%
68	13.186	1884	1887	1890	rBV	2222799	1933944	8.40%	0.550%
69	13.257	1896	1899	1909	rVB5	740644	1443175	6.27%	0.411%
70	13.339	1909	1913	1914	rBV3	650586	816374	3.54%	0.232%
71	13.463	1928	1934	1939	rVV	2777646	3534877	15.35%	1.006%

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF053019\
 Data File : BF114676.D
 Acq On : 30 May 2019 22:34
 Operator : HP/JU
 Sample : K3068-10
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 B-6E(7-8)

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-BF052919.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	13.574	1949	1953	1955	rVV2	2847089	3478761	15.10%	0.990%
73	13.604	1955	1958	1960	rVV	3183467	3177811	13.80%	0.904%
74	13.627	1960	1962	1967	rVV2	2446470	3690829	16.02%	1.050%
75	13.674	1967	1970	1976	rVV	2549491	3300814	14.33%	0.939%
76	13.827	1989	1996	1999	rVV2	9315745	18034527	78.29%	5.132%
77	13.863	1999	2002	2006	rVV	9303553	12013726	52.16%	3.419%
78	13.933	2012	2014	2017	rVV	2842038	2596207	11.27%	0.739%
79	13.963	2017	2019	2021	rVV	926241	945793	4.11%	0.269%
80	14.010	2024	2027	2029	rVV2	1719122	1643624	7.14%	0.468%
81	14.039	2029	2032	2037	rVV2	1627090	2181572	9.47%	0.621%
82	14.145	2047	2050	2052	rVB4	637472	653425	2.84%	0.186%
83	14.174	2052	2055	2057	rBV	979339	987412	4.29%	0.281%
84	14.210	2057	2061	2064	rVV	2858415	3125416	13.57%	0.889%
85	14.245	2064	2067	2070	rVB	1872313	1727757	7.50%	0.492%
86	14.304	2071	2077	2079	rBV2	1385456	1947676	8.46%	0.554%
87	14.333	2079	2082	2084	rVV	1346889	1241694	5.39%	0.353%
88	14.351	2084	2085	2089	rVB3	1473326	1314984	5.71%	0.374%
89	14.504	2108	2111	2114	rBV2	835919	1085864	4.71%	0.309%
90	14.616	2127	2130	2135	rVB5	825833	945503	4.10%	0.269%
91	14.845	2162	2169	2171	rBV	6721039	13511074	58.66%	3.845%
92	14.927	2180	2183	2186	rVB	2254578	2294825	9.96%	0.653%
93	15.116	2209	2215	2219	rVB	4307551	6557355	28.47%	1.866%
94	15.174	2219	2225	2229	rVB	6299166	8864620	38.48%	2.522%
95	15.221	2229	2233	2235	rBV	1677138	2062887	8.96%	0.587%
96	15.251	2235	2238	2244	rVB2	2625467	3540380	15.37%	1.007%
97	16.563	2454	2461	2466	rVB2	3321260	6623515	28.75%	1.885%
98	16.757	2491	2494	2498	rBV2	493902	741899	3.22%	0.211%
99	16.957	2521	2528	2538	rVB	2491120	5532347	24.02%	1.574%
100	17.157	2557	2562	2576	rVB2	863215	2101046	9.12%	0.598%

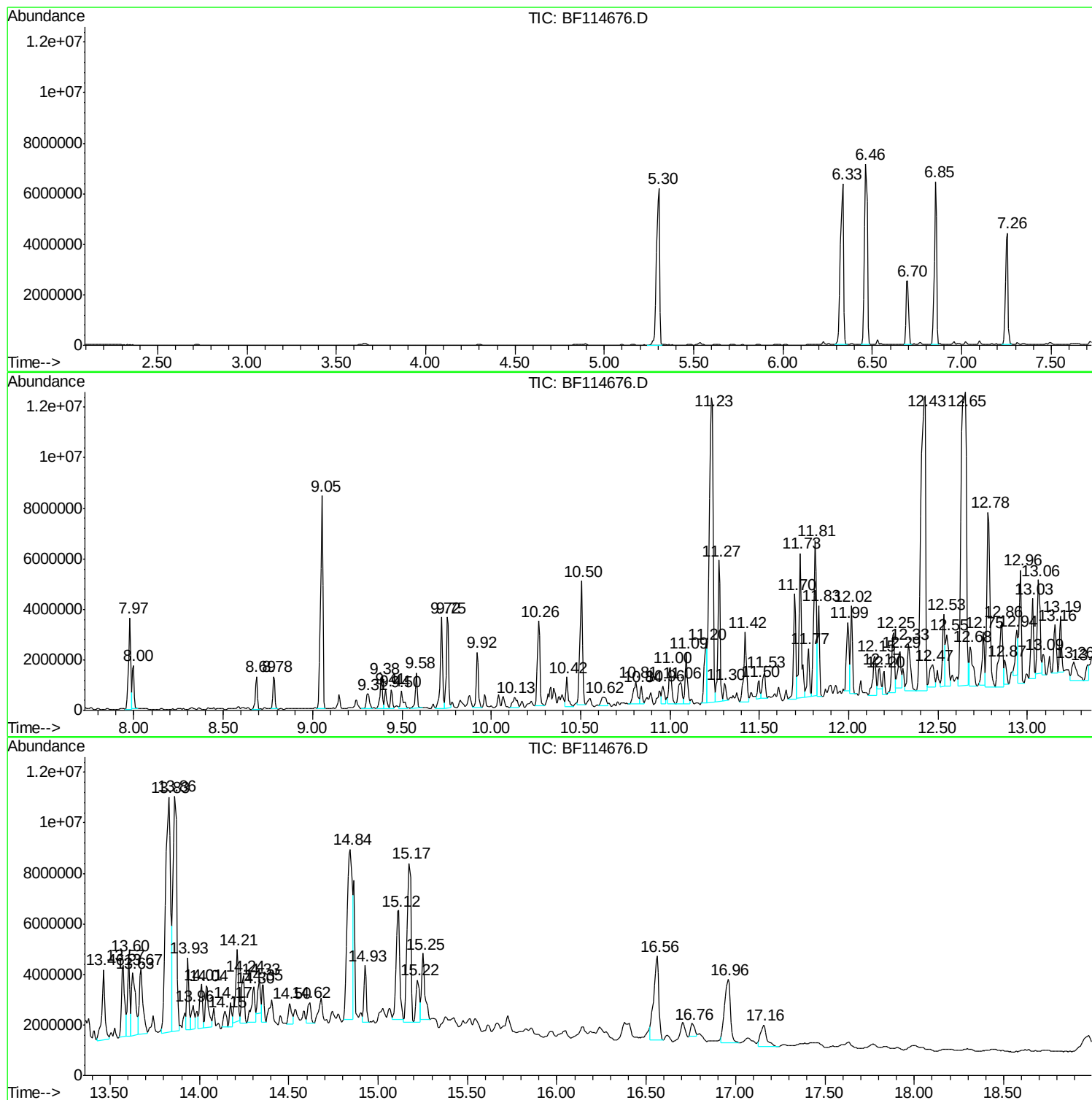
Sum of corrected areas: 351428253

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.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\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

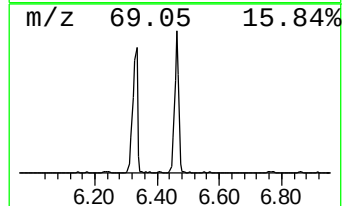
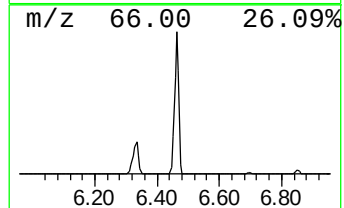
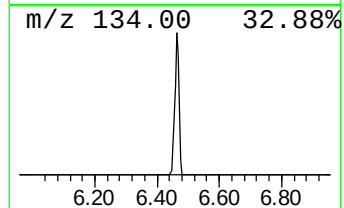
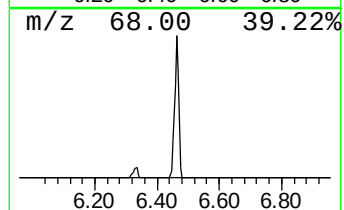
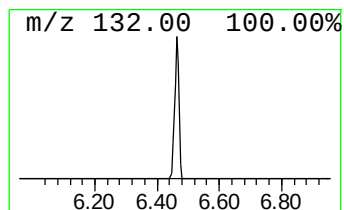
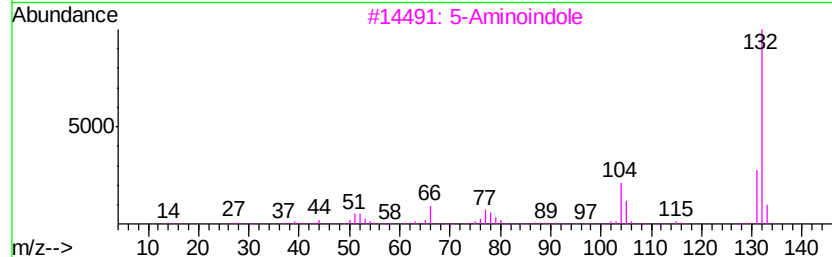
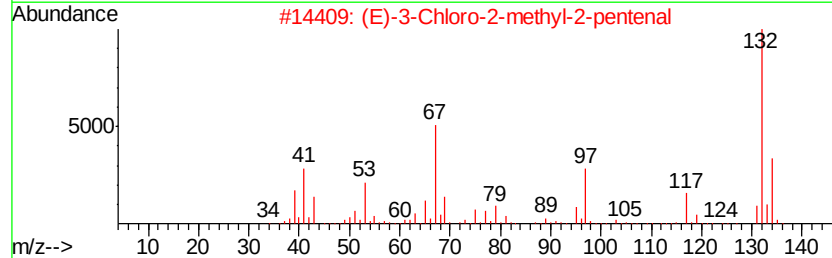
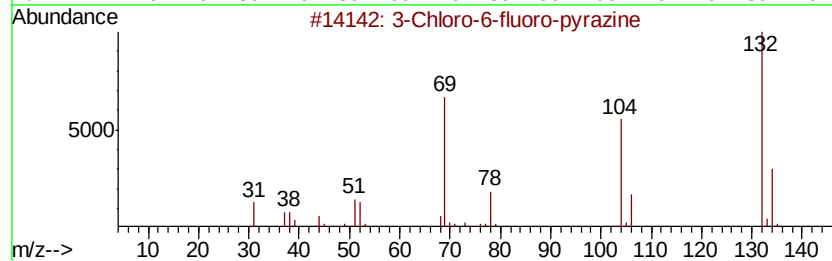
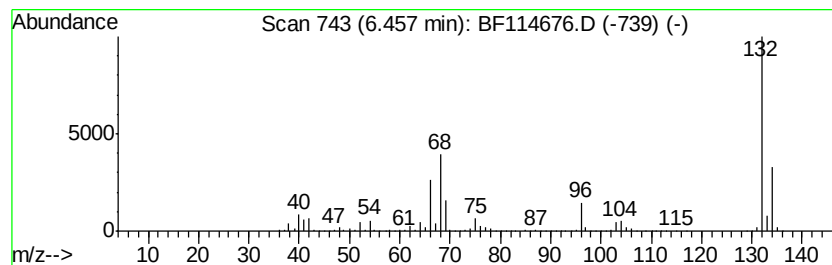
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 1 unknown6.46 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.46	62.75 ng	7168970	1,4-Dichlorobenzene-d4	6.70

