LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

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:\HPCHEM1\BNA_F\METHODS\8270-BF081517.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	5.322	546	550	562	rBV	657161	615356	17.87%	1.417%
2	6.357	722	726	743	rVB	708914	727222	21.12%	1.675%
3	6.492	745	749	752	rBV	661324	632660	18.37%	1.457%
4	6.722	785	788	792	rBV	803193	727366	21.12%	1.675%
5	6.881	811	815	818	rBV	564040	491361	14.27%	1.132%
6	7.287	880	884	895	rVB	424199	360864	10.48%	0.831%
7	8.010	1002	1007	1009	rBV	1020169	949331	27.57%	2.187%
8	8.028	1009	1010	1016	rVB	664653	477648	13.87%	1.100%
9	8.363	1064	1067	1077	rBV	64733	70166	2.04%	0.162%
10	8.722	1124	1128	1134	rBV	324105	283566	8.24%	0.653%
11	8.816	1140	1144	1150	rVB	279173	265942	7.72%	0.613%
12	9.081	1185	1189	1200	rVB	796854	671837	19.51%	1.547%
13	9.181	1200	1206	1212	rBV	91588	99293	2.88%	0.229%
14	9.351	1228	1235	1238	rBV	119697	159419	4.63%	0.367%
15	9.422	1242	1247	1249	rVV	212975	227632	6.61%	0.524%
16	9.445	1249	1251	1254	rVV	143205	119309	3.46%	0.275%
17	9.480	1254	1257	1261	rVV2	100603	104156	3.02%	0.240%
18	9.533	1261	1266	1272	rVV	106973	130521	3.79%	0.301%
19	9.622	1275	1281	1286	rBV	338546	311200	9.04%	0.717%
20	9.757	1298	1304	1307	rBV2	852465	816706	23.72%	1.881%
21	9.792	1307	1310	1313	rVV	472602	399847	11.61%	0.921%
22	9.963	1335	1339	1343	rBV	525747	443625	12.88%	1.022%
23	10.004	1343	1346	1349	rVB	71044	61518	1.79%	0.142%
24	10.075	1353	1358	1361	rBV2	76143	85173	2.47%	0.196%
25	10.163	1369	1373	1375	rBV3	48102	64487	1.87%	0.149%
26	10.304	1394	1397	1403	rVV	977649	872412	25.34%	2.009%
27	10.392	1410	1412	1414	rVV2	80167	72847	2.12%	0.168%
28	10.416	1414	1416	1418	rVV	61878	61583	1.79%	0.142%
29	10.463	1421	1424	1427	rVV	164148	149171	4.33%	0.344%
30	10.545	1431	1438	1442	rVV2	449442	487024	14.14%	1.122%
31	10.669	1455	1459	1465	rVB3	82831	94338	2.74%	0.217%
32	10.851	1483	1490	1493	rBV2	174402	216697	6.29%	0.499%
33	10.880	1493	1495	1498	rVB	86763	71076	2.06%	0.164%
34	10.933	1501	1504	1507	rVB	83527	73417	2.13%	0.169%

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

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:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	10.980	1507	1512	1514	rBV3	59051	76574	2.22%	0.176%
36	11.045	1521	1523	1527	rVB2	105132	100266	2.91%	0.231%
37	11.092	1527	1531	1534	rVV	68218	84425	2.45%	0.194%
38	11.139	1535	1539	1544	rVB	326521	329311	9.56%	0.758%
39	11.245	1552	1557	1558	rBV	674364	714124	20.74%	1.645%
40	11.275	1558	1562	1564	rVV	3432634	3443402	100.00%	7.931%
41	11.316	1564	1569	1572	rVV	1053684	1020741	29.64%	2.351%
42	11.351	1572	1575	1578	rVB2	126946	115506	3.35%	0.266%
43	11.475	1589	1596	1599	rBV	720834	713427	20.72%	1.643%
44	11.539	1603	1607	1610	rVV3	117811	113648	3.30%	0.262%
45	11.569	1610	1612	1616	rVB3	103470	113179	3.29%	0.261%
46	11.651	1624	1626	1631	rVB	71720	79133	2.30%	0.182%
47	11.745	1636	1642	1644	rVV	497022	497926	14.46%	1.147%
48	11.769	1644	1646	1651	rVB	691099	568197	16.50%	1.309%
49	11.816	1651	1654	1657	rBV	237525	213575	6.20%	0.492%
50	11.857	1657	1661	1663	rVV	877462	943382	27.40%	2.173%
51	11.874	1663	1664	1669	rVB	357118	234745	6.82%	0.541%
52	11.922	1669	1672	1674	rBV2	67690	68632	1.99%	0.158%
53	11.945	1674	1676	1679	rVV	86447	71335	2.07%	0.164%
54	12.039	1689	1692	1694	rVV	324021	291451	8.46%	0.671%
55	12.063	1694	1696	1699	rVB2	188599	153893	4.47%	0.354%
56	12.216	1720	1722	1724	rBV	107951	81963	2.38%	0.189%
57	12.239	1724	1726	1729	rVB	95181	78177	2.27%	0.180%
58	12.292	1731	1735	1738	rBV	237454	280326	8.14%	0.646%
59	12.327	1738	1741	1743	rVV2	156157	172798	5.02%	0.398%
60	12.374	1747	1749	1754	rBV2	136009	186609	5.42%	0.430%
61	12.463	1758	1764	1767	rBV	3043448	3290521	95.56%	7.579%
62	12.516	1771	1773	1775	rVB	87717	65332	1.90%	0.150%
63	12.545	1775	1778	1781	rVB	176694	150194	4.36%	0.346%
64	12.598	1781	1787	1795	rBV3	154869	308946	8.97%	0.712%
65	12.686	1795	1802	1805	rBV2	2728459	3258580	94.63%	7.505%
66	12.727	1807	1809	1814	rVB3	151961	170523	4.95%	0.393%
67	12.798	1817	1821	1823	rBV	213992	208459	6.05%	0.480%
68	12.821	1823	1825	1832	rVB2	659011	785069	22.80%	1.808%
69	12.898	1832	1838	1841	rBV2	237507	390337	11.34%	0.899%
70	12.927	1841	1843	1845	rVB	119227	86410	2.51%	0.199%
71	12.980	1849	1852	1854	rBV3	163616	192752	5.60%	0.444%

