LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

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_G\METHODS\8270-BG022316.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	3.058	33	37	45	rBB	12128	17546	6.58%	0.991%
2	3.199	57	61	66	rBV2	3097	5174	1.94%	0.292%
3	5.778	497	500	505	rBB	3407	4906	1.84%	0.277%
4	7.411	772	778	783	rBB2	4340	7047	2.64%	0.398%
5	7.752	832	836	842	rBB	4408	6818	2.56%	0.385%
6	8.204	908	913	920	rBB2	16647	27893	10.46%	1.576%
7	8.533	965	969	974	rBB2	3666	5697	2.14%	0.322%
8	9.391	1110	1115	1120	rBB	3237	4989	1.87%	0.282%
9	11.030	1387	1394	1401	rBB	30082	51386	19.27%	2.903%
10	13.450	1801	1806	1811	rBB	8195	11182	4.19%	0.632%
11	14.343	1952	1958	1960	rBV3	1568	3286	1.23%	0.186%
12	14.537	1987	1991	1998	rBV3	2402	5566	2.09%	0.314%
13	14.636	2003	2008	2012	rVV3	2903	4488	1.68%	0.254%
14	14.824	2033	2040	2046	rVB2	40959	63414	23.78%	3.583%
15	15.424	2138	2142	2145	rBV5	2141	3947	1.48%	0.223%
16	15.453	2145	2147	2154	rVB5	3226	4524	1.70%	0.256%
17	15.524	2154	2159	2164	rVB5	1897	3079	1.15%	0.174%
18	15.576	2166	2168	2172	rBV5	1777	2767	1.04%	0.156%
19	15.835	2209	2212	2219	rVB5	2136	4687	1.76%	0.265%
20	16.311	2288	2293	2298	rBV5	6946	13516	5.07%	0.764%
21	16.493	2317	2324	2327	rBV2	7461	14587	5.47%	0.824%
22	16.657	2350	2352	2356	rVB5	4332	4939	1.85%	0.279%
23	16.698	2356	2359	2364	rBV6	2384	3473	1.30%	0.196%
24	16.857	2382	2386	2388	rBV5	2619	4503	1.69%	0.254%
25	17.215	2443	2447	2453	rVB5	4502	7744	2.90%	0.437%
26	17.268	2453	2456	2459	rVV5	2240	3431	1.29%	0.194%
27	17.309	2460	2463	2467	rVB4	5176	7603	2.85%	0.430%
28	17.380	2473	2475	2479	rVB4	4946	5343	2.00%	0.302%
29	17.562	2500	2506	2510	rBV	34808	55432	20.78%	3.132%
30	17.603	2510	2513	2521	rVB	55467	82591	30.97%	4.666%
31	17.697	2524	2529	2533	rBV	15571	23889	8.96%	1.350%
32	18.361	2636	2642	2646	rBV8	5467	11377	4.27%	0.643%
33	18.437	2649	2655	2658	rBV	13664	24613	9.23%	1.391%
34	18.484	2659	2663	2670	rVB	11766	17362	6.51%	0.981%

LSC Area Percent Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

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_G\METHODS\8270-BG022316.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

35	18.619	2683	2686	2690	rBV4	3415	6469	2.43%	0.365%
36	18.660	2690	2693	2699	rVB3	8333	12973	4.86%	0.733%
37	18.919	2734	2737	2740	rBV4	8241	10755	4.03%	0.608%
38	18.972	2742	2746	2750	rVB4	11766	18447	6.92%	1.042%
39	19.130	2771	2773	2775	rBV3	3733	3653	1.37%	0.206%
40	19.219	2785	2788	2791	rBV5	4480	5395	2.02%	0.305%
41	19.336	2803	2808	2811	rBV3	6374	11680	4.38%	0.660%
42	19.430	2820	2824	2827	rVB5	5207	7041	2.64%	0.398%
43	19.483	2828	2833	2840	rVB2	21724	35194	13.20%	1.988%
44	19.606	2848	2854	2859	rBV	189891	266720	100.00%	15.068%
45	19.688	2866	2868	2873	rVB6	5980	7320	2.74%	0.414%
46	19.730	2873	2875	2879	rBV5	5959	7376	2.77%	0.417%
47	19.923	2904	2908	2910	rBV	20673	24654	9.24%	1.393%
48	19.965	2910	2915	2920	rVV	186068	263846	98.92%	14.906%
49	20.023	2921	2925	2930	rVB	19207	28865	10.82%	1.631%
50	20.141	2941	2945	2949	rVB3	24887	33798	12.67%	1.909%
51	20.276	2963	2968	2969	rBV5	9332	16076	6.03%	0.908%
52	20.417	2986	2992	2998	rBV8	11260	29718	11.14%	1.679%
53	20.605	3022	3024	3028	rVB	14774	12569	4.71%	0.710%
54	20.746	3044	3048	3052	rBV	15302	24069	9.02%	1.360%
55	20.787	3052	3055	3063	rVB5	17833	35052	13.14%	1.980%
56	21.216	3124	3128	3133	rVB	24586	39191	14.69%	2.214%
57	21.498	3173	3176	3182	rVB3	12844	22823	8.56%	1.289%
58	21.827	3226	3232	3238	rBV2	63131	167877	62.94%	9.484%
59	21.891	3239	3243	3249	rVB	55787	100140	37.54%	5.657%
60	24.112	3616	3621	3627	rBV4	21327	56287	21.10%	3.180%
61	32.477	5043	5045	5049	rBV5	2341	3294	1.24%	0.186%

Sum of corrected areas: 1770081

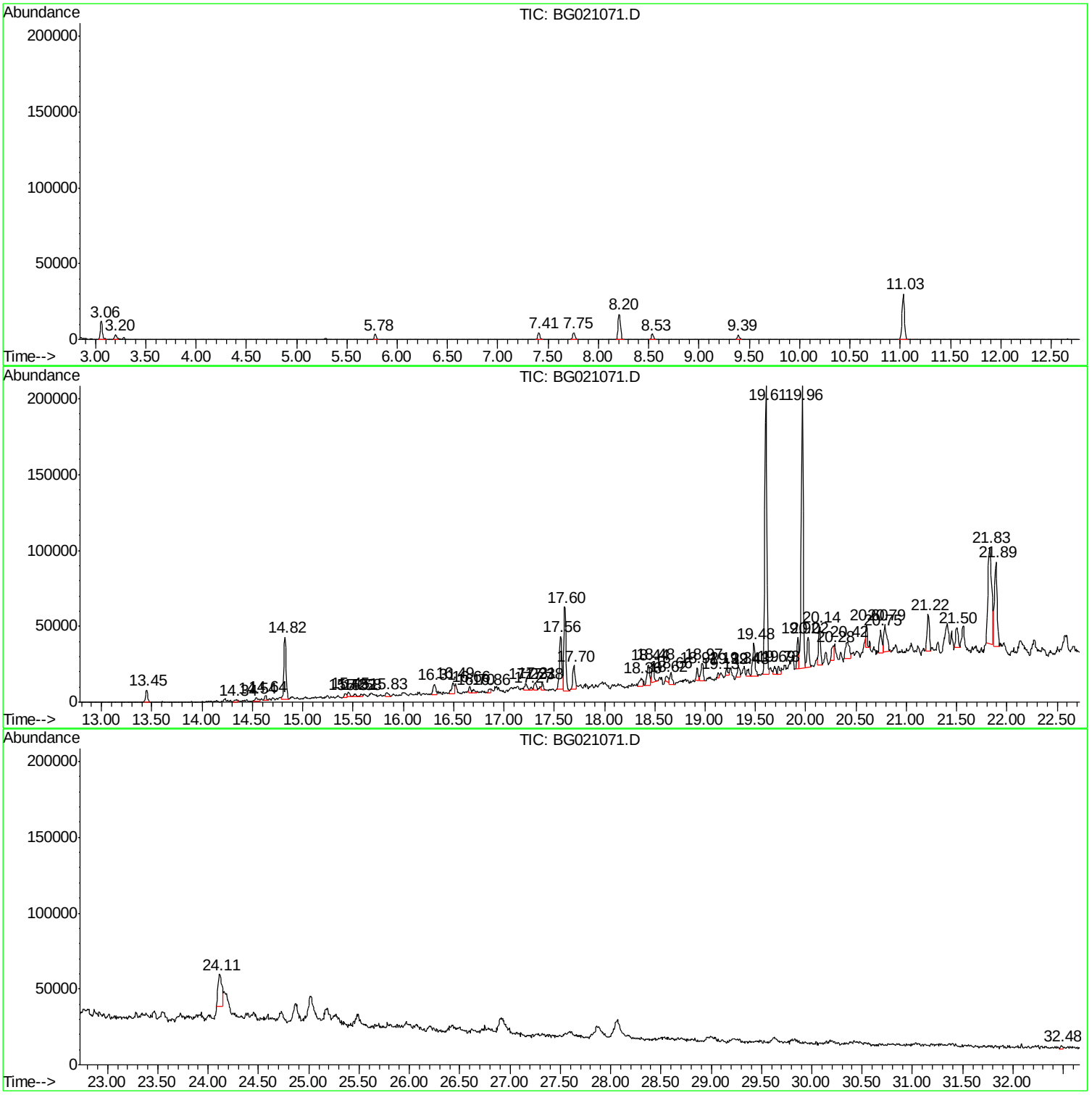
LSC Report - Integrated Chromatogram

Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.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 G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

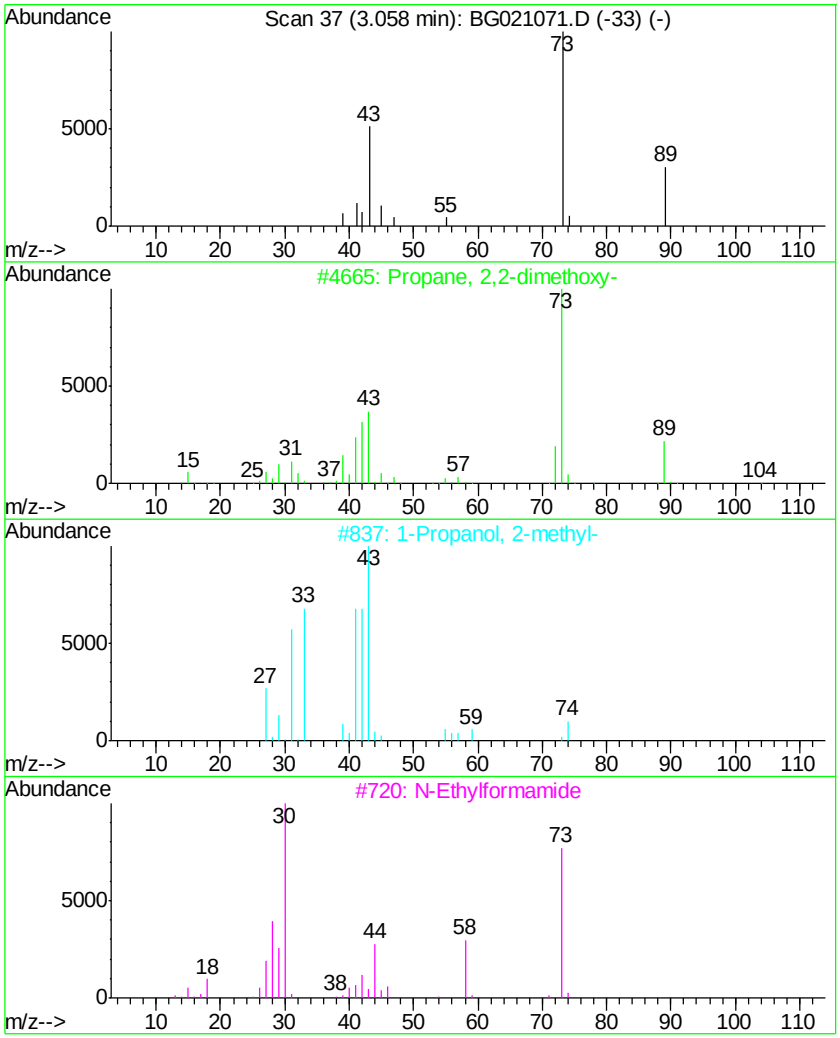
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

