

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
 Data File : BM022430.D
 Acq On : 30 Aug 2019 04:40
 Operator : HP/JU
 Sample : K4594-01 10X
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 S704A-N-0.0-0.5-082819

Integration Parameters: rteint.p
 Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs: 0.2
 Stop Thrs : 0
 Filtering: 5
 Min Area: 3 % of largest Peak
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM082919.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	10.292	1236	1242	1248	rBV	80978	137143	1.04%	0.164%
2	14.180	1896	1903	1909	rBB2	135688	201328	1.53%	0.241%
3	14.245	1909	1914	1922	rBB	197772	273539	2.08%	0.328%
4	14.592	1967	1973	1981	rBV	98878	140786	1.07%	0.169%
5	15.245	2078	2084	2095	rBB	228693	320382	2.44%	0.384%
6	15.692	2150	2160	2167	rBV3	66222	135411	1.03%	0.162%
7	16.698	2323	2331	2336	rVV2	79703	144252	1.10%	0.173%
8	16.768	2339	2343	2352	rVB	140177	189516	1.44%	0.227%
9	16.951	2365	2374	2377	rBV2	181617	266140	2.03%	0.319%
10	16.998	2377	2382	2388	rVV	4018738	5178057	39.44%	6.207%
11	17.086	2388	2397	2402	rVV	775275	1043274	7.95%	1.251%
12	17.374	2437	2446	2454	rBV2	314999	520358	3.96%	0.624%
13	17.827	2517	2523	2527	rBV	237063	337640	2.57%	0.405%
14	17.874	2527	2531	2538	rVV	335339	462014	3.52%	0.554%
15	17.956	2540	2545	2550	rVV	130112	184893	1.41%	0.222%
16	18.021	2550	2556	2560	rVV3	526845	853270	6.50%	1.023%
17	18.056	2560	2562	2570	rVB	161608	196390	1.50%	0.235%
18	18.333	2603	2609	2615	rVB	255559	339231	2.58%	0.407%
19	18.403	2615	2621	2626	rBV	208574	294057	2.24%	0.352%
20	18.750	2675	2680	2684	rBV	106953	167579	1.28%	0.201%
21	18.915	2700	2708	2713	rBV2	139527	248575	1.89%	0.298%
22	19.039	2720	2729	2733	rBV	10633016	13127828	100.00%	15.736%
23	19.268	2758	2768	2772	rBV2	197514	336006	2.56%	0.403%
24	19.403	2779	2791	2797	rBV	7464486	10688377	81.42%	12.812%
25	19.462	2797	2801	2808	rVB	196261	285463	2.17%	0.342%
26	19.574	2815	2820	2827	rBV2	291539	494630	3.77%	0.593%
27	19.650	2827	2833	2838	rVB	236594	363640	2.77%	0.436%
28	19.715	2838	2844	2852	rBV3	240122	610864	4.65%	0.732%
29	19.786	2852	2856	2862	rVV	97516	139439	1.06%	0.167%
30	19.892	2862	2874	2879	rVB	703256	1361163	10.37%	1.632%
31	19.992	2887	2891	2895	rBV	576597	708039	5.39%	0.849%
32	20.050	2895	2901	2904	rVV2	324137	574523	4.38%	0.689%
33	20.086	2904	2907	2911	rVB	181168	210996	1.61%	0.253%
34	20.192	2918	2925	2928	rBV	180282	250068	1.90%	0.300%

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Integration Parameters: rteint.p

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

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35	20.239	2928	2933	2937	rBV2	189500	260423	1.98%	0.312%
36	20.527	2978	2982	2985	rBV	128002	168788	1.29%	0.202%
37	20.603	2991	2995	3000	rBV4	71147	147558	1.12%	0.177%
38	20.656	3000	3004	3009	rVV	344517	447580	3.41%	0.536%
39	20.809	3026	3030	3034	rBV	558489	754152	5.74%	0.904%
40	20.850	3034	3037	3040	rVV	432787	521391	3.97%	0.625%
41	20.892	3040	3044	3052	rVV3	360527	750610	5.72%	0.900%
42	20.956	3052	3055	3060	rVB	418680	522369	3.98%	0.626%
43	21.056	3063	3072	3079	rBV2	175428	455797	3.47%	0.546%
44	21.162	3080	3090	3095	rBV2	4134090	7139230	54.38%	8.557%
45	21.215	3095	3099	3103	rVB	3815314	4356907	33.19%	5.222%
46	21.321	3113	3117	3122	rBV	643134	754680	5.75%	0.905%
47	21.386	3125	3128	3131	rVV2	145709	205025	1.56%	0.246%
48	21.444	3135	3138	3141	rVV	238482	320868	2.44%	0.385%
49	21.491	3141	3146	3150	rVV2	310715	576160	4.39%	0.691%
50	21.662	3171	3175	3177	rBV	126079	211895	1.61%	0.254%
51	21.709	3180	3183	3187	rVV	411770	541812	4.13%	0.649%
52	21.762	3188	3192	3195	rVB2	166935	223010	1.70%	0.267%
53	21.862	3206	3209	3213	rVB3	135771	169170	1.29%	0.203%
54	21.903	3213	3216	3219	rVV2	239709	344642	2.63%	0.413%
55	21.938	3219	3222	3226	rVV2	224905	300867	2.29%	0.361%
56	21.997	3227	3232	3237	rVB3	147272	268412	2.04%	0.322%
57	22.203	3262	3267	3270	rBV	258278	387692	2.95%	0.465%
58	22.468	3307	3312	3317	rBV2	244181	414395	3.16%	0.497%
59	22.721	3346	3355	3359	rBV	2996246	6536568	49.79%	7.835%
60	22.809	3366	3370	3376	rVB2	121239	210332	1.60%	0.252%
61	22.874	3376	3381	3386	rBV	405936	620757	4.73%	0.744%
62	22.997	3398	3402	3403	rBV	125765	156441	1.19%	0.188%
63	23.180	3426	3433	3442	rVB	1663207	2887341	21.99%	3.461%
64	23.274	3442	3449	3457	rBV	2446256	4201726	32.01%	5.036%
65	23.356	3459	3463	3467	rVV	220550	397629	3.03%	0.477%
66	23.409	3467	3472	3479	rVB	655241	1188112	9.05%	1.424%
67	24.191	3601	3605	3617	rVB2	149062	343481	2.62%	0.412%
68	25.550	3826	3836	3845	rVB2	1105176	2922247	22.26%	3.503%
69	25.785	3871	3876	3883	rVB2	166117	394804	3.01%	0.473%
70	26.226	3941	3951	3966	rVB	849508	2539101	19.34%	3.044%

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Smoothing : ON Filtering: 5
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Stop Thrs : 0 Peak Location: TOP

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Peak separation: 5

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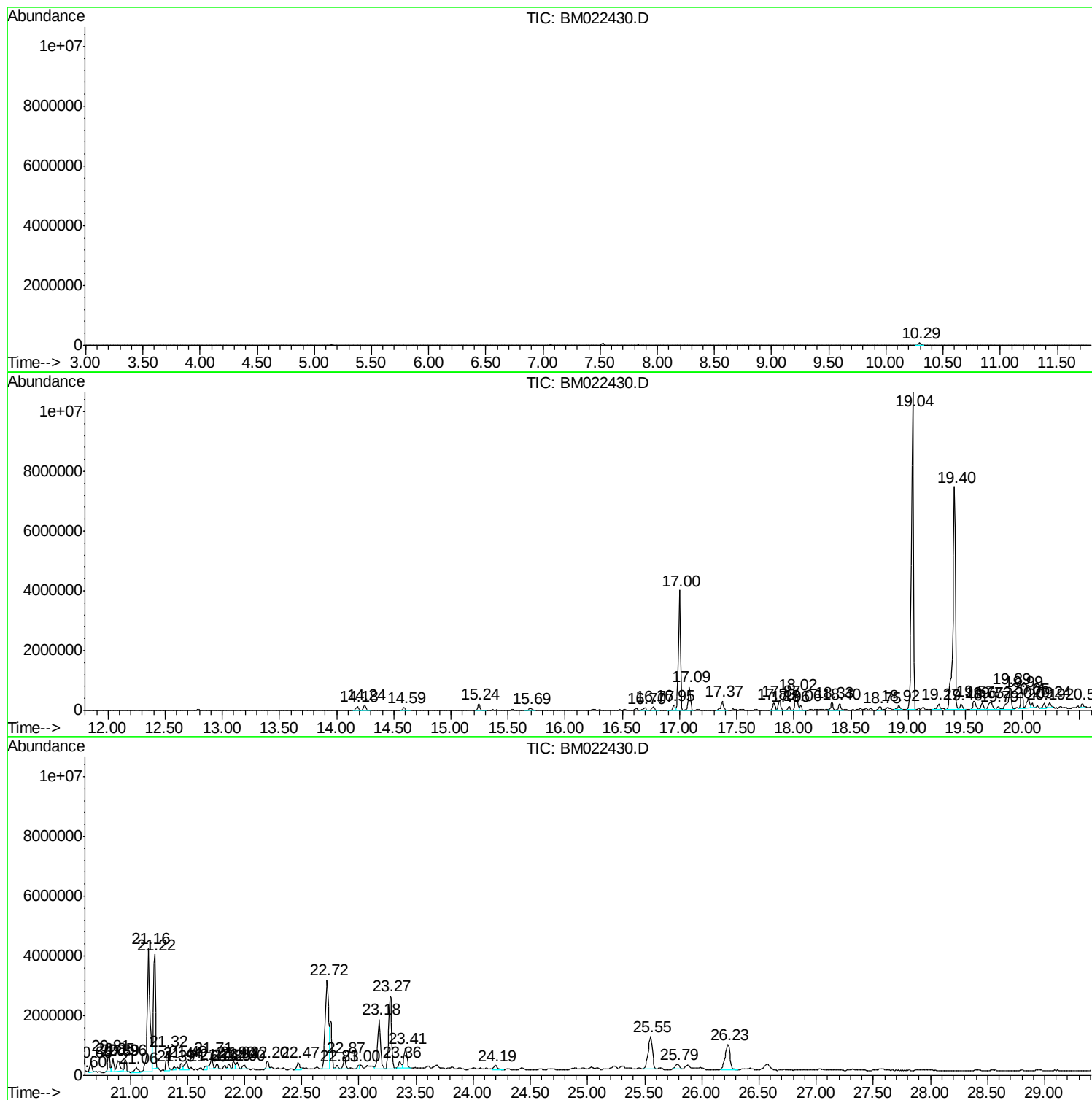
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM082919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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



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Data File : BM022430.D
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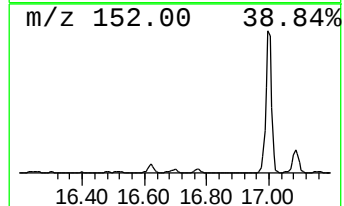
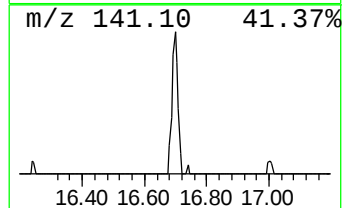
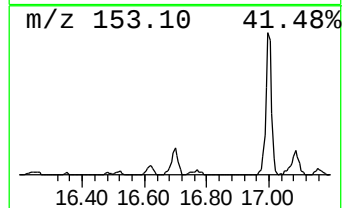
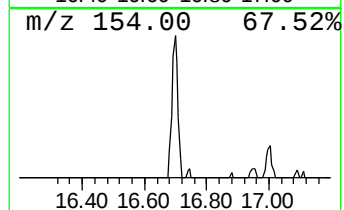
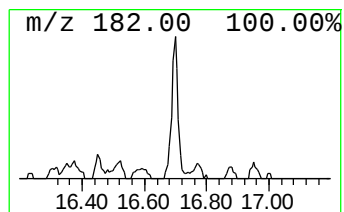
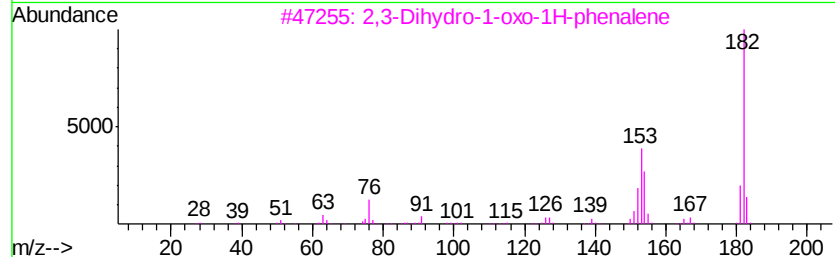
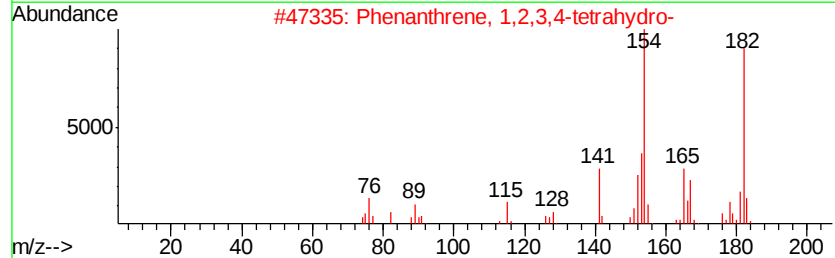
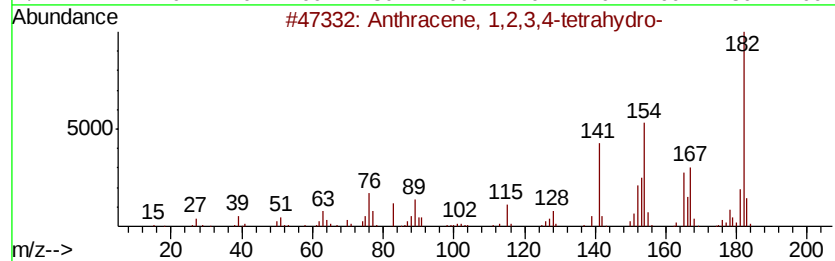
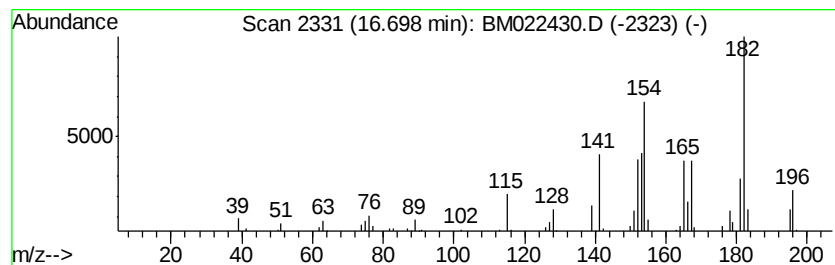
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TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

