LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

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-BF051019.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	2.122	3	6	18	rVB	1269583	1609759	18.90%	1.171%
2	5.487	573	578	598	rBV	5370439	5576001	65.46%	4.056%
3	6.498	745	750	753	rBV	5272409	5791677	67.99%	4.213%
4	6.628	767	772	775	rBV	5927769	5562298	65.30%	4.046%
5	6.851	806	810	817	rBV	1439328	1347483	15.82%	0.980%
6	7.004	832	836	840	rBV	4409356	4273551	50.17%	3.108%
7	7.410	901	905	916	rVB	3492850	3632519	42.64%	2.642%
8	8.128	1022	1027	1034	rBV	1729364	1798440	21.11%	1.308%
9	8.845	1146	1149	1152	rBV	223561	192800	2.26%	0.140%
10	8.910	1157	1160	1163	rBV	169113	224224	2.63%	0.163%
11	8.939	1163	1165	1169	rVV	207289	210157	2.47%	0.153%
12	9.010	1173	1177	1180	rBV5	58000	98556	1.16%	0.072%
13	9.122	1193	1196	1198	rBV2	154455	134205	1.58%	0.098%
14	9.151	1198	1201	1205	rBV3	115754	103450	1.21%	0.075%
15	9.204	1206	1210	1213	rBV	6016999	5298491	62.20%	3.854%
16	9.280	1220	1223	1226	rBV	408262	456138	5.35%	0.332%
17	9.398	1241	1243	1247	rVB	276847	248348	2.92%	0.181%
18	9.475	1252	1256	1259	rBV	289037	378950	4.45%	0.276%
19	9.545	1265	1268	1270	rBV	560215	581350	6.82%	0.423%
20	9.569	1270	1272	1274	rVV	293943	212026	2.49%	0.154%
21	9.592	1274	1276	1280	rVB3	1146897	1080886	12.69%	0.786%
22	9.657	1283	1287	1289	rBV2	378384	443501	5.21%	0.323%
23	9.751	1300	1303	1305	rBV3	799386	872527	10.24%	0.635%
24	9.774	1305	1307	1308	rVV	385756	294731	3.46%	0.214%
25	9.798	1308	1311	1313	rVB	1076748	947199	11.12%	0.689%
26	9.833	1315	1317	1319	rVV3	219692	185906	2.18%	0.135%
27	9.869	1319	1323	1324	rVV2	621735	774518	9.09%	0.563%
28	9.886	1324	1326	1329	rVV	1734622	1431907	16.81%	1.042%
29	9.916	1329	1331	1340	rVV	1901312	2098904	24.64%	1.527%
30	9.992	1341	1344	1348	rVB2	411491	544049	6.39%	0.396%
31	10.039	1350	1352	1355	rVV2	357232	336404	3.95%	0.245%
32	10.204	1378	1380	1382	rBV2	329135	331888	3.90%	0.241%
33	10.292	1392	1395	1401	rBV4	1143423	1334004	15.66%	0.970%
34	10.345	1401	1404	1406	rBV2	558854	622698	7.31%	0.453%

LSC Area Percent Report

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Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

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-BF051019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	10.433	1416	1419	1423	rBV	1149185	1213445	14.24%	0.883%
36	10.680	1457	1461	1465	rBV	2322950	2433665	28.57%	1.770%
37	11.186	1544	1547	1550	rBV	717566	716461	8.41%	0.521%
38	11.274	1560	1562	1568	rVB	1117597	1158780	13.60%	0.843%
39	11.380	1577	1580	1581	rBV	1208008	1171291	13.75%	0.852%
40	11.410	1581	1585	1588	rVV	5622646	6208511	72.88%	4.516%
41	11.457	1590	1593	1595	rVV	1600413	1309122	15.37%	0.952%
42	11.886	1663	1666	1668	rBV	1596312	1534557	18.01%	1.116%
43	11.916	1668	1671	1676	rVB2	2283905	2846288	33.41%	2.070%
44	11.998	1682	1685	1687	rBV2	1606807	1799778	21.13%	1.309%
45	12.021	1687	1689	1692	rVB	1420033	1114650	13.08%	0.811%
46	12.174	1713	1715	1718	rBV	1130867	1086248	12.75%	0.790%
47	12.210	1718	1721	1726	rVB2	1905334	1847378	21.69%	1.344%
48	12.433	1757	1759	1762	rBV	870361	800862	9.40%	0.583%
49	12.527	1772	1775	1779	rVB	1460688	1578867	18.53%	1.148%
50	12.604	1784	1788	1791	rVB	4517124	5291324	62.12%	3.849%
51	12.839	1822	1828	1831	rBV	5882943	8518567	100.00%	6.196%
52	12.963	1846	1849	1851	rVB	2787903	2337634	27.44%	1.700%
53	13.262	1897	1900	1907	rVB	1410160	1572316	18.46%	1.144%
54	13.357	1913	1916	1918	rBV	924186	854301	10.03%	0.621%
55	13.386	1918	1921	1923	rVB	1271017	1046166	12.28%	0.761%
56	13.668	1966	1969	1976	rVB	1540093	1499191	17.60%	1.090%
57	13.774	1984	1987	1989	rBV	1249472	1207641	14.18%	0.878%
58	13.798	1989	1991	1994	rVB	1171752	1025597	12.04%	0.746%
59	13.827	1994	1996	1999	rBV2	677470	766539	9.00%	0.558%
60	13.874	2002	2004	2008	rVB	1294458	1274095	14.96%	0.927%
61	14.021	2025	2029	2032	rBV2	3854219	5446450	63.94%	3.962%
62	14.057	2032	2035	2042	rVB	4003856	4848250	56.91%	3.526%
63	14.380	2088	2090	2092	rBV	497782	406181	4.77%	0.295%
64	14.415	2094	2096	2099	rVV	1356124	1364613	16.02%	0.993%
65	14.451	2100	2102	2105	rVB	764544	626574	7.36%	0.456%
66	14.545	2116	2118	2124	rVB2	929969	1304144	15.31%	0.949%
67	14.915	2178	2181	2185	rVB2	517505	645651	7.58%	0.470%
68	15.092	2205	2211	2224	rVB2	2884639	6815531	80.01%	4.957%
69	15.186	2225	2227	2231	rVB	500438	532437	6.25%	0.387%
70	15.386	2257	2261	2267	rVB	2024074	2818516	33.09%	2.050%
71	15.456	2267	2273	2276	rBV	2778819	3715026	43.61%	2.702%

LSC Area Percent Report

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Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

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-BF051019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	15.509	2279	2282	2285	rVV	1037092	1388927	16.30%	1.010%
73	15.545	2285	2288	2295	rVB2	677799	1070696	12.57%	0.779%
74	16.998	2529	2535	2542	rVB	1182317	2301077	27.01%	1.674%
75	17.162	2559	2563	2568	rVV	289706	481522	5.65%	0.350%
76	17.221	2569	2573	2580	rVB	284777	537334	6.31%	0.391%
77	17.450	2605	2612	2621	rVB	893225	1937690	22.75%	1.409%

Sum of corrected areas: 137483438

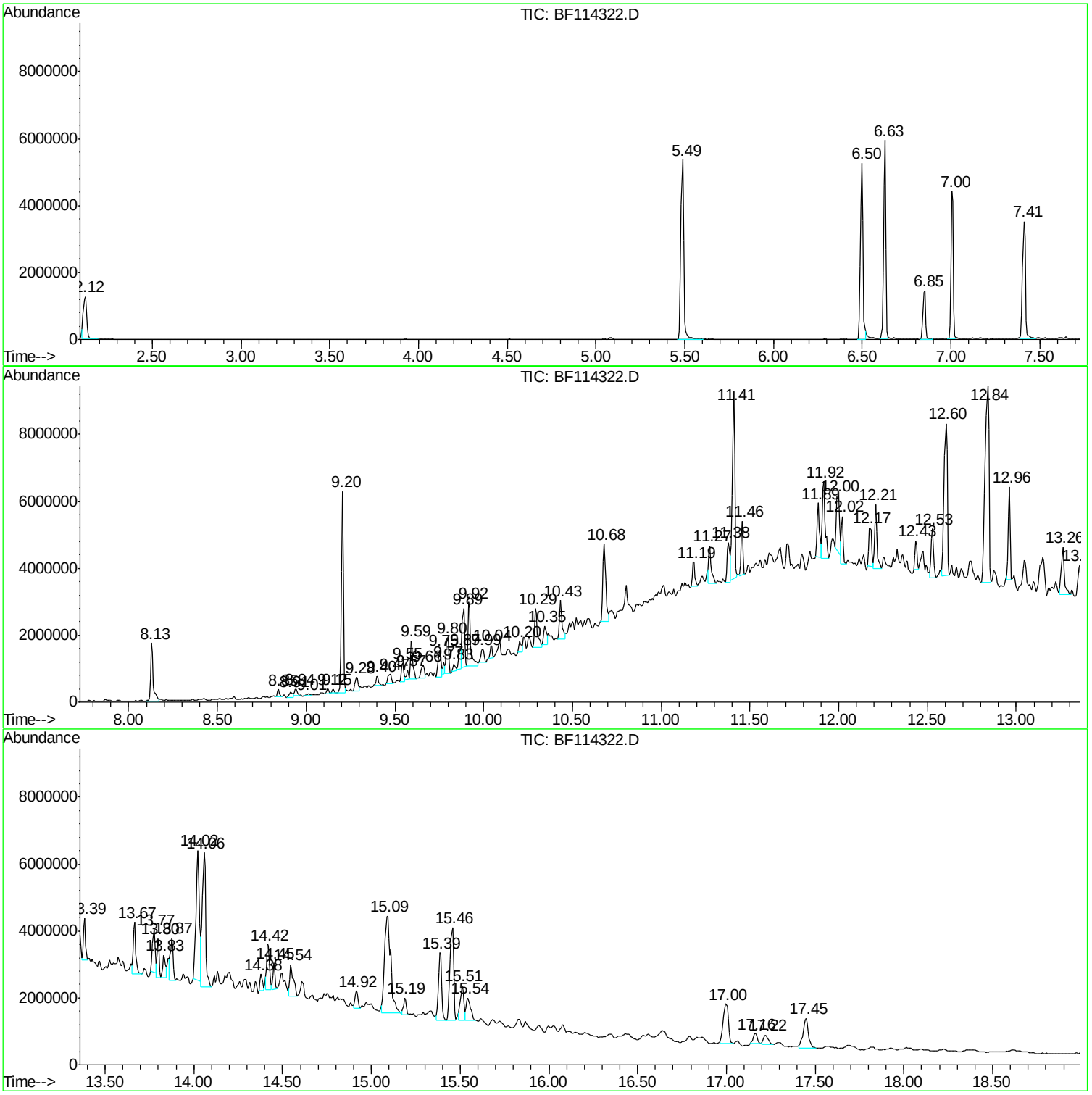
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.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\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