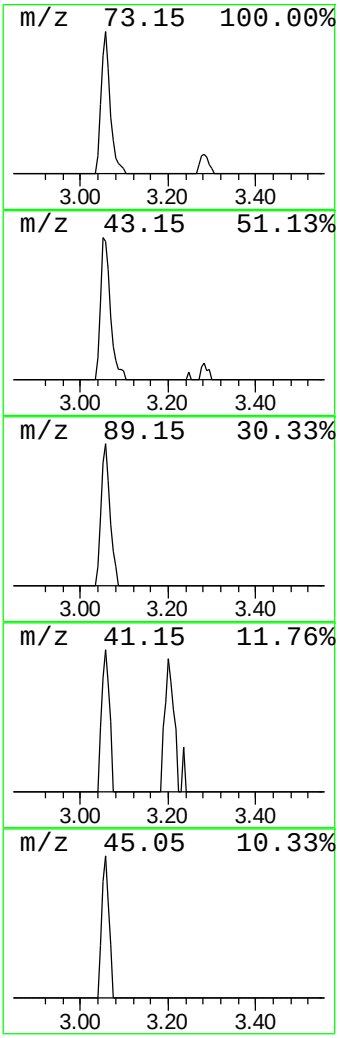
****

Peak Number 1 Propane, 2,2-dimethoxy- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.06	12.58 ng	17546	1,4-Dichlorobenzene-d4	8.21

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2,2-dimethoxy-	104	C5H12O2	000077-76-9	74
2	1-Propanol, 2-methyl-	74	C4H10O	000078-83-1	5
3	N-Ethylformamide	73	C3H7NO	000627-45-2	5
4	Acetamide, N-methyl-	73	C3H7NO	000079-16-3	4
5	1-Propene-1-thiol	74	C3H6S	000925-89-3	4





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

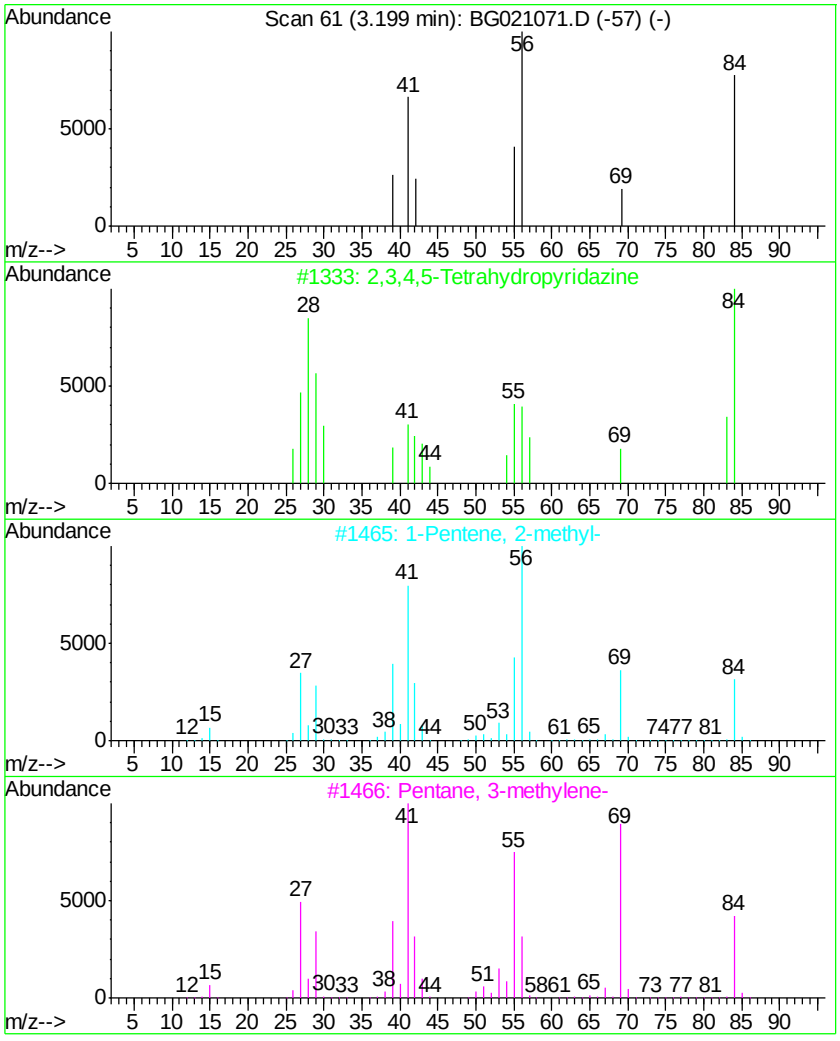
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

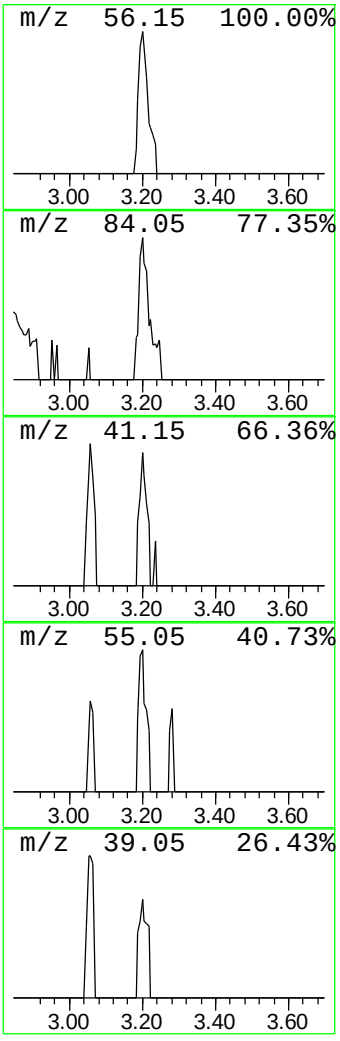
****

Peak Number 2 unknown3.20 Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.20	3.71 ng	5174	1,4-Dichlorobenzene-d4	8.21

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3,4,5-Tetrahydropyridazine	84	C4H8N2	000694-06-4	40
2	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	9
3	Pentane, 3-methylene-	84	C6H12	000760-21-4	9
4	2-Pentene, 2-methyl-	84	C6H12	000625-27-4	7
5	1-Propene, 3-(ethenyloxy)-	84	C5H8O	003917-15-5	5





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

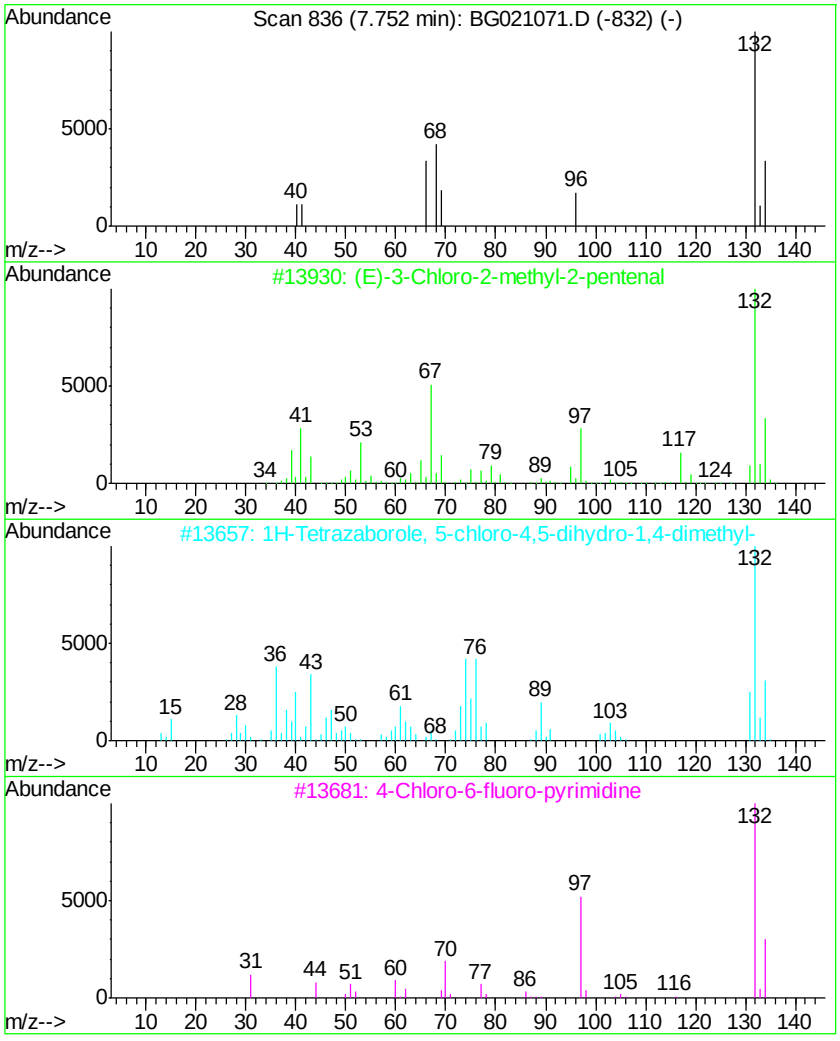
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