Peak Number 1 Anthracene, 1,2,3,4-tetrahy... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.	
16.70	10.84 ng	144252	Phenanthrene-d10	16.95	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 1,2,3,4-tetrahydro-	182	C14H14	002141-42-6	89
2	Phenanthrene, 1,2,3,4-tetrahydro-	182	C14H14	001013-08-7	89
3	2,3-Dihydro-1-oxo-1H-phenalene	182	C13H10O	000518-85-4	49
4	2,4,6-Trimethoxytoluene	182	C10H14O3	014107-97-2	43
5	5H-Indeno[1,2-b]pyridin-4-ylamine	182	C12H10N2	1000303-41-6	43



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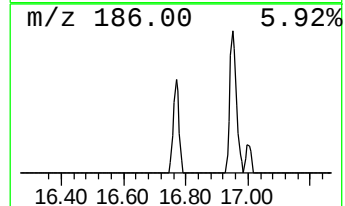
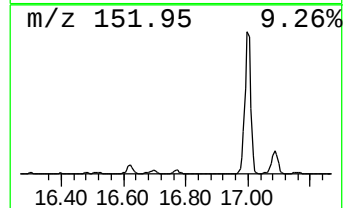
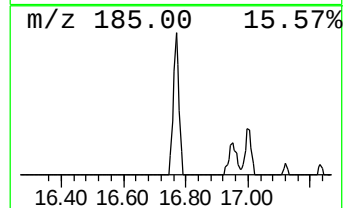
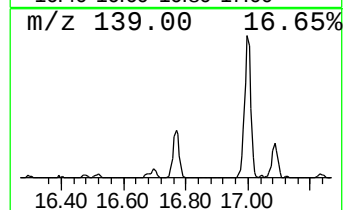
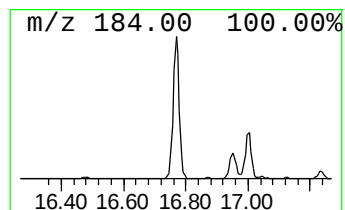
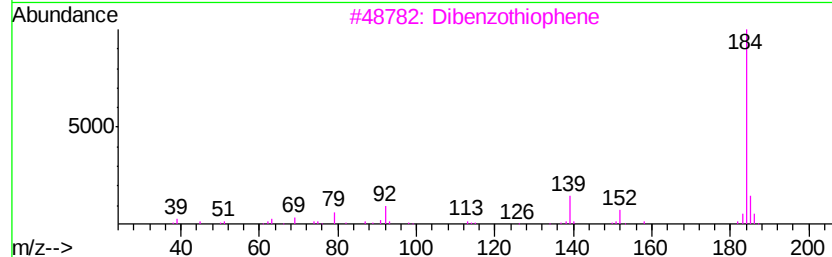
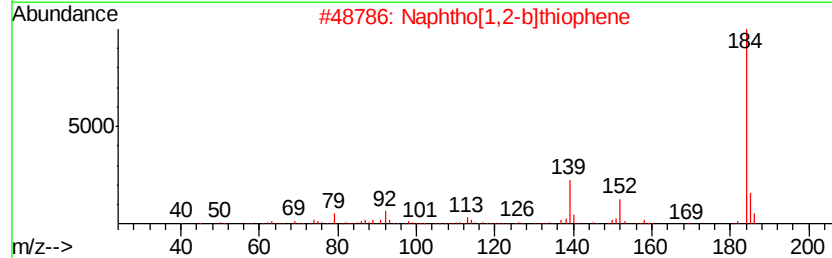
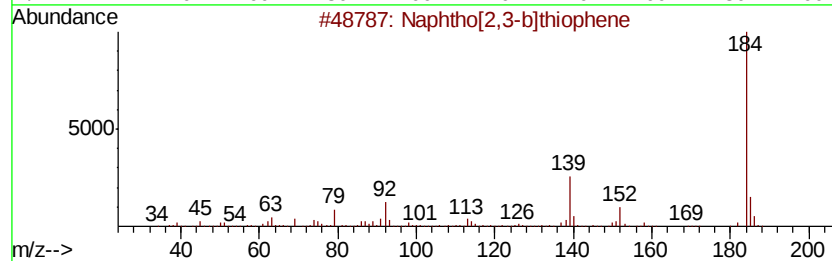
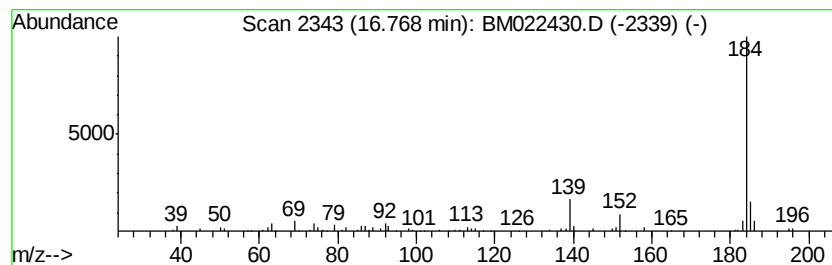
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM082919.M
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TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

Peak Number 2 Naphtho[2,3-b]thiophene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD		R.T.	
16.77	14.24 ng	189516	Phenanthrene-d10		16.95	
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Naphtho[2,3-b]thiophene	184	C12H8S	000268-77-9	95
2		Naphtho[1,2-b]thiophene	184	C12H8S	000234-41-3	93
3		Dibenzothiophene	184	C12H8S	000132-65-0	93
4		Naphtho[2,1-b]thiophene	184	C12H8S	000233-02-3	91
5		Azuleno(2,1-b)thiophene	184	C12H8S	000248-13-5	91



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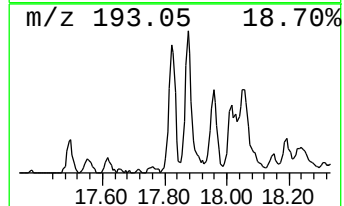
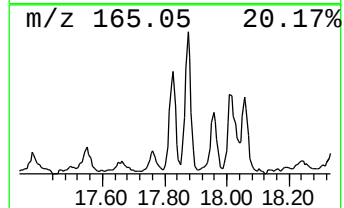
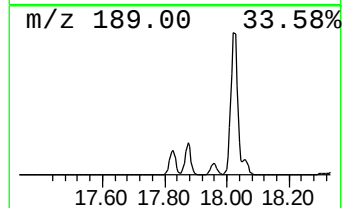
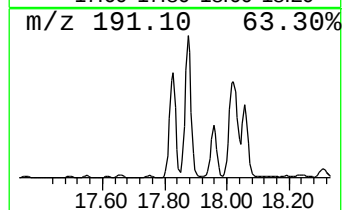
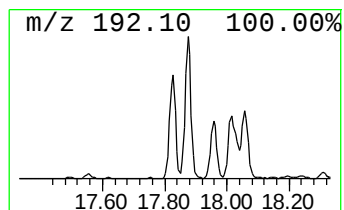
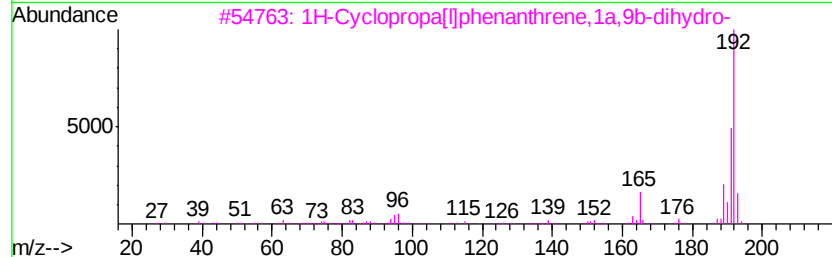
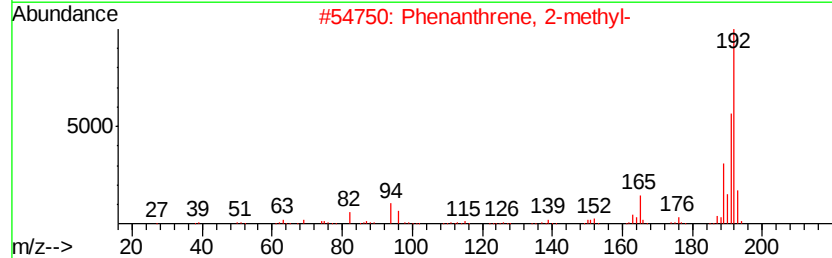
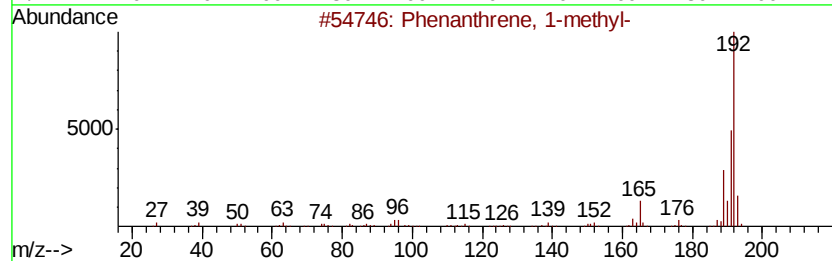
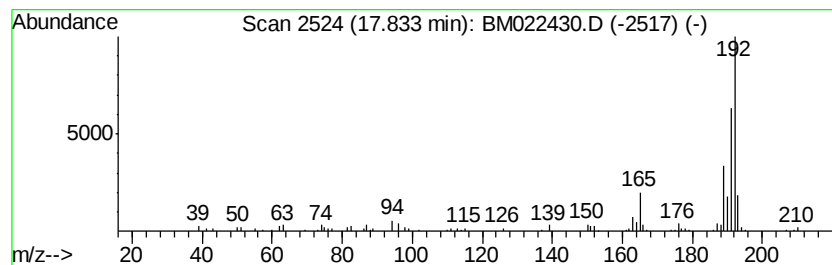
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TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

Peak Number 3 Phenanthrene, 1-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.	
17.83	25.37 ng	337640	Phenanthrene-d10	16.95	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
2	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	95
3	1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	94
4	1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	93
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	91



