LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

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-BF122215.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	5.013	253	256	265	rVB	185509	284390	15.65%	0.885%
2	5.447	292	294	297	rBV	1162956	1244984	68.53%	3.874%
3	6.476	382	384	387	rBV	1021668	1295618	71.32%	4.032%
4	6.602	392	395	398	rBV	1478663	1366870	75.24%	4.253%
5	6.830	413	415	417	rBV	273222	254468	14.01%	0.792%
6	6.990	426	429	431	rBV	983625	1195754	65.82%	3.721%
7	7.390	462	464	467	rBV	769625	833327	45.87%	2.593%
8	8.110	525	527	531	rBB	427343	375726	20.68%	1.169%
9	9.196	619	622	624	rBV	1552593	1793582	98.73%	5.581%
10	9.585	654	656	658	rVV	271564	223513	12.30%	0.696%
11	9.722	667	668	671	rBV	61845	84153	4.63%	0.262%
12	9.870	678	681	682	rBV	375888	409023	22.51%	1.273%
13	9.893	682	683	686	rVB	48167	58291	3.21%	0.181%
14	10.076	697	699	700	rBV	49948	59949	3.30%	0.187%
15	10.305	717	719	723	rVV	37749	48872	2.69%	0.152%
16	10.408	727	728	731	rVB	95961	125681	6.92%	0.391%
17	10.522	735	738	741	rVV3	24020	49277	2.71%	0.153%
18	10.568	741	742	744	rVB	38417	46028	2.53%	0.143%
19	10.659	747	750	752	rBV	1201449	1196471	65.86%	3.723%
20	10.773	759	760	764	rVB2	46877	75963	4.18%	0.236%
21	10.968	772	777	780	rBV4	48902	110704	6.09%	0.344%
22	11.093	785	788	792	rBV2	50361	119167	6.56%	0.371%
23	11.162	792	794	796	rVB	59945	54754	3.01%	0.170%
24	11.208	796	798	799	rBV	51636	73236	4.03%	0.228%
25	11.242	799	801	805	rVB	65074	113196	6.23%	0.352%
26	11.356	808	811	812	rBV	379061	600365	33.05%	1.868%
27	11.379	812	813	815	rVV	1523915	1108657	61.03%	3.450%
28	11.425	815	817	819	rVB	398863	381965	21.03%	1.189%
29	11.459	819	820	822	rVB	44923	50069	2.76%	0.156%
30	11.585	828	831	832	rBV	98024	111611	6.14%	0.347%
31	11.642	835	836	838	rVV2	48052	49487	2.72%	0.154%
32	11.688	838	840	842	rVB2	44708	52026	2.86%	0.162%
33	11.768	844	847	848	rVB2	28298	40746	2.24%	0.127%
34	11.859	852	855	856	rBV	154521	246747	13.58%	0.768%

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

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-BF122215.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	11.882	856	857	859	rVB	372130	295304	16.25%	0.919%
36	11.928	859	861	863	rBV	149616	159475	8.78%	0.496%
37	11.962	863	864	869	rVB2	369293	568780	31.31%	1.770%
38	12.145	878	880	882	rVV	187520	177642	9.78%	0.553%
39	12.179	882	883	885	rVB	104577	80762	4.45%	0.251%
40	12.294	891	893	895	rBV2	53498	73747	4.06%	0.229%
41	12.328	895	896	897	rVV	70239	55079	3.03%	0.171%
42	12.351	897	898	900	rVB2	48988	50284	2.77%	0.156%
43	12.408	900	903	904	rBV	158615	215345	11.85%	0.670%
44	12.442	904	906	909	rVB2	116724	202077	11.12%	0.629%
45	12.499	909	911	915	rVB	123934	158863	8.74%	0.494%
46	12.568	915	917	919	rBV	1541017	1816705	100.00%	5.653%
47	12.636	919	923	924	rVB2	42917	85731	4.72%	0.267%
48	12.659	924	925	927	rVB	146617	125922	6.93%	0.392%
49	12.716	927	930	931	rBV2	80016	117983	6.49%	0.367%
50	12.797	931	937	940	rVB2	1301666	1775935	97.76%	5.526%
51	12.842	940	941	944	rVB2	124120	144806	7.97%	0.451%
52	12.934	945	949	953	rVB	1217124	1511837	83.22%	4.705%
53	13.014	953	956	962	rBV3	148046	353077	19.44%	1.099%
54	13.128	962	966	967	rVB	212313	429779	23.66%	1.337%
55	13.185	967	971	973	rBV	180116	268319	14.77%	0.835%
56	13.231	973	975	978	rVB2	173130	248416	13.67%	0.773%
57	13.322	981	983	984	rVB	87382	94318	5.19%	0.294%
58	13.345	984	985	987	rBV2	93989	119737	6.59%	0.373%
59	13.437	990	993	994	rVB2	32340	47131	2.59%	0.147%
60	13.471	994	996	997	rVB	39498	42231	2.32%	0.131%
61	13.517	997	1000	1001	rBV2	51367	113963	6.27%	0.355%
62	13.608	1006	1008	1009	rBV	33396	43290	2.38%	0.135%
63	13.631	1009	1010	1012	rVB	119816	124998	6.88%	0.389%
64	13.745	1017	1020	1021	rBV	114934	206195	11.35%	0.642%
65	13.768	1021	1022	1023	rVB	110310	75673	4.17%	0.235%
66	13.791	1023	1024	1026	rBV	81308	126580	6.97%	0.394%
67	13.837	1026	1028	1032	rVB2	240041	363100	19.99%	1.130%
68	13.905	1032	1034	1038	rBV3	25925	46669	2.57%	0.145%
69	13.985	1038	1041	1043	rBV2	958878	1398802	77.00%	4.353%
70	14.019	1043	1044	1046	rVV	696535	548642	30.20%	1.707%
71	14.099	1048	1051	1052	rBV2	99292	120261	6.62%	0.374%

LSC Area Percent Report

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Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

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
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Peak separation: 5

Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	14.145	1052	1055	1060	rBV4	73942	225674	12.42%	0.702%
73	14.214	1060	1061	1063	rVB2	69442	72293	3.98%	0.225%
74	14.374	1073	1075	1077	rBV	106199	160618	8.84%	0.500%
75	14.408	1077	1078	1080	rVB	56766	60007	3.30%	0.187%
76	14.465	1080	1083	1085	rBV3	94763	190127	10.47%	0.592%
77	14.568	1090	1092	1095	rVB2	59327	84562	4.65%	0.263%
78	14.694	1100	1103	1107	rBV4	60562	147512	8.12%	0.459%
79	14.762	1107	1109	1113	rVB3	36158	83367	4.59%	0.259%
80	14.865	1116	1118	1119	rBV	79679	86410	4.76%	0.269%
81	15.014	1128	1131	1136	rBV	483261	1067224	58.75%	3.321%
82	15.082	1136	1137	1139	rVV	32292	47274	2.60%	0.147%
83	15.117	1139	1140	1142	rVV	115048	134385	7.40%	0.418%
84	15.220	1146	1149	1150	rBV2	37347	78405	4.32%	0.244%
85	15.300	1154	1156	1160	rVV	245314	432283	23.79%	1.345%
86	15.368	1160	1162	1165	rVV	502151	624925	34.40%	1.945%
87	15.425	1165	1167	1168	rVV	211598	249428	13.73%	0.776%
88	15.460	1168	1170	1174	rVV2	120419	222271	12.23%	0.692%
89	15.528	1174	1176	1179	rVV4	21943	41250	2.27%	0.128%
90	15.597	1179	1182	1183	rVV	32990	53884	2.97%	0.168%
91	15.631	1183	1185	1190	rVV3	48707	122290	6.73%	0.381%
92	15.848	1201	1204	1206	rBV	37018	71014	3.91%	0.221%
93	15.894	1206	1208	1212	rBV4	26907	69332	3.82%	0.216%
94	16.843	1287	1291	1295	rBV	206905	422684	23.27%	1.315%
95	17.003	1301	1305	1308	rBV2	47451	118286	6.51%	0.368%
96	17.060	1308	1310	1313	rVV2	48111	101432	5.58%	0.316%
97	17.117	1313	1315	1321	rVB4	33118	93387	5.14%	0.291%
98	17.266	1325	1328	1334	rBV	144806	300094	16.52%	0.934%
99	17.506	1346	1349	1359	rVV	42616	132600	7.30%	0.413%
100	19.437	1514	1518	1525	rBV	31455	120403	6.63%	0.375%

Sum of corrected areas: 32135549

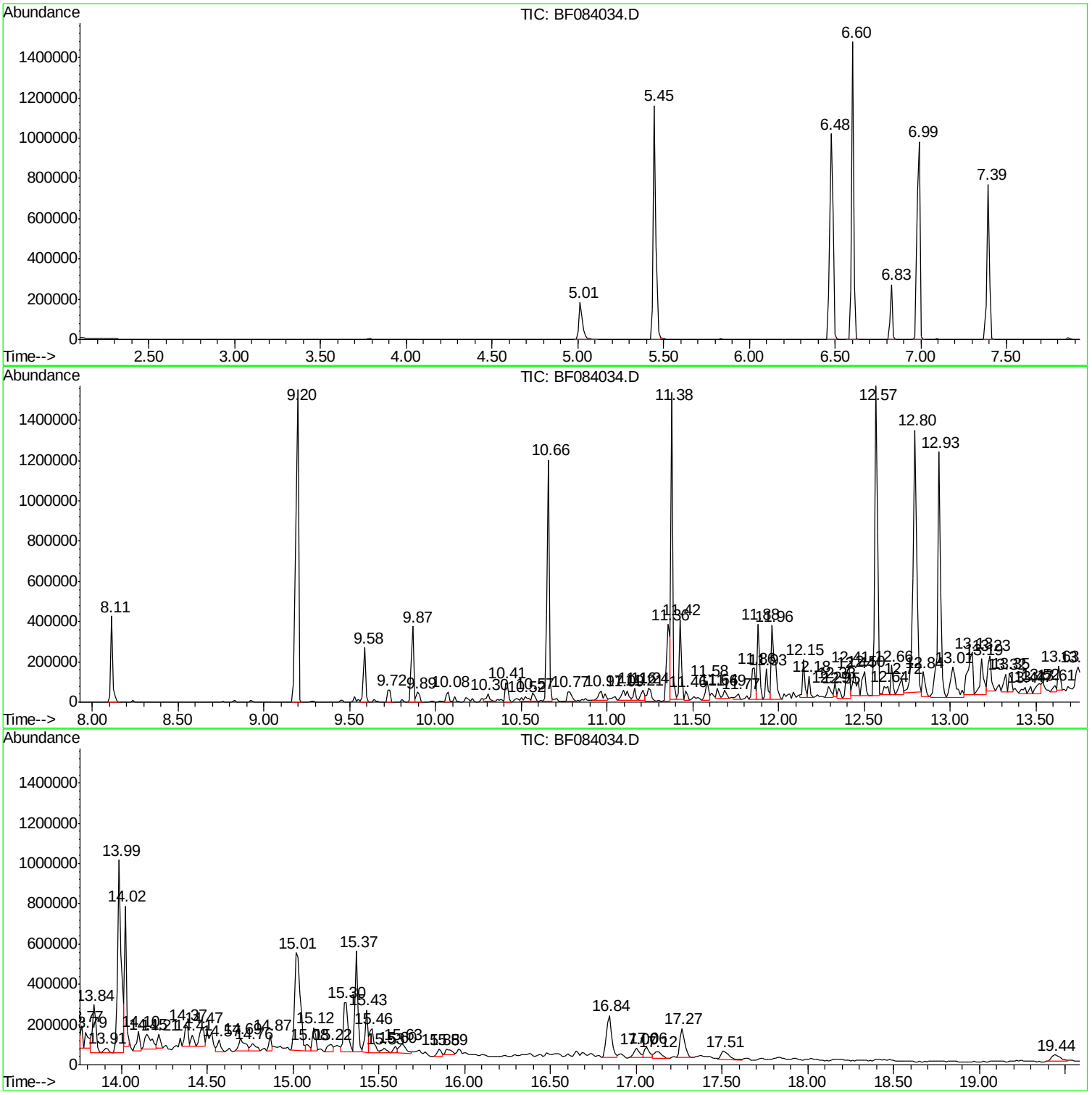
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
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ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

