LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

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_M\METHODS\8270-BM043019.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	5.346	395	401	411	rBV	1060936	1533369	33.02%	2.478%
2	6.928	664	670	684	rBV	956075	1592071	34.29%	2.573%
3	7.292	726	732	742	rBV	1074975	1673853	36.05%	2.706%
4	7.763	806	812	818	rBV	225515	360843	7.77%	0.583%
5	8.081	859	866	874	rBV	746596	1190296	25.64%	1.924%
6	8.928	1003	1010	1024	rBV	575539	992257	21.37%	1.604%
7	10.557	1280	1287	1292	rBV	252897	435511	9.38%	0.704%
8	10.604	1292	1295	1302	rVB	63801	104124	2.24%	0.168%
9	12.069	1533	1544	1553	rVB3	17860	52030	1.12%	0.084%
10	12.222	1562	1570	1580	rBV	46641	78089	1.68%	0.126%
11	12.439	1601	1607	1615	rVB	32582	53683	1.16%	0.087%
12	13.021	1700	1706	1724	rBV	991501	1501101	32.33%	2.426%
13	13.727	1819	1826	1830	rBV	30345	51816	1.12%	0.084%
14	13.863	1843	1849	1862	rBV	223883	342937	7.39%	0.554%
15	14.133	1888	1895	1906	rBV	302678	483446	10.41%	0.781%
16	14.410	1933	1942	1950	rBV2	383488	610036	13.14%	0.986%
17	15.010	2039	2044	2050	rBV3	31196	61888	1.33%	0.100%
18	15.280	2086	2090	2096	rVB2	60131	79527	1.71%	0.129%
19	15.480	2121	2124	2134	rVB3	37620	74478	1.60%	0.120%
20	15.904	2190	2196	2213	rVB	1027867	1531405	32.98%	2.475%
21	16.133	2227	2235	2245	rBV7	43799	109620	2.36%	0.177%
22	16.457	2284	2290	2296	rBV7	29570	78819	1.70%	0.127%
23	16.733	2332	2337	2342	rBV	52954	79568	1.71%	0.129%
24	16.815	2346	2351	2358	rVB2	79522	123143	2.65%	0.199%
25	16.980	2375	2379	2387	rVB	66446	97184	2.09%	0.157%
26	17.157	2403	2409	2413	rBV	494049	736276	15.86%	1.190%
27	17.204	2413	2417	2427	rVB	969283	1472979	31.72%	2.381%
28	17.292	2427	2432	2437	rBV	228860	340711	7.34%	0.551%
29	17.351	2437	2442	2447	rVB2	47534	92482	1.99%	0.149%
30	17.468	2460	2462	2470	rVB3	28847	48160	1.04%	0.078%
31	17.562	2471	2478	2485	rBV6	26427	80247	1.73%	0.130%
32	17.633	2485	2490	2494	rVV2	57198	104877	2.26%	0.170%
33	17.674	2494	2497	2503	rVV	104409	148411	3.20%	0.240%
34	17.739	2503	2508	2513	rVB2	94741	137775	2.97%	0.223%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

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_M\METHODS\8270-BM043019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	17.839	2520	2525	2529	rBV5	37380	68914	1.48%	0.111%
36	17.886	2529	2533	2541	rVB	43199	87388	1.88%	0.141%
37	17.956	2541	2545	2549	rBV2	41538	68395	1.47%	0.111%
38	18.033	2553	2558	2562	rVV2	422131	671912	14.47%	1.086%
39	18.080	2562	2566	2572	rVV	380357	563363	12.13%	0.911%
40	18.162	2576	2580	2585	rVV	83756	120804	2.60%	0.195%
41	18.221	2585	2590	2595	rVV2	418934	828920	17.85%	1.340%
42	18.262	2595	2597	2604	rVB	307547	399386	8.60%	0.646%
43	18.345	2605	2611	2615	rBV6	47277	88801	1.91%	0.144%
44	18.433	2622	2626	2630	rVB2	75394	100344	2.16%	0.162%
45	18.539	2638	2644	2647	rBV	296662	421899	9.09%	0.682%
46	18.586	2647	2652	2661	rVB	399320	605028	13.03%	0.978%
47	18.751	2676	2680	2682	rBV2	55469	77190	1.66%	0.125%
48	18.780	2682	2685	2690	rVV4	94768	175302	3.78%	0.283%
49	18.833	2690	2694	2697	rVV	104942	147256	3.17%	0.238%
50	18.874	2697	2701	2704	rVB2	75607	103577	2.23%	0.167%
51	18.951	2709	2714	2720	rBV2	341270	667324	14.37%	1.079%
52	19.045	2728	2730	2734	rVB	140789	152744	3.29%	0.247%
53	19.103	2734	2740	2751	rBV3	295446	580486	12.50%	0.938%
54	19.221	2751	2760	2765	rVV	1928380	2542720	54.76%	4.110%
55	19.286	2766	2771	2774	rVV	101333	151319	3.26%	0.245%
56	19.321	2774	2777	2781	rVV2	112868	167043	3.60%	0.270%
57	19.374	2781	2786	2790	rVV	375593	511042	11.01%	0.826%
58	19.421	2790	2794	2798	rVV3	153019	230028	4.95%	0.372%
59	19.462	2798	2801	2803	rVV2	80213	109531	2.36%	0.177%
60	19.492	2803	2806	2810	rVB	160873	203160	4.38%	0.328%
61	19.592	2817	2823	2830	rVB	3318365	4643146	100.00%	7.505%
62	19.656	2830	2834	2839	rVB3	144107	219979	4.74%	0.356%
63	19.786	2851	2856	2867	rVB	1624397	2107426	45.39%	3.406%
64	19.909	2872	2877	2886	rBV4	293694	757480	16.31%	1.224%
65	19.992	2888	2891	2895	rBV4	69458	99129	2.13%	0.160%
66	20.050	2895	2901	2903	rBV5	322392	631349	13.60%	1.020%
67	20.180	2920	2923	2929	rVV2	153251	208910	4.50%	0.338%
68	20.239	2929	2933	2937	rVB2	501127	616648	13.28%	0.997%
69	20.339	2946	2950	2953	rBV3	67161	95631	2.06%	0.155%
70	20.380	2953	2957	2961	rBV2	490734	612704	13.20%	0.990%
71	20.421	2961	2964	2969	rVB	351280	452950	9.76%	0.732%

LSC Area Percent Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

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_M\METHODS\8270-BM043019.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

72	20.586	2990	2992	2996	rVB4	52759	55818	1.20%	0.090%
73	20.827	3029	3033	3039	rVB	325966	479481	10.33%	0.775%
74	20.915	3045	3048	3052	rVB	78899	103612	2.23%	0.167%
75	20.992	3057	3061	3065	rVV2	322707	545155	11.74%	0.881%
76	21.039	3065	3069	3072	rVV2	558572	818324	17.62%	1.323%
77	21.074	3072	3075	3078	rVV	324176	423478	9.12%	0.684%
78	21.127	3081	3084	3090	rVB	270066	376779	8.11%	0.609%
79	21.339	3114	3120	3125	rBV3	1835766	3750997	80.79%	6.063%
80	21.392	3125	3129	3134	rVB	1635270	2245186	48.35%	3.629%
81	21.556	3153	3157	3171	rVB	678140	1144271	24.64%	1.850%
82	21.709	3180	3183	3187	rBV3	130160	172805	3.72%	0.279%
83	21.850	3204	3207	3209	rBV	97700	98857	2.13%	0.160%
84	21.903	3210	3216	3221	rVV	382553	668023	14.39%	1.080%
85	21.956	3221	3225	3231	rVB2	315673	548375	11.81%	0.886%
86	22.027	3234	3237	3241	rVB2	135512	177395	3.82%	0.287%
87	22.103	3247	3250	3253	rBV2	170503	236812	5.10%	0.383%
88	22.209	3265	3268	3272	rVB	175249	215668	4.64%	0.349%
89	22.950	3388	3394	3406	rVB	1212618	3541643	76.28%	5.724%
90	23.121	3419	3423	3432	rVB	286182	543703	11.71%	0.879%
91	23.438	3471	3477	3487	rVB	1078256	2032793	43.78%	3.286%
92	23.538	3488	3494	3501	rBV	1231391	2358247	50.79%	3.812%
93	23.638	3506	3511	3516	rVV	451094	770289	16.59%	1.245%
94	25.968	3898	3907	3918	rVB2	609594	1866620	40.20%	3.017%
95	26.685	4020	4029	4048	rVB	585096	1951811	42.04%	3.155%