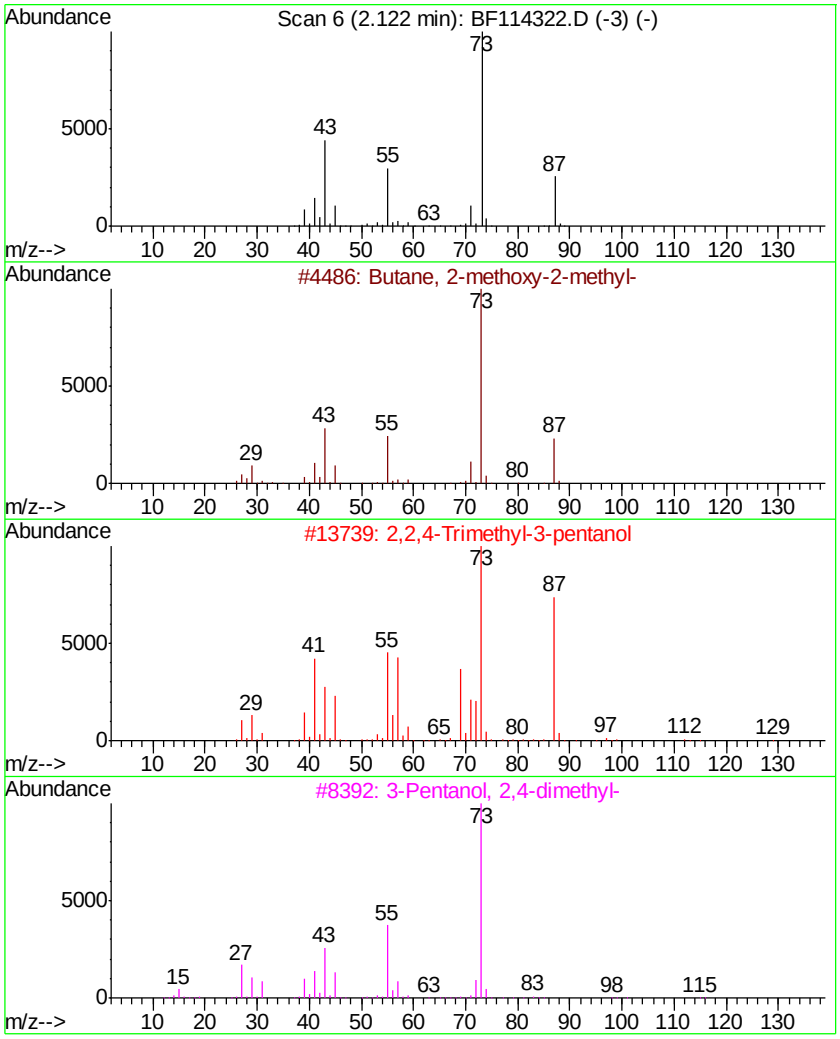
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

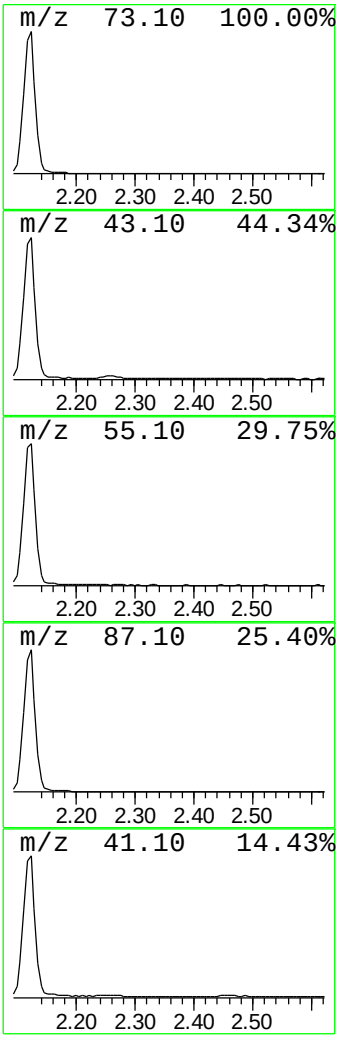
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.12	23.89 ng	1609760	1,4-Dichlorobenzene-d4	6.85

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	83
2	2,2,4-Trimethyl-3-pentanol	130	C8H18O	005162-48-1	39
3	3-Pentanol, 2,4-dimethyl-	116	C7H16O	000600-36-2	37
4	Silane, tetramethyl-	88	C4H12Si	000075-76-3	35
5	Borane, dimethoxy-	74	C2H7BO2	004542-61-4	25





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

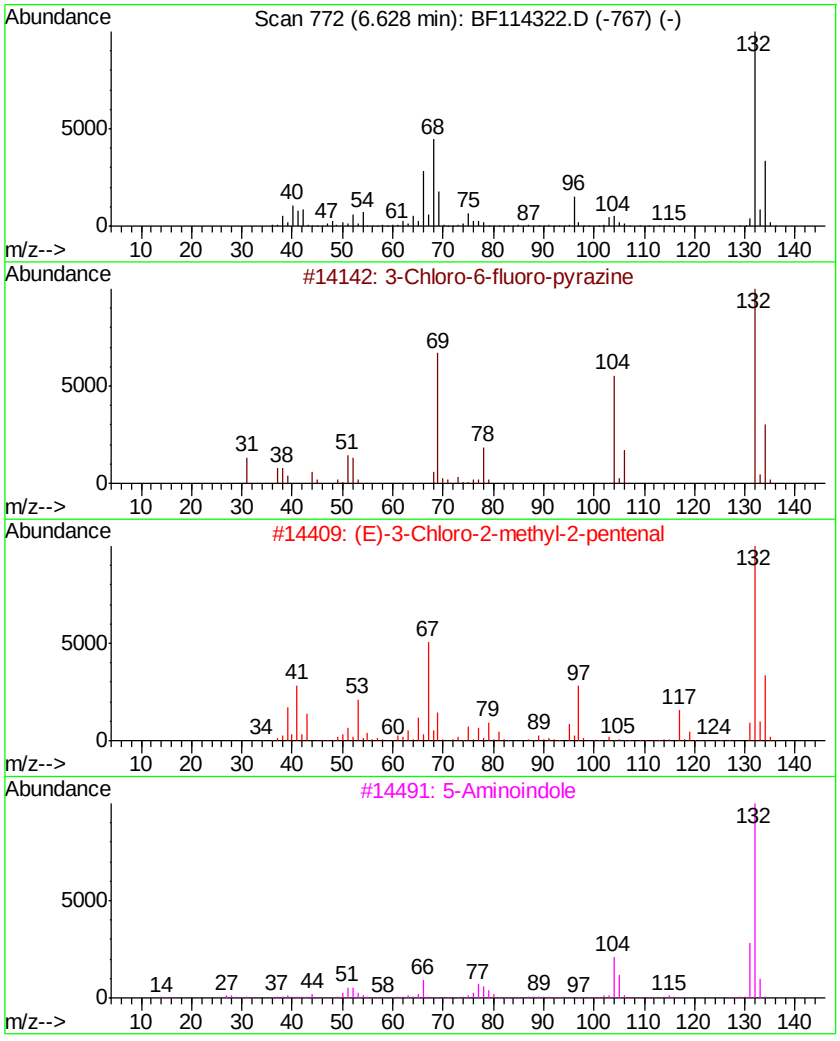
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

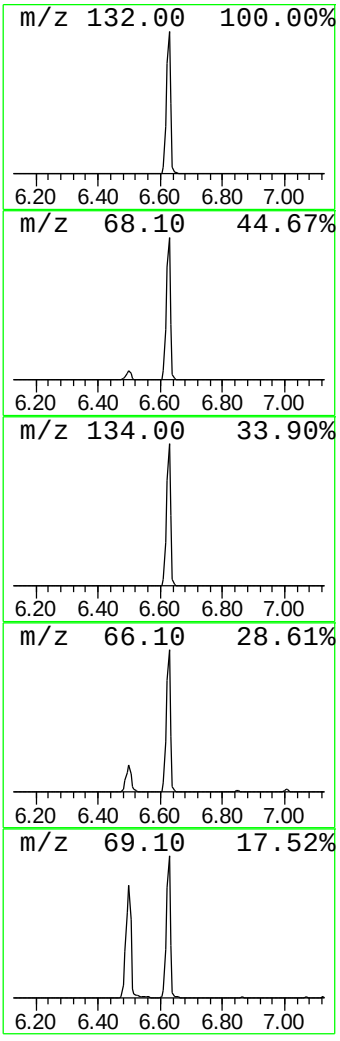
****

Peak Number 2 unknown6.63 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.63	82.56 ng	5562300	1,4-Dichlorobenzene-d4	6.85

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	27
2	(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	12
3	5-Aminoindole	132	C8H8N2	005192-03-0	12
4	Tranylcypromine-propionyl	189	C12H15NO	1000123-86-3	12
5	Bicyclo[4.2.0]octa-1,3,5-triene,...	132	C10H12	028749-81-7	9





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

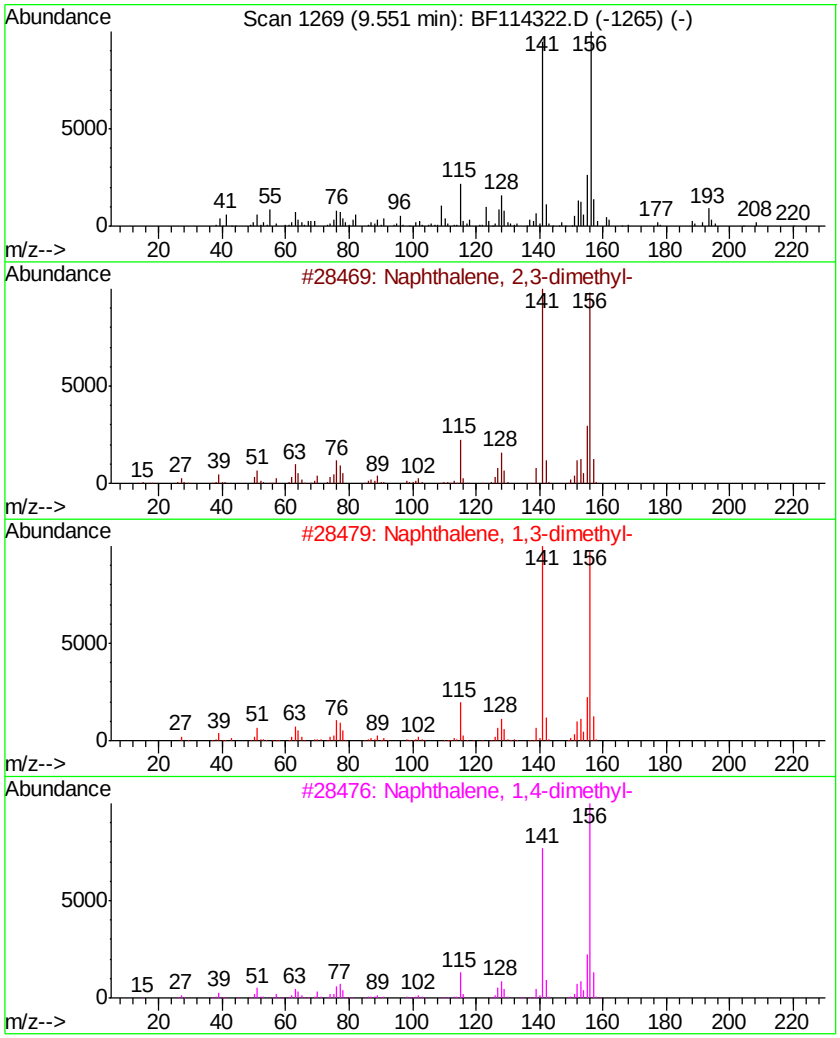
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