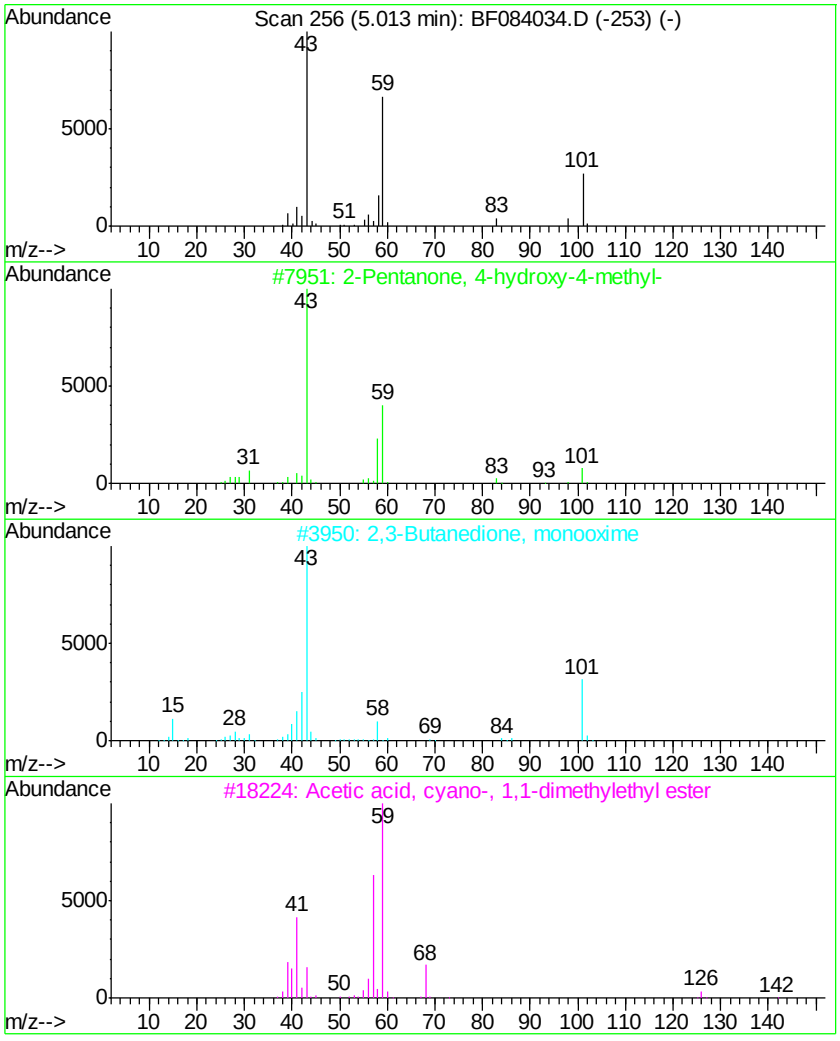
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

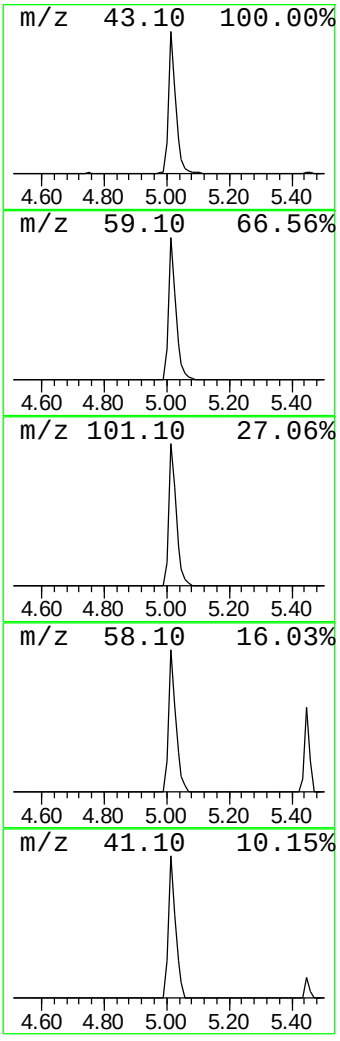
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.01	22.35 ng	284390	1,4-Dichlorobenzene-d4	6.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	25
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Morpholine, 4-methyl-	101	C5H11NO	000109-02-4	9
5	4-Penten-2-one, 4-methyl-	98	C6H10O	003744-02-3	9





Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

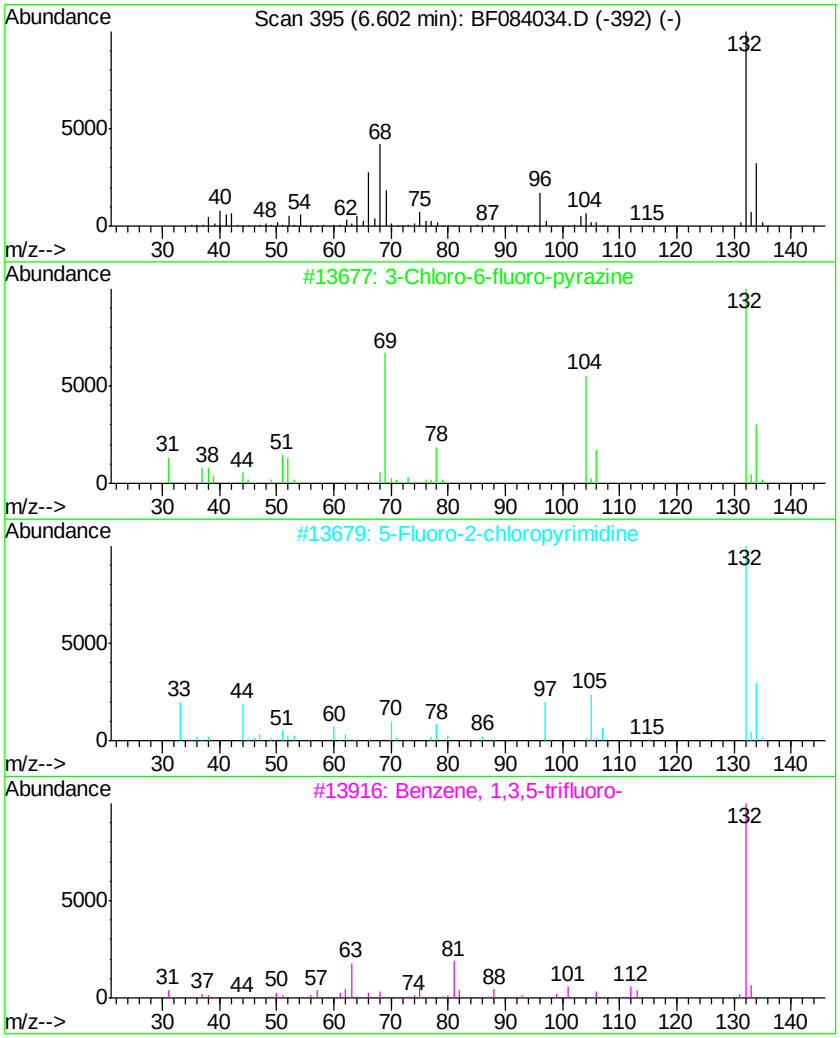
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

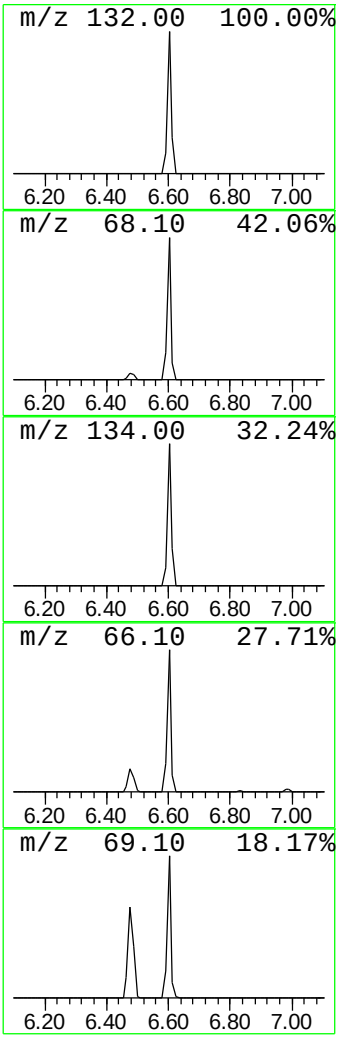
****

Peak Number 2 unknown6.60 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.60	107.43 ng	1366870	1,4-Dichlorobenzene-d4	6.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	27
2	5-Fluoro-2-chloropyrimidine	132	C4H2ClFN2	062802-42-0	16
3	Benzene, 1,3,5-trifluoro-	132	C6H3F3	000372-38-3	14
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





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Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