Sum of corrected areas: 61868382

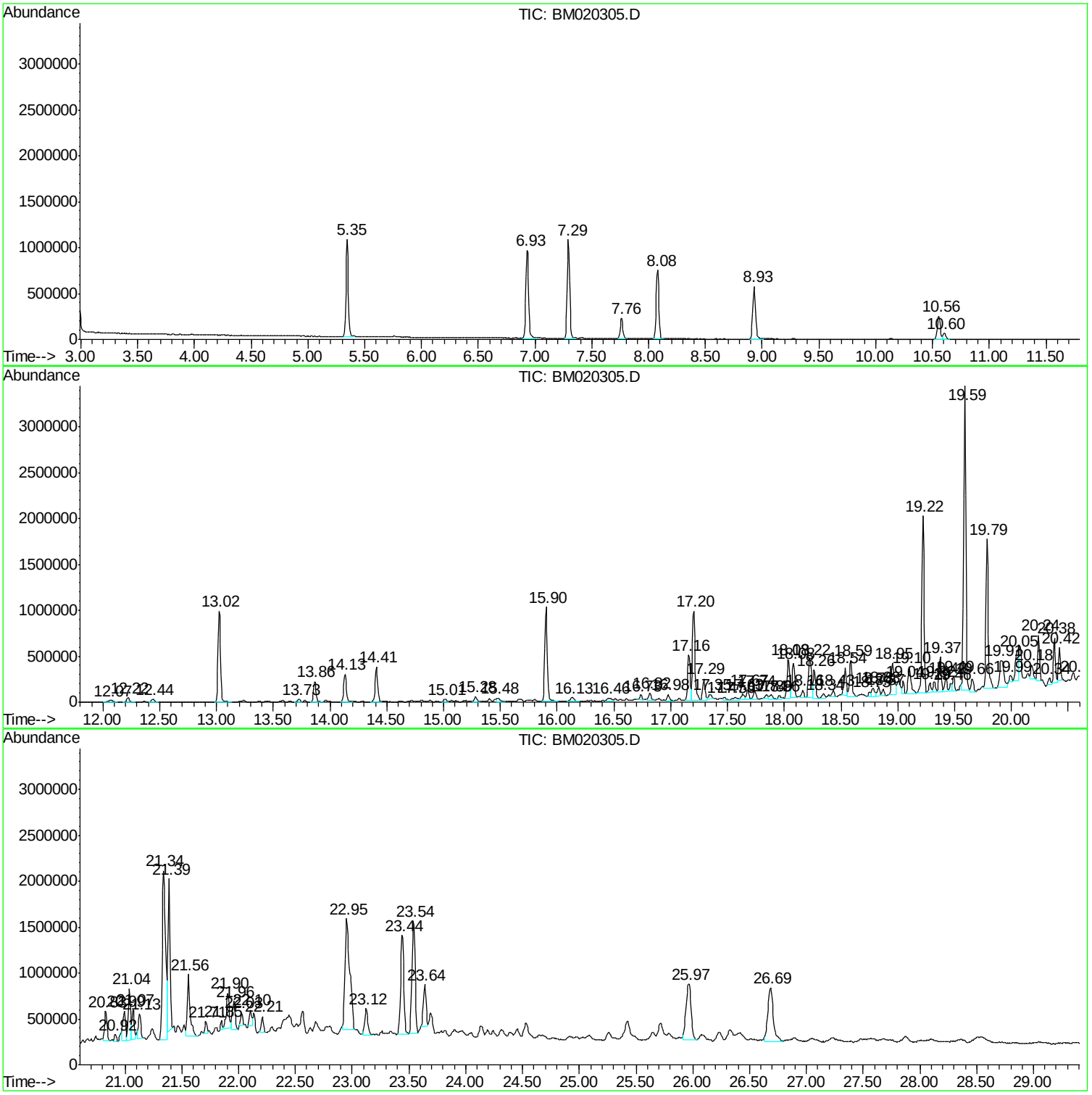
LSC Report - Integrated Chromatogram

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

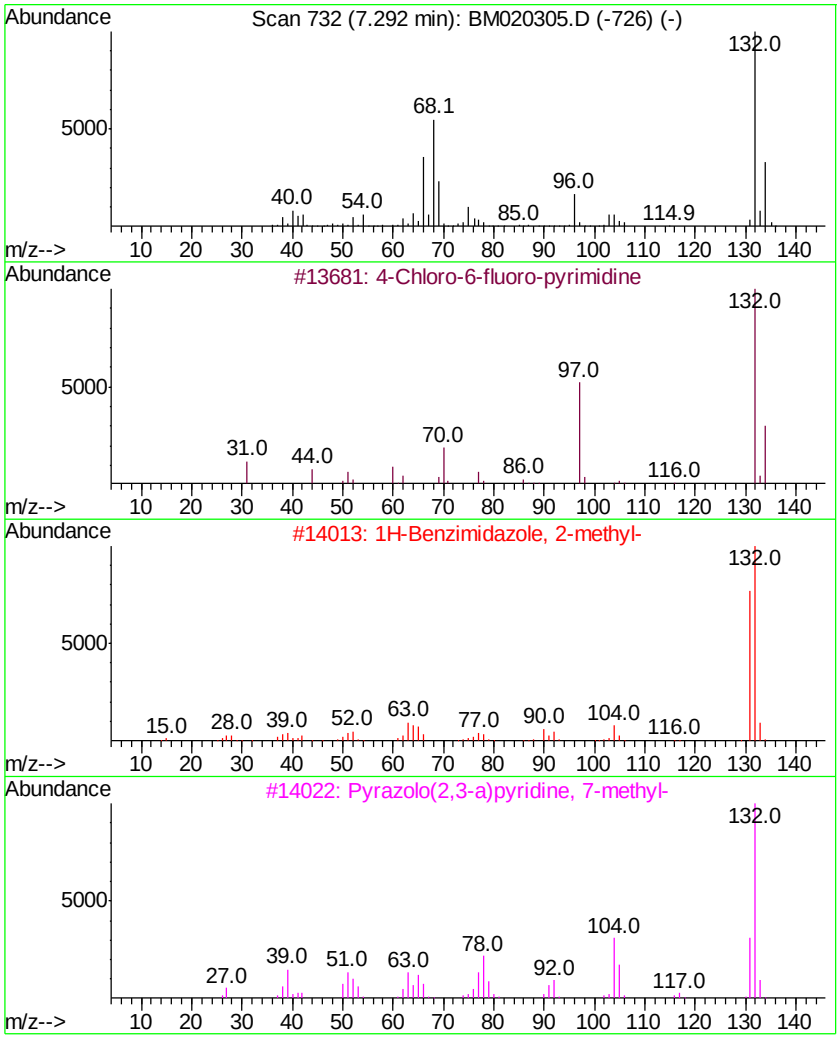
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

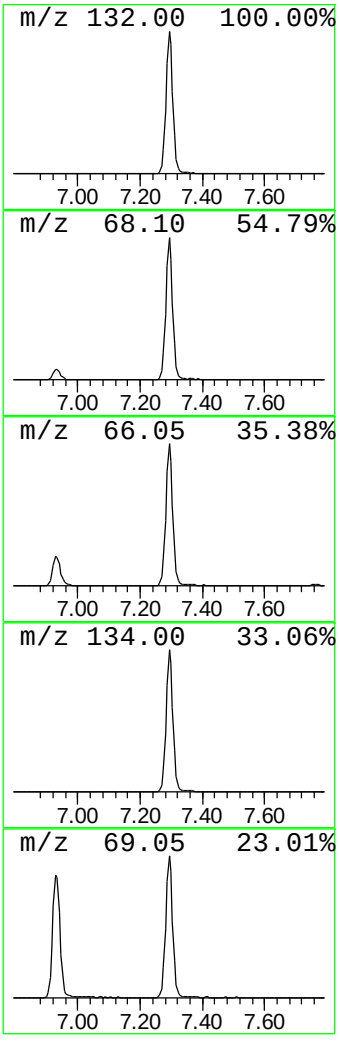
****

Peak Number 1 unknown7.29 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.29	92.77 ng	1673850	1,4-Dichlorobenzene-d4	7.76

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Chloro-6-fluoro-pyrimidine	132	C4H2ClFN2	051422-01-6	27
2	1H-Benzimidazole, 2-methyl-	132	C8H8N2	000615-15-6	22
3	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	22
4	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	16
5	2H-Cyclopenta[d]pyridazine, 2-me...	132	C8H8N2	022291-85-6	16





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

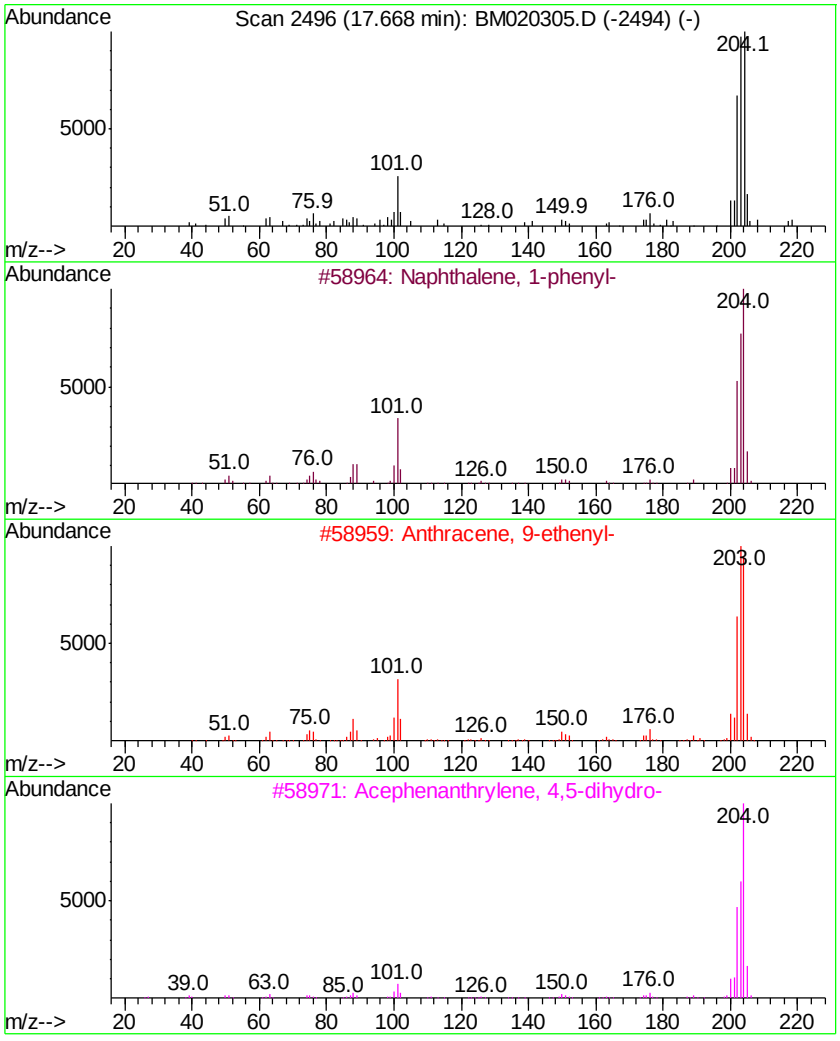
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

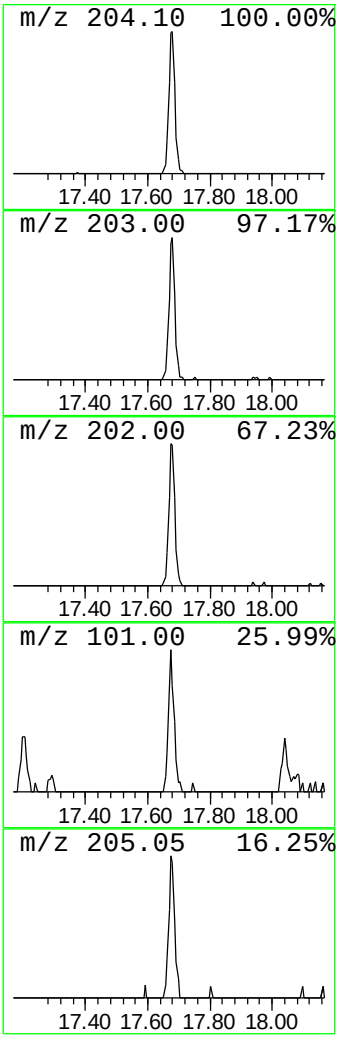
****

Peak Number 3 Naphthalene, 1-phenyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.67	4.03 ng	148411	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	93
2	Anthracene, 9-ethenyl-	204	C16H12	002444-68-0	90
3	Acephenanthrylene, 4,5-dihydro-	204	C16H12	006232-48-0	87
4	Dibenzo[a,e]cyclooctene	204	C16H12	000262-89-5	76
5	1H-Indene, 1-(phenylmethylene)-	204	C16H12	005394-86-5	76





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

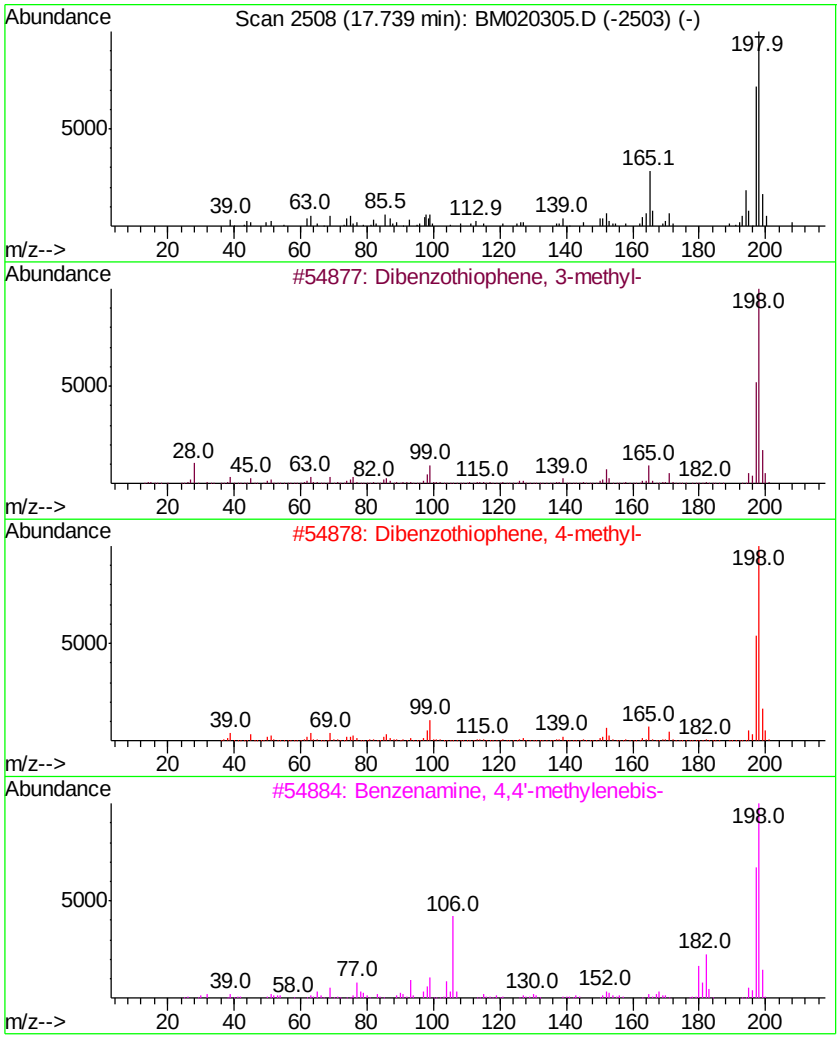
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