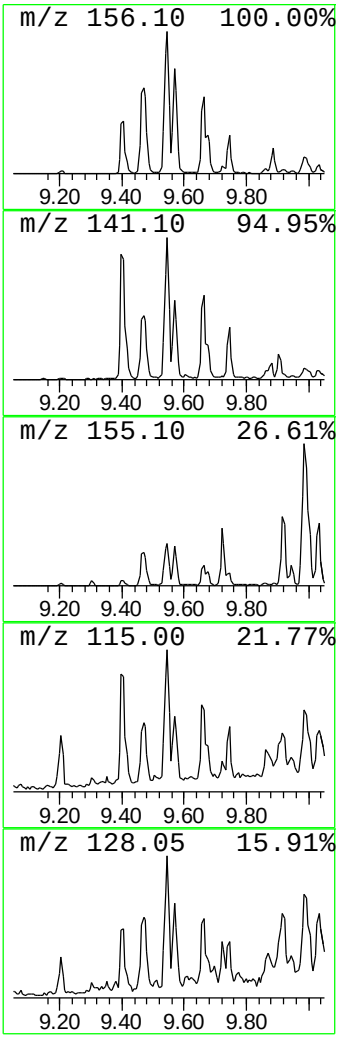
****

Peak Number 4 Naphthalene, 2,3-dimethyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.55	8.12 ng	581350	Acenaphthene-d10	9.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2,3-dimethyl-	156	C12H12	000581-40-8	98
2	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	96
3	Naphthalene, 1,4-dimethyl-	156	C12H12	000571-58-4	96
4	Naphthalene, 1,5-dimethyl-	156	C12H12	000571-61-9	95
5	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	95





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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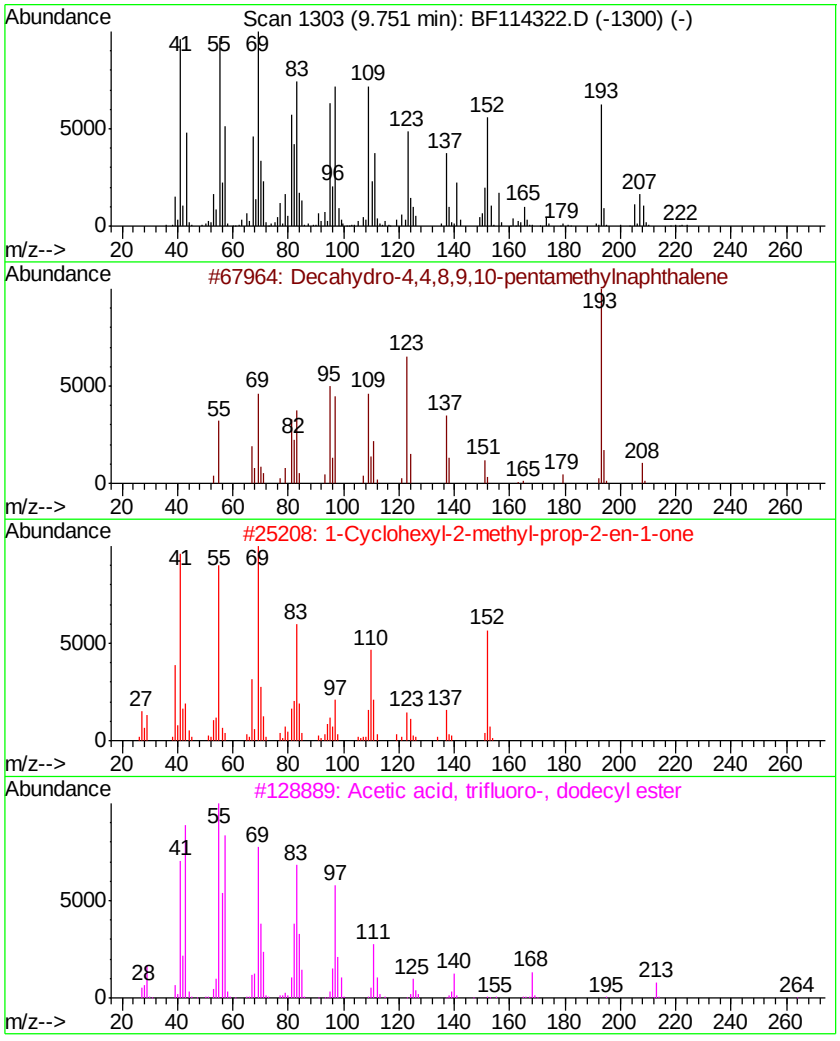
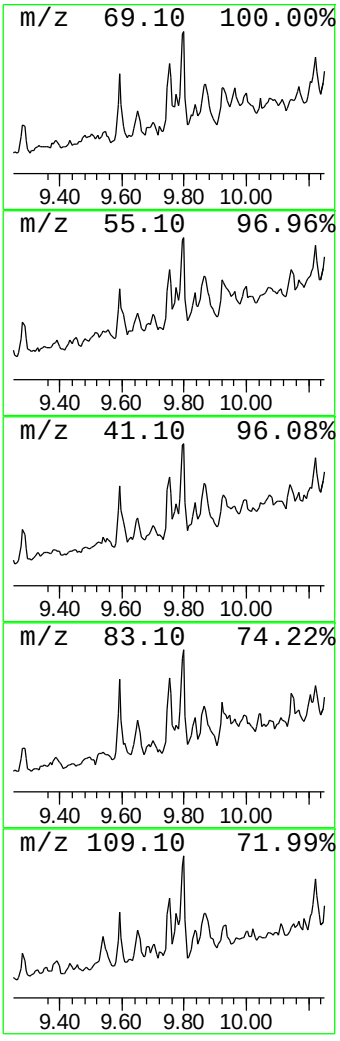
Peak Number 5 Decahydro-4,4,8,9,10-pentam... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.75	12.19 ng	872527	Acenaphthene-d10	9.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	080655-44-3	86
2	1-Cyclohexyl-2-methyl-prop-2-en-...	152	C10H16O	025183-82-8	46
3	Acetic acid, trifluoro-, dodecyl...	282	C14H25F3O2	006222-00-0	38
4	Decyl trifluoroacetate	254	C12H21F3O2	000333-88-0	35
5	Cyclopentane, (2-methylpropyl)-	126	C9H18	003788-32-7	30





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

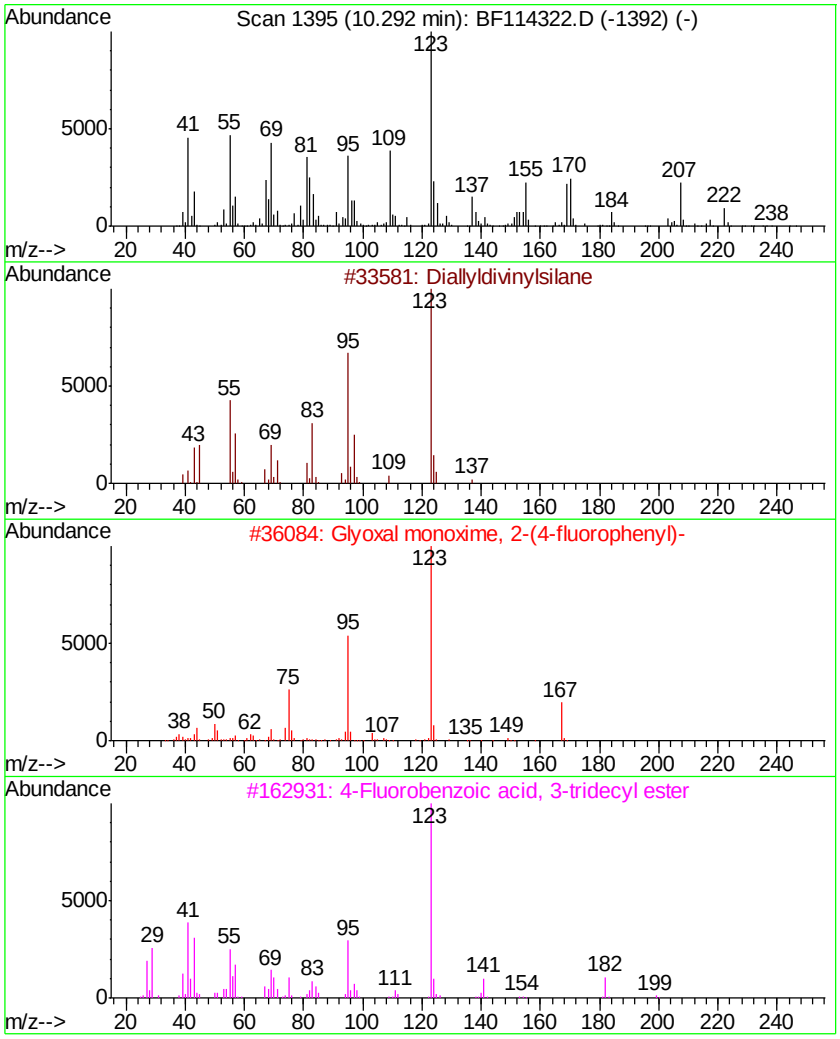
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

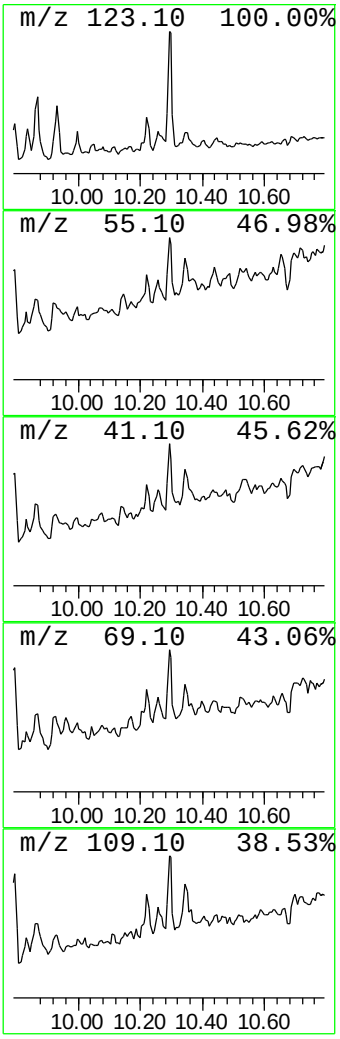
****

Peak Number 7 unknown10.29 Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.29	18.63 ng	1334000	Acenaphthene-d10	9.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diallyldivinylsilane	164	C10H16Si	119901-88-1	35
2	Glyoxal monoxime, 2-(4-fluorophe...	167	C8H6FNO2	017628-74-9	27
3	4-Fluorobenzoic acid, 3-tridecyl...	322	C20H31FO2	1000280-67-9	27
4	4-Fluorobenzoic acid, 2-ethylcyc...	250	C15H19FO2	1000279-06-0	27
5	4-Fluorobenzoic acid, 3-tetradec...	336	C21H33FO2	1000280-68-1	27





Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
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Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

