

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
 Data File : BP000375.D
 Acq On : 23 Sep 2019 21:05
 Operator : HP/JU
 Sample : K4997-03
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_P
 ClientSampleId :
 WC-09-091919

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_P\METHODS\8270-BP091619.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	5.422	563	567	578	rBV	3679801	3357678	47.75%	3.471%
2	6.434	734	739	742	rBV	3959073	3453018	49.11%	3.570%
3	6.563	757	761	765	rBV	4051479	3726572	53.00%	3.852%
4	6.793	796	800	803	rBV	1365910	1061131	15.09%	1.097%
5	6.952	823	827	830	rBV	3531060	3208641	45.63%	3.317%
6	7.352	890	895	898	rBV	2447737	2251348	32.02%	2.327%
7	8.075	1014	1018	1020	rBV	1495015	1341389	19.08%	1.387%
8	9.151	1197	1201	1204	rBV	6531188	5185205	73.74%	5.360%
9	9.487	1255	1258	1261	rBV	173444	168435	2.40%	0.174%
10	9.546	1265	1268	1276	rVB	735434	732015	10.41%	0.757%
11	9.693	1289	1293	1298	rVB	692803	603133	8.58%	0.623%
12	9.834	1313	1317	1320	rVB	1861384	1623656	23.09%	1.678%
13	9.863	1320	1322	1325	rVB2	132948	105928	1.51%	0.110%
14	10.034	1348	1351	1355	rVB	184018	170494	2.42%	0.176%
15	10.151	1366	1371	1374	rBV3	146621	191013	2.72%	0.197%
16	10.246	1382	1387	1388	rBV2	104119	144748	2.06%	0.150%
17	10.381	1407	1410	1416	rVB3	202395	264606	3.76%	0.274%
18	10.628	1446	1452	1455	rBV	3553445	3403988	48.41%	3.519%
19	10.751	1469	1473	1480	rVB2	209149	227001	3.23%	0.235%
20	10.934	1500	1504	1507	rBV3	122964	166006	2.36%	0.172%
21	11.063	1521	1526	1528	rBV3	114770	149556	2.13%	0.155%
22	11.087	1528	1530	1532	rVV	184286	163240	2.32%	0.169%
23	11.128	1534	1537	1541	rVV2	255186	290863	4.14%	0.301%
24	11.175	1542	1545	1548	rVV3	129821	184468	2.62%	0.191%
25	11.222	1551	1553	1558	rVB	201429	205068	2.92%	0.212%
26	11.328	1567	1571	1573	rBV	2378705	2157054	30.68%	2.230%
27	11.351	1573	1575	1578	rVV	3327092	2486375	35.36%	2.570%
28	11.398	1580	1583	1586	rVB	749134	659350	9.38%	0.682%
29	11.434	1586	1589	1593	rBV3	168065	216330	3.08%	0.224%
30	11.504	1599	1601	1604	rVB	151769	139778	1.99%	0.144%
31	11.557	1604	1610	1613	rBV2	172959	257582	3.66%	0.266%
32	11.628	1620	1622	1624	rVB2	141563	110633	1.57%	0.114%
33	11.663	1624	1628	1630	rVB2	272673	262083	3.73%	0.271%
34	11.745	1640	1642	1646	rVB	135354	127242	1.81%	0.132%

Data Path : Z:\SVOASRV\HPCHEM1\BNA_P\DATA\BP092319\
 Data File : BP000375.D
 Acq On : 23 Sep 2019 21:05
 Operator : HP/JU
 Sample : K4997-03
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_P
 ClientSampleId :
 WC-09-091919

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_P\METHODS\8270-BP091619.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	11.787	1646	1649	1652	rBV2	167718	169331	2.41%	0.175%
36	11.834	1653	1657	1659	rVV	1194870	1006032	14.31%	1.040%
37	11.863	1659	1662	1666	rVV	1707386	1536918	21.86%	1.589%
38	11.910	1666	1670	1672	rVV	418238	366472	5.21%	0.379%
39	11.945	1672	1676	1678	rVV	1459143	1505493	21.41%	1.556%
40	11.969	1678	1680	1684	rVB	1025624	791474	11.26%	0.818%
41	12.016	1685	1688	1690	rBV2	111073	122014	1.74%	0.126%
42	12.040	1690	1692	1695	rVV2	162969	154729	2.20%	0.160%
43	12.069	1695	1697	1699	rVV	191919	146978	2.09%	0.152%
44	12.128	1702	1707	1709	rVV2	602179	621897	8.84%	0.643%
45	12.151	1709	1711	1718	rVB2	517986	549898	7.82%	0.568%
46	12.210	1718	1721	1725	rBV2	104224	185897	2.64%	0.192%
47	12.263	1728	1730	1731	rBV	163578	127281	1.81%	0.132%
48	12.281	1731	1733	1736	rVV2	369539	360215	5.12%	0.372%
49	12.316	1736	1739	1741	rVV	434286	413370	5.88%	0.427%
50	12.340	1741	1743	1745	rVB	316340	246241	3.50%	0.255%
51	12.392	1745	1752	1754	rBV	1200773	1357993	19.31%	1.404%
52	12.428	1754	1758	1760	rVV	660928	905920	12.88%	0.937%
53	12.475	1763	1766	1771	rVV2	644019	831642	11.83%	0.860%
54	12.551	1775	1779	1782	rVV	4447559	3869840	55.04%	4.001%
55	12.598	1784	1787	1788	rVV	252941	236207	3.36%	0.244%
56	12.616	1788	1790	1793	rVV3	314884	298304	4.24%	0.308%
57	12.645	1793	1795	1798	rVV	370502	322248	4.58%	0.333%
58	12.681	1798	1801	1803	rVV2	299797	288184	4.10%	0.298%
59	12.704	1803	1805	1809	rVV4	171366	285841	4.07%	0.295%
60	12.781	1813	1818	1821	rVV	4248346	4526480	64.37%	4.679%
61	12.804	1821	1822	1825	rVV2	361397	285510	4.06%	0.295%
62	12.845	1825	1829	1832	rVB2	400147	494727	7.04%	0.511%
63	12.898	1835	1838	1840	rVV2	260088	289397	4.12%	0.299%
64	12.928	1840	1843	1850	rVB	7285051	7031548	100.00%	7.269%
65	13.004	1852	1856	1859	rBV2	660670	888956	12.64%	0.919%
66	13.063	1863	1866	1868	rBV3	201316	227004	3.23%	0.235%
67	13.092	1868	1871	1872	rVV2	563542	614982	8.75%	0.636%
68	13.110	1872	1874	1878	rVB	894591	914708	13.01%	0.946%
69	13.181	1878	1886	1889	rBV2	594266	889360	12.65%	0.919%
70	13.222	1889	1893	1896	rVV2	958660	981316	13.96%	1.014%
71	13.281	1900	1903	1906	rVV2	234809	297767	4.23%	0.308%

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
 Data File : BP000375.D
 Acq On : 23 Sep 2019 21:05
 Operator : HP/JU
 Sample : K4997-03
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_P
 ClientSampleId :
 WC-09-091919

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_P\METHODS\8270-BP091619.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	13.310	1906	1908	1911	rVV	813589	729256	10.37%	0.754%
73	13.345	1911	1914	1917	rVB	789325	716034	10.18%	0.740%
74	13.498	1937	1940	1941	rBV2	134619	149956	2.13%	0.155%
75	13.522	1941	1944	1946	rVV3	192560	218819	3.11%	0.226%
76	13.622	1959	1961	1967	rVB	574949	663882	9.44%	0.686%
77	13.734	1976	1980	1984	rBV2	479093	711690	10.12%	0.736%
78	13.769	1984	1986	1988	rVB	312756	235292	3.35%	0.243%
79	13.792	1988	1990	1994	rBV2	222859	238371	3.39%	0.246%
80	13.839	1995	1998	2007	rVB3	922749	1236212	17.58%	1.278%
81	13.992	2016	2024	2026	rBV2	2557387	3789241	53.89%	3.917%
82	14.022	2026	2029	2037	rVB	1647126	1804102	25.66%	1.865%
83	14.081	2037	2039	2041	rBV	182773	191900	2.73%	0.198%
84	14.251	2066	2068	2071	rVB	169217	128901	1.83%	0.133%
85	14.345	2082	2084	2086	rBV	187406	182464	2.59%	0.189%
86	14.387	2086	2091	2094	rVV	718844	808822	11.50%	0.836%
87	14.416	2094	2096	2100	rVB	405147	388653	5.53%	0.402%
88	14.457	2100	2103	2104	rBV2	175963	169708	2.41%	0.175%
89	14.481	2104	2107	2110	rVV3	419200	489948	6.97%	0.506%
90	14.510	2110	2112	2114	rVB	350644	271852	3.87%	0.281%
91	14.781	2155	2158	2162	rBV4	137435	254375	3.62%	0.263%
92	15.045	2198	2203	2206	rBV2	1342671	2104048	29.92%	2.175%
93	15.157	2219	2222	2233	rVB3	475912	927670	13.19%	0.959%
94	15.351	2251	2255	2261	rVB	891743	1117026	15.89%	1.155%
95	15.416	2261	2266	2271	rVB	1200352	1492080	21.22%	1.542%
96	15.475	2272	2276	2280	rBV	1313842	1701700	24.20%	1.759%
97	15.510	2280	2282	2289	rVB4	329686	523094	7.44%	0.541%
98	15.969	2356	2360	2364	rBV	254124	366661	5.21%	0.379%
99	16.963	2523	2529	2537	rVB2	579753	1087275	15.46%	1.124%
100	17.410	2599	2605	2616	rVB	510131	1096792	15.60%	1.134%

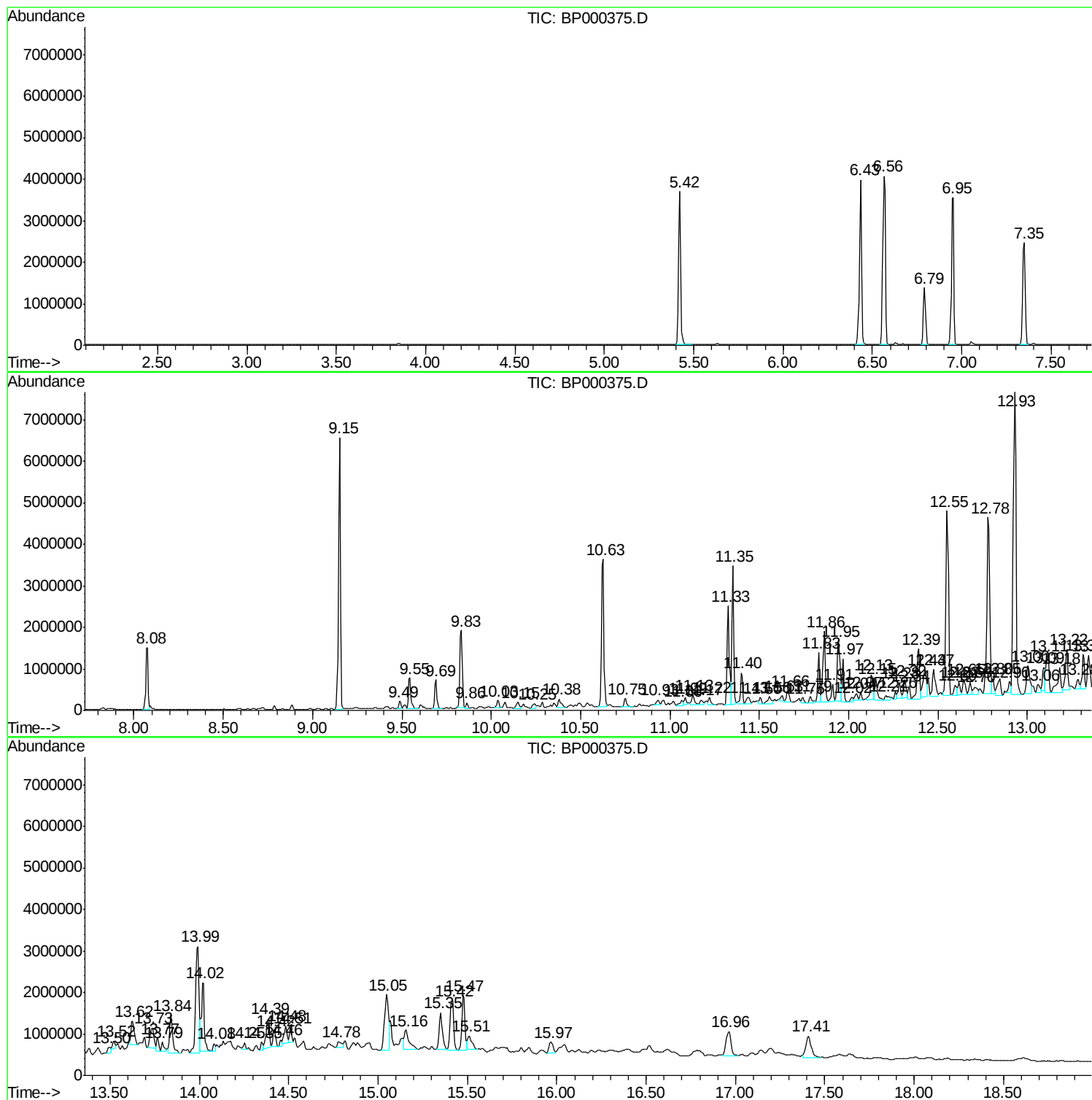
Sum of corrected areas: 96733625

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.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 P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