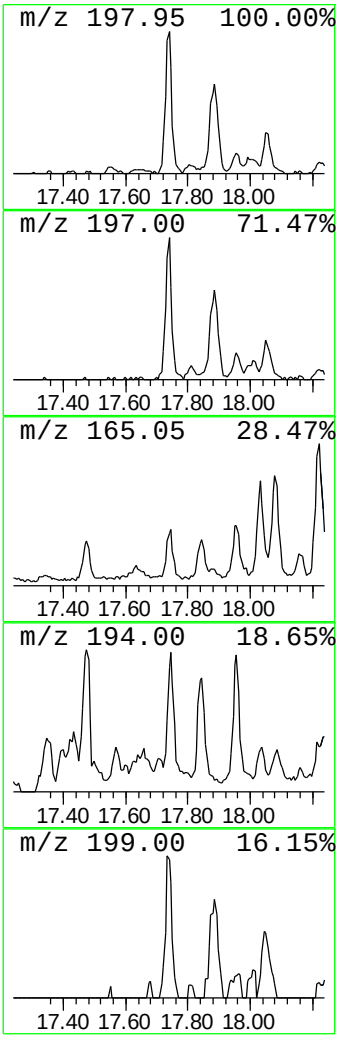
****

Peak Number 4 Dibenzothiophene, 3-methyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.74	3.74 ng	137775	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dibenzothiophene, 3-methyl-	198	C13H10S	016587-52-3	81
2	Dibenzothiophene, 4-methyl-	198	C13H10S	007372-88-5	81
3	Benzenamine, 4,4'-methylenebis-	198	C13H14N2	000101-77-9	64
4	9-Acridinamine, 1,2,3,4-tetrahydro-	198	C13H14N2	000321-64-2	64
5	Pyridine, 4-(4-dimethylaminophen...	198	C13H14N2	001137-80-0	53





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

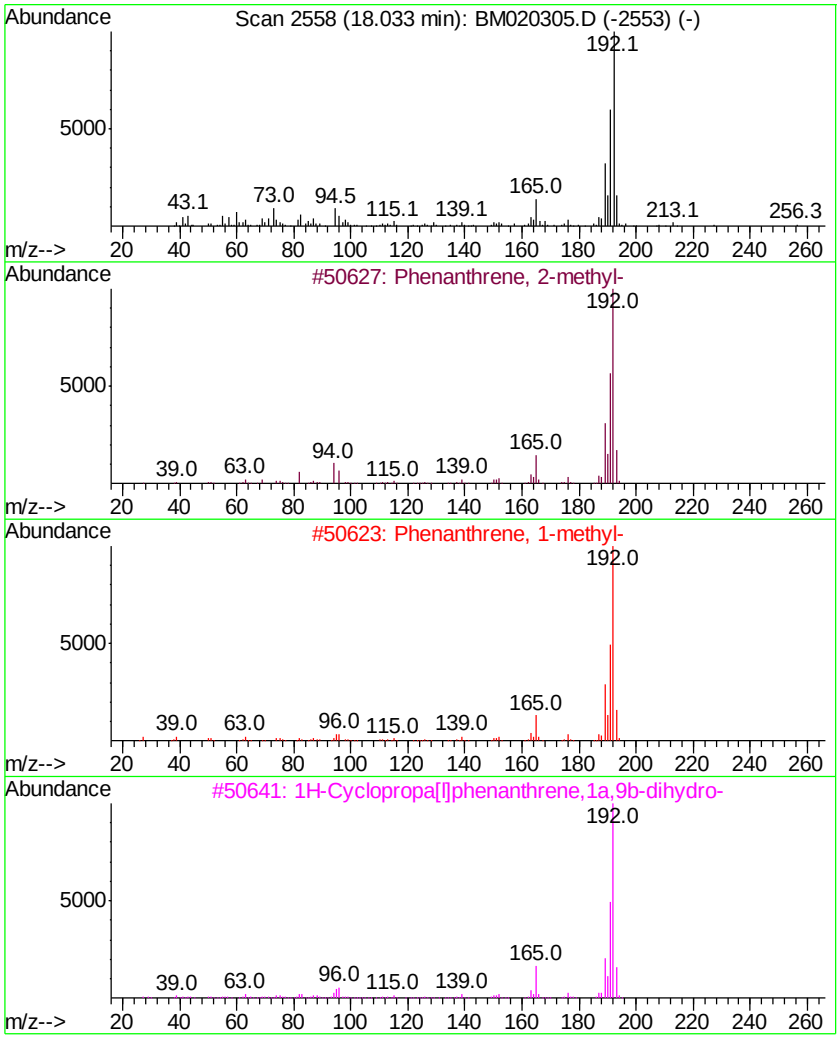
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

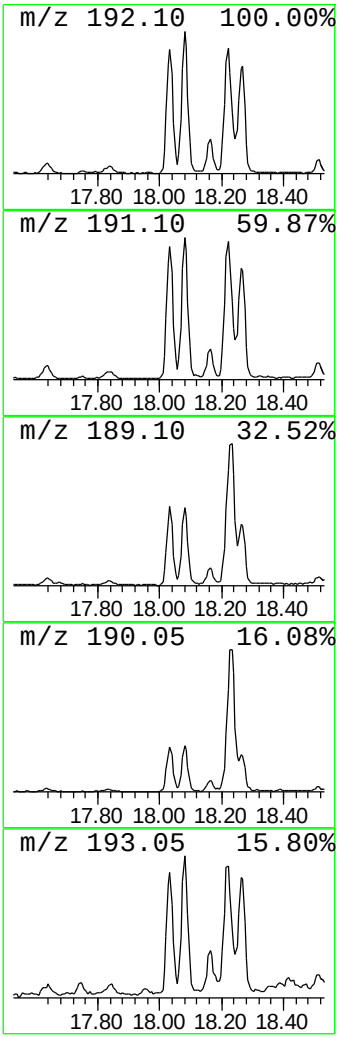
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.03	18.25 ng	671912	Phenanthrene-d10	17.16

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	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	96
4	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
5	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	95





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

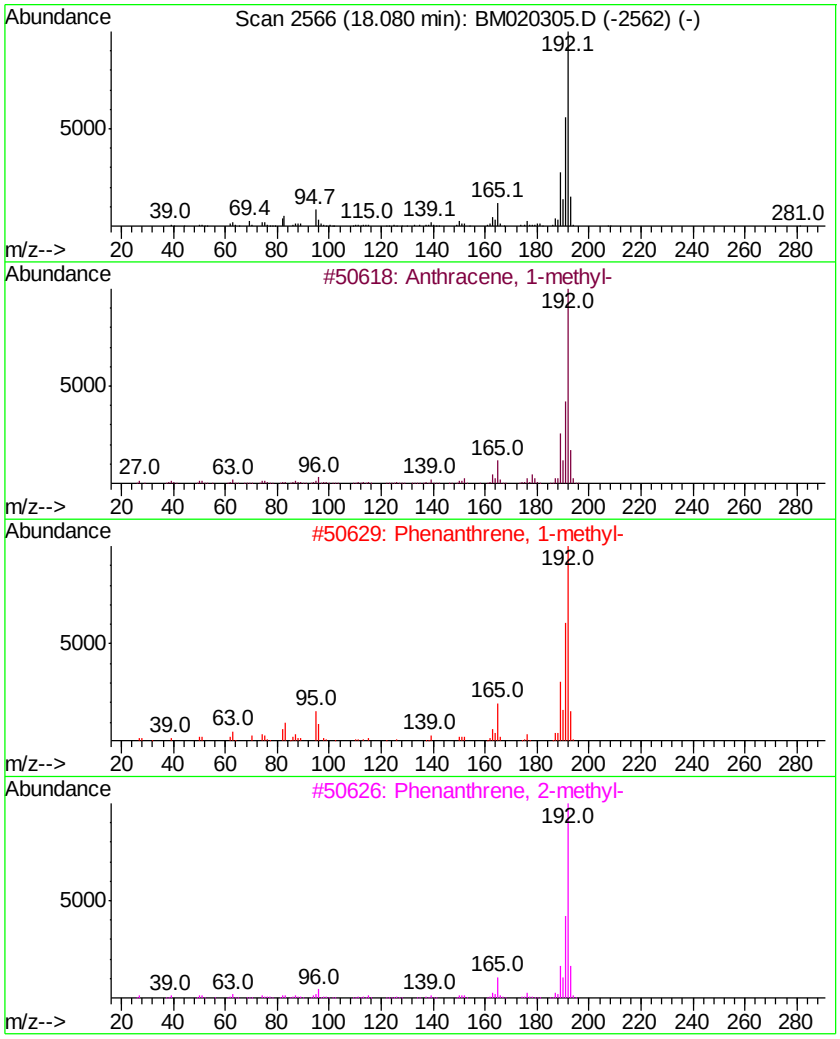
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

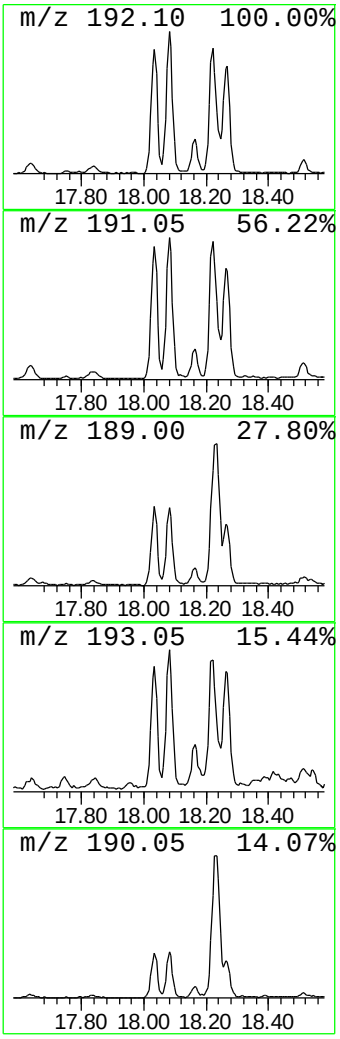
****

Peak Number 6 Anthracene, 1-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.08	15.30 ng	563363	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95
2	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	94
3	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
4	Anthracene, 9-methyl-	192	C15H12	000779-02-2	91
5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	91