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

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:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	13.010	1854	1857	1860	rVB	674884	614206	17.84%	1.415%
73	13.074	1860	1868	1871	rBV	673446	713513	20.72%	1.643%
74	13.110	1871	1874	1877	rBV2	321730	301137	8.75%	0.694%
75	13.169	1882	1884	1887	rBV3	68956	80913	2.35%	0.186%
76	13.204	1887	1890	1892	rVB	178048	140073	4.07%	0.323%
77	13.233	1892	1895	1899	rBV	203346	186858	5.43%	0.430%
78	13.486	1935	1938	1940	rBV	94003	108196	3.14%	0.249%
79	13.516	1940	1943	1947	rVB	127756	171836	4.99%	0.396%
80	13.621	1958	1961	1964	rBV	221579	247356	7.18%	0.570%
81	13.651	1964	1966	1968	rVV	255727	213325	6.20%	0.491%
82	13.674	1968	1970	1976	rVV3	191634	298939	8.68%	0.689%
83	13.721	1976	1978	1982	rVB2	157788	155646	4.52%	0.358%
84	13.874	1997	2004	2007	rBV2	1641382	2525601	73.35%	5.817%
85	13.904	2007	2009	2015	rVB	1304606	1181050	34.30%	2.720%
86	13.980	2020	2022	2024	rVB	224724	158923	4.62%	0.366%
87	14.021	2026	2029	2031	rBV	86068	85742	2.49%	0.197%
88	14.263	2067	2070	2072	rVB	250828	210861	6.12%	0.486%
89	14.292	2073	2075	2079	rVB	114676	105328	3.06%	0.243%
90	14.357	2083	2086	2088	rVV2	158994	173899	5.05%	0.401%
91	14.386	2088	2091	2092	rVV	156041	140324	4.08%	0.323%
92	14.404	2092	2094	2098	rVB2	170533	154933	4.50%	0.357%
93	14.892	2173	2177	2180	rBV	802810	1209185	35.12%	2.785%
94	14.992	2191	2194	2198	rVB	198701	194533	5.65%	0.448%
95	15.174	2222	2225	2231	rVB	434937	548922	15.94%	1.264%
96	15.239	2231	2236	2240	rBV	697245	852550	24.76%	1.964%
97	15.292	2241	2245	2248	rVV	398916	500755	14.54%	1.153%
98	15.321	2248	2250	2256	rVB2	229086	268224	7.79%	0.618%
99	16.668	2474	2479	2488	rVB2	254545	464508	13.49%	1.070%
100	17.080	2544	2549	2560	rVB	179520	360161	10.46%	0.830%

Sum of corrected areas: 43416135

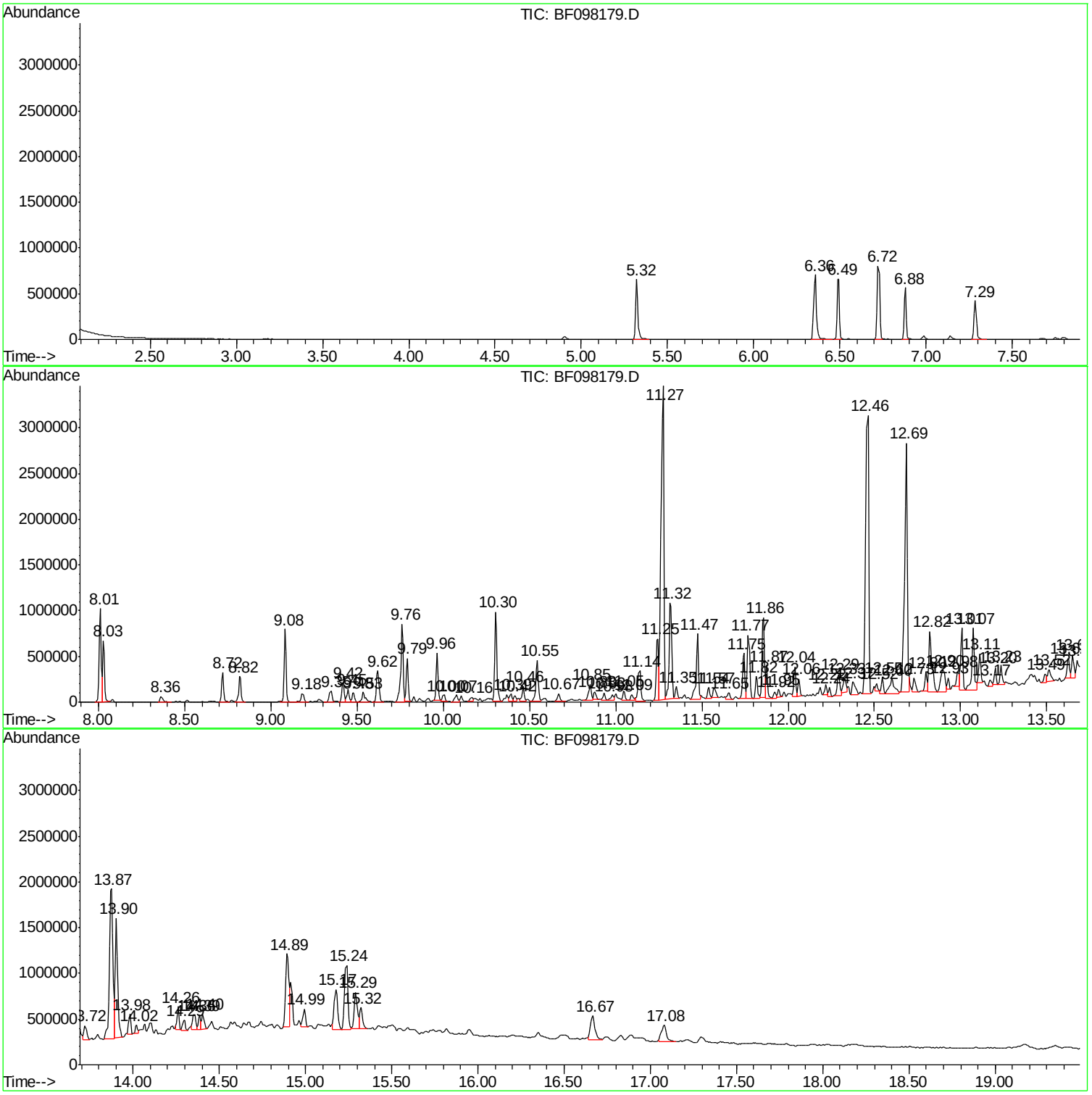
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