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	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		5-Aminoindole	132	C8H8N2	005192-03-0	12
4		Xenon	132	Xe	007440-63-3	9
5		Bicyclo[4.2.0]octa-1,3,5-triene,...	132	C10H12	028749-81-7	9



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

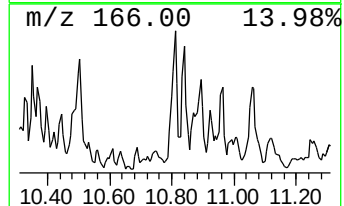
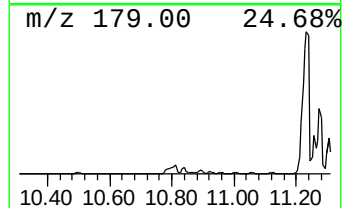
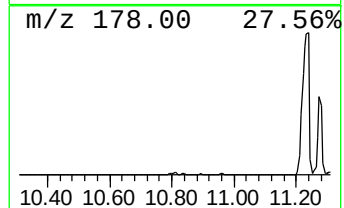
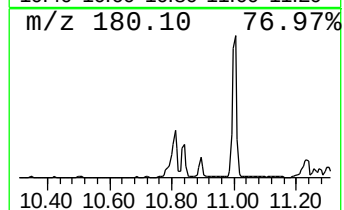
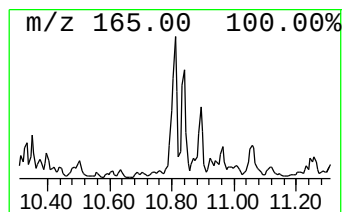
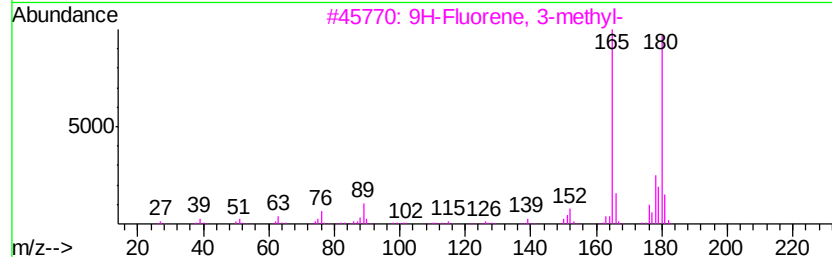
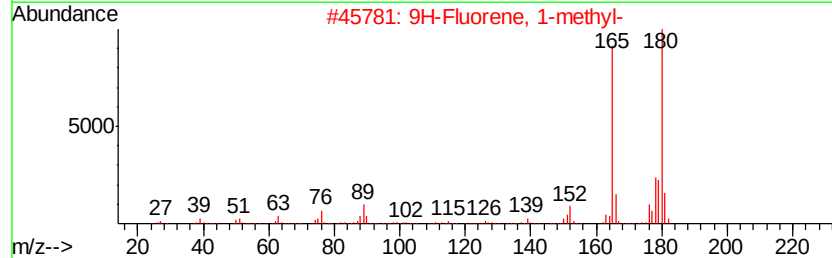
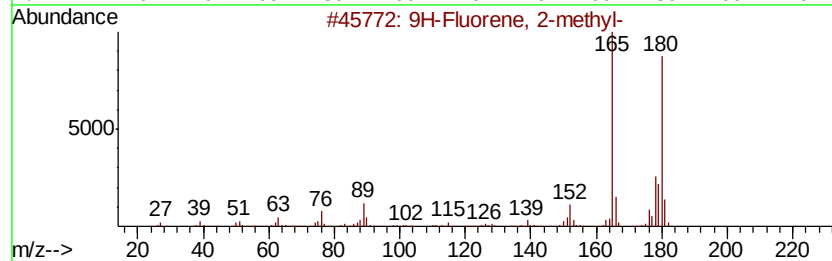
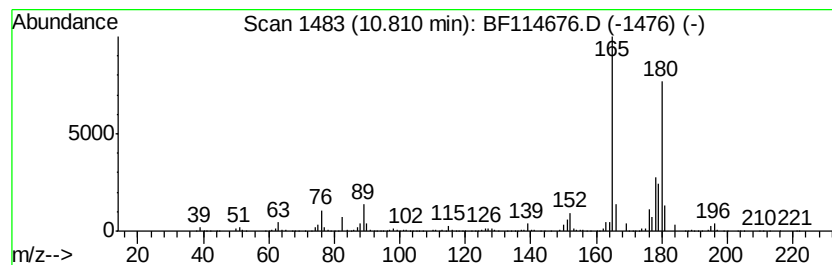
Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.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, 2-methyl- Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD		R.T.	
10.81	12.83 ng	1457100	Phenanthrene-d10		11.20	
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluorene, 2-methyl-		180	C14H12	001430-97-3	97
2	9H-Fluorene, 1-methyl-		180	C14H12	001730-37-6	96
3	9H-Fluorene, 3-methyl-		180	C14H12	002523-39-9	95
4	9H-Fluorene, 9-methyl-		180	C14H12	002523-37-7	93
5	4a,9a-Methano-9H-fluorene		180	C14H12	019540-84-2	70



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

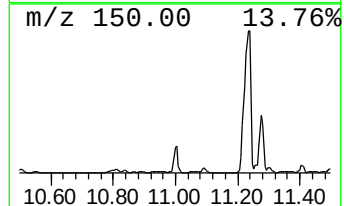
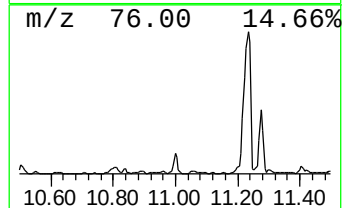
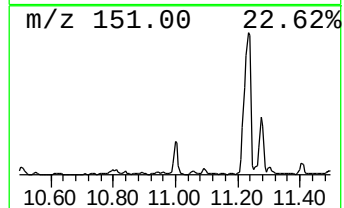
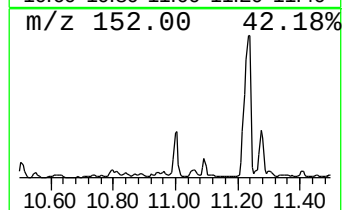
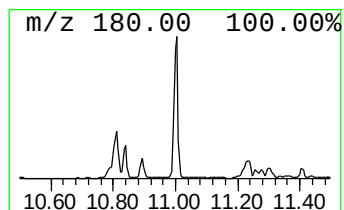
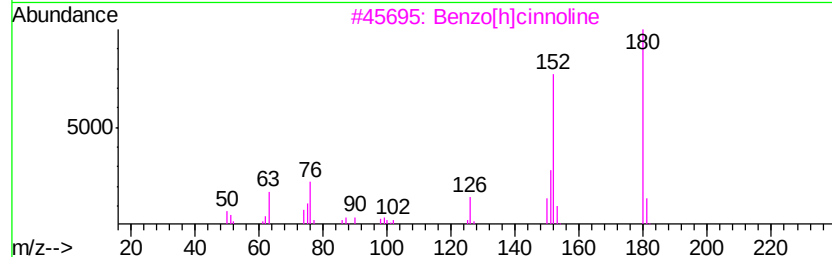
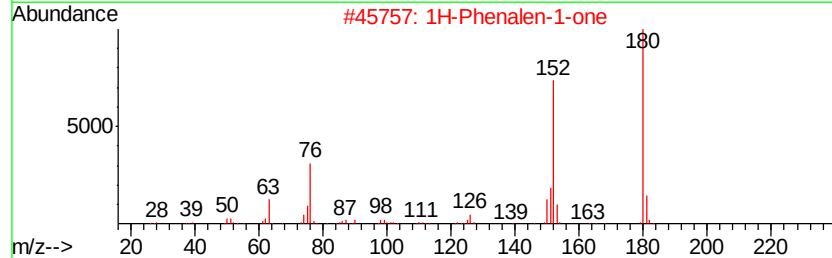
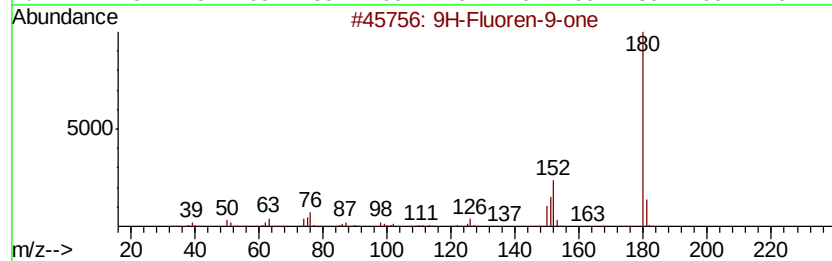
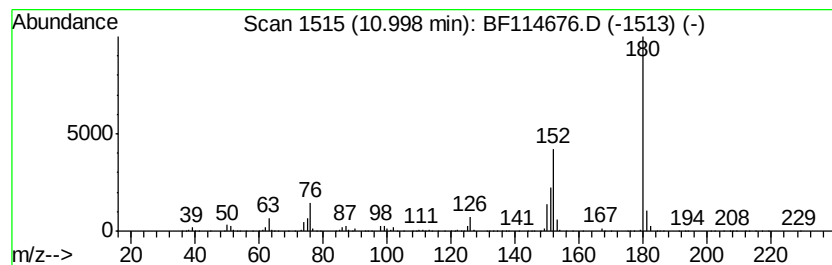
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.00	13.05 ng	1481770	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9H-Fluoren-9-one	180	C13H8O	000486-25-9	95
2		1H-Phenalen-1-one	180	C13H8O	000548-39-0	52
3		Benzo[h]cinnoline	180	C12H8N2	000230-31-9	50
4		2,3-Diazaphenanthrene	180	C12H8N2	000229-72-1	42
5		1,1'-Biphenyl, 4-ethenyl-	180	C14H12	002350-89-2	40