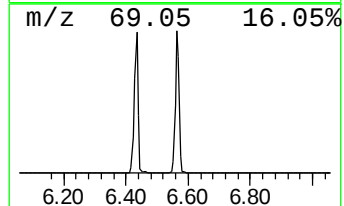
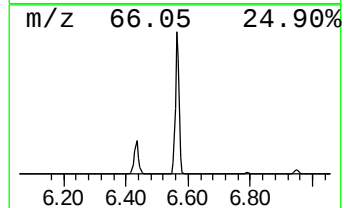
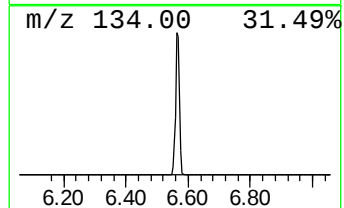
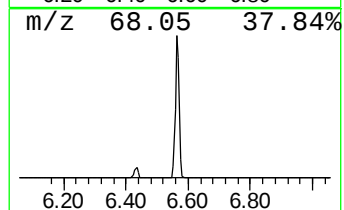
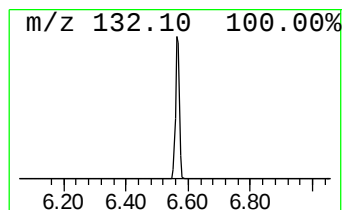
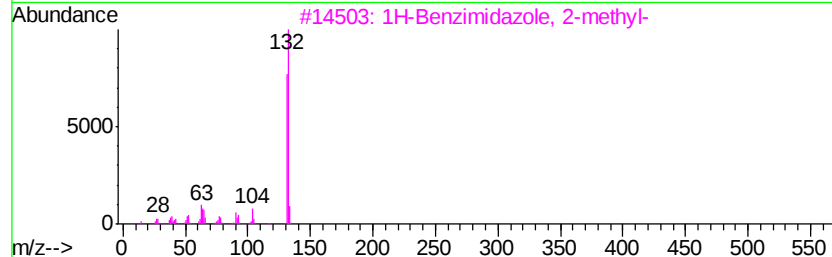
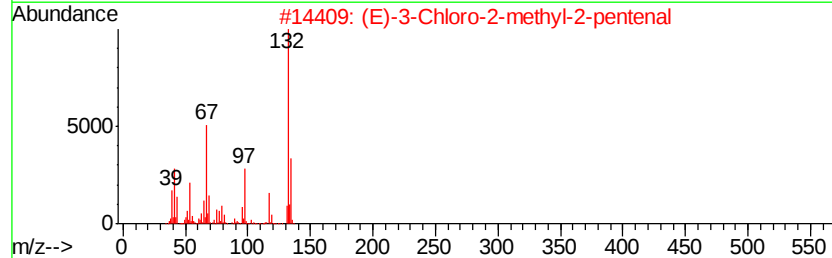
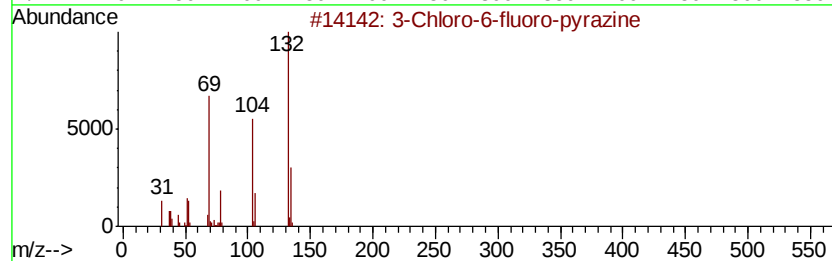
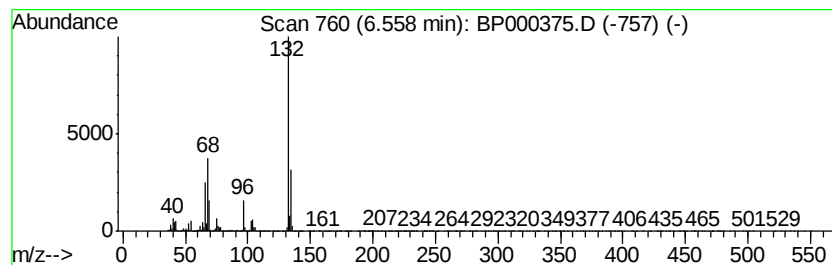
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 1 unknown6.56 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.56	70.24 ng	3726570	1,4-Dichlorobenzene-d4	6.79

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	35
2		(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	17
3		1H-Benzimidazole, 2-methyl-	132	C8H8N2	000615-15-6	10
4		4-Chloro-6-fluoro-pyrimidine	132	C4H2ClFN2	051422-01-6	9
5		(5-Methyl-2-pyridyl)acetonitrile	132	C8H8N2	1000241-93-9	9



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

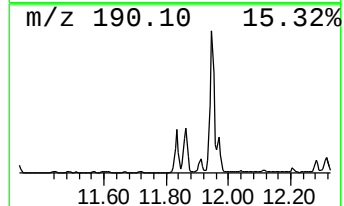
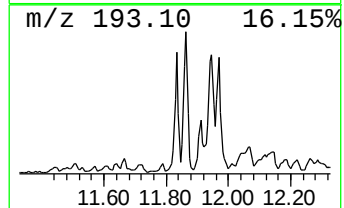
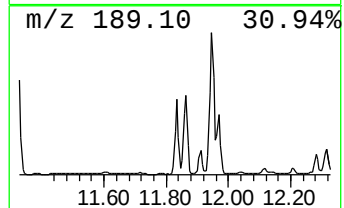
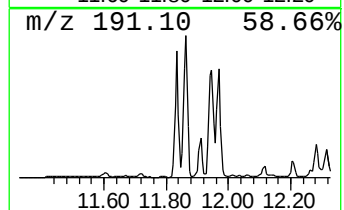
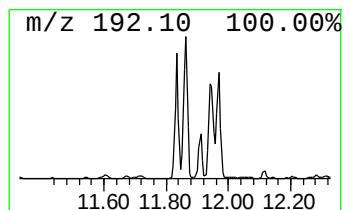
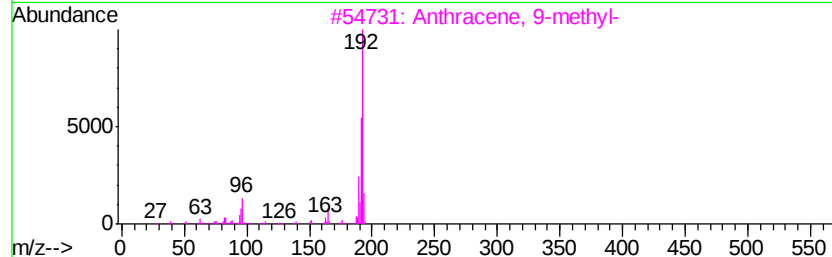
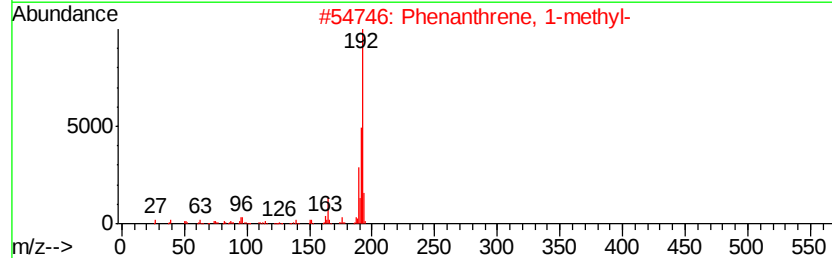
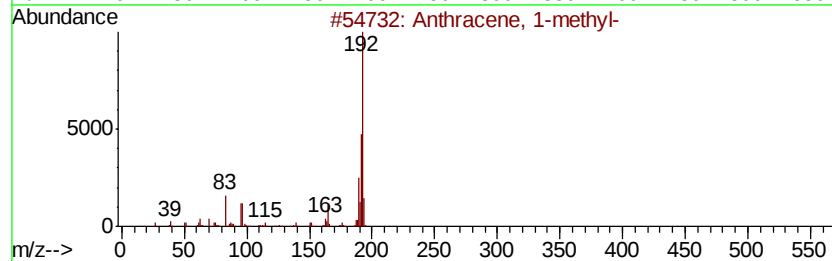
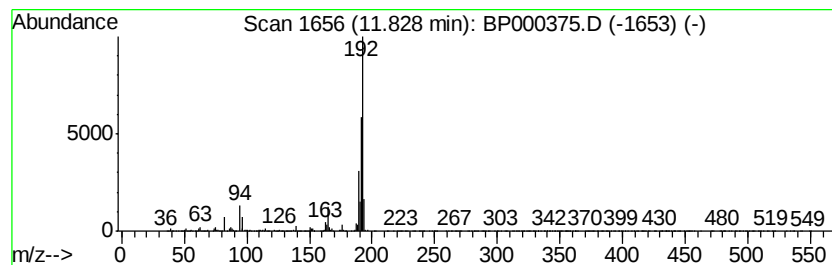
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 3 Anthracene, 1-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.83	9.33 ng	1006030	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	94
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
3		Anthracene, 9-methyl-	192	C15H12	000779-02-2	93
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
5		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

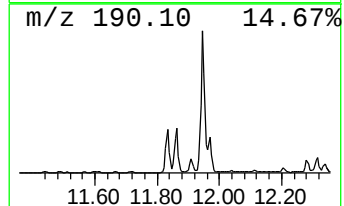
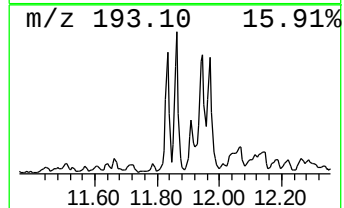
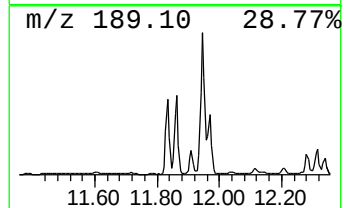
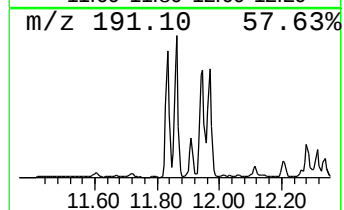
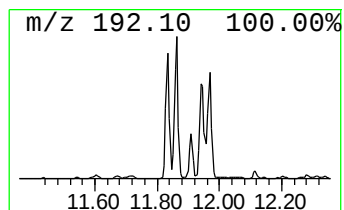
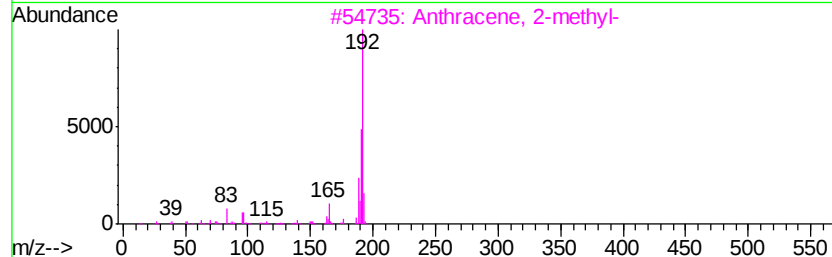
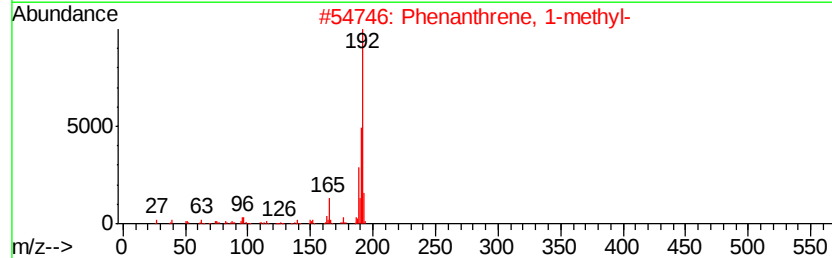
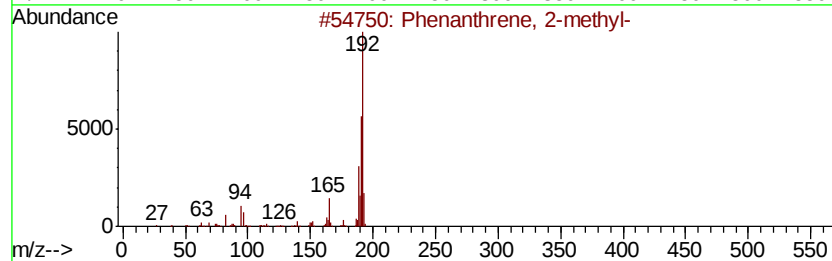
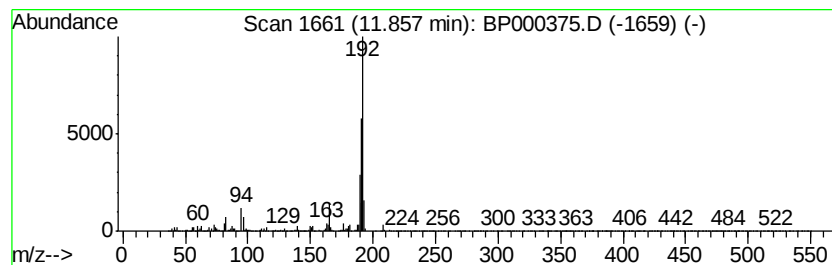
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 4 Phenanthrene, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.86	14.25 ng	1536920	Phenanthrene-d10	11.33