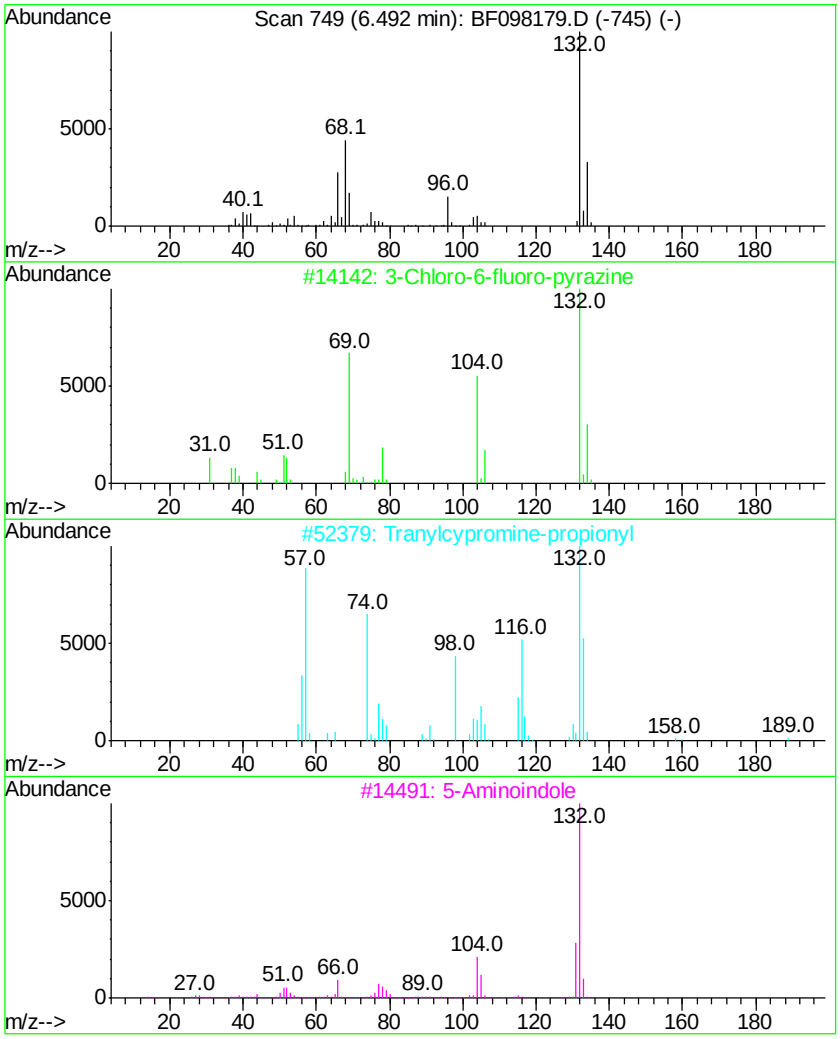
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

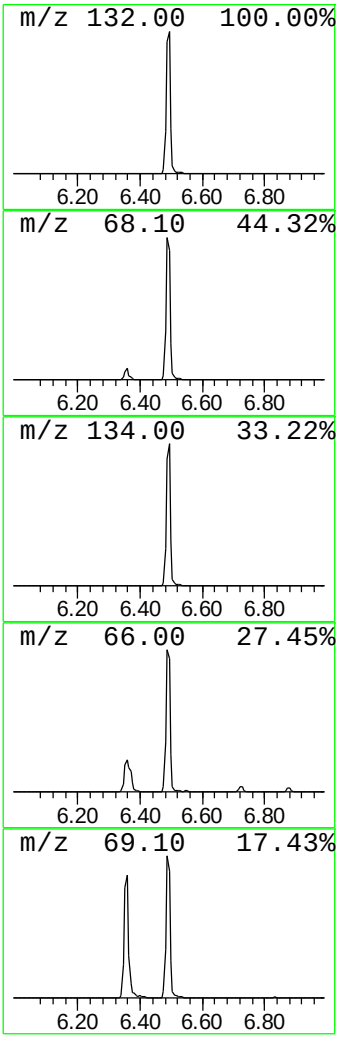
****

Peak Number 1 unknown6.49 Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.49	17.40 ng	632660	1,4-Dichlorobenzene-d4	6.72