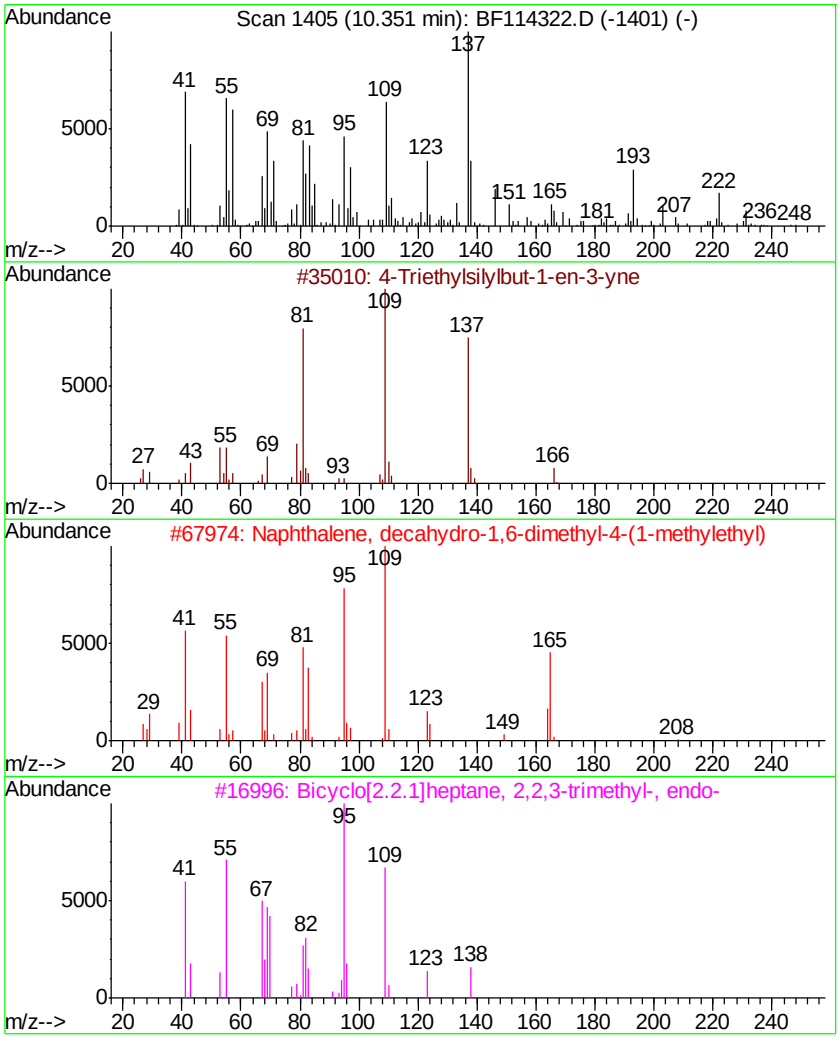
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

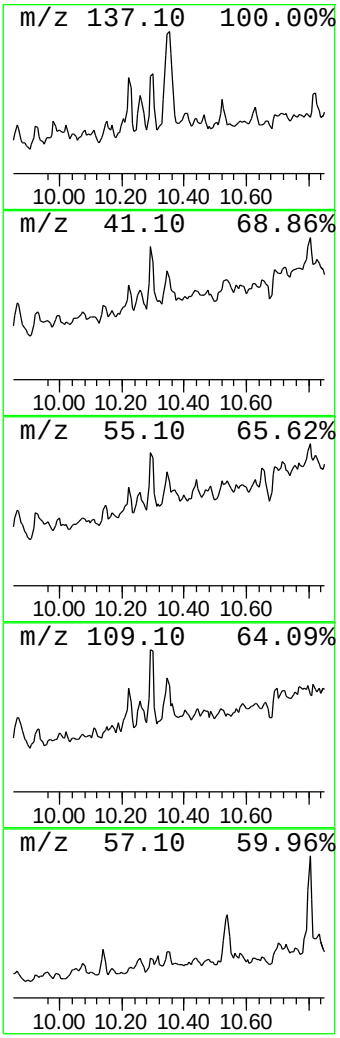
****

Peak Number 8 4-Triethylsilylbut-1-en-3-yne Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.35	8.70 ng	622698	Acenaphthene-d10	9.89

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Triethylsilylbut-1-en-3-yne	166	C10H18Si	001693-70-5	50
2	Naphthalene, decahydro-1,6-dimet...	208	C15H28	029788-41-8	42
3	Bicyclo[2.2.1]heptane, 2,2,3-tri...	138	C10H18	020536-40-7	38
4	5-Ethoxy-2-methyl-pyridine	137	C8H11NO	055270-48-9	38
5	Bicyclo[2.2.1]heptane, 2,2,3-tri...	138	C10H18	020536-41-8	38





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Operator : JU/SJ
Sample : K2866-04
Misc :
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ClientSampleId : RO-COMP-2

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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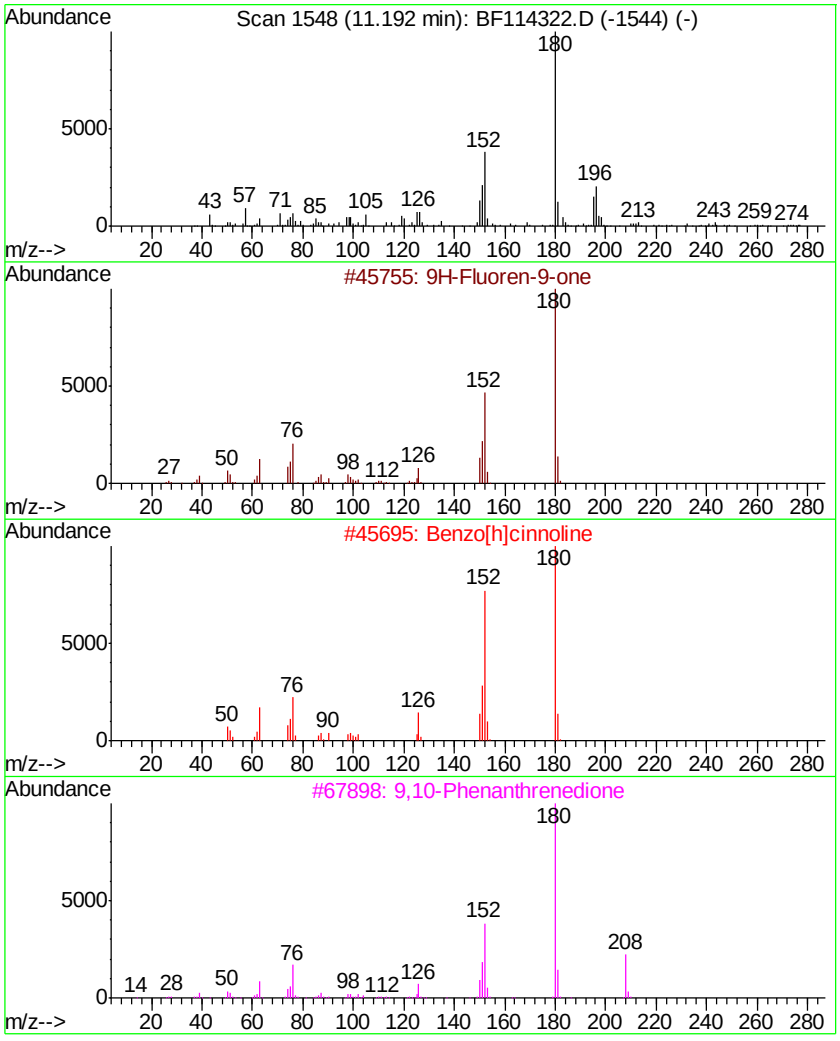
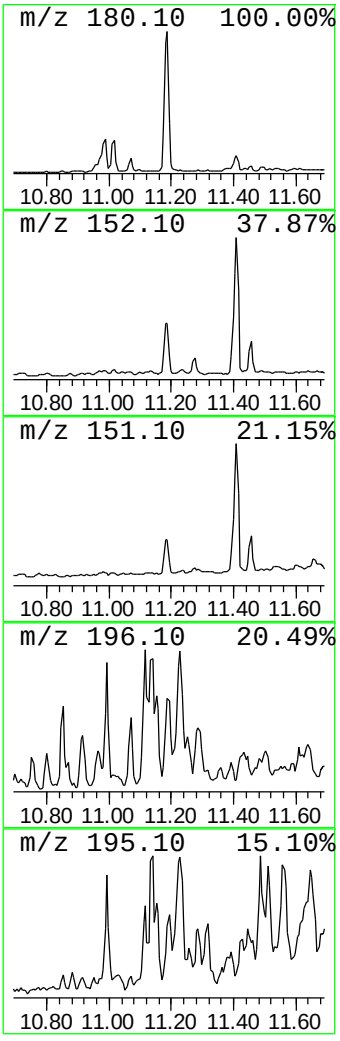
Peak Number 9 9H-Fluoren-9-one Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	12.23 ng	716461	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluoren-9-one	180	C13H8O	000486-25-9	96
2	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	87
3	9,10-Phenanthrenedione	208	C14H8O2	000084-11-7	86
4	Diphenic anhydride	224	C14H8O3	006050-13-1	83
5	1H-Phenalen-1-one	180	C13H8O	000548-39-0	72





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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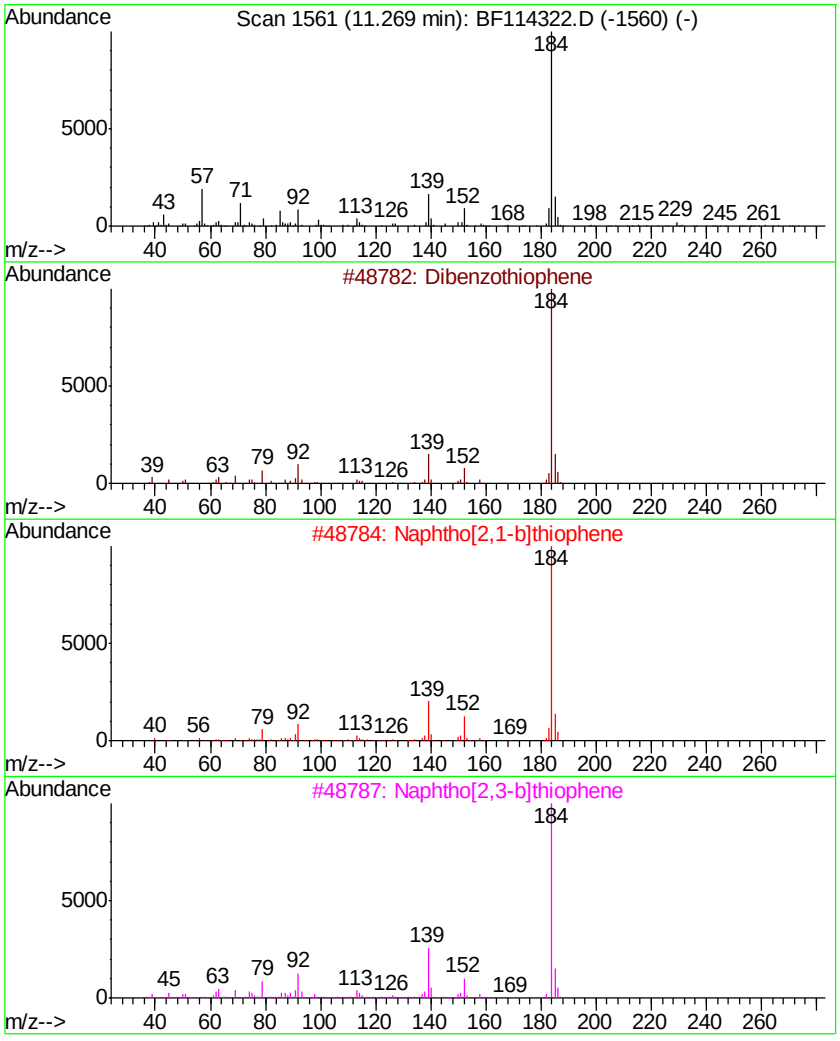
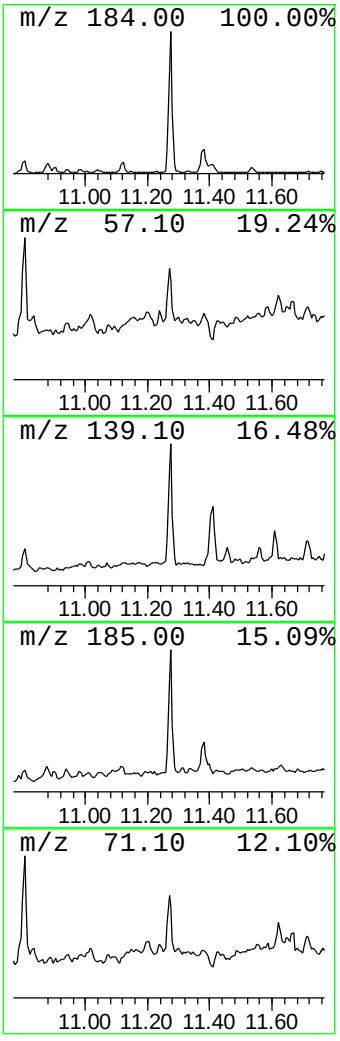
Peak Number 10 Dibenzothiophene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.27	19.79 ng	1158780	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene	184	C12H8S	000132-65-0	96
2	Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	95
3	Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	93
4	Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91
5	Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	90