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
4		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	95
5		Anthracene, 9-methyl-	192	C15H12	000779-02-2	95



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

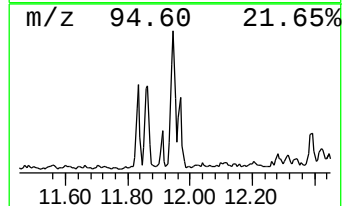
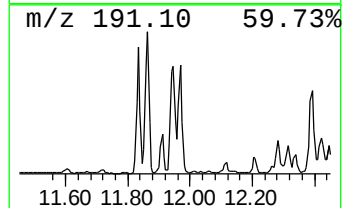
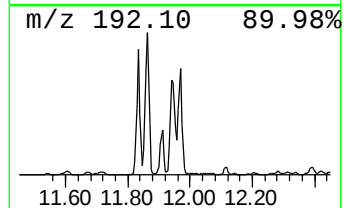
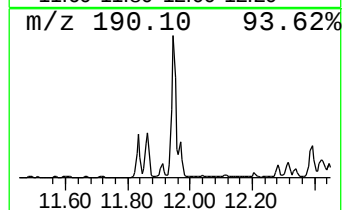
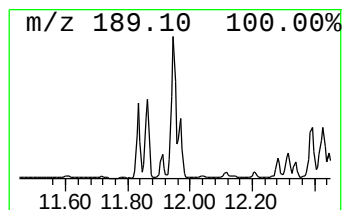
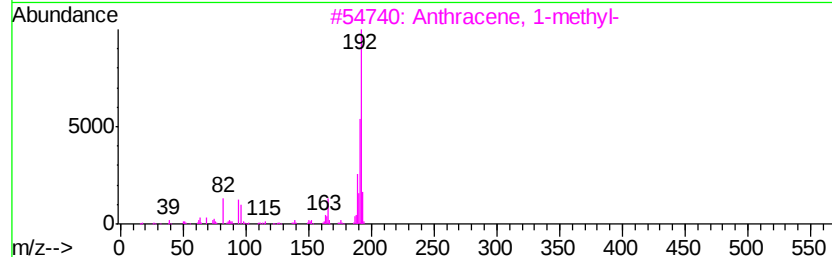
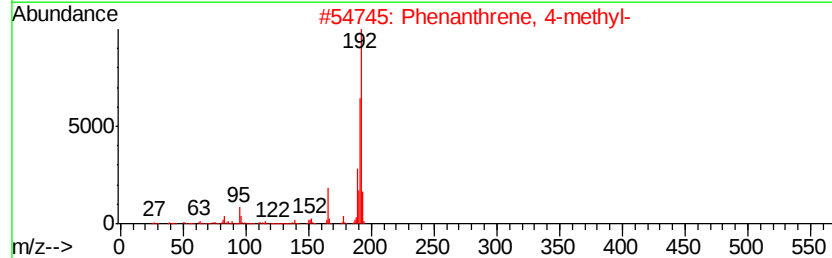
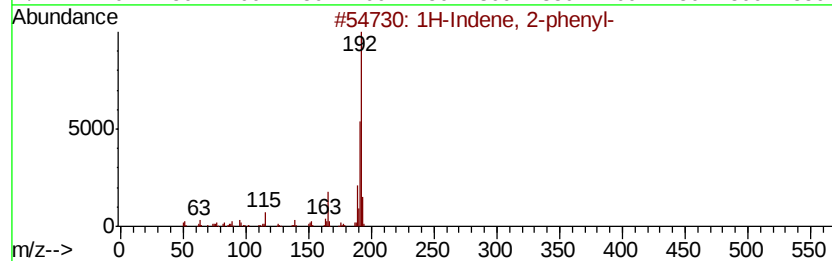
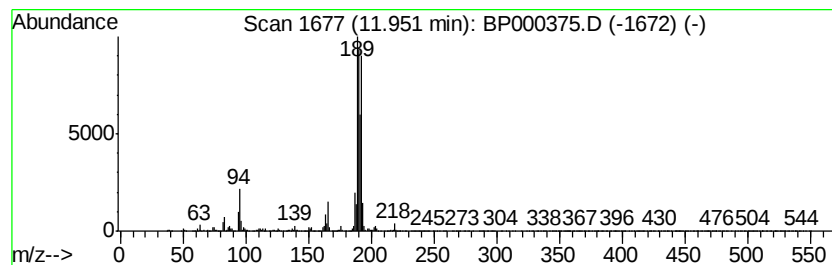
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 5 1H-Indene, 2-phenyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.95	13.96 ng	1505490	Phenanthrene-d10	11.33

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	50
2		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	50
3		Anthracene, 1-methyl-	192	C15H12	000610-48-0	50
4		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	50
5		Anthracene, 2-methyl-	192	C15H12	000613-12-7	50



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

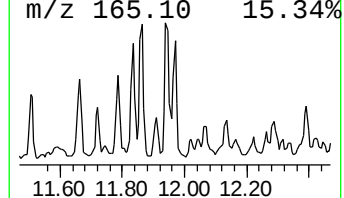
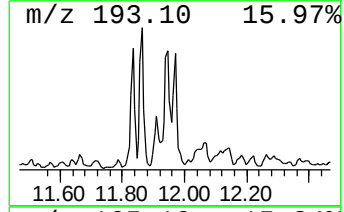
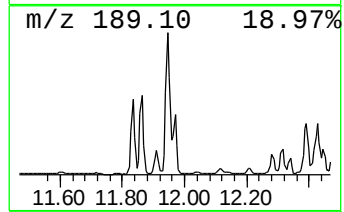
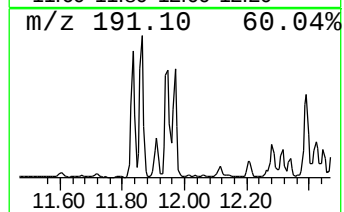
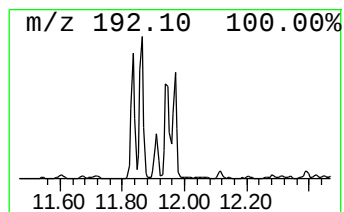
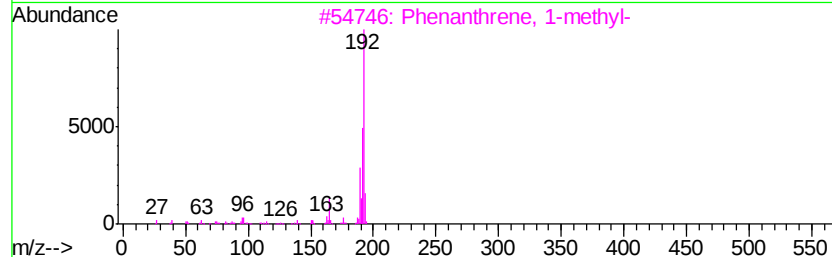
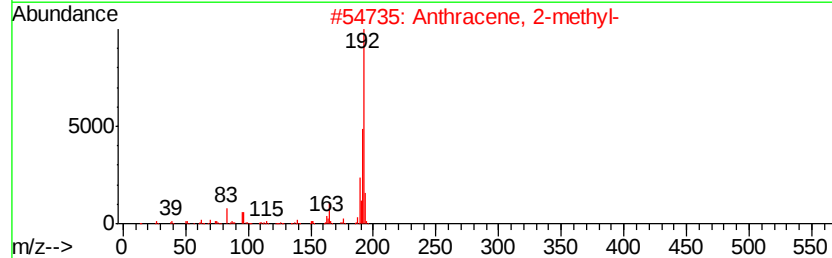
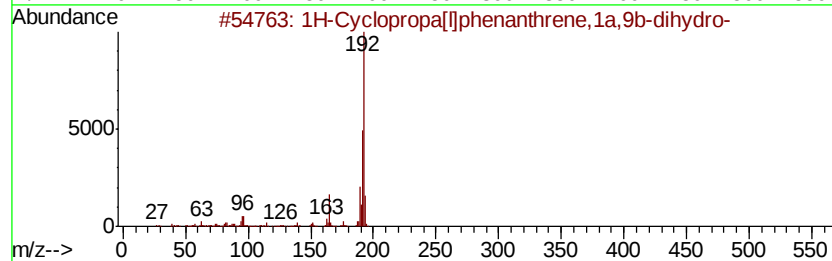
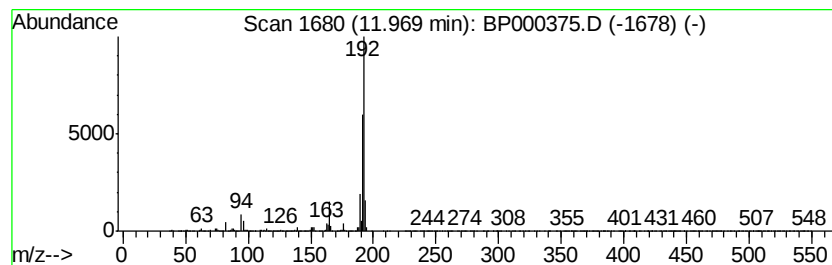
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 6 1H-Cyclopropa[l]phenanthren... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.97	7.34 ng	791474	Phenanthrene-d10	11.33

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1H-Cyclopropa[l]phenanthrene, 1a, ...	192	C15H12	000949-41-7	94
2		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
3		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	91



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

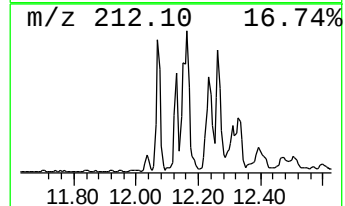
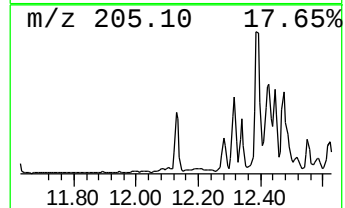
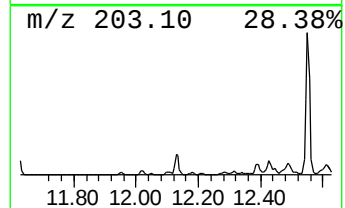
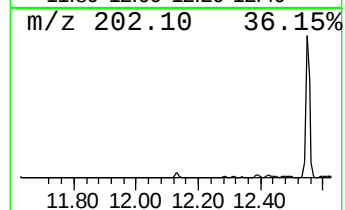
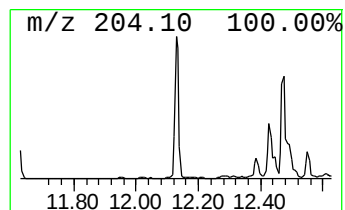
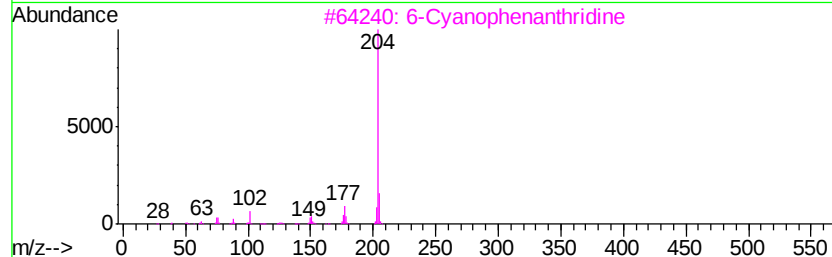
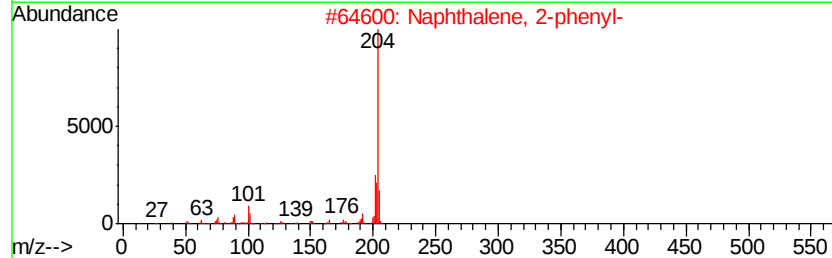
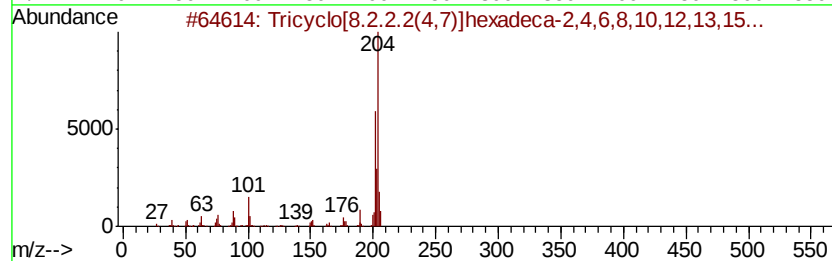
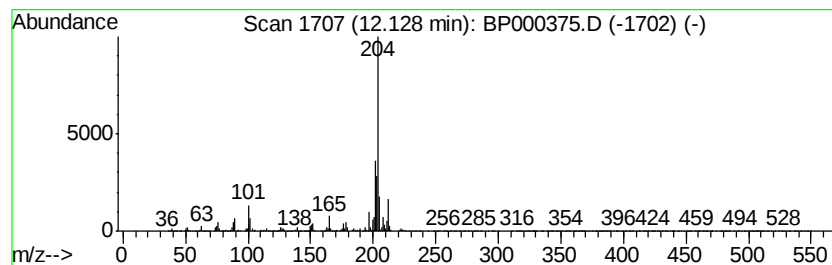
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 7 Tricyclo[8.2.2.2(4,7)]hexad... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.13	5.77 ng	621897	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	70
2		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	70
3		6-Cyanophenanthridine	204	C14H8N2	002176-28-5	55
4		9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	49
5		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	49