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	16
2	Tranylcypromine-propionyl	189	C12H15NO	1000123-86-3	10
3	5-Aminoindole	132	C8H8N2	005192-03-0	10
4	Bicyclo[4.2.0]octa-1,3,5-triene,...	132	C10H12	028749-81-7	9
5	(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	9





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

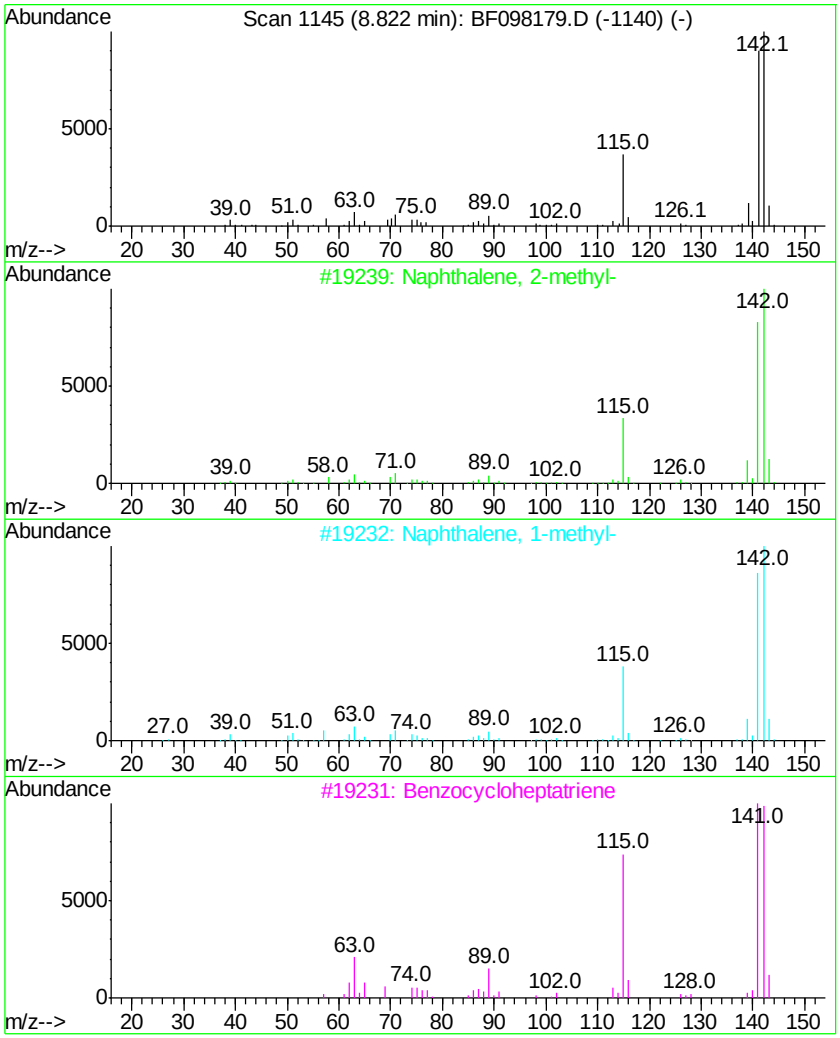
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

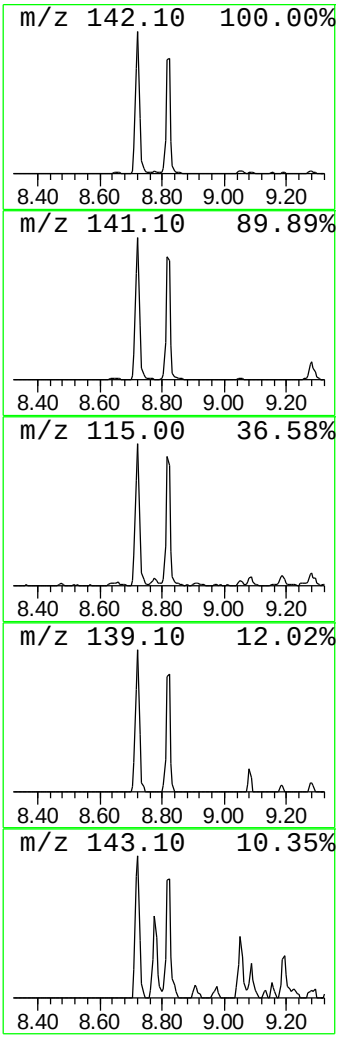
****

Peak Number 3 Naphthalene, 1-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.82	5.60 ng	265942	Naphthalene-d8	8.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	97
2	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	96
3	Benzocycloheptatriene	142	C11H10	000264-09-5	94
4	1,4-Methanonaphthalene, 1,4-dihy...	142	C11H10	004453-90-1	94
5	1H-Indene, 1-ethylidene-	142	C11H10	002471-83-2	72