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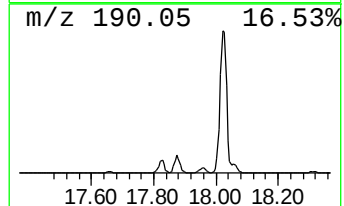
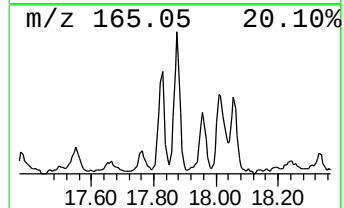
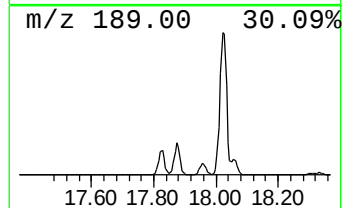
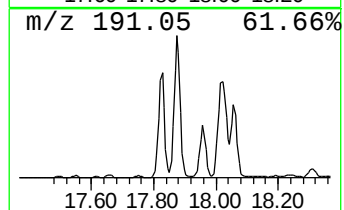
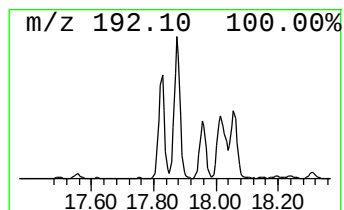
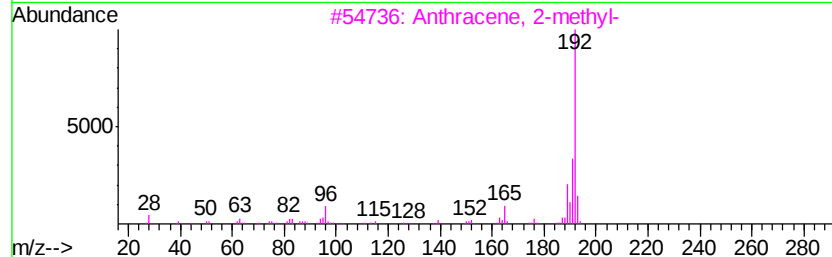
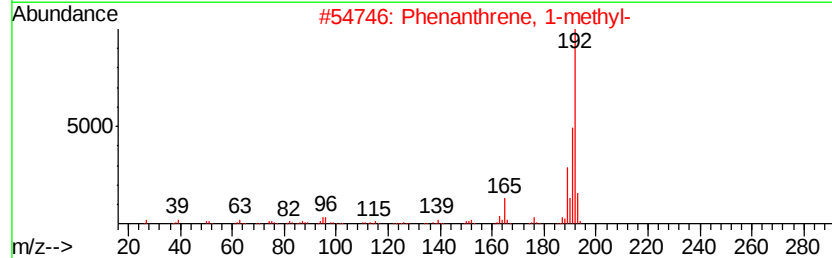
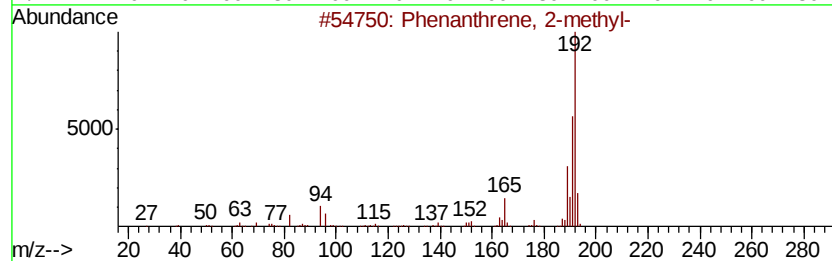
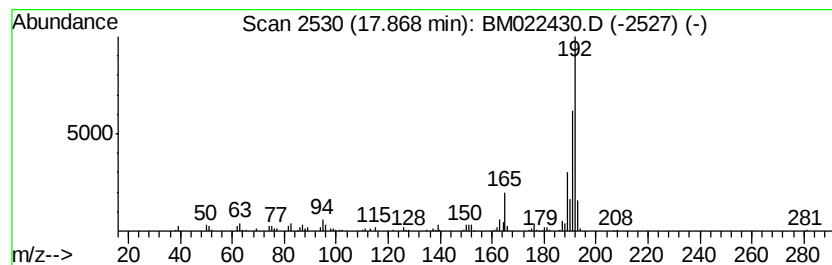
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ClientSampleId :
S704A-N-0.0-0.5-082819

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.	
17.87	34.72 ng	462014	Phenanthrene-d10	16.95	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
2	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
3	Anthracene, 2-methyl-	192	C15H12	000613-12-7	94
4	1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	94
5	Anthracene, 9-methyl-	192	C15H12	000779-02-2	94



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
S704A-N-0.0-0.5-082819

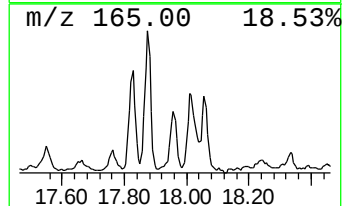
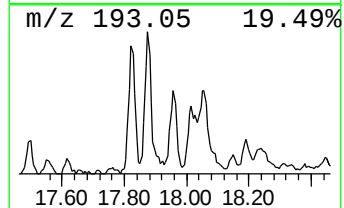
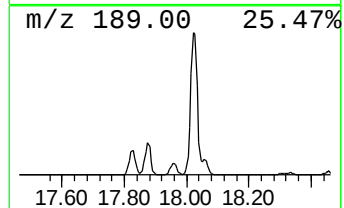
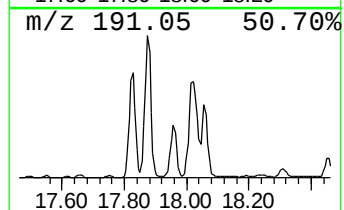
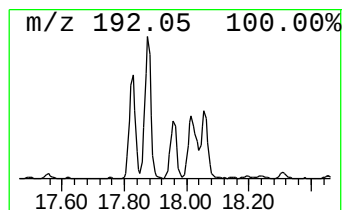
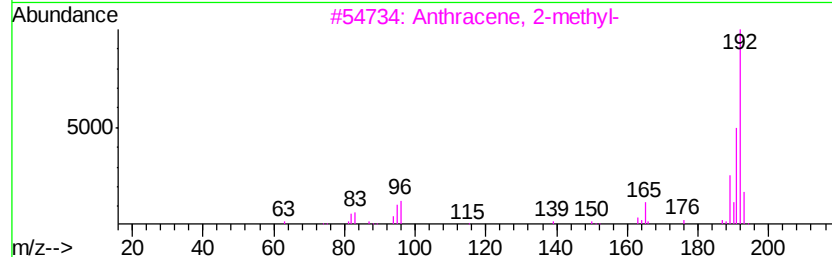
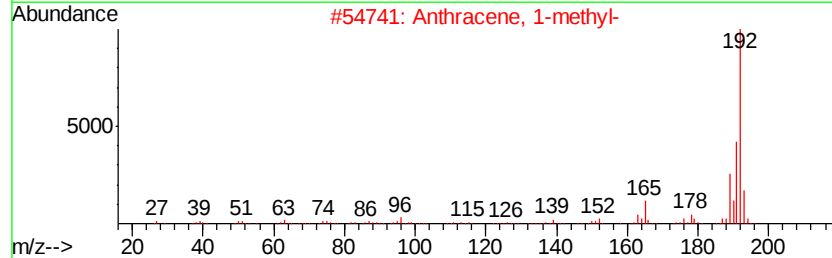
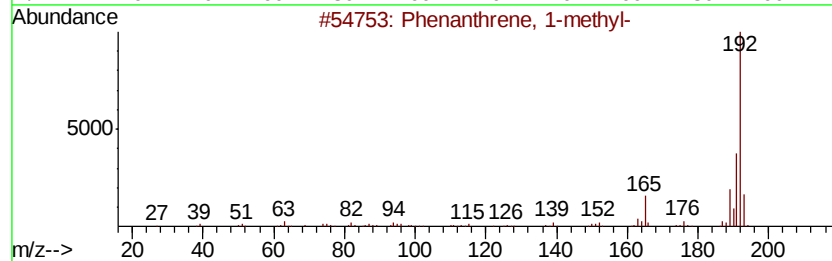
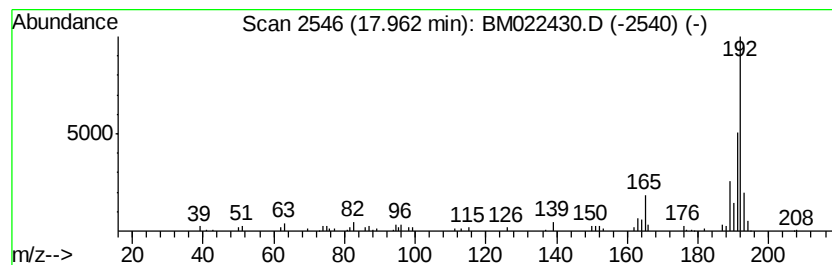
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 5 Anthracene, 1-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.96	13.89 ng	184893	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96
2		Anthracene, 1-methyl-	192	C15H12	000610-48-0	95
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	94
4		1H-Cyclopropa[1,1]phenanthrene, 1a,...	192	C15H12	000949-41-7	93
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	93



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
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Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

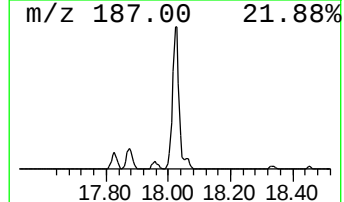
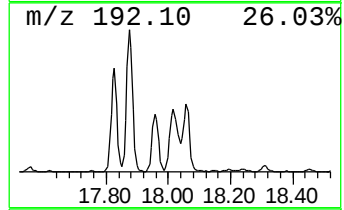
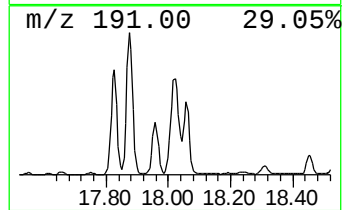
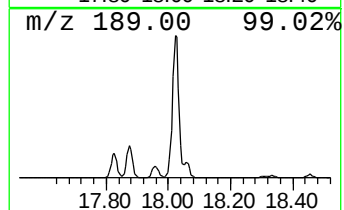
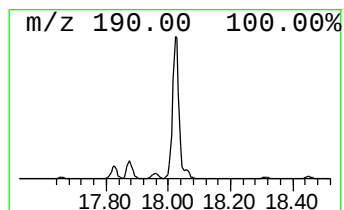
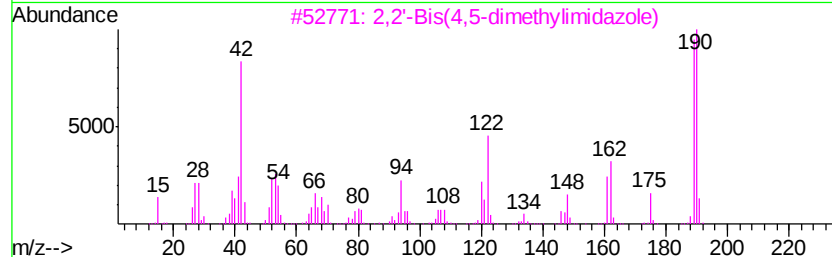
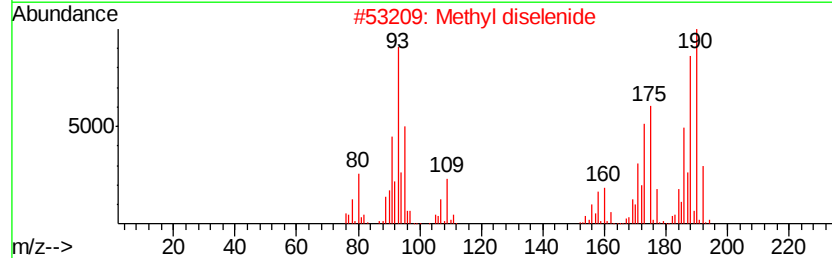
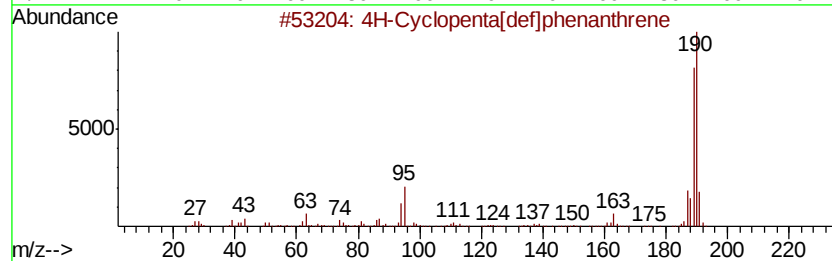
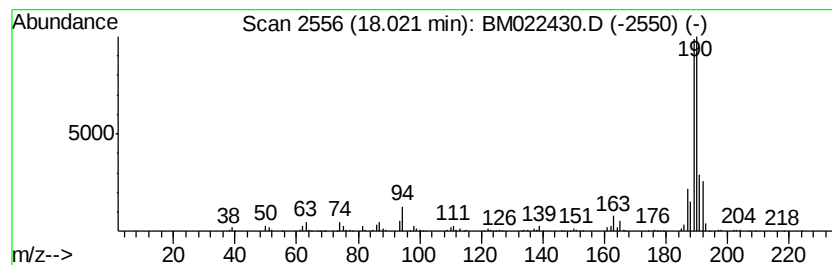
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ClientSampleId :
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.	
18.02	64.12 ng	853270	Phenanthrene-d10	16.95	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	94
2	Methyl diselenide	190	C2H6Se2	007101-31-7	55
3	2,2'-Bis(4,5-dimethylimidazole)	190	C10H14N4	069286-06-2	42
4	1-Aminocyclopentanecarboxylic ac...	389	C20H36ClN04	1000329-17-2	16
5	2-Naphthaldehyde, 1,2,3,4-tetra...	190	C12H14O2	002472-02-8	14



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
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ClientSampleId :
S704A-N-0.0-0.5-082819