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

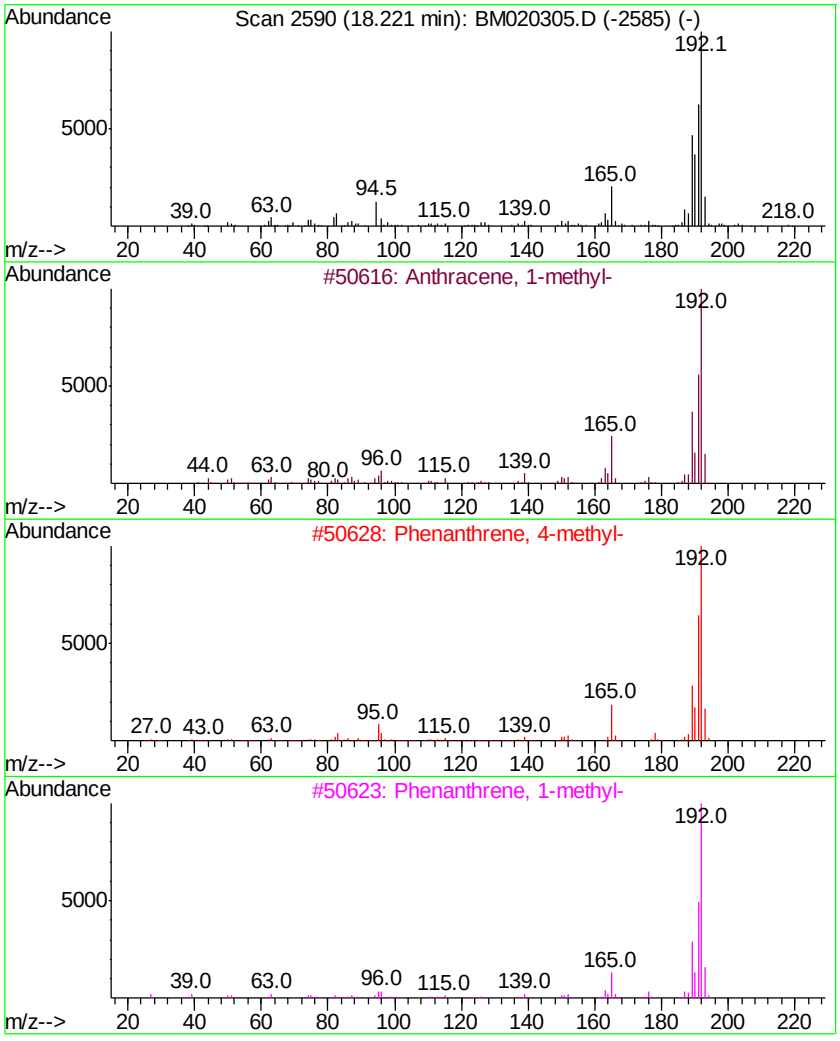
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

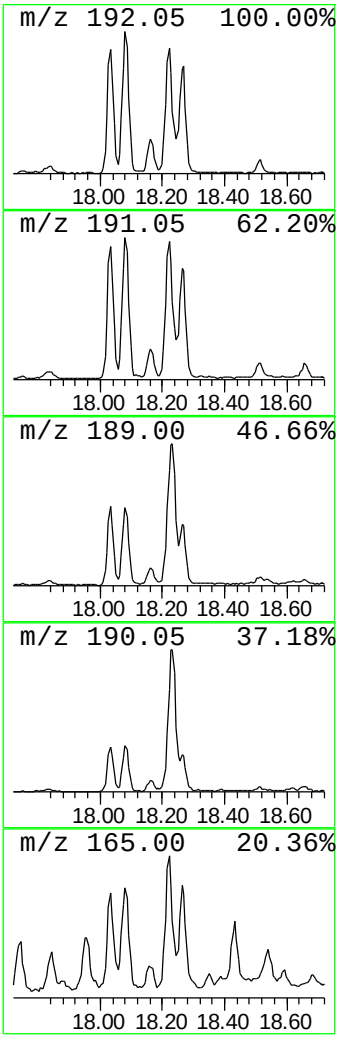
****

Peak Number 7 Phenanthrene, 4-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.22	22.52 ng	828920	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 1-methyl-	192	C15H12	000610-48-0	93
2	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	93
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	91
4	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	70
5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	70





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

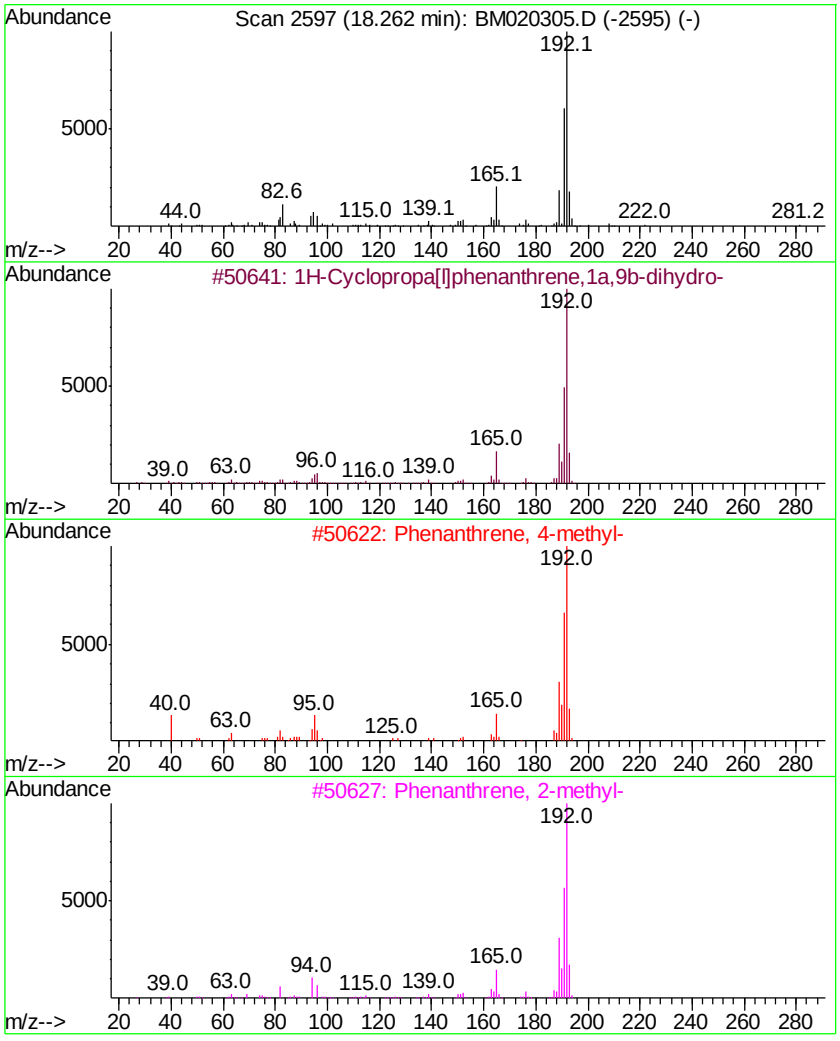
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

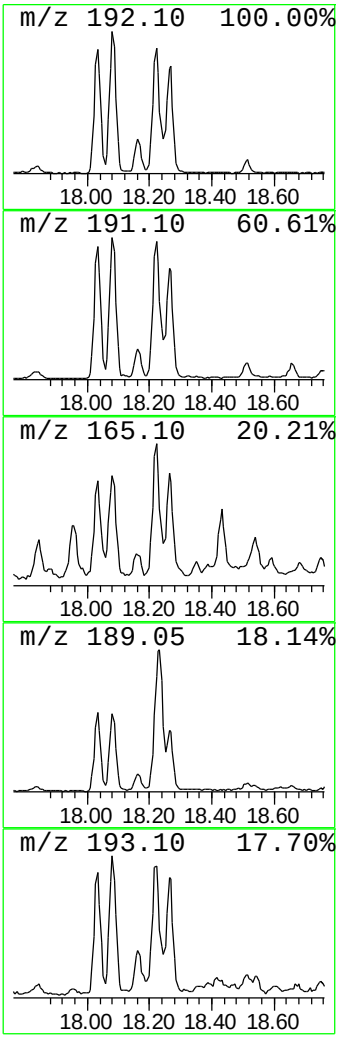
****

Peak Number 8 1H-Cyclopropa[l]phenanthren... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.26	10.85 ng	399386	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	93
2	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	93
3	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	90
4	Anthracene, 1-methyl-	192	C15H12	000610-48-0	90
5	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	87





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

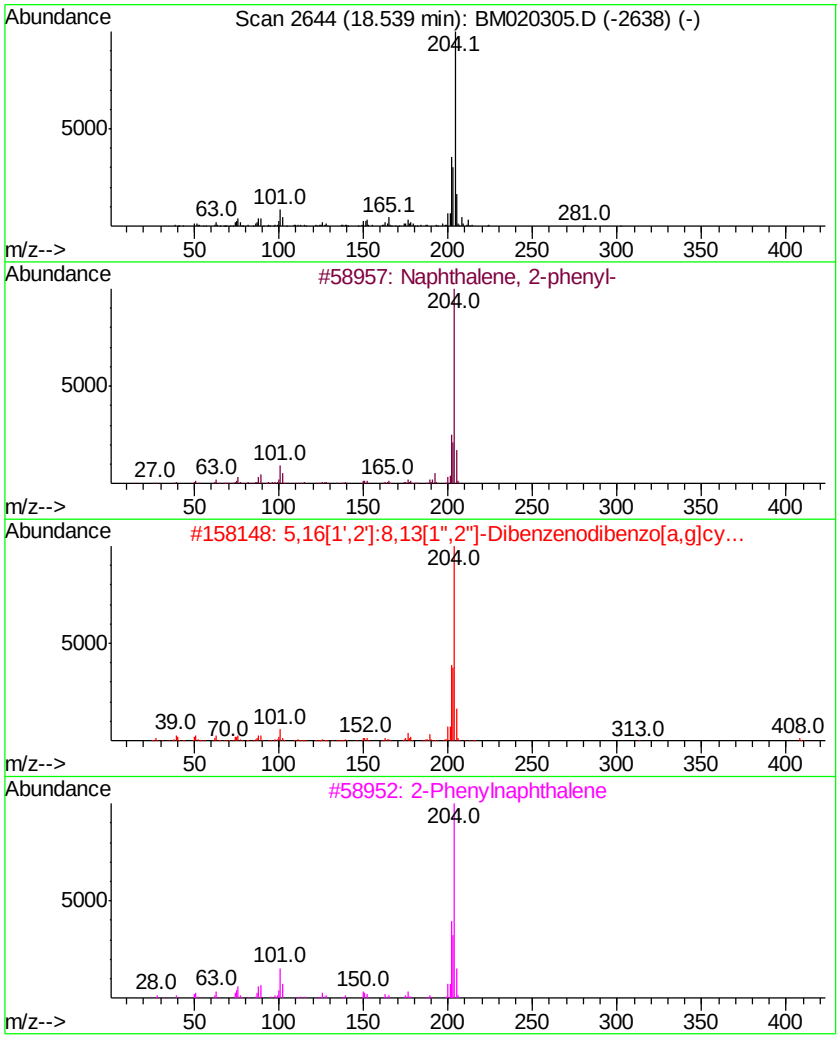
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

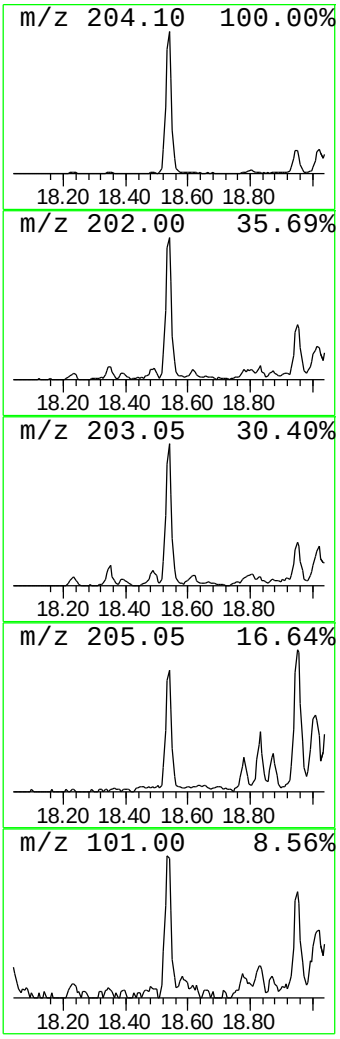
****

Peak Number 9 Naphthalene, 2-phenyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.54	11.46 ng	421899	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	93
2	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	91
3	2-Phenylnaphthalene	204	C16H12	035465-71-5	90
4	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	81
5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	70