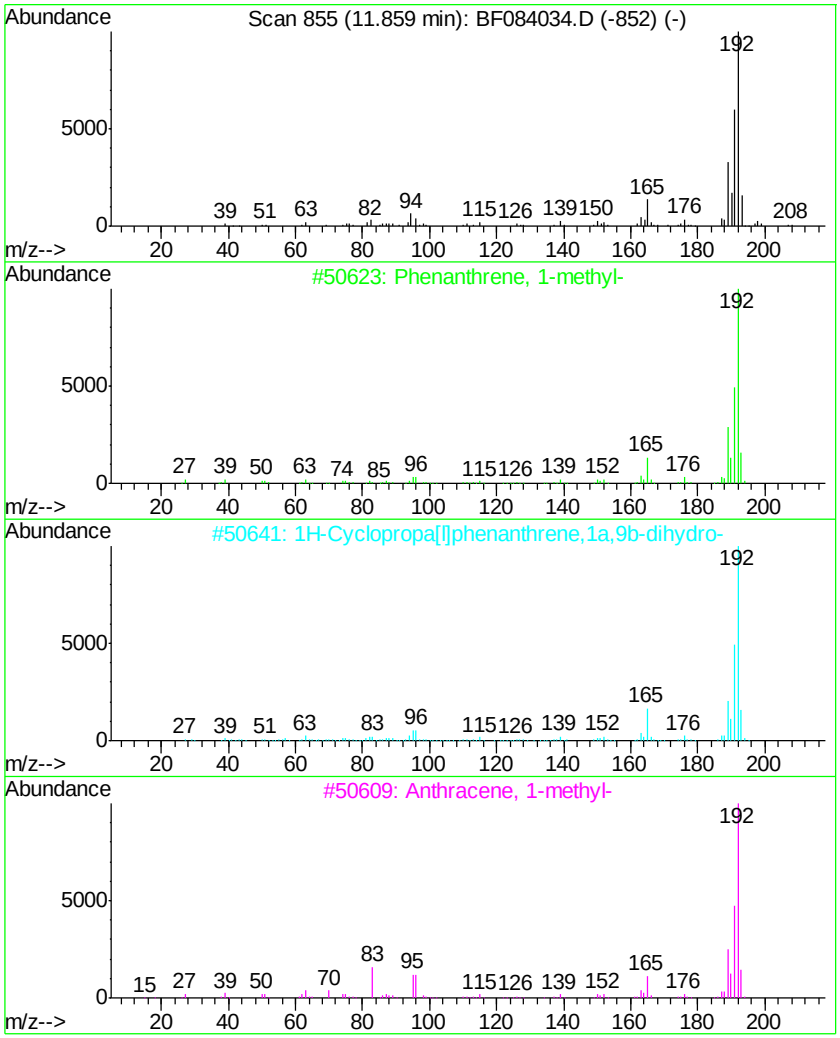
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

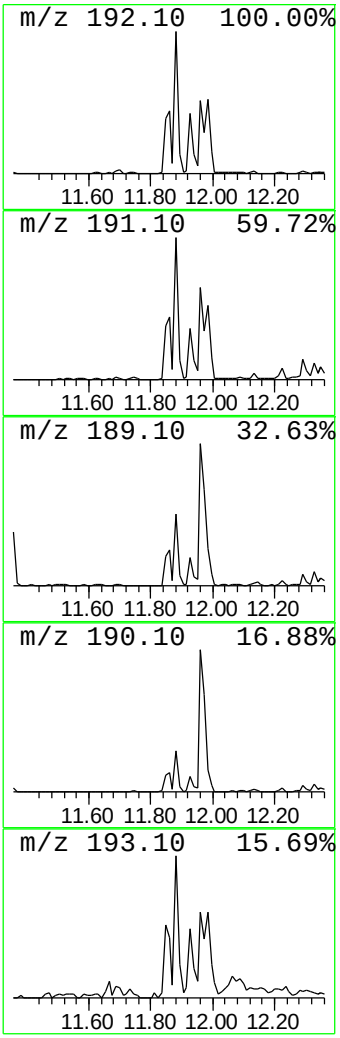
****

Peak Number 4 Phenanthrene, 1-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.86	8.22 ng	246747	Phenanthrene-d10	11.36

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
2	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	91
3	Anthracene, 1-methyl-	192	C15H12	000610-48-0	91
4	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	91
5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	91





Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

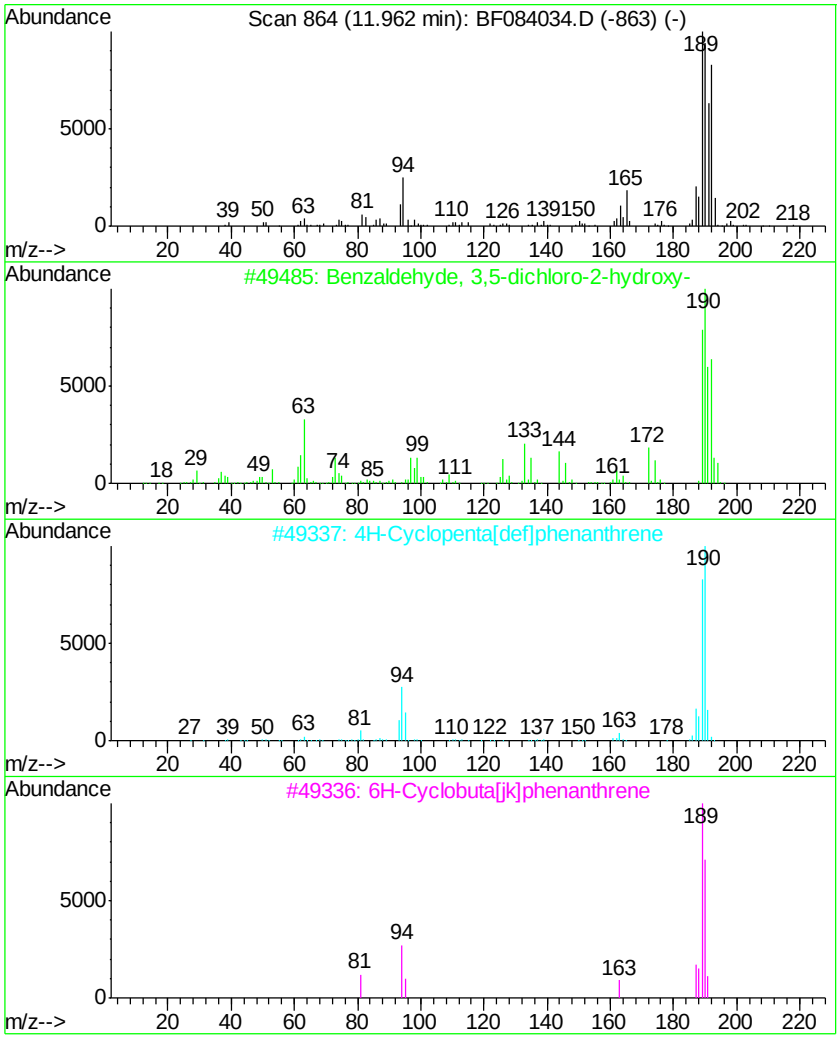
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

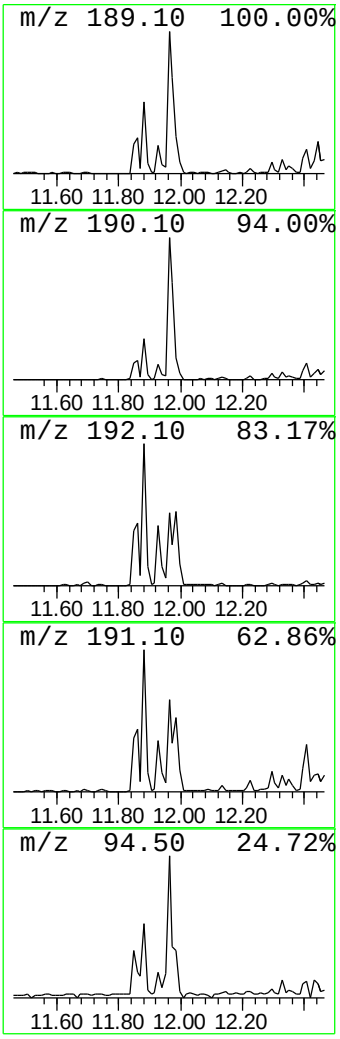
****

Peak Number 6 Benzaldehyde, 3,5-dichloro-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.96	18.95 ng	568780	Phenanthrene-d10	11.36

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	60
3	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	49
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	41
5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	38





Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

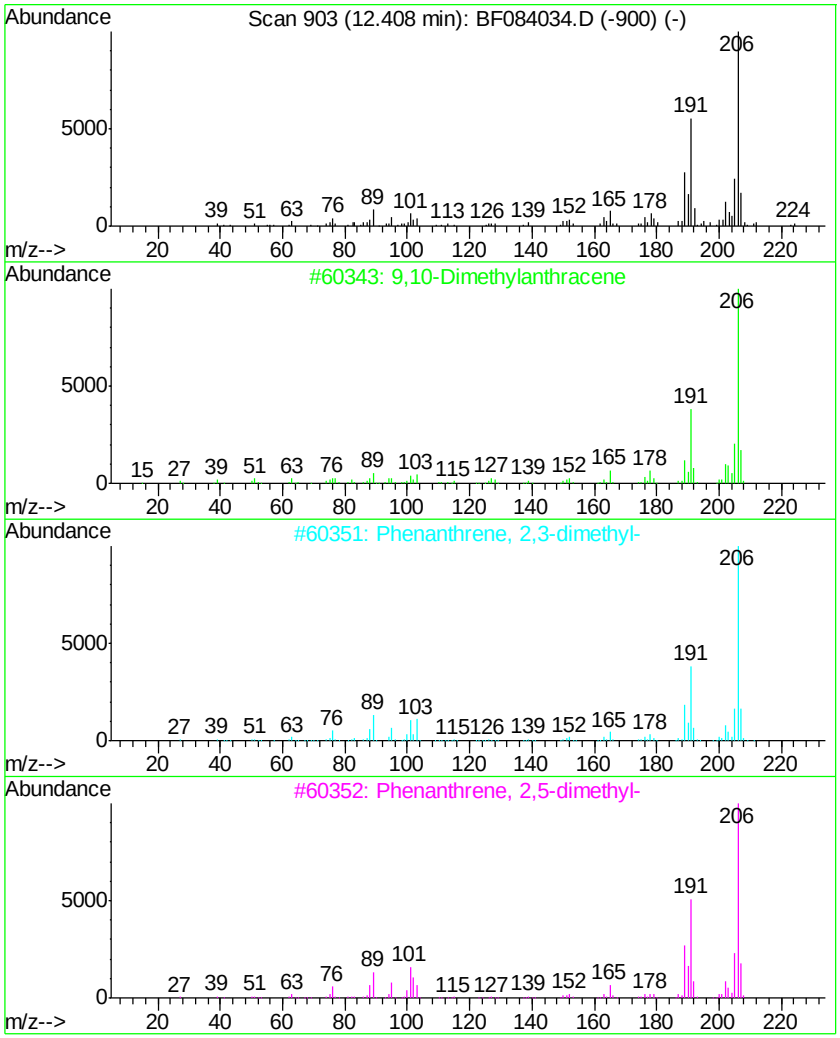
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