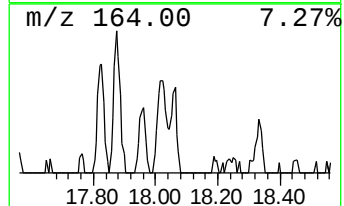
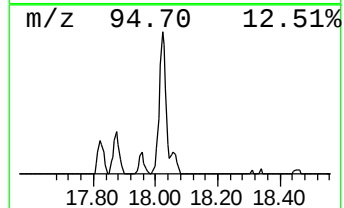
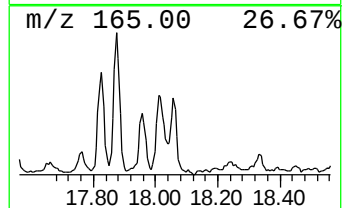
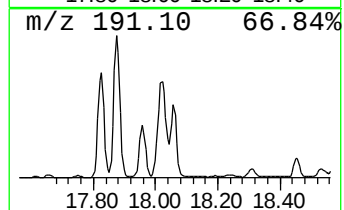
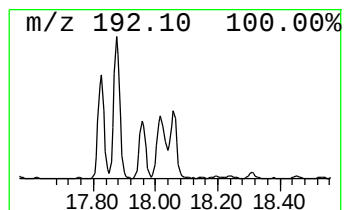
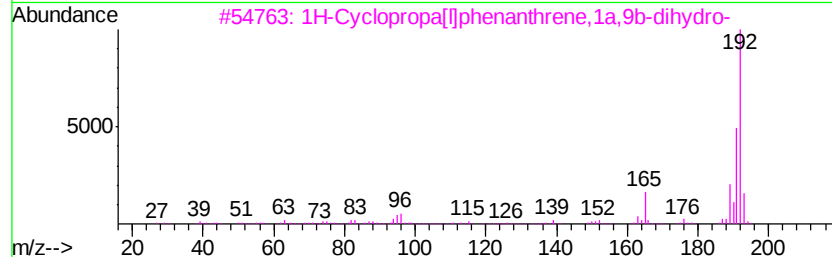
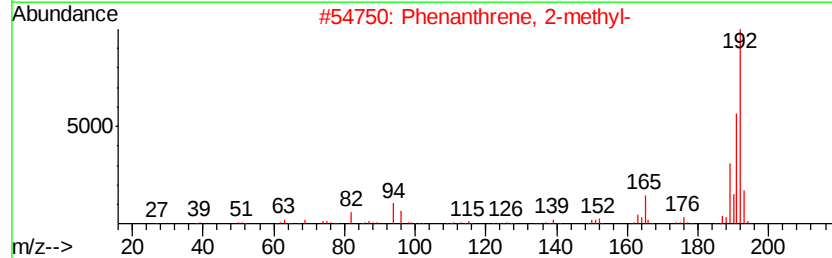
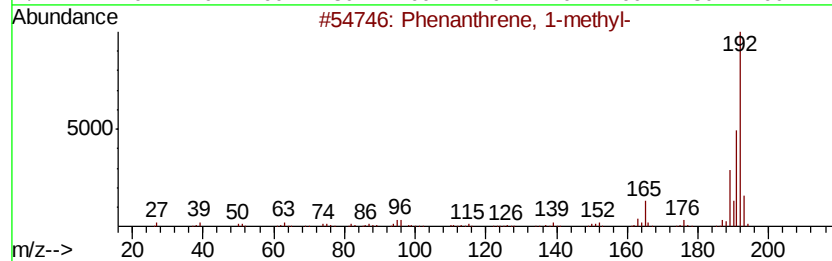
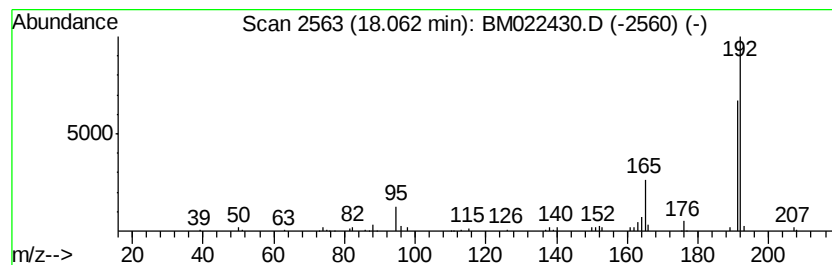
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 7 1H-Cyclopropa[l]phenanthren... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.06	14.76 ng	196390	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	87
2		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	86
3		1H-Cyclopropa[l]phenanthrene, 1a,...	192	C15H12	000949-41-7	83
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	83
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	80



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

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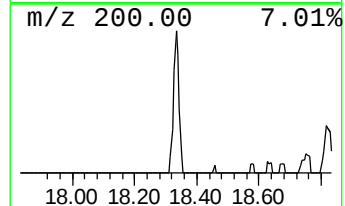
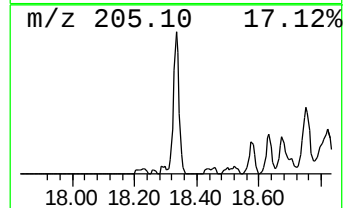
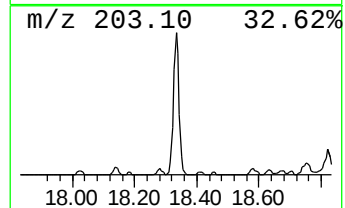
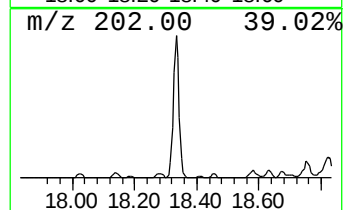
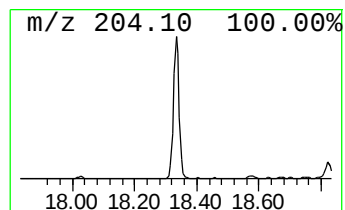
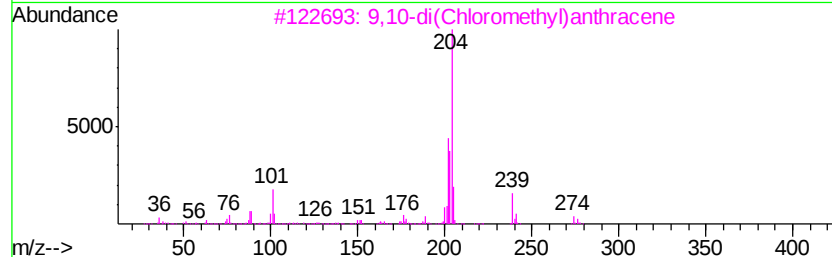
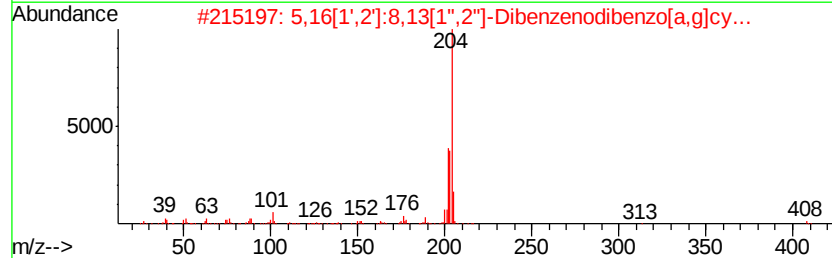
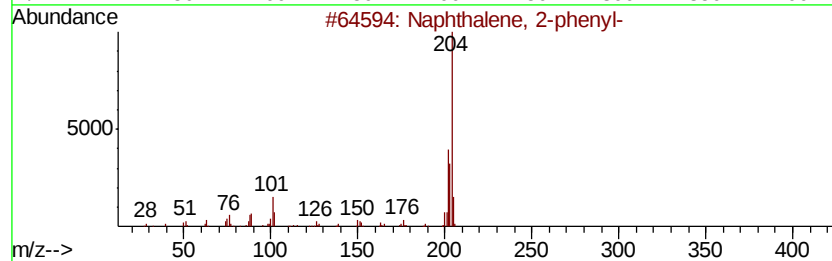
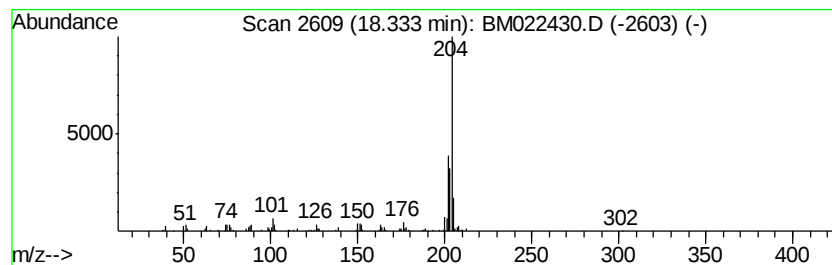
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 8 Naphthalene, 2-phenyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.33	25.49 ng	339231	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	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		9,10-di(Chloromethyl)anthracene	274	C16H12Cl2	010387-13-0	83
4		6-Phenylbenzocyclohepten-7-one	232	C17H12O	093327-56-1	83
5		Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	62



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
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Instrument :
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ClientSampleId :
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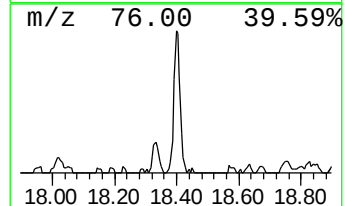
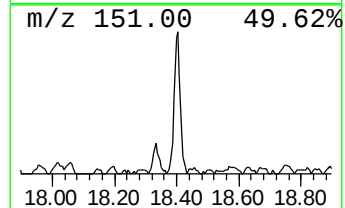
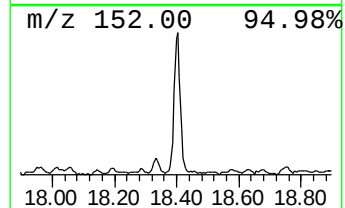
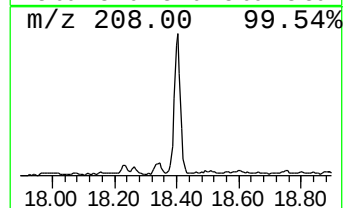
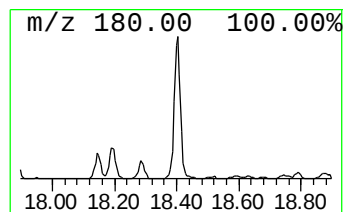
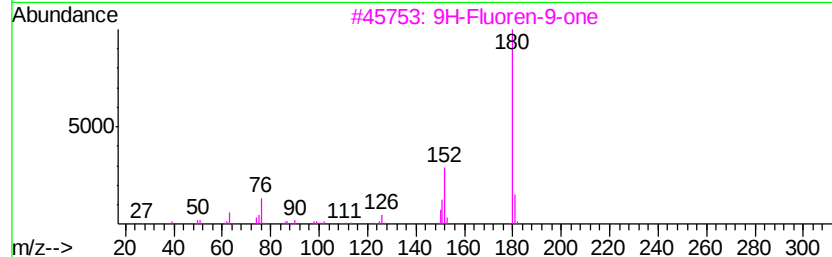
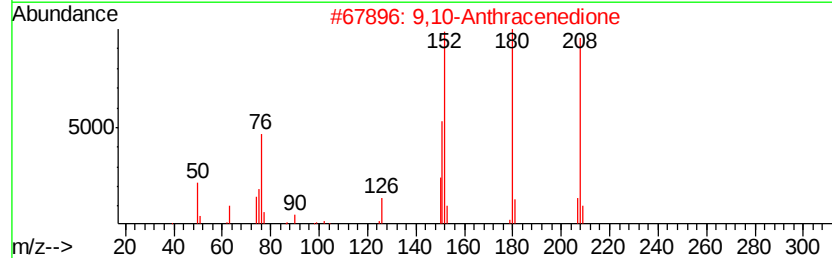
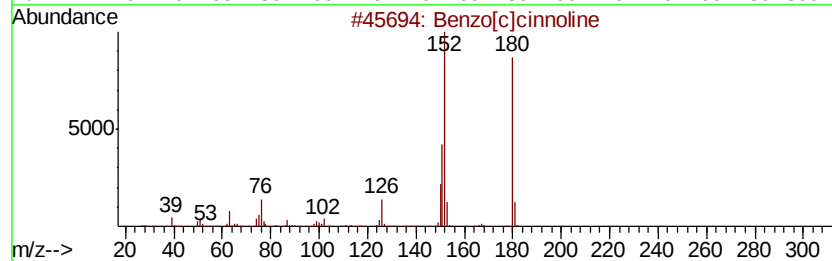
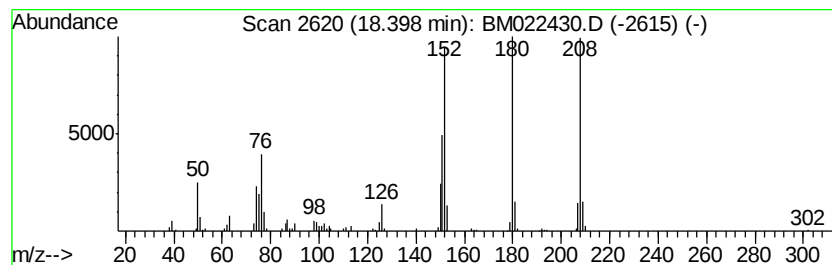
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 9 Benzo[c]cinnoline Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.40	22.10 ng	294057	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	96
2		9,10-Anthracenedione	208	C14H8O2	000084-65-1	95
3		9H-Fluoren-9-one	180	C13H8O	000486-25-9	93
4		1H-Phenalen-1-one	180	C13H8O	000548-39-0	64
5		1,4-Anthracenedione	208	C14H8O2	000635-12-1	64