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

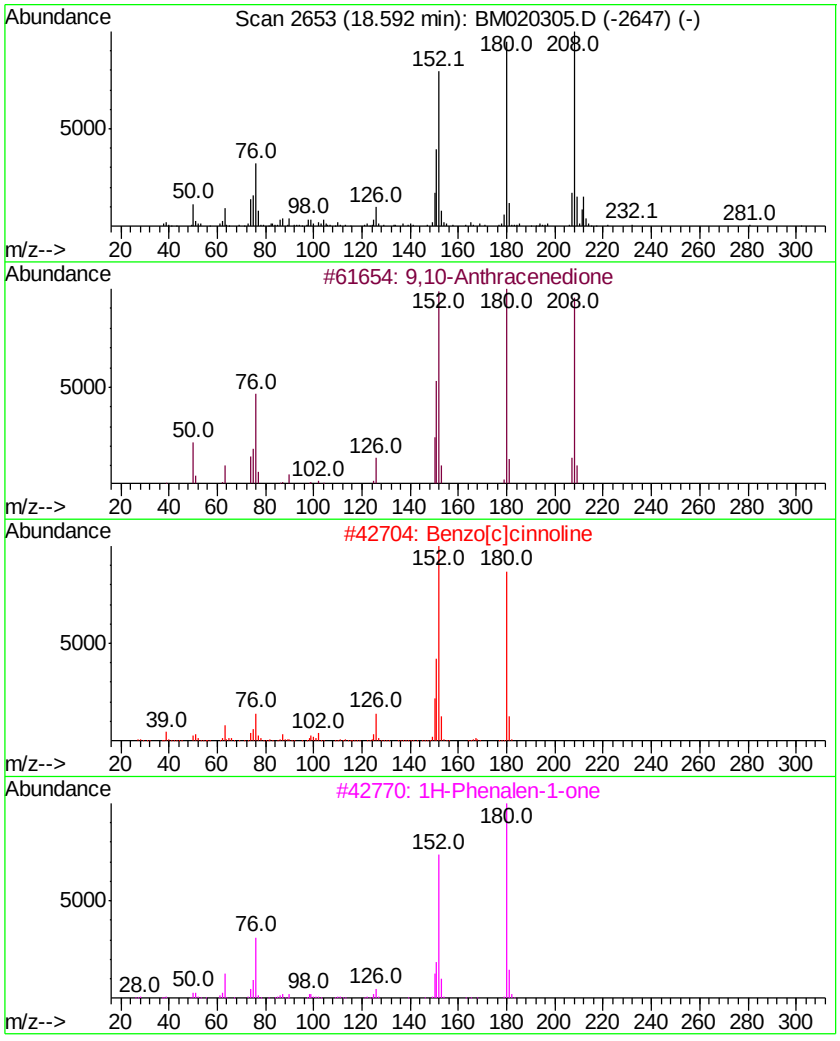
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

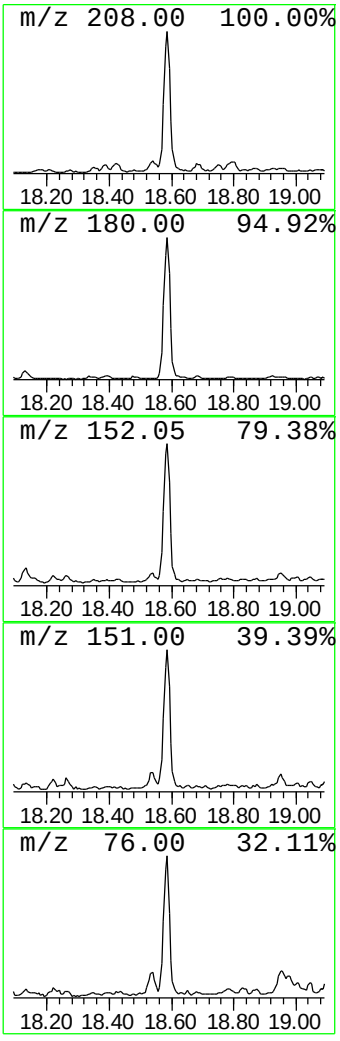
****

Peak Number 10 9,10-Anthracenedione Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.59	16.43 ng	605028	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	95
2	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	92
3	1H-Phenalen-1-one	180	C13H8O	000548-39-0	60
4	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	55
5	1,4-Anthracenedione	208	C14H8O2	000635-12-1	45





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

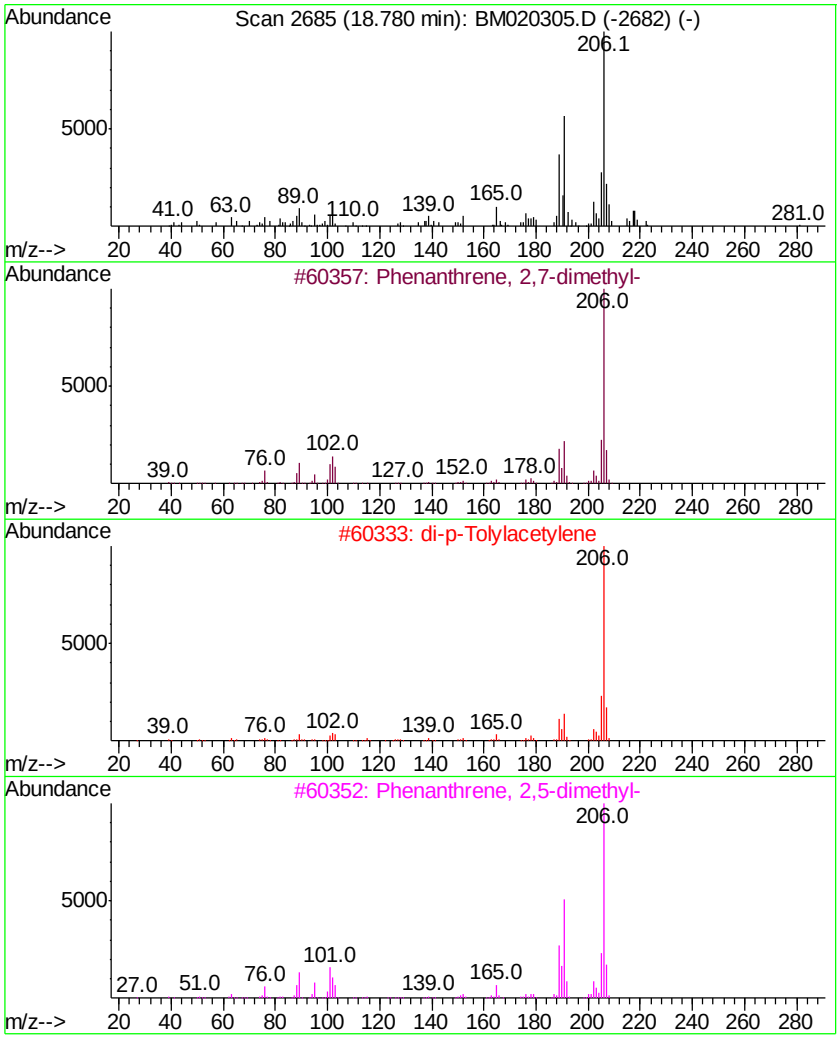
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

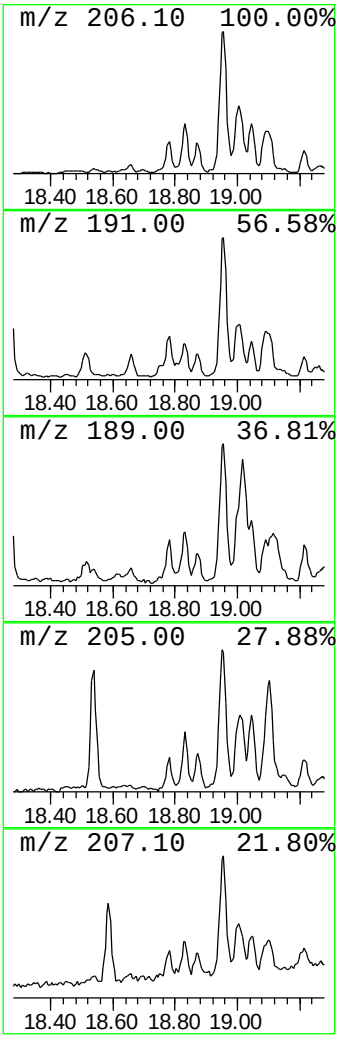
****

Peak Number 11 Phenanthrene, 2,7-dimethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.78	4.76 ng	175302	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	87
2	di-p-Tolylacetylene	206	C16H14	002789-88-0	83
3	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	83
4	9,10-Dimethylanthracene	206	C16H14	000781-43-1	80
5	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	80





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

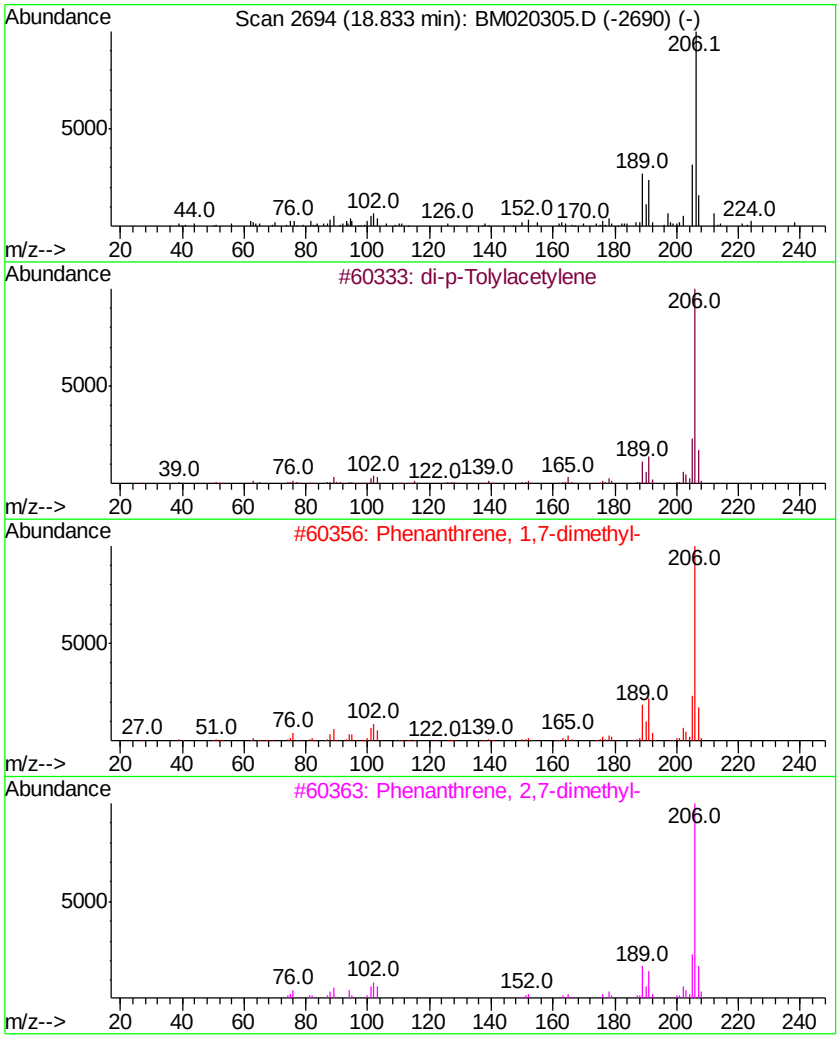
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