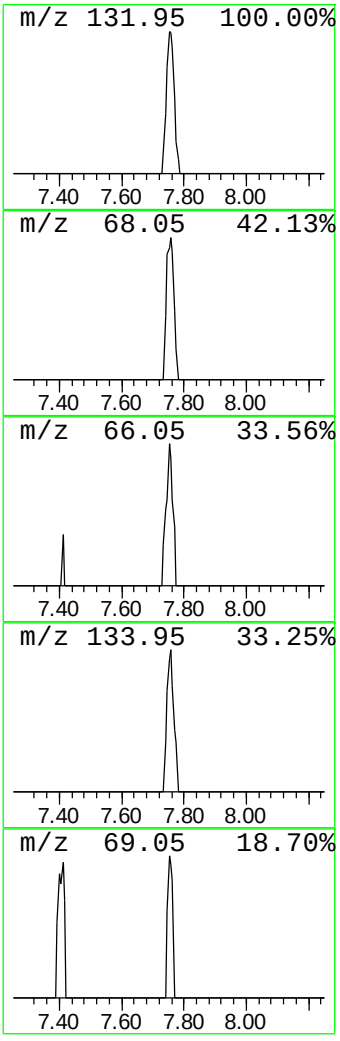
****

Peak Number 3 unknown7.75 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.75	4.89 ng	6818	1,4-Dichlorobenzene-d4	8.21

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(E)-3-Chloro-2-methyl-2-pentenal	132	C6H9ClO	031357-76-3	25
2	1H-Tetrazaborole, 5-chloro-4,5-d...	132	C2H6BClN4	021960-49-6	9
3	4-Chloro-6-fluoro-pyrimidine	132	C4H2ClFN2	051422-01-6	9
4	3-Chloro-6-fluoro-pyrazine	132	C4H2ClFN2	1000146-10-7	9
5	4-Chloro-2-fluoro-pyrimidine	132	C4H2ClFN2	051422-00-5	9





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

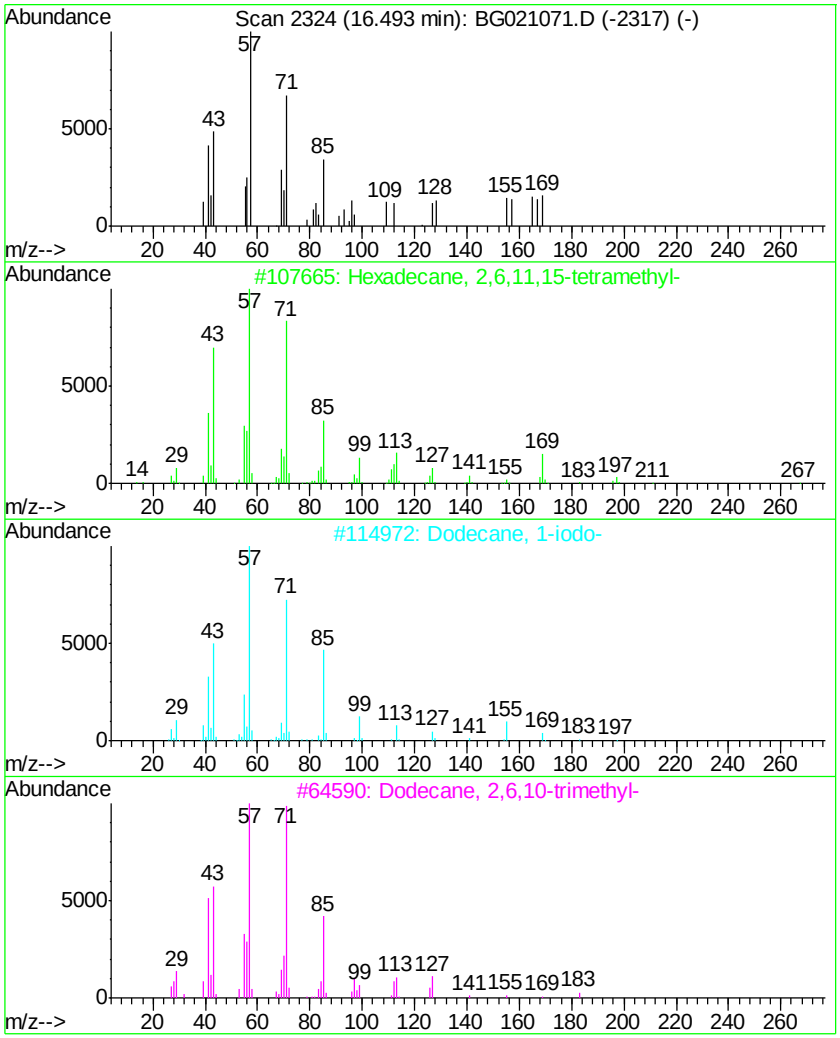
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

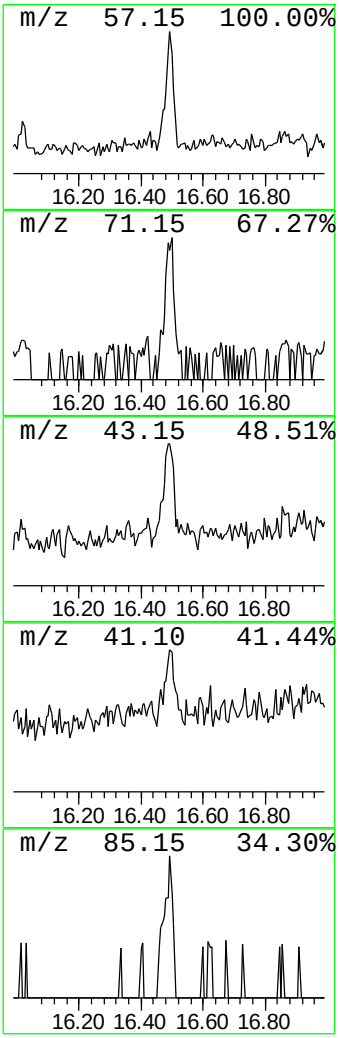
****

Peak Number 5 Hexadecane, 2,6,11,15-tetra... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.49	5.26 ng	14587	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,11,15-tetramethyl-	282	C20H42	000504-44-9	50
2	Dodecane, 1-iodo-	296	C12H25I	004292-19-7	43
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	38
4	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	38
5	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	37





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

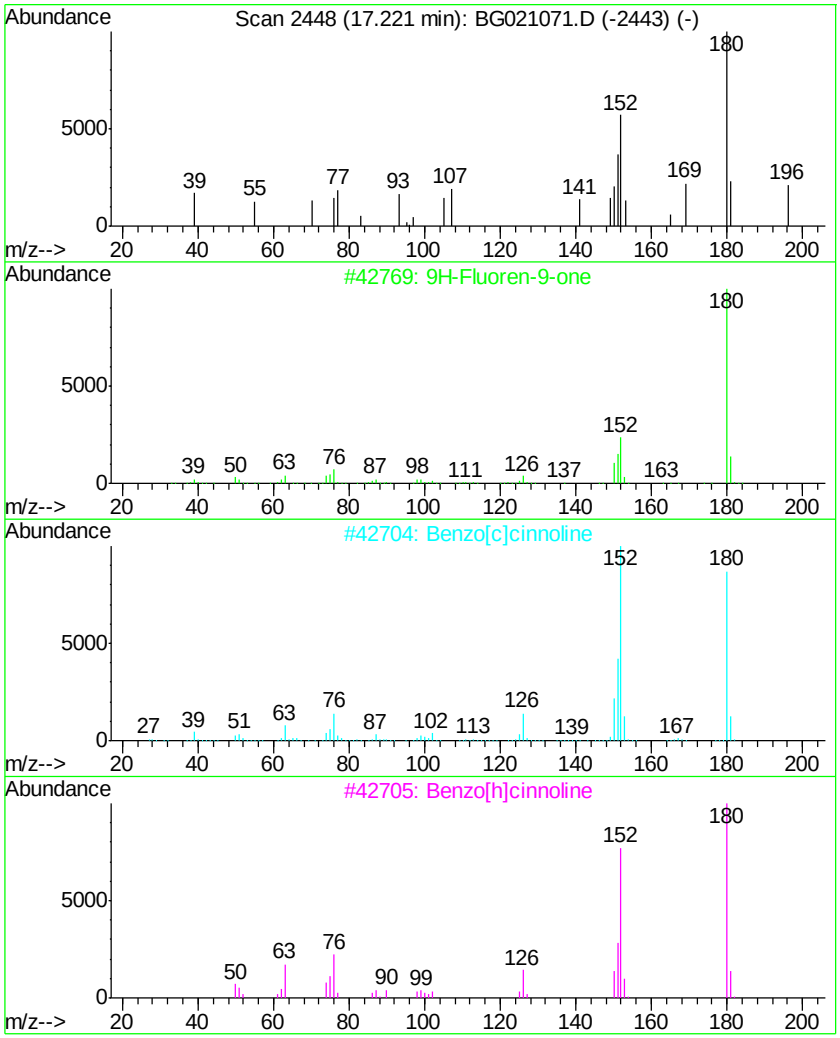
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

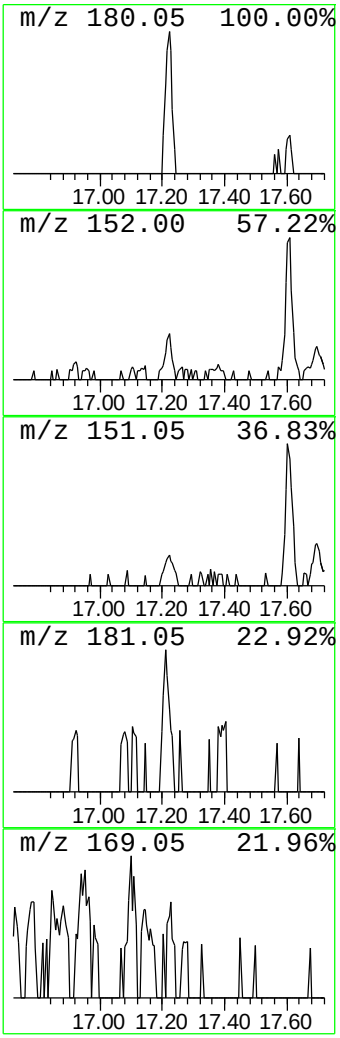
****

Peak Number 6 9H-Fluoren-9-one Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.22	2.79 ng	7744	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Fluoren-9-one	180	C13H8O	000486-25-9	52
2	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	38
3	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	38
4	1H-Phenalen-1-one	180	C13H8O	000548-39-0	28
5	1,3-Benzenedimethanol, 2-hydroxy...	196	C11H16O3	054845-41-9	27