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

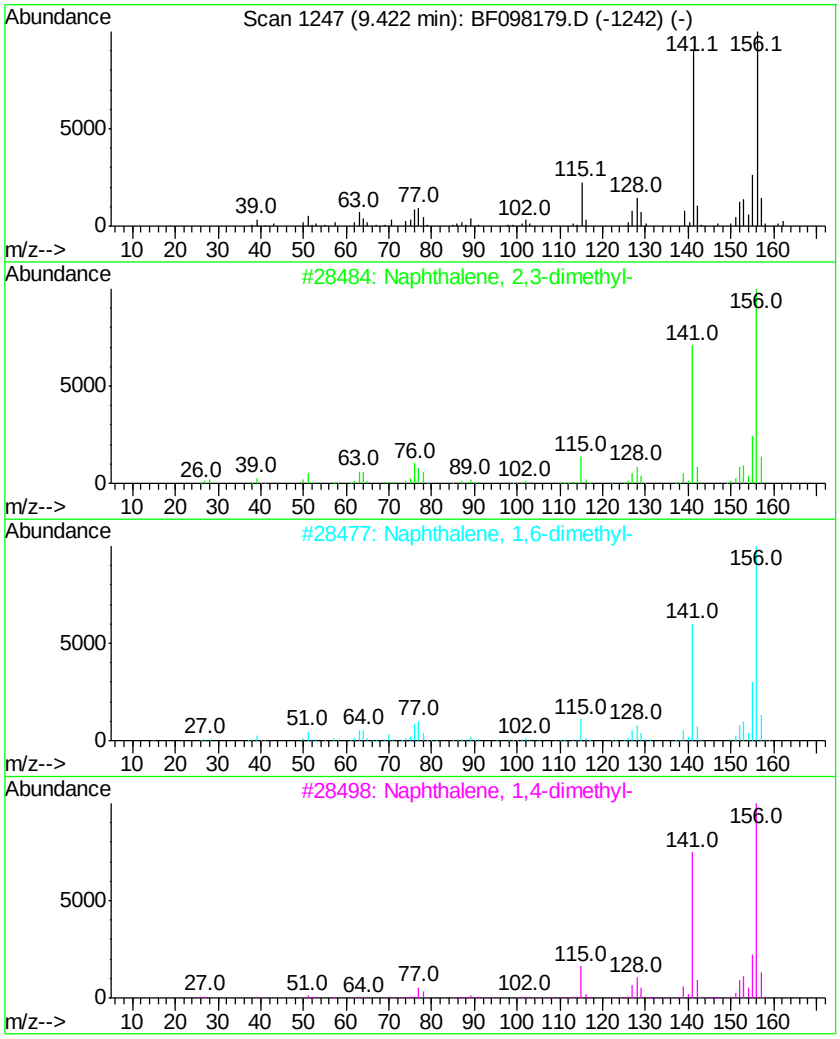
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

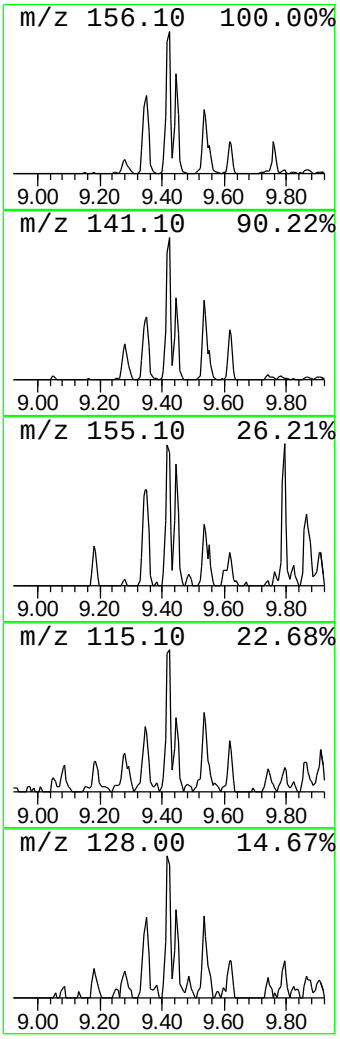
****

Peak Number 4 Naphthalene, 2,3-dimethyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.42	5.57 ng	227632	Acenaphthene-d10	9.76

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2,3-dimethyl-	156	C12H12	000581-40-8	97
2	Naphthalene, 1,6-dimethyl-	156	C12H12	000575-43-9	97
3	Naphthalene, 1,4-dimethyl-	156	C12H12	000571-58-4	97
4	Naphthalene, 2,7-dimethyl-	156	C12H12	000582-16-1	97
5	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	97





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

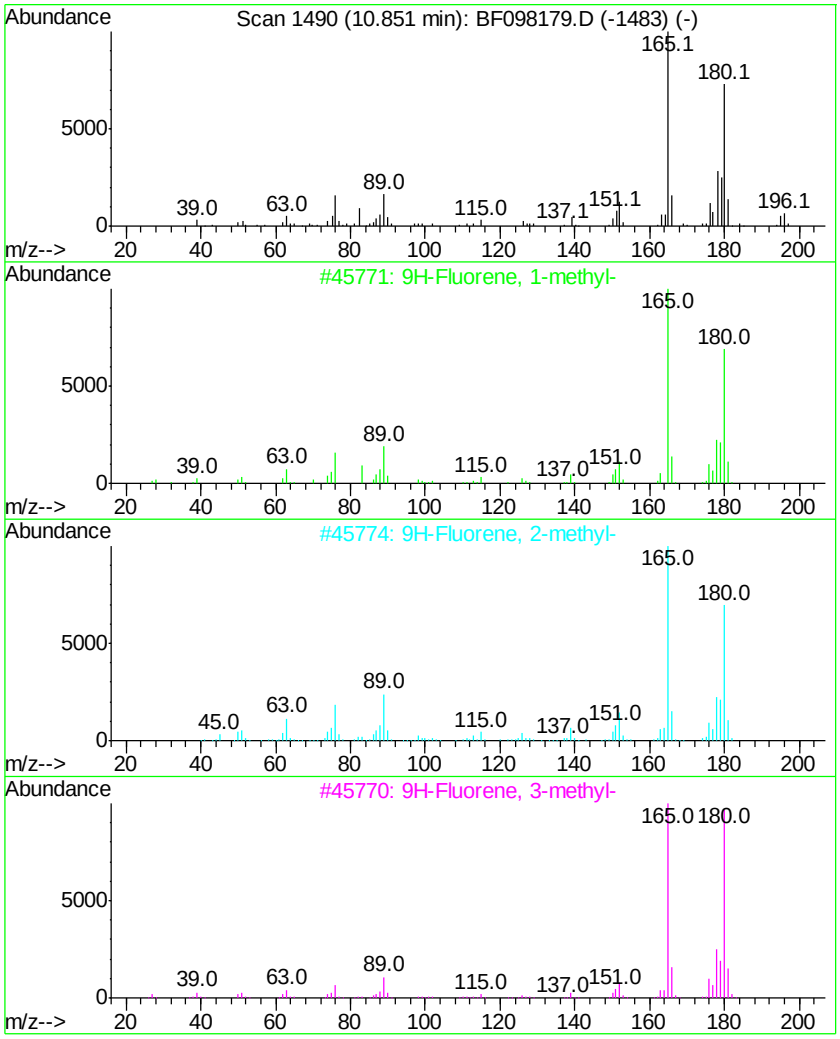
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