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

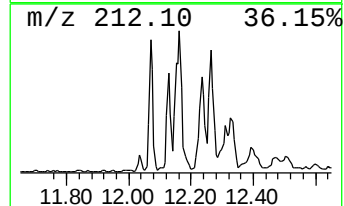
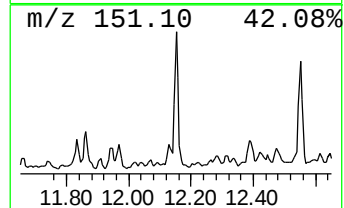
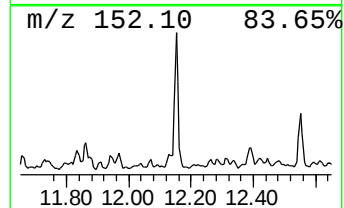
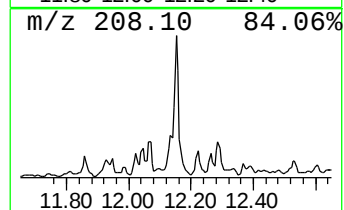
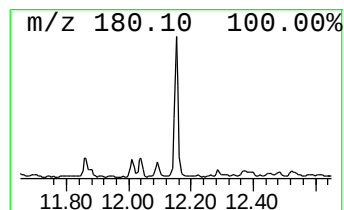
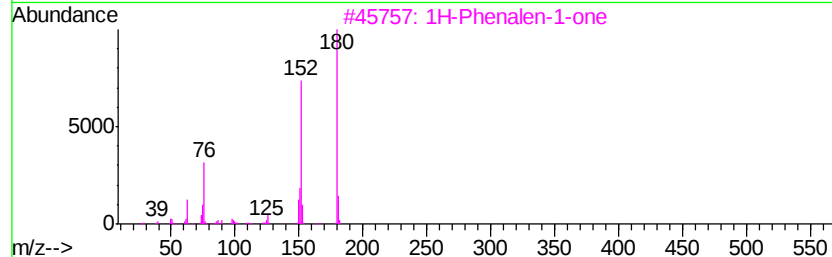
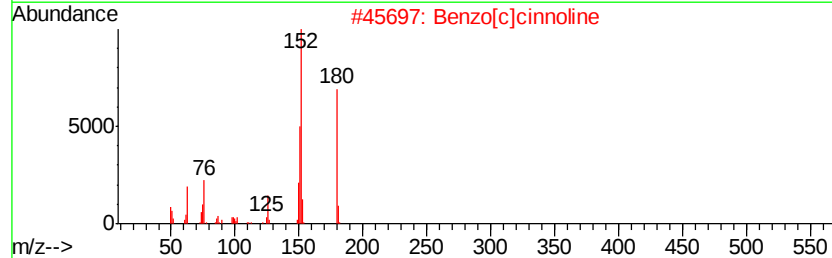
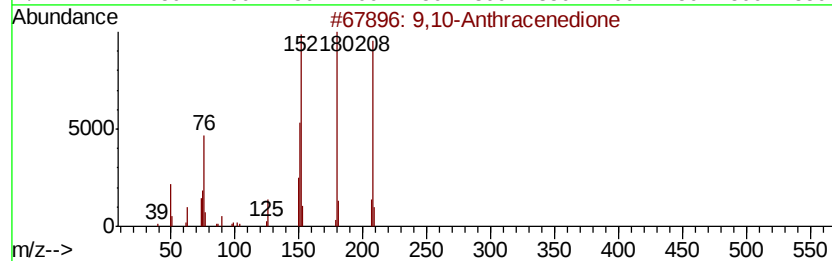
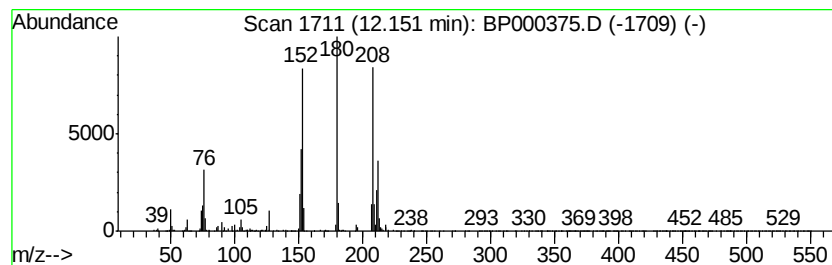
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 8 9,10-Anthracenedione Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.15	5.10 ng	549898	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Anthracenedione	208	C14H8O2	000084-65-1	98
2		Benzo[c]cinnoline	180	C12H8N2	000230-17-1	78
3		1H-Phenalen-1-one	180	C13H8O	000548-39-0	50
4		5,6-Dimethyl-1,10-phenanthroline	208	C14H12N2	003002-81-1	46
5		9H-Fluoren-9-one	180	C13H8O	000486-25-9	42



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

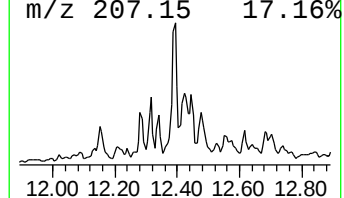
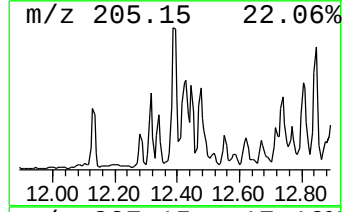
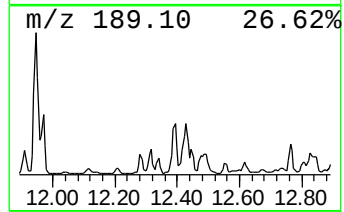
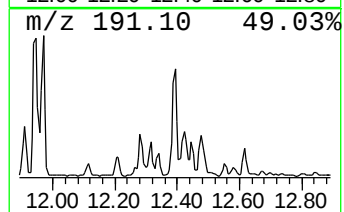
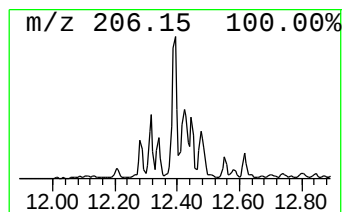
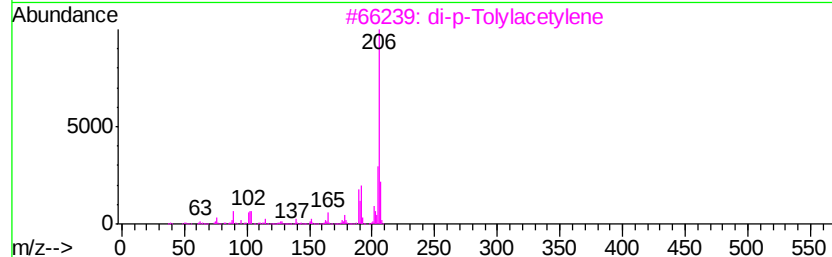
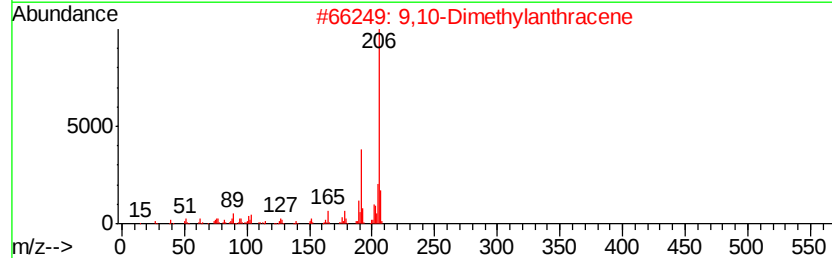
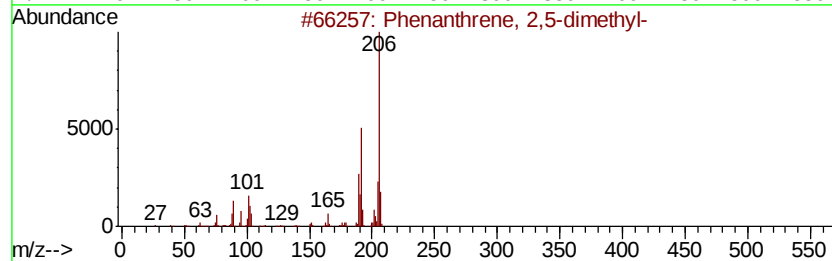
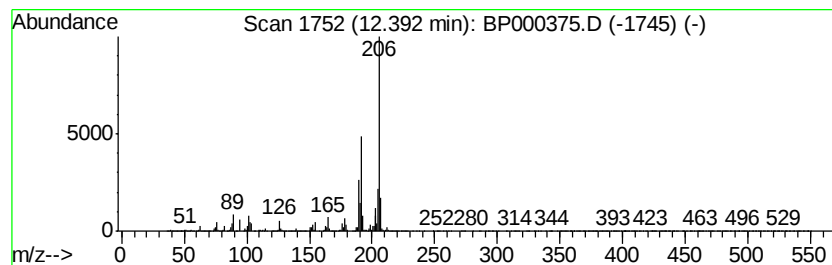
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 9 Phenanthrene, 2,5-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.39	12.59 ng	1357990	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	97
2		9,10-Dimethylantracene	206	C16H14	000781-43-1	94
3		di-p-Tolylacetylene	206	C16H14	002789-88-0	92
4		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	91
5		Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	86