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

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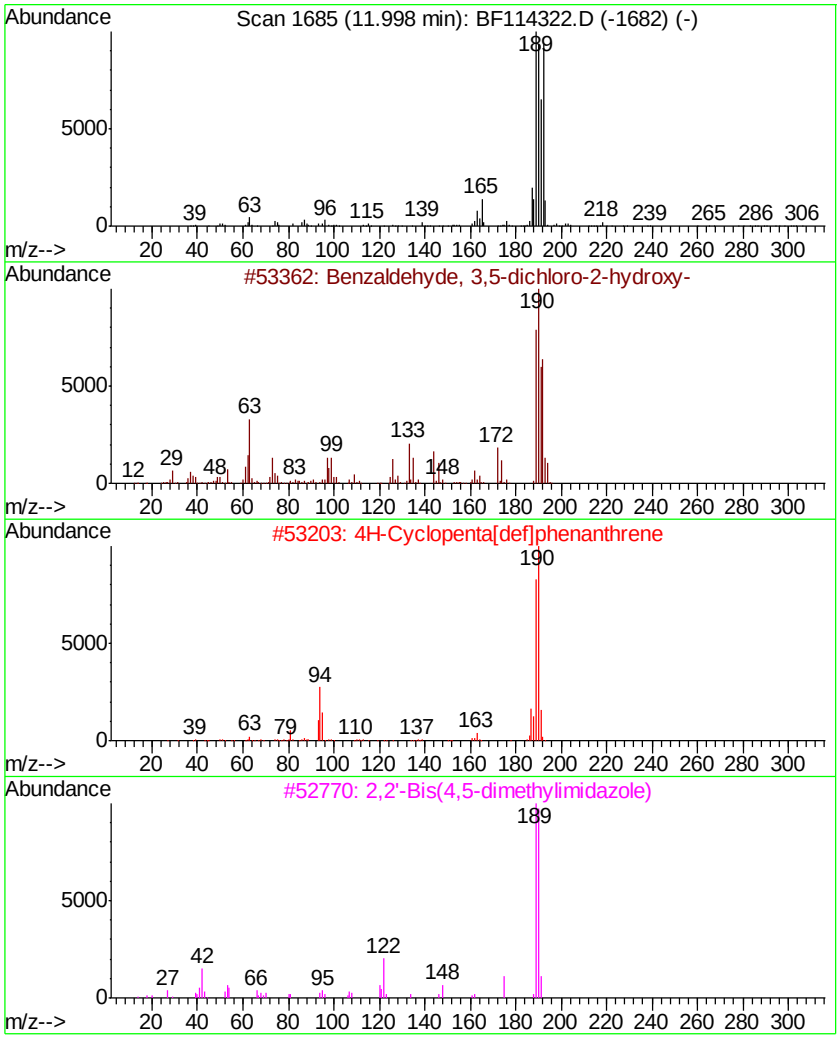
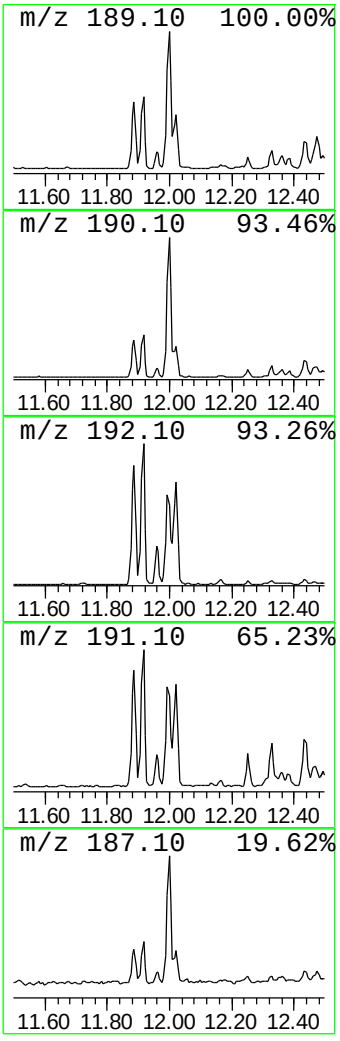
Peak Number 11 Benzaldehyde, 3,5-dichloro-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.00	30.73 ng	1799780	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 3,5-dichloro-2-hyd...	190	C7H4Cl2O2	000090-60-8	72
2	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	53
3	2,2'-Bis(4,5-dimethylimidazole)	190	C10H14N4	069286-06-2	43
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	42
5	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	38





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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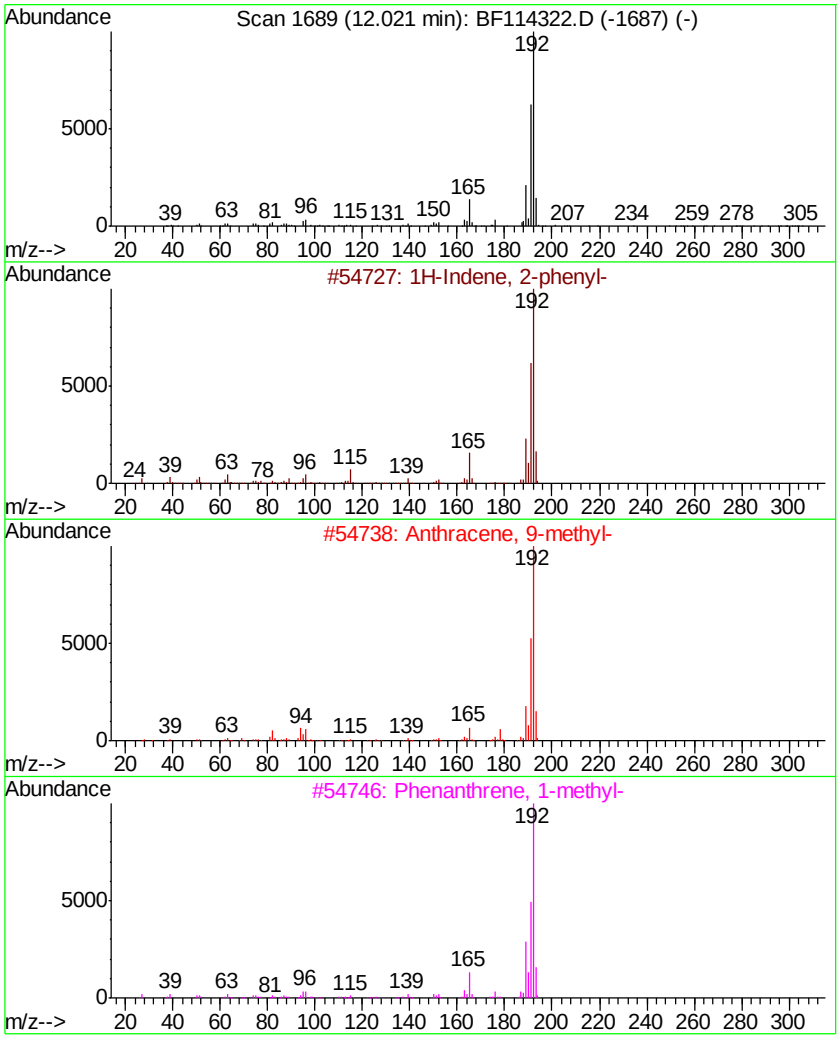
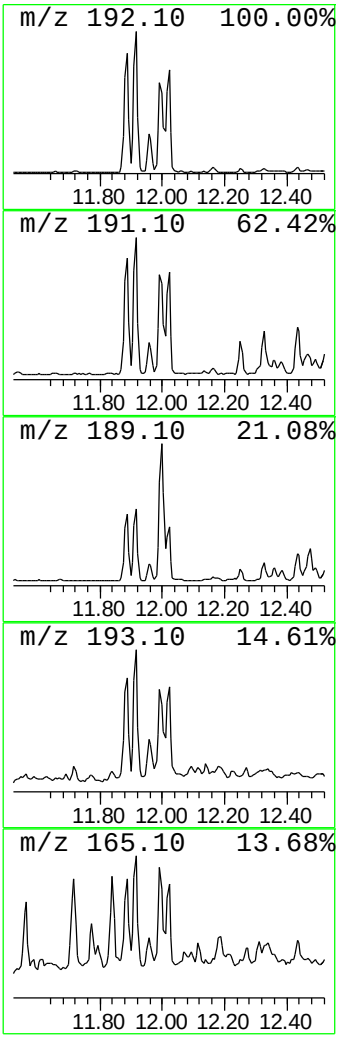
Peak Number 12 1H-Indene, 2-phenyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.02	19.03 ng	1114650	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	90
2	Anthracene, 9-methyl-	192	C15H12	000779-02-2	87
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	86
4	1H-Indene, 1-phenyl-	192	C15H12	001961-96-2	81
5	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	81





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

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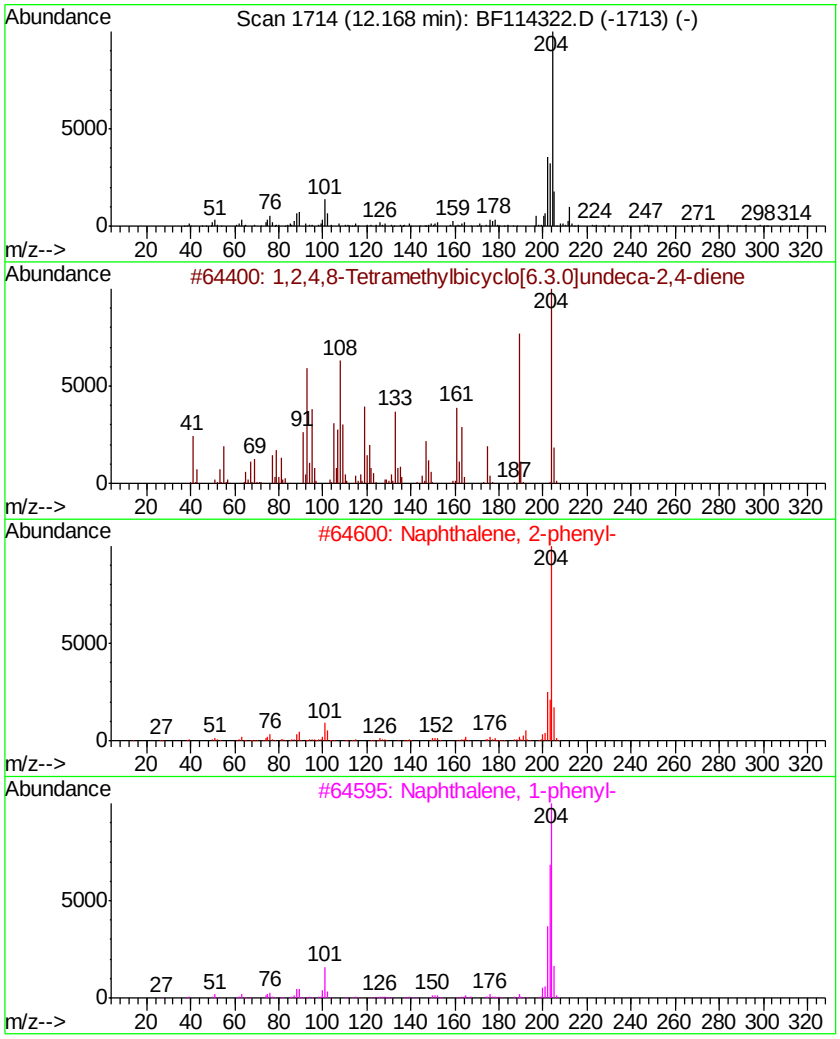
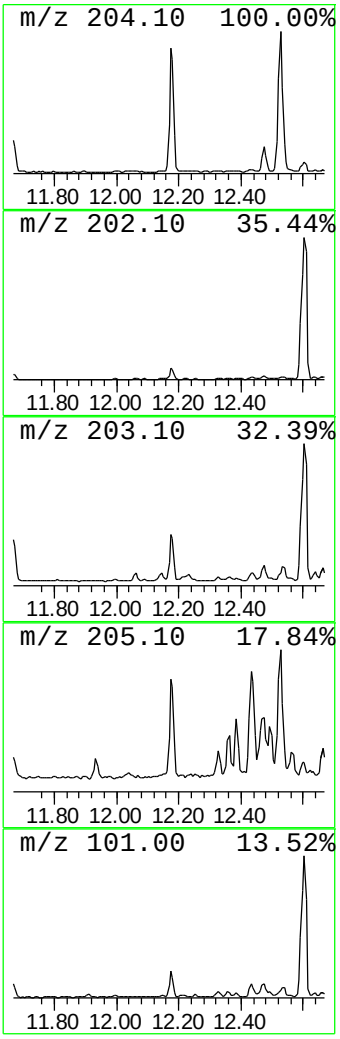
Peak Number 13 1,2,4,8-Tetramethylbicyclo[... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.17	18.55 ng	1086250	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	90
2	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	86
3	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	78
4	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	70
5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	58