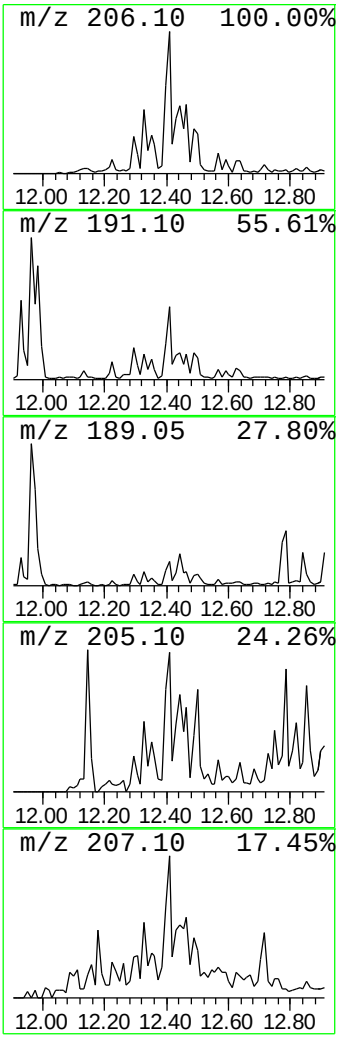
****

Peak Number 7 9,10-Dimethylanthracene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.41	7.17 ng	215345	Phenanthrene-d10	11.36

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Dimethylanthracene	206	C16H14	000781-43-1	93
2	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	93
3	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	93
4	di-p-Tolylacetylene	206	C16H14	002789-88-0	91
5	1H-Indene, 2-methyl-3-phenyl-	206	C16H14	035099-60-6	90





Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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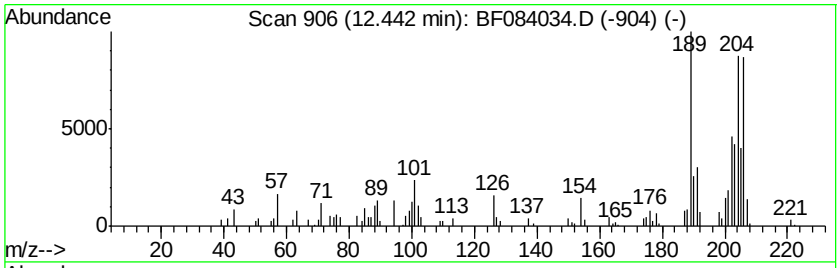
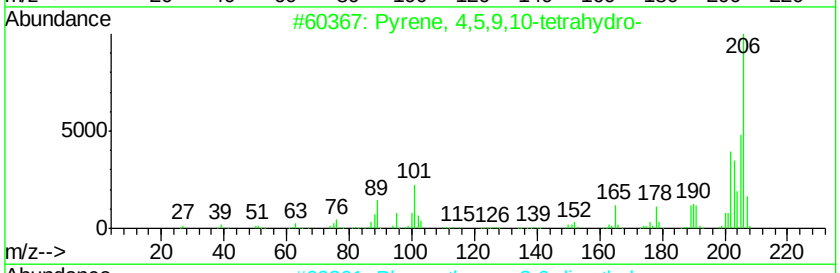
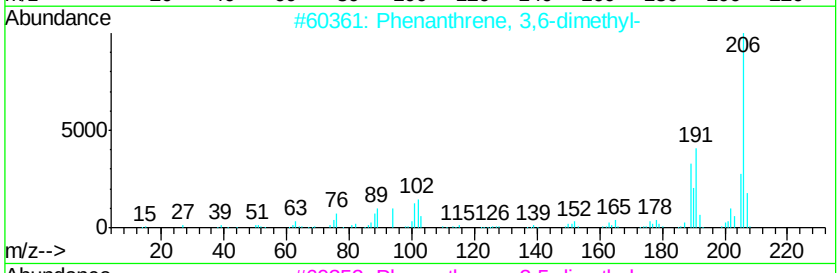
Peak Number 8 unknown12.44 Concentration Rank 17

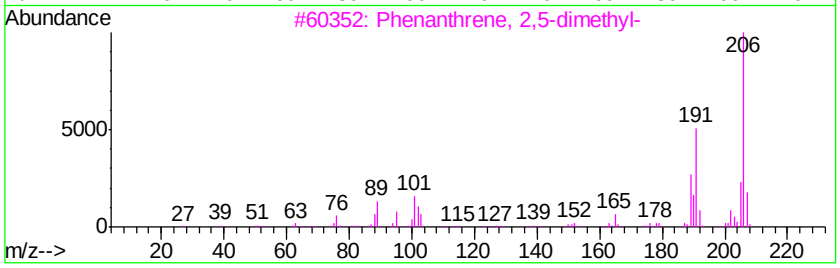
R.T.	EstConc	Area	Relative to ISTD	R.T.
12.44	6.73 ng	202077	Phenanthrene-d10	11.36

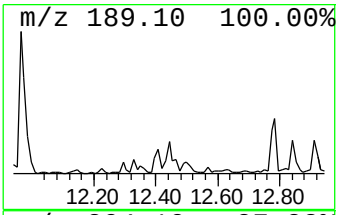
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 4,5,9,10-tetrahydro-	206	C16H14	000781-17-9	42
2	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	38
3	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	30
4	4-(Trifluoromethoxy)benzoic acid	206	C8H5F3O3	000330-12-1	30
5	Indeno[2,1-a]indene, 4b,5,9b,10-...	206	C16H14	005695-17-0	25

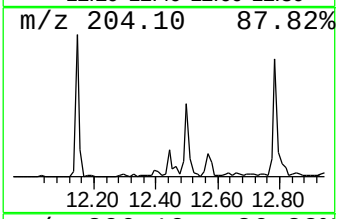


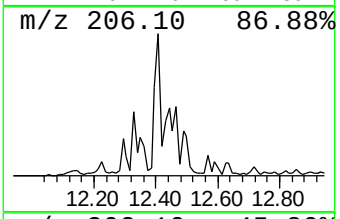


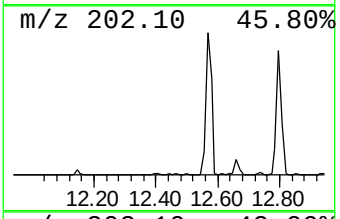


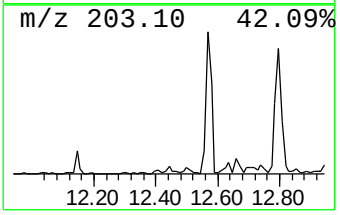












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Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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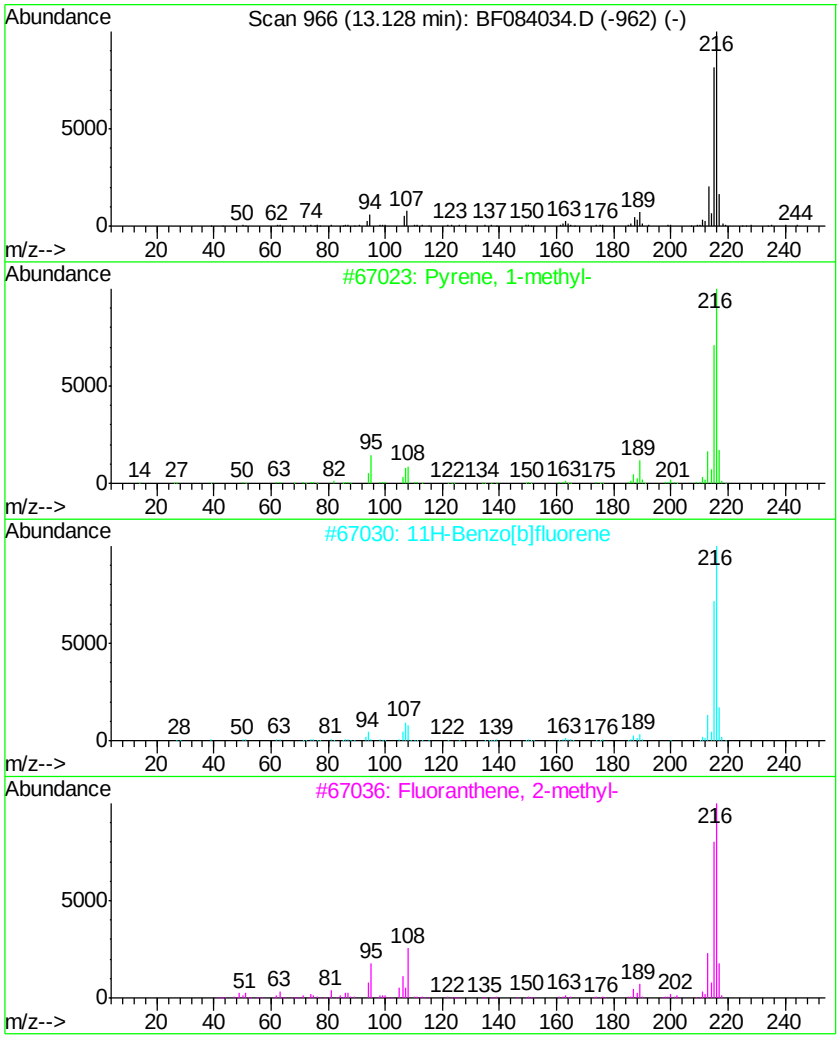
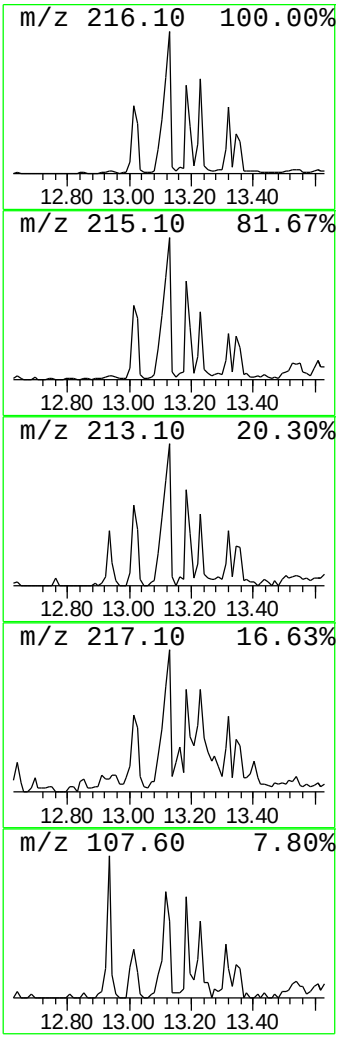
Peak Number 9 Pyrene, 1-methyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.13	6.14 ng	429779	Chrysene-d12	14.00