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
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Sample : K4594-01 10X
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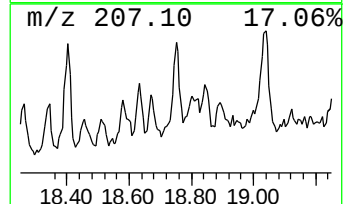
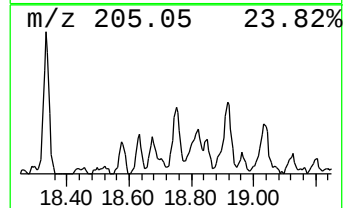
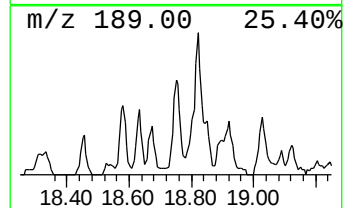
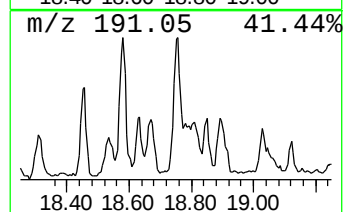
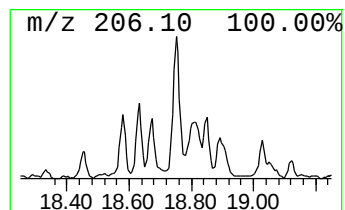
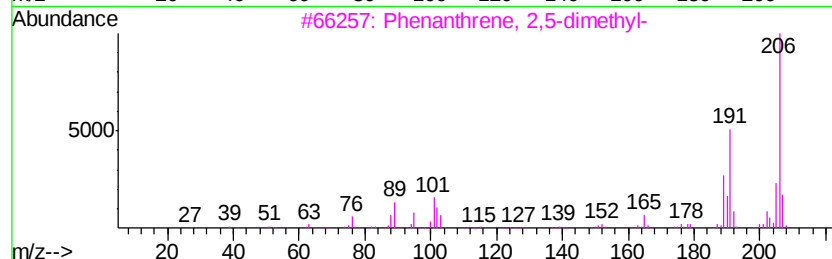
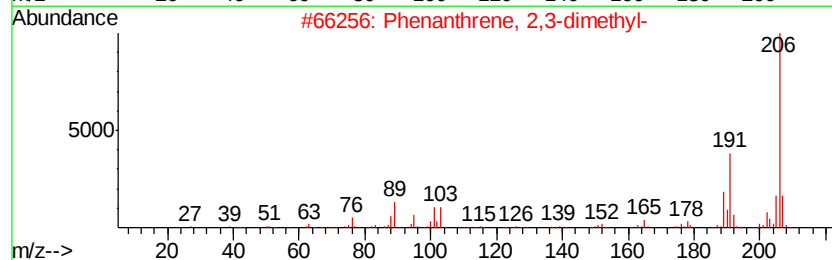
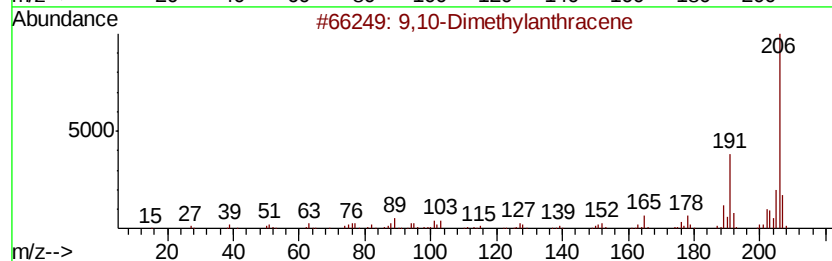
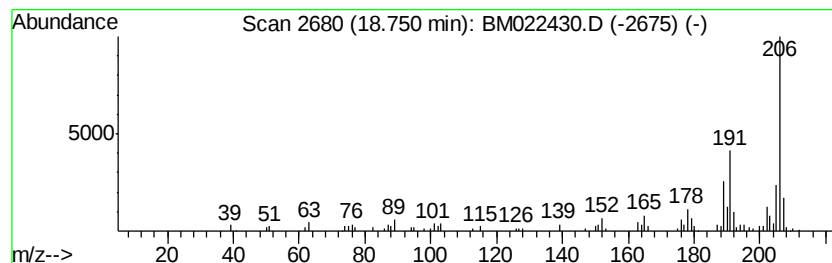
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 10 Phenanthrene, 2,3-dimethyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.75	12.59 ng	167579	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Dimethylantracene	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		Phenanthrene, 2,7-dimethyl-	206	C16H14	001576-69-8	90
5		Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	87



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
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Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
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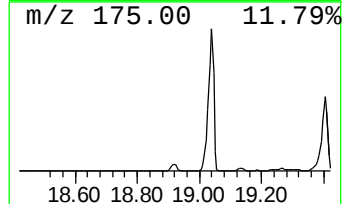
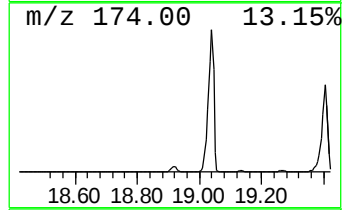
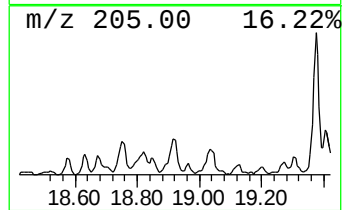
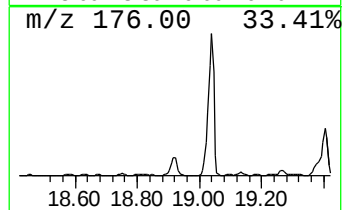
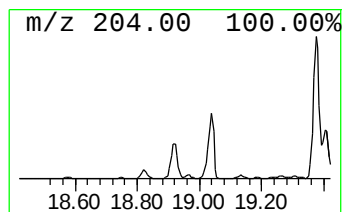
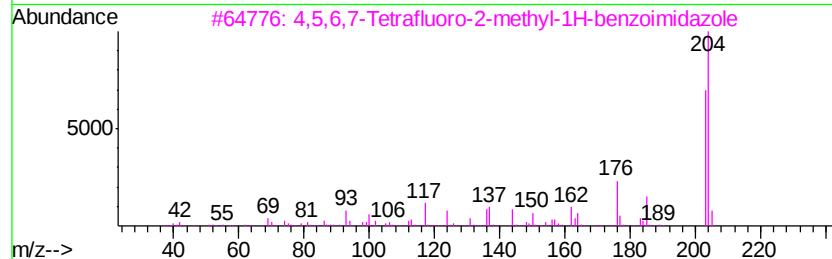
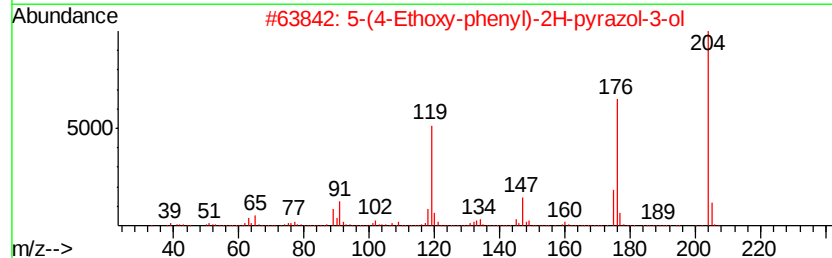
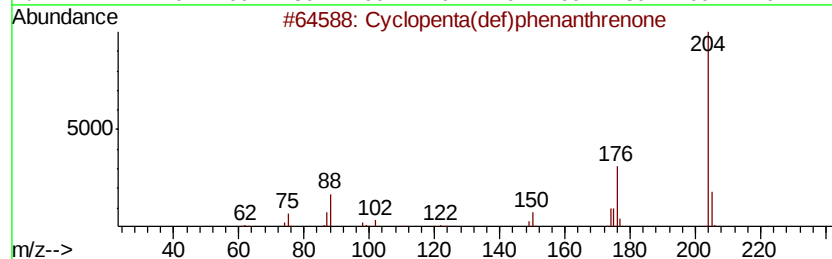
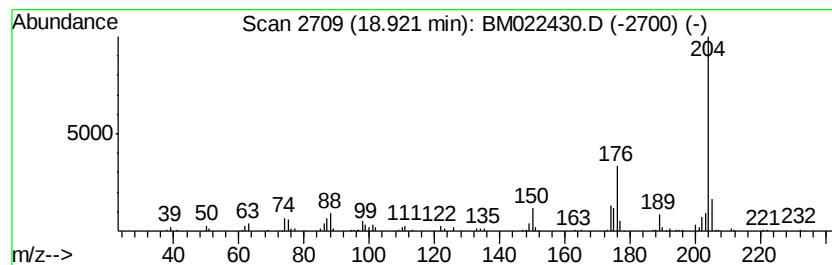
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 11 Cyclopenta(def)phenanthrenone Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.92	18.68 ng	248575	Phenanthrene-d10	16.95

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	90
2		5-(4-Ethoxy-phenyl)-2H-pyrazol-3-ol	204	C11H12N2O2	1000278-26-8	59
3		4,5,6,7-Tetrafluoro-2-methyl-1H-...	204	C8H4F4N2	081430-75-3	59
4		3,4-Biphenyldicarbonitrile	204	C14H8N2	004128-63-6	59
5		[1,1'-Biphenyl]-2,2'-dicarbonitrile	204	C14H8N2	004341-02-0	53



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
S704A-N-0.0-0.5-082819

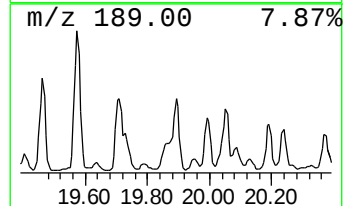
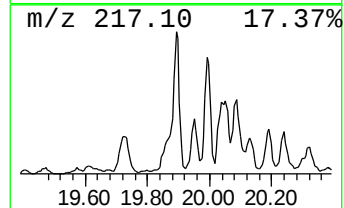
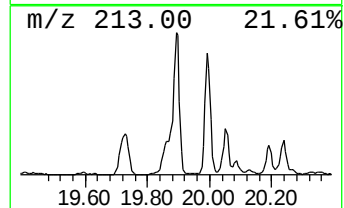
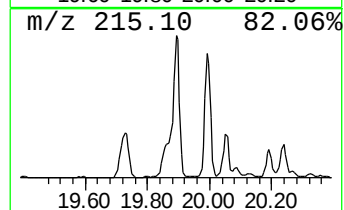
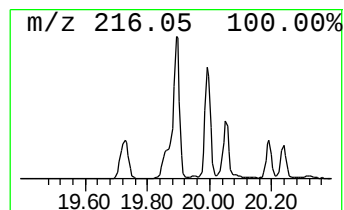
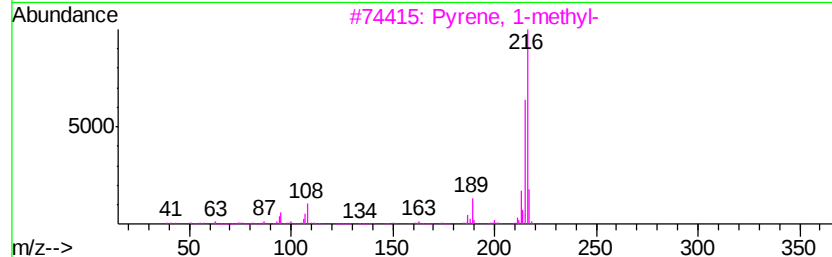
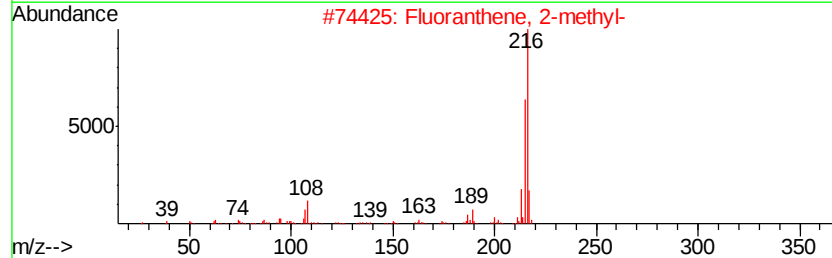
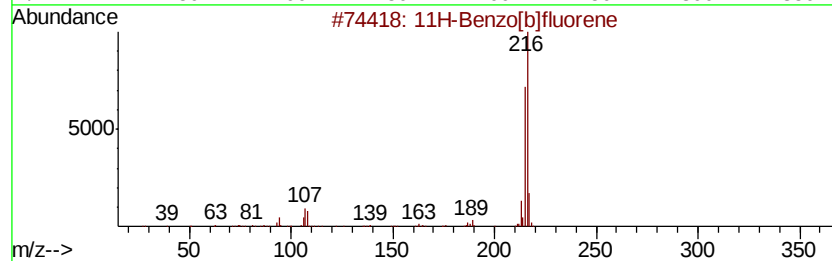
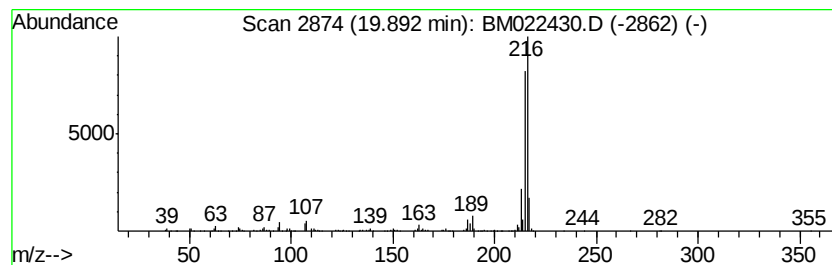
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 12 11H-Benzo[b]fluorene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.89	3.81 ng	1361160	Chrysene-d12	21.17

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	95
2		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
3		Pyrene, 1-methyl-	216	C17H12	002381-21-7	91
4		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	91
5		7H-Benzo[c]fluorene	216	C17H12	000205-12-9	80