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

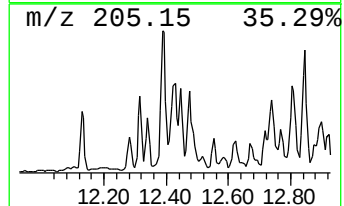
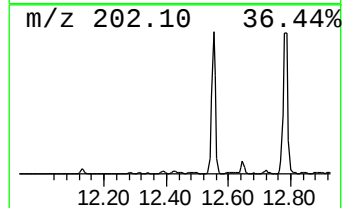
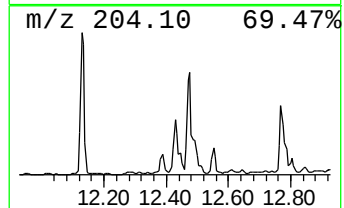
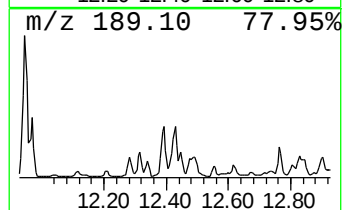
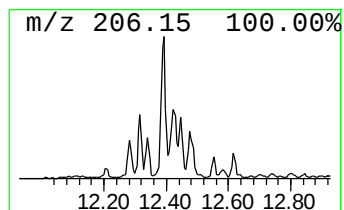
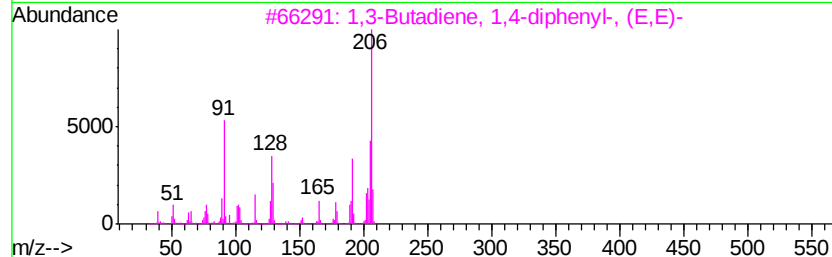
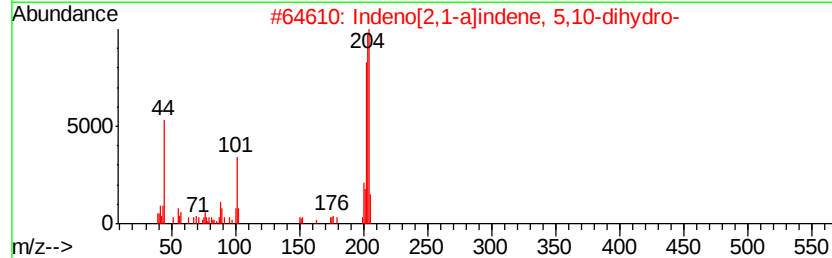
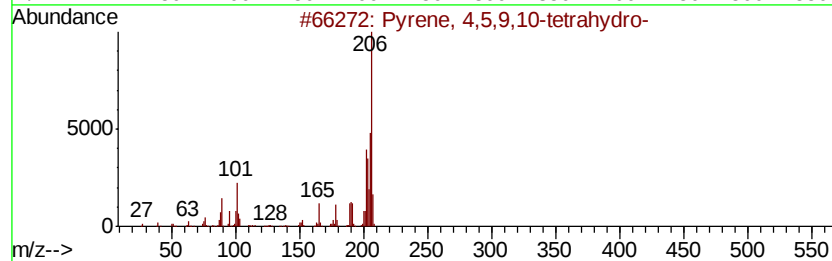
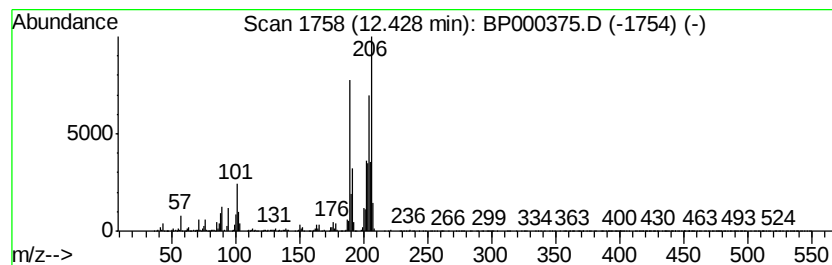
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.43	8.40 ng	905920	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	55
2		Indeno[2,1-a]indene, 5,10-dihydro-	204	C16H12	006543-29-9	44
3		1,3-Butadiene, 1,4-diphenyl-, (E...)	206	C16H14	000538-81-8	41
4		Naphthalene, 1,2-dihydro-1-phenyl-	206	C16H14	016606-46-5	38
5		9,10-Dimethylantracene	206	C16H14	000781-43-1	35



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

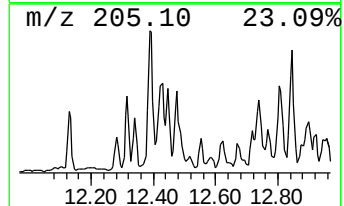
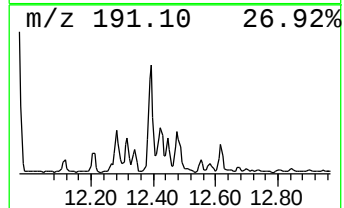
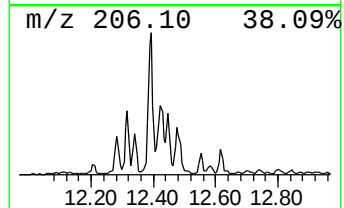
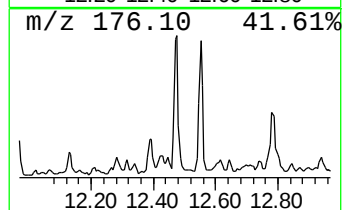
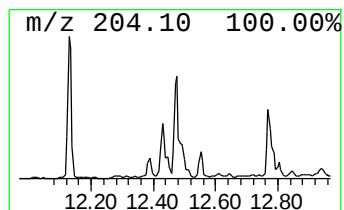
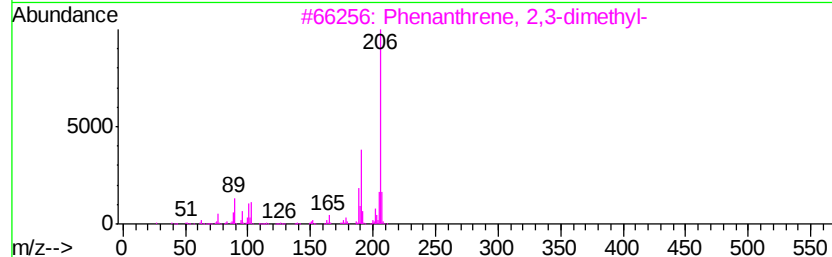
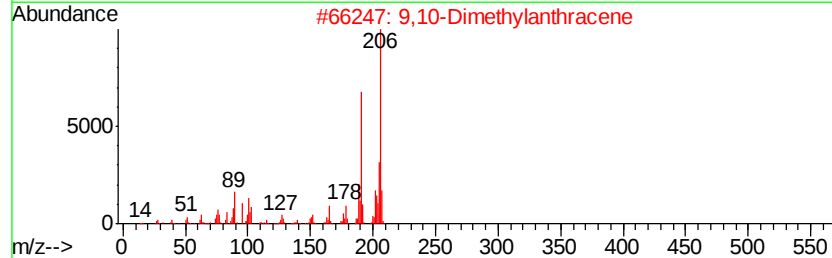
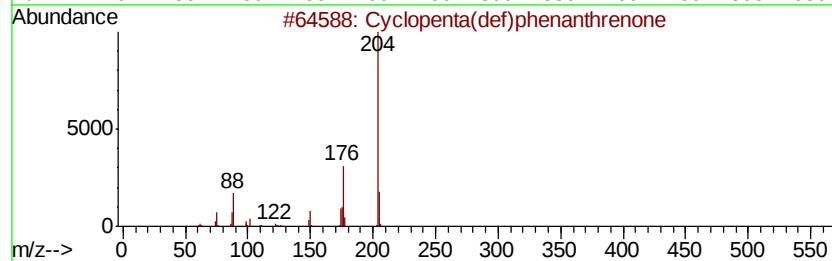
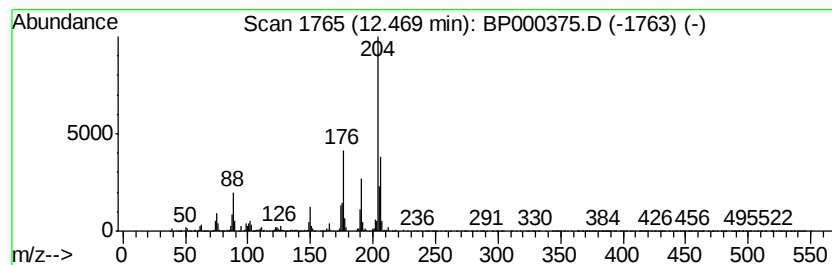
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 11 Cyclopenta(def)phenanthrenone Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.47	7.71 ng	831642	Phenanthrene-d10	11.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	94
2		9,10-Dimethylantracene	206	C16H14	000781-43-1	52
3		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	50
4		[14]Annulene, 1,6:8,13-bis(metha...	206	C16H14	085385-68-8	50
5		[1,1'-Biphenyl]-4-ol, 4'-chloro-	204	C12H9ClO	028034-99-3	43



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

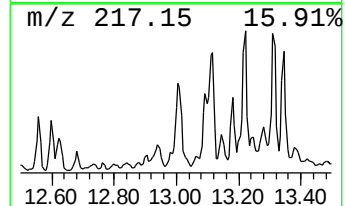
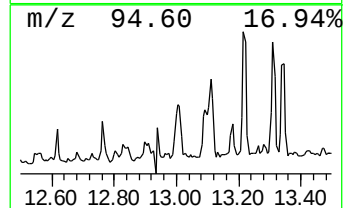
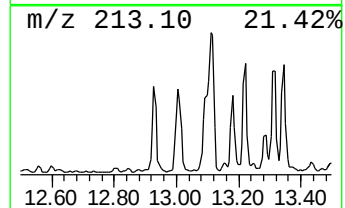
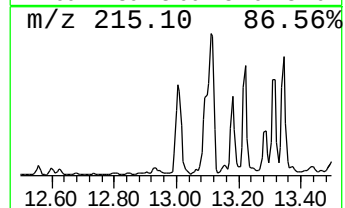
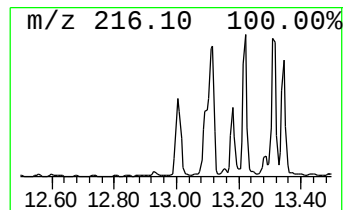
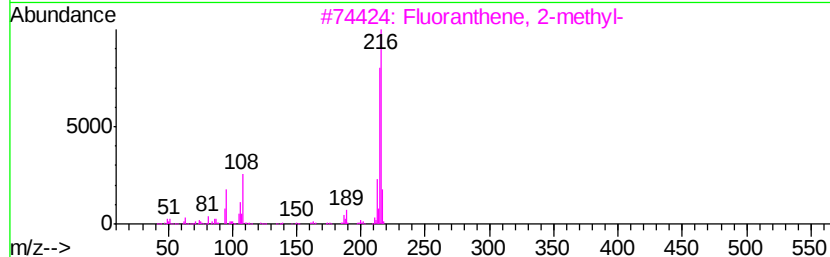
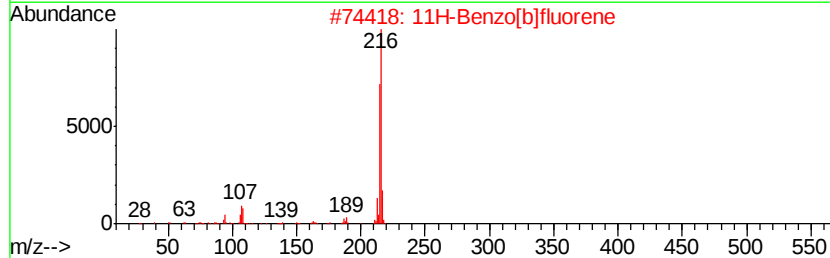
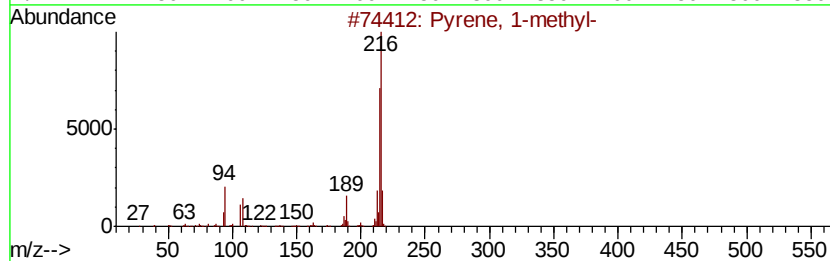
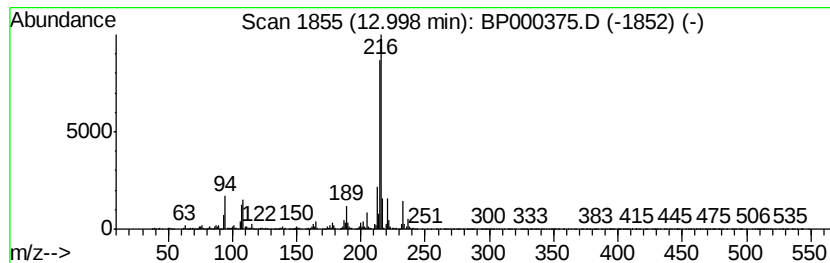
Instrument :
BNA_P
ClientSampleId :
WC-09-091919

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 12 Pyrene, 1-methyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.	
13.00	4.69 ng	888956	Chrysene-d12	13.99	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	97
2	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
3	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
4	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	74
5	Pyrene, 2-methyl-	216	C17H12	003442-78-2	64