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	91
5	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	80





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Misc :
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Instrument : BNA_F
ClientSampleId : SB-5

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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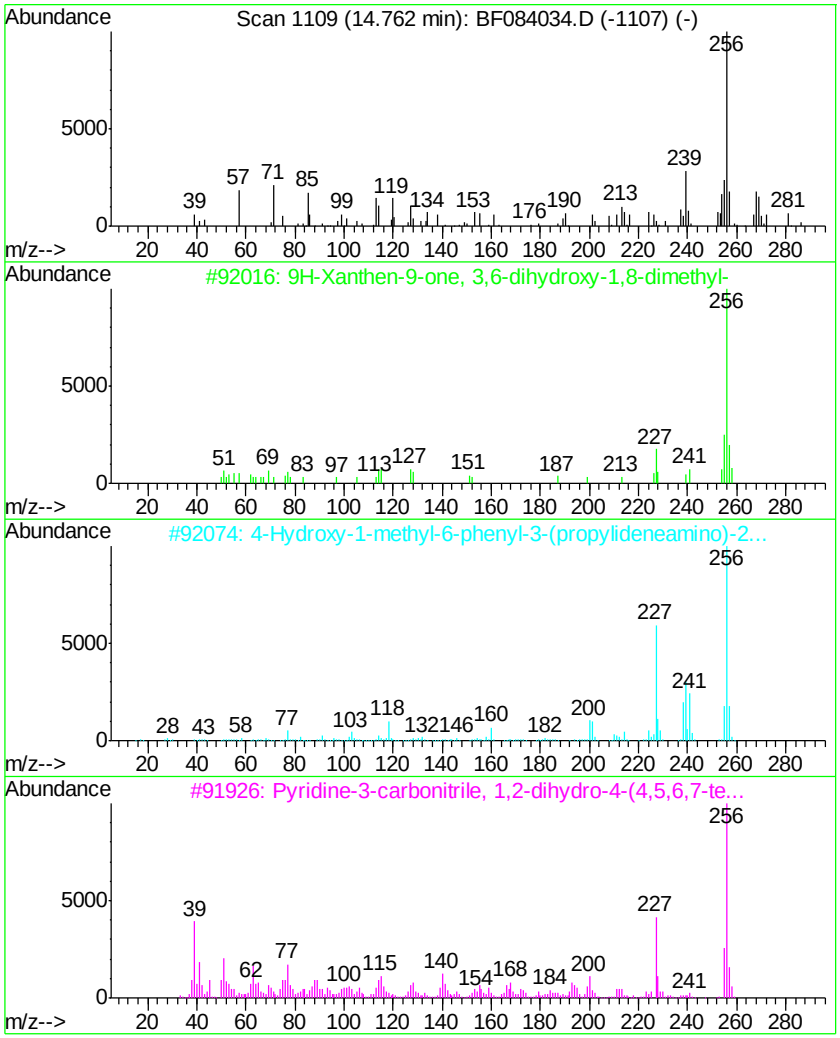
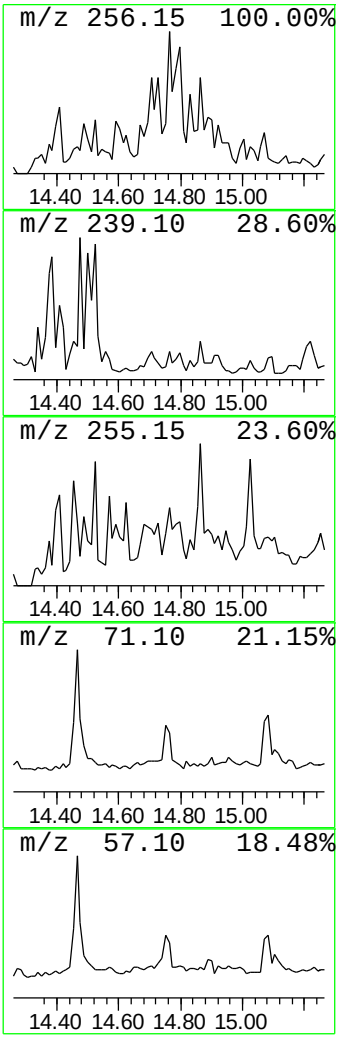
Peak Number 10 9H-Xanthen-9-one, 3,6-dihyd... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.76	6.68 ng	83367	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthen-9-one, 3,6-dihydroxy-...	256	C15H12O4	067065-96-7	58
2	4-Hydroxy-1-methyl-6-phenyl-3-(p...	256	C15H16N2O2	1000239-66-9	58
3	Pyridine-3-carbonitrile, 1,2-dih...	256	C14H12N2OS	1000265-37-9	50
4	Benz[a]anthracene, 7,12-dimethyl-	256	C20H16	000057-97-6	50
5	3,8-Azo-4,7-methanocyclobuta[b]n...	350	C25H22N2	040229-71-8	50





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Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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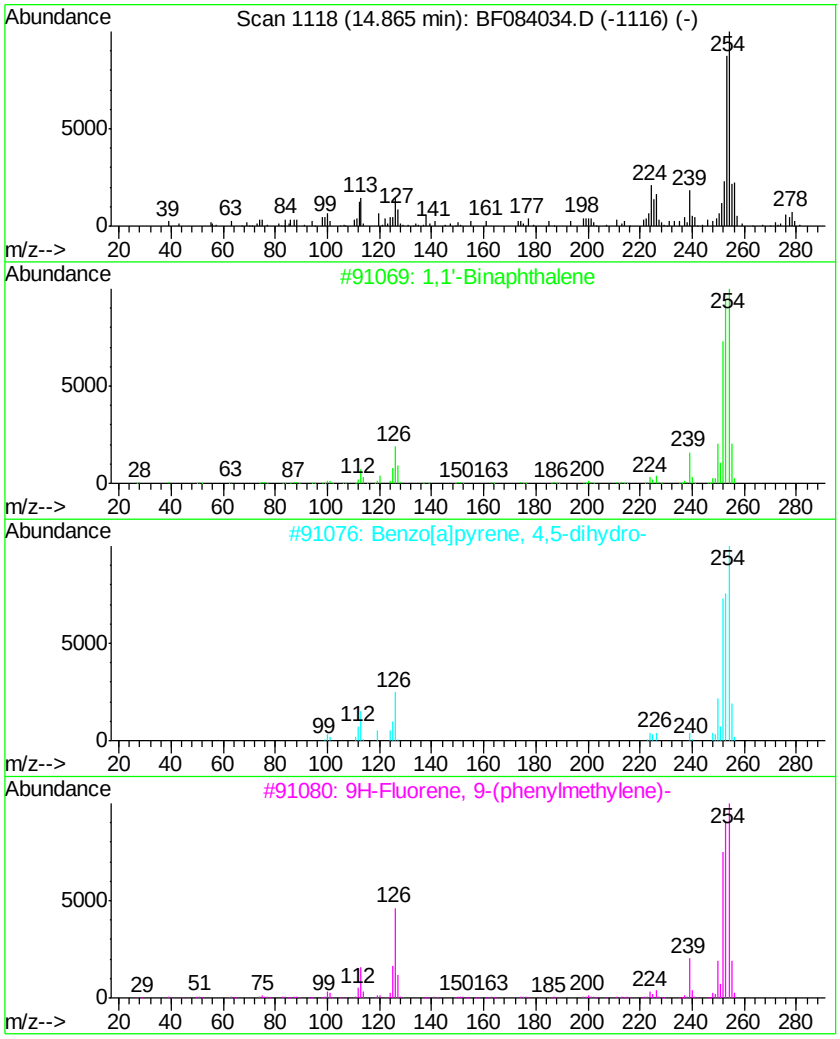
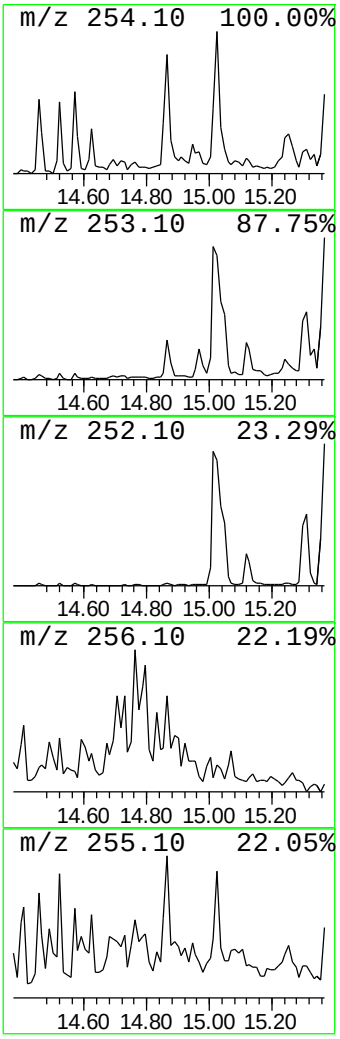
Peak Number 11 1,1'-Binaphthalene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.87	6.93 ng	86410	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Binaphthalene	254	C20H14	000604-53-5	86
2	Benzo[a]pyrene, 4,5-dihydro-	254	C20H14	057652-66-1	76
3	9H-Fluorene, 9-(phenylmethylene)-	254	C20H14	001836-87-9	70
4	9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	62
5	1,2'-Binaphthalene	254	C20H14	004325-74-0	58