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
S704A-N-0.0-0.5-082819

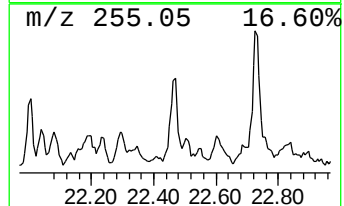
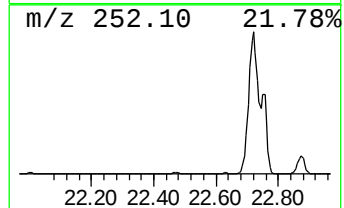
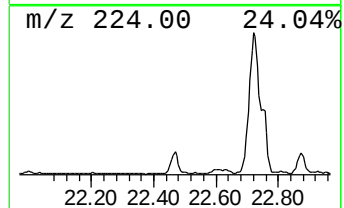
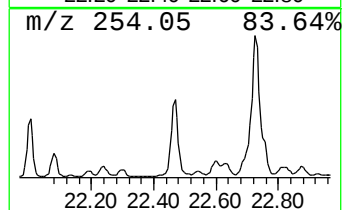
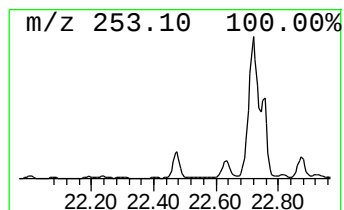
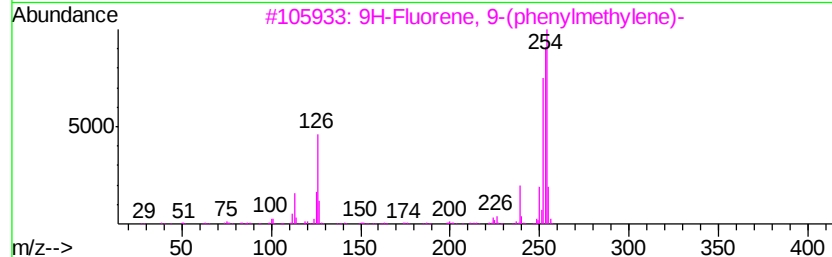
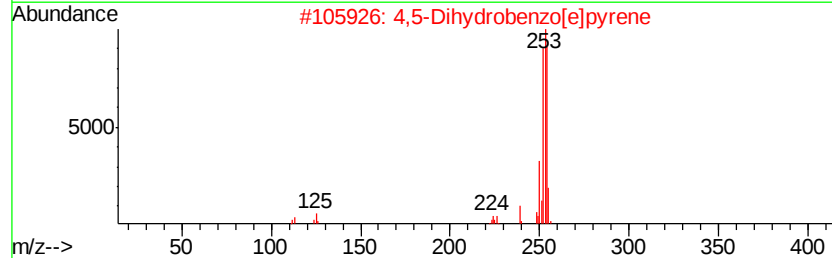
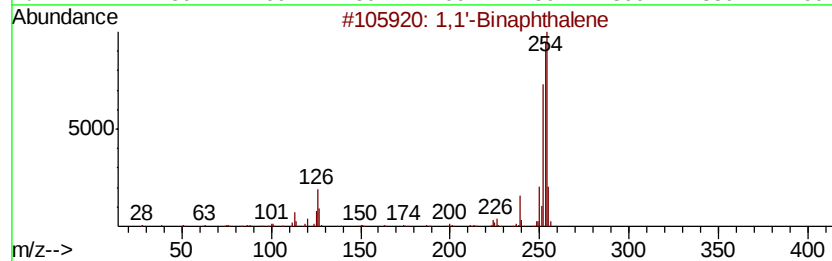
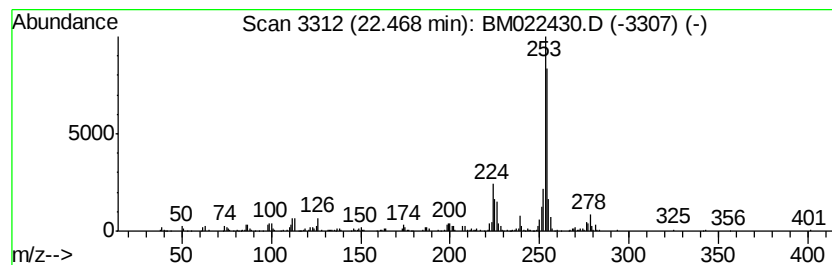
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 13 1,1'-Binaphthalene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.47	20.84 ng	414395	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,1'-Binaphthalene	254	C20H14	000604-53-5	64
2		4,5-Dihydrobenzo[el]pyrene	254	C20H14	095676-42-9	64
3		9H-Fluorene, 9-(phenylmethyl)-	254	C20H14	001836-87-9	64
4		1,2'-Binaphthalene	254	C20H14	004325-74-0	64
5		9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	53



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
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ClientSampleId :
S704A-N-0.0-0.5-082819

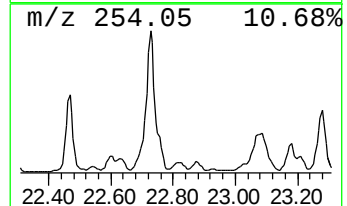
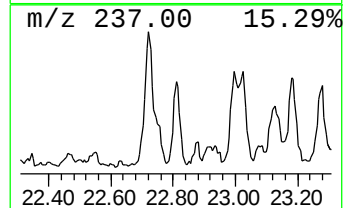
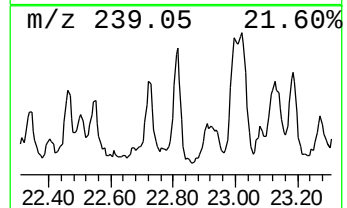
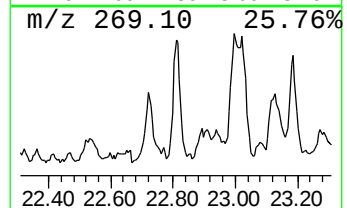
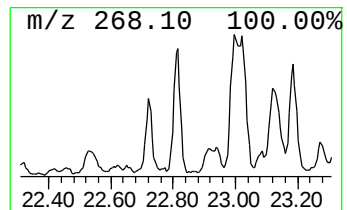
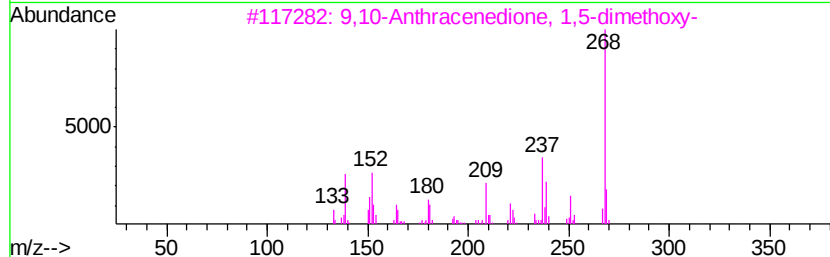
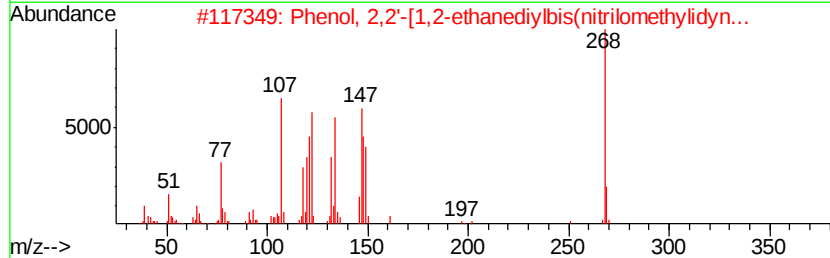
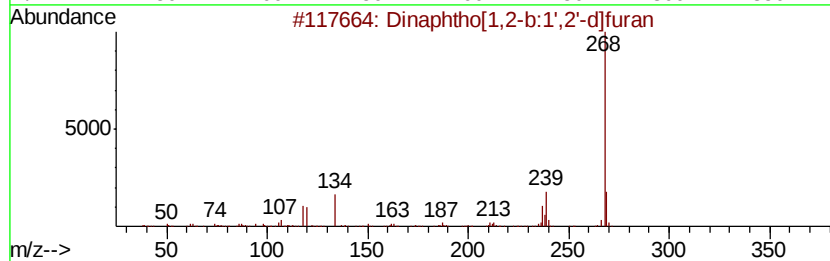
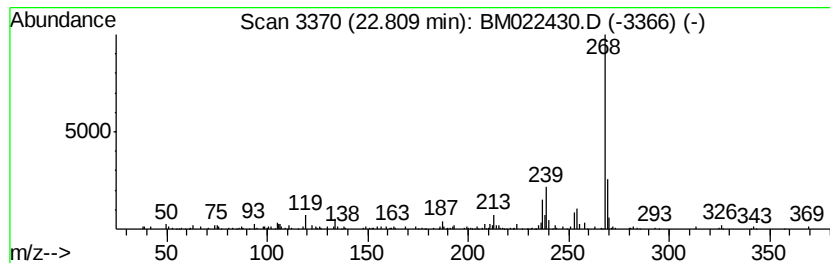
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 14 Dinaphtho[1,2-b:1',2'-d]furan Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.81	10.58 ng	210332	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	81
2		Phenol, 2,2'-[1,2-ethanediylbis(...	268	C16H16N2O2	000094-93-9	60
3		9,10-Anthracenedione, 1,5-dimeth...	268	C16H12O4	006448-90-4	59
4		Dinaphtho[2,1-b:1',2'-d]furan	268	C20H12O	000194-63-8	58
5		Benzo(a)pyrene 4,5-oxide	268	C20H12O	037574-47-3	58



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
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ClientSampleId :
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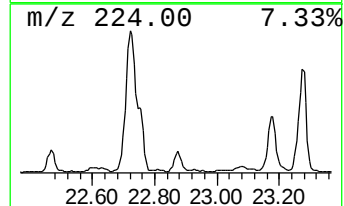
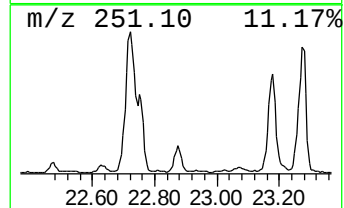
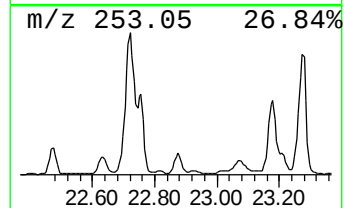
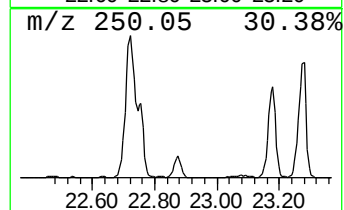
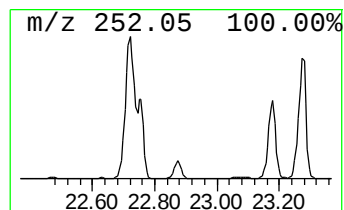
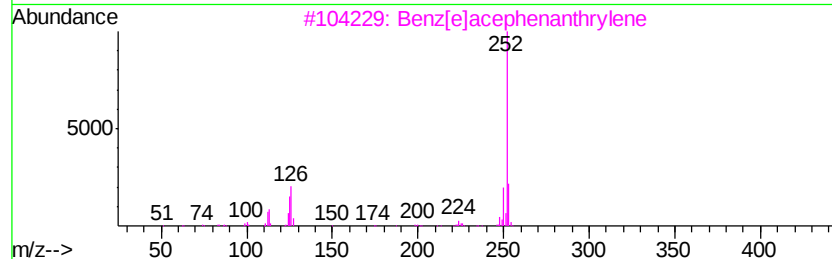
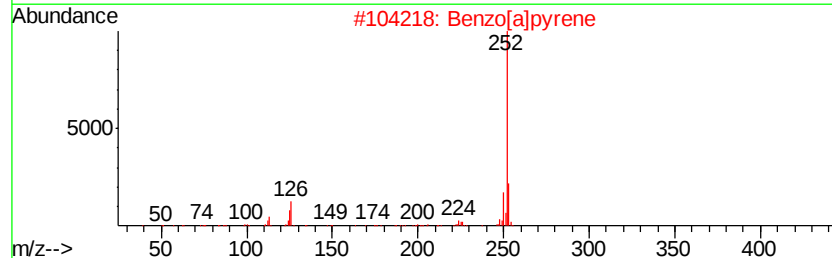
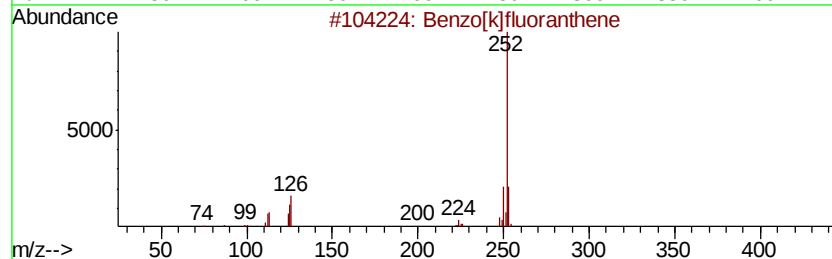
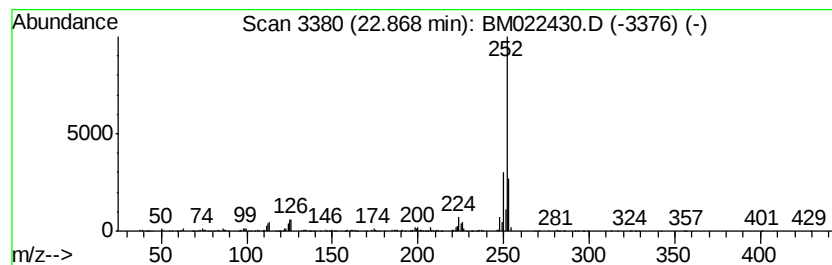
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 15 Benzo[j]fluoranthene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.87	31.22 ng	620757	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[k]fluoranthene	252	C20H12	000207-08-9	91
2		Benzo[a]pyrene	252	C20H12	000050-32-8	87
3		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	81
4		Benzo[i]fluoranthene	252	C20H12	000205-82-3	74
5		Benzo[e]pyrene	252	C20H12	000192-97-2	74