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

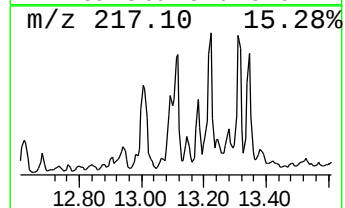
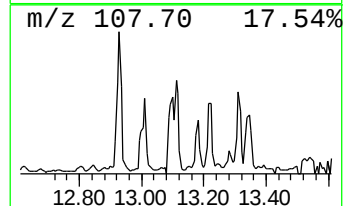
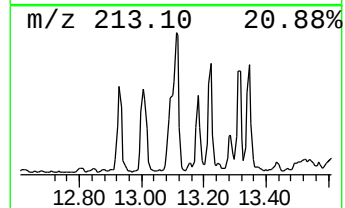
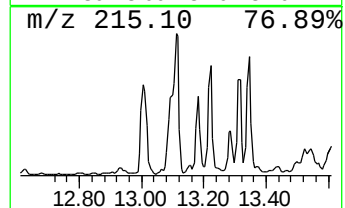
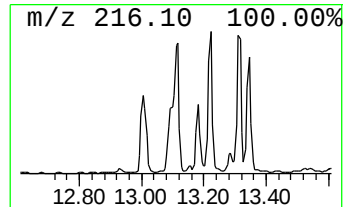
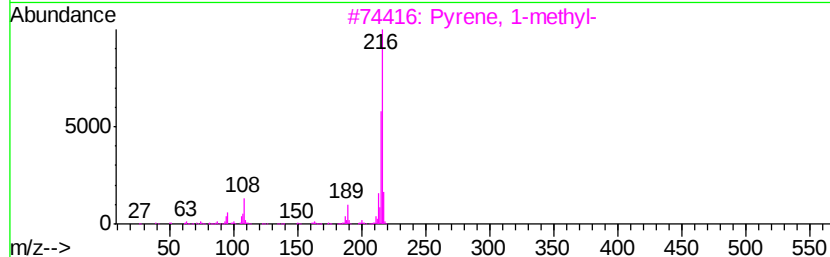
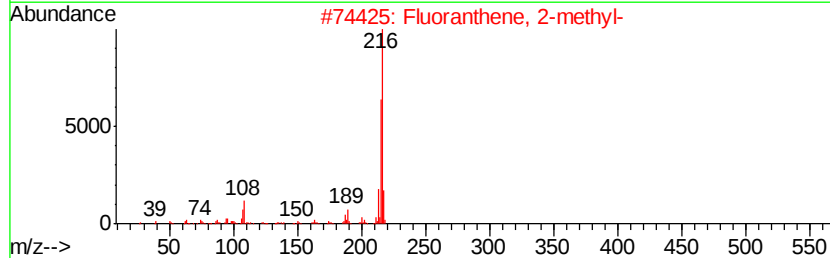
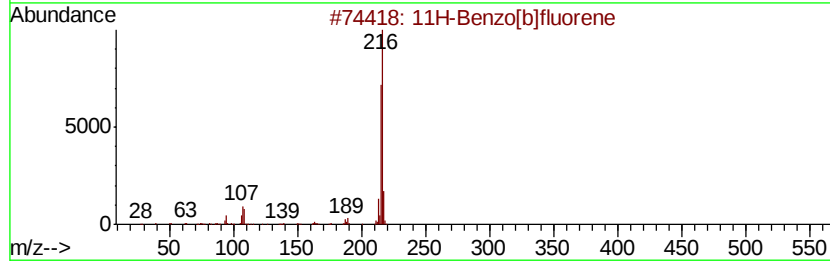
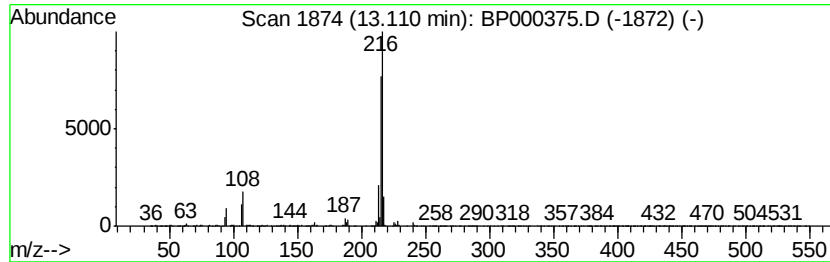
Instrument :
BNA_P
ClientSampleId :
WC-09-091919

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 13 11H-Benzo[b]fluorene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.	
13.11	4.83 ng	914708	Chrysene-d12	13.99	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	93
2	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	87
3	Pyrene, 1-methyl-	216	C17H12	002381-21-7	86
4	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	80
5	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	64



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

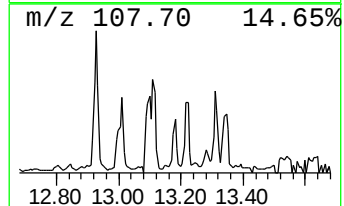
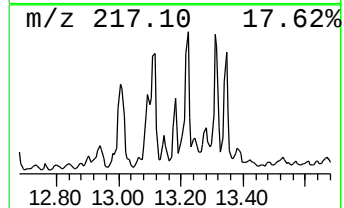
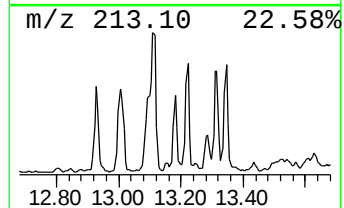
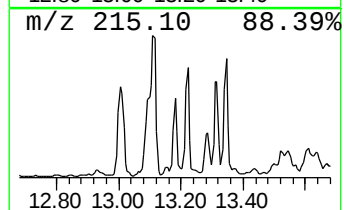
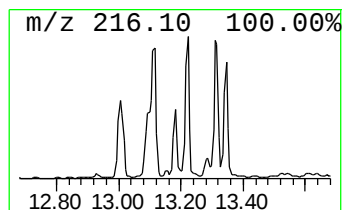
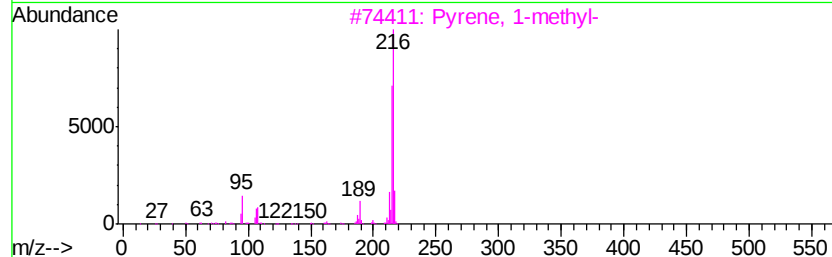
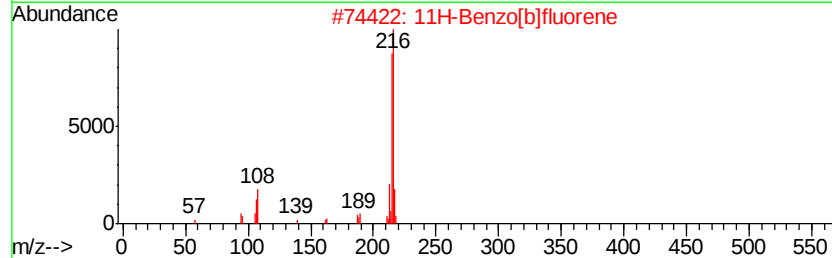
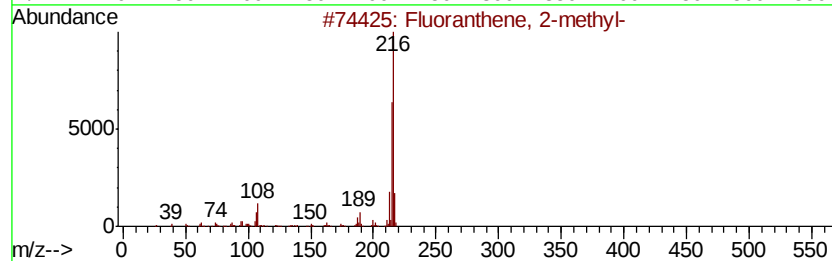
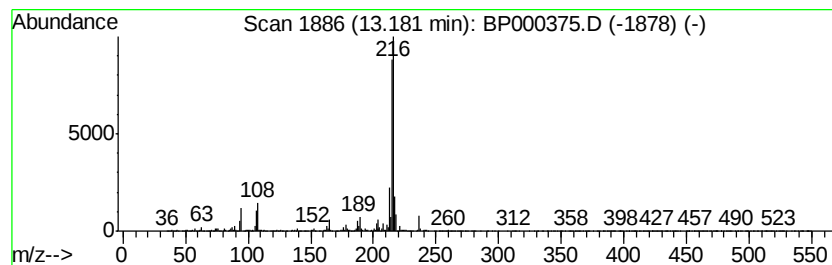
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 14 Fluoranthene, 2-methyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.18	4.69 ng	889360	Chrysene-d12	13.99

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
2			11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91
3			Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
4			11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87
5			6H-Thiazolo[5,4-e]indole, 2,7,8-...	216	C12H12N2S	1000338-32-0	64



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

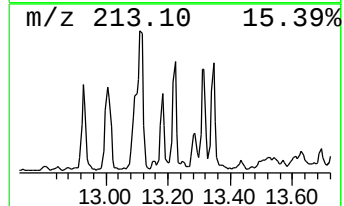
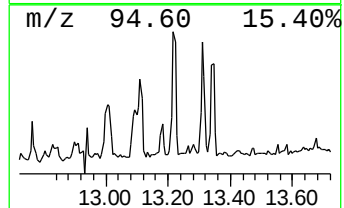
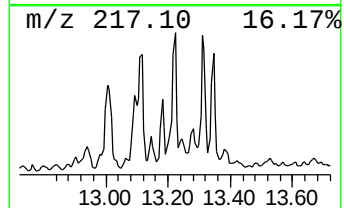
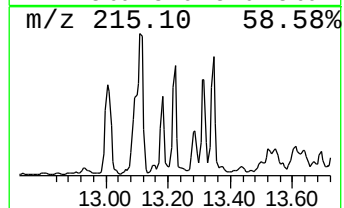
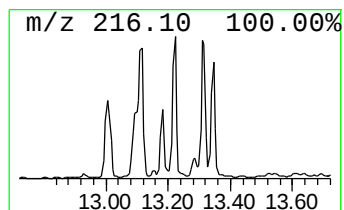
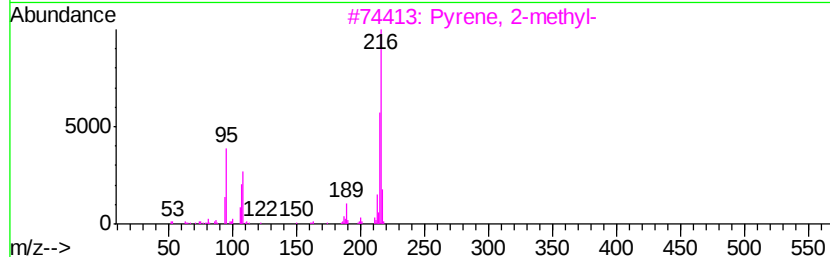
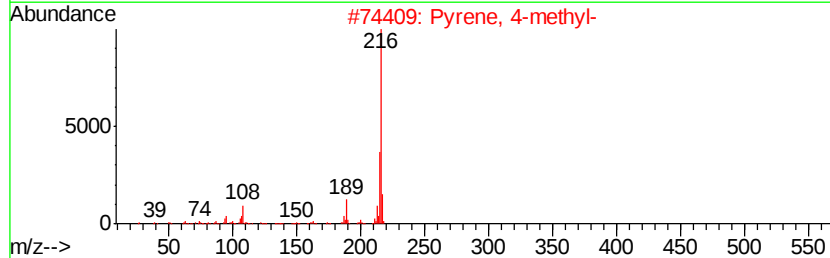
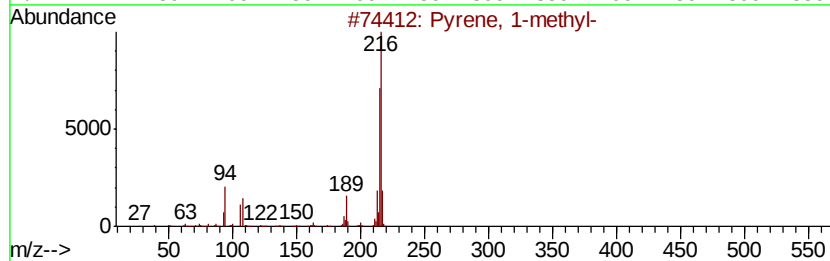
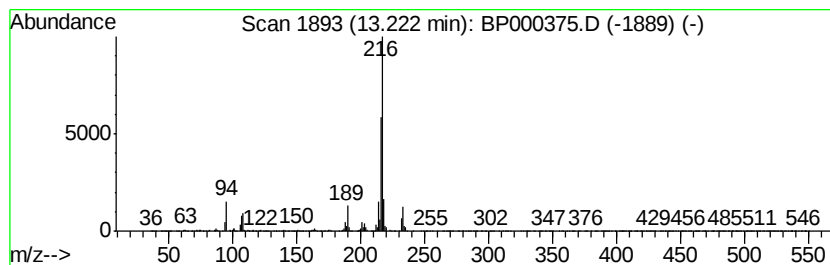
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 15 Pyrene, 4-methyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.18 ng	981316	Chrysene-d12	13.99

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pyrene, 1-methyl-	216	C17H12	002381-21-7	97
2		Pyrene, 4-methyl-	216	C17H12	003353-12-6	94
3		Pyrene, 2-methyl-	216	C17H12	003442-78-2	94
4		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87
5		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	87