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

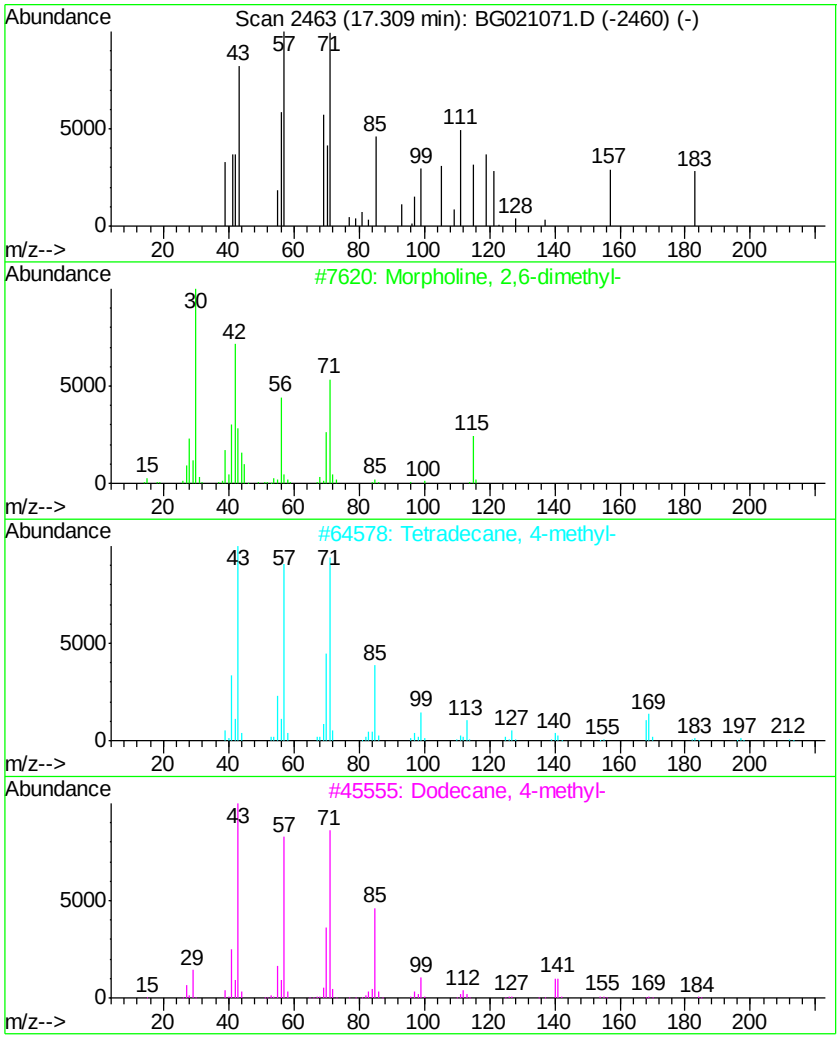
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

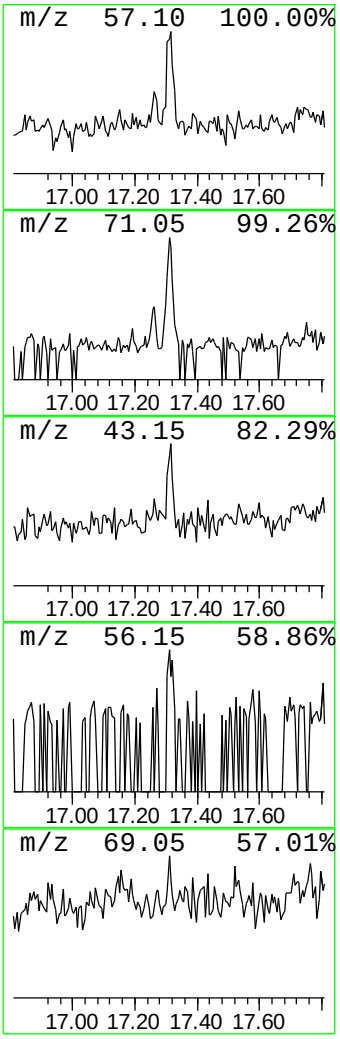
****

Peak Number 7 unknown17.31 Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.31	2.74 ng	7603	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Morpholine, 2,6-dimethyl-	115	C6H13NO	000141-91-3	38
2	Tetradecane, 4-methyl-	212	C15H32	025117-24-2	32
3	Dodecane, 4-methyl-	184	C13H28	006117-97-1	32
4	Decane	142	C10H22	000124-18-5	28
5	1-Octanol, 2-butyl-	186	C12H26O	003913-02-8	28





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

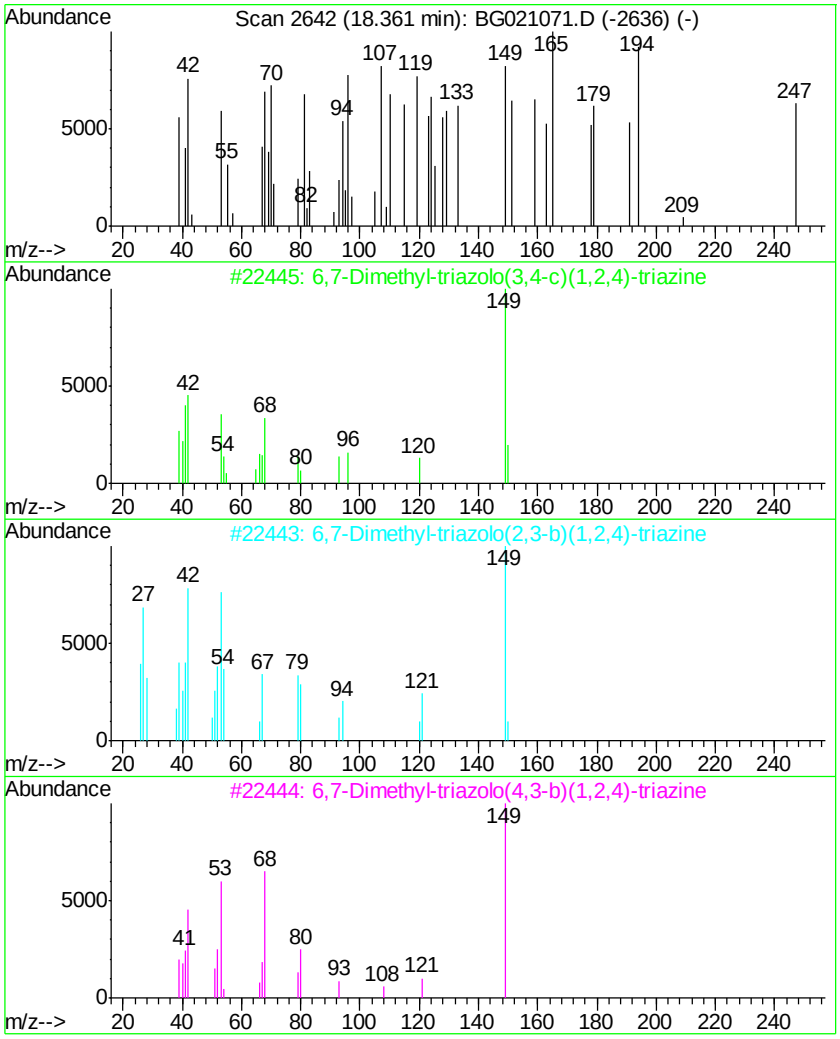
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

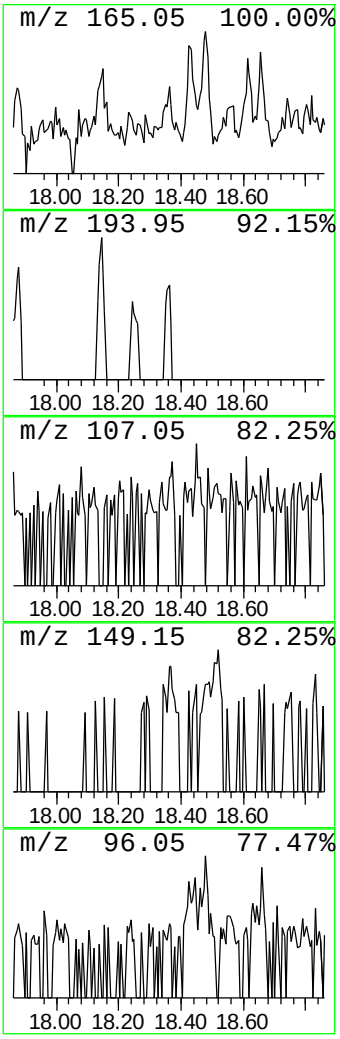
****

Peak Number 8 unknown18.36 Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.36	4.10 ng	11377	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6,7-Dimethyl-triazolo(3,4-c)(1,2...	149	C6H7N5	061139-79-5	22
2	6,7-Dimethyl-triazolo(2,3-b)(1,2...	149	C6H7N5	061139-76-2	14
3	6,7-Dimethyl-triazolo(4,3-b)(1,2...	149	C6H7N5	061139-73-9	14
4	Pyrimidine, 4-methoxy-2-methyl-	124	C6H8N2O	007314-65-0	11
5	1,2-Pentadiene	68	C5H8	000591-95-7	11





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

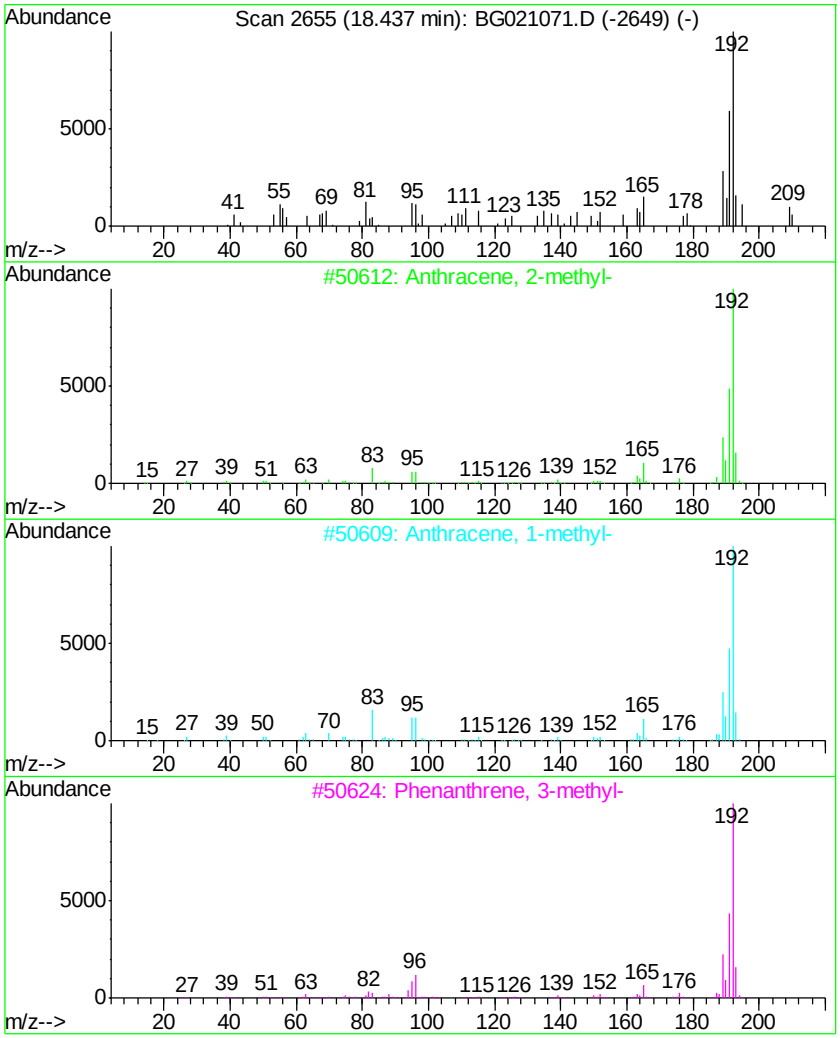
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