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ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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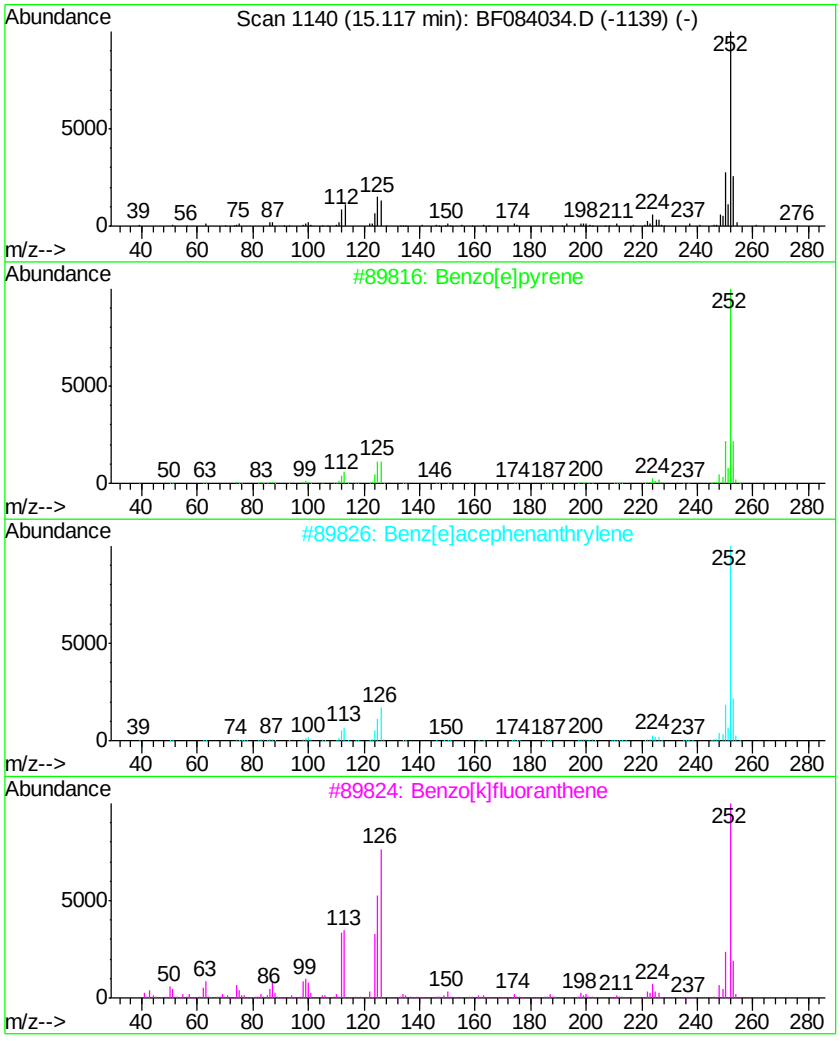
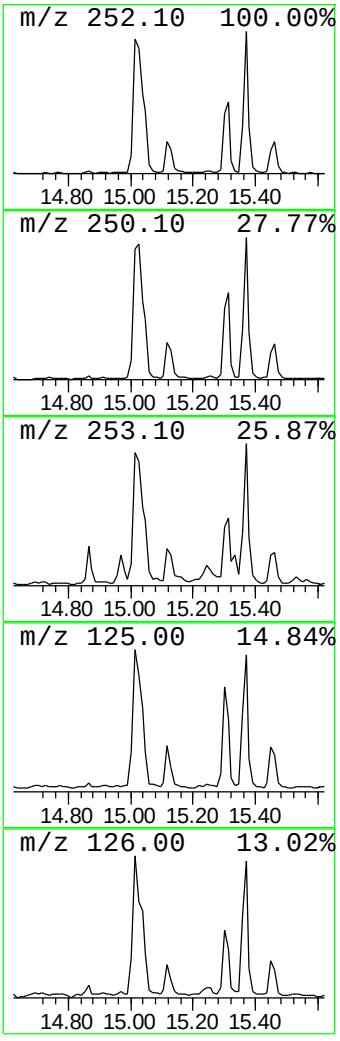
Peak Number 12 Benzo[e]pyrene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.12	10.78 ng	134385	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	96
2	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94
3	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
4	Perylene	252	C20H12	000198-55-0	93
5	Benzo[a]pyrene	252	C20H12	000050-32-8	90





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Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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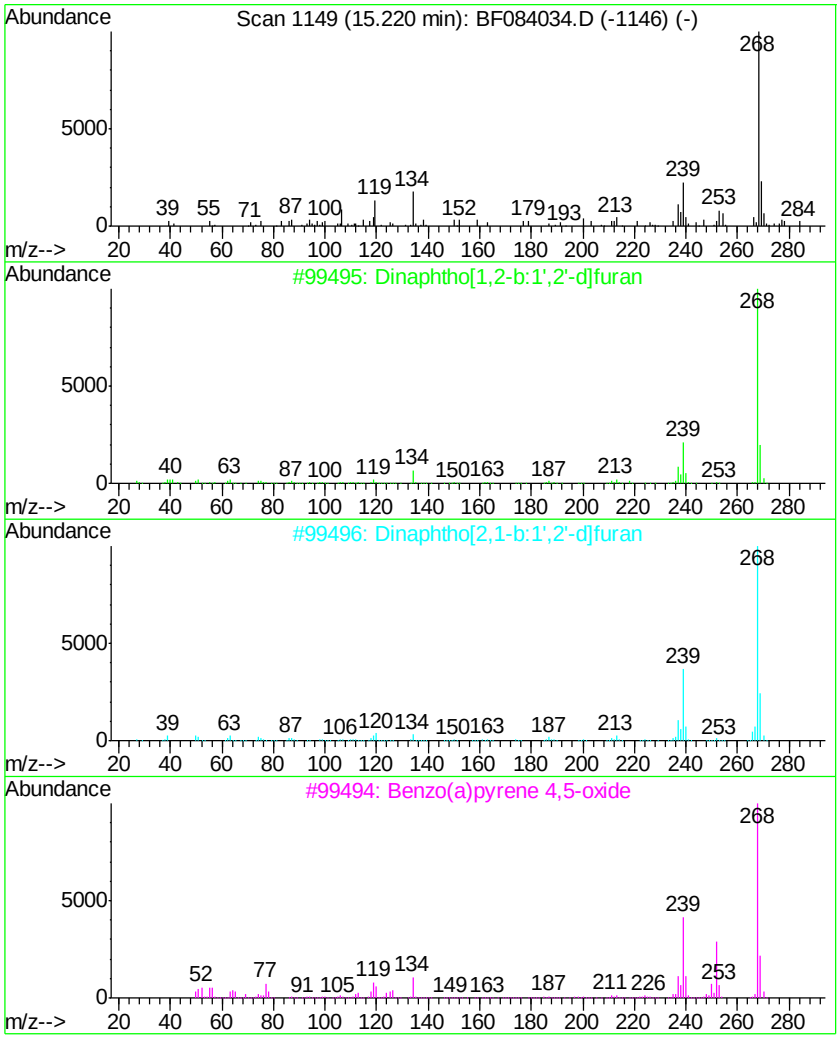
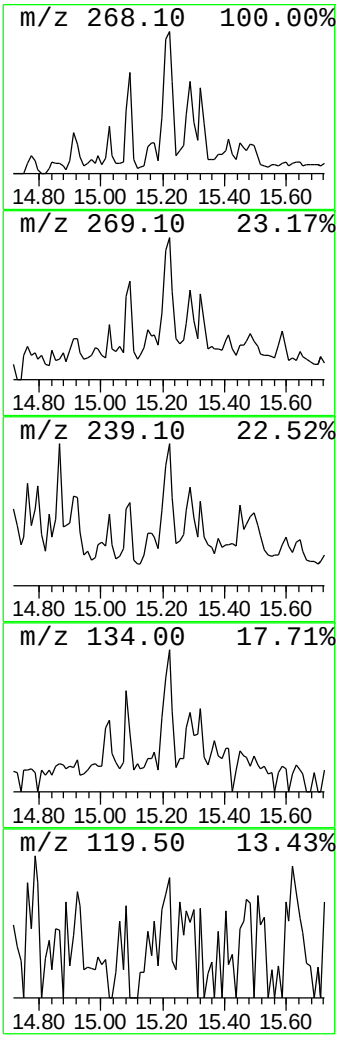
Peak Number 13 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.22	6.29 ng	78405	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	74
2	Dinaphtho[2,1-b:1',2'-d]furan	268	C20H12O	000194-63-8	64
3	Benzo(a)pyrene 4,5-oxide	268	C20H12O	037574-47-3	64
4	4H-1-Benzopyran-4-one, 5-hydroxy...	268	C16H12O4	000520-28-5	64
5	4H-Dibenz[a,kl]anthracene, 5,6-d...	268	C21H16	007198-87-0	59





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Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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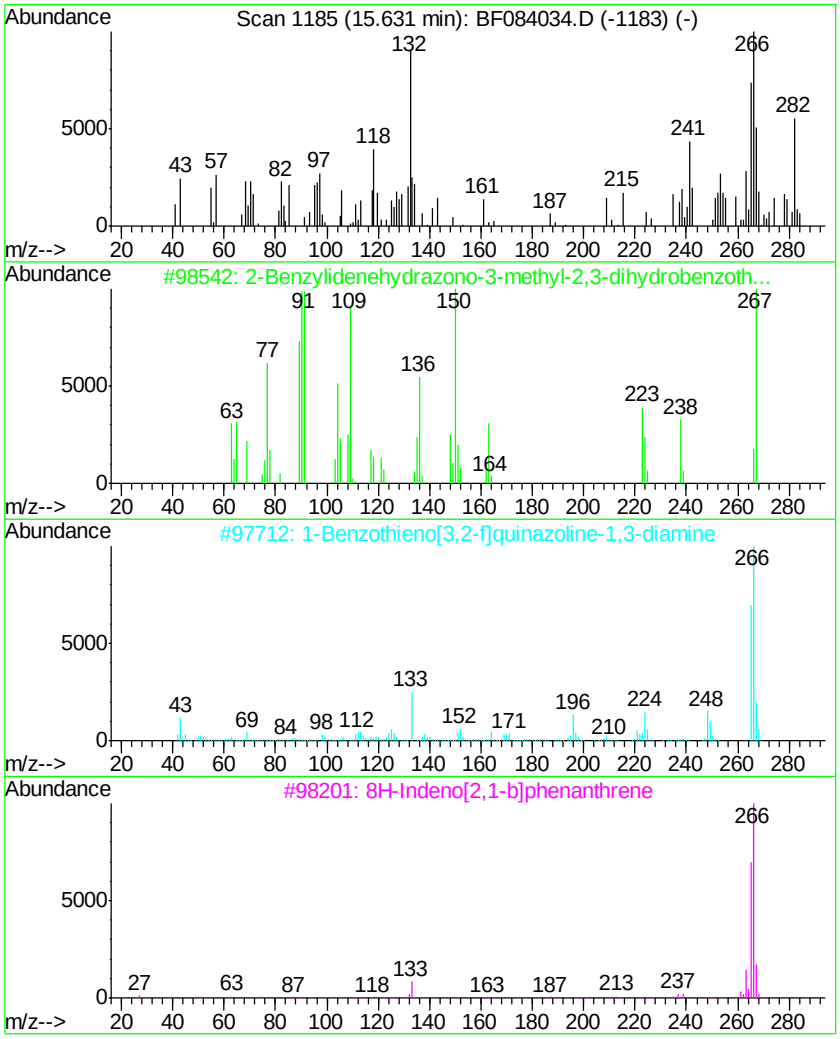
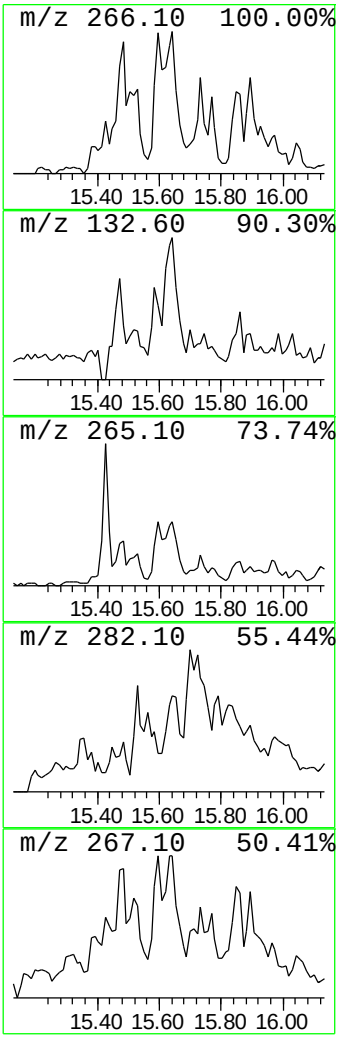
Peak Number 15 2-Benzylidenehydrazono-3-me... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.63	9.81 ng	122290	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Benzylidenehydrazono-3-methyl-...	267	C15H13N3S	1000146-59-1	59
2	1-Benzothieno[3,2-f]quinazoline-...	266	C14H10N4S	065642-92-4	30
3	8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	27
4	1-Methyl-4-oxy-5-phenyl-1,3-dihy...	266	C16H14N2O2	1000286-08-5	25
5	13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	22