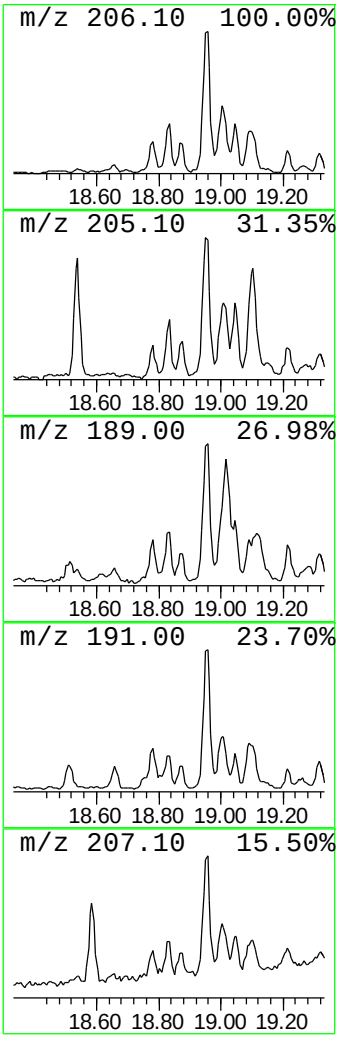
****

Peak Number 12 di-p-Tolylacetylene Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.83	4.00 ng	147256	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	di-p-Tolylacetylene	206	C16H14	002789-88-0	90
2	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	90
3	Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	86
4	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	83
5	1,4-Diphenyl-1,3-butadiene	206	C16H14	000886-65-7	80





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

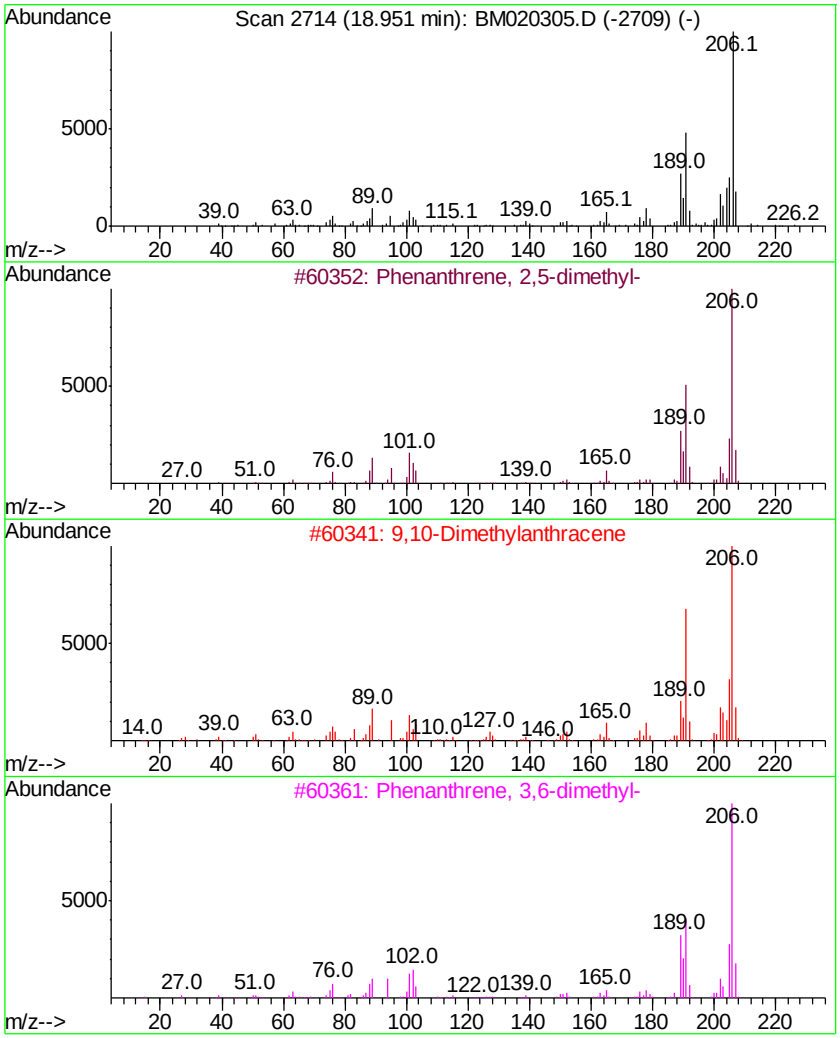
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

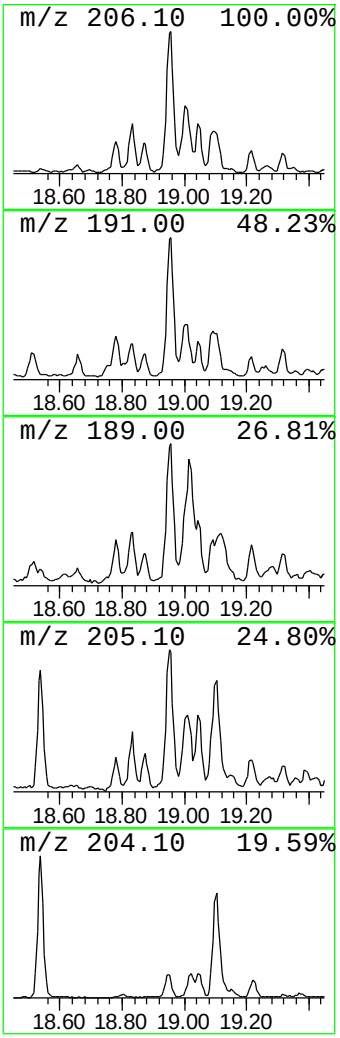
****

Peak Number 13 Phenanthrene, 2,5-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.95	18.13 ng	667324	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	94
2	9,10-Dimethylanthracene	206	C16H14	000781-43-1	93
3	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	90
4	Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	90
5	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	89





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

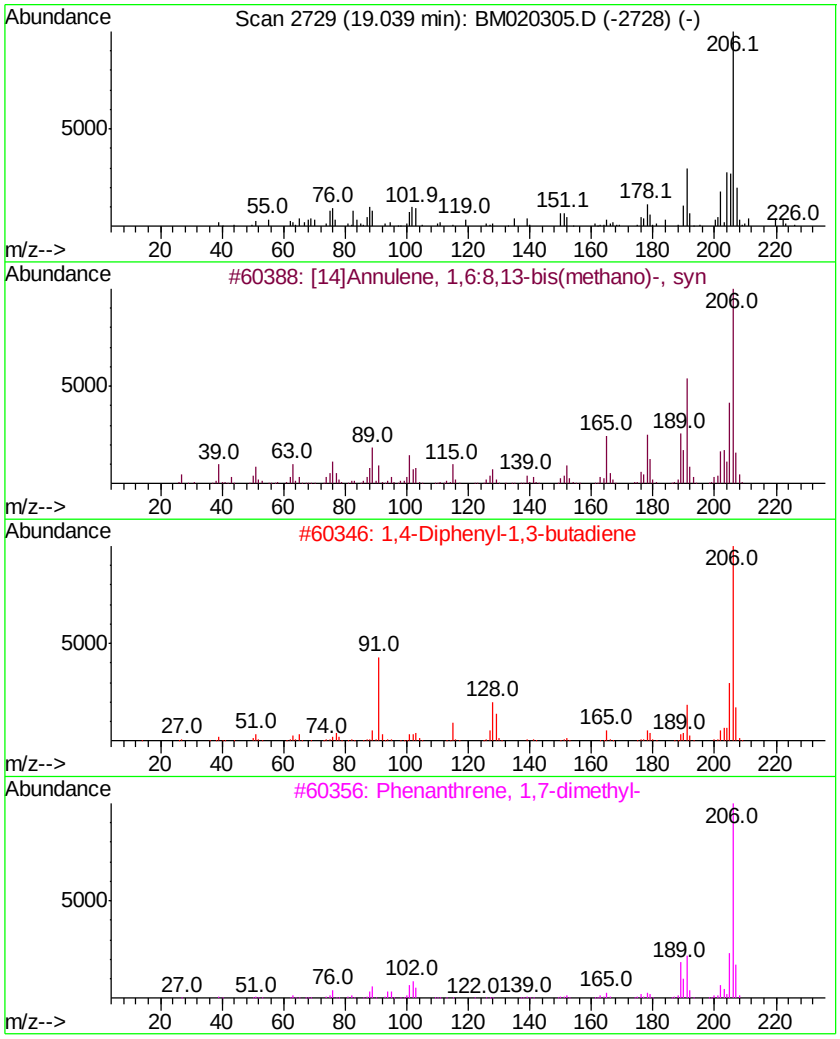
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

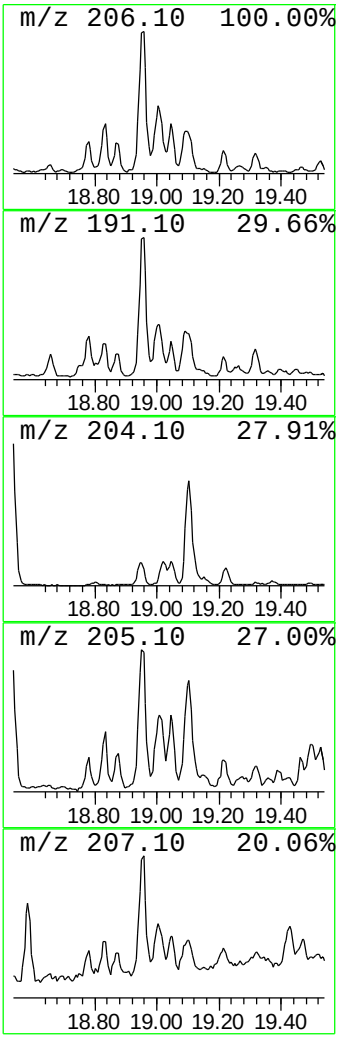
****

Peak Number 14 [14]Annulene, 1,6:8,13-bis(... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.04	4.15 ng	152744	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[14]Annulene, 1,6:8,13-bis(metha...	206	C16H14	085385-68-8	83
2	1,4-Diphenyl-1,3-butadiene	206	C16H14	000886-65-7	76
3	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	70
4	1,3-Butadiene, 1,4-diphenyl-, (E...	206	C16H14	000538-81-8	70
5	Naphthalene, 1,2-dihydro-4-phenyl-	206	C16H14	007469-40-1	64