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

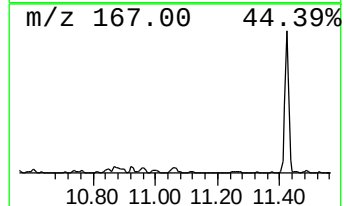
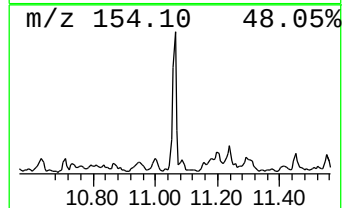
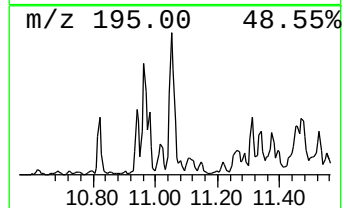
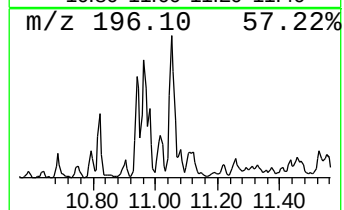
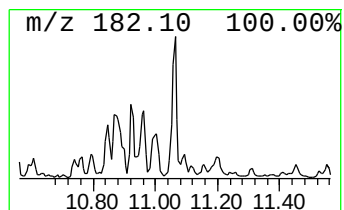
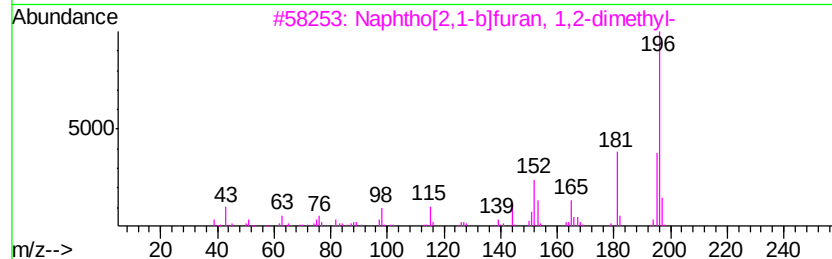
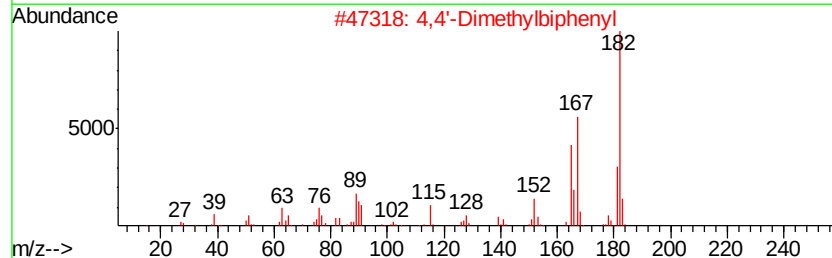
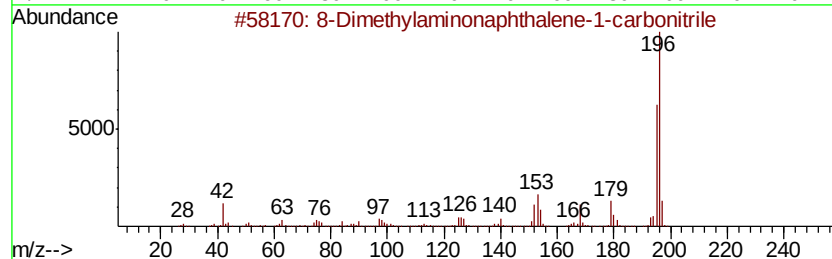
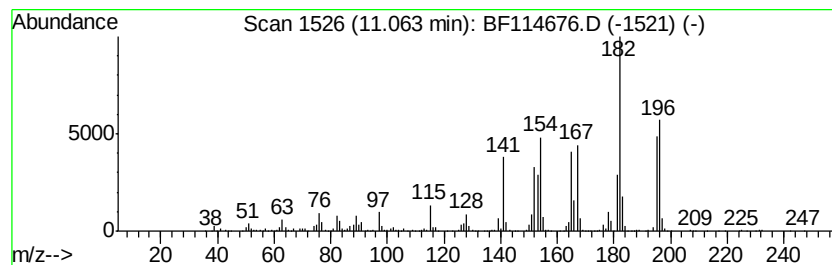
Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 5 unknown11.06 Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.06	9.86 ng	1118970	Phenanthrene-d10	11.20	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	8-Dimethylaminonaphthalene-1-car...	196	C13H12N2	128644-69-9	43
2	4,4'-Dimethylbiphenyl	182	C14H14	000613-33-2	42
3	Naphtho[2,1-b]furan, 1,2-dimethyl-	196	C14H12O	129812-23-3	38
4	Phenol, 4-(2-phenylethenyl)-, (E)-	196	C14H12O	006554-98-9	38
5	Anthracene, 1,2,3,4-tetrahydro-	182	C14H14	002141-42-6	38



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

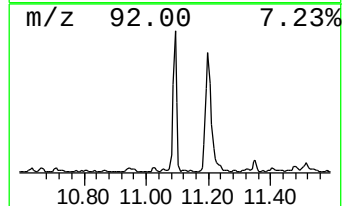
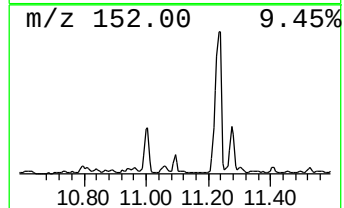
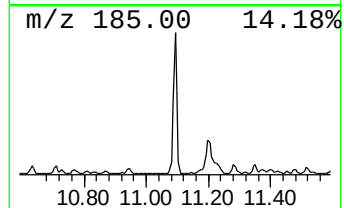
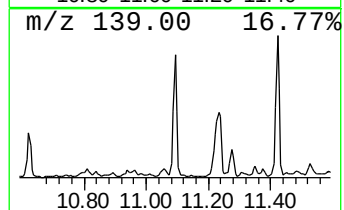
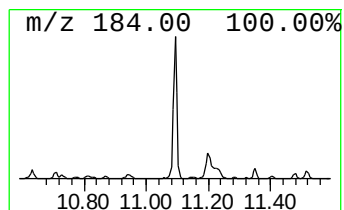
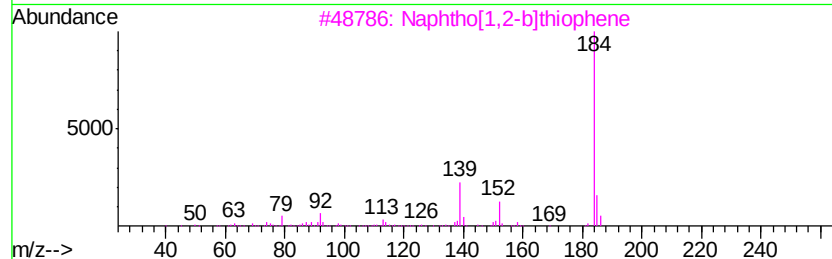
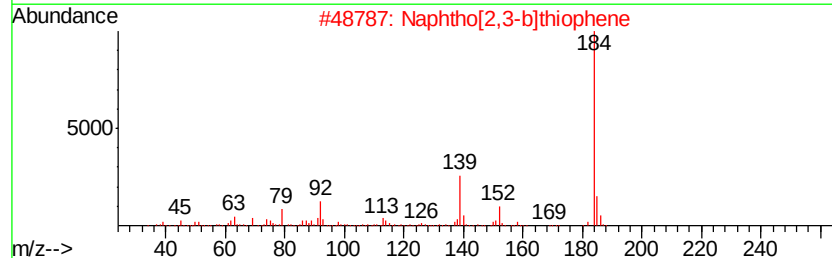
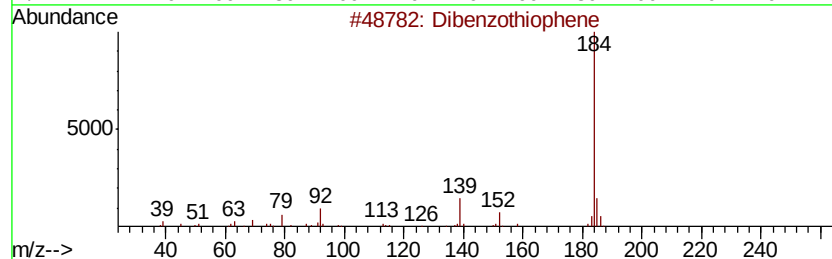
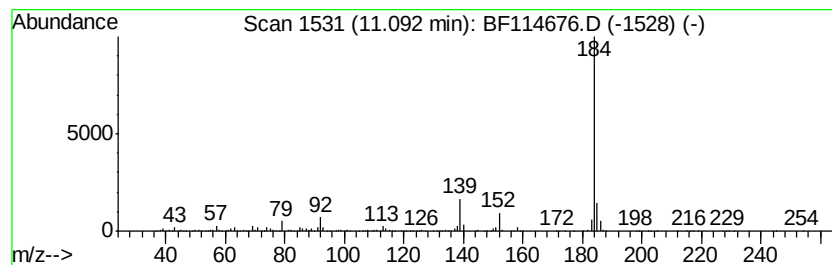
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 6 Dibenzothiophene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.09	15.46 ng	1755730	Phenanthrene-d10	11.20

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	95
3		Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	95
4		Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	94
5		Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