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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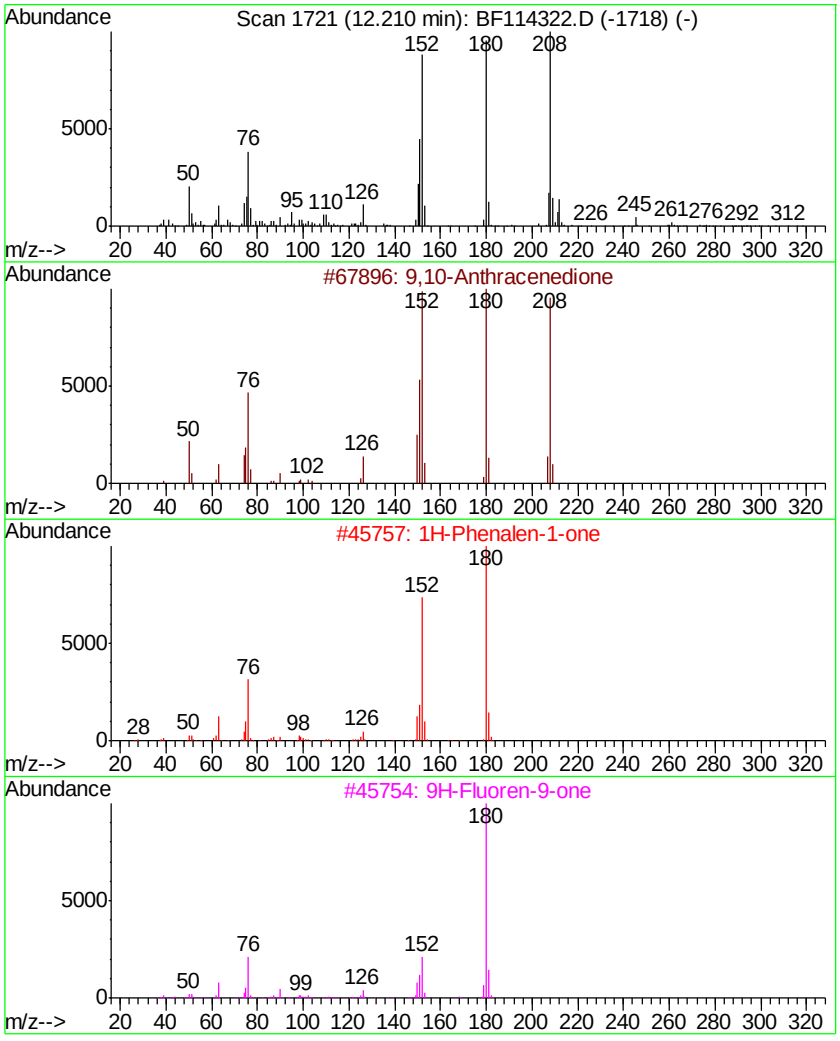
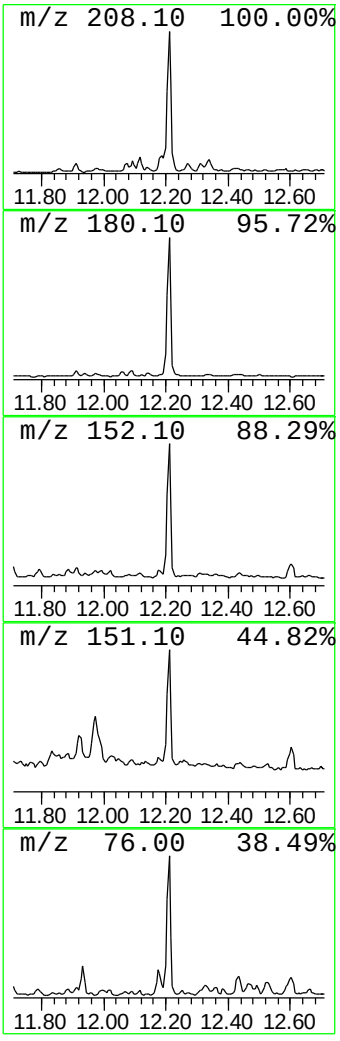
Peak Number 14 9,10-Anthracenedione Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.21	31.54 ng	1847380	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	99
2	1H-Phenalen-1-one	180	C13H8O	000548-39-0	55
3	9H-Fluoren-9-one	180	C13H8O	000486-25-9	53
4	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	50
5	5,6-Dimethyl-1,10-phenanthroline	208	C14H12N2	003002-81-1	49





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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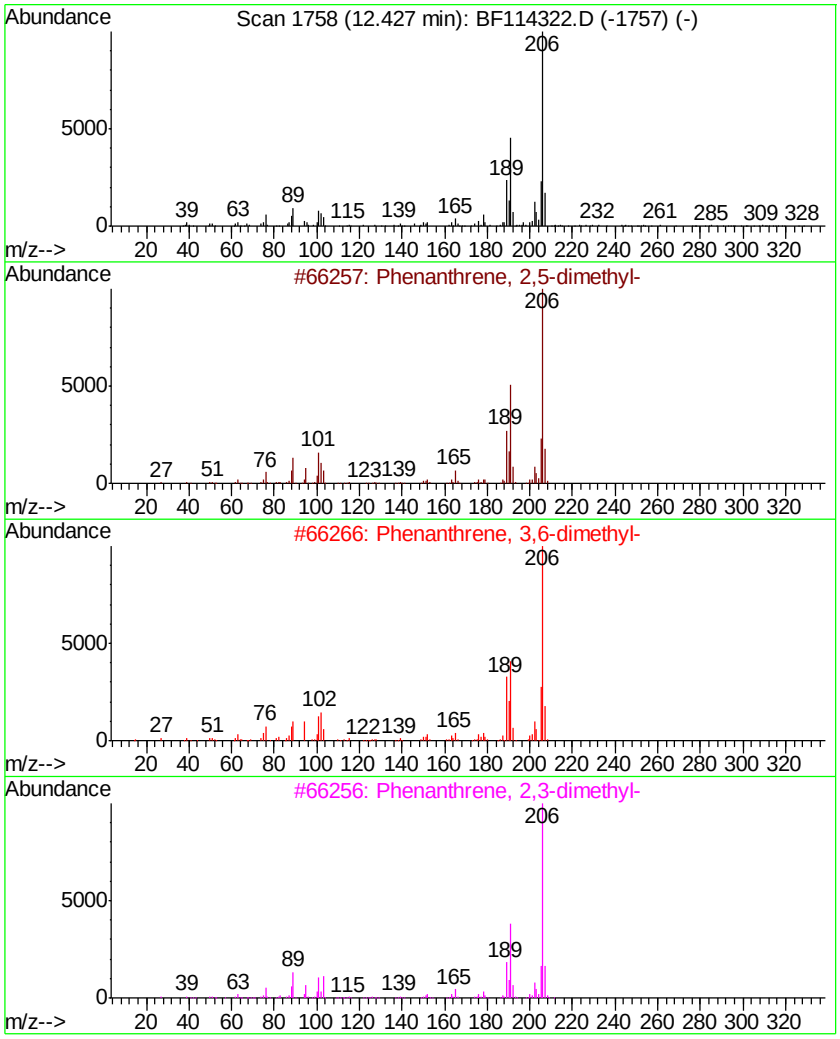
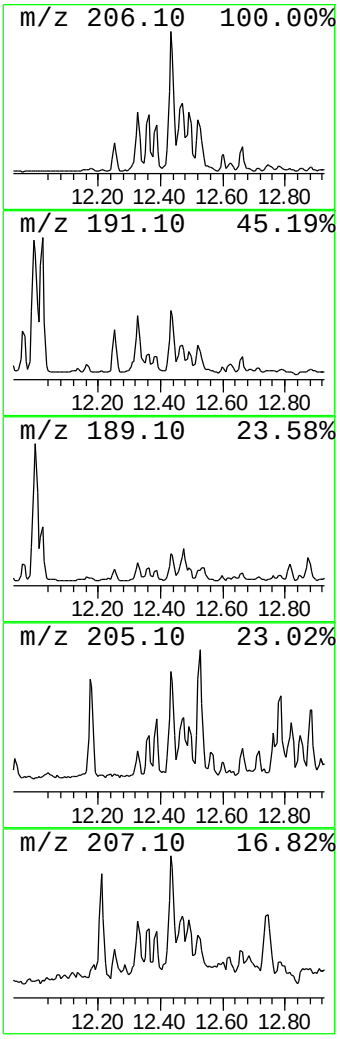
Peak Number 15 Phenanthrene, 2,5-dimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.43	13.67 ng	800862	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	93
2	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	91
3	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	87
4	di-p-Tolylacetylene	206	C16H14	002789-88-0	86
5	1,3-Diphenyl-3-methylcyclopropene	206	C16H14	086544-79-8	81