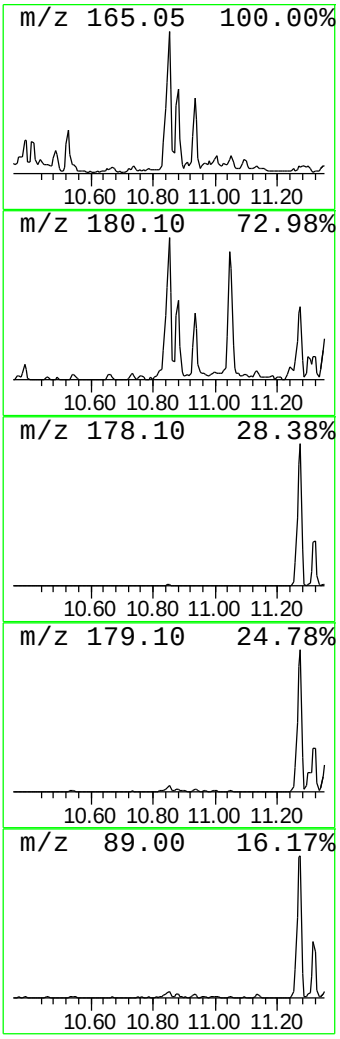
****

Peak Number 5 9H-Fluorene, 1-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.85	6.07 ng	216697	Phenanthrene-d10	11.25

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluorene, 1-methyl-	180	C14H12	001730-37-6	98
2	9H-Fluorene, 2-methyl-	180	C14H12	001430-97-3	97
3	9H-Fluorene, 3-methyl-	180	C14H12	002523-39-9	90
4	9H-Fluorene, 4-methyl-	180	C14H12	001556-99-6	90
5	9H-Fluorene, 9-methyl-	180	C14H12	002523-37-7	89





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

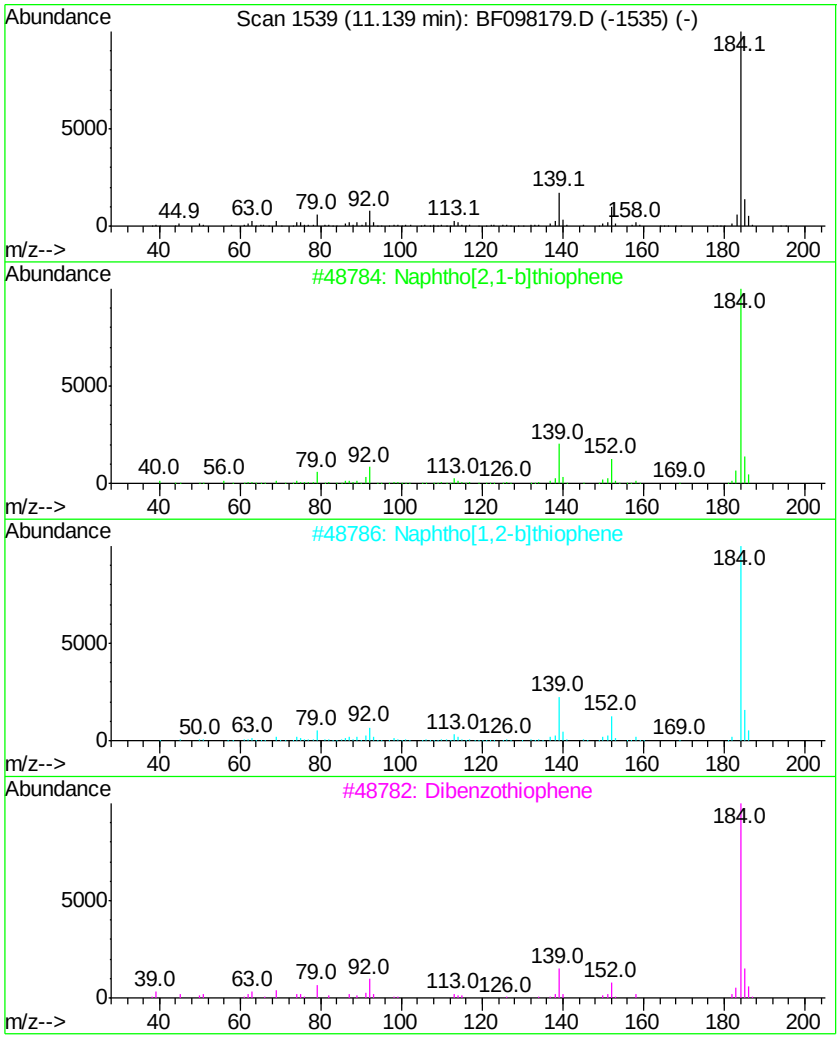
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