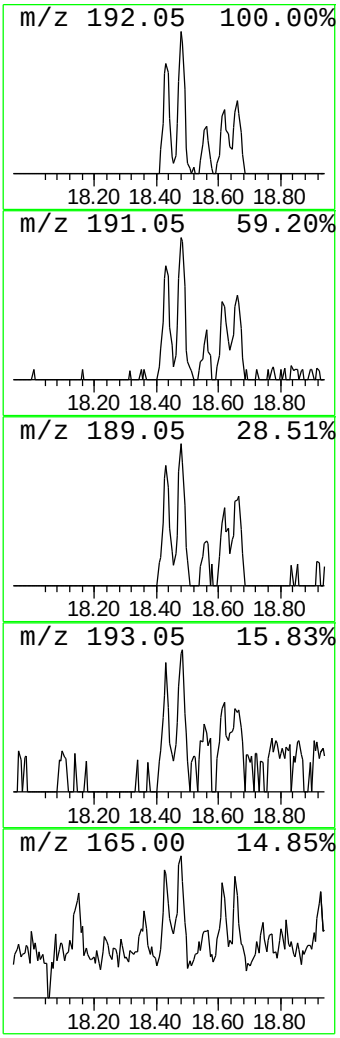
****

Peak Number 9 Anthracene, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.44	8.88 ng	24613	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 2-methyl-	192	C15H12	000613-12-7	76
2	Anthracene, 1-methyl-	192	C15H12	000610-48-0	76
3	Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	76
4	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	70
5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	68





Library Search Compound Report

Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

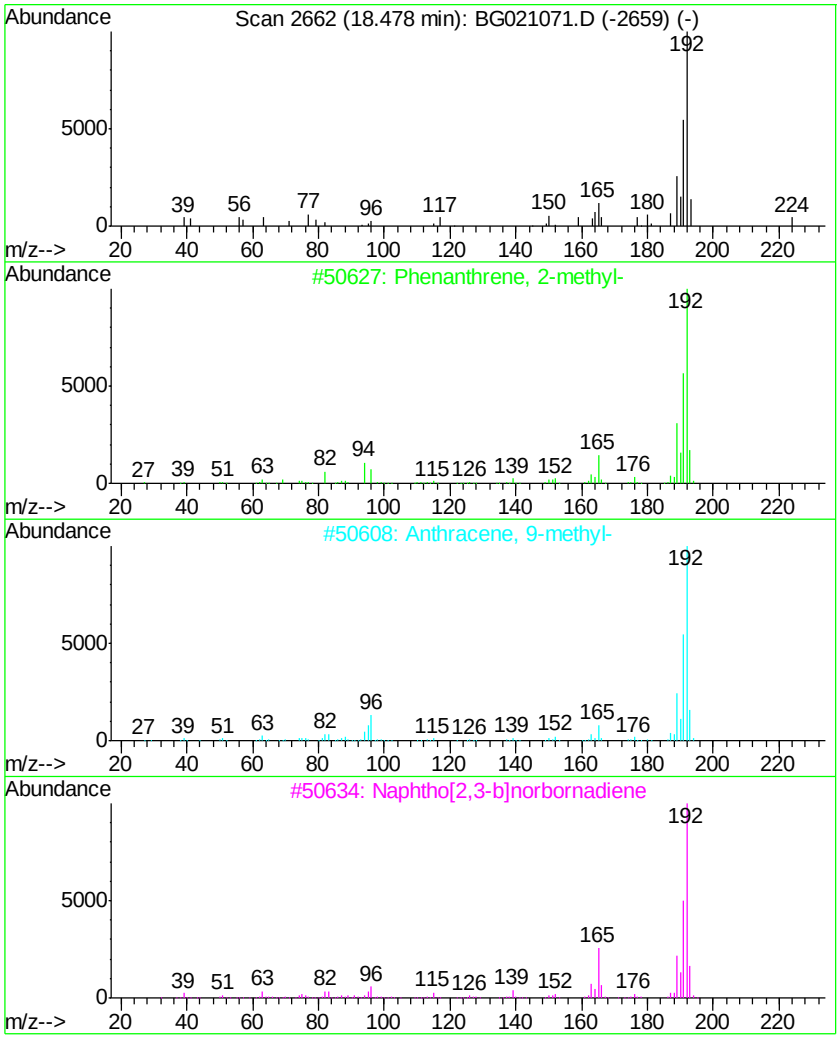
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

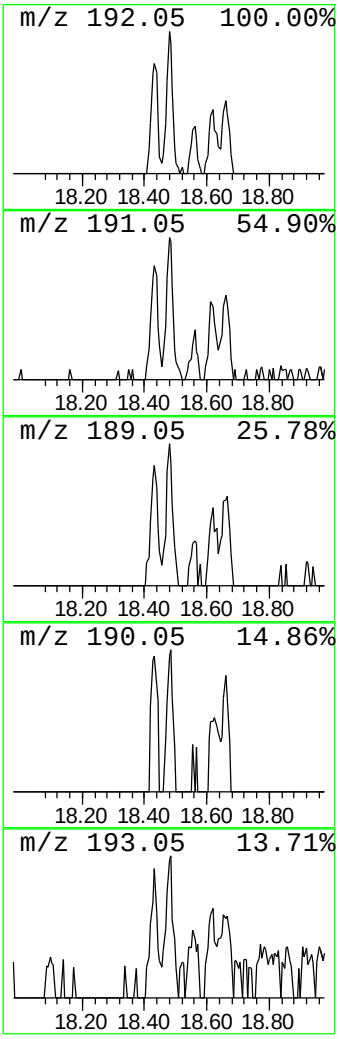
****

Peak Number 10 Phenanthrene, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.48	6.26 ng	17362	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	83
2	Anthracene, 9-methyl-	192	C15H12	000779-02-2	81
3	Naphtho[2,3-b]norbornadiene	192	C15H12	107426-38-0	81
4	1H-Cyclopropa[l]phenanthrene,1a,...	192	C15H12	000949-41-7	80
5	Phenanthrene, 3-methyl-	192	C15H12	000832-71-3	72





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

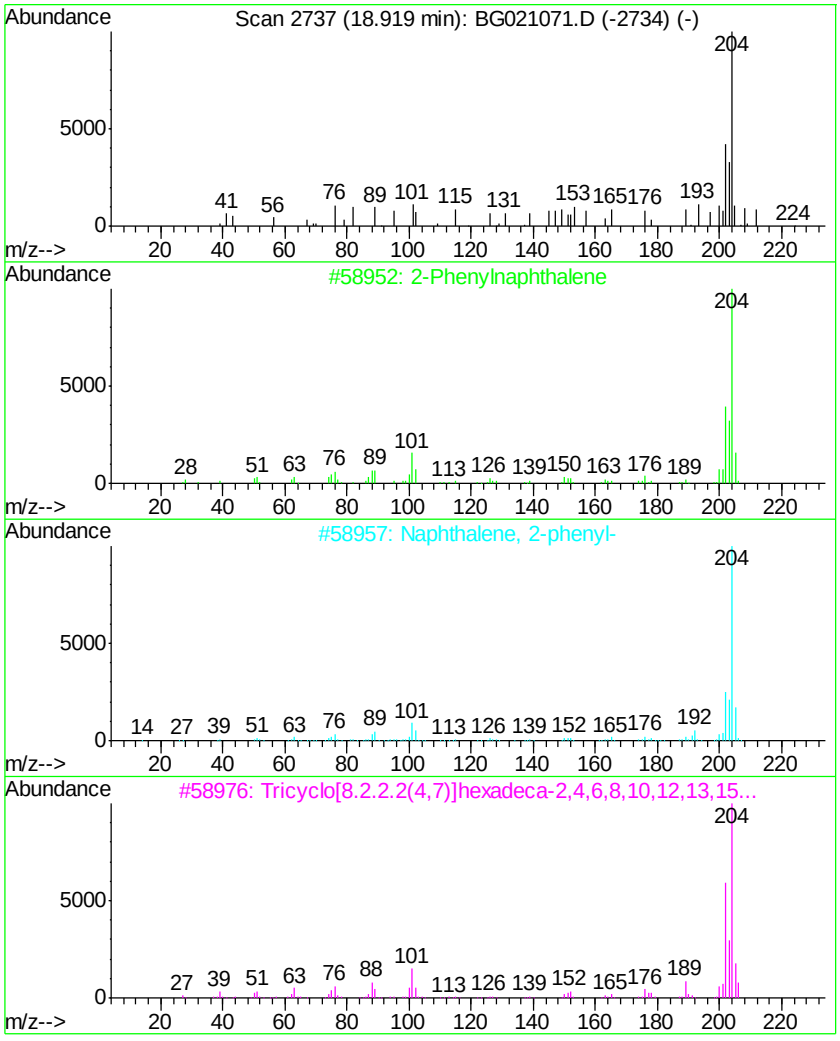
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

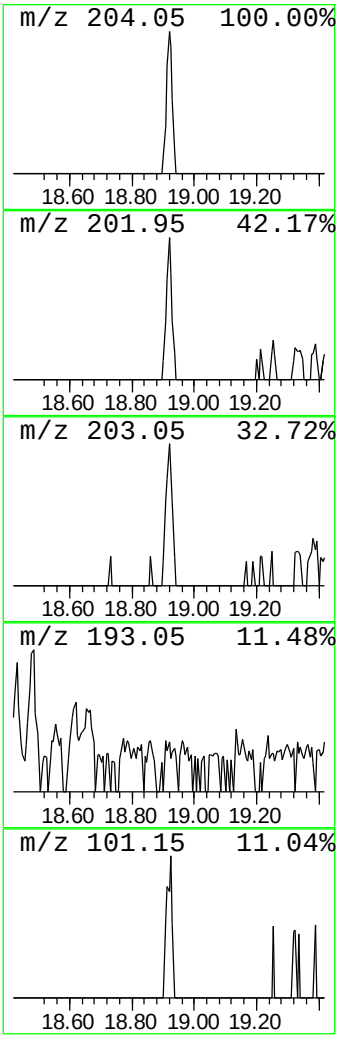
****

Peak Number 12 unknown18.92 Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.92	3.88 ng	10755	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Phenylnaphthalene	204	C16H12	035465-71-5	46
2	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	45
3	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	45
4	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	45
5	Imidazo[2,1-b]thiazole, 2,3,5,6-...	204	C11H12N2S	005036-02-2	43