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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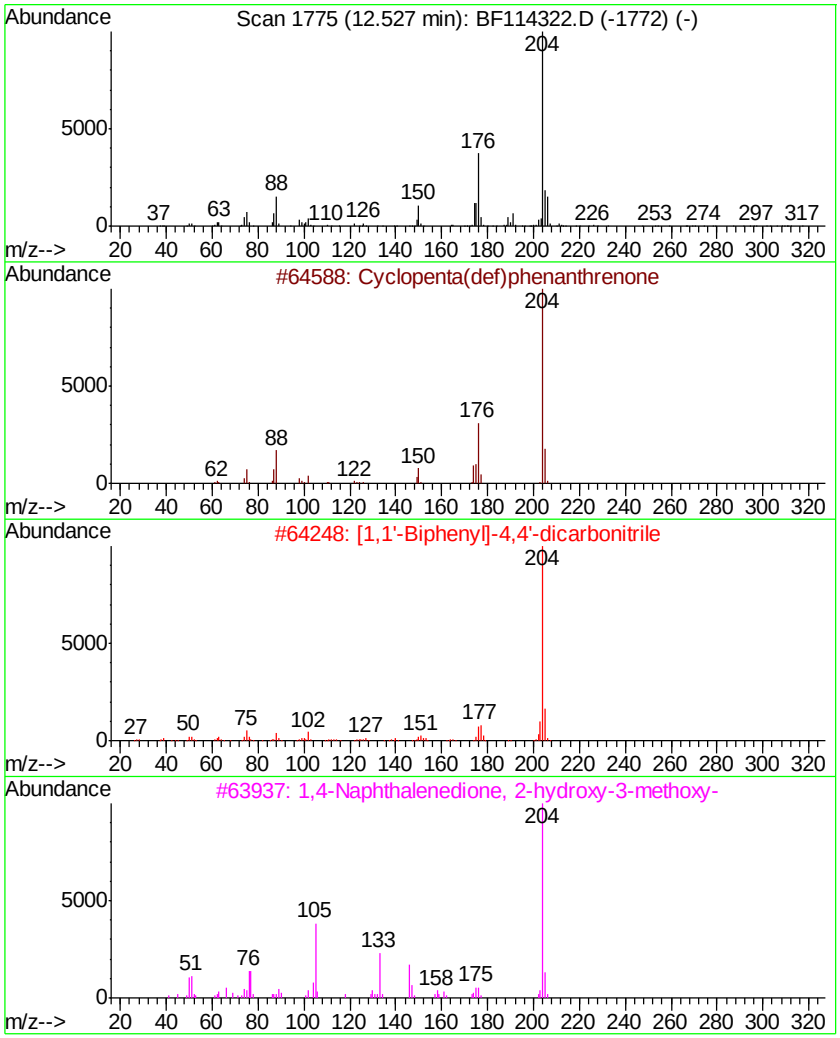
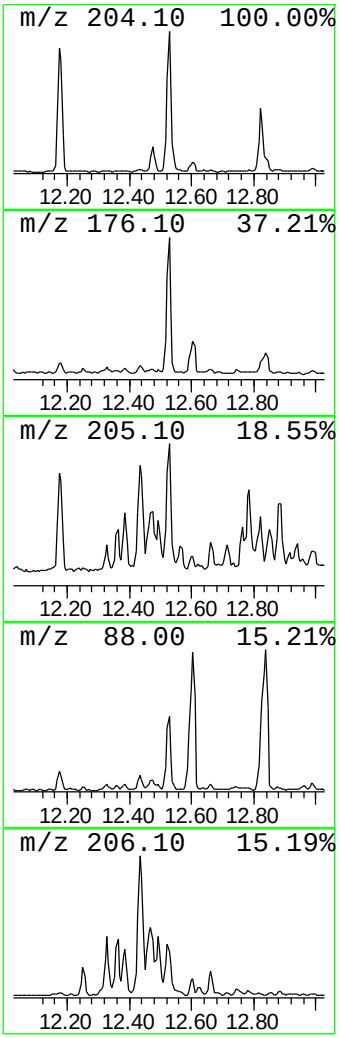
Peak Number 16 Cyclopenta(def)phenanthrenone Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.53	26.96 ng	1578870	Phenanthrene-d10	11.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	96
2	[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	64
3	1,4-Naphthalenedione, 2-hydroxy-...	204	C11H8O4	005257-83-0	50
4	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	49
5	Quinoline, 8-methoxy-5-nitro-	204	C10H8N2O3	1000298-88-7	47





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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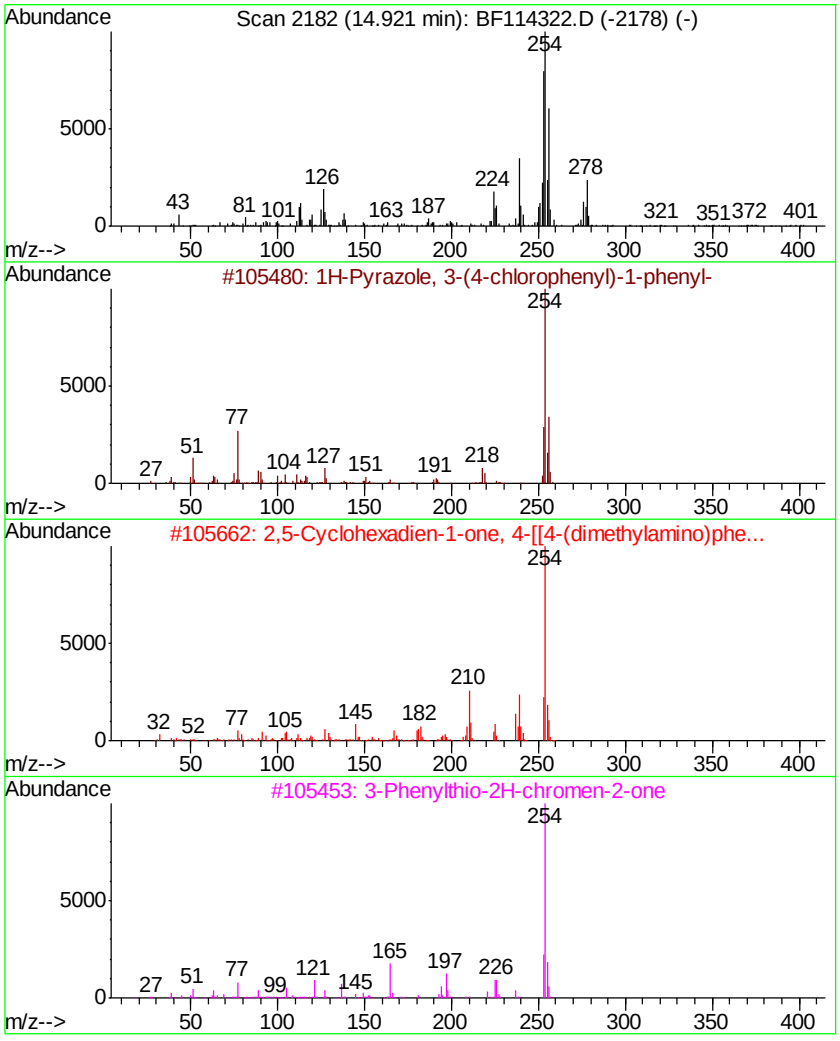
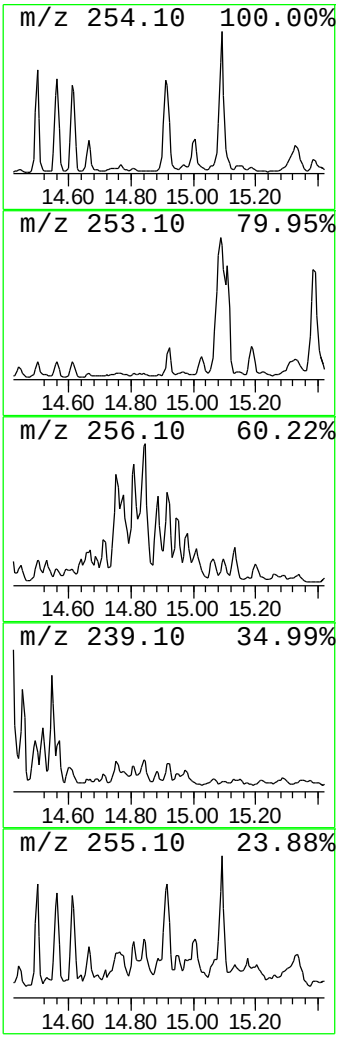
Peak Number 17 1H-Pyrazole, 3-(4-chlorophe... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.92	9.30 ng	645651	Perylene-d12	15.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Pyrazole, 3-(4-chlorophenyl)-...	254	C15H11ClN2	033064-19-6	64
2	2,5-Cyclohexadien-1-one, 4-[[4-(...	254	C16H18N2O	1000319-40-8	53
3	3-Phenylthio-2H-chromen-2-one	254	C15H10O2S	072167-95-4	52
4	2-Hydroxy-4-methyl-5-(p-tolylazo...	254	C15H14N2O2	066777-90-0	50
5	trans-4-(Methylthio)chalcone	254	C16H14OS	079134-84-2	50





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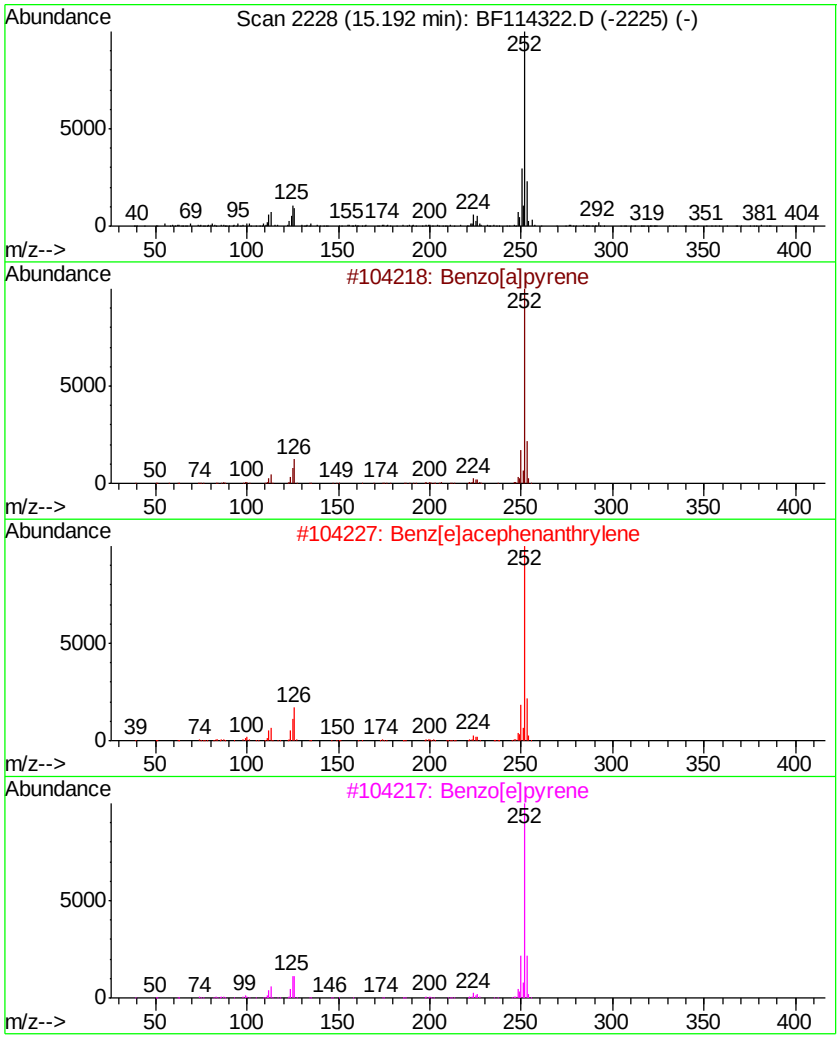
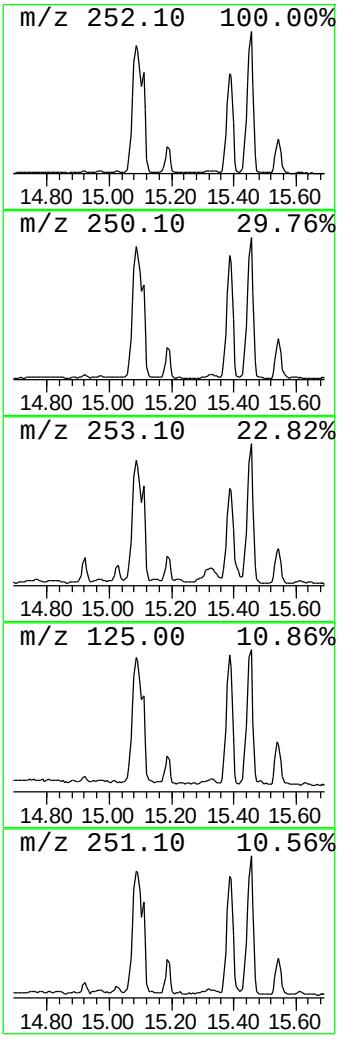
Peak Number 18 Benzo[a]pyrene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.19	7.67 ng	532437	Perylene-d12	15.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[a]pyrene	252	C20H12	000050-32-8	98
2	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	96
3	Benzo[e]pyrene	252	C20H12	000192-97-2	96
4	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
5	Perylene	252	C20H12	000198-55-0	89