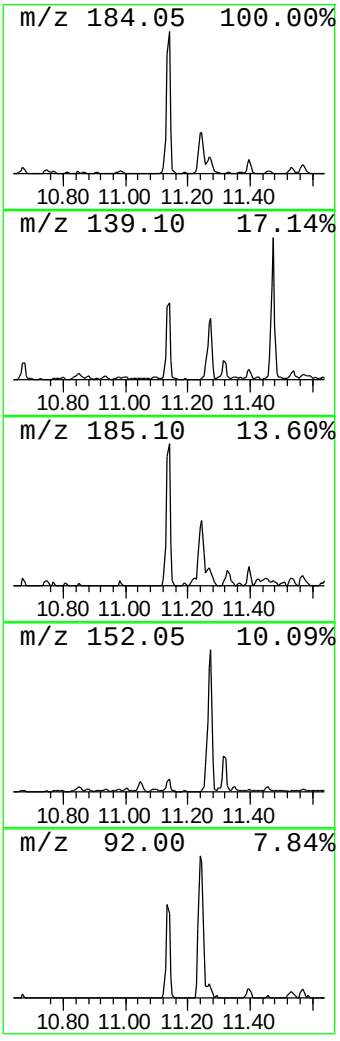
****

Peak Number 6 Naphtho[2,1-b]thiophene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.14	9.22 ng	329311	Phenanthrene-d10	11.25

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	97
2	Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	97
3	Dibenzothiophene	184	C12H8S	000132-65-0	96
4	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	95
5	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

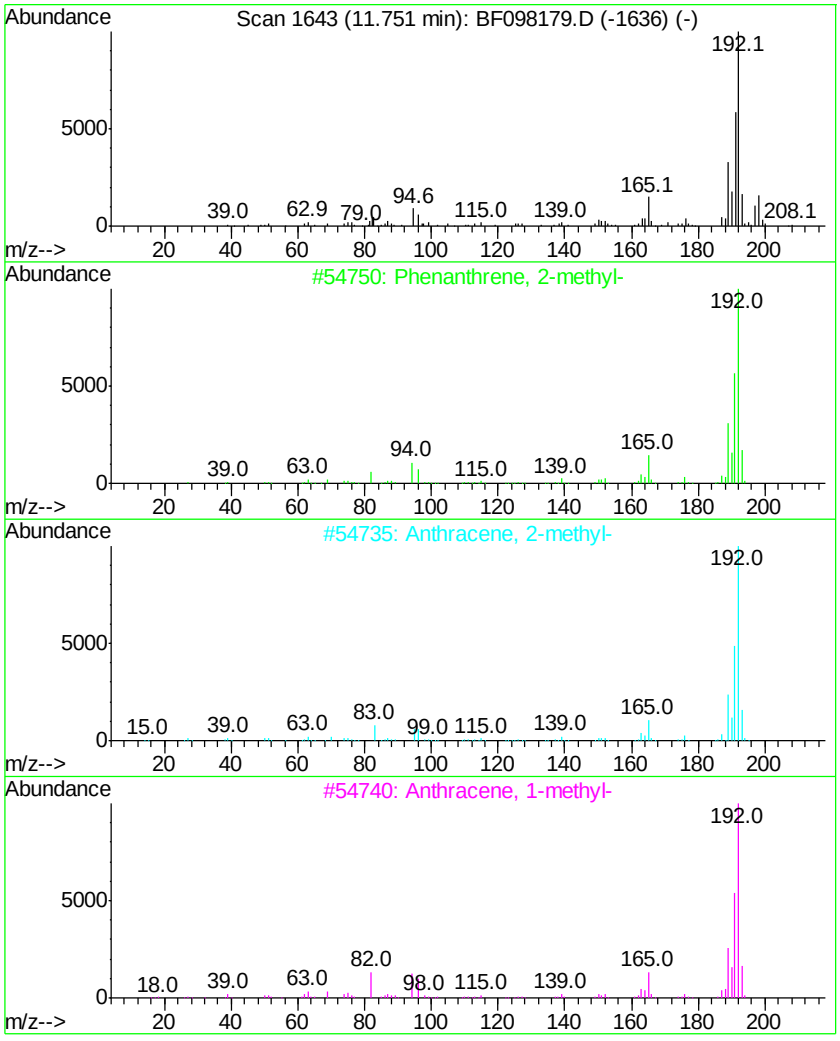
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

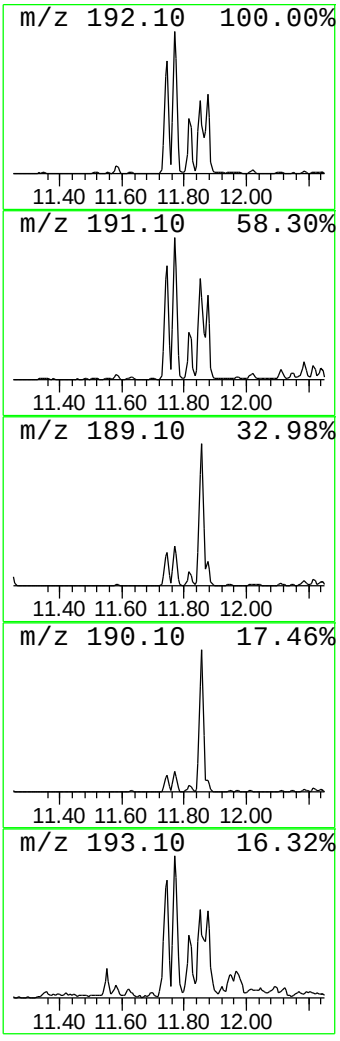
****

Peak Number 7 Phenanthrene, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.75	13.95 ng	497926	Phenanthrene-d10	11.25