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

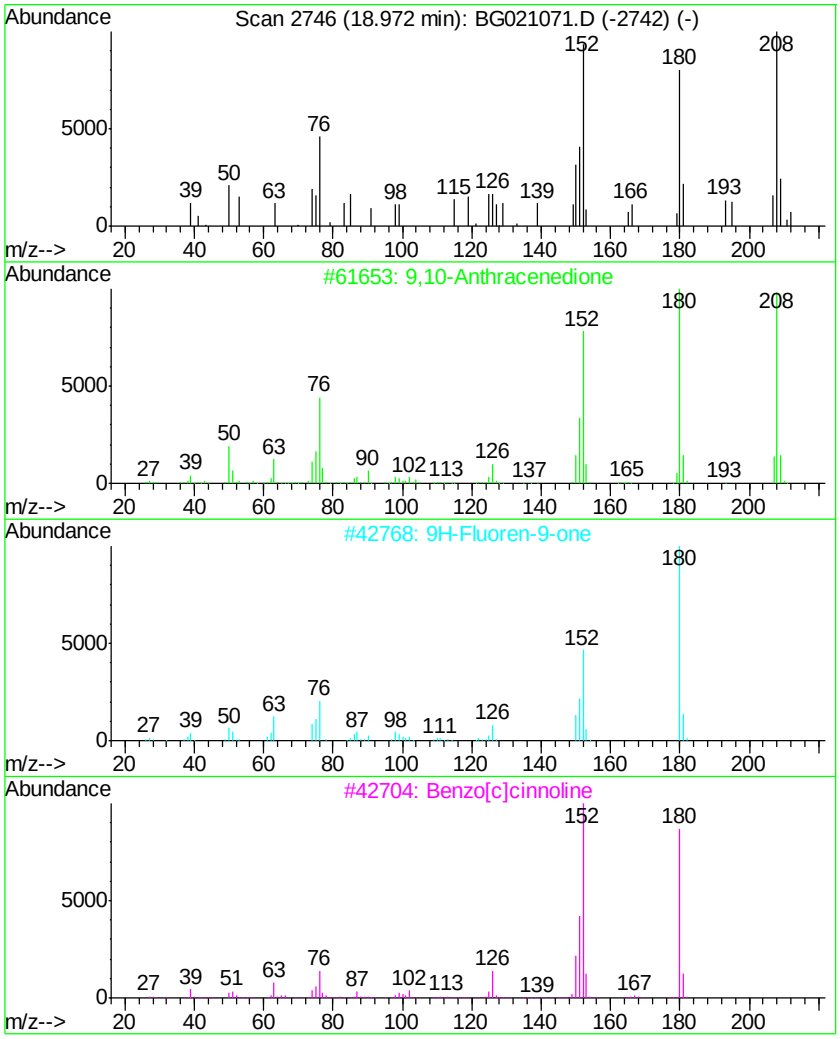
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

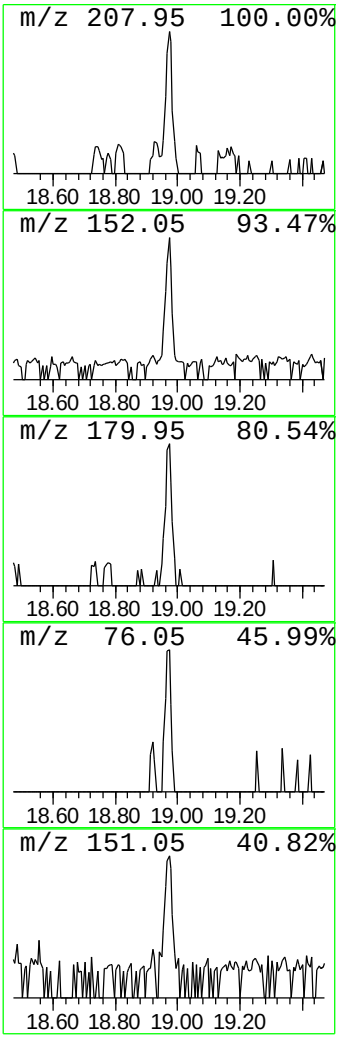
****

Peak Number 13 9,10-Anthracenedione Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.97	6.66 ng	18447	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Anthracenedione	208	C14H8O2	000084-65-1	97
2	9H-Fluoren-9-one	180	C13H8O	000486-25-9	60
3	Benzo[c]cinnoline	180	C12H8N2	000230-17-1	52
4	Benzo[h]cinnoline	180	C12H8N2	000230-31-9	47
5	2(1H)-Pyridone, 4-hydroxy-6-meth...	209	C11H15NO3	007135-84-4	38





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

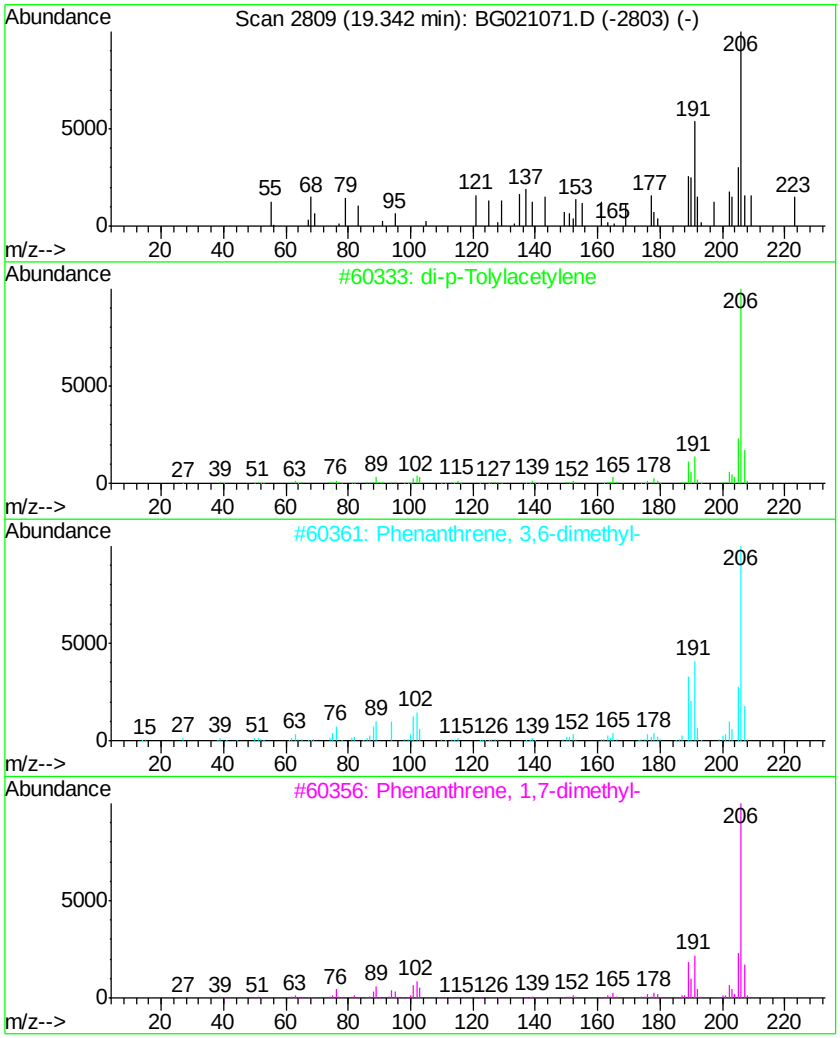
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

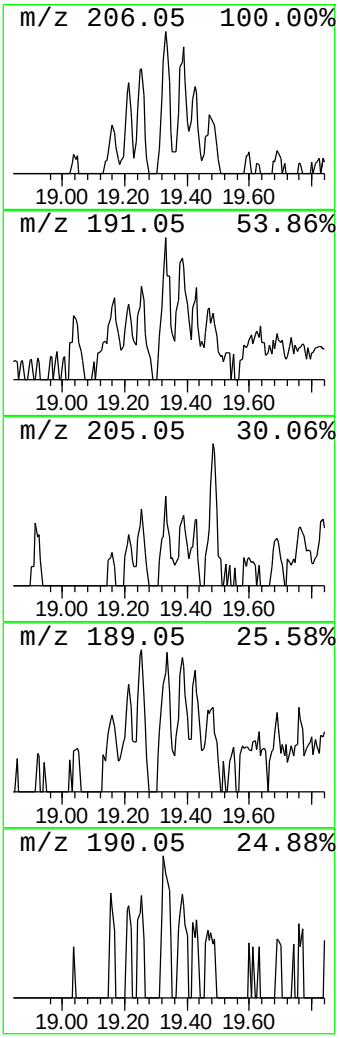
****

Peak Number 14 di-p-Tolylacetylene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.34	4.21 ng	11680	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	di-p-Tolylacetylene	206	C16H14	002789-88-0	87
2	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	81
3	Phenanthrene, 1,7-dimethyl-	206	C16H14	000483-87-4	72
4	9,10-Dimethylanthracene	206	C16H14	000781-43-1	68
5	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	58





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

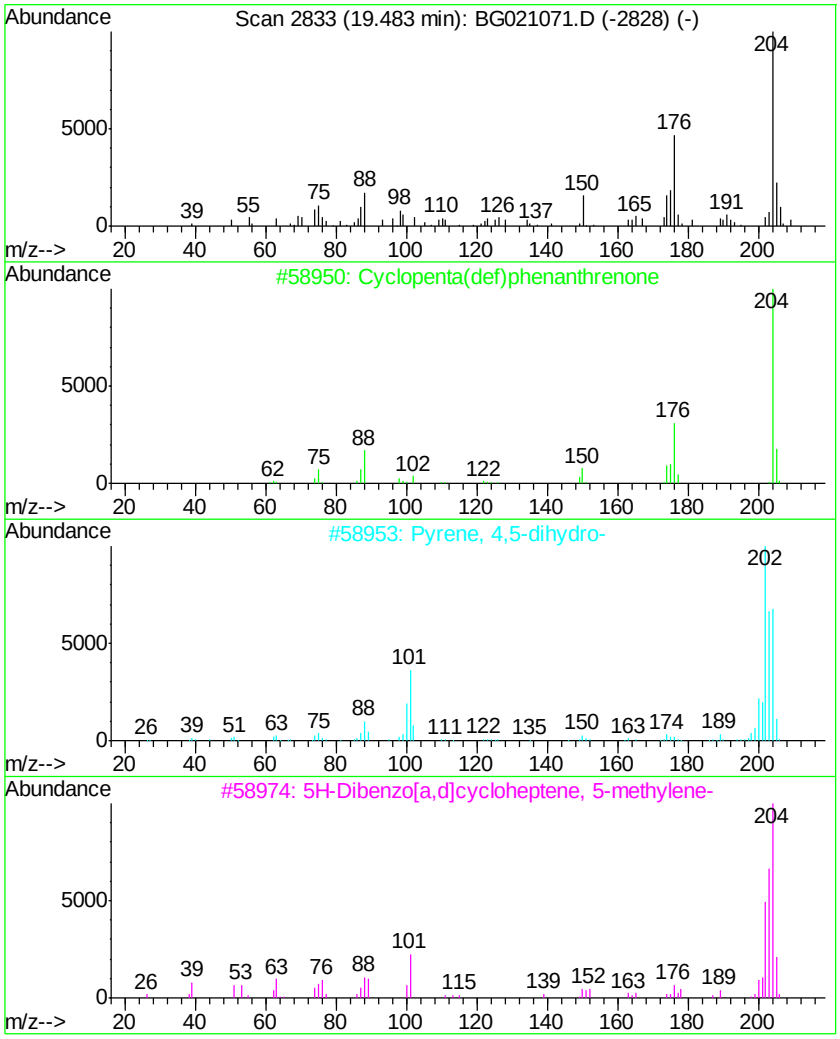
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