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Instrument : BNA_F
ClientSampleId : SB-5

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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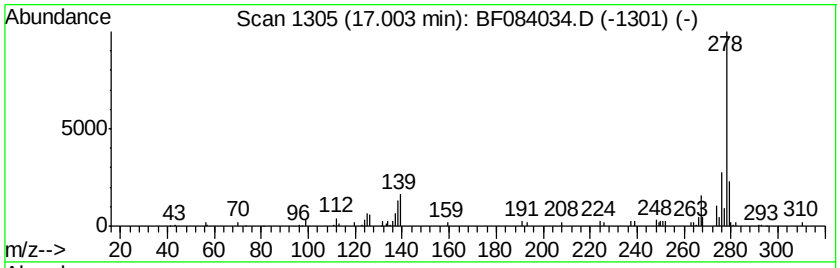
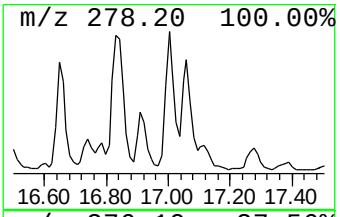
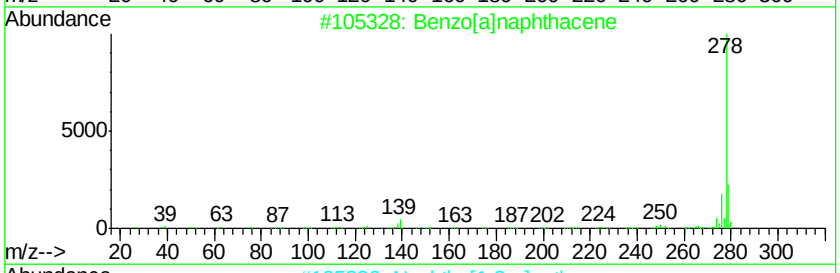
Peak Number 16 Benzo[a]naphthacene Concentration Rank 11

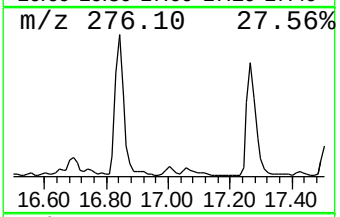
R.T.	EstConc	Area	Relative to ISTD	R.T.
17.00	9.48 ng	118286	Perylene-d12	15.43

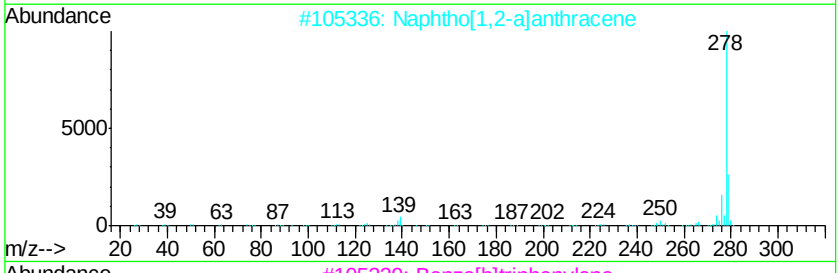
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[a]naphthacene	278	C22H14	000226-88-0	90
2	Naphtho[1,2-a]anthracene	278	C22H14	000195-06-2	89
3	Benzo[b]triphenylene	278	C22H14	000215-58-7	86
4	Benzo[b]chrysene	278	C22H14	000214-17-5	86
5	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	70

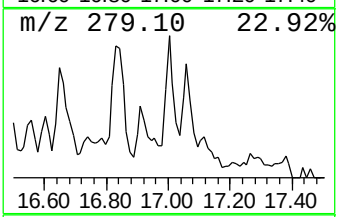


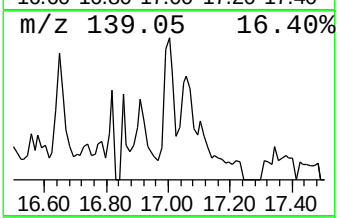


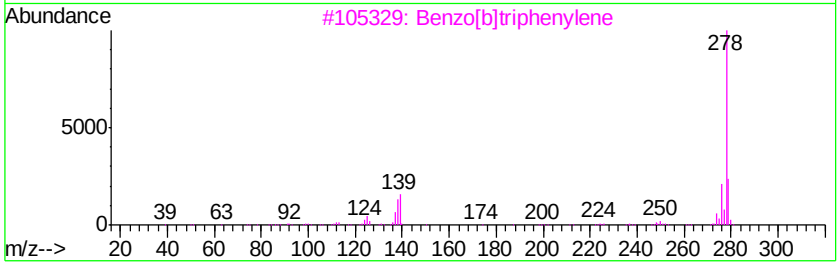


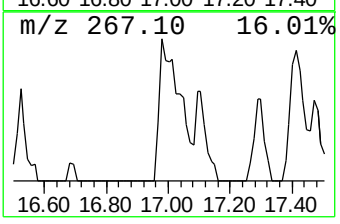












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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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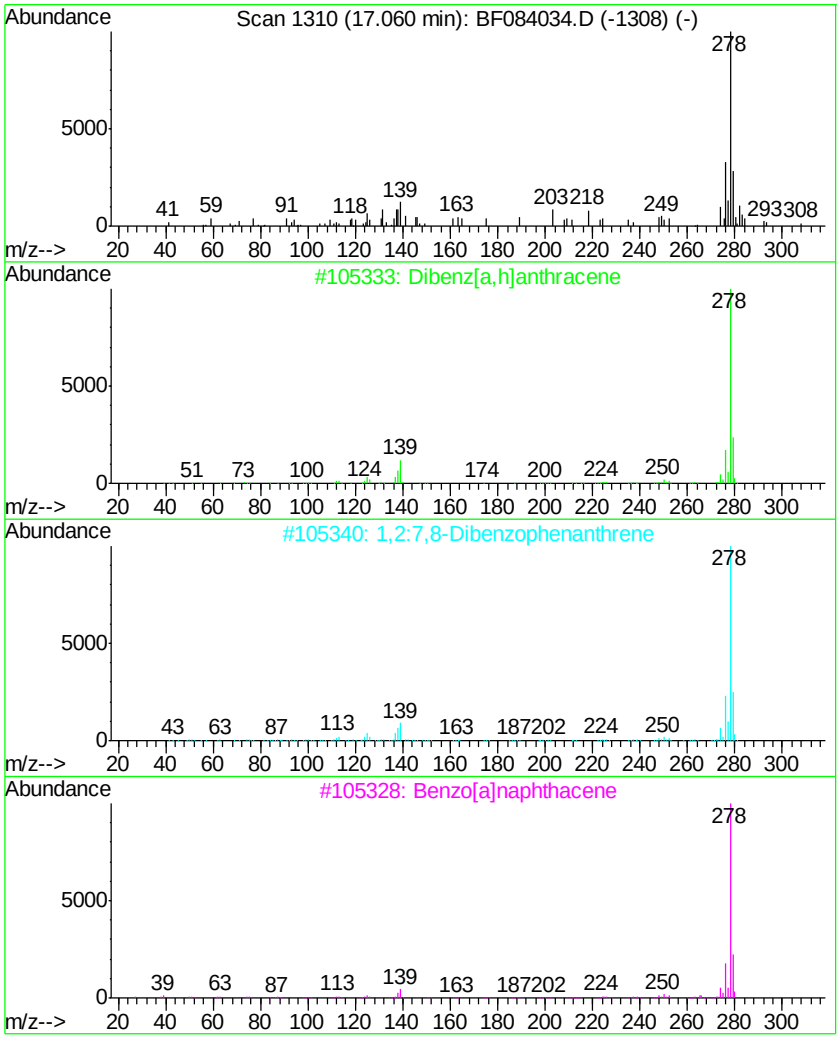
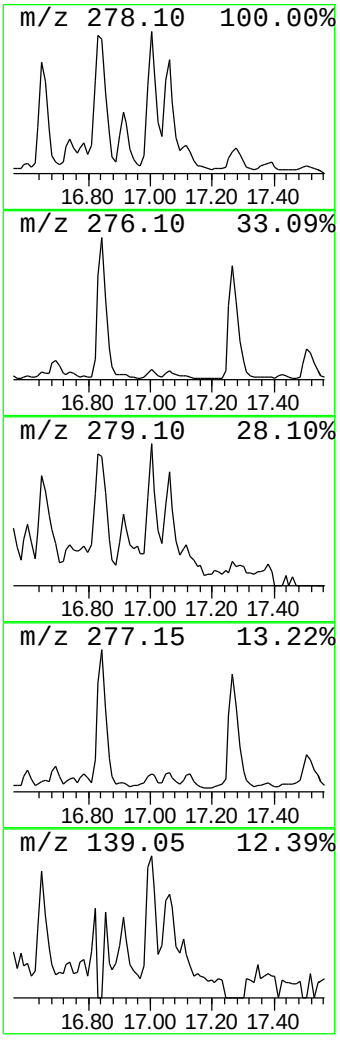
Peak Number 17 Dibenz[a,h]anthracene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.06	8.13 ng	101432	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	94
2	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	92
3	Benzo[a]naphthacene	278	C22H14	000226-88-0	76
4	Pentaphene	278	C22H14	000222-93-5	70
5	Benzo[b]chrysene	278	C22H14	000214-17-5	70





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Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