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

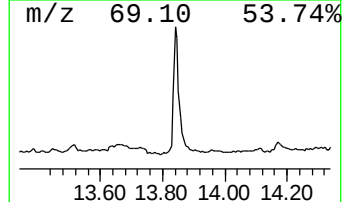
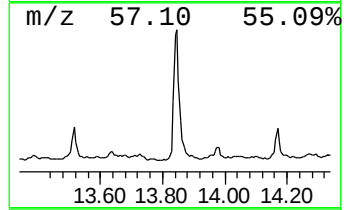
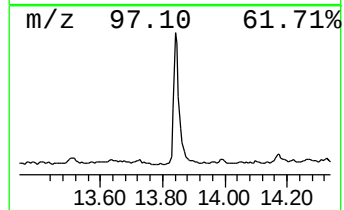
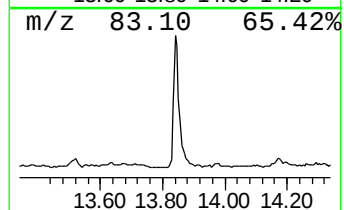
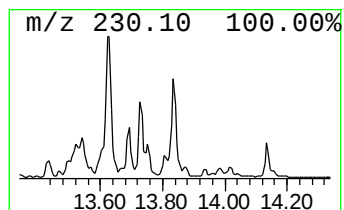
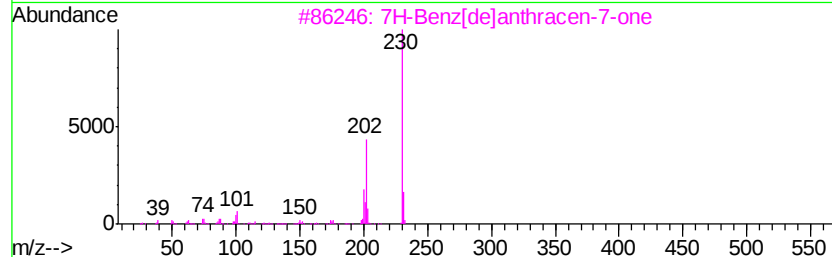
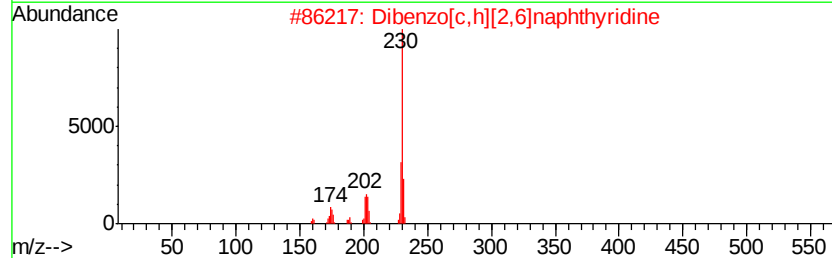
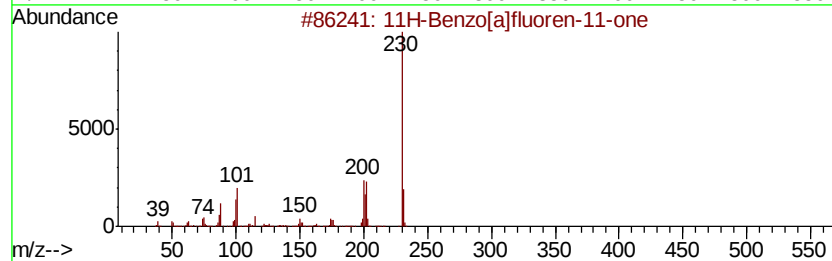
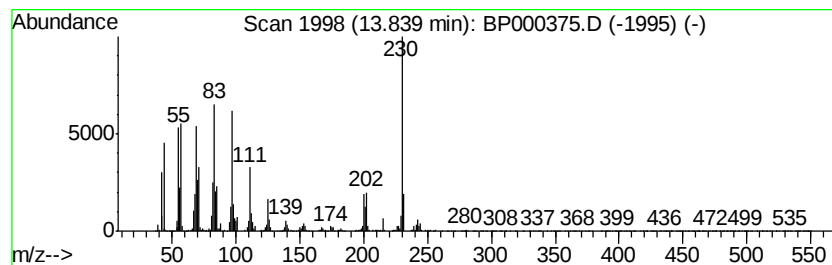
Instrument :
BNA_P
ClientSampleId :
WC-09-091919

Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 16 11H-Benzo[a]fluoren-11-one Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.	
13.84	6.52 ng	1236210	Chrysene-d12	13.99	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[a]fluoren-11-one	230	C17H10O	000479-79-8	90
2	Dibenzo[c,h][2,6]naphthyridine	230	C16H10N2	000218-30-4	59
3	7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	42
4	Oxalic acid, monoamide, N-cyclohexyl...	325	C19H35NO3	1000309-48-8	37
5	(E)-.alpha.,.alpha.'-Dicyanostil...	230	C16H10N2	002450-55-7	27



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

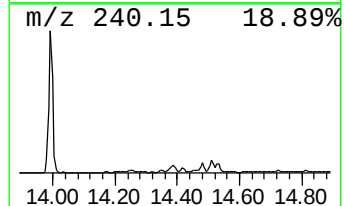
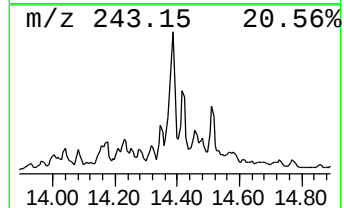
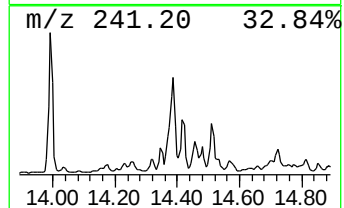
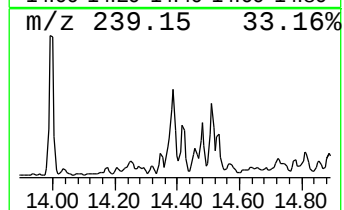
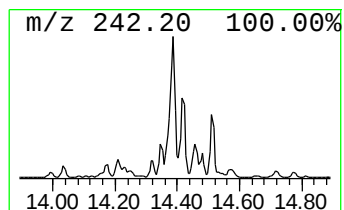
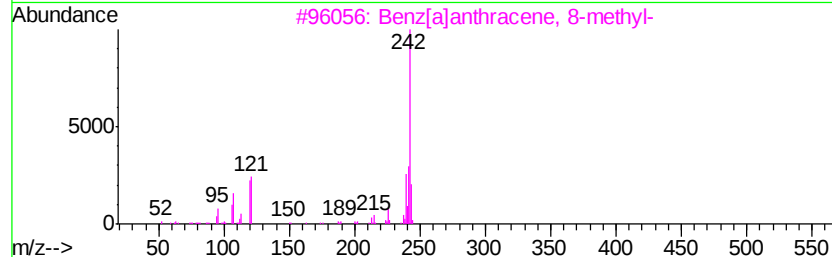
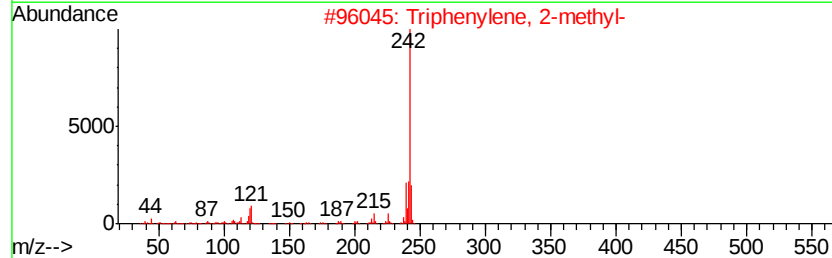
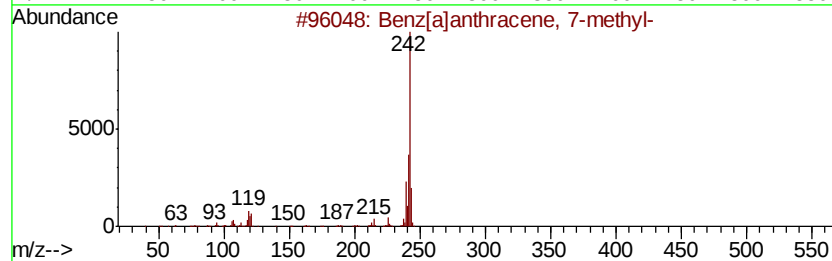
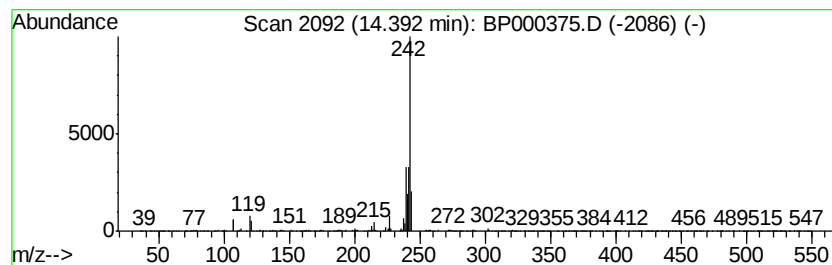
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 17 Benz[a]anthracene, 7-methyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.39	4.27 ng	808822	Chrysene-d12	13.99

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benz[a]anthracene, 7-methyl-	242	C19H14	002541-69-7	93
2		Triphenylene, 2-methyl-	242	C19H14	001705-84-6	93
3		Benz[a]anthracene, 8-methyl-	242	C19H14	002381-31-9	91
4		Chrysene, 1-methyl-	242	C19H14	003351-28-8	91
5		Benz[a]anthracene, 1-methyl-	242	C19H14	002498-77-3	90



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

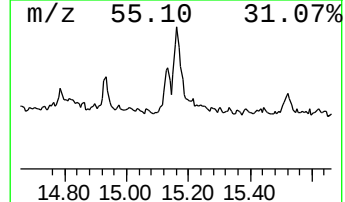
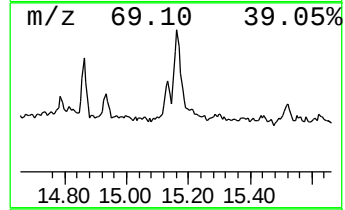
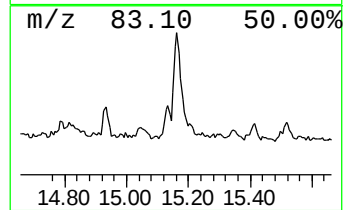
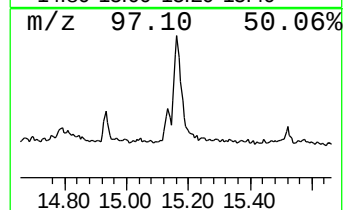
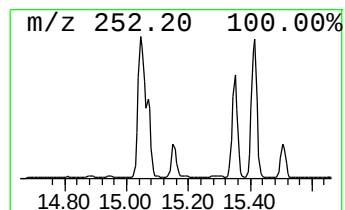
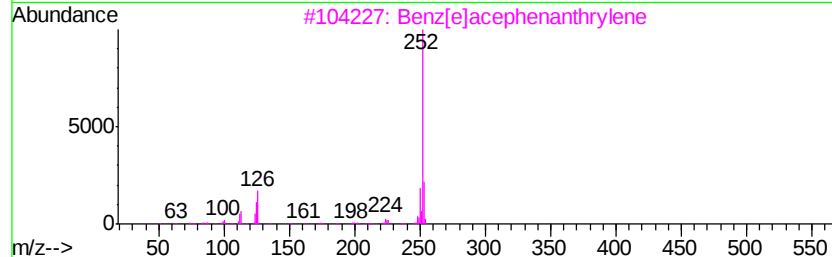
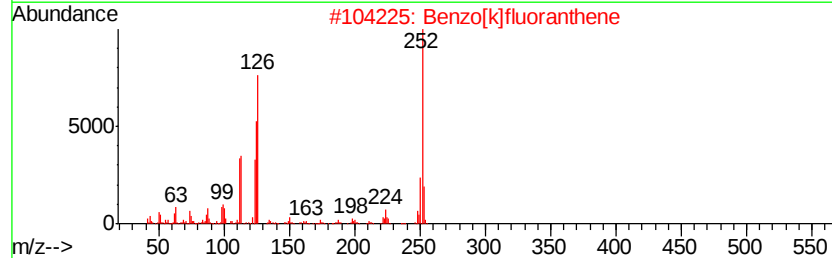
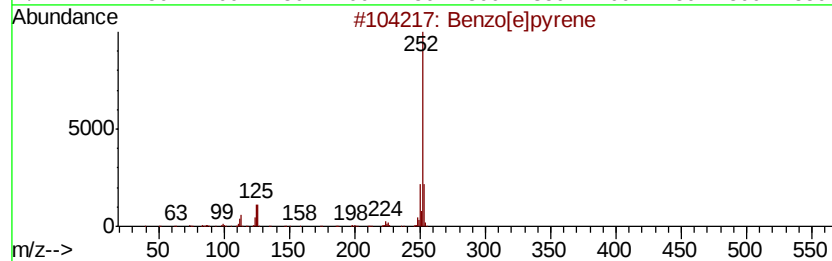
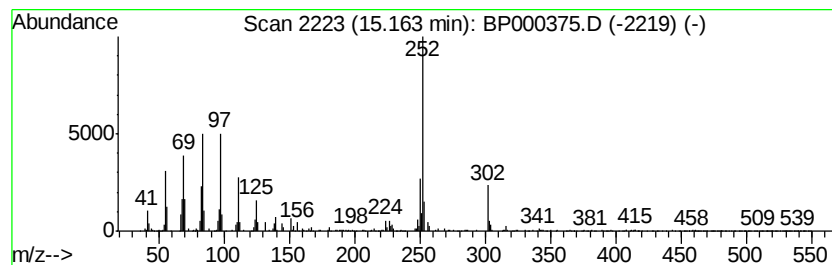
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 18 Benzo[e]pyrene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.16	10.90 ng	927670	Perylene-d12	15.47