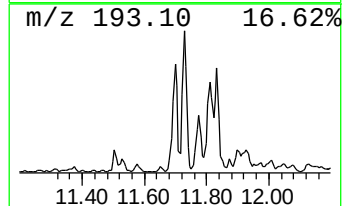
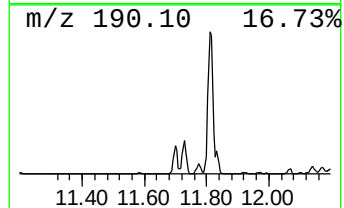
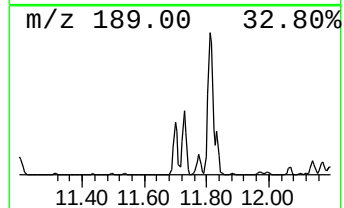
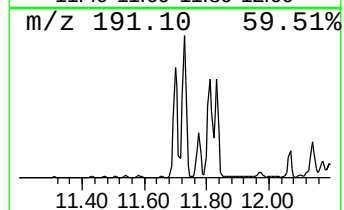
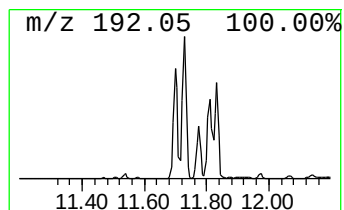
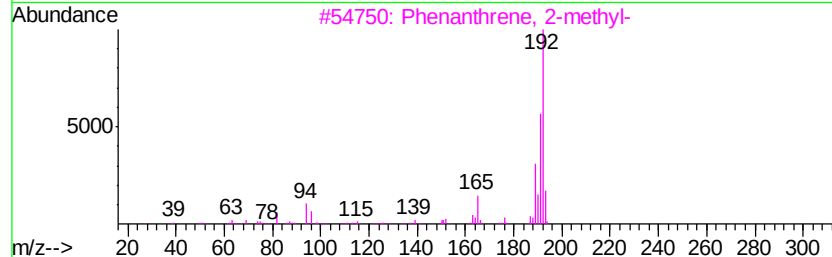
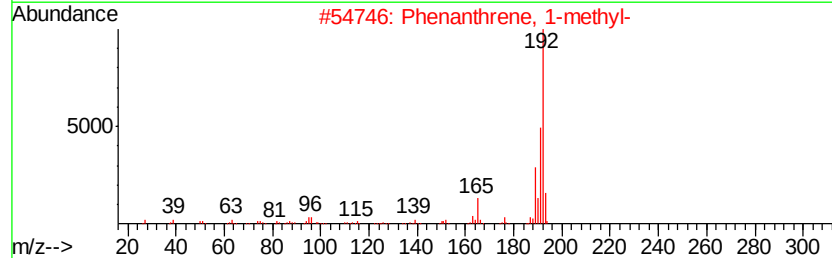
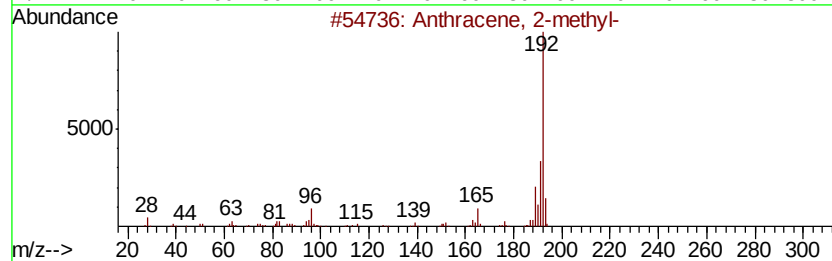
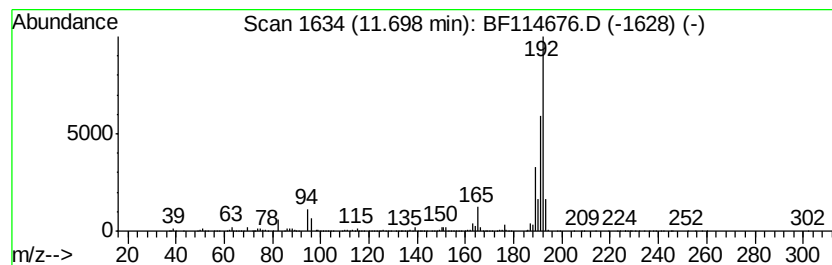
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.70	36.47 ng	4140590	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
4		Anthracene, 9-methyl-	192	C15H12	000779-02-2	91
5		Anthracene, 1-methyl-	192	C15H12	000610-48-0	91



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

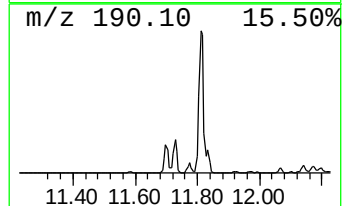
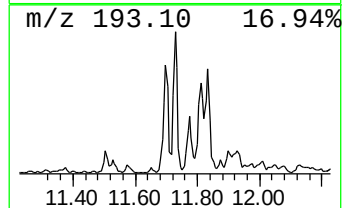
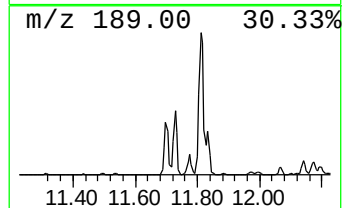
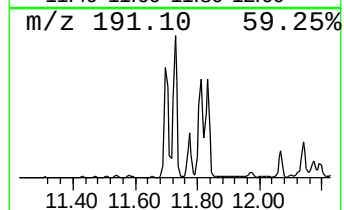
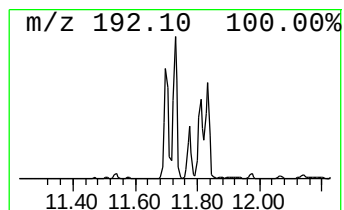
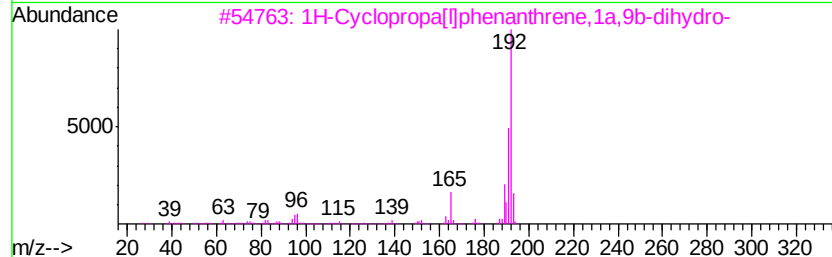
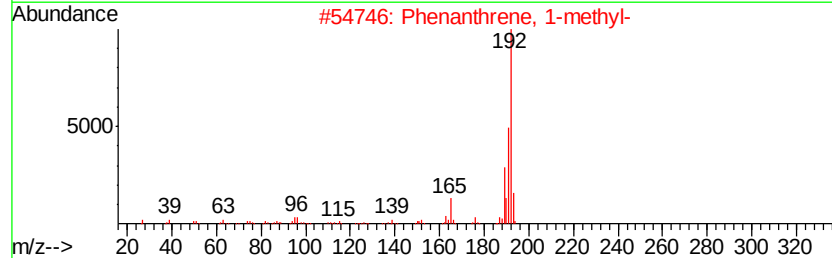
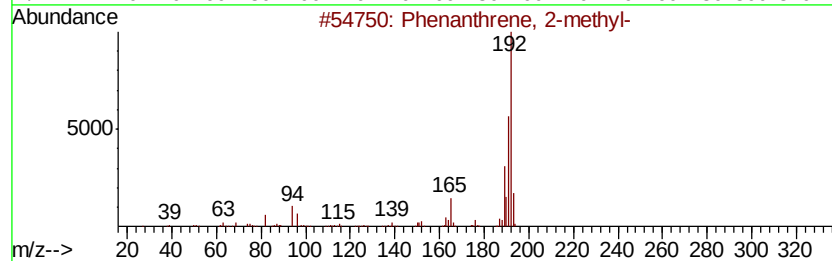
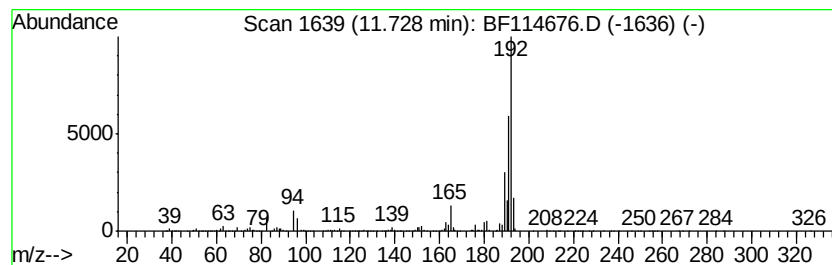
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 8 Phenanthrene, 2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.73	52.95 ng	6011500	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
5		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	94



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

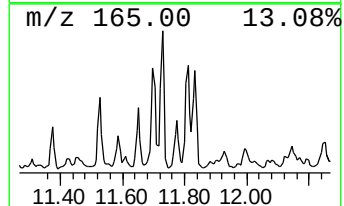
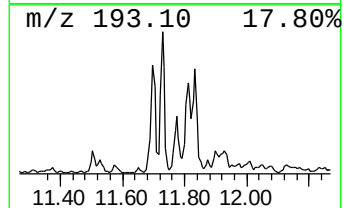
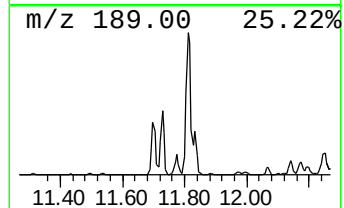
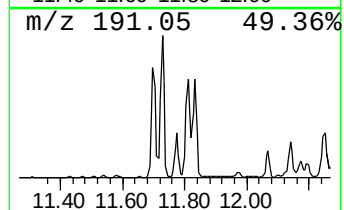
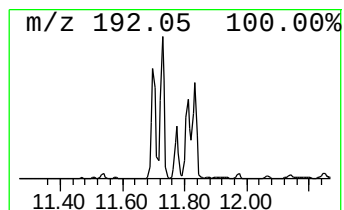
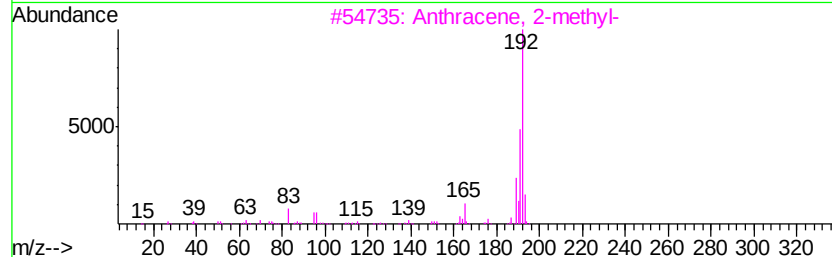
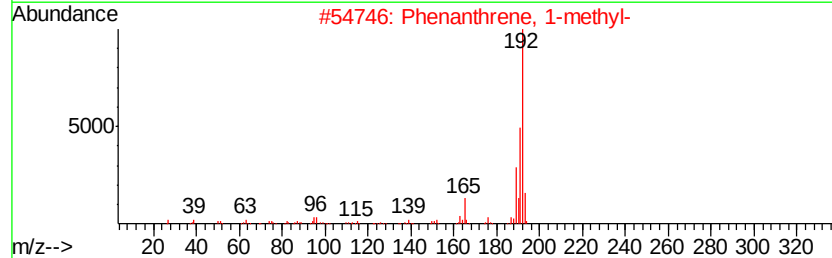
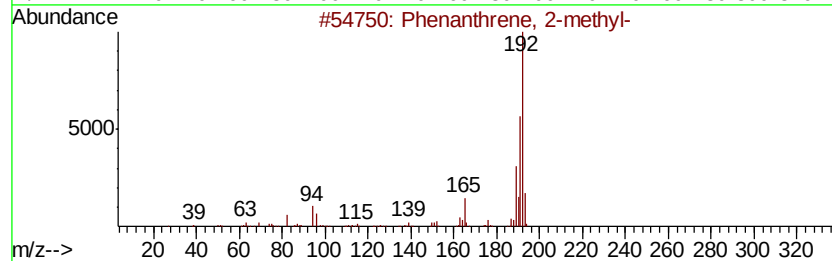
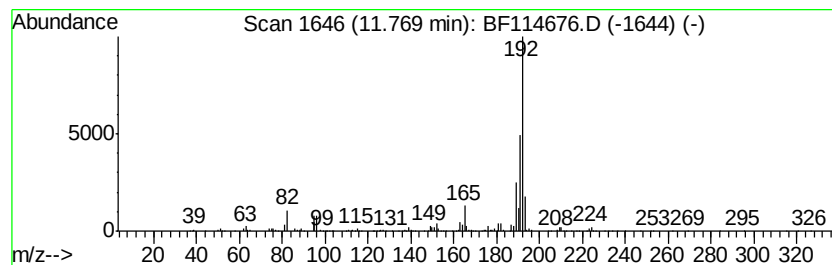
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 9 Phenanthrene, 1-methyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.77	15.44 ng	1752550	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
4		1H-Cyclopropa[1,1]phenanthrene, 1a,...	192	C15H12	000949-41-7	96
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	96