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
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Operator : HP/JU
Sample : K4594-01 10X
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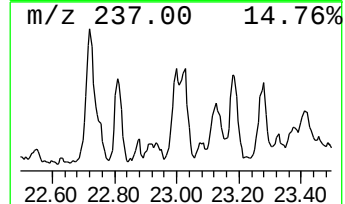
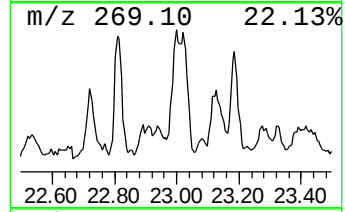
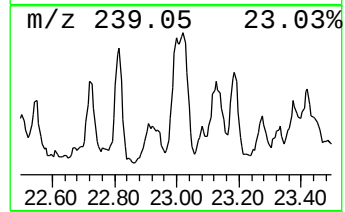
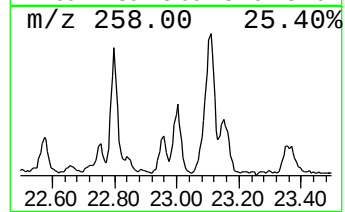
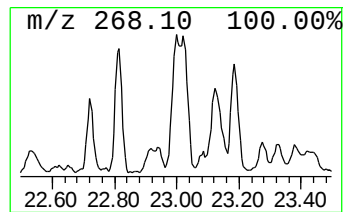
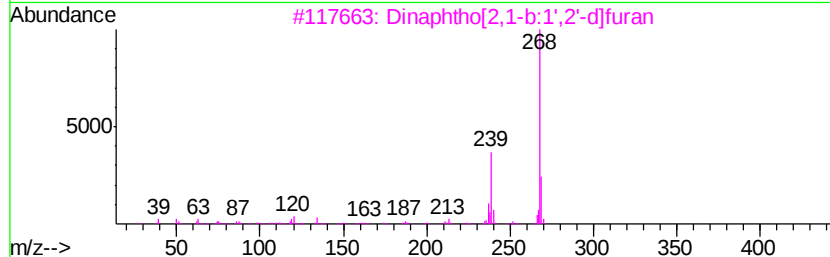
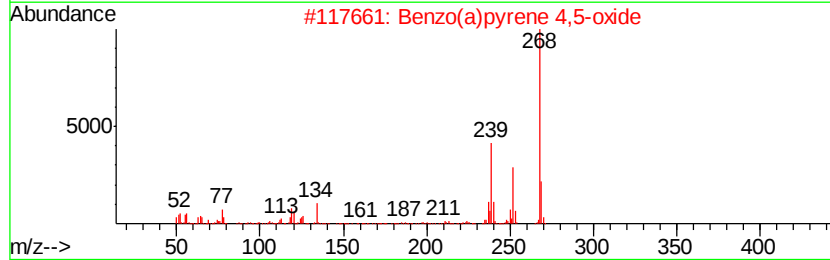
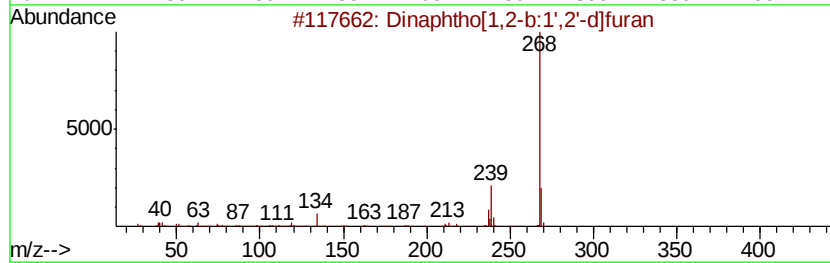
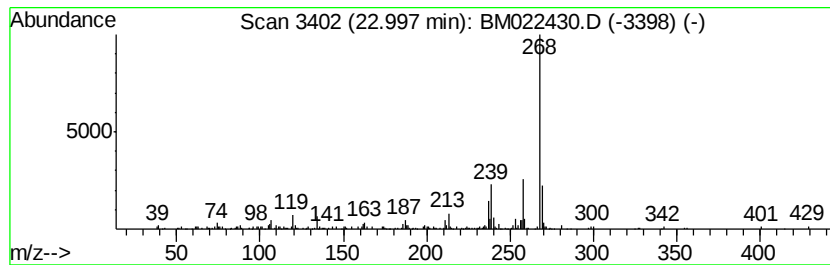
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 16 Benzo(a)pyrene 4,5-oxide Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.00	7.87 ng	156441	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	94
2		Benzo(a)pyrene 4,5-oxide	268	C20H12O	037574-47-3	74
3		Dinaphtho[2,1-b:1',2'-d]furan	268	C20H12O	000194-63-8	64
4		Benzo(a)pyren-7-ol	268	C20H12O	037994-82-4	64
5		4H-1-Benzopyran-4-one, 5-hydroxy...	268	C16H12O4	000520-28-5	59



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
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Sample : K4594-01 10X
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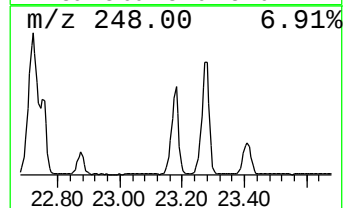
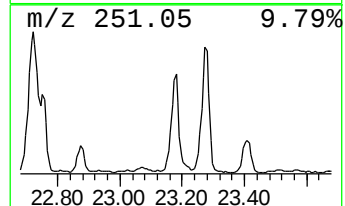
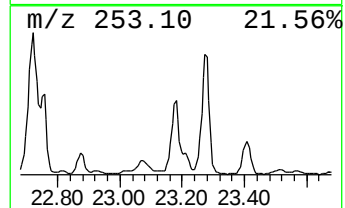
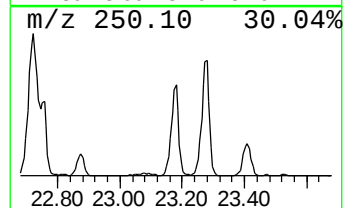
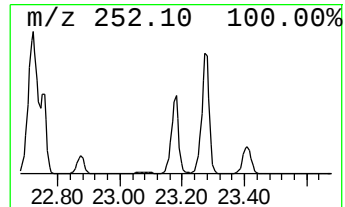
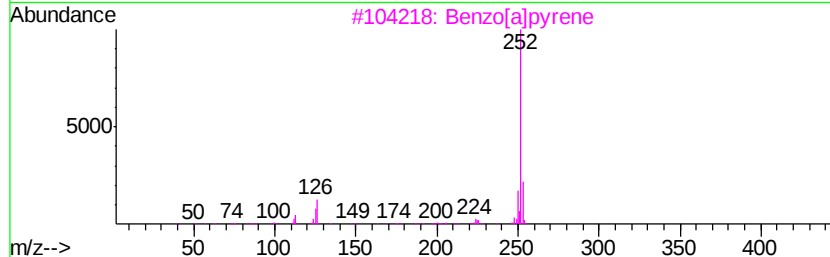
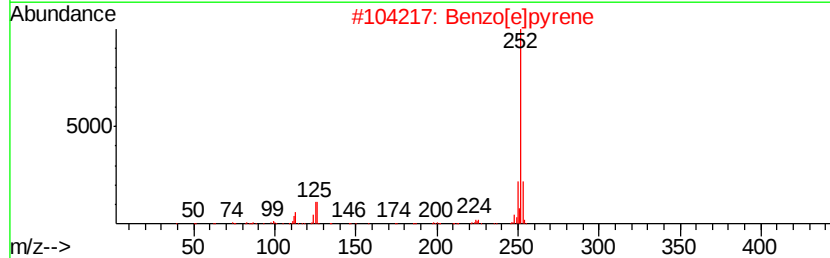
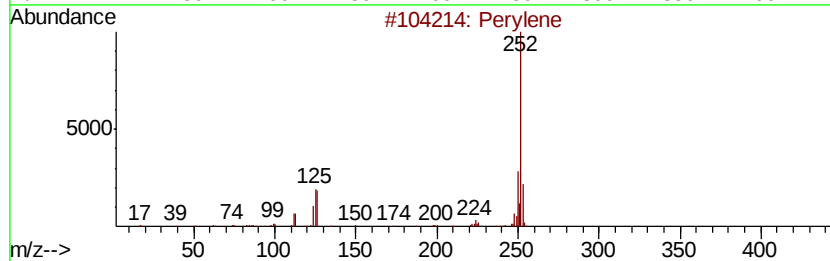
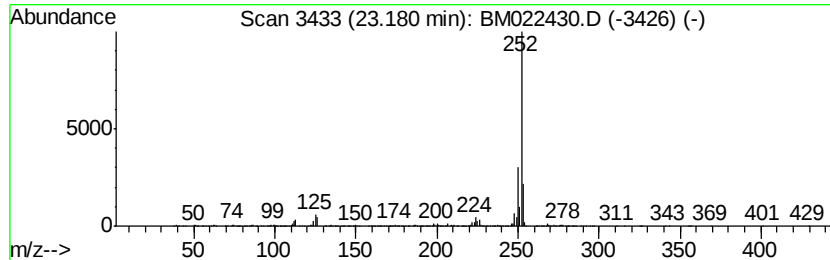
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 17 Perylene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.18	145.23 ng	2887340	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Perylene	252	C20H12	000198-55-0	94
2		Benzo[e]pyrene	252	C20H12	000192-97-2	91
3		Benzo[a]pyrene	252	C20H12	000050-32-8	91
4		Benzo[k]fluoranthene	252	C20H12	000207-08-9	90
5		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	87



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
S704A-N-0.0-0.5-082819

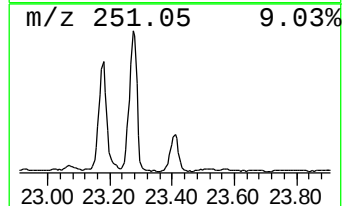
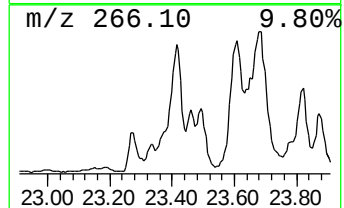
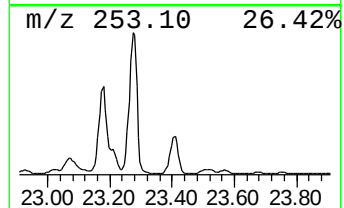
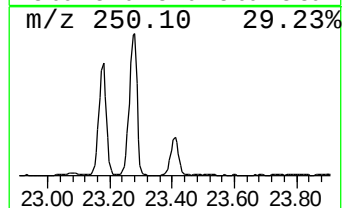
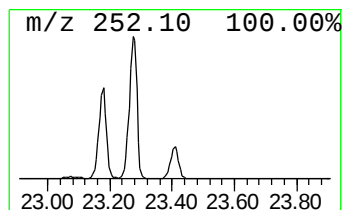
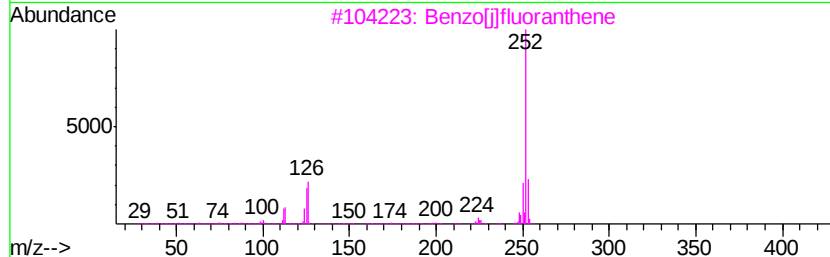
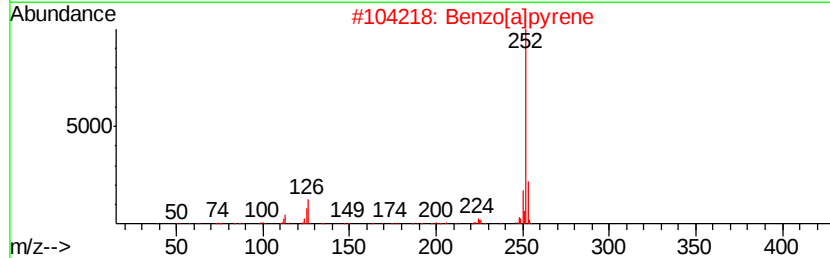
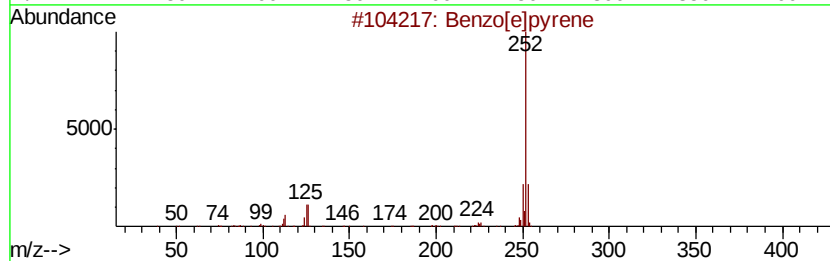
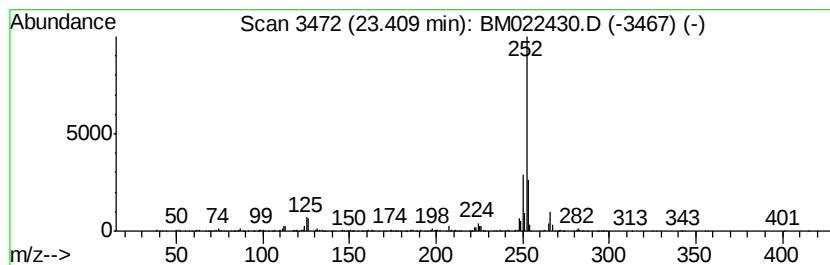
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 18 Benzo[e]pyrene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.41	59.76 ng	1188110	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	95
2		Benzo[a]pyrene	252	C20H12	000050-32-8	89
3		Benzo[i]fluoranthene	252	C20H12	000205-82-3	89
4		Perylene	252	C20H12	000198-55-0	89
5		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	89