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

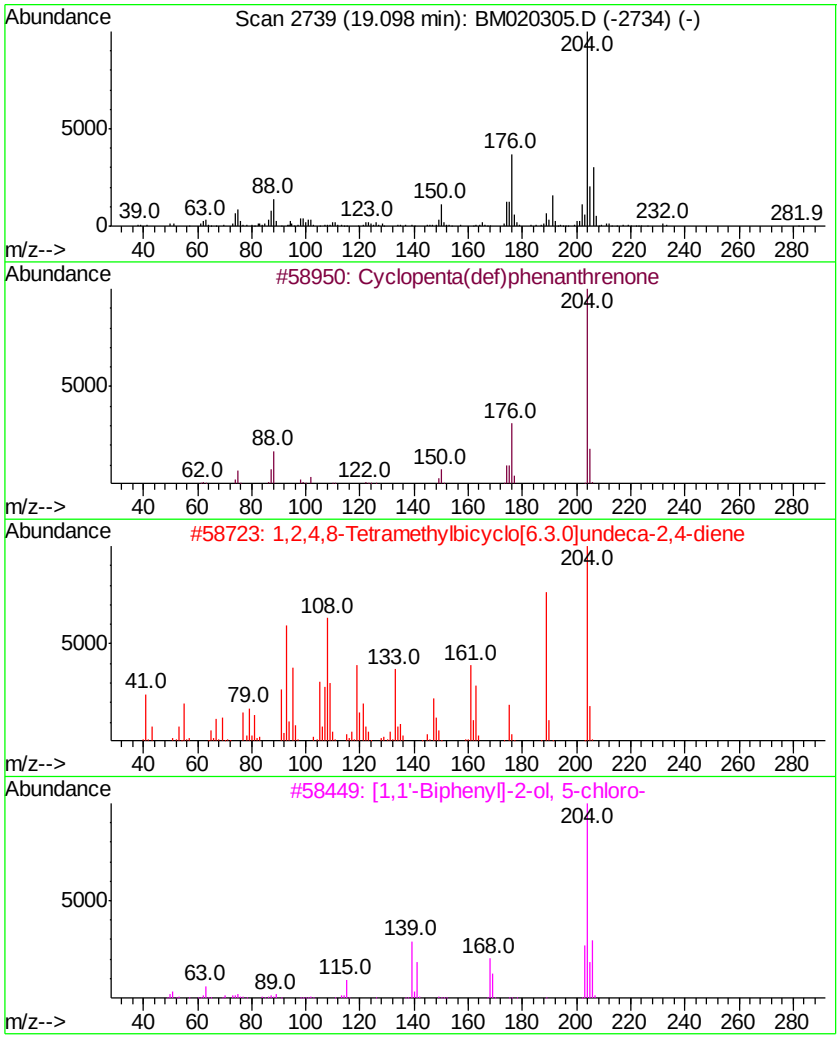
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

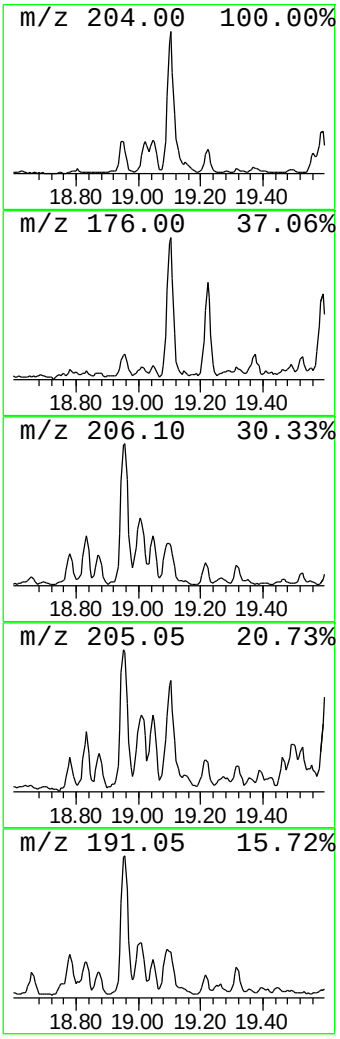
****

Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.10	15.77 ng	580486	Phenanthrene-d10	17.16

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	89
2	1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	49
3	[1,1'-Biphenyl]-2-ol, 5-chloro-	204	C12H9ClO	000607-12-5	47
4	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	47
5	[1,1'-Biphenyl]-2,2'-dicarbonitrile	204	C14H8N2	004341-02-0	47





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

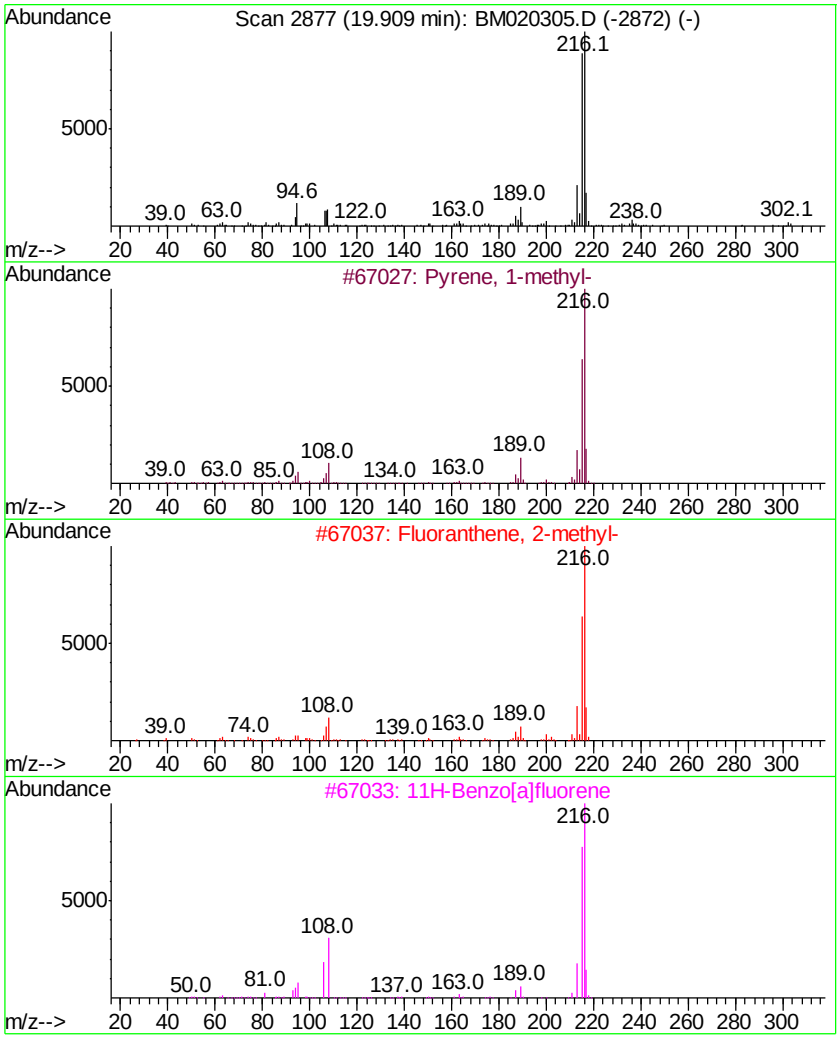
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

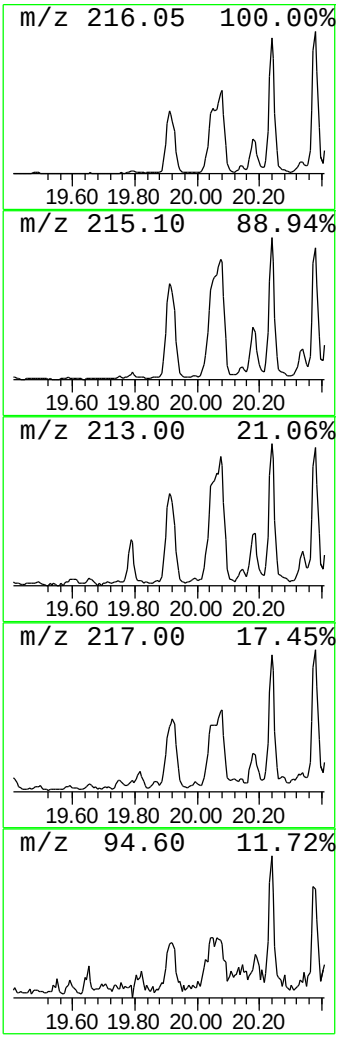
****

Peak Number 16 Pyrene, 1-methyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.91	4.04 ng	757480	Chrysene-d12	21.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	96
2	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
3	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	90
4	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	87
5	7H-Benzo[c]fluorene	216	C17H12	000205-12-9	80





Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

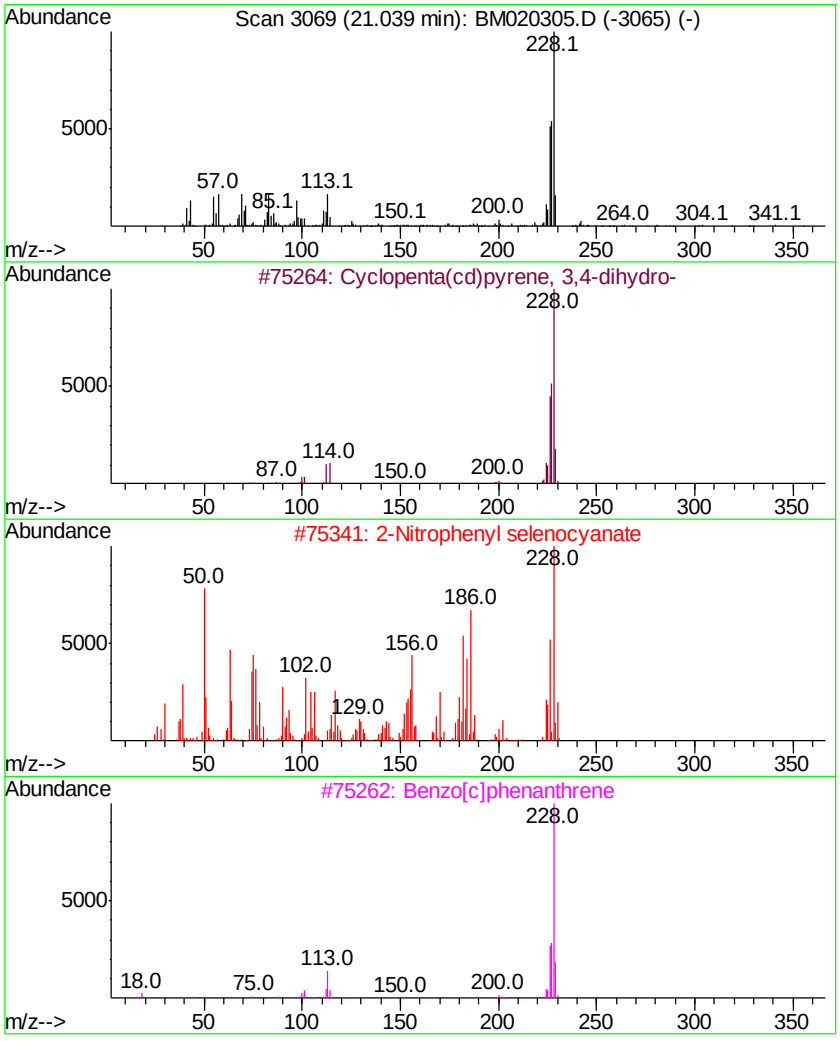
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

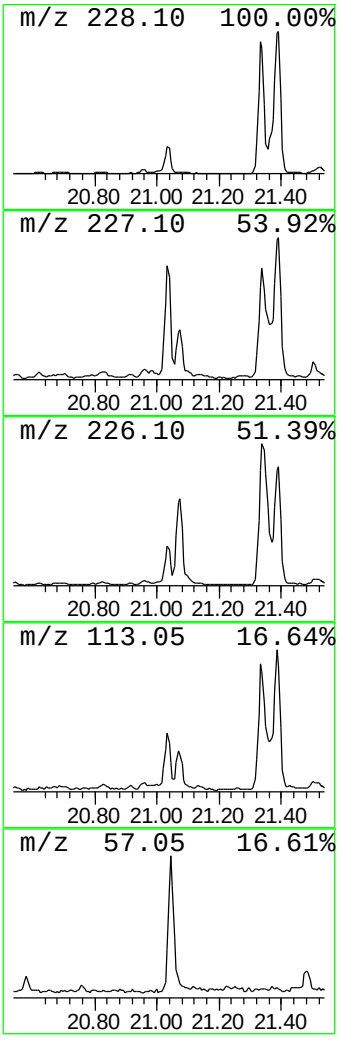
****

Peak Number 17 Cyclopenta(cd)pyrene, 3,4-d... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.04	4.36 ng	818324	Chrysene-d12	21.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(cd)pyrene, 3,4-dihydro-	228	C18H12	025732-74-5	55
2	2-Nitrophenyl selenocyanate	228	C7H4N2O2Se	051694-22-5	47
3	Benzo[c]phenanthrene	228	C18H12	000195-19-7	46
4	Triphenylene	228	C18H12	000217-59-4	43
5	Naphthacene	228	C18H12	000092-24-0	38