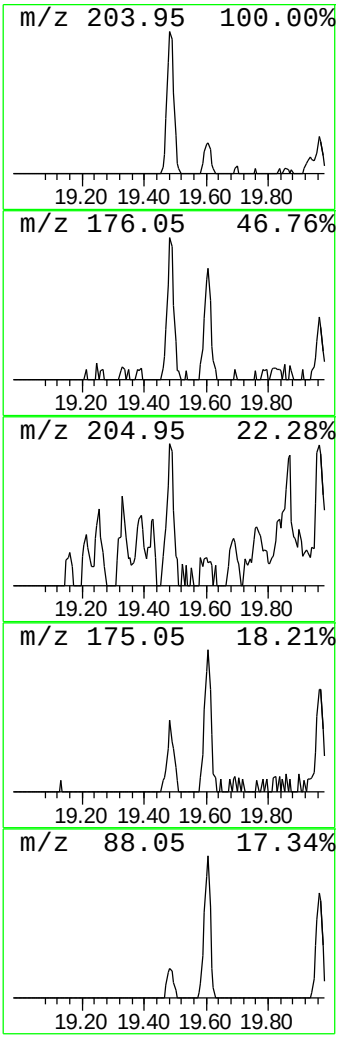
****

Peak Number 15 Cyclopenta(def)phenanthrenone Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.48	12.70 ng	35194	Phenanthrene-d10	17.56

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	90
2	Pyrene, 4,5-dihydro-	204	C16H12	006628-98-4	43
3	5H-Dibenzo[a,d]cycloheptene, 5-m...	204	C16H12	002975-79-3	43
4	1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	42
5	[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	40





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

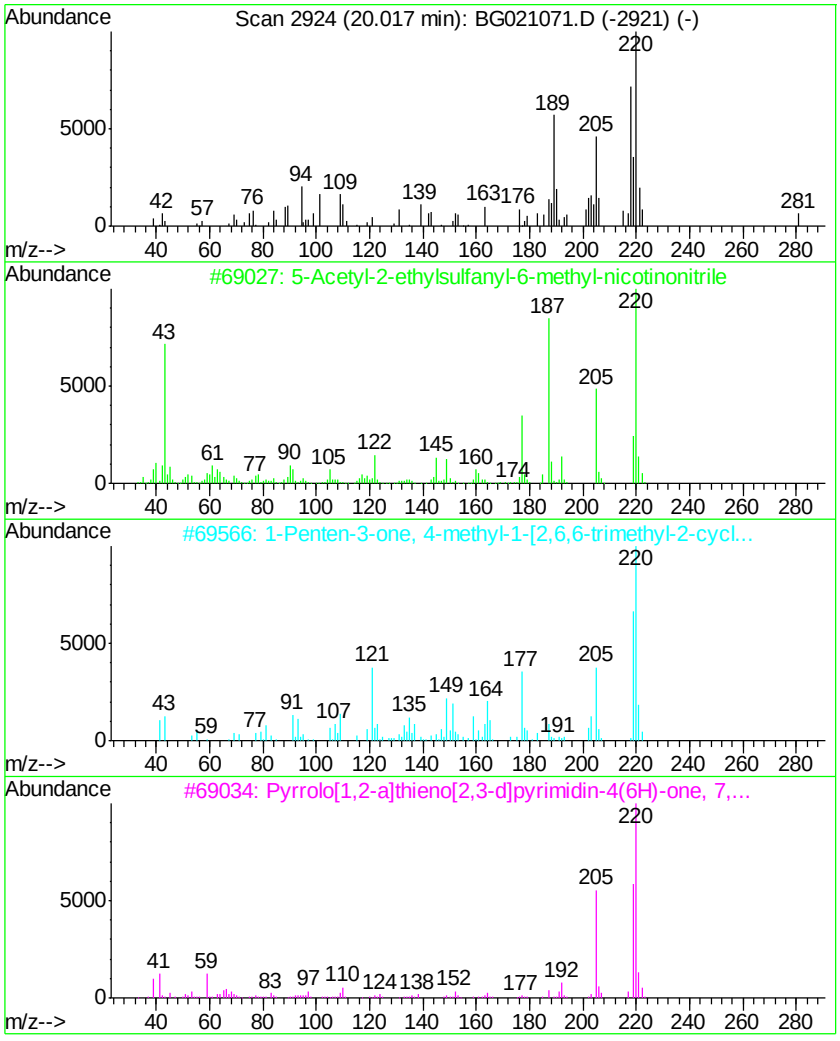
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

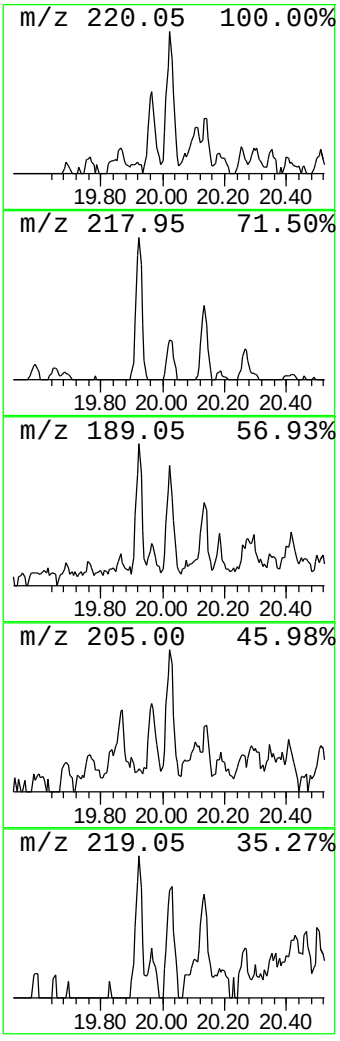
****

Peak Number 16 5-Acetyl-2-ethylsulfanyl-6-... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.02	3.44 ng	28865	Chrysene-d12	21.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Acetyl-2-ethylsulfanyl-6-methy...	220	C11H12N2OS	303146-26-1	53
2	1-Penten-3-one, 4-methyl-1-[2,6,...	220	C15H24O	1000132-20-9	38
3	Pyrrolo[1,2-a]thieno[2,3-d]pyrim...	220	C11H12N2OS	056929-61-4	38
4	6,7,8,9-Tetrahydro-5-methylisoth...	220	C11H12N2OS	339156-87-5	38
5	7-Nitro-6-methoxy-2,3-dimethylin...	220	C11H12N2O3	068289-71-4	35





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

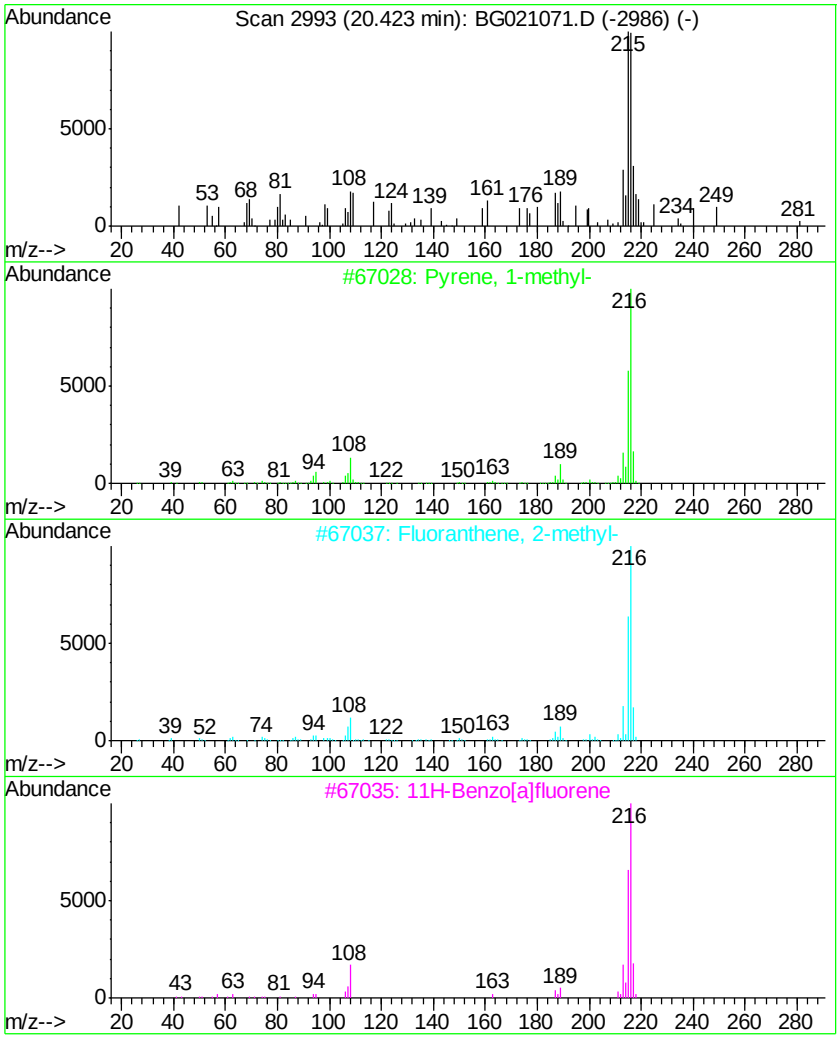
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

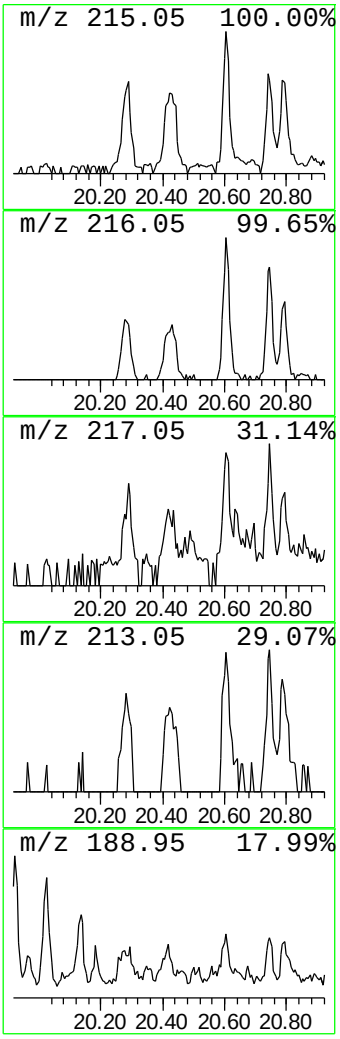
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.42	3.54 ng	29718	Chrysene-d12	21.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	74
2	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	70
3	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	53
4	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	50
5	2-Propenoic acid, 3-[3-(trifluor...	216	C10H7F3O2	067801-07-4	50