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

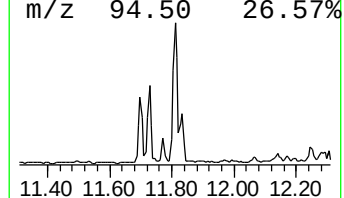
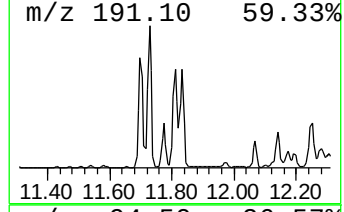
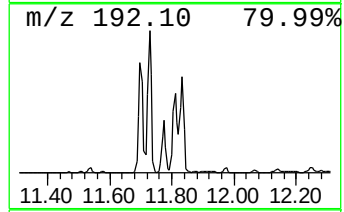
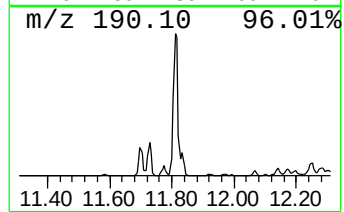
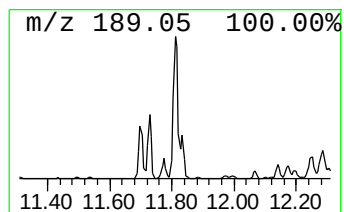
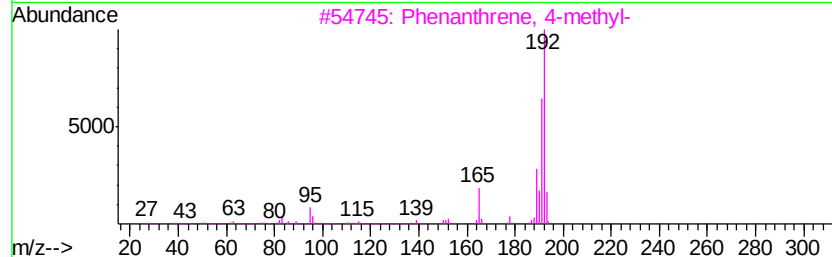
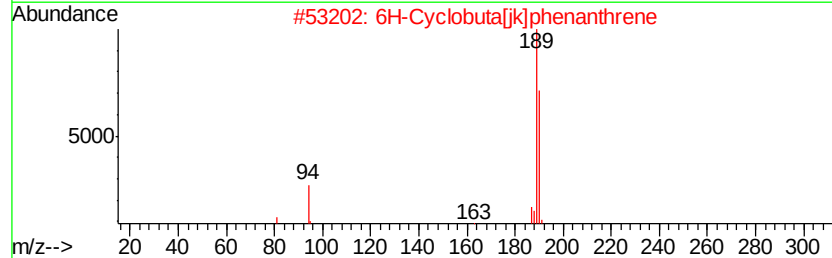
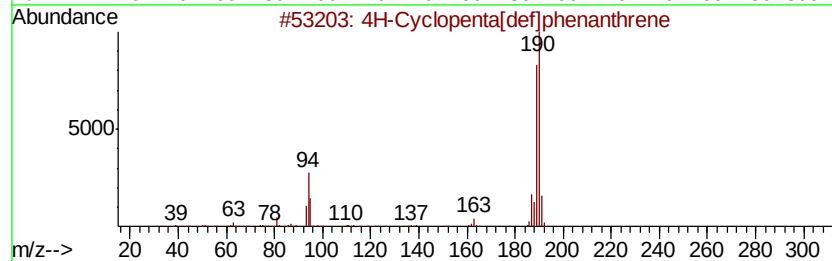
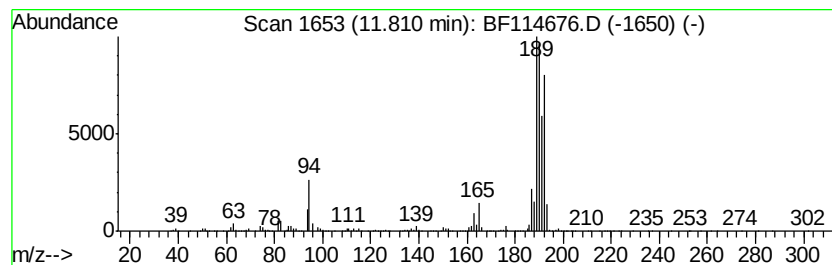
Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.81	56.57 ng	6422380	Phenanthrene-d10	11.20	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
2	6H-Cyclobuta[i]kphenanthrene	190	C15H10	083469-43-6	49
3	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	42
4	5H-Dibenzo[a,d]cycloheptene	192	C15H12	000256-81-5	42
5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	38



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

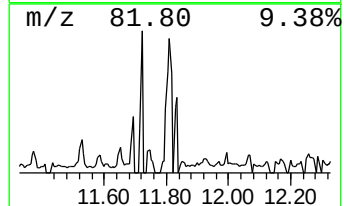
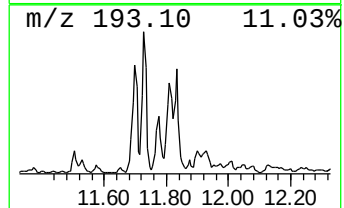
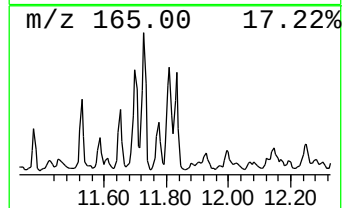
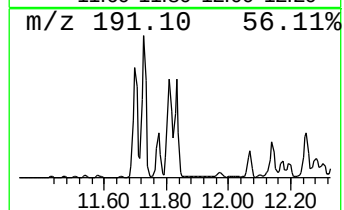
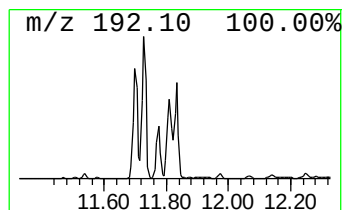
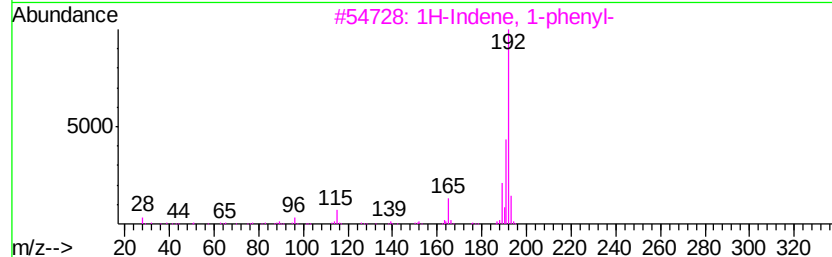
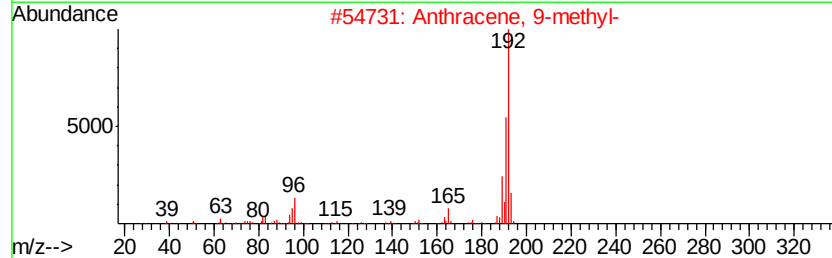
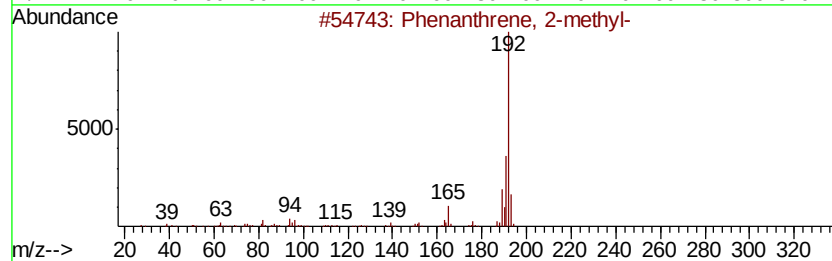
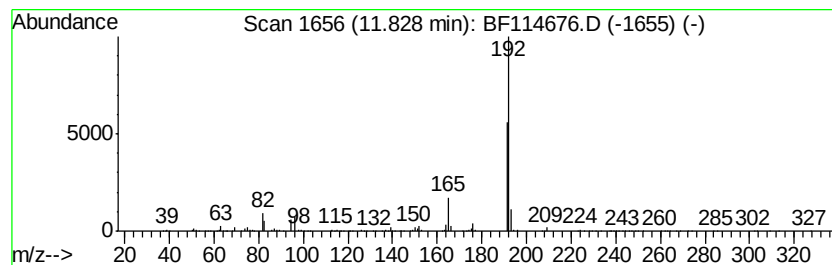
Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 11 Anthracene, 9-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.83	23.81 ng	2703460	Phenanthrene-d10	11.20	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
2	Anthracene, 9-methyl-	192	C15H12	000779-02-2	91
3	1H-Indene, 1-phenyl-	192	C15H12	001961-96-2	90
4	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	90
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	90



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
 Data File : BF114676.D
 Acq On : 30 May 2019 22:34
 Operator : HP/JU
 Sample : K3068-10
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