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

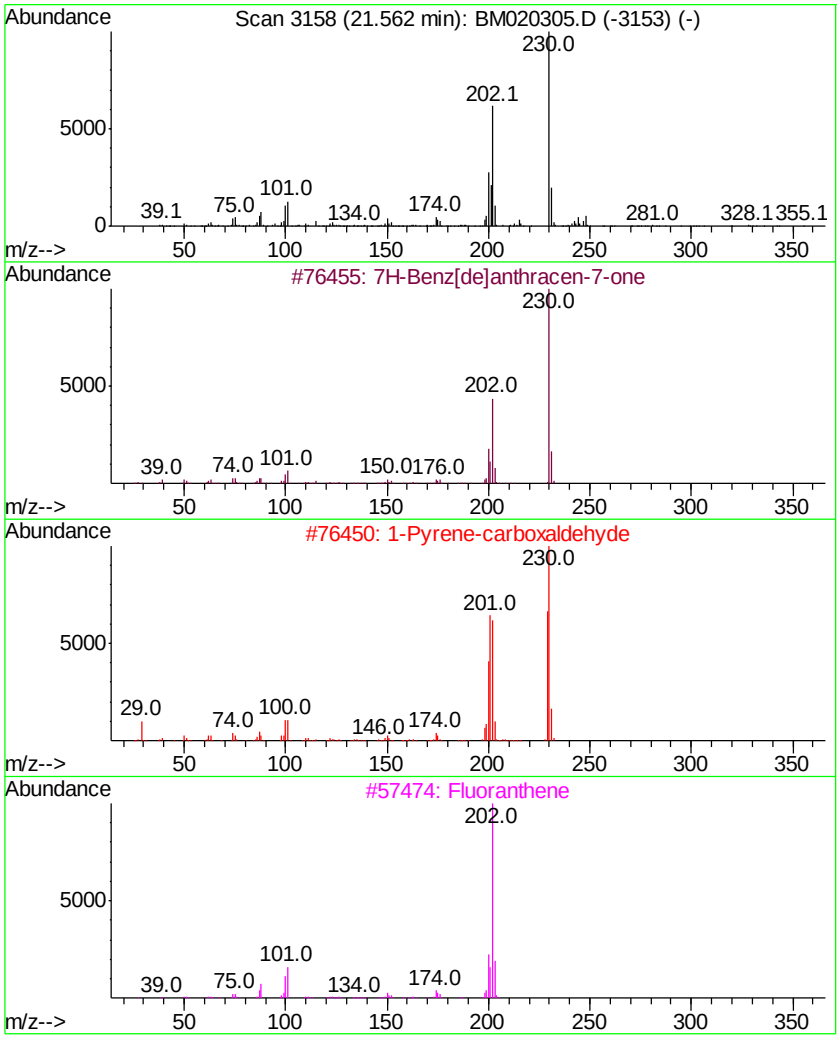
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

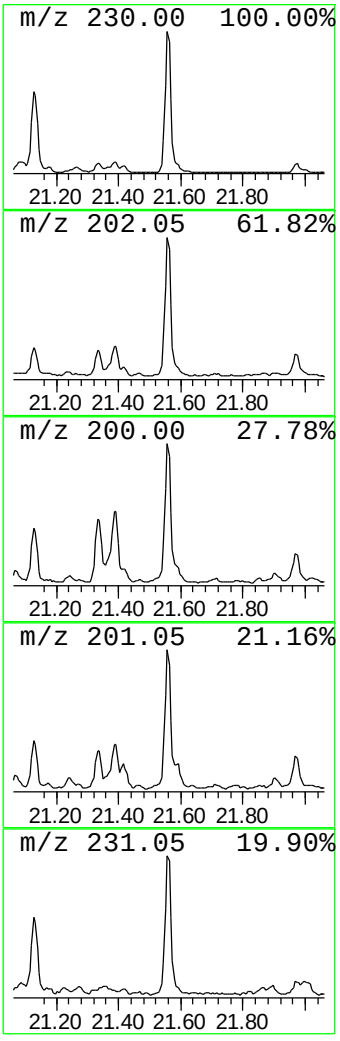
****

Peak Number 18 7H-Benz[de]anthracen-7-one Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.56	6.10 ng	1144270	Chrysene-d12	21.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	97
2	1-Pyrene-carboxaldehyde	230	C17H10O	003029-19-4	89
3	Fluoranthene	202	C16H10	000206-44-0	78
4	11H-Benzo[a]fluoren-11-one	230	C17H10O	000479-79-8	76
5	Pyrene, 1,3-dimethyl-	230	C18H14	064401-21-4	47





Library Search Compound Report

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

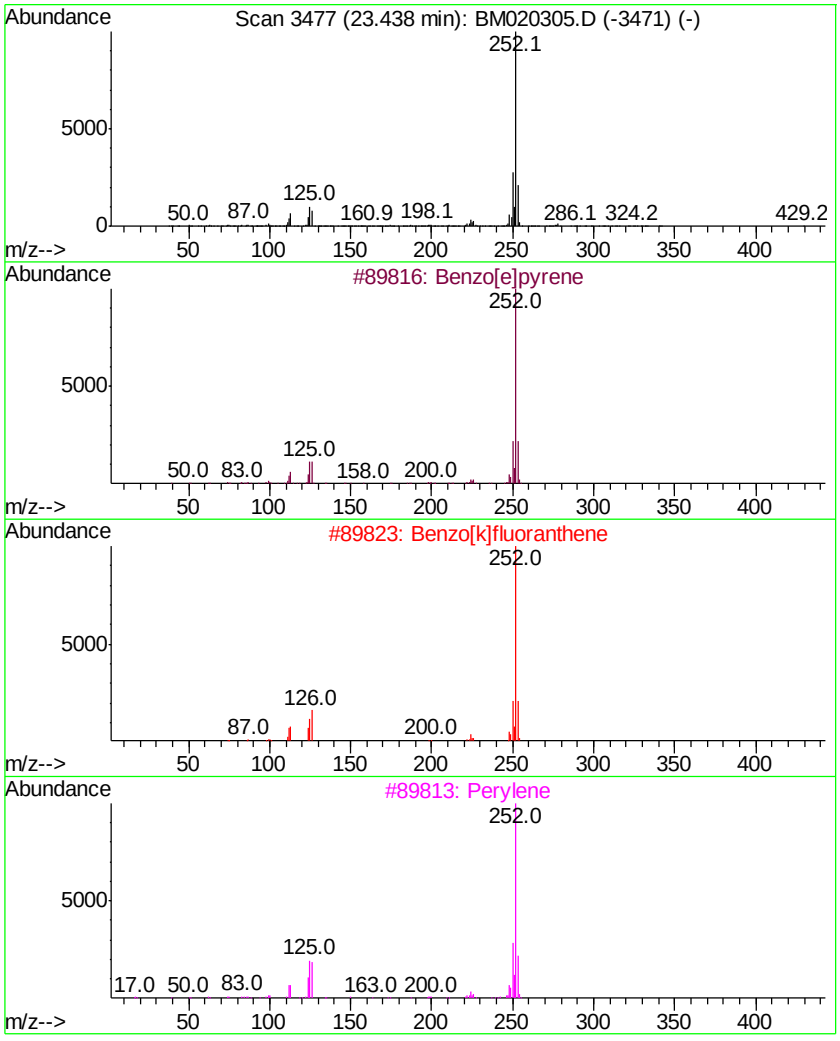
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

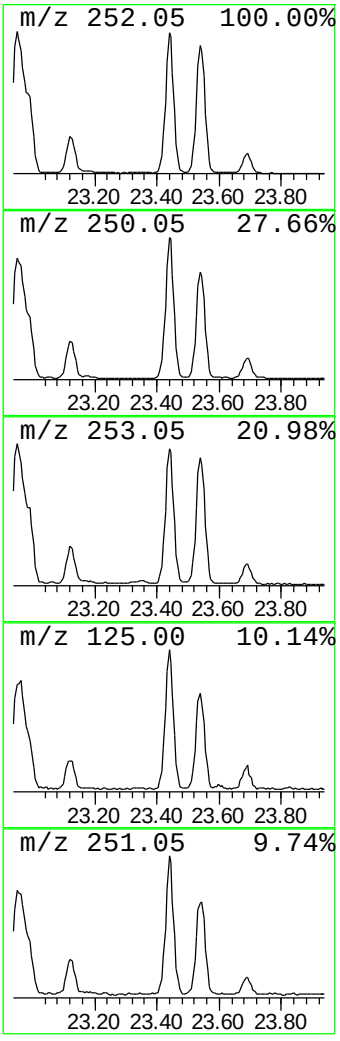
****

Peak Number 20 Benzo[e]pyrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.44	52.78 ng	2032790	Perylene-d12	23.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[e]pyrene	252	C20H12	000192-97-2	98
2	Benzo[k]fluoranthene	252	C20H12	000207-08-9	97
3	Perylene	252	C20H12	000198-55-0	95
4	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
5	Benzo[a]pyrene	252	C20H12	000050-32-8	93





Tentatively Identified Compound (LSC) summary

Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM051219\
Data File : BM020305.D
Acq On : 12 May 2019 19:06
Operator : JU/SJ
Sample : K2768-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument : BNA_M
ClientSampleId : P026-SS013-0612-01

Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM043019.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
unknown7.29	7.29	92.8	ng	1673850	1	7.76	360843	20.0
Naphthalene, 1-ph...	17.67	4.0	ng	148411	4	17.16	736276	20.0
Dibenzothiophene,...	17.74	3.7	ng	137775	4	17.16	736276	20.0
Phenanthrene, 2-m...	18.03	18.3	ng	671912	4	17.16	736276	20.0
Anthracene, 1-met...	18.08	15.3	ng	563363	4	17.16	736276	20.0
Phenanthrene, 4-m...	18.22	22.5	ng	828920	4	17.16	736276	20.0
1H-Cyclopropa[l]p...	18.26	10.9	ng	399386	4	17.16	736276	20.0
Naphthalene, 2-ph...	18.54	11.5	ng	421899	4	17.16	736276	20.0
9,10-Anthracenedione	18.59	16.4	ng	605028	4	17.16	736276	20.0
Phenanthrene, 2,7...	18.78	4.8	ng	175302	4	17.16	736276	20.0
di-p-Tolylacetylene	18.83	4.0	ng	147256	4	17.16	736276	20.0
Phenanthrene, 2,5...	18.95	18.1	ng	667324	4	17.16	736276	20.0
[14]Annulene, 1,6...	19.04	4.2	ng	152744	4	17.16	736276	20.0
Cyclopenta(def)ph...	19.10	15.8	ng	580486	4	17.16	736276	20.0
Pyrene, 1-methyl-	19.91	4.0	ng	757480	5	21.35	3751000	20.0
Cyclopenta(cd)pyr...	21.04	4.4	ng	818324	5	21.35	3751000	20.0
7H-Benz[de]anthra...	21.56	6.1	ng	1144270	5	21.35	3751000	20.0
Benzo[e]pyrene	23.44	52.8	ng	2032790	6	23.64	770289	20.0