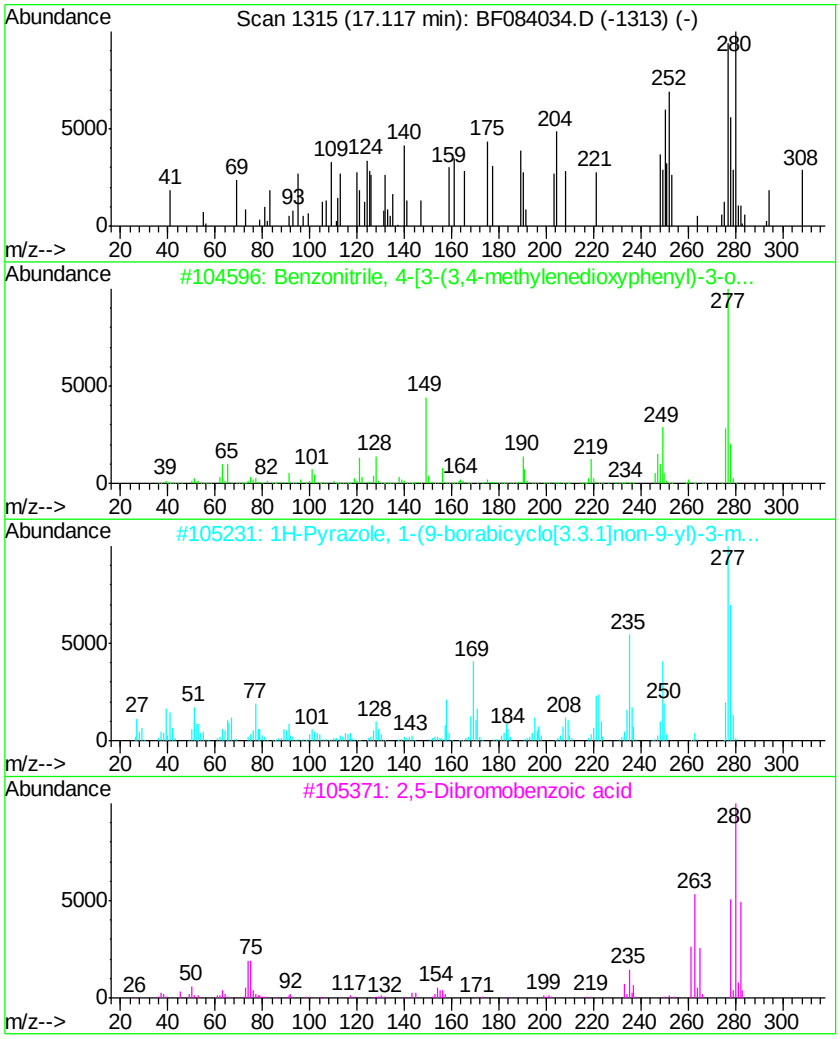
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

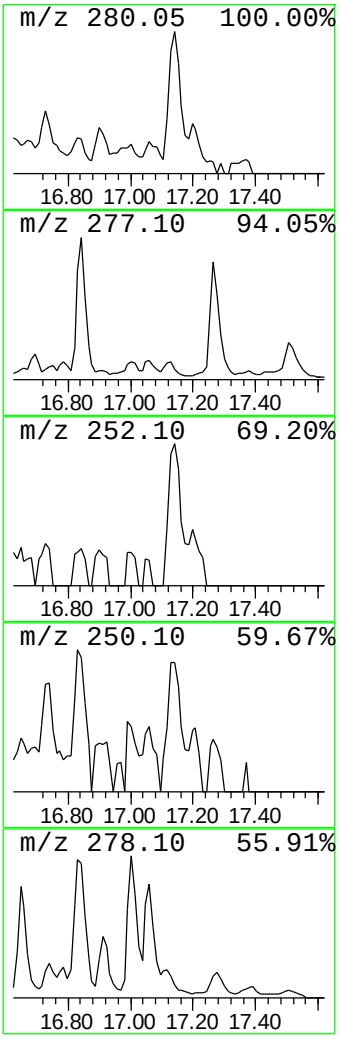
****

Peak Number 18 unknown17.12 Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.12	7.49 ng	93387	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzonitrile, 4-[3-(3,4-methylen...	277	C17H11NO3	1000273-95-6	22
2	1H-Pyrazole, 1-(9-borabicyclo[3....	278	C18H23BN2	125995-69-9	16
3	2,5-Dibromobenzoic acid	278	C7H4Br2O2	000610-71-9	14
4	3,5-Dibromobenzoic acid	278	C7H4Br2O2	000618-58-6	14
5	Cinnamic acid, 3-methoxy-4-(trim...	280	C14H20O4Si	027798-70-5	14





Data Path : Z:\HPCHEM1\BNA F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

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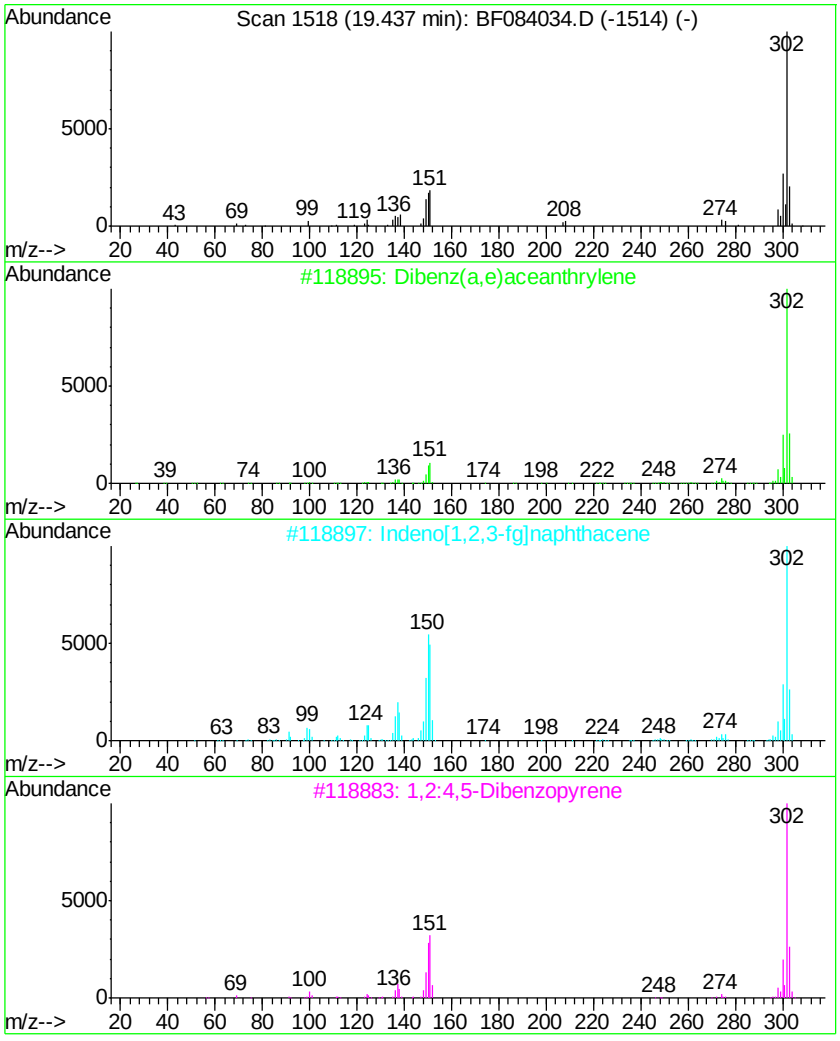
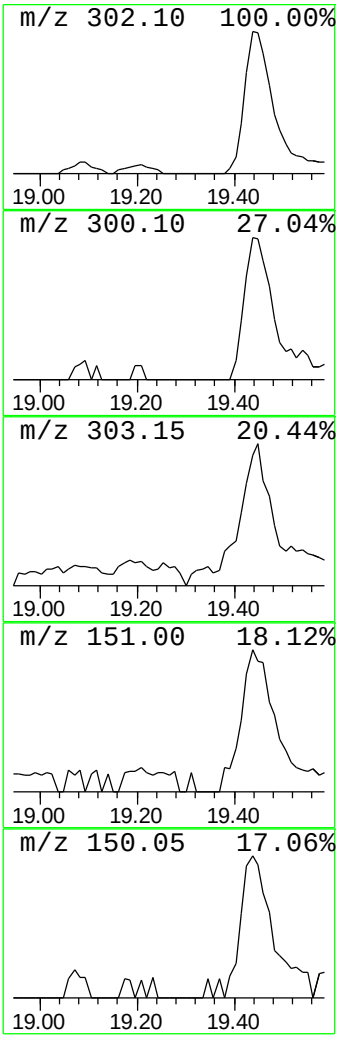
Peak Number 20 Dibenz(a,e)aceanthrylene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.44	9.65 ng	120403	Perylene-d12	15.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenz(a,e)aceanthrylene	302	C24H14	005385-75-1	91
2	Indeno[1,2,3-fg]naphthacene	302	C24H14	000203-11-2	91
3	1,2:4,5-Dibenzopyrene	302	C24H14	000192-65-4	87
4	3,4:8,9-Dibenzopyrene	302	C24H14	000189-64-0	64
5	3,4:9,10-Dibenzopyrene	302	C24H14	000189-55-9	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF122215\
Data File : BF084034.D
Acq On : 23 Dec 2015 12:39
Operator : UM/SJ
Sample : G4913-05
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument : BNA_F
ClientSampleId : SB-5

Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF122215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	5.01	22.4	ng	284390	1	6.83	254468	20.0
unknown6.60	6.60	107.4	ng	1366870	1	6.83	254468	20.0
Phenanthrene, 1-m...	11.86	8.2	ng	246747	4	11.36	600365	20.0
Benzaldehyde, 3,5...	11.96	18.9	ng	568780	4	11.36	600365	20.0
9,10-Dimethylanth...	12.41	7.2	ng	215345	4	11.36	600365	20.0
unknown12.44	12.44	6.7	ng	202077	4	11.36	600365	20.0
Pyrene, 1-methyl-	13.13	6.1	ng	429779	5	14.00	1398800	20.0
9H-Xanthen-9-one,...	14.76	6.7	ng	83367	6	15.43	249428	20.0
1,1'-Binaphthalene	14.87	6.9	ng	86410	6	15.43	249428	20.0
Benzo[e]pyrene	15.12	10.8	ng	134385	6	15.43	249428	20.0
Dinaphtho[1,2-b:1...	15.22	6.3	ng	78405	6	15.43	249428	20.0
2-Benzylidenehydr...	15.63	9.8	ng	122290	6	15.43	249428	20.0
Benzo[a]naphthacene	17.00	9.5	ng	118286	6	15.43	249428	20.0
Dibenz[a,h]anthra...	17.06	8.1	ng	101432	6	15.43	249428	20.0
unknown17.12	17.12	7.5	ng	93387	6	15.43	249428	20.0
Dibenz(a,e)aceant...	19.44	9.7	ng	120403	6	15.43	249428	20.0