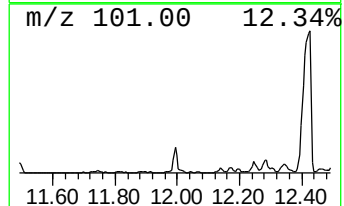
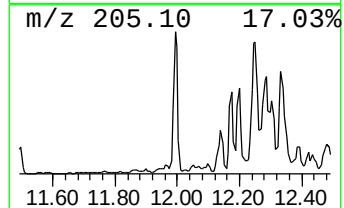
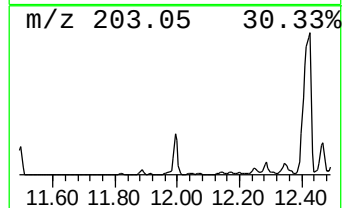
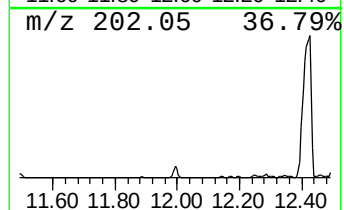
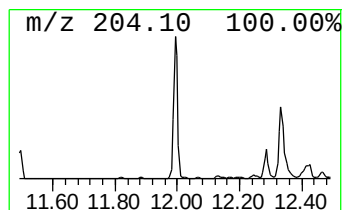
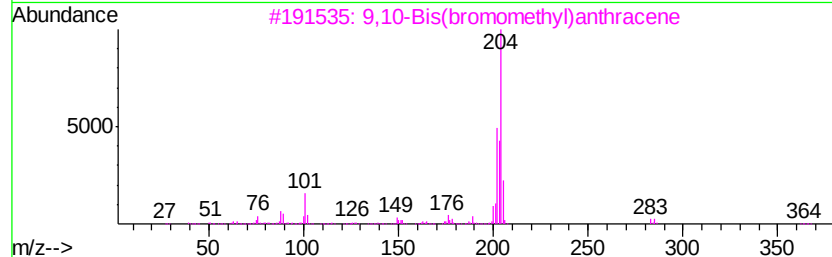
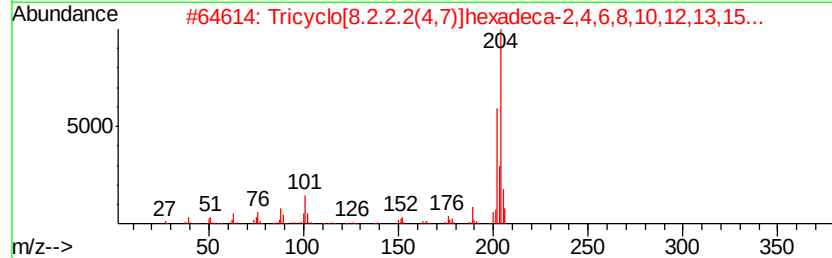
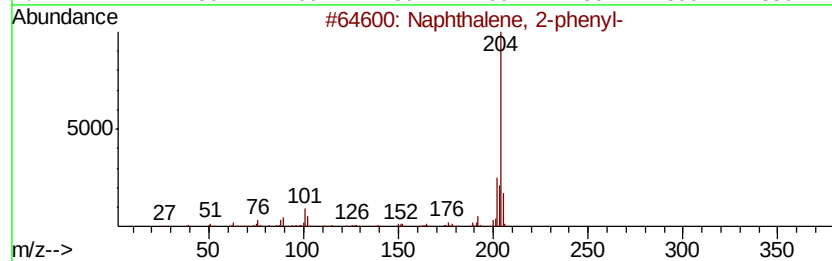
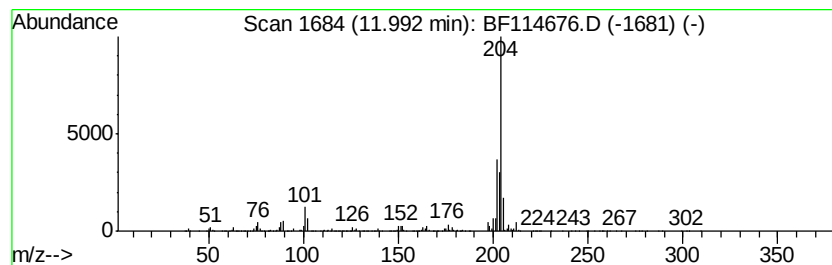
Instrument :
 BNA_F
 ClientSampleId :
 B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.99	22.01 ng	2499220	Phenanthrene-d10	11.20	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	90
2	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	74
3	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	58
4	Benzene, 1,1'-(1-buten-3-yne-1,4...	204	C16H12	013141-45-2	53
5	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	53



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

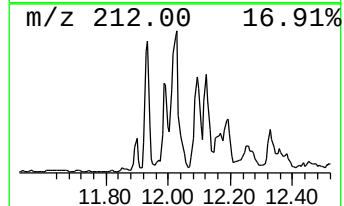
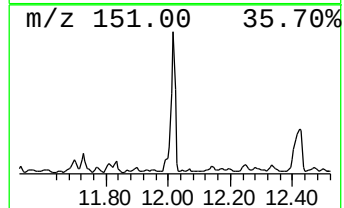
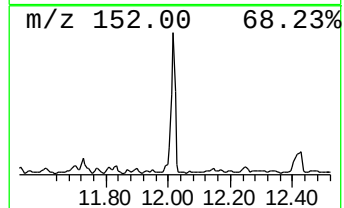
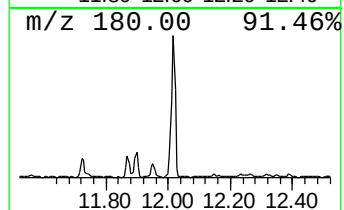
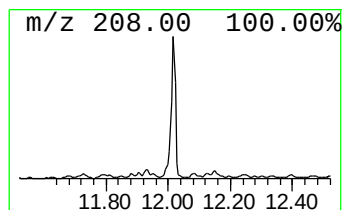
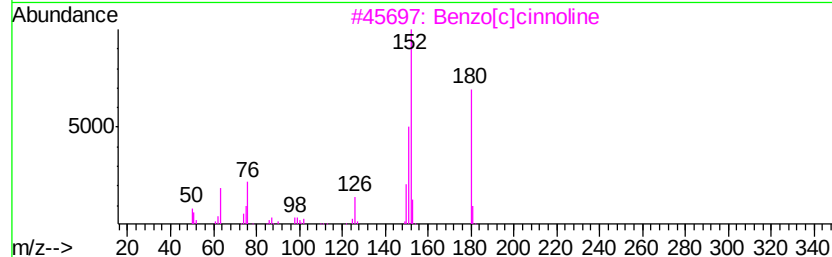
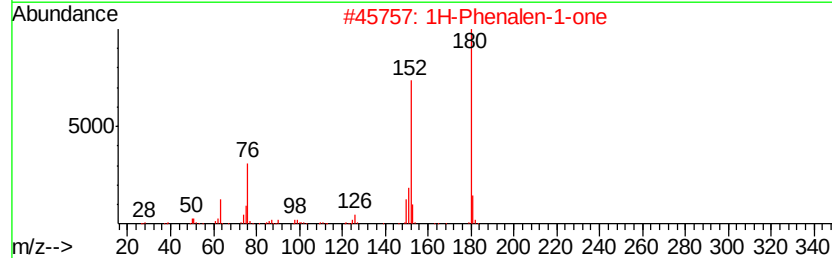
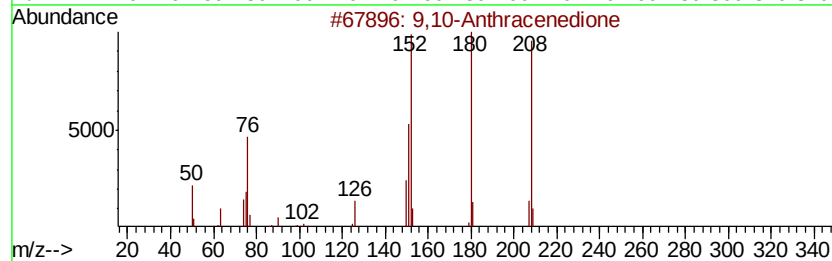
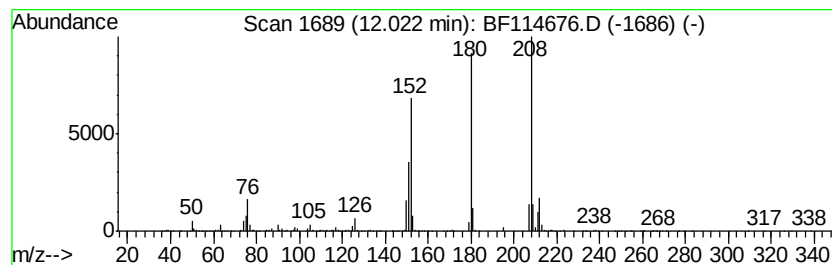
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 13 9,10-Anthracenedione Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.02	24.58 ng	2791150	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Anthracenedione	208	C14H8O2	000084-65-1	98
2		1H-Phenalen-1-one	180	C13H8O	000548-39-0	64
3		Benzo[c]cinnoline	180	C12H8N2	000230-17-1	64
4		1,4-Anthracenedione	208	C14H8O2	000635-12-1	58
5		9H-Fluoren-9-one	180	C13H8O	000486-25-9	25



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

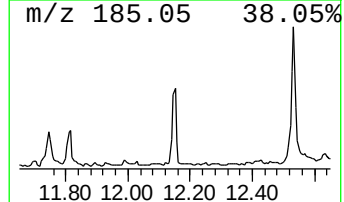
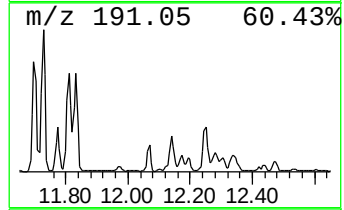
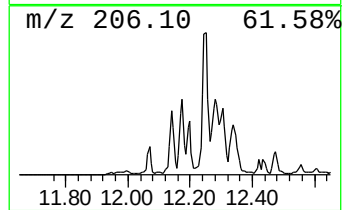
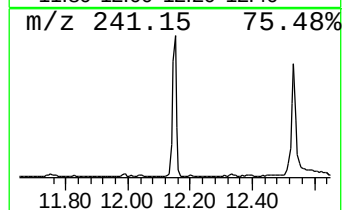
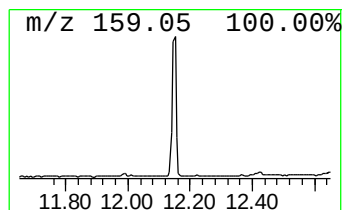
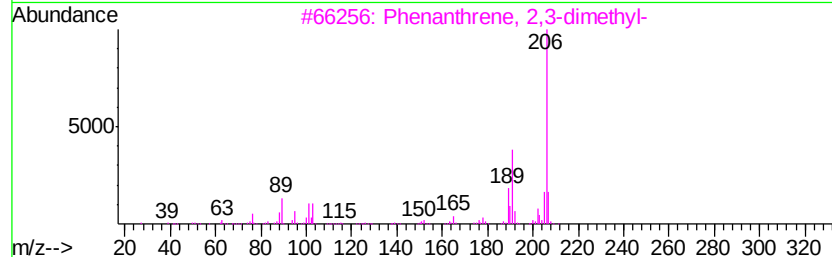
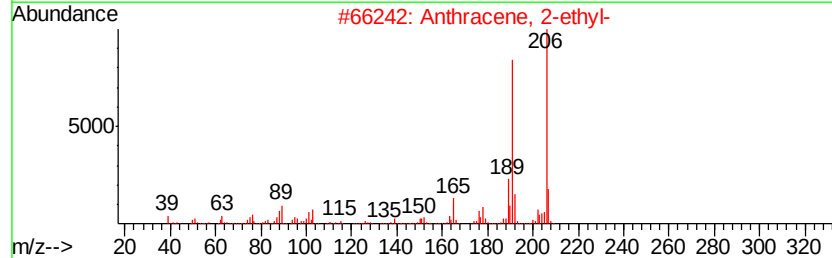
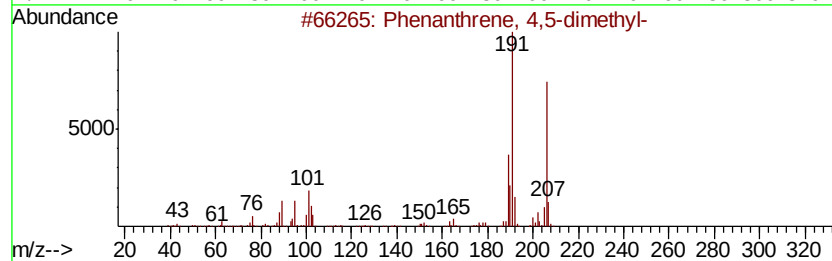
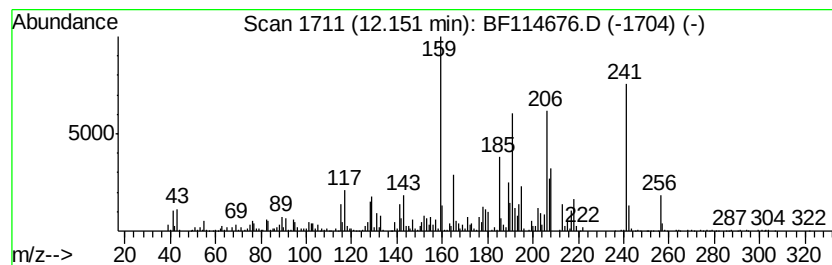
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.15	18.19 ng	2064920	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	93
2		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	83
3		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	70
4		3-Methyl-1-phenyl-1H-indene	206	C16H14	022360-63-0	60
5		1H-Indene, 2-methyl-3-phenyl-	206	C16H14	035099-60-6	60