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	94
5	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	93





Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

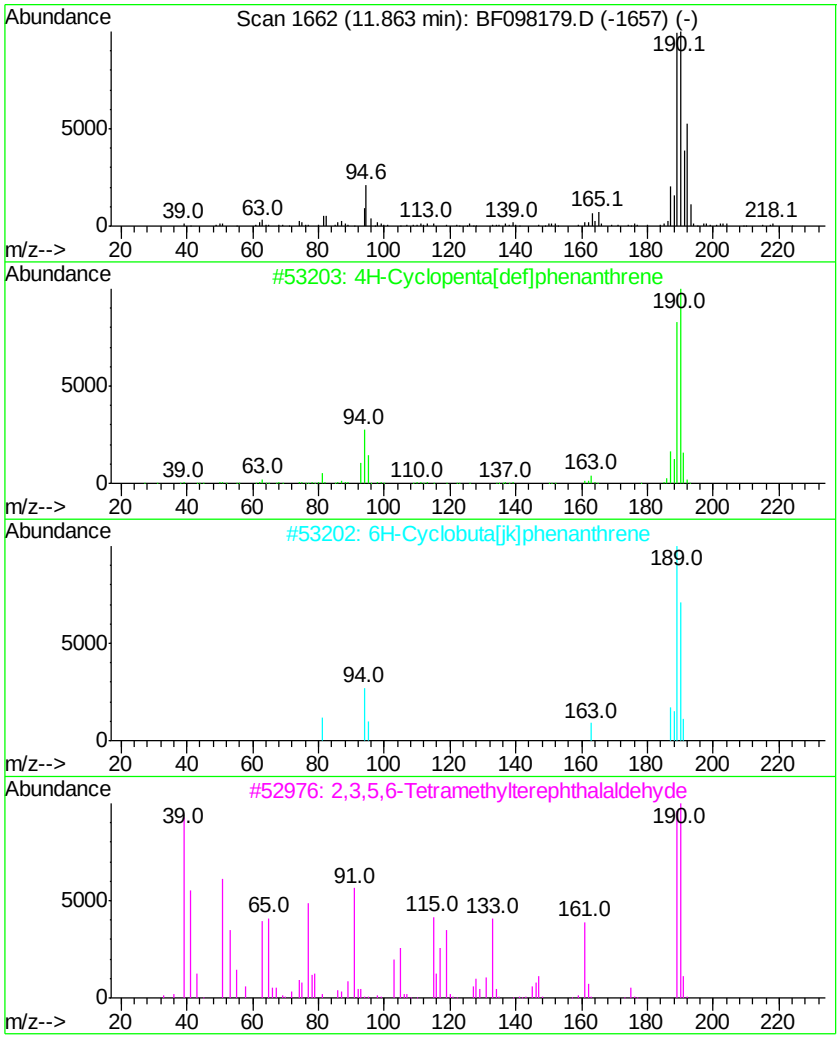
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

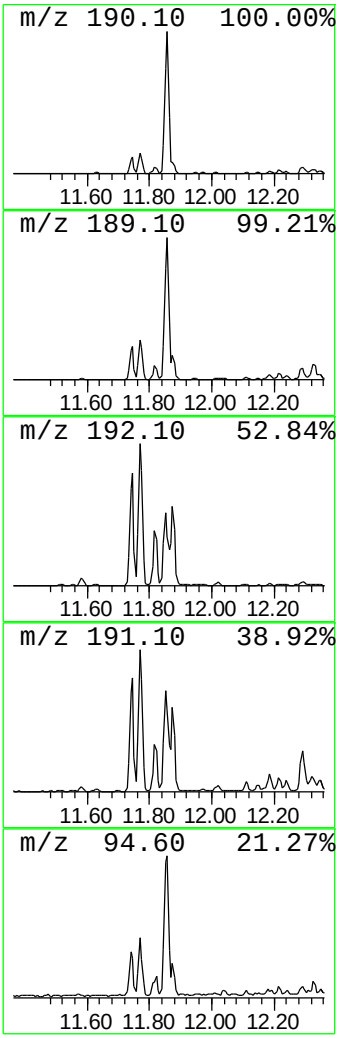
****

Peak Number 10 4H-Cyclopenta[def]phenanthrene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.86	26.42 ng	943382	Phenanthrene-d10	11.25

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	94
2	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	64
3	2,3,5,6-Tetramethylterephthalald...	190	C12H14O2	007072-01-7	50
4	Methyl diselenide	190	C2H6Se2	007101-31-7	49
5	2,2'-Bis(4,5-dimethylimidazole)	190	C10H14N4	069286-06-2	40





Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF083017\
Data File : BF098179.D
Acq On : 31 Aug 2017 2:09
Operator : SJ/JU
Sample : I5024-04 5X
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : CL-01-082917-B

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081517.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

****

Peak Number 11 Phenanthrene, 1-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.87	6.57 ng	234745	Phenanthrene-d10	11.25

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	92
2	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	91
3	Anthracene, 2-methyl-	192	C15H12	000613-12-7	87
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	83
5	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	81