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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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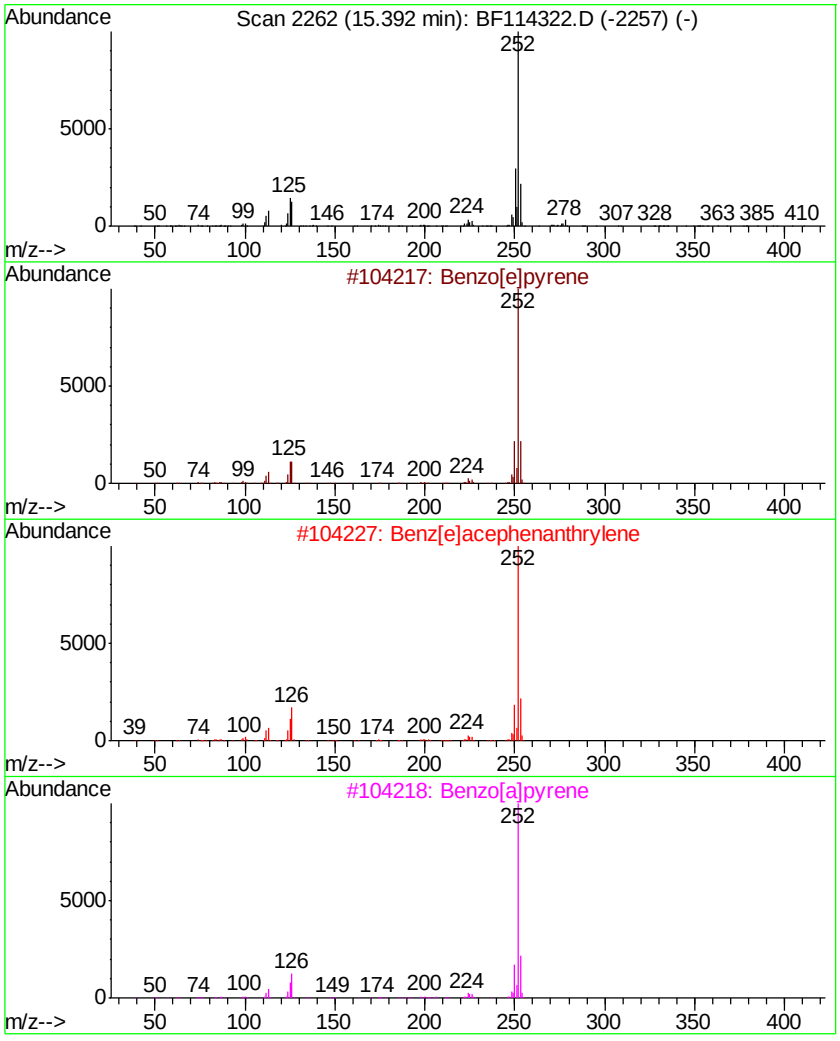
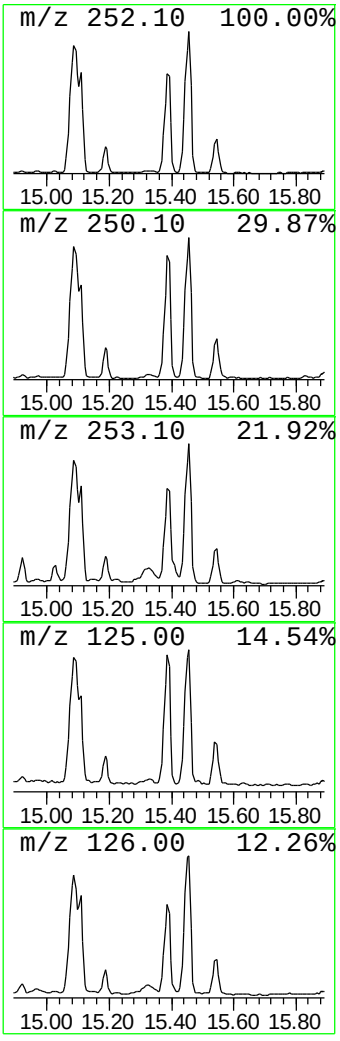
Peak Number 19 Benzo[e]pyrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.39	40.59 ng	2818520	Perylene-d12	15.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	99
2	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	99
3	Benzo[a]pyrene	252	C20H12	000050-32-8	98
4	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
5	Benzo[j]fluoranthene	252	C20H12	000205-82-3	89





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

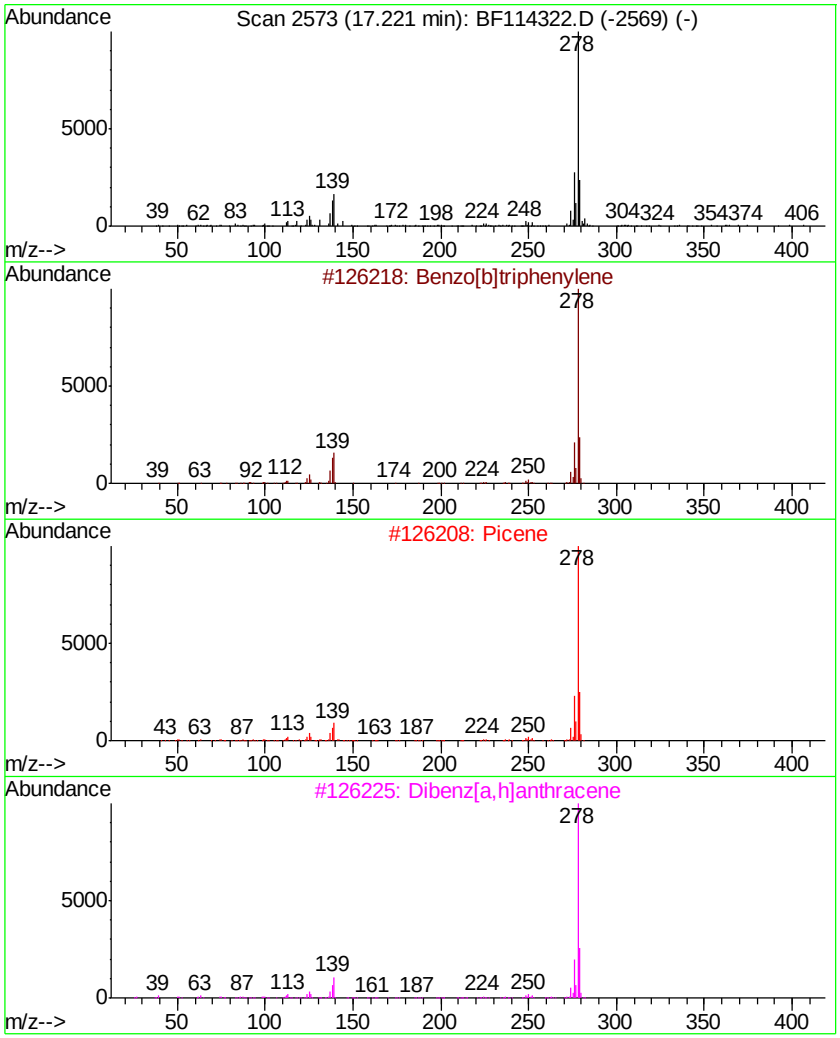
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

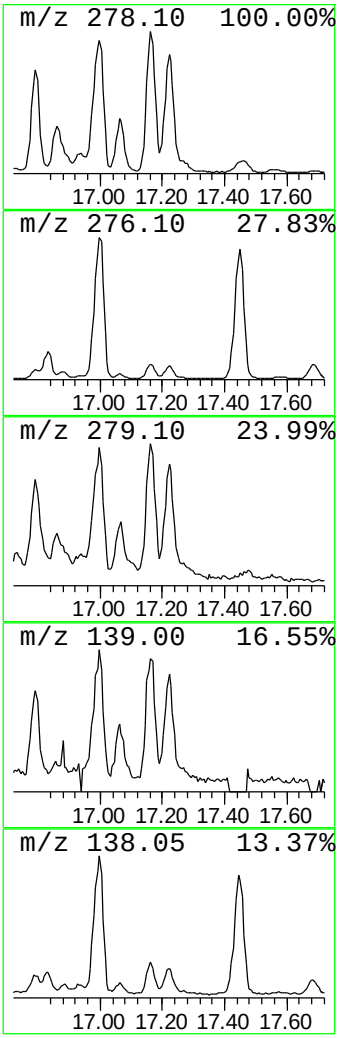
****

Peak Number 20 Benzo[b]triphenylene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.22	7.74 ng	537334	Perylene-d12	15.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene	278	C22H14	000215-58-7	98
2	Picene	278	C22H14	000213-46-7	98
3	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	96
4	Naphtho[1,2-a]anthracene	278	C22H14	000195-06-2	93
5	Benzo[a]naphthacene	278	C22H14	000226-88-0	93





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF051619\
Data File : BF114322.D
Acq On : 16 May 2019 21:06
Operator : JU/SJ
Sample : K2866-04
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : RO-COMP-2

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF051019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	2.12	23.9	ng	1609760	1	6.85	1347480	20.0
unknown6.63	6.63	82.6	ng	5562300	1	6.85	1347480	20.0
Naphthalene, 2,3-...	9.55	8.1	ng	581350	3	9.89	1431910	20.0
Decahydro-4,4,8,9...	9.75	12.2	ng	872527	3	9.89	1431910	20.0
unknown10.29	10.29	18.6	ng	1334000	3	9.89	1431910	20.0
4-Triethylsilylbu...	10.35	8.7	ng	622698	3	9.89	1431910	20.0
9H-Fluoren-9-one	11.19	12.2	ng	716461	4	11.38	1171290	20.0
Dibenzothiophene	11.27	19.8	ng	1158780	4	11.38	1171290	20.0
Benzaldehyde, 3,5...	12.00	30.7	ng	1799780	4	11.38	1171290	20.0
1H-Indene, 2-phenyl-	12.02	19.0	ng	1114650	4	11.38	1171290	20.0
1,2,4,8-Tetrameth...	12.17	18.6	ng	1086250	4	11.38	1171290	20.0
9,10-Anthracenedione	12.21	31.5	ng	1847380	4	11.38	1171290	20.0
Phenanthrene, 2,5...	12.43	13.7	ng	800862	4	11.38	1171290	20.0
Cyclopenta(def)ph...	12.53	27.0	ng	1578870	4	11.38	1171290	20.0
1H-Pyrazole, 3-(4...	14.92	9.3	ng	645651	6	15.51	1388930	20.0
Benzo[a]pyrene	15.19	7.7	ng	532437	6	15.51	1388930	20.0
Benzo[e]pyrene	15.39	40.6	ng	2818520	6	15.51	1388930	20.0
Benzo[b]triphenylene	17.22	7.7	ng	537334	6	15.51	1388930	20.0