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

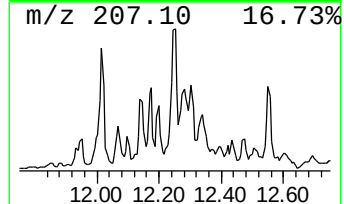
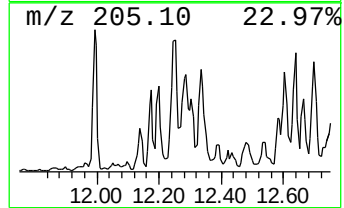
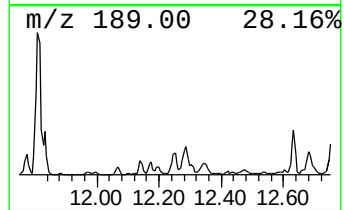
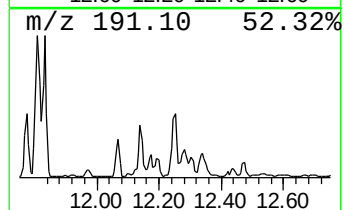
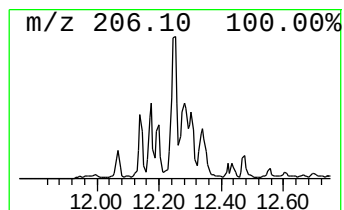
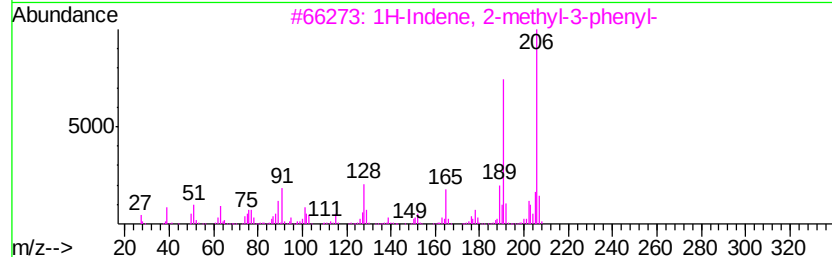
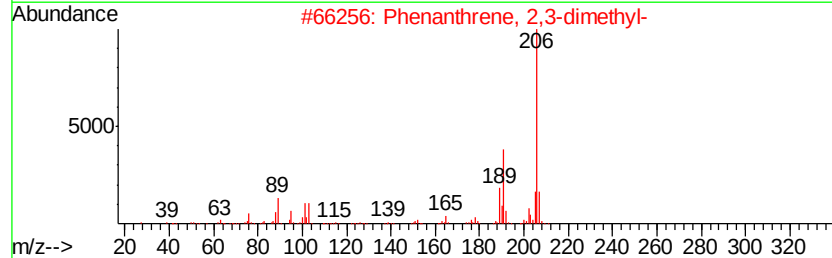
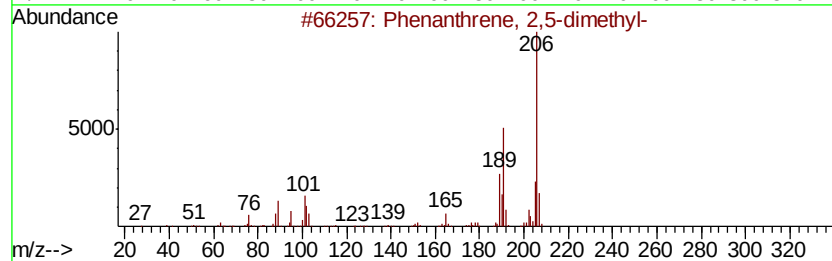
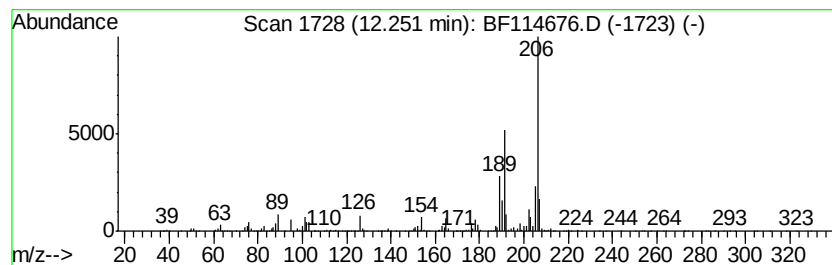
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 15 Phenanthrene, 2,5-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.25	25.57 ng	2903420	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	97
2		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	93
3		1H-Indene, 2-methyl-3-phenyl-	206	C16H14	035099-60-6	90
4		9,10-Dimethylantracene	206	C16H14	000781-43-1	90
5		Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	89



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

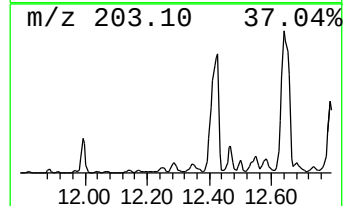
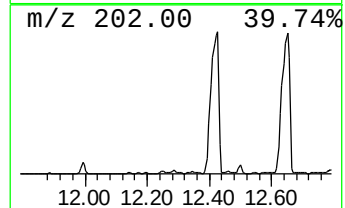
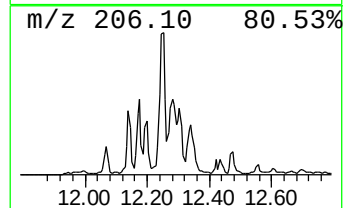
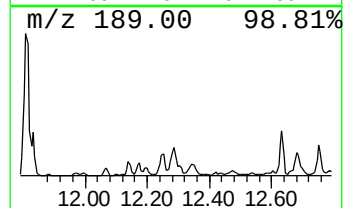
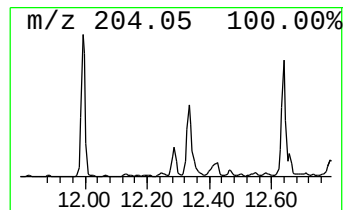
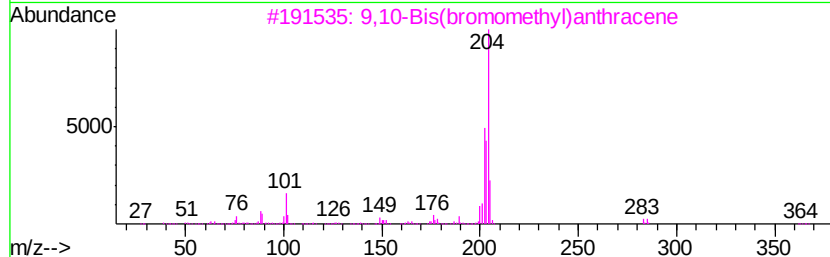
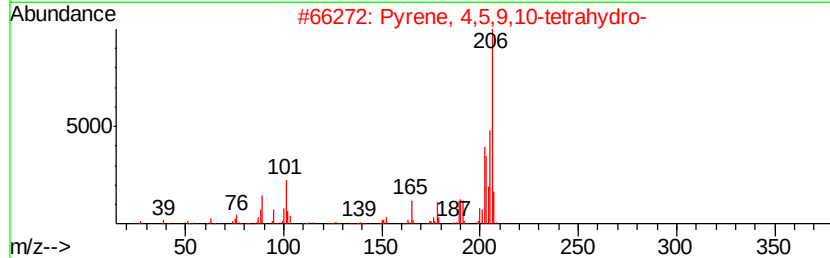
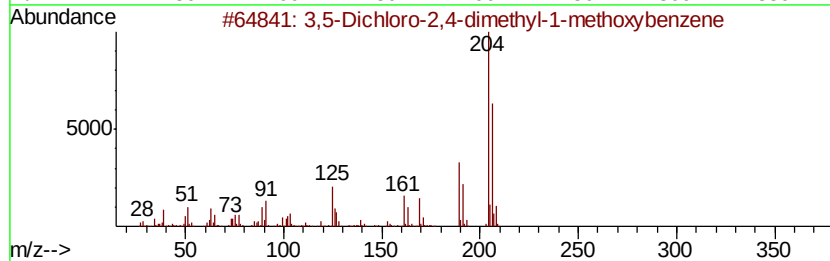
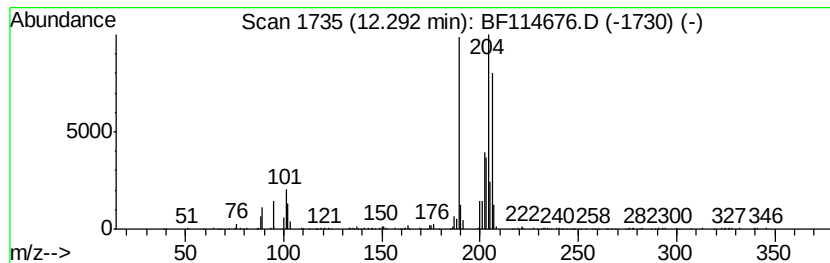
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 16 unknown12.29 Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.29	16.43 ng	1865010	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3,5-Dichloro-2,4-dimethyl-1-meth...	204	C9H10Cl2O	1000250-17-8	43
2		Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	42
3		9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	38
4		Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	30
5		2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	27