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	94
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
3		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	90
4		Benzo[a]pyrene	252	C20H12	000050-32-8	90
5		Perylene	252	C20H12	000198-55-0	76



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

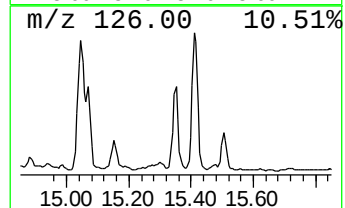
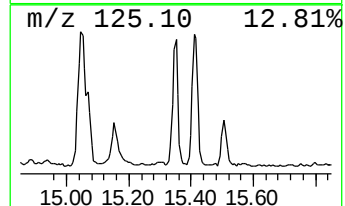
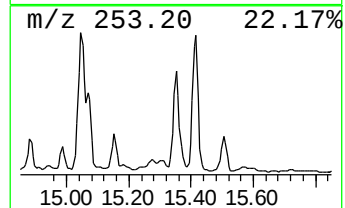
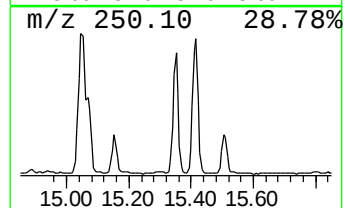
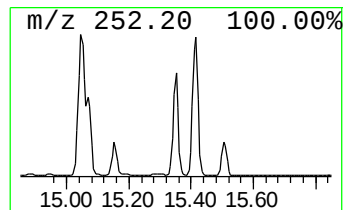
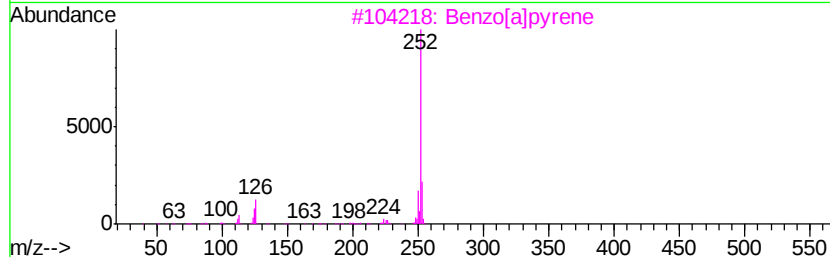
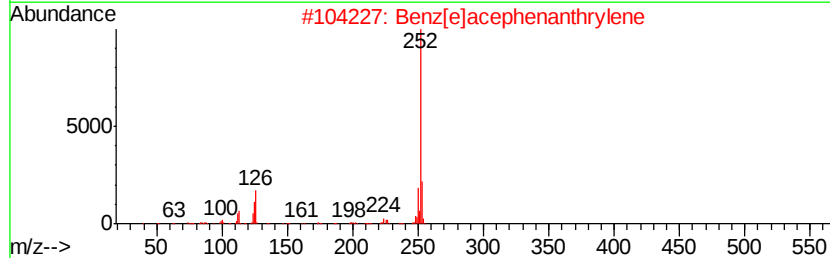
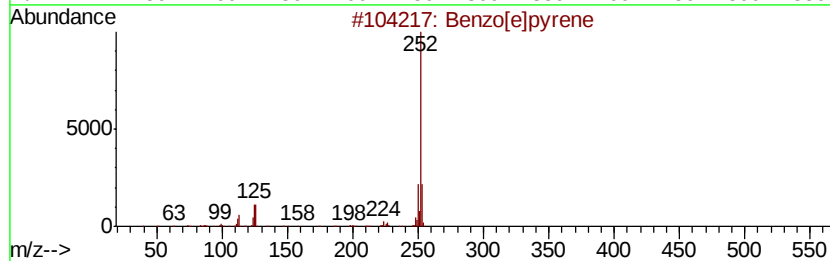
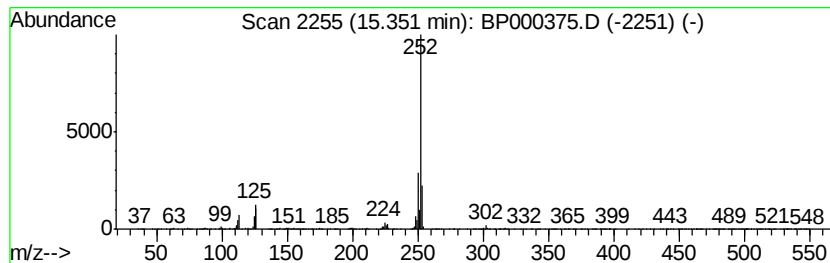
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 19 Perylene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.35	13.13 ng	1117030	Perylene-d12	15.47

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



Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\
Data File : BP000375.D
Acq On : 23 Sep 2019 21:05
Operator : HP/JU
Sample : K4997-03
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_P
ClientSampleId :
WC-09-091919

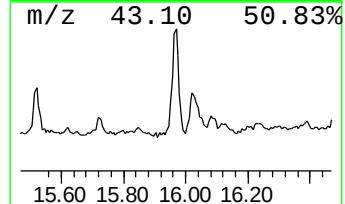
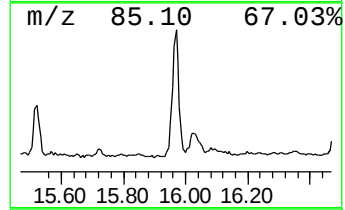
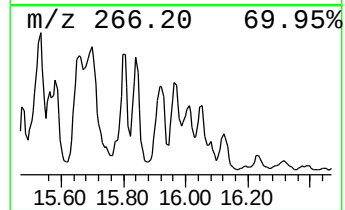
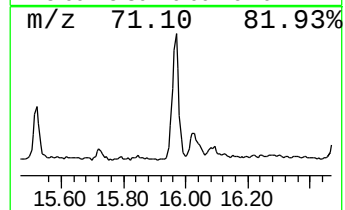
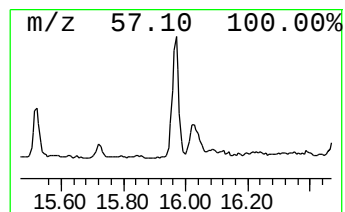
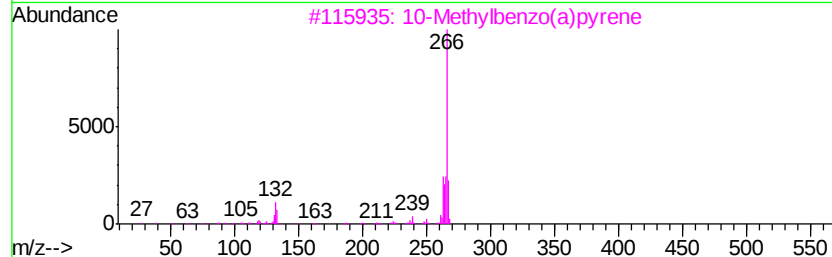
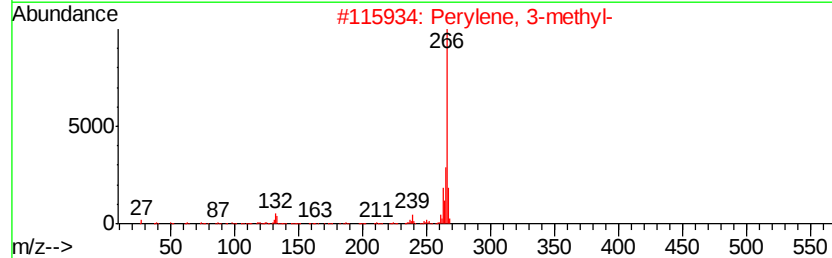
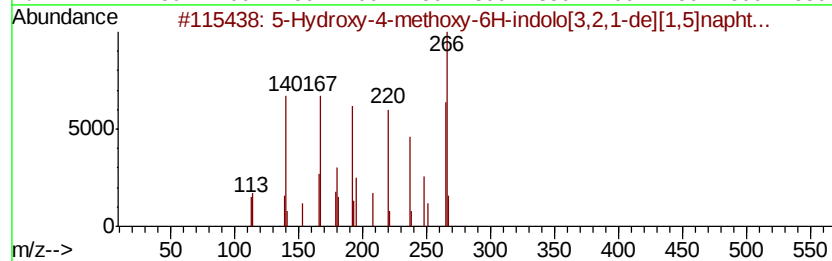
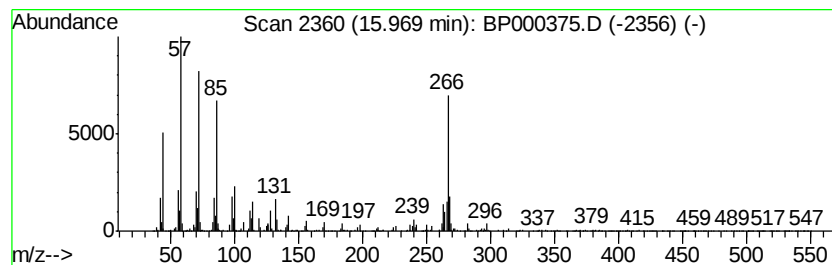
Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 20 unknown15.97 Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.97	4.31 ng	366661	Perylene-d12	15.47

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			5-Hydroxy-4-methoxy-6H-indolo[3,...	266	C15H10N2O3	018110-86-6	46
2			Perylene, 3-methyl-	266	C21H14	024471-47-4	25
3			10-Methylbenzo(a)pyrene	266	C21H14	063104-32-5	15
4			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	15
5			3,3-Diethylheptadecane	296	C21H44	1000360-41-6	12



Data Path : Z:\SVOASRV\HPCHEM1\BNA_P\DATA\BP092319\
 Data File : BP000375.D
 Acq On : 23 Sep 2019 21:05
 Operator : HP/JU
 Sample : K4997-03
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_P
 ClientSampleId :
 WC-09-091919

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_P\METHODS\8270-BP091619.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
unknown6.56	6.56	70.2	ng	3726570	1	6.79	1061130	20.0
Anthracene, 1-met...	11.83	9.3	ng	1006030	4	11.33	2157050	20.0
Phenanthrene, 2-m...	11.86	14.3	ng	1536920	4	11.33	2157050	20.0
1H-Indene, 2-phenyl-	11.95	14.0	ng	1505490	4	11.33	2157050	20.0
1H-Cyclopropa[1]p...	11.97	7.3	ng	791474	4	11.33	2157050	20.0
Tricyclo[8.2.2.2(...	12.13	5.8	ng	621897	4	11.33	2157050	20.0
9,10-Anthracenedione	12.15	5.1	ng	549898	4	11.33	2157050	20.0
Phenanthrene, 2,5...	12.39	12.6	ng	1357990	4	11.33	2157050	20.0
Pyrene, 4,5,9,10-...	12.43	8.4	ng	905920	4	11.33	2157050	20.0
Cyclopenta(def)ph...	12.47	7.7	ng	831642	4	11.33	2157050	20.0
Pyrene, 1-methyl-	13.00	4.7	ng	888956	5	13.99	3789240	20.0
11H-Benzo[b]fluorene	13.11	4.8	ng	914708	5	13.99	3789240	20.0
Fluoranthene, 2-m...	13.18	4.7	ng	889360	5	13.99	3789240	20.0
Pyrene, 4-methyl-	13.22	5.2	ng	981316	5	13.99	3789240	20.0
11H-Benzo[a]fluor...	13.84	6.5	ng	1236210	5	13.99	3789240	20.0
Benz[a]anthracene...	14.39	4.3	ng	808822	5	13.99	3789240	20.0
Benzo[e]pyrene	15.16	10.9	ng	927670	6	15.47	1701700	20.0
Perylene	15.35	13.1	ng	1117030	6	15.47	1701700	20.0
unknown15.97	15.97	4.3	ng	366661	6	15.47	1701700	20.0