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

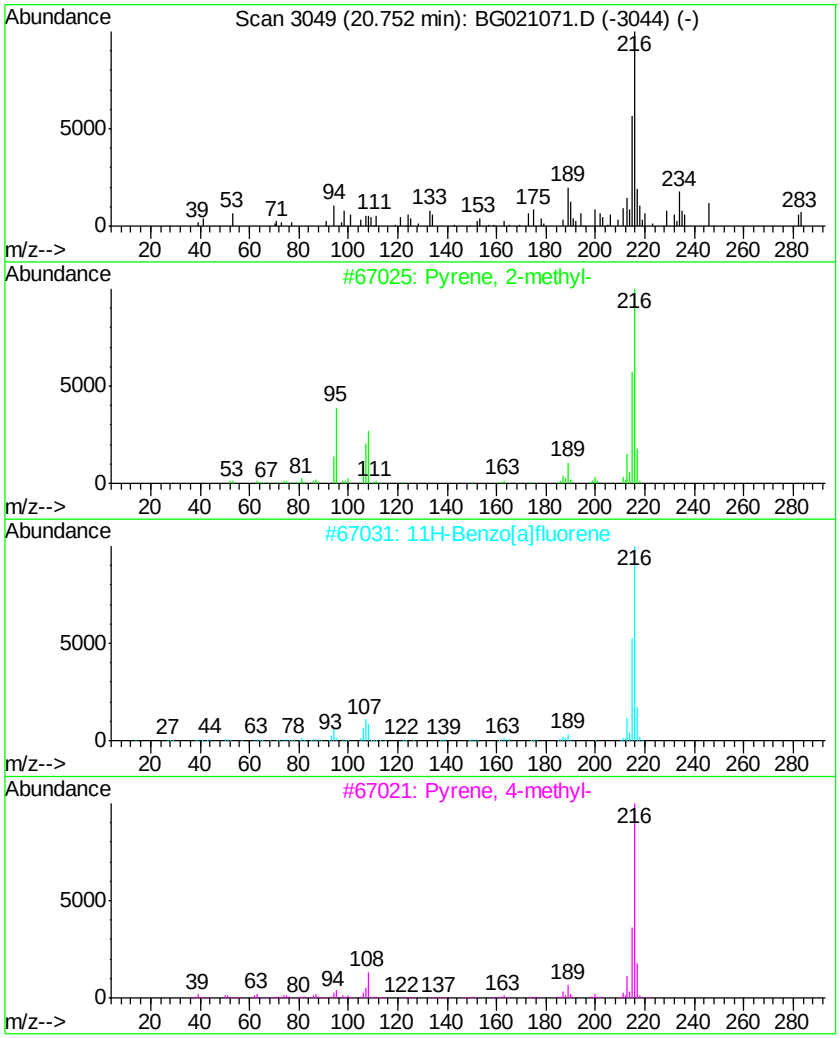
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

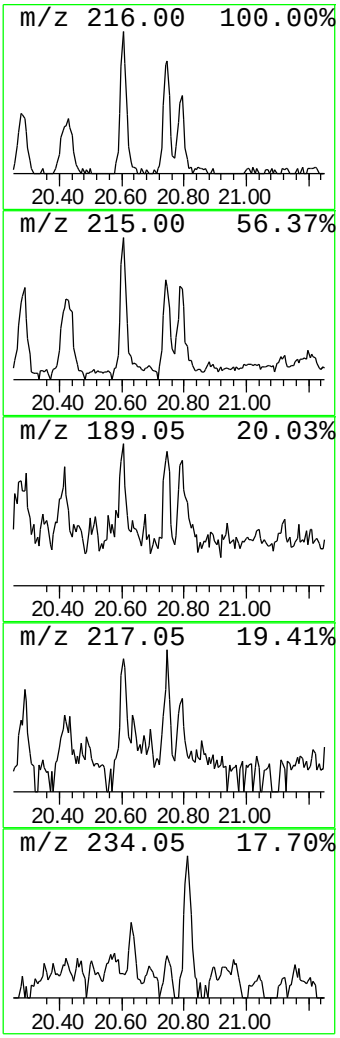
****

Peak Number 18 Pyrene, 2-methyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.75	2.87 ng	24069	Chrysene-d12	21.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 2-methyl-	216	C17H12	003442-78-2	68
2	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	64
3	Pyrene, 4-methyl-	216	C17H12	003353-12-6	64
4	4,6-Dimethoxy-1-naphthaldehyde	216	C13H12O3	065565-33-5	59
5	Pyrene, 1-methyl-	216	C17H12	002381-21-7	58





Data Path : Z:\HPCHEM1\BNA G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

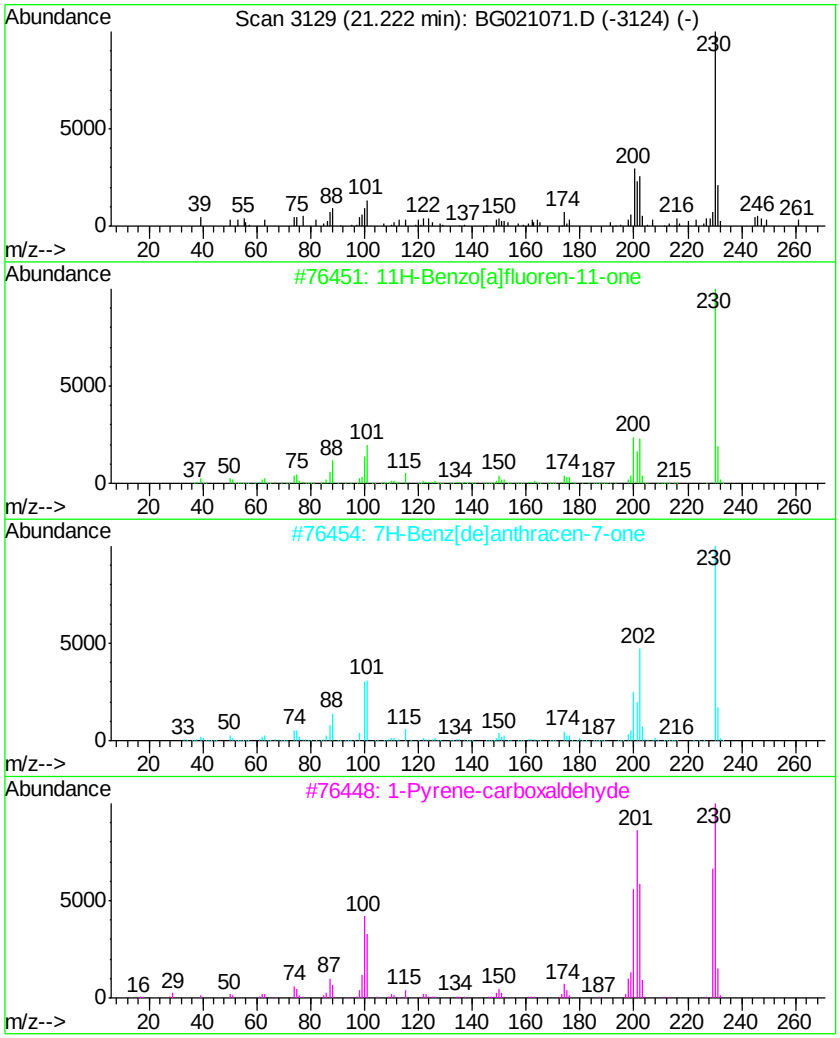
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

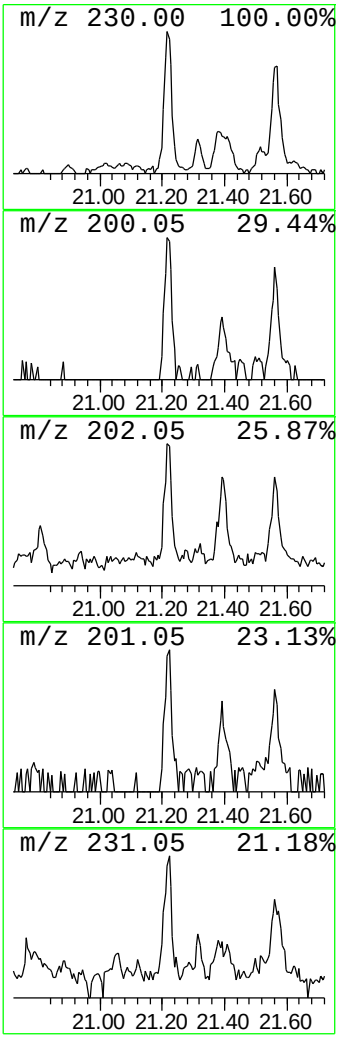
****

Peak Number 20 11H-Benzo[a]fluoren-11-one Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.22	4.67 ng	39191	Chrysene-d12	21.84

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Benzo[a]fluoren-11-one	230	C17H10O	000479-79-8	93
2	7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	89
3	1-Pyrene-carboxaldehyde	230	C17H10O	003029-19-4	64
4	Pyrene, 1,3-dimethyl-	230	C18H14	064401-21-4	53
5	Benzonitrile, 4,4'-(1,2-ethenedi...	230	C16H10N2	006292-62-2	49





Tentatively Identified Compound (LSC) summary

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG022416\
Data File : BG021071.D
Acq On : 25 Feb 2016 3:50
Operator : UM/SJ
Sample : H1557-02 10X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument : BNA_G
ClientSampleId : P-10

Quant Method : Z:\HPCHEM1\BNA_G\METHODS\8270-BG022316.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
Propane, 2,2-dime...	3.06	12.6	ng	17546	1	8.21	27893	20.0
unknown3.20	3.20	3.7	ng	5174	1	8.21	27893	20.0
unknown7.75	7.75	4.9	ng	6818	1	8.21	27893	20.0
Hexadecane, 2,6,1...	16.49	5.3	ng	14587	4	17.56	55432	20.0
9H-Fluoren-9-one	17.22	2.8	ng	7744	4	17.56	55432	20.0
unknown17.31	17.31	2.7	ng	7603	4	17.56	55432	20.0
unknown18.36	18.36	4.1	ng	11377	4	17.56	55432	20.0
Anthracene, 2-met...	18.44	8.9	ng	24613	4	17.56	55432	20.0
Phenanthrene, 2-m...	18.48	6.3	ng	17362	4	17.56	55432	20.0
unknown18.92	18.92	3.9	ng	10755	4	17.56	55432	20.0
9,10-Anthracenedione	18.97	6.7	ng	18447	4	17.56	55432	20.0
di-p-Tolylacetylene	19.34	4.2	ng	11680	4	17.56	55432	20.0
Cyclopenta(def)ph...	19.48	12.7	ng	35194	4	17.56	55432	20.0
5-Acetyl-2-ethyls...	20.02	3.4	ng	28865	5	21.84	167877	20.0
Pyrene, 1-methyl-	20.42	3.5	ng	29718	5	21.84	167877	20.0
Pyrene, 2-methyl-	20.75	2.9	ng	24069	5	21.84	167877	20.0
11H-Benzo[a]fluor...	21.22	4.7	ng	39191	5	21.84	167877	20.0