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

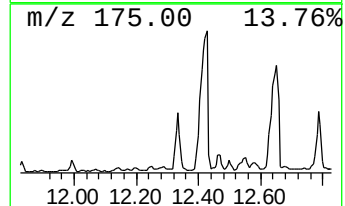
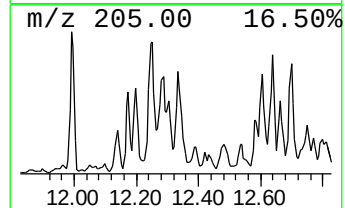
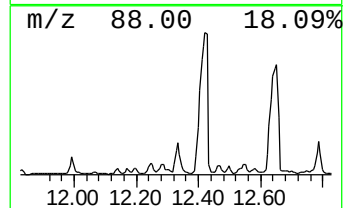
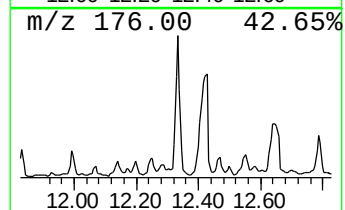
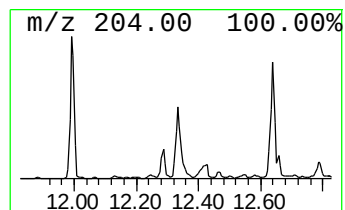
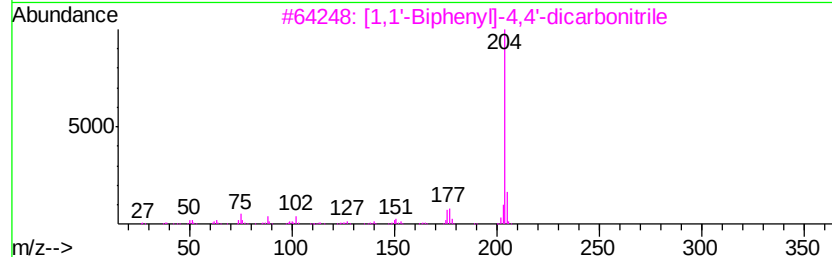
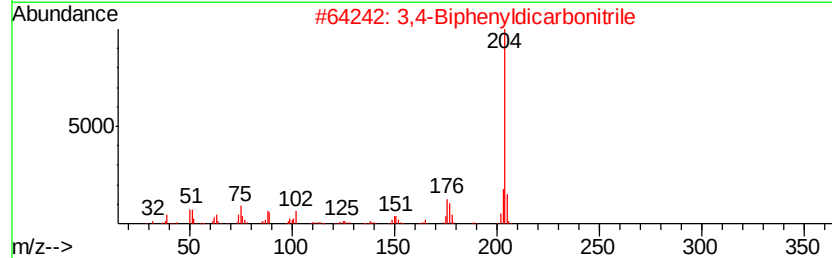
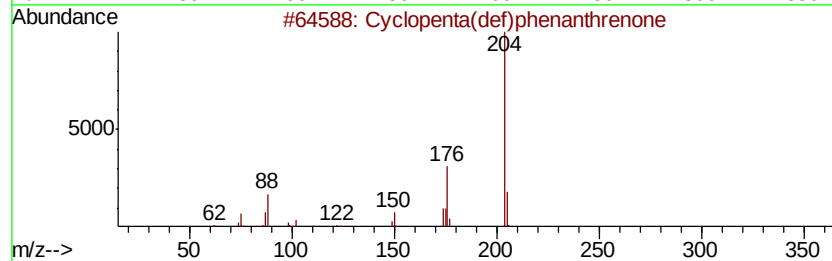
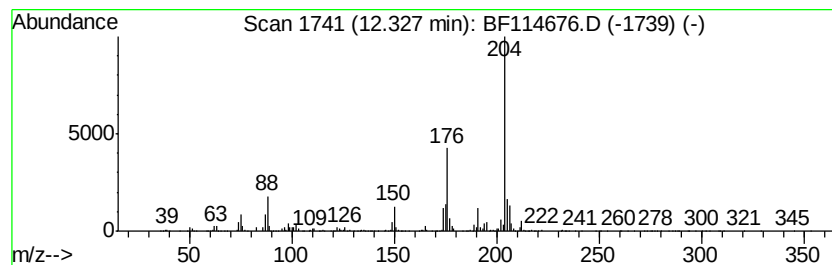
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 17 Cyclopenta(def)phenanthrenone Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.33	22.34 ng	2536600	Phenanthrene-d10	11.20

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	97
2		3,4-Biphenyldicarbonitrile	204	C14H8N2	004128-63-6	53
3		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	52
4		1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	45
5		[1,1'-Biphenyl]-2-ol, 5-chloro-	204	C12H9ClO	000607-12-5	43



Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF053019\
Data File : BF114676.D
Acq On : 30 May 2019 22:34
Operator : HP/JU
Sample : K3068-10
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
B-6E(7-8)

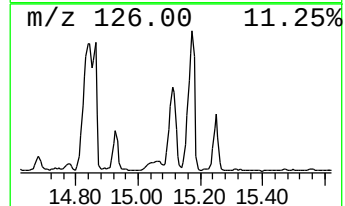
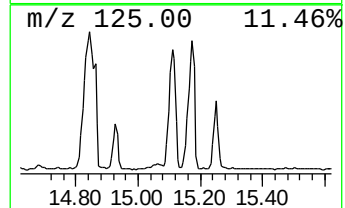
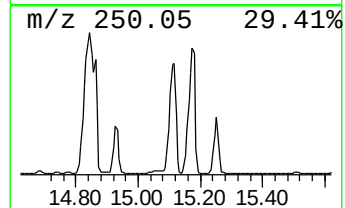
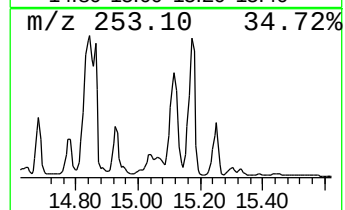
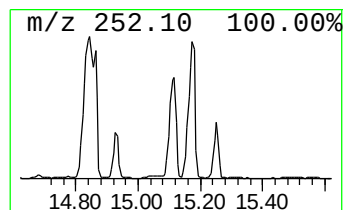
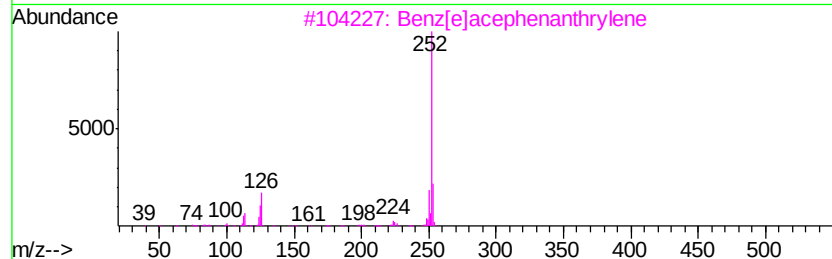
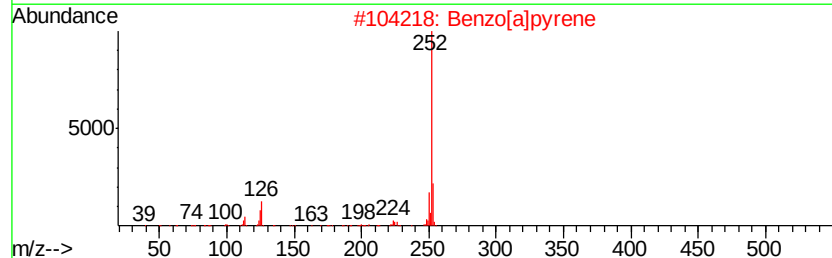
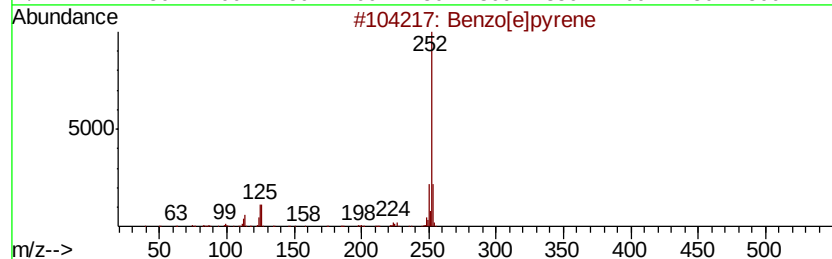
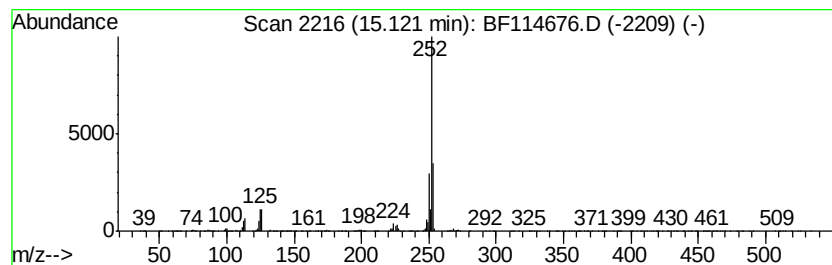
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF052919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 19 Benzo[e]pyrene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.12	63.57 ng	6557360	Perylene-d12	15.22

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	94
2		Benzo[a]pyrene	252	C20H12	000050-32-8	93
3		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	93
4		Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
5		Perylene	252	C20H12	000198-55-0	93



Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF053019\
 Data File : BF114676.D
 Acq On : 30 May 2019 22:34
 Operator : HP/JU
 Sample : K3068-10
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 B-6E(7-8)

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF052919.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
unknown6.46	6.46	62.8	ng	7168970	1	6.70	2284860	20.0
9H-Fluorene, 2-me...	10.81	12.8	ng	1457100	4	11.20	2270660	20.0
9H-Fluoren-9-one	11.00	13.1	ng	1481770	4	11.20	2270660	20.0
unknown11.06	11.06	9.9	ng	1118970	4	11.20	2270660	20.0
Dibenzothiophene	11.09	15.5	ng	1755730	4	11.20	2270660	20.0
Anthracene, 2-met...	11.70	36.5	ng	4140590	4	11.20	2270660	20.0
Phenanthrene, 2-m...	11.73	53.0	ng	6011500	4	11.20	2270660	20.0
Phenanthrene, 1-m...	11.77	15.4	ng	1752550	4	11.20	2270660	20.0
4H-Cyclopenta[def...	11.81	56.6	ng	6422380	4	11.20	2270660	20.0
Anthracene, 9-met...	11.83	23.8	ng	2703460	4	11.20	2270660	20.0
Naphthalene, 2-ph...	11.99	22.0	ng	2499220	4	11.20	2270660	20.0
9,10-Anthracenedione	12.02	24.6	ng	2791150	4	11.20	2270660	20.0
Phenanthrene, 4,5...	12.15	18.2	ng	2064920	4	11.20	2270660	20.0
Phenanthrene, 2,5...	12.25	25.6	ng	2903420	4	11.20	2270660	20.0
unknown12.29	12.29	16.4	ng	1865010	4	11.20	2270660	20.0
Cyclopenta(def)ph...	12.33	22.3	ng	2536600	4	11.20	2270660	20.0
Benzo[e]pyrene	15.12	63.6	ng	6557360	6	15.22	2062890	20.0