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

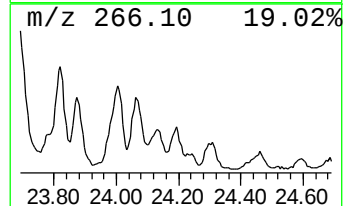
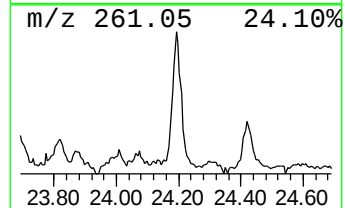
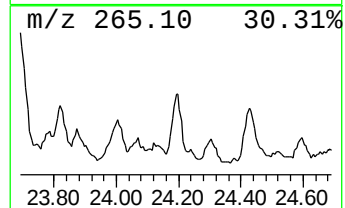
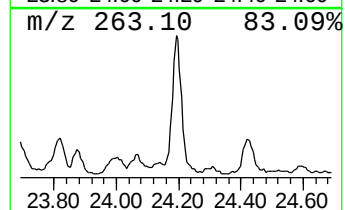
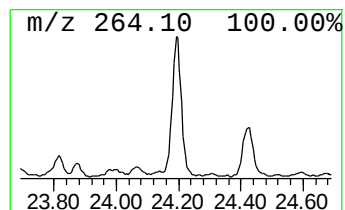
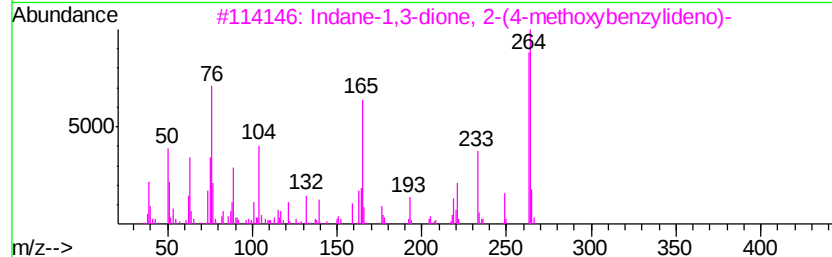
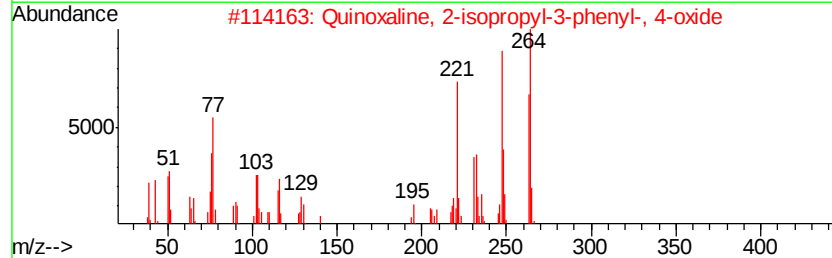
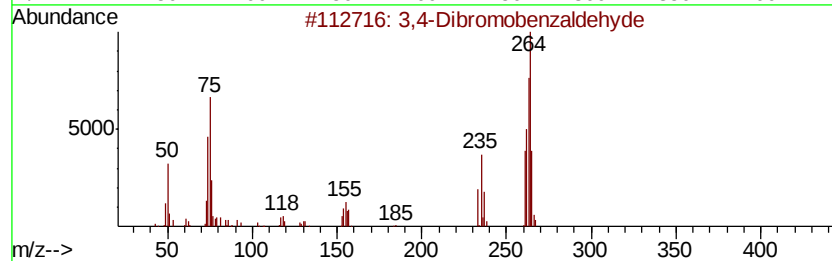
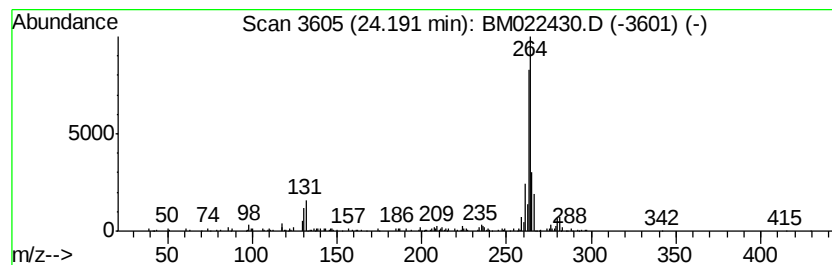
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ClientSampleId :
S704A-N-0.0-0.5-082819

Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM082919.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 19 3,4-Dibromobenzaldehyde Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.		
24.19	17.28 ng	343481	Perylene-d12	23.36		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	3,4-Dibromobenzaldehyde	262	C7H4Br2O	074003-55-7	72	
2	Quinoxaline, 2-isopropyl-3-phenyl...	264	C17H16N2O	016007-79-7	58	
3	Indane-1,3-dione, 2-(4-methoxybenzylidene)-	264	C17H12O3	007421-76-3	42	
4	1H-Pyrazole-4-carbonitrile, 3-(4...	263	C12H10ClN3S	068364-67-0	38	
5	Phenyl t-butyl telluride	264	C10H14Te	083817-38-3	30	



Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082919\
Data File : BM022430.D
Acq On : 30 Aug 2019 04:40
Operator : HP/JU
Sample : K4594-01 10X
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :
S704A-N-0.0-0.5-082819

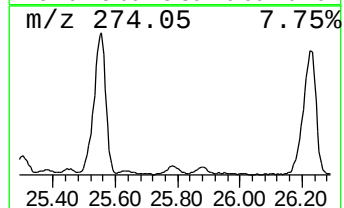
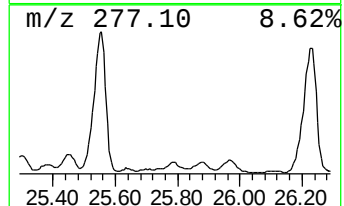
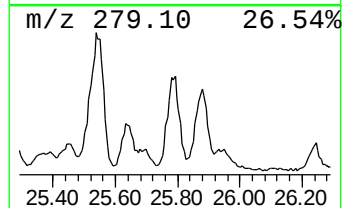
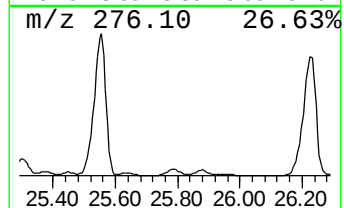
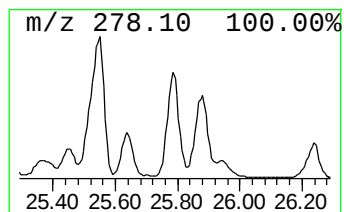
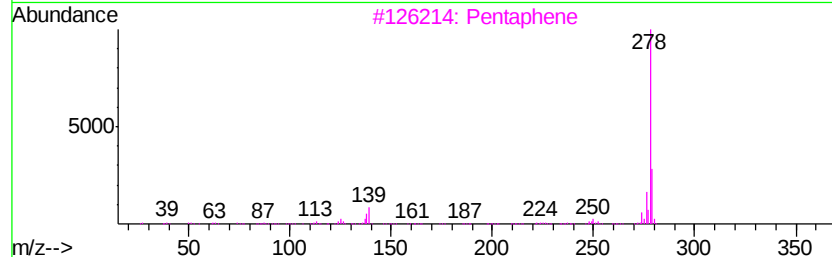
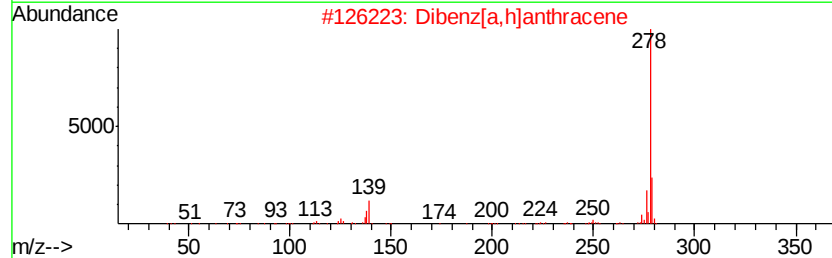
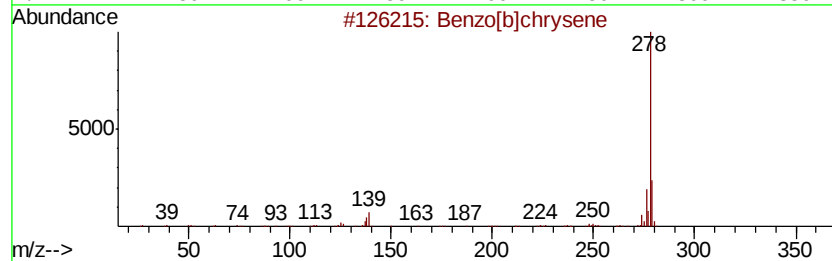
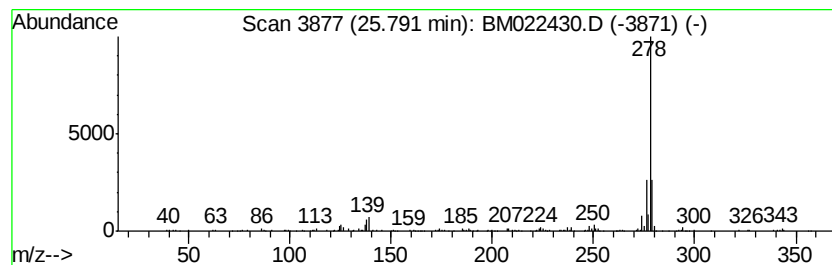
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

Peak Number 20 Benzo[b]chrysene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.79	19.86 ng	394804	Perylene-d12	23.36

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[b]chrysene	278	C22H14	000214-17-5	94
2		Dibenz[a,h]anthracene	278	C22H14	000053-70-3	93
3		Pentaphene	278	C22H14	000222-93-5	93
4		Benzo[a]naphthacene	278	C22H14	000226-88-0	90
5		Picene	278	C22H14	000213-46-7	89



Data Path : Z:\SVOASRV\HPCHEM1\BNA_M\DATA\BM082919\
 Data File : BM022430.D
 Acq On : 30 Aug 2019 04:40
 Operator : HP/JU
 Sample : K4594-01 10X
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA_M\METHODS\8270-BM082919.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Anthracene, 1,2,3...	16.70	10.8	ng	144252	4	16.95	266140	20.0
Naphtho[2,3-b]thi...	16.77	14.2	ng	189516	4	16.95	266140	20.0
Phenanthrene, 1-m...	17.83	25.4	ng	337640	4	16.95	266140	20.0
Phenanthrene, 2-m...	17.87	34.7	ng	462014	4	16.95	266140	20.0
Anthracene, 1-met...	17.96	13.9	ng	184893	4	16.95	266140	20.0
4H-Cyclopenta[def...	18.02	64.1	ng	853270	4	16.95	266140	20.0
1H-Cyclopropa[1]p...	18.06	14.8	ng	196390	4	16.95	266140	20.0
Naphthalene, 2-ph...	18.33	25.5	ng	339231	4	16.95	266140	20.0
Benzo[c]cinnoline	18.40	22.1	ng	294057	4	16.95	266140	20.0
Phenanthrene, 2,3...	18.75	12.6	ng	167579	4	16.95	266140	20.0
Cyclopenta(def)ph...	18.92	18.7	ng	248575	4	16.95	266140	20.0
11H-Benzo[b]fluorene	19.89	3.8	ng	1361160	5	21.17	7139230	20.0
1,1'-Binaphthalene	22.47	20.8	ng	414395	6	23.36	397629	20.0
Dinaphtho[1,2-b:1...	22.81	10.6	ng	210332	6	23.36	397629	20.0
Benzo[j]fluoranthene	22.87	31.2	ng	620757	6	23.36	397629	20.0
Benzo(a)pyrene 4,...	23.00	7.9	ng	156441	6	23.36	397629	20.0
Perylene	23.18	145.2	ng	2887340	6	23.36	397629	20.0
Benzo[e]pyrene	23.41	59.8	ng	1188110	6	23.36	397629	20.0
3,4-Dibromobenzal...	24.19	17.3	ng	343481	6	23.36	397629	20.0
Benzo[b]chrysene	25.79	19.9	ng	394804	6	23.36	397629	20.0